

Regione Lombardia
Provincia di Pavia
Comuni di Corana

Progetto

**Progetto di un impianto per la
produzione di biometano alimentato con
prodotti e sottoprodotti di origine
agricola**

Localizzazione

Comune di Corana (PV)

Iter autorizzativo

Procedura Abilitativa Semplificata (PAS)

Committenza

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Titolo elaborato

**Relazione geotecnica opere di
fondazione**

Scala

-

Dettagli
documento

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RELAZIONE GEOTECNICA
Fondazioni per cabine di campo

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1 INTRODUZIONE TRATTA DALLA RELAZIONE GEOLOGICA

1.1 ASSETTO GEOLOGICO D'INQUADRAMENTO

Come riportato e descritto nella relazione geologica allegata, l'area oggetto di intervento si trova nel comune di Corana (PV), prospiciente alla via S.P.25 – Strada Torremenapace. Il sito in esame è posto a Sud rispetto all'agglomerato urbano di Corana e si trova ad una quota topografica tra 70.9 e 72.2 m slm.

L'area direttamente interessata dalla realizzazione di un campo solare con la collocazione di cabine elettriche presenta un territorio pianeggiante, priva di rilievi o rilevati, adibita attualmente a campo agricolo.

Per maggiori dettagli circa la caratterizzazione geologica, geomorfologica e geotecnica del terreno del sito d'installazione si rimanda alla relazione geologica allegata.

1.2 MODELLO GEOTECNICO DEL SOTTOSUOLO

La situazione litostratigrafica locale è stata definita mediante 8 prove penetrometriche statiche e 1 indagine sismica MASW, eseguite in sito e riportate nella relazione geologica allegata alla presente. Ulteriori informazioni sono state dedotte sia dalla letteratura che da precedenti studi in terreni simili nelle aree circostanti.

La situazione litostratigrafica è la seguente:

- **Unità Litotecnica 1** = 0.0-0.7m da p.c.: costituito da terreno coltivo/materiale rimaneggiato
- **Unità Litotecnica 2** = -0.70-1.20m da p.c.: costituito da limo sabbioso argilloso
- **Unità Litotecnica 3** = -1.20-9.60m da p.c.: costituito da argilla con limo
- **Unità Litotecnica 4** = -9.60-11.60m da p.c.: costituito da sabbia ghiaiosa

Nella struttura in progetto si prevede l'inserimento di una nuova unità litotecnica, per migliorare le caratteristiche geotecniche del sito in esame e garantire un miglior piano di posa della fondazione.

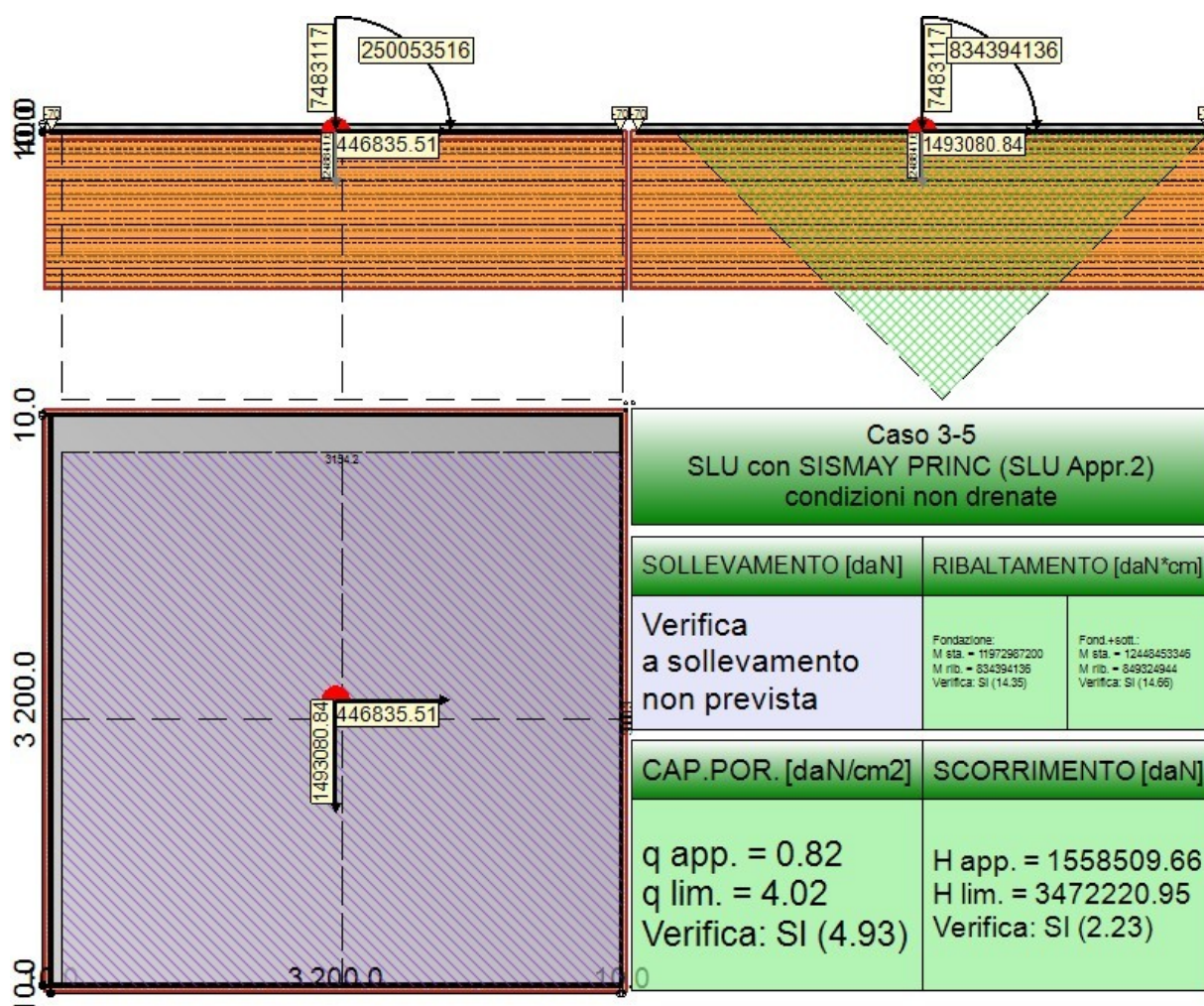
- **Unità Litotecnica aggiuntiva** = 0.0-0.30m da p.c.: costituito da terreno stabilizzato di riporto compattato.

I parametri geotecnici preliminari sono stati desunti dall'ampia letteratura disponibile nonché dall'esperienza acquisita durante la realizzazione di interventi in condizioni geologiche del tutto confrontabili.

2 VERIFICHE GEOTECNICHE FONDAZIONI

Si riportano le verifiche geotecniche degli elementi maggiormente sollecitati nelle configurazioni tipologiche. Ovvero vengono condotte le verifiche in condizione drenate e non drenate in termini di ribaltamento, capacità portante e scorrimento delle strutture. Più precisamente si analizzano le platee di fondazione per le tipologie 1-3-4 e la trave tipo di fondazione per la configurazione tipologica 2.

2.1 PLATEA DI FONDAZIONE TIPOLOGICA 1 - VASCA



2.1.1 DESCRIZIONE DEI CASI DI CALCOLO E RIASSUNTO DEI RISULTATI

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

Indici e nomi dei casi di carico			Elenco delle verifiche eseguite per ciascun caso				Sisma
Caso	Nome	Sestetti	Ver. dren.	Ver. non dren.	Ver. equ.	Ver. upl.	Coef. sism.
1	SLU SENZA Sisma (SLU Appr.2)	1-1	No	Si	Si	No	Non sismico
1-1 Caso 1-1							
2	SLU con SISMAY PRINC (SLU Appr.2)	da 2-1 a 2-16	No	Si	Si	No	$k_{h,x}= 0.02, k_{h,y}= 0.00$
2-1 Caso 4-1; 2-2 Caso 4-2; 2-3 Caso 4-3; 2-4 Caso 4-4; 2-5 Caso 4-5; 2-6 Caso 4-6; 2-7 Caso 4-7; 2-8 Caso 4-8; 2-9 Caso 4-9; 2-10 Caso 4-10; 2-11 Caso 4-11; 2-12 Caso 4-12; 2-13 Caso 4-13; 2-14 Caso 4-14; 2-15 Caso 4-15; 2-16 Caso 4-16							
3	SLU con SISMAY PRINC (SLU Appr.2)	da 3-1 a 3-16	No	Si	Si	No	$k_{h,x}= 0.00, k_{h,y}= 0.02$
3-1 Caso 5-1; 3-2 Caso 5-2; 3-3 Caso 5-3; 3-4 Caso 5-4; 3-5 Caso 5-5; 3-6 Caso 5-6; 3-7 Caso 5-7; 3-8 Caso 5-8; 3-9 Caso 5-9; 3-10 Caso 5-10; 3-11 Caso 5-11; 3-12 Caso 5-12; 3-13 Caso 5-13; 3-14 Caso 5-14; 3-15 Caso 5-15; 3-16 Caso 5-16							
4	SLUEqu (SLU EQU)	4-1	No	Si	Si	No	Non sismico
4-1 Caso 9-1							
5	SLD con SISMAY PRINC (SLD)	da 5-1 a 5-16	No	Si	Si	No	$k_{h,x}= 0.01, k_{h,y}= 0.00$
5-1 Caso 6-1; 5-2 Caso 6-2; 5-3 Caso 6-3; 5-4 Caso 6-4; 5-5 Caso 6-5; 5-6 Caso 6-6; 5-7 Caso 6-7; 5-8 Caso 6-8; 5-9 Caso 6-9; 5-10 Caso 6-10; 5-11 Caso 6-11; 5-12 Caso 6-12; 5-13 Caso 6-13; 5-14 Caso 6-14; 5-15 Caso 6-15; 5-16 Caso 6-16							
6	SLD con SISMAY PRINC (SLD)	da 6-1 a 6-16	No	Si	Si	No	$k_{h,x}= 0.00, k_{h,y}= 0.01$
6-1 Caso 7-1; 6-2 Caso 7-2; 6-3 Caso 7-3; 6-4 Caso 7-4; 6-5 Caso 7-5; 6-6 Caso 7-6; 6-7 Caso 7-7; 6-8 Caso 7-8; 6-9 Caso 7-9; 6-10 Caso 7-10; 6-11 Caso 7-11; 6-12 Caso 7-12; 6-13 Caso 7-13; 6-14 Caso 7-14; 6-15 Caso 7-15; 6-16 Caso 7-16							

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

Caso	$\gamma_{G1,fav}$	$\gamma_{G1,sfa}$	$\gamma_{G2,fav}$	$\gamma_{G2,sfa}$	$\gamma_{Qi,fav}$	$\gamma_{Qi,sfa}$			
1	1.00	1.30	0.80	1.50	0.00	1.50			
2	1.00	1.00	1.00	1.00	1.00	1.00			
3	1.00	1.00	1.00	1.00	1.00	1.00			
4	0.90	1.10	0.80	1.50	0.00	1.50			
5	-	-	-	-	-	-			
6	-	-	-	-	-	-			
Caso	γ_{τ}	γ_{ϕ}	$\gamma_{c'}$	γ_{su}	$\gamma_{R,v}$	$\gamma_{R,h}$	$\gamma_{R,e}$	$\gamma_{R,eq}$	$\gamma_{R,upl}$
1	1.00	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
2	-	-	-	-	1.80	1.10	1.30	1.00	1.00
3	-	-	-	-	1.80	1.10	1.30	1.00	1.00
4	1.00	1.25	1.25	1.40	-	-	-	1.00	1.00
5	-	-	-	-	2.30	1.10	1.30	-	-
6	-	-	-	-	2.30	1.10	1.30	-	-

Segue la tabella riassuntiva di tutte le verifiche a ribaltamento.

Fondazione			Fondazione e Sotofondo			
Caso	R_d [daN*cm]	E_d [daN*cm]	Verifica	R_d [daN*cm]	E_d [daN*cm]	Verifica
1-1	17429731200	0	SI (17429731200/0 = 1.00 >= 1.0)	18059492490	0	SI (18059492490/0 = 1.00 >= 1.0)
2-1	11972987200	833511720	SI (11972987200/833511720 = 14.36 >= 1.0)	12448453350	848406240	SI (12448453350/848406240 = 14.67 >= 1.0)
2-2	11972987200	833511720	SI (11972987200/833511720 = 14.36 >= 1.0)	12448453350	848406240	SI (12448453350/848406240 = 14.67 >= 1.0)
2-3	11972987200	833511720	SI (11972987200/833511720 = 14.36 >= 1.0)	12448453350	848406240	SI (12448453350/848406240 = 14.67 >= 1.0)
2-4	11972987200	833511720	SI (11972987200/833511720 = 14.36 >= 1.0)	12448453350	848406240	SI (12448453350/848406240 = 14.67 >= 1.0)
2-5	11972987200	832957570	SI (11972987200/832957570 = 14.37 >= 1.0)	12448453350	847829530	SI (12448453350/847829530 = 14.68 >= 1.0)

[illegible]

[illegible]

6-4	11972987200	497580940	SI (11972987200/497580940 = 24.06 >= 1.0)	12448453350	506452670	SI (12448453350/506452670 = 24.58 >= 1.0)
6-5	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-6	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-7	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-8	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-9	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-10	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-11	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-12	11972987200	498967690	SI (11972987200/498967690 = 24.00 >= 1.0)	12448453350	507896320	SI (12448453350/507896320 = 24.51 >= 1.0)
6-13	11972987200	497580940	SI (11972987200/497580940 = 24.06 >= 1.0)	12448453350	506452670	SI (12448453350/506452670 = 24.58 >= 1.0)
6-14	11972987200	497580940	SI (11972987200/497580940 = 24.06 >= 1.0)	12448453350	506452670	SI (12448453350/506452670 = 24.58 >= 1.0)
6-15	11972987200	497580940	SI (11972987200/497580940 = 24.06 >= 1.0)	12448453350	506452670	SI (12448453350/506452670 = 24.58 >= 1.0)
6-16	11972987200	497580940	SI (11972987200/497580940 = 24.06 >= 1.0)	12448453350	506452670	SI (12448453350/506452670 = 24.58 >= 1.0)

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

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	Verifica non richiesta.			11217076.1	34645254.9	SI (34645254.9/11217076.1 = 3.09 >= 1.0)
2-1	Verifica non richiesta.			7731958.6	38100128.8	SI (38100128.8/7731958.6 = 4.93 >= 1.0)
2-2	Verifica non richiesta.			7731958.6	38095417.6	SI (38095417.6/7731958.6 = 4.93 >= 1.0)
2-3	Verifica non richiesta.			7731958.6	38095417.6	SI (38095417.6/7731958.6 = 4.93 >= 1.0)
2-4	Verifica non richiesta.			7731958.6	38100128.8	SI (38100128.8/7731958.6 = 4.93 >= 1.0)
2-5	Verifica non richiesta.			7731958.6	38104680.1	SI (38104680.1/7731958.6 = 4.93 >= 1.0)
2-6	Verifica non richiesta.			7731958.6	38099968.7	SI (38099968.7/7731958.6 = 4.93 >= 1.0)
2-7	Verifica non richiesta.			7731958.6	38099968.7	SI (38099968.7/7731958.6 = 4.93 >= 1.0)
2-8	Verifica non richiesta.			7731958.6	38104680.1	SI

				(38104680.1/773195 8.6 = 4.93 >= 1.0)
2-9	Verifica non richiesta.	7731958.6	38104680.1	SI (38104680.1/773195 8.6 = 4.93 >= 1.0)
2-10	Verifica non richiesta.	7731958.6	38099968.7	SI (38099968.7/773195 8.6 = 4.93 >= 1.0)
2-11	Verifica non richiesta.	7731958.6	38099968.7	SI (38099968.7/773195 8.6 = 4.93 >= 1.0)
2-12	Verifica non richiesta.	7731958.6	38104680.1	SI (38104680.1/773195 8.6 = 4.93 >= 1.0)
2-13	Verifica non richiesta.	7731958.6	38100128.8	SI (38100128.8/773195 8.6 = 4.93 >= 1.0)
2-14	Verifica non richiesta.	7731958.6	38095417.6	SI (38095417.6/773195 8.6 = 4.93 >= 1.0)
2-15	Verifica non richiesta.	7731958.6	38095417.6	SI (38095417.6/773195 8.6 = 4.93 >= 1.0)
2-16	Verifica non richiesta.	7731958.6	38100128.8	SI (38100128.8/773195 8.6 = 4.93 >= 1.0)
3-1	Verifica non richiesta.	7731958.6	38109049.1	SI (38109049.1/773195 8.6 = 4.93 >= 1.0)
3-2	Verifica non richiesta.	7731958.6	38110169.9	SI (38110169.9/773195 8.6 = 4.93 >= 1.0)
3-3	Verifica non richiesta.	7731958.6	38110169.9	SI (38110169.9/773195 8.6 = 4.93 >= 1.0)
3-4	Verifica non richiesta.	7731958.6	38109049.1	SI (38109049.1/773195 8.6 = 4.93 >= 1.0)
3-5	Verifica non richiesta.	7731958.6	38089928	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-6	Verifica non richiesta.	7731958.6	38091048.5	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-7	Verifica non richiesta.	7731958.6	38091048.5	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-8	Verifica non richiesta.	7731958.6	38089928	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-9	Verifica non richiesta.	7731958.6	38089928	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-10	Verifica non richiesta.	7731958.6	38091048.5	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-11	Verifica non richiesta.	7731958.6	38091048.5	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-12	Verifica non richiesta.	7731958.6	38089928	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-13	Verifica non richiesta.	7731958.6	38109049.1	SI (38109049.1/773195 8.6 = 4.93 >= 1.0)
3-14	Verifica non richiesta.	7731958.6	38110170	SI (38110170/7731958. 6 = 4.93 >= 1.0)
3-15	Verifica non richiesta.	7731958.6	38110170	SI (38110170/7731958.

				6 = 4.93 >= 1.0)
3-16	Verifica non richiesta.	7731958.6	38109049.1	SI (38109049.1/7731958.6 = 4.93 >= 1.0)
4-1	Verifica non richiesta.	10130696.4	56803892.7	SI (56803892.7/10130696.4 = 5.61 >= 1.0)
5-1	Verifica non richiesta.	7731958.6	31758405.9	SI (31758405.9/7731958.6 = 4.11 >= 1.0)
5-2	Verifica non richiesta.	7731958.6	31756143.5	SI (31756143.5/7731958.6 = 4.11 >= 1.0)
5-3	Verifica non richiesta.	7731958.6	31756143.5	SI (31756143.5/7731958.6 = 4.11 >= 1.0)
5-4	Verifica non richiesta.	7731958.6	31758405.9	SI (31758405.9/7731958.6 = 4.11 >= 1.0)
5-5	Verifica non richiesta.	7731958.6	31760558.7	SI (31760558.7/7731958.6 = 4.11 >= 1.0)
5-6	Verifica non richiesta.	7731958.6	31758296.1	SI (31758296.1/7731958.6 = 4.11 >= 1.0)
5-7	Verifica non richiesta.	7731958.6	31758296.1	SI (31758296.1/7731958.6 = 4.11 >= 1.0)
5-8	Verifica non richiesta.	7731958.6	31760558.7	SI (31760558.7/7731958.6 = 4.11 >= 1.0)
5-9	Verifica non richiesta.	7731958.6	31760558.7	SI (31760558.7/7731958.6 = 4.11 >= 1.0)
5-10	Verifica non richiesta.	7731958.6	31758296.1	SI (31758296.1/7731958.6 = 4.11 >= 1.0)
5-11	Verifica non richiesta.	7731958.6	31758296.1	SI (31758296.1/7731958.6 = 4.11 >= 1.0)
5-12	Verifica non richiesta.	7731958.6	31760558.7	SI (31760558.7/7731958.6 = 4.11 >= 1.0)
5-13	Verifica non richiesta.	7731958.6	31758405.9	SI (31758405.9/7731958.6 = 4.11 >= 1.0)
5-14	Verifica non richiesta.	7731958.6	31756143.5	SI (31756143.5/7731958.6 = 4.11 >= 1.0)
5-15	Verifica non richiesta.	7731958.6	31756143.5	SI (31756143.5/7731958.6 = 4.11 >= 1.0)
5-16	Verifica non richiesta.	7731958.6	31758405.9	SI (31758405.9/7731958.6 = 4.11 >= 1.0)
6-1	Verifica non richiesta.	7731958.6	31762604	SI (31762604/7731958.6 = 4.11 >= 1.0)
6-2	Verifica non richiesta.	7731958.6	31763142.2	SI (31763142.2/7731958.6 = 4.11 >= 1.0)
6-3	Verifica non richiesta.	7731958.6	31763142.2	SI (31763142.2/7731958.6 = 4.11 >= 1.0)
6-4	Verifica non richiesta.	7731958.6	31762604	SI (31762604/7731958.6 = 4.11 >= 1.0)
6-5	Verifica non richiesta.	7731958.6	31753560	SI (31753560/7731958.6 = 4.11 >= 1.0)

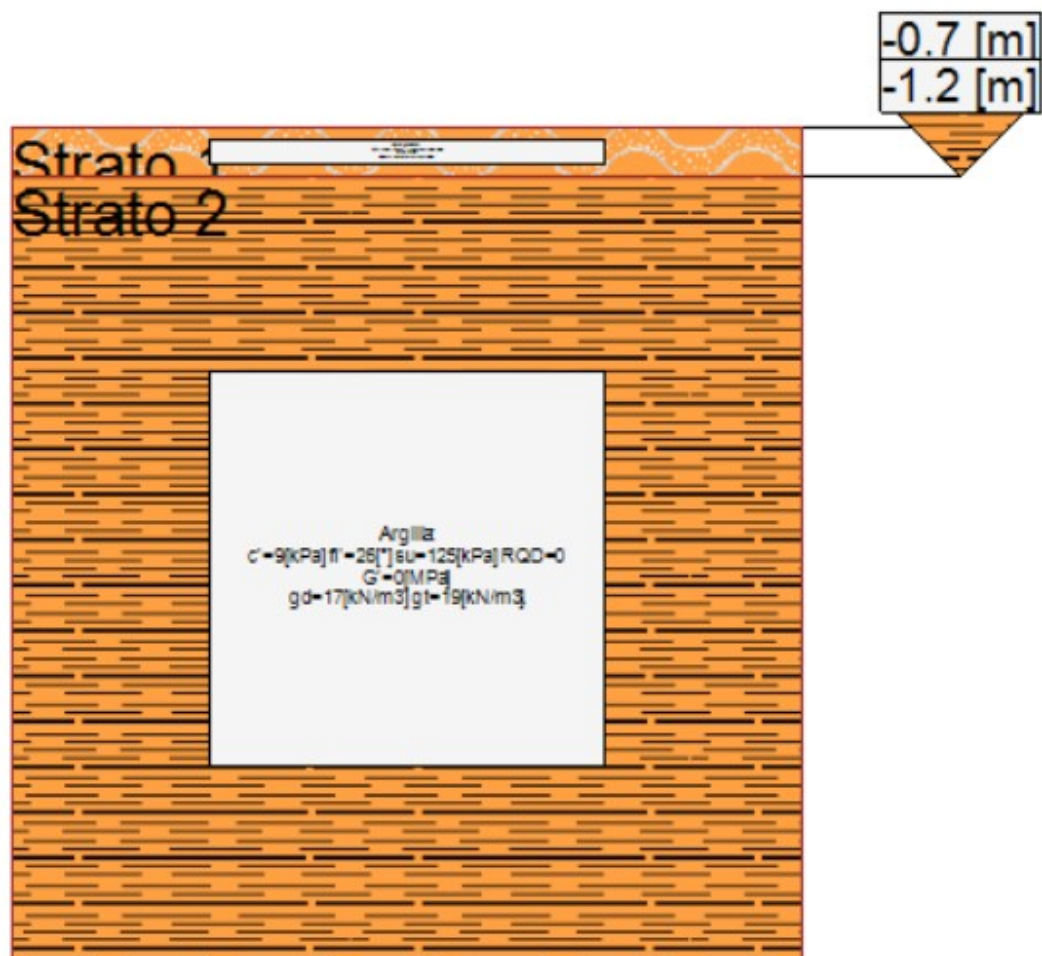
6-6	Verifica non richiesta.	7731958.6	31754098.2	SI (31754098.2/7731958.6 = 4.11 >= 1.0)
6-7	Verifica non richiesta.	7731958.6	31754098.2	SI (31754098.2/7731958.6 = 4.11 >= 1.0)
6-8	Verifica non richiesta.	7731958.6	31753560	SI (31753560/7731958.6 = 4.11 >= 1.0)
6-9	Verifica non richiesta.	7731958.6	31753560	SI (31753560/7731958.6 = 4.11 >= 1.0)
6-10	Verifica non richiesta.	7731958.6	31754098.2	SI (31754098.2/7731958.6 = 4.11 >= 1.0)
6-11	Verifica non richiesta.	7731958.6	31754098.2	SI (31754098.2/7731958.6 = 4.11 >= 1.0)
6-12	Verifica non richiesta.	7731958.6	31753560	SI (31753560/7731958.6 = 4.11 >= 1.0)
6-13	Verifica non richiesta.	7731958.6	31762604	SI (31762604/7731958.6 = 4.11 >= 1.0)
6-14	Verifica non richiesta.	7731958.6	31763142.2	SI (31763142.2/7731958.6 = 4.11 >= 1.0)
6-15	Verifica non richiesta.	7731958.6	31763142.2	SI (31763142.2/7731958.6 = 4.11 >= 1.0)
6-16	Verifica non richiesta.	7731958.6	31762604	SI (31762604/7731958.6 = 4.11 >= 1.0)

