

PERMISSIBLE EMBEDMENT DEPTH OF CABLE PROTECTION PIPES



Compression strength class: 1250
Impact resistance: N
Material: polypropylene (PP)

Go to EVOCAB SUPERHARD
calculation table

Installation places - according to EN 124-1





- A15**

Areas which can only be used by pedestrians and pedal cyclists.
- B125**

Pedestrian areas and comparable areas, car parks or car parking decks.
- C250**

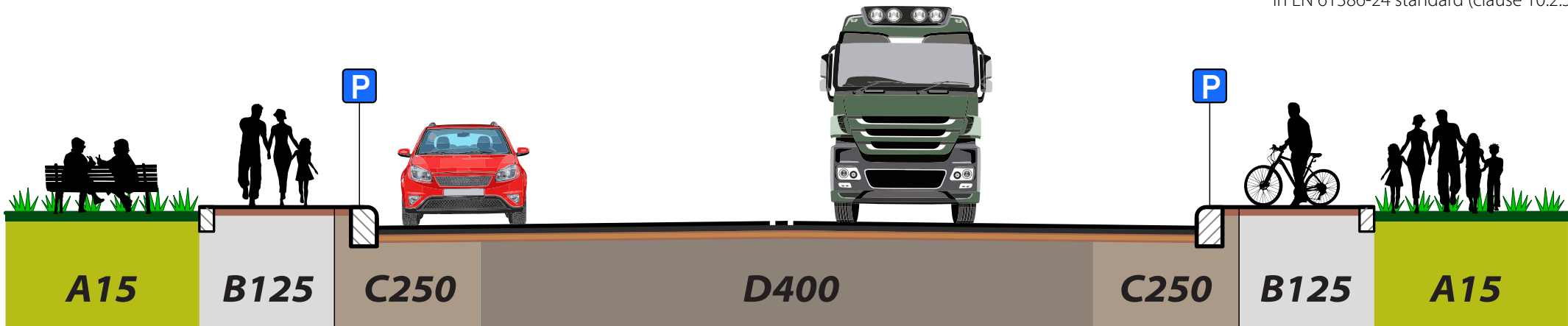
Area of kerbside channels of roads which, when measured from kerb edge, extends a maximum of 0.5m into carriageway and a maximum of 0.2 m into pedestrian area.
- D400**

Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all types of road vehicles.

Installation place:	 A15	 B125	 C250	 D400
Single wheel load:	10 kN	60 kN	100 kN	120 kN

	Minimum depth of embedment depth			
DN/OD 110 mm:	0.3 m	0.4 m	0.5 m	0.6 m
DN/OD 160 mm:	0.3 m	0.4 m	0.6 m	0.6 m
DN/OD 200 mm:	0.3 m	0.5 m	0.6 m	0.7 m
DN/OD 250 mm:	0.3 m	0.5 m	0.6 m	0.7 m
DN/OD 315 mm:	0.3 m	0.5 m	0.7 m	0.7 m
DN/OD 400 mm:	0.3 m	0.5 m	0.7 m	0.7 m

* by not exceeding 5% borderline value of initial deflection specified in EN 61386-24 standard (clause 10.2.5)



CABLE PROTECTION PIPES FOR UNDERGROUND SYSTEMS



DN/OD 110 mm

**EVOCAB SUPERHARD
N1250**

Characteristics accepted in the calculations:

Water table level from the top of the ground surface - 0,1 m

Unit weight of dry soil - 20 kN/m³

Unit weight of wet soil - 11 kN/m³

Unit weight of water - 10 kN/m³

Standard Proctor Density (SPD) ≥ 95 %	Place of installation:	Group 1 (class A15) - Areas which can only be used by pedestrians and pedal cyclists (single wheel load <10 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		62.9	40.7	31.6	27.5	26.0	25.7	26.1	27.1	30.3	33.8	35.7	39.5	43.8	45.8	76.4	117.6
Initial deflection of the pipe after construction, %		2.89	2.58	2.45	2.39	2.36	2.36	2.36	2.37	2.41	2.46	2.48	2.53	2.58	2.61	2.95	3.35
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 2 (class B125) - Pedestrian areas and comparable areas, car parks or car parking decks (single wheel load 60 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		340.7	197.0	131.6	97.0	77.0	64.7	57.0	52.1	50.4	50.7	51.2	53.4	57.9	59.6	85.6	122.7
Initial deflection of the pipe after construction, %		6.71	4.71	3.80	3.32	3.05	2.88	2.77	2.70	2.67	2.67	2.67	2.69	2.75	2.77	3.03	3.37
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 3 (class C250) - For gully tops, installed in the area of kerbside channels of roads which, when measured from the kerb edge, extends a maximum of 0,5 m into carriageway and a maximum of 0,2 m into the pedestrian area (single wheel load 100 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		562.9	322.0	211.6	152.5	117.8	96.0	81.7	72.1	67.9	66.2	65.9	67.9	74.2	75.6	93.7	127.3
Initial deflection of the pipe after construction, %		9.79	6.44	4.90	4.08	3.60	3.30	3.10	2.97	2.90	2.87	2.86	2.88	2.96	2.97	3.13	3.43
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 4 (class D400) - Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all type of road vehicles (single wheel load 120 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		674.0	384.5	251.6	180.3	138.2	111.6	94.0	82.1	76.3	73.3	72.6	74.1	80.8	82.1	97.6	129.4
Initial deflection of the pipe after construction, %		11.33	7.30	5.45	4.46	3.88	3.51	3.27	3.10	3.01	2.97	2.95	2.96	3.04	3.05	3.18	3.45

5.38

Initial deflection of the pipe exceeds 5% borderline specified in EN 61386-24 standard (clause 10.2.5)

Notes.

Groups of place of installation according to EN 124-1 standard.

For backfilling of the trench, it is recommended to use G1, G2, G3, G4 soil group material.

Soil groups - according to CEN/TR 1046 standard annex A table A.1.

Soil type: G1, G2, G3 – granular, e.g., crushed rock, river and beach gravel, dune and drift sand, moraine sand, weathered gravel, liquid sand, loamy sand, G4 - cohesive, e.g., loess, loam, alluvial marl, clay.

Initial deflection of the pipe must not exceed 5% borderline specified in EN 61386-24 standard.



Go to **EVOCAB SUPERHARD**
summary page



CABLE PROTECTION PIPES FOR UNDERGROUND SYSTEMS



DN/OD 160 mm

**EVOCAB SUPERHARD
N1250**

Characteristics accepted in the calculations:

Water table level from the top of the ground surface - 0,1 m

Unit weight of dry soil - 20 kN/m³

Unit weight of wet soil - 11 kN/m³

Unit weight of water - 10 kN/m³

Standard Proctor Density (SPD) ≥ 95 %	Place of installation:	Group 1 (class A15) - Areas which can only be used by pedestrians and pedal cyclists (single wheel load <10 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		63.4	41.2	32.1	28.1	26.5	26.2	26.7	27.6	30.8	34.3	36.2	40.0	44.3	46.3	76.9	118.1
Initial deflection of the pipe after construction, %		2.99	2.64	2.50	2.43	2.41	2.40	2.40	2.42	2.46	2.51	2.53	2.59	2.64	2.67	3.04	3.47
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 2 (class B125) - Pedestrian areas and comparable areas, car parks or car parking decks (single wheel load 60 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		341.2	197.5	132.1	97.5	77.5	65.3	57.5	52.6	50.9	51.2	51.7	53.9	58.4	60.1	86.1	123.3
Initial deflection of the pipe after construction, %		7.18	4.98	3.98	3.46	3.15	2.97	2.85	2.77	2.74	2.74	2.74	2.76	2.82	2.84	3.13	3.49
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 3 (class C250) - For gully tops, installed in the area of kerbside channels of roads which, when measured from the kerb edge, extends a maximum of 0,5 m into carriageway and a maximum of 0,2 m into the pedestrian area (single wheel load 100 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		563.4	322.5	212.1	153.1	118.3	96.5	82.2	72.6	68.4	66.7	66.4	68.4	74.7	76.1	94.3	127.8
Initial deflection of the pipe after construction, %		10.55	6.87	5.19	4.29	3.76	3.43	3.21	3.06	2.99	2.96	2.95	2.97	3.05	3.06	3.23	3.54
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 4 (class D400) - Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all type of road vehicles (single wheel load 120 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		674.5	385.0	252.1	180.8	138.7	112.1	94.6	82.6	76.8	73.8	73.1	74.7	81.4	82.6	98.1	130.0
Initial deflection of the pipe after construction, %		12.24	7.81	5.79	4.70	4.06	3.66	3.39	3.21	3.12	3.06	3.05	3.06	3.14	3.16	3.28	3.57

5.38

Initial deflection of the pipe exceeds 5% borderline specified in EN 61386-24 standard (clause 10.2.5)

Notes.

Groups of place of installation according to EN 124-1 standard.

For backfilling of the trench, it is recommended to use G1, G2, G3, G4 soil group material.

