anas
GRUPPO FS ITALIANE

Direzione Tecnica

S.S 685 "DELLE TRE VALLI UMBRE"

TRATTO SPOLETO - ACQUASPARTA

1° stralcio: Madonna di Baiano-Firenzuola

PROGETTO ESECUTIVO

COD. PG143

PROGETTAZIONE: ATI SINTAGMA - GDG - ICARIA

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PROTOCOLLO | DATA

11.SOTTOVIA
11.01 SOTTOPASSO KM 2+315

Relazione di calcolo muri

CODICE PROGETTO			NOME FILE	REVISIONE	SCALA:
PROGETTO	LIV. PROG.	ANNO			
DTPG143	E	23	CODICE ELAB. T00ST01STRRE02	A	-

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
A	Emissione	Ago 2023	F.Brunori	F.Durastanti	N.Granieri

INDICE

1 INTRODUZIONE

1.1 Oggetto e scopo

La presente relazione ha per oggetto ha per oggetto il dimensionamento e le verifiche di resistenza secondo il metodo semiprobabilistico agli Stati Limite (S.L.) dei muri di imbocco relativi al sottopasso S01 km 2+315. L'opera stradale servita è denominata "Strada delle tre valli umbre" e si snoda fra lo svincolo di progetto della S.G.C. E45 in località Acquasparta e lo svincolo della nuova Flaminia (SS.3) in località Eggi per una lunghezza di 20+885 km. L'opera è ubicata nell'area del comune di Spoleto (PG) in prossimità della frazione Madonna di Baiano.

Si riportano le immagini del sito di ubicazione dell'opera e della planimetria di progetto:

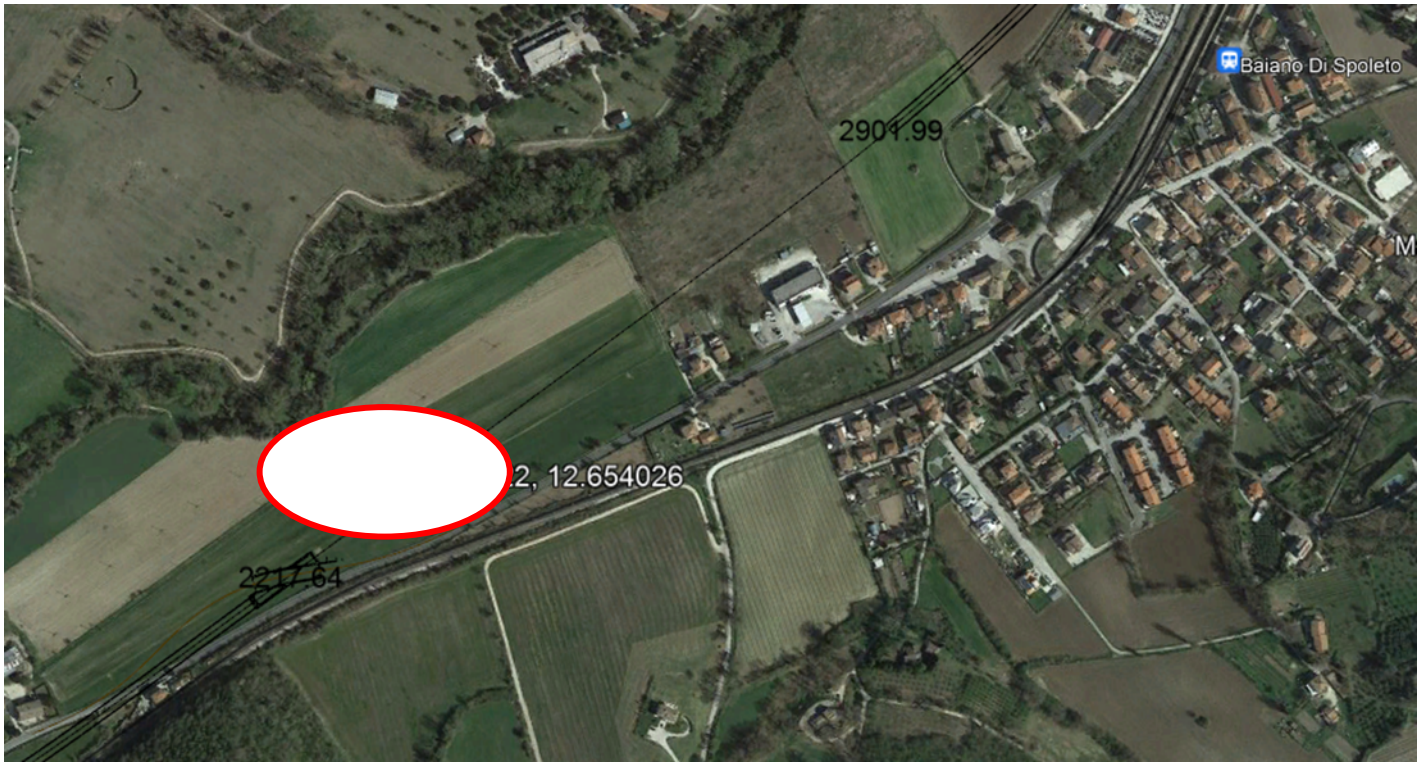


Figura 1-1. Localizzazione geografica dell'opera

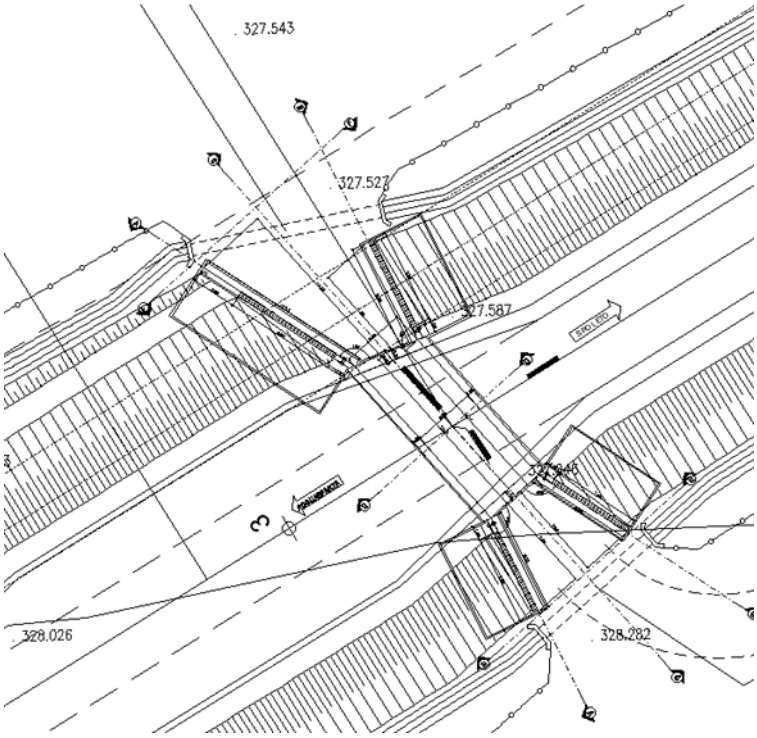


Figura 1-2. Planimetria dell'opera

Le analisi strutturali e le verifiche di sicurezza sono state effettuate secondo il DM 17 gennaio 2018.

1.2 Descrizione dell'opera

L'opera consiste in un muro di sostegno in c.a.

La sezione trasversale retta ha un'altezza del paramento è H_p=6.28 m, uno spessore in testa b_s=0.40 m, uno spessore all'incastro con la fondazione b_i=1.03 m, l'altezza della fondazione è H_f=1.00 m con una lunghezza a monte L_m=4.10 m e a valle L_v=0.50 m.

Nell'immagine seguente si riportano una sezione trasversale dell'opera.

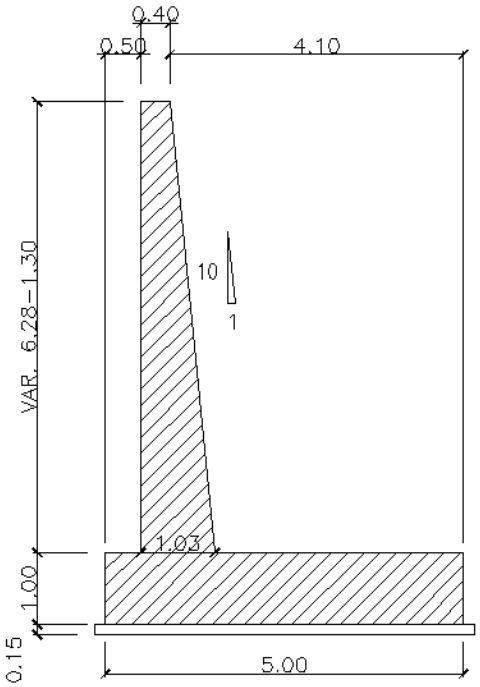


Figura 1-3. Sezione trasversale dell'opera

2 RIFERIMENTI NORMATIVI

La normativa cui viene fatto riferimento nelle fasi di calcolo e progettazione è la seguente:

- Norme Tecniche per le Costruzioni, DM del 17/01/2018;
- Legge 05/01/1971 n°1086: Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso, ed a struttura metallica;
- Legge 02/02/1974 n°64: Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche;
- C.M. 21/01/2019 n.7: Istruzioni per l'applicazione delle "Norme tecniche per le costruzioni;
- UNI EN 1991-1-4:2005: Eurocodice 1 – Azioni sulle strutture – Parte 1-4: Azioni in generale – Azioni del vento;
- UNI EN 1992-1-1:2005: Eurocodice 2 – Progettazione delle strutture di calcestruzzo – Parte 1-1: Regole generali e regole per gli edifici;
- UNI EN 1992-2:2006: Eurocodice 2 – Progettazione delle strutture di calcestruzzo – Parte 2: Ponti;
- UNI EN 1993-1-1:2005: Eurocodice 3 – Progettazione delle strutture di acciaio – Parte 1-1: Regole generali e regole per gli edifici;
- UNI EN 1993-2:2007: Eurocodice 3 – Progettazione delle strutture di acciaio – Parte 2: Ponti;
- UNI EN 1998-1:2005: Eurocodice 8 – Progettazione delle strutture per la resistenza sismica – Parte 1: Regole generali, azioni sismiche e regole per gli edifici;
- UNI EN 1998-2:2006: Eurocodice 8 – Progettazione delle strutture per la resistenza sismica – Parte 2: Ponti;

3 MATERIALI

3.1 Calcestruzzo magrone

Conglomerato classe di resistenza *C12/15 – Rck 15MPa*

Resistenza caratteristica cubica:	Rck = 15 N/mm^2
Resistenza caratteristica cilindrica:	fck = 12 N/mm^2
Classe di esposizione:	X0
Classe di consistenza slump:	S3

3.2 Calcestruzzo elevazione muri

Conglomerato classe di resistenza *C32/40 – Rck 40MPa*

Resistenza caratteristica cubica:	Rck = 40 N/mm^2
Resistenza caratteristica cilindrica:	fck = 32 N/mm^2
Classe di esposizione:	XF2
Classe di consistenza slump:	S4
Copriferro armatura principale	50 mm

3.3 Calcestruzzo fondazione muri

Conglomerato classe di resistenza *C28/35 – Rck 35MPa*

Resistenza caratteristica cubica:	Rck = 35 N/mm^2
Resistenza caratteristica cilindrica:	fck = 28 N/mm^2
Classe di esposizione:	XC2
Classe di consistenza slump:	S4
Copriferro armatura principale	50 mm

3.4 Acciaio per armature

Tensione caratteristica di snervamento:	f_{yk} = 450 MPa;
Tensione di progetto:	$f_{yd} = f_{yk} / \gamma_m$
in cui γ_m = 1.15	f_{yd} = 450 / 1.15 = 391.3 MPa;
Modulo Elastico	E_s = 210'000 MPa.

4 SOFTWARE DI CALCOLO

L'analisi strutturale e le verifiche sono condotte con l'ausilio di un codice di calcolo automatico. La verifica della sicurezza degli elementi strutturali è stata valutata con i metodi della scienza delle costruzioni.
L'analisi strutturale sotto le azioni sismiche è condotta con il metodo dell'analisi statica equivalente secondo le disposizioni del capitolo 7 del DM 17/01/2018.
La verifica delle sezioni degli elementi strutturali è eseguita con il metodo degli Stati Limite. Le combinazioni di carico adottate sono esaustive relativamente agli scenari di carico più gravosi cui l'opera sarà soggetta.

4.1 Affidabilità dei codici di calcolo

Un attento esame preliminare della documentazione a corredo del software ha consentito di valutarne l'affidabilità. La documentazione fornita dal produttore del software contiene un'esauriente descrizione delle basi teoriche, degli algoritmi impiegati e l'individuazione dei campi d'impiego. La società produttrice Aztec Informatica srl ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.

4.2 Modalità di presentazione dei risultati

La relazione di calcolo strutturale presenta i dati di calcolo tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità. La relazione di calcolo illustra in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare.

4.3 Informazioni generali sull'elaborazione

Il software prevede una serie di controlli automatici che consentono l'individuazione di errori di modellazione, di non rispetto di limitazioni geometriche e di armatura e di presenza di elementi non verificati. Il codice di calcolo consente di visualizzare e controllare, sia in forma grafica che tabellare, i dati del modello strutturale, in modo da avere una visione consapevole del comportamento corretto del modello strutturale.

4.4 Giudizio motivato di accettabilità dei risultati

I risultati delle elaborazioni sono stati sottoposti a controlli dal sottoscritto utente del software. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali. Inoltre sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni.
In base a quanto sopra, io sottoscritto asserisco che l'elaborazione è corretta ed idonea al caso specifico, pertanto i risultati di calcolo sono da ritenersi validi ed accettabili.

5 INQUADRAMENTO GEOTECNICO

5.1 Terreno di ricoprimento/rinterro

Per il terreno di ricoprimento/rinterro sono state assunte le seguenti caratteristiche geotecniche:

5.2 Terreno di fondazione

Si riportano di seguito i parametri geotecnici ell'unità geologica intercettata dall'opera:

Unità ALL:

γ_k = 18 - 19 kN/m^3

c_k' = 0 kPa

f_k' = 38°-42°

E_k = 25 - 50 MPa

Ai fini delle verifiche si adotteranno i seguenti parametri:

γ = 18.5 kN/m^3 peso dell'unità di volume

f ' = 40° angolo di attrito

c' = 0 kPa coesione

E = 37.5 MPa modulo elastico

La falda si trova ad una profondità di circa 8.0 m da fondo scavo. pertanto ininfluente ai fini del dimensionamento del muro.

Dalle indagini condotte si evince una categoria stratigrafica di suolo pari a 'C'.

6 INQUADRAMENTO SISMICO

Nel seguente paragrafo è riportata la valutazione dei parametri di pericolosità sismica utili alla determinazione delle azioni sismiche di progetto dell'opera cui si riferisce il presente documento, in accordo a quanto specificato a riguardo dal D.M. 17gennaio 2018.

Sulla base delle indicazioni delle NTC2018 si assumono i seguenti valori per determinare l'azione sismica di riferimento.

L'ubicazione del sito in oggetto (Long: 12.654026; Lat: 42.722922):

- Classe d'uso: IV
- Coefficiente d'uso: Cu (IV) = 2.0
- Categoria topografica: T1
- Coefficiente di amplificazione topografica S_T=1
- Categoria di sottosuolo C
- Vita nominale: Vn = 50 anni
- Vita di riferimento: VR = VN x Cu = 100 anni
- Coefficiente di amplificazione stratigrafica Ss = 1.356


FASE 1. INDIVIDUAZIONE DELLA PERICOLOSITÁ DEL SITO
Ricerca per coordinate
LONGITUDINE
12.65403
LATITUDINE
42.72292
Ricerca per comune
REGIONE
Umbria
PROVINCIA
Perugia
COMUNE
Spoleto
Elaborazioni grafiche
Grafici spettri di risposta
Variabilità dei parametri
Elaborazioni numeriche
Tabella parametri
Nodi del reticolo intorno al sito
km7.5
24740
24741
-7.5
7.5
km
24962
24963
-7.5
Reticolo di riferimento
Controllo sul reticolo
Sito esterno al reticolo
Interpolazione su 3 nodi
Interpolazione corretta
Interpolazione
superficie rigata
La "Ricerca per comune" utilizza le coordinate ISTAT del comune per identificare il sito. Si sottolinea che all'interno del territorio comunale le azioni sismiche possono essere significativamente diverse da quelle così individuate e si consiglia, quindi, la "Ricerca per coordinate".
INTRO
FASE 1
FASE 2
FASE 3


FASE 2. SCELTA DELLA STRATEGIA DI PROGETTAZIONE
Vita nominale della costruzione (in anni) - V_N
50
info
Coefficiente d'uso della costruzione - c_U
2
info
Valori di progetto
Periodo di riferimento per la costruzione (in anni) - V_R
100
info
Periodi di ritorno per la definizione dell'azione sismica (in anni) - T_R
info
Stati limite di esercizio - SLE
SLO - P_{VR} = 81%
60
SLD - P_{VR} = 63%
101
Stati limite ultimi - SLU
SLV - P_{VR} = 10%
949
SLC - P_{VR} = 5%
1950
Elaborazioni
Grafici parametri azione
Grafici spettri di risposta
Tabella parametri azione
Strategia di progettazione
10000
1000
100
10
T_R [anni]
60
101
949
1950
SLO
SLD
SLV
SLC
LEGENDA GRAFICO
Strategia per costruzioni ordinarie
Strategia scelta
INTRO
FASE 1
FASE 2
FASE 3

SLATO LIMITE	T_R [anni]	a_g [g]	F_o [-]	T_C^* [s]
SLO	60	0.085	2.461	0.284
SLD	101	0.104	2.443	0.294
SLV	949	0.232	2.469	0.330
SLC	1950	0.285	2.499	0.342

Parametri e punti dello spettro di risposta orizzontale per lo stato SLV

Parametri indipendenti

STATO LIMITE	SLV
a_g	0.232 g
F_o	2.469
T_C^*	0.330 s
S_S	1.356
C_C	1.513
S_T	1.000
q	1.000

Parametri dipendenti

S	1.356
η	1.000
T_B	0.167 s
T_C	0.500 s
T_D	2.530 s

Espressioni dei parametri dipendenti

$S = S_S \cdot S_T$ (NTC-08 Eq. 3.2.5)

$\eta = \sqrt{10/(5+\xi)} \geq 0{,}55;\ \eta = 1/q$ (NTC-08 Eq. 3.2.6; §. 3.2.3.5)

$T_B = T_C / 3$ (NTC-07 Eq. 3.2.8)

$T_C = C_C \cdot T_C^*$ (NTC-07 Eq. 3.2.7)

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

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

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

$$T_B \leq T < T_C \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$$

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

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

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

Punti dello spettro di risposta

T [s]	Se [g]	
0.000	0.315	
0.167	0.778	T_B
0.500	0.778	T_C
0.597	0.652	
0.693	0.561	
0.790	0.492	
0.887	0.439	
0.983	0.396	
1.080	0.360	
1.177	0.331	
1.273	0.306	
1.370	0.284	
1.467	0.265	
1.563	0.249	
1.660	0.234	
1.757	0.221	
1.853	0.210	
1.950	0.199	
2.046	0.190	
2.143	0.182	
2.240	0.174	
2.336	0.166	
2.433	0.160	
2.530	0.154	T_D
2.600	0.146	
2.670	0.138	
2.740	0.131	
2.810	0.125	
2.880	0.119	
2.950	0.113	
3.020	0.108	
3.090	0.103	
3.160	0.099	
3.230	0.094	
3.300	0.090	
3.370	0.087	
3.440	0.083	
3.510	0.080	
3.580	0.077	
3.650	0.074	
3.720	0.071	
3.790	0.069	
3.860	0.066	
3.930	0.064	
4.000	0.062	

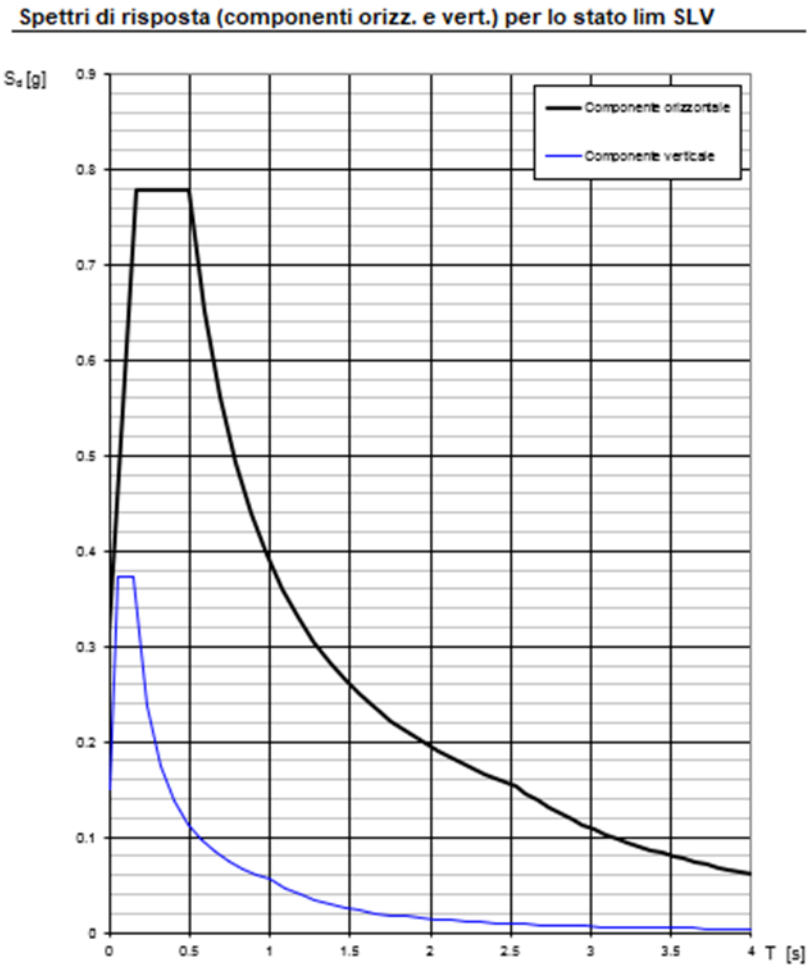


Figura 6.1. Spettro di Risposta SLV. Componenti orizzontali e orizzontali del sisma

7 DESCRIZIONE MODELLO DI CALCOLO

7.1 Schema statico e valori di calcolo delle azioni

Lo schema statico considerato è quello di muro a mensola incastrata sulla zattera.
Effettuando il calcolo tramite la normativa attualmente vigente è necessario fare la distinzione fra i parametri caratteristici ed i valori di calcolo (o di progetto) sia delle azioni che delle resistenze.
I valori di calcolo si ottengono dai valori caratteristici mediante l'applicazione di opportuni coefficienti di sicurezza parziali g. In particolare si distinguono combinazioni di carico di tipo A1-M1 nelle quali vengono incrementati i carichi e lasciati inalterati i parametri di resistenza del terreno e combinazioni di carico di tipo A2-M2 nelle quali vengono ridotti i parametri di resistenza del terreno e incrementati i soli carichi variabili.

7.2 Calcolo delle spinte

Metodo di Culmann

Il metodo di Culmann adotta le stesse ipotesi di base del metodo di Coulomb. La differenza sostanziale è che mentre Coulomb considera un terrapieno con superficie a pendenza costante e carico uniformemente distribuito (il che permette di ottenere una espressione in forma chiusa per il coefficiente di spinta) il metodo di Culmann consente di analizzare situazioni con profilo di forma generica e carichi sia concentrati che distribuiti comunque disposti. Inoltre, rispetto al metodo di Coulomb, risulta più immediato e lineare tener conto della coesione del masso spingente. Il metodo di Culmann, nato come metodo essenzialmente grafico, si è evoluto per essere trattato mediante analisi numerica (noto in questa forma come metodo del cuneo di tentativo). Come il metodo di Coulomb anche questo metodo considera una superficie di rottura rettilinea.
I passi del procedimento risolutivo sono i seguenti:

- si impone una superficie di rottura (angolo di inclinazione rispetto all'orizzontale) e si con sidera il cuneo di spinta delimitato dalla superficie di rottura stessa, dalla parete su cui si calcola la spinta e dal profilo del terreno;
- si valutano tutte le forze agenti sul cuneo di spinta e cioè peso proprio (W), carichi sul terrapieno, resistenza per attrito e per coesione lungo la superficie di rottura (R e C) e resistenza per coesione lungo la parete (A);
- dalle equazioni di equilibrio si ricava il valore della spinta S sulla parete.

Questo processo viene iterato fino a trovare l'angolo di rottura per cui la spinta risulta massima.
La convergenza non si raggiunge se il terrapieno risulta inclinato di un angolo maggiore dell'angolo d'attrito del terreno.
Nei casi in cui è applicabile il metodo di Coulomb (profilo a monte rettilineo e carico uniformemente distribuito) i risultati ottenuti col metodo di Culmann coincidono con quelli del metodo di Coulomb.

Le pressioni sulla parete di spinta si ricavano derivando l'espressione della spinta S rispetto all'ordinata z. Noto il diagramma delle pressioni è possibile ricavare il punto di applicazione della spinta.

Spinta in presenza di sisma

Per tener conto dell'incremento di spinta dovuta al sisma si fa riferimento al metodo di Mononobe-Okabe (cui fa riferimento la Normativa Italiana).

La Normativa Italiana suggerisce di tener conto di un incremento di spinta dovuto al sisma nel modo seguente.

Detta ε l'inclinazione del terrapieno rispetto all'orizzontale e β l'inclinazione della parete rispetto alla verticale, si calcola la spinta S' considerando un'inclinazione del terrapieno e della parte pari a

$$\varepsilon' = \varepsilon + \theta$$

$$\beta' = \beta + \theta$$

dove

$$\theta = \text{arctg}(k_h/(1 \pm k_v))$$

essendo k_h il coefficiente sismico orizzontale e k_v il coefficiente sismico verticale, definito in funzione di kh.

In presenza di falda a monte, θ assume le seguenti espressioni:

Terreno a bassa permeabilità

Terreno a permeabilità elevata

Detta S la spinta calcolata in condizioni statiche l'incremento di spinta da applicare è espresso da

dove il coefficiente A vale

In presenza di falda a monte, nel coefficiente A si tiene conto dell'influenza dei pesi di volume nel calcolo di θ.

Adottando il metodo di Mononobe-Okabe per il calcolo della spinta, il coefficiente A viene posto pari a A=1.

Tale incremento di spinta è applicato a metà altezza della parete di spinta nel caso di forma rettangolare del diagramma di incremento sismico, allo stesso punto di applicazione della spinta statica nel caso in cui la forma del diagramma di incremento sismico è uguale a quella del diagramma statico.

Oltre a questo incremento bisogna tener conto delle forze d'inerzia orizzontali e verticali che si destano per effetto del sisma. Tali forze vengono valutate come

dove W è il peso del muro, del terreno soprastante la mensola di monte ed i relativi sovraccarichi e va applicata nel baricentro dei pesi.
Il metodo di Culmann tiene conto automaticamente dell'incremento di spinta. Basta inserire nell'equazione risolutiva la forza d'inerzia del cuneo di spinta. La superficie di rottura nel caso di sisma risulta meno inclinata della corrispondente superficie in assenza di sisma.

8 ANALISI DEI CARICHI

8.1 Peso proprio della struttura e carichi permanenti portati

Peso Proprio del cls 25.00 kN/m^3

Spinta del terreno: *Metodo di Culmann*

8.2 Sovraccarichi accidentali

Per la determinazione dell'incremento di spinta dovuto alla presenza di carico accidentale (eventuale viabilità stradale o di cantiere), si considerano i seguenti carichi a tergo:

q = 10 kN/m^2 (sovraccarico accidentale in condizioni statiche).

8.3 Azione sismica

Le azioni sismiche vengono valutate in base alle accelerazioni massime attese in superficie.

Si fanno le seguenti assunzioni:

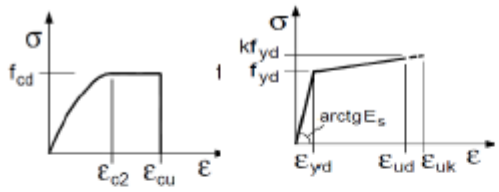
Coordinate area interesse opera	Lat: 42.722922 Long: 12.654026
Vita nominale opera	V_N = 50 anni
Classe d'uso opera	IV→ Cu=2
Vita di riferimento	V_R = VN x Cu = 100 anni
Categoria sottosuolo	C
Categoria topografica	T1

9 CRITERI DI VERIFICA

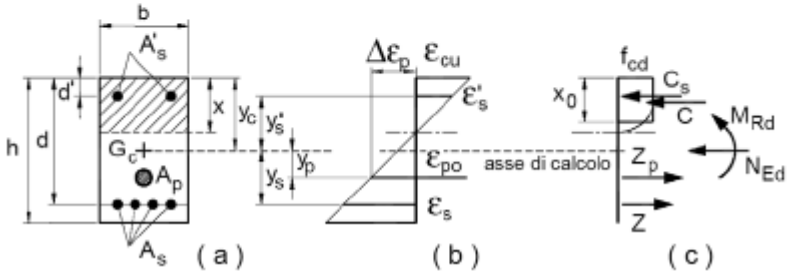
9.1 Criteri di verifica SLU

9.1.1 Verifiche STR a pressoflessione

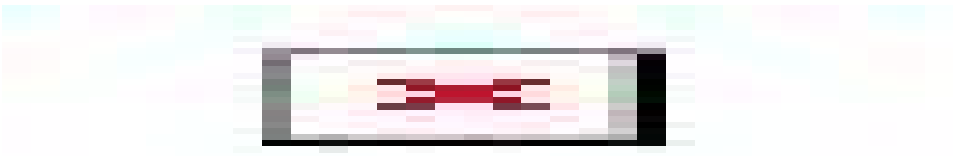
La determinazione della capacità resistente a flessione/pressoflessione della generica sezione viene effettuata con i criteri di cui al punto 4.1.2.1.2.4 delle NTC18, secondo quanto riportato schematicamente nelle figure seguito, tenendo conto dei valori delle resistenze e deformazioni di calcolo riportate al paragrafo dedicato alle caratteristiche dei materiali:



Legami costitutivi Calcestruzzo ed Acciaio -



Schema di riferimento per la valutazione della capacità resistente a pressoflessione generica sezione - La verifica consisterà nel controllare il soddisfacimento della seguente condizione



9.1.2 Verifiche STR a taglio

Per la verifica di resistenza allo SLU con riferimento alle sollecitazioni taglianti deve risultare:

$$V_{Rd} \geq V_{Ed}$$

Il taglio V_{Ed} è pari ai massimi valori del taglio sollecitante derivante dall'analisi per i vari elementi strutturali. Per tutti gli elementi strutturali il massimo taglio si riscontra in corrispondenza della sezione di attacco tra l'elemento stesso e quello ad esso ortogonale.
[NTC – 4.1.2.1.3.1] La resistenza a taglio in assenza di armatura specifica risulta pari a:

$$V_{Rd} = \left\{0.18 \cdot k \cdot \frac{(100 \cdot \rho_l \cdot f_{ck})^{1/3}}{\gamma_c} + 0.15\sigma_{cp}\right\} \cdot b_w \cdot d \geq (v_{min} + 0.15\sigma_{cp}) \cdot b_w \cdot d$$

dove:

- $v_{min} = 0.035 \cdot k^{3/2} \cdot f_{ck}^{1/2}$;
- $k = 1 + (200/d)^{1/2} \leq 2$;
- $\rho_l = A_{sl}/(b_w \cdot d) \leq 0.02$;
- $\sigma_{cp} = N_{Ed}/A_c \leq 0.02 f_{cd}$;
- d è l'altezza utile della sezione (in mm);
- b_w è la larghezza minima della sezione (in mm).

[NTC – 4.1.2.1.3.2] In presenza di armatura resistente a taglio, il taglio resistente V_{Rd} è il minimo tra la resistenza a taglio trazione V_{Rsd} e la resistenza a taglio compressione V_{Rcd}.

$$V_{Rsd} = 0.9 \cdot d \cdot \frac{A_{sw}}{s} \cdot f_{yd}(\operatorname{ctg}\alpha + \operatorname{ctg}\theta)\sin\alpha$$

$$V_{Rcd} = 0.9 \cdot d \cdot b_w \cdot f'_{cd}(\operatorname{ctg}\alpha + \operatorname{ctg}\theta)/(1 + ctg^2\theta)$$

in cui:

- d è l'altezza utile della sezione (in mm);
- b_w è la larghezza minima della sezione (in mm).
- A_{sw} è l'area dell'armatura trasversale;
- s è l'interasse tra due armature trasversali consecutive;
- f'_{cd} è la resistenza a compressione ridotta del calcestruzzo d'anima, pari a 0.5fcd;
- α è l'inclinazione dell'armatura resistente a taglio rispetto all'asse dell'elemento;
- θ è l'inclinazione della biella di calcestruzzo compressa.

9.1.3 Verifiche GEO a ribaltamento

La verifica a ribaltamento consiste nel determinare il momento risultante di tutte le forze che tendono a fare ribaltare il muro (momento ribaltante Mr) ed il momento risultante di tutte le forze che tendono a stabilizzare il muro (momento stabilizzante Ms) rispetto allo spigolo a valle della fondazione e verificare che il rapporto Ms/Mr sia maggiore di un determinato coefficiente di sicurezza η_r.
Eseguendo il calcolo mediante gli eurocodici si può impostare $\eta r \geq 1.0$.
Deve quindi essere verificata la seguente diseguaglianza

Il momento ribaltante Mr è dato dalla componente orizzontale della spinta S, dalle forze di inerzia del muro e del terreno gravante sulla fondazione di monte (caso di presenza di sisma) per i rispettivi bracci. Nel momento stabilizzante interviene il peso del muro (applicato nel baricentro) ed il peso del terreno gravante sulla fondazione di monte. Per quanto riguarda invece la componente verticale della spinta essa sarà stabilizzante se l'angolo d'attrito terra-muro δ è positivo, ribaltante se δ è negativo. δ è positivo quando è il terrapieno che scorre rispetto al muro, negativo quando è il muro che tende a scorrere rispetto al terrapieno (questo può essere il caso di una spalla da ponte gravata da carichi notevoli). Se sono presenti dei tiranti essi contribuiscono al momento stabilizzante.
Questa verifica ha significato solo per fondazione superficiale e non per fondazione su pali.

9.1.4 Verifiche GEO a scorrimento

Per la verifica a scorrimento del muro lungo il piano di fondazione deve risultare che la somma di tutte le forze parallele al piano di posa che tendono a fare scorrere il muro deve essere minore di tutte le forze, parallele al piano di scorrimento, che si oppongono allo scivolamento, secondo un certo coefficiente di sicurezza. La verifica a scorrimento risulta soddisfatta se il rapporto fra la risultante delle forze resistenti allo scivolamento Fr e la risultante delle forze che tendono a fare scorrere il muro Fs risulta maggiore di un determinato coefficiente di sicurezza ηs
Eseguendo il calcolo mediante gli Eurocodici si può impostare $\eta s \geq 1.0$

Le forze che intervengono nella Fs sono la componente della spinta parallela al piano di fondazione e la componente delle forze d'inerzia parallela al piano di fondazione.
La forza resistente è data dalla resistenza d'attrito e dalla resistenza per adesione lungo la base della fondazione. Detta N la componente normale al piano di fondazione del carico totale gravante in fondazione e indicando con ƒl'angolo d'attrito terreno-fondazione, con ca l'adesione terreno-fondazione e con Br la larghezza della fondazione reagente, la forza resistente può esprimersi come:

La Normativa consente di computare, nelle forze resistenti, una aliquota dell'eventuale spinta dovuta al terreno posto a valle del muro. In tal caso, però, il coefficiente di sicurezza deve essere aumentato opportunamente. L'aliquota di spinta passiva che si può considerare ai fini della verifica a scorrimento non può comunque superare il 50 percento.
Per quanto riguarda l'angolo d'attrito terra-fondazione, d_f, diversi autori suggeriscono di assumere un valore di d_f pari all'angolo d'attrito del terreno di fondazione.

9.1.5 Verifiche GEO a carico limite

Il rapporto fra il carico limite in fondazione e la componente normale della risultante dei carichi trasmessi dal muro sul terreno di fondazione deve essere superiore a η_q. Cioè, detto Qu, il carico limite ed R la risultante verticale dei carichi in fondazione, deve essere:

$$\frac{Q_u}{R} \geq \eta_q$$

Eseguendo il calcolo mediante gli Eurocodici si può impostare $\eta_q \geq 1.0$
Si adotta per il calcolo del carico limite in fondazione il metodo di MEYERHOF.
L'espressione del carico ultimo è data dalla relazione:

In questa espressione:

c coesione del terreno in fondazione;

ϕ angolo di attrito del terreno in fondazione;

γ peso di volume del terreno in fondazione;

B larghezza della fondazione;

D profondità del piano di posa;

q pressione geostatica alla quota del piano di posa.

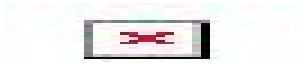
I vari fattori che compaiono nella formula sono dati da:

Indichiamo con K_p il coefficiente di spinta passiva espresso da:

I fattori d e i che compaiono nella formula sono rispettivamente i fattori di profondità ed i fattori di inclinazione del carico espressi dalle seguenti relazioni:

Fattori di Profondità:

per $\phi = 0$



per $\phi > 0$

Fattori di Inclinazione:

per $\phi > 0$

per $\phi = 0$

9.1.6 Verifiche GEO alla stabilità globale

La verifica alla stabilità globale del complesso muro+terreno deve fornire un coefficiente di sicurezza non inferiore a η_g.

Eseguendo il calcolo mediante gli Eurocodici si può impostare $\eta_g \geq 1.0$

Viene usata la tecnica della suddivisione a strisce della superficie di scorrimento da analizzare. La superficie di scorrimento viene supposta circolare e determinata in modo tale da non avere intersezione con il profilo del muro o con i pali di fondazione. Si determina il minimo coefficiente di sicurezza su una maglia di centri di dimensioni 10x10 posta in prossimità della sommità del muro. Il numero di strisce è pari a 50.
Si adotta per la verifica di stabilità globale il metodo di Bishop.

Il coefficiente di sicurezza nel metodo di Bishop si esprime secondo la seguente formula:

$$\eta = \frac{\Sigma_i \left(\frac{c_i b_i + (W_i - u_i b_i) tg\phi_i}{m} \right)}{\Sigma_i W_i sin\alpha_i}$$

dove il termine m è espresso da

$$m = \left(1 + \frac{tg\phi_i tg\alpha_i}{\eta}\right) cos\alpha_i$$

In questa espressione n è il numero delle strisce considerate, bi e ai sono la larghezza e l'inclinazione della base della striscia iesima rispetto all'orizzontale, Wi è il peso della striscia i-esima , ci e fi sono le caratteristiche del terreno (coesione ed angolo di attrito) lungo la base della striscia ed ui è la pressione neutra lungo la base della striscia.
L'espressione del coefficiente di sicurezza di Bishop contiene al secondo membro il termine m che è funzione di . Quindi essa viene risolta per successive approssimazioni assumendo un valore iniziale per da inserire nell'espressione di m ed iterare fin quando il valore calcolato coincide con il valore assunto.

9.2 Criteri di Verifica SLE

La verifica nei confronti degli Stati limite di esercizio, consiste nel controllare, con riferimento alle sollecitazioni di calcolo corrispondenti alle Combinazioni di Esercizio il tasso di Lavoro nei Materiali e l'ampiezza delle fessure attesa, secondo quanto di seguito specificato.

9.2.1 Verifiche alle tensioni

La verifica delle tensioni in esercizio consiste nel controllare il rispetto dei limiti tensionali previsti per il calcestruzzo e per l'acciaio per ciascuna delle combinazioni di carico caratteristiche "Rara" e "Quasi Permanente"; i valori tensionali nei materiali sono valutati secondo le note teorie di analisi delle sezioni in c.a. in campo elastico e con calcestruzzo "non reagente" adottando come limiti di riferimento quelli previsti dalle NTC2018 al §4.1.2.2.5.1:

$\sigma_{c,max} \leq 0{,}60\ f_{ck}$ per combinazione caratteristica [4.1.15]

$\sigma_{c,max} \leq 0{,}45\ f_{ck}$ per combinazione quasi permanente. [4.1.16]

9.2.2 Verifiche a fessurazione

La verifica di fessurazione consiste nel controllare l'ampiezza dell'apertura delle fessure sotto combinazione di carico frequente e combinazione quasi permanente. Le armature di acciaio ordinario sono ritenute poco sensibili [NTC – Tabella 4.1.IV]. In relazione all'aggressività ambientale e alla sensibilità dell'acciaio, l'apertura limite delle fessure è riportato nel prospetto seguente:

Tab. 4.1.IV - *Criteri di scelta dello stato limite di fessurazione*

Gruppi di Esigenze	Condizioni ambientali	Combinazione di azioni	Armatura			
			Sensibile		Poco sensibile	
			Stato limite	w_k	Stato limite	w_k
A	Ordinarie	frequente	apertura fessure	$\leq w_2$	apertura fessure	$\leq w_3$
		quasi permanente	apertura fessure	$\leq w_1$	apertura fessure	$\leq w_2$
B	Aggressive	frequente	apertura fessure	$\leq w_1$	apertura fessure	$\leq w_2$
		quasi permanente	decompressione	-	apertura fessure	$\leq w_1$
C	Molto aggressive	frequente	formazione fessure	-	apertura fessure	$\leq w_1$
		quasi permanente	decompressione	-	apertura fessure	$\leq w_1$

Tabella 4.1.III – *Descrizione delle condizioni ambientali*

CONDIZIONI AMBIENTALI	CLASSE DI ESPOSIZIONE
Ordinarie	X0, XC1, XC2, XC3, XF1
Aggressive	XC4, XD1, XS1, XA1, XA2, XF2, XF3
Molto aggressive	XD2, XD3, XS2, XS3, XA3, XF4

Risultando:

w_1= 0.2 mm
w_2= 0.3 mm
w_3= 0.4 mm

10 COMBINAZIONI DI CARICO

Si distinguono combinazioni di carico di tipo A1-M1 nelle quali vengono incrementati i carichi permanenti e lasciati inalterati i parametri di resistenza del terreno e combinazioni di carico di tipo A2-M2 nelle quali vengono ridotti i parametri di resistenza del terreno e lasciati inalterati i carichi.

Operando in tal modo si ottengono valori delle spinte (azioni) maggiorate e valori di resistenza ridotti e pertanto nelle verifiche globali è possibile fare riferimento a coefficienti di sicurezza unitari.

Norme Tecniche 2018

Simbologia adottata

g_{G1sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti
g_{G1fav}	Coefficiente parziale favorevole sulle azioni permanenti
g_{G2sfav}	Coefficiente parziale sfavorevole sulle azioni permanenti non strutturali
g_{G2fav}	Coefficiente parziale favorevole sulle azioni permanenti non strutturali
g_{Q}	Coefficiente parziale sulle azioni variabili
$g_{anf'}$	Coefficiente parziale di riduzione dell'angolo di attrito drenato
$g_{c'}$	Coefficiente parziale di riduzione della coesione drenata
g_{cu}	Coefficiente parziale di riduzione della coesione non drenata
g_{qu}	Coefficiente parziale di riduzione del carico ultimo

Coefficienti di partecipazione combinazioni statiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	g_{G1fav}	1,00	1,00
Permanenti	Sfavorevole	g_{G1sfav}	1,35	1,00
Permanenti non strutturali	Favorevole	g_{G2fav}	0,00	0,00
Permanenti non strutturali	Sfavorevole	g_{G2sfav}	1,50	1,30
Variabili	Favorevole	g_{Qifav}	0,00	0,00
Variabili	Sfavorevole	g_{Qisfav}	1,50	1,30
Variabili da traffico	Favorevole	g_{Qfav}	0,00	0,00
Variabili da traffico	Sfavorevole	g_{Qsfav}	1,35	1,15

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	g_{tanf}	1,00	1,25
Coesione efficace	$g_{c'}$	1,00	1,25
Resistenza non drenata	g_{cu}	1,00	1,40
Resistenza a compressione uniassiale	g_{qu}	1,00	1,60
Peso dell'unità di volume	g_{g}	1,00	1,00

Coefficienti di partecipazione combinazioni sismiche

Coefficienti parziali per le azioni o per l'effetto delle azioni:

Carichi	*Effetto*		*A1*	*A2*
Permanenti	Favorevole	g_{G1fav}	1,00	1,00
Permanenti	Sfavorevole	g_{G1sfav}	1,00	1,00
Permanenti	Favorevole	g_{G2fav}	0,00	0,00
Permanenti	Sfavorevole	g_{G2sfav}	1,00	1,00
Variabili	Favorevole	g_{Qifav}	0,00	0,00
Variabili	Sfavorevole	g_{Qisfav}	1,00	1,00
Variabili da traffico	Favorevole	g_{Qfav}	0,00	0,00
Variabili da traffico	Sfavorevole	g_{Qsfav}	1,00	1,00

Coefficienti parziali per i parametri geotecnici del terreno:

Parametri		*M1*	*M2*
Tangente dell'angolo di attrito	$g_{tanf'}$	1,00	1,00
Coesione efficace	$g_{c'}$	1,00	1,00
Resistenza non drenata	g_{cu}	1,00	1,00
Resistenza a compressione uniassiale	g_{qu}	1,00	1,00
Peso dell'unità di volume	g_{g}	1,00	1,00

11 ANALISI DELLA SEZIONE DI CALCOLO

11.1 Dati di input

Materiali

Simbologia adottata

n°	Indice materiale
Descr	Descrizione del materiale
Calcestruzzo armato	
C	Classe di resistenza del cls
A	Classe di resistenza dell'acciaio
g	Peso specifico, espresso in [kN/mc]
R_{ck}	Resistenza caratteristica a compressione, espressa in [kPa]
E	Modulo elastico, espresso in [kPa]
n	Coeff. di Poisson
n	Coeff. di omogenizzazione acciaio/cls
ntc	Coeff. di omogenizzazione cls teso/compresso

Calcestruzzo armato

n°	Descr	C	A	g	R_{ck}	E	n	n	ntc
				[kN/mc]	[kPa]	[kPa]			
4	C28/35	C28/35	B450C	24.5170	35000	32587986	0.30	15.00	0.50
5	C32/40	C32/40	B450C	24.5170	40000	33642648	0.30	15.00	0.50

Acciai

Descr	f_{yk}	f_{uk}
	[kPa]	[kPa]
B450C	449936	539963

Geometria profilo terreno a monte del muro

Simbologia adottata
(Sistema di riferimento con origine in testa al muro, ascissa X positiva verso monte, ordinata Y positiva verso l'alto)

n°	numero ordine del punto
X	ascissa del punto espressa in [m]
Y	ordinata del punto espressa in [m]
A	inclinazione del tratto espressa in [°]

n°	X	Y	A
	[m]	[m]	[°]
1	0.00	0.00	0.000
2	15.00	0.00	0.000

Inclinazione terreno a valle del muro rispetto all'orizzontale 0.000 [°]

Geometria muro

Geometria paramento e fondazione

Lunghezza muro	8.80	[m]
Paramento		
Materiale	C32/40	
Altezza paramento	6.48	[m]
Altezza paramento libero	6.48	[m]
Spessore in sommità	0.40	[m]
Spessore all'attacco con la fondazione	1.05	[m]
Inclinazione paramento esterno	0.00	[°]
Inclinazione paramento interno	5.70	[°]

Fondazione

Materiale	C28/35	
Lunghezza mensola di valle	0.50	[m]
Lunghezza mensola di monte	4.10	[m]
Lunghezza totale	5.65	[m]
Inclinazione piano di posa	0.00	[°]
Spessore	1.00	[m]
Spessore magrone	0.00	[m]

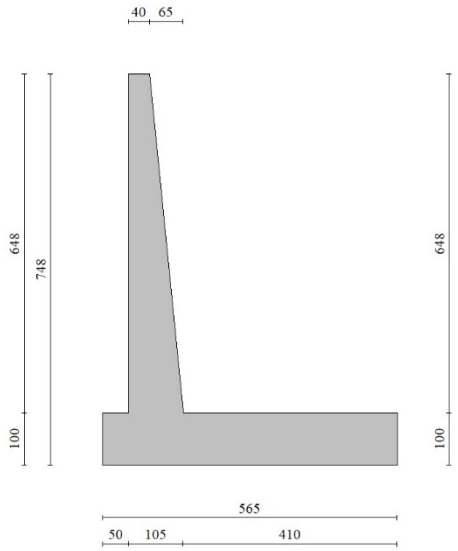


Fig. 1 - Sezione quotata del muro

Descrizione terreni

Parametri di resistenza

Simbologia adottata

n°	Indice del terreno
Descr	Descrizione terreno
g	Peso di volume del terreno espresso in [kN/mc]
g_s	Peso di volume saturo del terreno espresso in [kN/mc]
f	Angolo d'attrito interno espresso in [°]
d	Angolo d'attrito terra-muro espresso in [°]
c	Coesione espressa in [kPa]
c_a	Adesione terra-muro espressa in [kPa]

Per calcolo portanza con il metodo di Bustamante-Doix

Cesp	Coeff. di espansione laterale (solo per il metodo di Bustamante-Doix)
tl	Tensione tangenziale limite, espressa in [kPa]

n°	Descr	g [kN/mc]	g_{sat} [kN/mc]	f [°]	d [°]	c [kPa]	ca [kPa]	Cesp	tl [kPa]	
1	Rilevato	20.0000	20.0000	35.000	23.333	0	0	---	---	
2	Fondazione	18.5000	18.5000	40.000	26.670	0	0	---	---	

Stratigrafia

Simbologia adottata

n°	Indice dello strato
H	Spessore dello strato espresso in [m]
a	Inclinazione espressa in [°]
Terreno	Terreno dello strato

Per calcolo pali (solo se presenti)

Kw	Costante di Winkler orizzontale espressa in Kg/cm²/cm
Ks	Coefficiente di spinta
Cesp	Coefficiente di espansione laterale (per tutti i metodi tranne il metodo di Bustamante-Doix)

Per calcolo della spinta con coeff. di spinta definiti (usati solo se attiva l'opzione 'Usa coeff. di spinta da strato')
Kst_{sta}, Kst_{sis} Coeff. di spinta statico e sismico

n°	H	a	Terreno	Kw	Ks	Cesp	Kst_{sta}	Kst_{sis}
	[m]	[°]		[Kg/cm³]				
1	7.48	0.000	Rilevato	---	---	---	---	---
2	5.00	0.000	Fondazione	---	---	---	---	---

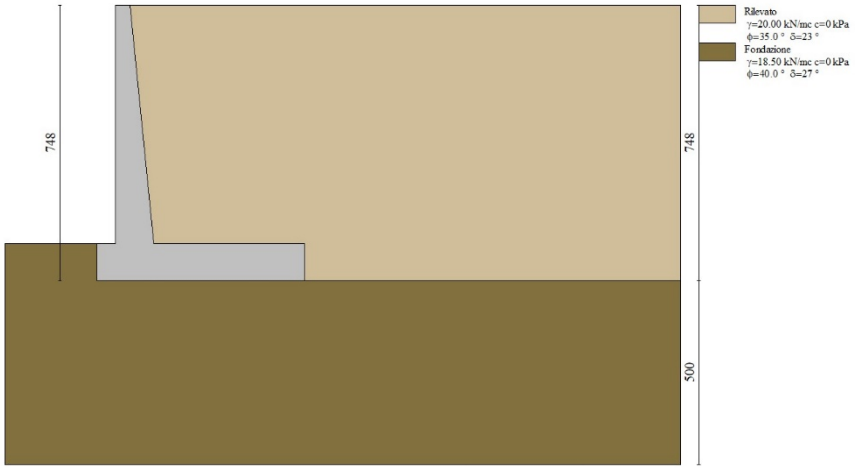


Fig. 2 - Stratigrafia

Condizioni di carico

Simbologia adottata

Carichi verticali positivi verso il basso.
Carichi orizzontali positivi verso sinistra.
Momento positivo senso antiorario.

X	Ascissa del punto di applicazione del carico concentrato espressa in [m]
F_x	Componente orizzontale del carico concentrato espressa in [kN]
F_y	Componente verticale del carico concentrato espressa in [kN]
M	Momento espresso in [kNm]
X_i	Ascissa del punto iniziale del carico ripartito espressa in [m]
X_f	Ascissa del punto finale del carico ripartito espressa in [m]
Q_i	Intensità del carico per $x=X_i$ espressa in [kN]
Q_f	Intensità del carico per $x=X_f$ espressa in [kN]

Condizione n° 1 (Sovraccarico mobile su rilevato) - VARIABILE TF
Coeff. di combinazione $Y_0=0.75$ - $Y_1=0.75$ - $Y_2=0.20$

Carichi sul terreno

n°	Tipo	X	Fx	Fy	M	Xi	Xf	Qi	Qf
		[m]	[kN]	[kN]	[kNm]	[m]	[m]	[kN]	[kN]
1	Distribuito					0.00	15.00	10.0000	10.0000

Normativa

Normativa usata: **Norme Tecniche sulle Costruzioni 2018 (D.M. 17.01.2018) + Circolare C.S.LL.PP. 21/01/2019 n.7**

Coeff. parziali per le azioni o per l'effetto delle azioni

Carichi	Effetto		Combinazioni statiche					Combinazioni sismiche	
			UPL	EQU	A1	A2	EQU	A1	A2
Permanenti strutturali	Favorevoli	$g_{G1,fav}$	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Permanenti strutturali	Sfavorevoli	$g_{G1,sfav}$	1.10	1.30	1.30	1.00	1.00	1.00	1.00

Carichi	Effetto		Combinazioni statiche					Combinazioni sismiche	
			UPL	EQU	A1	A2	EQU	A1	A2
Permanenti non strutturali	Favorevoli	$g_{G2,fav}$	0.80	0.80	0.80	0.80	0.00	0.00	0.00
Permanenti non strutturali	Sfavorevoli	$g_{G2,sfav}$	1.50	1.50	1.50	1.30	1.00	1.00	1.00
Variabili	Favorevoli	$g_{Q,fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili	Sfavorevoli	$g_{Q,sfav}$	1.50	1.50	1.50	1.30	1.00	1.00	1.00
Variabili da traffico	Favorevoli	$g_{QT,fav}$	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variabili da traffico	Sfavorevoli	$g_{QT,sfav}$	1.50	1.35	1.35	1.15	1.00	1.00	1.00

Coeff. parziali per i parametri geotecnici del terreno

Parametro		Combinazioni statiche		Combinazioni sismiche	
		M1	M2	M1	M2
Tangente dell'angolo di attrito	$g_{tan(f')}$	1.00	1.25	1.00	1.00
Coesione efficace	$g_{c'}$	1.00	1.25	1.00	1.00
Resistenza non drenata	g_{cu}	1.00	1.40	1.00	1.00
Peso nell'unita di volume	g_g	1.00	1.00	1.00	1.00

Coeff. parziali g_R per le verifiche agli stati limite ultimi STR e GEO

Verifica	Combinazioni statiche			Combinazioni sismiche		
	R1	R2	R3	R1	R2	R3
Capacità portante	--	--	1.40	--	--	1.20
Scorrimento	--	--	1.10	--	--	1.00
Resistenza terreno a valle	--	--	1.40	--	--	1.20
Ribaltameno	--	--	1.15	--	--	1.00
Stabilità fronte di scavo	--	1.10	--	--	1.20	--

Descrizione combinazioni di carico

Con riferimento alle azioni elementari prima determinate, si sono considerate le seguenti combinazioni di carico:
- Combinazione fondamentale, impiegata per gli stati limite ultimi (SLU):

$$g_{G1}\,G_1 + g_{G2}\,G_2 + g_{Q1}\,Q_{k1} + g_{Q2}\,Q_{k2} + g_{Q3}\,Q_{k3} + \ldots$$

- Combinazione caratteristica, cosiddetta rara, impiegata per gli stati limite di esercizio (SLE) irreversibili:

$$G_1 + G_2 + Q_{k1} + Y_{0,2}\,Q_{k2} + Y_{0,3}\,Q_{k3} + \ldots$$

- Combinazione frequente, impiegata per gli stati limite di esercizio (SLE) reversibili:

$$G_1 + G_2 + Y_{1,1}\,Q_{k1} + Y_{2,2}\,Q_{k2} + Y_{2,3}\,Q_{k3} + \ldots$$

- Combinazione quasi permanente, impiegata per gli effetti di lungo periodo:

$$G_1 + G_2 + Y_{2,1}\,Q_{k1} + Y_{2,2}\,Q_{k2} + Y_{2,3}\,Q_{k3} + \ldots$$

- Combinazione sismica, impiegata per gli stati limite ultimi connessi all'azione sismica E:

$$E + G_1 + G_2 + Y_{2,1}\,Q_{k1} + Y_{2,2}\,Q_{k2} + Y_{2,3}\,Q_{k3} + \ldots$$

I valori dei coeff. $Y_{0,j}$, $Y_{1,j}$, $Y_{2,j}$ sono definiti nelle singole condizioni variabili.
I valori dei coeff. g_G e g_Q, sono definiti nella tabella normativa.

In particolare si sono considerate le seguenti combinazioni:

Simbologia adottata

g	Coefficiente di partecipazione della condizione
Y	Coefficiente di combinazione della condizione

Combinazione n° 1 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole

Combinazione n° 2 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole
Sovraccarico mobile su rilevato	1.35	1.00	Sfavorevole

Combinazione n° 3 - STR (A1-M1-R3) H + V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 4 - STR (A1-M1-R3) H - V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 5 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.30	--	Sfavorevole
Peso terrapieno	1.30	--	Sfavorevole
Spinta terreno	1.30	--	Sfavorevole

Combinazione n° 6 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.30	--	Sfavorevole
Spinta terreno	1.30	--	Sfavorevole

Combinazione n° 7 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.30	--	Sfavorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole

Combinazione n° 8 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.30	--	Sfavorevole
Peso terrapieno	1.30	--	Sfavorevole
Spinta terreno	1.30	--	Sfavorevole
Sovraccarico mobile su rilevato	1.35	1.00	Sfavorevole

Combinazione n° 9 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.30	--	Sfavorevole
Spinta terreno	1.30	--	Sfavorevole
Sovraccarico mobile su rilevato	1.35	1.00	Sfavorevole

Combinazione n° 10 - STR (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.30	--	Sfavorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole
Sovraccarico mobile su rilevato	1.35	1.00	Sfavorevole

Combinazione n° 11 - GEO (A2-M2-R2)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 12 - GEO (A2-M2-R2)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole

Condizione	g	Y	Effetto
Spinta terreno	1.00	--	Sfavorevole
Sovraccarico mobile su rilevato	1.15	1.00	Sfavorevole

Combinazione n° 13 - GEO (A2-M2-R2) H + V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 14 - GEO (A2-M2-R2) H - V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 15 - EQU (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole

Combinazione n° 16 - EQU (A1-M1-R3)

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.30	--	Sfavorevole
Sovraccarico mobile su rilevato	1.35	1.00	Sfavorevole

Combinazione n° 17 - EQU (A1-M1-R3) H + V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 18 - EQU (A1-M1-R3) H - V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Favorevole
Peso terrapieno	1.00	--	Favorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 19 - SLER

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 20 - SLEF

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 21 - SLEQ

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 22 - SLER

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
Sovraccarico mobile su rilevato	1.00	0.75	Sfavorevole

Combinazione n° 23 - SLEF

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
Sovraccarico mobile su rilevato	1.00	0.20	Sfavorevole

Combinazione n° 24 - SLEQ

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole
Sovraccarico mobile su rilevato	1.00	0.20	Sfavorevole

Combinazione n° 25 - SLEQ H + V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Combinazione n° 26 - SLEQ H - V

Condizione	g	Y	Effetto
Peso muro	1.00	--	Sfavorevole
Peso terrapieno	1.00	--	Sfavorevole
Spinta terreno	1.00	--	Sfavorevole

Dati sismici

Vita nominale 50 anni
Classe d'uso IV
Vita di riferimento 100 anni

	Simbolo	U.M.		SLU	SLE
Accelerazione al suolo	a_g	[m/s^2]		2.276	1.020
Accelerazione al suolo	a_g/g	[%]		0.232	0.104
Massimo fattore amplificazione spettro orizzontale	F0			2.469	2.443
Periodo inizio tratto spettro a velocità costante	Tc*			0.329	0.294
Tipo di sottosuolo - Coefficiente stratigrafico	Ss		C	1.356	1.500
Categoria topografica - Coefficiente amplificazione topografica	St		T1	1.000	

Stato limite ...	Coeff. di riduzione b_m	kh [%]	kv [%]
Ultimo	0.380	11.955	5.977
Ultimo - Ribaltamento	0.570	17.932	8.966
Esercizio	0.470	7.330	3.665

Forma diagramma incremento sismico **Stessa forma del diagramma statico**

11.2 Opzioni di calcolo

Spinta

Metodo di calcolo della spinta	Culmann
Tipo di spinta	Spinta attiva
Terreno a bassa permeabilità	NO
Superficie di spinta limitata	NO

Capacità portante

Metodo di calcolo della portanza	Meyerhof
Criterio di media calcolo del terreno equivalente (terreni stratificati)	Ponderata
Criterio di riduzione per eccentricità della portanza	Meyerhof
Criterio di riduzione per rottura locale (punzonamento)	Nessuna
Larghezza fondazione nel terzo termine della formula del carico limite ($0.5B\gamma N_\gamma$)	Larghezza ridotta (B')
Fattori di forma e inclinazione del carico	Fattori di inclinazione e fattori di forma

Se la fondazione ha larghezza superiore a 2.0 m viene applicato il fattore di riduzione per comportamento a piastra

Stabilità globale

Metodo di calcolo della stabilità globale	Bishop

Altro

Partecipazione spinta passiva terreno antistante	0.00
Partecipazione resistenza passiva dente di fondazione	50.00
Componente verticale della spinta nel calcolo delle sollecitazioni	NO
Considera terreno sulla fondazione di valle	NO
Considera spinta e peso acqua fondazione di valle	NO

Spostamenti

Non è stato richiesto il calcolo degli spostamenti

Cedimenti

Non è stato richiesto il calcolo dei cedimenti

Specifiche per le verifiche nelle combinazioni allo Stato Limite Ultimo (SLU)

	SLU	Eccezionale
Coefficiente di sicurezza calcestruzzo a compressione	1.50	1.00
Coefficiente di sicurezza acciaio	1.15	1.00
Fattore di riduzione da resistenza cubica a cilindrica	0.83	0.83
Fattore di riduzione per carichi di lungo periodo	0.85	0.85
Coefficiente di sicurezza per la sezione	1.00	1.00

Specifiche per le verifiche nelle combinazioni allo Stato Limite di Esercizio (SLE)

Paramento e fondazione muro

Verifiche strutturali nelle combinazioni SLD eseguite. Struttura in classe d'uso III o IV

Condizioni ambientali	Aggressive
Armatura ad aderenza migliorata	SI

Verifica a fessurazione

Sensibilità armatura	Poco sensibile
Metodo di calcolo aperture delle fessure	NTC 2018 - CIRCOLARE 21 gennaio 2019, n. 7 C.S.LL.PP.
Calcolo momento fessurazione	Apertura
Resistenza a trazione per	Flessione
Valori limite aperture delle fessure:	w_1=0.20
	w_2=0.30
	w_3=0.40

Verifica delle tensioni

Valori limite delle tensioni nei materiali:

Combinazione	Calcestruzzo	Acciaio
Rara	0.60 f_{ck}	0.80 f_{yk}
Frequente	1.00 f_{ck}	1.00 f_{yk}
Quasi permanente	0.45 f_{ck}	1.00 f_{yk}

11.3 Risultati per combinazione

11.3.1 Spinta e forze

Simbologia adottata

Ic	Indice della combinazione
A	Tipo azione
I	Inclinazione della spinta, espressa in [°]
V	Valore dell'azione, espressa in [kN]
C_X, C_Y	Componente in direzione X ed Y dell'azione, espressa in [kN]
P_X, P_Y	Coordinata X ed Y del punto di applicazione dell'azione, espressa in [m]

Ic	A	V [kN]	I [°]	C_X [kN]	C_Y [kN]	P_X [m]	P_Y [m]
1	Spinta statica	177.78	23.33	163.24	70.41	4.75	-4.99
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	573.27/0.00	2.53	-3.16
2	Spinta statica	202.46	23.33	185.90	80.19	4.75	-4.83
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	637.35/0.00	2.52	-3.15
3	Spinta statica	136.75	23.33	125.57	54.16	4.75	-4.99
	Incremento di spinta sismica		50.08	45.99	19.84	4.75	-4.99
	Peso/Inerzia muro			30.29	253.37/15.14	1.04	-5.50
	Peso/Inerzia terrapieno			68.53	573.27/34.27	2.53	-3.16
4	Spinta statica	136.75	23.33	125.57	54.16	4.75	-4.99
	Incremento di spinta sismica		34.47	31.65	13.65	4.75	-4.99
	Peso/Inerzia muro			30.29	253.37/-15.14	1.04	-5.50
	Peso/Inerzia terrapieno			68.53	573.27/-34.27	2.53	-3.16
5	Spinta statica	177.78	23.33	163.24	70.41	4.75	-4.99
	Peso/Inerzia muro			0.00	329.38/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	745.25/0.00	2.53	-3.16
6	Spinta statica	177.78	23.33	163.24	70.41	4.75	-4.99
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	745.25/0.00	2.53	-3.16
7	Spinta statica	177.78	23.33	163.24	70.41	4.75	-4.99
	Peso/Inerzia muro			0.00	329.38/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	573.27/0.00	2.53	-3.16
8	Spinta statica	202.46	23.33	185.90	80.19	4.75	-4.83
	Peso/Inerzia muro			0.00	329.38/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	809.34/0.00	2.52	-3.16
9	Spinta statica	202.46	23.33	185.90	80.19	4.75	-4.83
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	809.34/0.00	2.52	-3.16
10	Spinta statica	202.46	23.33	185.90	80.19	4.75	-4.83
	Peso/Inerzia muro			0.00	329.38/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	637.35/0.00	2.52	-3.15
19	Spinta statica	136.75	23.33	125.57	54.16	4.75	-4.99
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	573.27/0.00	2.53	-3.16
20	Spinta statica	136.75	23.33	125.57	54.16	4.75	-4.99
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	573.27/0.00	2.53	-3.16
21	Spinta statica	136.75	23.33	125.57	54.16	4.75	-4.99
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	573.27/0.00	2.53	-3.16
22	Spinta statica	150.46	23.33	138.16	59.59	4.75	-4.87
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	608.87/0.00	2.52	-3.16
23	Spinta statica	140.41	23.33	128.92	55.61	4.75	-4.95
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	582.77/0.00	2.53	-3.16
24	Spinta statica	140.41	23.33	128.92	55.61	4.75	-4.95
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	582.77/0.00	2.53	-3.16
25	Spinta statica	136.75	23.33	125.57	54.16	4.75	-4.99
	Incremento di spinta sismica		29.46	27.05	11.67	4.75	-4.99
	Peso/Inerzia muro			18.57	253.37/9.29	1.04	-5.50
	Peso/Inerzia terrapieno			42.02	573.27/21.01	2.53	-3.16

Ic	A	V [kN]	I [°]	C_X [kN]	C_Y [kN]	P_X [m]	P_Y [m]
26	Spinta statica	136.75	23.33	125.57	54.16	4.75	-4.99
	Incremento di spinta sismica		19.59	17.99	7.76	4.75	-4.99
	Peso/Inerzia muro			18.57	253.37/-9.29	1.04	-5.50
	Peso/Inerzia terrapieno			42.02	573.27/-21.01	2.53	-3.16

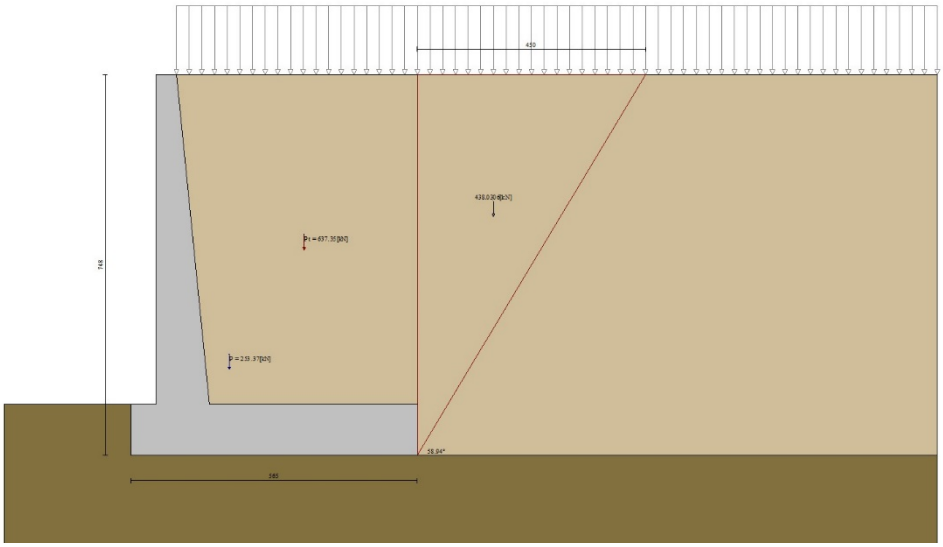


Fig. 3 - Cuneo di spinta (combinazione statica) (Combinazione n° 2)

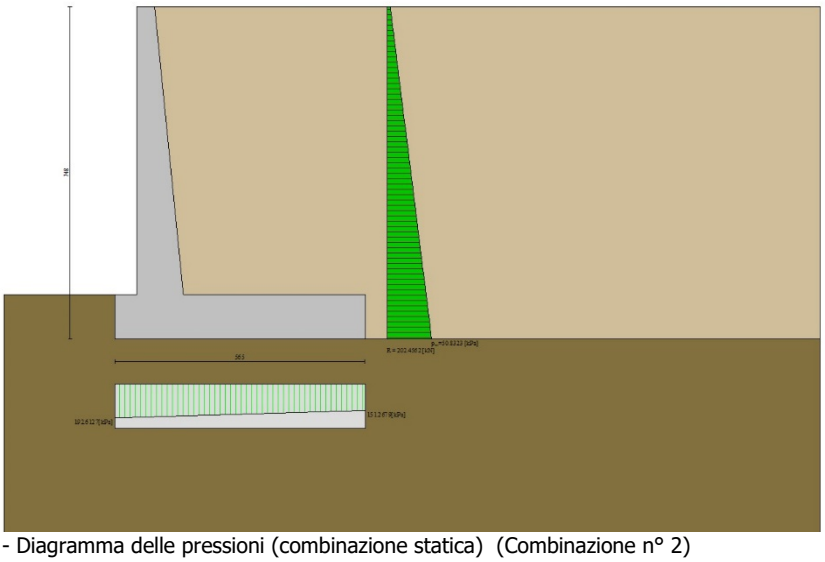


Fig. 4 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 2)

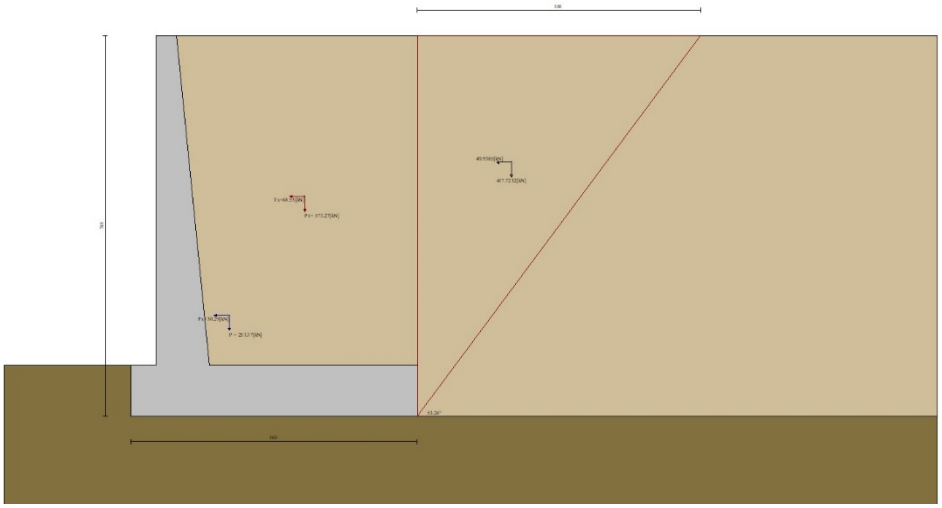


Fig. 5 - Cuneo di spinta (combinazione sismica) (Combinazione n° 3)

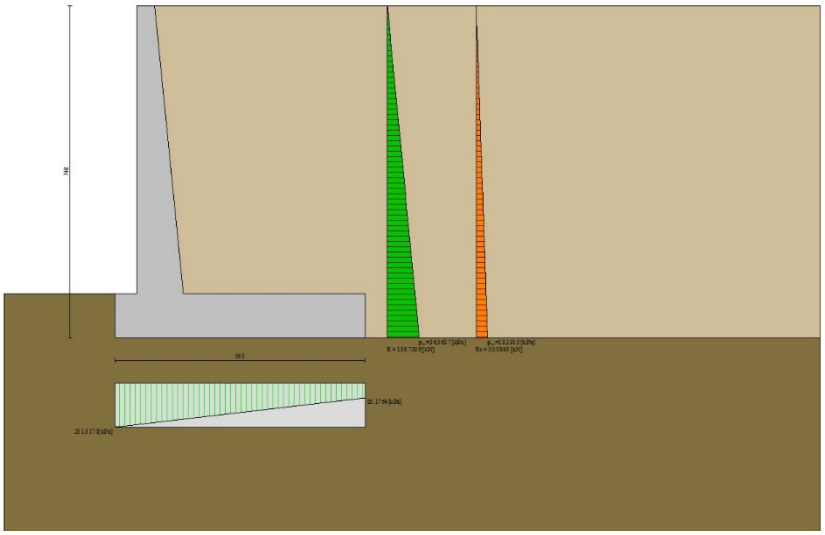


Fig. 6 - Diagramma delle pressioni (combinazione sismica) (Combinazione n° 3)

11.3.2 Risultanti globali

Simbologia adottata

Cmb	Indice/Tipo combinazione
N	Componente normale al piano di posa, espressa in [kN]
T	Componente parallela al piano di posa, espressa in [kN]
M_r	Momento ribaltante, espresso in [kNm]
M_s	Momento stabilizzante, espresso in [kNm]
ecc	Eccentricità risultante, espressa in [m]

