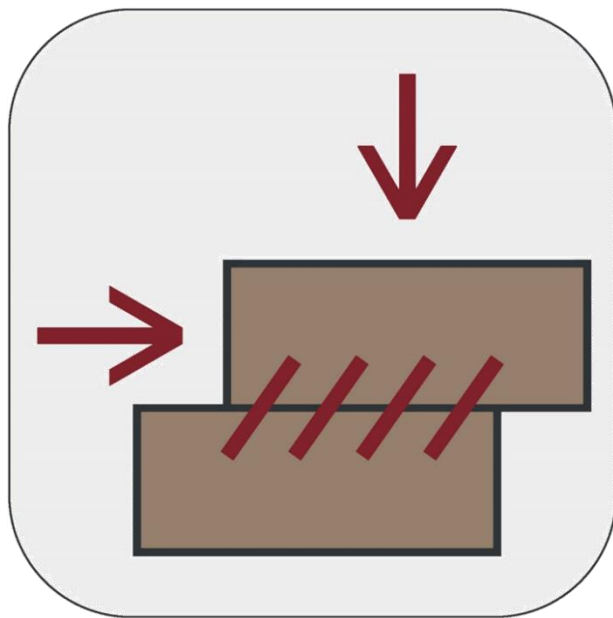


hoil Office



SO-Shear

Current samples are in "Metric" units.

SO-Shear also supports “SI”,
“English [ksf]” and “English [psi]” units.

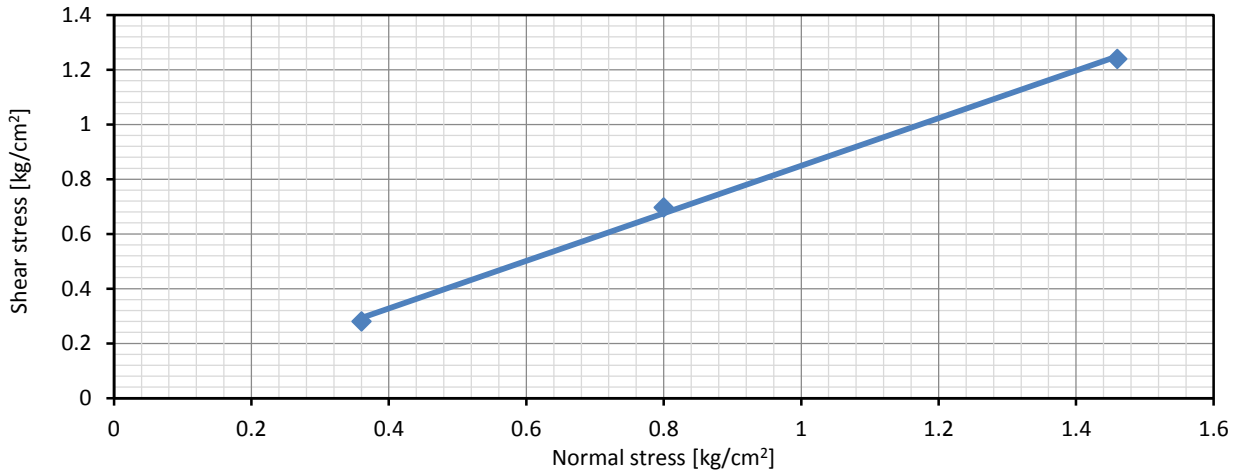
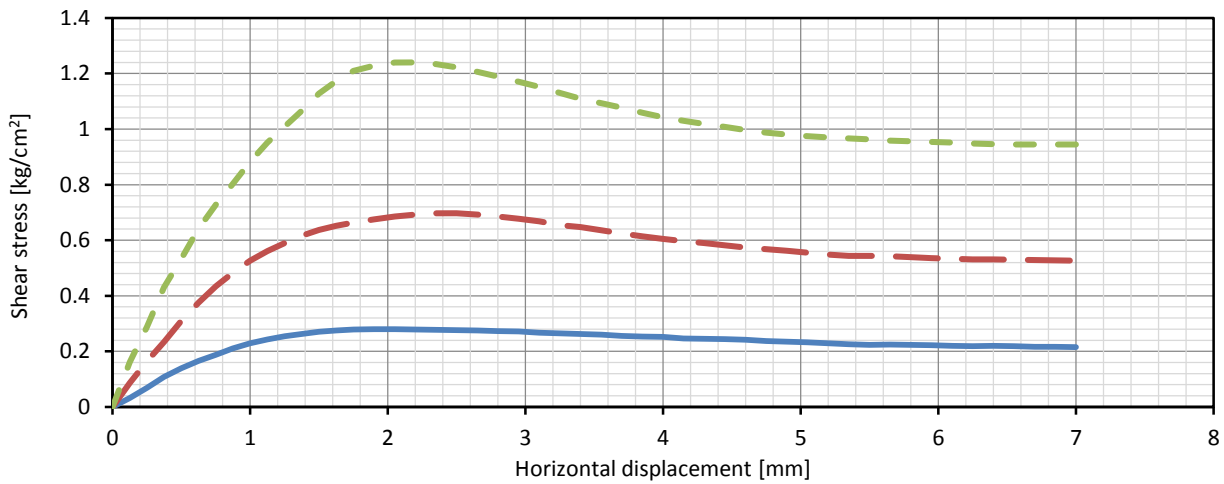
Output – Type a

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Other
Shear box	Square Width = 6.0 [cm]

Stage	Initial			
	01	02	03	04
H [cm]	4.00	4.21	3.89	-
γ_d [g/cm ³]	1.69	1.69	1.70	-
w [%]	0.0	0.0	0.0	-
e [-]	0.57	0.57	0.56	-
s [%]	0.0	0.0	0.0	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	2.05	0.22	7.00	0.52	1
2	- - -	0.80	0.70	2.50	0.53	7.00	0.36	1
3	- - -	1.46	1.24	2.20	0.95	7.00	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

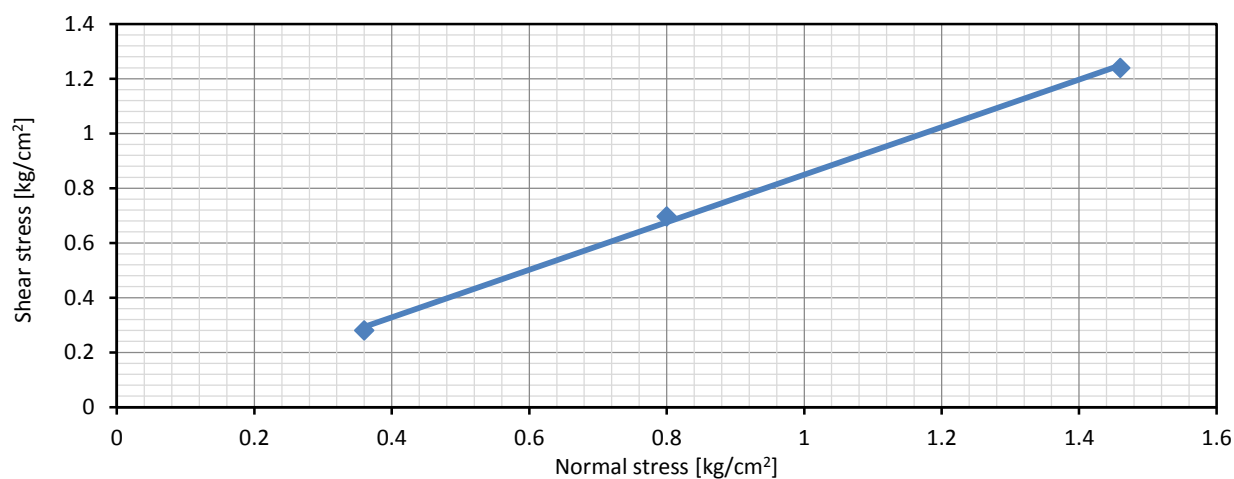
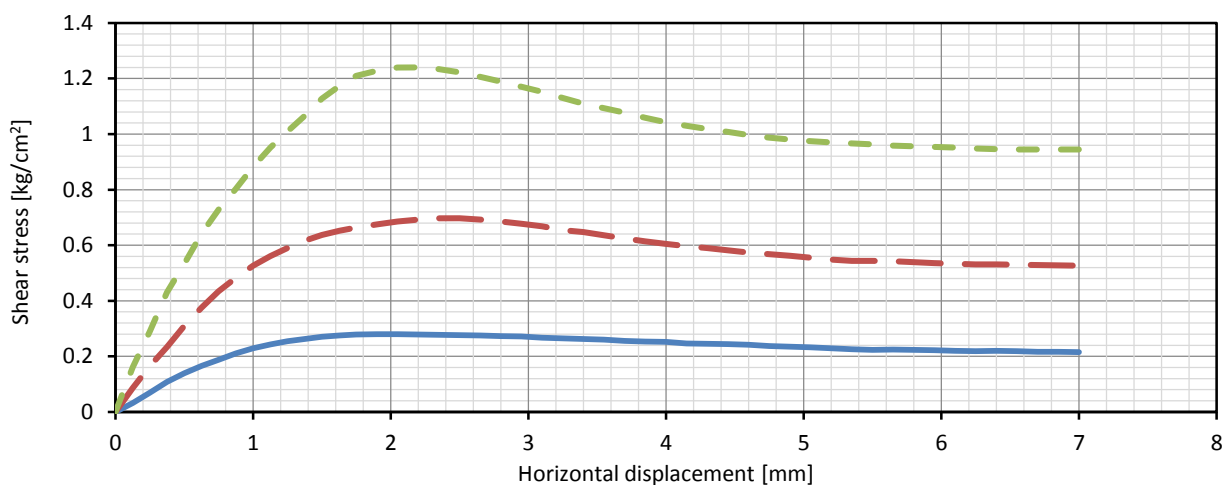
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Other
Shear box	Square Width = 6.0 [cm]

Stage	Initial				Preshear				
	Test no.	01	02	03	04	01	02	03	04
H [cm]	4.00	4.21	3.89	-	3.98	4.18	3.87	-	
γ_d [g/cm ³]	1.69	1.69	1.70	-	1.70	1.70	1.71	-	
w [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	
e [-]	0.57	0.57	0.56	-	0.56	0.56	0.55	-	
s [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	2.05	0.22	7.00	0.52	1
2	- - -	0.80	0.70	2.50	0.53	7.00	0.36	1
3	- - -	1.46	1.24	2.20	0.95	7.00	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

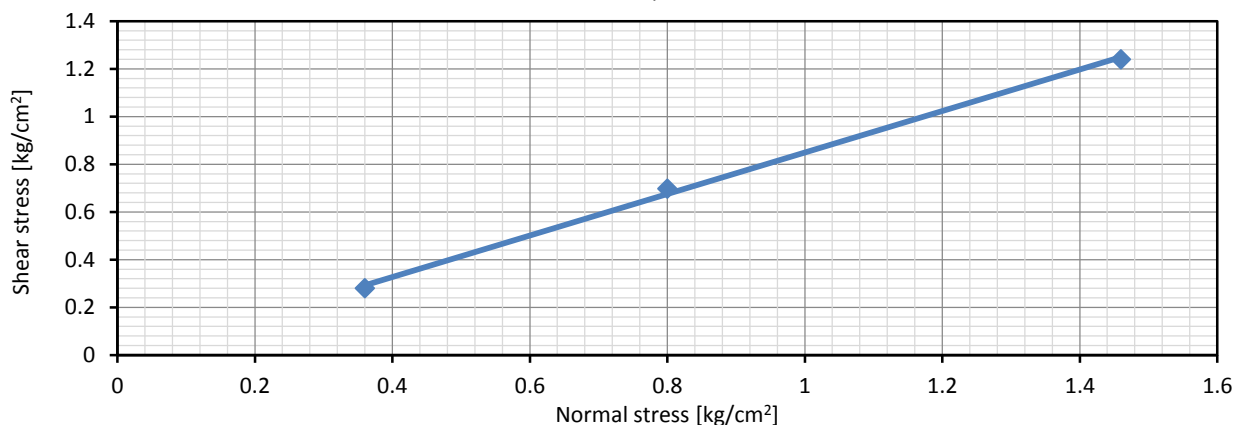
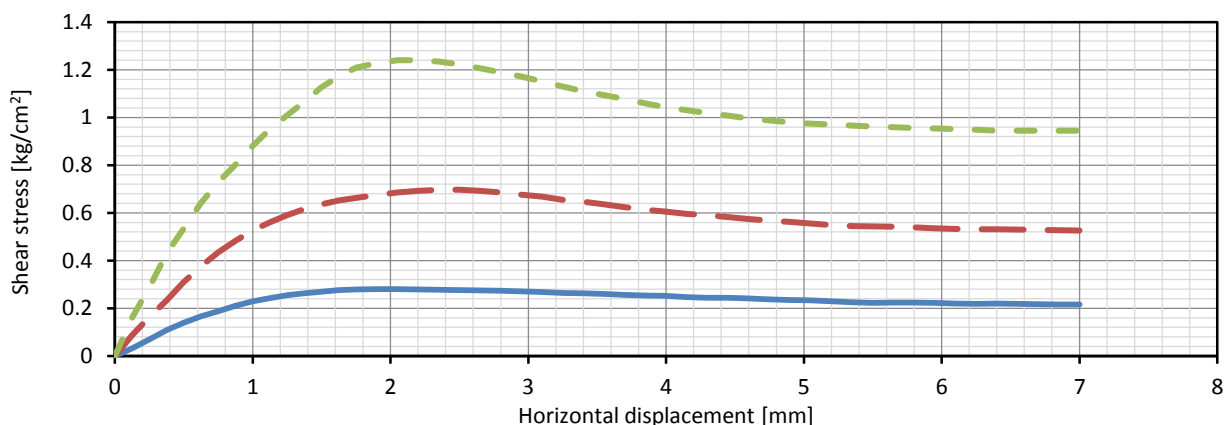
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Other	Square	Width = 6.0 [cm]

Stage	Initial				Preshear				Final			
Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	4.00	4.21	3.89	-	3.98	4.18	3.87	-	-	-	-	-
γ_d [g/cm ³]	1.69	1.69	1.70	-	1.70	1.70	1.71	-	-	-	-	-
w [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	-	-
e [-]	0.57	0.57	0.56	-	0.56	0.56	0.55	-	-	-	-	-
s [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	-	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	2.05	0.22	7.00	0.52	1
2	- - -	0.80	0.70	2.50	0.53	7.00	0.36	1
3	- - -	1.46	1.24	2.20	0.95	7.00	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

