CASE STUDY
NOR – Oslo E101
Tempory to permanent noise barrier solutions

Requirements:

1. Effective Noise Control

- A necessity in our time because of growing traffic density and merging of conurbations and recreational areas, already during the construction period.
- REBLOC noise barrier systems combine vehicle restraint system and noise barrier
- Space-saving and economic integration during road construction

Requirements:

2. Crash tested systems

- Full-scale crash tests according to EN1317 of all products
- Continuous investments in research and development to guarantee innovative and secure technology
- CE – certification according EN1317-5

Requirements:

3. Noise Reduction Performance

- Sound absorption: material taking in sound energy (EN 1793-1)
- Sound insulation: reflection of sound energy (EN 1793-6)
- Successfully tested according to:
- EN 14388 Road traffic noise reducing device – Specifications
- EN 1793 Road traffic noise reducing devices - Test method for determining the acoustic performance
- EN 1793-1 Intrinsic characteristics of sound absorption under diffuse sound field conditions
- EN 1793-6 Intrinsic characteristics - In situ values of airborne sound insulation under direct sound field conditions

Requirements:

4. Considering Site Characteristics and Needs

- Combined System
- Modular system construction with space-saving and slim design

- Short distance to noise
- improved noise control with the same barrier height as conventional noise barriers

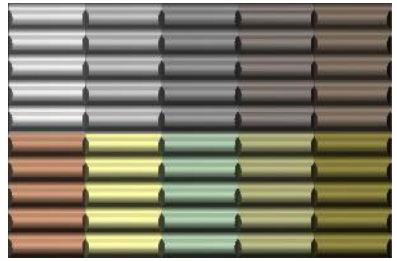
- No anchorage or foundation in the soil necessary -> changes of road construction can also be made after installation of the barrier
- Possible SWITCH application: suitable as temporary noise barrier before installed in the permanent position.

Product Advantages

- Fast installation through simultaneous installation of concrete barriers and noise barriers
- minimization of traffic disturbances

- Innovative REBLOC coupling system
- 100% vandalism protection
- No loose parts

- Different materials, colors and creative designs are available as sound absorption material
- Customize your noise barrier



Project details:

E101 Forberedende arbeider Fornebukrysset – Strand
Customer: SKANSKA Norge AS
Provider: REBLOC Norge AS
Installer: VEIDRIFT AS

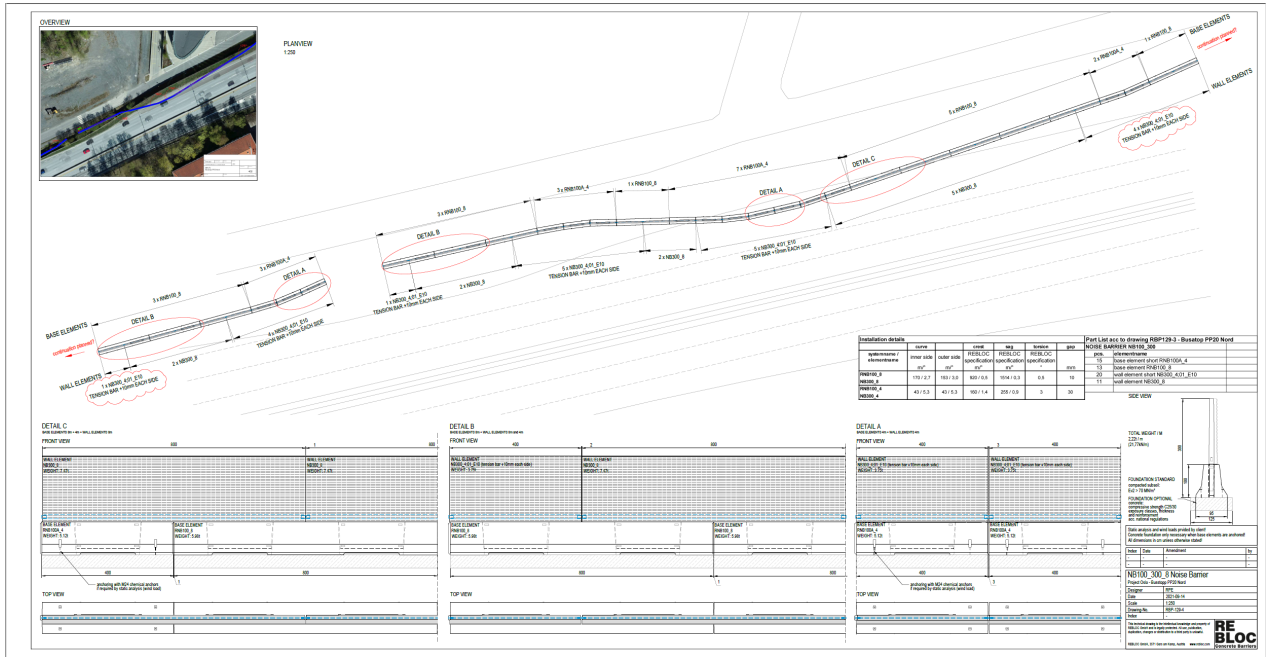
Product: REBLOC NB100/300_8
Amount: Total of 4.000m
Construction period: 2023