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

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	Verifica non richiesta.			0	3770327.3	SI (3770327.3/0 = 1.00 >= 1.0)
2-1	Verifica non richiesta.			1554526.8	3472613.1	SI (3472613.1/1554526.8 = 2.23 >= 1.0)
2-2	Verifica non richiesta.			1555346.4	3472438.1	SI (3472438.1/1555346.4 = 2.23 >= 1.0)
2-3	Verifica non richiesta.			1555346.4	3472438.1	SI (3472438.1/1555346.4 = 2.23 >= 1.0)
2-4	Verifica non richiesta.			1554526.8	3472613.1	SI (3472613.1/1554526.8 = 2.23 >= 1.0)
2-5	Verifica non richiesta.			1552365.4	3472791.2	SI (3472791.2/1552365.4 = 2.24 >= 1.0)
2-6	Verifica non richiesta.			1553186.1	3472616.1	SI (3472616.1/1553186.1 = 2.24 >= 1.0)
2-7	Verifica non richiesta.			1553186.1	3472616.1	SI (3472616.1/1553186.1 = 2.24 >= 1.0)
2-8	Verifica non richiesta.			1552365.4	3472791.2	SI (3472791.2/1552365.4 = 2.24 >= 1.0)
2-9	Verifica non richiesta.			1552365.4	3472791.2	SI (3472791.2/1552365.4 = 2.24 >= 1.0)
2-10	Verifica non richiesta.			1553186.1	3472616.1	SI (3472616.1/1553186.1 = 2.24 >= 1.0)

				1 = 2.24 >= 1.0)
2-11	Verifica non richiesta.	1553186.1	3472616.1	SI (3472616.1/1553186.1 = 2.24 >= 1.0)
2-12	Verifica non richiesta.	1552365.4	3472791.2	SI (3472791.2/1552365.4 = 2.24 >= 1.0)
2-13	Verifica non richiesta.	1554526.8	3472613.1	SI (3472613.1/1554526.8 = 2.23 >= 1.0)
2-14	Verifica non richiesta.	1555346.4	3472438.1	SI (3472438.1/1555346.4 = 2.23 >= 1.0)
2-15	Verifica non richiesta.	1555346.4	3472438.1	SI (3472438.1/1555346.4 = 2.23 >= 1.0)
2-16	Verifica non richiesta.	1554526.8	3472613.1	SI (3472613.1/1554526.8 = 2.23 >= 1.0)
3-1	Verifica non richiesta.	1549397.2	3472966.5	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
3-2	Verifica non richiesta.	1549202.2	3473008.4	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-3	Verifica non richiesta.	1549202.2	3473008.4	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-4	Verifica non richiesta.	1549397.2	3472966.5	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
3-5	Verifica non richiesta.	1558509.7	3472220.9	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-6	Verifica non richiesta.	1558315.8	3472262.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-7	Verifica non richiesta.	1558315.8	3472262.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-8	Verifica non richiesta.	1558509.7	3472220.9	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-9	Verifica non richiesta.	1558509.7	3472220.9	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-10	Verifica non richiesta.	1558315.8	3472262.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-11	Verifica non richiesta.	1558315.8	3472262.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-12	Verifica non richiesta.	1558509.7	3472220.9	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-13	Verifica non richiesta.	1549397.2	3472966.5	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
3-14	Verifica non richiesta.	1549202.2	3473008.4	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-15	Verifica non richiesta.	1549202.2	3473008.4	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-16	Verifica non richiesta.	1549397.2	3472966.5	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
4-1	Verifica non richiesta.	0	3317888	SI (3317888/0 = 1.00 >= 1.0)
5-1	Verifica non richiesta.	929607	3603477.3	SI

				(3603477.3/929607 = 3.88 >= 1.0)
5-2	Verifica non richiesta.	930097.2	3603380.8	SI (3603380.8/930097.2 = 3.87 >= 1.0)
5-3	Verifica non richiesta.	930097.2	3603380.8	SI (3603380.8/930097.2 = 3.87 >= 1.0)
5-4	Verifica non richiesta.	929607	3603477.3	SI (3603477.3/929607 = 3.88 >= 1.0)
5-5	Verifica non richiesta.	928314.5	3603587.4	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-6	Verifica non richiesta.	928805.3	3603491	SI (3603491/928805.3 = 3.88 >= 1.0)
5-7	Verifica non richiesta.	928805.3	3603491	SI (3603491/928805.3 = 3.88 >= 1.0)
5-8	Verifica non richiesta.	928314.5	3603587.4	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-9	Verifica non richiesta.	928314.5	3603587.4	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-10	Verifica non richiesta.	928805.3	3603491	SI (3603491/928805.3 = 3.88 >= 1.0)
5-11	Verifica non richiesta.	928805.3	3603491	SI (3603491/928805.3 = 3.88 >= 1.0)
5-12	Verifica non richiesta.	928314.5	3603587.4	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-13	Verifica non richiesta.	929607	3603477.3	SI (3603477.3/929607 = 3.88 >= 1.0)
5-14	Verifica non richiesta.	930097.2	3603380.8	SI (3603380.8/930097.2 = 3.87 >= 1.0)
5-15	Verifica non richiesta.	930097.2	3603380.8	SI (3603380.8/930097.2 = 3.87 >= 1.0)
5-16	Verifica non richiesta.	929607	3603477.3	SI (3603477.3/929607 = 3.88 >= 1.0)
6-1	Verifica non richiesta.	926539.5	3603703.3	SI (3603703.3/926539.5 = 3.89 >= 1.0)
6-2	Verifica non richiesta.	926422.9	3603726.4	SI (3603726.4/926422.9 = 3.89 >= 1.0)
6-3	Verifica non richiesta.	926422.9	3603726.4	SI (3603726.4/926422.9 = 3.89 >= 1.0)
6-4	Verifica non richiesta.	926539.5	3603703.3	SI (3603703.3/926539.5 = 3.89 >= 1.0)
6-5	Verifica non richiesta.	931988.8	3603242	SI (3603242/931988.8 = 3.87 >= 1.0)
6-6	Verifica non richiesta.	931872.8	3603265.1	SI (3603265.1/931872.8 = 3.87 >= 1.0)
6-7	Verifica non richiesta.	931872.8	3603265.1	SI (3603265.1/931872.8 = 3.87 >= 1.0)
6-8	Verifica non richiesta.	931988.8	3603242	SI (3603242/931988.8 =



2.1.4 VERIFICHE IN CONDIZIONI NON DRENATE

2.1.4.1 SOLLECITAZIONI AL PIANO DI POSA

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

Rispetto al sistema di rif. globale:								
Caso	Fx [daN]	Fy [daN]	Fz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-11217076.08	0	0	0	0	10
2-1	1489451.71	445069.97	-7731958.6	-249622546	833511720	0	0	10
2-2	1489451.71	-447924.25	-7731958.6	250318241	833511720	0	0	10
2-3	1489451.71	447924.25	-7731958.6	-250318241	833511720	0	0	10
2-4	1489451.71	-445069.97	-7731958.6	249622546	833511720	0	0	10
2-5	-1487195.71	445069.97	-7731958.6	-249622546	-832957570	0	0	10
2-6	-1487195.7	-447924.25	-7731958.6	250318241	-832957570	0	0	10
2-7	-1487195.71	447924.25	-7731958.6	-250318241	-832957570	0	0	10
2-8	-1487195.7	-445069.97	-7731958.6	249622546	-832957570	0	0	10
2-9	1487195.71	445069.97	-7731958.6	-249622546	832957570	0	0	10
2-10	1487195.71	-447924.25	-7731958.6	250318241	832957570	0	0	10
2-11	1487195.71	447924.25	-7731958.6	-250318241	832957570	0	0	10
2-12	1487195.71	-445069.97	-7731958.6	249622546	832957570	0	0	10
2-13	-1489451.7	445069.97	-7731958.6	-249622546	-833511720	0	0	10
2-14	-1489451.7	-447924.25	-7731958.6	250318241	-833511720	0	0	10
2-15	-1489451.7	447924.25	-7731958.6	-250318241	-833511720	0	0	10
2-16	-1489451.7	-445069.97	-7731958.6	249622546	-833511720	0	0	10
3-1	446835.51	1483566.58	-7731958.6	-832075154	250053516	0	0	10
3-2	-446158.71	1483566.58	-7731958.6	-832075154	-249887271	0	0	10
3-3	446158.71	1483566.58	-7731958.6	-832075154	249887271	0	0	10
3-4	-446835.51	1483566.58	-7731958.6	-832075154	-250053516	0	0	10
3-5	446835.51	-1493080.84	-7731958.6	834394136	250053516	0	0	10
3-6	-446158.71	-1493080.84	-7731958.6	834394136	-249887271	0	0	10
3-7	446158.71	-1493080.84	-7731958.6	834394136	249887271	0	0	10
3-8	-446835.51	-1493080.84	-7731958.6	834394136	-250053516	0	0	10
3-9	446835.51	1493080.84	-7731958.6	-834394136	250053516	0	0	10
3-10	-446158.71	1493080.84	-7731958.6	-834394136	-249887271	0	0	10
3-11	446158.71	1493080.84	-7731958.6	-834394136	249887271	0	0	10
3-12	-446835.51	1493080.84	-7731958.6	-834394136	-250053516	0	0	10
3-13	446835.51	-1483566.57	-7731958.6	832075154	250053516	0	0	10
3-14	-446158.71	-1483566.57	-7731958.6	832075154	-249887271	0	0	10
3-15	446158.71	-1483566.57	-7731958.6	832075154	249887271	0	0	10
3-16	-446835.51	-1483566.57	-7731958.6	832075154	-250053516	0	0	10
4-1	0	0	-10130696.44	0	0	0	0	10
5-1	890692.12	266151.84	-7731958.6	-149274283	498440009	0	0	10
5-2	890692.12	-267858.7	-7731958.6	149690308	498440009	0	0	10
5-3	890692.12	267858.7	-7731958.6	-149690308	498440009	0	0	10
5-4	890692.12	-266151.84	-7731958.6	149274283	498440009	0	0	10
5-5	-889343.03	266151.85	-7731958.6	-149274283	-498108627	0	0	10
5-6	-889343.03	-267858.7	-7731958.6	149690308	-498108627	0	0	10
5-7	-889343.03	267858.7	-7731958.6	-149690308	-498108627	0	0	10
5-8	-889343.03	-266151.84	-7731958.6	149274283	-498108627	0	0	10
5-9	889343.03	266151.84	-7731958.6	-149274283	498108627	0	0	10
5-10	889343.03	-267858.7	-7731958.6	149690308	498108627	0	0	10
5-11	889343.03	267858.7	-7731958.6	-149690308	498108627	0	0	10
5-12	889343.03	-266151.84	-7731958.6	149274283	498108627	0	0	10
5-13	-890692.12	266151.85	-7731958.6	-149274283	-498440009	0	0	10
5-14	-890692.12	-267858.7	-7731958.6	149690308	-498440009	0	0	10
5-15	-890692.12	267858.7	-7731958.6	-149690308	-498440009	0	0	10
5-16	-890692.12	-266151.84	-7731958.6	149274283	-498440009	0	0	10
6-1	267207.64	887172.81	-7731958.6	-497580942	149532003	0	0	10
6-2	-266802.91	887172.81	-7731958.6	-497580942	-149432588	0	0	10
6-3	266802.91	887172.81	-7731958.6	-497580942	149432588	0	0	10
6-4	-267207.63	887172.81	-7731958.6	-497580942	-149532003	0	0	10
6-5	267207.64	-892862.34	-7731958.6	498967693	149532003	0	0	10
6-6	-266802.91	-892862.34	-7731958.6	498967693	-149432588	0	0	10
6-7	266802.91	-892862.34	-7731958.6	498967693	149432588	0	0	10
6-8	-267207.63	-892862.34	-7731958.6	498967693	-149532003	0	0	10
6-9	267207.64	892862.34	-7731958.6	-498967693	149532003	0	0	10

6-10	-266802.91	892862.34	-7731958.6	-498967693	-149432588	0	0	10
6-11	266802.91	892862.34	-7731958.6	-498967693	149432588	0	0	10
6-12	-267207.63	892862.34	-7731958.6	-498967693	-149532003	0	0	10
6-13	267207.64	-887172.81	-7731958.6	497580942	149532003	0	0	10
6-14	-266802.91	-887172.81	-7731958.6	497580942	-149432588	0	0	10
6-15	266802.91	-887172.81	-7731958.6	497580942	149432588	0	0	10
6-16	-267207.63	-887172.81	-7731958.6	497580942	-149532003	0	0	10
Rispetto al sistema di rif. locale (centro piano di posa):								
Caso	Hx [daN]	Hy [daN]	Vz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-11217076.08	0	0	-	-	-
2-1	1489451.71	445069.97	-7731958.6	-254073246	848406237	-	-	-
2-2	1489451.71	-447924.25	-7731958.6	254797484	848406237	-	-	-
2-3	1489451.71	447924.25	-7731958.6	-254797484	848406237	-	-	-
2-4	1489451.71	-445069.97	-7731958.6	254073246	848406237	-	-	-
2-5	-1487195.71	445069.97	-7731958.6	-254073246	-847829527	-	-	-
2-6	-1487195.7	-447924.25	-7731958.6	254797484	-847829527	-	-	-
2-7	-1487195.71	447924.25	-7731958.6	-254797484	-847829527	-	-	-
2-8	-1487195.7	-445069.97	-7731958.6	254073246	-847829527	-	-	-
2-9	1487195.71	445069.97	-7731958.6	-254073246	847829527	-	-	-
2-10	1487195.71	-447924.25	-7731958.6	254797484	847829527	-	-	-
2-11	1487195.71	447924.25	-7731958.6	-254797484	847829527	-	-	-
2-12	1487195.71	-445069.97	-7731958.6	254073246	847829527	-	-	-
2-13	-1489451.7	445069.97	-7731958.6	-254073246	-848406237	-	-	-
2-14	-1489451.7	-447924.25	-7731958.6	254797484	-848406237	-	-	-
2-15	-1489451.7	447924.25	-7731958.6	-254797484	-848406237	-	-	-
2-16	-1489451.7	-445069.97	-7731958.6	254073246	-848406237	-	-	-
3-1	446835.51	1483566.58	-7731958.6	-846910820	254521871	-	-	-
3-2	-446158.71	1483566.58	-7731958.6	-846910820	-254348858	-	-	-
3-3	446158.71	1483566.58	-7731958.6	-846910820	254348858	-	-	-
3-4	-446835.51	1483566.58	-7731958.6	-846910820	-254521871	-	-	-
3-5	446835.51	-1493080.84	-7731958.6	849324944	254521871	-	-	-
3-6	-446158.71	-1493080.84	-7731958.6	849324944	-254348858	-	-	-
3-7	446158.71	-1493080.84	-7731958.6	849324944	254348858	-	-	-
3-8	-446835.51	-1493080.84	-7731958.6	849324944	-254521871	-	-	-
3-9	446835.51	1493080.84	-7731958.6	-849324944	254521871	-	-	-
3-10	-446158.71	1493080.84	-7731958.6	-849324944	-254348858	-	-	-
3-11	446158.71	1493080.84	-7731958.6	-849324944	254348858	-	-	-
3-12	-446835.51	1493080.84	-7731958.6	-849324944	-254521871	-	-	-
3-13	446835.51	-1483566.57	-7731958.6	846910820	254521871	-	-	-
3-14	-446158.71	-1483566.57	-7731958.6	846910820	-254348858	-	-	-
3-15	446158.71	-1483566.57	-7731958.6	846910820	254348858	-	-	-
3-16	-446835.51	-1483566.57	-7731958.6	846910820	-254521871	-	-	-
4-1	0	0	-10130696.44	0	0	-	-	-
5-1	890692.12	266151.84	-7731958.6	-151935801	507346930	-	-	-
5-2	890692.12	-267858.7	-7731958.6	152368895	507346930	-	-	-
5-3	890692.12	267858.7	-7731958.6	-152368895	507346930	-	-	-
5-4	890692.12	-266151.84	-7731958.6	151935801	507346930	-	-	-
5-5	-889343.03	266151.85	-7731958.6	-151935802	-507002057	-	-	-
5-6	-889343.03	-267858.7	-7731958.6	152368895	-507002057	-	-	-
5-7	-889343.03	267858.7	-7731958.6	-152368895	-507002057	-	-	-
5-8	-889343.03	-266151.84	-7731958.6	151935801	-507002057	-	-	-
5-9	889343.03	266151.84	-7731958.6	-151935801	507002057	-	-	-
5-10	889343.03	-267858.7	-7731958.6	152368895	507002057	-	-	-
5-11	889343.03	267858.7	-7731958.6	-152368895	507002057	-	-	-
5-12	889343.03	-266151.84	-7731958.6	151935801	507002057	-	-	-
5-13	-890692.12	266151.85	-7731958.6	-151935802	-507346930	-	-	-
5-14	-890692.12	-267858.7	-7731958.6	152368895	-507346930	-	-	-
5-15	-890692.12	267858.7	-7731958.6	-152368895	-507346930	-	-	-
5-16	-890692.12	-266151.84	-7731958.6	151935801	-507346930	-	-	-
6-1	267207.64	887172.81	-7731958.6	-506452670	152204079	-	-	-
6-2	-266802.91	887172.81	-7731958.6	-506452670	-152100617	-	-	-
6-3	266802.91	887172.81	-7731958.6	-506452670	152100617	-	-	-
6-4	-267207.63	887172.81	-7731958.6	-506452670	-152204079	-	-	-
6-5	267207.64	-892862.34	-7731958.6	507896316	152204079	-	-	-
6-6	-266802.91	-892862.34	-7731958.6	507896316	-152100617	-	-	-
6-7	266802.91	-892862.34	-7731958.6	507896316	152100617	-	-	-
6-8	-267207.63	-892862.34	-7731958.6	507896316	-152204079	-	-	-
6-9	267207.64	892862.34	-7731958.6	-507896316	152204079	-	-	-

6-10	-266802.91	892862.34	-7731958.6	-507896316	-152100617	-	-	-
6-11	266802.91	892862.34	-7731958.6	-507896316	152100617	-	-	-
6-12	-267207.63	892862.34	-7731958.6	-507896316	-152204079	-	-	-
6-13	267207.64	-887172.81	-7731958.6	506452670	152204079	-	-	-
6-14	-266802.91	-887172.81	-7731958.6	506452670	-152100617	-	-	-
6-15	266802.91	-887172.81	-7731958.6	506452670	152100617	-	-	-
6-16	-267207.63	-887172.81	-7731958.6	506452670	-152204079	-	-	-

Le sollecitazioni applicate provocano un'eccentricità lungo X (max=109.73 cm) e lungo Y (max=109.85 cm), perciò le verifiche vengono eseguite sulla fondazione ridotta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	0	0	asse X	asse Y
2-1	109.73	32.86	asse X	asse Y
2-2	109.73	32.95	asse X	asse Y
2-3	109.73	32.95	asse X	asse Y
2-4	109.73	32.86	asse X	asse Y
2-5	109.65	32.86	asse X	asse Y
2-6	109.65	32.95	asse X	asse Y
2-7	109.65	32.95	asse X	asse Y
2-8	109.65	32.86	asse X	asse Y
2-9	109.65	32.86	asse X	asse Y
2-10	109.65	32.95	asse X	asse Y
2-11	109.65	32.95	asse X	asse Y
2-12	109.65	32.86	asse X	asse Y
2-13	109.73	32.86	asse X	asse Y
2-14	109.73	32.95	asse X	asse Y
2-15	109.73	32.95	asse X	asse Y
2-16	109.73	32.86	asse X	asse Y
3-1	32.92	109.53	asse Y	asse X
3-2	32.9	109.53	asse Y	asse X
3-3	32.9	109.53	asse Y	asse X
3-4	32.92	109.53	asse Y	asse X
3-5	32.92	109.85	asse Y	asse X
3-6	32.9	109.85	asse Y	asse X
3-7	32.9	109.85	asse Y	asse X
3-8	32.92	109.85	asse Y	asse X
3-9	32.92	109.85	asse Y	asse X
3-10	32.9	109.85	asse Y	asse X
3-11	32.9	109.85	asse Y	asse X
3-12	32.92	109.85	asse Y	asse X
3-13	32.92	109.53	asse Y	asse X
3-14	32.9	109.53	asse Y	asse X
3-15	32.9	109.53	asse Y	asse X
3-16	32.92	109.53	asse Y	asse X
4-1	0	0	asse X	asse Y
5-1	65.62	19.65	asse X	asse Y
5-2	65.62	19.71	asse X	asse Y
5-3	65.62	19.71	asse X	asse Y
5-4	65.62	19.65	asse X	asse Y
5-5	65.57	19.65	asse X	asse Y
5-6	65.57	19.71	asse X	asse Y
5-7	65.57	19.71	asse X	asse Y
5-8	65.57	19.65	asse X	asse Y
5-9	65.57	19.65	asse X	asse Y
5-10	65.57	19.71	asse X	asse Y
5-11	65.57	19.71	asse X	asse Y
5-12	65.57	19.65	asse X	asse Y
5-13	65.62	19.65	asse X	asse Y
5-14	65.62	19.71	asse X	asse Y
5-15	65.62	19.71	asse X	asse Y
5-16	65.62	19.65	asse X	asse Y
6-1	19.69	65.5	asse Y	asse X
6-2	19.67	65.5	asse Y	asse X
6-3	19.67	65.5	asse Y	asse X
6-4	19.69	65.5	asse Y	asse X

6-5	19.69	65.69	asse Y	asse X
6-6	19.67	65.69	asse Y	asse X
6-7	19.67	65.69	asse Y	asse X
6-8	19.69	65.69	asse Y	asse X
6-9	19.69	65.69	asse Y	asse X
6-10	19.67	65.69	asse Y	asse X
6-11	19.67	65.69	asse Y	asse X
6-12	19.69	65.69	asse Y	asse X
6-13	19.69	65.5	asse Y	asse X
6-14	19.67	65.5	asse Y	asse X
6-15	19.67	65.5	asse Y	asse X
6-16	19.69	65.5	asse Y	asse X

2.1.4.2 CAPACITÀ PORTANTE

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

Caso	γ_{su}	γ_γ	s_u [daN/cm ²]	γ [daN/cm ³]	q_t [daN/cm ²]	N_c	s_c	d_c	i_{bc}	i_{lc}	b_c	g_c	t_γ [daN/cm ²]	$q_{lim,c}$ [daN/cm ²]	$q_{lim,q}$ [daN/cm ²]
1-1	1.00	1.00	1.24	0.0017	0.02	5.14	1.20	1.00	1.00	1.00	1.00	1.00	0	7.65	0.02
2-1	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-2	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
2-3	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
2-4	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-5	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-6	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-7	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-8	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-9	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-10	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-11	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-12	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-13	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
2-14	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
2-15	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
2-16	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-1	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-2	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-3	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-4	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-5	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-6	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-7	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-8	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-9	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-10	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-11	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-12	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.21	0.02
3-13	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-14	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-15	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
3-16	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.96	0.99	1.00	1.00	0	7.22	0.02
4-1	1.40	1.00	0.88	0.0017	0.02	5.14	1.20	1.00	1.00	1.00	1.00	1.00	0	5.46	0.02
5-1	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-2	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-3	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-4	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-5	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-6	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-7	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-8	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02

5-9	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-10	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-11	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-12	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-13	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-14	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-15	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
5-16	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-1	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-2	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-3	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-4	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-5	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-6	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-7	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-8	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-9	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-10	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-11	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-12	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-13	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-14	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-15	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02
6-16	-	-	1.24	0.0017	0.02	5.14	1.19	1.00	0.98	0.99	1.00	1.00	0	7.4	0.02

Segue il confronto fra la pressione limite ed applicata.