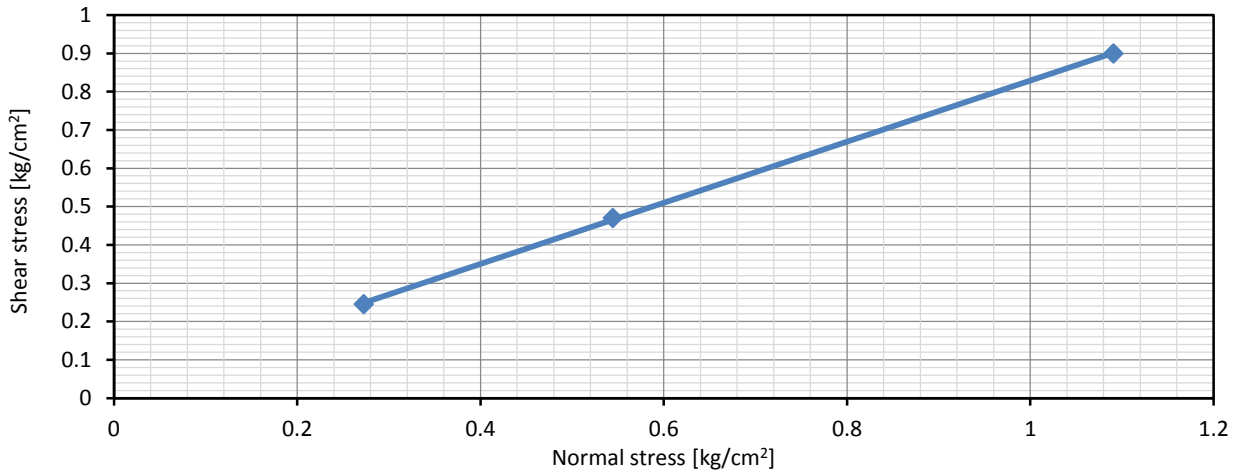
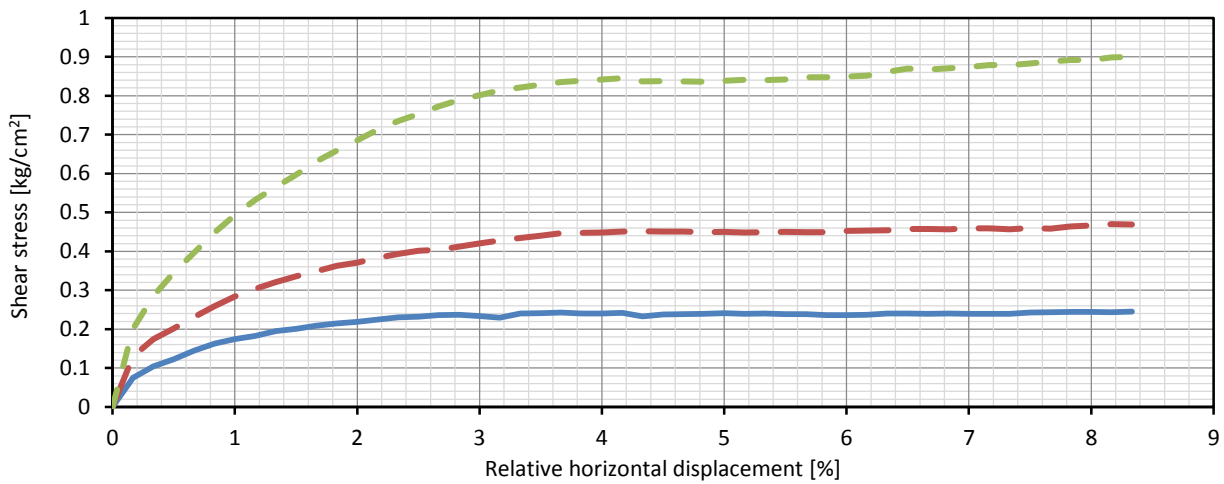
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Inundated
Shear box	Square Width = 30.0 [cm]

Stage	Initial			
	Test no.	01	02	03
H [cm]	20.60	21.80	20.10	-
γ_d [g/cm ³]	1.64	1.65	1.65	-
w [%]	4.8	4.8	4.8	-
e [-]	0.62	0.61	0.61	-
s [%]	20.7	21.0	21.0	-



Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [%]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	8.33	0.25	8.33	0.92	1
2	- - -	0.54	0.47	8.17	0.47	8.33	0.36	1
3	- - -	1.09	0.90	8.33	0.90	8.33	-0.02	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
38.6	0.03

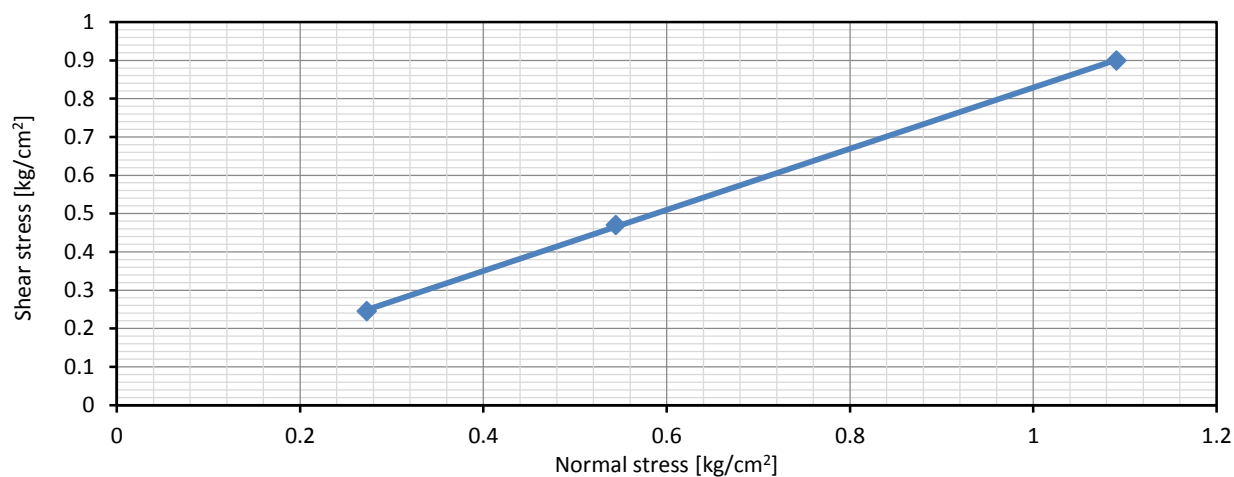
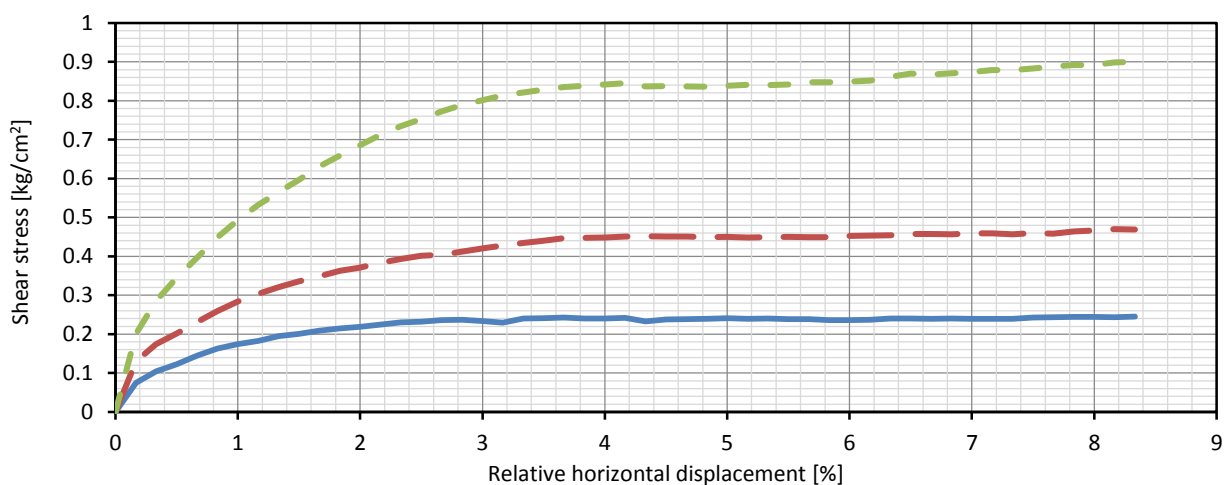
Att.: By user's will, area correction is applied to the calculations (*).

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Inundated
Shear box	Square Width = 30.0 [cm]

Stage	Initial				Preshear				
	Test no.	01	02	03	04	01	02	03	04
H [cm]	20.60	21.80	20.10	-	20.38	21.72	19.84	-	
γ_d [g/cm ³]	1.64	1.65	1.65	-	1.66	1.66	1.67	-	
w [%]	4.8	4.8	4.8	-	22.6	22.6	22.1	-	
e [-]	0.62	0.61	0.61	-	0.60	0.60	0.59	-	
s [%]	20.7	21.0	21.0	-	100	100	100	-	



Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [%]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	8.33	0.25	8.33	0.92	1
2	- - -	0.54	0.47	8.17	0.47	8.33	0.36	1
3	- - -	1.09	0.90	8.33	0.90	8.33	-0.02	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
38.6	0.03

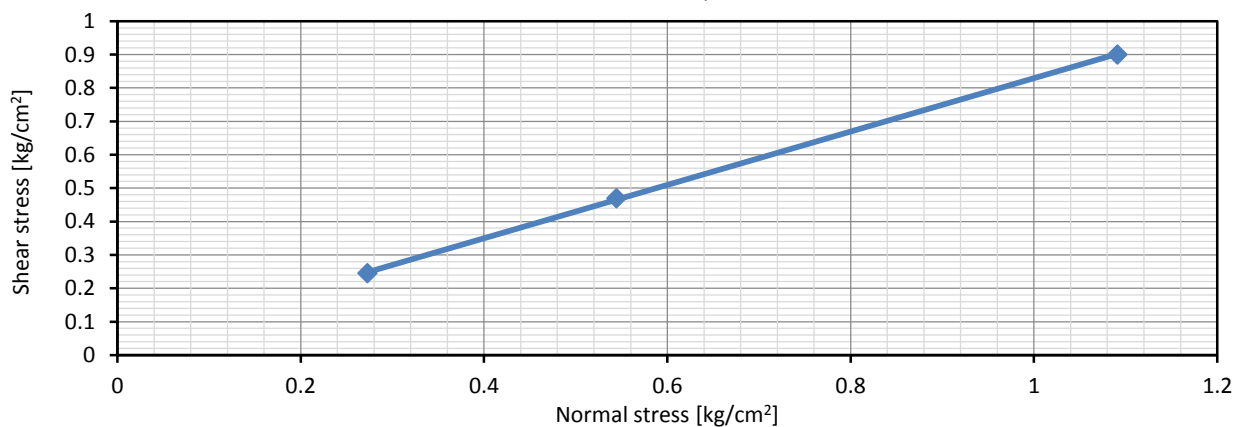
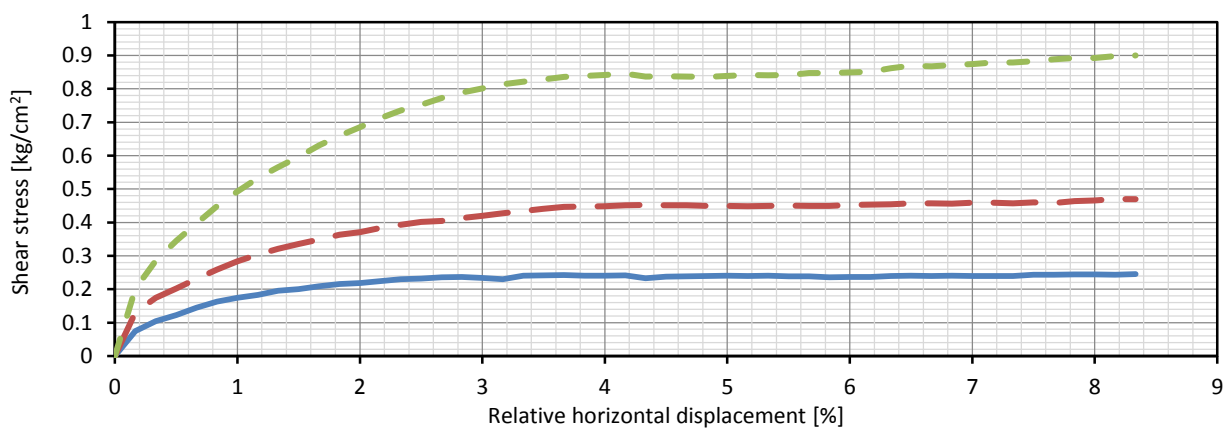
Att.: By user's will, area correction is applied to the calculations (*).

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Inundated	Square	Width = 30.0 [cm]

Stage	Initial				Preshear				Final			
Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	20.60	21.80	20.10	-	20.38	21.72	19.84	-	-	-	-	-
γ_d [g/cm ³]	1.64	1.65	1.65	-	1.66	1.66	1.67	-	-	-	-	-
w [%]	4.8	4.8	4.8	-	22.6	22.6	22.1	-	-	-	-	-
e [-]	0.62	0.61	0.61	-	0.60	0.60	0.59	-	-	-	-	-
s [%]	20.7	21.0	21.0	-	100	100	100	-	-	-	-	-



Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [%]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	8.33	0.25	8.33	0.92	1
2	- - -	0.54	0.47	8.17	0.47	8.33	0.36	1
3	- - -	1.09	0.90	8.33	0.90	8.33	-0.02	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
38.6	0.03

Att.: By user's will, area correction is applied to the calculations (*).

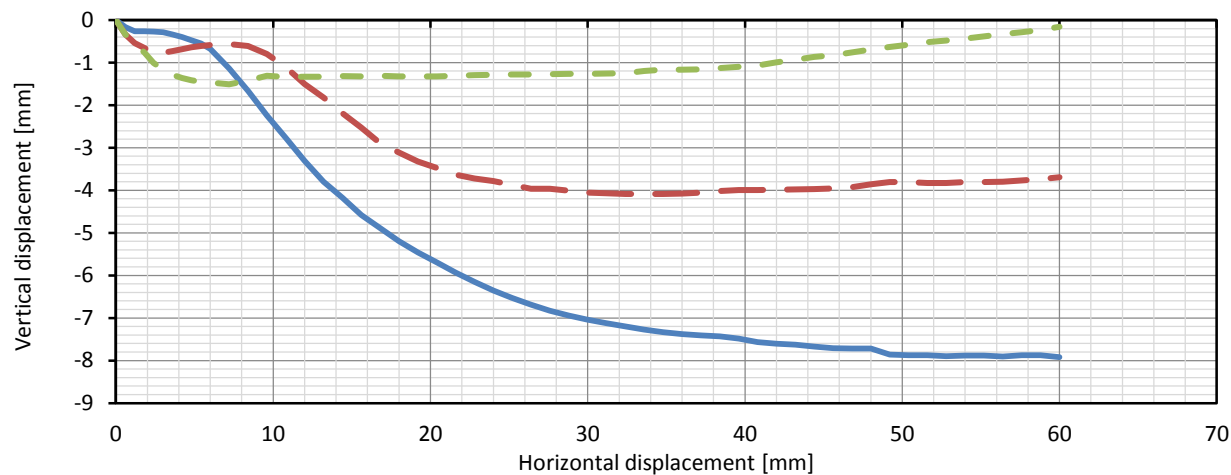
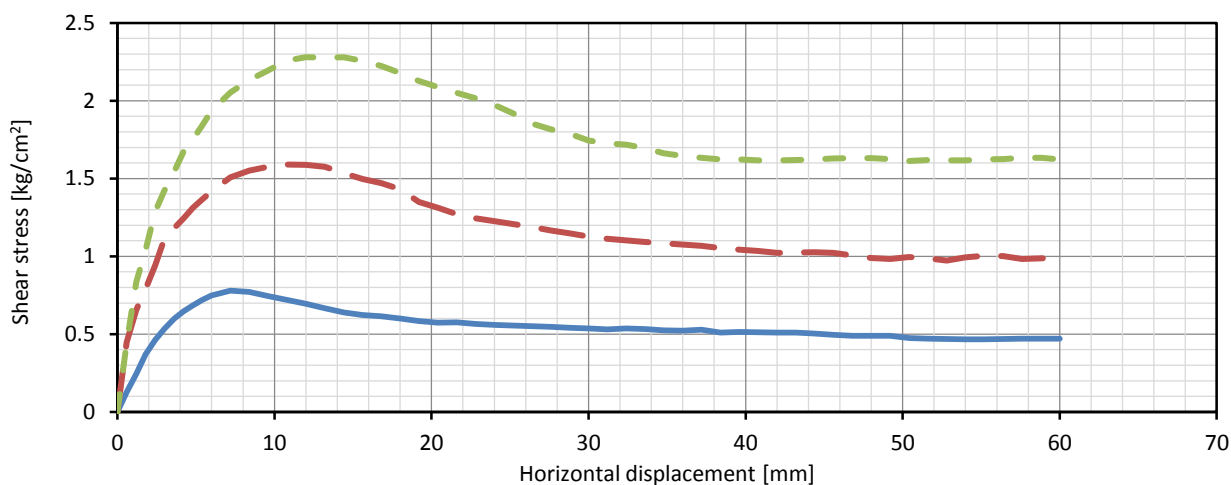
Output – Type b