Ic	N	T	M_r	M_s	ecc
	[kN]	[kN]	[kNm]	[kNm]	[m]
1 - STR (A1-M1-R3)	897.05	163.24	407.02	2857.27	0.092
2 - STR (A1-M1-R3)	970.91	185.90	491.77	3123.18	0.113
3 - STR (A1-M1-R3)	950.05	270.38	783.65	3024.56	0.465
4 - STR (A1-M1-R3)	845.05	256.04	894.93	2842.61	0.519
5 - STR (A1-M1-R3)	1145.05	163.24	407.02	3595.17	0.039
6 - STR (A1-M1-R3)	1069.04	163.24	407.02	3447.37	-0.021
7 - STR (A1-M1-R3)	973.06	163.24	407.02	3005.07	0.153
8 - STR (A1-M1-R3)	1218.90	185.90	491.77	3861.08	0.059
9 - STR (A1-M1-R3)	1142.89	185.90	491.77	3713.27	0.005
10 - STR (A1-M1-R3)	1046.92	185.90	491.77	3270.98	0.169
11 - GEO (A2-M2-R2)	882.55	162.02	403.99	2775.38	0.136
12 - GEO (A2-M2-R2)	945.74	186.93	497.15	3003.41	0.173
13 - GEO (A2-M2-R2)	950.05	270.38	783.65	3024.56	0.465
14 - GEO (A2-M2-R2)	845.05	256.04	894.93	2842.61	0.519
15 - EQU (A1-M1-R3)	897.05	163.24	407.02	2857.27	0.092
16 - EQU (A1-M1-R3)	970.91	185.90	491.77	3123.18	0.113
17 - EQU (A1-M1-R3)	986.32	346.60	1028.43	3163.37	0.659
18 - EQU (A1-M1-R3)	829.51	326.71	1199.38	2894.39	0.780
19 - SLER	880.80	125.57	313.09	2765.52	0.039
20 - SLEF	880.80	125.57	313.09	2765.52	0.039
21 - SLEQ	880.80	125.57	313.09	2765.52	0.039
22 - SLER	921.84	138.16	360.18	2913.24	0.054
23 - SLEF	891.75	128.92	325.65	2804.91	0.043
24 - SLEQ	891.75	128.92	325.65	2804.91	0.043
25 - SLEQ	922.77	213.21	598.76	2921.56	0.306
26 - SLEQ	858.27	204.15	666.31	2809.33	0.326

11.3.3 Verifiche geotecniche

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

Cmb	Indice/Tipo combinazione
S	Sisma (H: componente orizzontale, V: componente verticale)
FS_{SCO}	Coeff. di sicurezza allo scorrimento
FS_{RIB}	Coeff. di sicurezza al ribaltamento
FS_{QLIM}	Coeff. di sicurezza a carico limite
FS_{STAB}	Coeff. di sicurezza a stabilità globale
FS_{HYD}	Coeff. di sicurezza a sifonamento
FS_{UPL}	Coeff. di sicurezza a sollevamento

Cmb	Sismica	FS_{SCO}	FS_{RIB}	FS_{QLIM}	FS_{STAB}	FS_{HYD}	FS_{UPL}
1 - STR (A1-M1-R3)		2.760		24.530			
2 - STR (A1-M1-R3)		2.623		21.655			
3 - STR (A1-M1-R3)	H + V	1.765		13.581			
4 - STR (A1-M1-R3)	H - V	1.658		14.012			
5 - STR (A1-M1-R3)		3.523		22.746			
6 - STR (A1-M1-R3)		3.290		24.228			
7 - STR (A1-M1-R3)		2.994		22.610			
8 - STR (A1-M1-R3)		3.293		20.311			
9 - STR (A1-M1-R3)		3.088		22.735			
10 - STR (A1-M1-R3)		2.829		20.199			
11 - GEO (A2-M2-R2)					2.073		
12 - GEO (A2-M2-R2)					1.975		
13 - GEO (A2-M2-R2)	H + V				2.057		
14 - GEO (A2-M2-R2)	H - V				2.003		
15 - EQU (A1-M1-R3)			7.020				
16 - EQU (A1-M1-R3)			6.351				
17 - EQU (A1-M1-R3)	H + V		3.076				
18 - EQU (A1-M1-R3)	H - V		2.413				

Verifica a scorrimento fondazione

Simbologia adottata

n°	Indice combinazione
Rsa	Resistenza allo scorrimento per attrito, espresso in [kN]
Rpt	Resistenza passiva terreno antistante, espresso in [kN]
Rps	Resistenza passiva sperone, espresso in [kN]

Rp Resistenza a carichi orizzontali pali (solo per fondazione mista), espresso in [kN]
Rt Resistenza a carichi orizzontali tiranti (solo se presenti), espresso in [kN]
R Resistenza allo scorrimento (somma di Rsa+Rpt+Rps+Rp), espresso in [kN]
T Carico parallelo al piano di posa, espresso in [kN]
FS Fattore di sicurezza (rapporto R/T)

n°	Rsa [kN]	Rpt [kN]	Rps [kN]	Rp [kN]	Rt [kN]	R [kN]	T [kN]	FS
1 - STR (A1-M1-R3)	450.58	0.00	0.00	--	--	450.58	163.24	2.760
2 - STR (A1-M1-R3)	487.68	0.00	0.00	--	--	487.68	185.90	2.623
3 - STR (A1-M1-R3) H + V	477.20	0.00	0.00	--	--	477.20	270.38	1.765
4 - STR (A1-M1-R3) H - V	424.46	0.00	0.00	--	--	424.46	256.04	1.658
5 - STR (A1-M1-R3)	575.15	0.00	0.00	--	--	575.15	163.24	3.523
6 - STR (A1-M1-R3)	536.97	0.00	0.00	--	--	536.97	163.24	3.290
7 - STR (A1-M1-R3)	488.76	0.00	0.00	--	--	488.76	163.24	2.994
8 - STR (A1-M1-R3)	612.24	0.00	0.00	--	--	612.24	185.90	3.293
9 - STR (A1-M1-R3)	574.07	0.00	0.00	--	--	574.07	185.90	3.088
10 - STR (A1-M1-R3)	525.86	0.00	0.00	--	--	525.86	185.90	2.829

Verifica a carico limite

Simbologia adottata

n° Indice combinazione
N Carico normale totale al piano di posa, espresso in [kN]
Qu carico limite del terreno, espresso in [kN]
Qd Portanza di progetto, espresso in [kN]
FS Fattore di sicurezza (rapporto tra il carico limie e carico agente al piano di posa)

n°	N [kN]	Qu [kN]	Qd [kN]	FS
1 - STR (A1-M1-R3)	897.05	22004.43	15717.45	24.530
2 - STR (A1-M1-R3)	970.91	21025.45	15018.18	21.655
3 - STR (A1-M1-R3) H + V	950.05	12902.50	10752.08	13.581
4 - STR (A1-M1-R3) H - V	845.05	11840.44	9867.04	14.012
5 - STR (A1-M1-R3)	1145.05	26045.34	18603.81	22.746
6 - STR (A1-M1-R3)	1069.04	25900.21	18500.15	24.228
7 - STR (A1-M1-R3)	973.06	22001.17	15715.12	22.610
8 - STR (A1-M1-R3)	1218.90	24757.16	17683.69	20.311
9 - STR (A1-M1-R3)	1142.89	25983.79	18559.85	22.735
10 - STR (A1-M1-R3)	1046.92	21146.91	15104.94	20.199

Dettagli calcolo portanza

Simbologia adottata

n° Indice combinazione
Nc, Nq, Ng Fattori di capacità portante
ic, iq, ig Fattori di inclinazione del carico
dc, dq, dg Fattori di profondità del piano di posa
gc, gq, gg Fattori di inclinazione del profilo topografico
bc, bq, bg Fattori di inclinazione del piano di posa
sc, sq, sg Fattori di forma della fondazione
pc, pq, pg Fattori di riduzione per punzonamento secondo Vesic
Re Fattore di riduzione capacità portante per eccentricità secondo Meyerhof
Ir, Irc Indici di rigidezza per punzonamento secondo Vesic
rg Fattori per tener conto dell'effetto piastra. Per fondazioni che hanno larghezza maggiore di 2 m, il terzo termine della formula trinomia 0.5B γN_γ viene moltiplicato per questo fattore
D Affondamento del piano di posa, espresso in [m]
B' Larghezza fondazione ridotta, espresso in [m]
H Altezza del cuneo di rottura, espresso in [m]
g Peso di volume del terreno medio, espresso in [kN/mc]
f Angolo di attrito del terreno medio, espresso in [°]
c Coesione del terreno medio, espresso in [kPa]
Per i coeff. che in tabella sono indicati con il simbolo '--' sono coeff. non presenti nel metodo scelto (Meyerhof).

n°	Nc Nq Ng	ic iq ig	dc dq dg	gc gq gg	bc bq bg	sc sq sg	pc pq pg	Ir	Irc	Re	rg
1	75.313 64.195 93.691	0.784 0.784 0.551	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.872	0.887
2	75.313 64.195 93.691	0.774 0.774 0.531	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.858	0.887
3	75.313 64.195 93.691	0.678 0.678 0.363	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.713	0.887
4	75.313 64.195 93.691	0.660 0.660 0.335	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.697	0.887
5	75.313 64.195 93.691	0.828 0.828 0.635	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.917	0.887

n°	Nc Nq Ng	ic iq ig	dc dq dg	gc gq gg	bc bq bg	sc sq sg	pc pq pg	Ir	Irc	Re	rg
6	75.313 64.195 93.691	0.816 0.816 0.613	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.940	0.887
7	75.313 64.195 93.691	0.800 0.800 0.581	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.835	0.887
8	75.313 64.195 93.691	0.817 0.817 0.613	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.898	0.887
9	75.313 64.195 93.691	0.805 0.805 0.591	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.971	0.887
10	75.313 64.195 93.691	0.789 0.789 0.560	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.827	0.887

n°	D [m]	B' [m]	H [m]	g [°]	f [kN/mc]	c [kPa]
1	1.00	5.65	6.05	18.50	40.00	0
2	1.00	5.65	6.05	18.50	40.00	0
3	1.00	5.65	6.05	18.50	40.00	0
4	1.00	5.65	6.05	18.50	40.00	0
5	1.00	5.65	6.05	18.50	40.00	0
6	1.00	5.65	6.05	18.50	40.00	0
7	1.00	5.65	6.05	18.50	40.00	0
8	1.00	5.65	6.05	18.50	40.00	0
9	1.00	5.65	6.05	18.50	40.00	0
10	1.00	5.65	6.05	18.50	40.00	0

Verifica a ribaltamento

Simbologia adottata

n° Indice combinazione
Ms Momento stabilizzante, espresso in [kNm]
Mr Momento ribaltante, espresso in [kNm]
FS Fattore di sicurezza (rapporto tra momento stabilizzante e momento ribaltante)
La verifica viene eseguita rispetto allo spigolo inferiore esterno della fondazione

n°	Ms [kNm]	Mr [kNm]	FS
15 - EQU (A1-M1-R3)	2857.27	407.02	7.020
16 - EQU (A1-M1-R3)	3123.18	491.77	6.351
17 - EQU (A1-M1-R3) H + V	3163.37	1028.43	3.076
18 - EQU (A1-M1-R3) H - V	2894.39	1199.38	2.413

Verifica stabilità globale muro + terreno

Simbologia adottata

Ic Indice/Tipo combinazione
C Centro superficie di scorrimento, espresso in [m]
R Raggio, espresso in [m]
FS Fattore di sicurezza

Ic	C [m]	R [m]	FS
11 - GEO (A2-M2-R2)	-1.01; 3.02	11.99	2.073
12 - GEO (A2-M2-R2)	-1.51; 4.03	13.11	1.975
13 - GEO (A2-M2-R2) H + V	-1.51; 4.53	13.56	2.057
14 - GEO (A2-M2-R2) H - V	-1.51; 4.53	13.56	2.003

Dettagli strisce verifiche stabilità

Simbologia adottata

Le ascisse X sono considerate positive verso monte
Le ordinate Y sono considerate positive verso l'alto
Origine in testa al muro (spigolo contro terra)
W peso della striscia espresso in [kN]
Qy carico sulla striscia espresso in [kN]
Qf carico acqua sulla striscia espresso in [kN]
a angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario)
f angolo d'attrito del terreno lungo la base della striscia
c coesione del terreno lungo la base della striscia espressa in [kPa]
b larghezza della striscia espressa in [m]
u pressione neutra lungo la base della striscia espressa in [kPa]

Tx; Ty Resistenza al taglio fornita dai tiranti in direzione X ed Y espressa in [kPa]

Combinazione n° 11 - GEO (A2-M2-R2)

n°	W [kN]	Qy [kN]	Qf [kN]	b [m]	a [°]	f [°]	c [kPa]	u [kPa]	Tx; Ty [kN]
1	15.65	0.00	0.00	10.60 - 0.76	69.882	29.256	0	0.0	
2	41.69	0.00	0.00	0.76	61.124	29.256	0	0.0	
3	60.06	0.00	0.00	0.76	54.273	29.256	0	0.0	
4	74.49	0.00	0.00	0.76	48.443	29.256	0	0.0	
5	86.35	0.00	0.00	0.76	43.229	29.256	0	0.0	
6	96.29	0.00	0.00	0.76	38.433	29.256	0	0.0	
7	104.69	0.00	0.00	0.76	33.940	29.256	0	0.0	
8	104.65	0.00	0.00	0.76	29.675	29.256	0	0.0	
9	120.91	0.00	0.00	0.76	25.585	33.873	0	0.0	
10	125.55	0.00	0.00	0.76	21.631	33.873	0	0.0	
11	129.35	0.00	0.00	0.76	17.782	33.873	0	0.0	
12	132.38	0.00	0.00	0.76	14.016	33.873	0	0.0	
13	134.67	0.00	0.00	0.76	10.310	33.873	0	0.0	
14	145.69	0.00	0.00	0.76	6.648	33.873	0	0.0	
15	102.72	0.00	0.00	0.76	3.013	33.873	0	0.0	
16	36.47	0.00	0.00	0.76	-0.609	33.873	0	0.0	
17	35.37	0.00	0.00	0.76	-4.234	33.873	0	0.0	
18	34.25	0.00	0.00	0.76	-7.877	33.873	0	0.0	
19	32.43	0.00	0.00	0.76	-11.552	33.873	0	0.0	
20	29.90	0.00	0.00	0.76	-15.276	33.873	0	0.0	
21	26.62	0.00	0.00	0.76	-19.067	33.873	0	0.0	
22	22.54	0.00	0.00	0.76	-22.948	33.873	0	0.0	
23	17.60	0.00	0.00	0.76	-26.944	33.873	0	0.0	
24	11.43	0.00	0.00	0.76	-31.089	33.873	0	0.0	
25	3.89	0.00	0.00	-8.33 - 0.76	-34.808	33.873	0	0.0	

Combinazione n° 12 - GEO (A2-M2-R2)

n°	W [kN]	Qy [kN]	Qf [kN]	b [m]	a [°]	f [°]	c [kPa]	u [kPa]	Tx; Ty [kN]
1	15.78	9.36	0.00	10.98 - 0.81	67.245	29.256	0	0.0	
2	42.75	9.36	0.00	0.81	59.421	29.256	0	0.0	
3	62.73	9.36	0.00	0.81	52.972	29.256	0	0.0	
4	78.69	9.36	0.00	0.81	47.392	29.256	0	0.0	
5	91.92	9.36	0.00	0.81	42.359	29.256	0	0.0	
6	103.07	9.36	0.00	0.81	37.706	29.256	0	0.0	
7	112.54	9.36	0.00	0.81	33.330	29.256	0	0.0	
8	113.22	9.36	0.00	0.81	29.166	29.256	0	0.0	
9	130.64	9.36	0.00	0.81	25.166	33.873	0	0.0	
10	135.90	9.36	0.00	0.81	21.293	33.873	0	0.0	
11	140.22	9.36	0.00	0.81	17.521	33.873	0	0.0	
12	143.66	9.36	0.00	0.81	13.826	33.873	0	0.0	
13	147.64	9.36	0.00	0.81	10.188	33.873	0	0.0	
14	166.14	4.60	0.00	0.81	6.592	33.873	0	0.0	
15	42.20	0.00	0.00	0.81	3.023	33.873	0	0.0	
16	40.26	0.00	0.00	0.81	-0.536	33.873	0	0.0	
17	39.77	0.00	0.00	0.81	-4.096	33.873	0	0.0	
18	38.51	0.00	0.00	0.81	-7.672	33.873	0	0.0	
19	36.46	0.00	0.00	0.81	-11.279	33.873	0	0.0	
20	33.61	0.00	0.00	0.81	-14.932	33.873	0	0.0	
21	29.91	0.00	0.00	0.81	-18.648	33.873	0	0.0	
22	25.31	0.00	0.00	0.81	-22.448	33.873	0	0.0	
23	19.75	0.00	0.00	0.81	-26.356	33.873	0	0.0	
24	12.87	0.00	0.00	0.81	-30.402	33.873	0	0.0	
25	4.42	0.00	0.00	-9.36 - 0.81	-34.185	33.873	0	0.0	

Combinazione n° 13 - GEO (A2-M2-R2) H + V

n°	W [kN]	Qy [kN]	Qf [kN]	b [m]	a [°]	f [°]	c [kPa]	u [kPa]	Tx; Ty [kN]
1	15.33	0.00	0.00	11.27 - 0.83	65.907	35.000	0	0.0	
2	41.87	0.00	0.00	0.83	58.544	35.000	0	0.0	
3	61.96	0.00	0.00	0.83	52.324	35.000	0	0.0	
4	78.17	0.00	0.00	0.83	46.898	35.000	0	0.0	
5	91.66	0.00	0.00	0.83	41.981	35.000	0	0.0	
6	103.08	0.00	0.00	0.83	37.422	35.000	0	0.0	
7	112.80	0.00	0.00	0.83	33.128	35.000	0	0.0	
8	112.58	0.00	0.00	0.83	29.036	35.000	0	0.0	
9	131.52	0.00	0.00	0.83	25.101	40.000	0	0.0	
10	136.96	0.00	0.00	0.83	21.290	40.000	0	0.0	
11	141.44	0.00	0.00	0.83	17.576	40.000	0	0.0	
12	145.03	0.00	0.00	0.83	13.936	40.000	0	0.0	
13	148.18	0.00	0.00	0.83	10.354	40.000	0	0.0	
14	168.03	0.00	0.00	0.83	6.812	40.000	0	0.0	
15	50.37	0.00	0.00	0.83	3.296	40.000	0	0.0	
16	40.09	0.00	0.00	0.83	-0.207	40.000	0	0.0	
17	39.65	0.00	0.00	0.83	-3.712	40.000	0	0.0	

n°	W	Qy	Qf	b	a	f	c	u	Tx; Ty
	[kN]	[kN]	[kN]	[m]	[°]	[°]	[kPa]	[kPa]	[kN]
18	38.44	0.00	0.00	0.83	-7.230	40.000	0	0.0	
19	36.42	0.00	0.00	0.83	-10.776	40.000	0	0.0	
20	33.59	0.00	0.00	0.83	-14.364	40.000	0	0.0	
21	29.91	0.00	0.00	0.83	-18.011	40.000	0	0.0	
22	25.32	0.00	0.00	0.83	-21.736	40.000	0	0.0	
23	19.76	0.00	0.00	0.83	-25.560	40.000	0	0.0	
24	12.85	0.00	0.00	0.83	-29.512	40.000	0	0.0	
25	4.41	0.00	0.00	-9.43 - 0.83	-33.198	40.000	0	0.0	

Combinazione n° 14 - GEO (A2-M2-R2) H - V

n°	W	Qy	Qf	b	a	f	c	u	Tx; Ty
	[kN]	[kN]	[kN]	[m]	[°]	[°]	[kPa]	[kPa]	[kN]
1	15.33	0.00	0.00	11.27 - 0.83	65.907	35.000	0	0.0	
2	41.87	0.00	0.00	0.83	58.544	35.000	0	0.0	
3	61.96	0.00	0.00	0.83	52.324	35.000	0	0.0	
4	78.17	0.00	0.00	0.83	46.898	35.000	0	0.0	
5	91.66	0.00	0.00	0.83	41.981	35.000	0	0.0	
6	103.08	0.00	0.00	0.83	37.422	35.000	0	0.0	
7	112.80	0.00	0.00	0.83	33.128	35.000	0	0.0	
8	112.58	0.00	0.00	0.83	29.036	35.000	0	0.0	
9	131.52	0.00	0.00	0.83	25.101	40.000	0	0.0	
10	136.96	0.00	0.00	0.83	21.290	40.000	0	0.0	
11	141.44	0.00	0.00	0.83	17.576	40.000	0	0.0	
12	145.03	0.00	0.00	0.83	13.936	40.000	0	0.0	
13	148.18	0.00	0.00	0.83	10.354	40.000	0	0.0	
14	168.03	0.00	0.00	0.83	6.812	40.000	0	0.0	
15	50.37	0.00	0.00	0.83	3.296	40.000	0	0.0	
16	40.09	0.00	0.00	0.83	-0.207	40.000	0	0.0	
17	39.65	0.00	0.00	0.83	-3.712	40.000	0	0.0	
18	38.44	0.00	0.00	0.83	-7.230	40.000	0	0.0	
19	36.42	0.00	0.00	0.83	-10.776	40.000	0	0.0	
20	33.59	0.00	0.00	0.83	-14.364	40.000	0	0.0	
21	29.91	0.00	0.00	0.83	-18.011	40.000	0	0.0	
22	25.32	0.00	0.00	0.83	-21.736	40.000	0	0.0	
23	19.76	0.00	0.00	0.83	-25.560	40.000	0	0.0	
24	12.85	0.00	0.00	0.83	-29.512	40.000	0	0.0	
25	4.41	0.00	0.00	-9.43 - 0.83	-33.198	40.000	0	0.0	

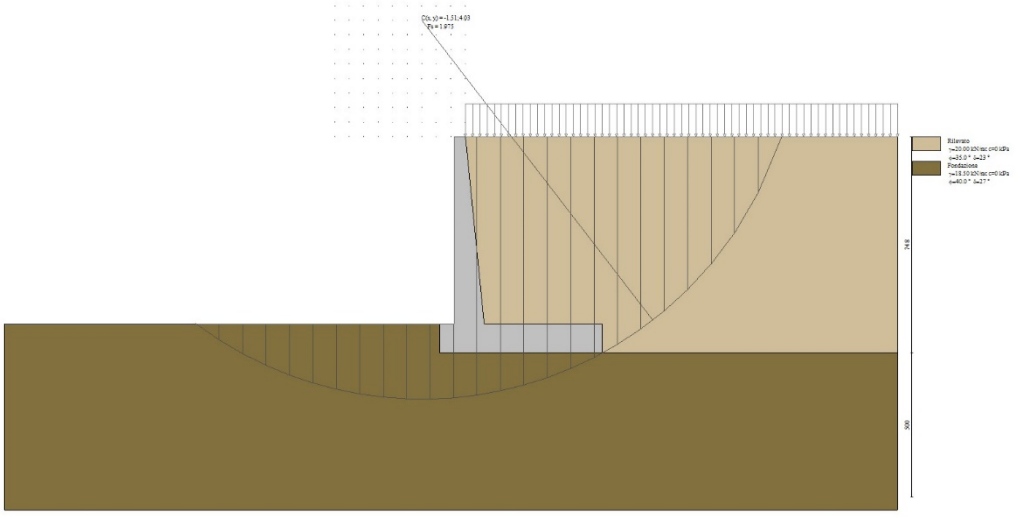


Fig. 7 - Stabilità fronte di scavo - Cerchio critico (Combinazione n° 12)

11.3.4 Sollecitazioni

Elementi calcolati a trave
Simbologia adottata

n° Indice della sezione
X Posizione della sezione, espresso in [m]
N Sforzo normale, espresso in [kN]. Positivo se di compressione.
T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

La posizione delle sezioni di verifica fanno riferimento al sistema di riferimento globale la cui origine è nello spigolo in alto a destra del paramento.

Paramento

Combinazione n° 1 - STR (A1-M1-R3)

n°	X [m]	N [kN]	T [kN]	M [kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.03	0.00
3	-0.20	2.00	0.13	0.02
4	-0.30	3.04	0.29	0.05
5	-0.40	4.11	0.52	0.11
6	-0.50	5.19	0.81	0.20
7	-0.60	6.30	1.17	0.32
8	-0.70	7.44	1.58	0.50
9	-0.80	8.60	2.07	0.72
10	-0.90	9.78	2.62	1.00
11	-1.00	10.99	3.23	1.34
12	-1.10	12.23	3.91	1.75
13	-1.20	13.48	4.65	2.24
14	-1.30	14.76	5.46	2.82
15	-1.40	16.07	6.33	3.48
16	-1.50	17.40	7.27	4.24
17	-1.60	18.76	8.27	5.10
18	-1.69	20.13	9.33	6.08
19	-1.79	21.54	10.46	7.17
20	-1.89	22.97	11.66	8.38
21	-1.99	24.42	12.91	9.72
22	-2.09	25.89	14.24	11.20
23	-2.19	27.39	15.63	12.82
24	-2.29	28.92	17.08	14.59
25	-2.39	30.47	18.60	16.51
26	-2.49	32.04	20.18	18.60
27	-2.59	33.64	21.82	20.86
28	-2.69	35.26	23.53	23.29
29	-2.79	36.91	25.31	25.90
30	-2.89	38.58	27.15	28.71
31	-2.99	40.27	29.05	31.70
32	-3.09	41.99	31.02	34.90
33	-3.19	43.74	33.06	38.31
34	-3.29	45.51	35.15	41.93
35	-3.39	47.30	37.32	45.77
36	-3.49	49.11	39.54	49.84
37	-3.59	50.96	41.84	54.15
38	-3.69	52.82	44.19	58.69
39	-3.79	54.71	46.61	63.49
40	-3.89	56.62	49.10	68.53
41	-3.99	58.56	51.65	73.84
42	-4.09	60.53	54.26	79.42
43	-4.19	62.51	56.94	85.26
44	-4.29	64.52	59.68	91.39
45	-4.39	66.56	62.49	97.81
46	-4.49	68.62	65.37	104.52
47	-4.59	70.70	68.30	111.53
48	-4.69	72.81	71.30	118.84
49	-4.79	74.95	74.37	126.47
50	-4.88	77.10	77.50	134.42
51	-4.98	79.28	80.70	142.69
52	-5.08	81.49	83.96	151.30
53	-5.18	83.72	87.28	160.25
54	-5.28	85.97	90.67	169.54
55	-5.38	88.25	94.13	179.18
56	-5.48	90.56	97.64	189.19
57	-5.58	92.88	101.23	199.55
58	-5.68	95.24	104.87	210.29
59	-5.78	97.61	108.59	221.41
60	-5.88	100.01	112.36	232.92
61	-5.98	102.44	116.20	244.81
62	-6.08	104.89	120.11	257.11
63	-6.18	107.36	124.08	269.81
64	-6.28	109.86	128.11	282.92
65	-6.38	112.38	132.21	296.45

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
66	-6.48	114.93	136.38	310.40

Combinazione n° 2 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.37	0.02
3	-0.20	2.00	0.80	0.09
4	-0.30	3.04	1.30	0.20
5	-0.40	4.11	1.86	0.38
6	-0.50	5.19	2.49	0.62
7	-0.60	6.30	3.18	0.93
8	-0.70	7.44	3.94	1.32
9	-0.80	8.60	4.76	1.79
10	-0.90	9.78	5.64	2.35
11	-1.00	10.99	6.59	3.01
12	-1.10	12.23	7.61	3.78
13	-1.20	13.48	8.69	4.66
14	-1.30	14.76	9.83	5.65
15	-1.40	16.07	11.04	6.76
16	-1.50	17.40	12.31	8.01
17	-1.60	18.76	13.65	9.39
18	-1.69	20.13	15.05	10.92
19	-1.79	21.54	16.51	12.60
20	-1.89	22.97	18.04	14.43
21	-1.99	24.42	19.64	16.42
22	-2.09	25.89	21.30	18.59
23	-2.19	27.39	23.02	20.93
24	-2.29	28.92	24.81	23.45
25	-2.39	30.47	26.66	26.17
26	-2.49	32.04	28.58	29.08
27	-2.59	33.64	30.56	32.19
28	-2.69	35.26	32.61	35.51
29	-2.79	36.91	34.72	39.04
30	-2.89	38.58	36.90	42.80
31	-2.99	40.27	39.14	46.79
32	-3.09	41.99	41.45	51.01
33	-3.19	43.74	43.81	55.47
34	-3.29	45.51	46.25	60.18
35	-3.39	47.30	48.75	65.15
36	-3.49	49.11	51.31	70.37
37	-3.59	50.96	53.94	75.87
38	-3.69	52.82	56.63	81.64
39	-3.79	54.71	59.39	87.69
40	-3.89	56.62	62.21	94.02
41	-3.99	58.56	65.10	100.66
42	-4.09	60.53	68.05	107.59
43	-4.19	62.51	71.06	114.83
44	-4.29	64.52	74.14	122.38
45	-4.39	66.56	77.29	130.26
46	-4.49	68.62	80.50	138.46
47	-4.59	70.70	83.77	146.99
48	-4.69	72.81	87.11	155.86
49	-4.79	74.95	90.51	165.08
50	-4.88	77.10	93.98	174.66
51	-4.98	79.28	97.51	184.59
52	-5.08	81.49	101.11	194.89
53	-5.18	83.72	104.77	205.56
54	-5.28	85.97	108.49	216.62
55	-5.38	88.25	112.28	228.05
56	-5.48	90.56	116.14	239.88
57	-5.58	92.88	120.05	252.11
58	-5.68	95.24	124.04	264.75
59	-5.78	97.61	128.09	277.79
60	-5.88	100.01	132.20	291.26
61	-5.98	102.44	136.38	305.15
62	-6.08	104.89	140.62	319.47
63	-6.18	107.36	144.92	334.23
64	-6.28	109.86	149.30	349.44
65	-6.38	112.38	153.73	365.09
66	-6.48	114.93	158.23	381.21

Combinazione n° 3 - STR (A1-M1-R3) H + V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.05	0.15	0.01
3	-0.20	2.12	0.37	0.04
4	-0.30	3.22	0.67	0.11
5	-0.40	4.35	1.03	0.21

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
6	-0.50	5.50	1.46	0.36
7	-0.60	6.68	1.95	0.56
8	-0.70	7.88	2.52	0.82
9	-0.80	9.11	3.16	1.14
10	-0.90	10.37	3.87	1.54
11	-1.00	11.65	4.65	2.02
12	-1.10	12.96	5.49	2.58
13	-1.20	14.29	6.41	3.25
14	-1.30	15.65	7.40	4.01
15	-1.40	17.03	8.45	4.88
16	-1.50	18.44	9.58	5.86
17	-1.60	19.88	10.77	6.97
18	-1.69	21.34	12.03	8.21
19	-1.79	22.83	13.37	9.59
20	-1.89	24.34	14.77	11.11
21	-1.99	25.88	16.24	12.78
22	-2.09	27.44	17.78	14.60
23	-2.19	29.03	19.39	16.60
24	-2.29	30.65	21.08	18.76
25	-2.39	32.29	22.83	21.11
26	-2.49	33.96	24.65	23.64
27	-2.59	35.65	26.53	26.36
28	-2.69	37.37	28.49	29.28
29	-2.79	39.11	30.52	32.42
30	-2.89	40.89	32.62	35.76
31	-2.99	42.68	34.79	39.33
32	-3.09	44.50	37.02	43.12
33	-3.19	46.35	39.33	47.16
34	-3.29	48.23	41.71	51.43
35	-3.39	50.13	44.15	55.95
36	-3.49	52.05	46.67	60.73
37	-3.59	54.00	49.25	65.78
38	-3.69	55.98	51.90	71.09
39	-3.79	57.98	54.63	76.69
40	-3.89	60.01	57.42	82.56
41	-3.99	62.06	60.28	88.74
42	-4.09	64.14	63.21	95.20
43	-4.19	66.25	66.22	101.98
44	-4.29	68.38	69.29	109.07
45	-4.39	70.54	72.43	116.48
46	-4.49	72.72	75.64	124.21
47	-4.59	74.93	78.92	132.28
48	-4.69	77.16	82.27	140.70
49	-4.79	79.43	85.68	149.46
50	-4.88	81.71	89.17	158.57
51	-4.98	84.02	92.73	168.05
52	-5.08	86.36	96.36	177.90
53	-5.18	88.72	100.05	188.13
54	-5.28	91.11	103.82	198.73
55	-5.38	93.53	107.65	209.73
56	-5.48	95.97	111.56	221.13
57	-5.58	98.44	115.53	232.94
58	-5.68	100.93	119.58	245.15
59	-5.78	103.45	123.69	257.78
60	-5.88	105.99	127.87	270.84
61	-5.98	108.56	132.13	284.34
62	-6.08	111.16	136.45	298.27
63	-6.18	113.78	140.84	312.65
64	-6.28	116.42	145.30	327.49
65	-6.38	119.10	149.83	342.78
66	-6.48	121.80	154.43	358.55

Combinazione n° 4 - STR (A1-M1-R3) H - V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.93	0.15	0.01
3	-0.20	1.88	0.36	0.04
4	-0.30	2.86	0.64	0.10
5	-0.40	3.86	0.98	0.20
6	-0.50	4.88	1.38	0.34
7	-0.60	5.93	1.85	0.53
8	-0.70	6.99	2.38	0.77
9	-0.80	8.09	2.98	1.07
10	-0.90	9.20	3.64	1.45
11	-1.00	10.34	4.36	1.89
12	-1.10	11.49	5.15	2.42
13	-1.20	12.68	6.00	3.03
14	-1.30	13.88	6.91	3.74
15	-1.40	15.11	7.89	4.55
16	-1.50	16.36	8.93	5.47
17	-1.60	17.63	10.04	6.50

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
18	-1.69	18.93	11.21	7.65
19	-1.79	20.25	12.44	8.92
20	-1.89	21.59	13.74	10.33
21	-1.99	22.96	15.10	11.88
22	-2.09	24.35	16.52	13.57
23	-2.19	25.76	18.01	15.42
24	-2.29	27.19	19.56	17.42
25	-2.39	28.65	21.18	19.59
26	-2.49	30.13	22.86	21.93
27	-2.59	31.63	24.60	24.45
28	-2.69	33.15	26.41	27.16
29	-2.79	34.70	28.28	30.05
30	-2.89	36.27	30.22	33.14
31	-2.99	37.87	32.21	36.44
32	-3.09	39.48	34.28	39.94
33	-3.19	41.12	36.40	43.67
34	-3.29	42.79	38.59	47.61
35	-3.39	44.47	40.85	51.79
36	-3.49	46.18	43.17	56.20
37	-3.59	47.91	45.55	60.86
38	-3.69	49.66	47.99	65.76
39	-3.79	51.44	50.50	70.92
40	-3.89	53.24	53.07	76.35
41	-3.99	55.06	55.71	82.04
42	-4.09	56.91	58.41	88.00
43	-4.19	58.78	61.18	94.25
44	-4.29	60.67	64.00	100.79
45	-4.39	62.58	66.89	107.62
46	-4.49	64.52	69.85	114.75
47	-4.59	66.48	72.87	122.19
48	-4.69	68.46	75.95	129.94
49	-4.79	70.47	79.10	138.02
50	-4.88	72.49	82.31	146.42
51	-4.98	74.55	85.59	155.15
52	-5.08	76.62	88.92	164.23
53	-5.18	78.72	92.33	173.65
54	-5.28	80.84	95.79	183.42
55	-5.38	82.98	99.32	193.55
56	-5.48	85.14	102.91	204.05
57	-5.58	87.33	106.57	214.92
58	-5.68	89.54	110.29	226.17
59	-5.78	91.78	114.08	237.81
60	-5.88	94.03	117.93	249.83
61	-5.98	96.31	121.84	262.26
62	-6.08	98.62	125.82	275.09
63	-6.18	100.94	129.86	288.33
64	-6.28	103.29	133.96	301.98
65	-6.38	105.66	138.13	316.07
66	-6.48	108.06	142.36	330.58

Combinazione n° 5 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.29	0.03	0.00
3	-0.20	2.61	0.13	0.02
4	-0.30	3.96	0.29	0.06
5	-0.40	5.34	0.52	0.12
6	-0.50	6.75	0.81	0.22
7	-0.60	8.19	1.17	0.35
8	-0.70	9.67	1.58	0.53
9	-0.80	11.18	2.07	0.77
10	-0.90	12.72	2.62	1.06
11	-1.00	14.29	3.23	1.42
12	-1.10	15.89	3.91	1.85
13	-1.20	17.53	4.65	2.36
14	-1.30	19.19	5.46	2.95
15	-1.40	20.89	6.33	3.64
16	-1.50	22.62	7.27	4.42
17	-1.60	24.38	8.27	5.31
18	-1.69	26.18	9.33	6.32
19	-1.79	28.00	10.46	7.44
20	-1.89	29.86	11.66	8.68
21	-1.99	31.74	12.91	10.06
22	-2.09	33.66	14.24	11.58
23	-2.19	35.61	15.63	13.24
24	-2.29	37.59	17.08	15.05
25	-2.39	39.61	18.60	17.02
26	-2.49	41.65	20.18	19.15
27	-2.59	43.73	21.82	21.46
28	-2.69	45.84	23.53	23.94
29	-2.79	47.98	25.31	26.61

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
30	-2.89	50.15	27.15	29.47
31	-2.99	52.36	29.05	32.52
32	-3.09	54.59	31.02	35.78
33	-3.19	56.86	33.06	39.25
34	-3.29	59.16	35.15	42.94
35	-3.39	61.49	37.32	46.85
36	-3.49	63.85	39.54	51.00
37	-3.59	66.24	41.84	55.38
38	-3.69	68.67	44.19	60.00
39	-3.79	71.12	46.61	64.87
40	-3.89	73.61	49.10	70.00
41	-3.99	76.13	51.65	75.40
42	-4.09	78.68	54.26	81.06
43	-4.19	81.27	56.94	87.00
44	-4.29	83.88	59.68	93.22
45	-4.39	86.53	62.49	99.74
46	-4.49	89.21	65.37	106.55
47	-4.59	91.92	68.30	113.66
48	-4.69	94.66	71.30	121.08
49	-4.79	97.43	74.37	128.82
50	-4.88	100.23	77.50	136.88
51	-4.98	103.07	80.70	145.27
52	-5.08	105.94	83.96	154.00
53	-5.18	108.84	87.28	163.07
54	-5.28	111.77	90.67	172.49
55	-5.38	114.73	94.13	182.26
56	-5.48	117.72	97.64	192.40
57	-5.58	120.75	101.23	202.90
58	-5.68	123.81	104.87	213.79
59	-5.78	126.90	108.59	225.05
60	-5.88	130.02	112.36	236.70
61	-5.98	133.17	116.20	248.75
62	-6.08	136.35	120.11	261.20
63	-6.18	139.57	124.08	274.05
64	-6.28	142.81	128.11	287.33
65	-6.38	146.09	132.21	301.02
66	-6.48	149.40	136.38	315.14

Combinazione n° 6 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.03	0.00
3	-0.20	2.00	0.13	0.02
4	-0.30	3.04	0.29	0.05
5	-0.40	4.11	0.52	0.11
6	-0.50	5.19	0.81	0.20
7	-0.60	6.30	1.17	0.32
8	-0.70	7.44	1.58	0.50
9	-0.80	8.60	2.07	0.72
10	-0.90	9.78	2.62	1.00
11	-1.00	10.99	3.23	1.34
12	-1.10	12.23	3.91	1.75
13	-1.20	13.48	4.65	2.24
14	-1.30	14.76	5.46	2.82
15	-1.40	16.07	6.33	3.48
16	-1.50	17.40	7.27	4.24
17	-1.60	18.76	8.27	5.10
18	-1.69	20.13	9.33	6.08
19	-1.79	21.54	10.46	7.17
20	-1.89	22.97	11.66	8.38
21	-1.99	24.42	12.91	9.72
22	-2.09	25.89	14.24	11.20
23	-2.19	27.39	15.63	12.82
24	-2.29	28.92	17.08	14.59
25	-2.39	30.47	18.60	16.51
26	-2.49	32.04	20.18	18.60
27	-2.59	33.64	21.82	20.86
28	-2.69	35.26	23.53	23.29
29	-2.79	36.91	25.31	25.90
30	-2.89	38.58	27.15	28.71
31	-2.99	40.27	29.05	31.70
32	-3.09	41.99	31.02	34.90
33	-3.19	43.74	33.06	38.31
34	-3.29	45.51	35.15	41.93
35	-3.39	47.30	37.32	45.77
36	-3.49	49.11	39.54	49.84
37	-3.59	50.96	41.84	54.15
38	-3.69	52.82	44.19	58.69
39	-3.79	54.71	46.61	63.49
40	-3.89	56.62	49.10	68.53
41	-3.99	58.56	51.65	73.84

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
42	-4.09	60.53	54.26	79.42
43	-4.19	62.51	56.94	85.26
44	-4.29	64.52	59.68	91.39
45	-4.39	66.56	62.49	97.81
46	-4.49	68.62	65.37	104.52
47	-4.59	70.70	68.30	111.53
48	-4.69	72.81	71.30	118.84
49	-4.79	74.95	74.37	126.47
50	-4.88	77.10	77.50	134.42
51	-4.98	79.28	80.70	142.69
52	-5.08	81.49	83.96	151.30
53	-5.18	83.72	87.28	160.25
54	-5.28	85.97	90.67	169.54
55	-5.38	88.25	94.13	179.18
56	-5.48	90.56	97.64	189.19
57	-5.58	92.88	101.23	199.55
58	-5.68	95.24	104.87	210.29
59	-5.78	97.61	108.59	221.41
60	-5.88	100.01	112.36	232.92
61	-5.98	102.44	116.20	244.81
62	-6.08	104.89	120.11	257.11
63	-6.18	107.36	124.08	269.81
64	-6.28	109.86	128.11	282.92
65	-6.38	112.38	132.21	296.45
66	-6.48	114.93	136.38	310.40

Combinazione n° 7 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.29	0.03	0.00
3	-0.20	2.61	0.13	0.02
4	-0.30	3.96	0.29	0.06
5	-0.40	5.34	0.52	0.12
6	-0.50	6.75	0.81	0.22
7	-0.60	8.19	1.17	0.35
8	-0.70	9.67	1.58	0.53
9	-0.80	11.18	2.07	0.77
10	-0.90	12.72	2.62	1.06
11	-1.00	14.29	3.23	1.42
12	-1.10	15.89	3.91	1.85
13	-1.20	17.53	4.65	2.36
14	-1.30	19.19	5.46	2.95
15	-1.40	20.89	6.33	3.64
16	-1.50	22.62	7.27	4.42
17	-1.60	24.38	8.27	5.31
18	-1.69	26.18	9.33	6.32
19	-1.79	28.00	10.46	7.44
20	-1.89	29.86	11.66	8.68
21	-1.99	31.74	12.91	10.06
22	-2.09	33.66	14.24	11.58
23	-2.19	35.61	15.63	13.24
24	-2.29	37.59	17.08	15.05
25	-2.39	39.61	18.60	17.02
26	-2.49	41.65	20.18	19.15
27	-2.59	43.73	21.82	21.46
28	-2.69	45.84	23.53	23.94
29	-2.79	47.98	25.31	26.61
30	-2.89	50.15	27.15	29.47
31	-2.99	52.36	29.05	32.52
32	-3.09	54.59	31.02	35.78
33	-3.19	56.86	33.06	39.25
34	-3.29	59.16	35.15	42.94
35	-3.39	61.49	37.32	46.85
36	-3.49	63.85	39.54	51.00
37	-3.59	66.24	41.84	55.38
38	-3.69	68.67	44.19	60.00
39	-3.79	71.12	46.61	64.87
40	-3.89	73.61	49.10	70.00
41	-3.99	76.13	51.65	75.40
42	-4.09	78.68	54.26	81.06
43	-4.19	81.27	56.94	87.00
44	-4.29	83.88	59.68	93.22
45	-4.39	86.53	62.49	99.74
46	-4.49	89.21	65.37	106.55
47	-4.59	91.92	68.30	113.66
48	-4.69	94.66	71.30	121.08
49	-4.79	97.43	74.37	128.82
50	-4.88	100.23	77.50	136.88
51	-4.98	103.07	80.70	145.27
52	-5.08	105.94	83.96	154.00
53	-5.18	108.84	87.28	163.07

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
54	-5.28	111.77	90.67	172.49
55	-5.38	114.73	94.13	182.26
56	-5.48	117.72	97.64	192.40
57	-5.58	120.75	101.23	202.90
58	-5.68	123.81	104.87	213.79
59	-5.78	126.90	108.59	225.05
60	-5.88	130.02	112.36	236.70
61	-5.98	133.17	116.20	248.75
62	-6.08	136.35	120.11	261.20
63	-6.18	139.57	124.08	274.05
64	-6.28	142.81	128.11	287.33
65	-6.38	146.09	132.21	301.02
66	-6.48	149.40	136.38	315.14

Combinazione n° 8 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.29	0.37	0.02
3	-0.20	2.61	0.80	0.09
4	-0.30	3.96	1.30	0.21
5	-0.40	5.34	1.86	0.39
6	-0.50	6.75	2.49	0.64
7	-0.60	8.19	3.18	0.96
8	-0.70	9.67	3.94	1.35
9	-0.80	11.18	4.76	1.84
10	-0.90	12.72	5.64	2.42
11	-1.00	14.29	6.59	3.09
12	-1.10	15.89	7.61	3.88
13	-1.20	17.53	8.69	4.77
14	-1.30	19.19	9.83	5.78
15	-1.40	20.89	11.04	6.92
16	-1.50	22.62	12.31	8.19
17	-1.60	24.38	13.65	9.61
18	-1.69	26.18	15.05	11.16
19	-1.79	28.00	16.51	12.87
20	-1.89	29.86	18.04	14.73
21	-1.99	31.74	19.64	16.76
22	-2.09	33.66	21.30	18.97
23	-2.19	35.61	23.02	21.35
24	-2.29	37.59	24.81	23.91
25	-2.39	39.61	26.66	26.67
26	-2.49	41.65	28.58	29.63
27	-2.59	43.73	30.56	32.79
28	-2.69	45.84	32.61	36.16
29	-2.79	47.98	34.72	39.75
30	-2.89	50.15	36.90	43.56
31	-2.99	52.36	39.14	47.61
32	-3.09	54.59	41.45	51.89
33	-3.19	56.86	43.81	56.42
34	-3.29	59.16	46.25	61.19
35	-3.39	61.49	48.75	66.23
36	-3.49	63.85	51.31	71.53
37	-3.59	66.24	53.94	77.10
38	-3.69	68.67	56.63	82.94
39	-3.79	71.12	59.39	89.07
40	-3.89	73.61	62.21	95.49
41	-3.99	76.13	65.10	102.21
42	-4.09	78.68	68.05	109.23
43	-4.19	81.27	71.06	116.56
44	-4.29	83.88	74.14	124.21
45	-4.39	86.53	77.29	132.18
46	-4.49	89.21	80.50	140.49
47	-4.59	91.92	83.77	149.12
48	-4.69	94.66	87.11	158.10
49	-4.79	97.43	90.51	167.44
50	-4.88	100.23	93.98	177.12
51	-4.98	103.07	97.51	187.17
52	-5.08	105.94	101.11	197.59
53	-5.18	108.84	104.77	208.39
54	-5.28	111.77	108.49	219.57
55	-5.38	114.73	112.28	231.13
56	-5.48	117.72	116.14	243.10
57	-5.58	120.75	120.05	255.46
58	-5.68	123.81	124.04	268.24
59	-5.78	126.90	128.09	281.43
60	-5.88	130.02	132.20	295.04
61	-5.98	133.17	136.38	309.08
62	-6.08	136.35	140.62	323.56
63	-6.18	139.57	144.92	338.48
64	-6.28	142.81	149.30	353.85
65	-6.38	146.09	153.73	369.67

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
66	-6.48	149.40	158.23	385.95

Combinazione n° 9 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.37	0.02
3	-0.20	2.00	0.80	0.09
4	-0.30	3.04	1.30	0.20
5	-0.40	4.11	1.86	0.38
6	-0.50	5.19	2.49	0.62
7	-0.60	6.30	3.18	0.93
8	-0.70	7.44	3.94	1.32
9	-0.80	8.60	4.76	1.79
10	-0.90	9.78	5.64	2.35
11	-1.00	10.99	6.59	3.01
12	-1.10	12.23	7.61	3.78
13	-1.20	13.48	8.69	4.66
14	-1.30	14.76	9.83	5.65
15	-1.40	16.07	11.04	6.76
16	-1.50	17.40	12.31	8.01
17	-1.60	18.76	13.65	9.39
18	-1.69	20.13	15.05	10.92
19	-1.79	21.54	16.51	12.60
20	-1.89	22.97	18.04	14.43
21	-1.99	24.42	19.64	16.42
22	-2.09	25.89	21.30	18.59
23	-2.19	27.39	23.02	20.93
24	-2.29	28.92	24.81	23.45
25	-2.39	30.47	26.66	26.17
26	-2.49	32.04	28.58	29.08
27	-2.59	33.64	30.56	32.19
28	-2.69	35.26	32.61	35.51
29	-2.79	36.91	34.72	39.04
30	-2.89	38.58	36.90	42.80
31	-2.99	40.27	39.14	46.79
32	-3.09	41.99	41.45	51.01
33	-3.19	43.74	43.81	55.47
34	-3.29	45.51	46.25	60.18
35	-3.39	47.30	48.75	65.15
36	-3.49	49.11	51.31	70.37
37	-3.59	50.96	53.94	75.87
38	-3.69	52.82	56.63	81.64
39	-3.79	54.71	59.39	87.69
40	-3.89	56.62	62.21	94.02
41	-3.99	58.56	65.10	100.66
42	-4.09	60.53	68.05	107.59
43	-4.19	62.51	71.06	114.83
44	-4.29	64.52	74.14	122.38
45	-4.39	66.56	77.29	130.26
46	-4.49	68.62	80.50	138.46
47	-4.59	70.70	83.77	146.99
48	-4.69	72.81	87.11	155.86
49	-4.79	74.95	90.51	165.08
50	-4.88	77.10	93.98	174.66
51	-4.98	79.28	97.51	184.59
52	-5.08	81.49	101.11	194.89
53	-5.18	83.72	104.77	205.56
54	-5.28	85.97	108.49	216.62
55	-5.38	88.25	112.28	228.05
56	-5.48	90.56	116.14	239.88
57	-5.58	92.88	120.05	252.11
58	-5.68	95.24	124.04	264.75
59	-5.78	97.61	128.09	277.79
60	-5.88	100.01	132.20	291.26
61	-5.98	102.44	136.38	305.15
62	-6.08	104.89	140.62	319.47
63	-6.18	107.36	144.92	334.23
64	-6.28	109.86	149.30	349.44
65	-6.38	112.38	153.73	365.09
66	-6.48	114.93	158.23	381.21

Combinazione n° 10 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.29	0.37	0.02
3	-0.20	2.61	0.80	0.09
4	-0.30	3.96	1.30	0.21
5	-0.40	5.34	1.86	0.39

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
6	-0.50	6.75	2.49	0.64
7	-0.60	8.19	3.18	0.96
8	-0.70	9.67	3.94	1.35
9	-0.80	11.18	4.76	1.84
10	-0.90	12.72	5.64	2.42
11	-1.00	14.29	6.59	3.09
12	-1.10	15.89	7.61	3.88
13	-1.20	17.53	8.69	4.77
14	-1.30	19.19	9.83	5.78
15	-1.40	20.89	11.04	6.92
16	-1.50	22.62	12.31	8.19
17	-1.60	24.38	13.65	9.61
18	-1.69	26.18	15.05	11.16
19	-1.79	28.00	16.51	12.87
20	-1.89	29.86	18.04	14.73
21	-1.99	31.74	19.64	16.76
22	-2.09	33.66	21.30	18.97
23	-2.19	35.61	23.02	21.35
24	-2.29	37.59	24.81	23.91
25	-2.39	39.61	26.66	26.67
26	-2.49	41.65	28.58	29.63
27	-2.59	43.73	30.56	32.79
28	-2.69	45.84	32.61	36.16
29	-2.79	47.98	34.72	39.75
30	-2.89	50.15	36.90	43.56
31	-2.99	52.36	39.14	47.61
32	-3.09	54.59	41.45	51.89
33	-3.19	56.86	43.81	56.42
34	-3.29	59.16	46.25	61.19
35	-3.39	61.49	48.75	66.23
36	-3.49	63.85	51.31	71.53
37	-3.59	66.24	53.94	77.10
38	-3.69	68.67	56.63	82.94
39	-3.79	71.12	59.39	89.07
40	-3.89	73.61	62.21	95.49
41	-3.99	76.13	65.10	102.21
42	-4.09	78.68	68.05	109.23
43	-4.19	81.27	71.06	116.56
44	-4.29	83.88	74.14	124.21
45	-4.39	86.53	77.29	132.18
46	-4.49	89.21	80.50	140.49
47	-4.59	91.92	83.77	149.12
48	-4.69	94.66	87.11	158.10
49	-4.79	97.43	90.51	167.44
50	-4.88	100.23	93.98	177.12
51	-4.98	103.07	97.51	187.17
52	-5.08	105.94	101.11	197.59
53	-5.18	108.84	104.77	208.39
54	-5.28	111.77	108.49	219.57
55	-5.38	114.73	112.28	231.13
56	-5.48	117.72	116.14	243.10
57	-5.58	120.75	120.05	255.46
58	-5.68	123.81	124.04	268.24
59	-5.78	126.90	128.09	281.43
60	-5.88	130.02	132.20	295.04
61	-5.98	133.17	136.38	309.08
62	-6.08	136.35	140.62	323.56
63	-6.18	139.57	144.92	338.48
64	-6.28	142.81	149.30	353.85
65	-6.38	146.09	153.73	369.67
66	-6.48	149.40	158.23	385.95

Combinazione n° 19 - SLER

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.03	0.00
3	-0.20	2.00	0.10	0.02
4	-0.30	3.04	0.23	0.04
5	-0.40	4.11	0.40	0.09
6	-0.50	5.19	0.62	0.17
7	-0.60	6.30	0.90	0.27
8	-0.70	7.44	1.22	0.41
9	-0.80	8.60	1.59	0.59
10	-0.90	9.78	2.01	0.81
11	-1.00	10.99	2.49	1.09
12	-1.10	12.23	3.01	1.42
13	-1.20	13.48	3.58	1.81
14	-1.30	14.76	4.20	2.27
15	-1.40	16.07	4.87	2.80
16	-1.50	17.40	5.59	3.40
17	-1.60	18.76	6.36	4.09

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
18	-1.69	20.13	7.18	4.86
19	-1.79	21.54	8.05	5.72
20	-1.89	22.97	8.97	6.68
21	-1.99	24.42	9.93	7.74
22	-2.09	25.89	10.95	8.91
23	-2.19	27.39	12.02	10.18
24	-2.29	28.92	13.14	11.58
25	-2.39	30.47	14.30	13.09
26	-2.49	32.04	15.52	14.73
27	-2.59	33.64	16.79	16.51
28	-2.69	35.26	18.10	18.42
29	-2.79	36.91	19.47	20.47
30	-2.89	38.58	20.88	22.67
31	-2.99	40.27	22.35	25.02
32	-3.09	41.99	23.86	27.53
33	-3.19	43.74	25.43	30.20
34	-3.29	45.51	27.04	33.03
35	-3.39	47.30	28.70	36.04
36	-3.49	49.11	30.42	39.23
37	-3.59	50.96	32.18	42.60
38	-3.69	52.82	33.99	46.15
39	-3.79	54.71	35.86	49.90
40	-3.89	56.62	37.77	53.85
41	-3.99	58.56	39.73	58.00
42	-4.09	60.53	41.74	62.35
43	-4.19	62.51	43.80	66.92
44	-4.29	64.52	45.91	71.71
45	-4.39	66.56	48.07	76.72
46	-4.49	68.62	50.28	81.96
47	-4.59	70.70	52.54	87.43
48	-4.69	72.81	54.85	93.14
49	-4.79	74.95	57.21	99.09
50	-4.88	77.10	59.62	105.29
51	-4.98	79.28	62.07	111.75
52	-5.08	81.49	64.58	118.46
53	-5.18	83.72	67.14	125.44
54	-5.28	85.97	69.75	132.68
55	-5.38	88.25	72.40	140.20
56	-5.48	90.56	75.11	148.00
57	-5.58	92.88	77.87	156.08
58	-5.68	95.24	80.67	164.45
59	-5.78	97.61	83.53	173.11
60	-5.88	100.01	86.43	182.08
61	-5.98	102.44	89.39	191.34
62	-6.08	104.89	92.39	200.92
63	-6.18	107.36	95.45	210.81
64	-6.28	109.86	98.55	221.02
65	-6.38	112.38	101.70	231.56
66	-6.48	114.93	104.91	242.42

Combinazione n° 20 - SLEF

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.03	0.00
3	-0.20	2.00	0.10	0.02
4	-0.30	3.04	0.23	0.04
5	-0.40	4.11	0.40	0.09
6	-0.50	5.19	0.62	0.17
7	-0.60	6.30	0.90	0.27
8	-0.70	7.44	1.22	0.41
9	-0.80	8.60	1.59	0.59
10	-0.90	9.78	2.01	0.81
11	-1.00	10.99	2.49	1.09
12	-1.10	12.23	3.01	1.42
13	-1.20	13.48	3.58	1.81
14	-1.30	14.76	4.20	2.27
15	-1.40	16.07	4.87	2.80
16	-1.50	17.40	5.59	3.40
17	-1.60	18.76	6.36	4.09
18	-1.69	20.13	7.18	4.86
19	-1.79	21.54	8.05	5.72
20	-1.89	22.97	8.97	6.68
21	-1.99	24.42	9.93	7.74
22	-2.09	25.89	10.95	8.91
23	-2.19	27.39	12.02	10.18
24	-2.29	28.92	13.14	11.58
25	-2.39	30.47	14.30	13.09
26	-2.49	32.04	15.52	14.73
27	-2.59	33.64	16.79	16.51
28	-2.69	35.26	18.10	18.42
29	-2.79	36.91	19.47	20.47

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
30	-2.89	38.58	20.88	22.67
31	-2.99	40.27	22.35	25.02
32	-3.09	41.99	23.86	27.53
33	-3.19	43.74	25.43	30.20
34	-3.29	45.51	27.04	33.03
35	-3.39	47.30	28.70	36.04
36	-3.49	49.11	30.42	39.23
37	-3.59	50.96	32.18	42.60
38	-3.69	52.82	33.99	46.15
39	-3.79	54.71	35.86	49.90
40	-3.89	56.62	37.77	53.85
41	-3.99	58.56	39.73	58.00
42	-4.09	60.53	41.74	62.35
43	-4.19	62.51	43.80	66.92
44	-4.29	64.52	45.91	71.71
45	-4.39	66.56	48.07	76.72
46	-4.49	68.62	50.28	81.96
47	-4.59	70.70	52.54	87.43
48	-4.69	72.81	54.85	93.14
49	-4.79	74.95	57.21	99.09
50	-4.88	77.10	59.62	105.29
51	-4.98	79.28	62.07	111.75
52	-5.08	81.49	64.58	118.46
53	-5.18	83.72	67.14	125.44
54	-5.28	85.97	69.75	132.68
55	-5.38	88.25	72.40	140.20
56	-5.48	90.56	75.11	148.00
57	-5.58	92.88	77.87	156.08
58	-5.68	95.24	80.67	164.45
59	-5.78	97.61	83.53	173.11
60	-5.88	100.01	86.43	182.08
61	-5.98	102.44	89.39	191.34
62	-6.08	104.89	92.39	200.92
63	-6.18	107.36	95.45	210.81
64	-6.28	109.86	98.55	221.02
65	-6.38	112.38	101.70	231.56
66	-6.48	114.93	104.91	242.42

Combinazione n° 21 - SLEQ

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.03	0.00
3	-0.20	2.00	0.10	0.02
4	-0.30	3.04	0.23	0.04
5	-0.40	4.11	0.40	0.09
6	-0.50	5.19	0.62	0.17
7	-0.60	6.30	0.90	0.27
8	-0.70	7.44	1.22	0.41
9	-0.80	8.60	1.59	0.59
10	-0.90	9.78	2.01	0.81
11	-1.00	10.99	2.49	1.09
12	-1.10	12.23	3.01	1.42
13	-1.20	13.48	3.58	1.81
14	-1.30	14.76	4.20	2.27
15	-1.40	16.07	4.87	2.80
16	-1.50	17.40	5.59	3.40
17	-1.60	18.76	6.36	4.09
18	-1.69	20.13	7.18	4.86
19	-1.79	21.54	8.05	5.72
20	-1.89	22.97	8.97	6.68
21	-1.99	24.42	9.93	7.74
22	-2.09	25.89	10.95	8.91
23	-2.19	27.39	12.02	10.18
24	-2.29	28.92	13.14	11.58
25	-2.39	30.47	14.30	13.09
26	-2.49	32.04	15.52	14.73
27	-2.59	33.64	16.79	16.51
28	-2.69	35.26	18.10	18.42
29	-2.79	36.91	19.47	20.47
30	-2.89	38.58	20.88	22.67
31	-2.99	40.27	22.35	25.02
32	-3.09	41.99	23.86	27.53
33	-3.19	43.74	25.43	30.20
34	-3.29	45.51	27.04	33.03
35	-3.39	47.30	28.70	36.04
36	-3.49	49.11	30.42	39.23
37	-3.59	50.96	32.18	42.60
38	-3.69	52.82	33.99	46.15
39	-3.79	54.71	35.86	49.90
40	-3.89	56.62	37.77	53.85
41	-3.99	58.56	39.73	58.00

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
42	-4.09	60.53	41.74	62.35
43	-4.19	62.51	43.80	66.92
44	-4.29	64.52	45.91	71.71
45	-4.39	66.56	48.07	76.72
46	-4.49	68.62	50.28	81.96
47	-4.59	70.70	52.54	87.43
48	-4.69	72.81	54.85	93.14
49	-4.79	74.95	57.21	99.09
50	-4.88	77.10	59.62	105.29
51	-4.98	79.28	62.07	111.75
52	-5.08	81.49	64.58	118.46
53	-5.18	83.72	67.14	125.44
54	-5.28	85.97	69.75	132.68
55	-5.38	88.25	72.40	140.20
56	-5.48	90.56	75.11	148.00
57	-5.58	92.88	77.87	156.08
58	-5.68	95.24	80.67	164.45
59	-5.78	97.61	83.53	173.11
60	-5.88	100.01	86.43	182.08
61	-5.98	102.44	89.39	191.34
62	-6.08	104.89	92.39	200.92
63	-6.18	107.36	95.45	210.81
64	-6.28	109.86	98.55	221.02
65	-6.38	112.38	101.70	231.56
66	-6.48	114.93	104.91	242.42

Combinazione n° 22 - SLER

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.21	0.01
3	-0.20	2.00	0.47	0.05
4	-0.30	3.04	0.79	0.13
5	-0.40	4.11	1.15	0.24
6	-0.50	5.19	1.56	0.40
7	-0.60	6.30	2.02	0.61
8	-0.70	7.44	2.53	0.87
9	-0.80	8.60	3.09	1.19
10	-0.90	9.78	3.69	1.57
11	-1.00	10.99	4.35	2.02
12	-1.10	12.23	5.06	2.55
13	-1.20	13.48	5.82	3.15
14	-1.30	14.76	6.63	3.84
15	-1.40	16.07	7.48	4.62
16	-1.50	17.40	8.39	5.50
17	-1.60	18.76	9.35	6.47
18	-1.69	20.13	10.35	7.55
19	-1.79	21.54	11.41	8.74
20	-1.89	22.97	12.51	10.04
21	-1.99	24.42	13.67	11.46
22	-2.09	25.89	14.87	13.01
23	-2.19	27.39	16.13	14.69
24	-2.29	28.92	17.43	16.50
25	-2.39	30.47	18.79	18.45
26	-2.49	32.04	20.19	20.55
27	-2.59	33.64	21.64	22.80
28	-2.69	35.26	23.15	25.20
29	-2.79	36.91	24.70	27.77
30	-2.89	38.58	26.30	30.50
31	-2.99	40.27	27.95	33.40
32	-3.09	41.99	29.65	36.47
33	-3.19	43.74	31.40	39.73
34	-3.29	45.51	33.21	43.17
35	-3.39	47.30	35.06	46.80
36	-3.49	49.11	36.96	50.63
37	-3.59	50.96	38.91	54.66
38	-3.69	52.82	40.90	58.90
39	-3.79	54.71	42.95	63.35
40	-3.89	56.62	45.05	68.01
41	-3.99	58.56	47.20	72.89
42	-4.09	60.53	49.40	78.01
43	-4.19	62.51	51.65	83.35
44	-4.29	64.52	53.94	88.93
45	-4.39	66.56	56.29	94.75
46	-4.49	68.62	58.69	100.81
47	-4.59	70.70	61.13	107.13
48	-4.69	72.81	63.63	113.71
49	-4.79	74.95	66.17	120.55
50	-4.88	77.10	68.77	127.65
51	-4.98	79.28	71.41	135.03
52	-5.08	81.49	74.11	142.68
53	-5.18	83.72	76.85	150.61

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
54	-5.28	85.97	79.65	158.84
55	-5.38	88.25	82.49	167.35
56	-5.48	90.56	85.38	176.16
57	-5.58	92.88	88.33	185.28
58	-5.68	95.24	91.32	194.70
59	-5.78	97.61	94.36	204.44
60	-5.88	100.01	97.45	214.49
61	-5.98	102.44	100.59	224.86
62	-6.08	104.89	103.79	235.57
63	-6.18	107.36	107.03	246.60
64	-6.28	109.86	110.32	257.98
65	-6.38	112.38	113.66	269.69
66	-6.48	114.93	117.05	281.76

Combinazione n° 23 - SLEF

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.07	0.01
3	-0.20	2.00	0.20	0.03
4	-0.30	3.04	0.38	0.07
5	-0.40	4.11	0.60	0.13
6	-0.50	5.19	0.87	0.23
7	-0.60	6.30	1.20	0.36
8	-0.70	7.44	1.57	0.53
9	-0.80	8.60	1.99	0.75
10	-0.90	9.78	2.46	1.02
11	-1.00	10.99	2.98	1.34
12	-1.10	12.23	3.55	1.72
13	-1.20	13.48	4.18	2.17
14	-1.30	14.76	4.85	2.69
15	-1.40	16.07	5.57	3.29
16	-1.50	17.40	6.34	3.96
17	-1.60	18.76	7.16	4.72
18	-1.69	20.13	8.02	5.58
19	-1.79	21.54	8.94	6.53
20	-1.89	22.97	9.91	7.58
21	-1.99	24.42	10.93	8.73
22	-2.09	25.89	12.00	10.00
23	-2.19	27.39	13.12	11.38
24	-2.29	28.92	14.28	12.89
25	-2.39	30.47	15.50	14.52
26	-2.49	32.04	16.77	16.28
27	-2.59	33.64	18.08	18.18
28	-2.69	35.26	19.45	20.23
29	-2.79	36.91	20.86	22.41
30	-2.89	38.58	22.33	24.75
31	-2.99	40.27	23.84	27.25
32	-3.09	41.99	25.41	29.91
33	-3.19	43.74	27.02	32.74
34	-3.29	45.51	28.68	35.74
35	-3.39	47.30	30.40	38.91
36	-3.49	49.11	32.16	42.27
37	-3.59	50.96	33.97	45.81
38	-3.69	52.82	35.84	49.55
39	-3.79	54.71	37.75	53.49
40	-3.89	56.62	39.71	57.62
41	-3.99	58.56	41.72	61.97
42	-4.09	60.53	43.78	66.53
43	-4.19	62.51	45.89	71.30
44	-4.29	64.52	48.05	76.30
45	-4.39	66.56	50.26	81.53
46	-4.49	68.62	52.52	86.99
47	-4.59	70.70	54.83	92.68
48	-4.69	72.81	57.19	98.62
49	-4.79	74.95	59.60	104.81
50	-4.88	77.10	62.06	111.26
51	-4.98	79.28	64.57	117.96
52	-5.08	81.49	67.12	124.92
53	-5.18	83.72	69.73	132.15
54	-5.28	85.97	72.39	139.66
55	-5.38	88.25	75.09	147.44
56	-5.48	90.56	77.85	155.51
57	-5.58	92.88	80.66	163.87
58	-5.68	95.24	83.51	172.52
59	-5.78	97.61	86.42	181.47
60	-5.88	100.01	89.37	190.72
61	-5.98	102.44	92.38	200.28
62	-6.08	104.89	95.43	210.16
63	-6.18	107.36	98.53	220.36
64	-6.28	109.86	101.69	230.88
65	-6.38	112.38	104.89	241.73

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
66	-6.48	114.93	108.14	252.91

Combinazione n° 24 - SLEQ

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.99	0.07	0.01
3	-0.20	2.00	0.20	0.03
4	-0.30	3.04	0.38	0.07
5	-0.40	4.11	0.60	0.13
6	-0.50	5.19	0.87	0.23
7	-0.60	6.30	1.20	0.36
8	-0.70	7.44	1.57	0.53
9	-0.80	8.60	1.99	0.75
10	-0.90	9.78	2.46	1.02
11	-1.00	10.99	2.98	1.34
12	-1.10	12.23	3.55	1.72
13	-1.20	13.48	4.18	2.17
14	-1.30	14.76	4.85	2.69
15	-1.40	16.07	5.57	3.29
16	-1.50	17.40	6.34	3.96
17	-1.60	18.76	7.16	4.72
18	-1.69	20.13	8.02	5.58
19	-1.79	21.54	8.94	6.53
20	-1.89	22.97	9.91	7.58
21	-1.99	24.42	10.93	8.73
22	-2.09	25.89	12.00	10.00
23	-2.19	27.39	13.12	11.38
24	-2.29	28.92	14.28	12.89
25	-2.39	30.47	15.50	14.52
26	-2.49	32.04	16.77	16.28
27	-2.59	33.64	18.08	18.18
28	-2.69	35.26	19.45	20.23
29	-2.79	36.91	20.86	22.41
30	-2.89	38.58	22.33	24.75
31	-2.99	40.27	23.84	27.25
32	-3.09	41.99	25.41	29.91
33	-3.19	43.74	27.02	32.74
34	-3.29	45.51	28.68	35.74
35	-3.39	47.30	30.40	38.91
36	-3.49	49.11	32.16	42.27
37	-3.59	50.96	33.97	45.81
38	-3.69	52.82	35.84	49.55
39	-3.79	54.71	37.75	53.49
40	-3.89	56.62	39.71	57.62
41	-3.99	58.56	41.72	61.97
42	-4.09	60.53	43.78	66.53
43	-4.19	62.51	45.89	71.30
44	-4.29	64.52	48.05	76.30
45	-4.39	66.56	50.26	81.53
46	-4.49	68.62	52.52	86.99
47	-4.59	70.70	54.83	92.68
48	-4.69	72.81	57.19	98.62
49	-4.79	74.95	59.60	104.81
50	-4.88	77.10	62.06	111.26
51	-4.98	79.28	64.57	117.96
52	-5.08	81.49	67.12	124.92
53	-5.18	83.72	69.73	132.15
54	-5.28	85.97	72.39	139.66
55	-5.38	88.25	75.09	147.44
56	-5.48	90.56	77.85	155.51
57	-5.58	92.88	80.66	163.87
58	-5.68	95.24	83.51	172.52
59	-5.78	97.61	86.42	181.47
60	-5.88	100.01	89.37	190.72
61	-5.98	102.44	92.38	200.28
62	-6.08	104.89	95.43	210.16
63	-6.18	107.36	98.53	220.36
64	-6.28	109.86	101.69	230.88
65	-6.38	112.38	104.89	241.73
66	-6.48	114.93	108.14	252.91

Combinazione n° 25 - SLEQ_H + V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	1.03	0.10	0.01
3	-0.20	2.08	0.27	0.03
4	-0.30	3.15	0.49	0.08
5	-0.40	4.26	0.78	0.16

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
6	-0.50	5.38	1.13	0.28
7	-0.60	6.53	1.54	0.45
8	-0.70	7.71	2.01	0.66
9	-0.80	8.91	2.54	0.92
10	-0.90	10.14	3.13	1.25
11	-1.00	11.40	3.79	1.65
12	-1.10	12.67	4.51	2.13
13	-1.20	13.98	5.28	2.68
14	-1.30	15.31	6.12	3.32
15	-1.40	16.66	7.02	4.05
16	-1.50	18.04	7.99	4.89
17	-1.60	19.44	9.01	5.83
18	-1.69	20.87	10.09	6.88
19	-1.79	22.33	11.24	8.05
20	-1.89	23.81	12.45	9.35
21	-1.99	25.31	13.72	10.77
22	-2.09	26.84	15.05	12.33
23	-2.19	28.40	16.44	14.04
24	-2.29	29.98	17.89	15.90
25	-2.39	31.59	19.41	17.91
26	-2.49	33.22	20.98	20.08
27	-2.59	34.87	22.62	22.42
28	-2.69	36.55	24.32	24.94
29	-2.79	38.26	26.08	27.64
30	-2.89	39.99	27.90	30.52
31	-2.99	41.75	29.78	33.60
32	-3.09	43.53	31.73	36.88
33	-3.19	45.34	33.74	40.36
34	-3.29	47.17	35.80	44.06
35	-3.39	49.03	37.93	47.97
36	-3.49	50.91	40.12	52.11
37	-3.59	52.82	42.37	56.48
38	-3.69	54.76	44.69	61.09
39	-3.79	56.72	47.06	65.94
40	-3.89	58.70	49.50	71.04
41	-3.99	60.71	51.99	76.39
42	-4.09	62.74	54.55	82.01
43	-4.19	64.80	57.17	87.90
44	-4.29	66.89	59.85	94.06
45	-4.39	69.00	62.60	100.50
46	-4.49	71.13	65.40	107.23
47	-4.59	73.30	68.27	114.25
48	-4.69	75.48	71.19	121.57
49	-4.79	77.69	74.18	129.20
50	-4.88	79.93	77.23	137.14
51	-4.98	82.19	80.34	145.39
52	-5.08	84.48	83.51	153.97
53	-5.18	86.79	86.75	162.89
54	-5.28	89.13	90.04	172.14
55	-5.38	91.49	93.40	181.73
56	-5.48	93.88	96.82	191.67
57	-5.58	96.29	100.30	201.97
58	-5.68	98.73	103.84	212.63
59	-5.78	101.19	107.44	223.66
60	-5.88	103.68	111.11	235.06
61	-5.98	106.19	114.83	246.84
62	-6.08	108.73	118.62	259.02
63	-6.18	111.29	122.47	271.58
64	-6.28	113.88	126.38	284.54
65	-6.38	116.50	130.35	297.91
66	-6.48	119.14	134.38	311.69