Caso	$\gamma_{R;V}$	q_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	3.34	10368400	34645254.9	11217076.1	SI (34645254.9/11217076.1 = 3.09 >= 1.0)
2-1	1.80	4.03	9464560.08	38100128.8	7731958.6	SI (38100128.8/7731958.6 = 4.93 >= 1.0)
2-2	1.80	4.03	9463997.96	38095417.6	7731958.6	SI (38095417.6/7731958.6 = 4.93 >= 1.0)
2-3	1.80	4.03	9463997.96	38095417.6	7731958.6	SI (38095417.6/7731958.6 = 4.93 >= 1.0)
2-4	1.80	4.03	9464560.08	38100128.8	7731958.6	SI (38100128.8/7731958.6 = 4.93 >= 1.0)
2-5	1.80	4.03	9465030.62	38104680.1	7731958.6	SI (38104680.1/7731958.6 = 4.93 >= 1.0)
2-6	1.80	4.03	9464468.48	38099968.7	7731958.6	SI (38099968.7/7731958.6 = 4.93 >= 1.0)
2-7	1.80	4.03	9464468.48	38099968.7	7731958.6	SI (38099968.7/7731958.6 = 4.93 >= 1.0)
2-8	1.80	4.03	9465030.62	38104680.1	7731958.6	SI (38104680.1/7731958.6 = 4.93 >= 1.0)
2-9	1.80	4.03	9465030.62	38104680.1	7731958.6	SI (38104680.1/7731958.6 = 4.93 >= 1.0)
2-10	1.80	4.03	9464468.48	38099968.7	7731958.6	SI (38099968.7/7731958.6 = 4.93 >= 1.0)
2-11	1.80	4.03	9464468.48	38099968.7	7731958.6	SI (38099968.7/7731958.6 = 4.93 >= 1.0)
2-12	1.80	4.03	9465030.62	38104680.1	7731958.6	SI

						(38104680.1/773195 8.6 = 4.93 >= 1.0)
2-13	1.80	4.03	9464560.08	38100128.8	7731958.6	SI (38100128.8/773195 8.6 = 4.93 >= 1.0)
2-14	1.80	4.03	9463997.96	38095417.6	7731958.6	SI (38095417.6/773195 8.6 = 4.93 >= 1.0)
2-15	1.80	4.03	9463997.96	38095417.6	7731958.6	SI (38095417.6/773195 8.6 = 4.93 >= 1.0)
2-16	1.80	4.03	9464560.08	38100128.8	7731958.6	SI (38100128.8/773195 8.6 = 4.93 >= 1.0)
3-1	1.80	4.03	9465431.96	38109049.1	7731958.6	SI (38109049.1/773195 8.6 = 4.93 >= 1.0)
3-2	1.80	4.03	9465566.26	38110169.9	7731958.6	SI (38110169.9/773195 8.6 = 4.93 >= 1.0)
3-3	1.80	4.03	9465566.26	38110169.9	7731958.6	SI (38110169.9/773195 8.6 = 4.93 >= 1.0)
3-4	1.80	4.03	9465431.96	38109049.1	7731958.6	SI (38109049.1/773195 8.6 = 4.93 >= 1.0)
3-5	1.80	4.02	9463462.33	38089928	7731958.6	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-6	1.80	4.03	9463596.6	38091048.5	7731958.6	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-7	1.80	4.03	9463596.6	38091048.5	7731958.6	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-8	1.80	4.02	9463462.33	38089928	7731958.6	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-9	1.80	4.02	9463462.33	38089928	7731958.6	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-10	1.80	4.03	9463596.6	38091048.5	7731958.6	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-11	1.80	4.03	9463596.6	38091048.5	7731958.6	SI (38091048.5/773195 8.6 = 4.93 >= 1.0)
3-12	1.80	4.02	9463462.33	38089928	7731958.6	SI (38089928/7731958. 6 = 4.93 >= 1.0)
3-13	1.80	4.03	9465431.96	38109049.1	7731958.6	SI (38109049.1/773195 8.6 = 4.93 >= 1.0)
3-14	1.80	4.03	9465566.26	38110170	7731958.6	SI (38110170/7731958. 6 = 4.93 >= 1.0)
3-15	1.80	4.03	9465566.26	38110170	7731958.6	SI (38110170/7731958. 6 = 4.93 >= 1.0)
3-16	1.80	4.03	9465431.96	38109049.1	7731958.6	SI (38109049.1/773195 8.6 = 4.93 >= 1.0)
4-1	-	5.48	10368400	56803892.7	10130696.4	SI (56803892.7/101306 96.4 = 5.61 >= 1.0)
5-1	2.30	3.23	9824436.59	31758405.9	7731958.6	SI

						(31758405.9/773195 8.6 = 4.11 >= 1.0)
5-2	2.30	3.23	9824090.56	31756143.5	7731958.6	SI (31756143.5/773195 8.6 = 4.11 >= 1.0)
5-3	2.30	3.23	9824090.56	31756143.5	7731958.6	SI (31756143.5/773195 8.6 = 4.11 >= 1.0)
5-4	2.30	3.23	9824436.59	31758405.9	7731958.6	SI (31758405.9/773195 8.6 = 4.11 >= 1.0)
5-5	2.30	3.23	9824720.33	31760558.7	7731958.6	SI (31760558.7/773195 8.6 = 4.11 >= 1.0)
5-6	2.30	3.23	9824374.29	31758296.1	7731958.6	SI (31758296.1/773195 8.6 = 4.11 >= 1.0)
5-7	2.30	3.23	9824374.29	31758296.1	7731958.6	SI (31758296.1/773195 8.6 = 4.11 >= 1.0)
5-8	2.30	3.23	9824720.33	31760558.7	7731958.6	SI (31760558.7/773195 8.6 = 4.11 >= 1.0)
5-9	2.30	3.23	9824720.33	31760558.7	7731958.6	SI (31760558.7/773195 8.6 = 4.11 >= 1.0)
5-10	2.30	3.23	9824374.29	31758296.1	7731958.6	SI (31758296.1/773195 8.6 = 4.11 >= 1.0)
5-11	2.30	3.23	9824374.29	31758296.1	7731958.6	SI (31758296.1/773195 8.6 = 4.11 >= 1.0)
5-12	2.30	3.23	9824720.33	31760558.7	7731958.6	SI (31760558.7/773195 8.6 = 4.11 >= 1.0)
5-13	2.30	3.23	9824436.59	31758405.9	7731958.6	SI (31758405.9/773195 8.6 = 4.11 >= 1.0)
5-14	2.30	3.23	9824090.56	31756143.5	7731958.6	SI (31756143.5/773195 8.6 = 4.11 >= 1.0)
5-15	2.30	3.23	9824090.56	31756143.5	7731958.6	SI (31756143.5/773195 8.6 = 4.11 >= 1.0)
5-16	2.30	3.23	9824436.59	31758405.9	7731958.6	SI (31758405.9/773195 8.6 = 4.11 >= 1.0)
6-1	2.30	3.23	9824957.97	31762604	7731958.6	SI (31762604/7731958. 6 = 4.11 >= 1.0)
6-2	2.30	3.23	9825040.64	31763142.2	7731958.6	SI (31763142.2/773195 8.6 = 4.11 >= 1.0)
6-3	2.30	3.23	9825040.64	31763142.2	7731958.6	SI (31763142.2/773195 8.6 = 4.11 >= 1.0)
6-4	2.30	3.23	9824957.97	31762604	7731958.6	SI (31762604/7731958. 6 = 4.11 >= 1.0)
6-5	2.30	3.23	9823770.25	31753560	7731958.6	SI (31753560/7731958. 6 = 4.11 >= 1.0)
6-6	2.30	3.23	9823852.91	31754098.2	7731958.6	SI (31754098.2/773195 8.6 = 4.11 >= 1.0)
6-7	2.30	3.23	9823852.91	31754098.2	7731958.6	SI

						(31754098.2/7731958.6 = 4.11 >= 1.0)
6-8	2.30	3.23	9823770.25	31753560	7731958.6	SI (31753560/7731958.6 = 4.11 >= 1.0)
6-9	2.30	3.23	9823770.25	31753560	7731958.6	SI (31753560/7731958.6 = 4.11 >= 1.0)
6-10	2.30	3.23	9823852.91	31754098.2	7731958.6	SI (31754098.2/7731958.6 = 4.11 >= 1.0)
6-11	2.30	3.23	9823852.91	31754098.2	7731958.6	SI (31754098.2/7731958.6 = 4.11 >= 1.0)
6-12	2.30	3.23	9823770.25	31753560	7731958.6	SI (31753560/7731958.6 = 4.11 >= 1.0)
6-13	2.30	3.23	9824957.97	31762604	7731958.6	SI (31762604/7731958.6 = 4.11 >= 1.0)
6-14	2.30	3.23	9825040.64	31763142.2	7731958.6	SI (31763142.2/7731958.6 = 4.11 >= 1.0)
6-15	2.30	3.23	9825040.64	31763142.2	7731958.6	SI (31763142.2/7731958.6 = 4.11 >= 1.0)
6-16	2.30	3.23	9824957.97	31762604	7731958.6	SI (31762604/7731958.6 = 4.11 >= 1.0)

2.1.4.3 SCORRIMENTO

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

Caso	γ_{su}	s_u [daN/cm ²]	a [daN/cm ²]	$\gamma_{R,h}$	$\gamma_{R,e}$	R_h [daN]	R_e [daN]
1-1	1.00	1	0.4	1.10	1.00	3770327.27	0
2-1	-	1	0.4	1.10	1.30	3441658.21	30954.92
2-2	-	1	0.4	1.10	1.30	3441453.81	30984.26
2-3	-	1	0.4	1.10	1.30	3441453.81	30984.26
2-4	-	1	0.4	1.10	1.30	3441658.21	30954.92
2-5	-	1	0.4	1.10	1.30	3441829.32	30961.87
2-6	-	1	0.4	1.10	1.30	3441624.9	30991.23
2-7	-	1	0.4	1.10	1.30	3441624.9	30991.23
2-8	-	1	0.4	1.10	1.30	3441829.32	30961.87
2-9	-	1	0.4	1.10	1.30	3441829.32	30961.87
2-10	-	1	0.4	1.10	1.30	3441624.9	30991.23
2-11	-	1	0.4	1.10	1.30	3441624.9	30991.23
2-12	-	1	0.4	1.10	1.30	3441829.32	30961.87
2-13	-	1	0.4	1.10	1.30	3441658.21	30954.92
2-14	-	1	0.4	1.10	1.30	3441453.81	30984.26
2-15	-	1	0.4	1.10	1.30	3441453.81	30984.26
2-16	-	1	0.4	1.10	1.30	3441658.21	30954.92
3-1	-	1	0.4	1.10	1.30	3441975.26	30991.27
3-2	-	1	0.4	1.10	1.30	3442024.09	30984.3
3-3	-	1	0.4	1.10	1.30	3442024.09	30984.3
3-4	-	1	0.4	1.10	1.30	3441975.26	30991.27
3-5	-	1	0.4	1.10	1.30	3441259.03	30961.92
3-6	-	1	0.4	1.10	1.30	3441307.85	30954.97
3-7	-	1	0.4	1.10	1.30	3441307.85	30954.97
3-8	-	1	0.4	1.10	1.30	3441259.03	30961.92
3-9	-	1	0.4	1.10	1.30	3441259.03	30961.92
3-10	-	1	0.4	1.10	1.30	3441307.85	30954.97
3-11	-	1	0.4	1.10	1.30	3441307.85	30954.97

3-12	-	1	0.4	1.10	1.30	3441259.03	30961.92
3-13	-	1	0.4	1.10	1.30	3441975.26	30991.27
3-14	-	1	0.4	1.10	1.30	3442024.09	30984.3
3-15	-	1	0.4	1.10	1.30	3442024.09	30984.3
3-16	-	1	0.4	1.10	1.30	3441975.26	30991.27
4-1	1.40	0.8	0.32	-	-	3317888	0
5-1	-	1	0.4	1.10	1.30	3572522.4	30954.92
5-2	-	1	0.4	1.10	1.30	3572396.57	30984.26
5-3	-	1	0.4	1.10	1.30	3572396.57	30984.26
5-4	-	1	0.4	1.10	1.30	3572522.4	30954.92
5-5	-	1	0.4	1.10	1.30	3572625.57	30961.87
5-6	-	1	0.4	1.10	1.30	3572499.74	30991.23
5-7	-	1	0.4	1.10	1.30	3572499.74	30991.23
5-8	-	1	0.4	1.10	1.30	3572625.57	30961.87
5-9	-	1	0.4	1.10	1.30	3572625.57	30961.87
5-10	-	1	0.4	1.10	1.30	3572499.74	30991.23
5-11	-	1	0.4	1.10	1.30	3572499.74	30991.23
5-12	-	1	0.4	1.10	1.30	3572625.57	30961.87
5-13	-	1	0.4	1.10	1.30	3572522.4	30954.92
5-14	-	1	0.4	1.10	1.30	3572396.57	30984.26
5-15	-	1	0.4	1.10	1.30	3572396.57	30984.26
5-16	-	1	0.4	1.10	1.30	3572522.4	30954.92
6-1	-	1	0.4	1.10	1.30	3572711.99	30991.27
6-2	-	1	0.4	1.10	1.30	3572742.05	30984.3
6-3	-	1	0.4	1.10	1.30	3572742.05	30984.3
6-4	-	1	0.4	1.10	1.30	3572711.99	30991.27
6-5	-	1	0.4	1.10	1.30	3572280.09	30961.92
6-6	-	1	0.4	1.10	1.30	3572310.15	30954.97
6-7	-	1	0.4	1.10	1.30	3572310.15	30954.97
6-8	-	1	0.4	1.10	1.30	3572280.09	30961.92
6-9	-	1	0.4	1.10	1.30	3572280.09	30961.92
6-10	-	1	0.4	1.10	1.30	3572310.15	30954.97
6-11	-	1	0.4	1.10	1.30	3572310.15	30954.97
6-12	-	1	0.4	1.10	1.30	3572280.09	30961.92
6-13	-	1	0.4	1.10	1.30	3572711.99	30991.27
6-14	-	1	0.4	1.10	1.30	3572742.05	30984.3
6-15	-	1	0.4	1.10	1.30	3572742.05	30984.3
6-16	-	1	0.4	1.10	1.30	3572711.99	30991.27

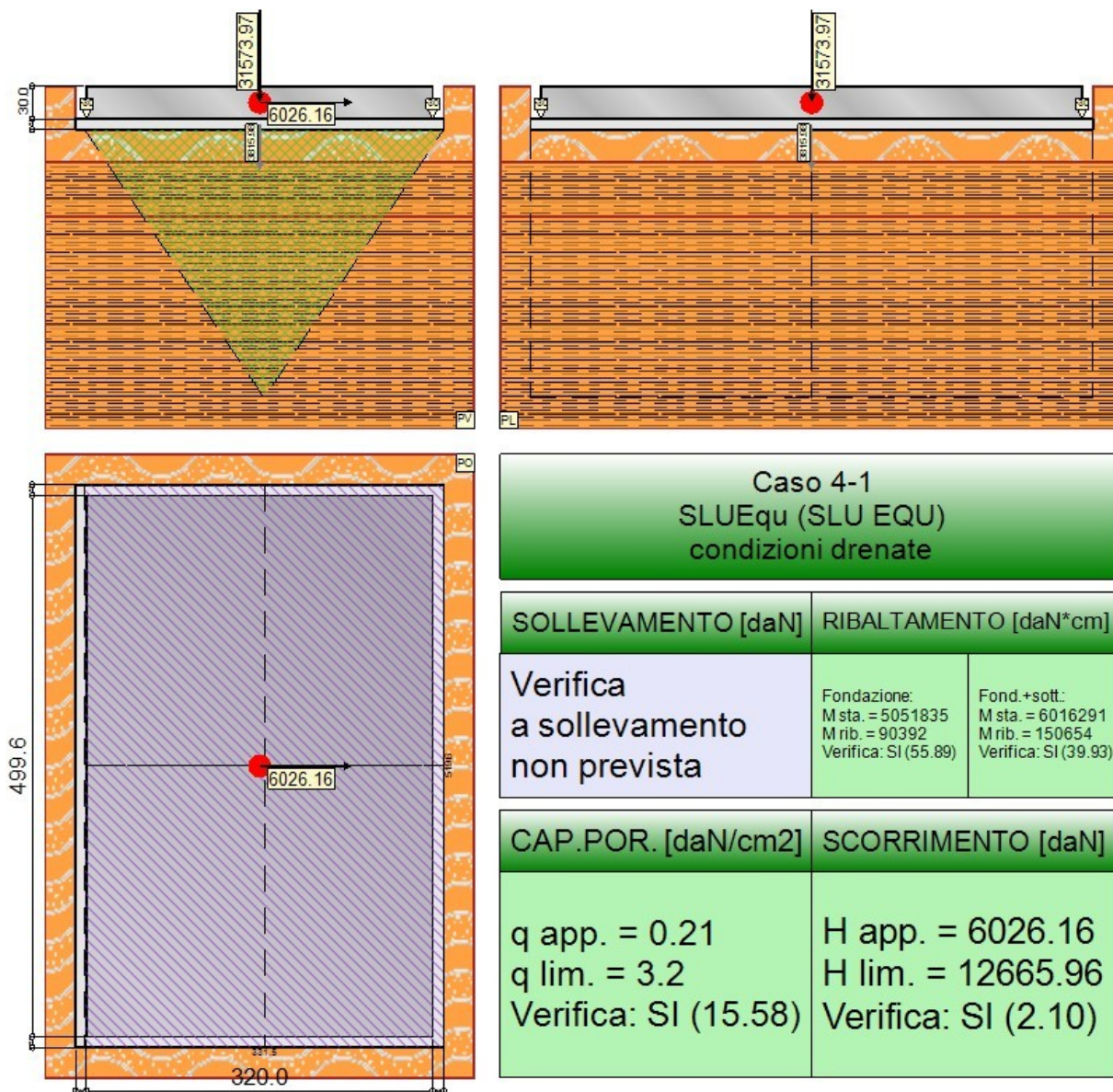
Segue il confronto fra la resistenza a scorrimento e l'azione applicata.

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	3770327.3	0	SI (3770327.3/0 = 1.00 \geq 1.0)
2-1	3472613.1	1554526.8	SI (3472613.1/1554526.8 = 2.23 \geq 1.0)
2-2	3472438.1	1555346.4	SI (3472438.1/1555346.4 = 2.23 \geq 1.0)
2-3	3472438.1	1555346.4	SI (3472438.1/1555346.4 = 2.23 \geq 1.0)
2-4	3472613.1	1554526.8	SI (3472613.1/1554526.8 = 2.23 \geq 1.0)
2-5	3472791.2	1552365.4	SI (3472791.2/1552365.4 = 2.24 \geq 1.0)
2-6	3472616.1	1553186.1	SI (3472616.1/1553186.1 = 2.24 \geq 1.0)
2-7	3472616.1	1553186.1	SI (3472616.1/1553186.1 = 2.24 \geq 1.0)
2-8	3472791.2	1552365.4	SI (3472791.2/1552365.4 = 2.24 \geq 1.0)
2-9	3472791.2	1552365.4	SI (3472791.2/1552365.4 = 2.24 \geq 1.0)
2-10	3472616.1	1553186.1	SI (3472616.1/1553186.1 = 2.24 \geq 1.0)
2-11	3472616.1	1553186.1	SI (3472616.1/1553186.1 = 2.24 \geq 1.0)

2-12	3472791.2	1552365.4	SI (3472791.2/1552365.4 = 2.24 >= 1.0)
2-13	3472613.1	1554526.8	SI (3472613.1/1554526.8 = 2.23 >= 1.0)
2-14	3472438.1	1555346.4	SI (3472438.1/1555346.4 = 2.23 >= 1.0)
2-15	3472438.1	1555346.4	SI (3472438.1/1555346.4 = 2.23 >= 1.0)
2-16	3472613.1	1554526.8	SI (3472613.1/1554526.8 = 2.23 >= 1.0)
3-1	3472966.5	1549397.2	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
3-2	3473008.4	1549202.2	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-3	3473008.4	1549202.2	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-4	3472966.5	1549397.2	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
3-5	3472220.9	1558509.7	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-6	3472262.8	1558315.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-7	3472262.8	1558315.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-8	3472220.9	1558509.7	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-9	3472220.9	1558509.7	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-10	3472262.8	1558315.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-11	3472262.8	1558315.8	SI (3472262.8/1558315.8 = 2.23 >= 1.0)
3-12	3472220.9	1558509.7	SI (3472220.9/1558509.7 = 2.23 >= 1.0)
3-13	3472966.5	1549397.2	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
3-14	3473008.4	1549202.2	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-15	3473008.4	1549202.2	SI (3473008.4/1549202.2 = 2.24 >= 1.0)
3-16	3472966.5	1549397.2	SI (3472966.5/1549397.2 = 2.24 >= 1.0)
4-1	3317888	0	SI (3317888/0 = 1.00 >= 1.0)
5-1	3603477.3	929607	SI (3603477.3/929607 = 3.88 >= 1.0)
5-2	3603380.8	930097.2	SI (3603380.8/930097.2 = 3.87 >= 1.0)
5-3	3603380.8	930097.2	SI (3603380.8/930097.2 = 3.87 >= 1.0)
5-4	3603477.3	929607	SI (3603477.3/929607 = 3.88 >= 1.0)
5-5	3603587.4	928314.5	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-6	3603491	928805.3	SI (3603491/928805.3 = 3.88 >= 1.0)
5-7	3603491	928805.3	SI (3603491/928805.3 = 3.88 >= 1.0)
5-8	3603587.4	928314.5	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-9	3603587.4	928314.5	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-10	3603491	928805.3	SI (3603491/928805.3 = 3.88 >= 1.0)
5-11	3603491	928805.3	SI (3603491/928805.3 = 3.88 >= 1.0)
5-12	3603587.4	928314.5	SI (3603587.4/928314.5 = 3.88 >= 1.0)
5-13	3603477.3	929607	SI (3603477.3/929607 = 3.88 >= 1.0)
5-14	3603380.8	930097.2	SI (3603380.8/930097.2 = 3.87 >= 1.0)
5-15	3603380.8	930097.2	SI (3603380.8/930097.2 = 3.87 >= 1.0)

			1.0)
5-16	3603477.3	929607	SI (3603477.3/929607 = 3.88 >= 1.0)
6-1	3603703.3	926539.5	SI (3603703.3/926539.5 = 3.89 >= 1.0)
6-2	3603726.4	926422.9	SI (3603726.4/926422.9 = 3.89 >= 1.0)
6-3	3603726.4	926422.9	SI (3603726.4/926422.9 = 3.89 >= 1.0)
6-4	3603703.3	926539.5	SI (3603703.3/926539.5 = 3.89 >= 1.0)
6-5	3603242	931988.8	SI (3603242/931988.8 = 3.87 >= 1.0)
6-6	3603265.1	931872.8	SI (3603265.1/931872.8 = 3.87 >= 1.0)
6-7	3603265.1	931872.8	SI (3603265.1/931872.8 = 3.87 >= 1.0)
6-8	3603242	931988.8	SI (3603242/931988.8 = 3.87 >= 1.0)
6-9	3603242	931988.8	SI (3603242/931988.8 = 3.87 >= 1.0)
6-10	3603265.1	931872.8	SI (3603265.1/931872.8 = 3.87 >= 1.0)
6-11	3603265.1	931872.8	SI (3603265.1/931872.8 = 3.87 >= 1.0)
6-12	3603242	931988.8	SI (3603242/931988.8 = 3.87 >= 1.0)
6-13	3603703.3	926539.5	SI (3603703.3/926539.5 = 3.89 >= 1.0)
6-14	3603726.4	926422.9	SI (3603726.4/926422.9 = 3.89 >= 1.0)
6-15	3603726.4	926422.9	SI (3603726.4/926422.9 = 3.89 >= 1.0)
6-16	3603703.3	926539.5	SI (3603703.3/926539.5 = 3.89 >= 1.0)

2.2 TRAVE TIPO DI FONDAZIONE TIPOLOGICA 2 - TRINCEE



2.2.1 DESCRIZIONE DEI CASI DI CALCOLO E RIASSUNTO DEI RISULTATI

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

Indici e nomi dei casi di carico			Elenco delle verifiche eseguite per ciascun caso				Sisma
Caso	Nome	Sestetti	Ver. dren.	Ver. non dren.	Ver. equ.	Ver. upl.	Coef. sism.
1	SLU SENZA SISMA (SLU Appr.2)	1-1	Si	Si	Si	No	Non sismico
1-1 Caso 1-1 Nodo 3786							
2	SLU con SISMAX PRINC (SLU)	2-1	Si	Si	Si	No	$k_{h,x}= 0.02$, $k_{h,y}= 0.00$

	Appr.2)						
2-1 Caso 4-1 Nodo 3786							
3	SLU con SISMAY PRINC (SLU Appr.2)	3-1	Si	Si	Si	No	$k_{h,x} = 0.00$, $k_{h,y} = 0.02$
3-1 Caso 5-1 Nodo 3786							
4	SLUEqu (SLU EQU)	4-1	Si	Si	Si	No	Non sismico
4-1 Caso 9-1 Nodo 3786							
5	SLD con SISMAY PRINC (SLD)	5-1	Si	Si	Si	No	$k_{h,x} = 0.01$, $k_{h,y} = 0.00$
5-1 Caso 6-1 Nodo 3786							
6	SLD con SISMAY PRINC (SLD)	6-1	Si	Si	Si	No	$k_{h,x} = 0.00$, $k_{h,y} = 0.01$
6-1 Caso 7-1 Nodo 3786							