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Natural
Shear box	Square Width = 30.0 [cm]

Stage	Initial				
	Test no.	01	02	03	04
H [cm]	20.60	18.90	21.30	-	-
γ_d [g/cm ³]	1.73	1.75	1.74	-	-
w [%]	6.3	6.3	6.3	-	-
e [-]	0.53	0.51	0.52	-	-
s [%]	31.4	32.5	31.9	-	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	1.00	0.78	7.20	0.47	60.00	-7.92	0.09
2	- - -	2.00	1.59	10.80	0.99	60.00	-3.70	0.09
3	- - -	3.00	2.28	12.00	1.62	60.00	-0.16	0.09
-	-	-	-	-	-	-	-	-

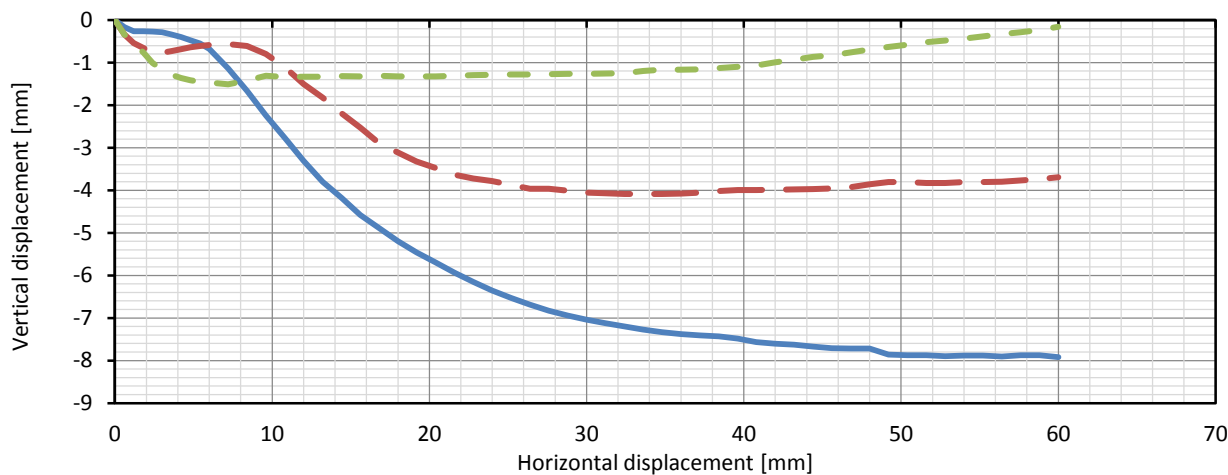
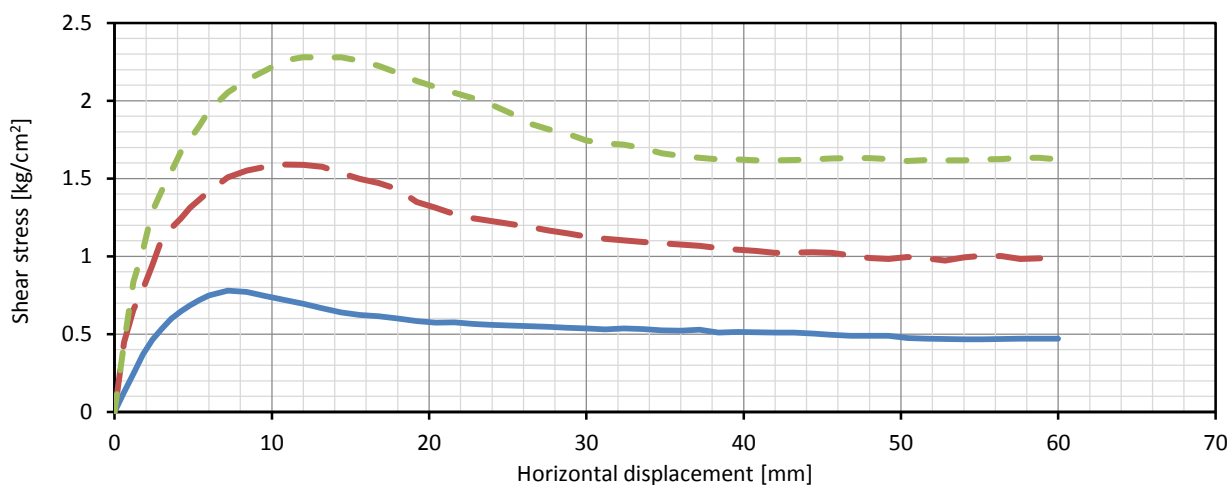
ϕ [deg.]	c [kg/cm ²]
36.9	0.05

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Natural
Shear box	Square Width = 30.0 [cm]

Stage	Initial				Preshear				
	Test no.	01	02	03	04	01	02	03	04
H [cm]	20.60	18.90	21.30	-	20.47	18.74	21.04	-	
γ_d [g/cm ³]	1.73	1.75	1.74	-	1.74	1.76	1.76	-	
w [%]	6.3	6.3	6.3	-	6.3	6.3	6.3	-	
e [-]	0.53	0.51	0.52	-	0.52	0.50	0.50	-	
s [%]	31.4	32.5	31.9	-	32.0	33.3	33.1	-	



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	1.00	0.78	7.20	0.47	60.00	-7.92	0.09
2	- - -	2.00	1.59	10.80	0.99	60.00	-3.70	0.09
3	- - -	3.00	2.28	12.00	1.62	60.00	-0.16	0.09
-	-	-	-	-	-	-	-	-

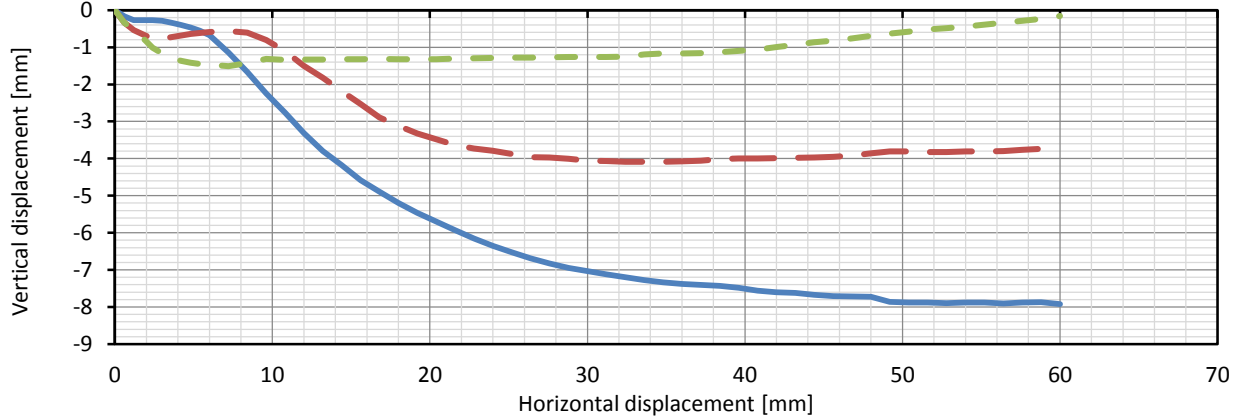
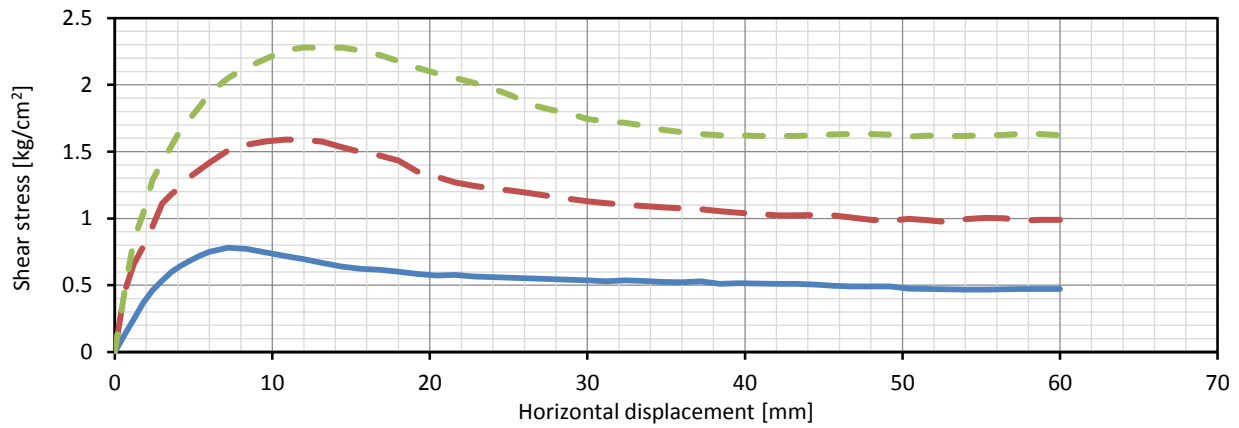
ϕ [deg.]	c [kg/cm ²]
36.9	0.05

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Natural	Square	Width = 30.0 [cm]

Stage	Initial				Preshear				Final			
Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	20.60	18.90	21.30	-	20.47	18.74	21.04	-	-	-	-	-
γ_d [g/cm ³]	1.73	1.75	1.74	-	1.74	1.76	1.76	-	-	-	-	-
w [%]	6.3	6.3	6.3	-	6.3	6.3	6.3	-	-	-	-	-
e [-]	0.53	0.51	0.52	-	0.52	0.50	0.50	-	-	-	-	-
s [%]	31.4	32.5	31.9	-	32.0	33.3	33.1	-	-	-	-	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	1.00	0.78	7.20	0.47	60.00	-7.92	0.09
2	- - -	2.00	1.59	10.80	0.99	60.00	-3.70	0.09
3	- - -	3.00	2.28	12.00	1.62	60.00	-0.16	0.09
-	-	-	-	-	-	-	-	-

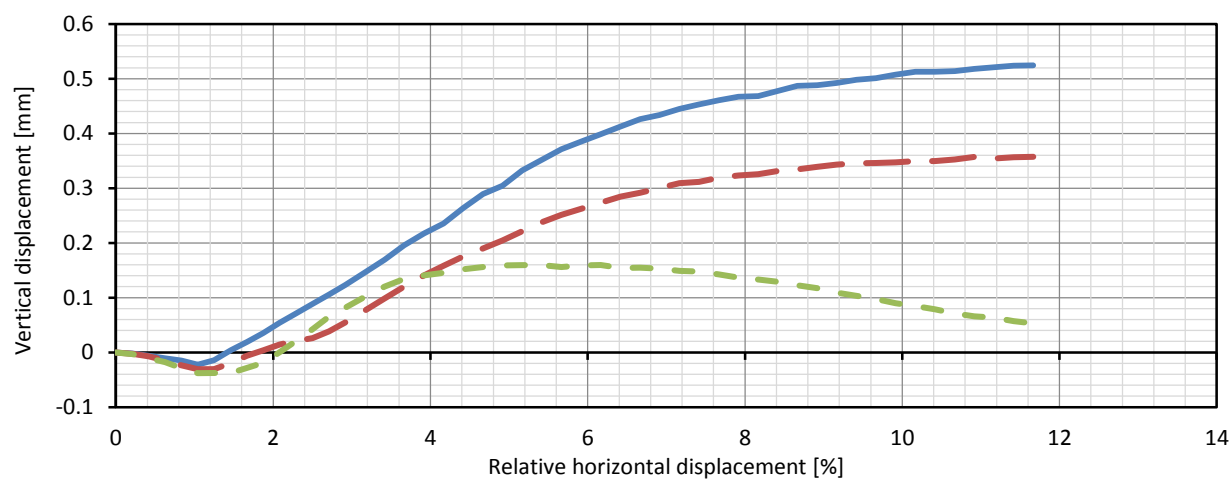
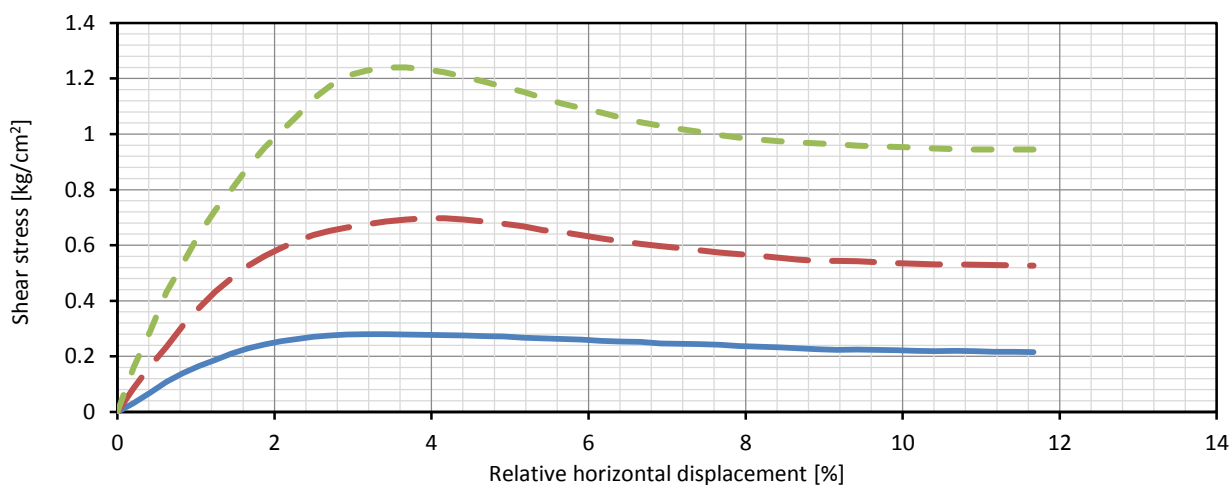
ϕ [deg.]	c [kg/cm ²]
36.9	0.05

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Other
Shear box	Square Width = 6.0 [cm]

Stage	Initial				
	Test no.	01	02	03	04
H [cm]	4.00	4.21	3.89	-	-
γ_d [g/cm ³]	1.69	1.69	1.70	-	-
w [%]	0.0	0.0	0.0	-	-
e [-]	0.57	0.57	0.56	-	-
s [%]	0.0	0.0	0.0	-	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [%]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	3.42	0.22	11.67	0.52	1
2	- - -	0.80	0.70	4.17	0.53	11.67	0.36	1
3	- - -	1.46	1.24	3.67	0.95	11.67	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