SKANSKA

VEIDRIFT AS
Part of Ramudden Global

Why working together with REBLOC ?

Support from the first idea till end of project execution

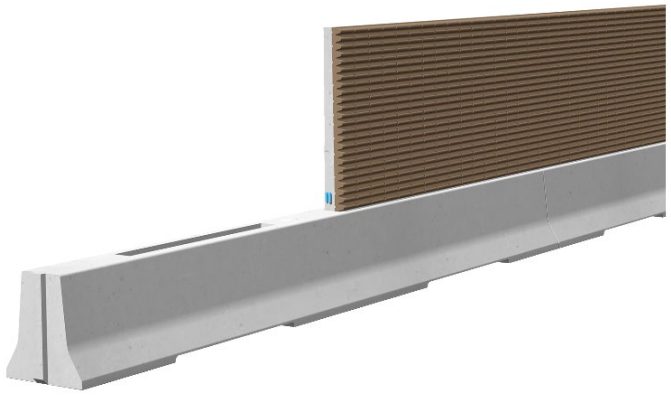


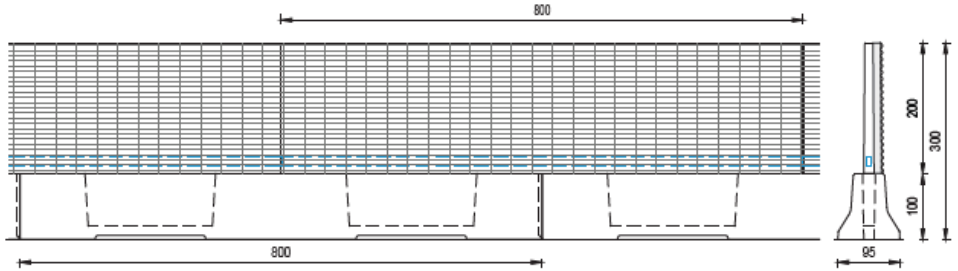
Prefabricated parts in highest quality combined with sophisticated logistics

Modular system components provide fast progress

REBLOC® Concrete Barriers

NB100/300_8





Containment level	**H2**
Working width	**W4 (W_N ≤ 1.3 m)**
Impact severity level	**ASI B**
Vehicle intrusion	**VI1 (VI_N ≤ 0.6 m)**
Airborne sound insulation DL_{SI}	**Class D4 acc. to EN 1793-6 (in situ)**
Installation	**Free standing on asphalt | concrete**
Minimum installation length	**64 m (8 base elements, 7 panels)**
Initial/end anchorage	**Not necessary, optional**
Base element dimensions L x W x H in cm | weight	**800 x 95 x 100 cm | approx. 5980 kg**
Curve radius	**r ≥ 200 m, smaller radii on request**

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Single-sided noise barrier system:
650 m, Bundesstraße B1 Gunskirchen

Single-sided noise barrier system:
1000 m, motorway A1 Matzleinsdorf (Austria)