Combinazione n° 26 - SLEQ_H - V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	0.00	0.00	0.00	0.00
2	-0.10	0.95	0.10	0.01
3	-0.20	1.93	0.26	0.03
4	-0.30	2.93	0.48	0.08
5	-0.40	3.95	0.75	0.16
6	-0.50	5.00	1.08	0.27
7	-0.60	6.07	1.47	0.43
8	-0.70	7.17	1.92	0.63
9	-0.80	8.28	2.43	0.88
10	-0.90	9.43	2.99	1.20
11	-1.00	10.59	3.61	1.57
12	-1.10	11.78	4.29	2.02
13	-1.20	12.99	5.02	2.55
14	-1.30	14.22	5.82	3.15
15	-1.40	15.48	6.67	3.85
16	-1.50	16.76	7.58	4.64
17	-1.60	18.07	8.55	5.53

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
18	-1.69	19.40	9.57	6.53
19	-1.79	20.75	10.66	7.63
20	-1.89	22.12	11.80	8.86
21	-1.99	23.52	13.00	10.21
22	-2.09	24.94	14.25	11.69
23	-2.19	26.39	15.57	13.30
24	-2.29	27.86	16.94	15.06
25	-2.39	29.35	18.37	16.96
26	-2.49	30.87	19.86	19.01
27	-2.59	32.41	21.40	21.23
28	-2.69	33.97	23.01	23.60
29	-2.79	35.56	24.67	26.15
30	-2.89	37.17	26.39	28.88
31	-2.99	38.80	28.16	31.78
32	-3.09	40.45	30.00	34.88
33	-3.19	42.13	31.89	38.17
34	-3.29	43.84	33.84	41.66
35	-3.39	45.56	35.85	45.35
36	-3.49	47.31	37.91	49.26
37	-3.59	49.09	40.04	53.39
38	-3.69	50.89	42.22	57.74
39	-3.79	52.71	44.46	62.31
40	-3.89	54.55	46.75	67.13
41	-3.99	56.42	49.11	72.18
42	-4.09	58.31	51.52	77.48
43	-4.19	60.22	53.99	83.03
44	-4.29	62.16	56.52	88.85
45	-4.39	64.12	59.10	94.92
46	-4.49	66.10	61.75	101.27
47	-4.59	68.11	64.45	107.89
48	-4.69	70.14	67.21	114.80
49	-4.79	72.20	70.03	122.00
50	-4.88	74.28	72.90	129.48
51	-4.98	76.38	75.83	137.27
52	-5.08	78.50	78.82	145.37
53	-5.18	80.65	81.87	153.77
54	-5.28	82.82	84.98	162.49
55	-5.38	85.02	88.14	171.54
56	-5.48	87.24	91.36	180.92
57	-5.58	89.48	94.64	190.63
58	-5.68	91.75	97.98	200.68
59	-5.78	94.03	101.38	211.08
60	-5.88	96.35	104.83	221.83
61	-5.98	98.68	108.34	232.94
62	-6.08	101.04	111.91	244.42
63	-6.18	103.42	115.54	256.26
64	-6.28	105.83	119.22	268.48
65	-6.38	108.26	122.96	281.09
66	-6.48	110.71	126.76	294.08

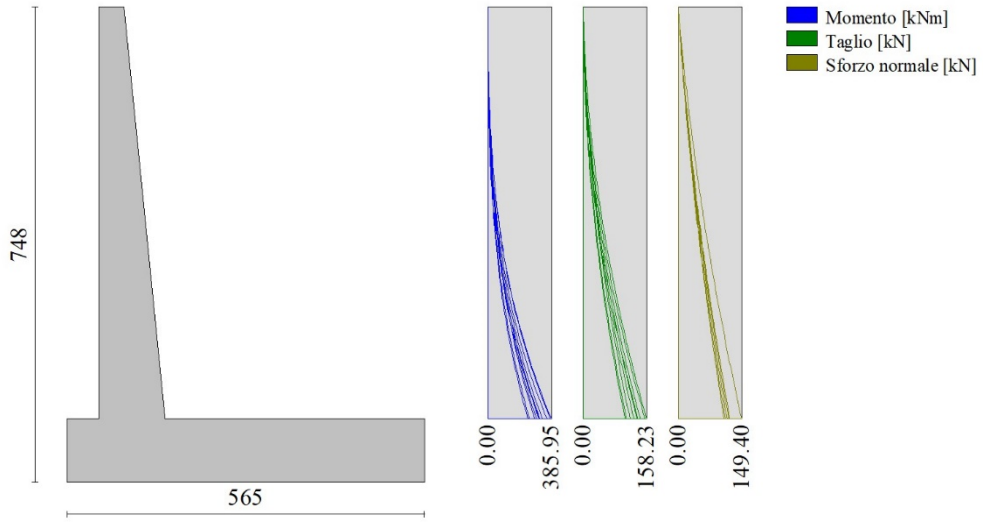


Fig. 8 - Paramento (Inviluppo)

Fondazione

Combinazione n° 1 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	14.96	0.75
3	-0.70	0.00	29.86	2.99
4	-0.60	0.00	44.71	6.72
5	-0.50	0.00	59.51	11.93
6	-0.40	0.00	74.25	18.62
7	0.65	0.00	-157.39	-354.22
8	0.75	0.00	-154.65	-338.62
9	0.85	0.00	-151.86	-323.29
10	0.95	0.00	-149.01	-308.25
11	1.05	0.00	-146.10	-293.49
12	1.15	0.00	-143.14	-279.03
13	1.25	0.00	-140.13	-264.87
14	1.35	0.00	-137.06	-251.01
15	1.45	0.00	-133.94	-237.46
16	1.55	0.00	-130.76	-224.22
17	1.65	0.00	-127.52	-211.31
18	1.75	0.00	-124.23	-198.72
19	1.85	0.00	-120.89	-186.46
20	1.95	0.00	-117.49	-174.54
21	2.05	0.00	-114.04	-162.97
22	2.15	0.00	-110.53	-151.74
23	2.25	0.00	-106.96	-140.86
24	2.35	0.00	-103.34	-130.35
25	2.45	0.00	-99.67	-120.20
26	2.55	0.00	-95.94	-110.41
27	2.65	0.00	-92.16	-101.01
28	2.75	0.00	-88.32	-91.98
29	2.85	0.00	-84.43	-83.35
30	2.95	0.00	-80.48	-75.10
31	3.05	0.00	-76.47	-67.25
32	3.15	0.00	-72.41	-59.81
33	3.25	0.00	-68.30	-52.77
34	3.35	0.00	-64.13	-46.15
35	3.45	0.00	-59.91	-39.95
36	3.55	0.00	-55.63	-34.17
37	3.65	0.00	-51.30	-28.82
38	3.75	0.00	-46.91	-23.91
39	3.85	0.00	-42.46	-19.44
40	3.95	0.00	-37.97	-15.42
41	4.05	0.00	-33.41	-11.85
42	4.15	0.00	-28.80	-8.74
43	4.25	0.00	-24.14	-6.09
44	4.35	0.00	-19.42	-3.91
45	4.45	0.00	-14.65	-2.21
46	4.55	0.00	-9.82	-0.99
47	4.65	0.00	-4.94	-0.25
48	4.75	0.00	0.00	0.00

Combinazione n° 2 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	16.77	0.84
3	-0.70	0.00	33.47	3.35
4	-0.60	0.00	50.10	7.53
5	-0.50	0.00	66.65	13.37
6	-0.40	0.00	83.13	20.86
7	0.65	0.00	-164.90	-380.10
8	0.75	0.00	-162.34	-363.73
9	0.85	0.00	-159.71	-347.63
10	0.95	0.00	-157.01	-331.79
11	1.05	0.00	-154.23	-316.23
12	1.15	0.00	-151.38	-300.95
13	1.25	0.00	-148.46	-285.96
14	1.35	0.00	-145.46	-271.26
15	1.45	0.00	-142.39	-256.87
16	1.55	0.00	-139.25	-242.79
17	1.65	0.00	-136.03	-229.02
18	1.75	0.00	-132.74	-215.58
19	1.85	0.00	-129.38	-202.48
20	1.95	0.00	-125.94	-189.71
21	2.05	0.00	-122.43	-177.29
22	2.15	0.00	-118.85	-165.23

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
23	2.25	0.00	-115.19	-153.52
24	2.35	0.00	-111.46	-142.19
25	2.45	0.00	-107.66	-131.23
26	2.55	0.00	-103.79	-120.66
27	2.65	0.00	-99.84	-110.48
28	2.75	0.00	-95.81	-100.70
29	2.85	0.00	-91.72	-91.32
30	2.95	0.00	-87.55	-82.35
31	3.05	0.00	-83.31	-73.81
32	3.15	0.00	-78.99	-65.69
33	3.25	0.00	-74.61	-58.01
34	3.35	0.00	-70.15	-50.78
35	3.45	0.00	-65.61	-43.99
36	3.55	0.00	-61.00	-37.66
37	3.65	0.00	-56.32	-31.79
38	3.75	0.00	-51.57	-26.39
39	3.85	0.00	-46.74	-21.48
40	3.95	0.00	-41.84	-17.05
41	4.05	0.00	-36.87	-13.11
42	4.15	0.00	-31.82	-9.68
43	4.25	0.00	-26.70	-6.75
44	4.35	0.00	-21.51	-4.34
45	4.45	0.00	-16.24	-2.45
46	4.55	0.00	-10.90	-1.09
47	4.65	0.00	-5.49	-0.27
48	4.75	0.00	0.00	0.00

Combinazione n° 3 - STR (A1-M1-R3) H + V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	22.53	1.13
3	-0.70	0.00	44.77	4.50
4	-0.60	0.00	66.72	10.07
5	-0.50	0.00	88.37	17.83
6	-0.40	0.00	109.72	27.74
7	0.65	0.00	-35.36	-241.48
8	0.75	0.00	-40.39	-237.69
9	0.85	0.00	-45.11	-233.41
10	0.95	0.00	-49.55	-228.68
11	1.05	0.00	-53.69	-223.51
12	1.15	0.00	-57.53	-217.95
13	1.25	0.00	-61.08	-212.02
14	1.35	0.00	-64.34	-205.74
15	1.45	0.00	-67.30	-199.16
16	1.55	0.00	-69.97	-192.29
17	1.65	0.00	-72.34	-185.17
18	1.75	0.00	-74.42	-177.83
19	1.85	0.00	-76.21	-170.30
20	1.95	0.00	-77.70	-162.60
21	2.05	0.00	-78.90	-154.77
22	2.15	0.00	-79.80	-146.83
23	2.25	0.00	-80.41	-138.82
24	2.35	0.00	-80.72	-130.76
25	2.45	0.00	-80.74	-122.68
26	2.55	0.00	-80.47	-114.62
27	2.65	0.00	-79.90	-106.60
28	2.75	0.00	-79.04	-98.65
29	2.85	0.00	-77.88	-90.80
30	2.95	0.00	-76.43	-83.09
31	3.05	0.00	-74.68	-75.53
32	3.15	0.00	-72.64	-68.16
33	3.25	0.00	-70.31	-61.01
34	3.35	0.00	-67.68	-54.11
35	3.45	0.00	-64.76	-47.48
36	3.55	0.00	-61.54	-41.16
37	3.65	0.00	-58.03	-35.18
38	3.75	0.00	-54.23	-29.57
39	3.85	0.00	-50.13	-24.35
40	3.95	0.00	-45.74	-19.55
41	4.05	0.00	-41.05	-15.21
42	4.15	0.00	-36.07	-11.35
43	4.25	0.00	-30.79	-8.00
44	4.35	0.00	-25.22	-5.20
45	4.45	0.00	-19.36	-2.97
46	4.55	0.00	-13.20	-1.34
47	4.65	0.00	-6.75	-0.34
48	4.75	0.00	0.00	0.00

Combinazione n° 4 - STR (A1-M1-R3) H - V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	20.61	1.03
3	-0.70	0.00	40.93	4.11
4	-0.60	0.00	60.96	9.21
5	-0.50	0.00	80.70	16.30
6	-0.40	0.00	100.15	25.34
7	0.65	0.00	-110.92	-395.12
8	0.75	0.00	-114.06	-383.87
9	0.85	0.00	-116.90	-372.32
10	0.95	0.00	-119.45	-360.50
11	1.05	0.00	-121.71	-348.44
12	1.15	0.00	-123.68	-336.17
13	1.25	0.00	-125.35	-323.72
14	1.35	0.00	-126.74	-311.11
15	1.45	0.00	-127.83	-298.38
16	1.55	0.00	-128.63	-285.55
17	1.65	0.00	-129.13	-272.66
18	1.75	0.00	-129.35	-259.74
19	1.85	0.00	-129.27	-246.80
20	1.95	0.00	-128.90	-233.89
21	2.05	0.00	-128.24	-221.03
22	2.15	0.00	-127.29	-208.25
23	2.25	0.00	-126.04	-195.58
24	2.35	0.00	-124.51	-183.05
25	2.45	0.00	-122.68	-170.69
26	2.55	0.00	-120.56	-158.53
27	2.65	0.00	-118.14	-146.59
28	2.75	0.00	-115.44	-134.91
29	2.85	0.00	-112.44	-123.51
30	2.95	0.00	-109.15	-112.43
31	3.05	0.00	-105.57	-101.69
32	3.15	0.00	-101.70	-91.33
33	3.25	0.00	-97.53	-81.36
34	3.35	0.00	-93.07	-71.83
35	3.45	0.00	-88.32	-62.76
36	3.55	0.00	-83.28	-54.17
37	3.65	0.00	-77.95	-46.11
38	3.75	0.00	-72.32	-38.59
39	3.85	0.00	-66.40	-31.66
40	3.95	0.00	-60.19	-25.32
41	4.05	0.00	-53.69	-19.63
42	4.15	0.00	-46.90	-14.60
43	4.25	0.00	-39.81	-10.26
44	4.35	0.00	-32.43	-6.64
45	4.45	0.00	-24.76	-3.78
46	4.55	0.00	-16.80	-1.70
47	4.65	0.00	-8.55	-0.43
48	4.75	0.00	0.00	0.00

Combinazione n° 5 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	17.92	0.90
3	-0.70	0.00	35.81	3.58
4	-0.60	0.00	53.66	8.06
5	-0.50	0.00	71.49	14.31
6	-0.40	0.00	89.29	22.35
7	0.65	0.00	0.49	-16.14
8	0.75	0.00	-0.12	-16.15
9	0.85	0.00	-0.70	-16.11
10	0.95	0.00	-1.25	-16.02
11	1.05	0.00	-1.77	-15.86
12	1.15	0.00	-2.26	-15.66
13	1.25	0.00	-2.72	-15.41
14	1.35	0.00	-3.15	-15.12
15	1.45	0.00	-3.55	-14.79
16	1.55	0.00	-3.92	-14.41
17	1.65	0.00	-4.26	-14.00
18	1.75	0.00	-4.57	-13.56
19	1.85	0.00	-4.85	-13.09
20	1.95	0.00	-5.10	-12.59
21	2.05	0.00	-5.32	-12.07
22	2.15	0.00	-5.51	-11.53
23	2.25	0.00	-5.67	-10.97
24	2.35	0.00	-5.80	-10.40
25	2.45	0.00	-5.90	-9.81
26	2.55	0.00	-5.97	-9.22
27	2.65	0.00	-6.02	-8.62
28	2.75	0.00	-6.03	-8.02
29	2.85	0.00	-6.01	-7.41
30	2.95	0.00	-5.96	-6.82

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
31	3.05	0.00	-5.88	-6.22
32	3.15	0.00	-5.78	-5.64
33	3.25	0.00	-5.64	-5.07
34	3.35	0.00	-5.47	-4.51
35	3.45	0.00	-5.28	-3.98
36	3.55	0.00	-5.05	-3.46
37	3.65	0.00	-4.79	-2.97
38	3.75	0.00	-4.51	-2.50
39	3.85	0.00	-4.19	-2.07
40	3.95	0.00	-3.84	-1.66
41	4.05	0.00	-3.47	-1.30
42	4.15	0.00	-3.06	-0.97
43	4.25	0.00	-2.63	-0.69
44	4.35	0.00	-2.16	-0.45
45	4.45	0.00	-1.66	-0.26
46	4.55	0.00	-1.14	-0.12
47	4.65	0.00	-0.58	-0.03
48	4.75	0.00	0.00	0.00

Combinazione n° 6 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	16.07	0.80
3	-0.70	0.00	32.16	3.22
4	-0.60	0.00	48.26	7.24
5	-0.50	0.00	64.38	12.87
6	-0.40	0.00	80.51	20.11
7	0.65	0.00	-10.43	-12.94
8	0.75	0.00	-9.88	-11.93
9	0.85	0.00	-9.35	-10.97
10	0.95	0.00	-8.83	-10.06
11	1.05	0.00	-8.32	-9.20
12	1.15	0.00	-7.84	-8.39
13	1.25	0.00	-7.36	-7.63
14	1.35	0.00	-6.90	-6.92
15	1.45	0.00	-6.46	-6.25
16	1.55	0.00	-6.02	-5.63
17	1.65	0.00	-5.61	-5.05
18	1.75	0.00	-5.21	-4.51
19	1.85	0.00	-4.82	-4.00
20	1.95	0.00	-4.45	-3.54
21	2.05	0.00	-4.09	-3.11
22	2.15	0.00	-3.75	-2.72
23	2.25	0.00	-3.42	-2.36
24	2.35	0.00	-3.11	-2.04
25	2.45	0.00	-2.81	-1.74
26	2.55	0.00	-2.53	-1.48
27	2.65	0.00	-2.26	-1.24
28	2.75	0.00	-2.00	-1.02
29	2.85	0.00	-1.76	-0.84
30	2.95	0.00	-1.54	-0.67
31	3.05	0.00	-1.33	-0.53
32	3.15	0.00	-1.13	-0.40
33	3.25	0.00	-0.95	-0.30
34	3.35	0.00	-0.78	-0.21
35	3.45	0.00	-0.63	-0.14
36	3.55	0.00	-0.50	-0.09
37	3.65	0.00	-0.37	-0.04
38	3.75	0.00	-0.27	-0.01
39	3.85	0.00	-0.17	0.01
40	3.95	0.00	-0.10	0.02
41	4.05	0.00	-0.03	0.03
42	4.15	0.00	0.02	0.03
43	4.25	0.00	0.05	0.03
44	4.35	0.00	0.07	0.02
45	4.45	0.00	0.07	0.01
46	4.55	0.00	0.06	0.01
47	4.65	0.00	0.04	0.00
48	4.75	0.00	0.00	0.00

Combinazione n° 7 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	16.80	0.84
3	-0.70	0.00	33.51	3.36
4	-0.60	0.00	50.11	7.54
5	-0.50	0.00	66.62	13.38
6	-0.40	0.00	83.03	20.86

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
7	0.65	0.00	-146.47	-357.42
8	0.75	0.00	-144.89	-342.85
9	0.85	0.00	-143.21	-328.44
10	0.95	0.00	-141.43	-314.21
11	1.05	0.00	-139.55	-300.16
12	1.15	0.00	-137.57	-286.30
13	1.25	0.00	-135.49	-272.65
14	1.35	0.00	-133.31	-259.21
15	1.45	0.00	-131.03	-245.99
16	1.55	0.00	-128.65	-233.01
17	1.65	0.00	-126.17	-220.26
18	1.75	0.00	-123.59	-207.78
19	1.85	0.00	-120.92	-195.55
20	1.95	0.00	-118.14	-183.60
21	2.05	0.00	-115.26	-171.92
22	2.15	0.00	-112.29	-160.55
23	2.25	0.00	-109.21	-149.47
24	2.35	0.00	-106.04	-138.71
25	2.45	0.00	-102.76	-128.27
26	2.55	0.00	-99.39	-118.16
27	2.65	0.00	-95.92	-108.39
28	2.75	0.00	-92.34	-98.98
29	2.85	0.00	-88.67	-89.93
30	2.95	0.00	-84.90	-81.25
31	3.05	0.00	-81.03	-72.95
32	3.15	0.00	-77.06	-65.04
33	3.25	0.00	-72.99	-57.54
34	3.35	0.00	-68.82	-50.45
35	3.45	0.00	-64.55	-43.78
36	3.55	0.00	-60.18	-37.54
37	3.65	0.00	-55.71	-31.75
38	3.75	0.00	-51.15	-26.40
39	3.85	0.00	-46.48	-21.52
40	3.95	0.00	-41.71	-17.11
41	4.05	0.00	-36.85	-13.18
42	4.15	0.00	-31.88	-9.74
43	4.25	0.00	-26.82	-6.81
44	4.35	0.00	-21.65	-4.38
45	4.45	0.00	-16.39	-2.48
46	4.55	0.00	-11.03	-1.11
47	4.65	0.00	-5.56	-0.28
48	4.75	0.00	0.00	0.00

Combinazione n° 8 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	19.73	0.99
3	-0.70	0.00	39.42	3.94
4	-0.60	0.00	59.05	8.87
5	-0.50	0.00	78.64	15.75
6	-0.40	0.00	98.18	24.59
7	0.65	0.00	-7.02	-42.01
8	0.75	0.00	-7.81	-41.27
9	0.85	0.00	-8.56	-40.45
10	0.95	0.00	-9.25	-39.56
11	1.05	0.00	-9.90	-38.60
12	1.15	0.00	-10.49	-37.58
13	1.25	0.00	-11.04	-36.51
14	1.35	0.00	-11.55	-35.38
15	1.45	0.00	-12.00	-34.20
16	1.55	0.00	-12.40	-32.98
17	1.65	0.00	-12.76	-31.72
18	1.75	0.00	-13.07	-30.43
19	1.85	0.00	-13.33	-29.11
20	1.95	0.00	-13.55	-27.76
21	2.05	0.00	-13.71	-26.40
22	2.15	0.00	-13.83	-25.02
23	2.25	0.00	-13.90	-23.63
24	2.35	0.00	-13.92	-22.24
25	2.45	0.00	-13.89	-20.85
26	2.55	0.00	-13.82	-19.47
27	2.65	0.00	-13.69	-18.09
28	2.75	0.00	-13.52	-16.73
29	2.85	0.00	-13.30	-15.39
30	2.95	0.00	-13.04	-14.07
31	3.05	0.00	-12.72	-12.78
32	3.15	0.00	-12.36	-11.53
33	3.25	0.00	-11.95	-10.31
34	3.35	0.00	-11.49	-9.14
35	3.45	0.00	-10.98	-8.02
36	3.55	0.00	-10.42	-6.95

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
37	3.65	0.00	-9.82	-5.93
38	3.75	0.00	-9.17	-4.98
39	3.85	0.00	-8.47	-4.10
40	3.95	0.00	-7.72	-3.29
41	4.05	0.00	-6.92	-2.56
42	4.15	0.00	-6.08	-1.91
43	4.25	0.00	-5.18	-1.35
44	4.35	0.00	-4.24	-0.87
45	4.45	0.00	-3.25	-0.50
46	4.55	0.00	-2.22	-0.22
47	4.65	0.00	-1.13	-0.06
48	4.75	0.00	0.00	0.00

Combinazione n° 9 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	17.89	0.89
3	-0.70	0.00	35.77	3.58
4	-0.60	0.00	53.65	8.05
5	-0.50	0.00	71.53	14.31
6	-0.40	0.00	89.40	22.35
7	0.65	0.00	-17.94	-38.82
8	0.75	0.00	-17.57	-37.04
9	0.85	0.00	-17.20	-35.30
10	0.95	0.00	-16.83	-33.60
11	1.05	0.00	-16.45	-31.94
12	1.15	0.00	-16.07	-30.31
13	1.25	0.00	-15.69	-28.72
14	1.35	0.00	-15.30	-27.17
15	1.45	0.00	-14.91	-25.66
16	1.55	0.00	-14.51	-24.19
17	1.65	0.00	-14.11	-22.76
18	1.75	0.00	-13.71	-21.37
19	1.85	0.00	-13.31	-20.02
20	1.95	0.00	-12.90	-18.71
21	2.05	0.00	-12.49	-17.44
22	2.15	0.00	-12.07	-16.21
23	2.25	0.00	-11.65	-15.03
24	2.35	0.00	-11.23	-13.88
25	2.45	0.00	-10.80	-12.78
26	2.55	0.00	-10.37	-11.72
27	2.65	0.00	-9.94	-10.71
28	2.75	0.00	-9.50	-9.73
29	2.85	0.00	-9.06	-8.81
30	2.95	0.00	-8.61	-7.92
31	3.05	0.00	-8.16	-7.08
32	3.15	0.00	-7.71	-6.29
33	3.25	0.00	-7.26	-5.54
34	3.35	0.00	-6.80	-4.84
35	3.45	0.00	-6.34	-4.18
36	3.55	0.00	-5.87	-3.57
37	3.65	0.00	-5.40	-3.01
38	3.75	0.00	-4.93	-2.49
39	3.85	0.00	-4.45	-2.02
40	3.95	0.00	-3.97	-1.60
41	4.05	0.00	-3.49	-1.23
42	4.15	0.00	-3.00	-0.91
43	4.25	0.00	-2.51	-0.63
44	4.35	0.00	-2.01	-0.40
45	4.45	0.00	-1.52	-0.23
46	4.55	0.00	-1.01	-0.10
47	4.65	0.00	-0.51	-0.03
48	4.75	0.00	0.00	0.00

Combinazione n° 10 - STR (A1-M1-R3)

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	18.62	0.93
3	-0.70	0.00	37.12	3.72
4	-0.60	0.00	55.50	8.35
5	-0.50	0.00	73.77	14.82
6	-0.40	0.00	91.91	23.10
7	0.65	0.00	-153.98	-383.29
8	0.75	0.00	-152.58	-367.96
9	0.85	0.00	-151.06	-352.78
10	0.95	0.00	-149.43	-337.75
11	1.05	0.00	-147.67	-322.90
12	1.15	0.00	-145.80	-308.22

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
13	1.25	0.00	-143.81	-293.74
14	1.35	0.00	-141.70	-279.46
15	1.45	0.00	-139.48	-265.40
16	1.55	0.00	-137.14	-251.57
17	1.65	0.00	-134.68	-237.98
18	1.75	0.00	-132.10	-224.64
19	1.85	0.00	-129.40	-211.56
20	1.95	0.00	-126.59	-198.76
21	2.05	0.00	-123.66	-186.25
22	2.15	0.00	-120.61	-174.04
23	2.25	0.00	-117.44	-162.13
24	2.35	0.00	-114.16	-150.55
25	2.45	0.00	-110.75	-139.30
26	2.55	0.00	-107.23	-128.40
27	2.65	0.00	-103.60	-117.86
28	2.75	0.00	-99.84	-107.69
29	2.85	0.00	-95.97	-97.90
30	2.95	0.00	-91.97	-88.50
31	3.05	0.00	-87.87	-79.51
32	3.15	0.00	-83.64	-70.93
33	3.25	0.00	-79.29	-62.78
34	3.35	0.00	-74.83	-55.08
35	3.45	0.00	-70.25	-47.82
36	3.55	0.00	-65.56	-41.03
37	3.65	0.00	-60.74	-34.71
38	3.75	0.00	-55.81	-28.88
39	3.85	0.00	-50.76	-23.56
40	3.95	0.00	-45.59	-18.74
41	4.05	0.00	-40.30	-14.44
42	4.15	0.00	-34.90	-10.68
43	4.25	0.00	-29.38	-7.47
44	4.35	0.00	-23.74	-4.81
45	4.45	0.00	-17.98	-2.72
46	4.55	0.00	-12.10	-1.22
47	4.65	0.00	-6.11	-0.31
48	4.75	0.00	0.00	0.00

Combinazione n° 19 - SLER

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	13.78	0.69
3	-0.70	0.00	27.54	2.76
4	-0.60	0.00	41.28	6.20
5	-0.50	0.00	54.99	11.01
6	-0.40	0.00	68.69	17.20
7	0.65	0.00	0.37	-12.41
8	0.75	0.00	-0.09	-12.43
9	0.85	0.00	-0.54	-12.39
10	0.95	0.00	-0.96	-12.32
11	1.05	0.00	-1.36	-12.20
12	1.15	0.00	-1.74	-12.05
13	1.25	0.00	-2.09	-11.86
14	1.35	0.00	-2.42	-11.63
15	1.45	0.00	-2.73	-11.37
16	1.55	0.00	-3.01	-11.09
17	1.65	0.00	-3.27	-10.77
18	1.75	0.00	-3.51	-10.43
19	1.85	0.00	-3.73	-10.07
20	1.95	0.00	-3.92	-9.69
21	2.05	0.00	-4.09	-9.29
22	2.15	0.00	-4.24	-8.87
23	2.25	0.00	-4.36	-8.44
24	2.35	0.00	-4.46	-8.00
25	2.45	0.00	-4.54	-7.55
26	2.55	0.00	-4.60	-7.09
27	2.65	0.00	-4.63	-6.63
28	2.75	0.00	-4.64	-6.17
29	2.85	0.00	-4.62	-5.70
30	2.95	0.00	-4.59	-5.24
31	3.05	0.00	-4.53	-4.79
32	3.15	0.00	-4.44	-4.34
33	3.25	0.00	-4.34	-3.90
34	3.35	0.00	-4.21	-3.47
35	3.45	0.00	-4.06	-3.06
36	3.55	0.00	-3.88	-2.66
37	3.65	0.00	-3.69	-2.28
38	3.75	0.00	-3.47	-1.92
39	3.85	0.00	-3.22	-1.59
40	3.95	0.00	-2.96	-1.28
41	4.05	0.00	-2.67	-1.00
42	4.15	0.00	-2.35	-0.75

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
43	4.25	0.00	-2.02	-0.53
44	4.35	0.00	-1.66	-0.34
45	4.45	0.00	-1.28	-0.20
46	4.55	0.00	-0.88	-0.09
47	4.65	0.00	-0.45	-0.02
48	4.75	0.00	0.00	0.00

Combinazione n° 20 - SLEF

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	13.78	0.69
3	-0.70	0.00	27.54	2.76
4	-0.60	0.00	41.28	6.20
5	-0.50	0.00	54.99	11.01
6	-0.40	0.00	68.69	17.20
7	0.65	0.00	0.37	-12.41
8	0.75	0.00	-0.09	-12.43
9	0.85	0.00	-0.54	-12.39
10	0.95	0.00	-0.96	-12.32
11	1.05	0.00	-1.36	-12.20
12	1.15	0.00	-1.74	-12.05
13	1.25	0.00	-2.09	-11.86
14	1.35	0.00	-2.42	-11.63
15	1.45	0.00	-2.73	-11.37
16	1.55	0.00	-3.01	-11.09
17	1.65	0.00	-3.27	-10.77
18	1.75	0.00	-3.51	-10.43
19	1.85	0.00	-3.73	-10.07
20	1.95	0.00	-3.92	-9.69
21	2.05	0.00	-4.09	-9.29
22	2.15	0.00	-4.24	-8.87
23	2.25	0.00	-4.36	-8.44
24	2.35	0.00	-4.46	-8.00
25	2.45	0.00	-4.54	-7.55
26	2.55	0.00	-4.60	-7.09
27	2.65	0.00	-4.63	-6.63
28	2.75	0.00	-4.64	-6.17
29	2.85	0.00	-4.62	-5.70
30	2.95	0.00	-4.59	-5.24
31	3.05	0.00	-4.53	-4.79
32	3.15	0.00	-4.44	-4.34
33	3.25	0.00	-4.34	-3.90
34	3.35	0.00	-4.21	-3.47
35	3.45	0.00	-4.06	-3.06
36	3.55	0.00	-3.88	-2.66
37	3.65	0.00	-3.69	-2.28
38	3.75	0.00	-3.47	-1.92
39	3.85	0.00	-3.22	-1.59
40	3.95	0.00	-2.96	-1.28
41	4.05	0.00	-2.67	-1.00
42	4.15	0.00	-2.35	-0.75
43	4.25	0.00	-2.02	-0.53
44	4.35	0.00	-1.66	-0.34
45	4.45	0.00	-1.28	-0.20
46	4.55	0.00	-0.88	-0.09
47	4.65	0.00	-0.45	-0.02
48	4.75	0.00	0.00	0.00

Combinazione n° 21 - SLEQ

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	13.78	0.69
3	-0.70	0.00	27.54	2.76
4	-0.60	0.00	41.28	6.20
5	-0.50	0.00	54.99	11.01
6	-0.40	0.00	68.69	17.20
7	0.65	0.00	0.37	-12.41
8	0.75	0.00	-0.09	-12.43
9	0.85	0.00	-0.54	-12.39
10	0.95	0.00	-0.96	-12.32
11	1.05	0.00	-1.36	-12.20
12	1.15	0.00	-1.74	-12.05
13	1.25	0.00	-2.09	-11.86
14	1.35	0.00	-2.42	-11.63
15	1.45	0.00	-2.73	-11.37
16	1.55	0.00	-3.01	-11.09
17	1.65	0.00	-3.27	-10.77
18	1.75	0.00	-3.51	-10.43

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
19	1.85	0.00	-3.73	-10.07
20	1.95	0.00	-3.92	-9.69
21	2.05	0.00	-4.09	-9.29
22	2.15	0.00	-4.24	-8.87
23	2.25	0.00	-4.36	-8.44
24	2.35	0.00	-4.46	-8.00
25	2.45	0.00	-4.54	-7.55
26	2.55	0.00	-4.60	-7.09
27	2.65	0.00	-4.63	-6.63
28	2.75	0.00	-4.64	-6.17
29	2.85	0.00	-4.62	-5.70
30	2.95	0.00	-4.59	-5.24
31	3.05	0.00	-4.53	-4.79
32	3.15	0.00	-4.44	-4.34
33	3.25	0.00	-4.34	-3.90
34	3.35	0.00	-4.21	-3.47
35	3.45	0.00	-4.06	-3.06
36	3.55	0.00	-3.88	-2.66
37	3.65	0.00	-3.69	-2.28
38	3.75	0.00	-3.47	-1.92
39	3.85	0.00	-3.22	-1.59
40	3.95	0.00	-2.96	-1.28
41	4.05	0.00	-2.67	-1.00
42	4.15	0.00	-2.35	-0.75
43	4.25	0.00	-2.02	-0.53
44	4.35	0.00	-1.66	-0.34
45	4.45	0.00	-1.28	-0.20
46	4.55	0.00	-0.88	-0.09
47	4.65	0.00	-0.45	-0.02
48	4.75	0.00	0.00	0.00

Combinazione n° 22 - SLER

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	14.79	0.74
3	-0.70	0.00	29.55	2.96
4	-0.60	0.00	44.27	6.65
5	-0.50	0.00	58.96	11.81
6	-0.40	0.00	73.62	18.44
7	0.65	0.00	-3.80	-26.79
8	0.75	0.00	-4.37	-26.38
9	0.85	0.00	-4.90	-25.92
10	0.95	0.00	-5.41	-25.40
11	1.05	0.00	-5.88	-24.84
12	1.15	0.00	-6.31	-24.23
13	1.25	0.00	-6.72	-23.57
14	1.35	0.00	-7.09	-22.88
15	1.45	0.00	-7.42	-22.16
16	1.55	0.00	-7.73	-21.40
17	1.65	0.00	-8.00	-20.61
18	1.75	0.00	-8.24	-19.80
19	1.85	0.00	-8.44	-18.97
20	1.95	0.00	-8.62	-18.11
21	2.05	0.00	-8.75	-17.24
22	2.15	0.00	-8.86	-16.36
23	2.25	0.00	-8.93	-15.47
24	2.35	0.00	-8.97	-14.58
25	2.45	0.00	-8.98	-13.68
26	2.55	0.00	-8.95	-12.78
27	2.65	0.00	-8.89	-11.89
28	2.75	0.00	-8.80	-11.01
29	2.85	0.00	-8.67	-10.13
30	2.95	0.00	-8.52	-9.27
31	3.05	0.00	-8.32	-8.43
32	3.15	0.00	-8.10	-7.61
33	3.25	0.00	-7.84	-6.81
34	3.35	0.00	-7.55	-6.04
35	3.45	0.00	-7.23	-5.30
36	3.55	0.00	-6.87	-4.60
37	3.65	0.00	-6.48	-3.93
38	3.75	0.00	-6.05	-3.30
39	3.85	0.00	-5.60	-2.72
40	3.95	0.00	-5.11	-2.18
41	4.05	0.00	-4.59	-1.70
42	4.15	0.00	-4.03	-1.27
43	4.25	0.00	-3.44	-0.89
44	4.35	0.00	-2.82	-0.58
45	4.45	0.00	-2.16	-0.33
46	4.55	0.00	-1.48	-0.15
47	4.65	0.00	-0.75	-0.04
48	4.75	0.00	0.00	0.00

Combinazione n° 23 - SLEF

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	14.05	0.70
3	-0.70	0.00	28.08	2.81
4	-0.60	0.00	42.08	6.32
5	-0.50	0.00	56.05	11.22
6	-0.40	0.00	70.00	17.53
7	0.65	0.00	-0.74	-16.25
8	0.75	0.00	-1.23	-16.15
9	0.85	0.00	-1.70	-16.00
10	0.95	0.00	-2.15	-15.81
11	1.05	0.00	-2.56	-15.57
12	1.15	0.00	-2.96	-15.30
13	1.25	0.00	-3.32	-14.98
14	1.35	0.00	-3.66	-14.63
15	1.45	0.00	-3.98	-14.25
16	1.55	0.00	-4.27	-13.84
17	1.65	0.00	-4.53	-13.40
18	1.75	0.00	-4.77	-12.93
19	1.85	0.00	-4.99	-12.44
20	1.95	0.00	-5.17	-11.93
21	2.05	0.00	-5.33	-11.41
22	2.15	0.00	-5.47	-10.87
23	2.25	0.00	-5.58	-10.32
24	2.35	0.00	-5.67	-9.75
25	2.45	0.00	-5.72	-9.18
26	2.55	0.00	-5.76	-8.61
27	2.65	0.00	-5.76	-8.03
28	2.75	0.00	-5.75	-7.46
29	2.85	0.00	-5.70	-6.88
30	2.95	0.00	-5.63	-6.32
31	3.05	0.00	-5.54	-5.76
32	3.15	0.00	-5.42	-5.21
33	3.25	0.00	-5.27	-4.68
34	3.35	0.00	-5.10	-4.16
35	3.45	0.00	-4.90	-3.66
36	3.55	0.00	-4.68	-3.18
37	3.65	0.00	-4.43	-2.72
38	3.75	0.00	-4.16	-2.29
39	3.85	0.00	-3.86	-1.89
40	3.95	0.00	-3.53	-1.52
41	4.05	0.00	-3.18	-1.19
42	4.15	0.00	-2.80	-0.89
43	4.25	0.00	-2.40	-0.63
44	4.35	0.00	-1.97	-0.41
45	4.45	0.00	-1.52	-0.23
46	4.55	0.00	-1.04	-0.11
47	4.65	0.00	-0.53	-0.03
48	4.75	0.00	0.00	0.00

Combinazione n° 24 - SLEQ

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	14.05	0.70
3	-0.70	0.00	28.08	2.81
4	-0.60	0.00	42.08	6.32
5	-0.50	0.00	56.05	11.22
6	-0.40	0.00	70.00	17.53
7	0.65	0.00	-0.74	-16.25
8	0.75	0.00	-1.23	-16.15
9	0.85	0.00	-1.70	-16.00
10	0.95	0.00	-2.15	-15.81
11	1.05	0.00	-2.56	-15.57
12	1.15	0.00	-2.96	-15.30
13	1.25	0.00	-3.32	-14.98
14	1.35	0.00	-3.66	-14.63
15	1.45	0.00	-3.98	-14.25
16	1.55	0.00	-4.27	-13.84
17	1.65	0.00	-4.53	-13.40
18	1.75	0.00	-4.77	-12.93
19	1.85	0.00	-4.99	-12.44
20	1.95	0.00	-5.17	-11.93
21	2.05	0.00	-5.33	-11.41
22	2.15	0.00	-5.47	-10.87
23	2.25	0.00	-5.58	-10.32
24	2.35	0.00	-5.67	-9.75
25	2.45	0.00	-5.72	-9.18
26	2.55	0.00	-5.76	-8.61

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
27	2.65	0.00	-5.76	-8.03
28	2.75	0.00	-5.75	-7.46
29	2.85	0.00	-5.70	-6.88
30	2.95	0.00	-5.63	-6.32
31	3.05	0.00	-5.54	-5.76
32	3.15	0.00	-5.42	-5.21
33	3.25	0.00	-5.27	-4.68
34	3.35	0.00	-5.10	-4.16
35	3.45	0.00	-4.90	-3.66
36	3.55	0.00	-4.68	-3.18
37	3.65	0.00	-4.43	-2.72
38	3.75	0.00	-4.16	-2.29
39	3.85	0.00	-3.86	-1.89
40	3.95	0.00	-3.53	-1.52
41	4.05	0.00	-3.18	-1.19
42	4.15	0.00	-2.80	-0.89
43	4.25	0.00	-2.40	-0.63
44	4.35	0.00	-1.97	-0.41
45	4.45	0.00	-1.52	-0.23
46	4.55	0.00	-1.04	-0.11
47	4.65	0.00	-0.53	-0.03
48	4.75	0.00	0.00	0.00

Combinazione n° 25 - SLEQ_H + V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	19.11	0.96
3	-0.70	0.00	38.04	3.82
4	-0.60	0.00	56.77	8.56
5	-0.50	0.00	75.32	15.16
6	-0.40	0.00	93.68	23.62
7	0.65	0.00	-21.59	-152.41
8	0.75	0.00	-24.83	-150.09
9	0.85	0.00	-27.88	-147.45
10	0.95	0.00	-30.74	-144.52
11	1.05	0.00	-33.42	-141.31
12	1.15	0.00	-35.90	-137.84
13	1.25	0.00	-38.20	-134.13
14	1.35	0.00	-40.31	-130.21
15	1.45	0.00	-42.23	-126.08
16	1.55	0.00	-43.97	-121.77
17	1.65	0.00	-45.51	-117.29
18	1.75	0.00	-46.87	-112.67
19	1.85	0.00	-48.04	-107.92
20	1.95	0.00	-49.02	-103.07
21	2.05	0.00	-49.81	-98.13
22	2.15	0.00	-50.41	-93.11
23	2.25	0.00	-50.83	-88.05
24	2.35	0.00	-51.05	-82.96
25	2.45	0.00	-51.09	-77.85
26	2.55	0.00	-50.94	-72.74
27	2.65	0.00	-50.60	-67.67
28	2.75	0.00	-50.08	-62.63
29	2.85	0.00	-49.36	-57.66
30	2.95	0.00	-48.46	-52.76
31	3.05	0.00	-47.37	-47.97
32	3.15	0.00	-46.09	-43.30
33	3.25	0.00	-44.62	-38.76
34	3.35	0.00	-42.96	-34.38
35	3.45	0.00	-41.12	-30.17
36	3.55	0.00	-39.08	-26.16
37	3.65	0.00	-36.86	-22.36
38	3.75	0.00	-34.45	-18.80
39	3.85	0.00	-31.86	-15.48
40	3.95	0.00	-29.07	-12.43
41	4.05	0.00	-26.09	-9.67
42	4.15	0.00	-22.93	-7.22
43	4.25	0.00	-19.58	-5.09
44	4.35	0.00	-16.04	-3.31
45	4.45	0.00	-12.31	-1.89
46	4.55	0.00	-8.40	-0.85
47	4.65	0.00	-4.29	-0.22
48	4.75	0.00	0.00	0.00

Combinazione n° 26 - SLEQ_H - V

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
1	-0.90	0.00	0.00	0.00
2	-0.80	0.00	17.93	0.90

n°	X	N	T	M
	[m]	[kN]	[kN]	[kNm]
3	-0.70	0.00	35.67	3.58
4	-0.60	0.00	53.22	8.02
5	-0.50	0.00	70.59	14.22
6	-0.40	0.00	87.77	22.14
7	0.65	0.00	-67.93	-246.51
8	0.75	0.00	-70.01	-239.61
9	0.85	0.00	-71.90	-232.51
10	0.95	0.00	-73.60	-225.24
11	1.05	0.00	-75.12	-217.80
12	1.15	0.00	-76.45	-210.22
13	1.25	0.00	-77.60	-202.52
14	1.35	0.00	-78.55	-194.71
15	1.45	0.00	-79.32	-186.81
16	1.55	0.00	-79.91	-178.85
17	1.65	0.00	-80.31	-170.84
18	1.75	0.00	-80.52	-162.79
19	1.85	0.00	-80.54	-154.74
20	1.95	0.00	-80.38	-146.69
21	2.05	0.00	-80.03	-138.67
22	2.15	0.00	-79.49	-130.69
23	2.25	0.00	-78.77	-122.78
24	2.35	0.00	-77.86	-114.94
25	2.45	0.00	-76.76	-107.21
26	2.55	0.00	-75.48	-99.60
27	2.65	0.00	-74.01	-92.12
28	2.75	0.00	-72.35	-84.80
29	2.85	0.00	-70.51	-77.66
30	2.95	0.00	-68.48	-70.71
31	3.05	0.00	-66.26	-63.97
32	3.15	0.00	-63.86	-57.46
33	3.25	0.00	-61.27	-51.20
34	3.35	0.00	-58.49	-45.21
35	3.45	0.00	-55.53	-39.51
36	3.55	0.00	-52.38	-34.11
37	3.65	0.00	-49.04	-29.04
38	3.75	0.00	-45.51	-24.31
39	3.85	0.00	-41.80	-19.95
40	3.95	0.00	-37.90	-15.96
41	4.05	0.00	-33.82	-12.37
42	4.15	0.00	-29.55	-9.20
43	4.25	0.00	-25.09	-6.47
44	4.35	0.00	-20.45	-4.19
45	4.45	0.00	-15.61	-2.38
46	4.55	0.00	-10.60	-1.07
47	4.65	0.00	-5.39	-0.27
48	4.75	0.00	0.00	0.00

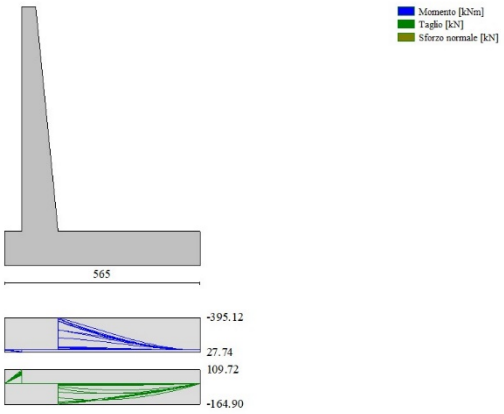


Fig. 9 - Fondazione (Inviluppo)

11.3.5 Verifiche strutturali

Verifiche a flessione

Elementi calcolati a trave

Simbologia adottata

n°	indice sezione
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
Afi	area ferri inferiori espresso in [cmq]
Afs	area ferri superiori espressa in [cmq]
M	momento agente espressa in [kNm]
N	sforzo normale agente espressa in [kN]
Mrd	momento resistente espresso in [kNm]
Nrd	sforzo normale resistente espresso in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Paramento

Combinazione n° 1 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.00	0.99	0.00	0.00	100000.000
3	-0.20	100	42	15.71	15.71	0.02	2.00	210.80	2.00	11346.029
4	-0.30	100	43	15.71	15.71	0.05	3.04	216.86	3.04	4192.121
5	-0.40	100	44	15.71	15.71	0.11	4.11	222.94	4.11	2036.137
6	-0.50	100	45	15.71	15.71	0.20	5.19	229.05	5.19	1154.706
7	-0.60	100	46	15.71	15.71	0.32	6.30	235.17	6.30	723.882
8	-0.70	100	47	15.71	15.71	0.50	7.44	241.31	7.44	486.920
9	-0.80	100	48	15.71	15.71	0.72	8.60	247.48	8.60	345.124
10	-0.90	100	49	15.71	15.71	1.00	9.78	253.66	9.78	254.717
11	-1.00	100	50	15.71	15.71	1.34	10.99	259.87	10.99	194.147
12	-1.10	100	51	15.71	15.71	1.75	12.23	266.10	12.23	151.916
13	-1.20	100	52	15.71	15.71	2.24	13.48	272.35	13.48	121.493
14	-1.30	100	53	15.71	15.71	2.82	14.76	278.63	14.76	98.967
15	-1.40	100	54	15.71	15.71	3.48	16.07	284.92	16.07	81.896
16	-1.50	100	55	15.71	15.71	4.24	17.40	291.24	17.40	68.698
17	-1.60	100	56	15.71	15.71	5.10	18.76	297.59	18.76	58.315
18	-1.69	100	57	15.71	15.71	6.08	20.13	303.95	20.13	50.021
19	-1.79	100	58	15.71	15.71	7.17	21.54	310.34	21.54	43.306
20	-1.89	100	59	15.71	15.71	8.38	22.97	316.75	22.97	37.804
21	-1.99	100	60	15.71	15.71	9.72	24.42	323.18	24.42	33.247
22	-2.09	100	61	15.71	15.71	11.20	25.89	329.64	25.89	29.435
23	-2.19	100	62	15.71	15.71	12.82	27.39	336.12	27.39	26.220
24	-2.29	100	63	15.71	15.71	14.59	28.92	342.63	28.92	23.485
25	-2.39	100	64	15.71	15.71	16.51	30.47	349.16	30.47	21.143
26	-2.49	100	65	15.71	15.71	18.60	32.04	355.71	32.04	19.122
27	-2.59	100	66	15.71	15.71	20.86	33.64	362.29	33.64	17.369
28	-2.69	100	67	15.71	15.71	23.29	35.26	368.89	35.26	15.839
29	-2.79	100	68	15.71	15.71	25.90	36.91	375.52	36.91	14.497
30	-2.89	100	69	15.71	15.71	28.71	38.58	382.17	38.58	13.313
31	-2.99	100	70	15.71	15.71	31.70	40.27	388.85	40.27	12.265
32	-3.09	100	71	15.71	15.71	34.90	41.99	395.55	41.99	11.333
33	-3.19	100	72	15.71	15.71	38.31	43.74	402.28	43.74	10.501
34	-3.29	100	73	15.71	15.71	41.93	45.51	409.03	45.51	9.755
35	-3.39	100	74	15.71	15.71	45.77	47.30	415.81	47.30	9.084
36	-3.49	100	75	15.71	15.71	49.84	49.11	422.62	49.11	8.479
37	-3.59	100	76	15.71	15.71	54.15	50.96	429.45	50.96	7.931
38	-3.69	100	77	15.71	15.71	58.69	52.82	436.31	52.82	7.434
39	-3.79	100	78	15.71	15.71	63.49	54.71	443.20	54.71	6.981
40	-3.89	100	79	15.71	15.71	68.53	56.62	450.11	56.62	6.568
41	-3.99	100	80	15.71	15.71	73.84	58.56	457.05	58.56	6.190
42	-4.09	100	81	15.71	15.71	79.42	60.53	464.02	60.53	5.843
43	-4.19	100	82	15.71	15.71	85.26	62.51	471.02	62.51	5.524
44	-4.29	100	83	15.71	15.71	91.39	64.52	478.05	64.52	5.231
45	-4.39	100	84	15.71	15.71	97.81	66.56	485.10	66.56	4.960
46	-4.49	100	85	15.71	15.71	104.52	68.62	492.19	68.62	4.709
47	-4.59	100	86	15.71	15.71	111.53	70.70	499.30	70.70	4.477
48	-4.69	100	87	15.71	15.71	118.84	72.81	506.45	72.81	4.261
49	-4.79	100	88	15.71	15.71	126.47	74.95	513.62	74.95	4.061
50	-4.88	100	89	15.71	15.71	134.42	77.10	520.82	77.10	3.875
51	-4.98	100	90	15.71	15.71	142.69	79.28	528.06	79.28	3.701
52	-5.08	100	91	15.71	15.71	151.30	81.49	535.32	81.49	3.538
53	-5.18	100	92	15.71	15.71	160.25	83.72	542.62	83.72	3.386
54	-5.28	100	93	15.71	15.71	169.54	85.97	549.94	85.97	3.244
55	-5.38	100	94	15.71	15.71	179.18	88.25	557.30	88.25	3.110
56	-5.48	100	95	15.71	15.71	189.19	90.56	564.69	90.56	2.985
57	-5.58	100	96	15.71	15.71	199.55	92.88	572.11	92.88	2.867

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
58	-5.68	100	97	15.71	15.71	210.29	95.24	579.57	95.24	2.756
59	-5.78	100	98	15.71	15.71	221.41	97.61	587.06	97.61	2.651
60	-5.88	100	99	15.71	15.71	232.92	100.01	594.58	100.01	2.553
61	-5.98	100	100	15.71	15.71	244.81	102.44	602.13	102.44	2.460
62	-6.08	100	101	15.71	15.71	257.11	104.89	609.72	104.89	2.371
63	-6.18	100	102	15.71	15.71	269.81	107.36	617.34	107.36	2.288
64	-6.28	100	103	15.71	15.71	282.92	109.86	625.00	109.86	2.209
65	-6.38	100	104	15.71	15.71	296.45	112.38	632.69	112.38	2.134
66	-6.47	100	105	15.71	15.71	310.40	114.93	639.76	114.93	2.061

Combinazione n° 2 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.02	0.99	0.19	0.99	9.442
3	-0.20	100	42	15.71	15.71	0.09	2.00	210.80	2.00	2462.283
4	-0.30	100	43	15.71	15.71	0.20	3.04	216.86	3.04	1070.622
5	-0.40	100	44	15.71	15.71	0.38	4.11	222.94	4.11	590.372
6	-0.50	100	45	15.71	15.71	0.62	5.19	229.05	5.19	371.026
7	-0.60	100	46	15.71	15.71	0.93	6.30	235.17	6.30	253.361
8	-0.70	100	47	15.71	15.71	1.32	7.44	241.31	7.44	183.259
9	-0.80	100	48	15.71	15.71	1.79	8.60	247.48	8.60	138.282
10	-0.90	100	49	15.71	15.71	2.35	9.78	253.66	9.78	107.788
11	-1.00	100	50	15.71	15.71	3.01	10.99	259.87	10.99	86.208
12	-1.10	100	51	15.71	15.71	3.78	12.23	266.10	12.23	70.406
13	-1.20	100	52	15.71	15.71	4.66	13.48	272.35	13.48	58.507
14	-1.30	100	53	15.71	15.71	5.65	14.76	278.63	14.76	49.335
15	-1.40	100	54	15.71	15.71	6.76	16.07	284.92	16.07	42.124
16	-1.50	100	55	15.71	15.71	8.01	17.40	291.24	17.40	36.359
17	-1.60	100	56	15.71	15.71	9.39	18.76	297.59	18.76	31.680
18	-1.69	100	57	15.71	15.71	10.92	20.13	303.95	20.13	27.835
19	-1.79	100	58	15.71	15.71	12.60	21.54	310.34	21.54	24.638
20	-1.89	100	59	15.71	15.71	14.43	22.97	316.75	22.97	21.952
21	-1.99	100	60	15.71	15.71	16.42	24.42	323.18	24.42	19.677
22	-2.09	100	61	15.71	15.71	18.59	25.89	329.64	25.89	17.732
23	-2.19	100	62	15.71	15.71	20.93	27.39	336.12	27.39	16.059
24	-2.29	100	63	15.71	15.71	23.45	28.92	342.63	28.92	14.608
25	-2.39	100	64	15.71	15.71	26.17	30.47	349.16	30.47	13.343
26	-2.49	100	65	15.71	15.71	29.08	32.04	355.71	32.04	12.234
27	-2.59	100	66	15.71	15.71	32.19	33.64	362.29	33.64	11.255
28	-2.69	100	67	15.71	15.71	35.51	35.26	368.89	35.26	10.389
29	-2.79	100	68	15.71	15.71	39.04	36.91	375.52	36.91	9.618
30	-2.89	100	69	15.71	15.71	42.80	38.58	382.17	38.58	8.929
31	-2.99	100	70	15.71	15.71	46.79	40.27	388.85	40.27	8.311
32	-3.09	100	71	15.71	15.71	51.01	41.99	395.55	41.99	7.755
33	-3.19	100	72	15.71	15.71	55.47	43.74	402.28	43.74	7.252
34	-3.29	100	73	15.71	15.71	60.18	45.51	409.03	45.51	6.797
35	-3.39	100	74	15.71	15.71	65.15	47.30	415.81	47.30	6.383
36	-3.49	100	75	15.71	15.71	70.37	49.11	422.62	49.11	6.005
37	-3.59	100	76	15.71	15.71	75.87	50.96	429.45	50.96	5.660
38	-3.69	100	77	15.71	15.71	81.64	52.82	436.31	52.82	5.345
39	-3.79	100	78	15.71	15.71	87.69	54.71	443.20	54.71	5.054
40	-3.89	100	79	15.71	15.71	94.02	56.62	450.11	56.62	4.787
41	-3.99	100	80	15.71	15.71	100.66	58.56	457.05	58.56	4.541
42	-4.09	100	81	15.71	15.71	107.59	60.53	464.02	60.53	4.313
43	-4.19	100	82	15.71	15.71	114.83	62.51	471.02	62.51	4.102
44	-4.29	100	83	15.71	15.71	122.38	64.52	478.05	64.52	3.906
45	-4.39	100	84	15.71	15.71	130.26	66.56	485.10	66.56	3.724
46	-4.49	100	85	15.71	15.71	138.46	68.62	492.19	68.62	3.555
47	-4.59	100	86	15.71	15.71	146.99	70.70	499.30	70.70	3.397
48	-4.69	100	87	15.71	15.71	155.86	72.81	506.45	72.81	3.249
49	-4.79	100	88	15.71	15.71	165.08	74.95	513.62	74.95	3.111
50	-4.88	100	89	15.71	15.71	174.66	77.10	520.82	77.10	2.982
51	-4.98	100	90	15.71	15.71	184.59	79.28	528.06	79.28	2.861
52	-5.08	100	91	15.71	15.71	194.89	81.49	535.32	81.49	2.747
53	-5.18	100	92	15.71	15.71	205.56	83.72	542.62	83.72	2.640
54	-5.28	100	93	15.71	15.71	216.62	85.97	549.94	85.97	2.539
55	-5.38	100	94	15.71	15.71	228.05	88.25	557.30	88.25	2.444
56	-5.48	100	95	15.71	15.71	239.88	90.56	564.69	90.56	2.354
57	-5.58	100	96	15.71	15.71	252.11	92.88	572.11	92.88	2.269
58	-5.68	100	97	15.71	15.71	264.75	95.24	579.57	95.24	2.189
59	-5.78	100	98	15.71	15.71	277.79	97.61	587.06	97.61	2.113
60	-5.88	100	99	15.71	15.71	291.26	100.01	594.58	100.01	2.041
61	-5.98	100	100	15.71	15.71	305.15	102.44	602.13	102.44	1.973
62	-6.08	100	101	15.71	15.71	319.47	104.89	609.72	104.89	1.909
63	-6.18	100	102	15.71	15.71	334.23	107.36	617.34	107.36	1.847
64	-6.28	100	103	15.71	15.71	349.44	109.86	625.00	109.86	1.789
65	-6.38	100	104	15.71	15.71	365.09	112.38	632.69	112.38	1.733
66	-6.47	100	105	15.71	15.71	381.21	114.93	639.76	114.93	1.678

Combinazione n° 3 - STR (A1-M1-R3) H + V

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.01	1.05	0.00	0.00	100000.000
3	-0.20	100	42	15.71	15.71	0.04	2.12	210.82	2.12	4890.610
4	-0.30	100	43	15.71	15.71	0.11	3.22	216.89	3.22	2014.824
5	-0.40	100	44	15.71	15.71	0.21	4.35	222.99	4.35	1060.687
6	-0.50	100	45	15.71	15.71	0.36	5.50	229.10	5.50	640.209
7	-0.60	100	46	15.71	15.71	0.56	6.68	235.24	6.68	421.895
8	-0.70	100	47	15.71	15.71	0.82	7.88	241.40	7.88	295.667
9	-0.80	100	48	15.71	15.71	1.14	9.11	247.58	9.11	216.882
10	-0.90	100	49	15.71	15.71	1.54	10.37	253.78	10.37	164.805
11	-1.00	100	50	15.71	15.71	2.02	11.65	260.01	11.65	128.808
12	-1.10	100	51	15.71	15.71	2.58	12.96	266.25	12.96	103.015
13	-1.20	100	52	15.71	15.71	3.25	14.29	272.53	14.29	83.981
14	-1.30	100	53	15.71	15.71	4.01	15.65	278.82	15.65	69.582
15	-1.40	100	54	15.71	15.71	4.88	17.03	285.14	17.03	58.459
16	-1.50	100	55	15.71	15.71	5.86	18.44	291.48	18.44	49.709
17	-1.60	100	56	15.71	15.71	6.97	19.88	297.85	19.88	42.717
18	-1.69	100	57	15.71	15.71	8.21	21.34	304.24	21.34	37.052
19	-1.79	100	58	15.71	15.71	9.59	22.83	310.65	22.83	32.405
20	-1.89	100	59	15.71	15.71	11.11	24.34	317.09	24.34	28.552
21	-1.99	100	60	15.71	15.71	12.78	25.88	323.55	25.88	25.325
22	-2.09	100	61	15.71	15.71	14.60	27.44	330.04	27.44	22.600
23	-2.19	100	62	15.71	15.71	16.60	29.03	336.55	29.03	20.278
24	-2.29	100	63	15.71	15.71	18.76	30.65	343.09	30.65	18.286
25	-2.39	100	64	15.71	15.71	21.11	32.29	349.65	32.29	16.566
26	-2.49	100	65	15.71	15.71	23.64	33.96	356.24	33.96	15.071
27	-2.59	100	66	15.71	15.71	26.36	35.65	362.85	35.65	13.765
28	-2.69	100	67	15.71	15.71	29.28	37.37	369.49	37.37	12.617
29	-2.79	100	68	15.71	15.71	32.42	39.11	376.16	39.11	11.604
30	-2.89	100	69	15.71	15.71	35.76	40.89	382.85	40.89	10.706
31	-2.99	100	70	15.71	15.71	39.33	42.68	389.57	42.68	9.905
32	-3.09	100	71	15.71	15.71	43.12	44.50	396.31	44.50	9.190
33	-3.19	100	72	15.71	15.71	47.16	46.35	403.08	46.35	8.548
34	-3.29	100	73	15.71	15.71	51.43	48.23	409.88	48.23	7.970
35	-3.39	100	74	15.71	15.71	55.95	50.13	416.71	50.13	7.447
36	-3.49	100	75	15.71	15.71	60.73	52.05	423.56	52.05	6.974
37	-3.59	100	76	15.71	15.71	65.78	54.00	430.45	54.00	6.544
38	-3.69	100	77	15.71	15.71	71.09	55.98	437.36	55.98	6.152
39	-3.79	100	78	15.71	15.71	76.69	57.98	444.30	57.98	5.794
40	-3.89	100	79	15.71	15.71	82.56	60.01	451.26	60.01	5.466
41	-3.99	100	80	15.71	15.71	88.74	62.06	458.26	62.06	5.164
42	-4.09	100	81	15.71	15.71	95.20	64.14	465.29	64.14	4.887
43	-4.19	100	82	15.71	15.71	101.98	66.25	472.35	66.25	4.632
44	-4.29	100	83	15.71	15.71	109.07	68.38	479.43	68.38	4.396
45	-4.39	100	84	15.71	15.71	116.48	70.54	486.55	70.54	4.177
46	-4.49	100	85	15.71	15.71	124.21	72.72	493.70	72.72	3.975
47	-4.59	100	86	15.71	15.71	132.28	74.93	500.88	74.93	3.786
48	-4.69	100	87	15.71	15.71	140.70	77.16	508.09	77.16	3.611
49	-4.79	100	88	15.71	15.71	149.46	79.43	515.33	79.43	3.448
50	-4.88	100	89	15.71	15.71	158.57	81.71	522.61	81.71	3.296
51	-4.98	100	90	15.71	15.71	168.05	84.02	529.91	84.02	3.153
52	-5.08	100	91	15.71	15.71	177.90	86.36	537.25	86.36	3.020
53	-5.18	100	92	15.71	15.71	188.13	88.72	544.62	88.72	2.895
54	-5.28	100	93	15.71	15.71	198.73	91.11	552.03	91.11	2.778
55	-5.38	100	94	15.71	15.71	209.73	93.53	559.46	93.53	2.667
56	-5.48	100	95	15.71	15.71	221.13	95.97	566.94	95.97	2.564
57	-5.58	100	96	15.71	15.71	232.94	98.44	574.44	98.44	2.466
58	-5.68	100	97	15.71	15.71	245.15	100.93	581.98	100.93	2.374
59	-5.78	100	98	15.71	15.71	257.78	103.45	589.56	103.45	2.287
60	-5.88	100	99	15.71	15.71	270.84	105.99	597.17	105.99	2.205
61	-5.98	100	100	15.71	15.71	284.34	108.56	604.81	108.56	2.127
62	-6.08	100	101	15.71	15.71	298.27	111.16	612.49	111.16	2.053
63	-6.18	100	102	15.71	15.71	312.65	113.78	620.21	113.78	1.984
64	-6.28	100	103	15.71	15.71	327.49	116.42	627.96	116.42	1.918
65	-6.38	100	104	15.71	15.71	342.78	119.10	635.75	119.10	1.855
66	-6.47	100	105	15.71	15.71	358.55	121.80	642.92	121.80	1.793

Combinazione n° 4 - STR (A1-M1-R3) H - V

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.01	0.93	0.00	0.00	100000.000
3	-0.20	100	42	15.71	15.71	0.04	1.88	210.78	1.88	5120.365
4	-0.30	100	43	15.71	15.71	0.10	2.86	216.83	2.86	2117.433
5	-0.40	100	44	15.71	15.71	0.20	3.86	222.90	3.86	1118.167
6	-0.50	100	45	15.71	15.71	0.34	4.88	228.99	4.88	676.655
7	-0.60	100	46	15.71	15.71	0.53	5.93	235.10	5.93	446.891
8	-0.70	100	47	15.71	15.71	0.77	6.99	241.23	6.99	313.771
9	-0.80	100	48	15.71	15.71	1.07	8.09	247.38	8.09	230.532
10	-0.90	100	49	15.71	15.71	1.45	9.20	253.55	9.20	175.423
11	-1.00	100	50	15.71	15.71	1.89	10.34	259.74	10.34	137.274

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
12	-1.10	100	51	15.71	15.71	2.42	11.49	265.95	11.49	109.904
13	-1.20	100	52	15.71	15.71	3.03	12.68	272.18	12.68	89.682
14	-1.30	100	53	15.71	15.71	3.74	13.88	278.43	13.88	74.368
15	-1.40	100	54	15.71	15.71	4.55	15.11	284.71	15.11	62.526
16	-1.50	100	55	15.71	15.71	5.47	16.36	291.01	16.36	53.203
17	-1.60	100	56	15.71	15.71	6.50	17.63	297.32	17.63	45.747
18	-1.69	100	57	15.71	15.71	7.65	18.93	303.66	18.93	39.701
19	-1.79	100	58	15.71	15.71	8.92	20.25	310.03	20.25	34.739
20	-1.89	100	59	15.71	15.71	10.33	21.59	316.41	21.59	30.622
21	-1.99	100	60	15.71	15.71	11.88	22.96	322.82	22.96	27.172
22	-2.09	100	61	15.71	15.71	13.57	24.35	329.24	24.35	24.256
23	-2.19	100	62	15.71	15.71	15.42	25.76	335.69	25.76	21.771
24	-2.29	100	63	15.71	15.71	17.42	27.19	342.17	27.19	19.638
25	-2.39	100	64	15.71	15.71	19.59	28.65	348.66	28.65	17.796
26	-2.49	100	65	15.71	15.71	21.93	30.13	355.18	30.13	16.194
27	-2.59	100	66	15.71	15.71	24.45	31.63	361.72	31.63	14.793
28	-2.69	100	67	15.71	15.71	27.16	33.15	368.29	33.15	13.562
29	-2.79	100	68	15.71	15.71	30.05	34.70	374.88	34.70	12.475
30	-2.89	100	69	15.71	15.71	33.14	36.27	381.49	36.27	11.511
31	-2.99	100	70	15.71	15.71	36.44	37.87	388.13	37.87	10.652
32	-3.09	100	71	15.71	15.71	39.94	39.48	394.79	39.48	9.883
33	-3.19	100	72	15.71	15.71	43.67	41.12	401.47	41.12	9.194
34	-3.29	100	73	15.71	15.71	47.61	42.79	408.18	42.79	8.573
35	-3.39	100	74	15.71	15.71	51.79	44.47	414.91	44.47	8.011
36	-3.49	100	75	15.71	15.71	56.20	46.18	421.67	46.18	7.503
37	-3.59	100	76	15.71	15.71	60.86	47.91	428.45	47.91	7.040
38	-3.69	100	77	15.71	15.71	65.76	49.66	435.26	49.66	6.619
39	-3.79	100	78	15.71	15.71	70.92	51.44	442.10	51.44	6.233
40	-3.89	100	79	15.71	15.71	76.35	53.24	448.96	53.24	5.881
41	-3.99	100	80	15.71	15.71	82.04	55.06	455.84	55.06	5.557
42	-4.09	100	81	15.71	15.71	88.00	56.91	462.76	56.91	5.258
43	-4.19	100	82	15.71	15.71	94.25	58.78	469.70	58.78	4.983
44	-4.29	100	83	15.71	15.71	100.79	60.67	476.66	60.67	4.729
45	-4.39	100	84	15.71	15.71	107.62	62.58	483.66	62.58	4.494
46	-4.49	100	85	15.71	15.71	114.75	64.52	490.68	64.52	4.276
47	-4.59	100	86	15.71	15.71	122.19	66.48	497.72	66.48	4.073
48	-4.69	100	87	15.71	15.71	129.94	68.46	504.80	68.46	3.885
49	-4.79	100	88	15.71	15.71	138.02	70.47	511.91	70.47	3.709
50	-4.88	100	89	15.71	15.71	146.42	72.49	519.04	72.49	3.545
51	-4.98	100	90	15.71	15.71	155.15	74.55	526.20	74.55	3.391
52	-5.08	100	91	15.71	15.71	164.23	76.62	533.39	76.62	3.248
53	-5.18	100	92	15.71	15.71	173.65	78.72	540.61	78.72	3.113
54	-5.28	100	93	15.71	15.71	183.42	80.84	547.86	80.84	2.987
55	-5.38	100	94	15.71	15.71	193.55	82.98	555.14	82.98	2.868
56	-5.48	100	95	15.71	15.71	204.05	85.14	562.45	85.14	2.756
57	-5.58	100	96	15.71	15.71	214.92	87.33	569.79	87.33	2.651
58	-5.68	100	97	15.71	15.71	226.17	89.54	577.16	89.54	2.552
59	-5.78	100	98	15.71	15.71	237.81	91.78	584.56	91.78	2.458
60	-5.88	100	99	15.71	15.71	249.83	94.03	591.99	94.03	2.370
61	-5.98	100	100	15.71	15.71	262.26	96.31	599.45	96.31	2.286
62	-6.08	100	101	15.71	15.71	275.09	98.62	606.95	98.62	2.206
63	-6.18	100	102	15.71	15.71	288.33	100.94	614.47	100.94	2.131
64	-6.28	100	103	15.71	15.71	301.98	103.29	622.03	103.29	2.060
65	-6.38	100	104	15.71	15.71	316.07	105.66	629.63	105.66	1.992
66	-6.47	100	105	15.71	15.71	330.58	108.06	636.60	108.06	1.926

Combinazione n° 5 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.00	1.29	0.00	0.00	100000.000
3	-0.20	100	42	15.71	15.71	0.02	2.61	210.90	2.61	9788.323
4	-0.30	100	43	15.71	15.71	0.06	3.96	217.02	3.96	3712.199
5	-0.40	100	44	15.71	15.71	0.12	5.34	223.16	5.34	1835.886
6	-0.50	100	45	15.71	15.71	0.22	6.75	229.33	6.75	1055.081
7	-0.60	100	46	15.71	15.71	0.35	8.19	235.52	8.19	668.245
8	-0.70	100	47	15.71	15.71	0.53	9.67	241.74	9.67	453.188
9	-0.80	100	48	15.71	15.71	0.77	11.18	247.98	11.18	323.371
10	-0.90	100	49	15.71	15.71	1.06	12.72	254.25	12.72	240.001
11	-1.00	100	50	15.71	15.71	1.42	14.29	260.55	14.29	183.802
12	-1.10	100	51	15.71	15.71	1.85	15.89	266.87	15.89	144.413
13	-1.20	100	52	15.71	15.71	2.36	17.53	273.22	17.53	115.907
14	-1.30	100	53	15.71	15.71	2.95	19.19	279.60	19.19	94.717
15	-1.40	100	54	15.71	15.71	3.64	20.89	286.00	20.89	78.601
16	-1.50	100	55	15.71	15.71	4.42	22.62	292.44	22.62	66.102
17	-1.60	100	56	15.71	15.71	5.31	24.38	298.90	24.38	56.241
18	-1.69	100	57	15.71	15.71	6.32	26.18	305.39	26.18	48.344
19	-1.79	100	58	15.71	15.71	7.44	28.00	311.91	28.00	41.935
20	-1.89	100	59	15.71	15.71	8.68	29.86	318.46	29.86	36.673
21	-1.99	100	60	15.71	15.71	10.06	31.74	325.03	31.74	32.306
22	-2.09	100	61	15.71	15.71	11.58	33.66	331.64	33.66	28.647
23	-2.19	100	62	15.71	15.71	13.24	35.61	338.27	35.61	25.555