Soil groups - according to CEN/TR 1046 standard annex A table A.1.

Soil type: G1, G2, G3 – granular, e.g., crushed rock, river and beach gravel, dune and drift sand, moraine sand, weathered gravel, liquid sand, loamy sand, G4 - cohesive, e.g., loess, loam, alluvial marl, clay.

Initial deflection of the pipe must not exceed 5% borderline specified in EN 61386-24 standard.



Go to **EVOCAB SUPERHARD**
summary page



CABLE PROTECTION PIPES FOR UNDERGROUND SYSTEMS



DN/OD 200 mm

**EVOCAB SUPERHARD
N1250**

Characteristics accepted in the calculations:

Water table level from the top of the ground surface - 0,1 m

Unit weight of dry soil - 20 kN/m³

Unit weight of wet soil - 11 kN/m³

Unit weight of water - 10 kN/m³

Standard Proctor Density (SPD) ≥ 95 %	Place of installation:	Group 1 (class A15) - Areas which can only be used by pedestrians and pedal cyclists (single wheel load <10 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		63.9	41.7	32.5	28.5	26.9	26.6	27.1	28.0	31.2	34.8	36.6	40.5	44.7	46.8	77.3	118.5
Initial deflection of the pipe after construction, %		3.26	2.82	2.64	2.56	2.52	2.51	2.52	2.53	2.59	2.65	2.68	2.74	2.81	2.84	3.28	3.77
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 2 (class B125) - Pedestrian areas and comparable areas, car parks or car parking decks (single wheel load 60 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		341.6	197.9	132.5	97.9	77.9	65.7	57.9	53.0	51.4	51.6	52.2	54.3	58.9	60.5	86.5	123.7
Initial deflection of the pipe after construction, %		8.52	5.75	4.50	3.83	3.45	3.22	3.07	2.97	2.93	2.92	2.93	2.95	3.02	3.04	3.38	3.78
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 3 (class C250) - For gully tops, installed in the area of kerbside channels of roads which, when measured from the kerb edge, extends a maximum of 0,5 m into carriageway and a maximum of 0,2 m into the pedestrian area (single wheel load 100 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		563.9	322.9	212.5	153.5	118.7	96.9	82.6	73.0	68.9	67.1	66.8	68.8	75.1	76.5	94.7	128.2
Initial deflection of the pipe after construction, %		12.76	8.13	6.00	4.88	4.21	3.79	3.52	3.33	3.24	3.20	3.19	3.21	3.30	3.32	3.51	3.85
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 4 (class D400) - Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all type of road vehicles (single wheel load 120 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		675.0	385.4	252.5	181.3	139.1	112.6	95.0	83.0	77.2	74.3	73.5	75.1	81.8	83.0	98.5	130.4
Initial deflection of the pipe after construction, %		14.88	9.31	6.76	5.40	4.59	4.08	3.75	3.52	3.39	3.33	3.30	3.32	3.42	3.43	3.57	3.88

5.38

Initial deflection of the pipe exceeds 5% borderline specified in EN 61386-24 standard (clause 10.2.5)

Notes.

Groups of place of installation according to EN 124-1 standard.

For backfilling of the trench, it is recommended to use G1, G2, G3, G4 soil group material.

Soil groups - according to CEN/TR 1046 standard annex A table A.1.

Soil type: G1, G2, G3 – granular, e.g., crushed rock, river and beach gravel, dune and drift sand, moraine sand, weathered gravel, liquid sand, loamy sand, G4 - cohesive, e.g., loess, loam, alluvial marl, clay.

Initial deflection of the pipe must not exceed 5% borderline specified in EN 61386-24 standard.



Go to **EVOCAB SUPERHARD**
summary page



CABLE PROTECTION PIPES FOR UNDERGROUND SYSTEMS



DN/OD 250 mm

**EVOCAB SUPERHARD
N1250**

Characteristics accepted in the calculations:

Water table level from the top of the ground surface - 0,1 m

Unit weight of dry soil - 20 kN/m³

Unit weight of wet soil - 11 kN/m³

Unit weight of water - 10 kN/m³

Standard Proctor Density (SPD) ≥ 95 %	Place of installation:	Group 1 (class A15) - Areas which can only be used by pedestrians and pedal cyclists (single wheel load <10 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		64.4	42.2	33.0	29.0	27.4	27.1	27.6	28.5	31.8	35.3	37.1	41.0	45.3	47.3	77.9	119.1
Initial deflection of the pipe after construction, %		3.30	2.84	2.66	2.58	2.54	2.53	2.54	2.55	2.60	2.66	2.70	2.76	2.83	2.86	3.31	3.80
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 2 (class B125) - Pedestrian areas and comparable areas, car parks or car parking decks (single wheel load 60 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		342.2	198.4	133.0	98.5	78.4	66.2	58.5	53.5	51.9	52.1	52.7	54.8	59.4	61.0	87.0	124.2
Initial deflection of the pipe after construction, %		8.63	5.82	4.55	3.87	3.48	3.24	3.09	2.99	2.95	2.94	2.95	2.98	3.04	3.07	3.40	3.81
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 3 (class C250) - For gully tops, installed in the area of kerbside channels of roads which, when measured from the kerb edge, extends a maximum of 0,5 m into carriageway and a maximum of 0,2 m into the pedestrian area (single wheel load 100 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		564.4	323.4	213.0	154.0	119.3	97.5	83.2	73.5	69.4	67.6	67.4	69.4	75.7	77.0	95.2	128.8
Initial deflection of the pipe after construction, %		12.94	8.23	6.08	4.93	4.25	3.83	3.55	3.36	3.27	3.23	3.21	3.23	3.33	3.35	3.53	3.88
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 4 (class D400) - Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all type of road vehicles (single wheel load 120 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		675.5	385.9	253.0	181.8	139.7	113.1	95.5	83.5	77.7	74.8	74.0	75.6	82.3	83.5	99.0	130.9
Initial deflection of the pipe after construction, %		15.09	9.44	6.84	5.46	4.64	4.12	3.78	3.55	3.42	3.35	3.33	3.35	3.45	3.46	3.59	3.91

5.38

Initial deflection of the pipe exceeds 5% borderline specified in EN 61386-24 standard (clause 10.2.5)

Notes.

Groups of place of installation according to EN 124-1 standard.

For backfilling of the trench, it is recommended to use G1, G2, G3, G4 soil group material.

Soil groups - according to CEN/TR 1046 standard annex A table A.1.

Soil type: G1, G2, G3 – granular, e.g., crushed rock, river and beach gravel, dune and drift sand, moraine sand, weathered gravel, liquid sand, loamy sand, G4 - cohesive, e.g., loess, loam, alluvial marl, clay.

Initial deflection of the pipe must not exceed 5% borderline specified in EN 61386-24 standard.



Go to **EVOCAB SUPERHARD**
summary page



CABLE PROTECTION PIPES FOR UNDERGROUND SYSTEMS



DN/OD 315 mm

**EVOCAB SUPERHARD
N1250**

Characteristics accepted in the calculations:

Water table level from the top of the ground surface - 0,1 m

Unit weight of dry soil - 20 kN/m³

Unit weight of wet soil - 11 kN/m³

Unit weight of water - 10 kN/m³

Standard Proctor Density (SPD) ≥ 95 %	Place of installation:	Group 1 (class A15) - Areas which can only be used by pedestrians and pedal cyclists (single wheel load <10 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		65.1	42.9	33.7	29.7	28.1	27.8	28.3	29.2	32.4	36.0	37.8	41.7	45.9	48.0	78.5	119.7
Initial deflection of the pipe after construction, %		3.36	2.89	2.70	2.61	2.57	2.56	2.57	2.58	2.64	2.70	2.73	2.80	2.87	2.91	3.36	3.86
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 2 (class B125) - Pedestrian areas and comparable areas, car parks or car parking decks (single wheel load 60 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		342.8	199.1	133.7	99.1	79.1	66.9	59.1	54.2	52.6	52.8	53.4	55.5	60.1	61.7	87.7	124.9
Initial deflection of the pipe after construction, %		8.90	5.98	4.65	3.96	3.55	3.30	3.14	3.04	3.00	2.99	2.99	3.02	3.09	3.12	3.46	3.87
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 3 (class C250) - For gully tops, installed in the area of kerbside channels of roads which, when measured from the kerb edge, extends a maximum of 0,5 m into carriageway and a maximum of 0,2 m into the pedestrian area (single wheel load 100 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		565.1	324.1	213.7	154.7	119.9	98.1	83.8	74.2	70.1	68.3	68.0	70.0	76.3	77.7	95.9	129.5
Initial deflection of the pipe after construction, %		13.37	8.48	6.24	5.05	4.35	3.91	3.62	3.43	3.33	3.28	3.27	3.29	3.39	3.41	3.59	3.94
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 4 (class D400) - Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all type of road vehicles (single wheel load 120 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		676.2	386.6	253.7	182.5	140.4	113.8	96.2	84.2	78.4	75.5	74.7	76.3	83.0	84.2	99.7	131.6
Initial deflection of the pipe after construction, %		15.60	9.73	7.04	5.60	4.75	4.22	3.86	3.62	3.49	3.42	3.39	3.40	3.51	3.52	3.66	3.97

5.38

Initial deflection of the pipe exceeds 5% borderline specified in EN 61386-24 standard (clause 10.2.5)

Notes.