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

Caso	$\gamma_{G1,fav}$	$\gamma_{G1,sfa}$	$\gamma_{G2,fav}$	$\gamma_{G2,sfa}$	$\gamma_{Q1,fav}$	$\gamma_{Q1,sfa}$
1	1.00	1.30	0.80	1.50	0.00	1.50
2	1.00	1.00	1.00	1.00	1.00	1.00
3	1.00	1.00	1.00	1.00	1.00	1.00
4	0.90	1.10	0.80	1.50	0.00	1.50
5	-	-	-	-	-	-
6	-	-	-	-	-	-

Caso	γ_γ	γ_ϕ	$\gamma_{c'}$	γ_{su}	$\gamma_{R,v}$	$\gamma_{R,h}$	$\gamma_{R,e}$	$\gamma_{R,eq}$	$\gamma_{R,upl}$
1	1.00	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
2	-	-	-	-	1.80	1.10	1.30	1.00	1.00
3	-	-	-	-	1.80	1.10	1.30	1.00	1.00
4	1.00	1.25	1.25	1.40	-	-	-	1.00	1.00
5	-	-	-	-	2.30	1.10	1.30	-	-
6	-	-	-	-	2.30	1.10	1.30	-	-

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

Caso	Fondazione		Verifica	Fondazione e Sottofondo		
	R_d [daN*cm]	E_d [daN*cm]		R_d [daN*cm]	E_d [daN*cm]	Verifica
1-1	6014950	90390	SI (6014950/90390 = 66.54 \geq 1.0)	7327920	150650	SI (7327920/150650 = 48.64 \geq 1.0)
2-1	4887200	53860	SI (4887200/53860 = 90.73 \geq 1.0)	5913450	89780	SI (5913450/89780 = 65.87 \geq 1.0)
3-1	9176650	58350	SI (9176650/58350 > 100)	10470990	97250	SI (10470990/97250 > 100)
4-1	5051840	90390	SI (5051840/90390 = 55.89 \geq 1.0)	6016290	150650	SI (6016290/150650 = 39.93 \geq 1.0)
5-1	4148190	56440	SI (4148190/56440 = 73.50 \geq 1.0)	5128250	94060	SI (5128250/94060 = 54.52 \geq 1.0)
6-1	6713280	59110	SI (6713280/59110 > 100)	7853660	98520	SI (7853660/98520 = 79.71 \geq 1.0)

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

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	43105.4	485722.5	SI (485722.5/43105.4 = 11.27 \geq 1.0)	43105.4	420022.3	SI (420022.3/43105.4 = 9.74 \geq 1.0)
2-1	34785	621458.8	SI (621458.8/34785 = 17.87 \geq 1.0)	34785	540040.2	SI (540040.2/34785 = 15.53 \geq 1.0)
3-1	61594.1	652477.8	SI (652477.8/61594.1 = 10.59 \geq 1.0)	61594.1	544159.5	SI (544159.5/61594.1 = 8.83 \geq 1.0)
4-1	35389.9	551214.3	SI (551214.3/35389.9 = 15.58 \geq 1.0)	35389.9	674886	SI (674886/35389.9 = 19.07 \geq 1.0)
5-1	30166.2	497576.9	SI (497576.9/30166.2 = 16.49 \geq 1.0)	30166.2	423203	SI (423203/30166.2 = 14.03 \geq 1.0)
6-1	46198	519769	SI (519769/46198 = 11.25 \geq 1.0)	46198	426481.5	SI (426481.5/46198 = 9.14 \geq 1.0)

			11.25 >= 1.0)			= 9.23 >= 1.0)
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Segue la tabella riassuntiva di tutte le verifiche di *resistenza a scorrimento*, i dettagli sono riportati nei paragrafi successivi.

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	6026	17268.7	SI (17268.7/6026 = 2.87 >= 1.0)	6026	41898.5	SI (41898.5/6026 = 6.95 >= 1.0)
2-1	3591	13896.3	SI (13896.3/3591 = 3.87 >= 1.0)	3591	39662.5	SI (39662.5/3591 = 11.04 >= 1.0)
3-1	3890	23991.4	SI (23991.4/3890 = 6.17 >= 1.0)	3890	39851.8	SI (39851.8/3890 = 10.24 >= 1.0)
4-1	6026.2	12666	SI (12666/6026.2 = 2.10 >= 1.0)	6026.2	35078.4	SI (35078.4/6026.2 = 5.82 >= 1.0)
5-1	3762.6	12157	SI (12157/3762.6 = 3.23 >= 1.0)	3762.6	39560.9	SI (39560.9/3762.6 = 10.51 >= 1.0)
6-1	3941	18193.9	SI (18193.9/3941 = 4.62 >= 1.0)	3941	39747.1	SI (39747.1/3941 = 10.09 >= 1.0)

2.2.2 DESCRIZIONE DEL METODO DI CALCOLO

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

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

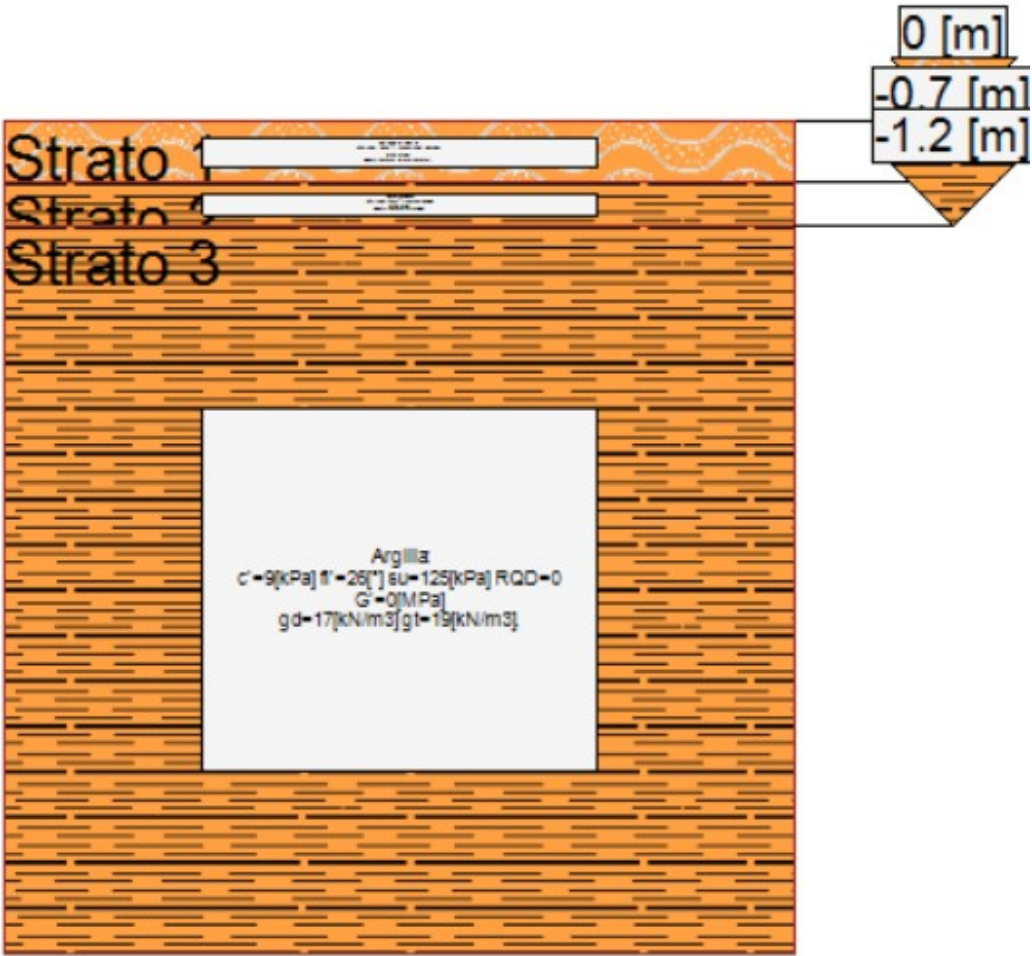
Per le verifiche in condizioni non drenate si utilizzando i coefficienti di capacità portante, quelli correttivi dovuti alla forma della fondazione (s), all'approfondimento (d), alla presenza di un'azione orizzontale (i), all'inclinazione del piano di posa (b) e del piano campagna (g), suggeriti da Brinch Hansen e Vesic (1970, 1973).

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

La resistenza a scorrimento, viene ottenuta sommando i contributi del carico normale al piano di posa moltiplicato per il coefficiente d'attrito, e dell'area del piano di posa (eventualmente ridotta per carico verticale eccentrico) per l'adesione fondazione-terreno. In condizioni drenate, l'attrito fondazione terreno è assunto pari all'angolo di resistenza al taglio del terreno moltiplicato per il coefficiente 0.75, l'adesione fondazione terreno è trascurata (assunta pari a 0). In condizioni non drenate, l'adesione fondazione terreno è assunta pari alla resistenza al taglio non drenata del terreno moltiplicata per il coefficiente 0.40. Si considera il contributo della pressione del terreno a lato della fondazione. La resistenza laterale del terreno è assunta pari alla resistenza passiva disponibile moltiplicata per 0.50.

2.2.3 DESCRIZIONE DEL TERRENO

La stratigrafia è eterogenea, presenta 3 strati								
n.	nome	z _i [cm]	z _f [cm]	γ _d [daN/cm ³]	γ _t [daN/cm ³]	c' [daN/cm ²]	φ' [°]	s _u [daN/cm ²]
1	Terreno di riporto	0	-70	0.0017	0.0019	0	30	0.5
2	Limo sabbioso	-70	-120	0.0017	0.0019	0.07	26	1
3	Argilla	-120	-960	0.0017	0.0019	0.09	26	1.25
La stratigrafia non contiene una falda								



2.2.4 VERIFICHE IN CONDIZIONI DRENATE

2.2.4.1 SOLLECITAZIONI AL PIANO DI POSA

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

Rispetto al sistema di rif. globale:								
Caso	F _x [daN]	F _y [daN]	F _z [daN]	M _x [daN*cm]	M _y [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	6026	0	-43105.42	0	0	0	0	25
2-1	3591	0	-34784.99	0	0	0	0	25
3-1	3890	0	-61594.06	0	0	0	0	25
4-1	6026.16	0	-35389.95	0	0	0	0	25
5-1	3762.56	0	-30166.17	0	0	0	0	25
6-1	3940.97	0	-46197.99	0	0	0	0	25
Rispetto al sistema di rif. locale (centro piano di posa):								
Caso	H _x [daN]	H _y [daN]	V _z [daN]	M _x [daN*cm]	M _y [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	6026	0	-43105.42	0	150650	-	-	-
2-1	3591	0	-34784.99	0	89775	-	-	-
3-1	3890	0	-61594.06	0	97250	-	-	-
4-1	6026.16	0	-35389.95	0	150654	-	-	-
5-1	3762.56	0	-30166.17	0	94064	-	-	-
6-1	3940.97	0	-46197.99	0	98524	-	-	-

Le sollecitazioni applicate provocano un' eccentricità lungo X (max = 4.26 [cm]), perciò le verifiche vengono eseguite sulla fondazione ridotta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	3.49	0	asse X	asse Y
2-1	2.58	0	asse X	asse Y
3-1	1.58	0	asse X	asse Y
4-1	4.26	0	asse X	asse Y
5-1	3.12	0	asse X	asse Y
6-1	2.13	0	asse X	asse Y

2.2.4.2 CAPACITÀ PORTANTE

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

Caso	γ_ϕ	γ_γ	ϕ [°]	γ' [daN/cm ³]	N_γ	s_γ	d_γ	$i_{b\gamma}$	$i_{l\gamma}$	b_γ	g_γ	h_γ	$q'_{lim,\gamma}$ [daN/cm ²]
1-1	1.00	1.00	26.8	0.0017	14.12	1.17	1.00	0.78	1.00	1.00	1.00	-	3.63
2-1	-	-	26.8	0.0017	14.11	1.17	1.00	0.84	1.00	1.00	1.00	0.91	3.6
3-1	-	-	26.8	0.0017	14.10	1.17	1.00	0.88	1.00	1.00	1.00	0.91	3.79
4-1	1.25	1.00	22.1	0.0017	7.23	1.14	1.00	0.75	1.00	1.00	1.00	-	1.74
5-1	-	-	26.8	0.0017	14.12	1.17	1.00	0.82	1.00	1.00	1.00	0.96	3.71
6-1	-	-	26.8	0.0017	14.11	1.17	1.00	0.86	1.00	1.00	1.00	0.96	3.89
Caso	$\gamma_{c'}$	c' [daN/cm ²]	N_c	s_c	d_c	i_{bc}	i_{lc}	b_c	g_c	h_c	$q'_{lim,c}$ [daN/cm ²]		
1-1	1.00	0.07	23.64	1.34	1.04	0.84	1.00	1.00	1.00	-	1.82		
2-1	-	0.07	23.64	1.34	1.04	0.89	1.00	1.00	1.00	0.96	1.86		
3-1	-	0.07	23.63	1.34	1.04	0.92	1.00	1.00	1.00	0.96	1.92		
4-1	1.25	0.05	17.00	1.28	1.04	0.81	1.00	1.00	1.00	-	0.93		
5-1	-	0.07	23.64	1.34	1.04	0.88	1.00	1.00	1.00	0.99	1.87		
6-1	-	0.07	23.63	1.34	1.04	0.90	1.00	1.00	1.00	0.99	1.92		
Caso	q' [daN/cm ²]	N_q	s_q	d_q	i_{bq}	i_{lq}	b_q	g_q	h_q	$q'_{lim,q}$ [daN/cm ²]			
1-1	0.07	12.96	1.17	1.04	0.86	1.00	1.00	1.00	-	0.91			
2-1	0.07	12.95	1.17	1.04	0.90	1.00	1.00	1.00	0.95	0.91			
3-1	0.07	12.95	1.17	1.04	0.93	1.00	1.00	1.00	0.95	0.94			
4-1	0.07	7.91	1.14	1.04	0.83	1.00	1.00	1.00	-	0.53			
5-1	0.07	12.96	1.17	1.04	0.89	1.00	1.00	1.00	0.98	0.93			
6-1	0.07	12.95	1.17	1.04	0.91	1.00	1.00	1.00	0.98	0.95			

Segue il confronto fra la pressione limite ed applicata.

Caso	$\gamma_{R,v}$	q'_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	2.81	173033.73	485722.5	43105.4	SI (485722.5/43105.4 = 11.27 \geq 1.0)
2-1	1.80	3.57	173983.64	621458.8	34785	SI (621458.8/34785 = 17.87 \geq 1.0)
3-1	1.80	3.73	175024.9	652477.8	61594.1	SI (652477.8/61594.1 = 10.59 \geq 1.0)
4-1	-	3.2	172241.8	551214.3	35389.9	SI (551214.3/35389.9 = 15.58 \geq 1.0)
5-1	2.30	2.87	173425.23	497576.9	30166.2	SI (497576.9/30166.2 = 16.49 \geq 1.0)
6-1	2.30	2.98	174449.42	519769	46198	SI (519769/46198 = 11.25 \geq 1.0)

2.2.4.3 SCORRIMENTO

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

Caso	γ_w	γ'_v	ϕ [°]	c' [daN/cm ²]	δ [°]	a [daN/cm ²]	$\gamma_{R,h}$	$\gamma_{R,e}$	R_h [daN]	R_e [daN]
1-1	1.00	1.00	30	0	22.5	0	1.10	1.00	16231.68	1037.04
2-1	-	-	30	0	22.5	0	1.10	1.30	13098.56	797.73
3-1	-	-	30	0	22.5	0	1.10	1.30	23193.72	797.73
4-1	1.25	1.25	24.8	0	18.6	0	-	-	11905.54	760.42
5-1	-	-	30	0	22.5	0	1.10	1.30	11359.3	797.73
6-1	-	-	30	0	22.5	0	1.10	1.30	17396.21	797.73

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

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	17268.7	6026	SI (17268.7/6026 = 2.87 \geq 1.0)
2-1	13896.3	3591	SI (13896.3/3591 = 3.87 \geq 1.0)
3-1	23991.4	3890	SI (23991.4/3890 = 6.17 \geq 1.0)
4-1	12666	6026.2	SI (12666/6026.2 = 2.10 \geq 1.0)
5-1	12157	3762.6	SI (12157/3762.6 = 3.23 \geq 1.0)
6-1	18193.9	3941	SI (18193.9/3941 = 4.62 \geq 1.0)

2.2.5 VERIFICHE IN CONDIZIONI NON DRENATE

2.2.5.1 SOLLECITAZIONI AL PIANO DI POSA

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

Rispetto al sistema di rif. globale:								
Caso	Fx [daN]	Fy [daN]	Fz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	6026	0	-43105.42	0	0	0	0	25
2-1	3591	0	-34784.99	0	0	0	0	25
3-1	3890	0	-61594.06	0	0	0	0	25
4-1	6026.16	0	-35389.95	0	0	0	0	25
5-1	3762.56	0	-30166.17	0	0	0	0	25
6-1	3940.97	0	-46197.99	0	0	0	0	25
Rispetto al sistema di rif. locale (centro piano di posa):								
Caso	Hx [daN]	Hy [daN]	Vz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	6026	0	-43105.42	0	150650	-	-	-
2-1	3591	0	-34784.99	0	89775	-	-	-
3-1	3890	0	-61594.06	0	97250	-	-	-
4-1	6026.16	0	-35389.95	0	150654	-	-	-
5-1	3762.56	0	-30166.17	0	94064	-	-	-
6-1	3940.97	0	-46197.99	0	98524	-	-	-

Le sollecitazioni applicate provocano un' eccentricità lungo X (max = 4.26 [cm]), perciò le verifiche vengono

eseguite sulla fondazione ridotta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	3.49	0	asse X	asse Y
2-1	2.58	0	asse X	asse Y
3-1	1.58	0	asse X	asse Y
4-1	4.26	0	asse X	asse Y
5-1	3.12	0	asse X	asse Y
6-1	2.13	0	asse X	asse Y

2.2.4.2 CAPACITÀ PORTANTE

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

Caso	γ_{su}	γ_γ	s_u [daN/cm ²]	γ [daN/cm ³]	q_t [daN/cm ²]	N_c	s_c	d_c	i_{bc}	i_{lc}	b_c	g_c	t_γ [daN/cm ²]	$q_{lim,c}$ [daN/cm ²]	$q_{lim,q}$ [daN/cm ²]
1-1	1.00	1.00	0.9	0.0017	0.07	5.14	1.13	1.05	0.99	1.00	1.00	1.00	0	5.43	0.07
2-1	-	-	0.91	0.0017	0.07	5.14	1.13	1.05	0.99	1.00	1.00	1.00	0	5.46	0.07
3-1	-	-	0.91	0.0017	0.07	5.14	1.13	1.05	0.99	1.00	1.00	1.00	0	5.47	0.07
4-1	1.40	1.00	0.64	0.0017	0.07	5.14	1.13	1.05	0.98	1.00	1.00	1.00	0	3.85	0.07
5-1	-	-	0.9	0.0017	0.07	5.14	1.13	1.05	0.99	1.00	1.00	1.00	0	5.46	0.07
6-1	-	-	0.91	0.0017	0.07	5.14	1.13	1.05	0.99	1.00	1.00	1.00	0	5.47	0.07

Segue il confronto fra la pressione limite ed applicata.

Caso	$\gamma_{R,v}$	q_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	2.43	173033.73	420022.3	43105.4	SI (420022.3/43105.4 = 9.74 >= 1.0)
2-1	1.80	3.1	173983.64	540040.2	34785	SI (540040.2/34785 = 15.53 >= 1.0)
3-1	1.80	3.11	175024.9	544159.5	61594.1	SI (544159.5/61594.1 = 8.83 >= 1.0)
4-1	-	3.92	172241.8	674886	35389.9	SI (674886/35389.9 = 19.07 >= 1.0)
5-1	2.30	2.44	173425.23	423203	30166.2	SI (423203/30166.2 = 14.03 >= 1.0)
6-1	2.30	2.44	174449.42	426481.5	46198	SI (426481.5/46198 = 9.23 >= 1.0)

2.2.4.3 SCORRIMENTO

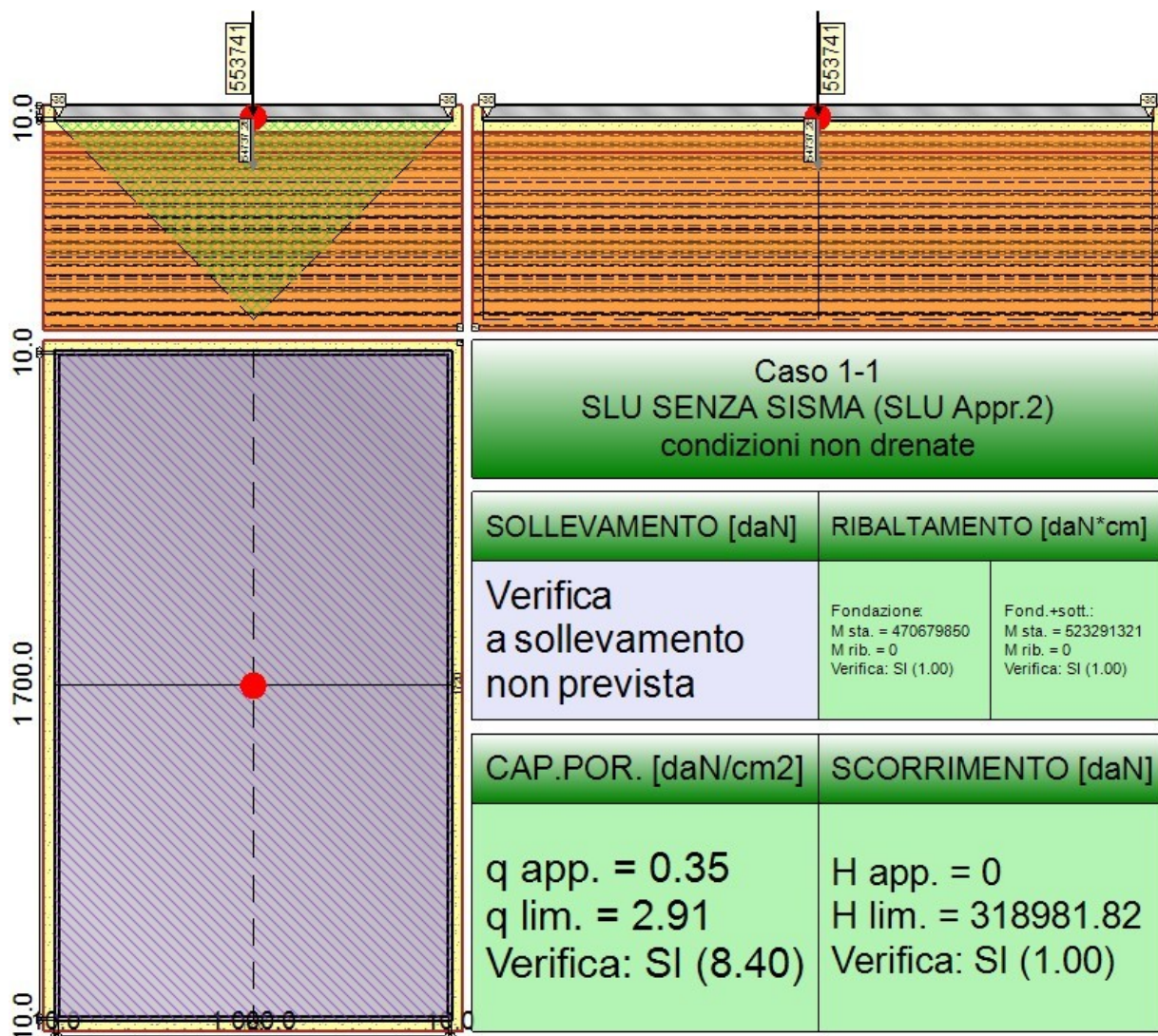
Le seguenti tabelle elencano il valore dell'angolo di resistenza al taglio, della coesione efficace, dell'attrito e dell'aderenza fondazione-terreno, e della resistenza disponibile sul piano di posa e sulle pareti laterali.