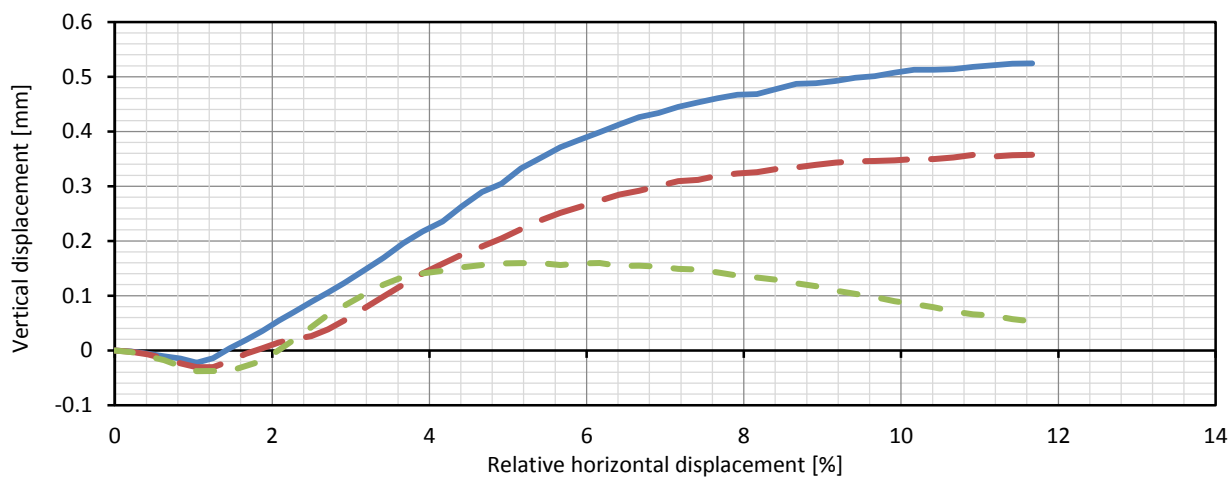
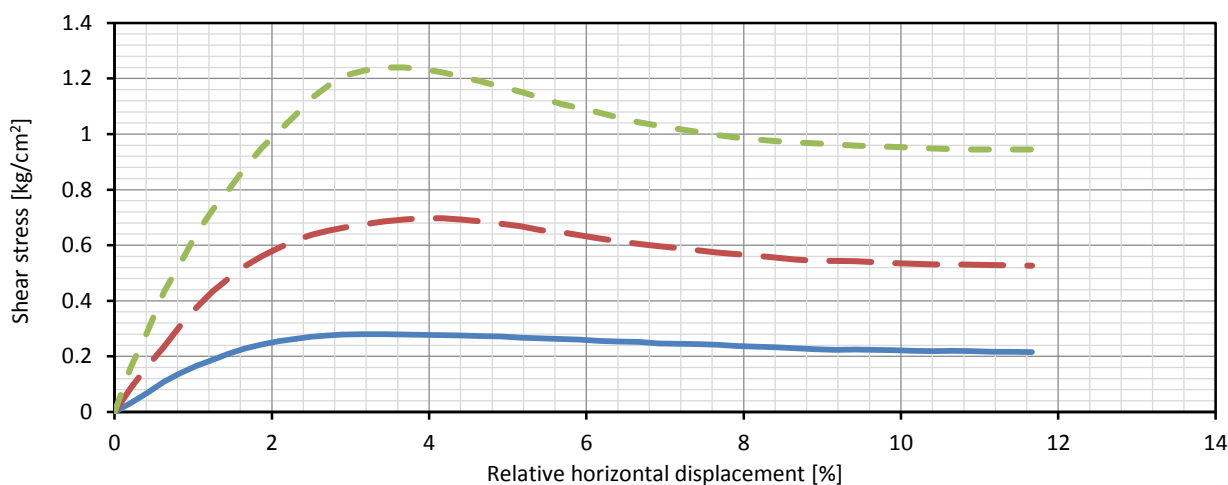
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Other
Shear box	Square Width = 6.0 [cm]

Stage	Initial				Preshear				
	Test no.	01	02	03	04	01	02	03	04
H [cm]	4.00	4.21	3.89	-	3.98	4.18	3.87	-	
γ_d [g/cm ³]	1.69	1.69	1.70	-	1.70	1.70	1.71	-	
w [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	
e [-]	0.57	0.57	0.56	-	0.56	0.56	0.55	-	
s [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [%]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	3.42	0.22	11.67	0.52	1
2	- - -	0.80	0.70	4.17	0.53	11.67	0.36	1
3	- - -	1.46	1.24	3.67	0.95	11.67	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

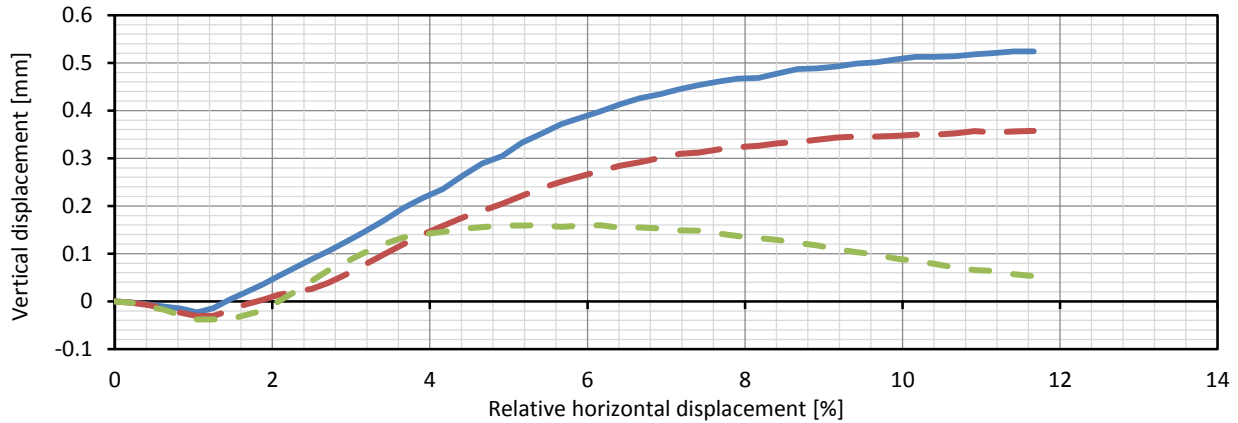
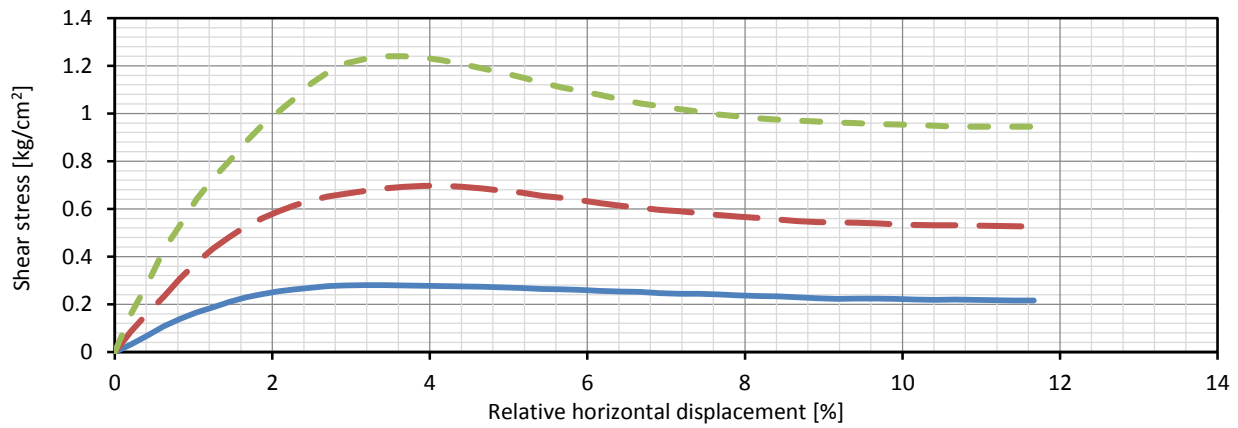
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Other	Square	Width = 6.0 [cm]

Stage	Initial				Preshear				Final			
Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	4.00	4.21	3.89	-	3.98	4.18	3.87	-	-	-	-	-
γ_d [g/cm ³]	1.69	1.69	1.70	-	1.70	1.70	1.71	-	-	-	-	-
w [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	-	-
e [-]	0.57	0.57	0.56	-	0.56	0.56	0.55	-	-	-	-	-
s [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	-	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [%]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	3.42	0.22	11.67	0.52	1
2	- - -	0.80	0.70	4.17	0.53	11.67	0.36	1
3	- - -	1.46	1.24	3.67	0.95	11.67	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

Err.: Cohesion is negative!

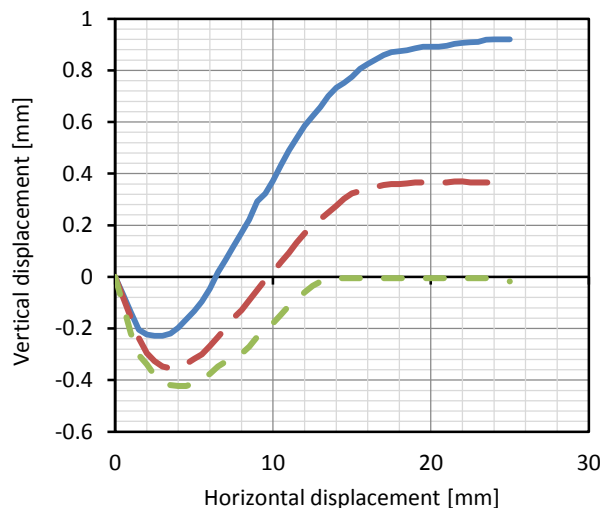
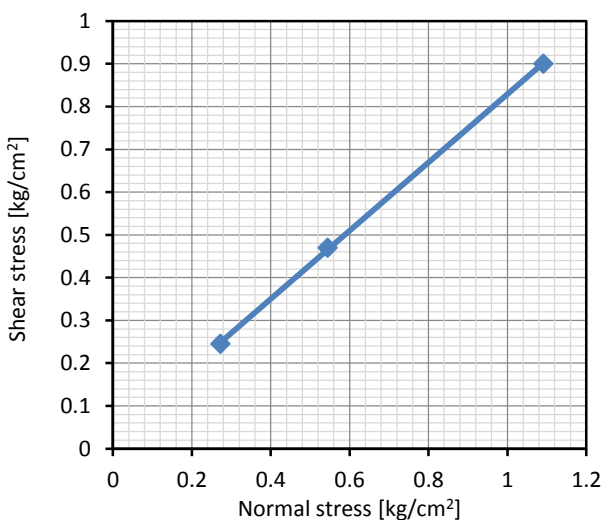
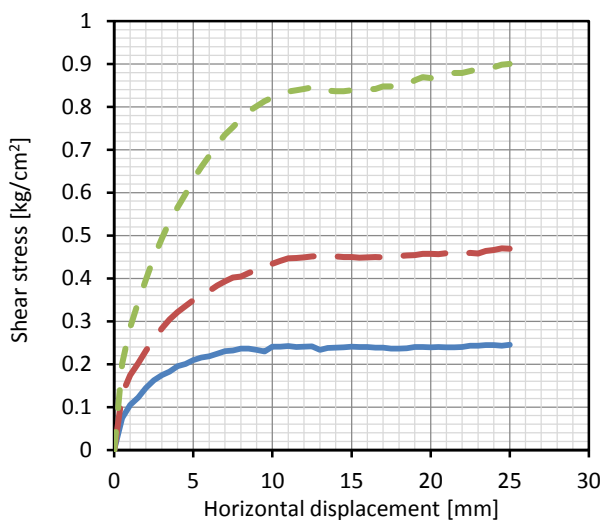
Output – Type c

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Inundated
Shear box	Square Width = 30.0 [cm]

Stage	Initial				
	Test no.	01	02	03	04
H [cm]	20.60	21.80	20.10	-	-
γ_d [g/cm ³]	1.64	1.65	1.65	-	-
w [%]	4.8	4.8	4.8	-	-
e [-]	0.62	0.61	0.61	-	-
s [%]	20.7	21.0	21.0	-	-



ϕ [deg.]	c [kg/cm ²]
38.6	0.03

Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	25.00	0.25	25.00	0.92	1
2	- - -	0.54	0.47	24.50	0.47	25.00	0.36	1
3	- - -	1.09	0.90	25.00	0.90	25.00	-0.02	1
-	-	-	-	-	-	-	-	-

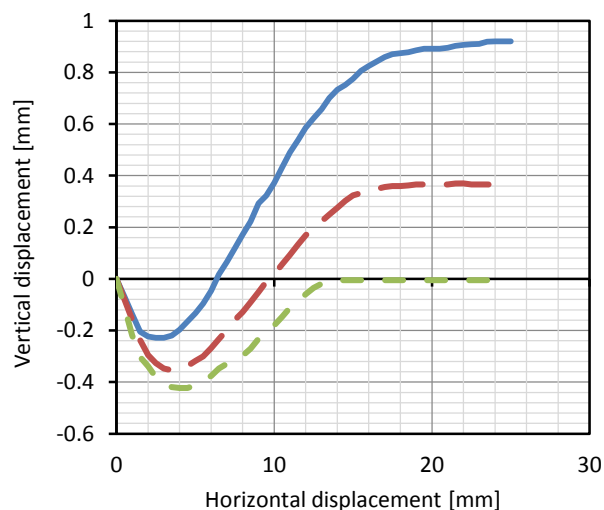
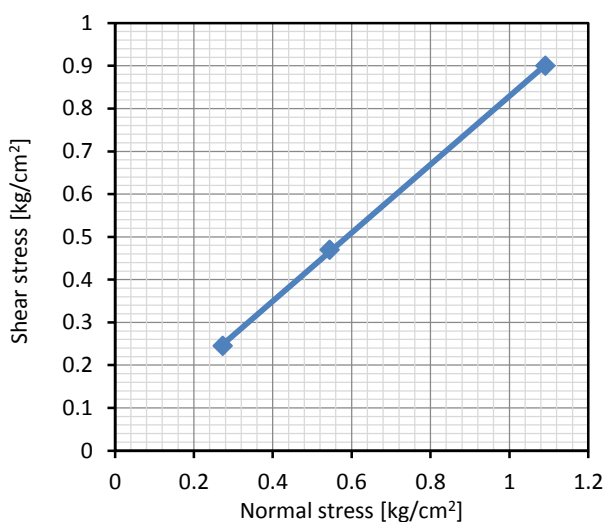
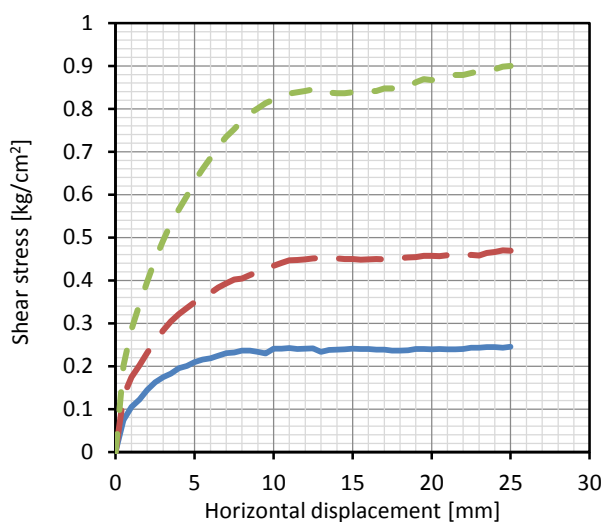
Att.: By user's will, area correction is applied to the calculations (*).

