

PERMISSIBLE EMBEDMENT DEPTH OF CABLE PROTECTION PIPES



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

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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**

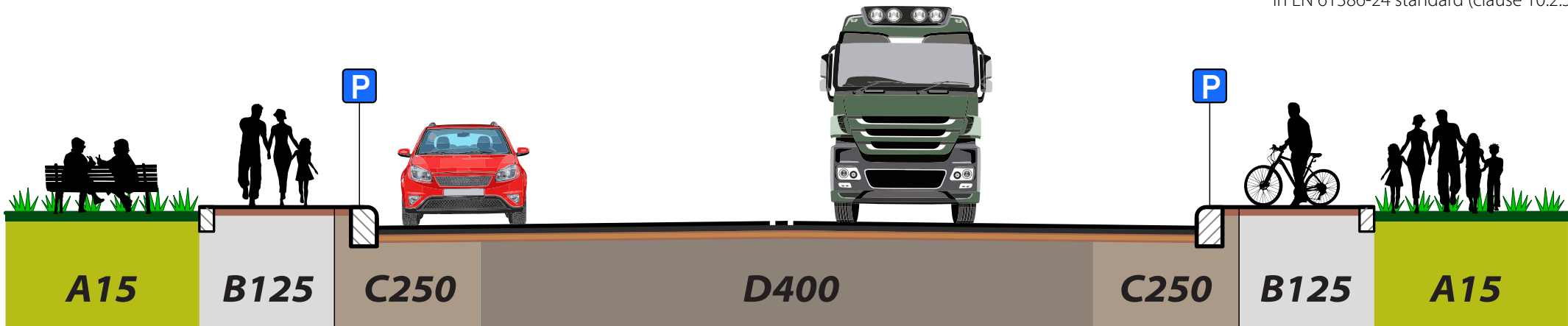
Area of kerbside channels of roads which, when measured from kerb edge, extends a maximum of 0.5m into carriageway and a maximum of 0.2 m into pedestrian area.
- D400**

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			
DN/OD 110 mm:	0.3 m	0.4 m	0.6 m	0.6 m
DN/OD 160 mm:	0.3 m	0.5 m	0.6 m	0.6 m
DN/OD 200 mm:	0.3 m	0.5 m	0.7 m	0.7 m
DN/OD 250 mm:	0.3 m	0.5 m	0.7 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, %		3.06	2.68	2.53	2.46	2.43	2.43	2.44	2.45	2.50	2.55	2.58	2.64	2.70	2.73	3.17	3.70
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, %		6.92	4.84	3.89	3.39	3.10	2.92	2.80	2.73	2.70	2.70	2.71	2.73	2.79	2.80	3.07	3.43
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, %		10.13	6.64	5.04	4.18	3.68	3.36	3.15	3.01	2.95	2.92	2.91	2.93	3.01	3.02	3.17	3.48
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, %		11.73	7.54	5.61	4.58	3.97	3.58	3.33	3.15	3.06	3.01	3.00	3.01	3.10	3.11	3.22	3.51

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.



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DN/OD 160 mm

**EVOCAB SUPERHARD
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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, %		3.20	2.78	2.60	2.53	2.50	2.49	2.50	2.51	2.57	2.62	2.65	2.72	2.79	2.82	3.31	3.88
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, %		7.42	5.13	4.09	3.53	3.21	3.02	2.89	2.81	2.78	2.78	2.78	2.81	2.87	2.89	3.17	3.55
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, %		10.96	7.11	5.35	4.41	3.85	3.50	3.28	3.12	3.05	3.01	3.00	3.02	3.11	3.12	3.28	3.61
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, %		12.72	8.10	5.98	4.85	4.17	3.75	3.47	3.28	3.18	3.12	3.10	3.12	3.21	3.22	3.33	3.64

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.



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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, %		3.62	3.05	2.82	2.72	2.67	2.67	2.68	2.70	2.76	2.83	2.87	2.96	3.05	3.09	3.70	4.40
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, %		8.92	5.99	4.66	3.96	3.55	3.30	3.14	3.03	2.99	2.98	2.99	3.02	3.09	3.12	3.44	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		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, %		13.41	8.51	6.27	5.07	4.36	3.91	3.62	3.42	3.33	3.28	3.27	3.29	3.39	3.41	3.58	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		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, %		15.66	9.77	7.07	5.62	4.76	4.22	3.86	3.62	3.49	3.42	3.39	3.41	3.52	3.53	3.64	3.98

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.



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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, %		3.66	3.09	2.85	2.74	2.70	2.69	2.70	2.72	2.79	2.86	2.90	2.99	3.08	3.13	3.75	4.45
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, %		9.04	6.07	4.72	4.00	3.58	3.33	3.17	3.06	3.02	3.01	3.02	3.04	3.12	3.14	3.47	3.91
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, %		13.61	8.63	6.35	5.13	4.41	3.96	3.66	3.46	3.36	3.31	3.30	3.32	3.43	3.44	3.61	3.98
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, %		15.90	9.91	7.17	5.69	4.82	4.27	3.90	3.66	3.52	3.45	3.43	3.44	3.55	3.56	3.67	4.01

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.



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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, %		3.77	3.16	2.91	2.80	2.76	2.75	2.76	2.78	2.85	2.92	2.97	3.05	3.15	3.20	3.84	4.56
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, %		9.34	6.25	4.84	4.09	3.66	3.39	3.23	3.12	3.07	3.06	3.07	3.10	3.17	3.20	3.53	3.97
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, %		14.10	8.91	6.54	5.27	4.52	4.05	3.74	3.53	3.43	3.37	3.36	3.38	3.49	3.51	3.67	4.05
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, %		16.48	10.24	7.39	5.85	4.94	4.37	3.99	3.73	3.60	3.52	3.49	3.51	3.62	3.64	3.74	4.08

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.



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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, %		3.79	3.19	2.94	2.82	2.78	2.77	2.78	2.80	2.87	2.95	2.99	3.08	3.17	3.22	3.86	4.58
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, %		9.36	6.26	4.86	4.11	3.68	3.41	3.24	3.14	3.09	3.08	3.09	3.11	3.19	3.22	3.54	3.99
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, %		14.12	8.93	6.56	5.28	4.54	4.06	3.76	3.55	3.44	3.39	3.38	3.40	3.51	3.53	3.69	4.06
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, %		16.50	10.26	7.41	5.87	4.96	4.39	4.01	3.75	3.61	3.54	3.51	3.53	3.64	3.65	3.75	4.10

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.



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