Caso	γ_{su}	s_u [daN/cm ²]	a [daN/cm ²]	$\gamma_{R,h}$	$\gamma_{R,e}$	R_h [daN]	R_e [daN]
1-1	1.00	0.5	0.2	1.10	1.00	31460.68	10437.78
2-1	-	0.5	0.2	1.10	1.30	31633.39	8029.06
3-1	-	0.5	0.2	1.10	1.30	31822.71	8029.06
4-1	1.40	0.4	0.16	-	-	27558.69	7519.76
5-1	-	0.5	0.2	1.10	1.30	31531.86	8029.06
6-1	-	0.5	0.2	1.10	1.30	31718.08	8029.06

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

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	41898.5	6026	SI (41898.5/6026 = 6.95 >= 1.0)
2-1	39662.5	3591	SI (39662.5/3591 = 11.04 >= 1.0)
3-1	39851.8	3890	SI (39851.8/3890 = 10.24 >= 1.0)
4-1	35078.4	6026.2	SI (35078.4/6026.2 = 5.82 >= 1.0)
5-1	39560.9	3762.6	SI (39560.9/3762.6 = 10.51 >= 1.0)
6-1	39747.1	3941	SI (39747.1/3941 = 10.09 >= 1.0)

2.3 PLATEA DI FONDIZIONE TIPOLOGICA 3 - UFFICI E CABINE



2.3.1 DESCRIZIONE DEI CASI DI CALCOLO E RIASSUNTO DEI RISULTATI

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

Indici e nomi dei casi di carico			Elenco delle verifiche eseguite per ciascun caso				Sisma
Caso	Nome	Sestetti	Ver. dren.	Ver. non dren.	Ver. equ.	Ver. upl.	Coef. sism.
1	SLU SENZA SISMA (SLU Appr.2)	1-1	Si	Si	Si	No	Non sismico
1-1 Caso 1-1							
2	SLU con SISMAL PRINC (SLU Appr.2)	da 2-1 a 2-16	Si	Si	Si	No	$k_{h,x} = 0.02$, $k_{h,y} = 0.00$
2-1 Caso 4-1; 2-2 Caso 4-2; 2-3 Caso 4-3; 2-4 Caso 4-4; 2-5 Caso 4-5; 2-6 Caso 4-6; 2-7 Caso 4-7; 2-8 Caso 4-8; 2-9 Caso 4-9; 2-10 Caso 4-10; 2-11 Caso 4-11; 2-12 Caso 4-12; 2-13 Caso 4-13; 2-14 Caso 4-14; 2-15 Caso 4-15; 2-16 Caso 4-16							
3	SLU con SISMAL da 3-1	da 3-1	Si	Si	Si	No	$k_{h,x} = 0.00$, $k_{h,y} = 0.00$

	PRINC (SLU Appr.2)	3-16					0.02
3-1 Caso 5-1; 3-2 Caso 5-2; 3-3 Caso 5-3; 3-4 Caso 5-4; 3-5 Caso 5-5; 3-6 Caso 5-6; 3-7 Caso 5-7; 3-8 Caso 5-8; 3-9 Caso 5-9; 3-10 Caso 5-10; 3-11 Caso 5-11; 3-12 Caso 5-12; 3-13 Caso 5-13; 3-14 Caso 5-14; 3-15 Caso 5-15; 3-16 Caso 5-16							
4	SLUEqu (SLU EQU)	4-1	Si	Si	Si	No	Non sismico
4-1 Caso 9-1							
5	SLD con SISMAY PRINC (SLD)	da 5-1 a 5-16	Si	Si	Si	No	$k_{h,x} = 0.01, k_{h,y} = 0.00$
5-1 Caso 6-1; 5-2 Caso 6-2; 5-3 Caso 6-3; 5-4 Caso 6-4; 5-5 Caso 6-5; 5-6 Caso 6-6; 5-7 Caso 6-7; 5-8 Caso 6-8; 5-9 Caso 6-9; 5-10 Caso 6-10; 5-11 Caso 6-11; 5-12 Caso 6-12; 5-13 Caso 6-13; 5-14 Caso 6-14; 5-15 Caso 6-15; 5-16 Caso 6-16							
6	SLD con SISMAY PRINC (SLD)	da 6-1 a 6-16	Si	Si	Si	No	$k_{h,x} = 0.00, k_{h,y} = 0.01$
6-1 Caso 7-1; 6-2 Caso 7-2; 6-3 Caso 7-3; 6-4 Caso 7-4; 6-5 Caso 7-5; 6-6 Caso 7-6; 6-7 Caso 7-7; 6-8 Caso 7-8; 6-9 Caso 7-9; 6-10 Caso 7-10; 6-11 Caso 7-11; 6-12 Caso 7-12; 6-13 Caso 7-13; 6-14 Caso 7-14; 6-15 Caso 7-15; 6-16 Caso 7-16							

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

Caso	$\gamma_{G1,fav}$	$\gamma_{G1,sfa}$	$\gamma_{G2,fav}$	$\gamma_{G2,sfa}$	$\gamma_{Q1,fav}$	$\gamma_{Q1,sfa}$			
1	1.00	1.30	0.80	1.50	0.00	1.50			
2	1.00	1.00	1.00	1.00	1.00	1.00			
3	1.00	1.00	1.00	1.00	1.00	1.00			
4	0.90	1.10	0.80	1.50	0.00	1.50			
5	-	-	-	-	-	-			
6	-	-	-	-	-	-			
Caso	γ_{γ}	γ_{ϕ}	$\gamma_{c'}$	γ_{su}	$\gamma_{R,v}$	$\gamma_{R,h}$	$\gamma_{R,e}$	$\gamma_{R,equ}$	$\gamma_{R,upl}$
1	1.00	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
2	-	-	-	-	1.80	1.10	1.30	1.00	1.00
3	-	-	-	-	1.80	1.10	1.30	1.00	1.00
4	1.00	1.25	1.25	1.40	-	-	-	1.00	1.00
5	-	-	-	-	2.30	1.10	1.30	-	-
6	-	-	-	-	2.30	1.10	1.30	-	-

Segue la tabella riassuntiva di tutte le verifiche a ribaltamento.

Caso	Fondazione			Fondazione e Sottotondo		
	R_d [daN*cm]	E_d [daN*cm]	Verifica	R_d [daN*cm]	E_d [daN*cm]	Verifica
1-1	470679850	0	SI (470679850/0 = 1.00 >= 1.0)	523291320	0	SI (523291320/0 = 1.00 >= 1.0)
2-1	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-2	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-3	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-4	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-5	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-6	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-7	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-8	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-9	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-10	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-11	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-12	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)
2-13	290649850	0	SI (290649850/0 = 1.00 >= 1.0)	330280080	0	SI (330280080/0 = 1.00 >= 1.0)

[illegible]

5-13	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
5-14	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
5-15	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
5-16	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-1	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-2	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-3	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-4	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-5	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-6	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-7	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-8	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-9	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-10	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-11	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-12	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-13	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-14	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-15	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=
6-16	290649850	0	SI (290649850/0 1.00 >= 1.0)	=	330280080	0	SI (330280080/0 1.00 >= 1.0)	=

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

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	608478.3	12638325.6	SI (12638325.6/608478.3 = 20.77 >= 1.0)	608478.3	5112690.6	SI (5112690.6/608478.3 = 8.40 >= 1.0)
2-1	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-2	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-3	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-4	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-5	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-6	384046.6	14778502.9	SI	384046.6	6499743.8	SI

[illegible]

			(14778502.9/384046.6 = 38.48 >= 1.0)			(6499743.8/384046.6 = 16.92 >= 1.0)
3-13	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-14	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-15	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-16	384046.6	14778502.9	SI (14778502.9/384046.6 = 38.48 >= 1.0)	384046.6	6499743.8	SI (6499743.8/384046.6 = 16.92 >= 1.0)
4-1	540600	14933668.4	SI (14933668.4/540600 = 27.62 >= 1.0)	540600	8322728	SI (8322728/540600 = 15.40 >= 1.0)
5-1	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-2	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-3	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-4	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-5	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-6	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-7	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-8	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-9	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-10	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-11	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-12	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-13	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-14	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-15	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
5-16	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-1	384046.6	12213294	SI	384046.6	5112690.6	SI

			(12213294/384046.6 = 31.80 >= 1.0)			(5112690.6/384046.6 = 13.31 >= 1.0)
6-2	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-3	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-4	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-5	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-6	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-7	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-8	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-9	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-10	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-11	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-12	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-13	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-14	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-15	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-16	384046.6	12213294	SI (12213294/384046.6 = 31.80 >= 1.0)	384046.6	5112690.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)

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

Caso	Cond. drenate				Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica		E_d [daN]	R_d [daN]	Verifica
1-1	0	229127.2	SI (229127.2/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)
2-1	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)
2-2	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)
2-3	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)
2-4	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)
2-5	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)
2-6	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)

[illegible]

5-6	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-7	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-8	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-9	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-10	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-11	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-12	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-13	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-14	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-15	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
5-16	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-1	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-2	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-3	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-4	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-5	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-6	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-7	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-8	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-9	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-10	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-11	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-12	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-13	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-14	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-15	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=
6-16	0	144615.7	SI (144615.7/0 1.00 >= 1.0)	=	0	318981.8	SI (318981.8/0 1.00 >= 1.0)	=

2.3.2 DESCRIZIONE DEL METODO DI CALCOLO

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

Per le verifiche in condizioni drenate, si utilizzano i coefficienti di capacità portante N_q (Prandtl, 1921), N_c (Reissner, 1924), N_{γ} (Vesic, 1973), i coefficienti correttivi dovuti alla forma della fondazione (s , Meyerhof, 1951 e 1963), all'approfondimento (d , Brinch Hansen, 1970), all'inclinazione del carico (i , Vesic, 1973), all'inclinazione

del piano di posa (b, Vesic, 1973), all'inclinazione del piano campagna (g, Vesic, 1973).

Per le verifiche in condizioni non drenate si utilizzando i coefficienti di capacità portante, quelli correttivi dovuti alla forma della fondazione (s), all'approfondimento (d), alla presenza di un'azione orizzontale (i), all'inclinazione del piano di posa (b) e del piano campagna (g), suggeriti da Brinch Hansen e Vesic (1970, 1973).

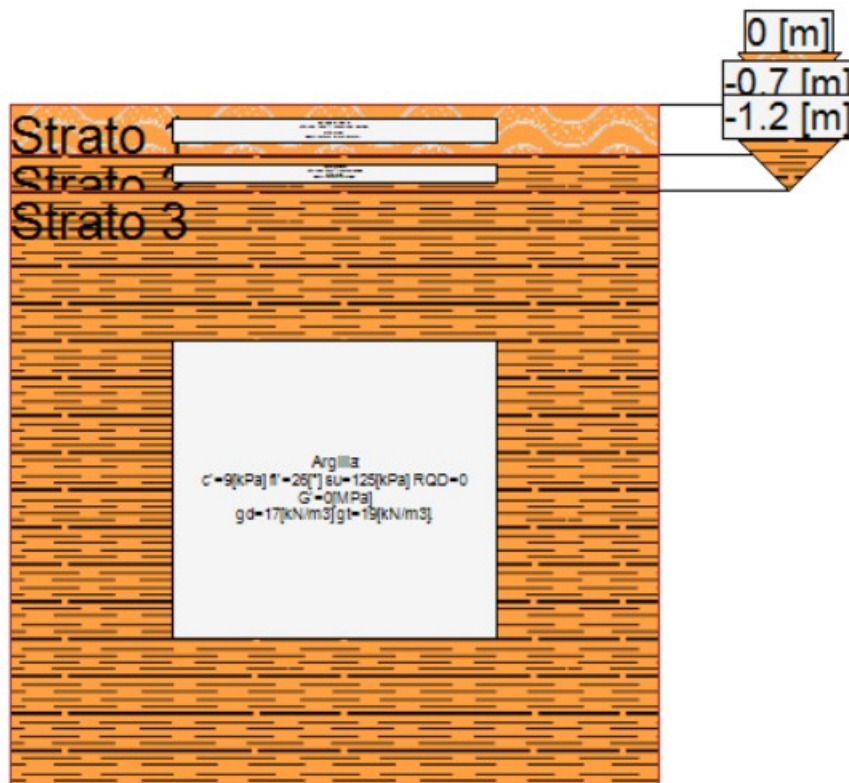
Nel caso di terreno eterogeneo (litologie differenti, presenza di falda), i parametri meccanici utilizzati nel calcolo sono ottenuti come media ponderata dei valori rinvenuti all'interno del cuneo di rottura.

La resistenza a scorrimento, viene ottenuta sommando i contributi del carico normale al piano di posa moltiplicato per il coefficiente d'attrito, e dell'area del piano di posa (eventualmente ridotta per carico verticale eccentrico) per l'adesione fondazione-terreno. In condizioni drenate, l'attrito fondazione terreno è assunto pari all'angolo di resistenza al taglio del terreno moltiplicato per il coefficiente 0.75, l'adesione fondazione terreno è trascurata (assunta pari a 0). In condizioni non drenate, l'adesione fondazione terreno è assunta pari alla resistenza al taglio non drenata del terreno moltiplicata per il coefficiente 0.40. Si considera il contributo della pressione del terreno a lato della fondazione. La resistenza laterale del terreno è assunta pari alla resistenza passiva disponibile moltiplicata per 0.50.

2.3.3 DESCRIZIONE DEL TERRENO

La stratigrafia è eterogenea, presenta 4 strati							
n.	nome	z_i [cm]	z_f [cm]	γ_d [kN/m ³]	γ_t [kN/m ³]	c' [kPa]	ϕ' [°]
1	Terreno di riporto	0	-100	17	19	0	30
2	Ghiaia e sabbia con ciottoli	-100	-190	18.5	20.5	0	63.9
3	Limi sabbiosi	-190	-370	17	19	0	30.3
4	Ghiaia e sabbia con ciottoli	-370	-600	18.5	20.5	0	43.5

La stratigrafia non contiene una falda



2.3.4 VERIFICHE IN CONDIZIONI DRENATE

2.3.4.1 SOLLECITAZIONI AL PIANO DI POSA

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

Rispetto al sistema di rif. globale:								
Caso	Fx [daN]	Fy [daN]	Fz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-608478.28	0	0	0	0	10
2-1	0	0	-384046.6	0	0	0	0	10
2-2	0	0	-384046.6	0	0	0	0	10
2-3	0	0	-384046.6	0	0	0	0	10
2-4	0	0	-384046.6	0	0	0	0	10
2-5	0	0	-384046.6	0	0	0	0	10
2-6	0	0	-384046.6	0	0	0	0	10
2-7	0	0	-384046.6	0	0	0	0	10
2-8	0	0	-384046.6	0	0	0	0	10
2-9	0	0	-384046.6	0	0	0	0	10
2-10	0	0	-384046.6	0	0	0	0	10
2-11	0	0	-384046.6	0	0	0	0	10
2-12	0	0	-384046.6	0	0	0	0	10
2-13	0	0	-384046.6	0	0	0	0	10
2-14	0	0	-384046.6	0	0	0	0	10
2-15	0	0	-384046.6	0	0	0	0	10
2-16	0	0	-384046.6	0	0	0	0	10
3-1	0	0	-384046.6	0	0	0	0	10
3-2	0	0	-384046.6	0	0	0	0	10
3-3	0	0	-384046.6	0	0	0	0	10
3-4	0	0	-384046.6	0	0	0	0	10
3-5	0	0	-384046.6	0	0	0	0	10
3-6	0	0	-384046.6	0	0	0	0	10
3-7	0	0	-384046.6	0	0	0	0	10
3-8	0	0	-384046.6	0	0	0	0	10
3-9	0	0	-384046.6	0	0	0	0	10
3-10	0	0	-384046.6	0	0	0	0	10
3-11	0	0	-384046.6	0	0	0	0	10
3-12	0	0	-384046.6	0	0	0	0	10
3-13	0	0	-384046.6	0	0	0	0	10
3-14	0	0	-384046.6	0	0	0	0	10
3-15	0	0	-384046.6	0	0	0	0	10
3-16	0	0	-384046.6	0	0	0	0	10
4-1	0	0	-540600.04	0	0	0	0	10
5-1	0	0	-384046.6	0	0	0	0	10
5-2	0	0	-384046.6	0	0	0	0	10
5-3	0	0	-384046.6	0	0	0	0	10
5-4	0	0	-384046.6	0	0	0	0	10
5-5	0	0	-384046.6	0	0	0	0	10
5-6	0	0	-384046.6	0	0	0	0	10
5-7	0	0	-384046.6	0	0	0	0	10
5-8	0	0	-384046.6	0	0	0	0	10
5-9	0	0	-384046.6	0	0	0	0	10
5-10	0	0	-384046.6	0	0	0	0	10
5-11	0	0	-384046.6	0	0	0	0	10
5-12	0	0	-384046.6	0	0	0	0	10
5-13	0	0	-384046.6	0	0	0	0	10
5-14	0	0	-384046.6	0	0	0	0	10
5-15	0	0	-384046.6	0	0	0	0	10
5-16	0	0	-384046.6	0	0	0	0	10
6-1	0	0	-384046.6	0	0	0	0	10
6-2	0	0	-384046.6	0	0	0	0	10
6-3	0	0	-384046.6	0	0	0	0	10
6-4	0	0	-384046.6	0	0	0	0	10
6-5	0	0	-384046.6	0	0	0	0	10
6-6	0	0	-384046.6	0	0	0	0	10

6-7	0	0	-384046.6	0	0	0	0	10
6-8	0	0	-384046.6	0	0	0	0	10
6-9	0	0	-384046.6	0	0	0	0	10
6-10	0	0	-384046.6	0	0	0	0	10
6-11	0	0	-384046.6	0	0	0	0	10
6-12	0	0	-384046.6	0	0	0	0	10
6-13	0	0	-384046.6	0	0	0	0	10
6-14	0	0	-384046.6	0	0	0	0	10
6-15	0	0	-384046.6	0	0	0	0	10
6-16	0	0	-384046.6	0	0	0	0	10
Rispetto al sistema di rif. locale (centro piano di posa):								
Caso	Hx [daN]	Hy [daN]	Vz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-608478.28	0	0	-	-	-
2-1	0	0	-384046.6	0	0	-	-	-
2-2	0	0	-384046.6	0	0	-	-	-
2-3	0	0	-384046.6	0	0	-	-	-
2-4	0	0	-384046.6	0	0	-	-	-
2-5	0	0	-384046.6	0	0	-	-	-
2-6	0	0	-384046.6	0	0	-	-	-
2-7	0	0	-384046.6	0	0	-	-	-
2-8	0	0	-384046.6	0	0	-	-	-
2-9	0	0	-384046.6	0	0	-	-	-
2-10	0	0	-384046.6	0	0	-	-	-
2-11	0	0	-384046.6	0	0	-	-	-
2-12	0	0	-384046.6	0	0	-	-	-
2-13	0	0	-384046.6	0	0	-	-	-
2-14	0	0	-384046.6	0	0	-	-	-
2-15	0	0	-384046.6	0	0	-	-	-
2-16	0	0	-384046.6	0	0	-	-	-
3-1	0	0	-384046.6	0	0	-	-	-
3-2	0	0	-384046.6	0	0	-	-	-
3-3	0	0	-384046.6	0	0	-	-	-
3-4	0	0	-384046.6	0	0	-	-	-
3-5	0	0	-384046.6	0	0	-	-	-
3-6	0	0	-384046.6	0	0	-	-	-
3-7	0	0	-384046.6	0	0	-	-	-
3-8	0	0	-384046.6	0	0	-	-	-
3-9	0	0	-384046.6	0	0	-	-	-
3-10	0	0	-384046.6	0	0	-	-	-
3-11	0	0	-384046.6	0	0	-	-	-
3-12	0	0	-384046.6	0	0	-	-	-
3-13	0	0	-384046.6	0	0	-	-	-
3-14	0	0	-384046.6	0	0	-	-	-
3-15	0	0	-384046.6	0	0	-	-	-
3-16	0	0	-384046.6	0	0	-	-	-
4-1	0	0	-540600.04	0	0	-	-	-
5-1	0	0	-384046.6	0	0	-	-	-
5-2	0	0	-384046.6	0	0	-	-	-
5-3	0	0	-384046.6	0	0	-	-	-
5-4	0	0	-384046.6	0	0	-	-	-
5-5	0	0	-384046.6	0	0	-	-	-
5-6	0	0	-384046.6	0	0	-	-	-
5-7	0	0	-384046.6	0	0	-	-	-
5-8	0	0	-384046.6	0	0	-	-	-
5-9	0	0	-384046.6	0	0	-	-	-
5-10	0	0	-384046.6	0	0	-	-	-
5-11	0	0	-384046.6	0	0	-	-	-
5-12	0	0	-384046.6	0	0	-	-	-
5-13	0	0	-384046.6	0	0	-	-	-
5-14	0	0	-384046.6	0	0	-	-	-
5-15	0	0	-384046.6	0	0	-	-	-
5-16	0	0	-384046.6	0	0	-	-	-
6-1	0	0	-384046.6	0	0	-	-	-
6-2	0	0	-384046.6	0	0	-	-	-

6-3	0	0	-384046.6	0	0	-	-	-
6-4	0	0	-384046.6	0	0	-	-	-
6-5	0	0	-384046.6	0	0	-	-	-
6-6	0	0	-384046.6	0	0	-	-	-
6-7	0	0	-384046.6	0	0	-	-	-
6-8	0	0	-384046.6	0	0	-	-	-
6-9	0	0	-384046.6	0	0	-	-	-
6-10	0	0	-384046.6	0	0	-	-	-
6-11	0	0	-384046.6	0	0	-	-	-
6-12	0	0	-384046.6	0	0	-	-	-
6-13	0	0	-384046.6	0	0	-	-	-
6-14	0	0	-384046.6	0	0	-	-	-
6-15	0	0	-384046.6	0	0	-	-	-
6-16	0	0	-384046.6	0	0	-	-	-

Le sollecitazioni applicate non provocano un' eccentricità, perciò la fondazione non viene ridotta per le verifiche, ma si adotta un'impronta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	0	0	asse X	asse Y
2-1	0	0	asse X	asse Y
2-2	0	0	asse X	asse Y
2-3	0	0	asse X	asse Y
2-4	0	0	asse X	asse Y
2-5	0	0	asse X	asse Y
2-6	0	0	asse X	asse Y
2-7	0	0	asse X	asse Y
2-8	0	0	asse X	asse Y
2-9	0	0	asse X	asse Y
2-10	0	0	asse X	asse Y
2-11	0	0	asse X	asse Y
2-12	0	0	asse X	asse Y
2-13	0	0	asse X	asse Y
2-14	0	0	asse X	asse Y
2-15	0	0	asse X	asse Y
2-16	0	0	asse X	asse Y
3-1	0	0	asse X	asse Y
3-2	0	0	asse X	asse Y
3-3	0	0	asse X	asse Y
3-4	0	0	asse X	asse Y
3-5	0	0	asse X	asse Y
3-6	0	0	asse X	asse Y
3-7	0	0	asse X	asse Y
3-8	0	0	asse X	asse Y
3-9	0	0	asse X	asse Y
3-10	0	0	asse X	asse Y
3-11	0	0	asse X	asse Y
3-12	0	0	asse X	asse Y
3-13	0	0	asse X	asse Y
3-14	0	0	asse X	asse Y
3-15	0	0	asse X	asse Y
3-16	0	0	asse X	asse Y
4-1	0	0	asse X	asse Y
5-1	0	0	asse X	asse Y
5-2	0	0	asse X	asse Y
5-3	0	0	asse X	asse Y
5-4	0	0	asse X	asse Y
5-5	0	0	asse X	asse Y
5-6	0	0	asse X	asse Y
5-7	0	0	asse X	asse Y
5-8	0	0	asse X	asse Y
5-9	0	0	asse X	asse Y
5-10	0	0	asse X	asse Y
5-11	0	0	asse X	asse Y

5-12	0	0	asse X	asse Y
5-13	0	0	asse X	asse Y
5-14	0	0	asse X	asse Y
5-15	0	0	asse X	asse Y
5-16	0	0	asse X	asse Y
6-1	0	0	asse X	asse Y
6-2	0	0	asse X	asse Y
6-3	0	0	asse X	asse Y
6-4	0	0	asse X	asse Y
6-5	0	0	asse X	asse Y
6-6	0	0	asse X	asse Y
6-7	0	0	asse X	asse Y
6-8	0	0	asse X	asse Y
6-9	0	0	asse X	asse Y
6-10	0	0	asse X	asse Y
6-11	0	0	asse X	asse Y
6-12	0	0	asse X	asse Y
6-13	0	0	asse X	asse Y
6-14	0	0	asse X	asse Y
6-15	0	0	asse X	asse Y
6-16	0	0	asse X	asse Y

2.3.4.2 CAPACITÀ PORTANTE

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

Caso	γ_ϕ	γ_γ	ϕ [°]	γ' [daN/cm ³]	N_γ	s_γ	d_γ	$i_{b\gamma}$	$i_{i\gamma}$	b_γ	g_γ	h_γ	$q'_{lim,\gamma}$ [daN/cm ²]
1-1	1.00	1.00	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	-	13.06
2-1	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-2	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-3	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-4	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-5	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-6	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-7	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-8	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-9	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-10	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-11	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-12	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-13	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-14	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-15	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
2-16	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-1	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-2	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-3	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-4	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-5	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-6	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-7	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-8	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-9	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-10	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-11	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-12	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-13	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-14	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-15	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
3-16	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.91	11.83
4-1	1.25	1.00	21.6	0.0017	6.73	1.13	1.00	1.00	1.00	1.00	1.00	-	6.58

5-1	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-2	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-3	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-4	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-5	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-6	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-7	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-8	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-9	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-10	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-11	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-12	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-13	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-14	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-15	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
5-16	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-1	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-2	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-3	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-4	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-5	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-6	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-7	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-8	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-9	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-10	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-11	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-12	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-13	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-14	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-15	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
6-16	-	-	26.3	0.0017	13.06	1.15	1.00	1.00	1.00	1.00	1.00	0.96	12.56
Caso	γ_c	c' [daN/cm ²]	N _c	s _c	d _c	i _{bc}	i _{lc}	b _c	g _c	h _c	$q^{lim,c}$ [daN/cm ²]		
1-1	1.00	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	-	2.45		
2-1	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-2	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-3	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-4	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-5	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-6	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-7	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-8	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-9	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-10	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-11	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-12	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-13	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-14	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-15	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
2-16	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-1	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-2	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-3	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-4	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-5	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-6	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-7	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-8	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-9	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-10	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-11	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-12	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		
3-13	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36		

3-14	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36
3-15	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36
3-16	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.96	2.36
4-1	1.25	0.06	16.43	1.26	1.01	1.00	1.00	1.00	1.00	-	1.35
5-1	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-2	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-3	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-4	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-5	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-6	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-7	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-8	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-9	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-10	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-11	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-12	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-13	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-14	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-15	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
5-16	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-1	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-2	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-3	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-4	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-5	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-6	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-7	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-8	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-9	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-10	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-11	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-12	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-13	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-14	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-15	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
6-16	-	0.08	22.72	1.31	1.01	1.00	1.00	1.00	1.00	0.99	2.41
Caso	q' [daN/cm²]	N _q	s _q	d _q	i _{bq}	i _{iq}	b _q	g _q	h _q	q' _{lim,q} [daN/cm²]	
1-1	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	-	0.97	
2-1	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-2	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-3	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-4	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-5	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-6	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-7	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-8	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-9	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-10	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-11	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-12	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-13	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-14	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-15	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
2-16	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-1	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-2	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-3	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-4	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-5	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-6	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-7	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-8	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	
3-9	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92	

3-10	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92
3-11	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92
3-12	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92
3-13	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92
3-14	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92
3-15	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92
3-16	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.95	0.92
4-1	0.07	7.50	1.13	1.01	1.00	1.00	1.00	1.00	-	0.58
5-1	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-2	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-3	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-4	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-5	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-6	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-7	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-8	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-9	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-10	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-11	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-12	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-13	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-14	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-15	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
5-16	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-1	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-2	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-3	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-4	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-5	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-6	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-7	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-8	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-9	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-10	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-11	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-12	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-13	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-14	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-15	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95
6-16	0.07	12.22	1.15	1.01	1.00	1.00	1.00	1.00	0.98	0.95

Segue il confronto fra la pressione limite ed applicata.