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
24	-2.29	100	63	15.71	15.71	15.05	37.59	344.94	37.59	22.922
25	-2.39	100	64	15.71	15.71	17.02	39.61	351.64	39.61	20.662
26	-2.49	100	65	15.71	15.71	19.15	41.65	358.36	41.65	18.711
27	-2.59	100	66	15.71	15.71	21.46	43.73	365.12	43.73	17.015
28	-2.69	100	67	15.71	15.71	23.94	45.84	371.91	45.84	15.534
29	-2.79	100	68	15.71	15.71	26.61	47.98	378.73	47.98	14.233
30	-2.89	100	69	15.71	15.71	29.47	50.15	385.58	50.15	13.085
31	-2.99	100	70	15.71	15.71	32.52	52.36	392.46	52.36	12.067
32	-3.09	100	71	15.71	15.71	35.78	54.59	399.37	54.59	11.161
33	-3.19	100	72	15.71	15.71	39.25	56.86	406.32	56.86	10.351
34	-3.29	100	73	15.71	15.71	42.94	59.16	413.30	59.16	9.625
35	-3.39	100	74	15.71	15.71	46.85	61.49	420.32	61.49	8.971
36	-3.49	100	75	15.71	15.71	51.00	63.85	427.37	63.85	8.380
37	-3.59	100	76	15.71	15.71	55.38	66.24	434.45	66.24	7.846
38	-3.69	100	77	15.71	15.71	60.00	68.67	441.56	68.67	7.360
39	-3.79	100	78	15.71	15.71	64.87	71.12	448.72	71.12	6.917
40	-3.89	100	79	15.71	15.71	70.00	73.61	455.90	73.61	6.513
41	-3.99	100	80	15.71	15.71	75.40	76.13	463.12	76.13	6.143
42	-4.09	100	81	15.71	15.71	81.06	78.68	470.38	78.68	5.803
43	-4.19	100	82	15.71	15.71	87.00	81.27	477.67	81.27	5.491
44	-4.29	100	83	15.71	15.71	93.22	83.88	485.00	83.88	5.203
45	-4.39	100	84	15.71	15.71	99.74	86.53	492.37	86.53	4.937
46	-4.49	100	85	15.71	15.71	106.55	89.21	499.78	89.21	4.691
47	-4.59	100	86	15.71	15.71	113.66	91.92	507.22	91.92	4.463
48	-4.69	100	87	15.71	15.71	121.08	94.66	514.70	94.66	4.251
49	-4.79	100	88	15.71	15.71	128.82	97.43	522.22	97.43	4.054
50	-4.88	100	89	15.71	15.71	136.88	100.23	529.77	100.23	3.870
51	-4.98	100	90	15.71	15.71	145.27	103.07	537.37	103.07	3.699
52	-5.08	100	91	15.71	15.71	154.00	105.94	545.01	105.94	3.539
53	-5.18	100	92	15.71	15.71	163.07	108.84	552.68	108.84	3.389
54	-5.28	100	93	15.71	15.71	172.49	111.77	560.40	111.77	3.249
55	-5.38	100	94	15.71	15.71	182.26	114.73	568.16	114.73	3.117
56	-5.48	100	95	15.71	15.71	192.40	117.72	575.96	117.72	2.994
57	-5.58	100	96	15.71	15.71	202.90	120.75	583.80	120.75	2.877
58	-5.68	100	97	15.71	15.71	213.79	123.81	591.68	123.81	2.768
59	-5.78	100	98	15.71	15.71	225.05	126.90	599.60	126.90	2.664
60	-5.88	100	99	15.71	15.71	236.70	130.02	607.57	130.02	2.567
61	-5.98	100	100	15.71	15.71	248.75	133.17	615.58	133.17	2.475
62	-6.08	100	101	15.71	15.71	261.20	136.35	623.63	136.35	2.388
63	-6.18	100	102	15.71	15.71	274.05	139.57	631.73	139.57	2.305
64	-6.28	100	103	15.71	15.71	287.33	142.81	639.87	142.81	2.227
65	-6.38	100	104	15.71	15.71	301.02	146.09	648.06	146.09	2.153
66	-6.47	100	105	15.71	15.71	315.14	149.40	655.62	149.40	2.080

Combinazione n° 6 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.00	0.99	0.00	0.00	100000.000
3	-0.20	100	42	15.71	15.71	0.02	2.00	210.80	2.00	11346.029
4	-0.30	100	43	15.71	15.71	0.05	3.04	216.86	3.04	4192.121
5	-0.40	100	44	15.71	15.71	0.11	4.11	222.94	4.11	2036.137
6	-0.50	100	45	15.71	15.71	0.20	5.19	229.05	5.19	1154.706
7	-0.60	100	46	15.71	15.71	0.32	6.30	235.17	6.30	723.882
8	-0.70	100	47	15.71	15.71	0.50	7.44	241.31	7.44	486.920
9	-0.80	100	48	15.71	15.71	0.72	8.60	247.48	8.60	345.124
10	-0.90	100	49	15.71	15.71	1.00	9.78	253.66	9.78	254.717
11	-1.00	100	50	15.71	15.71	1.34	10.99	259.87	10.99	194.147
12	-1.10	100	51	15.71	15.71	1.75	12.23	266.10	12.23	151.916
13	-1.20	100	52	15.71	15.71	2.24	13.48	272.35	13.48	121.493
14	-1.30	100	53	15.71	15.71	2.82	14.76	278.63	14.76	98.967
15	-1.40	100	54	15.71	15.71	3.48	16.07	284.92	16.07	81.896
16	-1.50	100	55	15.71	15.71	4.24	17.40	291.24	17.40	68.698
17	-1.60	100	56	15.71	15.71	5.10	18.76	297.59	18.76	58.315
18	-1.69	100	57	15.71	15.71	6.08	20.13	303.95	20.13	50.021
19	-1.79	100	58	15.71	15.71	7.17	21.54	310.34	21.54	43.306
20	-1.89	100	59	15.71	15.71	8.38	22.97	316.75	22.97	37.804
21	-1.99	100	60	15.71	15.71	9.72	24.42	323.18	24.42	33.247
22	-2.09	100	61	15.71	15.71	11.20	25.89	329.64	25.89	29.435
23	-2.19	100	62	15.71	15.71	12.82	27.39	336.12	27.39	26.220
24	-2.29	100	63	15.71	15.71	14.59	28.92	342.63	28.92	23.485
25	-2.39	100	64	15.71	15.71	16.51	30.47	349.16	30.47	21.143
26	-2.49	100	65	15.71	15.71	18.60	32.04	355.71	32.04	19.122
27	-2.59	100	66	15.71	15.71	20.86	33.64	362.29	33.64	17.369
28	-2.69	100	67	15.71	15.71	23.29	35.26	368.89	35.26	15.839
29	-2.79	100	68	15.71	15.71	25.90	36.91	375.52	36.91	14.497
30	-2.89	100	69	15.71	15.71	28.71	38.58	382.17	38.58	13.313
31	-2.99	100	70	15.71	15.71	31.70	40.27	388.85	40.27	12.265
32	-3.09	100	71	15.71	15.71	34.90	41.99	395.55	41.99	11.333
33	-3.19	100	72	15.71	15.71	38.31	43.74	402.28	43.74	10.501
34	-3.29	100	73	15.71	15.71	41.93	45.51	409.03	45.51	9.755
35	-3.39	100	74	15.71	15.71	45.77	47.30	415.81	47.30	9.084

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
36	-3.49	100	75	15.71	15.71	49.84	49.11	422.62	49.11	8.479
37	-3.59	100	76	15.71	15.71	54.15	50.96	429.45	50.96	7.931
38	-3.69	100	77	15.71	15.71	58.69	52.82	436.31	52.82	7.434
39	-3.79	100	78	15.71	15.71	63.49	54.71	443.20	54.71	6.981
40	-3.89	100	79	15.71	15.71	68.53	56.62	450.11	56.62	6.568
41	-3.99	100	80	15.71	15.71	73.84	58.56	457.05	58.56	6.190
42	-4.09	100	81	15.71	15.71	79.42	60.53	464.02	60.53	5.843
43	-4.19	100	82	15.71	15.71	85.26	62.51	471.02	62.51	5.524
44	-4.29	100	83	15.71	15.71	91.39	64.52	478.05	64.52	5.231
45	-4.39	100	84	15.71	15.71	97.81	66.56	485.10	66.56	4.960
46	-4.49	100	85	15.71	15.71	104.52	68.62	492.19	68.62	4.709
47	-4.59	100	86	15.71	15.71	111.53	70.70	499.30	70.70	4.477
48	-4.69	100	87	15.71	15.71	118.84	72.81	506.45	72.81	4.261
49	-4.79	100	88	15.71	15.71	126.47	74.95	513.62	74.95	4.061
50	-4.88	100	89	15.71	15.71	134.42	77.10	520.82	77.10	3.875
51	-4.98	100	90	15.71	15.71	142.69	79.28	528.06	79.28	3.701
52	-5.08	100	91	15.71	15.71	151.30	81.49	535.32	81.49	3.538
53	-5.18	100	92	15.71	15.71	160.25	83.72	542.62	83.72	3.386
54	-5.28	100	93	15.71	15.71	169.54	85.97	549.94	85.97	3.244
55	-5.38	100	94	15.71	15.71	179.18	88.25	557.30	88.25	3.110
56	-5.48	100	95	15.71	15.71	189.19	90.56	564.69	90.56	2.985
57	-5.58	100	96	15.71	15.71	199.55	92.88	572.11	92.88	2.867
58	-5.68	100	97	15.71	15.71	210.29	95.24	579.57	95.24	2.756
59	-5.78	100	98	15.71	15.71	221.41	97.61	587.06	97.61	2.651
60	-5.88	100	99	15.71	15.71	232.92	100.01	594.58	100.01	2.553
61	-5.98	100	100	15.71	15.71	244.81	102.44	602.13	102.44	2.460
62	-6.08	100	101	15.71	15.71	257.11	104.89	609.72	104.89	2.371
63	-6.18	100	102	15.71	15.71	269.81	107.36	617.34	107.36	2.288
64	-6.28	100	103	15.71	15.71	282.92	109.86	625.00	109.86	2.209
65	-6.38	100	104	15.71	15.71	296.45	112.38	632.69	112.38	2.134
66	-6.47	100	105	15.71	15.71	310.40	114.93	639.76	114.93	2.061

Combinazione n° 7 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.00	1.29	0.00	0.00	100000.000
3	-0.20	100	42	15.71	15.71	0.02	2.61	210.90	2.61	9788.323
4	-0.30	100	43	15.71	15.71	0.06	3.96	217.02	3.96	3712.199
5	-0.40	100	44	15.71	15.71	0.12	5.34	223.16	5.34	1835.886
6	-0.50	100	45	15.71	15.71	0.22	6.75	229.33	6.75	1055.081
7	-0.60	100	46	15.71	15.71	0.35	8.19	235.52	8.19	668.245
8	-0.70	100	47	15.71	15.71	0.53	9.67	241.74	9.67	453.188
9	-0.80	100	48	15.71	15.71	0.77	11.18	247.98	11.18	323.371
10	-0.90	100	49	15.71	15.71	1.06	12.72	254.25	12.72	240.001
11	-1.00	100	50	15.71	15.71	1.42	14.29	260.55	14.29	183.802
12	-1.10	100	51	15.71	15.71	1.85	15.89	266.87	15.89	144.413
13	-1.20	100	52	15.71	15.71	2.36	17.53	273.22	17.53	115.907
14	-1.30	100	53	15.71	15.71	2.95	19.19	279.60	19.19	94.717
15	-1.40	100	54	15.71	15.71	3.64	20.89	286.00	20.89	78.601
16	-1.50	100	55	15.71	15.71	4.42	22.62	292.44	22.62	66.102
17	-1.60	100	56	15.71	15.71	5.31	24.38	298.90	24.38	56.241
18	-1.69	100	57	15.71	15.71	6.32	26.18	305.39	26.18	48.344
19	-1.79	100	58	15.71	15.71	7.44	28.00	311.91	28.00	41.935
20	-1.89	100	59	15.71	15.71	8.68	29.86	318.46	29.86	36.673
21	-1.99	100	60	15.71	15.71	10.06	31.74	325.03	31.74	32.306
22	-2.09	100	61	15.71	15.71	11.58	33.66	331.64	33.66	28.647
23	-2.19	100	62	15.71	15.71	13.24	35.61	338.27	35.61	25.555
24	-2.29	100	63	15.71	15.71	15.05	37.59	344.94	37.59	22.922
25	-2.39	100	64	15.71	15.71	17.02	39.61	351.64	39.61	20.662
26	-2.49	100	65	15.71	15.71	19.15	41.65	358.36	41.65	18.711
27	-2.59	100	66	15.71	15.71	21.46	43.73	365.12	43.73	17.015
28	-2.69	100	67	15.71	15.71	23.94	45.84	371.91	45.84	15.534
29	-2.79	100	68	15.71	15.71	26.61	47.98	378.73	47.98	14.233
30	-2.89	100	69	15.71	15.71	29.47	50.15	385.58	50.15	13.085
31	-2.99	100	70	15.71	15.71	32.52	52.36	392.46	52.36	12.067
32	-3.09	100	71	15.71	15.71	35.78	54.59	399.37	54.59	11.161
33	-3.19	100	72	15.71	15.71	39.25	56.86	406.32	56.86	10.351
34	-3.29	100	73	15.71	15.71	42.94	59.16	413.30	59.16	9.625
35	-3.39	100	74	15.71	15.71	46.85	61.49	420.32	61.49	8.971
36	-3.49	100	75	15.71	15.71	51.00	63.85	427.37	63.85	8.380
37	-3.59	100	76	15.71	15.71	55.38	66.24	434.45	66.24	7.846
38	-3.69	100	77	15.71	15.71	60.00	68.67	441.56	68.67	7.360
39	-3.79	100	78	15.71	15.71	64.87	71.12	448.72	71.12	6.917
40	-3.89	100	79	15.71	15.71	70.00	73.61	455.90	73.61	6.513
41	-3.99	100	80	15.71	15.71	75.40	76.13	463.12	76.13	6.143
42	-4.09	100	81	15.71	15.71	81.06	78.68	470.38	78.68	5.803
43	-4.19	100	82	15.71	15.71	87.00	81.27	477.67	81.27	5.491
44	-4.29	100	83	15.71	15.71	93.22	83.88	485.00	83.88	5.203
45	-4.39	100	84	15.71	15.71	99.74	86.53	492.37	86.53	4.937
46	-4.49	100	85	15.71	15.71	106.55	89.21	499.78	89.21	4.691
47	-4.59	100	86	15.71	15.71	113.66	91.92	507.22	91.92	4.463

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
48	-4.69	100	87	15.71	15.71	121.08	94.66	514.70	94.66	4.251
49	-4.79	100	88	15.71	15.71	128.82	97.43	522.22	97.43	4.054
50	-4.88	100	89	15.71	15.71	136.88	100.23	529.77	100.23	3.870
51	-4.98	100	90	15.71	15.71	145.27	103.07	537.37	103.07	3.699
52	-5.08	100	91	15.71	15.71	154.00	105.94	545.01	105.94	3.539
53	-5.18	100	92	15.71	15.71	163.07	108.84	552.68	108.84	3.389
54	-5.28	100	93	15.71	15.71	172.49	111.77	560.40	111.77	3.249
55	-5.38	100	94	15.71	15.71	182.26	114.73	568.16	114.73	3.117
56	-5.48	100	95	15.71	15.71	192.40	117.72	575.96	117.72	2.994
57	-5.58	100	96	15.71	15.71	202.90	120.75	583.80	120.75	2.877
58	-5.68	100	97	15.71	15.71	213.79	123.81	591.68	123.81	2.768
59	-5.78	100	98	15.71	15.71	225.05	126.90	599.60	126.90	2.664
60	-5.88	100	99	15.71	15.71	236.70	130.02	607.57	130.02	2.567
61	-5.98	100	100	15.71	15.71	248.75	133.17	615.58	133.17	2.475
62	-6.08	100	101	15.71	15.71	261.20	136.35	623.63	136.35	2.388
63	-6.18	100	102	15.71	15.71	274.05	139.57	631.73	139.57	2.305
64	-6.28	100	103	15.71	15.71	287.33	142.81	639.87	142.81	2.227
65	-6.38	100	104	15.71	15.71	301.02	146.09	648.06	146.09	2.153
66	-6.47	100	105	15.71	15.71	315.14	149.40	655.62	149.40	2.080

Combinazione n° 8 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.02	1.29	0.25	1.29	11.845
3	-0.20	100	42	15.71	15.71	0.09	2.61	210.90	2.61	2380.939
4	-0.30	100	43	15.71	15.71	0.21	3.96	217.02	3.96	1036.941
5	-0.40	100	44	15.71	15.71	0.39	5.34	223.16	5.34	572.656
6	-0.50	100	45	15.71	15.71	0.64	6.75	229.33	6.75	360.392
7	-0.60	100	46	15.71	15.71	0.96	8.19	235.52	8.19	246.419
8	-0.70	100	47	15.71	15.71	1.35	9.67	241.74	9.67	178.455
9	-0.80	100	48	15.71	15.71	1.84	11.18	247.98	11.18	134.813
10	-0.90	100	49	15.71	15.71	2.42	12.72	254.25	12.72	105.198
11	-1.00	100	50	15.71	15.71	3.09	14.29	260.55	14.29	84.225
12	-1.10	100	51	15.71	15.71	3.88	15.89	266.87	15.89	68.855
13	-1.20	100	52	15.71	15.71	4.77	17.53	273.22	17.53	57.272
14	-1.30	100	53	15.71	15.71	5.78	19.19	279.60	19.19	48.338
15	-1.40	100	54	15.71	15.71	6.92	20.89	286.00	20.89	41.309
16	-1.50	100	55	15.71	15.71	8.19	22.62	292.44	22.62	35.685
17	-1.60	100	56	15.71	15.71	9.61	24.38	298.90	24.38	31.119
18	-1.69	100	57	15.71	15.71	11.16	26.18	305.39	26.18	27.363
19	-1.79	100	58	15.71	15.71	12.87	28.00	311.91	28.00	24.239
20	-1.89	100	59	15.71	15.71	14.73	29.86	318.46	29.86	21.614
21	-1.99	100	60	15.71	15.71	16.76	31.74	325.03	31.74	19.388
22	-2.09	100	61	15.71	15.71	18.97	33.66	331.64	33.66	17.485
23	-2.19	100	62	15.71	15.71	21.35	35.61	338.27	35.61	15.845
24	-2.29	100	63	15.71	15.71	23.91	37.59	344.94	37.59	14.424
25	-2.39	100	64	15.71	15.71	26.67	39.61	351.64	39.61	13.184
26	-2.49	100	65	15.71	15.71	29.63	41.65	358.36	41.65	12.096
27	-2.59	100	66	15.71	15.71	32.79	43.73	365.12	43.73	11.136
28	-2.69	100	67	15.71	15.71	36.16	45.84	371.91	45.84	10.285
29	-2.79	100	68	15.71	15.71	39.75	47.98	378.73	47.98	9.528
30	-2.89	100	69	15.71	15.71	43.56	50.15	385.58	50.15	8.851
31	-2.99	100	70	15.71	15.71	47.61	52.36	392.46	52.36	8.244
32	-3.09	100	71	15.71	15.71	51.89	54.59	399.37	54.59	7.697
33	-3.19	100	72	15.71	15.71	56.42	56.86	406.32	56.86	7.202
34	-3.29	100	73	15.71	15.71	61.19	59.16	413.30	59.16	6.754
35	-3.39	100	74	15.71	15.71	66.23	61.49	420.32	61.49	6.347
36	-3.49	100	75	15.71	15.71	71.53	63.85	427.37	63.85	5.975
37	-3.59	100	76	15.71	15.71	77.10	66.24	434.45	66.24	5.635
38	-3.69	100	77	15.71	15.71	82.94	68.67	441.56	68.67	5.324
39	-3.79	100	78	15.71	15.71	89.07	71.12	448.72	71.12	5.038
40	-3.89	100	79	15.71	15.71	95.49	73.61	455.90	73.61	4.774
41	-3.99	100	80	15.71	15.71	102.21	76.13	463.12	76.13	4.531
42	-4.09	100	81	15.71	15.71	109.23	78.68	470.38	78.68	4.306
43	-4.19	100	82	15.71	15.71	116.56	81.27	477.67	81.27	4.098
44	-4.29	100	83	15.71	15.71	124.21	83.88	485.00	83.88	3.905
45	-4.39	100	84	15.71	15.71	132.18	86.53	492.37	86.53	3.725
46	-4.49	100	85	15.71	15.71	140.49	89.21	499.78	89.21	3.558
47	-4.59	100	86	15.71	15.71	149.12	91.92	507.22	91.92	3.401
48	-4.69	100	87	15.71	15.71	158.10	94.66	514.70	94.66	3.255
49	-4.79	100	88	15.71	15.71	167.44	97.43	522.22	97.43	3.119
50	-4.88	100	89	15.71	15.71	177.12	100.23	529.77	100.23	2.991
51	-4.98	100	90	15.71	15.71	187.17	103.07	537.37	103.07	2.871
52	-5.08	100	91	15.71	15.71	197.59	105.94	545.01	105.94	2.758
53	-5.18	100	92	15.71	15.71	208.39	108.84	552.68	108.84	2.652
54	-5.28	100	93	15.71	15.71	219.57	111.77	560.40	111.77	2.552
55	-5.38	100	94	15.71	15.71	231.13	114.73	568.16	114.73	2.458
56	-5.48	100	95	15.71	15.71	243.10	117.72	575.96	117.72	2.369
57	-5.58	100	96	15.71	15.71	255.46	120.75	583.80	120.75	2.285
58	-5.68	100	97	15.71	15.71	268.24	123.81	591.68	123.81	2.206
59	-5.78	100	98	15.71	15.71	281.43	126.90	599.60	126.90	2.131

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
60	-5.88	100	99	15.71	15.71	295.04	130.02	607.57	130.02	2.059
61	-5.98	100	100	15.71	15.71	309.08	133.17	615.58	133.17	1.992
62	-6.08	100	101	15.71	15.71	323.56	136.35	623.63	136.35	1.927
63	-6.18	100	102	15.71	15.71	338.48	139.57	631.73	139.57	1.866
64	-6.28	100	103	15.71	15.71	353.85	142.81	639.87	142.81	1.808
65	-6.38	100	104	15.71	15.71	369.67	146.09	648.06	146.09	1.753
66	-6.47	100	105	15.71	15.71	385.95	149.40	655.62	149.40	1.699

Combinazione n° 9 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.02	0.99	0.19	0.99	9.442
3	-0.20	100	42	15.71	15.71	0.09	2.00	210.80	2.00	2462.283
4	-0.30	100	43	15.71	15.71	0.20	3.04	216.86	3.04	1070.622
5	-0.40	100	44	15.71	15.71	0.38	4.11	222.94	4.11	590.372
6	-0.50	100	45	15.71	15.71	0.62	5.19	229.05	5.19	371.026
7	-0.60	100	46	15.71	15.71	0.93	6.30	235.17	6.30	253.361
8	-0.70	100	47	15.71	15.71	1.32	7.44	241.31	7.44	183.259
9	-0.80	100	48	15.71	15.71	1.79	8.60	247.48	8.60	138.282
10	-0.90	100	49	15.71	15.71	2.35	9.78	253.66	9.78	107.788
11	-1.00	100	50	15.71	15.71	3.01	10.99	259.87	10.99	86.208
12	-1.10	100	51	15.71	15.71	3.78	12.23	266.10	12.23	70.406
13	-1.20	100	52	15.71	15.71	4.66	13.48	272.35	13.48	58.507
14	-1.30	100	53	15.71	15.71	5.65	14.76	278.63	14.76	49.335
15	-1.40	100	54	15.71	15.71	6.76	16.07	284.92	16.07	42.124
16	-1.50	100	55	15.71	15.71	8.01	17.40	291.24	17.40	36.359
17	-1.60	100	56	15.71	15.71	9.39	18.76	297.59	18.76	31.680
18	-1.69	100	57	15.71	15.71	10.92	20.13	303.95	20.13	27.835
19	-1.79	100	58	15.71	15.71	12.60	21.54	310.34	21.54	24.638
20	-1.89	100	59	15.71	15.71	14.43	22.97	316.75	22.97	21.952
21	-1.99	100	60	15.71	15.71	16.42	24.42	323.18	24.42	19.677
22	-2.09	100	61	15.71	15.71	18.59	25.89	329.64	25.89	17.732
23	-2.19	100	62	15.71	15.71	20.93	27.39	336.12	27.39	16.059
24	-2.29	100	63	15.71	15.71	23.45	28.92	342.63	28.92	14.608
25	-2.39	100	64	15.71	15.71	26.17	30.47	349.16	30.47	13.343
26	-2.49	100	65	15.71	15.71	29.08	32.04	355.71	32.04	12.234
27	-2.59	100	66	15.71	15.71	32.19	33.64	362.29	33.64	11.255
28	-2.69	100	67	15.71	15.71	35.51	35.26	368.89	35.26	10.389
29	-2.79	100	68	15.71	15.71	39.04	36.91	375.52	36.91	9.618
30	-2.89	100	69	15.71	15.71	42.80	38.58	382.17	38.58	8.929
31	-2.99	100	70	15.71	15.71	46.79	40.27	388.85	40.27	8.311
32	-3.09	100	71	15.71	15.71	51.01	41.99	395.55	41.99	7.755
33	-3.19	100	72	15.71	15.71	55.47	43.74	402.28	43.74	7.252
34	-3.29	100	73	15.71	15.71	60.18	45.51	409.03	45.51	6.797
35	-3.39	100	74	15.71	15.71	65.15	47.30	415.81	47.30	6.383
36	-3.49	100	75	15.71	15.71	70.37	49.11	422.62	49.11	6.005
37	-3.59	100	76	15.71	15.71	75.87	50.96	429.45	50.96	5.660
38	-3.69	100	77	15.71	15.71	81.64	52.82	436.31	52.82	5.345
39	-3.79	100	78	15.71	15.71	87.69	54.71	443.20	54.71	5.054
40	-3.89	100	79	15.71	15.71	94.02	56.62	450.11	56.62	4.787
41	-3.99	100	80	15.71	15.71	100.66	58.56	457.05	58.56	4.541
42	-4.09	100	81	15.71	15.71	107.59	60.53	464.02	60.53	4.313
43	-4.19	100	82	15.71	15.71	114.83	62.51	471.02	62.51	4.102
44	-4.29	100	83	15.71	15.71	122.38	64.52	478.05	64.52	3.906
45	-4.39	100	84	15.71	15.71	130.26	66.56	485.10	66.56	3.724
46	-4.49	100	85	15.71	15.71	138.46	68.62	492.19	68.62	3.555
47	-4.59	100	86	15.71	15.71	146.99	70.70	499.30	70.70	3.397
48	-4.69	100	87	15.71	15.71	155.86	72.81	506.45	72.81	3.249
49	-4.79	100	88	15.71	15.71	165.08	74.95	513.62	74.95	3.111
50	-4.88	100	89	15.71	15.71	174.66	77.10	520.82	77.10	2.982
51	-4.98	100	90	15.71	15.71	184.59	79.28	528.06	79.28	2.861
52	-5.08	100	91	15.71	15.71	194.89	81.49	535.32	81.49	2.747
53	-5.18	100	92	15.71	15.71	205.56	83.72	542.62	83.72	2.640
54	-5.28	100	93	15.71	15.71	216.62	85.97	549.94	85.97	2.539
55	-5.38	100	94	15.71	15.71	228.05	88.25	557.30	88.25	2.444
56	-5.48	100	95	15.71	15.71	239.88	90.56	564.69	90.56	2.354
57	-5.58	100	96	15.71	15.71	252.11	92.88	572.11	92.88	2.269
58	-5.68	100	97	15.71	15.71	264.75	95.24	579.57	95.24	2.189
59	-5.78	100	98	15.71	15.71	277.79	97.61	587.06	97.61	2.113
60	-5.88	100	99	15.71	15.71	291.26	100.01	594.58	100.01	2.041
61	-5.98	100	100	15.71	15.71	305.15	102.44	602.13	102.44	1.973
62	-6.08	100	101	15.71	15.71	319.47	104.89	609.72	104.89	1.909
63	-6.18	100	102	15.71	15.71	334.23	107.36	617.34	107.36	1.847
64	-6.28	100	103	15.71	15.71	349.44	109.86	625.00	109.86	1.789
65	-6.38	100	104	15.71	15.71	365.09	112.38	632.69	112.38	1.733
66	-6.47	100	105	15.71	15.71	381.21	114.93	639.76	114.93	1.678

Combinazione n° 10 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	0.00	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	-0.10	100	41	0.00	0.00	0.02	1.29	0.25	1.29	11.845
3	-0.20	100	42	15.71	15.71	0.09	2.61	210.90	2.61	2380.939
4	-0.30	100	43	15.71	15.71	0.21	3.96	217.02	3.96	1036.941
5	-0.40	100	44	15.71	15.71	0.39	5.34	223.16	5.34	572.656
6	-0.50	100	45	15.71	15.71	0.64	6.75	229.33	6.75	360.392
7	-0.60	100	46	15.71	15.71	0.96	8.19	235.52	8.19	246.419
8	-0.70	100	47	15.71	15.71	1.35	9.67	241.74	9.67	178.455
9	-0.80	100	48	15.71	15.71	1.84	11.18	247.98	11.18	134.813
10	-0.90	100	49	15.71	15.71	2.42	12.72	254.25	12.72	105.198
11	-1.00	100	50	15.71	15.71	3.09	14.29	260.55	14.29	84.225
12	-1.10	100	51	15.71	15.71	3.88	15.89	266.87	15.89	68.855
13	-1.20	100	52	15.71	15.71	4.77	17.53	273.22	17.53	57.272
14	-1.30	100	53	15.71	15.71	5.78	19.19	279.60	19.19	48.338
15	-1.40	100	54	15.71	15.71	6.92	20.89	286.00	20.89	41.309
16	-1.50	100	55	15.71	15.71	8.19	22.62	292.44	22.62	35.685
17	-1.60	100	56	15.71	15.71	9.61	24.38	298.90	24.38	31.119
18	-1.69	100	57	15.71	15.71	11.16	26.18	305.39	26.18	27.363
19	-1.79	100	58	15.71	15.71	12.87	28.00	311.91	28.00	24.239
20	-1.89	100	59	15.71	15.71	14.73	29.86	318.46	29.86	21.614
21	-1.99	100	60	15.71	15.71	16.76	31.74	325.03	31.74	19.388
22	-2.09	100	61	15.71	15.71	18.97	33.66	331.64	33.66	17.485
23	-2.19	100	62	15.71	15.71	21.35	35.61	338.27	35.61	15.845
24	-2.29	100	63	15.71	15.71	23.91	37.59	344.94	37.59	14.424
25	-2.39	100	64	15.71	15.71	26.67	39.61	351.64	39.61	13.184
26	-2.49	100	65	15.71	15.71	29.63	41.65	358.36	41.65	12.096
27	-2.59	100	66	15.71	15.71	32.79	43.73	365.12	43.73	11.136
28	-2.69	100	67	15.71	15.71	36.16	45.84	371.91	45.84	10.285
29	-2.79	100	68	15.71	15.71	39.75	47.98	378.73	47.98	9.528
30	-2.89	100	69	15.71	15.71	43.56	50.15	385.58	50.15	8.851
31	-2.99	100	70	15.71	15.71	47.61	52.36	392.46	52.36	8.244
32	-3.09	100	71	15.71	15.71	51.89	54.59	399.37	54.59	7.697
33	-3.19	100	72	15.71	15.71	56.42	56.86	406.32	56.86	7.202
34	-3.29	100	73	15.71	15.71	61.19	59.16	413.30	59.16	6.754
35	-3.39	100	74	15.71	15.71	66.23	61.49	420.32	61.49	6.347
36	-3.49	100	75	15.71	15.71	71.53	63.85	427.37	63.85	5.975
37	-3.59	100	76	15.71	15.71	77.10	66.24	434.45	66.24	5.635
38	-3.69	100	77	15.71	15.71	82.94	68.67	441.56	68.67	5.324
39	-3.79	100	78	15.71	15.71	89.07	71.12	448.72	71.12	5.038
40	-3.89	100	79	15.71	15.71	95.49	73.61	455.90	73.61	4.774
41	-3.99	100	80	15.71	15.71	102.21	76.13	463.12	76.13	4.531
42	-4.09	100	81	15.71	15.71	109.23	78.68	470.38	78.68	4.306
43	-4.19	100	82	15.71	15.71	116.56	81.27	477.67	81.27	4.098
44	-4.29	100	83	15.71	15.71	124.21	83.88	485.00	83.88	3.905
45	-4.39	100	84	15.71	15.71	132.18	86.53	492.37	86.53	3.725
46	-4.49	100	85	15.71	15.71	140.49	89.21	499.78	89.21	3.558
47	-4.59	100	86	15.71	15.71	149.12	91.92	507.22	91.92	3.401
48	-4.69	100	87	15.71	15.71	158.10	94.66	514.70	94.66	3.255
49	-4.79	100	88	15.71	15.71	167.44	97.43	522.22	97.43	3.119
50	-4.88	100	89	15.71	15.71	177.12	100.23	529.77	100.23	2.991
51	-4.98	100	90	15.71	15.71	187.17	103.07	537.37	103.07	2.871
52	-5.08	100	91	15.71	15.71	197.59	105.94	545.01	105.94	2.758
53	-5.18	100	92	15.71	15.71	208.39	108.84	552.68	108.84	2.652
54	-5.28	100	93	15.71	15.71	219.57	111.77	560.40	111.77	2.552
55	-5.38	100	94	15.71	15.71	231.13	114.73	568.16	114.73	2.458
56	-5.48	100	95	15.71	15.71	243.10	117.72	575.96	117.72	2.369
57	-5.58	100	96	15.71	15.71	255.46	120.75	583.80	120.75	2.285
58	-5.68	100	97	15.71	15.71	268.24	123.81	591.68	123.81	2.206
59	-5.78	100	98	15.71	15.71	281.43	126.90	599.60	126.90	2.131
60	-5.88	100	99	15.71	15.71	295.04	130.02	607.57	130.02	2.059
61	-5.98	100	100	15.71	15.71	309.08	133.17	615.58	133.17	1.992
62	-6.08	100	101	15.71	15.71	323.56	136.35	623.63	136.35	1.927
63	-6.18	100	102	15.71	15.71	338.48	139.57	631.73	139.57	1.866
64	-6.28	100	103	15.71	15.71	353.85	142.81	639.87	142.81	1.808
65	-6.38	100	104	15.71	15.71	369.67	146.09	648.06	146.09	1.753
66	-6.47	100	105	15.71	15.71	385.95	149.40	655.62	149.40	1.699

Fondazione

Combinazione n° 1 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.75	0.00	557.71	0.00	745.197
3	-0.70	100	100	15.71	15.71	2.99	0.00	557.71	0.00	186.528
4	-0.60	100	100	15.71	15.71	6.72	0.00	557.71	0.00	83.003
5	-0.50	100	100	15.71	15.71	11.93	0.00	557.71	0.00	46.746
6	-0.40	100	100	15.71	15.71	18.62	0.00	557.71	0.00	29.955
7	0.65	100	100	15.71	15.71	-354.22	0.00	-557.71	0.00	1.574
8	0.75	100	100	15.71	15.71	-338.62	0.00	-557.71	0.00	1.647

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
9	0.85	100	100	15.71	15.71	-323.29	0.00	-557.71	0.00	1.725
10	0.95	100	100	15.71	15.71	-308.25	0.00	-557.71	0.00	1.809
11	1.05	100	100	15.71	15.71	-293.49	0.00	-557.71	0.00	1.900
12	1.15	100	100	15.71	15.71	-279.03	0.00	-557.71	0.00	1.999
13	1.25	100	100	15.71	15.71	-264.87	0.00	-557.71	0.00	2.106
14	1.35	100	100	15.71	15.71	-251.01	0.00	-557.71	0.00	2.222
15	1.45	100	100	15.71	15.71	-237.46	0.00	-557.71	0.00	2.349
16	1.55	100	100	15.71	15.71	-224.22	0.00	-557.71	0.00	2.487
17	1.65	100	100	15.71	15.71	-211.31	0.00	-557.71	0.00	2.639
18	1.75	100	100	15.71	15.71	-198.72	0.00	-557.71	0.00	2.807
19	1.85	100	100	15.71	15.71	-186.46	0.00	-557.71	0.00	2.991
20	1.95	100	100	15.71	15.71	-174.54	0.00	-557.71	0.00	3.195
21	2.05	100	100	15.71	15.71	-162.97	0.00	-557.71	0.00	3.422
22	2.15	100	100	15.71	15.71	-151.74	0.00	-557.71	0.00	3.675
23	2.25	100	100	15.71	15.71	-140.86	0.00	-557.71	0.00	3.959
24	2.35	100	100	15.71	15.71	-130.35	0.00	-557.71	0.00	4.279
25	2.45	100	100	15.71	15.71	-120.20	0.00	-557.71	0.00	4.640
26	2.55	100	100	15.71	15.71	-110.41	0.00	-557.71	0.00	5.051
27	2.65	100	100	15.71	15.71	-101.01	0.00	-557.71	0.00	5.521
28	2.75	100	100	15.71	15.71	-91.98	0.00	-557.71	0.00	6.063
29	2.85	100	100	15.71	15.71	-83.35	0.00	-557.71	0.00	6.691
30	2.95	100	100	15.71	15.71	-75.10	0.00	-557.71	0.00	7.426
31	3.05	100	100	15.71	15.71	-67.25	0.00	-557.71	0.00	8.293
32	3.15	100	100	15.71	15.71	-59.81	0.00	-557.71	0.00	9.325
33	3.25	100	100	15.71	15.71	-52.77	0.00	-557.71	0.00	10.568
34	3.35	100	100	15.71	15.71	-46.15	0.00	-557.71	0.00	12.085
35	3.45	100	100	15.71	15.71	-39.95	0.00	-557.71	0.00	13.961
36	3.55	100	100	15.71	15.71	-34.17	0.00	-557.71	0.00	16.322
37	3.65	100	100	15.71	15.71	-28.82	0.00	-557.71	0.00	19.349
38	3.75	100	100	15.71	15.71	-23.91	0.00	-557.71	0.00	23.323
39	3.85	100	100	15.71	15.71	-19.44	0.00	-557.71	0.00	28.684
40	3.95	100	100	15.71	15.71	-15.42	0.00	-557.71	0.00	36.165
41	4.05	100	100	15.71	15.71	-11.85	0.00	-557.71	0.00	47.057
42	4.15	100	100	15.71	15.71	-8.74	0.00	-557.71	0.00	63.809
43	4.25	100	100	15.71	15.71	-6.09	0.00	-557.71	0.00	91.539
44	4.35	100	100	15.71	15.71	-3.91	0.00	-557.71	0.00	142.494
45	4.45	100	100	15.71	15.71	-2.21	0.00	-557.71	0.00	252.377
46	4.55	100	100	15.71	15.71	-0.99	0.00	-557.71	0.00	565.738
47	4.65	100	100	15.71	15.71	-0.25	0.00	-557.71	0.00	2254.572
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 2 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.84	0.00	557.71	0.00	664.527
3	-0.70	100	100	15.71	15.71	3.35	0.00	557.71	0.00	166.374
4	-0.60	100	100	15.71	15.71	7.53	0.00	557.71	0.00	74.052
5	-0.50	100	100	15.71	15.71	13.37	0.00	557.71	0.00	41.715
6	-0.40	100	100	15.71	15.71	20.86	0.00	557.71	0.00	26.737
7	0.65	100	100	15.71	15.71	-380.10	0.00	-557.71	0.00	1.467
8	0.75	100	100	15.71	15.71	-363.73	0.00	-557.71	0.00	1.533
9	0.85	100	100	15.71	15.71	-347.63	0.00	-557.71	0.00	1.604
10	0.95	100	100	15.71	15.71	-331.79	0.00	-557.71	0.00	1.681
11	1.05	100	100	15.71	15.71	-316.23	0.00	-557.71	0.00	1.764
12	1.15	100	100	15.71	15.71	-300.95	0.00	-557.71	0.00	1.853
13	1.25	100	100	15.71	15.71	-285.96	0.00	-557.71	0.00	1.950
14	1.35	100	100	15.71	15.71	-271.26	0.00	-557.71	0.00	2.056
15	1.45	100	100	15.71	15.71	-256.87	0.00	-557.71	0.00	2.171
16	1.55	100	100	15.71	15.71	-242.79	0.00	-557.71	0.00	2.297
17	1.65	100	100	15.71	15.71	-229.02	0.00	-557.71	0.00	2.435
18	1.75	100	100	15.71	15.71	-215.58	0.00	-557.71	0.00	2.587
19	1.85	100	100	15.71	15.71	-202.48	0.00	-557.71	0.00	2.754
20	1.95	100	100	15.71	15.71	-189.71	0.00	-557.71	0.00	2.940
21	2.05	100	100	15.71	15.71	-177.29	0.00	-557.71	0.00	3.146
22	2.15	100	100	15.71	15.71	-165.23	0.00	-557.71	0.00	3.375
23	2.25	100	100	15.71	15.71	-153.52	0.00	-557.71	0.00	3.633
24	2.35	100	100	15.71	15.71	-142.19	0.00	-557.71	0.00	3.922
25	2.45	100	100	15.71	15.71	-131.23	0.00	-557.71	0.00	4.250
26	2.55	100	100	15.71	15.71	-120.66	0.00	-557.71	0.00	4.622
27	2.65	100	100	15.71	15.71	-110.48	0.00	-557.71	0.00	5.048
28	2.75	100	100	15.71	15.71	-100.70	0.00	-557.71	0.00	5.539
29	2.85	100	100	15.71	15.71	-91.32	0.00	-557.71	0.00	6.107
30	2.95	100	100	15.71	15.71	-82.35	0.00	-557.71	0.00	6.772
31	3.05	100	100	15.71	15.71	-73.81	0.00	-557.71	0.00	7.556
32	3.15	100	100	15.71	15.71	-65.69	0.00	-557.71	0.00	8.489
33	3.25	100	100	15.71	15.71	-58.01	0.00	-557.71	0.00	9.613
34	3.35	100	100	15.71	15.71	-50.78	0.00	-557.71	0.00	10.984
35	3.45	100	100	15.71	15.71	-43.99	0.00	-557.71	0.00	12.679
36	3.55	100	100	15.71	15.71	-37.66	0.00	-557.71	0.00	14.811
37	3.65	100	100	15.71	15.71	-31.79	0.00	-557.71	0.00	17.544
38	3.75	100	100	15.71	15.71	-26.39	0.00	-557.71	0.00	21.130

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
39	3.85	100	100	15.71	15.71	-21.48	0.00	-557.71	0.00	25.966
40	3.95	100	100	15.71	15.71	-17.05	0.00	-557.71	0.00	32.713
41	4.05	100	100	15.71	15.71	-13.11	0.00	-557.71	0.00	42.532
42	4.15	100	100	15.71	15.71	-9.68	0.00	-557.71	0.00	57.629
43	4.25	100	100	15.71	15.71	-6.75	0.00	-557.71	0.00	82.610
44	4.35	100	100	15.71	15.71	-4.34	0.00	-557.71	0.00	128.498
45	4.45	100	100	15.71	15.71	-2.45	0.00	-557.71	0.00	227.418
46	4.55	100	100	15.71	15.71	-1.09	0.00	-557.71	0.00	509.408
47	4.65	100	100	15.71	15.71	-0.27	0.00	-557.71	0.00	2028.588
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 3 - STR (A1-M1-R3) H + V

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	1.13	0.00	557.71	0.00	493.944
3	-0.70	100	100	15.71	15.71	4.50	0.00	557.71	0.00	124.025
4	-0.60	100	100	15.71	15.71	10.07	0.00	557.71	0.00	55.364
5	-0.50	100	100	15.71	15.71	17.83	0.00	557.71	0.00	31.279
6	-0.40	100	100	15.71	15.71	27.74	0.00	557.71	0.00	20.107
7	0.65	100	100	15.71	15.71	-241.48	0.00	-557.71	0.00	2.310
8	0.75	100	100	15.71	15.71	-237.69	0.00	-557.71	0.00	2.346
9	0.85	100	100	15.71	15.71	-233.41	0.00	-557.71	0.00	2.389
10	0.95	100	100	15.71	15.71	-228.68	0.00	-557.71	0.00	2.439
11	1.05	100	100	15.71	15.71	-223.51	0.00	-557.71	0.00	2.495
12	1.15	100	100	15.71	15.71	-217.95	0.00	-557.71	0.00	2.559
13	1.25	100	100	15.71	15.71	-212.02	0.00	-557.71	0.00	2.631
14	1.35	100	100	15.71	15.71	-205.74	0.00	-557.71	0.00	2.711
15	1.45	100	100	15.71	15.71	-199.16	0.00	-557.71	0.00	2.800
16	1.55	100	100	15.71	15.71	-192.29	0.00	-557.71	0.00	2.900
17	1.65	100	100	15.71	15.71	-185.17	0.00	-557.71	0.00	3.012
18	1.75	100	100	15.71	15.71	-177.83	0.00	-557.71	0.00	3.136
19	1.85	100	100	15.71	15.71	-170.30	0.00	-557.71	0.00	3.275
20	1.95	100	100	15.71	15.71	-162.60	0.00	-557.71	0.00	3.430
21	2.05	100	100	15.71	15.71	-154.77	0.00	-557.71	0.00	3.603
22	2.15	100	100	15.71	15.71	-146.83	0.00	-557.71	0.00	3.798
23	2.25	100	100	15.71	15.71	-138.82	0.00	-557.71	0.00	4.018
24	2.35	100	100	15.71	15.71	-130.76	0.00	-557.71	0.00	4.265
25	2.45	100	100	15.71	15.71	-122.68	0.00	-557.71	0.00	4.546
26	2.55	100	100	15.71	15.71	-114.62	0.00	-557.71	0.00	4.866
27	2.65	100	100	15.71	15.71	-106.60	0.00	-557.71	0.00	5.232
28	2.75	100	100	15.71	15.71	-98.65	0.00	-557.71	0.00	5.653
29	2.85	100	100	15.71	15.71	-90.80	0.00	-557.71	0.00	6.142
30	2.95	100	100	15.71	15.71	-83.09	0.00	-557.71	0.00	6.712
31	3.05	100	100	15.71	15.71	-75.53	0.00	-557.71	0.00	7.384
32	3.15	100	100	15.71	15.71	-68.16	0.00	-557.71	0.00	8.183
33	3.25	100	100	15.71	15.71	-61.01	0.00	-557.71	0.00	9.142
34	3.35	100	100	15.71	15.71	-54.11	0.00	-557.71	0.00	10.308
35	3.45	100	100	15.71	15.71	-47.48	0.00	-557.71	0.00	11.746
36	3.55	100	100	15.71	15.71	-41.16	0.00	-557.71	0.00	13.549
37	3.65	100	100	15.71	15.71	-35.18	0.00	-557.71	0.00	15.852
38	3.75	100	100	15.71	15.71	-29.57	0.00	-557.71	0.00	18.863
39	3.85	100	100	15.71	15.71	-24.35	0.00	-557.71	0.00	22.908
40	3.95	100	100	15.71	15.71	-19.55	0.00	-557.71	0.00	28.527
41	4.05	100	100	15.71	15.71	-15.21	0.00	-557.71	0.00	36.671
42	4.15	100	100	15.71	15.71	-11.35	0.00	-557.71	0.00	49.137
43	4.25	100	100	15.71	15.71	-8.00	0.00	-557.71	0.00	69.674
44	4.35	100	100	15.71	15.71	-5.20	0.00	-557.71	0.00	107.223
45	4.45	100	100	15.71	15.71	-2.97	0.00	-557.71	0.00	187.786
46	4.55	100	100	15.71	15.71	-1.34	0.00	-557.71	0.00	416.331
47	4.65	100	100	15.71	15.71	-0.34	0.00	-557.71	0.00	1641.293
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 4 - STR (A1-M1-R3) H - V

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	1.03	0.00	557.71	0.00	539.846
3	-0.70	100	100	15.71	15.71	4.11	0.00	557.71	0.00	135.600
4	-0.60	100	100	15.71	15.71	9.21	0.00	557.71	0.00	60.553
5	-0.50	100	100	15.71	15.71	16.30	0.00	557.71	0.00	34.224
6	-0.40	100	100	15.71	15.71	25.34	0.00	557.71	0.00	22.009
7	0.65	100	100	15.71	15.71	-395.12	0.00	-557.71	0.00	1.411
8	0.75	100	100	15.71	15.71	-383.87	0.00	-557.71	0.00	1.453
9	0.85	100	100	15.71	15.71	-372.32	0.00	-557.71	0.00	1.498
10	0.95	100	100	15.71	15.71	-360.50	0.00	-557.71	0.00	1.547
11	1.05	100	100	15.71	15.71	-348.44	0.00	-557.71	0.00	1.601
12	1.15	100	100	15.71	15.71	-336.17	0.00	-557.71	0.00	1.659
13	1.25	100	100	15.71	15.71	-323.72	0.00	-557.71	0.00	1.723
14	1.35	100	100	15.71	15.71	-311.11	0.00	-557.71	0.00	1.793

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
15	1.45	100	100	15.71	15.71	-298.38	0.00	-557.71	0.00	1.869
16	1.55	100	100	15.71	15.71	-285.55	0.00	-557.71	0.00	1.953
17	1.65	100	100	15.71	15.71	-272.66	0.00	-557.71	0.00	2.045
18	1.75	100	100	15.71	15.71	-259.74	0.00	-557.71	0.00	2.147
19	1.85	100	100	15.71	15.71	-246.80	0.00	-557.71	0.00	2.260
20	1.95	100	100	15.71	15.71	-233.89	0.00	-557.71	0.00	2.384
21	2.05	100	100	15.71	15.71	-221.03	0.00	-557.71	0.00	2.523
22	2.15	100	100	15.71	15.71	-208.25	0.00	-557.71	0.00	2.678
23	2.25	100	100	15.71	15.71	-195.58	0.00	-557.71	0.00	2.852
24	2.35	100	100	15.71	15.71	-183.05	0.00	-557.71	0.00	3.047
25	2.45	100	100	15.71	15.71	-170.69	0.00	-557.71	0.00	3.267
26	2.55	100	100	15.71	15.71	-158.53	0.00	-557.71	0.00	3.518
27	2.65	100	100	15.71	15.71	-146.59	0.00	-557.71	0.00	3.805
28	2.75	100	100	15.71	15.71	-134.91	0.00	-557.71	0.00	4.134
29	2.85	100	100	15.71	15.71	-123.51	0.00	-557.71	0.00	4.515
30	2.95	100	100	15.71	15.71	-112.43	0.00	-557.71	0.00	4.961
31	3.05	100	100	15.71	15.71	-101.69	0.00	-557.71	0.00	5.484
32	3.15	100	100	15.71	15.71	-91.33	0.00	-557.71	0.00	6.107
33	3.25	100	100	15.71	15.71	-81.36	0.00	-557.71	0.00	6.855
34	3.35	100	100	15.71	15.71	-71.83	0.00	-557.71	0.00	7.764
35	3.45	100	100	15.71	15.71	-62.76	0.00	-557.71	0.00	8.887
36	3.55	100	100	15.71	15.71	-54.17	0.00	-557.71	0.00	10.295
37	3.65	100	100	15.71	15.71	-46.11	0.00	-557.71	0.00	12.095
38	3.75	100	100	15.71	15.71	-38.59	0.00	-557.71	0.00	14.450
39	3.85	100	100	15.71	15.71	-31.66	0.00	-557.71	0.00	17.618
40	3.95	100	100	15.71	15.71	-25.32	0.00	-557.71	0.00	22.023
41	4.05	100	100	15.71	15.71	-19.63	0.00	-557.71	0.00	28.416
42	4.15	100	100	15.71	15.71	-14.60	0.00	-557.71	0.00	38.212
43	4.25	100	100	15.71	15.71	-10.26	0.00	-557.71	0.00	54.373
44	4.35	100	100	15.71	15.71	-6.64	0.00	-557.71	0.00	83.962
45	4.45	100	100	15.71	15.71	-3.78	0.00	-557.71	0.00	147.535
46	4.55	100	100	15.71	15.71	-1.70	0.00	-557.71	0.00	328.152
47	4.65	100	100	15.71	15.71	-0.43	0.00	-557.71	0.00	1297.741
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 5 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.90	0.00	557.71	0.00	622.341
3	-0.70	100	100	15.71	15.71	3.58	0.00	557.71	0.00	155.672
4	-0.60	100	100	15.71	15.71	8.06	0.00	557.71	0.00	69.226
5	-0.50	100	100	15.71	15.71	14.31	0.00	557.71	0.00	38.961
6	-0.40	100	100	15.71	15.71	22.35	0.00	557.71	0.00	24.949
7	0.65	100	100	15.71	15.71	-16.14	0.00	-557.71	0.00	34.561
8	0.75	100	100	15.71	15.71	-16.15	0.00	-557.71	0.00	34.523
9	0.85	100	100	15.71	15.71	-16.11	0.00	-557.71	0.00	34.611
10	0.95	100	100	15.71	15.71	-16.02	0.00	-557.71	0.00	34.823
11	1.05	100	100	15.71	15.71	-15.86	0.00	-557.71	0.00	35.154
12	1.15	100	100	15.71	15.71	-15.66	0.00	-557.71	0.00	35.607
13	1.25	100	100	15.71	15.71	-15.41	0.00	-557.71	0.00	36.182
14	1.35	100	100	15.71	15.71	-15.12	0.00	-557.71	0.00	36.884
15	1.45	100	100	15.71	15.71	-14.79	0.00	-557.71	0.00	37.719
16	1.55	100	100	15.71	15.71	-14.41	0.00	-557.71	0.00	38.697
17	1.65	100	100	15.71	15.71	-14.00	0.00	-557.71	0.00	39.826
18	1.75	100	100	15.71	15.71	-13.56	0.00	-557.71	0.00	41.123
19	1.85	100	100	15.71	15.71	-13.09	0.00	-557.71	0.00	42.602
20	1.95	100	100	15.71	15.71	-12.59	0.00	-557.71	0.00	44.285
21	2.05	100	100	15.71	15.71	-12.07	0.00	-557.71	0.00	46.196
22	2.15	100	100	15.71	15.71	-11.53	0.00	-557.71	0.00	48.365
23	2.25	100	100	15.71	15.71	-10.97	0.00	-557.71	0.00	50.830
24	2.35	100	100	15.71	15.71	-10.40	0.00	-557.71	0.00	53.635
25	2.45	100	100	15.71	15.71	-9.81	0.00	-557.71	0.00	56.835
26	2.55	100	100	15.71	15.71	-9.22	0.00	-557.71	0.00	60.498
27	2.65	100	100	15.71	15.71	-8.62	0.00	-557.71	0.00	64.707
28	2.75	100	100	15.71	15.71	-8.02	0.00	-557.71	0.00	69.570
29	2.85	100	100	15.71	15.71	-7.41	0.00	-557.71	0.00	75.220
30	2.95	100	100	15.71	15.71	-6.82	0.00	-557.71	0.00	81.828
31	3.05	100	100	15.71	15.71	-6.22	0.00	-557.71	0.00	89.620
32	3.15	100	100	15.71	15.71	-5.64	0.00	-557.71	0.00	98.889
33	3.25	100	100	15.71	15.71	-5.07	0.00	-557.71	0.00	110.030
34	3.35	100	100	15.71	15.71	-4.51	0.00	-557.71	0.00	123.583
35	3.45	100	100	15.71	15.71	-3.98	0.00	-557.71	0.00	140.297
36	3.55	100	100	15.71	15.71	-3.46	0.00	-557.71	0.00	161.245
37	3.65	100	100	15.71	15.71	-2.97	0.00	-557.71	0.00	188.003
38	3.75	100	100	15.71	15.71	-2.50	0.00	-557.71	0.00	222.962
39	3.85	100	100	15.71	15.71	-2.07	0.00	-557.71	0.00	269.897
40	3.95	100	100	15.71	15.71	-1.66	0.00	-557.71	0.00	335.058
41	4.05	100	100	15.71	15.71	-1.30	0.00	-557.71	0.00	429.417
42	4.15	100	100	15.71	15.71	-0.97	0.00	-557.71	0.00	573.721
43	4.25	100	100	15.71	15.71	-0.69	0.00	-557.71	0.00	811.220
44	4.35	100	100	15.71	15.71	-0.45	0.00	-557.71	0.00	1245.020

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
45	4.45	100	100	15.71	15.71	-0.26	0.00	-557.71	0.00	2174.746
46	4.55	100	100	15.71	15.71	-0.12	0.00	-557.71	0.00	4809.255
47	4.65	100	100	15.71	15.71	-0.03	0.00	-557.71	0.00	18912.652
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 6 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.80	0.00	557.71	0.00	694.092
3	-0.70	100	100	15.71	15.71	3.22	0.00	557.71	0.00	173.470
4	-0.60	100	100	15.71	15.71	7.24	0.00	557.71	0.00	77.074
5	-0.50	100	100	15.71	15.71	12.87	0.00	557.71	0.00	43.341
6	-0.40	100	100	15.71	15.71	20.11	0.00	557.71	0.00	27.730
7	0.65	100	100	15.71	15.71	-12.94	0.00	-557.71	0.00	43.090
8	0.75	100	100	15.71	15.71	-11.93	0.00	-557.71	0.00	46.758
9	0.85	100	100	15.71	15.71	-10.97	0.00	-557.71	0.00	50.857
10	0.95	100	100	15.71	15.71	-10.06	0.00	-557.71	0.00	55.452
11	1.05	100	100	15.71	15.71	-9.20	0.00	-557.71	0.00	60.620
12	1.15	100	100	15.71	15.71	-8.39	0.00	-557.71	0.00	66.456
13	1.25	100	100	15.71	15.71	-7.63	0.00	-557.71	0.00	73.070
14	1.35	100	100	15.71	15.71	-6.92	0.00	-557.71	0.00	80.598
15	1.45	100	100	15.71	15.71	-6.25	0.00	-557.71	0.00	89.205
16	1.55	100	100	15.71	15.71	-5.63	0.00	-557.71	0.00	99.093
17	1.65	100	100	15.71	15.71	-5.05	0.00	-557.71	0.00	110.512
18	1.75	100	100	15.71	15.71	-4.51	0.00	-557.71	0.00	123.772
19	1.85	100	100	15.71	15.71	-4.00	0.00	-557.71	0.00	139.265
20	1.95	100	100	15.71	15.71	-3.54	0.00	-557.71	0.00	157.487
21	2.05	100	100	15.71	15.71	-3.11	0.00	-557.71	0.00	179.074
22	2.15	100	100	15.71	15.71	-2.72	0.00	-557.71	0.00	204.853
23	2.25	100	100	15.71	15.71	-2.36	0.00	-557.71	0.00	235.909
24	2.35	100	100	15.71	15.71	-2.04	0.00	-557.71	0.00	273.692
25	2.45	100	100	15.71	15.71	-1.74	0.00	-557.71	0.00	320.164
26	2.55	100	100	15.71	15.71	-1.48	0.00	-557.71	0.00	378.037
27	2.65	100	100	15.71	15.71	-1.24	0.00	-557.71	0.00	451.130
28	2.75	100	100	15.71	15.71	-1.02	0.00	-557.71	0.00	544.963
29	2.85	100	100	15.71	15.71	-0.84	0.00	-557.71	0.00	667.730
30	2.95	100	100	15.71	15.71	-0.67	0.00	-557.71	0.00	832.021
31	3.05	100	100	15.71	15.71	-0.53	0.00	-557.71	0.00	1057.978
32	3.15	100	100	15.71	15.71	-0.40	0.00	-557.71	0.00	1379.509
33	3.25	100	100	15.71	15.71	-0.30	0.00	-557.71	0.00	1857.530
34	3.35	100	100	15.71	15.71	-0.21	0.00	-557.71	0.00	2611.472
35	3.45	100	100	15.71	15.71	-0.14	0.00	-557.71	0.00	3906.379
36	3.55	100	100	15.71	15.71	-0.09	0.00	-557.71	0.00	6455.249
37	3.65	100	100	15.71	15.71	-0.04	0.00	-557.71	0.00	12977.660
38	3.75	100	100	15.71	15.71	-0.01	0.00	-557.71	0.00	50540.283
39	3.85	100	100	15.71	15.71	0.01	0.00	557.71	0.00	51205.991
40	3.95	100	100	15.71	15.71	0.02	0.00	557.71	0.00	22975.960
41	4.05	100	100	15.71	15.71	0.03	0.00	557.71	0.00	18237.549
42	4.15	100	100	15.71	15.71	0.03	0.00	557.71	0.00	17829.363
43	4.25	100	100	15.71	15.71	0.03	0.00	557.71	0.00	20030.651
44	4.35	100	100	15.71	15.71	0.02	0.00	557.71	0.00	25657.869
45	4.45	100	100	15.71	15.71	0.01	0.00	557.71	0.00	38649.223
46	4.55	100	100	15.71	15.71	0.01	0.00	0.00	0.00	100000.000
47	4.65	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 7 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.84	0.00	557.71	0.00	663.115
3	-0.70	100	100	15.71	15.71	3.36	0.00	557.71	0.00	166.106
4	-0.60	100	100	15.71	15.71	7.54	0.00	557.71	0.00	73.971
5	-0.50	100	100	15.71	15.71	13.38	0.00	557.71	0.00	41.691
6	-0.40	100	100	15.71	15.71	20.86	0.00	557.71	0.00	26.735
7	0.65	100	100	15.71	15.71	-357.42	0.00	-557.71	0.00	1.560
8	0.75	100	100	15.71	15.71	-342.85	0.00	-557.71	0.00	1.627
9	0.85	100	100	15.71	15.71	-328.44	0.00	-557.71	0.00	1.698
10	0.95	100	100	15.71	15.71	-314.21	0.00	-557.71	0.00	1.775
11	1.05	100	100	15.71	15.71	-300.16	0.00	-557.71	0.00	1.858
12	1.15	100	100	15.71	15.71	-286.30	0.00	-557.71	0.00	1.948
13	1.25	100	100	15.71	15.71	-272.65	0.00	-557.71	0.00	2.046
14	1.35	100	100	15.71	15.71	-259.21	0.00	-557.71	0.00	2.152
15	1.45	100	100	15.71	15.71	-245.99	0.00	-557.71	0.00	2.267
16	1.55	100	100	15.71	15.71	-233.01	0.00	-557.71	0.00	2.394
17	1.65	100	100	15.71	15.71	-220.26	0.00	-557.71	0.00	2.532
18	1.75	100	100	15.71	15.71	-207.78	0.00	-557.71	0.00	2.684
19	1.85	100	100	15.71	15.71	-195.55	0.00	-557.71	0.00	2.852
20	1.95	100	100	15.71	15.71	-183.60	0.00	-557.71	0.00	3.038

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
21	2.05	100	100	15.71	15.71	-171.92	0.00	-557.71	0.00	3.244
22	2.15	100	100	15.71	15.71	-160.55	0.00	-557.71	0.00	3.474
23	2.25	100	100	15.71	15.71	-149.47	0.00	-557.71	0.00	3.731
24	2.35	100	100	15.71	15.71	-138.71	0.00	-557.71	0.00	4.021
25	2.45	100	100	15.71	15.71	-128.27	0.00	-557.71	0.00	4.348
26	2.55	100	100	15.71	15.71	-118.16	0.00	-557.71	0.00	4.720
27	2.65	100	100	15.71	15.71	-108.39	0.00	-557.71	0.00	5.145
28	2.75	100	100	15.71	15.71	-98.98	0.00	-557.71	0.00	5.635
29	2.85	100	100	15.71	15.71	-89.93	0.00	-557.71	0.00	6.202
30	2.95	100	100	15.71	15.71	-81.25	0.00	-557.71	0.00	6.864
31	3.05	100	100	15.71	15.71	-72.95	0.00	-557.71	0.00	7.645
32	3.15	100	100	15.71	15.71	-65.04	0.00	-557.71	0.00	8.574
33	3.25	100	100	15.71	15.71	-57.54	0.00	-557.71	0.00	9.693
34	3.35	100	100	15.71	15.71	-50.45	0.00	-557.71	0.00	11.055
35	3.45	100	100	15.71	15.71	-43.78	0.00	-557.71	0.00	12.739
36	3.55	100	100	15.71	15.71	-37.54	0.00	-557.71	0.00	14.856
37	3.65	100	100	15.71	15.71	-31.75	0.00	-557.71	0.00	17.568
38	3.75	100	100	15.71	15.71	-26.40	0.00	-557.71	0.00	21.123
39	3.85	100	100	15.71	15.71	-21.52	0.00	-557.71	0.00	25.915
40	3.95	100	100	15.71	15.71	-17.11	0.00	-557.71	0.00	32.596
41	4.05	100	100	15.71	15.71	-13.18	0.00	-557.71	0.00	42.312
42	4.15	100	100	15.71	15.71	-9.74	0.00	-557.71	0.00	57.238
43	4.25	100	100	15.71	15.71	-6.81	0.00	-557.71	0.00	81.921
44	4.35	100	100	15.71	15.71	-4.38	0.00	-557.71	0.00	127.226
45	4.45	100	100	15.71	15.71	-2.48	0.00	-557.71	0.00	224.819
46	4.55	100	100	15.71	15.71	-1.11	0.00	-557.71	0.00	502.818
47	4.65	100	100	15.71	15.71	-0.28	0.00	-557.71	0.00	1999.318
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 8 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.99	0.00	557.71	0.00	565.055
3	-0.70	100	100	15.71	15.71	3.94	0.00	557.71	0.00	141.379
4	-0.60	100	100	15.71	15.71	8.87	0.00	557.71	0.00	62.886
5	-0.50	100	100	15.71	15.71	15.75	0.00	557.71	0.00	35.402
6	-0.40	100	100	15.71	15.71	24.59	0.00	557.71	0.00	22.676
7	0.65	100	100	15.71	15.71	-42.01	0.00	-557.71	0.00	13.275
8	0.75	100	100	15.71	15.71	-41.27	0.00	-557.71	0.00	13.514
9	0.85	100	100	15.71	15.71	-40.45	0.00	-557.71	0.00	13.787
10	0.95	100	100	15.71	15.71	-39.56	0.00	-557.71	0.00	14.098
11	1.05	100	100	15.71	15.71	-38.60	0.00	-557.71	0.00	14.448
12	1.15	100	100	15.71	15.71	-37.58	0.00	-557.71	0.00	14.840
13	1.25	100	100	15.71	15.71	-36.51	0.00	-557.71	0.00	15.278
14	1.35	100	100	15.71	15.71	-35.38	0.00	-557.71	0.00	15.766
15	1.45	100	100	15.71	15.71	-34.20	0.00	-557.71	0.00	16.308
16	1.55	100	100	15.71	15.71	-32.98	0.00	-557.71	0.00	16.912
17	1.65	100	100	15.71	15.71	-31.72	0.00	-557.71	0.00	17.583
18	1.75	100	100	15.71	15.71	-30.43	0.00	-557.71	0.00	18.330
19	1.85	100	100	15.71	15.71	-29.11	0.00	-557.71	0.00	19.162
20	1.95	100	100	15.71	15.71	-27.76	0.00	-557.71	0.00	20.090
21	2.05	100	100	15.71	15.71	-26.40	0.00	-557.71	0.00	21.127
22	2.15	100	100	15.71	15.71	-25.02	0.00	-557.71	0.00	22.290
23	2.25	100	100	15.71	15.71	-23.63	0.00	-557.71	0.00	23.598
24	2.35	100	100	15.71	15.71	-22.24	0.00	-557.71	0.00	25.075
25	2.45	100	100	15.71	15.71	-20.85	0.00	-557.71	0.00	26.747
26	2.55	100	100	15.71	15.71	-19.47	0.00	-557.71	0.00	28.652
27	2.65	100	100	15.71	15.71	-18.09	0.00	-557.71	0.00	30.831
28	2.75	100	100	15.71	15.71	-16.73	0.00	-557.71	0.00	33.340
29	2.85	100	100	15.71	15.71	-15.39	0.00	-557.71	0.00	36.247
30	2.95	100	100	15.71	15.71	-14.07	0.00	-557.71	0.00	39.641
31	3.05	100	100	15.71	15.71	-12.78	0.00	-557.71	0.00	43.637
32	3.15	100	100	15.71	15.71	-11.53	0.00	-557.71	0.00	48.385
33	3.25	100	100	15.71	15.71	-10.31	0.00	-557.71	0.00	54.089
34	3.35	100	100	15.71	15.71	-9.14	0.00	-557.71	0.00	61.025
35	3.45	100	100	15.71	15.71	-8.02	0.00	-557.71	0.00	69.578
36	3.55	100	100	15.71	15.71	-6.95	0.00	-557.71	0.00	80.301
37	3.65	100	100	15.71	15.71	-5.93	0.00	-557.71	0.00	94.003
38	3.75	100	100	15.71	15.71	-4.98	0.00	-557.71	0.00	111.915
39	3.85	100	100	15.71	15.71	-4.10	0.00	-557.71	0.00	135.980
40	3.95	100	100	15.71	15.71	-3.29	0.00	-557.71	0.00	169.418
41	4.05	100	100	15.71	15.71	-2.56	0.00	-557.71	0.00	217.887
42	4.15	100	100	15.71	15.71	-1.91	0.00	-557.71	0.00	292.087
43	4.25	100	100	15.71	15.71	-1.35	0.00	-557.71	0.00	414.346
44	4.35	100	100	15.71	15.71	-0.87	0.00	-557.71	0.00	637.920
45	4.45	100	100	15.71	15.71	-0.50	0.00	-557.71	0.00	1117.690
46	4.55	100	100	15.71	15.71	-0.22	0.00	-557.71	0.00	2478.972
47	4.65	100	100	15.71	15.71	-0.06	0.00	-557.71	0.00	9776.596
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 9 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.89	0.00	557.71	0.00	623.584
3	-0.70	100	100	15.71	15.71	3.58	0.00	557.71	0.00	155.906
4	-0.60	100	100	15.71	15.71	8.05	0.00	557.71	0.00	69.296
5	-0.50	100	100	15.71	15.71	14.31	0.00	557.71	0.00	38.982
6	-0.40	100	100	15.71	15.71	22.35	0.00	557.71	0.00	24.950
7	0.65	100	100	15.71	15.71	-38.82	0.00	-557.71	0.00	14.367
8	0.75	100	100	15.71	15.71	-37.04	0.00	-557.71	0.00	15.056
9	0.85	100	100	15.71	15.71	-35.30	0.00	-557.71	0.00	15.798
10	0.95	100	100	15.71	15.71	-33.60	0.00	-557.71	0.00	16.598
11	1.05	100	100	15.71	15.71	-31.94	0.00	-557.71	0.00	17.462
12	1.15	100	100	15.71	15.71	-30.31	0.00	-557.71	0.00	18.399
13	1.25	100	100	15.71	15.71	-28.72	0.00	-557.71	0.00	19.416
14	1.35	100	100	15.71	15.71	-27.17	0.00	-557.71	0.00	20.524
15	1.45	100	100	15.71	15.71	-25.66	0.00	-557.71	0.00	21.731
16	1.55	100	100	15.71	15.71	-24.19	0.00	-557.71	0.00	23.053
17	1.65	100	100	15.71	15.71	-22.76	0.00	-557.71	0.00	24.503
18	1.75	100	100	15.71	15.71	-21.37	0.00	-557.71	0.00	26.098
19	1.85	100	100	15.71	15.71	-20.02	0.00	-557.71	0.00	27.859
20	1.95	100	100	15.71	15.71	-18.71	0.00	-557.71	0.00	29.811
21	2.05	100	100	15.71	15.71	-17.44	0.00	-557.71	0.00	31.980
22	2.15	100	100	15.71	15.71	-16.21	0.00	-557.71	0.00	34.402
23	2.25	100	100	15.71	15.71	-15.03	0.00	-557.71	0.00	37.118
24	2.35	100	100	15.71	15.71	-13.88	0.00	-557.71	0.00	40.176
25	2.45	100	100	15.71	15.71	-12.78	0.00	-557.71	0.00	43.638
26	2.55	100	100	15.71	15.71	-11.72	0.00	-557.71	0.00	47.579
27	2.65	100	100	15.71	15.71	-10.71	0.00	-557.71	0.00	52.091
28	2.75	100	100	15.71	15.71	-9.73	0.00	-557.71	0.00	57.290
29	2.85	100	100	15.71	15.71	-8.81	0.00	-557.71	0.00	63.325
30	2.95	100	100	15.71	15.71	-7.92	0.00	-557.71	0.00	70.385
31	3.05	100	100	15.71	15.71	-7.08	0.00	-557.71	0.00	78.719
32	3.15	100	100	15.71	15.71	-6.29	0.00	-557.71	0.00	88.652
33	3.25	100	100	15.71	15.71	-5.54	0.00	-557.71	0.00	100.623
34	3.35	100	100	15.71	15.71	-4.84	0.00	-557.71	0.00	115.234
35	3.45	100	100	15.71	15.71	-4.18	0.00	-557.71	0.00	133.324
36	3.55	100	100	15.71	15.71	-3.57	0.00	-557.71	0.00	156.096
37	3.65	100	100	15.71	15.71	-3.01	0.00	-557.71	0.00	185.325
38	3.75	100	100	15.71	15.71	-2.49	0.00	-557.71	0.00	223.709
39	3.85	100	100	15.71	15.71	-2.02	0.00	-557.71	0.00	275.529
40	3.95	100	100	15.71	15.71	-1.60	0.00	-557.71	0.00	347.891
41	4.05	100	100	15.71	15.71	-1.23	0.00	-557.71	0.00	453.316
42	4.15	100	100	15.71	15.71	-0.91	0.00	-557.71	0.00	615.559
43	4.25	100	100	15.71	15.71	-0.63	0.00	-557.71	0.00	884.322
44	4.35	100	100	15.71	15.71	-0.40	0.00	-557.71	0.00	1378.513
45	4.45	100	100	15.71	15.71	-0.23	0.00	-557.71	0.00	2444.957
46	4.55	100	100	15.71	15.71	-0.10	0.00	-557.71	0.00	5488.313
47	4.65	100	100	15.71	15.71	-0.03	0.00	-557.71	0.00	21902.135
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

Combinazione n° 10 - STR (A1-M1-R3)

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	-0.90	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	-0.80	100	100	15.71	15.71	0.93	0.00	557.71	0.00	598.467
3	-0.70	100	100	15.71	15.71	3.72	0.00	557.71	0.00	149.933
4	-0.60	100	100	15.71	15.71	8.35	0.00	557.71	0.00	66.778
5	-0.50	100	100	15.71	15.71	14.82	0.00	557.71	0.00	37.642
6	-0.40	100	100	15.71	15.71	23.10	0.00	557.71	0.00	24.142
7	0.65	100	100	15.71	15.71	-383.29	0.00	-557.71	0.00	1.455
8	0.75	100	100	15.71	15.71	-367.96	0.00	-557.71	0.00	1.516
9	0.85	100	100	15.71	15.71	-352.78	0.00	-557.71	0.00	1.581
10	0.95	100	100	15.71	15.71	-337.75	0.00	-557.71	0.00	1.651
11	1.05	100	100	15.71	15.71	-322.90	0.00	-557.71	0.00	1.727
12	1.15	100	100	15.71	15.71	-308.22	0.00	-557.71	0.00	1.809
13	1.25	100	100	15.71	15.71	-293.74	0.00	-557.71	0.00	1.899
14	1.35	100	100	15.71	15.71	-279.46	0.00	-557.71	0.00	1.996
15	1.45	100	100	15.71	15.71	-265.40	0.00	-557.71	0.00	2.101
16	1.55	100	100	15.71	15.71	-251.57	0.00	-557.71	0.00	2.217
17	1.65	100	100	15.71	15.71	-237.98	0.00	-557.71	0.00	2.344
18	1.75	100	100	15.71	15.71	-224.64	0.00	-557.71	0.00	2.483
19	1.85	100	100	15.71	15.71	-211.56	0.00	-557.71	0.00	2.636
20	1.95	100	100	15.71	15.71	-198.76	0.00	-557.71	0.00	2.806
21	2.05	100	100	15.71	15.71	-186.25	0.00	-557.71	0.00	2.994
22	2.15	100	100	15.71	15.71	-174.04	0.00	-557.71	0.00	3.205
23	2.25	100	100	15.71	15.71	-162.13	0.00	-557.71	0.00	3.440
24	2.35	100	100	15.71	15.71	-150.55	0.00	-557.71	0.00	3.704
25	2.45	100	100	15.71	15.71	-139.30	0.00	-557.71	0.00	4.004
26	2.55	100	100	15.71	15.71	-128.40	0.00	-557.71	0.00	4.343
27	2.65	100	100	15.71	15.71	-117.86	0.00	-557.71	0.00	4.732

n°	Y	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
28	2.75	100	100	15.71	15.71	-107.69	0.00	-557.71	0.00	5.179
29	2.85	100	100	15.71	15.71	-97.90	0.00	-557.71	0.00	5.697
30	2.95	100	100	15.71	15.71	-88.50	0.00	-557.71	0.00	6.302
31	3.05	100	100	15.71	15.71	-79.51	0.00	-557.71	0.00	7.015
32	3.15	100	100	15.71	15.71	-70.93	0.00	-557.71	0.00	7.863
33	3.25	100	100	15.71	15.71	-62.78	0.00	-557.71	0.00	8.883
34	3.35	100	100	15.71	15.71	-55.08	0.00	-557.71	0.00	10.126
35	3.45	100	100	15.71	15.71	-47.82	0.00	-557.71	0.00	11.663
36	3.55	100	100	15.71	15.71	-41.03	0.00	-557.71	0.00	13.593
37	3.65	100	100	15.71	15.71	-34.71	0.00	-557.71	0.00	16.066
38	3.75	100	100	15.71	15.71	-28.88	0.00	-557.71	0.00	19.308
39	3.85	100	100	15.71	15.71	-23.56	0.00	-557.71	0.00	23.676
40	3.95	100	100	15.71	15.71	-18.74	0.00	-557.71	0.00	29.765
41	4.05	100	100	15.71	15.71	-14.44	0.00	-557.71	0.00	38.617
42	4.15	100	100	15.71	15.71	-10.68	0.00	-557.71	0.00	52.215
43	4.25	100	100	15.71	15.71	-7.47	0.00	-557.71	0.00	74.696
44	4.35	100	100	15.71	15.71	-4.81	0.00	-557.71	0.00	115.950
45	4.45	100	100	15.71	15.71	-2.72	0.00	-557.71	0.00	204.797
46	4.55	100	100	15.71	15.71	-1.22	0.00	-557.71	0.00	457.823
47	4.65	100	100	15.71	15.71	-0.31	0.00	-557.71	0.00	1819.568
48	4.75	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