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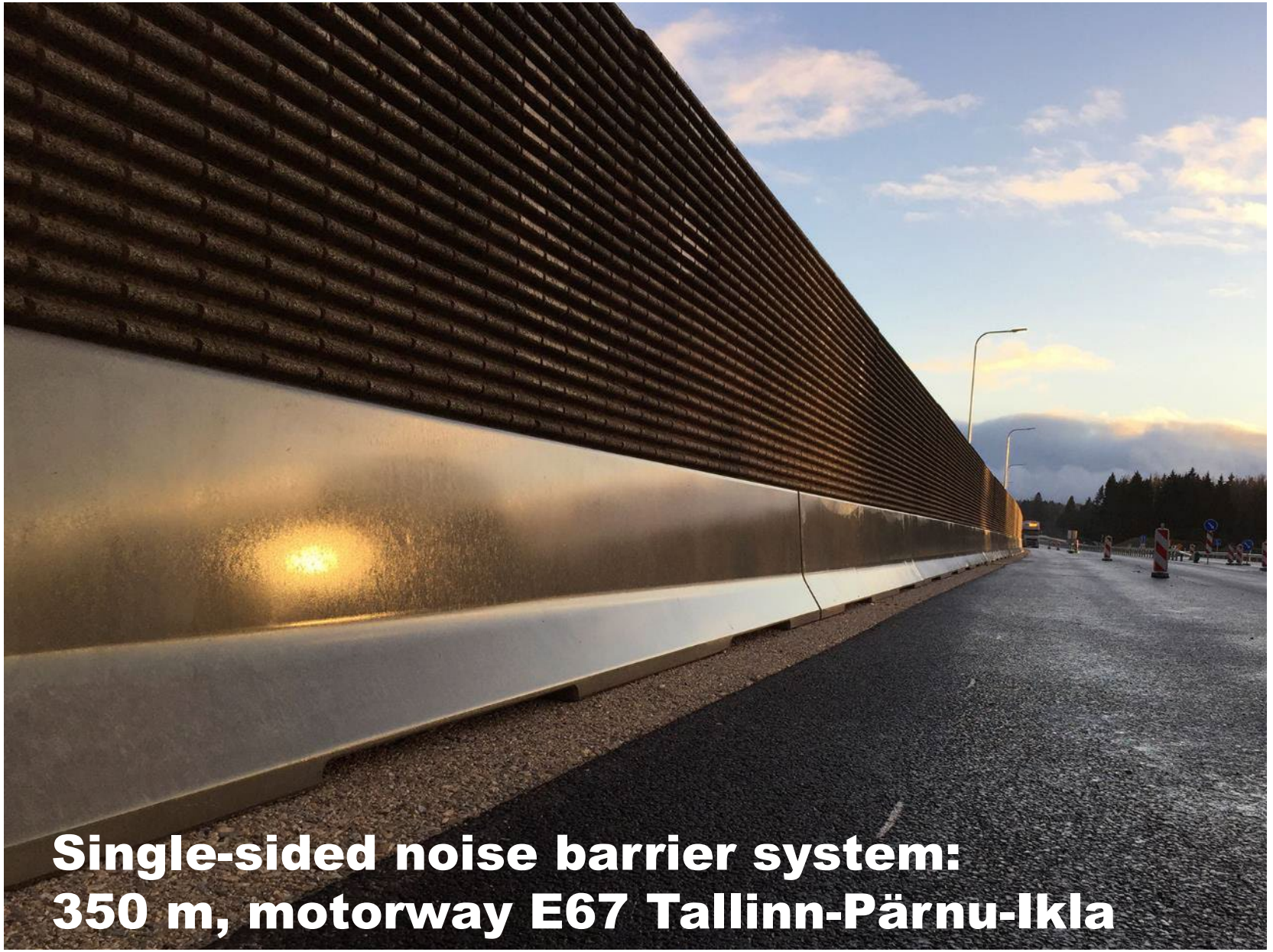
Concrete Barriers



Single-sided noise barrier system:
350 m, motorway E67 Tallinn-Pärnu-Ikla

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Double-sided noise barrier system: 700 m, motorway M1-M7 Budapest (Hungary)