Caso	$\gamma_{R,v}$	q'_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	7.2	1754400	12638325.6	608478.3	SI (12638325.6/608478.3 = 20.77 >= 1.0)
2-1	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-2	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-3	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-4	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-5	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-6	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)

2-7	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-8	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-9	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-10	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-11	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-12	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-13	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-14	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-15	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
2-16	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-1	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-2	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-3	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-4	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-5	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-6	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-7	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-8	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-9	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-10	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-11	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-12	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)

3-13	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-14	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-15	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
3-16	1.80	8.42	1754400	14778502.9	384046.6	SI (14778502.9/384046.6 = 38.48 >= 1.0)
4-1	-	8.51	1754400	14933668.4	540600	SI (14933668.4/540600 = 27.62 >= 1.0)
5-1	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-2	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-3	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-4	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-5	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-6	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-7	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-8	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-9	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-10	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-11	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-12	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-13	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-14	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-15	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
5-16	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-1	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)

6-2	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-3	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-4	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-5	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-6	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-7	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-8	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-9	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-10	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-11	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-12	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-13	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-14	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-15	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)
6-16	2.30	6.96	1754400	12213294	384046.6	SI (12213294/384046.6 = 31.80 >= 1.0)

2.3.4.3 SCORRIMENTO

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

Caso	γ_{φ}	$\gamma_{c'}$	φ [°]	c' [daN/cm ²]	δ [°]	a [daN/cm ²]	$\gamma_{R,h}$	$\gamma_{R,e}$	R_h [daN]	R_e [daN]
1-1	1.00	1.00	30	0	22.5	0	1.10	1.00	229127.23	0
2-1	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-2	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-3	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-4	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-5	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-6	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-7	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-8	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-9	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-10	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-11	-	-	30	0	22.5	0	1.10	1.30	144615.74	0

2-12	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-13	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-14	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-15	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
2-16	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-1	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-2	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-3	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-4	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-5	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-6	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-7	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-8	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-9	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-10	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-11	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-12	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-13	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-14	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-15	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
3-16	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
4-1	1.25	1.25	24.8	0	18.6	0	-	-	181863.33	0
5-1	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-2	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-3	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-4	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-5	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-6	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-7	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-8	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-9	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-10	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-11	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-12	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-13	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-14	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-15	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
5-16	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-1	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-2	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-3	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-4	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-5	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-6	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-7	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-8	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-9	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-10	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-11	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-12	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-13	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-14	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-15	-	-	30	0	22.5	0	1.10	1.30	144615.74	0
6-16	-	-	30	0	22.5	0	1.10	1.30	144615.74	0

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

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	229127.2	0	SI (229127.2/0 = 1.00 >= 1.0)
2-1	144615.7	0	SI (144615.7/0 = 1.00 >= 1.0)
2-2	144615.7	0	SI (144615.7/0 = 1.00 >= 1.0)
2-3	144615.7	0	SI (144615.7/0 = 1.00 >= 1.0)
2-4	144615.7	0	SI (144615.7/0 = 1.00 >= 1.0)

[illegible]

2.3.5 VERIFICHE IN CONDIZIONI NON DRENATE

2.3.5.1 SOLLECITAZIONI AL PIANO DI POSA

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

Rispetto al sistema di rif. globale:								
Caso	Fx [daN]	Fy [daN]	Fz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-608478.28	0	0	0	0	10
2-1	0	0	-384046.6	0	0	0	0	10
2-2	0	0	-384046.6	0	0	0	0	10
2-3	0	0	-384046.6	0	0	0	0	10
2-4	0	0	-384046.6	0	0	0	0	10
2-5	0	0	-384046.6	0	0	0	0	10
2-6	0	0	-384046.6	0	0	0	0	10
2-7	0	0	-384046.6	0	0	0	0	10
2-8	0	0	-384046.6	0	0	0	0	10
2-9	0	0	-384046.6	0	0	0	0	10
2-10	0	0	-384046.6	0	0	0	0	10
2-11	0	0	-384046.6	0	0	0	0	10
2-12	0	0	-384046.6	0	0	0	0	10
2-13	0	0	-384046.6	0	0	0	0	10
2-14	0	0	-384046.6	0	0	0	0	10
2-15	0	0	-384046.6	0	0	0	0	10
2-16	0	0	-384046.6	0	0	0	0	10
3-1	0	0	-384046.6	0	0	0	0	10
3-2	0	0	-384046.6	0	0	0	0	10
3-3	0	0	-384046.6	0	0	0	0	10
3-4	0	0	-384046.6	0	0	0	0	10
3-5	0	0	-384046.6	0	0	0	0	10
3-6	0	0	-384046.6	0	0	0	0	10
3-7	0	0	-384046.6	0	0	0	0	10
3-8	0	0	-384046.6	0	0	0	0	10
3-9	0	0	-384046.6	0	0	0	0	10
3-10	0	0	-384046.6	0	0	0	0	10
3-11	0	0	-384046.6	0	0	0	0	10
3-12	0	0	-384046.6	0	0	0	0	10
3-13	0	0	-384046.6	0	0	0	0	10
3-14	0	0	-384046.6	0	0	0	0	10
3-15	0	0	-384046.6	0	0	0	0	10
3-16	0	0	-384046.6	0	0	0	0	10
4-1	0	0	-540600.04	0	0	0	0	10
5-1	0	0	-384046.6	0	0	0	0	10
5-2	0	0	-384046.6	0	0	0	0	10
5-3	0	0	-384046.6	0	0	0	0	10
5-4	0	0	-384046.6	0	0	0	0	10
5-5	0	0	-384046.6	0	0	0	0	10
5-6	0	0	-384046.6	0	0	0	0	10
5-7	0	0	-384046.6	0	0	0	0	10
5-8	0	0	-384046.6	0	0	0	0	10
5-9	0	0	-384046.6	0	0	0	0	10
5-10	0	0	-384046.6	0	0	0	0	10
5-11	0	0	-384046.6	0	0	0	0	10
5-12	0	0	-384046.6	0	0	0	0	10
5-13	0	0	-384046.6	0	0	0	0	10
5-14	0	0	-384046.6	0	0	0	0	10
5-15	0	0	-384046.6	0	0	0	0	10
5-16	0	0	-384046.6	0	0	0	0	10
6-1	0	0	-384046.6	0	0	0	0	10
6-2	0	0	-384046.6	0	0	0	0	10
6-3	0	0	-384046.6	0	0	0	0	10
6-4	0	0	-384046.6	0	0	0	0	10
6-5	0	0	-384046.6	0	0	0	0	10
6-6	0	0	-384046.6	0	0	0	0	10

6-7	0	0	-384046.6	0	0	0	0	10
6-8	0	0	-384046.6	0	0	0	0	10
6-9	0	0	-384046.6	0	0	0	0	10
6-10	0	0	-384046.6	0	0	0	0	10
6-11	0	0	-384046.6	0	0	0	0	10
6-12	0	0	-384046.6	0	0	0	0	10
6-13	0	0	-384046.6	0	0	0	0	10
6-14	0	0	-384046.6	0	0	0	0	10
6-15	0	0	-384046.6	0	0	0	0	10
6-16	0	0	-384046.6	0	0	0	0	10
Rispetto al sistema di rif. locale (centro piano di posa):								
Caso	Hx [daN]	Hy [daN]	Vz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-608478.28	0	0	-	-	-
2-1	0	0	-384046.6	0	0	-	-	-
2-2	0	0	-384046.6	0	0	-	-	-
2-3	0	0	-384046.6	0	0	-	-	-
2-4	0	0	-384046.6	0	0	-	-	-
2-5	0	0	-384046.6	0	0	-	-	-
2-6	0	0	-384046.6	0	0	-	-	-
2-7	0	0	-384046.6	0	0	-	-	-
2-8	0	0	-384046.6	0	0	-	-	-
2-9	0	0	-384046.6	0	0	-	-	-
2-10	0	0	-384046.6	0	0	-	-	-
2-11	0	0	-384046.6	0	0	-	-	-
2-12	0	0	-384046.6	0	0	-	-	-
2-13	0	0	-384046.6	0	0	-	-	-
2-14	0	0	-384046.6	0	0	-	-	-
2-15	0	0	-384046.6	0	0	-	-	-
2-16	0	0	-384046.6	0	0	-	-	-
3-1	0	0	-384046.6	0	0	-	-	-
3-2	0	0	-384046.6	0	0	-	-	-
3-3	0	0	-384046.6	0	0	-	-	-
3-4	0	0	-384046.6	0	0	-	-	-
3-5	0	0	-384046.6	0	0	-	-	-
3-6	0	0	-384046.6	0	0	-	-	-
3-7	0	0	-384046.6	0	0	-	-	-
3-8	0	0	-384046.6	0	0	-	-	-
3-9	0	0	-384046.6	0	0	-	-	-
3-10	0	0	-384046.6	0	0	-	-	-
3-11	0	0	-384046.6	0	0	-	-	-
3-12	0	0	-384046.6	0	0	-	-	-
3-13	0	0	-384046.6	0	0	-	-	-
3-14	0	0	-384046.6	0	0	-	-	-
3-15	0	0	-384046.6	0	0	-	-	-
3-16	0	0	-384046.6	0	0	-	-	-
4-1	0	0	-540600.04	0	0	-	-	-
5-1	0	0	-384046.6	0	0	-	-	-
5-2	0	0	-384046.6	0	0	-	-	-
5-3	0	0	-384046.6	0	0	-	-	-
5-4	0	0	-384046.6	0	0	-	-	-
5-5	0	0	-384046.6	0	0	-	-	-
5-6	0	0	-384046.6	0	0	-	-	-
5-7	0	0	-384046.6	0	0	-	-	-
5-8	0	0	-384046.6	0	0	-	-	-
5-9	0	0	-384046.6	0	0	-	-	-
5-10	0	0	-384046.6	0	0	-	-	-
5-11	0	0	-384046.6	0	0	-	-	-
5-12	0	0	-384046.6	0	0	-	-	-
5-13	0	0	-384046.6	0	0	-	-	-
5-14	0	0	-384046.6	0	0	-	-	-
5-15	0	0	-384046.6	0	0	-	-	-
5-16	0	0	-384046.6	0	0	-	-	-
6-1	0	0	-384046.6	0	0	-	-	-
6-2	0	0	-384046.6	0	0	-	-	-

6-3	0	0	-384046.6	0	0	-	-	-
6-4	0	0	-384046.6	0	0	-	-	-
6-5	0	0	-384046.6	0	0	-	-	-
6-6	0	0	-384046.6	0	0	-	-	-
6-7	0	0	-384046.6	0	0	-	-	-
6-8	0	0	-384046.6	0	0	-	-	-
6-9	0	0	-384046.6	0	0	-	-	-
6-10	0	0	-384046.6	0	0	-	-	-
6-11	0	0	-384046.6	0	0	-	-	-
6-12	0	0	-384046.6	0	0	-	-	-
6-13	0	0	-384046.6	0	0	-	-	-
6-14	0	0	-384046.6	0	0	-	-	-
6-15	0	0	-384046.6	0	0	-	-	-
6-16	0	0	-384046.6	0	0	-	-	-

Le sollecitazioni applicate non provocano un' eccentricità, perciò la fondazione non viene ridotta per le verifiche, ma si adotta un'impronta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	0	0	asse X	asse Y
2-1	0	0	asse X	asse Y
2-2	0	0	asse X	asse Y
2-3	0	0	asse X	asse Y
2-4	0	0	asse X	asse Y
2-5	0	0	asse X	asse Y
2-6	0	0	asse X	asse Y
2-7	0	0	asse X	asse Y
2-8	0	0	asse X	asse Y
2-9	0	0	asse X	asse Y
2-10	0	0	asse X	asse Y
2-11	0	0	asse X	asse Y
2-12	0	0	asse X	asse Y
2-13	0	0	asse X	asse Y
2-14	0	0	asse X	asse Y
2-15	0	0	asse X	asse Y
2-16	0	0	asse X	asse Y
3-1	0	0	asse X	asse Y
3-2	0	0	asse X	asse Y
3-3	0	0	asse X	asse Y
3-4	0	0	asse X	asse Y
3-5	0	0	asse X	asse Y
3-6	0	0	asse X	asse Y
3-7	0	0	asse X	asse Y
3-8	0	0	asse X	asse Y
3-9	0	0	asse X	asse Y
3-10	0	0	asse X	asse Y
3-11	0	0	asse X	asse Y
3-12	0	0	asse X	asse Y
3-13	0	0	asse X	asse Y
3-14	0	0	asse X	asse Y
3-15	0	0	asse X	asse Y
3-16	0	0	asse X	asse Y
4-1	0	0	asse X	asse Y
5-1	0	0	asse X	asse Y
5-2	0	0	asse X	asse Y
5-3	0	0	asse X	asse Y
5-4	0	0	asse X	asse Y
5-5	0	0	asse X	asse Y
5-6	0	0	asse X	asse Y
5-7	0	0	asse X	asse Y
5-8	0	0	asse X	asse Y
5-9	0	0	asse X	asse Y
5-10	0	0	asse X	asse Y
5-11	0	0	asse X	asse Y

5-12	0	0	asse X	asse Y
5-13	0	0	asse X	asse Y
5-14	0	0	asse X	asse Y
5-15	0	0	asse X	asse Y
5-16	0	0	asse X	asse Y
6-1	0	0	asse X	asse Y
6-2	0	0	asse X	asse Y
6-3	0	0	asse X	asse Y
6-4	0	0	asse X	asse Y
6-5	0	0	asse X	asse Y
6-6	0	0	asse X	asse Y
6-7	0	0	asse X	asse Y
6-8	0	0	asse X	asse Y
6-9	0	0	asse X	asse Y
6-10	0	0	asse X	asse Y
6-11	0	0	asse X	asse Y
6-12	0	0	asse X	asse Y
6-13	0	0	asse X	asse Y
6-14	0	0	asse X	asse Y
6-15	0	0	asse X	asse Y
6-16	0	0	asse X	asse Y

2.3.5.2 CAPACITÀ PORTANTE

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

Caso	γ_{su}	γ_γ	s_u [daN/cm ²]	γ [daN/cm ³]	q_t [daN/cm ²]	N_c	s_c	d_c	i_{bc}	i_{lc}	b_c	g_c	t_γ [daN/cm ²]	$q_{lim,c}$ [daN/cm ²]	$q_{lim,q}$ [daN/cm ²]
1-1	1.00	1.00	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-1	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-2	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-3	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-4	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-5	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-6	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-7	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-8	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-9	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-10	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-11	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-12	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-13	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-14	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-15	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
2-16	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-1	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-2	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-3	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-4	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-5	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-6	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-7	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-8	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-9	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-10	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-11	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-12	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-13	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-14	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-15	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
3-16	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07

4-1	1.40	1.00	0.8	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	4.68	0.07
5-1	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-2	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-3	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-4	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-5	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-6	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-7	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-8	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-9	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-10	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-11	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-12	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-13	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-14	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-15	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
5-16	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-1	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-2	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-3	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-4	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-5	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-6	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-7	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-8	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-9	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-10	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-11	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-12	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-13	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-14	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-15	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07
6-16	-	-	1.12	0.0017	0.07	5.14	1.12	1.02	1.00	1.00	1.00	1.00	0	6.55	0.07

Segue il confronto fra la pressione limite ed applicata.

Caso	$\gamma_{R,v}$	q_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	2.91	1754400	5112690.6	608478.3	SI (5112690.6/608478.3 = 8.40 >= 1.0)
2-1	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-2	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-3	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-4	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-5	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-6	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-7	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-8	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-9	1.80	3.7	1754400	6499743.8	384046.6	SI

						(6499743.8/384046.6 = 16.92 >= 1.0)
2-10	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-11	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-12	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-13	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-14	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-15	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
2-16	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-1	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-2	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-3	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-4	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-5	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-6	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-7	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-8	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-9	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-10	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-11	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-12	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-13	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-14	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 >= 1.0)
3-15	1.80	3.7	1754400	6499743.8	384046.6	SI

						(6499743.8/384046.6 = 16.92 ≥ 1.0)
3-16	1.80	3.7	1754400	6499743.8	384046.6	SI (6499743.8/384046.6 = 16.92 ≥ 1.0)
4-1	-	4.74	1754400	8322728	540600	SI (8322728/540600 = 15.40 ≥ 1.0)
5-1	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-2	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-3	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-4	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-5	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-6	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-7	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-8	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-9	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-10	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-11	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-12	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-13	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-14	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-15	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
5-16	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
6-1	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
6-2	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
6-3	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 ≥ 1.0)
6-4	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6

						= 13.31 >= 1.0)
6-5	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-6	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-7	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-8	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-9	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-10	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-11	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-12	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-13	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-14	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-15	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)
6-16	2.30	2.91	1754400	5112690.6	384046.6	SI (5112690.6/384046.6 = 13.31 >= 1.0)

2.3.5.3 SCORRIMENTO

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

Caso	γ_{su}	s_u [daN/cm ²]	a [daN/cm ²]	$\gamma_{R,h}$	$\gamma_{R,e}$	R_h [daN]	R_e [daN]
1-1	1.00	0.5	0.2	1.10	1.00	318981.82	0
2-1	-	0.5	0.2	1.10	1.30	318981.82	0
2-2	-	0.5	0.2	1.10	1.30	318981.82	0
2-3	-	0.5	0.2	1.10	1.30	318981.82	0
2-4	-	0.5	0.2	1.10	1.30	318981.82	0
2-5	-	0.5	0.2	1.10	1.30	318981.82	0
2-6	-	0.5	0.2	1.10	1.30	318981.82	0
2-7	-	0.5	0.2	1.10	1.30	318981.82	0
2-8	-	0.5	0.2	1.10	1.30	318981.82	0
2-9	-	0.5	0.2	1.10	1.30	318981.82	0
2-10	-	0.5	0.2	1.10	1.30	318981.82	0
2-11	-	0.5	0.2	1.10	1.30	318981.82	0
2-12	-	0.5	0.2	1.10	1.30	318981.82	0
2-13	-	0.5	0.2	1.10	1.30	318981.82	0
2-14	-	0.5	0.2	1.10	1.30	318981.82	0
2-15	-	0.5	0.2	1.10	1.30	318981.82	0
2-16	-	0.5	0.2	1.10	1.30	318981.82	0
3-1	-	0.5	0.2	1.10	1.30	318981.82	0
3-2	-	0.5	0.2	1.10	1.30	318981.82	0
3-3	-	0.5	0.2	1.10	1.30	318981.82	0

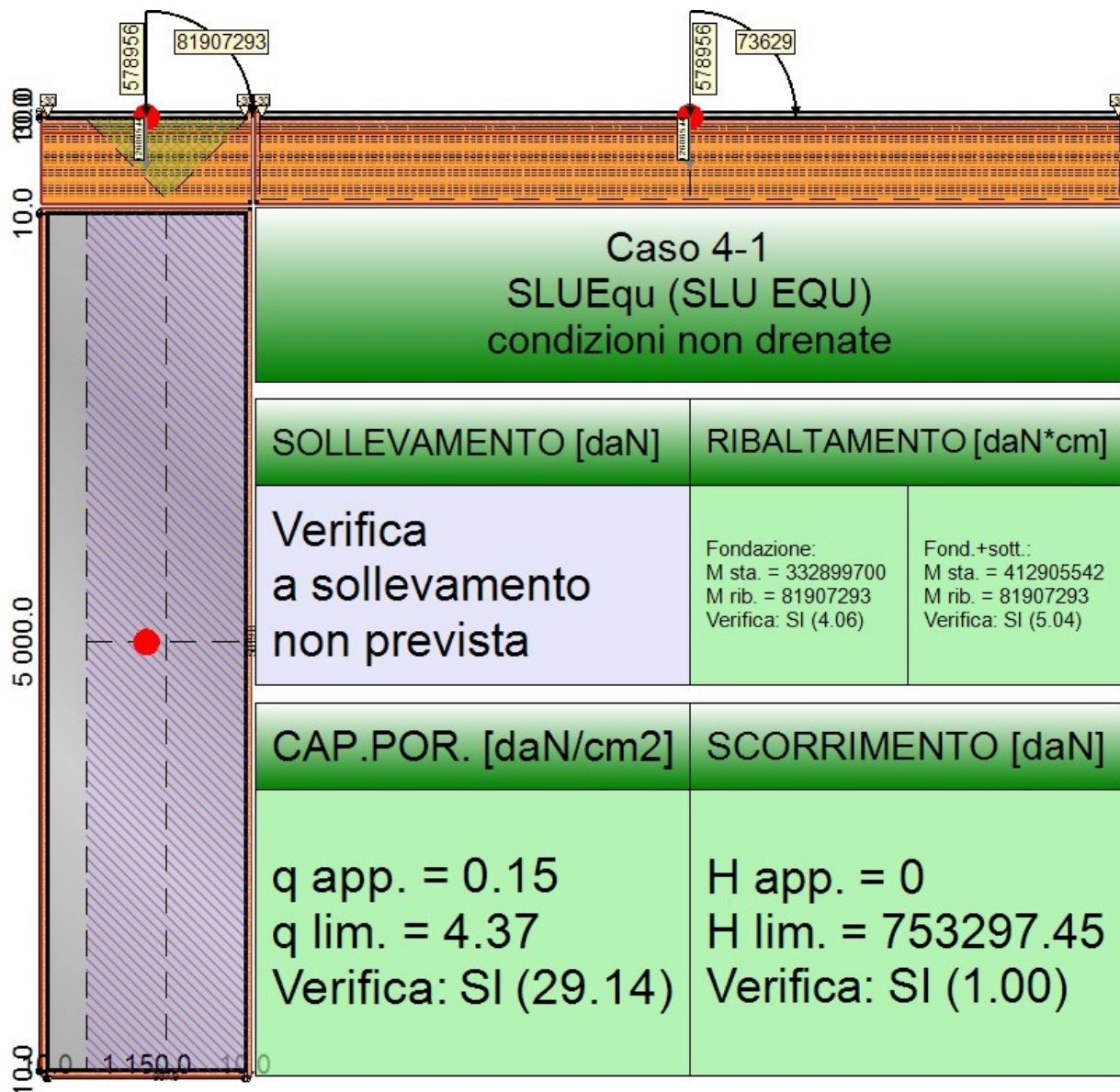
3-4	-	0.5	0.2	1.10	1.30	318981.82	0
3-5	-	0.5	0.2	1.10	1.30	318981.82	0
3-6	-	0.5	0.2	1.10	1.30	318981.82	0
3-7	-	0.5	0.2	1.10	1.30	318981.82	0
3-8	-	0.5	0.2	1.10	1.30	318981.82	0
3-9	-	0.5	0.2	1.10	1.30	318981.82	0
3-10	-	0.5	0.2	1.10	1.30	318981.82	0
3-11	-	0.5	0.2	1.10	1.30	318981.82	0
3-12	-	0.5	0.2	1.10	1.30	318981.82	0
3-13	-	0.5	0.2	1.10	1.30	318981.82	0
3-14	-	0.5	0.2	1.10	1.30	318981.82	0
3-15	-	0.5	0.2	1.10	1.30	318981.82	0
3-16	-	0.5	0.2	1.10	1.30	318981.82	0
4-1	1.40	0.4	0.16	-	-	280704	0
5-1	-	0.5	0.2	1.10	1.30	318981.82	0
5-2	-	0.5	0.2	1.10	1.30	318981.82	0
5-3	-	0.5	0.2	1.10	1.30	318981.82	0
5-4	-	0.5	0.2	1.10	1.30	318981.82	0
5-5	-	0.5	0.2	1.10	1.30	318981.82	0
5-6	-	0.5	0.2	1.10	1.30	318981.82	0
5-7	-	0.5	0.2	1.10	1.30	318981.82	0
5-8	-	0.5	0.2	1.10	1.30	318981.82	0
5-9	-	0.5	0.2	1.10	1.30	318981.82	0
5-10	-	0.5	0.2	1.10	1.30	318981.82	0
5-11	-	0.5	0.2	1.10	1.30	318981.82	0
5-12	-	0.5	0.2	1.10	1.30	318981.82	0
5-13	-	0.5	0.2	1.10	1.30	318981.82	0
5-14	-	0.5	0.2	1.10	1.30	318981.82	0
5-15	-	0.5	0.2	1.10	1.30	318981.82	0
5-16	-	0.5	0.2	1.10	1.30	318981.82	0
6-1	-	0.5	0.2	1.10	1.30	318981.82	0
6-2	-	0.5	0.2	1.10	1.30	318981.82	0
6-3	-	0.5	0.2	1.10	1.30	318981.82	0
6-4	-	0.5	0.2	1.10	1.30	318981.82	0
6-5	-	0.5	0.2	1.10	1.30	318981.82	0
6-6	-	0.5	0.2	1.10	1.30	318981.82	0
6-7	-	0.5	0.2	1.10	1.30	318981.82	0
6-8	-	0.5	0.2	1.10	1.30	318981.82	0
6-9	-	0.5	0.2	1.10	1.30	318981.82	0
6-10	-	0.5	0.2	1.10	1.30	318981.82	0
6-11	-	0.5	0.2	1.10	1.30	318981.82	0
6-12	-	0.5	0.2	1.10	1.30	318981.82	0
6-13	-	0.5	0.2	1.10	1.30	318981.82	0
6-14	-	0.5	0.2	1.10	1.30	318981.82	0
6-15	-	0.5	0.2	1.10	1.30	318981.82	0
6-16	-	0.5	0.2	1.10	1.30	318981.82	0