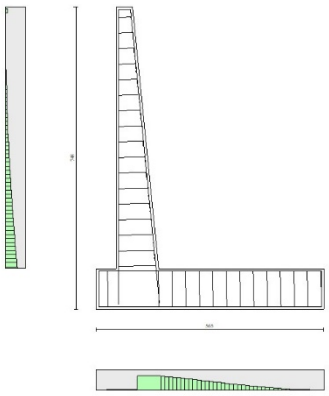


Fig. 10 - Paramento (Inviluppo)

Verifiche a taglio

Simbologia adottata

n° (o Is)	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
A_{sw}	area ferri a taglio espresso in [cmq]
cotgq	inclinazione delle bielle compresse, q inclinazione dei puntoni di calcestruzzo
V_{Rcd}	resistenza di progetto a 'taglio compressione' espressa in [kN]
V_{Rsd}	resistenza di progetto a 'taglio trazione' espressa in [kN]
V_{Rd}	resistenza di progetto a taglio espresso in [kN]. Per elementi con armature trasversali resistenti al taglio (A_{sw}>0.0) V_{Rd}=min(V_{Rcd}, V_{Rsd}).
T	taglio agente espressa in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione resistente e sollecitazione agente)

Paramento

Combinazione n° 1 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.28	0.03	5178.776
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.41	0.13	1808.132
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.42	0.29	816.256
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.40	0.52	466.503
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.36	0.81	302.873
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.30	1.17	213.099
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.21	1.58	158.513
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.10	2.07	122.815
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	256.96	2.62	98.166
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	259.81	3.23	80.413
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	262.64	3.91	67.192
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.45	4.65	57.071
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.23	5.46	49.144
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.00	6.33	42.815
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	273.76	7.27	37.678
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	276.49	8.27	33.449
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	279.22	9.33	29.922
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	281.92	10.46	26.949
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	284.61	11.66	24.419
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	287.29	12.91	22.246
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	289.95	14.24	20.365
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	292.60	15.63	18.725
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	295.23	17.08	17.287
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	297.85	18.60	16.018
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	300.46	20.18	14.892
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	303.06	21.82	13.887
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	305.65	23.53	12.988
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	308.22	25.31	12.178
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	310.79	27.15	11.448
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	313.34	29.05	10.785
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	315.89	31.02	10.183
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	318.42	33.06	9.633
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	320.94	35.15	9.130
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	323.46	37.32	8.668
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	325.96	39.54	8.243
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	328.46	41.84	7.851
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	330.95	44.19	7.489
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	333.43	46.61	7.153
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	335.90	49.10	6.842
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	338.37	51.65	6.551
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	340.82	54.26	6.281
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	343.27	56.94	6.029
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	345.71	59.68	5.792
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	348.15	62.49	5.571
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	350.58	65.37	5.363
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	353.00	68.30	5.168
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	355.41	71.30	4.984
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	357.82	74.37	4.811
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	360.23	77.50	4.648
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	362.62	80.70	4.494
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	365.01	83.96	4.348
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	367.40	87.28	4.209
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	369.78	90.67	4.078
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	372.16	94.13	3.954
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	374.52	97.64	3.836
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	376.89	101.23	3.723
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	379.25	104.87	3.616
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	381.60	108.59	3.514
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	383.95	112.36	3.417
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	386.30	116.20	3.324
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	388.64	120.11	3.236
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	390.98	124.08	3.151
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	393.31	128.11	3.070
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	395.64	132.21	2.992
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	397.77	136.38	2.917

Combinazione n° 2 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.28	0.37	458.892
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.41	0.80	294.345
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.42	1.30	183.892
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.40	1.86	130.011
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.36	2.49	98.491
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.30	3.18	78.020
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.21	3.94	63.786
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.10	4.76	53.396
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	256.96	5.64	45.532
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	259.81	6.59	39.406
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	262.64	7.61	34.525
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.45	8.69	30.561

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.23	9.83	27.290
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.00	11.04	24.555
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	273.76	12.31	22.240
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	276.49	13.65	20.262
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	279.22	15.05	18.556
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	281.92	16.51	17.072
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	284.61	18.04	15.773
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	287.29	19.64	14.629
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	289.95	21.30	13.614
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	292.60	23.02	12.709
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	295.23	24.81	11.899
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	297.85	26.66	11.170
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	300.46	28.58	10.512
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	303.06	30.56	9.915
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	305.65	32.61	9.372
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	308.22	34.72	8.877
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	310.79	36.90	8.423
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	313.34	39.14	8.006
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	315.89	41.45	7.622
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	318.42	43.81	7.267
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	320.94	46.25	6.939
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	323.46	48.75	6.635
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	325.96	51.31	6.353
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	328.46	53.94	6.089
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	330.95	56.63	5.844
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	333.43	59.39	5.614
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	335.90	62.21	5.399
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	338.37	65.10	5.198
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	340.82	68.05	5.009
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	343.27	71.06	4.831
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	345.71	74.14	4.663
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	348.15	77.29	4.505
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	350.58	80.50	4.355
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	353.00	83.77	4.214
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	355.41	87.11	4.080
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	357.82	90.51	3.953
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	360.23	93.98	3.833
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	362.62	97.51	3.719
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	365.01	101.11	3.610
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	367.40	104.77	3.507
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	369.78	108.49	3.408
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	372.16	112.28	3.314
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	374.52	116.14	3.225
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	376.89	120.05	3.139
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	379.25	124.04	3.058
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	381.60	128.09	2.979
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	383.95	132.20	2.904
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	386.30	136.38	2.833
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	388.64	140.62	2.764
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	390.98	144.92	2.698
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	393.31	149.30	2.634
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	395.64	153.73	2.574
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	397.77	158.23	2.514

Combinazione n° 3 - STR (A1-M1-R3) H + V

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.28	0.15	1114.105
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.42	0.37	632.094
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.44	0.67	359.749
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.44	1.03	236.289
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.40	1.46	168.585
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.35	1.95	127.043
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.27	2.52	99.571
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.17	3.16	80.390
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	257.04	3.87	66.430
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	259.90	4.65	55.934
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	262.74	5.49	47.829
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.55	6.41	41.432
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.35	7.40	36.288
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.14	8.45	32.085
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	273.90	9.58	28.605
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	276.65	10.77	25.688
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	279.38	12.03	23.218
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	282.10	13.37	21.105
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	284.80	14.77	19.283
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	287.49	16.24	17.701
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	290.16	17.78	16.317
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	292.82	19.39	15.098
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	295.47	21.08	14.020
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	298.11	22.83	13.060

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	300.73	24.65	12.202
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	303.34	26.53	11.432
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	305.94	28.49	10.737
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	308.53	30.52	10.109
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	311.11	32.62	9.538
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	313.68	34.79	9.017
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	316.24	37.02	8.541
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	318.78	39.33	8.105
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	321.32	41.71	7.705
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	323.85	44.15	7.335
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	326.38	46.67	6.994
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	328.89	49.25	6.678
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	331.39	51.90	6.385
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	333.89	54.63	6.112
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	336.38	57.42	5.858
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	338.86	60.28	5.621
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	341.33	63.21	5.400
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	343.80	66.22	5.192
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	346.26	69.29	4.997
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	348.71	72.43	4.815
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	351.16	75.64	4.643
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	353.60	78.92	4.481
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	356.03	82.27	4.328
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	358.46	85.68	4.183
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	360.88	89.17	4.047
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	363.29	92.73	3.918
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	365.71	96.36	3.795
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	368.11	100.05	3.679
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	370.51	103.82	3.569
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	372.90	107.65	3.464
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	375.29	111.56	3.364
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	377.68	115.53	3.269
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	380.06	119.58	3.178
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	382.43	123.69	3.092
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	384.81	127.87	3.009
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	387.17	132.13	2.930
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	389.54	136.45	2.855
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	391.90	140.84	2.783
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	394.25	145.30	2.713
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	396.60	149.83	2.647
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	398.75	154.43	2.582

Combinazione n° 4 - STR (A1-M1-R3) H - V

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.27	0.15	1135.356
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.39	0.36	651.934
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.39	0.64	374.134
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.37	0.98	247.244
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.32	1.38	177.226
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.25	1.85	134.046
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.15	2.38	105.371
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.03	2.98	85.279
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	256.89	3.64	70.614
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	259.72	4.36	59.559
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	262.54	5.15	51.003
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.34	6.00	44.238
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.11	6.91	38.788
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	270.87	7.89	34.330
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	273.62	8.93	30.633
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	276.34	10.04	27.530
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	279.05	11.21	24.899
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	281.74	12.44	22.647
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	284.42	13.74	20.704
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	287.09	15.10	19.015
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	289.74	16.52	17.535
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	292.37	18.01	16.233
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	294.99	19.56	15.079
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	297.60	21.18	14.051
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	300.20	22.86	13.133
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	302.78	24.60	12.307
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	305.36	26.41	11.562
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	307.92	28.28	10.888
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	310.47	30.22	10.275
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	313.01	32.21	9.716
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	315.54	34.28	9.205
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	318.05	36.40	8.737
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	320.56	38.59	8.306
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	323.06	40.85	7.909
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	325.55	43.17	7.542
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	328.03	45.55	7.202

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	330.51	47.99	6.887
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	332.97	50.50	6.593
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	335.43	53.07	6.320
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	337.87	55.71	6.065
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	340.31	58.41	5.826
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	342.75	61.18	5.603
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	345.17	64.00	5.393
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	347.59	66.89	5.196
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	350.00	69.85	5.011
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	352.40	72.87	4.836
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	354.80	75.95	4.671
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	357.19	79.10	4.516
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	359.57	82.31	4.368
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	361.95	85.59	4.229
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	364.32	88.92	4.097
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	366.69	92.33	3.972
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	369.05	95.79	3.853
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	371.41	99.32	3.739
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	373.76	102.91	3.632
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	376.10	106.57	3.529
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	378.44	110.29	3.431
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	380.77	114.08	3.338
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	383.10	117.93	3.249
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	385.43	121.84	3.163
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	387.75	125.82	3.082
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	390.06	129.86	3.004
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	392.38	133.96	2.929
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	394.68	138.13	2.857
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	396.79	142.36	2.787

Combinazione n° 5 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.32	0.03	5179.973
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.49	0.13	1808.739
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.54	0.29	816.669
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.57	0.52	466.818
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.57	0.81	303.129
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.55	1.17	213.316
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.51	1.58	158.702
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.44	2.07	122.982
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	257.36	2.62	98.317
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	260.26	3.23	80.551
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	263.13	3.91	67.319
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.99	4.65	57.189
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.84	5.46	49.254
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.66	6.33	42.919
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	274.47	7.27	37.776
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	277.26	8.27	33.542
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	280.04	9.33	30.011
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	282.81	10.46	27.034
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	285.56	11.66	24.500
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	288.29	12.91	22.324
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	291.02	14.24	20.440
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	293.73	15.63	18.798
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	296.43	17.08	17.357
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	299.12	18.60	16.086
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	301.79	20.18	14.958
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	304.46	21.82	13.951
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	307.12	23.53	13.050
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	309.76	25.31	12.239
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	312.40	27.15	11.507
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	315.02	29.05	10.843
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	317.64	31.02	10.239
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	320.25	33.06	9.688
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	322.85	35.15	9.184
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	325.44	37.32	8.721
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	328.03	39.54	8.295
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	330.60	41.84	7.903
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	333.17	44.19	7.539
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	335.73	46.61	7.203
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	338.29	49.10	6.890
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	340.84	51.65	6.599
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	343.38	54.26	6.328
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	345.91	56.94	6.075
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	348.44	59.68	5.838
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	350.97	62.49	5.616
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	353.48	65.37	5.408
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	356.00	68.30	5.212
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	358.50	71.30	5.028
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	361.00	74.37	4.854

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	363.50	77.50	4.690
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	365.99	80.70	4.535
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	368.48	83.96	4.389
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	370.96	87.28	4.250
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	373.44	90.67	4.119
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	375.91	94.13	3.994
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	378.38	97.64	3.875
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	380.85	101.23	3.762
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	383.31	104.87	3.655
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	385.77	108.59	3.553
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	388.23	112.36	3.455
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	390.68	116.20	3.362
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	393.13	120.11	3.273
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	395.57	124.08	3.188
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	398.02	128.11	3.107
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	400.46	132.21	3.029
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	402.70	136.38	2.953

Combinazione n° 6 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.28	0.03	5178.776
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.41	0.13	1808.132
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.42	0.29	816.256
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.40	0.52	466.503
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.36	0.81	302.873
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.30	1.17	213.099
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.21	1.58	158.513
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.10	2.07	122.815
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	256.96	2.62	98.166
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	259.81	3.23	80.413
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	262.64	3.91	67.192
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.45	4.65	57.071
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.23	5.46	49.144
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.00	6.33	42.815
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	273.76	7.27	37.678
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	276.49	8.27	33.449
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	279.22	9.33	29.922
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	281.92	10.46	26.949
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	284.61	11.66	24.419
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	287.29	12.91	22.246
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	289.95	14.24	20.365
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	292.60	15.63	18.725
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	295.23	17.08	17.287
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	297.85	18.60	16.018
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	300.46	20.18	14.892
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	303.06	21.82	13.887
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	305.65	23.53	12.988
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	308.22	25.31	12.178
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	310.79	27.15	11.448
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	313.34	29.05	10.785
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	315.89	31.02	10.183
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	318.42	33.06	9.633
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	320.94	35.15	9.130
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	323.46	37.32	8.668
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	325.96	39.54	8.243
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	328.46	41.84	7.851
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	330.95	44.19	7.489
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	333.43	46.61	7.153
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	335.90	49.10	6.842
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	338.37	51.65	6.551
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	340.82	54.26	6.281
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	343.27	56.94	6.029
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	345.71	59.68	5.792
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	348.15	62.49	5.571
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	350.58	65.37	5.363
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	353.00	68.30	5.168
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	355.41	71.30	4.984
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	357.82	74.37	4.811
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	360.23	77.50	4.648
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	362.62	80.70	4.494
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	365.01	83.96	4.348
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	367.40	87.28	4.209
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	369.78	90.67	4.078
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	372.16	94.13	3.954
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	374.52	97.64	3.836
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	376.89	101.23	3.723
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	379.25	104.87	3.616
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	381.60	108.59	3.514
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	383.95	112.36	3.417
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	386.30	116.20	3.324

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	388.64	120.11	3.236
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	390.98	124.08	3.151
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	393.31	128.11	3.070
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	395.64	132.21	2.992
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	397.77	136.38	2.917

Combinazione n° 7 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.32	0.03	5179.973
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.49	0.13	1808.739
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.54	0.29	816.669
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.57	0.52	466.818
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.57	0.81	303.129
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.55	1.17	213.316
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.51	1.58	158.702
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.44	2.07	122.982
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	257.36	2.62	98.317
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	260.26	3.23	80.551
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	263.13	3.91	67.319
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.99	4.65	57.189
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.84	5.46	49.254
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.66	6.33	42.919
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	274.47	7.27	37.776
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	277.26	8.27	33.542
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	280.04	9.33	30.011
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	282.81	10.46	27.034
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	285.56	11.66	24.500
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	288.29	12.91	22.324
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	291.02	14.24	20.440
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	293.73	15.63	18.798
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	296.43	17.08	17.357
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	299.12	18.60	16.086
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	301.79	20.18	14.958
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	304.46	21.82	13.951
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	307.12	23.53	13.050
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	309.76	25.31	12.239
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	312.40	27.15	11.507
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	315.02	29.05	10.843
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	317.64	31.02	10.239
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	320.25	33.06	9.688
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	322.85	35.15	9.184
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	325.44	37.32	8.721
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	328.03	39.54	8.295
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	330.60	41.84	7.903
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	333.17	44.19	7.539
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	335.73	46.61	7.203
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	338.29	49.10	6.890
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	340.84	51.65	6.599
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	343.38	54.26	6.328
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	345.91	56.94	6.075
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	348.44	59.68	5.838
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	350.97	62.49	5.616
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	353.48	65.37	5.408
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	356.00	68.30	5.212
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	358.50	71.30	5.028
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	361.00	74.37	4.854
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	363.50	77.50	4.690
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	365.99	80.70	4.535
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	368.48	83.96	4.389
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	370.96	87.28	4.250
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	373.44	90.67	4.119
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	375.91	94.13	3.994
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	378.38	97.64	3.875
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	380.85	101.23	3.762
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	383.31	104.87	3.655
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	385.77	108.59	3.553
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	388.23	112.36	3.455
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	390.68	116.20	3.362
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	393.13	120.11	3.273
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	395.57	124.08	3.188
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	398.02	128.11	3.107
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	400.46	132.21	3.029
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	402.70	136.38	2.953

Combinazione n° 8 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.32	0.37	458.998
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.49	0.80	294.444
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.54	1.30	183.984
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.57	1.86	130.099
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.57	2.49	98.575
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.55	3.18	78.099
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.51	3.94	63.862
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.44	4.76	53.469
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	257.36	5.64	45.602
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	260.26	6.59	39.474
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	263.13	7.61	34.590
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.99	8.69	30.624
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.84	9.83	27.351
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.66	11.04	24.614
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	274.47	12.31	22.298
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	277.26	13.65	20.318
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	280.04	15.05	18.611
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	282.81	16.51	17.126
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	285.56	18.04	15.826
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	288.29	19.64	14.680
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	291.02	21.30	13.664
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	293.73	23.02	12.758
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	296.43	24.81	11.947
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	299.12	26.66	11.218
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	301.79	28.58	10.559
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	304.46	30.56	9.961
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	307.12	32.61	9.417
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	309.76	34.72	8.921
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	312.40	36.90	8.466
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	315.02	39.14	8.049
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	317.64	41.45	7.664
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	320.25	43.81	7.309
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	322.85	46.25	6.981
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	325.44	48.75	6.676
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	328.03	51.31	6.393
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	330.60	53.94	6.129
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	333.17	56.63	5.883
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	335.73	59.39	5.653
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	338.29	62.21	5.438
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	340.84	65.10	5.236
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	343.38	68.05	5.046
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	345.91	71.06	4.868
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	348.44	74.14	4.700
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	350.97	77.29	4.541
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	353.48	80.50	4.391
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	356.00	83.77	4.250
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	358.50	87.11	4.116
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	361.00	90.51	3.989
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	363.50	93.98	3.868
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	365.99	97.51	3.753
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	368.48	101.11	3.645
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	370.96	104.77	3.541
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	373.44	108.49	3.442
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	375.91	112.28	3.348
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	378.38	116.14	3.258
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	380.85	120.05	3.172
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	383.31	124.04	3.090
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	385.77	128.09	3.012
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	388.23	132.20	2.937
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	390.68	136.38	2.865
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	393.13	140.62	2.796
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	395.57	144.92	2.730
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	398.02	149.30	2.666
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	400.46	153.73	2.605
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	402.70	158.23	2.545

Combinazione n° 9 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.28	0.37	458.892
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.41	0.80	294.345
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.42	1.30	183.892
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.40	1.86	130.011
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.36	2.49	98.491
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.30	3.18	78.020
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.21	3.94	63.786
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.10	4.76	53.396
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	256.96	5.64	45.532
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	259.81	6.59	39.406
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	262.64	7.61	34.525
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.45	8.69	30.561

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.23	9.83	27.290
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.00	11.04	24.555
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	273.76	12.31	22.240
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	276.49	13.65	20.262
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	279.22	15.05	18.556
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	281.92	16.51	17.072
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	284.61	18.04	15.773
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	287.29	19.64	14.629
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	289.95	21.30	13.614
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	292.60	23.02	12.709
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	295.23	24.81	11.899
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	297.85	26.66	11.170
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	300.46	28.58	10.512
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	303.06	30.56	9.915
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	305.65	32.61	9.372
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	308.22	34.72	8.877
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	310.79	36.90	8.423
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	313.34	39.14	8.006
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	315.89	41.45	7.622
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	318.42	43.81	7.267
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	320.94	46.25	6.939
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	323.46	48.75	6.635
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	325.96	51.31	6.353
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	328.46	53.94	6.089
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	330.95	56.63	5.844
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	333.43	59.39	5.614
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	335.90	62.21	5.399
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	338.37	65.10	5.198
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	340.82	68.05	5.009
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	343.27	71.06	4.831
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	345.71	74.14	4.663
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	348.15	77.29	4.505
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	350.58	80.50	4.355
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	353.00	83.77	4.214
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	355.41	87.11	4.080
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	357.82	90.51	3.953
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	360.23	93.98	3.833
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	362.62	97.51	3.719
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	365.01	101.11	3.610
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	367.40	104.77	3.507
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	369.78	108.49	3.408
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	372.16	112.28	3.314
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	374.52	116.14	3.225
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	376.89	120.05	3.139
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	379.25	124.04	3.058
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	381.60	128.09	2.979
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	383.95	132.20	2.904
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	386.30	136.38	2.833
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	388.64	140.62	2.764
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	390.98	144.92	2.698
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	393.31	149.30	2.634
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	395.64	153.73	2.574
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	397.77	158.23	2.514

Combinazione n° 10 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	0.00	100	40	0.00	0.00	--	0.00	0.00	165.96	0.00	100.000
2	-0.10	100	41	0.00	0.00	--	0.00	0.00	169.32	0.37	458.998
3	-0.20	100	42	0.00	0.00	--	0.00	0.00	236.49	0.80	294.444
4	-0.30	100	43	0.00	0.00	--	0.00	0.00	239.54	1.30	183.984
5	-0.40	100	44	0.00	0.00	--	0.00	0.00	242.57	1.86	130.099
6	-0.50	100	45	0.00	0.00	--	0.00	0.00	245.57	2.49	98.575
7	-0.60	100	46	0.00	0.00	--	0.00	0.00	248.55	3.18	78.099
8	-0.70	100	47	0.00	0.00	--	0.00	0.00	251.51	3.94	63.862
9	-0.80	100	48	0.00	0.00	--	0.00	0.00	254.44	4.76	53.469
10	-0.90	100	49	0.00	0.00	--	0.00	0.00	257.36	5.64	45.602
11	-1.00	100	50	0.00	0.00	--	0.00	0.00	260.26	6.59	39.474
12	-1.10	100	51	0.00	0.00	--	0.00	0.00	263.13	7.61	34.590
13	-1.20	100	52	0.00	0.00	--	0.00	0.00	265.99	8.69	30.624
14	-1.30	100	53	0.00	0.00	--	0.00	0.00	268.84	9.83	27.351
15	-1.40	100	54	0.00	0.00	--	0.00	0.00	271.66	11.04	24.614
16	-1.50	100	55	0.00	0.00	--	0.00	0.00	274.47	12.31	22.298
17	-1.60	100	56	0.00	0.00	--	0.00	0.00	277.26	13.65	20.318
18	-1.69	100	57	0.00	0.00	--	0.00	0.00	280.04	15.05	18.611
19	-1.79	100	58	0.00	0.00	--	0.00	0.00	282.81	16.51	17.126
20	-1.89	100	59	0.00	0.00	--	0.00	0.00	285.56	18.04	15.826
21	-1.99	100	60	0.00	0.00	--	0.00	0.00	288.29	19.64	14.680
22	-2.09	100	61	0.00	0.00	--	0.00	0.00	291.02	21.30	13.664
23	-2.19	100	62	0.00	0.00	--	0.00	0.00	293.73	23.02	12.758
24	-2.29	100	63	0.00	0.00	--	0.00	0.00	296.43	24.81	11.947
25	-2.39	100	64	0.00	0.00	--	0.00	0.00	299.12	26.66	11.218

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
26	-2.49	100	65	0.00	0.00	--	0.00	0.00	301.79	28.58	10.559
27	-2.59	100	66	0.00	0.00	--	0.00	0.00	304.46	30.56	9.961
28	-2.69	100	67	0.00	0.00	--	0.00	0.00	307.12	32.61	9.417
29	-2.79	100	68	0.00	0.00	--	0.00	0.00	309.76	34.72	8.921
30	-2.89	100	69	0.00	0.00	--	0.00	0.00	312.40	36.90	8.466
31	-2.99	100	70	0.00	0.00	--	0.00	0.00	315.02	39.14	8.049
32	-3.09	100	71	0.00	0.00	--	0.00	0.00	317.64	41.45	7.664
33	-3.19	100	72	0.00	0.00	--	0.00	0.00	320.25	43.81	7.309
34	-3.29	100	73	0.00	0.00	--	0.00	0.00	322.85	46.25	6.981
35	-3.39	100	74	0.00	0.00	--	0.00	0.00	325.44	48.75	6.676
36	-3.49	100	75	0.00	0.00	--	0.00	0.00	328.03	51.31	6.393
37	-3.59	100	76	0.00	0.00	--	0.00	0.00	330.60	53.94	6.129
38	-3.69	100	77	0.00	0.00	--	0.00	0.00	333.17	56.63	5.883
39	-3.79	100	78	0.00	0.00	--	0.00	0.00	335.73	59.39	5.653
40	-3.89	100	79	0.00	0.00	--	0.00	0.00	338.29	62.21	5.438
41	-3.99	100	80	0.00	0.00	--	0.00	0.00	340.84	65.10	5.236
42	-4.09	100	81	0.00	0.00	--	0.00	0.00	343.38	68.05	5.046
43	-4.19	100	82	0.00	0.00	--	0.00	0.00	345.91	71.06	4.868
44	-4.29	100	83	0.00	0.00	--	0.00	0.00	348.44	74.14	4.700
45	-4.39	100	84	0.00	0.00	--	0.00	0.00	350.97	77.29	4.541
46	-4.49	100	85	0.00	0.00	--	0.00	0.00	353.48	80.50	4.391
47	-4.59	100	86	0.00	0.00	--	0.00	0.00	356.00	83.77	4.250
48	-4.69	100	87	0.00	0.00	--	0.00	0.00	358.50	87.11	4.116
49	-4.79	100	88	0.00	0.00	--	0.00	0.00	361.00	90.51	3.989
50	-4.88	100	89	0.00	0.00	--	0.00	0.00	363.50	93.98	3.868
51	-4.98	100	90	0.00	0.00	--	0.00	0.00	365.99	97.51	3.753
52	-5.08	100	91	0.00	0.00	--	0.00	0.00	368.48	101.11	3.645
53	-5.18	100	92	0.00	0.00	--	0.00	0.00	370.96	104.77	3.541
54	-5.28	100	93	0.00	0.00	--	0.00	0.00	373.44	108.49	3.442
55	-5.38	100	94	0.00	0.00	--	0.00	0.00	375.91	112.28	3.348
56	-5.48	100	95	0.00	0.00	--	0.00	0.00	378.38	116.14	3.258
57	-5.58	100	96	0.00	0.00	--	0.00	0.00	380.85	120.05	3.172
58	-5.68	100	97	0.00	0.00	--	0.00	0.00	383.31	124.04	3.090
59	-5.78	100	98	0.00	0.00	--	0.00	0.00	385.77	128.09	3.012
60	-5.88	100	99	0.00	0.00	--	0.00	0.00	388.23	132.20	2.937
61	-5.98	100	100	0.00	0.00	--	0.00	0.00	390.68	136.38	2.865
62	-6.08	100	101	0.00	0.00	--	0.00	0.00	393.13	140.62	2.796
63	-6.18	100	102	0.00	0.00	--	0.00	0.00	395.57	144.92	2.730
64	-6.28	100	103	0.00	0.00	--	0.00	0.00	398.02	149.30	2.666
65	-6.38	100	104	0.00	0.00	--	0.00	0.00	400.46	153.73	2.605
66	-6.47	100	105	0.00	0.00	--	0.00	0.00	402.70	158.23	2.545

Fondazione

Combinazione n° 1 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-14.96	23.804
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-29.86	11.924
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-44.71	7.964
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-59.51	5.984
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-74.25	4.796
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-157.39	2.262
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-154.65	2.303
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-151.86	2.345
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-149.01	2.390
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-146.10	2.437
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-143.14	2.488
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-140.13	2.541
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-137.06	2.598
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-133.94	2.659
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-130.76	2.723
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-127.52	2.792
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-124.23	2.866
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-120.89	2.946
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-117.49	3.031
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-114.04	3.123
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-110.53	3.222
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-106.96	3.329
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-103.34	3.446
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-99.67	3.573
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-95.94	3.712
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-92.16	3.864
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-88.32	4.032
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-84.43	4.218
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-80.48	4.425
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-76.47	4.656
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-72.41	4.917
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-68.30	5.214

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-64.13	5.552
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-59.91	5.944
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-55.63	6.401
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-51.30	6.942
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-46.91	7.591
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-42.46	8.386
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-37.97	9.379
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-33.41	10.657
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-28.80	12.362
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-24.14	14.750
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-19.42	18.333
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-14.65	24.307
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.82	36.256
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.94	72.109
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 2 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.77	21.230
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-33.47	10.638
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-50.10	7.108
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-66.65	5.342
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-83.13	4.283
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-164.90	2.159
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-162.34	2.193
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-159.71	2.230
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-157.01	2.268
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-154.23	2.309
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-151.38	2.352
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-148.46	2.399
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-145.46	2.448
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-142.39	2.501
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-139.25	2.557
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-136.03	2.618
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-132.74	2.683
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-129.38	2.752
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-125.94	2.827
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-122.43	2.909
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-118.85	2.996
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-115.19	3.091
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-111.46	3.195
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-107.66	3.308
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-103.79	3.431
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-99.84	3.567
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-95.81	3.716
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-91.72	3.882
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-87.55	4.067
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-83.31	4.274
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-78.99	4.508
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-74.61	4.773
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-70.15	5.076
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-65.61	5.427
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-61.00	5.837
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-56.32	6.322
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-51.57	6.905
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-46.74	7.618
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-41.84	8.511
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-36.87	9.659
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-31.82	11.191
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-26.70	13.337
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-21.51	16.558
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.24	21.928
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-10.90	32.671
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.49	64.905
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 3 - STR (A1-M1-R3) H + V

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-22.53	15.803
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-44.77	7.953
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-66.72	5.337
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-88.37	4.030
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-109.72	3.245
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-35.36	10.069
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-40.39	8.817
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-45.11	7.893

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-49.55	7.187
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-53.69	6.633
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-57.53	6.190
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-61.08	5.830
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-64.34	5.535
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-67.30	5.291
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-69.97	5.089
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-72.34	4.922
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-74.42	4.785
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-76.21	4.673
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-77.70	4.583
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-78.90	4.513
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-79.80	4.462
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-80.41	4.429
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-80.72	4.411
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-80.74	4.410
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-80.47	4.425
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-79.90	4.457
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-79.04	4.505
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-77.88	4.572
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-76.43	4.659
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-74.68	4.768
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-72.64	4.902
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-70.31	5.064
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-67.68	5.261
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-64.76	5.499
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-61.54	5.786
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-58.03	6.136
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-54.23	6.566
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-50.13	7.103
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-45.74	7.786
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-41.05	8.675
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-36.07	9.873
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-30.79	11.564
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-25.22	14.118
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-19.36	18.395
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.20	26.977
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.75	52.778
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 4 - STR (A1-M1-R3) H - V

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-20.61	17.275
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-40.93	8.699
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-60.96	5.841
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-80.70	4.412
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-100.15	3.556
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-110.92	3.210
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-114.06	3.122
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-116.90	3.046
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-119.45	2.981
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-121.71	2.926
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-123.68	2.879
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-125.35	2.841
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-126.74	2.810
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-127.83	2.786
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-128.63	2.768
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-129.13	2.758
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-129.35	2.753
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-129.27	2.755
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-128.90	2.762
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-128.24	2.777
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-127.29	2.797
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-126.04	2.825
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-124.51	2.860
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-122.68	2.903
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-120.56	2.954
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-118.14	3.014
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-115.44	3.085
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-112.44	3.167
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-109.15	3.262
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-105.57	3.373
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-101.70	3.502
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-97.53	3.651
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-93.07	3.826
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-88.32	4.032
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-83.28	4.276
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-77.95	4.568
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-72.32	4.924
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-66.40	5.362

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-60.19	5.916
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-53.69	6.632
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-46.90	7.593
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-39.81	8.944
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-32.43	10.979
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-24.76	14.380
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.80	21.195
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-8.55	41.665
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 5 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-17.92	19.873
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-35.81	9.945
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-53.66	6.635
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-71.49	4.981
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-89.29	3.988
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	0.49	731.449
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.12	2925.436
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.70	508.382
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.25	285.027
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.77	201.366
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.26	157.731
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.72	131.062
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.15	113.170
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.55	100.414
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.92	90.930
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.26	83.665
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.57	77.981
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.85	73.470
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.10	69.859
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.32	66.959
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.51	64.639
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.67	62.803
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.80	61.383
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.90	60.329
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.97	59.606
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.02	59.193
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.03	59.076
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.01	59.253
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.96	59.728
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.88	60.516
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.78	61.642
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.64	63.142
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.47	65.071
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.28	67.500
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.05	70.532
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.79	74.310
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.51	79.034
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.19	85.002
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.84	92.658
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.47	102.705
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.06	116.320
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.63	135.619
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.16	164.841
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.66	213.880
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.14	312.422
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.58	608.907
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 6 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.07	22.155
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-32.16	11.072
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-48.26	7.378
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-64.38	5.531
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-80.51	4.423
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-10.43	34.144
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.88	36.039
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.35	38.095
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-8.83	40.334
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-8.32	42.776
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-7.84	45.448
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-7.36	48.379
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.90	51.604
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.46	55.164

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.02	59.107
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.61	63.491
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.21	68.383
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.82	73.867
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.45	80.041
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.09	87.028
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.75	94.979
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.42	104.079
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.11	114.564
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.81	126.731
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.53	140.967
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.26	157.771
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.00	177.810
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.76	201.984
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.54	231.531
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.33	268.204
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.13	314.547
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.95	374.377
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.78	453.664
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.63	562.208
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.50	717.165
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.37	951.199
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.27	1334.257
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.17	2045.379
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.10	3709.426
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.03	10927.755
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	0.02	22068.649
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	0.05	7097.923
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	0.07	5122.707
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	0.07	4801.180
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	0.06	5552.320
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	0.04	9035.259
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 7 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.80	21.190
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-33.51	10.627
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-50.11	7.106
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-66.62	5.345
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-83.03	4.289
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-146.47	2.431
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-144.89	2.458
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-143.21	2.487
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-141.43	2.518
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-139.55	2.552
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-137.57	2.589
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-135.49	2.628
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-133.31	2.671
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-131.03	2.718
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-128.65	2.768
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-126.17	2.822
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-123.59	2.881
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-120.92	2.945
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-118.14	3.014
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-115.26	3.089
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-112.29	3.171
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-109.21	3.261
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-106.04	3.358
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-102.76	3.465
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-99.39	3.583
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-95.92	3.712
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-92.34	3.856
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-88.67	4.016
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-84.90	4.194
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-81.03	4.395
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-77.06	4.621
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-72.99	4.879
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-68.82	5.174
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-64.55	5.516
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-60.18	5.917
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-55.71	6.391
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-51.15	6.962
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-46.48	7.661
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-41.71	8.537
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-36.85	9.664
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-31.88	11.169
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-26.82	13.278
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-21.65	16.446
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.39	21.728

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-11.03	32.297
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.56	64.017
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 8 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-19.73	18.046
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-39.42	9.034
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-59.05	6.030
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-78.64	4.528
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-98.18	3.627
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-7.02	50.703
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-7.81	45.575
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-8.56	41.621
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.25	38.497
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.90	35.984
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-10.49	33.933
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-11.04	32.244
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-11.55	30.842
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.00	29.676
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.40	28.706
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.76	27.901
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.07	27.241
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.33	26.707
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.55	26.286
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.71	25.969
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.83	25.749
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.90	25.621
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.92	25.582
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.89	25.632
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.82	25.772
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.69	26.003
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.52	26.333
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.30	26.767
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.04	27.316
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.72	27.994
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.36	28.818
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-11.95	29.811
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-11.49	31.004
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-10.98	32.438
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-10.42	34.169
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.82	36.271
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.17	38.852
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-8.47	42.065
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-7.72	46.144
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.92	51.454
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.08	58.604
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.18	68.694
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.24	83.922
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.25	109.416
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.22	160.566
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.13	314.319
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 9 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-17.89	19.908
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-35.77	9.955
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-53.65	6.637
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-71.53	4.979
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-89.40	3.983
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-17.94	19.850
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-17.57	20.264
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-17.20	20.700
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.83	21.159
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.45	21.644
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-16.07	22.157
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-15.69	22.699
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-15.30	23.275
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-14.91	23.886
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-14.51	24.535
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-14.11	25.228
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.71	25.967
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-13.31	26.759
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.90	27.607
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.49	28.520

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.07	29.503
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-11.65	30.566
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-11.23	31.719
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-10.80	32.972
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-10.37	34.341
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.94	35.841
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.50	37.492
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-9.06	39.318
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-8.61	41.348
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-8.16	43.618
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-7.71	46.173
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-7.26	49.071
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.80	52.383
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.34	56.207
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.87	60.669
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-5.40	65.945
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.93	72.277
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-4.45	80.019
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.97	89.699
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.49	102.147
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-3.00	118.747
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.51	141.991
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-2.01	176.862
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.52	234.985
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-1.01	351.241
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-0.51	700.025
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

Combinazione n° 10 - STR (A1-M1-R3)

n°	Y	B	H	A_{sw}	s	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[m]	[cm]	[cm]	[cmq]	[cm]		[kN]	[kN]	[kN]	[kN]	
1	-0.90	100	100	0.00	0.00	--	0.00	0.00	356.09	0.00	100.000
2	-0.80	100	100	0.00	0.00	--	0.00	0.00	356.09	-18.62	19.126
3	-0.70	100	100	0.00	0.00	--	0.00	0.00	356.09	-37.12	9.593
4	-0.60	100	100	0.00	0.00	--	0.00	0.00	356.09	-55.50	6.416
5	-0.50	100	100	0.00	0.00	--	0.00	0.00	356.09	-73.77	4.827
6	-0.40	100	100	0.00	0.00	--	0.00	0.00	356.09	-91.91	3.874
7	0.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-153.98	2.313
8	0.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-152.58	2.334
9	0.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-151.06	2.357
10	0.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-149.43	2.383
11	1.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-147.67	2.411
12	1.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-145.80	2.442
13	1.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-143.81	2.476
14	1.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-141.70	2.513
15	1.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-139.48	2.553
16	1.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-137.14	2.597
17	1.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-134.68	2.644
18	1.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-132.10	2.696
19	1.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-129.40	2.752
20	1.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-126.59	2.813
21	2.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-123.66	2.880
22	2.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-120.61	2.952
23	2.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-117.44	3.032
24	2.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-114.16	3.119
25	2.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-110.75	3.215
26	2.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-107.23	3.321
27	2.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-103.60	3.437
28	2.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-99.84	3.567
29	2.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-95.97	3.711
30	2.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-91.97	3.872
31	3.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-87.87	4.053
32	3.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-83.64	4.257
33	3.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-79.29	4.491
34	3.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-74.83	4.758
35	3.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-70.25	5.069
36	3.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-65.56	5.432
37	3.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-60.74	5.863
38	3.75	100	100	0.00	0.00	--	0.00	0.00	356.09	-55.81	6.381
39	3.85	100	100	0.00	0.00	--	0.00	0.00	356.09	-50.76	7.016
40	3.95	100	100	0.00	0.00	--	0.00	0.00	356.09	-45.59	7.811
41	4.05	100	100	0.00	0.00	--	0.00	0.00	356.09	-40.30	8.836
42	4.15	100	100	0.00	0.00	--	0.00	0.00	356.09	-34.90	10.204
43	4.25	100	100	0.00	0.00	--	0.00	0.00	356.09	-29.38	12.122
44	4.35	100	100	0.00	0.00	--	0.00	0.00	356.09	-23.74	15.002
45	4.45	100	100	0.00	0.00	--	0.00	0.00	356.09	-17.98	19.807
46	4.55	100	100	0.00	0.00	--	0.00	0.00	356.09	-12.10	29.421
47	4.65	100	100	0.00	0.00	--	0.00	0.00	356.09	-6.11	58.275
48	4.75	100	100	0.00	0.00	--	0.00	0.00	319.09	0.00	100.000

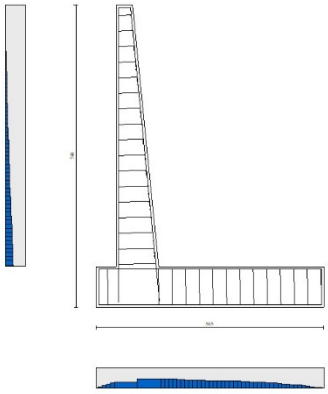


Fig. 11 - Paramento (Inviluppo)

Verifica delle tensioni

Simbologia adottata

n°	indice sezione
Y	ordinata sezione, espressa in [m]
B	larghezza sezione, espresso in [cm]
H	altezza sezione, espressa in [cm]
Afi	area ferri inferiori, espresso in [cmq]
Afs	area ferri superiori, espressa in [cmq]
M	momento agente, espressa in [kNm]
N	sforzo normale agente, espressa in [kN]
sc	tensione di compressione nel cls, espressa in [kPa]
sfi	tensione nei ferri inferiori, espressa in [kPa]
sfs	tensione nei ferri superiori, espressa in [kPa]

Combinazioni SLER

Paramento

Combinazione n° 19 - SLER

Tensione massima di compressione nel calcestruzzo	19920	[kPa]
Tensione massima di trazione dell'acciaio	359949	[kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.00	0.99	3	0	0
3	-0.20	100	42	15.71	15.71	0.02	2.00	5	59	70
4	-0.30	100	43	15.71	15.71	0.04	3.04	8	82	109
5	-0.40	100	44	15.71	15.71	0.09	4.11	11	99	154
6	-0.50	100	45	15.71	15.71	0.17	5.19	15	110	203
7	-0.60	100	46	15.71	15.71	0.27	6.30	19	114	260
8	-0.70	100	47	15.71	15.71	0.41	7.44	24	109	323
9	-0.80	100	48	15.71	15.71	0.59	8.60	30	96	393
10	-0.90	100	49	15.71	15.71	0.81	9.78	36	75	472
11	-1.00	100	50	15.71	15.71	1.09	10.99	43	41	560
12	-1.10	100	51	15.71	15.71	1.42	12.23	51	17	661
13	-1.20	100	52	15.71	15.71	1.81	13.48	61	112	778
14	-1.30	100	53	15.71	15.71	2.27	14.76	72	255	913
15	-1.40	100	54	15.71	15.71	2.80	16.07	86	459	1066
16	-1.50	100	55	15.71	15.71	3.40	17.40	101	735	1237
17	-1.60	100	56	15.71	15.71	4.09	18.76	118	1091	1426

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
18	-1.69	100	57	15.71	15.71	4.86	20.13	137	1532	1632
19	-1.79	100	58	15.71	15.71	5.72	21.54	158	2061	1853
20	-1.89	100	59	15.71	15.71	6.68	22.97	180	2680	2090
21	-1.99	100	60	15.71	15.71	7.74	24.42	204	3388	2340
22	-2.09	100	61	15.71	15.71	8.91	25.89	229	4184	2605
23	-2.19	100	62	15.71	15.71	10.18	27.39	256	5071	2883
24	-2.29	100	63	15.71	15.71	11.58	28.92	284	6047	3176
25	-2.39	100	64	15.71	15.71	13.09	30.47	314	7113	3482
26	-2.49	100	65	15.71	15.71	14.73	32.04	345	8268	3802
27	-2.59	100	66	15.71	15.71	16.51	33.64	377	9515	4136
28	-2.69	100	67	15.71	15.71	18.42	35.26	411	10852	4484
29	-2.79	100	68	15.71	15.71	20.47	36.91	446	12280	4845
30	-2.89	100	69	15.71	15.71	22.67	38.58	482	13800	5221
31	-2.99	100	70	15.71	15.71	25.02	40.27	519	15413	5610
32	-3.09	100	71	15.71	15.71	27.53	41.99	558	17117	6013
33	-3.19	100	72	15.71	15.71	30.20	43.74	598	18915	6431
34	-3.29	100	73	15.71	15.71	33.03	45.51	639	20807	6862
35	-3.39	100	74	15.71	15.71	36.04	47.30	682	22792	7306
36	-3.49	100	75	15.71	15.71	39.23	49.11	725	24872	7765
37	-3.59	100	76	15.71	15.71	42.60	50.96	770	27046	8238
38	-3.69	100	77	15.71	15.71	46.15	52.82	816	29316	8724
39	-3.79	100	78	15.71	15.71	49.90	54.71	864	31680	9224
40	-3.89	100	79	15.71	15.71	53.85	56.62	912	34141	9738
41	-3.99	100	80	15.71	15.71	58.00	58.56	961	36697	10265
42	-4.09	100	81	15.71	15.71	62.35	60.53	1012	39350	10806
43	-4.19	100	82	15.71	15.71	66.92	62.51	1064	42100	11361
44	-4.29	100	83	15.71	15.71	71.71	64.52	1117	44947	11929
45	-4.39	100	84	15.71	15.71	76.72	66.56	1171	47890	12510
46	-4.49	100	85	15.71	15.71	81.96	68.62	1226	50931	13105
47	-4.59	100	86	15.71	15.71	87.43	70.70	1282	54070	13713
48	-4.69	100	87	15.71	15.71	93.14	72.81	1339	57307	14334
49	-4.79	100	88	15.71	15.71	99.09	74.95	1397	60642	14969
50	-4.88	100	89	15.71	15.71	105.29	77.10	1456	64075	15616
51	-4.98	100	90	15.71	15.71	111.75	79.28	1517	67607	16277
52	-5.08	100	91	15.71	15.71	118.46	81.49	1578	71238	16951
53	-5.18	100	92	15.71	15.71	125.44	83.72	1640	74967	17637
54	-5.28	100	93	15.71	15.71	132.68	85.97	1704	78795	18337
55	-5.38	100	94	15.71	15.71	140.20	88.25	1768	82723	19049
56	-5.48	100	95	15.71	15.71	148.00	90.56	1833	86750	19774
57	-5.58	100	96	15.71	15.71	156.08	92.88	1900	90877	20511
58	-5.68	100	97	15.71	15.71	164.45	95.24	1967	95103	21261
59	-5.78	100	98	15.71	15.71	173.11	97.61	2035	99429	22024
60	-5.88	100	99	15.71	15.71	182.08	100.01	2104	103855	22798
61	-5.98	100	100	15.71	15.71	191.34	102.44	2174	108381	23586
62	-6.08	100	101	15.71	15.71	200.92	104.89	2245	113007	24385
63	-6.18	100	102	15.71	15.71	210.81	107.36	2317	117733	25197
64	-6.28	100	103	15.71	15.71	221.02	109.86	2390	122560	26021
65	-6.38	100	104	15.71	15.71	231.56	112.38	2464	127487	26857
66	-6.47	100	105	15.71	15.71	242.42	114.93	2542	132687	27740

Combinazione n° 22 - SLER

Tensione massima di compressione nel calcestruzzo 19920 [kPa]
Tensione massima di trazione dell'acciaio 359949 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.01	0.99	3	0	0
3	-0.20	100	42	15.71	15.71	0.05	2.00	6	48	81
4	-0.30	100	43	15.71	15.71	0.13	3.04	10	57	134
5	-0.40	100	44	15.71	15.71	0.24	4.11	15	56	197
6	-0.50	100	45	15.71	15.71	0.40	5.19	21	45	268
7	-0.60	100	46	15.71	15.71	0.61	6.30	27	18	352
8	-0.70	100	47	15.71	15.71	0.87	7.44	36	40	450
9	-0.80	100	48	15.71	15.71	1.19	8.60	46	144	567
10	-0.90	100	49	15.71	15.71	1.57	9.78	58	309	703
11	-1.00	100	50	15.71	15.71	2.02	10.99	72	548	858
12	-1.10	100	51	15.71	15.71	2.55	12.23	88	869	1031
13	-1.20	100	52	15.71	15.71	3.15	13.48	106	1277	1221
14	-1.30	100	53	15.71	15.71	3.84	14.76	126	1774	1426
15	-1.40	100	54	15.71	15.71	4.62	16.07	148	2360	1647
16	-1.50	100	55	15.71	15.71	5.50	17.40	171	3036	1882
17	-1.60	100	56	15.71	15.71	6.47	18.76	196	3801	2133
18	-1.69	100	57	15.71	15.71	7.55	20.13	223	4658	2398
19	-1.79	100	58	15.71	15.71	8.74	21.54	251	5605	2679
20	-1.89	100	59	15.71	15.71	10.04	22.97	280	6643	2973
21	-1.99	100	60	15.71	15.71	11.46	24.42	311	7773	3283
22	-2.09	100	61	15.71	15.71	13.01	25.89	344	8996	3608
23	-2.19	100	62	15.71	15.71	14.69	27.39	377	10311	3947
24	-2.29	100	63	15.71	15.71	16.50	28.92	413	11720	4301

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
25	-2.39	100	64	15.71	15.71	18.45	30.47	449	13223	4670
26	-2.49	100	65	15.71	15.71	20.55	32.04	487	14820	5054
27	-2.59	100	66	15.71	15.71	22.80	33.64	527	16512	5453
28	-2.69	100	67	15.71	15.71	25.20	35.26	567	18299	5866
29	-2.79	100	68	15.71	15.71	27.77	36.91	609	20182	6294
30	-2.89	100	69	15.71	15.71	30.50	38.58	652	22161	6737
31	-2.99	100	70	15.71	15.71	33.40	40.27	697	24237	7194
32	-3.09	100	71	15.71	15.71	36.47	41.99	743	26409	7665
33	-3.19	100	72	15.71	15.71	39.73	43.74	790	28679	8152
34	-3.29	100	73	15.71	15.71	43.17	45.51	838	31046	8652
35	-3.39	100	74	15.71	15.71	46.80	47.30	887	33510	9167
36	-3.49	100	75	15.71	15.71	50.63	49.11	938	36073	9696
37	-3.59	100	76	15.71	15.71	54.66	50.96	990	38734	10240
38	-3.69	100	77	15.71	15.71	58.90	52.82	1043	41494	10797
39	-3.79	100	78	15.71	15.71	63.35	54.71	1097	44352	11369
40	-3.89	100	79	15.71	15.71	68.01	56.62	1152	47309	11954
41	-3.99	100	80	15.71	15.71	72.89	58.56	1208	50366	12554
42	-4.09	100	81	15.71	15.71	78.01	60.53	1266	53521	13167
43	-4.19	100	82	15.71	15.71	83.35	62.51	1324	56777	13794
44	-4.29	100	83	15.71	15.71	88.93	64.52	1384	60132	14434
45	-4.39	100	84	15.71	15.71	94.75	66.56	1444	63587	15088
46	-4.49	100	85	15.71	15.71	100.81	68.62	1506	67142	15756
47	-4.59	100	86	15.71	15.71	107.13	70.70	1569	70797	16437
48	-4.69	100	87	15.71	15.71	113.71	72.81	1633	74552	17131
49	-4.79	100	88	15.71	15.71	120.55	74.95	1697	78408	17838
50	-4.88	100	89	15.71	15.71	127.65	77.10	1763	82365	18559
51	-4.98	100	90	15.71	15.71	135.03	79.28	1830	86422	19292
52	-5.08	100	91	15.71	15.71	142.68	81.49	1898	90580	20039
53	-5.18	100	92	15.71	15.71	150.61	83.72	1967	94839	20798
54	-5.28	100	93	15.71	15.71	158.84	85.97	2036	99199	21570
55	-5.38	100	94	15.71	15.71	167.35	88.25	2107	103660	22355
56	-5.48	100	95	15.71	15.71	176.16	90.56	2179	108222	23153
57	-5.58	100	96	15.71	15.71	185.28	92.88	2251	112885	23963
58	-5.68	100	97	15.71	15.71	194.70	95.24	2325	117650	24785
59	-5.78	100	98	15.71	15.71	204.44	97.61	2399	122516	25620
60	-5.88	100	99	15.71	15.71	214.49	100.01	2475	127484	26467
61	-5.98	100	100	15.71	15.71	224.86	102.44	2551	132553	27327
62	-6.08	100	101	15.71	15.71	235.57	104.89	2628	137724	28198
63	-6.18	100	102	15.71	15.71	246.60	107.36	2706	142997	29082
64	-6.28	100	103	15.71	15.71	257.98	109.86	2785	148371	29978
65	-6.38	100	104	15.71	15.71	269.69	112.38	2865	153847	30885
66	-6.47	100	105	15.71	15.71	281.76	114.93	2950	159626	31845

Fondazione

Combinazione n° 19 - SLER

Tensione massima di compressione nel calcestruzzo 17430 [kPa]
Tensione massima di trazione dell'acciaio 359949 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.69	0.00	8	498	75
3	-0.70	100	100	15.71	15.71	2.76	0.00	30	1990	299
4	-0.60	100	100	15.71	15.71	6.20	0.00	68	4476	673
5	-0.50	100	100	15.71	15.71	11.01	0.00	121	7953	1196
6	-0.40	100	100	15.71	15.71	17.20	0.00	189	12420	1867
7	0.65	100	100	15.71	15.71	-12.41	0.00	137	1348	8966
8	0.75	100	100	15.71	15.71	-12.43	0.00	137	1349	8976
9	0.85	100	100	15.71	15.71	-12.39	0.00	137	1346	8953
10	0.95	100	100	15.71	15.71	-12.32	0.00	136	1338	8898
11	1.05	100	100	15.71	15.71	-12.20	0.00	134	1325	8814
12	1.15	100	100	15.71	15.71	-12.05	0.00	133	1308	8702
13	1.25	100	100	15.71	15.71	-11.86	0.00	131	1288	8564
14	1.35	100	100	15.71	15.71	-11.63	0.00	128	1263	8401
15	1.45	100	100	15.71	15.71	-11.37	0.00	125	1235	8215
16	1.55	100	100	15.71	15.71	-11.09	0.00	122	1204	8007
17	1.65	100	100	15.71	15.71	-10.77	0.00	119	1170	7780
18	1.75	100	100	15.71	15.71	-10.43	0.00	115	1133	7535
19	1.85	100	100	15.71	15.71	-10.07	0.00	111	1094	7273
20	1.95	100	100	15.71	15.71	-9.69	0.00	107	1052	6997
21	2.05	100	100	15.71	15.71	-9.29	0.00	102	1008	6708
22	2.15	100	100	15.71	15.71	-8.87	0.00	98	963	6407
23	2.25	100	100	15.71	15.71	-8.44	0.00	93	917	6096
24	2.35	100	100	15.71	15.71	-8.00	0.00	88	869	5777
25	2.45	100	100	15.71	15.71	-7.55	0.00	83	820	5452
26	2.55	100	100	15.71	15.71	-7.09	0.00	78	770	5122
27	2.65	100	100	15.71	15.71	-6.63	0.00	73	720	4789

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
28	2.75	100	100	15.71	15.71	-6.17	0.00	68	670	4454
29	2.85	100	100	15.71	15.71	-5.70	0.00	63	619	4119
30	2.95	100	100	15.71	15.71	-5.24	0.00	58	569	3787
31	3.05	100	100	15.71	15.71	-4.79	0.00	53	520	3457
32	3.15	100	100	15.71	15.71	-4.34	0.00	48	471	3133
33	3.25	100	100	15.71	15.71	-3.90	0.00	43	423	2816
34	3.35	100	100	15.71	15.71	-3.47	0.00	38	377	2507
35	3.45	100	100	15.71	15.71	-3.06	0.00	34	332	2209
36	3.55	100	100	15.71	15.71	-2.66	0.00	29	289	1922
37	3.65	100	100	15.71	15.71	-2.28	0.00	25	248	1648
38	3.75	100	100	15.71	15.71	-1.92	0.00	21	209	1390
39	3.85	100	100	15.71	15.71	-1.59	0.00	18	173	1148
40	3.95	100	100	15.71	15.71	-1.28	0.00	14	139	925
41	4.05	100	100	15.71	15.71	-1.00	0.00	11	108	722
42	4.15	100	100	15.71	15.71	-0.75	0.00	8	81	540
43	4.25	100	100	15.71	15.71	-0.53	0.00	6	57	382
44	4.35	100	100	15.71	15.71	-0.34	0.00	4	37	249
45	4.45	100	100	15.71	15.71	-0.20	0.00	2	21	142
46	4.55	100	100	15.71	15.71	-0.09	0.00	1	10	64
47	4.65	100	100	15.71	15.71	-0.02	0.00	0	2	16
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Combinazione n° 22 - SLER

Tensione massima di compressione nel calcestruzzo 17430 [kPa]
Tensione massima di trazione dell'acciaio 359949 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.74	0.00	8	534	80
3	-0.70	100	100	15.71	15.71	2.96	0.00	33	2136	321
4	-0.60	100	100	15.71	15.71	6.65	0.00	73	4802	722
5	-0.50	100	100	15.71	15.71	11.81	0.00	130	8530	1283
6	-0.40	100	100	15.71	15.71	18.44	0.00	203	13319	2002
7	0.65	100	100	15.71	15.71	-26.79	0.00	295	2909	19348
8	0.75	100	100	15.71	15.71	-26.38	0.00	291	2865	19053
9	0.85	100	100	15.71	15.71	-25.92	0.00	285	2814	18718
10	0.95	100	100	15.71	15.71	-25.40	0.00	280	2758	18346
11	1.05	100	100	15.71	15.71	-24.84	0.00	274	2697	17938
12	1.15	100	100	15.71	15.71	-24.23	0.00	267	2631	17498
13	1.25	100	100	15.71	15.71	-23.57	0.00	260	2560	17027
14	1.35	100	100	15.71	15.71	-22.88	0.00	252	2485	16528
15	1.45	100	100	15.71	15.71	-22.16	0.00	244	2406	16004
16	1.55	100	100	15.71	15.71	-21.40	0.00	236	2324	15457
17	1.65	100	100	15.71	15.71	-20.61	0.00	227	2238	14888
18	1.75	100	100	15.71	15.71	-19.80	0.00	218	2150	14302
19	1.85	100	100	15.71	15.71	-18.97	0.00	209	2060	13699
20	1.95	100	100	15.71	15.71	-18.11	0.00	200	1967	13083
21	2.05	100	100	15.71	15.71	-17.24	0.00	190	1873	12456
22	2.15	100	100	15.71	15.71	-16.36	0.00	180	1777	11819
23	2.25	100	100	15.71	15.71	-15.47	0.00	170	1680	11176
24	2.35	100	100	15.71	15.71	-14.58	0.00	161	1583	10530
25	2.45	100	100	15.71	15.71	-13.68	0.00	151	1486	9881
26	2.55	100	100	15.71	15.71	-12.78	0.00	141	1388	9233
27	2.65	100	100	15.71	15.71	-11.89	0.00	131	1291	8589
28	2.75	100	100	15.71	15.71	-11.01	0.00	121	1195	7950
29	2.85	100	100	15.71	15.71	-10.13	0.00	112	1100	7318
30	2.95	100	100	15.71	15.71	-9.27	0.00	102	1007	6697
31	3.05	100	100	15.71	15.71	-8.43	0.00	93	915	6089
32	3.15	100	100	15.71	15.71	-7.61	0.00	84	826	5496
33	3.25	100	100	15.71	15.71	-6.81	0.00	75	740	4920
34	3.35	100	100	15.71	15.71	-6.04	0.00	67	656	4364
35	3.45	100	100	15.71	15.71	-5.30	0.00	58	576	3830
36	3.55	100	100	15.71	15.71	-4.60	0.00	51	499	3321
37	3.65	100	100	15.71	15.71	-3.93	0.00	43	427	2838
38	3.75	100	100	15.71	15.71	-3.30	0.00	36	359	2386
39	3.85	100	100	15.71	15.71	-2.72	0.00	30	295	1965
40	3.95	100	100	15.71	15.71	-2.18	0.00	24	237	1578
41	4.05	100	100	15.71	15.71	-1.70	0.00	19	185	1228
42	4.15	100	100	15.71	15.71	-1.27	0.00	14	138	916
43	4.25	100	100	15.71	15.71	-0.89	0.00	10	97	646
44	4.35	100	100	15.71	15.71	-0.58	0.00	6	63	420
45	4.45	100	100	15.71	15.71	-0.33	0.00	4	36	240
46	4.55	100	100	15.71	15.71	-0.15	0.00	2	16	108
47	4.65	100	100	15.71	15.71	-0.04	0.00	0	4	27
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Combinazioni SLEF

Paramento

Combinazione n° 20 - SLEF

Tensione massima di compressione nel calcestruzzo 33200 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y [m]	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	sc [kPa]	sfi [kPa]	sfs [kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.00	0.99	3	0	0
3	-0.20	100	42	15.71	15.71	0.02	2.00	5	59	70
4	-0.30	100	43	15.71	15.71	0.04	3.04	8	82	109
5	-0.40	100	44	15.71	15.71	0.09	4.11	11	99	154
6	-0.50	100	45	15.71	15.71	0.17	5.19	15	110	203
7	-0.60	100	46	15.71	15.71	0.27	6.30	19	114	260
8	-0.70	100	47	15.71	15.71	0.41	7.44	24	109	323
9	-0.80	100	48	15.71	15.71	0.59	8.60	30	96	393
10	-0.90	100	49	15.71	15.71	0.81	9.78	36	75	472
11	-1.00	100	50	15.71	15.71	1.09	10.99	43	41	560
12	-1.10	100	51	15.71	15.71	1.42	12.23	51	17	661
13	-1.20	100	52	15.71	15.71	1.81	13.48	61	112	778
14	-1.30	100	53	15.71	15.71	2.27	14.76	72	255	913
15	-1.40	100	54	15.71	15.71	2.80	16.07	86	459	1066
16	-1.50	100	55	15.71	15.71	3.40	17.40	101	735	1237
17	-1.60	100	56	15.71	15.71	4.09	18.76	118	1091	1426
18	-1.69	100	57	15.71	15.71	4.86	20.13	137	1532	1632
19	-1.79	100	58	15.71	15.71	5.72	21.54	158	2061	1853
20	-1.89	100	59	15.71	15.71	6.68	22.97	180	2680	2090
21	-1.99	100	60	15.71	15.71	7.74	24.42	204	3388	2340
22	-2.09	100	61	15.71	15.71	8.91	25.89	229	4184	2605
23	-2.19	100	62	15.71	15.71	10.18	27.39	256	5071	2883
24	-2.29	100	63	15.71	15.71	11.58	28.92	284	6047	3176
25	-2.39	100	64	15.71	15.71	13.09	30.47	314	7113	3482
26	-2.49	100	65	15.71	15.71	14.73	32.04	345	8268	3802
27	-2.59	100	66	15.71	15.71	16.51	33.64	377	9515	4136
28	-2.69	100	67	15.71	15.71	18.42	35.26	411	10852	4484
29	-2.79	100	68	15.71	15.71	20.47	36.91	446	12280	4845
30	-2.89	100	69	15.71	15.71	22.67	38.58	482	13800	5221
31	-2.99	100	70	15.71	15.71	25.02	40.27	519	15413	5610
32	-3.09	100	71	15.71	15.71	27.53	41.99	558	17117	6013
33	-3.19	100	72	15.71	15.71	30.20	43.74	598	18915	6431
34	-3.29	100	73	15.71	15.71	33.03	45.51	639	20807	6862
35	-3.39	100	74	15.71	15.71	36.04	47.30	682	22792	7306
36	-3.49	100	75	15.71	15.71	39.23	49.11	725	24872	7765
37	-3.59	100	76	15.71	15.71	42.60	50.96	770	27046	8238
38	-3.69	100	77	15.71	15.71	46.15	52.82	816	29316	8724
39	-3.79	100	78	15.71	15.71	49.90	54.71	864	31680	9224
40	-3.89	100	79	15.71	15.71	53.85	56.62	912	34141	9738
41	-3.99	100	80	15.71	15.71	58.00	58.56	961	36697	10265
42	-4.09	100	81	15.71	15.71	62.35	60.53	1012	39350	10806
43	-4.19	100	82	15.71	15.71	66.92	62.51	1064	42100	11361
44	-4.29	100	83	15.71	15.71	71.71	64.52	1117	44947	11929
45	-4.39	100	84	15.71	15.71	76.72	66.56	1171	47890	12510
46	-4.49	100	85	15.71	15.71	81.96	68.62	1226	50931	13105
47	-4.59	100	86	15.71	15.71	87.43	70.70	1282	54070	13713
48	-4.69	100	87	15.71	15.71	93.14	72.81	1339	57307	14334
49	-4.79	100	88	15.71	15.71	99.09	74.95	1397	60642	14969
50	-4.88	100	89	15.71	15.71	105.29	77.10	1456	64075	15616
51	-4.98	100	90	15.71	15.71	111.75	79.28	1517	67607	16277
52	-5.08	100	91	15.71	15.71	118.46	81.49	1578	71238	16951
53	-5.18	100	92	15.71	15.71	125.44	83.72	1640	74967	17637
54	-5.28	100	93	15.71	15.71	132.68	85.97	1704	78795	18337
55	-5.38	100	94	15.71	15.71	140.20	88.25	1768	82723	19049
56	-5.48	100	95	15.71	15.71	148.00	90.56	1833	86750	19774
57	-5.58	100	96	15.71	15.71	156.08	92.88	1900	90877	20511
58	-5.68	100	97	15.71	15.71	164.45	95.24	1967	95103	21261
59	-5.78	100	98	15.71	15.71	173.11	97.61	2035	99429	22024
60	-5.88	100	99	15.71	15.71	182.08	100.01	2104	103855	22798
61	-5.98	100	100	15.71	15.71	191.34	102.44	2174	108381	23586
62	-6.08	100	101	15.71	15.71	200.92	104.89	2245	113007	24385
63	-6.18	100	102	15.71	15.71	210.81	107.36	2317	117733	25197
64	-6.28	100	103	15.71	15.71	221.02	109.86	2390	122560	26021
65	-6.38	100	104	15.71	15.71	231.56	112.38	2464	127487	26857
66	-6.47	100	105	15.71	15.71	242.42	114.93	2542	132687	27740

Combinazione n° 23 - SLEF

Tensione massima di compressione nel calcestruzzo 33200 [kPa]

Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.01	0.99	3	0	0
3	-0.20	100	42	15.71	15.71	0.03	2.00	5	56	73
4	-0.30	100	43	15.71	15.71	0.07	3.04	8	75	116
5	-0.40	100	44	15.71	15.71	0.13	4.11	12	88	165
6	-0.50	100	45	15.71	15.71	0.23	5.19	16	93	221
7	-0.60	100	46	15.71	15.71	0.36	6.30	21	89	284
8	-0.70	100	47	15.71	15.71	0.53	7.44	27	77	354
9	-0.80	100	48	15.71	15.71	0.75	8.60	33	56	433
10	-0.90	100	49	15.71	15.71	1.02	9.78	40	18	524
11	-1.00	100	50	15.71	15.71	1.34	10.99	49	51	628
12	-1.10	100	51	15.71	15.71	1.72	12.23	59	160	750
13	-1.20	100	52	15.71	15.71	2.17	13.48	71	324	889
14	-1.30	100	53	15.71	15.71	2.69	14.76	85	555	1047
15	-1.40	100	54	15.71	15.71	3.29	16.07	101	861	1222
16	-1.50	100	55	15.71	15.71	3.96	17.40	119	1250	1414
17	-1.60	100	56	15.71	15.71	4.72	18.76	139	1725	1623
18	-1.69	100	57	15.71	15.71	5.58	20.13	160	2288	1846
19	-1.79	100	58	15.71	15.71	6.53	21.54	183	2939	2084
20	-1.89	100	59	15.71	15.71	7.58	22.97	207	3678	2336
21	-1.99	100	60	15.71	15.71	8.73	24.42	233	4506	2603
22	-2.09	100	61	15.71	15.71	10.00	25.89	260	5423	2883
23	-2.19	100	62	15.71	15.71	11.38	27.39	289	6429	3178
24	-2.29	100	63	15.71	15.71	12.89	28.92	319	7525	3486
25	-2.39	100	64	15.71	15.71	14.52	30.47	350	8711	3809
26	-2.49	100	65	15.71	15.71	16.28	32.04	383	9987	4145
27	-2.59	100	66	15.71	15.71	18.18	33.64	417	11355	4496
28	-2.69	100	67	15.71	15.71	20.23	35.26	453	12815	4861
29	-2.79	100	68	15.71	15.71	22.41	36.91	490	14366	5240
30	-2.89	100	69	15.71	15.71	24.75	38.58	528	16011	5633
31	-2.99	100	70	15.71	15.71	27.25	40.27	567	17748	6040
32	-3.09	100	71	15.71	15.71	29.91	41.99	608	19579	6461
33	-3.19	100	72	15.71	15.71	32.74	43.74	650	21504	6896
34	-3.29	100	73	15.71	15.71	35.74	45.51	693	23523	7345
35	-3.39	100	74	15.71	15.71	38.91	47.30	737	25637	7809
36	-3.49	100	75	15.71	15.71	42.27	49.11	782	27846	8286
37	-3.59	100	76	15.71	15.71	45.81	50.96	829	30151	8777
38	-3.69	100	77	15.71	15.71	49.55	52.82	877	32552	9282
39	-3.79	100	78	15.71	15.71	53.49	54.71	926	35049	9801
40	-3.89	100	79	15.71	15.71	57.62	56.62	976	37642	10334
41	-3.99	100	80	15.71	15.71	61.97	58.56	1027	40333	10880
42	-4.09	100	81	15.71	15.71	66.53	60.53	1080	43120	11440
43	-4.19	100	82	15.71	15.71	71.30	62.51	1133	46005	12014
44	-4.29	100	83	15.71	15.71	76.30	64.52	1188	48988	12601
45	-4.39	100	84	15.71	15.71	81.53	66.56	1244	52068	13202
46	-4.49	100	85	15.71	15.71	86.99	68.62	1301	55247	13816
47	-4.59	100	86	15.71	15.71	92.68	70.70	1359	58524	14443
48	-4.69	100	87	15.71	15.71	98.62	72.81	1417	61899	15084
49	-4.79	100	88	15.71	15.71	104.81	74.95	1477	65373	15738
50	-4.88	100	89	15.71	15.71	111.26	77.10	1538	68946	16405
51	-4.98	100	90	15.71	15.71	117.96	79.28	1600	72618	17085
52	-5.08	100	91	15.71	15.71	124.92	81.49	1663	76390	17778
53	-5.18	100	92	15.71	15.71	132.15	83.72	1728	80261	18483
54	-5.28	100	93	15.71	15.71	139.66	85.97	1793	84231	19202
55	-5.38	100	94	15.71	15.71	147.44	88.25	1859	88301	19934
56	-5.48	100	95	15.71	15.71	155.51	90.56	1926	92471	20678
57	-5.58	100	96	15.71	15.71	163.87	92.88	1994	96741	21435
58	-5.68	100	97	15.71	15.71	172.52	95.24	2062	101111	22204
59	-5.78	100	98	15.71	15.71	181.47	97.61	2132	105581	22986
60	-5.88	100	99	15.71	15.71	190.72	100.01	2203	110151	23780
61	-5.98	100	100	15.71	15.71	200.28	102.44	2275	114822	24586
62	-6.08	100	101	15.71	15.71	210.16	104.89	2348	119594	25405
63	-6.18	100	102	15.71	15.71	220.36	107.36	2421	124466	26236
64	-6.28	100	103	15.71	15.71	230.88	109.86	2496	129439	27079
65	-6.38	100	104	15.71	15.71	241.73	112.38	2571	134512	27934
66	-6.47	100	105	15.71	15.71	252.91	114.93	2651	139867	28837