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Inundated
Shear box	Square Width = 30.0 [cm]

Stage	Initial				Preshear				
	Test no.	01	02	03	04	01	02	03	04
H [cm]	20.60	21.80	20.10	-	20.38	21.72	19.84	-	
γ_d [g/cm ³]	1.64	1.65	1.65	-	1.66	1.66	1.67	-	
w [%]	4.8	4.8	4.8	-	22.6	22.6	22.1	-	
e [-]	0.62	0.61	0.61	-	0.60	0.60	0.59	-	
s [%]	20.7	21.0	21.0	-	100	100	100	-	



ϕ [deg.]	c [kg/cm ²]
38.6	0.03

Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	25.00	0.25	25.00	0.92	1
2	- - -	0.54	0.47	24.50	0.47	25.00	0.36	1
3	- - -	1.09	0.90	25.00	0.90	25.00	-0.02	1
-	-	-	-	-	-	-	-	-

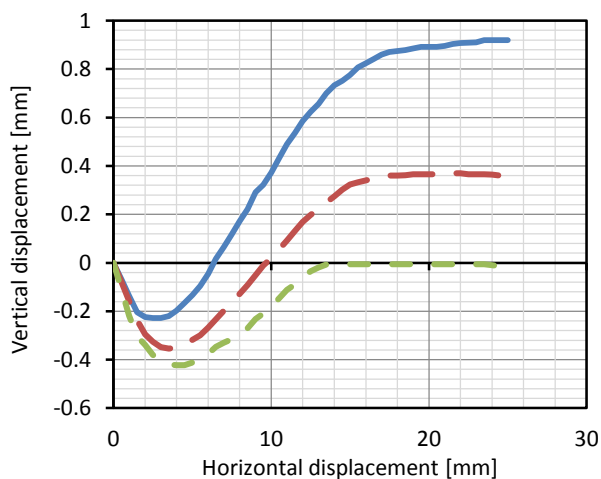
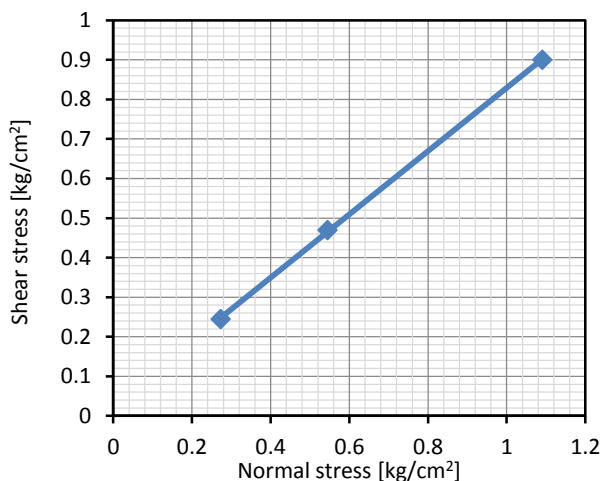
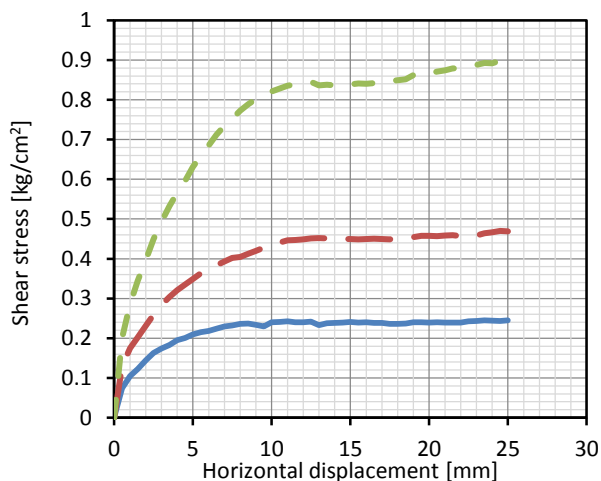
Att.: By user's will, area correction is applied to the calculations (*).

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Inundated	Square	Width = 30.0 [cm]

Stage	Initial				Preshear				Final			
Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	20.60	21.80	20.10	-	20.38	21.72	19.84	-	-	-	-	-
γ_d [g/cm ³]	1.64	1.65	1.65	-	1.66	1.66	1.67	-	-	-	-	-
w [%]	4.8	4.8	4.8	-	22.6	22.6	22.1	-	-	-	-	-
e [-]	0.62	0.61	0.61	-	0.60	0.60	0.59	-	-	-	-	-
s [%]	20.7	21.0	21.0	-	100	100	100	-	-	-	-	-



ϕ [deg.]	c [kg/cm ²]
38.6	0.03

Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	25.00	0.25	25.00	0.92	1
2	- - -	0.54	0.47	24.50	0.47	25.00	0.36	1
3	- - -	1.09	0.90	25.00	0.90	25.00	-0.02	1
-	-	-	-	-	-	-	-	-

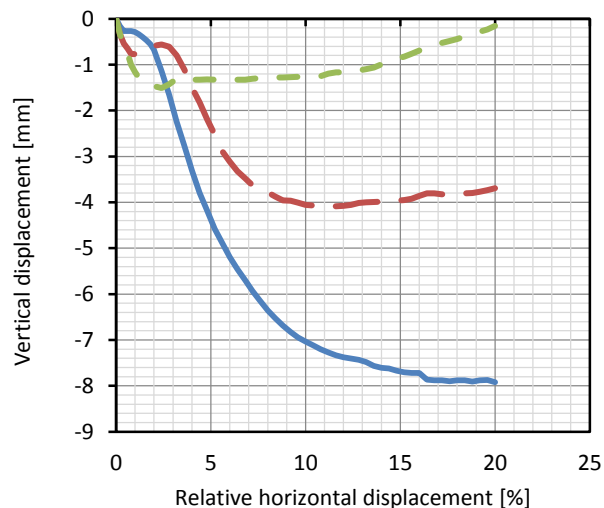
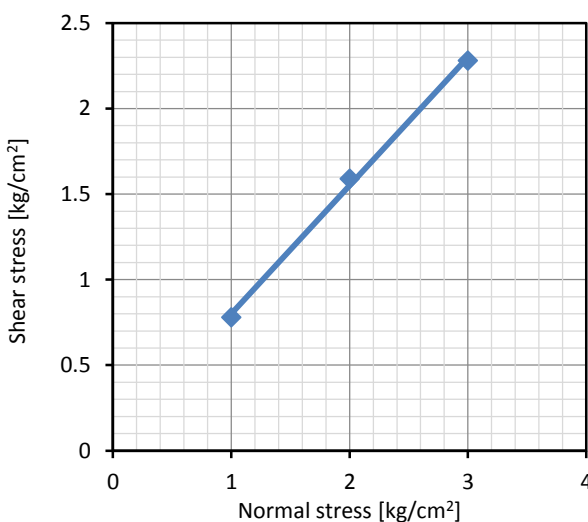
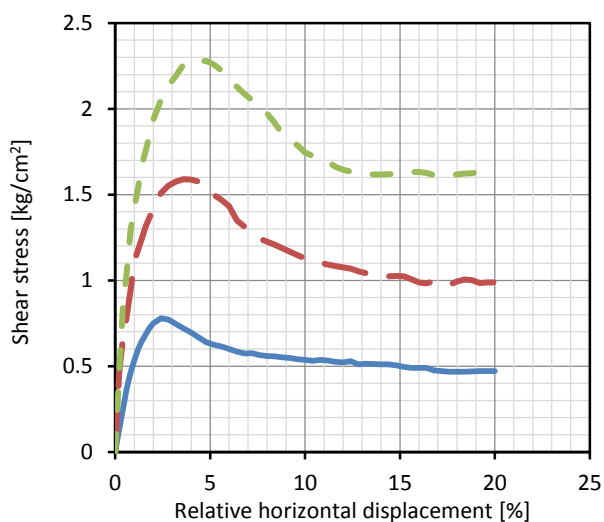
Att.: By user's will, area correction is applied to the calculations (*).

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Natural
Shear box	Square Width = 30.0 [cm]

Stage	Initial			
	01	02	03	04
H [cm]	20.60	18.90	21.30	-
γ_d [g/cm ³]	1.73	1.75	1.74	-
w [%]	6.3	6.3	6.3	-
e [-]	0.53	0.51	0.52	-
s [%]	31.4	32.5	31.9	-



ϕ [deg.]	c [kg/cm ²]
36.9	0.05

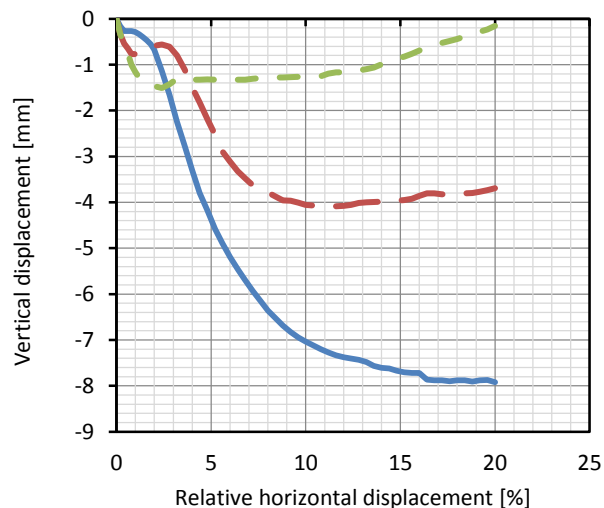
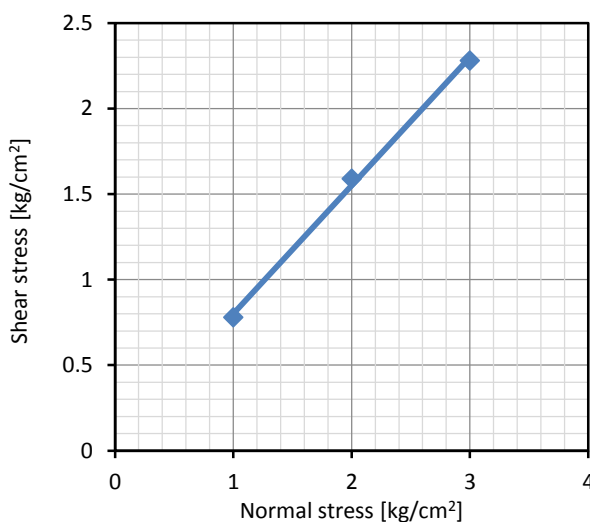
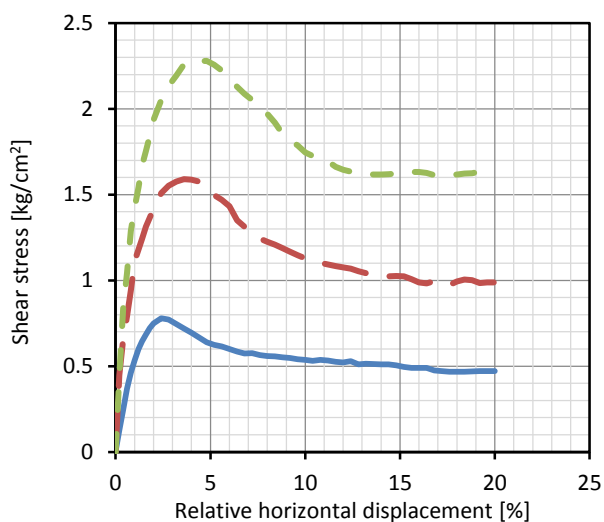
Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [%]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	1.00	0.78	2.40	0.47	20.00	-7.92	0.09
2	- - -	2.00	1.59	3.60	0.99	20.00	-3.70	0.09
3	- - -	3.00	2.28	4.00	1.62	20.00	-0.16	0.09
-	-	-	-	-	-	-	-	-

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Natural
Shear box	Square Width = 30.0 [cm]

Stage	Initial				Preshear			
	01	02	03	04	01	02	03	04
H [cm]	20.60	18.90	21.30	-	20.47	18.74	21.04	-
γ_d [g/cm ³]	1.73	1.75	1.74	-	1.74	1.76	1.76	-
w [%]	6.3	6.3	6.3	-	6.3	6.3	6.3	-
e [-]	0.53	0.51	0.52	-	0.52	0.50	0.50	-
s [%]	31.4	32.5	31.9	-	32.0	33.3	33.1	-



ϕ [deg.]	c [kg/cm ²]
36.9	0.05

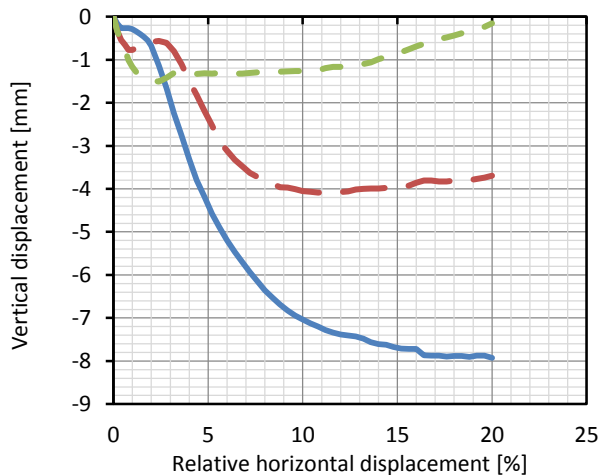
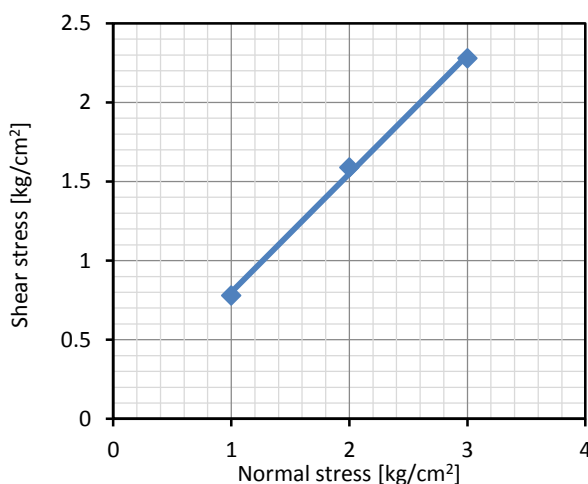
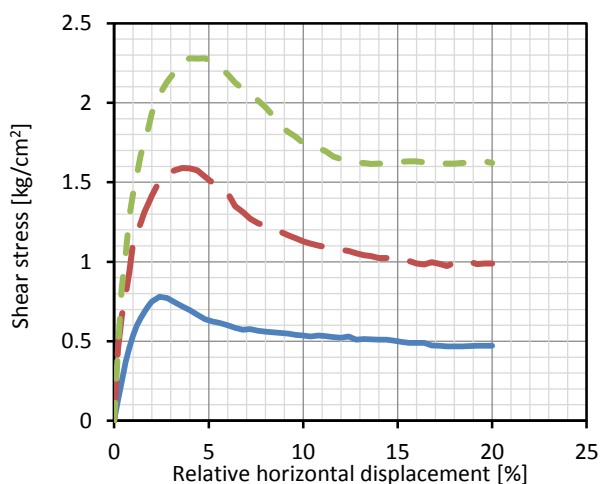
Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [%]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	1.00	0.78	2.40	0.47	20.00	-7.92	0.09
2	- - -	2.00	1.59	3.60	0.99	20.00	-3.70	0.09
3	- - -	3.00	2.28	4.00	1.62	20.00	-0.16	0.09
-	-	-	-	-	-	-	-	-

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Natural	Square	Width = 30.0 [cm]

Stage	Initial				Preshear				Final				
	Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	20.60	18.90	21.30	-	20.47	18.74	21.04	-	-	-	-	-	-
γ_d [g/cm ³]	1.73	1.75	1.74	-	1.74	1.76	1.76	-	-	-	-	-	-
w [%]	6.3	6.3	6.3	-	6.3	6.3	6.3	-	-	-	-	-	-
e [-]	0.53	0.51	0.52	-	0.52	0.50	0.50	-	-	-	-	-	-
s [%]	31.4	32.5	31.9	-	32.0	33.3	33.1	-	-	-	-	-	-



ϕ [deg.]	c [kg/cm ²]
36.9	0.05

Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [%]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	1.00	0.78	2.40	0.47	20.00	-7.92	0.09
2	- - -	2.00	1.59	3.60	0.99	20.00	-3.70	0.09
3	- - -	3.00	2.28	4.00	1.62	20.00	-0.16	0.09
-	-	-	-	-	-	-	-	-