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

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-1	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-2	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-3	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-4	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-5	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-6	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-7	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-8	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-9	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-10	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-11	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)
2-12	318981.8	0	SI (318981.8/0 = 1.00 >= 1.0)

[illegible]

2.4 PLATEA DI FONDIZIONE TIPOLOGICA 4 - MACCHINARI



2.3.1 DESCRIZIONE DEI CASI DI CALCOLO E RIASSUNTO DEI RISULTATI

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

Indici e nomi dei casi di carico			Elenco delle verifiche eseguite per ciascun caso				Sisma
Caso	Nome	Sestetti	Ver. dren.	Ver. non dren.	Ver. equ.	Ver. upl.	Coef. sism.
1	SLU SENZA Sisma (SLU Appr.2)	1-1	Si	Si	Si	No	Non sismico
1-1 Caso 1-1							
2	SLU con Sisma PRINC (SLU da 2-1 a 2-16)	da 2-1 a 2-16	Si	Si	Si	No	$k_{hx} = 0.02$, $k_{hy} = 0.00$

	Appr.2)						
2-1 Caso 4-1; 2-2 Caso 4-2; 2-3 Caso 4-3; 2-4 Caso 4-4; 2-5 Caso 4-5; 2-6 Caso 4-6; 2-7 Caso 4-7; 2-8 Caso 4-8; 2-9 Caso 4-9; 2-10 Caso 4-10; 2-11 Caso 4-11; 2-12 Caso 4-12; 2-13 Caso 4-13; 2-14 Caso 4-14; 2-15 Caso 4-15; 2-16 Caso 4-16							
3	SLU con SISMAY PRINC (SLU Appr.2)	da 3-1 a 3-16	Si	Si	Si	No	$k_{h,x}= 0.00, k_{h,y}= 0.02$
3-1 Caso 5-1; 3-2 Caso 5-2; 3-3 Caso 5-3; 3-4 Caso 5-4; 3-5 Caso 5-5; 3-6 Caso 5-6; 3-7 Caso 5-7; 3-8 Caso 5-8; 3-9 Caso 5-9; 3-10 Caso 5-10; 3-11 Caso 5-11; 3-12 Caso 5-12; 3-13 Caso 5-13; 3-14 Caso 5-14; 3-15 Caso 5-15; 3-16 Caso 5-16							
4	SLUEqu (SLU EQU)	4-1	Si	Si	Si	No	Non sismico
4-1 Caso 9-1							
5	SLD con SISMAY PRINC (SLD)	da 5-1 a 5-16	Si	Si	Si	No	$k_{h,x}= 0.01, k_{h,y}= 0.00$
5-1 Caso 6-1; 5-2 Caso 6-2; 5-3 Caso 6-3; 5-4 Caso 6-4; 5-5 Caso 6-5; 5-6 Caso 6-6; 5-7 Caso 6-7; 5-8 Caso 6-8; 5-9 Caso 6-9; 5-10 Caso 6-10; 5-11 Caso 6-11; 5-12 Caso 6-12; 5-13 Caso 6-13; 5-14 Caso 6-14; 5-15 Caso 6-15; 5-16 Caso 6-16							
6	SLD con SISMAY PRINC (SLD)	da 6-1 a 6-16	Si	Si	Si	No	$k_{h,x}= 0.00, k_{h,y}= 0.01$
6-1 Caso 7-1; 6-2 Caso 7-2; 6-3 Caso 7-3; 6-4 Caso 7-4; 6-5 Caso 7-5; 6-6 Caso 7-6; 6-7 Caso 7-7; 6-8 Caso 7-8; 6-9 Caso 7-9; 6-10 Caso 7-10; 6-11 Caso 7-11; 6-12 Caso 7-12; 6-13 Caso 7-13; 6-14 Caso 7-14; 6-15 Caso 7-15; 6-16 Caso 7-16							

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

Caso	$\gamma_{G1,fav}$	$\gamma_{G1,sfa}$	$\gamma_{G2,fav}$	$\gamma_{G2,sfa}$	$\gamma_{Q1,fav}$	$\gamma_{Q1,sfa}$
1	1.00	1.30	0.80	1.50	0.00	1.50
2	1.00	1.00	1.00	1.00	1.00	1.00
3	1.00	1.00	1.00	1.00	1.00	1.00
4	0.90	1.10	0.80	1.50	0.00	1.50
5	-	-	-	-	-	-
6	-	-	-	-	-	-

Caso	γ_γ	γ_ϕ	$\gamma_{c'}$	γ_{su}	$\gamma_{R,v}$	$\gamma_{R,h}$	$\gamma_{R,e}$	$\gamma_{R,eq}$	$\gamma_{R,upl}$
1	1.00	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
2	-	-	-	-	1.80	1.10	1.30	1.00	1.00
3	-	-	-	-	1.80	1.10	1.30	1.00	1.00
4	1.00	1.25	1.25	1.40	-	-	-	1.00	1.00
5	-	-	-	-	2.30	1.10	1.30	-	-
6	-	-	-	-	2.30	1.10	1.30	-	-

Segue la tabella riassuntiva di tutte le verifiche a ribaltamento.

Caso	Fondazione			Fondazione e Sottofondo		
	R_d [daN*cm]	E_d [daN*cm]	Verifica	R_d [daN*cm]	E_d [daN*cm]	Verifica
1-1	396309550	97508680	SI (396309550/97508680 = 4.06 >= 1.0)	510403190	97508680	SI (510403190/97508680 = 5.23 >= 1.0)
2-1	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)
2-2	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)
2-3	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)
2-4	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)
2-5	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)
2-6	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)
2-7	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)
2-8	285342600	70206250	SI (285342600/70206250 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/70206250 = 5.31 >= 1.0)

[illegible]

[illegible]

			(285342600/7020625 0 = 4.06 >= 1.0)			(372767620/7020625 0 = 5.31 >= 1.0)
6-7	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-8	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-9	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-10	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-11	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-12	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-13	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-14	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-15	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)
6-16	285342600	70206250	SI (285342600/7020625 0 = 4.06 >= 1.0)	372767620	70206250	SI (372767620/7020625 0 = 5.31 >= 1.0)

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

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	872484.1	29070089	SI (29070089/872484.1 = 33.32 >= 1.0)	872484.1	12777704.5	SI (12777704.5/872484.1 = 14.65 >= 1.0)
2-1	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-2	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-3	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-4	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-5	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-6	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-7	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-8	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-9	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-10	637209.6	34191204.3	SI (34191204.3/637209.6 = 53.66 >= 1.0)	637209.6	16298881.8	SI (16298881.8/637209.6 = 25.58 >= 1.0)

[illegible]

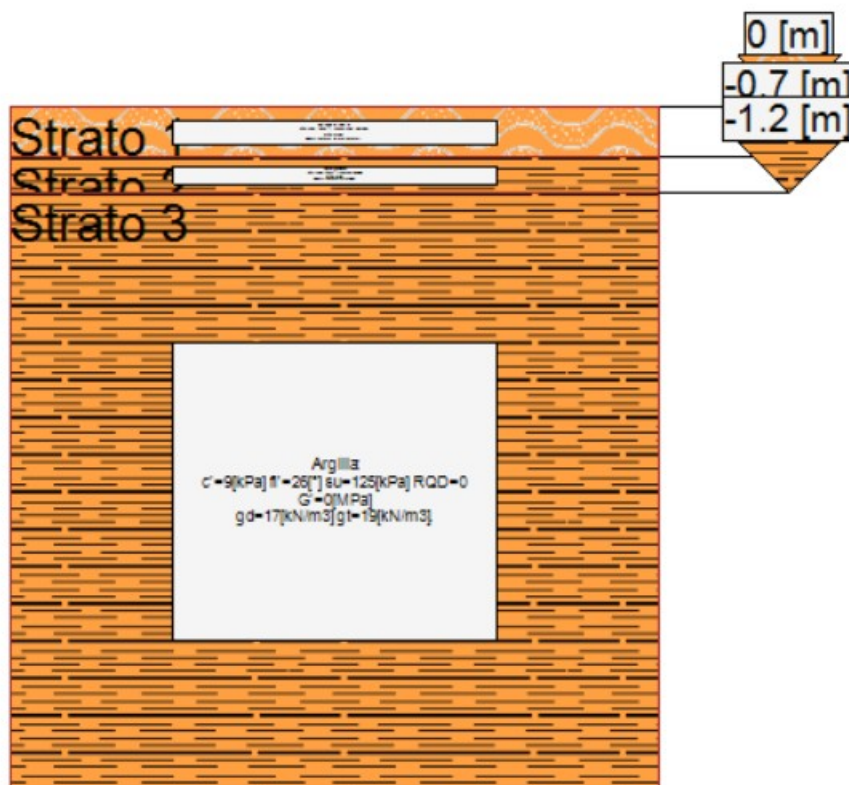
[illegible]

			(28264664.3/637209.6 = 44.36 >= 1.0)			(12826115.7/637209.6 = 20.13 >= 1.0)
6-9	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)
6-10	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)
6-11	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)
6-12	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)
6-13	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)
6-14	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)
6-15	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)
6-16	637209.6	28264664.3	SI (28264664.3/637209.6 = 44.36 >= 1.0)	637209.6	12826115.7	SI (12826115.7/637209.6 = 20.13 >= 1.0)

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

Caso	Cond. drenate				Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica		E_d [daN]	R_d [daN]	Verifica
1-1	0	328540.7	SI (328540.7/0 = 1.00 >= 1.0)	= 0		863843.8	SI (863843.8/0 = 1.00 >= 1.0)
2-1	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-2	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-3	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-4	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-5	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-6	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-7	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-8	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-9	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-10	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-11	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-12	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-13	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-14	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-15	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
2-16	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
3-1	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)
3-2	0	239946.2	SI (239946.2/0 = 1.00 >= 1.0)	= 0		866732.4	SI (866732.4/0 = 1.00 >= 1.0)

[illegible]



2.4.4 VERIFICHE IN CONDIZIONI DRENATE

2.4.4.1 SOLLECITAZIONI AL PIANO DI POSA

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

Rispetto al sistema di rif. globale:

Caso	Fx [daN]	Fy [daN]	Fz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-872484.08	87653	97508682	0	0	10
2-1	0	0	-637209.6	63110	70206251	0	0	10
2-2	0	0	-637209.6	63110	70206251	0	0	10
2-3	0	0	-637209.6	63110	70206251	0	0	10
2-4	0	0	-637209.6	63110	70206251	0	0	10
2-5	0	0	-637209.6	63110	70206251	0	0	10
2-6	0	0	-637209.6	63110	70206251	0	0	10
2-7	0	0	-637209.6	63110	70206251	0	0	10
2-8	0	0	-637209.6	63110	70206251	0	0	10
2-9	0	0	-637209.6	63110	70206251	0	0	10
2-10	0	0	-637209.6	63110	70206251	0	0	10
2-11	0	0	-637209.6	63110	70206251	0	0	10
2-12	0	0	-637209.6	63110	70206251	0	0	10
2-13	0	0	-637209.6	63110	70206251	0	0	10
2-14	0	0	-637209.6	63110	70206251	0	0	10
2-15	0	0	-637209.6	63110	70206251	0	0	10
2-16	0	0	-637209.6	63110	70206251	0	0	10
3-1	0	0	-637209.6	63110	70206251	0	0	10
3-2	0	0	-637209.6	63110	70206251	0	0	10
3-3	0	0	-637209.6	63110	70206251	0	0	10
3-4	0	0	-637209.6	63110	70206251	0	0	10
3-5	0	0	-637209.6	63110	70206251	0	0	10
3-6	0	0	-637209.6	63110	70206251	0	0	10
3-7	0	0	-637209.6	63110	70206251	0	0	10
3-8	0	0	-637209.6	63110	70206251	0	0	10

3-9	0	0	-637209.6	63110	70206251	0	0	10
3-10	0	0	-637209.6	63110	70206251	0	0	10
3-11	0	0	-637209.6	63110	70206251	0	0	10
3-12	0	0	-637209.6	63110	70206251	0	0	10
3-13	0	0	-637209.6	63110	70206251	0	0	10
3-14	0	0	-637209.6	63110	70206251	0	0	10
3-15	0	0	-637209.6	63110	70206251	0	0	10
3-16	0	0	-637209.6	63110	70206251	0	0	10
4-1	0	0	-705821.44	73629	81907293	0	0	10
5-1	0	0	-637209.6	63110	70206251	0	0	10
5-2	0	0	-637209.6	63110	70206251	0	0	10
5-3	0	0	-637209.6	63110	70206251	0	0	10
5-4	0	0	-637209.6	63110	70206251	0	0	10
5-5	0	0	-637209.6	63110	70206251	0	0	10
5-6	0	0	-637209.6	63110	70206251	0	0	10
5-7	0	0	-637209.6	63110	70206251	0	0	10
5-8	0	0	-637209.6	63110	70206251	0	0	10
5-9	0	0	-637209.6	63110	70206251	0	0	10
5-10	0	0	-637209.6	63110	70206251	0	0	10
5-11	0	0	-637209.6	63110	70206251	0	0	10
5-12	0	0	-637209.6	63110	70206251	0	0	10
5-13	0	0	-637209.6	63110	70206251	0	0	10
5-14	0	0	-637209.6	63110	70206251	0	0	10
5-15	0	0	-637209.6	63110	70206251	0	0	10
5-16	0	0	-637209.6	63110	70206251	0	0	10
6-1	0	0	-637209.6	63110	70206251	0	0	10
6-2	0	0	-637209.6	63110	70206251	0	0	10
6-3	0	0	-637209.6	63110	70206251	0	0	10
6-4	0	0	-637209.6	63110	70206251	0	0	10
6-5	0	0	-637209.6	63110	70206251	0	0	10
6-6	0	0	-637209.6	63110	70206251	0	0	10
6-7	0	0	-637209.6	63110	70206251	0	0	10
6-8	0	0	-637209.6	63110	70206251	0	0	10
6-9	0	0	-637209.6	63110	70206251	0	0	10
6-10	0	0	-637209.6	63110	70206251	0	0	10
6-11	0	0	-637209.6	63110	70206251	0	0	10
6-12	0	0	-637209.6	63110	70206251	0	0	10
6-13	0	0	-637209.6	63110	70206251	0	0	10
6-14	0	0	-637209.6	63110	70206251	0	0	10
6-15	0	0	-637209.6	63110	70206251	0	0	10
6-16	0	0	-637209.6	63110	70206251	0	0	10
Rispetto al sistema di rif. locale (centro piano di posa):								
Caso	Hx [daN]	Hy [daN]	Vz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-872484.08	87653	97508682	-	-	-
2-1	0	0	-637209.6	63110	70206251	-	-	-
2-2	0	0	-637209.6	63110	70206251	-	-	-
2-3	0	0	-637209.6	63110	70206251	-	-	-
2-4	0	0	-637209.6	63110	70206251	-	-	-
2-5	0	0	-637209.6	63110	70206251	-	-	-
2-6	0	0	-637209.6	63110	70206251	-	-	-
2-7	0	0	-637209.6	63110	70206251	-	-	-
2-8	0	0	-637209.6	63110	70206251	-	-	-
2-9	0	0	-637209.6	63110	70206251	-	-	-
2-10	0	0	-637209.6	63110	70206251	-	-	-
2-11	0	0	-637209.6	63110	70206251	-	-	-
2-12	0	0	-637209.6	63110	70206251	-	-	-
2-13	0	0	-637209.6	63110	70206251	-	-	-
2-14	0	0	-637209.6	63110	70206251	-	-	-
2-15	0	0	-637209.6	63110	70206251	-	-	-
2-16	0	0	-637209.6	63110	70206251	-	-	-
3-1	0	0	-637209.6	63110	70206251	-	-	-
3-2	0	0	-637209.6	63110	70206251	-	-	-
3-3	0	0	-637209.6	63110	70206251	-	-	-
3-4	0	0	-637209.6	63110	70206251	-	-	-
3-5	0	0	-637209.6	63110	70206251	-	-	-
3-6	0	0	-637209.6	63110	70206251	-	-	-
3-7	0	0	-637209.6	63110	70206251	-	-	-
3-8	0	0	-637209.6	63110	70206251	-	-	-

3-9	0	0	-637209.6	63110	70206251	-	-	-
3-10	0	0	-637209.6	63110	70206251	-	-	-
3-11	0	0	-637209.6	63110	70206251	-	-	-
3-12	0	0	-637209.6	63110	70206251	-	-	-
3-13	0	0	-637209.6	63110	70206251	-	-	-
3-14	0	0	-637209.6	63110	70206251	-	-	-
3-15	0	0	-637209.6	63110	70206251	-	-	-
3-16	0	0	-637209.6	63110	70206251	-	-	-
4-1	0	0	-705821.44	73629	81907293	-	-	-
5-1	0	0	-637209.6	63110	70206251	-	-	-
5-2	0	0	-637209.6	63110	70206251	-	-	-
5-3	0	0	-637209.6	63110	70206251	-	-	-
5-4	0	0	-637209.6	63110	70206251	-	-	-
5-5	0	0	-637209.6	63110	70206251	-	-	-
5-6	0	0	-637209.6	63110	70206251	-	-	-
5-7	0	0	-637209.6	63110	70206251	-	-	-
5-8	0	0	-637209.6	63110	70206251	-	-	-
5-9	0	0	-637209.6	63110	70206251	-	-	-
5-10	0	0	-637209.6	63110	70206251	-	-	-
5-11	0	0	-637209.6	63110	70206251	-	-	-
5-12	0	0	-637209.6	63110	70206251	-	-	-
5-13	0	0	-637209.6	63110	70206251	-	-	-
5-14	0	0	-637209.6	63110	70206251	-	-	-
5-15	0	0	-637209.6	63110	70206251	-	-	-
5-16	0	0	-637209.6	63110	70206251	-	-	-
6-1	0	0	-637209.6	63110	70206251	-	-	-
6-2	0	0	-637209.6	63110	70206251	-	-	-
6-3	0	0	-637209.6	63110	70206251	-	-	-
6-4	0	0	-637209.6	63110	70206251	-	-	-
6-5	0	0	-637209.6	63110	70206251	-	-	-
6-6	0	0	-637209.6	63110	70206251	-	-	-
6-7	0	0	-637209.6	63110	70206251	-	-	-
6-8	0	0	-637209.6	63110	70206251	-	-	-
6-9	0	0	-637209.6	63110	70206251	-	-	-
6-10	0	0	-637209.6	63110	70206251	-	-	-
6-11	0	0	-637209.6	63110	70206251	-	-	-
6-12	0	0	-637209.6	63110	70206251	-	-	-
6-13	0	0	-637209.6	63110	70206251	-	-	-
6-14	0	0	-637209.6	63110	70206251	-	-	-
6-15	0	0	-637209.6	63110	70206251	-	-	-
6-16	0	0	-637209.6	63110	70206251	-	-	-

Le sollecitazioni applicate non provocano un' eccentricità lungo X (max = 116.05 [cm]) e lungo Y (max = 0.1 [cm]), perciò le verifiche vengono eseguite sulla fondazione ridotta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	111.76	0.1	asse X	asse Y
2-1	110.18	0.1	asse X	asse Y
2-2	110.18	0.1	asse X	asse Y
2-3	110.18	0.1	asse X	asse Y
2-4	110.18	0.1	asse X	asse Y
2-5	110.18	0.1	asse X	asse Y
2-6	110.18	0.1	asse X	asse Y
2-7	110.18	0.1	asse X	asse Y
2-8	110.18	0.1	asse X	asse Y
2-9	110.18	0.1	asse X	asse Y
2-10	110.18	0.1	asse X	asse Y
2-11	110.18	0.1	asse X	asse Y
2-12	110.18	0.1	asse X	asse Y
2-13	110.18	0.1	asse X	asse Y
2-14	110.18	0.1	asse X	asse Y
2-15	110.18	0.1	asse X	asse Y
2-16	110.18	0.1	asse X	asse Y
3-1	110.18	0.1	asse X	asse Y
3-2	110.18	0.1	asse X	asse Y
3-3	110.18	0.1	asse X	asse Y
3-4	110.18	0.1	asse X	asse Y
3-5	110.18	0.1	asse X	asse Y

2-14	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
2-15	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
2-16	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-1	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-2	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-3	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-4	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-5	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-6	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-7	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-8	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-9	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-10	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-11	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-12	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-13	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-14	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-15	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
3-16	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.91	10.04
4-1	1.25	1.00	21.6	0.0017	6.75	1.04	1.00	1.00	1.00	1.00	1.00	-	5.6
5-1	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-2	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-3	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-4	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-5	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-6	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-7	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-8	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-9	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-10	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-11	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-12	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-13	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-14	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-15	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
5-16	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-1	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-2	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-3	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-4	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-5	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-6	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-7	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-8	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-9	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-10	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-11	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-12	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-13	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-14	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-15	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
6-16	-	-	26.3	0.0017	13.10	1.05	1.00	1.00	1.00	1.00	1.00	0.96	10.67
Caso	γ_c	ϵ' [daN/cm ²]	N _c	s _c	d _c	i _{bc}	i _{lc}	b _c	g _c	h _c	$q'_{lim,c}$ [daN/cm ²]		
1-1	1.00	0.08	22.76	1.10	1.01	1.00	1.00	1.00	1.00	-	2.04		
2-1	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-2	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-3	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-4	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-5	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-6	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-7	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-8	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-9	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-10	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-11	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-12	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		
2-13	-	0.08	22.75	1.10	1.01	1.00	1.00	1.00	1.00	0.96	1.97		

[illegible]

2-14	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
2-15	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
2-16	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-1	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-2	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-3	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-4	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-5	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-6	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-7	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-8	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-9	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-10	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-11	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-12	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-13	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-14	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-15	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
3-16	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.95	0.84
4-1	0.07	7.52	1.04	1.01	1.00	1.00	1.00	1.00	-	0.54
5-1	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-2	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-3	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-4	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-5	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-6	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-7	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-8	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-9	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-10	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-11	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-12	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-13	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-14	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-15	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
5-16	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-1	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-2	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-3	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-4	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-5	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-6	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-7	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-8	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-9	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-10	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-11	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-12	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-13	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-14	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-15	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87
6-16	0.07	12.25	1.05	1.01	1.00	1.00	1.00	1.00	0.98	0.87

Segue il confronto fra la pressione limite ed applicata.