Fondazione

Combinazione n° 20 - SLEF

Tensione massima di compressione nel calcestruzzo 29050 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.69	0.00	8	498	75
3	-0.70	100	100	15.71	15.71	2.76	0.00	30	1990	299
4	-0.60	100	100	15.71	15.71	6.20	0.00	68	4476	673
5	-0.50	100	100	15.71	15.71	11.01	0.00	121	7953	1196
6	-0.40	100	100	15.71	15.71	17.20	0.00	189	12420	1867
7	0.65	100	100	15.71	15.71	-12.41	0.00	137	1348	8966
8	0.75	100	100	15.71	15.71	-12.43	0.00	137	1349	8976
9	0.85	100	100	15.71	15.71	-12.39	0.00	137	1346	8953
10	0.95	100	100	15.71	15.71	-12.32	0.00	136	1338	8898
11	1.05	100	100	15.71	15.71	-12.20	0.00	134	1325	8814
12	1.15	100	100	15.71	15.71	-12.05	0.00	133	1308	8702
13	1.25	100	100	15.71	15.71	-11.86	0.00	131	1288	8564
14	1.35	100	100	15.71	15.71	-11.63	0.00	128	1263	8401
15	1.45	100	100	15.71	15.71	-11.37	0.00	125	1235	8215
16	1.55	100	100	15.71	15.71	-11.09	0.00	122	1204	8007
17	1.65	100	100	15.71	15.71	-10.77	0.00	119	1170	7780
18	1.75	100	100	15.71	15.71	-10.43	0.00	115	1133	7535
19	1.85	100	100	15.71	15.71	-10.07	0.00	111	1094	7273
20	1.95	100	100	15.71	15.71	-9.69	0.00	107	1052	6997
21	2.05	100	100	15.71	15.71	-9.29	0.00	102	1008	6708
22	2.15	100	100	15.71	15.71	-8.87	0.00	98	963	6407
23	2.25	100	100	15.71	15.71	-8.44	0.00	93	917	6096
24	2.35	100	100	15.71	15.71	-8.00	0.00	88	869	5777
25	2.45	100	100	15.71	15.71	-7.55	0.00	83	820	5452
26	2.55	100	100	15.71	15.71	-7.09	0.00	78	770	5122
27	2.65	100	100	15.71	15.71	-6.63	0.00	73	720	4789
28	2.75	100	100	15.71	15.71	-6.17	0.00	68	670	4454
29	2.85	100	100	15.71	15.71	-5.70	0.00	63	619	4119
30	2.95	100	100	15.71	15.71	-5.24	0.00	58	569	3787
31	3.05	100	100	15.71	15.71	-4.79	0.00	53	520	3457
32	3.15	100	100	15.71	15.71	-4.34	0.00	48	471	3133
33	3.25	100	100	15.71	15.71	-3.90	0.00	43	423	2816
34	3.35	100	100	15.71	15.71	-3.47	0.00	38	377	2507
35	3.45	100	100	15.71	15.71	-3.06	0.00	34	332	2209
36	3.55	100	100	15.71	15.71	-2.66	0.00	29	289	1922
37	3.65	100	100	15.71	15.71	-2.28	0.00	25	248	1648
38	3.75	100	100	15.71	15.71	-1.92	0.00	21	209	1390
39	3.85	100	100	15.71	15.71	-1.59	0.00	18	173	1148
40	3.95	100	100	15.71	15.71	-1.28	0.00	14	139	925
41	4.05	100	100	15.71	15.71	-1.00	0.00	11	108	722
42	4.15	100	100	15.71	15.71	-0.75	0.00	8	81	540
43	4.25	100	100	15.71	15.71	-0.53	0.00	6	57	382
44	4.35	100	100	15.71	15.71	-0.34	0.00	4	37	249
45	4.45	100	100	15.71	15.71	-0.20	0.00	2	21	142
46	4.55	100	100	15.71	15.71	-0.09	0.00	1	10	64
47	4.65	100	100	15.71	15.71	-0.02	0.00	0	2	16
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Combinazione n° 23 - SLEF

Tensione massima di compressione nel calcestruzzo 29050 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.70	0.00	8	508	76
3	-0.70	100	100	15.71	15.71	2.81	0.00	31	2029	305
4	-0.60	100	100	15.71	15.71	6.32	0.00	70	4563	686
5	-0.50	100	100	15.71	15.71	11.22	0.00	124	8107	1219
6	-0.40	100	100	15.71	15.71	17.53	0.00	193	12660	1903
7	0.65	100	100	15.71	15.71	-16.25	0.00	179	1764	11734
8	0.75	100	100	15.71	15.71	-16.15	0.00	178	1753	11663
9	0.85	100	100	15.71	15.71	-16.00	0.00	176	1737	11557
10	0.95	100	100	15.71	15.71	-15.81	0.00	174	1717	11417
11	1.05	100	100	15.71	15.71	-15.57	0.00	172	1691	11247
12	1.15	100	100	15.71	15.71	-15.30	0.00	168	1661	11048
13	1.25	100	100	15.71	15.71	-14.98	0.00	165	1627	10821
14	1.35	100	100	15.71	15.71	-14.63	0.00	161	1589	10568
15	1.45	100	100	15.71	15.71	-14.25	0.00	157	1547	10292
16	1.55	100	100	15.71	15.71	-13.84	0.00	152	1503	9994
17	1.65	100	100	15.71	15.71	-13.40	0.00	148	1455	9676
18	1.75	100	100	15.71	15.71	-12.93	0.00	142	1404	9339
19	1.85	100	100	15.71	15.71	-12.44	0.00	137	1351	8987
20	1.95	100	100	15.71	15.71	-11.93	0.00	131	1296	8620
21	2.05	100	100	15.71	15.71	-11.41	0.00	126	1239	8240
22	2.15	100	100	15.71	15.71	-10.87	0.00	120	1180	7850
23	2.25	100	100	15.71	15.71	-10.32	0.00	114	1120	7451
24	2.35	100	100	15.71	15.71	-9.75	0.00	107	1059	7044
25	2.45	100	100	15.71	15.71	-9.18	0.00	101	997	6633

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
26	2.55	100	100	15.71	15.71	-8.61	0.00	95	935	6218
27	2.65	100	100	15.71	15.71	-8.03	0.00	88	872	5802
28	2.75	100	100	15.71	15.71	-7.46	0.00	82	810	5386
29	2.85	100	100	15.71	15.71	-6.88	0.00	76	748	4972
30	2.95	100	100	15.71	15.71	-6.32	0.00	70	686	4563
31	3.05	100	100	15.71	15.71	-5.76	0.00	63	625	4159
32	3.15	100	100	15.71	15.71	-5.21	0.00	57	566	3763
33	3.25	100	100	15.71	15.71	-4.68	0.00	52	508	3377
34	3.35	100	100	15.71	15.71	-4.16	0.00	46	451	3002
35	3.45	100	100	15.71	15.71	-3.66	0.00	40	397	2641
36	3.55	100	100	15.71	15.71	-3.18	0.00	35	345	2295
37	3.65	100	100	15.71	15.71	-2.72	0.00	30	296	1966
38	3.75	100	100	15.71	15.71	-2.29	0.00	25	249	1655
39	3.85	100	100	15.71	15.71	-1.89	0.00	21	205	1366
40	3.95	100	100	15.71	15.71	-1.52	0.00	17	165	1099
41	4.05	100	100	15.71	15.71	-1.19	0.00	13	129	856
42	4.15	100	100	15.71	15.71	-0.89	0.00	10	96	640
43	4.25	100	100	15.71	15.71	-0.63	0.00	7	68	452
44	4.35	100	100	15.71	15.71	-0.41	0.00	4	44	294
45	4.45	100	100	15.71	15.71	-0.23	0.00	3	25	168
46	4.55	100	100	15.71	15.71	-0.11	0.00	1	11	76
47	4.65	100	100	15.71	15.71	-0.03	0.00	0	3	19
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Combinazioni SLEQ

Paramento

Combinazione n° 21 - SLEQ

Tensione massima di compressione nel calcestruzzo 14940 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.00	0.99	3	0	0
3	-0.20	100	42	15.71	15.71	0.02	2.00	5	59	70
4	-0.30	100	43	15.71	15.71	0.04	3.04	8	82	109
5	-0.40	100	44	15.71	15.71	0.09	4.11	11	99	154
6	-0.50	100	45	15.71	15.71	0.17	5.19	15	110	203
7	-0.60	100	46	15.71	15.71	0.27	6.30	19	114	260
8	-0.70	100	47	15.71	15.71	0.41	7.44	24	109	323
9	-0.80	100	48	15.71	15.71	0.59	8.60	30	96	393
10	-0.90	100	49	15.71	15.71	0.81	9.78	36	75	472
11	-1.00	100	50	15.71	15.71	1.09	10.99	43	41	560
12	-1.10	100	51	15.71	15.71	1.42	12.23	51	17	661
13	-1.20	100	52	15.71	15.71	1.81	13.48	61	112	778
14	-1.30	100	53	15.71	15.71	2.27	14.76	72	255	913
15	-1.40	100	54	15.71	15.71	2.80	16.07	86	459	1066
16	-1.50	100	55	15.71	15.71	3.40	17.40	101	735	1237
17	-1.60	100	56	15.71	15.71	4.09	18.76	118	1091	1426
18	-1.69	100	57	15.71	15.71	4.86	20.13	137	1532	1632
19	-1.79	100	58	15.71	15.71	5.72	21.54	158	2061	1853
20	-1.89	100	59	15.71	15.71	6.68	22.97	180	2680	2090
21	-1.99	100	60	15.71	15.71	7.74	24.42	204	3388	2340
22	-2.09	100	61	15.71	15.71	8.91	25.89	229	4184	2605
23	-2.19	100	62	15.71	15.71	10.18	27.39	256	5071	2883
24	-2.29	100	63	15.71	15.71	11.58	28.92	284	6047	3176
25	-2.39	100	64	15.71	15.71	13.09	30.47	314	7113	3482
26	-2.49	100	65	15.71	15.71	14.73	32.04	345	8268	3802
27	-2.59	100	66	15.71	15.71	16.51	33.64	377	9515	4136
28	-2.69	100	67	15.71	15.71	18.42	35.26	411	10852	4484
29	-2.79	100	68	15.71	15.71	20.47	36.91	446	12280	4845
30	-2.89	100	69	15.71	15.71	22.67	38.58	482	13800	5221
31	-2.99	100	70	15.71	15.71	25.02	40.27	519	15413	5610
32	-3.09	100	71	15.71	15.71	27.53	41.99	558	17117	6013
33	-3.19	100	72	15.71	15.71	30.20	43.74	598	18915	6431
34	-3.29	100	73	15.71	15.71	33.03	45.51	639	20807	6862
35	-3.39	100	74	15.71	15.71	36.04	47.30	682	22792	7306
36	-3.49	100	75	15.71	15.71	39.23	49.11	725	24872	7765
37	-3.59	100	76	15.71	15.71	42.60	50.96	770	27046	8238
38	-3.69	100	77	15.71	15.71	46.15	52.82	816	29316	8724
39	-3.79	100	78	15.71	15.71	49.90	54.71	864	31680	9224
40	-3.89	100	79	15.71	15.71	53.85	56.62	912	34141	9738
41	-3.99	100	80	15.71	15.71	58.00	58.56	961	36697	10265
42	-4.09	100	81	15.71	15.71	62.35	60.53	1012	39350	10806

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
43	-4.19	100	82	15.71	15.71	66.92	62.51	1064	42100	11361
44	-4.29	100	83	15.71	15.71	71.71	64.52	1117	44947	11929
45	-4.39	100	84	15.71	15.71	76.72	66.56	1171	47890	12510
46	-4.49	100	85	15.71	15.71	81.96	68.62	1226	50931	13105
47	-4.59	100	86	15.71	15.71	87.43	70.70	1282	54070	13713
48	-4.69	100	87	15.71	15.71	93.14	72.81	1339	57307	14334
49	-4.79	100	88	15.71	15.71	99.09	74.95	1397	60642	14969
50	-4.88	100	89	15.71	15.71	105.29	77.10	1456	64075	15616
51	-4.98	100	90	15.71	15.71	111.75	79.28	1517	67607	16277
52	-5.08	100	91	15.71	15.71	118.46	81.49	1578	71238	16951
53	-5.18	100	92	15.71	15.71	125.44	83.72	1640	74967	17637
54	-5.28	100	93	15.71	15.71	132.68	85.97	1704	78795	18337
55	-5.38	100	94	15.71	15.71	140.20	88.25	1768	82723	19049
56	-5.48	100	95	15.71	15.71	148.00	90.56	1833	86750	19774
57	-5.58	100	96	15.71	15.71	156.08	92.88	1900	90877	20511
58	-5.68	100	97	15.71	15.71	164.45	95.24	1967	95103	21261
59	-5.78	100	98	15.71	15.71	173.11	97.61	2035	99429	22024
60	-5.88	100	99	15.71	15.71	182.08	100.01	2104	103855	22798
61	-5.98	100	100	15.71	15.71	191.34	102.44	2174	108381	23586
62	-6.08	100	101	15.71	15.71	200.92	104.89	2245	113007	24385
63	-6.18	100	102	15.71	15.71	210.81	107.36	2317	117733	25197
64	-6.28	100	103	15.71	15.71	221.02	109.86	2390	122560	26021
65	-6.38	100	104	15.71	15.71	231.56	112.38	2464	127487	26857
66	-6.47	100	105	15.71	15.71	242.42	114.93	2542	132687	27740

Combinazione n° 24 - SLEQ

Tensione massima di compressione nel calcestruzzo 14940 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.01	0.99	3	0	0
3	-0.20	100	42	15.71	15.71	0.03	2.00	5	56	73
4	-0.30	100	43	15.71	15.71	0.07	3.04	8	75	116
5	-0.40	100	44	15.71	15.71	0.13	4.11	12	88	165
6	-0.50	100	45	15.71	15.71	0.23	5.19	16	93	221
7	-0.60	100	46	15.71	15.71	0.36	6.30	21	89	284
8	-0.70	100	47	15.71	15.71	0.53	7.44	27	77	354
9	-0.80	100	48	15.71	15.71	0.75	8.60	33	56	433
10	-0.90	100	49	15.71	15.71	1.02	9.78	40	18	524
11	-1.00	100	50	15.71	15.71	1.34	10.99	49	51	628
12	-1.10	100	51	15.71	15.71	1.72	12.23	59	160	750
13	-1.20	100	52	15.71	15.71	2.17	13.48	71	324	889
14	-1.30	100	53	15.71	15.71	2.69	14.76	85	555	1047
15	-1.40	100	54	15.71	15.71	3.29	16.07	101	861	1222
16	-1.50	100	55	15.71	15.71	3.96	17.40	119	1250	1414
17	-1.60	100	56	15.71	15.71	4.72	18.76	139	1725	1623
18	-1.69	100	57	15.71	15.71	5.58	20.13	160	2288	1846
19	-1.79	100	58	15.71	15.71	6.53	21.54	183	2939	2084
20	-1.89	100	59	15.71	15.71	7.58	22.97	207	3678	2336
21	-1.99	100	60	15.71	15.71	8.73	24.42	233	4506	2603
22	-2.09	100	61	15.71	15.71	10.00	25.89	260	5423	2883
23	-2.19	100	62	15.71	15.71	11.38	27.39	289	6429	3178
24	-2.29	100	63	15.71	15.71	12.89	28.92	319	7525	3486
25	-2.39	100	64	15.71	15.71	14.52	30.47	350	8711	3809
26	-2.49	100	65	15.71	15.71	16.28	32.04	383	9987	4145
27	-2.59	100	66	15.71	15.71	18.18	33.64	417	11355	4496
28	-2.69	100	67	15.71	15.71	20.23	35.26	453	12815	4861
29	-2.79	100	68	15.71	15.71	22.41	36.91	490	14366	5240
30	-2.89	100	69	15.71	15.71	24.75	38.58	528	16011	5633
31	-2.99	100	70	15.71	15.71	27.25	40.27	567	17748	6040
32	-3.09	100	71	15.71	15.71	29.91	41.99	608	19579	6461
33	-3.19	100	72	15.71	15.71	32.74	43.74	650	21504	6896
34	-3.29	100	73	15.71	15.71	35.74	45.51	693	23523	7345
35	-3.39	100	74	15.71	15.71	38.91	47.30	737	25637	7809
36	-3.49	100	75	15.71	15.71	42.27	49.11	782	27846	8286
37	-3.59	100	76	15.71	15.71	45.81	50.96	829	30151	8777
38	-3.69	100	77	15.71	15.71	49.55	52.82	877	32552	9282
39	-3.79	100	78	15.71	15.71	53.49	54.71	926	35049	9801
40	-3.89	100	79	15.71	15.71	57.62	56.62	976	37642	10334
41	-3.99	100	80	15.71	15.71	61.97	58.56	1027	40333	10880
42	-4.09	100	81	15.71	15.71	66.53	60.53	1080	43120	11440
43	-4.19	100	82	15.71	15.71	71.30	62.51	1133	46005	12014
44	-4.29	100	83	15.71	15.71	76.30	64.52	1188	48988	12601
45	-4.39	100	84	15.71	15.71	81.53	66.56	1244	52068	13202
46	-4.49	100	85	15.71	15.71	86.99	68.62	1301	55247	13816
47	-4.59	100	86	15.71	15.71	92.68	70.70	1359	58524	14443
48	-4.69	100	87	15.71	15.71	98.62	72.81	1417	61899	15084
49	-4.79	100	88	15.71	15.71	104.81	74.95	1477	65373	15738

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
50	-4.88	100	89	15.71	15.71	111.26	77.10	1538	68946	16405
51	-4.98	100	90	15.71	15.71	117.96	79.28	1600	72618	17085
52	-5.08	100	91	15.71	15.71	124.92	81.49	1663	76390	17778
53	-5.18	100	92	15.71	15.71	132.15	83.72	1728	80261	18483
54	-5.28	100	93	15.71	15.71	139.66	85.97	1793	84231	19202
55	-5.38	100	94	15.71	15.71	147.44	88.25	1859	88301	19934
56	-5.48	100	95	15.71	15.71	155.51	90.56	1926	92471	20678
57	-5.58	100	96	15.71	15.71	163.87	92.88	1994	96741	21435
58	-5.68	100	97	15.71	15.71	172.52	95.24	2062	101111	22204
59	-5.78	100	98	15.71	15.71	181.47	97.61	2132	105581	22986
60	-5.88	100	99	15.71	15.71	190.72	100.01	2203	110151	23780
61	-5.98	100	100	15.71	15.71	200.28	102.44	2275	114822	24586
62	-6.08	100	101	15.71	15.71	210.16	104.89	2348	119594	25405
63	-6.18	100	102	15.71	15.71	220.36	107.36	2421	124466	26236
64	-6.28	100	103	15.71	15.71	230.88	109.86	2496	129439	27079
65	-6.38	100	104	15.71	15.71	241.73	112.38	2571	134512	27934
66	-6.47	100	105	15.71	15.71	252.91	114.93	2651	139867	28837

Combinazione n° 25 - SLEQ H + V

Tensione massima di compressione nel calcestruzzo 14940 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.01	1.03	3	0	0
3	-0.20	100	42	15.71	15.71	0.03	2.08	5	57	77
4	-0.30	100	43	15.71	15.71	0.08	3.15	9	74	124
5	-0.40	100	44	15.71	15.71	0.16	4.26	13	83	179
6	-0.50	100	45	15.71	15.71	0.28	5.38	18	83	242
7	-0.60	100	46	15.71	15.71	0.45	6.53	24	73	313
8	-0.70	100	47	15.71	15.71	0.66	7.71	30	53	395
9	-0.80	100	48	15.71	15.71	0.92	8.91	38	11	490
10	-0.90	100	49	15.71	15.71	1.25	10.14	47	67	602
11	-1.00	100	50	15.71	15.71	1.65	11.40	59	199	735
12	-1.10	100	51	15.71	15.71	2.13	12.67	73	402	889
13	-1.20	100	52	15.71	15.71	2.68	13.98	89	691	1065
14	-1.30	100	53	15.71	15.71	3.32	15.31	107	1076	1261
15	-1.40	100	54	15.71	15.71	4.05	16.66	127	1563	1476
16	-1.50	100	55	15.71	15.71	4.89	18.04	150	2155	1710
17	-1.60	100	56	15.71	15.71	5.83	19.44	174	2852	1960
18	-1.69	100	57	15.71	15.71	6.88	20.87	201	3655	2228
19	-1.79	100	58	15.71	15.71	8.05	22.33	229	4564	2512
20	-1.89	100	59	15.71	15.71	9.35	23.81	259	5580	2814
21	-1.99	100	60	15.71	15.71	10.77	25.31	291	6704	3132
22	-2.09	100	61	15.71	15.71	12.33	26.84	325	7936	3468
23	-2.19	100	62	15.71	15.71	14.04	28.40	360	9278	3821
24	-2.29	100	63	15.71	15.71	15.90	29.98	397	10730	4191
25	-2.39	100	64	15.71	15.71	17.91	31.59	435	12293	4578
26	-2.49	100	65	15.71	15.71	20.08	33.22	476	13967	4983
27	-2.59	100	66	15.71	15.71	22.42	34.87	517	15755	5405
28	-2.69	100	67	15.71	15.71	24.94	36.55	561	17655	5845
29	-2.79	100	68	15.71	15.71	27.64	38.26	606	19670	6302
30	-2.89	100	69	15.71	15.71	30.52	39.99	653	21800	6776
31	-2.99	100	70	15.71	15.71	33.60	41.75	701	24045	7268
32	-3.09	100	71	15.71	15.71	36.88	43.53	751	26406	7778
33	-3.19	100	72	15.71	15.71	40.36	45.34	802	28884	8304
34	-3.29	100	73	15.71	15.71	44.06	47.17	855	31479	8849
35	-3.39	100	74	15.71	15.71	47.97	49.03	909	34193	9410
36	-3.49	100	75	15.71	15.71	52.11	50.91	965	37024	9989
37	-3.59	100	76	15.71	15.71	56.48	52.82	1023	39975	10585
38	-3.69	100	77	15.71	15.71	61.09	54.76	1081	43044	11198
39	-3.79	100	78	15.71	15.71	65.94	56.72	1141	46234	11828
40	-3.89	100	79	15.71	15.71	71.04	58.70	1203	49544	12475
41	-3.99	100	80	15.71	15.71	76.39	60.71	1266	52974	13140
42	-4.09	100	81	15.71	15.71	82.01	62.74	1330	56525	13821
43	-4.19	100	82	15.71	15.71	87.90	64.80	1396	60197	14519
44	-4.29	100	83	15.71	15.71	94.06	66.89	1463	63991	15233
45	-4.39	100	84	15.71	15.71	100.50	69.00	1532	67907	15965
46	-4.49	100	85	15.71	15.71	107.23	71.13	1601	71945	16712
47	-4.59	100	86	15.71	15.71	114.25	73.30	1673	76105	17477
48	-4.69	100	87	15.71	15.71	121.57	75.48	1745	80388	18257
49	-4.79	100	88	15.71	15.71	129.20	77.69	1819	84794	19054
50	-4.88	100	89	15.71	15.71	137.14	79.93	1894	89323	19867
51	-4.98	100	90	15.71	15.71	145.39	82.19	1970	93976	20697
52	-5.08	100	91	15.71	15.71	153.97	84.48	2047	98752	21542
53	-5.18	100	92	15.71	15.71	162.89	86.79	2126	103652	22403
54	-5.28	100	93	15.71	15.71	172.14	89.13	2206	108676	23280
55	-5.38	100	94	15.71	15.71	181.73	91.49	2287	113824	24173
56	-5.48	100	95	15.71	15.71	191.67	93.88	2369	119097	25081

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
57	-5.58	100	96	15.71	15.71	201.97	96.29	2453	124494	26005
58	-5.68	100	97	15.71	15.71	212.63	98.73	2537	130016	26945
59	-5.78	100	98	15.71	15.71	223.66	101.19	2623	135662	27899
60	-5.88	100	99	15.71	15.71	235.06	103.68	2710	141434	28869
61	-5.98	100	100	15.71	15.71	246.84	106.19	2798	147330	29855
62	-6.08	100	101	15.71	15.71	259.02	108.73	2888	153352	30855
63	-6.18	100	102	15.71	15.71	271.58	111.29	2978	159499	31871
64	-6.28	100	103	15.71	15.71	284.54	113.88	3070	165772	32901
65	-6.38	100	104	15.71	15.71	297.91	116.50	3162	172170	33946
66	-6.47	100	105	15.71	15.71	311.69	119.14	3261	178917	35051

Combinazione n° 26 - SLEQ H - V

Tensione massima di compressione nel calcestruzzo 14940 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	0.00	100	40	0.00	0.00	0.00	0.00	0	0	0
2	-0.10	100	41	0.00	0.00	0.01	0.95	3	0	0
3	-0.20	100	42	15.71	15.71	0.03	1.93	5	52	72
4	-0.30	100	43	15.71	15.71	0.08	2.93	8	68	116
5	-0.40	100	44	15.71	15.71	0.16	3.95	12	76	167
6	-0.50	100	45	15.71	15.71	0.27	5.00	17	75	227
7	-0.60	100	46	15.71	15.71	0.43	6.07	22	65	294
8	-0.70	100	47	15.71	15.71	0.63	7.17	29	44	371
9	-0.80	100	48	15.71	15.71	0.88	8.28	36	2	462
10	-0.90	100	49	15.71	15.71	1.20	9.43	45	78	569
11	-1.00	100	50	15.71	15.71	1.57	10.59	56	210	696
12	-1.10	100	51	15.71	15.71	2.02	11.78	69	412	843
13	-1.20	100	52	15.71	15.71	2.55	12.99	84	697	1009
14	-1.30	100	53	15.71	15.71	3.15	14.22	102	1074	1195
15	-1.40	100	54	15.71	15.71	3.85	15.48	121	1547	1398
16	-1.50	100	55	15.71	15.71	4.64	16.76	143	2119	1619
17	-1.60	100	56	15.71	15.71	5.53	18.07	166	2789	1855
18	-1.69	100	57	15.71	15.71	6.53	19.40	191	3559	2107
19	-1.79	100	58	15.71	15.71	7.63	20.75	218	4428	2375
20	-1.89	100	59	15.71	15.71	8.86	22.12	246	5399	2660
21	-1.99	100	60	15.71	15.71	10.21	23.52	276	6471	2960
22	-2.09	100	61	15.71	15.71	11.69	24.94	308	7645	3276
23	-2.19	100	62	15.71	15.71	13.30	26.39	341	8921	3609
24	-2.29	100	63	15.71	15.71	15.06	27.86	376	10302	3958
25	-2.39	100	64	15.71	15.71	16.96	29.35	412	11787	4323
26	-2.49	100	65	15.71	15.71	19.01	30.87	450	13378	4704
27	-2.59	100	66	15.71	15.71	21.23	32.41	490	15074	5102
28	-2.69	100	67	15.71	15.71	23.60	33.97	531	16878	5516
29	-2.79	100	68	15.71	15.71	26.15	35.56	574	18789	5947
30	-2.89	100	69	15.71	15.71	28.88	37.17	618	20808	6394
31	-2.99	100	70	15.71	15.71	31.78	38.80	663	22936	6858
32	-3.09	100	71	15.71	15.71	34.88	40.45	710	25174	7338
33	-3.19	100	72	15.71	15.71	38.17	42.13	759	27521	7835
34	-3.29	100	73	15.71	15.71	41.66	43.84	808	29979	8347
35	-3.39	100	74	15.71	15.71	45.35	45.56	860	32548	8877
36	-3.49	100	75	15.71	15.71	49.26	47.31	912	35229	9422
37	-3.59	100	76	15.71	15.71	53.39	49.09	966	38022	9984
38	-3.69	100	77	15.71	15.71	57.74	50.89	1022	40927	10561
39	-3.79	100	78	15.71	15.71	62.31	52.71	1079	43945	11155
40	-3.89	100	79	15.71	15.71	67.13	54.55	1137	47076	11765
41	-3.99	100	80	15.71	15.71	72.18	56.42	1196	50321	12391
42	-4.09	100	81	15.71	15.71	77.48	58.31	1257	53679	13033
43	-4.19	100	82	15.71	15.71	83.03	60.22	1319	57152	13690
44	-4.29	100	83	15.71	15.71	88.85	62.16	1382	60740	14364
45	-4.39	100	84	15.71	15.71	94.92	64.12	1446	64442	15053
46	-4.49	100	85	15.71	15.71	101.27	66.10	1512	68259	15757
47	-4.59	100	86	15.71	15.71	107.89	68.11	1579	72192	16477
48	-4.69	100	87	15.71	15.71	114.80	70.14	1647	76240	17213
49	-4.79	100	88	15.71	15.71	122.00	72.20	1717	80404	17964
50	-4.88	100	89	15.71	15.71	129.48	74.28	1788	84684	18730
51	-4.98	100	90	15.71	15.71	137.27	76.38	1859	89080	19511
52	-5.08	100	91	15.71	15.71	145.37	78.50	1932	93593	20307
53	-5.18	100	92	15.71	15.71	153.77	80.65	2007	98223	21118
54	-5.28	100	93	15.71	15.71	162.49	82.82	2082	102969	21945
55	-5.38	100	94	15.71	15.71	171.54	85.02	2158	107832	22786
56	-5.48	100	95	15.71	15.71	180.92	87.24	2236	112813	23641
57	-5.58	100	96	15.71	15.71	190.63	89.48	2315	117910	24512
58	-5.68	100	97	15.71	15.71	200.68	91.75	2394	123125	25396
59	-5.78	100	98	15.71	15.71	211.08	94.03	2475	128458	26296
60	-5.88	100	99	15.71	15.71	221.83	96.35	2557	133908	27210
61	-5.98	100	100	15.71	15.71	232.94	98.68	2640	139477	28138
62	-6.08	100	101	15.71	15.71	244.42	101.04	2724	145163	29080
63	-6.18	100	102	15.71	15.71	256.26	103.42	2810	150967	30036

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
64	-6.28	100	103	15.71	15.71	268.48	105.83	2896	156889	31007
65	-6.38	100	104	15.71	15.71	281.09	108.26	2983	162930	31991
66	-6.47	100	105	15.71	15.71	294.08	110.71	3076	169299	33031

Fondazione

Combinazione n° 21 - SLEQ

Tensione massima di compressione nel calcestruzzo 13073 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.69	0.00	8	498	75
3	-0.70	100	100	15.71	15.71	2.76	0.00	30	1990	299
4	-0.60	100	100	15.71	15.71	6.20	0.00	68	4476	673
5	-0.50	100	100	15.71	15.71	11.01	0.00	121	7953	1196
6	-0.40	100	100	15.71	15.71	17.20	0.00	189	12420	1867
7	0.65	100	100	15.71	15.71	-12.41	0.00	137	1348	8966
8	0.75	100	100	15.71	15.71	-12.43	0.00	137	1349	8976
9	0.85	100	100	15.71	15.71	-12.39	0.00	137	1346	8953
10	0.95	100	100	15.71	15.71	-12.32	0.00	136	1338	8898
11	1.05	100	100	15.71	15.71	-12.20	0.00	134	1325	8814
12	1.15	100	100	15.71	15.71	-12.05	0.00	133	1308	8702
13	1.25	100	100	15.71	15.71	-11.86	0.00	131	1288	8564
14	1.35	100	100	15.71	15.71	-11.63	0.00	128	1263	8401
15	1.45	100	100	15.71	15.71	-11.37	0.00	125	1235	8215
16	1.55	100	100	15.71	15.71	-11.09	0.00	122	1204	8007
17	1.65	100	100	15.71	15.71	-10.77	0.00	119	1170	7780
18	1.75	100	100	15.71	15.71	-10.43	0.00	115	1133	7535
19	1.85	100	100	15.71	15.71	-10.07	0.00	111	1094	7273
20	1.95	100	100	15.71	15.71	-9.69	0.00	107	1052	6997
21	2.05	100	100	15.71	15.71	-9.29	0.00	102	1008	6708
22	2.15	100	100	15.71	15.71	-8.87	0.00	98	963	6407
23	2.25	100	100	15.71	15.71	-8.44	0.00	93	917	6096
24	2.35	100	100	15.71	15.71	-8.00	0.00	88	869	5777
25	2.45	100	100	15.71	15.71	-7.55	0.00	83	820	5452
26	2.55	100	100	15.71	15.71	-7.09	0.00	78	770	5122
27	2.65	100	100	15.71	15.71	-6.63	0.00	73	720	4789
28	2.75	100	100	15.71	15.71	-6.17	0.00	68	670	4454
29	2.85	100	100	15.71	15.71	-5.70	0.00	63	619	4119
30	2.95	100	100	15.71	15.71	-5.24	0.00	58	569	3787
31	3.05	100	100	15.71	15.71	-4.79	0.00	53	520	3457
32	3.15	100	100	15.71	15.71	-4.34	0.00	48	471	3133
33	3.25	100	100	15.71	15.71	-3.90	0.00	43	423	2816
34	3.35	100	100	15.71	15.71	-3.47	0.00	38	377	2507
35	3.45	100	100	15.71	15.71	-3.06	0.00	34	332	2209
36	3.55	100	100	15.71	15.71	-2.66	0.00	29	289	1922
37	3.65	100	100	15.71	15.71	-2.28	0.00	25	248	1648
38	3.75	100	100	15.71	15.71	-1.92	0.00	21	209	1390
39	3.85	100	100	15.71	15.71	-1.59	0.00	18	173	1148
40	3.95	100	100	15.71	15.71	-1.28	0.00	14	139	925
41	4.05	100	100	15.71	15.71	-1.00	0.00	11	108	722
42	4.15	100	100	15.71	15.71	-0.75	0.00	8	81	540
43	4.25	100	100	15.71	15.71	-0.53	0.00	6	57	382
44	4.35	100	100	15.71	15.71	-0.34	0.00	4	37	249
45	4.45	100	100	15.71	15.71	-0.20	0.00	2	21	142
46	4.55	100	100	15.71	15.71	-0.09	0.00	1	10	64
47	4.65	100	100	15.71	15.71	-0.02	0.00	0	2	16
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Combinazione n° 24 - SLEQ

Tensione massima di compressione nel calcestruzzo 13073 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.70	0.00	8	508	76
3	-0.70	100	100	15.71	15.71	2.81	0.00	31	2029	305
4	-0.60	100	100	15.71	15.71	6.32	0.00	70	4563	686
5	-0.50	100	100	15.71	15.71	11.22	0.00	124	8107	1219
6	-0.40	100	100	15.71	15.71	17.53	0.00	193	12660	1903
7	0.65	100	100	15.71	15.71	-16.25	0.00	179	1764	11734

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
8	0.75	100	100	15.71	15.71	-16.15	0.00	178	1753	11663
9	0.85	100	100	15.71	15.71	-16.00	0.00	176	1737	11557
10	0.95	100	100	15.71	15.71	-15.81	0.00	174	1717	11417
11	1.05	100	100	15.71	15.71	-15.57	0.00	172	1691	11247
12	1.15	100	100	15.71	15.71	-15.30	0.00	168	1661	11048
13	1.25	100	100	15.71	15.71	-14.98	0.00	165	1627	10821
14	1.35	100	100	15.71	15.71	-14.63	0.00	161	1589	10568
15	1.45	100	100	15.71	15.71	-14.25	0.00	157	1547	10292
16	1.55	100	100	15.71	15.71	-13.84	0.00	152	1503	9994
17	1.65	100	100	15.71	15.71	-13.40	0.00	148	1455	9676
18	1.75	100	100	15.71	15.71	-12.93	0.00	142	1404	9339
19	1.85	100	100	15.71	15.71	-12.44	0.00	137	1351	8987
20	1.95	100	100	15.71	15.71	-11.93	0.00	131	1296	8620
21	2.05	100	100	15.71	15.71	-11.41	0.00	126	1239	8240
22	2.15	100	100	15.71	15.71	-10.87	0.00	120	1180	7850
23	2.25	100	100	15.71	15.71	-10.32	0.00	114	1120	7451
24	2.35	100	100	15.71	15.71	-9.75	0.00	107	1059	7044
25	2.45	100	100	15.71	15.71	-9.18	0.00	101	997	6633
26	2.55	100	100	15.71	15.71	-8.61	0.00	95	935	6218
27	2.65	100	100	15.71	15.71	-8.03	0.00	88	872	5802
28	2.75	100	100	15.71	15.71	-7.46	0.00	82	810	5386
29	2.85	100	100	15.71	15.71	-6.88	0.00	76	748	4972
30	2.95	100	100	15.71	15.71	-6.32	0.00	70	686	4563
31	3.05	100	100	15.71	15.71	-5.76	0.00	63	625	4159
32	3.15	100	100	15.71	15.71	-5.21	0.00	57	566	3763
33	3.25	100	100	15.71	15.71	-4.68	0.00	52	508	3377
34	3.35	100	100	15.71	15.71	-4.16	0.00	46	451	3002
35	3.45	100	100	15.71	15.71	-3.66	0.00	40	397	2641
36	3.55	100	100	15.71	15.71	-3.18	0.00	35	345	2295
37	3.65	100	100	15.71	15.71	-2.72	0.00	30	296	1966
38	3.75	100	100	15.71	15.71	-2.29	0.00	25	249	1655
39	3.85	100	100	15.71	15.71	-1.89	0.00	21	205	1366
40	3.95	100	100	15.71	15.71	-1.52	0.00	17	165	1099
41	4.05	100	100	15.71	15.71	-1.19	0.00	13	129	856
42	4.15	100	100	15.71	15.71	-0.89	0.00	10	96	640
43	4.25	100	100	15.71	15.71	-0.63	0.00	7	68	452
44	4.35	100	100	15.71	15.71	-0.41	0.00	4	44	294
45	4.45	100	100	15.71	15.71	-0.23	0.00	3	25	168
46	4.55	100	100	15.71	15.71	-0.11	0.00	1	11	76
47	4.65	100	100	15.71	15.71	-0.03	0.00	0	3	19
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Combinazione n° 25 - SLEQ H + V

Tensione massima di compressione nel calcestruzzo 13073 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.96	0.00	11	691	104
3	-0.70	100	100	15.71	15.71	3.82	0.00	42	2756	414
4	-0.60	100	100	15.71	15.71	8.56	0.00	94	6181	929
5	-0.50	100	100	15.71	15.71	15.16	0.00	167	10953	1647
6	-0.40	100	100	15.71	15.71	23.62	0.00	260	17057	2564
7	0.65	100	100	15.71	15.71	-152.41	0.00	1679	16550	110081
8	0.75	100	100	15.71	15.71	-150.09	0.00	1653	16298	108404
9	0.85	100	100	15.71	15.71	-147.45	0.00	1624	16012	106499
10	0.95	100	100	15.71	15.71	-144.52	0.00	1592	15693	104381
11	1.05	100	100	15.71	15.71	-141.31	0.00	1557	15345	102063
12	1.15	100	100	15.71	15.71	-137.84	0.00	1518	14968	99558
13	1.25	100	100	15.71	15.71	-134.13	0.00	1478	14566	96881
14	1.35	100	100	15.71	15.71	-130.21	0.00	1434	14139	94045
15	1.45	100	100	15.71	15.71	-126.08	0.00	1389	13691	91062
16	1.55	100	100	15.71	15.71	-121.77	0.00	1341	13223	87948
17	1.65	100	100	15.71	15.71	-117.29	0.00	1292	12737	84716
18	1.75	100	100	15.71	15.71	-112.67	0.00	1241	12235	81379
19	1.85	100	100	15.71	15.71	-107.92	0.00	1189	11720	77950
20	1.95	100	100	15.71	15.71	-103.07	0.00	1135	11192	74444
21	2.05	100	100	15.71	15.71	-98.13	0.00	1081	10656	70874
22	2.15	100	100	15.71	15.71	-93.11	0.00	1026	10111	67254
23	2.25	100	100	15.71	15.71	-88.05	0.00	970	9562	63597
24	2.35	100	100	15.71	15.71	-82.96	0.00	914	9008	59916
25	2.45	100	100	15.71	15.71	-77.85	0.00	858	8453	56227
26	2.55	100	100	15.71	15.71	-72.74	0.00	801	7899	52541
27	2.65	100	100	15.71	15.71	-67.67	0.00	745	7348	48873
28	2.75	100	100	15.71	15.71	-62.63	0.00	690	6801	45236
29	2.85	100	100	15.71	15.71	-57.66	0.00	635	6261	41643
30	2.95	100	100	15.71	15.71	-52.76	0.00	581	5730	38110
31	3.05	100	100	15.71	15.71	-47.97	0.00	528	5209	34648
32	3.15	100	100	15.71	15.71	-43.30	0.00	477	4702	31272

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
33	3.25	100	100	15.71	15.71	-38.76	0.00	427	4209	27995
34	3.35	100	100	15.71	15.71	-34.38	0.00	379	3733	24831
35	3.45	100	100	15.71	15.71	-30.17	0.00	332	3277	21794
36	3.55	100	100	15.71	15.71	-26.16	0.00	288	2841	18896
37	3.65	100	100	15.71	15.71	-22.36	0.00	246	2428	16152
38	3.75	100	100	15.71	15.71	-18.80	0.00	207	2041	13576
39	3.85	100	100	15.71	15.71	-15.48	0.00	171	1681	11180
40	3.95	100	100	15.71	15.71	-12.43	0.00	137	1350	8979
41	4.05	100	100	15.71	15.71	-9.67	0.00	107	1050	6985
42	4.15	100	100	15.71	15.71	-7.22	0.00	80	784	5214
43	4.25	100	100	15.71	15.71	-5.09	0.00	56	553	3677
44	4.35	100	100	15.71	15.71	-3.31	0.00	36	359	2390
45	4.45	100	100	15.71	15.71	-1.89	0.00	21	205	1365
46	4.55	100	100	15.71	15.71	-0.85	0.00	9	93	616
47	4.65	100	100	15.71	15.71	-0.22	0.00	2	23	156
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Combinazione n° 26 - SLEQ_H - V

Tensione massima di compressione nel calcestruzzo	13073	[kPa]
Tensione massima di trazione dell'acciaio	449936	[kPa]

n°	Y	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	-0.90	100	100	15.71	15.71	0.00	0.00	0	0	0
2	-0.80	100	100	15.71	15.71	0.90	0.00	10	649	98
3	-0.70	100	100	15.71	15.71	3.58	0.00	39	2585	389
4	-0.60	100	100	15.71	15.71	8.02	0.00	88	5796	871
5	-0.50	100	100	15.71	15.71	14.22	0.00	157	10268	1544
6	-0.40	100	100	15.71	15.71	22.14	0.00	244	15988	2404
7	0.65	100	100	15.71	15.71	-246.51	0.00	2716	26769	178047
8	0.75	100	100	15.71	15.71	-239.61	0.00	2640	26020	173065
9	0.85	100	100	15.71	15.71	-232.51	0.00	2561	25249	167939
10	0.95	100	100	15.71	15.71	-225.24	0.00	2481	24459	162683
11	1.05	100	100	15.71	15.71	-217.80	0.00	2399	23651	157311
12	1.15	100	100	15.71	15.71	-210.22	0.00	2316	22828	151836
13	1.25	100	100	15.71	15.71	-202.52	0.00	2231	21991	146272
14	1.35	100	100	15.71	15.71	-194.71	0.00	2145	21143	140631
15	1.45	100	100	15.71	15.71	-186.81	0.00	2058	20286	134929
16	1.55	100	100	15.71	15.71	-178.85	0.00	1970	19421	129177
17	1.65	100	100	15.71	15.71	-170.84	0.00	1882	18551	123390
18	1.75	100	100	15.71	15.71	-162.79	0.00	1793	17678	117581
19	1.85	100	100	15.71	15.71	-154.74	0.00	1705	16803	111764
20	1.95	100	100	15.71	15.71	-146.69	0.00	1616	15929	105951
21	2.05	100	100	15.71	15.71	-138.67	0.00	1528	15058	100157
22	2.15	100	100	15.71	15.71	-130.69	0.00	1440	14192	94395
23	2.25	100	100	15.71	15.71	-122.78	0.00	1353	13332	88679
24	2.35	100	100	15.71	15.71	-114.94	0.00	1266	12482	83021
25	2.45	100	100	15.71	15.71	-107.21	0.00	1181	11642	77436
26	2.55	100	100	15.71	15.71	-99.60	0.00	1097	10815	71937
27	2.65	100	100	15.71	15.71	-92.12	0.00	1015	10004	66537
28	2.75	100	100	15.71	15.71	-84.80	0.00	934	9209	61250
29	2.85	100	100	15.71	15.71	-77.66	0.00	855	8433	56090
30	2.95	100	100	15.71	15.71	-70.71	0.00	779	7678	51070
31	3.05	100	100	15.71	15.71	-63.97	0.00	705	6946	46202
32	3.15	100	100	15.71	15.71	-57.46	0.00	633	6240	41502
33	3.25	100	100	15.71	15.71	-51.20	0.00	564	5560	36982
34	3.35	100	100	15.71	15.71	-45.21	0.00	498	4910	32656
35	3.45	100	100	15.71	15.71	-39.51	0.00	435	4291	28538
36	3.55	100	100	15.71	15.71	-34.11	0.00	376	3705	24640
37	3.65	100	100	15.71	15.71	-29.04	0.00	320	3154	20976
38	3.75	100	100	15.71	15.71	-24.31	0.00	268	2640	17561
39	3.85	100	100	15.71	15.71	-19.95	0.00	220	2166	14406
40	3.95	100	100	15.71	15.71	-15.96	0.00	176	1733	11527
41	4.05	100	100	15.71	15.71	-12.37	0.00	136	1343	8935
42	4.15	100	100	15.71	15.71	-9.20	0.00	101	999	6646
43	4.25	100	100	15.71	15.71	-6.47	0.00	71	702	4671
44	4.35	100	100	15.71	15.71	-4.19	0.00	46	455	3026
45	4.45	100	100	15.71	15.71	-2.38	0.00	26	259	1722
46	4.55	100	100	15.71	15.71	-1.07	0.00	12	116	774
47	4.65	100	100	15.71	15.71	-0.27	0.00	3	29	196
48	4.75	100	100	0.00	0.00	0.00	0.00	0	0	0

Verifica a fessurazione

Simbologia adottata

n°	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
Af	area ferri zona tesa espresso in [cmq]
Aeff	area efficace espressa in [cmq]
M	momento agente espressa in [kNm]
Mpf	momento di formazione/apertura fessure espressa in [kNm]
e	deformazione espresso in %
Sm	spaziatura tra le fessure espressa in [mm]
w	apertura delle fessure espressa in [mm]

Combinazioni SLEF

Paramento

Combinazione n° 20 - SLEF

Apertura limite fessure w_{lim}=0.30

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	0.00	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
2	-0.10	100	41	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
3	-0.20	100	42	15.71	1061.56	0.02	128.19	0.000000	0.00	0.000
4	-0.30	100	43	15.71	1089.12	0.04	134.32	0.000000	0.00	0.000
5	-0.40	100	44	15.71	1116.73	0.09	140.58	0.000000	0.00	0.000
6	-0.50	100	45	15.71	1144.39	0.17	146.96	0.000000	0.00	0.000
7	-0.60	100	46	15.71	1172.08	0.27	153.48	0.000000	0.00	0.000
8	-0.70	100	47	15.71	1199.81	0.41	160.13	0.000000	0.00	0.000
9	-0.80	100	48	15.71	1227.58	0.59	166.91	0.000000	0.00	0.000
10	-0.90	100	49	15.71	1255.39	0.81	173.83	0.000000	0.00	0.000
11	-1.00	100	50	15.71	1283.23	1.09	180.88	0.000000	0.00	0.000
12	-1.10	100	51	15.71	1311.11	1.42	188.06	0.000000	0.00	0.000
13	-1.20	100	52	15.71	1339.02	1.81	195.36	0.000000	0.00	0.000
14	-1.30	100	53	15.71	1366.96	2.27	202.80	0.000000	0.00	0.000
15	-1.40	100	54	15.71	1394.94	2.80	210.37	0.000000	0.00	0.000
16	-1.50	100	55	15.71	1422.95	3.40	218.07	0.000000	0.00	0.000
17	-1.60	100	56	15.71	1450.99	4.09	225.91	0.000000	0.00	0.000
18	-1.69	100	57	15.71	1479.05	4.86	233.86	0.000000	0.00	0.000
19	-1.79	100	58	15.71	1500.00	5.72	241.97	0.000000	0.00	0.000
20	-1.89	100	59	15.71	1500.00	6.68	250.19	0.000000	0.00	0.000
21	-1.99	100	60	15.71	1500.00	7.74	258.55	0.000000	0.00	0.000
22	-2.09	100	61	15.71	1500.00	8.91	267.04	0.000000	0.00	0.000
23	-2.19	100	62	15.71	1500.00	10.18	275.67	0.000000	0.00	0.000
24	-2.29	100	63	15.71	1500.00	11.58	284.42	0.000000	0.00	0.000
25	-2.39	100	64	15.71	1500.00	13.09	293.30	0.000000	0.00	0.000
26	-2.49	100	65	15.71	1500.00	14.73	302.33	0.000000	0.00	0.000
27	-2.59	100	66	15.71	1500.00	16.51	311.48	0.000000	0.00	0.000
28	-2.69	100	67	15.71	1500.00	18.42	320.76	0.000000	0.00	0.000
29	-2.79	100	68	15.71	1500.00	20.47	330.17	0.000000	0.00	0.000
30	-2.89	100	69	15.71	1500.00	22.67	339.72	0.000000	0.00	0.000
31	-2.99	100	70	15.71	1500.00	25.02	349.39	0.000000	0.00	0.000
32	-3.09	100	71	15.71	1500.00	27.53	359.19	0.000000	0.00	0.000
33	-3.19	100	72	15.71	1500.00	30.20	369.14	0.000000	0.00	0.000
34	-3.29	100	73	15.71	1500.00	33.03	379.22	0.000000	0.00	0.000
35	-3.39	100	74	15.71	1500.00	36.04	389.43	0.000000	0.00	0.000
36	-3.49	100	75	15.71	1500.00	39.23	399.78	0.000000	0.00	0.000
37	-3.59	100	76	15.71	1500.00	42.60	410.24	0.000000	0.00	0.000
38	-3.69	100	77	15.71	1500.00	46.15	420.86	0.000000	0.00	0.000
39	-3.79	100	78	15.71	1500.00	49.90	431.60	0.000000	0.00	0.000
40	-3.89	100	79	15.71	1500.00	53.85	442.46	0.000000	0.00	0.000
41	-3.99	100	80	15.71	1500.00	58.00	453.47	0.000000	0.00	0.000
42	-4.09	100	81	15.71	1500.00	62.35	464.62	0.000000	0.00	0.000
43	-4.19	100	82	15.71	1500.00	66.92	475.90	0.000000	0.00	0.000
44	-4.29	100	83	15.71	1500.00	71.71	487.29	0.000000	0.00	0.000
45	-4.39	100	84	15.71	1500.00	76.72	498.83	0.000000	0.00	0.000
46	-4.49	100	85	15.71	1500.00	81.96	510.51	0.000000	0.00	0.000
47	-4.59	100	86	15.71	1500.00	87.43	522.32	0.000000	0.00	0.000
48	-4.69	100	87	15.71	1500.00	93.14	534.26	0.000000	0.00	0.000
49	-4.79	100	88	15.71	1500.00	99.09	546.34	0.000000	0.00	0.000
50	-4.88	100	89	15.71	1500.00	105.29	558.55	0.000000	0.00	0.000
51	-4.98	100	90	15.71	1500.00	111.75	570.89	0.000000	0.00	0.000
52	-5.08	100	91	15.71	1500.00	118.46	583.37	0.000000	0.00	0.000
53	-5.18	100	92	15.71	1500.00	125.44	595.97	0.000000	0.00	0.000
54	-5.28	100	93	15.71	1500.00	132.68	608.73	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
55	-5.38	100	94	15.71	1500.00	140.20	621.62	0.000000	0.00	0.000
56	-5.48	100	95	15.71	1500.00	148.00	634.62	0.000000	0.00	0.000
57	-5.58	100	96	15.71	1500.00	156.08	647.80	0.000000	0.00	0.000
58	-5.68	100	97	15.71	1500.00	164.45	661.07	0.000000	0.00	0.000
59	-5.78	100	98	15.71	1500.00	173.11	674.49	0.000000	0.00	0.000
60	-5.88	100	99	15.71	1500.00	182.08	688.05	0.000000	0.00	0.000
61	-5.98	100	100	15.71	1500.00	191.34	701.76	0.000000	0.00	0.000
62	-6.08	100	101	15.71	1500.00	200.92	715.59	0.000000	0.00	0.000
63	-6.18	100	102	15.71	1500.00	210.81	729.54	0.000000	0.00	0.000
64	-6.28	100	103	15.71	1500.00	221.02	743.66	0.000000	0.00	0.000
65	-6.38	100	104	15.71	1500.00	231.56	757.87	0.000000	0.00	0.000
66	-6.47	100	105	15.71	1500.00	242.42	770.84	0.000000	0.00	0.000

Combinazione n° 23 - SLEF

Apertura limite fessure w_{lim}=0.30

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	0.00	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
2	-0.10	100	41	0.00	0.00	0.01	0.00	0.000000	0.00	0.000
3	-0.20	100	42	15.71	1061.56	0.03	128.19	0.000000	0.00	0.000
4	-0.30	100	43	15.71	1089.12	0.07	134.32	0.000000	0.00	0.000
5	-0.40	100	44	15.71	1116.73	0.13	140.57	0.000000	0.00	0.000
6	-0.50	100	45	15.71	1144.39	0.23	146.97	0.000000	0.00	0.000
7	-0.60	100	46	15.71	1172.08	0.36	153.49	0.000000	0.00	0.000
8	-0.70	100	47	15.71	1199.81	0.53	160.13	0.000000	0.00	0.000
9	-0.80	100	48	15.71	1227.58	0.75	166.92	0.000000	0.00	0.000
10	-0.90	100	49	15.71	1255.39	1.02	173.83	0.000000	0.00	0.000
11	-1.00	100	50	15.71	1283.23	1.34	180.88	0.000000	0.00	0.000
12	-1.10	100	51	15.71	1311.11	1.72	188.05	0.000000	0.00	0.000
13	-1.20	100	52	15.71	1339.02	2.17	195.36	0.000000	0.00	0.000
14	-1.30	100	53	15.71	1366.96	2.69	202.80	0.000000	0.00	0.000
15	-1.40	100	54	15.71	1394.94	3.29	210.37	0.000000	0.00	0.000
16	-1.50	100	55	15.71	1422.95	3.96	218.07	0.000000	0.00	0.000
17	-1.60	100	56	15.71	1450.99	4.72	225.90	0.000000	0.00	0.000
18	-1.69	100	57	15.71	1479.05	5.58	233.87	0.000000	0.00	0.000
19	-1.79	100	58	15.71	1500.00	6.53	241.97	0.000000	0.00	0.000
20	-1.89	100	59	15.71	1500.00	7.58	250.20	0.000000	0.00	0.000
21	-1.99	100	60	15.71	1500.00	8.73	258.56	0.000000	0.00	0.000
22	-2.09	100	61	15.71	1500.00	10.00	267.05	0.000000	0.00	0.000
23	-2.19	100	62	15.71	1500.00	11.38	275.67	0.000000	0.00	0.000
24	-2.29	100	63	15.71	1500.00	12.89	284.42	0.000000	0.00	0.000
25	-2.39	100	64	15.71	1500.00	14.52	293.31	0.000000	0.00	0.000
26	-2.49	100	65	15.71	1500.00	16.28	302.33	0.000000	0.00	0.000
27	-2.59	100	66	15.71	1500.00	18.18	311.47	0.000000	0.00	0.000
28	-2.69	100	67	15.71	1500.00	20.23	320.75	0.000000	0.00	0.000
29	-2.79	100	68	15.71	1500.00	22.41	330.16	0.000000	0.00	0.000
30	-2.89	100	69	15.71	1500.00	24.75	339.72	0.000000	0.00	0.000
31	-2.99	100	70	15.71	1500.00	27.25	349.39	0.000000	0.00	0.000
32	-3.09	100	71	15.71	1500.00	29.91	359.21	0.000000	0.00	0.000
33	-3.19	100	72	15.71	1500.00	32.74	369.14	0.000000	0.00	0.000
34	-3.29	100	73	15.71	1500.00	35.74	379.22	0.000000	0.00	0.000
35	-3.39	100	74	15.71	1500.00	38.91	389.43	0.000000	0.00	0.000
36	-3.49	100	75	15.71	1500.00	42.27	399.78	0.000000	0.00	0.000
37	-3.59	100	76	15.71	1500.00	45.81	410.24	0.000000	0.00	0.000
38	-3.69	100	77	15.71	1500.00	49.55	420.85	0.000000	0.00	0.000
39	-3.79	100	78	15.71	1500.00	53.49	431.59	0.000000	0.00	0.000
40	-3.89	100	79	15.71	1500.00	57.62	442.46	0.000000	0.00	0.000
41	-3.99	100	80	15.71	1500.00	61.97	453.48	0.000000	0.00	0.000
42	-4.09	100	81	15.71	1500.00	66.53	464.62	0.000000	0.00	0.000
43	-4.19	100	82	15.71	1500.00	71.30	475.89	0.000000	0.00	0.000
44	-4.29	100	83	15.71	1500.00	76.30	487.31	0.000000	0.00	0.000
45	-4.39	100	84	15.71	1500.00	81.53	498.83	0.000000	0.00	0.000
46	-4.49	100	85	15.71	1500.00	86.99	510.52	0.000000	0.00	0.000
47	-4.59	100	86	15.71	1500.00	92.68	522.31	0.000000	0.00	0.000
48	-4.69	100	87	15.71	1500.00	98.62	534.26	0.000000	0.00	0.000
49	-4.79	100	88	15.71	1500.00	104.81	546.35	0.000000	0.00	0.000
50	-4.88	100	89	15.71	1500.00	111.26	558.54	0.000000	0.00	0.000
51	-4.98	100	90	15.71	1500.00	117.96	570.89	0.000000	0.00	0.000
52	-5.08	100	91	15.71	1500.00	124.92	583.37	0.000000	0.00	0.000
53	-5.18	100	92	15.71	1500.00	132.15	595.98	0.000000	0.00	0.000
54	-5.28	100	93	15.71	1500.00	139.66	608.74	0.000000	0.00	0.000
55	-5.38	100	94	15.71	1500.00	147.44	621.62	0.000000	0.00	0.000
56	-5.48	100	95	15.71	1500.00	155.51	634.63	0.000000	0.00	0.000
57	-5.58	100	96	15.71	1500.00	163.87	647.77	0.000000	0.00	0.000
58	-5.68	100	97	15.71	1500.00	172.52	661.06	0.000000	0.00	0.000
59	-5.78	100	98	15.71	1500.00	181.47	674.49	0.000000	0.00	0.000
60	-5.88	100	99	15.71	1500.00	190.72	688.07	0.000000	0.00	0.000
61	-5.98	100	100	15.71	1500.00	200.28	701.73	0.000000	0.00	0.000
62	-6.08	100	101	15.71	1500.00	210.16	715.59	0.000000	0.00	0.000
63	-6.18	100	102	15.71	1500.00	220.36	729.54	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
64	-6.28	100	103	15.71	1500.00	230.88	743.63	0.000000	0.00	0.000
65	-6.38	100	104	15.71	1500.00	241.73	757.88	0.000000	0.00	0.000
66	-6.47	100	105	15.71	1500.00	252.91	770.87	0.000000	0.00	0.000

Fondazione

Combinazione n° 20 - SLEF

Apertura limite fessure w_{lim}=0.40

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	-0.90	100	100	0.00	0.00	0.00	0.00	---	---	0.000
2	-0.80	100	100	15.71	1500.00	0.69	629.07	0.000000	0.00	0.000
3	-0.70	100	100	15.71	1500.00	2.76	629.07	0.000000	0.00	0.000
4	-0.60	100	100	15.71	1500.00	6.20	629.07	0.000000	0.00	0.000
5	-0.50	100	100	15.71	1500.00	11.01	629.07	0.000000	0.00	0.000
6	-0.40	100	100	15.71	1500.00	17.20	629.07	0.000000	0.00	0.000
7	0.65	100	100	15.71	1500.00	-12.41	-629.07	0.000000	0.00	0.000
8	0.75	100	100	15.71	1500.00	-12.43	-629.07	0.000000	0.00	0.000
9	0.85	100	100	15.71	1500.00	-12.39	-629.07	0.000000	0.00	0.000
10	0.95	100	100	15.71	1500.00	-12.32	-629.07	0.000000	0.00	0.000
11	1.05	100	100	15.71	1500.00	-12.20	-629.07	0.000000	0.00	0.000
12	1.15	100	100	15.71	1500.00	-12.05	-629.07	0.000000	0.00	0.000
13	1.25	100	100	15.71	1500.00	-11.86	-629.07	0.000000	0.00	0.000
14	1.35	100	100	15.71	1500.00	-11.63	-629.07	0.000000	0.00	0.000
15	1.45	100	100	15.71	1500.00	-11.37	-629.07	0.000000	0.00	0.000
16	1.55	100	100	15.71	1500.00	-11.09	-629.07	0.000000	0.00	0.000
17	1.65	100	100	15.71	1500.00	-10.77	-629.07	0.000000	0.00	0.000
18	1.75	100	100	15.71	1500.00	-10.43	-629.07	0.000000	0.00	0.000
19	1.85	100	100	15.71	1500.00	-10.07	-629.07	0.000000	0.00	0.000
20	1.95	100	100	15.71	1500.00	-9.69	-629.07	0.000000	0.00	0.000
21	2.05	100	100	15.71	1500.00	-9.29	-629.07	0.000000	0.00	0.000
22	2.15	100	100	15.71	1500.00	-8.87	-629.07	0.000000	0.00	0.000
23	2.25	100	100	15.71	1500.00	-8.44	-629.07	0.000000	0.00	0.000
24	2.35	100	100	15.71	1500.00	-8.00	-629.07	0.000000	0.00	0.000
25	2.45	100	100	15.71	1500.00	-7.55	-629.07	0.000000	0.00	0.000
26	2.55	100	100	15.71	1500.00	-7.09	-629.07	0.000000	0.00	0.000
27	2.65	100	100	15.71	1500.00	-6.63	-629.07	0.000000	0.00	0.000
28	2.75	100	100	15.71	1500.00	-6.17	-629.07	0.000000	0.00	0.000
29	2.85	100	100	15.71	1500.00	-5.70	-629.07	0.000000	0.00	0.000
30	2.95	100	100	15.71	1500.00	-5.24	-629.07	0.000000	0.00	0.000
31	3.05	100	100	15.71	1500.00	-4.79	-629.07	0.000000	0.00	0.000
32	3.15	100	100	15.71	1500.00	-4.34	-629.07	0.000000	0.00	0.000
33	3.25	100	100	15.71	1500.00	-3.90	-629.07	0.000000	0.00	0.000
34	3.35	100	100	15.71	1500.00	-3.47	-629.07	0.000000	0.00	0.000
35	3.45	100	100	15.71	1500.00	-3.06	-629.07	0.000000	0.00	0.000
36	3.55	100	100	15.71	1500.00	-2.66	-629.07	0.000000	0.00	0.000
37	3.65	100	100	15.71	1500.00	-2.28	-629.07	0.000000	0.00	0.000
38	3.75	100	100	15.71	1500.00	-1.92	-629.07	0.000000	0.00	0.000
39	3.85	100	100	15.71	1500.00	-1.59	-629.07	0.000000	0.00	0.000
40	3.95	100	100	15.71	1500.00	-1.28	-629.07	0.000000	0.00	0.000
41	4.05	100	100	15.71	1500.00	-1.00	-629.07	0.000000	0.00	0.000
42	4.15	100	100	15.71	1500.00	-0.75	-629.07	0.000000	0.00	0.000
43	4.25	100	100	15.71	1500.00	-0.53	-629.07	0.000000	0.00	0.000
44	4.35	100	100	15.71	1500.00	-0.34	-629.07	0.000000	0.00	0.000
45	4.45	100	100	15.71	1500.00	-0.20	-629.07	0.000000	0.00	0.000
46	4.55	100	100	15.71	1500.00	-0.09	-629.07	0.000000	0.00	0.000
47	4.65	100	100	15.71	1500.00	-0.02	-629.07	0.000000	0.00	0.000
48	4.75	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000

Combinazione n° 23 - SLEF

Apertura limite fessure w_{lim}=0.40

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	-0.90	100	100	0.00	0.00	0.00	0.00	---	---	0.000
2	-0.80	100	100	15.71	1500.00	0.70	629.07	0.000000	0.00	0.000
3	-0.70	100	100	15.71	1500.00	2.81	629.07	0.000000	0.00	0.000
4	-0.60	100	100	15.71	1500.00	6.32	629.07	0.000000	0.00	0.000
5	-0.50	100	100	15.71	1500.00	11.22	629.07	0.000000	0.00	0.000
6	-0.40	100	100	15.71	1500.00	17.53	629.07	0.000000	0.00	0.000
7	0.65	100	100	15.71	1500.00	-16.25	-629.07	0.000000	0.00	0.000
8	0.75	100	100	15.71	1500.00	-16.15	-629.07	0.000000	0.00	0.000
9	0.85	100	100	15.71	1500.00	-16.00	-629.07	0.000000	0.00	0.000
10	0.95	100	100	15.71	1500.00	-15.81	-629.07	0.000000	0.00	0.000
11	1.05	100	100	15.71	1500.00	-15.57	-629.07	0.000000	0.00	0.000
12	1.15	100	100	15.71	1500.00	-15.30	-629.07	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
13	1.25	100	100	15.71	1500.00	-14.98	-629.07	0.000000	0.00	0.000
14	1.35	100	100	15.71	1500.00	-14.63	-629.07	0.000000	0.00	0.000
15	1.45	100	100	15.71	1500.00	-14.25	-629.07	0.000000	0.00	0.000
16	1.55	100	100	15.71	1500.00	-13.84	-629.07	0.000000	0.00	0.000
17	1.65	100	100	15.71	1500.00	-13.40	-629.07	0.000000	0.00	0.000
18	1.75	100	100	15.71	1500.00	-12.93	-629.07	0.000000	0.00	0.000
19	1.85	100	100	15.71	1500.00	-12.44	-629.07	0.000000	0.00	0.000
20	1.95	100	100	15.71	1500.00	-11.93	-629.07	0.000000	0.00	0.000
21	2.05	100	100	15.71	1500.00	-11.41	-629.07	0.000000	0.00	0.000
22	2.15	100	100	15.71	1500.00	-10.87	-629.07	0.000000	0.00	0.000
23	2.25	100	100	15.71	1500.00	-10.32	-629.07	0.000000	0.00	0.000
24	2.35	100	100	15.71	1500.00	-9.75	-629.07	0.000000	0.00	0.000
25	2.45	100	100	15.71	1500.00	-9.18	-629.07	0.000000	0.00	0.000
26	2.55	100	100	15.71	1500.00	-8.61	-629.07	0.000000	0.00	0.000
27	2.65	100	100	15.71	1500.00	-8.03	-629.07	0.000000	0.00	0.000
28	2.75	100	100	15.71	1500.00	-7.46	-629.07	0.000000	0.00	0.000
29	2.85	100	100	15.71	1500.00	-6.88	-629.07	0.000000	0.00	0.000
30	2.95	100	100	15.71	1500.00	-6.32	-629.07	0.000000	0.00	0.000
31	3.05	100	100	15.71	1500.00	-5.76	-629.07	0.000000	0.00	0.000
32	3.15	100	100	15.71	1500.00	-5.21	-629.07	0.000000	0.00	0.000
33	3.25	100	100	15.71	1500.00	-4.68	-629.07	0.000000	0.00	0.000
34	3.35	100	100	15.71	1500.00	-4.16	-629.07	0.000000	0.00	0.000
35	3.45	100	100	15.71	1500.00	-3.66	-629.07	0.000000	0.00	0.000
36	3.55	100	100	15.71	1500.00	-3.18	-629.07	0.000000	0.00	0.000
37	3.65	100	100	15.71	1500.00	-2.72	-629.07	0.000000	0.00	0.000
38	3.75	100	100	15.71	1500.00	-2.29	-629.07	0.000000	0.00	0.000
39	3.85	100	100	15.71	1500.00	-1.89	-629.07	0.000000	0.00	0.000
40	3.95	100	100	15.71	1500.00	-1.52	-629.07	0.000000	0.00	0.000
41	4.05	100	100	15.71	1500.00	-1.19	-629.07	0.000000	0.00	0.000
42	4.15	100	100	15.71	1500.00	-0.89	-629.07	0.000000	0.00	0.000
43	4.25	100	100	15.71	1500.00	-0.63	-629.07	0.000000	0.00	0.000
44	4.35	100	100	15.71	1500.00	-0.41	-629.07	0.000000	0.00	0.000
45	4.45	100	100	15.71	1500.00	-0.23	-629.07	0.000000	0.00	0.000
46	4.55	100	100	15.71	1500.00	-0.11	-629.07	0.000000	0.00	0.000
47	4.65	100	100	15.71	1500.00	-0.03	-629.07	0.000000	0.00	0.000
48	4.75	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000

Combinazioni SLEQ

Paramento

Combinazione n° 21 - SLEQ

Apertura limite fessure w_{lim}=0.20

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	0.00	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
2	-0.10	100	41	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
3	-0.20	100	42	15.71	1061.56	0.02	128.19	0.000000	0.00	0.000
4	-0.30	100	43	15.71	1089.12	0.04	134.32	0.000000	0.00	0.000
5	-0.40	100	44	15.71	1116.73	0.09	140.58	0.000000	0.00	0.000
6	-0.50	100	45	15.71	1144.39	0.17	146.96	0.000000	0.00	0.000
7	-0.60	100	46	15.71	1172.08	0.27	153.48	0.000000	0.00	0.000
8	-0.70	100	47	15.71	1199.81	0.41	160.13	0.000000	0.00	0.000
9	-0.80	100	48	15.71	1227.58	0.59	166.91	0.000000	0.00	0.000
10	-0.90	100	49	15.71	1255.39	0.81	173.83	0.000000	0.00	0.000
11	-1.00	100	50	15.71	1283.23	1.09	180.88	0.000000	0.00	0.000
12	-1.10	100	51	15.71	1311.11	1.42	188.06	0.000000	0.00	0.000
13	-1.20	100	52	15.71	1339.02	1.81	195.36	0.000000	0.00	0.000
14	-1.30	100	53	15.71	1366.96	2.27	202.80	0.000000	0.00	0.000
15	-1.40	100	54	15.71	1394.94	2.80	210.37	0.000000	0.00	0.000
16	-1.50	100	55	15.71	1422.95	3.40	218.07	0.000000	0.00	0.000
17	-1.60	100	56	15.71	1450.99	4.09	225.91	0.000000	0.00	0.000
18	-1.69	100	57	15.71	1479.05	4.86	233.86	0.000000	0.00	0.000
19	-1.79	100	58	15.71	1500.00	5.72	241.97	0.000000	0.00	0.000
20	-1.89	100	59	15.71	1500.00	6.68	250.19	0.000000	0.00	0.000
21	-1.99	100	60	15.71	1500.00	7.74	258.55	0.000000	0.00	0.000
22	-2.09	100	61	15.71	1500.00	8.91	267.04	0.000000	0.00	0.000
23	-2.19	100	62	15.71	1500.00	10.18	275.67	0.000000	0.00	0.000
24	-2.29	100	63	15.71	1500.00	11.58	284.42	0.000000	0.00	0.000
25	-2.39	100	64	15.71	1500.00	13.09	293.30	0.000000	0.00	0.000
26	-2.49	100	65	15.71	1500.00	14.73	302.33	0.000000	0.00	0.000
27	-2.59	100	66	15.71	1500.00	16.51	311.48	0.000000	0.00	0.000
28	-2.69	100	67	15.71	1500.00	18.42	320.76	0.000000	0.00	0.000
29	-2.79	100	68	15.71	1500.00	20.47	330.17	0.000000	0.00	0.000
30	-2.89	100	69	15.71	1500.00	22.67	339.72	0.000000	0.00	0.000
31	-2.99	100	70	15.71	1500.00	25.02	349.39	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
32	-3.09	100	71	15.71	1500.00	27.53	359.19	0.000000	0.00	0.000
33	-3.19	100	72	15.71	1500.00	30.20	369.14	0.000000	0.00	0.000
34	-3.29	100	73	15.71	1500.00	33.03	379.22	0.000000	0.00	0.000
35	-3.39	100	74	15.71	1500.00	36.04	389.43	0.000000	0.00	0.000
36	-3.49	100	75	15.71	1500.00	39.23	399.78	0.000000	0.00	0.000
37	-3.59	100	76	15.71	1500.00	42.60	410.24	0.000000	0.00	0.000
38	-3.69	100	77	15.71	1500.00	46.15	420.86	0.000000	0.00	0.000
39	-3.79	100	78	15.71	1500.00	49.90	431.60	0.000000	0.00	0.000
40	-3.89	100	79	15.71	1500.00	53.85	442.46	0.000000	0.00	0.000
41	-3.99	100	80	15.71	1500.00	58.00	453.47	0.000000	0.00	0.000
42	-4.09	100	81	15.71	1500.00	62.35	464.62	0.000000	0.00	0.000
43	-4.19	100	82	15.71	1500.00	66.92	475.90	0.000000	0.00	0.000
44	-4.29	100	83	15.71	1500.00	71.71	487.29	0.000000	0.00	0.000
45	-4.39	100	84	15.71	1500.00	76.72	498.83	0.000000	0.00	0.000
46	-4.49	100	85	15.71	1500.00	81.96	510.51	0.000000	0.00	0.000
47	-4.59	100	86	15.71	1500.00	87.43	522.32	0.000000	0.00	0.000
48	-4.69	100	87	15.71	1500.00	93.14	534.26	0.000000	0.00	0.000
49	-4.79	100	88	15.71	1500.00	99.09	546.34	0.000000	0.00	0.000
50	-4.88	100	89	15.71	1500.00	105.29	558.55	0.000000	0.00	0.000
51	-4.98	100	90	15.71	1500.00	111.75	570.89	0.000000	0.00	0.000
52	-5.08	100	91	15.71	1500.00	118.46	583.37	0.000000	0.00	0.000
53	-5.18	100	92	15.71	1500.00	125.44	595.97	0.000000	0.00	0.000
54	-5.28	100	93	15.71	1500.00	132.68	608.73	0.000000	0.00	0.000
55	-5.38	100	94	15.71	1500.00	140.20	621.62	0.000000	0.00	0.000
56	-5.48	100	95	15.71	1500.00	148.00	634.62	0.000000	0.00	0.000
57	-5.58	100	96	15.71	1500.00	156.08	647.80	0.000000	0.00	0.000
58	-5.68	100	97	15.71	1500.00	164.45	661.07	0.000000	0.00	0.000
59	-5.78	100	98	15.71	1500.00	173.11	674.49	0.000000	0.00	0.000
60	-5.88	100	99	15.71	1500.00	182.08	688.05	0.000000	0.00	0.000
61	-5.98	100	100	15.71	1500.00	191.34	701.76	0.000000	0.00	0.000
62	-6.08	100	101	15.71	1500.00	200.92	715.59	0.000000	0.00	0.000
63	-6.18	100	102	15.71	1500.00	210.81	729.54	0.000000	0.00	0.000
64	-6.28	100	103	15.71	1500.00	221.02	743.66	0.000000	0.00	0.000
65	-6.38	100	104	15.71	1500.00	231.56	757.87	0.000000	0.00	0.000
66	-6.47	100	105	15.71	1500.00	242.42	770.84	0.000000	0.00	0.000