Application Examples

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Application Examples

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Application Examples

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Bus stop integration

Application Examples

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Application Examples

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Application Examples

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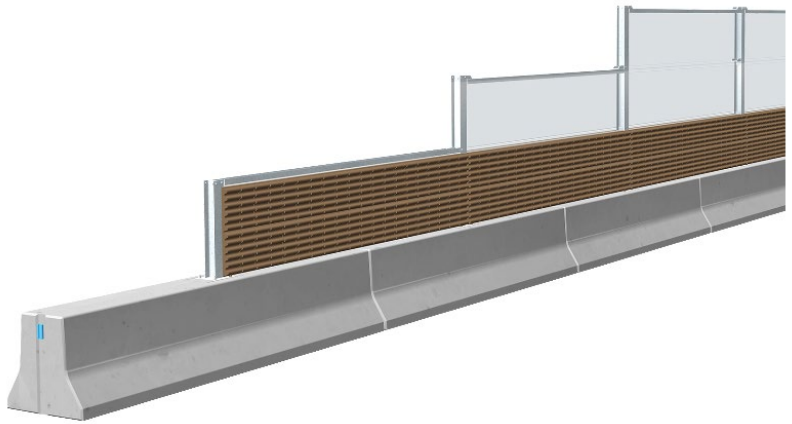
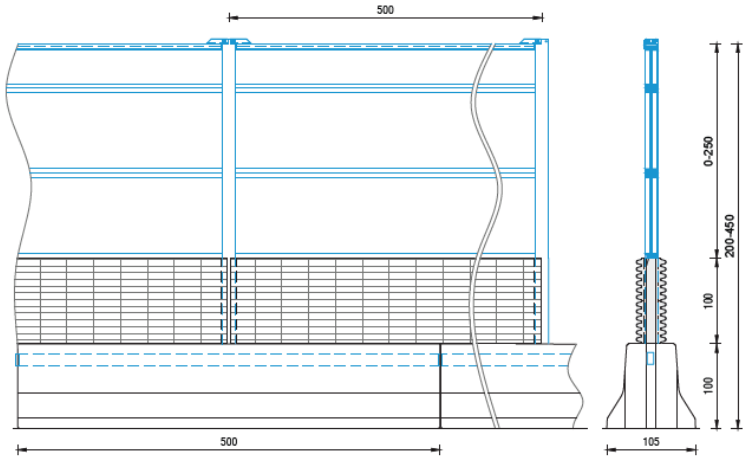
REBLOC® Concrete Barriers

NBL100X/200-450_5





Containment level	**H2**
Working width	**W4 (W_N ≤ 1.3 m)**
Impact severity level	**ASI B**
Vehicle intrusion	**VI2 (VI_N ≤ 0.8 m)**
Sound absorption DL_a	**Class A3 or A4 acc. to EN 1793-2**
Installation	**Free standing on compacted soil | asphalt | concrete**
Minimum installation length	**65 m (13 base elements, 11 panels)**
Initial/end anchorage	**Not necessary, optional**
Base element dimensions L x W x H in cm | weight	**500 x 105 x 100 cm | approx. 8560 kg**
Curve radius	**r ≥ 270 m, smaller radii on request**

Application Examples

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Application Examples

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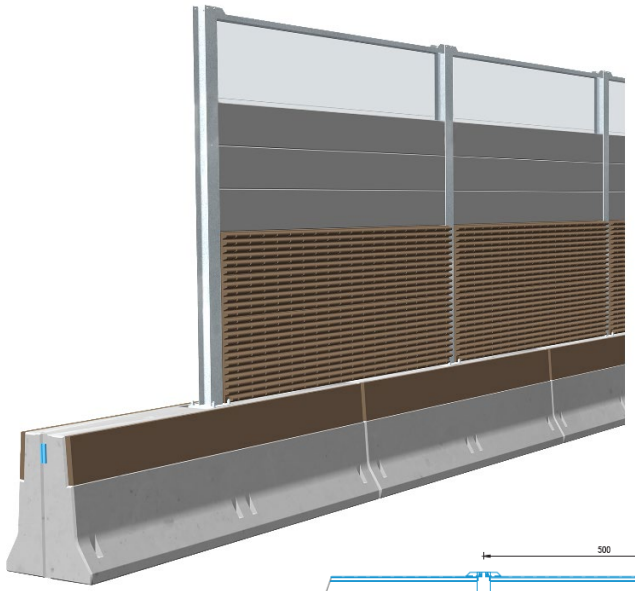
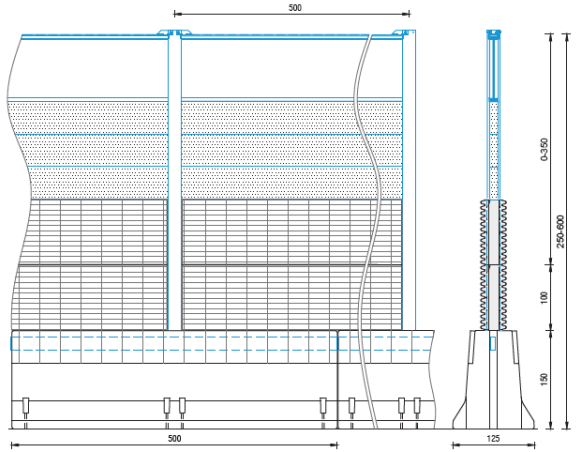
Application Examples