Caso	$\gamma_{R,v}$	q'_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	6.12	4751141.02	29070089	872484.1	SI (29070089/872484.1 = 33.32 \geq 1.0)
2-1	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209. 6 = 53.66 \geq 1.0)
2-2	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209. 6 = 53.66 \geq 1.0)
2-3	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209. 6 = 53.66 \geq 1.0)

[illegible]

						(34191204.3/637209.6 = 53.66 >= 1.0)
3-12	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209.6 = 53.66 >= 1.0)
3-13	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209.6 = 53.66 >= 1.0)
3-14	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209.6 = 53.66 >= 1.0)
3-15	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209.6 = 53.66 >= 1.0)
3-16	1.80	7.17	4767028.37	34191204.3	637209.6	SI (34191204.3/637209.6 = 53.66 >= 1.0)
4-1	-	7.29	4708109.05	34317035.4	705821.4	SI (34317035.4/705821.4 = 48.62 >= 1.0)
5-1	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-2	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-3	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-4	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-5	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-6	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-7	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-8	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-9	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-10	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-11	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-12	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-13	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-14	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-15	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
5-16	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-1	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)

						6 = 44.36 >= 1.0)
6-2	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-3	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-4	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-5	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-6	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-7	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-8	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-9	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-10	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-11	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-12	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-13	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-14	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-15	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)
6-16	2.30	5.93	4767028.37	28264664.3	637209.6	SI (28264664.3/637209.6 = 44.36 >= 1.0)

2.4.4.3 SCORRIMENTO

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

Caso	γ_{ϕ}	$\gamma_{c'}$	ϕ [°]	c' [daN/cm ²]	δ [°]	a [daN/cm ²]	$\gamma_{R,h}$	$\gamma_{R,e}$	R_h [daN]	R_e [daN]
1-1	1.00	1.00	30	0	22.5	0	1.10	1.00	328540.67	0
2-1	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-2	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-3	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-4	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-5	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-6	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-7	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-8	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-9	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-10	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-11	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-12	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-13	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-14	-	-	30	0	22.5	0	1.10	1.30	239946.23	0

2-15	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
2-16	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-1	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-2	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-3	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-4	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-5	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-6	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-7	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-8	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-9	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-10	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-11	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-12	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-13	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-14	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-15	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
3-16	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
4-1	1.25	1.25	24.8	0	18.6	0	-	-	237445.48	0
5-1	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-2	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-3	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-4	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-5	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-6	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-7	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-8	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-9	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-10	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-11	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-12	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-13	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-14	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-15	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
5-16	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-1	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-2	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-3	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-4	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-5	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-6	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-7	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-8	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-9	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-10	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-11	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-12	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-13	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-14	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-15	-	-	30	0	22.5	0	1.10	1.30	239946.23	0
6-16	-	-	30	0	22.5	0	1.10	1.30	239946.23	0

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

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	328540.7	0	SI (328540.7/0 = 1.00 >= 1.0)
2-1	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-2	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-3	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-4	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-5	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-6	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-7	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-8	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-9	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-10	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)
2-11	239946.2	0	SI (239946.2/0 = 1.00 >= 1.0)

[illegible]

2.4.5 VERIFICHE IN CONDIZIONI NON DRENATE

2.4.5.1 SOLLECITAZIONI AL PIANO DI POSA

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

Rispetto al sistema di rif. globale:								
Caso	Fx [daN]	Fy [daN]	Fz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-872484.08	87653	97508682	0	0	10
2-1	0	0	-637209.6	63110	70206251	0	0	10
2-2	0	0	-637209.6	63110	70206251	0	0	10
2-3	0	0	-637209.6	63110	70206251	0	0	10
2-4	0	0	-637209.6	63110	70206251	0	0	10
2-5	0	0	-637209.6	63110	70206251	0	0	10
2-6	0	0	-637209.6	63110	70206251	0	0	10
2-7	0	0	-637209.6	63110	70206251	0	0	10
2-8	0	0	-637209.6	63110	70206251	0	0	10
2-9	0	0	-637209.6	63110	70206251	0	0	10
2-10	0	0	-637209.6	63110	70206251	0	0	10
2-11	0	0	-637209.6	63110	70206251	0	0	10
2-12	0	0	-637209.6	63110	70206251	0	0	10
2-13	0	0	-637209.6	63110	70206251	0	0	10
2-14	0	0	-637209.6	63110	70206251	0	0	10
2-15	0	0	-637209.6	63110	70206251	0	0	10
2-16	0	0	-637209.6	63110	70206251	0	0	10
3-1	0	0	-637209.6	63110	70206251	0	0	10
3-2	0	0	-637209.6	63110	70206251	0	0	10
3-3	0	0	-637209.6	63110	70206251	0	0	10
3-4	0	0	-637209.6	63110	70206251	0	0	10
3-5	0	0	-637209.6	63110	70206251	0	0	10
3-6	0	0	-637209.6	63110	70206251	0	0	10
3-7	0	0	-637209.6	63110	70206251	0	0	10
3-8	0	0	-637209.6	63110	70206251	0	0	10
3-9	0	0	-637209.6	63110	70206251	0	0	10
3-10	0	0	-637209.6	63110	70206251	0	0	10
3-11	0	0	-637209.6	63110	70206251	0	0	10
3-12	0	0	-637209.6	63110	70206251	0	0	10
3-13	0	0	-637209.6	63110	70206251	0	0	10
3-14	0	0	-637209.6	63110	70206251	0	0	10
3-15	0	0	-637209.6	63110	70206251	0	0	10
3-16	0	0	-637209.6	63110	70206251	0	0	10
4-1	0	0	-705821.44	73629	81907293	0	0	10
5-1	0	0	-637209.6	63110	70206251	0	0	10
5-2	0	0	-637209.6	63110	70206251	0	0	10
5-3	0	0	-637209.6	63110	70206251	0	0	10
5-4	0	0	-637209.6	63110	70206251	0	0	10
5-5	0	0	-637209.6	63110	70206251	0	0	10
5-6	0	0	-637209.6	63110	70206251	0	0	10
5-7	0	0	-637209.6	63110	70206251	0	0	10
5-8	0	0	-637209.6	63110	70206251	0	0	10
5-9	0	0	-637209.6	63110	70206251	0	0	10
5-10	0	0	-637209.6	63110	70206251	0	0	10
5-11	0	0	-637209.6	63110	70206251	0	0	10
5-12	0	0	-637209.6	63110	70206251	0	0	10
5-13	0	0	-637209.6	63110	70206251	0	0	10
5-14	0	0	-637209.6	63110	70206251	0	0	10
5-15	0	0	-637209.6	63110	70206251	0	0	10
5-16	0	0	-637209.6	63110	70206251	0	0	10
6-1	0	0	-637209.6	63110	70206251	0	0	10
6-2	0	0	-637209.6	63110	70206251	0	0	10
6-3	0	0	-637209.6	63110	70206251	0	0	10
6-4	0	0	-637209.6	63110	70206251	0	0	10
6-5	0	0	-637209.6	63110	70206251	0	0	10
6-6	0	0	-637209.6	63110	70206251	0	0	10
6-7	0	0	-637209.6	63110	70206251	0	0	10
6-8	0	0	-637209.6	63110	70206251	0	0	10
6-9	0	0	-637209.6	63110	70206251	0	0	10

6-10	0	0	-637209.6	63110	70206251	0	0	10
6-11	0	0	-637209.6	63110	70206251	0	0	10
6-12	0	0	-637209.6	63110	70206251	0	0	10
6-13	0	0	-637209.6	63110	70206251	0	0	10
6-14	0	0	-637209.6	63110	70206251	0	0	10
6-15	0	0	-637209.6	63110	70206251	0	0	10
6-16	0	0	-637209.6	63110	70206251	0	0	10
Rispetto al sistema di rif. locale (centro piano di posa):								
Caso	Hx [daN]	Hy [daN]	Vz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	0	0	-872484.08	87653	97508682	-	-	-
2-1	0	0	-637209.6	63110	70206251	-	-	-
2-2	0	0	-637209.6	63110	70206251	-	-	-
2-3	0	0	-637209.6	63110	70206251	-	-	-
2-4	0	0	-637209.6	63110	70206251	-	-	-
2-5	0	0	-637209.6	63110	70206251	-	-	-
2-6	0	0	-637209.6	63110	70206251	-	-	-
2-7	0	0	-637209.6	63110	70206251	-	-	-
2-8	0	0	-637209.6	63110	70206251	-	-	-
2-9	0	0	-637209.6	63110	70206251	-	-	-
2-10	0	0	-637209.6	63110	70206251	-	-	-
2-11	0	0	-637209.6	63110	70206251	-	-	-
2-12	0	0	-637209.6	63110	70206251	-	-	-
2-13	0	0	-637209.6	63110	70206251	-	-	-
2-14	0	0	-637209.6	63110	70206251	-	-	-
2-15	0	0	-637209.6	63110	70206251	-	-	-
2-16	0	0	-637209.6	63110	70206251	-	-	-
3-1	0	0	-637209.6	63110	70206251	-	-	-
3-2	0	0	-637209.6	63110	70206251	-	-	-
3-3	0	0	-637209.6	63110	70206251	-	-	-
3-4	0	0	-637209.6	63110	70206251	-	-	-
3-5	0	0	-637209.6	63110	70206251	-	-	-
3-6	0	0	-637209.6	63110	70206251	-	-	-
3-7	0	0	-637209.6	63110	70206251	-	-	-
3-8	0	0	-637209.6	63110	70206251	-	-	-
3-9	0	0	-637209.6	63110	70206251	-	-	-
3-10	0	0	-637209.6	63110	70206251	-	-	-
3-11	0	0	-637209.6	63110	70206251	-	-	-
3-12	0	0	-637209.6	63110	70206251	-	-	-
3-13	0	0	-637209.6	63110	70206251	-	-	-
3-14	0	0	-637209.6	63110	70206251	-	-	-
3-15	0	0	-637209.6	63110	70206251	-	-	-
3-16	0	0	-637209.6	63110	70206251	-	-	-
4-1	0	0	-705821.44	73629	81907293	-	-	-
5-1	0	0	-637209.6	63110	70206251	-	-	-
5-2	0	0	-637209.6	63110	70206251	-	-	-
5-3	0	0	-637209.6	63110	70206251	-	-	-
5-4	0	0	-637209.6	63110	70206251	-	-	-
5-5	0	0	-637209.6	63110	70206251	-	-	-
5-6	0	0	-637209.6	63110	70206251	-	-	-
5-7	0	0	-637209.6	63110	70206251	-	-	-
5-8	0	0	-637209.6	63110	70206251	-	-	-
5-9	0	0	-637209.6	63110	70206251	-	-	-
5-10	0	0	-637209.6	63110	70206251	-	-	-
5-11	0	0	-637209.6	63110	70206251	-	-	-
5-12	0	0	-637209.6	63110	70206251	-	-	-
5-13	0	0	-637209.6	63110	70206251	-	-	-
5-14	0	0	-637209.6	63110	70206251	-	-	-
5-15	0	0	-637209.6	63110	70206251	-	-	-
5-16	0	0	-637209.6	63110	70206251	-	-	-
6-1	0	0	-637209.6	63110	70206251	-	-	-
6-2	0	0	-637209.6	63110	70206251	-	-	-
6-3	0	0	-637209.6	63110	70206251	-	-	-
6-4	0	0	-637209.6	63110	70206251	-	-	-
6-5	0	0	-637209.6	63110	70206251	-	-	-
6-6	0	0	-637209.6	63110	70206251	-	-	-
6-7	0	0	-637209.6	63110	70206251	-	-	-
6-8	0	0	-637209.6	63110	70206251	-	-	-
6-9	0	0	-637209.6	63110	70206251	-	-	-

6-10	0	0	-637209.6	63110	70206251	-	-	-
6-11	0	0	-637209.6	63110	70206251	-	-	-
6-12	0	0	-637209.6	63110	70206251	-	-	-
6-13	0	0	-637209.6	63110	70206251	-	-	-
6-14	0	0	-637209.6	63110	70206251	-	-	-
6-15	0	0	-637209.6	63110	70206251	-	-	-
6-16	0	0	-637209.6	63110	70206251	-	-	-

Le sollecitazioni applicate non provocano un' eccentricità lungo X (max = 116.05 [cm]) e lungo Y (max = 0.1 [cm]), perciò le verifiche vengono eseguite sulla fondazione ridotta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	111.76	0.1	asse X	asse Y
2-1	110.18	0.1	asse X	asse Y
2-2	110.18	0.1	asse X	asse Y
2-3	110.18	0.1	asse X	asse Y
2-4	110.18	0.1	asse X	asse Y
2-5	110.18	0.1	asse X	asse Y
2-6	110.18	0.1	asse X	asse Y
2-7	110.18	0.1	asse X	asse Y
2-8	110.18	0.1	asse X	asse Y
2-9	110.18	0.1	asse X	asse Y
2-10	110.18	0.1	asse X	asse Y
2-11	110.18	0.1	asse X	asse Y
2-12	110.18	0.1	asse X	asse Y
2-13	110.18	0.1	asse X	asse Y
2-14	110.18	0.1	asse X	asse Y
2-15	110.18	0.1	asse X	asse Y
2-16	110.18	0.1	asse X	asse Y
3-1	110.18	0.1	asse X	asse Y
3-2	110.18	0.1	asse X	asse Y
3-3	110.18	0.1	asse X	asse Y
3-4	110.18	0.1	asse X	asse Y
3-5	110.18	0.1	asse X	asse Y
3-6	110.18	0.1	asse X	asse Y
3-7	110.18	0.1	asse X	asse Y
3-8	110.18	0.1	asse X	asse Y
3-9	110.18	0.1	asse X	asse Y
3-10	110.18	0.1	asse X	asse Y
3-11	110.18	0.1	asse X	asse Y
3-12	110.18	0.1	asse X	asse Y
3-13	110.18	0.1	asse X	asse Y
3-14	110.18	0.1	asse X	asse Y
3-15	110.18	0.1	asse X	asse Y
3-16	110.18	0.1	asse X	asse Y
4-1	116.05	0.1	asse X	asse Y
5-1	110.18	0.1	asse X	asse Y
5-2	110.18	0.1	asse X	asse Y
5-3	110.18	0.1	asse X	asse Y
5-4	110.18	0.1	asse X	asse Y
5-5	110.18	0.1	asse X	asse Y
5-6	110.18	0.1	asse X	asse Y
5-7	110.18	0.1	asse X	asse Y
5-8	110.18	0.1	asse X	asse Y
5-9	110.18	0.1	asse X	asse Y
5-10	110.18	0.1	asse X	asse Y
5-11	110.18	0.1	asse X	asse Y
5-12	110.18	0.1	asse X	asse Y
5-13	110.18	0.1	asse X	asse Y
5-14	110.18	0.1	asse X	asse Y
5-15	110.18	0.1	asse X	asse Y
5-16	110.18	0.1	asse X	asse Y
6-1	110.18	0.1	asse X	asse Y
6-2	110.18	0.1	asse X	asse Y
6-3	110.18	0.1	asse X	asse Y
6-4	110.18	0.1	asse X	asse Y

6-5	110.18	0.1	asse X	asse Y
6-6	110.18	0.1	asse X	asse Y
6-7	110.18	0.1	asse X	asse Y
6-8	110.18	0.1	asse X	asse Y
6-9	110.18	0.1	asse X	asse Y
6-10	110.18	0.1	asse X	asse Y
6-11	110.18	0.1	asse X	asse Y
6-12	110.18	0.1	asse X	asse Y
6-13	110.18	0.1	asse X	asse Y
6-14	110.18	0.1	asse X	asse Y
6-15	110.18	0.1	asse X	asse Y
6-16	110.18	0.1	asse X	asse Y

2.4.5.2 CAPACITÀ PORTANTE

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

Caso	γ_{su}	γ_γ	s_u [daN/cm ²]	γ [daN/cm ³]	q_t [daN/cm ²]	N_c	s_c	d_c	i_{bc}	i_{lc}	b_c	g_c	t_γ [daN/cm ²]	$q_{lim,c}$ [daN/cm ²]	$q_{lim,q}$ [daN/cm ²]
1-1	1.00	1.00	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-1	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-2	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-3	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-4	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-5	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-6	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-7	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-8	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-9	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-10	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-11	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-12	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-13	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-14	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-15	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
2-16	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-1	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-2	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-3	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-4	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-5	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-6	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-7	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-8	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-9	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-10	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-11	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-12	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-13	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-14	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-15	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
3-16	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
4-1	1.40	1.00	0.79	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	4.3	0.07
5-1	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-2	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-3	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-4	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-5	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-6	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-7	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-8	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-9	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-10	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-11	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07

5-12	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-13	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-14	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-15	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
5-16	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-1	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-2	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-3	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-4	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-5	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-6	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-7	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-8	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-9	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-10	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-11	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-12	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-13	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-14	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-15	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07
6-16	-	-	1.11	0.0017	0.07	5.14	1.04	1.02	1.00	1.00	1.00	1.00	0	6.03	0.07

Segue il confronto fra la pressione limite ed applicata.

Caso	$\gamma_{R,v}$	q_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	2.69	4751141.02	12777704.5	872484.1	SI (12777704.5/872484.1 = 14.65 >= 1.0)
2-1	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-2	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-3	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-4	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-5	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-6	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-7	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-8	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-9	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-10	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-11	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-12	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-13	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-14	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)

2-15	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
2-16	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-1	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-2	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-3	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-4	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-5	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-6	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-7	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-8	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-9	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-10	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-11	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-12	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-13	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-14	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-15	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
3-16	1.80	3.42	4767028.37	16298881.8	637209.6	SI (16298881.8/637209.6 = 25.58 >= 1.0)
4-1	-	4.37	4708109.05	20570818	705821.4	SI (20570818/705821.4 = 29.14 >= 1.0)
5-1	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209.6 = 20.13 >= 1.0)
5-2	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209.6 = 20.13 >= 1.0)
5-3	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209.6 = 20.13 >= 1.0)
5-4	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209.6 = 20.13 >= 1.0)
5-5	2.30	2.69	4767028.37	12826115.7	637209.6	SI

					(12826115.7/637209. 6 = 20.13 >= 1.0)
5-6	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-7	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-8	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-9	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-10	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-11	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-12	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-13	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-14	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-15	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
5-16	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-1	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-2	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-3	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-4	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-5	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-6	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-7	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-8	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-9	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-10	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-11	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-12	2.30	2.69	4767028.37	12826115.7	SI (12826115.7/637209.

						6 = 20.13 >= 1.0)
6-13	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-14	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-15	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209. 6 = 20.13 >= 1.0)
6-16	2.30	2.69	4767028.37	12826115.7	637209.6	SI (12826115.7/637209. 6 = 20.13 >= 1.0)

2.3.5.3 SCORRIMENTO

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

Caso	γ_{su}	s_u [daN/cm ²]	a [daN/cm ²]	$\gamma_{R,h}$	$\gamma_{R,e}$	R_h [daN]	R_e [daN]
1-1	1.00	0.5	0.2	1.10	1.00	863843.82	0
2-1	-	0.5	0.2	1.10	1.30	866732.43	0
2-2	-	0.5	0.2	1.10	1.30	866732.43	0
2-3	-	0.5	0.2	1.10	1.30	866732.43	0
2-4	-	0.5	0.2	1.10	1.30	866732.43	0
2-5	-	0.5	0.2	1.10	1.30	866732.43	0
2-6	-	0.5	0.2	1.10	1.30	866732.43	0
2-7	-	0.5	0.2	1.10	1.30	866732.43	0
2-8	-	0.5	0.2	1.10	1.30	866732.43	0
2-9	-	0.5	0.2	1.10	1.30	866732.43	0
2-10	-	0.5	0.2	1.10	1.30	866732.43	0
2-11	-	0.5	0.2	1.10	1.30	866732.43	0
2-12	-	0.5	0.2	1.10	1.30	866732.43	0
2-13	-	0.5	0.2	1.10	1.30	866732.43	0
2-14	-	0.5	0.2	1.10	1.30	866732.43	0
2-15	-	0.5	0.2	1.10	1.30	866732.43	0
2-16	-	0.5	0.2	1.10	1.30	866732.43	0
3-1	-	0.5	0.2	1.10	1.30	866732.43	0
3-2	-	0.5	0.2	1.10	1.30	866732.43	0
3-3	-	0.5	0.2	1.10	1.30	866732.43	0
3-4	-	0.5	0.2	1.10	1.30	866732.43	0
3-5	-	0.5	0.2	1.10	1.30	866732.43	0
3-6	-	0.5	0.2	1.10	1.30	866732.43	0
3-7	-	0.5	0.2	1.10	1.30	866732.43	0
3-8	-	0.5	0.2	1.10	1.30	866732.43	0
3-9	-	0.5	0.2	1.10	1.30	866732.43	0
3-10	-	0.5	0.2	1.10	1.30	866732.43	0
3-11	-	0.5	0.2	1.10	1.30	866732.43	0
3-12	-	0.5	0.2	1.10	1.30	866732.43	0
3-13	-	0.5	0.2	1.10	1.30	866732.43	0
3-14	-	0.5	0.2	1.10	1.30	866732.43	0
3-15	-	0.5	0.2	1.10	1.30	866732.43	0
3-16	-	0.5	0.2	1.10	1.30	866732.43	0
4-1	1.40	0.4	0.16	-	-	753297.45	0
5-1	-	0.5	0.2	1.10	1.30	866732.43	0
5-2	-	0.5	0.2	1.10	1.30	866732.43	0
5-3	-	0.5	0.2	1.10	1.30	866732.43	0
5-4	-	0.5	0.2	1.10	1.30	866732.43	0
5-5	-	0.5	0.2	1.10	1.30	866732.43	0
5-6	-	0.5	0.2	1.10	1.30	866732.43	0
5-7	-	0.5	0.2	1.10	1.30	866732.43	0
5-8	-	0.5	0.2	1.10	1.30	866732.43	0
5-9	-	0.5	0.2	1.10	1.30	866732.43	0
5-10	-	0.5	0.2	1.10	1.30	866732.43	0
5-11	-	0.5	0.2	1.10	1.30	866732.43	0
5-12	-	0.5	0.2	1.10	1.30	866732.43	0
5-13	-	0.5	0.2	1.10	1.30	866732.43	0
5-14	-	0.5	0.2	1.10	1.30	866732.43	0

5-15	-	0.5	0.2	1.10	1.30	866732.43	0
5-16	-	0.5	0.2	1.10	1.30	866732.43	0
6-1	-	0.5	0.2	1.10	1.30	866732.43	0
6-2	-	0.5	0.2	1.10	1.30	866732.43	0
6-3	-	0.5	0.2	1.10	1.30	866732.43	0
6-4	-	0.5	0.2	1.10	1.30	866732.43	0
6-5	-	0.5	0.2	1.10	1.30	866732.43	0
6-6	-	0.5	0.2	1.10	1.30	866732.43	0
6-7	-	0.5	0.2	1.10	1.30	866732.43	0
6-8	-	0.5	0.2	1.10	1.30	866732.43	0
6-9	-	0.5	0.2	1.10	1.30	866732.43	0
6-10	-	0.5	0.2	1.10	1.30	866732.43	0
6-11	-	0.5	0.2	1.10	1.30	866732.43	0
6-12	-	0.5	0.2	1.10	1.30	866732.43	0
6-13	-	0.5	0.2	1.10	1.30	866732.43	0
6-14	-	0.5	0.2	1.10	1.30	866732.43	0
6-15	-	0.5	0.2	1.10	1.30	866732.43	0
6-16	-	0.5	0.2	1.10	1.30	866732.43	0

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

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	863843.8	0	SI (863843.8/0 = 1.00 >= 1.0)
2-1	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-2	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-3	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-4	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-5	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-6	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-7	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-8	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-9	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-10	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-11	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-12	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-13	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-14	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-15	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
2-16	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-1	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-2	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-3	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-4	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-5	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-6	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-7	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-8	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-9	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-10	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-11	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-12	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-13	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-14	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-15	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
3-16	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
4-1	753297.4	0	SI (753297.4/0 = 1.00 >= 1.0)
5-1	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-2	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-3	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-4	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-5	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-6	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-7	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-8	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-9	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-10	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-11	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)

5-12	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-13	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-14	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-15	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
5-16	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-1	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-2	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-3	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-4	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-5	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-6	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-7	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-8	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-9	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-10	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-11	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-12	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-13	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-14	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-15	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)
6-16	866732.4	0	SI (866732.4/0 = 1.00 >= 1.0)