Combinazione n° 24 - SLEQ

Apertura limite fessure w_{lim}=0.20

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	0.00	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
2	-0.10	100	41	0.00	0.00	0.01	0.00	0.000000	0.00	0.000
3	-0.20	100	42	15.71	1061.56	0.03	128.19	0.000000	0.00	0.000
4	-0.30	100	43	15.71	1089.12	0.07	134.32	0.000000	0.00	0.000
5	-0.40	100	44	15.71	1116.73	0.13	140.57	0.000000	0.00	0.000
6	-0.50	100	45	15.71	1144.39	0.23	146.97	0.000000	0.00	0.000
7	-0.60	100	46	15.71	1172.08	0.36	153.49	0.000000	0.00	0.000
8	-0.70	100	47	15.71	1199.81	0.53	160.13	0.000000	0.00	0.000
9	-0.80	100	48	15.71	1227.58	0.75	166.92	0.000000	0.00	0.000
10	-0.90	100	49	15.71	1255.39	1.02	173.83	0.000000	0.00	0.000
11	-1.00	100	50	15.71	1283.23	1.34	180.88	0.000000	0.00	0.000
12	-1.10	100	51	15.71	1311.11	1.72	188.05	0.000000	0.00	0.000
13	-1.20	100	52	15.71	1339.02	2.17	195.36	0.000000	0.00	0.000
14	-1.30	100	53	15.71	1366.96	2.69	202.80	0.000000	0.00	0.000
15	-1.40	100	54	15.71	1394.94	3.29	210.37	0.000000	0.00	0.000
16	-1.50	100	55	15.71	1422.95	3.96	218.07	0.000000	0.00	0.000
17	-1.60	100	56	15.71	1450.99	4.72	225.90	0.000000	0.00	0.000
18	-1.69	100	57	15.71	1479.05	5.58	233.87	0.000000	0.00	0.000
19	-1.79	100	58	15.71	1500.00	6.53	241.97	0.000000	0.00	0.000
20	-1.89	100	59	15.71	1500.00	7.58	250.20	0.000000	0.00	0.000
21	-1.99	100	60	15.71	1500.00	8.73	258.56	0.000000	0.00	0.000
22	-2.09	100	61	15.71	1500.00	10.00	267.05	0.000000	0.00	0.000
23	-2.19	100	62	15.71	1500.00	11.38	275.67	0.000000	0.00	0.000
24	-2.29	100	63	15.71	1500.00	12.89	284.42	0.000000	0.00	0.000
25	-2.39	100	64	15.71	1500.00	14.52	293.31	0.000000	0.00	0.000
26	-2.49	100	65	15.71	1500.00	16.28	302.33	0.000000	0.00	0.000
27	-2.59	100	66	15.71	1500.00	18.18	311.47	0.000000	0.00	0.000
28	-2.69	100	67	15.71	1500.00	20.23	320.75	0.000000	0.00	0.000
29	-2.79	100	68	15.71	1500.00	22.41	330.16	0.000000	0.00	0.000
30	-2.89	100	69	15.71	1500.00	24.75	339.72	0.000000	0.00	0.000
31	-2.99	100	70	15.71	1500.00	27.25	349.39	0.000000	0.00	0.000
32	-3.09	100	71	15.71	1500.00	29.91	359.21	0.000000	0.00	0.000
33	-3.19	100	72	15.71	1500.00	32.74	369.14	0.000000	0.00	0.000
34	-3.29	100	73	15.71	1500.00	35.74	379.22	0.000000	0.00	0.000
35	-3.39	100	74	15.71	1500.00	38.91	389.43	0.000000	0.00	0.000
36	-3.49	100	75	15.71	1500.00	42.27	399.78	0.000000	0.00	0.000
37	-3.59	100	76	15.71	1500.00	45.81	410.24	0.000000	0.00	0.000
38	-3.69	100	77	15.71	1500.00	49.55	420.85	0.000000	0.00	0.000
39	-3.79	100	78	15.71	1500.00	53.49	431.59	0.000000	0.00	0.000
40	-3.89	100	79	15.71	1500.00	57.62	442.46	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
41	-3.99	100	80	15.71	1500.00	61.97	453.48	0.000000	0.00	0.000
42	-4.09	100	81	15.71	1500.00	66.53	464.62	0.000000	0.00	0.000
43	-4.19	100	82	15.71	1500.00	71.30	475.89	0.000000	0.00	0.000
44	-4.29	100	83	15.71	1500.00	76.30	487.31	0.000000	0.00	0.000
45	-4.39	100	84	15.71	1500.00	81.53	498.83	0.000000	0.00	0.000
46	-4.49	100	85	15.71	1500.00	86.99	510.52	0.000000	0.00	0.000
47	-4.59	100	86	15.71	1500.00	92.68	522.31	0.000000	0.00	0.000
48	-4.69	100	87	15.71	1500.00	98.62	534.26	0.000000	0.00	0.000
49	-4.79	100	88	15.71	1500.00	104.81	546.35	0.000000	0.00	0.000
50	-4.88	100	89	15.71	1500.00	111.26	558.54	0.000000	0.00	0.000
51	-4.98	100	90	15.71	1500.00	117.96	570.89	0.000000	0.00	0.000
52	-5.08	100	91	15.71	1500.00	124.92	583.37	0.000000	0.00	0.000
53	-5.18	100	92	15.71	1500.00	132.15	595.98	0.000000	0.00	0.000
54	-5.28	100	93	15.71	1500.00	139.66	608.74	0.000000	0.00	0.000
55	-5.38	100	94	15.71	1500.00	147.44	621.62	0.000000	0.00	0.000
56	-5.48	100	95	15.71	1500.00	155.51	634.63	0.000000	0.00	0.000
57	-5.58	100	96	15.71	1500.00	163.87	647.77	0.000000	0.00	0.000
58	-5.68	100	97	15.71	1500.00	172.52	661.06	0.000000	0.00	0.000
59	-5.78	100	98	15.71	1500.00	181.47	674.49	0.000000	0.00	0.000
60	-5.88	100	99	15.71	1500.00	190.72	688.07	0.000000	0.00	0.000
61	-5.98	100	100	15.71	1500.00	200.28	701.73	0.000000	0.00	0.000
62	-6.08	100	101	15.71	1500.00	210.16	715.59	0.000000	0.00	0.000
63	-6.18	100	102	15.71	1500.00	220.36	729.54	0.000000	0.00	0.000
64	-6.28	100	103	15.71	1500.00	230.88	743.63	0.000000	0.00	0.000
65	-6.38	100	104	15.71	1500.00	241.73	757.88	0.000000	0.00	0.000
66	-6.47	100	105	15.71	1500.00	252.91	770.87	0.000000	0.00	0.000

Combinazione n° 25 - SLEQ H + V

Apertura limite fessure w_{lim}=0.20

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	0.00	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
2	-0.10	100	41	0.00	0.00	0.01	0.00	0.000000	0.00	0.000
3	-0.20	100	42	15.71	1061.53	0.03	128.20	0.000000	0.00	0.000
4	-0.30	100	43	15.71	1089.08	0.08	134.33	0.000000	0.00	0.000
5	-0.40	100	44	15.71	1116.68	0.16	140.59	0.000000	0.00	0.000
6	-0.50	100	45	15.71	1144.32	0.28	146.98	0.000000	0.00	0.000
7	-0.60	100	46	15.71	1172.00	0.45	153.50	0.000000	0.00	0.000
8	-0.70	100	47	15.71	1199.71	0.66	160.16	0.000000	0.00	0.000
9	-0.80	100	48	15.71	1227.47	0.92	166.94	0.000000	0.00	0.000
10	-0.90	100	49	15.71	1255.26	1.25	173.86	0.000000	0.00	0.000
11	-1.00	100	50	15.71	1283.09	1.65	180.91	0.000000	0.00	0.000
12	-1.10	100	51	15.71	1310.95	2.13	188.09	0.000000	0.00	0.000
13	-1.20	100	52	15.71	1338.85	2.68	195.41	0.000000	0.00	0.000
14	-1.30	100	53	15.71	1366.77	3.32	202.85	0.000000	0.00	0.000
15	-1.40	100	54	15.71	1394.73	4.05	210.43	0.000000	0.00	0.000
16	-1.50	100	55	15.71	1422.72	4.89	218.13	0.000000	0.00	0.000
17	-1.60	100	56	15.71	1450.74	5.83	225.97	0.000000	0.00	0.000
18	-1.69	100	57	15.71	1478.79	6.88	233.94	0.000000	0.00	0.000
19	-1.79	100	58	15.71	1500.00	8.05	242.04	0.000000	0.00	0.000
20	-1.89	100	59	15.71	1500.00	9.35	250.28	0.000000	0.00	0.000
21	-1.99	100	60	15.71	1500.00	10.77	258.64	0.000000	0.00	0.000
22	-2.09	100	61	15.71	1500.00	12.33	267.14	0.000000	0.00	0.000
23	-2.19	100	62	15.71	1500.00	14.04	275.78	0.000000	0.00	0.000
24	-2.29	100	63	15.71	1500.00	15.90	284.53	0.000000	0.00	0.000
25	-2.39	100	64	15.71	1500.00	17.91	293.44	0.000000	0.00	0.000
26	-2.49	100	65	15.71	1500.00	20.08	302.46	0.000000	0.00	0.000
27	-2.59	100	66	15.71	1500.00	22.42	311.61	0.000000	0.00	0.000
28	-2.69	100	67	15.71	1500.00	24.94	320.91	0.000000	0.00	0.000
29	-2.79	100	68	15.71	1500.00	27.64	330.33	0.000000	0.00	0.000
30	-2.89	100	69	15.71	1500.00	30.52	339.88	0.000000	0.00	0.000
31	-2.99	100	70	15.71	1500.00	33.60	349.58	0.000000	0.00	0.000
32	-3.09	100	71	15.71	1500.00	36.88	359.39	0.000000	0.00	0.000
33	-3.19	100	72	15.71	1500.00	40.36	369.35	0.000000	0.00	0.000
34	-3.29	100	73	15.71	1500.00	44.06	379.45	0.000000	0.00	0.000
35	-3.39	100	74	15.71	1500.00	47.97	389.66	0.000000	0.00	0.000
36	-3.49	100	75	15.71	1500.00	52.11	400.01	0.000000	0.00	0.000
37	-3.59	100	76	15.71	1500.00	56.48	410.50	0.000000	0.00	0.000
38	-3.69	100	77	15.71	1500.00	61.09	421.13	0.000000	0.00	0.000
39	-3.79	100	78	15.71	1500.00	65.94	431.87	0.000000	0.00	0.000
40	-3.89	100	79	15.71	1500.00	71.04	442.76	0.000000	0.00	0.000
41	-3.99	100	80	15.71	1500.00	76.39	453.78	0.000000	0.00	0.000
42	-4.09	100	81	15.71	1500.00	82.01	464.94	0.000000	0.00	0.000
43	-4.19	100	82	15.71	1500.00	87.90	476.22	0.000000	0.00	0.000
44	-4.29	100	83	15.71	1500.00	94.06	487.63	0.000000	0.00	0.000
45	-4.39	100	84	15.71	1500.00	100.50	499.21	0.000000	0.00	0.000
46	-4.49	100	85	15.71	1500.00	107.23	510.88	0.000000	0.00	0.000
47	-4.59	100	86	15.71	1500.00	114.25	522.72	0.000000	0.00	0.000
48	-4.69	100	87	15.71	1500.00	121.57	534.68	0.000000	0.00	0.000
49	-4.79	100	88	15.71	1500.00	129.20	546.75	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
50	-4.88	100	89	15.71	1500.00	137.14	558.98	0.000000	0.00	0.000
51	-4.98	100	90	15.71	1500.00	145.39	571.36	0.000000	0.00	0.000
52	-5.08	100	91	15.71	1500.00	153.97	583.86	0.000000	0.00	0.000
53	-5.18	100	92	15.71	1500.00	162.89	596.49	0.000000	0.00	0.000
54	-5.28	100	93	15.71	1500.00	172.14	609.25	0.000000	0.00	0.000
55	-5.38	100	94	15.71	1500.00	181.73	622.15	0.000000	0.00	0.000
56	-5.48	100	95	15.71	1500.00	191.67	635.20	0.000000	0.00	0.000
57	-5.58	100	96	15.71	1500.00	201.97	648.37	0.000000	0.00	0.000
58	-5.68	100	97	15.71	1500.00	212.63	661.67	0.000000	0.00	0.000
59	-5.78	100	98	15.71	1500.00	223.66	675.12	0.000000	0.00	0.000
60	-5.88	100	99	15.71	1500.00	235.06	688.70	0.000000	0.00	0.000
61	-5.98	100	100	15.71	1500.00	246.84	702.40	0.000000	0.00	0.000
62	-6.08	100	101	15.71	1500.00	259.02	716.26	0.000000	0.00	0.000
63	-6.18	100	102	15.71	1500.00	271.58	730.24	0.000000	0.00	0.000
64	-6.28	100	103	15.71	1500.00	284.54	744.39	0.000000	0.00	0.000
65	-6.38	100	104	15.71	1500.00	297.91	758.64	0.000000	0.00	0.000
66	-6.47	100	105	15.71	1500.00	311.69	771.62	0.000000	0.00	0.000

Combinazione n° 26 - SLEQ_H - V

Apertura limite fessure w_{lim}=0.20

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	0.00	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000
2	-0.10	100	41	0.00	0.00	0.01	0.00	0.000000	0.00	0.000
3	-0.20	100	42	15.71	1061.58	0.03	128.19	0.000000	0.00	0.000
4	-0.30	100	43	15.71	1089.16	0.08	134.31	0.000000	0.00	0.000
5	-0.40	100	44	15.71	1116.79	0.16	140.57	0.000000	0.00	0.000
6	-0.50	100	45	15.71	1144.45	0.27	146.95	0.000000	0.00	0.000
7	-0.60	100	46	15.71	1172.16	0.43	153.47	0.000000	0.00	0.000
8	-0.70	100	47	15.71	1199.91	0.63	160.11	0.000000	0.00	0.000
9	-0.80	100	48	15.71	1227.69	0.88	166.89	0.000000	0.00	0.000
10	-0.90	100	49	15.71	1255.51	1.20	173.80	0.000000	0.00	0.000
11	-1.00	100	50	15.71	1283.37	1.57	180.84	0.000000	0.00	0.000
12	-1.10	100	51	15.71	1311.27	2.02	188.02	0.000000	0.00	0.000
13	-1.20	100	52	15.71	1339.19	2.55	195.31	0.000000	0.00	0.000
14	-1.30	100	53	15.71	1367.16	3.15	202.75	0.000000	0.00	0.000
15	-1.40	100	54	15.71	1395.15	3.85	210.31	0.000000	0.00	0.000
16	-1.50	100	55	15.71	1423.18	4.64	218.01	0.000000	0.00	0.000
17	-1.60	100	56	15.71	1451.23	5.53	225.84	0.000000	0.00	0.000
18	-1.69	100	57	15.71	1479.32	6.53	233.80	0.000000	0.00	0.000
19	-1.79	100	58	15.71	1500.00	7.63	241.89	0.000000	0.00	0.000
20	-1.89	100	59	15.71	1500.00	8.86	250.10	0.000000	0.00	0.000
21	-1.99	100	60	15.71	1500.00	10.21	258.46	0.000000	0.00	0.000
22	-2.09	100	61	15.71	1500.00	11.69	266.94	0.000000	0.00	0.000
23	-2.19	100	62	15.71	1500.00	13.30	275.56	0.000000	0.00	0.000
24	-2.29	100	63	15.71	1500.00	15.06	284.30	0.000000	0.00	0.000
25	-2.39	100	64	15.71	1500.00	16.96	293.18	0.000000	0.00	0.000
26	-2.49	100	65	15.71	1500.00	19.01	302.18	0.000000	0.00	0.000
27	-2.59	100	66	15.71	1500.00	21.23	311.33	0.000000	0.00	0.000
28	-2.69	100	67	15.71	1500.00	23.60	320.60	0.000000	0.00	0.000
29	-2.79	100	68	15.71	1500.00	26.15	330.01	0.000000	0.00	0.000
30	-2.89	100	69	15.71	1500.00	28.88	339.53	0.000000	0.00	0.000
31	-2.99	100	70	15.71	1500.00	31.78	349.20	0.000000	0.00	0.000
32	-3.09	100	71	15.71	1500.00	34.88	359.00	0.000000	0.00	0.000
33	-3.19	100	72	15.71	1500.00	38.17	368.94	0.000000	0.00	0.000
34	-3.29	100	73	15.71	1500.00	41.66	379.00	0.000000	0.00	0.000
35	-3.39	100	74	15.71	1500.00	45.35	389.21	0.000000	0.00	0.000
36	-3.49	100	75	15.71	1500.00	49.26	399.53	0.000000	0.00	0.000
37	-3.59	100	76	15.71	1500.00	53.39	409.99	0.000000	0.00	0.000
38	-3.69	100	77	15.71	1500.00	57.74	420.59	0.000000	0.00	0.000
39	-3.79	100	78	15.71	1500.00	62.31	431.31	0.000000	0.00	0.000
40	-3.89	100	79	15.71	1500.00	67.13	442.18	0.000000	0.00	0.000
41	-3.99	100	80	15.71	1500.00	72.18	453.17	0.000000	0.00	0.000
42	-4.09	100	81	15.71	1500.00	77.48	464.29	0.000000	0.00	0.000
43	-4.19	100	82	15.71	1500.00	83.03	475.56	0.000000	0.00	0.000
44	-4.29	100	83	15.71	1500.00	88.85	486.94	0.000000	0.00	0.000
45	-4.39	100	84	15.71	1500.00	94.92	498.48	0.000000	0.00	0.000
46	-4.49	100	85	15.71	1500.00	101.27	510.13	0.000000	0.00	0.000
47	-4.59	100	86	15.71	1500.00	107.89	521.93	0.000000	0.00	0.000
48	-4.69	100	87	15.71	1500.00	114.80	533.85	0.000000	0.00	0.000
49	-4.79	100	88	15.71	1500.00	122.00	545.91	0.000000	0.00	0.000
50	-4.88	100	89	15.71	1500.00	129.48	558.11	0.000000	0.00	0.000
51	-4.98	100	90	15.71	1500.00	137.27	570.42	0.000000	0.00	0.000
52	-5.08	100	91	15.71	1500.00	145.37	582.88	0.000000	0.00	0.000
53	-5.18	100	92	15.71	1500.00	153.77	595.50	0.000000	0.00	0.000
54	-5.28	100	93	15.71	1500.00	162.49	608.21	0.000000	0.00	0.000
55	-5.38	100	94	15.71	1500.00	171.54	621.08	0.000000	0.00	0.000
56	-5.48	100	95	15.71	1500.00	180.92	634.08	0.000000	0.00	0.000
57	-5.58	100	96	15.71	1500.00	190.63	647.22	0.000000	0.00	0.000
58	-5.68	100	97	15.71	1500.00	200.68	660.49	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
59	-5.78	100	98	15.71	1500.00	211.08	673.88	0.000000	0.00	0.000
60	-5.88	100	99	15.71	1500.00	221.83	687.42	0.000000	0.00	0.000
61	-5.98	100	100	15.71	1500.00	232.94	701.10	0.000000	0.00	0.000
62	-6.08	100	101	15.71	1500.00	244.42	714.89	0.000000	0.00	0.000
63	-6.18	100	102	15.71	1500.00	256.26	728.83	0.000000	0.00	0.000
64	-6.28	100	103	15.71	1500.00	268.48	742.93	0.000000	0.00	0.000
65	-6.38	100	104	15.71	1500.00	281.09	757.14	0.000000	0.00	0.000
66	-6.47	100	105	15.71	1500.00	294.08	770.09	0.000000	0.00	0.000

Fondazione

Combinazione n° 21 - SLEQ

Apertura limite fessure w_{lim}=0.30

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	-0.90	100	100	0.00	0.00	0.00	0.00	---	---	0.000
2	-0.80	100	100	15.71	1500.00	0.69	629.07	0.000000	0.00	0.000
3	-0.70	100	100	15.71	1500.00	2.76	629.07	0.000000	0.00	0.000
4	-0.60	100	100	15.71	1500.00	6.20	629.07	0.000000	0.00	0.000
5	-0.50	100	100	15.71	1500.00	11.01	629.07	0.000000	0.00	0.000
6	-0.40	100	100	15.71	1500.00	17.20	629.07	0.000000	0.00	0.000
7	0.65	100	100	15.71	1500.00	-12.41	-629.07	0.000000	0.00	0.000
8	0.75	100	100	15.71	1500.00	-12.43	-629.07	0.000000	0.00	0.000
9	0.85	100	100	15.71	1500.00	-12.39	-629.07	0.000000	0.00	0.000
10	0.95	100	100	15.71	1500.00	-12.32	-629.07	0.000000	0.00	0.000
11	1.05	100	100	15.71	1500.00	-12.20	-629.07	0.000000	0.00	0.000
12	1.15	100	100	15.71	1500.00	-12.05	-629.07	0.000000	0.00	0.000
13	1.25	100	100	15.71	1500.00	-11.86	-629.07	0.000000	0.00	0.000
14	1.35	100	100	15.71	1500.00	-11.63	-629.07	0.000000	0.00	0.000
15	1.45	100	100	15.71	1500.00	-11.37	-629.07	0.000000	0.00	0.000
16	1.55	100	100	15.71	1500.00	-11.09	-629.07	0.000000	0.00	0.000
17	1.65	100	100	15.71	1500.00	-10.77	-629.07	0.000000	0.00	0.000
18	1.75	100	100	15.71	1500.00	-10.43	-629.07	0.000000	0.00	0.000
19	1.85	100	100	15.71	1500.00	-10.07	-629.07	0.000000	0.00	0.000
20	1.95	100	100	15.71	1500.00	-9.69	-629.07	0.000000	0.00	0.000
21	2.05	100	100	15.71	1500.00	-9.29	-629.07	0.000000	0.00	0.000
22	2.15	100	100	15.71	1500.00	-8.87	-629.07	0.000000	0.00	0.000
23	2.25	100	100	15.71	1500.00	-8.44	-629.07	0.000000	0.00	0.000
24	2.35	100	100	15.71	1500.00	-8.00	-629.07	0.000000	0.00	0.000
25	2.45	100	100	15.71	1500.00	-7.55	-629.07	0.000000	0.00	0.000
26	2.55	100	100	15.71	1500.00	-7.09	-629.07	0.000000	0.00	0.000
27	2.65	100	100	15.71	1500.00	-6.63	-629.07	0.000000	0.00	0.000
28	2.75	100	100	15.71	1500.00	-6.17	-629.07	0.000000	0.00	0.000
29	2.85	100	100	15.71	1500.00	-5.70	-629.07	0.000000	0.00	0.000
30	2.95	100	100	15.71	1500.00	-5.24	-629.07	0.000000	0.00	0.000
31	3.05	100	100	15.71	1500.00	-4.79	-629.07	0.000000	0.00	0.000
32	3.15	100	100	15.71	1500.00	-4.34	-629.07	0.000000	0.00	0.000
33	3.25	100	100	15.71	1500.00	-3.90	-629.07	0.000000	0.00	0.000
34	3.35	100	100	15.71	1500.00	-3.47	-629.07	0.000000	0.00	0.000
35	3.45	100	100	15.71	1500.00	-3.06	-629.07	0.000000	0.00	0.000
36	3.55	100	100	15.71	1500.00	-2.66	-629.07	0.000000	0.00	0.000
37	3.65	100	100	15.71	1500.00	-2.28	-629.07	0.000000	0.00	0.000
38	3.75	100	100	15.71	1500.00	-1.92	-629.07	0.000000	0.00	0.000
39	3.85	100	100	15.71	1500.00	-1.59	-629.07	0.000000	0.00	0.000
40	3.95	100	100	15.71	1500.00	-1.28	-629.07	0.000000	0.00	0.000
41	4.05	100	100	15.71	1500.00	-1.00	-629.07	0.000000	0.00	0.000
42	4.15	100	100	15.71	1500.00	-0.75	-629.07	0.000000	0.00	0.000
43	4.25	100	100	15.71	1500.00	-0.53	-629.07	0.000000	0.00	0.000
44	4.35	100	100	15.71	1500.00	-0.34	-629.07	0.000000	0.00	0.000
45	4.45	100	100	15.71	1500.00	-0.20	-629.07	0.000000	0.00	0.000
46	4.55	100	100	15.71	1500.00	-0.09	-629.07	0.000000	0.00	0.000
47	4.65	100	100	15.71	1500.00	-0.02	-629.07	0.000000	0.00	0.000
48	4.75	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000

Combinazione n° 24 - SLEQ

Apertura limite fessure w_{lim}=0.30

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	-0.90	100	100	0.00	0.00	0.00	0.00	---	---	0.000
2	-0.80	100	100	15.71	1500.00	0.70	629.07	0.000000	0.00	0.000
3	-0.70	100	100	15.71	1500.00	2.81	629.07	0.000000	0.00	0.000
4	-0.60	100	100	15.71	1500.00	6.32	629.07	0.000000	0.00	0.000
5	-0.50	100	100	15.71	1500.00	11.22	629.07	0.000000	0.00	0.000
6	-0.40	100	100	15.71	1500.00	17.53	629.07	0.000000	0.00	0.000
7	0.65	100	100	15.71	1500.00	-16.25	-629.07	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
8	0.75	100	100	15.71	1500.00	-16.15	-629.07	0.000000	0.00	0.000
9	0.85	100	100	15.71	1500.00	-16.00	-629.07	0.000000	0.00	0.000
10	0.95	100	100	15.71	1500.00	-15.81	-629.07	0.000000	0.00	0.000
11	1.05	100	100	15.71	1500.00	-15.57	-629.07	0.000000	0.00	0.000
12	1.15	100	100	15.71	1500.00	-15.30	-629.07	0.000000	0.00	0.000
13	1.25	100	100	15.71	1500.00	-14.98	-629.07	0.000000	0.00	0.000
14	1.35	100	100	15.71	1500.00	-14.63	-629.07	0.000000	0.00	0.000
15	1.45	100	100	15.71	1500.00	-14.25	-629.07	0.000000	0.00	0.000
16	1.55	100	100	15.71	1500.00	-13.84	-629.07	0.000000	0.00	0.000
17	1.65	100	100	15.71	1500.00	-13.40	-629.07	0.000000	0.00	0.000
18	1.75	100	100	15.71	1500.00	-12.93	-629.07	0.000000	0.00	0.000
19	1.85	100	100	15.71	1500.00	-12.44	-629.07	0.000000	0.00	0.000
20	1.95	100	100	15.71	1500.00	-11.93	-629.07	0.000000	0.00	0.000
21	2.05	100	100	15.71	1500.00	-11.41	-629.07	0.000000	0.00	0.000
22	2.15	100	100	15.71	1500.00	-10.87	-629.07	0.000000	0.00	0.000
23	2.25	100	100	15.71	1500.00	-10.32	-629.07	0.000000	0.00	0.000
24	2.35	100	100	15.71	1500.00	-9.75	-629.07	0.000000	0.00	0.000
25	2.45	100	100	15.71	1500.00	-9.18	-629.07	0.000000	0.00	0.000
26	2.55	100	100	15.71	1500.00	-8.61	-629.07	0.000000	0.00	0.000
27	2.65	100	100	15.71	1500.00	-8.03	-629.07	0.000000	0.00	0.000
28	2.75	100	100	15.71	1500.00	-7.46	-629.07	0.000000	0.00	0.000
29	2.85	100	100	15.71	1500.00	-6.88	-629.07	0.000000	0.00	0.000
30	2.95	100	100	15.71	1500.00	-6.32	-629.07	0.000000	0.00	0.000
31	3.05	100	100	15.71	1500.00	-5.76	-629.07	0.000000	0.00	0.000
32	3.15	100	100	15.71	1500.00	-5.21	-629.07	0.000000	0.00	0.000
33	3.25	100	100	15.71	1500.00	-4.68	-629.07	0.000000	0.00	0.000
34	3.35	100	100	15.71	1500.00	-4.16	-629.07	0.000000	0.00	0.000
35	3.45	100	100	15.71	1500.00	-3.66	-629.07	0.000000	0.00	0.000
36	3.55	100	100	15.71	1500.00	-3.18	-629.07	0.000000	0.00	0.000
37	3.65	100	100	15.71	1500.00	-2.72	-629.07	0.000000	0.00	0.000
38	3.75	100	100	15.71	1500.00	-2.29	-629.07	0.000000	0.00	0.000
39	3.85	100	100	15.71	1500.00	-1.89	-629.07	0.000000	0.00	0.000
40	3.95	100	100	15.71	1500.00	-1.52	-629.07	0.000000	0.00	0.000
41	4.05	100	100	15.71	1500.00	-1.19	-629.07	0.000000	0.00	0.000
42	4.15	100	100	15.71	1500.00	-0.89	-629.07	0.000000	0.00	0.000
43	4.25	100	100	15.71	1500.00	-0.63	-629.07	0.000000	0.00	0.000
44	4.35	100	100	15.71	1500.00	-0.41	-629.07	0.000000	0.00	0.000
45	4.45	100	100	15.71	1500.00	-0.23	-629.07	0.000000	0.00	0.000
46	4.55	100	100	15.71	1500.00	-0.11	-629.07	0.000000	0.00	0.000
47	4.65	100	100	15.71	1500.00	-0.03	-629.07	0.000000	0.00	0.000
48	4.75	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000

Combinazione n° 25 - SLEQ H + V

Apertura limite fessure w_{lim}=0.30

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	-0.90	100	100	0.00	0.00	0.00	0.00	---	---	0.000
2	-0.80	100	100	15.71	1500.00	0.96	629.07	0.000000	0.00	0.000
3	-0.70	100	100	15.71	1500.00	3.82	629.07	0.000000	0.00	0.000
4	-0.60	100	100	15.71	1500.00	8.56	629.07	0.000000	0.00	0.000
5	-0.50	100	100	15.71	1500.00	15.16	629.07	0.000000	0.00	0.000
6	-0.40	100	100	15.71	1500.00	23.62	629.07	0.000000	0.00	0.000
7	0.65	100	100	15.71	1500.00	-152.41	-629.07	0.000000	0.00	0.000
8	0.75	100	100	15.71	1500.00	-150.09	-629.07	0.000000	0.00	0.000
9	0.85	100	100	15.71	1500.00	-147.45	-629.07	0.000000	0.00	0.000
10	0.95	100	100	15.71	1500.00	-144.52	-629.07	0.000000	0.00	0.000
11	1.05	100	100	15.71	1500.00	-141.31	-629.07	0.000000	0.00	0.000
12	1.15	100	100	15.71	1500.00	-137.84	-629.07	0.000000	0.00	0.000
13	1.25	100	100	15.71	1500.00	-134.13	-629.07	0.000000	0.00	0.000
14	1.35	100	100	15.71	1500.00	-130.21	-629.07	0.000000	0.00	0.000
15	1.45	100	100	15.71	1500.00	-126.08	-629.07	0.000000	0.00	0.000
16	1.55	100	100	15.71	1500.00	-121.77	-629.07	0.000000	0.00	0.000
17	1.65	100	100	15.71	1500.00	-117.29	-629.07	0.000000	0.00	0.000
18	1.75	100	100	15.71	1500.00	-112.67	-629.07	0.000000	0.00	0.000
19	1.85	100	100	15.71	1500.00	-107.92	-629.07	0.000000	0.00	0.000
20	1.95	100	100	15.71	1500.00	-103.07	-629.07	0.000000	0.00	0.000
21	2.05	100	100	15.71	1500.00	-98.13	-629.07	0.000000	0.00	0.000
22	2.15	100	100	15.71	1500.00	-93.11	-629.07	0.000000	0.00	0.000
23	2.25	100	100	15.71	1500.00	-88.05	-629.07	0.000000	0.00	0.000
24	2.35	100	100	15.71	1500.00	-82.96	-629.07	0.000000	0.00	0.000
25	2.45	100	100	15.71	1500.00	-77.85	-629.07	0.000000	0.00	0.000
26	2.55	100	100	15.71	1500.00	-72.74	-629.07	0.000000	0.00	0.000
27	2.65	100	100	15.71	1500.00	-67.67	-629.07	0.000000	0.00	0.000
28	2.75	100	100	15.71	1500.00	-62.63	-629.07	0.000000	0.00	0.000
29	2.85	100	100	15.71	1500.00	-57.66	-629.07	0.000000	0.00	0.000
30	2.95	100	100	15.71	1500.00	-52.76	-629.07	0.000000	0.00	0.000
31	3.05	100	100	15.71	1500.00	-47.97	-629.07	0.000000	0.00	0.000
32	3.15	100	100	15.71	1500.00	-43.30	-629.07	0.000000	0.00	0.000
33	3.25	100	100	15.71	1500.00	-38.76	-629.07	0.000000	0.00	0.000
34	3.35	100	100	15.71	1500.00	-34.38	-629.07	0.000000	0.00	0.000

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
35	3.45	100	100	15.71	1500.00	-30.17	-629.07	0.000000	0.00	0.000
36	3.55	100	100	15.71	1500.00	-26.16	-629.07	0.000000	0.00	0.000
37	3.65	100	100	15.71	1500.00	-22.36	-629.07	0.000000	0.00	0.000
38	3.75	100	100	15.71	1500.00	-18.80	-629.07	0.000000	0.00	0.000
39	3.85	100	100	15.71	1500.00	-15.48	-629.07	0.000000	0.00	0.000
40	3.95	100	100	15.71	1500.00	-12.43	-629.07	0.000000	0.00	0.000
41	4.05	100	100	15.71	1500.00	-9.67	-629.07	0.000000	0.00	0.000
42	4.15	100	100	15.71	1500.00	-7.22	-629.07	0.000000	0.00	0.000
43	4.25	100	100	15.71	1500.00	-5.09	-629.07	0.000000	0.00	0.000
44	4.35	100	100	15.71	1500.00	-3.31	-629.07	0.000000	0.00	0.000
45	4.45	100	100	15.71	1500.00	-1.89	-629.07	0.000000	0.00	0.000
46	4.55	100	100	15.71	1500.00	-0.85	-629.07	0.000000	0.00	0.000
47	4.65	100	100	15.71	1500.00	-0.22	-629.07	0.000000	0.00	0.000
48	4.75	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000

Combinazione n° 26 - SLEQ_H - V

Apertura limite fessure w_{lim}=0.30

n°	Y	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[m]	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	-0.90	100	100	0.00	0.00	0.00	0.00	---	---	0.000
2	-0.80	100	100	15.71	1500.00	0.90	629.07	0.000000	0.00	0.000
3	-0.70	100	100	15.71	1500.00	3.58	629.07	0.000000	0.00	0.000
4	-0.60	100	100	15.71	1500.00	8.02	629.07	0.000000	0.00	0.000
5	-0.50	100	100	15.71	1500.00	14.22	629.07	0.000000	0.00	0.000
6	-0.40	100	100	15.71	1500.00	22.14	629.07	0.000000	0.00	0.000
7	0.65	100	100	15.71	1500.00	-246.51	-629.07	0.000000	0.00	0.000
8	0.75	100	100	15.71	1500.00	-239.61	-629.07	0.000000	0.00	0.000
9	0.85	100	100	15.71	1500.00	-232.51	-629.07	0.000000	0.00	0.000
10	0.95	100	100	15.71	1500.00	-225.24	-629.07	0.000000	0.00	0.000
11	1.05	100	100	15.71	1500.00	-217.80	-629.07	0.000000	0.00	0.000
12	1.15	100	100	15.71	1500.00	-210.22	-629.07	0.000000	0.00	0.000
13	1.25	100	100	15.71	1500.00	-202.52	-629.07	0.000000	0.00	0.000
14	1.35	100	100	15.71	1500.00	-194.71	-629.07	0.000000	0.00	0.000
15	1.45	100	100	15.71	1500.00	-186.81	-629.07	0.000000	0.00	0.000
16	1.55	100	100	15.71	1500.00	-178.85	-629.07	0.000000	0.00	0.000
17	1.65	100	100	15.71	1500.00	-170.84	-629.07	0.000000	0.00	0.000
18	1.75	100	100	15.71	1500.00	-162.79	-629.07	0.000000	0.00	0.000
19	1.85	100	100	15.71	1500.00	-154.74	-629.07	0.000000	0.00	0.000
20	1.95	100	100	15.71	1500.00	-146.69	-629.07	0.000000	0.00	0.000
21	2.05	100	100	15.71	1500.00	-138.67	-629.07	0.000000	0.00	0.000
22	2.15	100	100	15.71	1500.00	-130.69	-629.07	0.000000	0.00	0.000
23	2.25	100	100	15.71	1500.00	-122.78	-629.07	0.000000	0.00	0.000
24	2.35	100	100	15.71	1500.00	-114.94	-629.07	0.000000	0.00	0.000
25	2.45	100	100	15.71	1500.00	-107.21	-629.07	0.000000	0.00	0.000
26	2.55	100	100	15.71	1500.00	-99.60	-629.07	0.000000	0.00	0.000
27	2.65	100	100	15.71	1500.00	-92.12	-629.07	0.000000	0.00	0.000
28	2.75	100	100	15.71	1500.00	-84.80	-629.07	0.000000	0.00	0.000
29	2.85	100	100	15.71	1500.00	-77.66	-629.07	0.000000	0.00	0.000
30	2.95	100	100	15.71	1500.00	-70.71	-629.07	0.000000	0.00	0.000
31	3.05	100	100	15.71	1500.00	-63.97	-629.07	0.000000	0.00	0.000
32	3.15	100	100	15.71	1500.00	-57.46	-629.07	0.000000	0.00	0.000
33	3.25	100	100	15.71	1500.00	-51.20	-629.07	0.000000	0.00	0.000
34	3.35	100	100	15.71	1500.00	-45.21	-629.07	0.000000	0.00	0.000
35	3.45	100	100	15.71	1500.00	-39.51	-629.07	0.000000	0.00	0.000
36	3.55	100	100	15.71	1500.00	-34.11	-629.07	0.000000	0.00	0.000
37	3.65	100	100	15.71	1500.00	-29.04	-629.07	0.000000	0.00	0.000
38	3.75	100	100	15.71	1500.00	-24.31	-629.07	0.000000	0.00	0.000
39	3.85	100	100	15.71	1500.00	-19.95	-629.07	0.000000	0.00	0.000
40	3.95	100	100	15.71	1500.00	-15.96	-629.07	0.000000	0.00	0.000
41	4.05	100	100	15.71	1500.00	-12.37	-629.07	0.000000	0.00	0.000
42	4.15	100	100	15.71	1500.00	-9.20	-629.07	0.000000	0.00	0.000
43	4.25	100	100	15.71	1500.00	-6.47	-629.07	0.000000	0.00	0.000
44	4.35	100	100	15.71	1500.00	-4.19	-629.07	0.000000	0.00	0.000
45	4.45	100	100	15.71	1500.00	-2.38	-629.07	0.000000	0.00	0.000
46	4.55	100	100	15.71	1500.00	-1.07	-629.07	0.000000	0.00	0.000
47	4.65	100	100	15.71	1500.00	-0.27	-629.07	0.000000	0.00	0.000
48	4.75	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000

11.4 Risultati per inviluppo

11.4.1 Spinta e forze

Spinta e forze

Simbologia adottata

Ic	Indice della combinazione
A	Tipo azione
I	Inclinazione della spinta, espressa in [°]
V	Valore dell'azione, espressa in [kN]
C_X, C_Y	Componente in direzione X ed Y dell'azione, espressa in [kN]
P_X, P_Y	Coordinata X ed Y del punto di applicazione dell'azione, espressa in [m]

Ic	A	V	I	C_X	C_Y	P_X	P_Y
		[kN]	[°]	[kN]	[kN]	[m]	[m]
2	Spinta statica	202.46	23.33	185.90	80.19	4.75	-4.83
	Peso/Inerzia muro			0.00	253.37/0.00	1.04	-5.50
	Peso/Inerzia terrapieno			0.00	637.35/0.00	2.52	-3.15

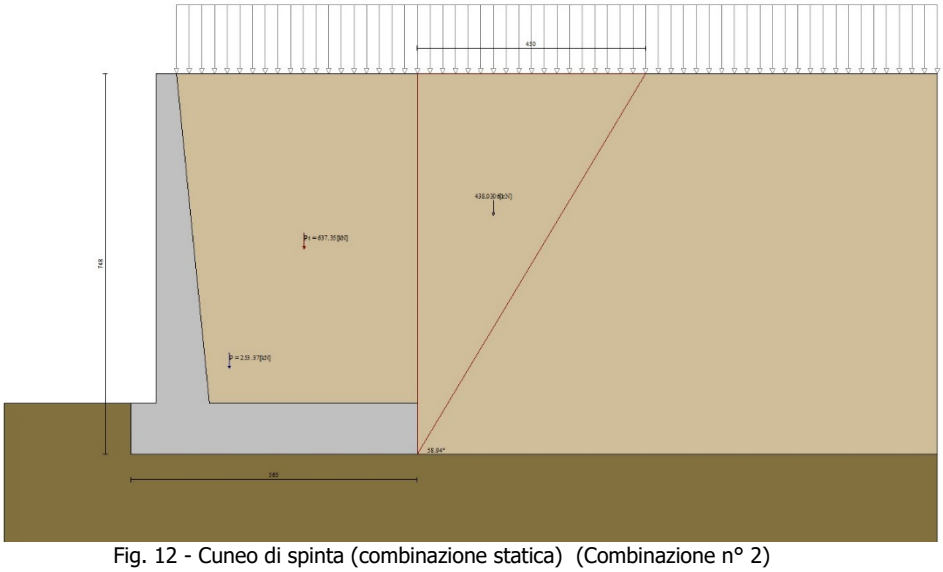


Fig. 12 - Cuneo di spinta (combinazione statica) (Combinazione n° 2)

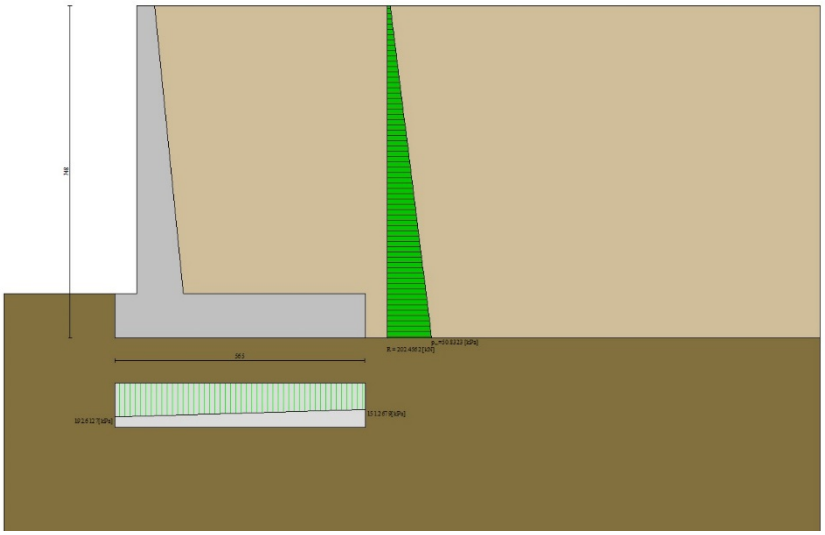


Fig. 13 - Diagramma delle pressioni (combinazione statica) (Combinazione n° 2)

11.4.2 Risultanti globali

Simbologia adottata

Cmb	Indice/Tipo combinazione
N	Componente normale al piano di posa, espressa in [kN]
T	Componente parallela al piano di posa, espressa in [kN]
M_r	Momento ribaltante, espresso in [kNm]
M_s	Momento stabilizzante, espresso in [kNm]
ecc	Eccentricità risultante, espressa in [m]

Ic	N [kN]	T [kN]	M_r [kNm]	M_s [kNm]	ecc [m]
1 - STR (A1-M1-R3)	897.05	163.24	407.02	2857.27	0.092
2 - STR (A1-M1-R3)	970.91	185.90	491.77	3123.18	0.113
3 - STR (A1-M1-R3)	950.05	270.38	783.65	3024.56	0.465
4 - STR (A1-M1-R3)	845.05	256.04	894.93	2842.61	0.519
5 - STR (A1-M1-R3)	1145.05	163.24	407.02	3595.17	0.039
6 - STR (A1-M1-R3)	1069.04	163.24	407.02	3447.37	-0.021
7 - STR (A1-M1-R3)	973.06	163.24	407.02	3005.07	0.153
8 - STR (A1-M1-R3)	1218.90	185.90	491.77	3861.08	0.059
9 - STR (A1-M1-R3)	1142.89	185.90	491.77	3713.27	0.005
10 - STR (A1-M1-R3)	1046.92	185.90	491.77	3270.98	0.169
11 - GEO (A2-M2-R2)	882.55	162.02	403.99	2775.38	0.136
12 - GEO (A2-M2-R2)	945.74	186.93	497.15	3003.41	0.173
13 - GEO (A2-M2-R2)	950.05	270.38	783.65	3024.56	0.465
14 - GEO (A2-M2-R2)	845.05	256.04	894.93	2842.61	0.519
15 - EQU (A1-M1-R3)	897.05	163.24	407.02	2857.27	0.092
16 - EQU (A1-M1-R3)	970.91	185.90	491.77	3123.18	0.113
17 - EQU (A1-M1-R3)	986.32	346.60	1028.43	3163.37	0.659
18 - EQU (A1-M1-R3)	829.51	326.71	1199.38	2894.39	0.780
19 - SLER	880.80	125.57	313.09	2765.52	0.039
20 - SLEF	880.80	125.57	313.09	2765.52	0.039
21 - SLEQ	880.80	125.57	313.09	2765.52	0.039
22 - SLER	921.84	138.16	360.18	2913.24	0.054
23 - SLEF	891.75	128.92	325.65	2804.91	0.043
24 - SLEQ	891.75	128.92	325.65	2804.91	0.043
25 - SLEQ	922.77	213.21	598.76	2921.56	0.306
26 - SLEQ	858.27	204.15	666.31	2809.33	0.326

11.4.3 Verifiche geotecniche

Quadro riassuntivo coeff. di sicurezza calcolati

Simbologia adottata

Cmb	Indice/Tipo combinazione
S	Sisma (H: componente orizzontale, V: componente verticale)
FS_{SCO}	Coeff. di sicurezza allo scorrimento
FS_{RIB}	Coeff. di sicurezza al ribaltamento
FS_{QLIM}	Coeff. di sicurezza a carico limite
FS_{STAB}	Coeff. di sicurezza a stabilità globale
FS_{HYD}	Coeff. di sicurezza a sifonamento
FS_{UPL}	Coeff. di sicurezza a sollevamento

Cmb	Sismica	FS_{SCO}	FS_{RIB}	FS_{QLIM}	FS_{STAB}	FS_{HYD}	FS_{UPL}
1 - STR (A1-M1-R3)		2.760		24.530			
2 - STR (A1-M1-R3)		2.623		21.655			
3 - STR (A1-M1-R3)	H + V	1.765		13.581			
4 - STR (A1-M1-R3)	H - V	1.658		14.012			
5 - STR (A1-M1-R3)		3.523		22.746			
6 - STR (A1-M1-R3)		3.290		24.228			
7 - STR (A1-M1-R3)		2.994		22.610			
8 - STR (A1-M1-R3)		3.293		20.311			
9 - STR (A1-M1-R3)		3.088		22.735			
10 - STR (A1-M1-R3)		2.829		20.199			
11 - GEO (A2-M2-R2)					2.073		
12 - GEO (A2-M2-R2)					1.975		
13 - GEO (A2-M2-R2)	H + V				2.057		
14 - GEO (A2-M2-R2)	H - V				2.003		
15 - EQU (A1-M1-R3)			7.020				
16 - EQU (A1-M1-R3)			6.351				
17 - EQU (A1-M1-R3)	H + V		3.076				
18 - EQU (A1-M1-R3)	H - V		2.413				

Verifica a scorrimento fondazione

Simbologia adottata

n°	Indice combinazione
Rsa	Resistenza allo scorrimento per attrito, espresso in [kN]
Rpt	Resistenza passiva terreno antistante, espresso in [kN]
Rps	Resistenza passiva sperone, espresso in [kN]
Rp	Resistenza a carichi orizzontali pali (solo per fondazione mista), espresso in [kN]
Rt	Resistenza a carichi orizzontali tiranti (solo se presenti), espresso in [kN]
R	Resistenza allo scorrimento (somma di Rsa+Rpt+Rps+Rp), espresso in [kN]
T	Carico parallelo al piano di posa, espresso in [kN]
FS	Fattore di sicurezza (rapporto R/T)

n°	Rsa	Rpt	Rps	Rp	Rt	R	T	FS
	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	
4 - STR (A1-M1-R3) H - V	424.46	0.00	0.00	--	--	424.46	256.04	1.658

Verifica a carico limite

Simbologia adottata

n°	Indice combinazione
N	Carico normale totale al piano di posa, espresso in [kN]
Qu	carico limite del terreno, espresso in [kN]
Qd	Portanza di progetto, espresso in [kN]
FS	Fattore di sicurezza (rapporto tra il carico limie e carico agente al piano di posa)

n°	N	Qu	Qd	FS
	[kN]	[kN]	[kN]	
3 - STR (A1-M1-R3) H + V	950.05	12902.50	10752.08	13.581

Dettagli calcolo portanza

Simbologia adottata

n°	Indice combinazione
Nc, Nq, Ng	Fattori di capacità portante
ic, iq, ig	Fattori di inclinazione del carico
dc, dq, dg	Fattori di profondità del piano di posa
gc, gq, gg	Fattori di inclinazione del profilo topografico
bc, bq, bg	Fattori di inclinazione del piano di posa
sc, sq, sg	Fattori di forma della fondazione
pc, pq, pg	Fattori di riduzione per punzonamento secondo Vesic
Re	Fattore di riduzione capacità portante per eccentricità secondo Meyerhof

Ir, Irc Indici di rigidezza per punzonamento secondo Vesic
rg Fattori per tener conto dell'effetto piastra. Per fondazioni che hanno larghezza maggiore di 2 m, il terzo termine della formula trinomia 0.5B γN_γ viene moltiplicato per questo fattore
D Affondamento del piano di posa, espresso in [m]
B' Larghezza fondazione ridotta, espresso in [m]
H Altezza del cuneo di rottura, espresso in [m]
g Peso di volume del terreno medio, espresso in [kN/mc]
f Angolo di attrito del terreno medio, espresso in [°]
c Coesione del terreno medio, espresso in [kPa]
Per i coeff. che in tabella sono indicati con il simbolo '--' sono coeff. non presenti nel metodo scelto (Meyerhof).

n°	Nc Nq Ng	ic iq ig	dc dq dg	gc gq gg	bc bq bg	sc sq sg	pc pq pg	Ir	Irc	Re	rg
3	75.313 64.195 93.691	0.678 0.678 0.363	1.076 1.038 1.038	-- -- --	-- -- --	1.590 1.295 1.295	-- -- --	--	--	0.713	0.887

n°	D [m]	B' [m]	H [m]	g [°]	f [kN/mc]	c [kPa]
3	1.00	5.65	6.05	18.50	40.00	0

Verifica a ribaltamento

Simbologia adottata
n° Indice combinazione
Ms Momento stabilizzante, espresso in [kNm]
Mr Momento ribaltante, espresso in [kNm]
FS Fattore di sicurezza (rapporto tra momento stabilizzante e momento ribaltante)
La verifica viene eseguita rispetto allo spigolo inferiore esterno della fondazione

n°	Ms [kNm]	Mr [kNm]	FS
18 - EQU (A1-M1-R3) H - V	2894.39	1199.38	2.413

Verifica stabilità globale muro + terreno

Simbologia adottata
Ic Indice/Tipo combinazione
C Centro superficie di scorrimento, espresso in [m]
R Raggio, espresso in [m]
FS Fattore di sicurezza

Ic	C [m]	R [m]	FS
12 - GEO (A2-M2-R2)	-1.51; 4.03	13.11	1.975

Dettagli strisce verifiche stabilità

Simbologia adottata
Le ascisse X sono considerate positive verso monte
Le ordinate Y sono considerate positive verso l'alto
Origine in testa al muro (spigolo contro terra)
W peso della striscia espresso in [kN]
Qy carico sulla striscia espresso in [kN]
Qf carico acqua sulla striscia espresso in [kN]
a angolo fra la base della striscia e l'orizzontale espresso in [°] (positivo antiorario)
f angolo d'attrito del terreno lungo la base della striscia
c coesione del terreno lungo la base della striscia espressa in [kPa]
b larghezza della striscia espressa in [m]
u pressione neutra lungo la base della striscia espressa in [kPa]
Tx; Ty Resistenza al taglio fornita dai tiranti in direzione X ed Y espressa in [kPa]

n°	W [kN]	Qy [kN]	Qf [kN]	b [m]	a [°]	f [°]	c [kPa]	u [kPa]	Tx; Ty [kN]
1	15.78	9.36	0.00	10.98 - 0.81	67.245	29.256	0	0.0	
2	42.75	9.36	0.00	0.81	59.421	29.256	0	0.0	
3	62.73	9.36	0.00	0.81	52.972	29.256	0	0.0	
4	78.69	9.36	0.00	0.81	47.392	29.256	0	0.0	
5	91.92	9.36	0.00	0.81	42.359	29.256	0	0.0	
6	103.07	9.36	0.00	0.81	37.706	29.256	0	0.0	
7	112.54	9.36	0.00	0.81	33.330	29.256	0	0.0	
8	113.22	9.36	0.00	0.81	29.166	29.256	0	0.0	
9	130.64	9.36	0.00	0.81	25.166	33.873	0	0.0	
10	135.90	9.36	0.00	0.81	21.293	33.873	0	0.0	
11	140.22	9.36	0.00	0.81	17.521	33.873	0	0.0	
12	143.66	9.36	0.00	0.81	13.826	33.873	0	0.0	
13	147.64	9.36	0.00	0.81	10.188	33.873	0	0.0	

n°	W	Qy	Qf	b	a	f	c	u	Tx; Ty
	[kN]	[kN]	[kN]	[m]	[°]	[°]	[kPa]	[kPa]	[kN]
14	166.14	4.60	0.00	0.81	6.592	33.873	0	0.0	
15	42.20	0.00	0.00	0.81	3.023	33.873	0	0.0	
16	40.26	0.00	0.00	0.81	-0.536	33.873	0	0.0	
17	39.77	0.00	0.00	0.81	-4.096	33.873	0	0.0	
18	38.51	0.00	0.00	0.81	-7.672	33.873	0	0.0	
19	36.46	0.00	0.00	0.81	-11.279	33.873	0	0.0	
20	33.61	0.00	0.00	0.81	-14.932	33.873	0	0.0	
21	29.91	0.00	0.00	0.81	-18.648	33.873	0	0.0	
22	25.31	0.00	0.00	0.81	-22.448	33.873	0	0.0	
23	19.75	0.00	0.00	0.81	-26.356	33.873	0	0.0	
24	12.87	0.00	0.00	0.81	-30.402	33.873	0	0.0	
25	4.42	0.00	0.00	-9.36 - 0.81	-34.185	33.873	0	0.0	

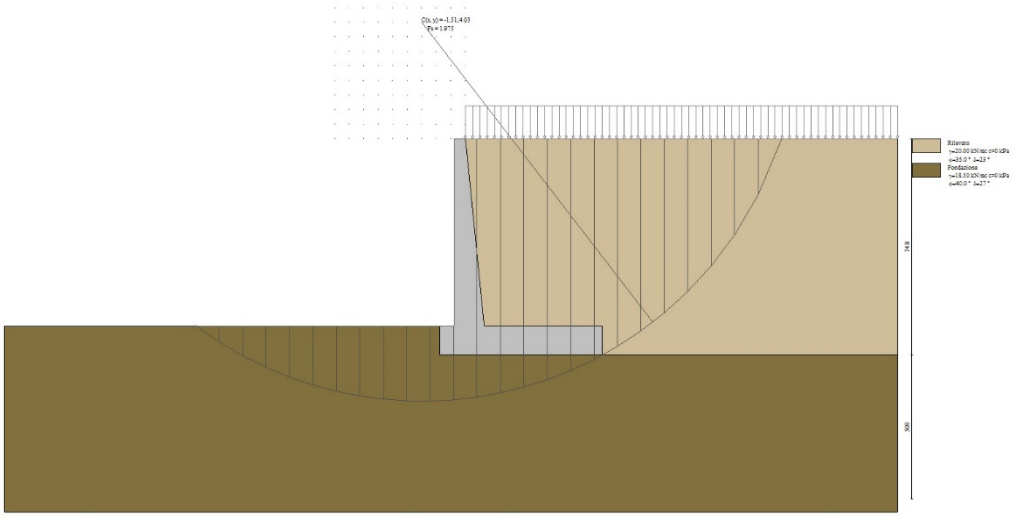


Fig. 14 - Stabilità fronte di scavo - Cerchio critico (Combinazione n° 12)

11.4.4 Sollecitazioni

Elementi calcolati a trave

Simbologia adottata

n° Indice della sezione
X Posizione della sezione, espresso in [m]
N Sforzo normale, espresso in [kN]. Positivo se di compressione.
T Taglio, espresso in [kN]. Positivo se diretto da monte verso valle
M Momento, espresso in [kNm]. Positivo se tende le fibre contro terra (a monte)

La posizione delle sezioni di verifica fanno riferimento al sistema di riferimento globale la cui origine è nello spigolo in alto a destra del paramento.

Paramento

n°	X	N_{min}	N_{max}	T_{min}	T_{max}	M_{min}	M_{max}
	[m]	[kN]	[kN]	[kN]	[kN]	[kNm]	[kNm]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	-0.10	0.93	1.29	0.03	0.37	0.00	0.02
3	-0.20	1.88	2.61	0.10	0.80	0.02	0.09
4	-0.30	2.86	3.96	0.23	1.30	0.04	0.21
5	-0.40	3.86	5.34	0.40	1.86	0.09	0.39
6	-0.50	4.88	6.75	0.62	2.49	0.17	0.64
7	-0.60	5.93	8.19	0.90	3.18	0.27	0.96
8	-0.70	6.99	9.67	1.22	3.94	0.41	1.35
9	-0.80	8.09	11.18	1.59	4.76	0.59	1.84
10	-0.90	9.20	12.72	2.01	5.64	0.81	2.42
11	-1.00	10.34	14.29	2.49	6.59	1.09	3.09
12	-1.10	11.49	15.89	3.01	7.61	1.42	3.88
13	-1.20	12.68	17.53	3.58	8.69	1.81	4.77
14	-1.30	13.88	19.19	4.20	9.83	2.27	5.78
15	-1.40	15.11	20.89	4.87	11.04	2.80	6.92
16	-1.50	16.36	22.62	5.59	12.31	3.40	8.19
17	-1.60	17.63	24.38	6.36	13.65	4.09	9.61

n°	X	N_{min}	N_{max}	T_{min}	T_{max}	M_{min}	M_{max}
	[m]	[kN]	[kN]	[kN]	[kN]	[kNm]	[kNm]
18	-1.69	18.93	26.18	7.18	15.05	4.86	11.16
19	-1.79	20.25	28.00	8.05	16.51	5.72	12.87
20	-1.89	21.59	29.86	8.97	18.04	6.68	14.73
21	-1.99	22.96	31.74	9.93	19.64	7.74	16.76
22	-2.09	24.35	33.66	10.95	21.30	8.91	18.97
23	-2.19	25.76	35.61	12.02	23.02	10.18	21.35
24	-2.29	27.19	37.59	13.14	24.81	11.58	23.91
25	-2.39	28.65	39.61	14.30	26.66	13.09	26.67
26	-2.49	30.13	41.65	15.52	28.58	14.73	29.63
27	-2.59	31.63	43.73	16.79	30.56	16.51	32.79
28	-2.69	33.15	45.84	18.10	32.61	18.42	36.16
29	-2.79	34.70	47.98	19.47	34.72	20.47	39.75
30	-2.89	36.27	50.15	20.88	36.90	22.67	43.56
31	-2.99	37.87	52.36	22.35	39.14	25.02	47.61
32	-3.09	39.48	54.59	23.86	41.45	27.53	51.89
33	-3.19	41.12	56.86	25.43	43.81	30.20	56.42
34	-3.29	42.79	59.16	27.04	46.25	33.03	61.19
35	-3.39	44.47	61.49	28.70	48.75	36.04	66.23
36	-3.49	46.18	63.85	30.42	51.31	39.23	71.53
37	-3.59	47.91	66.24	32.18	53.94	42.60	77.10
38	-3.69	49.66	68.67	33.99	56.63	46.15	82.94
39	-3.79	51.44	71.12	35.86	59.39	49.90	89.07
40	-3.89	53.24	73.61	37.77	62.21	53.85	95.49
41	-3.99	55.06	76.13	39.73	65.10	58.00	102.21
42	-4.09	56.91	78.68	41.74	68.05	62.35	109.23
43	-4.19	58.78	81.27	43.80	71.06	66.92	116.56
44	-4.29	60.67	83.88	45.91	74.14	71.71	124.21
45	-4.39	62.58	86.53	48.07	77.29	76.72	132.18
46	-4.49	64.52	89.21	50.28	80.50	81.96	140.49
47	-4.59	66.48	91.92	52.54	83.77	87.43	149.12
48	-4.69	68.46	94.66	54.85	87.11	93.14	158.10
49	-4.79	70.47	97.43	57.21	90.51	99.09	167.44
50	-4.88	72.49	100.23	59.62	93.98	105.29	177.12
51	-4.98	74.55	103.07	62.07	97.51	111.75	187.17
52	-5.08	76.62	105.94	64.58	101.11	118.46	197.59
53	-5.18	78.72	108.84	67.14	104.77	125.44	208.39
54	-5.28	80.84	111.77	69.75	108.49	132.68	219.57
55	-5.38	82.98	114.73	72.40	112.28	140.20	231.13
56	-5.48	85.14	117.72	75.11	116.14	148.00	243.10
57	-5.58	87.33	120.75	77.87	120.05	156.08	255.46
58	-5.68	89.54	123.81	80.67	124.04	164.45	268.24
59	-5.78	91.78	126.90	83.53	128.09	173.11	281.43
60	-5.88	94.03	130.02	86.43	132.20	182.08	295.04
61	-5.98	96.31	133.17	89.39	136.38	191.34	309.08
62	-6.08	98.62	136.35	92.39	140.62	200.92	323.56
63	-6.18	100.94	139.57	95.45	144.92	210.81	338.48
64	-6.28	103.29	142.81	98.55	149.30	221.02	353.85
65	-6.38	105.66	146.09	101.70	153.73	231.56	369.67
66	-6.48	108.06	149.40	104.91	158.23	242.42	385.95

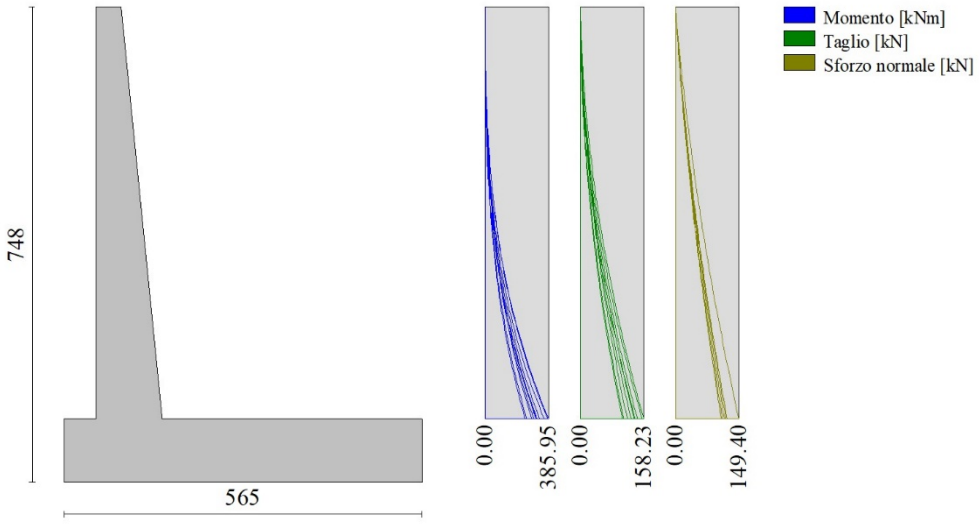


Fig. 15 - Paramento

Fondazione

n°	X	N_{min}	N_{max}	T_{min}	T_{max}	M_{min}	M_{max}
	[m]	[kN]	[kN]	[kN]	[kN]	[kNm]	[kNm]
1	-0.90	0.00	0.00	0.00	0.00	0.00	0.00
2	-0.80	0.00	0.00	13.78	22.53	0.69	1.13
3	-0.70	0.00	0.00	27.54	44.77	2.76	4.50
4	-0.60	0.00	0.00	41.28	66.72	6.20	10.07
5	-0.50	0.00	0.00	54.99	88.37	11.01	17.83
6	-0.40	0.00	0.00	68.69	109.72	17.20	27.74
7	0.65	0.00	0.00	-164.90	0.49	-395.12	-12.41
8	0.75	0.00	0.00	-162.34	-0.09	-383.87	-11.93
9	0.85	0.00	0.00	-159.71	-0.54	-372.32	-10.97
10	0.95	0.00	0.00	-157.01	-0.96	-360.50	-10.06
11	1.05	0.00	0.00	-154.23	-1.36	-348.44	-9.20
12	1.15	0.00	0.00	-151.38	-1.74	-336.17	-8.39
13	1.25	0.00	0.00	-148.46	-2.09	-323.72	-7.63
14	1.35	0.00	0.00	-145.46	-2.42	-311.11	-6.92
15	1.45	0.00	0.00	-142.39	-2.73	-298.38	-6.25
16	1.55	0.00	0.00	-139.25	-3.01	-285.55	-5.63
17	1.65	0.00	0.00	-136.03	-3.27	-272.66	-5.05
18	1.75	0.00	0.00	-132.74	-3.51	-259.74	-4.51
19	1.85	0.00	0.00	-129.40	-3.73	-246.80	-4.00
20	1.95	0.00	0.00	-128.90	-3.92	-233.89	-3.54
21	2.05	0.00	0.00	-128.24	-4.09	-221.03	-3.11
22	2.15	0.00	0.00	-127.29	-3.75	-208.25	-2.72
23	2.25	0.00	0.00	-126.04	-3.42	-195.58	-2.36
24	2.35	0.00	0.00	-124.51	-3.11	-183.05	-2.04
25	2.45	0.00	0.00	-122.68	-2.81	-170.69	-1.74
26	2.55	0.00	0.00	-120.56	-2.53	-158.53	-1.48
27	2.65	0.00	0.00	-118.14	-2.26	-146.59	-1.24
28	2.75	0.00	0.00	-115.44	-2.00	-134.91	-1.02
29	2.85	0.00	0.00	-112.44	-1.76	-123.51	-0.84
30	2.95	0.00	0.00	-109.15	-1.54	-112.43	-0.67
31	3.05	0.00	0.00	-105.57	-1.33	-101.69	-0.53
32	3.15	0.00	0.00	-101.70	-1.13	-91.33	-0.40
33	3.25	0.00	0.00	-97.53	-0.95	-81.36	-0.30
34	3.35	0.00	0.00	-93.07	-0.78	-71.83	-0.21
35	3.45	0.00	0.00	-88.32	-0.63	-62.76	-0.14
36	3.55	0.00	0.00	-83.28	-0.50	-54.17	-0.09
37	3.65	0.00	0.00	-77.95	-0.37	-46.11	-0.04
38	3.75	0.00	0.00	-72.32	-0.27	-38.59	-0.01
39	3.85	0.00	0.00	-66.40	-0.17	-31.66	0.01
40	3.95	0.00	0.00	-60.19	-0.10	-25.32	0.02
41	4.05	0.00	0.00	-53.69	-0.03	-19.63	0.03
42	4.15	0.00	0.00	-46.90	0.02	-14.60	0.03
43	4.25	0.00	0.00	-39.81	0.05	-10.26	0.03
44	4.35	0.00	0.00	-32.43	0.07	-6.64	0.02
45	4.45	0.00	0.00	-24.76	0.07	-3.78	0.01
46	4.55	0.00	0.00	-16.80	0.06	-1.70	0.01
47	4.65	0.00	0.00	-8.55	0.04	-0.43	0.00
48	4.75	0.00	0.00	0.00	0.00	0.00	0.00

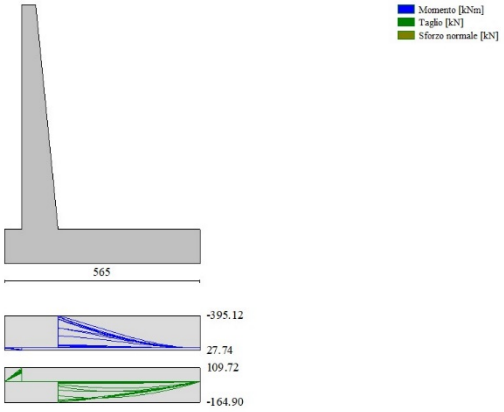


Fig. 16 - Fondazione

11.4.5 Verifiche strutturali

Verifiche a flessione

Elementi calcolati a trave
Simbologia adottata

n°	indice sezione
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
Afi	area ferri inferiori espresso in [cmq]
Afs	area ferri superiori espressa in [cmq]
M	momento agente espressa in [kNm]
N	sforzo normale agente espressa in [kN]
Mrd	momento resistente espresso in [kNm]
Nrd	sforzo normale resistente espresso in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione ultima e sollecitazione agente)

Paramento

n°	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	100	40	0.00	0.00	0.00	0.00	0.00	0.00	100000.000
2	100	41	0.00	0.00	0.02	0.99	0.19	0.99	9.442
3	100	42	15.71	15.71	0.09	2.61	210.90	2.61	2380.939
4	100	43	15.71	15.71	0.21	3.96	217.02	3.96	1036.941
5	100	44	15.71	15.71	0.39	5.34	223.16	5.34	572.656
6	100	45	15.71	15.71	0.64	6.75	229.33	6.75	360.392
7	100	46	15.71	15.71	0.96	8.19	235.52	8.19	246.419
8	100	47	15.71	15.71	1.35	9.67	241.74	9.67	178.455
9	100	48	15.71	15.71	1.84	11.18	247.98	11.18	134.813
10	100	49	15.71	15.71	2.42	12.72	254.25	12.72	105.198
11	100	50	15.71	15.71	3.09	14.29	260.55	14.29	84.225
12	100	51	15.71	15.71	3.88	15.89	266.87	15.89	68.855
13	100	52	15.71	15.71	4.77	17.53	273.22	17.53	57.272
14	100	53	15.71	15.71	5.78	19.19	279.60	19.19	48.338
15	100	54	15.71	15.71	6.92	20.89	286.00	20.89	41.309
16	100	55	15.71	15.71	8.19	22.62	292.44	22.62	35.685
17	100	56	15.71	15.71	9.61	24.38	298.90	24.38	31.119
18	100	57	15.71	15.71	11.16	26.18	305.39	26.18	27.363
19	100	58	15.71	15.71	12.87	28.00	311.91	28.00	24.239
20	100	59	15.71	15.71	14.73	29.86	318.46	29.86	21.614
21	100	60	15.71	15.71	16.76	31.74	325.03	31.74	19.388
22	100	61	15.71	15.71	18.97	33.66	331.64	33.66	17.485
23	100	62	15.71	15.71	21.35	35.61	338.27	35.61	15.845
24	100	63	15.71	15.71	23.91	37.59	344.94	37.59	14.424
25	100	64	15.71	15.71	26.67	39.61	351.64	39.61	13.184

n°	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
26	100	65	15.71	15.71	29.63	41.65	358.36	41.65	12.096
27	100	66	15.71	15.71	32.79	43.73	365.12	43.73	11.136
28	100	67	15.71	15.71	36.16	45.84	371.91	45.84	10.285
29	100	68	15.71	15.71	39.75	47.98	378.73	47.98	9.528
30	100	69	15.71	15.71	43.56	50.15	385.58	50.15	8.851
31	100	70	15.71	15.71	47.61	52.36	392.46	52.36	8.244
32	100	71	15.71	15.71	51.89	54.59	399.37	54.59	7.697
33	100	72	15.71	15.71	56.42	56.86	406.32	56.86	7.202
34	100	73	15.71	15.71	61.19	59.16	413.30	59.16	6.754
35	100	74	15.71	15.71	66.23	61.49	420.32	61.49	6.347
36	100	75	15.71	15.71	71.53	63.85	427.37	63.85	5.975
37	100	76	15.71	15.71	77.10	66.24	434.45	66.24	5.635
38	100	77	15.71	15.71	82.94	68.67	441.56	68.67	5.324
39	100	78	15.71	15.71	89.07	71.12	448.72	71.12	5.038
40	100	79	15.71	15.71	95.49	73.61	455.90	73.61	4.774
41	100	80	15.71	15.71	102.21	76.13	463.12	76.13	4.531
42	100	81	15.71	15.71	109.23	78.68	470.38	78.68	4.306
43	100	82	15.71	15.71	116.56	81.27	477.67	81.27	4.098
44	100	83	15.71	15.71	124.21	83.88	485.00	83.88	3.905
45	100	84	15.71	15.71	130.26	66.56	485.10	66.56	3.724
46	100	85	15.71	15.71	138.46	68.62	492.19	68.62	3.555
47	100	86	15.71	15.71	146.99	70.70	499.30	70.70	3.397
48	100	87	15.71	15.71	155.86	72.81	506.45	72.81	3.249
49	100	88	15.71	15.71	165.08	74.95	513.62	74.95	3.111
50	100	89	15.71	15.71	174.66	77.10	520.82	77.10	2.982
51	100	90	15.71	15.71	184.59	79.28	528.06	79.28	2.861
52	100	91	15.71	15.71	194.89	81.49	535.32	81.49	2.747
53	100	92	15.71	15.71	205.56	83.72	542.62	83.72	2.640
54	100	93	15.71	15.71	216.62	85.97	549.94	85.97	2.539
55	100	94	15.71	15.71	228.05	88.25	557.30	88.25	2.444
56	100	95	15.71	15.71	239.88	90.56	564.69	90.56	2.354
57	100	96	15.71	15.71	252.11	92.88	572.11	92.88	2.269
58	100	97	15.71	15.71	264.75	95.24	579.57	95.24	2.189
59	100	98	15.71	15.71	277.79	97.61	587.06	97.61	2.113
60	100	99	15.71	15.71	291.26	100.01	594.58	100.01	2.041
61	100	100	15.71	15.71	305.15	102.44	602.13	102.44	1.973
62	100	101	15.71	15.71	319.47	104.89	609.72	104.89	1.909
63	100	102	15.71	15.71	334.23	107.36	617.34	107.36	1.847
64	100	103	15.71	15.71	349.44	109.86	625.00	109.86	1.789
65	100	104	15.71	15.71	365.09	112.38	632.69	112.38	1.733
66	100	105	15.71	15.71	381.21	114.93	639.76	114.93	1.678