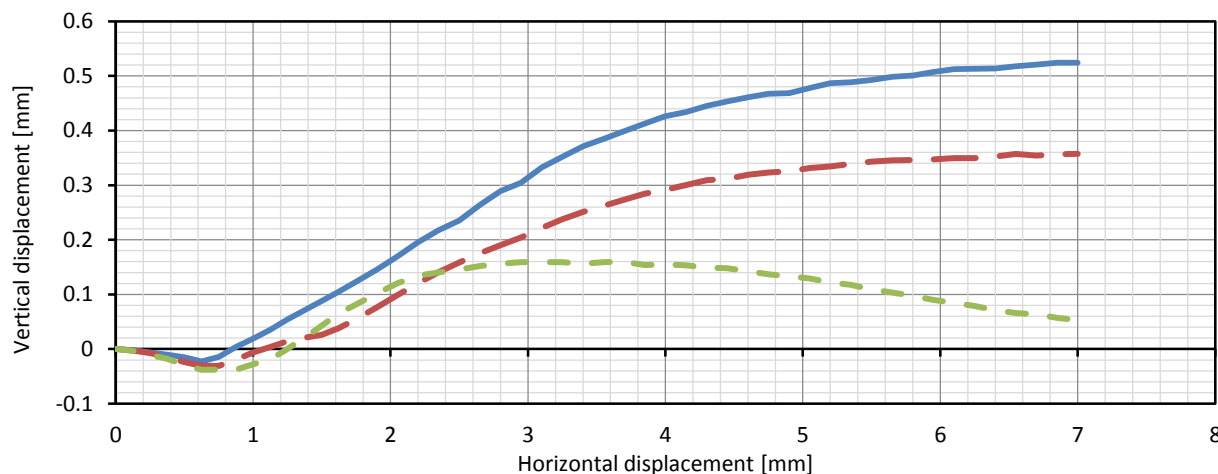
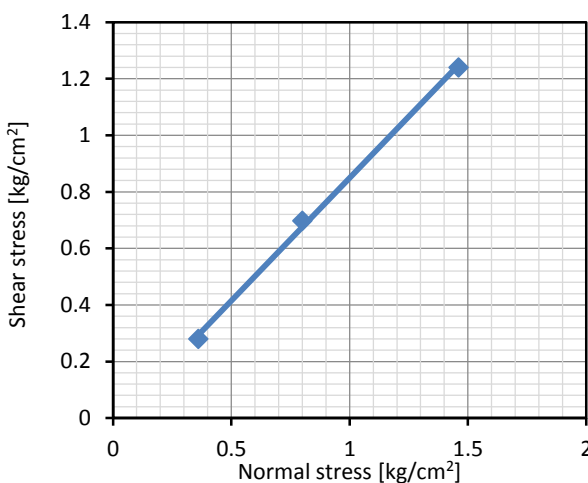
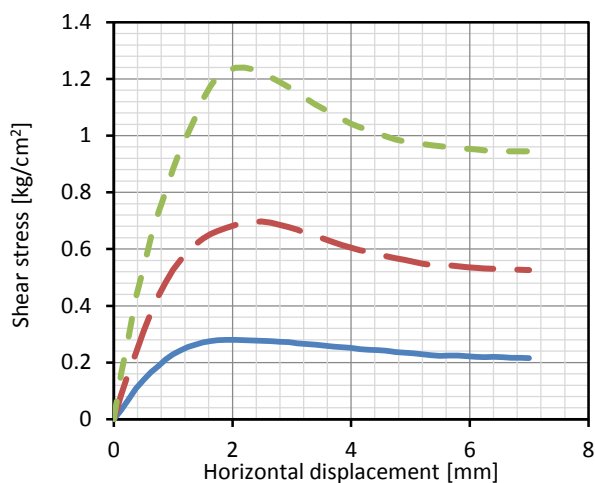
Output – Type d

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Other
Shear box	Square Width = 6.0 [cm]

Stage	Initial			
	01	02	03	04
H [cm]	4.00	4.21	3.89	-
γ_d [g/cm ³]	1.69	1.69	1.70	-
w [%]	0.0	0.0	0.0	-
e [-]	0.57	0.57	0.56	-
s [%]	0.0	0.0	0.0	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	2.05	0.22	7.00	0.52	1
2	- - -	0.80	0.70	2.50	0.53	7.00	0.36	1
3	- - -	1.46	1.24	2.20	0.95	7.00	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

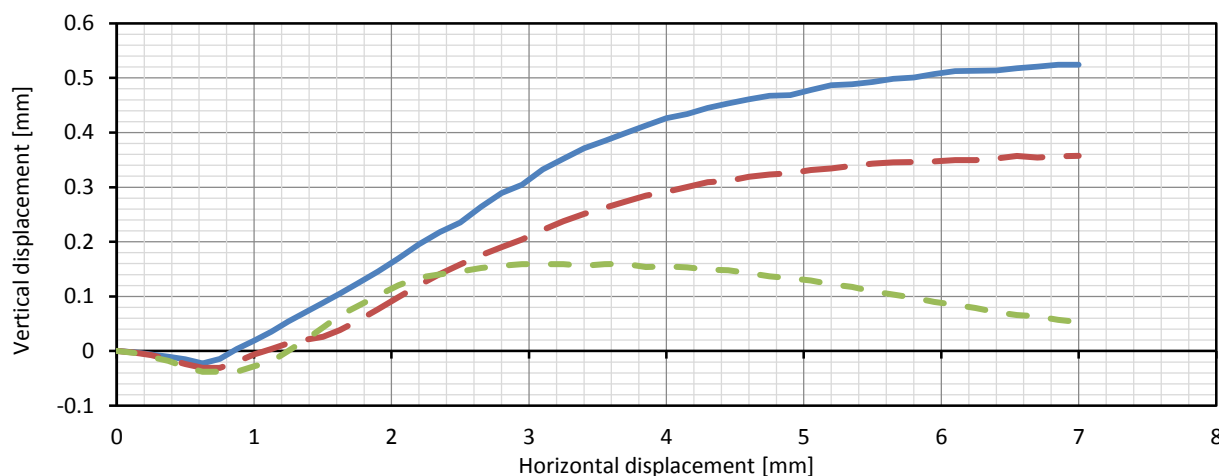
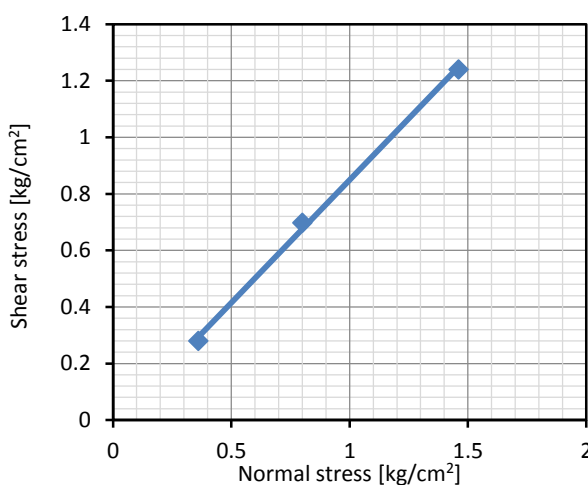
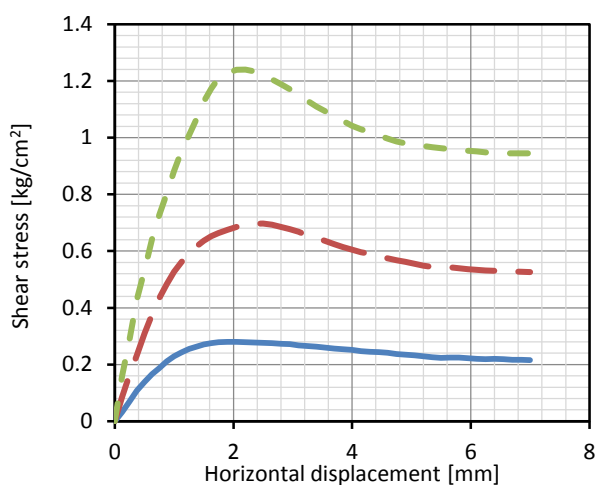
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Other
Shear box	Square Width = 6.0 [cm]

Stage	Initial				Preshear			
	01	02	03	04	01	02	03	04
H [cm]	4.00	4.21	3.89	-	3.98	4.18	3.87	-
γ_d [g/cm ³]	1.69	1.69	1.70	-	1.70	1.70	1.71	-
w [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-
e [-]	0.57	0.57	0.56	-	0.56	0.56	0.55	-
s [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	2.05	0.22	7.00	0.52	1
2	- - -	0.80	0.70	2.50	0.53	7.00	0.36	1
3	- - -	1.46	1.24	2.20	0.95	7.00	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

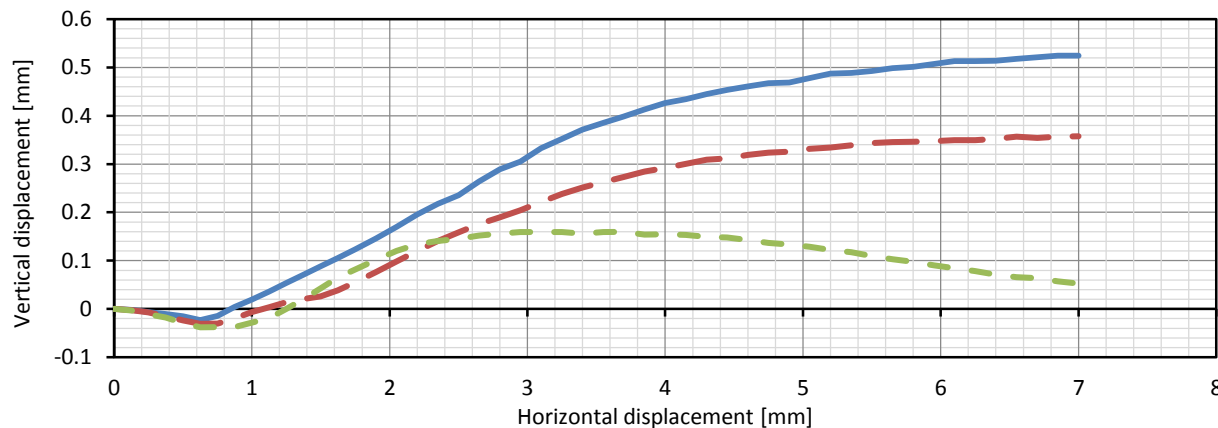
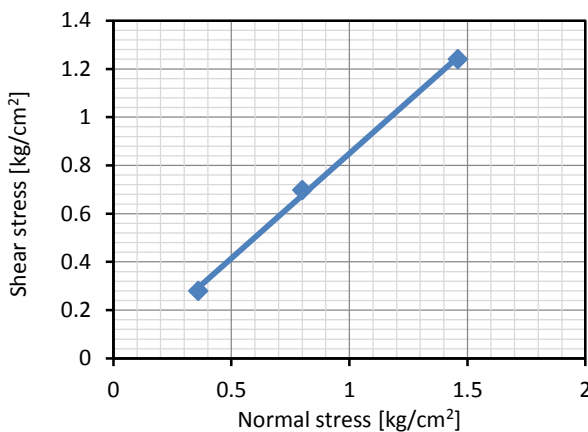
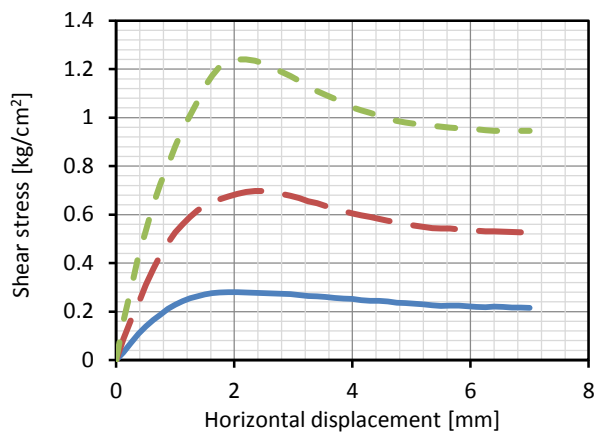
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Other	Square	Width = 6.0 [cm]

Stage	Initial				Preshear				Final			
Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	4.00	4.21	3.89	-	3.98	4.18	3.87	-	-	-	-	-
γ_d [g/cm ³]	1.69	1.69	1.70	-	1.70	1.70	1.71	-	-	-	-	-
w [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	-	-
e [-]	0.57	0.57	0.56	-	0.56	0.56	0.55	-	-	-	-	-
s [%]	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	-	-



Test no.	Symbol	σ_n [kg/cm ²]	τ_{max} [kg/cm ²]	Δ_{h-max} [mm]	τ_{ult} [kg/cm ²]	Δ_{h-ult} [mm]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.36	0.28	2.05	0.22	7.00	0.52	1
2	- - -	0.80	0.70	2.50	0.53	7.00	0.36	1
3	- - -	1.46	1.24	2.20	0.95	7.00	0.05	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
41.0	-0.02

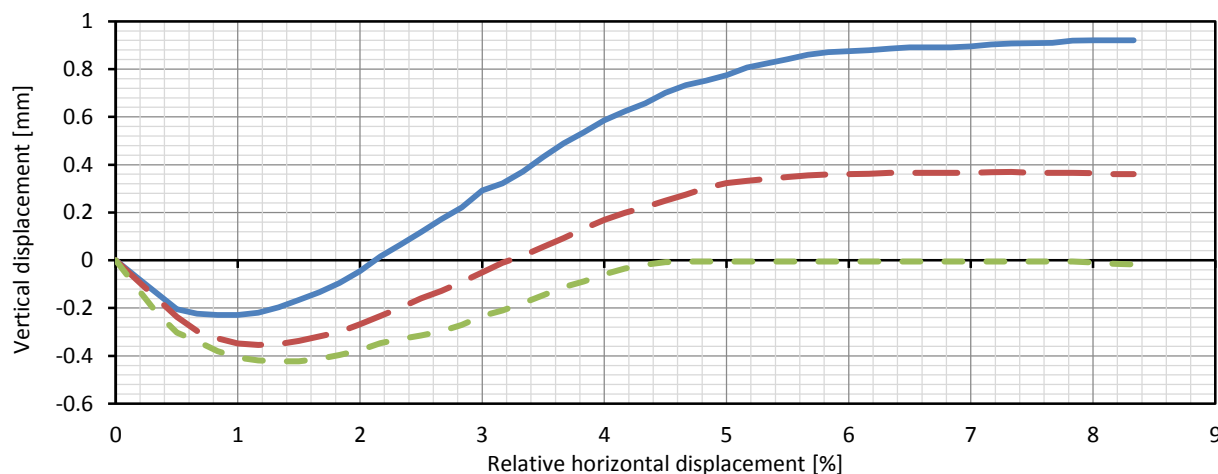
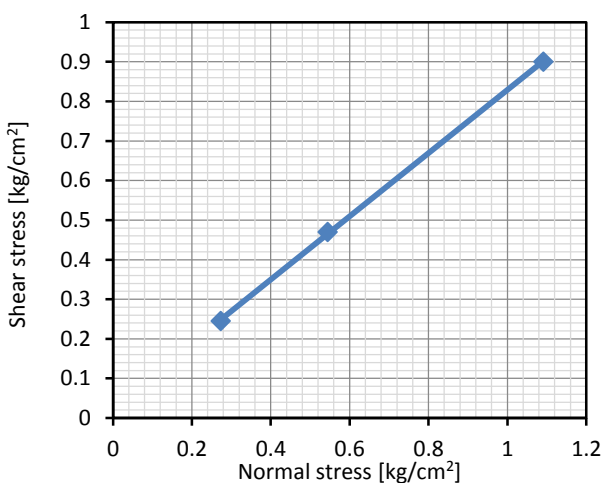
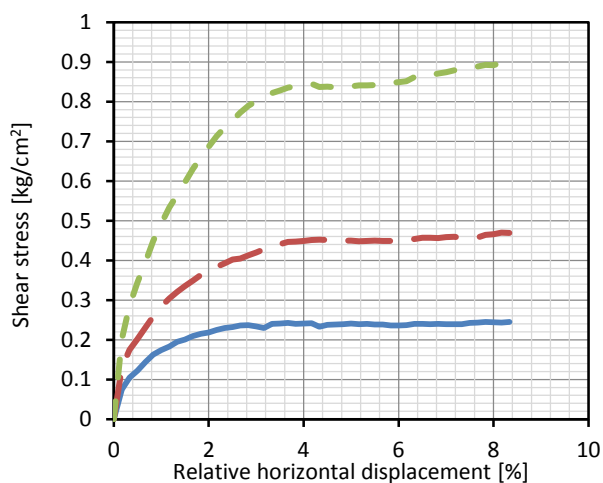
Err.: Cohesion is negative!