REBLOC® Concrete Barriers

REBLOC® Concrete Barriers

NBH150XA/250-600_5

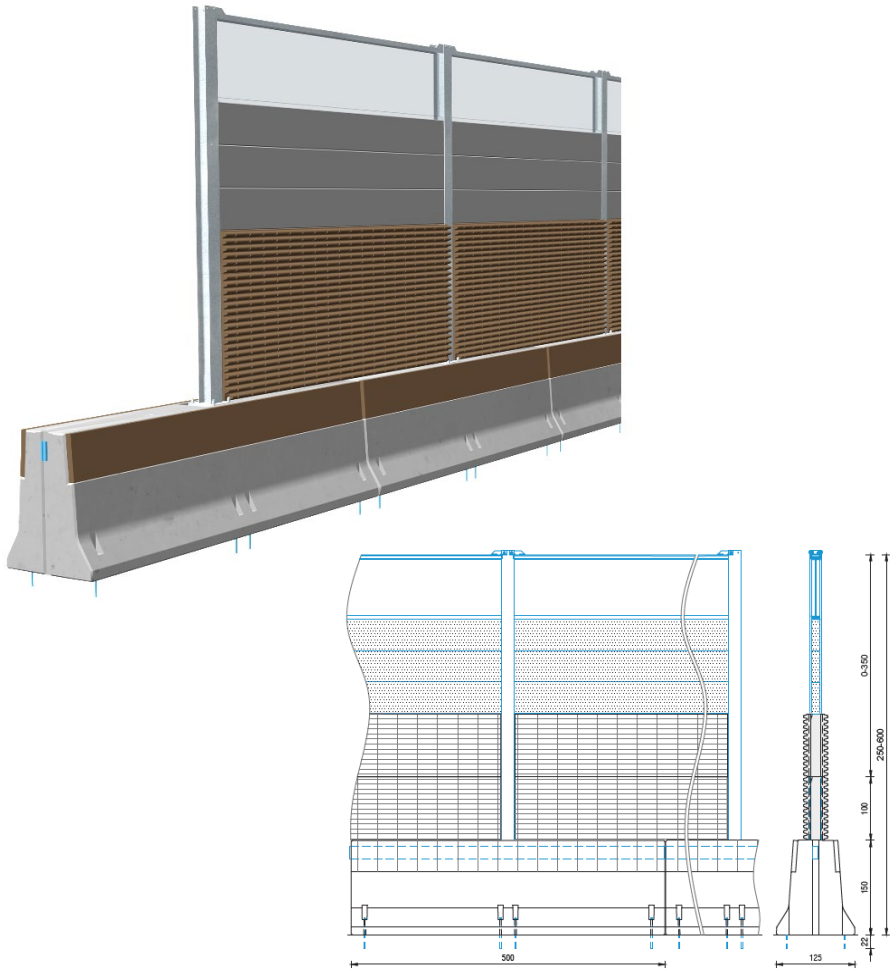




Containment level	**H4b**
Working width	**W5 (W_N ≤ 1.7 m)**
Impact severity level	**ASI B**
Vehicle intrusion	**VI2 (VI_N ≤ 0.8 m)**
Sound absorption DL_a	**Class A3 or A4 acc. to EN 1793-1**
Installation	**Free standing on compacted soil | asphalt | concrete**
Minimum installation length	**65 m (13 base elements, 12 panels)**
Initial/end anchorage	**Not necessary, optional**
Base element dimensions L x W x H in cm | weight	**500 x 125 x 150 cm | approx. 12160 kg**
Curve radius	**r ≥ 220 m, smaller radii on request**

REBLOC® Concrete Barriers

NBH150XA/250-600_5_8A



Containment level	**H4b**
Working width	**W4 (W_N ≤ 1.3 m)**
Impact severity level	**ASI B**
Vehicle intrusion	**VI1 (VI_N ≤ 0.6 m)**
Sound absorption DL_a	**Class A3 or A4 acc. to EN 1793-1**
Installation	**Anchored in concrete foundation**
Minimum installation length	**35 m (7 base elements, 6 panels)**
Initial/end anchorage	**Not necessary, optional**
Base element dimensions L x W x H in cm | weight	**500 x 125 x 150 cm | approx. 12160 kg**
Curve radius	**r ≥ 220 m, smaller radii on request**

Application Examples

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