Fondazione

n°	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
1	100	100	15.71	15.71	0.00	0.00	0.00	0.00	100000.000
2	100	100	15.71	15.71	1.13	0.00	557.71	0.00	493.944
3	100	100	15.71	15.71	4.50	0.00	557.71	0.00	124.025
4	100	100	15.71	15.71	10.07	0.00	557.71	0.00	55.364
5	100	100	15.71	15.71	17.83	0.00	557.71	0.00	31.279
6	100	100	15.71	15.71	27.74	0.00	557.71	0.00	20.107
7	100	100	15.71	15.71	-395.12	0.00	-557.71	0.00	1.411
8	100	100	15.71	15.71	-383.87	0.00	-557.71	0.00	1.453
9	100	100	15.71	15.71	-372.32	0.00	-557.71	0.00	1.498
10	100	100	15.71	15.71	-360.50	0.00	-557.71	0.00	1.547
11	100	100	15.71	15.71	-348.44	0.00	-557.71	0.00	1.601
12	100	100	15.71	15.71	-336.17	0.00	-557.71	0.00	1.659
13	100	100	15.71	15.71	-323.72	0.00	-557.71	0.00	1.723
14	100	100	15.71	15.71	-311.11	0.00	-557.71	0.00	1.793
15	100	100	15.71	15.71	-298.38	0.00	-557.71	0.00	1.869
16	100	100	15.71	15.71	-285.55	0.00	-557.71	0.00	1.953
17	100	100	15.71	15.71	-272.66	0.00	-557.71	0.00	2.045
18	100	100	15.71	15.71	-259.74	0.00	-557.71	0.00	2.147
19	100	100	15.71	15.71	-246.80	0.00	-557.71	0.00	2.260
20	100	100	15.71	15.71	-233.89	0.00	-557.71	0.00	2.384
21	100	100	15.71	15.71	-221.03	0.00	-557.71	0.00	2.523
22	100	100	15.71	15.71	-208.25	0.00	-557.71	0.00	2.678
23	100	100	15.71	15.71	-195.58	0.00	-557.71	0.00	2.852
24	100	100	15.71	15.71	-183.05	0.00	-557.71	0.00	3.047
25	100	100	15.71	15.71	-170.69	0.00	-557.71	0.00	3.267
26	100	100	15.71	15.71	-158.53	0.00	-557.71	0.00	3.518
27	100	100	15.71	15.71	-146.59	0.00	-557.71	0.00	3.805
28	100	100	15.71	15.71	-134.91	0.00	-557.71	0.00	4.134
29	100	100	15.71	15.71	-123.51	0.00	-557.71	0.00	4.515
30	100	100	15.71	15.71	-112.43	0.00	-557.71	0.00	4.961
31	100	100	15.71	15.71	-101.69	0.00	-557.71	0.00	5.484
32	100	100	15.71	15.71	-91.33	0.00	-557.71	0.00	6.107
33	100	100	15.71	15.71	-81.36	0.00	-557.71	0.00	6.855
34	100	100	15.71	15.71	-71.83	0.00	-557.71	0.00	7.764
35	100	100	15.71	15.71	-62.76	0.00	-557.71	0.00	8.887

n°	B	H	Afi	Afs	M	N	Mrd	Nrd	FS
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kNm]	[kN]	
36	100	100	15.71	15.71	-54.17	0.00	-557.71	0.00	10.295
37	100	100	15.71	15.71	-46.11	0.00	-557.71	0.00	12.095
38	100	100	15.71	15.71	-38.59	0.00	-557.71	0.00	14.450
39	100	100	15.71	15.71	-31.66	0.00	-557.71	0.00	17.618
40	100	100	15.71	15.71	-25.32	0.00	-557.71	0.00	22.023
41	100	100	15.71	15.71	-19.63	0.00	-557.71	0.00	28.416
42	100	100	15.71	15.71	-14.60	0.00	-557.71	0.00	38.212
43	100	100	15.71	15.71	-10.26	0.00	-557.71	0.00	54.373
44	100	100	15.71	15.71	-6.64	0.00	-557.71	0.00	83.962
45	100	100	15.71	15.71	-3.78	0.00	-557.71	0.00	147.535
46	100	100	15.71	15.71	-1.70	0.00	-557.71	0.00	328.152
47	100	100	15.71	15.71	-0.43	0.00	-557.71	0.00	1297.741
48	100	100	0.00	0.00	0.00	0.00	0.00	0.00	100000.000

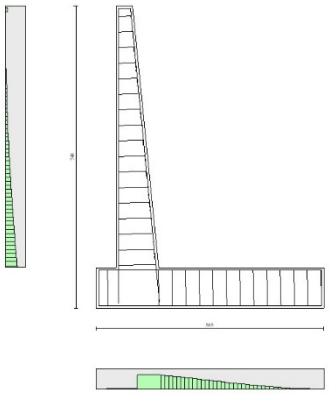


Fig. 17 - Paramento (Inviluppo)

Verifiche a taglio

Simbologia adottata

n° (o Is)	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
A_{sw}	area ferri a taglio espresso in [cmq]
cotgq	inclinazione delle bielle compresse, q inclinazione dei puntoni di calcestruzzo
V_{Rcd}	resistenza di progetto a 'taglio compressione' espressa in [kN]
V_{Rsd}	resistenza di progetto a 'taglio trazione' espressa in [kN]
V_{Rd}	resistenza di progetto a taglio espresso in [kN]. Per elementi con armature trasversali resistenti al taglio (A_{sw}>0.0) V_{Rd}=min(V_{Rcd}, V_{Rsd}).
T	taglio agente espressa in [kN]
FS	fattore di sicurezza (rapporto tra sollecitazione resistente e sollecitazione agente)

Paramento

n°	B	H	A_{sw}	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[cm]	[cm]	[cmq]		[kN]	[kN]	[kN]	[kN]	
1	100	40	0.00	--	0.00	0.00	165.96	0.00	100.000
2	100	41	0.00	--	0.00	0.00	169.28	0.37	458.892
3	100	42	0.00	--	0.00	0.00	236.41	0.80	294.345
4	100	43	0.00	--	0.00	0.00	239.42	1.30	183.892
5	100	44	0.00	--	0.00	0.00	242.40	1.86	130.011
6	100	45	0.00	--	0.00	0.00	245.36	2.49	98.491
7	100	46	0.00	--	0.00	0.00	248.30	3.18	78.020
8	100	47	0.00	--	0.00	0.00	251.21	3.94	63.786
9	100	48	0.00	--	0.00	0.00	254.10	4.76	53.396
10	100	49	0.00	--	0.00	0.00	256.96	5.64	45.532
11	100	50	0.00	--	0.00	0.00	259.81	6.59	39.406

n°	B	H	A_{sw}	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[cm]	[cm]	[cmq]		[kN]	[kN]	[kN]	[kN]	
12	100	51	0.00	--	0.00	0.00	262.64	7.61	34.525
13	100	52	0.00	--	0.00	0.00	265.45	8.69	30.561
14	100	53	0.00	--	0.00	0.00	268.23	9.83	27.290
15	100	54	0.00	--	0.00	0.00	271.00	11.04	24.555
16	100	55	0.00	--	0.00	0.00	273.76	12.31	22.240
17	100	56	0.00	--	0.00	0.00	276.49	13.65	20.262
18	100	57	0.00	--	0.00	0.00	279.22	15.05	18.556
19	100	58	0.00	--	0.00	0.00	281.92	16.51	17.072
20	100	59	0.00	--	0.00	0.00	284.61	18.04	15.773
21	100	60	0.00	--	0.00	0.00	287.29	19.64	14.629
22	100	61	0.00	--	0.00	0.00	289.95	21.30	13.614
23	100	62	0.00	--	0.00	0.00	292.60	23.02	12.709
24	100	63	0.00	--	0.00	0.00	295.23	24.81	11.899
25	100	64	0.00	--	0.00	0.00	297.85	26.66	11.170
26	100	65	0.00	--	0.00	0.00	300.46	28.58	10.512
27	100	66	0.00	--	0.00	0.00	303.06	30.56	9.915
28	100	67	0.00	--	0.00	0.00	305.65	32.61	9.372
29	100	68	0.00	--	0.00	0.00	308.22	34.72	8.877
30	100	69	0.00	--	0.00	0.00	310.79	36.90	8.423
31	100	70	0.00	--	0.00	0.00	313.34	39.14	8.006
32	100	71	0.00	--	0.00	0.00	315.89	41.45	7.622
33	100	72	0.00	--	0.00	0.00	318.42	43.81	7.267
34	100	73	0.00	--	0.00	0.00	320.94	46.25	6.939
35	100	74	0.00	--	0.00	0.00	323.46	48.75	6.635
36	100	75	0.00	--	0.00	0.00	325.96	51.31	6.353
37	100	76	0.00	--	0.00	0.00	328.46	53.94	6.089
38	100	77	0.00	--	0.00	0.00	330.95	56.63	5.844
39	100	78	0.00	--	0.00	0.00	333.43	59.39	5.614
40	100	79	0.00	--	0.00	0.00	335.90	62.21	5.399
41	100	80	0.00	--	0.00	0.00	338.37	65.10	5.198
42	100	81	0.00	--	0.00	0.00	340.82	68.05	5.009
43	100	82	0.00	--	0.00	0.00	343.27	71.06	4.831
44	100	83	0.00	--	0.00	0.00	345.71	74.14	4.663
45	100	84	0.00	--	0.00	0.00	348.15	77.29	4.505
46	100	85	0.00	--	0.00	0.00	350.58	80.50	4.355
47	100	86	0.00	--	0.00	0.00	353.00	83.77	4.214
48	100	87	0.00	--	0.00	0.00	355.41	87.11	4.080
49	100	88	0.00	--	0.00	0.00	357.82	90.51	3.953
50	100	89	0.00	--	0.00	0.00	360.23	93.98	3.833
51	100	90	0.00	--	0.00	0.00	362.62	97.51	3.719
52	100	91	0.00	--	0.00	0.00	365.01	101.11	3.610
53	100	92	0.00	--	0.00	0.00	367.40	104.77	3.507
54	100	93	0.00	--	0.00	0.00	369.78	108.49	3.408
55	100	94	0.00	--	0.00	0.00	372.16	112.28	3.314
56	100	95	0.00	--	0.00	0.00	374.52	116.14	3.225
57	100	96	0.00	--	0.00	0.00	376.89	120.05	3.139
58	100	97	0.00	--	0.00	0.00	379.25	124.04	3.058
59	100	98	0.00	--	0.00	0.00	381.60	128.09	2.979
60	100	99	0.00	--	0.00	0.00	383.95	132.20	2.904
61	100	100	0.00	--	0.00	0.00	386.30	136.38	2.833
62	100	101	0.00	--	0.00	0.00	388.64	140.62	2.764
63	100	102	0.00	--	0.00	0.00	390.98	144.92	2.698
64	100	103	0.00	--	0.00	0.00	393.31	149.30	2.634
65	100	104	0.00	--	0.00	0.00	395.64	153.73	2.574
66	100	105	0.00	--	0.00	0.00	397.77	158.23	2.514

Fondazione

n°	B	H	A_{sw}	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[cm]	[cm]	[cmq]		[kN]	[kN]	[kN]	[kN]	
1	100	100	0.00	--	0.00	0.00	356.09	0.00	100.000
2	100	100	0.00	--	0.00	0.00	356.09	-22.53	15.803
3	100	100	0.00	--	0.00	0.00	356.09	-44.77	7.953
4	100	100	0.00	--	0.00	0.00	356.09	-66.72	5.337
5	100	100	0.00	--	0.00	0.00	356.09	-88.37	4.030
6	100	100	0.00	--	0.00	0.00	356.09	-109.72	3.245
7	100	100	0.00	--	0.00	0.00	356.09	-164.90	2.159
8	100	100	0.00	--	0.00	0.00	356.09	-162.34	2.193
9	100	100	0.00	--	0.00	0.00	356.09	-159.71	2.230
10	100	100	0.00	--	0.00	0.00	356.09	-157.01	2.268
11	100	100	0.00	--	0.00	0.00	356.09	-154.23	2.309
12	100	100	0.00	--	0.00	0.00	356.09	-151.38	2.352
13	100	100	0.00	--	0.00	0.00	356.09	-148.46	2.399
14	100	100	0.00	--	0.00	0.00	356.09	-145.46	2.448
15	100	100	0.00	--	0.00	0.00	356.09	-142.39	2.501
16	100	100	0.00	--	0.00	0.00	356.09	-139.25	2.557
17	100	100	0.00	--	0.00	0.00	356.09	-136.03	2.618
18	100	100	0.00	--	0.00	0.00	356.09	-132.74	2.683
19	100	100	0.00	--	0.00	0.00	356.09	-129.40	2.752
20	100	100	0.00	--	0.00	0.00	356.09	-128.90	2.762
21	100	100	0.00	--	0.00	0.00	356.09	-128.24	2.777

n°	B	H	A_{sw}	cotq	V_{Rcd}	V_{Rsd}	V_{Rd}	T	FS
	[cm]	[cm]	[cmq]		[kN]	[kN]	[kN]	[kN]	
22	100	100	0.00	--	0.00	0.00	356.09	-127.29	2.797
23	100	100	0.00	--	0.00	0.00	356.09	-126.04	2.825
24	100	100	0.00	--	0.00	0.00	356.09	-124.51	2.860
25	100	100	0.00	--	0.00	0.00	356.09	-122.68	2.903
26	100	100	0.00	--	0.00	0.00	356.09	-120.56	2.954
27	100	100	0.00	--	0.00	0.00	356.09	-118.14	3.014
28	100	100	0.00	--	0.00	0.00	356.09	-115.44	3.085
29	100	100	0.00	--	0.00	0.00	356.09	-112.44	3.167
30	100	100	0.00	--	0.00	0.00	356.09	-109.15	3.262
31	100	100	0.00	--	0.00	0.00	356.09	-105.57	3.373
32	100	100	0.00	--	0.00	0.00	356.09	-101.70	3.502
33	100	100	0.00	--	0.00	0.00	356.09	-97.53	3.651
34	100	100	0.00	--	0.00	0.00	356.09	-93.07	3.826
35	100	100	0.00	--	0.00	0.00	356.09	-88.32	4.032
36	100	100	0.00	--	0.00	0.00	356.09	-83.28	4.276
37	100	100	0.00	--	0.00	0.00	356.09	-77.95	4.568
38	100	100	0.00	--	0.00	0.00	356.09	-72.32	4.924
39	100	100	0.00	--	0.00	0.00	356.09	-66.40	5.362
40	100	100	0.00	--	0.00	0.00	356.09	-60.19	5.916
41	100	100	0.00	--	0.00	0.00	356.09	-53.69	6.632
42	100	100	0.00	--	0.00	0.00	356.09	-46.90	7.593
43	100	100	0.00	--	0.00	0.00	356.09	-39.81	8.944
44	100	100	0.00	--	0.00	0.00	356.09	-32.43	10.979
45	100	100	0.00	--	0.00	0.00	356.09	-24.76	14.380
46	100	100	0.00	--	0.00	0.00	356.09	-16.80	21.195
47	100	100	0.00	--	0.00	0.00	356.09	-8.55	41.665
48	100	100	0.00	--	0.00	0.00	319.09	0.00	100.000

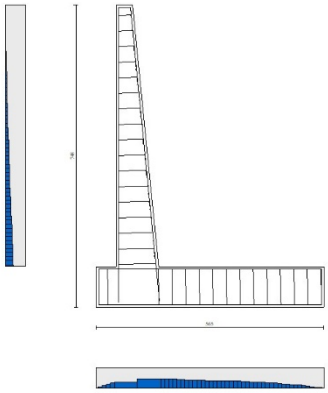


Fig. 18 - Paramento (Inviluppo)

Verifica delle tensioni

Simbologia adottata

n°	indice sezione
Y	ordinata sezione, espressa in [m]
B	larghezza sezione, espresso in [cm]
H	altezza sezione, espressa in [cm]
Afi	area ferri inferiori, espresso in [cmq]
Afs	area ferri superiori, espressa in [cmq]
M	momento agente, espressa in [kNm]
N	sforzo normale agente, espressa in [kN]
sc	tensione di compressione nel cls, espressa in [kPa]
sfi	tensione nei ferri inferiori, espressa in [kPa]
sfs	tensione nei ferri superiori, espressa in [kPa]

Combinazioni SLER

Paramento

Tensione massima di compressione nel calcestruzzo	19920	[kPa]
Tensione massima di trazione dell'acciaio	359949	[kPa]

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	100	40	0.00	0.00	0.00	0.00	0 (19)	0 (19)	0 (19)
2	100	41	0.00	0.00	0.01	0.99	3 (22)	0 (19)	0 (19)
3	100	42	15.71	15.71	0.05	2.00	6 (22)	59 (19)	81 (22)
4	100	43	15.71	15.71	0.13	3.04	10 (22)	82 (19)	134 (22)
5	100	44	15.71	15.71	0.24	4.11	15 (22)	99 (19)	197 (22)
6	100	45	15.71	15.71	0.40	5.19	21 (22)	110 (19)	268 (22)
7	100	46	15.71	15.71	0.61	6.30	27 (22)	114 (19)	352 (22)
8	100	47	15.71	15.71	0.87	7.44	36 (22)	109 (19)	450 (22)
9	100	48	15.71	15.71	1.19	8.60	46 (22)	144 (22)	567 (22)
10	100	49	15.71	15.71	1.57	9.78	58 (22)	309 (22)	703 (22)
11	100	50	15.71	15.71	2.02	10.99	72 (22)	548 (22)	858 (22)
12	100	51	15.71	15.71	2.55	12.23	88 (22)	869 (22)	1031 (22)
13	100	52	15.71	15.71	3.15	13.48	106 (22)	1277 (22)	1221 (22)
14	100	53	15.71	15.71	3.84	14.76	126 (22)	1774 (22)	1426 (22)
15	100	54	15.71	15.71	4.62	16.07	148 (22)	2360 (22)	1647 (22)
16	100	55	15.71	15.71	5.50	17.40	171 (22)	3036 (22)	1882 (22)
17	100	56	15.71	15.71	6.47	18.76	196 (22)	3801 (22)	2133 (22)
18	100	57	15.71	15.71	7.55	20.13	223 (22)	4658 (22)	2398 (22)
19	100	58	15.71	15.71	8.74	21.54	251 (22)	5605 (22)	2679 (22)
20	100	59	15.71	15.71	10.04	22.97	280 (22)	6643 (22)	2973 (22)
21	100	60	15.71	15.71	11.46	24.42	311 (22)	7773 (22)	3283 (22)
22	100	61	15.71	15.71	13.01	25.89	344 (22)	8996 (22)	3608 (22)
23	100	62	15.71	15.71	14.69	27.39	377 (22)	10311 (22)	3947 (22)
24	100	63	15.71	15.71	16.50	28.92	413 (22)	11720 (22)	4301 (22)
25	100	64	15.71	15.71	18.45	30.47	449 (22)	13223 (22)	4670 (22)
26	100	65	15.71	15.71	20.55	32.04	487 (22)	14820 (22)	5054 (22)
27	100	66	15.71	15.71	22.80	33.64	527 (22)	16512 (22)	5453 (22)
28	100	67	15.71	15.71	25.20	35.26	567 (22)	18299 (22)	5866 (22)
29	100	68	15.71	15.71	27.77	36.91	609 (22)	20182 (22)	6294 (22)
30	100	69	15.71	15.71	30.50	38.58	652 (22)	22161 (22)	6737 (22)
31	100	70	15.71	15.71	33.40	40.27	697 (22)	24237 (22)	7194 (22)
32	100	71	15.71	15.71	36.47	41.99	743 (22)	26409 (22)	7665 (22)
33	100	72	15.71	15.71	39.73	43.74	790 (22)	28679 (22)	8152 (22)
34	100	73	15.71	15.71	43.17	45.51	838 (22)	31046 (22)	8652 (22)
35	100	74	15.71	15.71	46.80	47.30	887 (22)	33510 (22)	9167 (22)
36	100	75	15.71	15.71	50.63	49.11	938 (22)	36073 (22)	9696 (22)
37	100	76	15.71	15.71	54.66	50.96	990 (22)	38734 (22)	10240 (22)
38	100	77	15.71	15.71	58.90	52.82	1043 (22)	41494 (22)	10797 (22)
39	100	78	15.71	15.71	63.35	54.71	1097 (22)	44352 (22)	11369 (22)
40	100	79	15.71	15.71	68.01	56.62	1152 (22)	47309 (22)	11954 (22)
41	100	80	15.71	15.71	72.89	58.56	1208 (22)	50366 (22)	12554 (22)
42	100	81	15.71	15.71	78.01	60.53	1266 (22)	53521 (22)	13167 (22)
43	100	82	15.71	15.71	83.35	62.51	1324 (22)	56777 (22)	13794 (22)
44	100	83	15.71	15.71	88.93	64.52	1384 (22)	60132 (22)	14434 (22)
45	100	84	15.71	15.71	94.75	66.56	1444 (22)	63587 (22)	15088 (22)
46	100	85	15.71	15.71	100.81	68.62	1506 (22)	67142 (22)	15756 (22)
47	100	86	15.71	15.71	107.13	70.70	1569 (22)	70797 (22)	16437 (22)
48	100	87	15.71	15.71	113.71	72.81	1633 (22)	74552 (22)	17131 (22)
49	100	88	15.71	15.71	120.55	74.95	1697 (22)	78408 (22)	17838 (22)
50	100	89	15.71	15.71	127.65	77.10	1763 (22)	82365 (22)	18559 (22)
51	100	90	15.71	15.71	135.03	79.28	1830 (22)	86422 (22)	19292 (22)
52	100	91	15.71	15.71	142.68	81.49	1898 (22)	90580 (22)	20039 (22)
53	100	92	15.71	15.71	150.61	83.72	1967 (22)	94839 (22)	20798 (22)
54	100	93	15.71	15.71	158.84	85.97	2036 (22)	99199 (22)	21570 (22)
55	100	94	15.71	15.71	167.35	88.25	2107 (22)	103660 (22)	22355 (22)
56	100	95	15.71	15.71	176.16	90.56	2179 (22)	108222 (22)	23153 (22)
57	100	96	15.71	15.71	185.28	92.88	2251 (22)	112885 (22)	23963 (22)
58	100	97	15.71	15.71	194.70	95.24	2325 (22)	117650 (22)	24785 (22)
59	100	98	15.71	15.71	204.44	97.61	2399 (22)	122516 (22)	25620 (22)
60	100	99	15.71	15.71	214.49	100.01	2475 (22)	127484 (22)	26467 (22)
61	100	100	15.71	15.71	224.86	102.44	2551 (22)	132553 (22)	27327 (22)
62	100	101	15.71	15.71	235.57	104.89	2628 (22)	137724 (22)	28198 (22)
63	100	102	15.71	15.71	246.60	107.36	2706 (22)	142997 (22)	29082 (22)
64	100	103	15.71	15.71	257.98	109.86	2785 (22)	148371 (22)	29978 (22)
65	100	104	15.71	15.71	269.69	112.38	2865 (22)	153847 (22)	30885 (22)
66	100	105	15.71	15.71	281.76	114.93	2950 (22)	159626 (22)	31845 (22)

Fondazione

Tensione massima di compressione nel calcestruzzo	17430	[kPa]

Tensione massima di trazione dell'acciaio 359949 [kPa]

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	sc [kPa]	sfi [kPa]	sfs [kPa]
1	100	100	15.71	15.71	0.00	0.00	0 (19)	0 (19)	0 (19)
2	100	100	15.71	15.71	0.74	0.00	8 (22)	534 (22)	80 (22)
3	100	100	15.71	15.71	2.96	0.00	33 (22)	2136 (22)	321 (22)
4	100	100	15.71	15.71	6.65	0.00	73 (22)	4802 (22)	722 (22)
5	100	100	15.71	15.71	11.81	0.00	130 (22)	8530 (22)	1283 (22)
6	100	100	15.71	15.71	18.44	0.00	203 (22)	13319 (22)	2002 (22)
7	100	100	15.71	15.71	-26.79	0.00	295 (22)	2909 (22)	19348 (22)
8	100	100	15.71	15.71	-26.38	0.00	291 (22)	2865 (22)	19053 (22)
9	100	100	15.71	15.71	-25.92	0.00	285 (22)	2814 (22)	18718 (22)
10	100	100	15.71	15.71	-25.40	0.00	280 (22)	2758 (22)	18346 (22)
11	100	100	15.71	15.71	-24.84	0.00	274 (22)	2697 (22)	17938 (22)
12	100	100	15.71	15.71	-24.23	0.00	267 (22)	2631 (22)	17498 (22)
13	100	100	15.71	15.71	-23.57	0.00	260 (22)	2560 (22)	17027 (22)
14	100	100	15.71	15.71	-22.88	0.00	252 (22)	2485 (22)	16528 (22)
15	100	100	15.71	15.71	-22.16	0.00	244 (22)	2406 (22)	16004 (22)
16	100	100	15.71	15.71	-21.40	0.00	236 (22)	2324 (22)	15457 (22)
17	100	100	15.71	15.71	-20.61	0.00	227 (22)	2238 (22)	14888 (22)
18	100	100	15.71	15.71	-19.80	0.00	218 (22)	2150 (22)	14302 (22)
19	100	100	15.71	15.71	-18.97	0.00	209 (22)	2060 (22)	13699 (22)
20	100	100	15.71	15.71	-18.11	0.00	200 (22)	1967 (22)	13083 (22)
21	100	100	15.71	15.71	-17.24	0.00	190 (22)	1873 (22)	12456 (22)
22	100	100	15.71	15.71	-16.36	0.00	180 (22)	1777 (22)	11819 (22)
23	100	100	15.71	15.71	-15.47	0.00	170 (22)	1680 (22)	11176 (22)
24	100	100	15.71	15.71	-14.58	0.00	161 (22)	1583 (22)	10530 (22)
25	100	100	15.71	15.71	-13.68	0.00	151 (22)	1486 (22)	9881 (22)
26	100	100	15.71	15.71	-12.78	0.00	141 (22)	1388 (22)	9233 (22)
27	100	100	15.71	15.71	-11.89	0.00	131 (22)	1291 (22)	8589 (22)
28	100	100	15.71	15.71	-11.01	0.00	121 (22)	1195 (22)	7950 (22)
29	100	100	15.71	15.71	-10.13	0.00	112 (22)	1100 (22)	7318 (22)
30	100	100	15.71	15.71	-9.27	0.00	102 (22)	1007 (22)	6697 (22)
31	100	100	15.71	15.71	-8.43	0.00	93 (22)	915 (22)	6089 (22)
32	100	100	15.71	15.71	-7.61	0.00	84 (22)	826 (22)	5496 (22)
33	100	100	15.71	15.71	-6.81	0.00	75 (22)	740 (22)	4920 (22)
34	100	100	15.71	15.71	-6.04	0.00	67 (22)	656 (22)	4364 (22)
35	100	100	15.71	15.71	-5.30	0.00	58 (22)	576 (22)	3830 (22)
36	100	100	15.71	15.71	-4.60	0.00	51 (22)	499 (22)	3321 (22)
37	100	100	15.71	15.71	-3.93	0.00	43 (22)	427 (22)	2838 (22)
38	100	100	15.71	15.71	-3.30	0.00	36 (22)	359 (22)	2386 (22)
39	100	100	15.71	15.71	-2.72	0.00	30 (22)	295 (22)	1965 (22)
40	100	100	15.71	15.71	-2.18	0.00	24 (22)	237 (22)	1578 (22)
41	100	100	15.71	15.71	-1.70	0.00	19 (22)	185 (22)	1228 (22)
42	100	100	15.71	15.71	-1.27	0.00	14 (22)	138 (22)	916 (22)
43	100	100	15.71	15.71	-0.89	0.00	10 (22)	97 (22)	646 (22)
44	100	100	15.71	15.71	-0.58	0.00	6 (22)	63 (22)	420 (22)
45	100	100	15.71	15.71	-0.33	0.00	4 (22)	36 (22)	240 (22)
46	100	100	15.71	15.71	-0.15	0.00	2 (22)	16 (22)	108 (22)
47	100	100	15.71	15.71	-0.04	0.00	0 (22)	4 (22)	27 (22)
48	100	100	0.00	0.00	0.00	0.00	0 (19)	0 (19)	0 (19)

Combinazioni SLEF

Paramento

Tensione massima di compressione nel calcestruzzo 33200 [kPa]
Tensione massima di trazione dell'acciaio 449936 [kPa]

n°	B [cm]	H [cm]	Afi [cmq]	Afs [cmq]	M [kNm]	N [kN]	sc [kPa]	sfi [kPa]	sfs [kPa]
1	100	40	0.00	0.00	0.00	0.00	0 (20)	0 (20)	0 (20)
2	100	41	0.00	0.00	0.01	0.99	3 (23)	0 (20)	0 (20)
3	100	42	15.71	15.71	0.03	2.00	5 (23)	59 (20)	73 (23)
4	100	43	15.71	15.71	0.07	3.04	8 (23)	82 (20)	116 (23)
5	100	44	15.71	15.71	0.13	4.11	12 (23)	99 (20)	165 (23)
6	100	45	15.71	15.71	0.23	5.19	16 (23)	110 (20)	221 (23)
7	100	46	15.71	15.71	0.36	6.30	21 (23)	114 (20)	284 (23)
8	100	47	15.71	15.71	0.53	7.44	27 (23)	109 (20)	354 (23)
9	100	48	15.71	15.71	0.75	8.60	33 (23)	96 (20)	433 (23)
10	100	49	15.71	15.71	1.02	9.78	40 (23)	75 (20)	524 (23)
11	100	50	15.71	15.71	1.34	10.99	49 (23)	51 (23)	628 (23)
12	100	51	15.71	15.71	1.72	12.23	59 (23)	160 (23)	750 (23)
13	100	52	15.71	15.71	2.17	13.48	71 (23)	324 (23)	889 (23)
14	100	53	15.71	15.71	2.69	14.76	85 (23)	555 (23)	1047 (23)
15	100	54	15.71	15.71	3.29	16.07	101 (23)	861 (23)	1222 (23)

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
16	100	55	15.71	15.71	3.96	17.40	119 (23)	1250 (23)	1414 (23)
17	100	56	15.71	15.71	4.72	18.76	139 (23)	1725 (23)	1623 (23)
18	100	57	15.71	15.71	5.58	20.13	160 (23)	2288 (23)	1846 (23)
19	100	58	15.71	15.71	6.53	21.54	183 (23)	2939 (23)	2084 (23)
20	100	59	15.71	15.71	7.58	22.97	207 (23)	3678 (23)	2336 (23)
21	100	60	15.71	15.71	8.73	24.42	233 (23)	4506 (23)	2603 (23)
22	100	61	15.71	15.71	10.00	25.89	260 (23)	5423 (23)	2883 (23)
23	100	62	15.71	15.71	11.38	27.39	289 (23)	6429 (23)	3178 (23)
24	100	63	15.71	15.71	12.89	28.92	319 (23)	7525 (23)	3486 (23)
25	100	64	15.71	15.71	14.52	30.47	350 (23)	8711 (23)	3809 (23)
26	100	65	15.71	15.71	16.28	32.04	383 (23)	9987 (23)	4145 (23)
27	100	66	15.71	15.71	18.18	33.64	417 (23)	11355 (23)	4496 (23)
28	100	67	15.71	15.71	20.23	35.26	453 (23)	12815 (23)	4861 (23)
29	100	68	15.71	15.71	22.41	36.91	490 (23)	14366 (23)	5240 (23)
30	100	69	15.71	15.71	24.75	38.58	528 (23)	16011 (23)	5633 (23)
31	100	70	15.71	15.71	27.25	40.27	567 (23)	17748 (23)	6040 (23)
32	100	71	15.71	15.71	29.91	41.99	608 (23)	19579 (23)	6461 (23)
33	100	72	15.71	15.71	32.74	43.74	650 (23)	21504 (23)	6896 (23)
34	100	73	15.71	15.71	35.74	45.51	693 (23)	23523 (23)	7345 (23)
35	100	74	15.71	15.71	38.91	47.30	737 (23)	25637 (23)	7809 (23)
36	100	75	15.71	15.71	42.27	49.11	782 (23)	27846 (23)	8286 (23)
37	100	76	15.71	15.71	45.81	50.96	829 (23)	30151 (23)	8777 (23)
38	100	77	15.71	15.71	49.55	52.82	877 (23)	32552 (23)	9282 (23)
39	100	78	15.71	15.71	53.49	54.71	926 (23)	35049 (23)	9801 (23)
40	100	79	15.71	15.71	57.62	56.62	976 (23)	37642 (23)	10334 (23)
41	100	80	15.71	15.71	61.97	58.56	1027 (23)	40333 (23)	10880 (23)
42	100	81	15.71	15.71	66.53	60.53	1080 (23)	43120 (23)	11440 (23)
43	100	82	15.71	15.71	71.30	62.51	1133 (23)	46005 (23)	12014 (23)
44	100	83	15.71	15.71	76.30	64.52	1188 (23)	48988 (23)	12601 (23)
45	100	84	15.71	15.71	81.53	66.56	1244 (23)	52068 (23)	13202 (23)
46	100	85	15.71	15.71	86.99	68.62	1301 (23)	55247 (23)	13816 (23)
47	100	86	15.71	15.71	92.68	70.70	1359 (23)	58524 (23)	14443 (23)
48	100	87	15.71	15.71	98.62	72.81	1417 (23)	61899 (23)	15084 (23)
49	100	88	15.71	15.71	104.81	74.95	1477 (23)	65373 (23)	15738 (23)
50	100	89	15.71	15.71	111.26	77.10	1538 (23)	68946 (23)	16405 (23)
51	100	90	15.71	15.71	117.96	79.28	1600 (23)	72618 (23)	17085 (23)
52	100	91	15.71	15.71	124.92	81.49	1663 (23)	76390 (23)	17778 (23)
53	100	92	15.71	15.71	132.15	83.72	1728 (23)	80261 (23)	18483 (23)
54	100	93	15.71	15.71	139.66	85.97	1793 (23)	84231 (23)	19202 (23)
55	100	94	15.71	15.71	147.44	88.25	1859 (23)	88301 (23)	19934 (23)
56	100	95	15.71	15.71	155.51	90.56	1926 (23)	92471 (23)	20678 (23)
57	100	96	15.71	15.71	163.87	92.88	1994 (23)	96741 (23)	21435 (23)
58	100	97	15.71	15.71	172.52	95.24	2062 (23)	101111 (23)	22204 (23)
59	100	98	15.71	15.71	181.47	97.61	2132 (23)	105581 (23)	22986 (23)
60	100	99	15.71	15.71	190.72	100.01	2203 (23)	110151 (23)	23780 (23)
61	100	100	15.71	15.71	200.28	102.44	2275 (23)	114822 (23)	24586 (23)
62	100	101	15.71	15.71	210.16	104.89	2348 (23)	119594 (23)	25405 (23)
63	100	102	15.71	15.71	220.36	107.36	2421 (23)	124466 (23)	26236 (23)
64	100	103	15.71	15.71	230.88	109.86	2496 (23)	129439 (23)	27079 (23)
65	100	104	15.71	15.71	241.73	112.38	2571 (23)	134512 (23)	27934 (23)
66	100	105	15.71	15.71	252.91	114.93	2651 (23)	139867 (23)	28837 (23)

Fondazione

Tensione massima di compressione nel calcestruzzo	29050	[kPa]
Tensione massima di trazione dell'acciaio	449936	[kPa]

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	100	100	15.71	15.71	0.00	0.00	0 (20)	0 (20)	0 (20)
2	100	100	15.71	15.71	0.70	0.00	8 (23)	508 (23)	76 (23)
3	100	100	15.71	15.71	2.81	0.00	31 (23)	2029 (23)	305 (23)
4	100	100	15.71	15.71	6.32	0.00	70 (23)	4563 (23)	686 (23)
5	100	100	15.71	15.71	11.22	0.00	124 (23)	8107 (23)	1219 (23)
6	100	100	15.71	15.71	17.53	0.00	193 (23)	12660 (23)	1903 (23)
7	100	100	15.71	15.71	-16.25	0.00	179 (23)	1764 (23)	11734 (23)
8	100	100	15.71	15.71	-16.15	0.00	178 (23)	1753 (23)	11663 (23)
9	100	100	15.71	15.71	-16.00	0.00	176 (23)	1737 (23)	11557 (23)
10	100	100	15.71	15.71	-15.81	0.00	174 (23)	1717 (23)	11417 (23)
11	100	100	15.71	15.71	-15.57	0.00	172 (23)	1691 (23)	11247 (23)
12	100	100	15.71	15.71	-15.30	0.00	168 (23)	1661 (23)	11048 (23)
13	100	100	15.71	15.71	-14.98	0.00	165 (23)	1627 (23)	10821 (23)
14	100	100	15.71	15.71	-14.63	0.00	161 (23)	1589 (23)	10568 (23)
15	100	100	15.71	15.71	-14.25	0.00	157 (23)	1547 (23)	10292 (23)
16	100	100	15.71	15.71	-13.84	0.00	152 (23)	1503 (23)	9994 (23)
17	100	100	15.71	15.71	-13.40	0.00	148 (23)	1455 (23)	9676 (23)
18	100	100	15.71	15.71	-12.93	0.00	142 (23)	1404 (23)	9339 (23)
19	100	100	15.71	15.71	-12.44	0.00	137 (23)	1351 (23)	8987 (23)
20	100	100	15.71	15.71	-11.93	0.00	131 (23)	1296 (23)	8620 (23)

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
21	100	100	15.71	15.71	-11.41	0.00	126 (23)	1239 (23)	8240 (23)
22	100	100	15.71	15.71	-10.87	0.00	120 (23)	1180 (23)	7850 (23)
23	100	100	15.71	15.71	-10.32	0.00	114 (23)	1120 (23)	7451 (23)
24	100	100	15.71	15.71	-9.75	0.00	107 (23)	1059 (23)	7044 (23)
25	100	100	15.71	15.71	-9.18	0.00	101 (23)	997 (23)	6633 (23)
26	100	100	15.71	15.71	-8.61	0.00	95 (23)	935 (23)	6218 (23)
27	100	100	15.71	15.71	-8.03	0.00	88 (23)	872 (23)	5802 (23)
28	100	100	15.71	15.71	-7.46	0.00	82 (23)	810 (23)	5386 (23)
29	100	100	15.71	15.71	-6.88	0.00	76 (23)	748 (23)	4972 (23)
30	100	100	15.71	15.71	-6.32	0.00	70 (23)	686 (23)	4563 (23)
31	100	100	15.71	15.71	-5.76	0.00	63 (23)	625 (23)	4159 (23)
32	100	100	15.71	15.71	-5.21	0.00	57 (23)	566 (23)	3763 (23)
33	100	100	15.71	15.71	-4.68	0.00	52 (23)	508 (23)	3377 (23)
34	100	100	15.71	15.71	-4.16	0.00	46 (23)	451 (23)	3002 (23)
35	100	100	15.71	15.71	-3.66	0.00	40 (23)	397 (23)	2641 (23)
36	100	100	15.71	15.71	-3.18	0.00	35 (23)	345 (23)	2295 (23)
37	100	100	15.71	15.71	-2.72	0.00	30 (23)	296 (23)	1966 (23)
38	100	100	15.71	15.71	-2.29	0.00	25 (23)	249 (23)	1655 (23)
39	100	100	15.71	15.71	-1.89	0.00	21 (23)	205 (23)	1366 (23)
40	100	100	15.71	15.71	-1.52	0.00	17 (23)	165 (23)	1099 (23)
41	100	100	15.71	15.71	-1.19	0.00	13 (23)	129 (23)	856 (23)
42	100	100	15.71	15.71	-0.89	0.00	10 (23)	96 (23)	640 (23)
43	100	100	15.71	15.71	-0.63	0.00	7 (23)	68 (23)	452 (23)
44	100	100	15.71	15.71	-0.41	0.00	4 (23)	44 (23)	294 (23)
45	100	100	15.71	15.71	-0.23	0.00	3 (23)	25 (23)	168 (23)
46	100	100	15.71	15.71	-0.11	0.00	1 (23)	11 (23)	76 (23)
47	100	100	15.71	15.71	-0.03	0.00	0 (23)	0 (1)	19 (23)
48	100	100	0.00	0.00	0.00	0.00	0 (20)	0 (20)	0 (20)

Combinazioni SLEQ

Paramento

Tensione massima di compressione nel calcestruzzo	14940	[kPa]
Tensione massima di trazione dell'acciaio	449936	[kPa]

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	100	40	0.00	0.00	0.00	0.00	0 (21)	0 (21)	0 (21)
2	100	41	0.00	0.00	0.01	1.03	3 (25)	0 (21)	0 (21)
3	100	42	15.71	15.71	0.03	2.08	5 (25)	59 (21)	77 (25)
4	100	43	15.71	15.71	0.08	3.15	9 (25)	82 (21)	124 (25)
5	100	44	15.71	15.71	0.16	4.26	13 (25)	99 (21)	179 (25)
6	100	45	15.71	15.71	0.28	5.38	18 (25)	110 (21)	242 (25)
7	100	46	15.71	15.71	0.45	6.53	24 (25)	114 (21)	313 (25)
8	100	47	15.71	15.71	0.66	7.71	30 (25)	109 (21)	395 (25)
9	100	48	15.71	15.71	0.92	8.91	38 (25)	96 (21)	490 (25)
10	100	49	15.71	15.71	1.20	9.43	47 (25)	78 (26)	602 (25)
11	100	50	15.71	15.71	1.57	10.59	59 (25)	210 (26)	735 (25)
12	100	51	15.71	15.71	2.02	11.78	73 (25)	412 (26)	889 (25)
13	100	52	15.71	15.71	2.55	12.99	89 (25)	697 (26)	1065 (25)
14	100	53	15.71	15.71	3.32	15.31	107 (25)	1076 (25)	1261 (25)
15	100	54	15.71	15.71	4.05	16.66	127 (25)	1563 (25)	1476 (25)
16	100	55	15.71	15.71	4.89	18.04	150 (25)	2155 (25)	1710 (25)
17	100	56	15.71	15.71	5.83	19.44	174 (25)	2852 (25)	1960 (25)
18	100	57	15.71	15.71	6.88	20.87	201 (25)	3655 (25)	2228 (25)
19	100	58	15.71	15.71	8.05	22.33	229 (25)	4564 (25)	2512 (25)
20	100	59	15.71	15.71	9.35	23.81	259 (25)	5580 (25)	2814 (25)
21	100	60	15.71	15.71	10.77	25.31	291 (25)	6704 (25)	3132 (25)
22	100	61	15.71	15.71	12.33	26.84	325 (25)	7936 (25)	3468 (25)
23	100	62	15.71	15.71	14.04	28.40	360 (25)	9278 (25)	3821 (25)
24	100	63	15.71	15.71	15.90	29.98	397 (25)	10730 (25)	4191 (25)
25	100	64	15.71	15.71	17.91	31.59	435 (25)	12293 (25)	4578 (25)
26	100	65	15.71	15.71	20.08	33.22	476 (25)	13967 (25)	4983 (25)
27	100	66	15.71	15.71	22.42	34.87	517 (25)	15755 (25)	5405 (25)
28	100	67	15.71	15.71	24.94	36.55	561 (25)	17655 (25)	5845 (25)
29	100	68	15.71	15.71	27.64	38.26	606 (25)	19670 (25)	6302 (25)
30	100	69	15.71	15.71	30.52	39.99	653 (25)	21800 (25)	6776 (25)
31	100	70	15.71	15.71	33.60	41.75	701 (25)	24045 (25)	7268 (25)
32	100	71	15.71	15.71	36.88	43.53	751 (25)	26406 (25)	7778 (25)
33	100	72	15.71	15.71	40.36	45.34	802 (25)	28884 (25)	8304 (25)
34	100	73	15.71	15.71	44.06	47.17	855 (25)	31479 (25)	8849 (25)
35	100	74	15.71	15.71	47.97	49.03	909 (25)	34193 (25)	9410 (25)
36	100	75	15.71	15.71	52.11	50.91	965 (25)	37024 (25)	9989 (25)
37	100	76	15.71	15.71	56.48	52.82	1023 (25)	39975 (25)	10585 (25)
38	100	77	15.71	15.71	61.09	54.76	1081 (25)	43044 (25)	11198 (25)
39	100	78	15.71	15.71	65.94	56.72	1141 (25)	46234 (25)	11828 (25)

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
40	100	79	15.71	15.71	71.04	58.70	1203 (25)	49544 (25)	12475 (25)
41	100	80	15.71	15.71	76.39	60.71	1266 (25)	52974 (25)	13140 (25)
42	100	81	15.71	15.71	82.01	62.74	1330 (25)	56525 (25)	13821 (25)
43	100	82	15.71	15.71	87.90	64.80	1396 (25)	60197 (25)	14519 (25)
44	100	83	15.71	15.71	94.06	66.89	1463 (25)	63991 (25)	15233 (25)
45	100	84	15.71	15.71	100.50	69.00	1532 (25)	67907 (25)	15965 (25)
46	100	85	15.71	15.71	107.23	71.13	1601 (25)	71945 (25)	16712 (25)
47	100	86	15.71	15.71	114.25	73.30	1673 (25)	76105 (25)	17477 (25)
48	100	87	15.71	15.71	121.57	75.48	1745 (25)	80388 (25)	18257 (25)
49	100	88	15.71	15.71	129.20	77.69	1819 (25)	84794 (25)	19054 (25)
50	100	89	15.71	15.71	137.14	79.93	1894 (25)	89323 (25)	19867 (25)
51	100	90	15.71	15.71	145.39	82.19	1970 (25)	93976 (25)	20697 (25)
52	100	91	15.71	15.71	153.97	84.48	2047 (25)	98752 (25)	21542 (25)
53	100	92	15.71	15.71	162.89	86.79	2126 (25)	103652 (25)	22403 (25)
54	100	93	15.71	15.71	172.14	89.13	2206 (25)	108676 (25)	23280 (25)
55	100	94	15.71	15.71	181.73	91.49	2287 (25)	113824 (25)	24173 (25)
56	100	95	15.71	15.71	191.67	93.88	2369 (25)	119097 (25)	25081 (25)
57	100	96	15.71	15.71	201.97	96.29	2453 (25)	124494 (25)	26005 (25)
58	100	97	15.71	15.71	212.63	98.73	2537 (25)	130016 (25)	26945 (25)
59	100	98	15.71	15.71	223.66	101.19	2623 (25)	135662 (25)	27899 (25)
60	100	99	15.71	15.71	235.06	103.68	2710 (25)	141434 (25)	28869 (25)
61	100	100	15.71	15.71	246.84	106.19	2798 (25)	147330 (25)	29855 (25)
62	100	101	15.71	15.71	259.02	108.73	2888 (25)	153352 (25)	30855 (25)
63	100	102	15.71	15.71	271.58	111.29	2978 (25)	159499 (25)	31871 (25)
64	100	103	15.71	15.71	284.54	113.88	3070 (25)	165772 (25)	32901 (25)
65	100	104	15.71	15.71	297.91	116.50	3162 (25)	172170 (25)	33946 (25)
66	100	105	15.71	15.71	311.69	119.14	3261 (25)	178917 (25)	35051 (25)

Fondazione

Tensione massima di compressione nel calcestruzzo	13073	[kPa]
Tensione massima di trazione dell'acciaio	449936	[kPa]

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
1	100	100	15.71	15.71	0.00	0.00	0 (21)	0 (21)	0 (21)
2	100	100	15.71	15.71	0.96	0.00	11 (25)	691 (25)	104 (25)
3	100	100	15.71	15.71	3.82	0.00	42 (25)	2756 (25)	414 (25)
4	100	100	15.71	15.71	8.56	0.00	94 (25)	6181 (25)	929 (25)
5	100	100	15.71	15.71	15.16	0.00	167 (25)	10953 (25)	1647 (25)
6	100	100	15.71	15.71	23.62	0.00	260 (25)	17057 (25)	2564 (25)
7	100	100	15.71	15.71	-246.51	0.00	2716 (26)	26769 (26)	178047 (26)
8	100	100	15.71	15.71	-239.61	0.00	2640 (26)	26020 (26)	173065 (26)
9	100	100	15.71	15.71	-232.51	0.00	2561 (26)	25249 (26)	167939 (26)
10	100	100	15.71	15.71	-225.24	0.00	2481 (26)	24459 (26)	162683 (26)
11	100	100	15.71	15.71	-217.80	0.00	2399 (26)	23651 (26)	157311 (26)
12	100	100	15.71	15.71	-210.22	0.00	2316 (26)	22828 (26)	151836 (26)
13	100	100	15.71	15.71	-202.52	0.00	2231 (26)	21991 (26)	146272 (26)
14	100	100	15.71	15.71	-194.71	0.00	2145 (26)	21143 (26)	140631 (26)
15	100	100	15.71	15.71	-186.81	0.00	2058 (26)	20286 (26)	134929 (26)
16	100	100	15.71	15.71	-178.85	0.00	1970 (26)	19421 (26)	129177 (26)
17	100	100	15.71	15.71	-170.84	0.00	1882 (26)	18551 (26)	123390 (26)
18	100	100	15.71	15.71	-162.79	0.00	1793 (26)	17678 (26)	117581 (26)
19	100	100	15.71	15.71	-154.74	0.00	1705 (26)	16803 (26)	111764 (26)
20	100	100	15.71	15.71	-146.69	0.00	1616 (26)	15929 (26)	105951 (26)
21	100	100	15.71	15.71	-138.67	0.00	1528 (26)	15058 (26)	100157 (26)
22	100	100	15.71	15.71	-130.69	0.00	1440 (26)	14192 (26)	94395 (26)
23	100	100	15.71	15.71	-122.78	0.00	1353 (26)	13332 (26)	88679 (26)
24	100	100	15.71	15.71	-114.94	0.00	1266 (26)	12482 (26)	83021 (26)
25	100	100	15.71	15.71	-107.21	0.00	1181 (26)	11642 (26)	77436 (26)
26	100	100	15.71	15.71	-99.60	0.00	1097 (26)	10815 (26)	71937 (26)
27	100	100	15.71	15.71	-92.12	0.00	1015 (26)	10004 (26)	66537 (26)
28	100	100	15.71	15.71	-84.80	0.00	934 (26)	9209 (26)	61250 (26)
29	100	100	15.71	15.71	-77.66	0.00	855 (26)	8433 (26)	56090 (26)
30	100	100	15.71	15.71	-70.71	0.00	779 (26)	7678 (26)	51070 (26)
31	100	100	15.71	15.71	-63.97	0.00	705 (26)	6946 (26)	46202 (26)
32	100	100	15.71	15.71	-57.46	0.00	633 (26)	6240 (26)	41502 (26)
33	100	100	15.71	15.71	-51.20	0.00	564 (26)	5560 (26)	36982 (26)
34	100	100	15.71	15.71	-45.21	0.00	498 (26)	4910 (26)	32656 (26)
35	100	100	15.71	15.71	-39.51	0.00	435 (26)	4291 (26)	28538 (26)
36	100	100	15.71	15.71	-34.11	0.00	376 (26)	3705 (26)	24640 (26)
37	100	100	15.71	15.71	-29.04	0.00	320 (26)	3154 (26)	20976 (26)
38	100	100	15.71	15.71	-24.31	0.00	268 (26)	2640 (26)	17561 (26)
39	100	100	15.71	15.71	-19.95	0.00	220 (26)	2166 (26)	14406 (26)
40	100	100	15.71	15.71	-15.96	0.00	176 (26)	1733 (26)	11527 (26)
41	100	100	15.71	15.71	-12.37	0.00	136 (26)	1343 (26)	8935 (26)
42	100	100	15.71	15.71	-9.20	0.00	101 (26)	999 (26)	6646 (26)
43	100	100	15.71	15.71	-6.47	0.00	71 (26)	702 (26)	4671 (26)
44	100	100	15.71	15.71	-4.19	0.00	46 (26)	455 (26)	3026 (26)

n°	B	H	Afi	Afs	M	N	sc	sfi	sfs
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kN]	[kPa]	[kPa]	[kPa]
45	100	100	15.71	15.71	-2.38	0.00	26 (26)	259 (26)	1722 (26)
46	100	100	15.71	15.71	-1.07	0.00	12 (26)	116 (26)	774 (26)
47	100	100	15.71	15.71	-0.27	0.00	3 (26)	29 (26)	196 (26)
48	100	100	0.00	0.00	0.00	0.00	0 (21)	0 (21)	0 (21)

Verifica a fessurazione

Simbologia adottata

n°	indice sezione
Y	ordinata sezione espressa in [m]
B	larghezza sezione espresso in [cm]
H	altezza sezione espressa in [cm]
Af	area ferri zona tesa espresso in [cmq]
Aeff	area efficace espressa in [cmq]
M	momento agente espressa in [kNm]
Mpf	momento di formazione/apertura fessure espressa in [kNm]
e	deformazione espresso in %
Sm	spaziatura tra le fessure espressa in [mm]
w	apertura delle fessure espressa in [mm]

Combinazioni SLEF

Paramento

Apertura limite fessure w_{lim}=0.30

n°	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (20)
2	100	41	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (20)
3	100	42	15.71	1061.56	0.02	128.19	0.000000	0.00	0.000 (20)
4	100	43	15.71	1089.12	0.04	134.32	0.000000	0.00	0.000 (20)
5	100	44	15.71	1116.73	0.09	140.58	0.000000	0.00	0.000 (20)
6	100	45	15.71	1144.39	0.17	146.96	0.000000	0.00	0.000 (20)
7	100	46	15.71	1172.08	0.27	153.48	0.000000	0.00	0.000 (20)
8	100	47	15.71	1199.81	0.41	160.13	0.000000	0.00	0.000 (20)
9	100	48	15.71	1227.58	0.59	166.91	0.000000	0.00	0.000 (20)
10	100	49	15.71	1255.39	0.81	173.83	0.000000	0.00	0.000 (20)
11	100	50	15.71	1283.23	1.09	180.88	0.000000	0.00	0.000 (20)
12	100	51	15.71	1311.11	1.42	188.06	0.000000	0.00	0.000 (20)
13	100	52	15.71	1339.02	1.81	195.36	0.000000	0.00	0.000 (20)
14	100	53	15.71	1366.96	2.27	202.80	0.000000	0.00	0.000 (20)
15	100	54	15.71	1394.94	2.80	210.37	0.000000	0.00	0.000 (20)
16	100	55	15.71	1422.95	3.40	218.07	0.000000	0.00	0.000 (20)
17	100	56	15.71	1450.99	4.09	225.91	0.000000	0.00	0.000 (20)
18	100	57	15.71	1479.05	4.86	233.86	0.000000	0.00	0.000 (20)
19	100	58	15.71	1500.00	5.72	241.97	0.000000	0.00	0.000 (20)
20	100	59	15.71	1500.00	6.68	250.19	0.000000	0.00	0.000 (20)
21	100	60	15.71	1500.00	7.74	258.55	0.000000	0.00	0.000 (20)
22	100	61	15.71	1500.00	8.91	267.04	0.000000	0.00	0.000 (20)
23	100	62	15.71	1500.00	10.18	275.67	0.000000	0.00	0.000 (20)
24	100	63	15.71	1500.00	11.58	284.42	0.000000	0.00	0.000 (20)
25	100	64	15.71	1500.00	13.09	293.30	0.000000	0.00	0.000 (20)
26	100	65	15.71	1500.00	14.73	302.33	0.000000	0.00	0.000 (20)
27	100	66	15.71	1500.00	16.51	311.48	0.000000	0.00	0.000 (20)
28	100	67	15.71	1500.00	18.42	320.76	0.000000	0.00	0.000 (20)
29	100	68	15.71	1500.00	20.47	330.17	0.000000	0.00	0.000 (20)
30	100	69	15.71	1500.00	22.67	339.72	0.000000	0.00	0.000 (20)
31	100	70	15.71	1500.00	25.02	349.39	0.000000	0.00	0.000 (20)
32	100	71	15.71	1500.00	27.53	359.19	0.000000	0.00	0.000 (20)
33	100	72	15.71	1500.00	30.20	369.14	0.000000	0.00	0.000 (20)
34	100	73	15.71	1500.00	33.03	379.22	0.000000	0.00	0.000 (20)
35	100	74	15.71	1500.00	36.04	389.43	0.000000	0.00	0.000 (20)
36	100	75	15.71	1500.00	39.23	399.78	0.000000	0.00	0.000 (20)
37	100	76	15.71	1500.00	42.60	410.24	0.000000	0.00	0.000 (20)
38	100	77	15.71	1500.00	46.15	420.86	0.000000	0.00	0.000 (20)
39	100	78	15.71	1500.00	49.90	431.60	0.000000	0.00	0.000 (20)
40	100	79	15.71	1500.00	53.85	442.46	0.000000	0.00	0.000 (20)
41	100	80	15.71	1500.00	58.00	453.47	0.000000	0.00	0.000 (20)
42	100	81	15.71	1500.00	62.35	464.62	0.000000	0.00	0.000 (20)
43	100	82	15.71	1500.00	66.92	475.90	0.000000	0.00	0.000 (20)
44	100	83	15.71	1500.00	71.71	487.29	0.000000	0.00	0.000 (20)
45	100	84	15.71	1500.00	76.72	498.83	0.000000	0.00	0.000 (20)
46	100	85	15.71	1500.00	81.96	510.51	0.000000	0.00	0.000 (20)
47	100	86	15.71	1500.00	87.43	522.32	0.000000	0.00	0.000 (20)
48	100	87	15.71	1500.00	93.14	534.26	0.000000	0.00	0.000 (20)

n°	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
49	100	88	15.71	1500.00	99.09	546.34	0.000000	0.00	0.000 (20)
50	100	89	15.71	1500.00	105.29	558.55	0.000000	0.00	0.000 (20)
51	100	90	15.71	1500.00	111.75	570.89	0.000000	0.00	0.000 (20)
52	100	91	15.71	1500.00	118.46	583.37	0.000000	0.00	0.000 (20)
53	100	92	15.71	1500.00	125.44	595.97	0.000000	0.00	0.000 (20)
54	100	93	15.71	1500.00	132.68	608.73	0.000000	0.00	0.000 (20)
55	100	94	15.71	1500.00	140.20	621.62	0.000000	0.00	0.000 (20)
56	100	95	15.71	1500.00	148.00	634.62	0.000000	0.00	0.000 (20)
57	100	96	15.71	1500.00	156.08	647.80	0.000000	0.00	0.000 (20)
58	100	97	15.71	1500.00	164.45	661.07	0.000000	0.00	0.000 (20)
59	100	98	15.71	1500.00	173.11	674.49	0.000000	0.00	0.000 (20)
60	100	99	15.71	1500.00	182.08	688.05	0.000000	0.00	0.000 (20)
61	100	100	15.71	1500.00	191.34	701.76	0.000000	0.00	0.000 (20)
62	100	101	15.71	1500.00	200.92	715.59	0.000000	0.00	0.000 (20)
63	100	102	15.71	1500.00	210.81	729.54	0.000000	0.00	0.000 (20)
64	100	103	15.71	1500.00	221.02	743.66	0.000000	0.00	0.000 (20)
65	100	104	15.71	1500.00	231.56	757.87	0.000000	0.00	0.000 (20)
66	100	105	15.71	1500.00	242.42	770.84	0.000000	0.00	0.000 (20)

Fondazione

Apertura limite fessure w_{lim}=0.40

n°	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	100	100	0.00	0.00	0.00	0.00	---	---	0.000 (20)
2	100	100	15.71	1500.00	0.69	629.07	0.000000	0.00	0.000 (20)
3	100	100	15.71	1500.00	2.76	629.07	0.000000	0.00	0.000 (20)
4	100	100	15.71	1500.00	6.20	629.07	0.000000	0.00	0.000 (20)
5	100	100	15.71	1500.00	11.01	629.07	0.000000	0.00	0.000 (20)
6	100	100	15.71	1500.00	17.20	629.07	0.000000	0.00	0.000 (20)
7	100	100	15.71	1500.00	-12.41	-629.07	0.000000	0.00	0.000 (20)
8	100	100	15.71	1500.00	-12.43	-629.07	0.000000	0.00	0.000 (20)
9	100	100	15.71	1500.00	-12.39	-629.07	0.000000	0.00	0.000 (20)
10	100	100	15.71	1500.00	-12.32	-629.07	0.000000	0.00	0.000 (20)
11	100	100	15.71	1500.00	-12.20	-629.07	0.000000	0.00	0.000 (20)
12	100	100	15.71	1500.00	-12.05	-629.07	0.000000	0.00	0.000 (20)
13	100	100	15.71	1500.00	-11.86	-629.07	0.000000	0.00	0.000 (20)
14	100	100	15.71	1500.00	-11.63	-629.07	0.000000	0.00	0.000 (20)
15	100	100	15.71	1500.00	-11.37	-629.07	0.000000	0.00	0.000 (20)
16	100	100	15.71	1500.00	-11.09	-629.07	0.000000	0.00	0.000 (20)
17	100	100	15.71	1500.00	-10.77	-629.07	0.000000	0.00	0.000 (20)
18	100	100	15.71	1500.00	-10.43	-629.07	0.000000	0.00	0.000 (20)
19	100	100	15.71	1500.00	-10.07	-629.07	0.000000	0.00	0.000 (20)
20	100	100	15.71	1500.00	-9.69	-629.07	0.000000	0.00	0.000 (20)
21	100	100	15.71	1500.00	-9.29	-629.07	0.000000	0.00	0.000 (20)
22	100	100	15.71	1500.00	-8.87	-629.07	0.000000	0.00	0.000 (20)
23	100	100	15.71	1500.00	-8.44	-629.07	0.000000	0.00	0.000 (20)
24	100	100	15.71	1500.00	-8.00	-629.07	0.000000	0.00	0.000 (20)
25	100	100	15.71	1500.00	-7.55	-629.07	0.000000	0.00	0.000 (20)
26	100	100	15.71	1500.00	-7.09	-629.07	0.000000	0.00	0.000 (20)
27	100	100	15.71	1500.00	-6.63	-629.07	0.000000	0.00	0.000 (20)
28	100	100	15.71	1500.00	-6.17	-629.07	0.000000	0.00	0.000 (20)
29	100	100	15.71	1500.00	-5.70	-629.07	0.000000	0.00	0.000 (20)
30	100	100	15.71	1500.00	-5.24	-629.07	0.000000	0.00	0.000 (20)
31	100	100	15.71	1500.00	-4.79	-629.07	0.000000	0.00	0.000 (20)
32	100	100	15.71	1500.00	-4.34	-629.07	0.000000	0.00	0.000 (20)
33	100	100	15.71	1500.00	-3.90	-629.07	0.000000	0.00	0.000 (20)
34	100	100	15.71	1500.00	-3.47	-629.07	0.000000	0.00	0.000 (20)
35	100	100	15.71	1500.00	-3.06	-629.07	0.000000	0.00	0.000 (20)
36	100	100	15.71	1500.00	-2.66	-629.07	0.000000	0.00	0.000 (20)
37	100	100	15.71	1500.00	-2.28	-629.07	0.000000	0.00	0.000 (20)
38	100	100	15.71	1500.00	-1.92	-629.07	0.000000	0.00	0.000 (20)
39	100	100	15.71	1500.00	-1.59	-629.07	0.000000	0.00	0.000 (20)
40	100	100	15.71	1500.00	-1.28	-629.07	0.000000	0.00	0.000 (20)
41	100	100	15.71	1500.00	-1.00	-629.07	0.000000	0.00	0.000 (20)
42	100	100	15.71	1500.00	-0.75	-629.07	0.000000	0.00	0.000 (20)
43	100	100	15.71	1500.00	-0.53	-629.07	0.000000	0.00	0.000 (20)
44	100	100	15.71	1500.00	-0.34	-629.07	0.000000	0.00	0.000 (20)
45	100	100	15.71	1500.00	-0.20	-629.07	0.000000	0.00	0.000 (20)
46	100	100	15.71	1500.00	-0.09	-629.07	0.000000	0.00	0.000 (20)
47	100	100	15.71	1500.00	-0.02	-629.07	0.000000	0.00	0.000 (20)
48	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (20)

Combinazioni SLEQ

Paramento

Apertura limite fessure w_{lim}=0.20

n°	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	100	40	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (21)
2	100	41	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (21)
3	100	42	15.71	1061.56	0.02	128.19	0.000000	0.00	0.000 (21)
4	100	43	15.71	1089.12	0.04	134.32	0.000000	0.00	0.000 (21)
5	100	44	15.71	1116.73	0.09	140.58	0.000000	0.00	0.000 (21)
6	100	45	15.71	1144.39	0.17	146.96	0.000000	0.00	0.000 (21)
7	100	46	15.71	1172.08	0.27	153.48	0.000000	0.00	0.000 (21)
8	100	47	15.71	1199.81	0.41	160.13	0.000000	0.00	0.000 (21)
9	100	48	15.71	1227.58	0.59	166.91	0.000000	0.00	0.000 (21)
10	100	49	15.71	1255.39	0.81	173.83	0.000000	0.00	0.000 (21)
11	100	50	15.71	1283.23	1.09	180.88	0.000000	0.00	0.000 (21)
12	100	51	15.71	1311.11	1.42	188.06	0.000000	0.00	0.000 (21)
13	100	52	15.71	1339.02	1.81	195.36	0.000000	0.00	0.000 (21)
14	100	53	15.71	1366.96	2.27	202.80	0.000000	0.00	0.000 (21)
15	100	54	15.71	1394.94	2.80	210.37	0.000000	0.00	0.000 (21)
16	100	55	15.71	1422.95	3.40	218.07	0.000000	0.00	0.000 (21)
17	100	56	15.71	1450.99	4.09	225.91	0.000000	0.00	0.000 (21)
18	100	57	15.71	1479.05	4.86	233.86	0.000000	0.00	0.000 (21)
19	100	58	15.71	1500.00	5.72	241.97	0.000000	0.00	0.000 (21)
20	100	59	15.71	1500.00	6.68	250.19	0.000000	0.00	0.000 (21)
21	100	60	15.71	1500.00	7.74	258.55	0.000000	0.00	0.000 (21)
22	100	61	15.71	1500.00	8.91	267.04	0.000000	0.00	0.000 (21)
23	100	62	15.71	1500.00	10.18	275.67	0.000000	0.00	0.000 (21)
24	100	63	15.71	1500.00	11.58	284.42	0.000000	0.00	0.000 (21)
25	100	64	15.71	1500.00	13.09	293.30	0.000000	0.00	0.000 (21)
26	100	65	15.71	1500.00	14.73	302.33	0.000000	0.00	0.000 (21)
27	100	66	15.71	1500.00	16.51	311.48	0.000000	0.00	0.000 (21)
28	100	67	15.71	1500.00	18.42	320.76	0.000000	0.00	0.000 (21)
29	100	68	15.71	1500.00	20.47	330.17	0.000000	0.00	0.000 (21)
30	100	69	15.71	1500.00	22.67	339.72	0.000000	0.00	0.000 (21)
31	100	70	15.71	1500.00	25.02	349.39	0.000000	0.00	0.000 (21)
32	100	71	15.71	1500.00	27.53	359.19	0.000000	0.00	0.000 (21)
33	100	72	15.71	1500.00	30.20	369.14	0.000000	0.00	0.000 (21)
34	100	73	15.71	1500.00	33.03	379.22	0.000000	0.00	0.000 (21)
35	100	74	15.71	1500.00	36.04	389.43	0.000000	0.00	0.000 (21)
36	100	75	15.71	1500.00	39.23	399.78	0.000000	0.00	0.000 (21)
37	100	76	15.71	1500.00	42.60	410.24	0.000000	0.00	0.000 (21)
38	100	77	15.71	1500.00	46.15	420.86	0.000000	0.00	0.000 (21)
39	100	78	15.71	1500.00	49.90	431.60	0.000000	0.00	0.000 (21)
40	100	79	15.71	1500.00	53.85	442.46	0.000000	0.00	0.000 (21)
41	100	80	15.71	1500.00	58.00	453.47	0.000000	0.00	0.000 (21)
42	100	81	15.71	1500.00	62.35	464.62	0.000000	0.00	0.000 (21)
43	100	82	15.71	1500.00	66.92	475.90	0.000000	0.00	0.000 (21)
44	100	83	15.71	1500.00	71.71	487.29	0.000000	0.00	0.000 (21)
45	100	84	15.71	1500.00	76.72	498.83	0.000000	0.00	0.000 (21)
46	100	85	15.71	1500.00	81.96	510.51	0.000000	0.00	0.000 (21)
47	100	86	15.71	1500.00	87.43	522.32	0.000000	0.00	0.000 (21)
48	100	87	15.71	1500.00	93.14	534.26	0.000000	0.00	0.000 (21)
49	100	88	15.71	1500.00	99.09	546.34	0.000000	0.00	0.000 (21)
50	100	89	15.71	1500.00	105.29	558.55	0.000000	0.00	0.000 (21)
51	100	90	15.71	1500.00	111.75	570.89	0.000000	0.00	0.000 (21)
52	100	91	15.71	1500.00	118.46	583.37	0.000000	0.00	0.000 (21)
53	100	92	15.71	1500.00	125.44	595.97	0.000000	0.00	0.000 (21)
54	100	93	15.71	1500.00	132.68	608.73	0.000000	0.00	0.000 (21)
55	100	94	15.71	1500.00	140.20	621.62	0.000000	0.00	0.000 (21)
56	100	95	15.71	1500.00	148.00	634.62	0.000000	0.00	0.000 (21)
57	100	96	15.71	1500.00	156.08	647.80	0.000000	0.00	0.000 (21)
58	100	97	15.71	1500.00	164.45	661.07	0.000000	0.00	0.000 (21)
59	100	98	15.71	1500.00	173.11	674.49	0.000000	0.00	0.000 (21)
60	100	99	15.71	1500.00	182.08	688.05	0.000000	0.00	0.000 (21)
61	100	100	15.71	1500.00	191.34	701.76	0.000000	0.00	0.000 (21)
62	100	101	15.71	1500.00	200.92	715.59	0.000000	0.00	0.000 (21)
63	100	102	15.71	1500.00	210.81	729.54	0.000000	0.00	0.000 (21)
64	100	103	15.71	1500.00	221.02	743.66	0.000000	0.00	0.000 (21)
65	100	104	15.71	1500.00	231.56	757.87	0.000000	0.00	0.000 (21)
66	100	105	15.71	1500.00	242.42	770.84	0.000000	0.00	0.000 (21)

Fondazione

Apertura limite fessure w_{lim}=0.30

n°	B	H	Af	Aeff	M	Mpf	e	Sm	w
	[cm]	[cm]	[cmq]	[cmq]	[kNm]	[kNm]	[%]	[mm]	[mm]
1	100	100	0.00	0.00	0.00	0.00	---	---	0.000 (21)
2	100	100	15.71	1500.00	0.69	629.07	0.000000	0.00	0.000 (21)
3	100	100	15.71	1500.00	2.76	629.07	0.000000	0.00	0.000 (21)
4	100	100	15.71	1500.00	6.20	629.07	0.000000	0.00	0.000 (21)
5	100	100	15.71	1500.00	11.01	629.07	0.000000	0.00	0.000 (21)
6	100	100	15.71	1500.00	17.20	629.07	0.000000	0.00	0.000 (21)
7	100	100	15.71	1500.00	-12.41	-629.07	0.000000	0.00	0.000 (21)
8	100	100	15.71	1500.00	-12.43	-629.07	0.000000	0.00	0.000 (21)
9	100	100	15.71	1500.00	-12.39	-629.07	0.000000	0.00	0.000 (21)
10	100	100	15.71	1500.00	-12.32	-629.07	0.000000	0.00	0.000 (21)
11	100	100	15.71	1500.00	-12.20	-629.07	0.000000	0.00	0.000 (21)
12	100	100	15.71	1500.00	-12.05	-629.07	0.000000	0.00	0.000 (21)
13	100	100	15.71	1500.00	-11.86	-629.07	0.000000	0.00	0.000 (21)
14	100	100	15.71	1500.00	-11.63	-629.07	0.000000	0.00	0.000 (21)
15	100	100	15.71	1500.00	-11.37	-629.07	0.000000	0.00	0.000 (21)
16	100	100	15.71	1500.00	-11.09	-629.07	0.000000	0.00	0.000 (21)
17	100	100	15.71	1500.00	-10.77	-629.07	0.000000	0.00	0.000 (21)
18	100	100	15.71	1500.00	-10.43	-629.07	0.000000	0.00	0.000 (21)
19	100	100	15.71	1500.00	-10.07	-629.07	0.000000	0.00	0.000 (21)
20	100	100	15.71	1500.00	-9.69	-629.07	0.000000	0.00	0.000 (21)
21	100	100	15.71	1500.00	-9.29	-629.07	0.000000	0.00	0.000 (21)
22	100	100	15.71	1500.00	-8.87	-629.07	0.000000	0.00	0.000 (21)
23	100	100	15.71	1500.00	-8.44	-629.07	0.000000	0.00	0.000 (21)
24	100	100	15.71	1500.00	-8.00	-629.07	0.000000	0.00	0.000 (21)
25	100	100	15.71	1500.00	-7.55	-629.07	0.000000	0.00	0.000 (21)
26	100	100	15.71	1500.00	-7.09	-629.07	0.000000	0.00	0.000 (21)
27	100	100	15.71	1500.00	-6.63	-629.07	0.000000	0.00	0.000 (21)
28	100	100	15.71	1500.00	-6.17	-629.07	0.000000	0.00	0.000 (21)
29	100	100	15.71	1500.00	-5.70	-629.07	0.000000	0.00	0.000 (21)
30	100	100	15.71	1500.00	-5.24	-629.07	0.000000	0.00	0.000 (21)
31	100	100	15.71	1500.00	-4.79	-629.07	0.000000	0.00	0.000 (21)
32	100	100	15.71	1500.00	-4.34	-629.07	0.000000	0.00	0.000 (21)
33	100	100	15.71	1500.00	-3.90	-629.07	0.000000	0.00	0.000 (21)
34	100	100	15.71	1500.00	-3.47	-629.07	0.000000	0.00	0.000 (21)
35	100	100	15.71	1500.00	-3.06	-629.07	0.000000	0.00	0.000 (21)
36	100	100	15.71	1500.00	-2.66	-629.07	0.000000	0.00	0.000 (21)
37	100	100	15.71	1500.00	-2.28	-629.07	0.000000	0.00	0.000 (21)
38	100	100	15.71	1500.00	-1.92	-629.07	0.000000	0.00	0.000 (21)
39	100	100	15.71	1500.00	-1.59	-629.07	0.000000	0.00	0.000 (21)
40	100	100	15.71	1500.00	-1.28	-629.07	0.000000	0.00	0.000 (21)
41	100	100	15.71	1500.00	-1.00	-629.07	0.000000	0.00	0.000 (21)
42	100	100	15.71	1500.00	-0.75	-629.07	0.000000	0.00	0.000 (21)
43	100	100	15.71	1500.00	-0.53	-629.07	0.000000	0.00	0.000 (21)
44	100	100	15.71	1500.00	-0.34	-629.07	0.000000	0.00	0.000 (21)
45	100	100	15.71	1500.00	-0.20	-629.07	0.000000	0.00	0.000 (21)
46	100	100	15.71	1500.00	-0.09	-629.07	0.000000	0.00	0.000 (21)
47	100	100	15.71	1500.00	-0.02	-629.07	0.000000	0.00	0.000 (21)
48	100	100	0.00	0.00	0.00	0.00	0.000000	0.00	0.000 (21)

11.5 Armatura di progetto

PARAMENTO:

- ARMATURA LONGITUDINALE: **ϕ20/20 lato terra + ϕ 20/20 lato scavo**
- ARMATURA TRASVERSALE: **9ϕ8/m²**

FONDAZIONE:

- ARMATURA LONGITUDINALE: **ϕ20/20 superiori + ϕ20/20 inferiori**
- ARMATURA TRASVERSALE: **NON PREVISTA**