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Inundated
Shear box	Square Width = 30.0 [cm]

Stage	Initial				
	Test no.	01	02	03	04
H [cm]	20.60	21.80	20.10	-	-
γ_d [g/cm ³]	1.64	1.65	1.65	-	-
w [%]	4.8	4.8	4.8	-	-
e [-]	0.62	0.61	0.61	-	-
s [%]	20.7	21.0	21.0	-	-



Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [%]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	8.33	0.25	8.33	0.92	1
2	- - -	0.54	0.47	8.17	0.47	8.33	0.36	1
3	- - -	1.09	0.90	8.33	0.90	8.33	-0.02	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
38.6	0.03

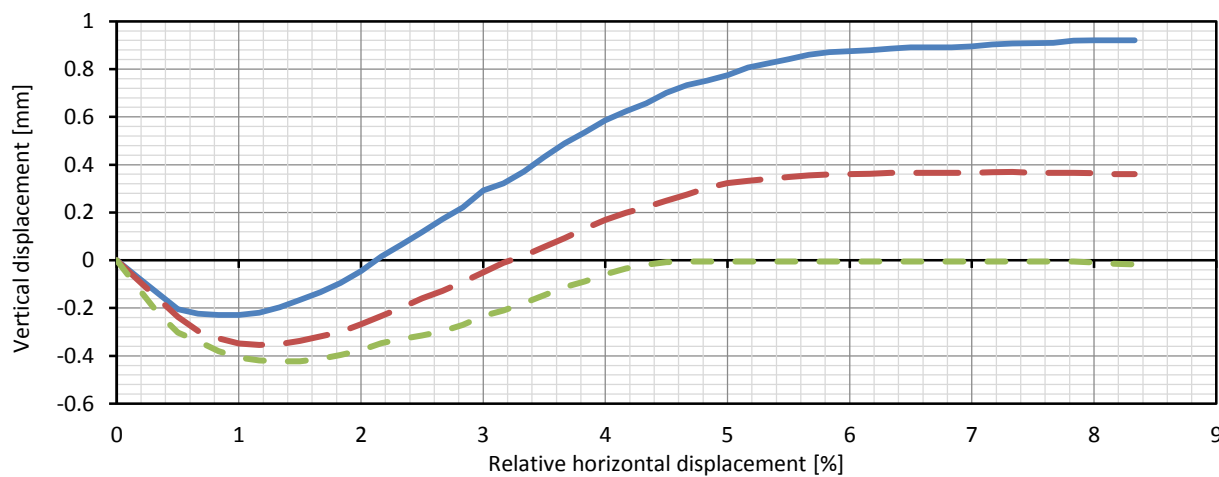
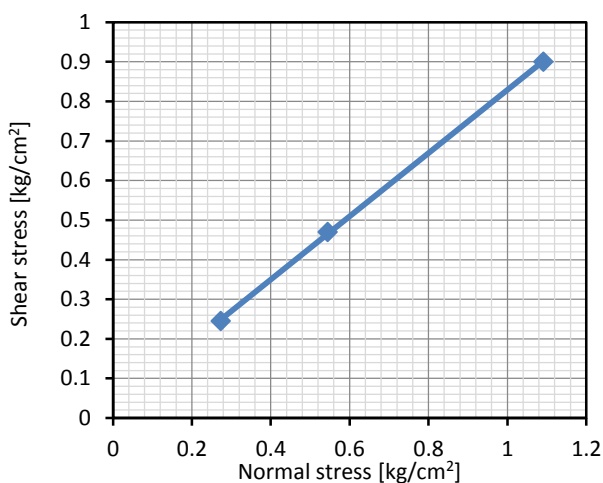
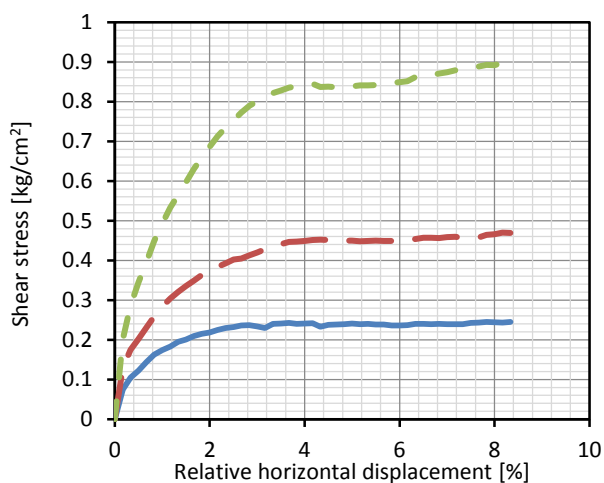
Att.: By user's will, area correction is applied to the calculations (*).

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Inundated
Shear box	Square Width = 30.0 [cm]

Stage	Initial				Preshear				
	Test no.	01	02	03	04	01	02	03	04
H [cm]	20.60	21.80	20.10	-	20.38	21.72	19.84	-	
γ_d [g/cm ³]	1.64	1.65	1.65	-	1.66	1.66	1.67	-	
w [%]	4.8	4.8	4.8	-	22.6	22.6	22.1	-	
e [-]	0.62	0.61	0.61	-	0.60	0.60	0.59	-	
s [%]	20.7	21.0	21.0	-	100	100	100	-	



Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [%]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	8.33	0.25	8.33	0.92	1
2	- - -	0.54	0.47	8.17	0.47	8.33	0.36	1
3	- - -	1.09	0.90	8.33	0.90	8.33	-0.02	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
38.6	0.03

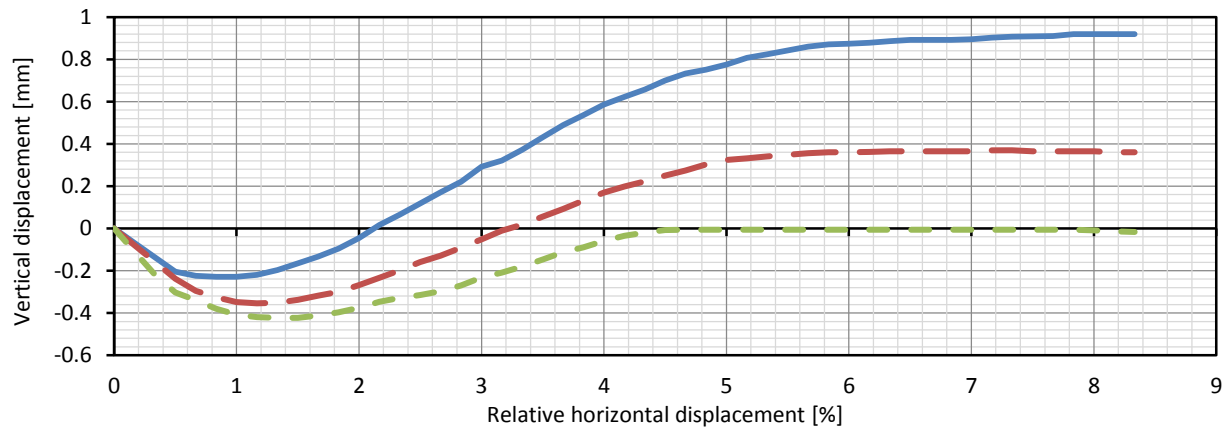
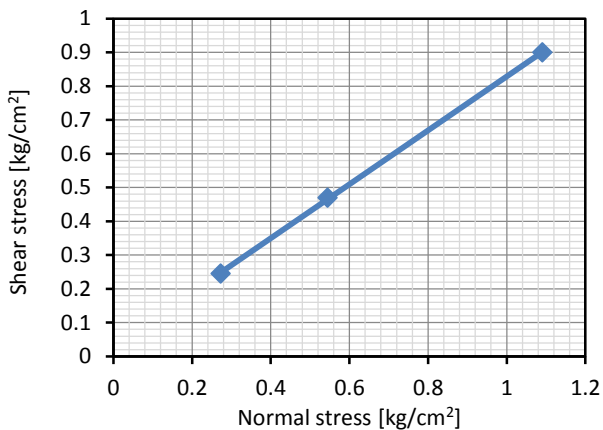
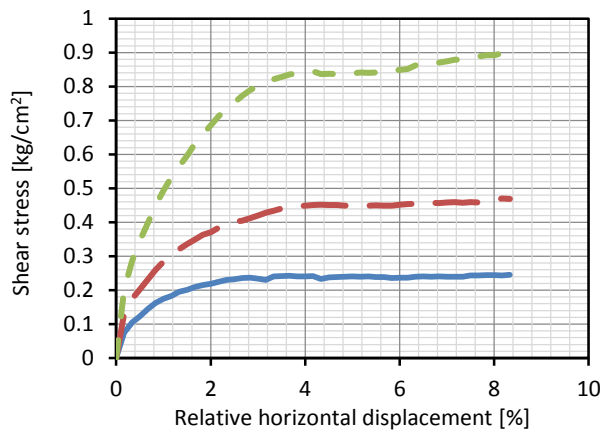
Att.: By user's will, area correction is applied to the calculations (*).

Direct Shear Test

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Moisture status	Shear box	
Fast	Inundated	Square	Width = 30.0 [cm]

Stage	Initial				Preshear				Final			
Test no.	01	02	03	04	01	02	03	04	01	02	03	04
H [cm]	20.60	21.80	20.10	-	20.38	21.72	19.84	-	-	-	-	-
γ_d [g/cm ³]	1.64	1.65	1.65	-	1.66	1.66	1.67	-	-	-	-	-
w [%]	4.8	4.8	4.8	-	22.6	22.6	22.1	-	-	-	-	-
e [-]	0.62	0.61	0.61	-	0.60	0.60	0.59	-	-	-	-	-
s [%]	20.7	21.0	21.0	-	100	100	100	-	-	-	-	-



Test no.	Symbol	σ_{n-max}^* [kg/cm ²]	τ_{max}^* [kg/cm ²]	Δ_{h-max} [%]	τ_{ult}^* [kg/cm ²]	Δ_{h-ult} [%]	Δ_{v-ult} [mm]	Disp. rate [mm/min]
1	—	0.27	0.25	8.33	0.25	8.33	0.92	1
2	- - -	0.54	0.47	8.17	0.47	8.33	0.36	1
3	- - -	1.09	0.90	8.33	0.90	8.33	-0.02	1
-	-	-	-	-	-	-	-	-

ϕ [deg.]	c [kg/cm ²]
38.6	0.03

Att.: By user's will, area correction is applied to the calculations (*).

Test data

Direct Shear - Test Data

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Inundated
Shear box	Square Width = 30.0 [cm]
G_s	2.65

Parameter	H [cm]	γ_d [g/cm ³]	w [%]	e [-]	S [%]
Initial	20.60	1.64	4.8	0.62	20.7
Preshear	20.38	1.66	22.6	0.60	100
Final	-	-	-	-	-

Vertical

○ Load: 225.00 [kg]
● Stress: 0.25 [kg/cm²]

Gauge factor, 1 div. : -

Horizontal

Load: ● Ring factor : 0.10 [kg]
○ Load
○ Stress

Rate of displacement : 1 [mm/min]
Gauge factor, 1 div. : -

No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
1	-	0.00	0.00	-	0.00	900.00	0.0	0.00	0.00	0.250
2	-	0.50	0.17	-	-0.07	898.50	669.8	66.98	0.07	0.250
3	-	1.00	0.33	-	-0.14	897.00	939.0	93.90	0.10	0.251
4	-	1.50	0.50	-	-0.20	895.50	1094.4	109.44	0.12	0.251
5	-	2.00	0.67	-	-0.22	894.00	1290.8	129.08	0.14	0.252
6	-	2.50	0.83	-	-0.23	892.50	1451.3	145.13	0.16	0.252
7	-	3.00	1.00	-	-0.23	891.00	1551.1	155.11	0.17	0.253
8	-	3.50	1.17	-	-0.22	889.50	1626.4	162.64	0.18	0.253
9	-	4.00	1.33	-	-0.20	888.00	1733.5	173.35	0.20	0.253
10	-	4.50	1.50	-	-0.17	886.50	1777.6	177.76	0.20	0.254
11	-	5.00	1.67	-	-0.13	885.00	1851.8	185.18	0.21	0.254
12	-	5.50	1.83	-	-0.10	883.50	1900.6	190.06	0.22	0.255
13	-	6.00	2.00	-	-0.05	882.00	1927.7	192.77	0.22	0.255
14	-	6.50	2.17	-	0.02	880.50	1976.2	197.62	0.22	0.256
15	-	7.00	2.33	-	0.07	879.00	2022.2	202.22	0.23	0.256
16	-	7.50	2.50	-	0.12	877.50	2033.8	203.38	0.23	0.256
17	-	8.00	2.67	-	0.17	876.00	2068.7	206.87	0.24	0.257
18	-	8.50	2.83	-	0.22	874.50	2068.7	206.87	0.24	0.257
19	-	9.00	3.00	-	0.29	873.00	2039.8	203.98	0.23	0.258
20	-	9.50	3.17	-	0.32	871.50	2003.4	200.34	0.23	0.258
21	-	10.00	3.33	-	0.37	870.00	2091.9	209.19	0.24	0.259
22	-	10.50	3.50	-	0.43	868.50	2093.7	209.37	0.24	0.259
23	-	11.00	3.67	-	0.49	867.00	2102.8	210.28	0.24	0.260
24	-	11.50	3.83	-	0.54	865.50	2079.3	207.93	0.24	0.260
25	-	12.00	4.00	-	0.59	864.00	2078.5	207.85	0.24	0.260
26	-	12.50	4.17	-	0.62	862.50	2085.5	208.55	0.24	0.261
27	-	13.00	4.33	-	0.66	861.00	2007.2	200.72	0.23	0.261

Direct Shear - Test Data

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 1
Location: Location	USCS: SP
Code: Project code	Sample: Remolded

No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
28	-	13.50	4.50	-	0.70	859.50	2045.0	204.50	0.24	0.262
29	-	14.00	4.67	-	0.73	858.00	2045.5	204.55	0.24	0.262
30	-	14.50	4.83	-	0.75	856.50	2051.4	205.14	0.24	0.263
31	-	15.00	5.00	-	0.78	855.00	2059.4	205.94	0.24	0.263
32	-	15.50	5.17	-	0.81	853.50	2045.5	204.55	0.24	0.264
33	-	16.00	5.33	-	0.82	852.00	2045.5	204.55	0.24	0.264
34	-	16.50	5.50	-	0.84	850.50	2029.7	202.97	0.24	0.265
35	-	17.00	5.67	-	0.86	849.00	2022.2	202.22	0.24	0.265
36	-	17.50	5.83	-	0.87	847.50	2000.1	200.01	0.24	0.265
37	-	18.00	6.00	-	0.87	846.00	1999.0	199.90	0.24	0.266
38	-	18.50	6.17	-	0.88	844.50	2001.1	200.11	0.24	0.266
39	-	19.00	6.33	-	0.89	843.00	2022.2	202.22	0.24	0.267
40	-	19.50	6.50	-	0.89	841.50	2022.2	202.22	0.24	0.267
41	-	20.00	6.67	-	0.89	840.00	2011.9	201.19	0.24	0.268
42	-	20.50	6.83	-	0.89	838.50	2013.7	201.37	0.24	0.268
43	-	21.00	7.00	-	0.90	837.00	2005.0	200.50	0.24	0.269
44	-	21.50	7.17	-	0.90	835.50	1999.0	199.90	0.24	0.269
45	-	22.00	7.33	-	0.91	834.00	1999.0	199.90	0.24	0.270
46	-	22.50	7.50	-	0.91	832.50	2022.2	202.22	0.24	0.270
47	-	23.00	7.67	-	0.91	831.00	2022.2	202.22	0.24	0.271
48	-	23.50	7.83	-	0.92	829.50	2029.7	202.97	0.24	0.271
49	-	24.00	8.00	-	0.92	828.00	2024.1	202.41	0.24	0.272
50	-	24.50	8.17	-	0.92	826.50	2011.3	201.13	0.24	0.272
51	-	25.00	8.33	-	0.92	825.00	2022.2	202.22	0.25	0.273