Groups of place of installation according to EN 124-1 standard.

For backfilling of the trench, it is recommended to use G1, G2, G3, G4 soil group material.

Soil groups - according to CEN/TR 1046 standard annex A table A.1.

Soil type: G1, G2, G3 – granular, e.g., crushed rock, river and beach gravel, dune and drift sand, moraine sand, weathered gravel, liquid sand, loamy sand, G4 - cohesive, e.g., loess, loam, alluvial marl, clay.

Initial deflection of the pipe must not exceed 5% borderline specified in EN 61386-24 standard.



Go to **EVOCAB SUPERHARD**
summary page



CABLE PROTECTION PIPES FOR UNDERGROUND SYSTEMS



DN/OD 400 mm

**EVOCAB SUPERHARD
N1250**

Characteristics accepted in the calculations:

Water table level from the top of the ground surface - 0,1 m

Unit weight of dry soil - 20 kN/m³

Unit weight of wet soil - 11 kN/m³

Unit weight of water - 10 kN/m³

Standard Proctor Density (SPD) ≥ 95 %	Place of installation:	Group 1 (class A15) - Areas which can only be used by pedestrians and pedal cyclists (single wheel load <10 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		66.0	43.8	34.6	30.6	29.0	28.7	29.2	30.1	33.3	36.9	38.7	42.6	46.8	48.9	79.4	120.6
Initial deflection of the pipe after construction, %		3.38	2.91	2.72	2.63	2.59	2.58	2.59	2.60	2.66	2.72	2.75	2.82	2.89	2.92	3.38	3.87
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 2 (class B125) - Pedestrian areas and comparable areas, car parks or car parking decks (single wheel load 60 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		343.7	200.0	134.6	100.0	80.0	67.8	60.0	55.1	53.5	53.7	54.3	56.4	61.0	62.6	88.6	125.8
Initial deflection of the pipe after construction, %		8.92	6.00	4.67	3.97	3.57	3.32	3.16	3.06	3.02	3.01	3.01	3.04	3.11	3.13	3.47	3.88
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 3 (class C250) - For gully tops, installed in the area of kerbside channels of roads which, when measured from the kerb edge, extends a maximum of 0,5 m into carriageway and a maximum of 0,2 m into the pedestrian area (single wheel load 100 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		566.0	325.0	214.6	155.6	120.8	99.0	84.7	75.1	71.0	69.2	68.9	70.9	77.2	78.6	96.8	130.3
Initial deflection of the pipe after construction, %		13.39	8.50	6.26	5.07	4.37	3.93	3.64	3.44	3.35	3.30	3.29	3.31	3.41	3.42	3.61	3.95
Standard Proctor Density (SPD) ≥ 98 %	Place of installation:	Group 4 (class D400) - Carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all type of road vehicles (single wheel load 120 kN) .															
Depth of embedment (H) from the ground surface to the top of the pipe, m		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5	1.7	1.9	2.0	3.5	5.5
Total vertical load (Q) to the pipe after construction, kN/m ²		677.1	387.5	254.6	183.4	141.2	114.7	97.1	85.1	79.3	76.4	75.6	77.2	83.9	85.1	100.6	132.5
Initial deflection of the pipe after construction, %		15.62	9.75	7.06	5.62	4.77	4.23	3.88	3.64	3.51	3.43	3.41	3.42	3.53	3.54	3.67	3.99

5.38

Initial deflection of the pipe exceeds 5% borderline specified in EN 61386-24 standard (clause 10.2.5)

Notes.

Groups of place of installation according to EN 124-1 standard.

For backfilling of the trench, it is recommended to use G1, G2, G3, G4 soil group material.

Soil groups - according to CEN/TR 1046 standard annex A table A.1.

Soil type: G1, G2, G3 – granular, e.g., crushed rock, river and beach gravel, dune and drift sand, moraine sand, weathered gravel, liquid sand, loamy sand, G4 - cohesive, e.g., loess, loam, alluvial marl, clay.

Initial deflection of the pipe must not exceed 5% borderline specified in EN 61386-24 standard.



Go to **EVOCAB SUPERHARD**
summary page