Direct Shear - Test Data

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Natural
Shear box	Square Width = 30.0 [cm]
G_s	2.65

Parameter	H [cm]	γ_d [g/cm ³]	w [%]	e [-]	S [%]
Initial	20.60	1.73	6.3	0.53	31.4
Preshear	20.47	1.74	6.3	0.52	32.0
Final	-	-	-	-	-

Vertical

- Load: 900.00 [kg]
- Stress: 1.00 [kg/cm²]

Gauge factor, 1 div. : -

Horizontal

- Load: Ring factor :
- Load
- Stress

Rate of displacement : 0.09 [mm/min]
Gauge factor, 1 div. : 0.01 [mm]

No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
1	0.0	0.00	0.00	-	0.00	-	-	0.00	0.00	-
2	60.0	0.60	0.20	-	-0.17	-	-	114.10	0.13	-
3	120.0	1.20	0.40	-	-0.27	-	-	220.59	0.25	-
4	180.0	1.80	0.60	-	-0.27	-	-	332.34	0.37	-
5	240.0	2.40	0.80	-	-0.27	-	-	415.91	0.46	-
6	300.0	3.00	1.00	-	-0.29	-	-	481.26	0.53	-
7	360.0	3.60	1.20	-	-0.34	-	-	539.32	0.60	-
8	420.0	4.20	1.40	-	-0.40	-	-	581.12	0.65	-
9	480.0	4.80	1.60	-	-0.47	-	-	616.39	0.68	-
10	540.0	5.40	1.80	-	-0.55	-	-	648.65	0.72	-
11	600.0	6.00	2.00	-	-0.67	-	-	674.64	0.75	-
12	720.0	7.20	2.40	-	-1.14	-	-	702.00	0.78	-
13	840.0	8.40	2.80	-	-1.66	-	-	694.04	0.77	-
14	960.0	9.60	3.20	-	-2.24	-	-	670.78	0.75	-
15	1080.0	10.80	3.60	-	-2.77	-	-	647.55	0.72	-
16	1200.0	12.00	4.00	-	-3.31	-	-	626.22	0.70	-
17	1320.0	13.20	4.40	-	-3.80	-	-	600.41	0.67	-
18	1440.0	14.40	4.80	-	-4.18	-	-	575.32	0.64	-
19	1560.0	15.60	5.20	-	-4.58	-	-	561.26	0.62	-
20	1680.0	16.80	5.60	-	-4.89	-	-	553.03	0.61	-
21	1800.0	18.00	6.00	-	-5.20	-	-	540.48	0.60	-
22	1920.0	19.20	6.40	-	-5.46	-	-	526.04	0.58	-
23	2040.0	20.40	6.80	-	-5.70	-	-	515.86	0.57	-
24	2160.0	21.60	7.20	-	-5.93	-	-	518.93	0.58	-
25	2280.0	22.80	7.60	-	-6.15	-	-	508.75	0.57	-
26	2400.0	24.00	8.00	-	-6.36	-	-	503.47	0.56	-
27	2520.0	25.20	8.40	-	-6.53	-	-	500.64	0.56	-

Direct Shear - Test Data

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 2
Location: Location	USCS: GW
Code: Project code	Sample: Remolded

No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
28	2640.0	26.40	8.80	-	-6.68	-	-	496.32	0.55	-
29	2760.0	27.60	9.20	-	-6.83	-	-	492.56	0.55	-
30	2880.0	28.80	9.60	-	-6.94	-	-	486.35	0.54	-
31	3000.0	30.00	10.00	-	-7.04	-	-	483.03	0.54	-
32	3120.0	31.20	10.40	-	-7.12	-	-	477.29	0.53	-
33	3240.0	32.40	10.80	-	-7.20	-	-	482.59	0.54	-
34	3360.0	33.60	11.20	-	-7.28	-	-	479.25	0.53	-
35	3480.0	34.80	11.60	-	-7.34	-	-	472.75	0.53	-
36	3600.0	36.00	12.00	-	-7.38	-	-	469.51	0.52	-
37	3720.0	37.20	12.40	-	-7.41	-	-	476.21	0.53	-
38	3840.0	38.40	12.80	-	-7.43	-	-	459.43	0.51	-
39	3960.0	39.60	13.20	-	-7.48	-	-	462.45	0.51	-
40	4080.0	40.80	13.60	-	-7.56	-	-	461.06	0.51	-
41	4200.0	42.00	14.00	-	-7.61	-	-	458.92	0.51	-
42	4320.0	43.20	14.40	-	-7.62	-	-	458.92	0.51	-
43	4440.0	44.40	14.80	-	-7.67	-	-	454.21	0.50	-
44	4560.0	45.60	15.20	-	-7.71	-	-	446.41	0.50	-
45	4680.0	46.80	15.60	-	-7.72	-	-	441.27	0.49	-
46	4800.0	48.00	16.00	-	-7.72	-	-	441.27	0.49	-
47	4920.0	49.20	16.40	-	-7.86	-	-	441.27	0.49	-
48	5040.0	50.40	16.80	-	-7.88	-	-	427.11	0.47	-
49	5160.0	51.60	17.20	-	-7.88	-	-	423.62	0.47	-
50	5280.0	52.80	17.60	-	-7.90	-	-	421.51	0.47	-
51	5400.0	54.00	18.00	-	-7.88	-	-	420.09	0.47	-
52	5520.0	55.20	18.40	-	-7.88	-	-	420.19	0.47	-
53	5640.0	56.40	18.80	-	-7.91	-	-	422.77	0.47	-
54	5760.0	57.60	19.20	-	-7.88	-	-	423.62	0.47	-
55	5880.0	58.80	19.60	-	-7.87	-	-	423.62	0.47	-
56	6000.0	60.00	20.00	-	-7.92	-	-	423.62	0.47	-

Direct Shear - Test Data

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 3
Location: Location	USCS: SW-SM
Code: Project code	Sample: Remolded

Test type	Fast
Moisture status	Other
Shear box	Square Width = 6.0 [cm]
G_s	2.65

Parameter	H [cm]	γ_d [g/cm ³]	w [%]	e [-]	S [%]
Initial	4.00	1.69	0.0	0.57	0.0
Preshear	3.98	1.70	0.0	0.56	0.0
Final	-	-	-	-	-

Vertical

○ Load: 12.96 [kg]
● Stress: 0.36 [kg/cm²]

Gauge factor, 1 div. : 0.01 [mm]

Horizontal

Load: ○ Ring factor :
○ Load
● Stress

Rate of displacement : 1 [mm/min]
Gauge factor, 1 div. : -

No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
1	-	0.00	0.00	0.0	0.00	-	-	-	0.00	-
2	-	0.13	0.21	-0.2	0.00	-	-	-	0.03	-
3	-	0.25	0.42	-0.6	-0.01	-	-	-	0.07	-
4	-	0.38	0.63	-1.1	-0.01	-	-	-	0.11	-
5	-	0.50	0.83	-1.5	-0.02	-	-	-	0.14	-
6	-	0.63	1.04	-2.3	-0.02	-	-	-	0.17	-
7	-	0.75	1.25	-1.4	-0.01	-	-	-	0.19	-
8	-	0.88	1.46	0.4	0.00	-	-	-	0.21	-
9	-	1.00	1.67	1.9	0.02	-	-	-	0.23	-
10	-	1.13	1.88	3.6	0.04	-	-	-	0.24	-
11	-	1.25	2.08	5.4	0.05	-	-	-	0.25	-
12	-	1.38	2.29	7.1	0.07	-	-	-	0.26	-
13	-	1.50	2.50	8.8	0.09	-	-	-	0.27	-
14	-	1.63	2.71	10.5	0.11	-	-	-	0.28	-
15	-	1.75	2.92	12.3	0.12	-	-	-	0.28	-
16	-	1.90	3.17	14.6	0.15	-	-	-	0.28	-
17	-	2.05	3.42	17.0	0.17	-	-	-	0.28	-
18	-	2.20	3.67	19.6	0.20	-	-	-	0.28	-
19	-	2.35	3.92	21.8	0.22	-	-	-	0.28	-
20	-	2.50	4.17	23.5	0.24	-	-	-	0.28	-
21	-	2.65	4.42	26.4	0.26	-	-	-	0.27	-
22	-	2.80	4.67	28.9	0.29	-	-	-	0.27	-
23	-	2.95	4.92	30.5	0.30	-	-	-	0.27	-
24	-	3.10	5.17	33.3	0.33	-	-	-	0.27	-
25	-	3.25	5.42	35.2	0.35	-	-	-	0.26	-
26	-	3.40	5.67	37.1	0.37	-	-	-	0.26	-
27	-	3.55	5.92	38.5	0.38	-	-	-	0.26	-

Direct Shear - Test Data

Project: Sample Client: Client Location: Location Code: Project code	BH/TP: TP-01 Depth: 3 USCS: SW-SM Sample: Remolded
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No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
28	-	3.70	6.17	39.9	0.40	-	-	-	0.26	-
29	-	3.85	6.42	41.3	0.41	-	-	-	0.25	-
30	-	4.00	6.67	42.6	0.43	-	-	-	0.25	-
31	-	4.15	6.92	43.4	0.43	-	-	-	0.25	-
32	-	4.30	7.17	44.5	0.44	-	-	-	0.24	-
33	-	4.45	7.42	45.3	0.45	-	-	-	0.24	-
34	-	4.60	7.67	46.1	0.46	-	-	-	0.24	-
35	-	4.75	7.92	46.7	0.47	-	-	-	0.24	-
36	-	4.90	8.17	46.9	0.47	-	-	-	0.24	-
37	-	5.05	8.42	47.8	0.48	-	-	-	0.23	-
38	-	5.20	8.67	48.7	0.49	-	-	-	0.23	-
39	-	5.35	8.92	48.8	0.49	-	-	-	0.23	-
40	-	5.50	9.17	49.2	0.49	-	-	-	0.22	-
41	-	5.65	9.42	49.8	0.50	-	-	-	0.22	-
42	-	5.80	9.67	50.1	0.50	-	-	-	0.22	-
43	-	5.95	9.92	50.7	0.51	-	-	-	0.22	-
44	-	6.10	10.17	51.3	0.51	-	-	-	0.22	-
45	-	6.25	10.42	51.3	0.51	-	-	-	0.22	-
46	-	6.40	10.67	51.4	0.51	-	-	-	0.22	-
47	-	6.55	10.92	51.8	0.52	-	-	-	0.22	-
48	-	6.70	11.17	52.1	0.52	-	-	-	0.22	-
49	-	6.85	11.42	52.4	0.52	-	-	-	0.22	-
50	-	7.00	11.67	52.4	0.52	-	-	-	0.22	-

Direct Shear - Test Data

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 4
Location: Location	USCS: SC
Code: Project code	Sample: Remolded

Test type	Slow
Moisture status	Other
Shear box	Circular Dia. = 10.0 [cm]
G_s	2.68

Parameter	H [cm]	γ_d [g/cm ³]	w [%]	e [-]	S [%]
Initial	-	-	-	-	-
Preshear	-	-	-	-	-
Final	-	-	-	-	-

Vertical

- Load: 39.27 [kg]
- Stress: 0.50 [kg/cm²]

Gauge factor, 1 div. : 0.01 [mm]

Horizontal

- Ring factor :
- Load
- Stress

Rate of displacement : -

Gauge factor, 1 div. : 0.01 [mm]

No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
1	0.0	0.00	0.00	-	-	-	-	0.00	0.00	-
2	43.3	0.43	0.43	-	-	-	-	11.88	0.15	-
3	86.7	0.87	0.87	-	-	-	-	17.51	0.22	-
4	130.0	1.30	1.30	-	-	-	-	20.79	0.26	-
5	173.3	1.73	1.73	-	-	-	-	22.94	0.29	-
6	216.7	2.17	2.17	-	-	-	-	24.45	0.31	-
7	260.0	2.60	2.60	-	-	-	-	25.58	0.33	-
8	303.3	3.03	3.03	-	-	-	-	26.45	0.34	-
9	346.7	3.47	3.47	-	-	-	-	27.14	0.35	-
10	390.0	3.90	3.90	-	-	-	-	27.71	0.35	-
11	433.3	4.33	4.33	-	-	-	-	28.18	0.36	-
12	476.7	4.77	4.77	-	-	-	-	28.57	0.36	-
13	520.0	5.20	5.20	-	-	-	-	28.91	0.37	-
14	563.3	5.63	5.63	-	-	-	-	29.20	0.37	-
15	606.7	6.07	6.07	-	-	-	-	29.46	0.38	-
16	650.0	6.50	6.50	-	-	-	-	29.68	0.38	-

Direct Shear - Test Data

Project: Sample	BH/TP: TP-01
Client: Client	Depth: 6
Location: Location	USCS: ML
Code: Project code	Sample: Undisturbed

Test type	Slow
Moisture status	Inundated
Shear box	Circular Dia. = 5.0 [cm]
G_s	2.69

Parameter	H [cm]	γ_d [g/cm ³]	w [%]	e [-]	S [%]
Initial	-	-	-	-	-
Preshear	-	-	-	-	-
Final	-	-	-	-	-

Vertical

- Load: 19.63 [kg]
- Stress: 1.00 [kg/cm²]

Gauge factor, 1 div. : -

Horizontal

Load: ○ Ring factor :

 ● Load

 ○ Stress

Rate of displacement : -

Gauge factor, 1 div. : 1 [mm]

No.	Horizontal			Vertical		Corrected area [cm ²]	Shear			Normal Stress [kg/cm ²]
	Disp. reading	Disp. [mm]	Relative disp. [%]	Disp. reading	Disp. [mm]		Load reading	Load [kg]	Stress [kg/cm ²]	
1	0.0	0.00	0.00	-	-	19.63	-	0.00	0.00	1.000
2	0.2	0.21	0.43	-	-	19.53	-	0.74	0.04	1.005
3	0.4	0.43	0.86	-	-	19.42	-	1.61	0.08	1.011
4	0.6	0.64	1.29	-	-	19.31	-	2.33	0.12	1.017
5	0.9	0.86	1.71	-	-	19.21	-	3.41	0.18	1.022
6	1.1	1.07	2.14	-	-	19.10	-	4.83	0.25	1.028
7	1.3	1.29	2.57	-	-	18.99	-	7.02	0.37	1.034
8	1.5	1.50	3.00	-	-	18.89	-	7.68	0.41	1.040
9	1.7	1.71	3.43	-	-	18.78	-	8.38	0.45	1.046
10	1.9	1.93	3.86	-	-	18.67	-	8.60	0.46	1.052
11	2.1	2.14	4.29	-	-	18.56	-	8.87	0.48	1.058
12	2.4	2.36	4.71	-	-	18.46	-	9.52	0.52	1.064
13	2.6	2.57	5.14	-	-	18.35	-	10.55	0.58	1.070
14	2.8	2.79	5.57	-	-	18.24	-	10.69	0.59	1.076
15	3.0	3.00	6.00	-	-	18.14	-	10.78	0.59	1.083
16	3.2	3.20	6.40	-	-	18.04	-	10.26	0.57	1.089
17	3.4	3.40	6.80	-	-	17.94	-	9.80	0.55	1.095
18	3.6	3.60	7.20	-	-	17.84	-	8.98	0.50	1.101
19	3.8	3.80	7.60	-	-	17.74	-	7.67	0.43	1.107