

Noise barriers

Installation manual

Version EN 1.0, november 2017
Original user Manual

Noise reducer
Noise reducer HA

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Disclaimer

Read the full manual before installation. All described work must be performed by trained personnel. Should you deviate from the instructions, any warranty entitlement and liability of the manufacturer shall no longer apply.

Safety

- Always wear the correct protective clothing when performing the work.
- Always use a lifting tool/hoisting system when moving heavy and/or large objects.
- Always use suitable tools.
- Adding or removing parts other than as described in this manual can have negative consequences on the functioning and, therefore, the safe operation of the final product and we categorically advise against this.

Removing and disassembling

Dispose of the product in accordance with local legislation and regulations.

Dimensions

All sizes and dimensions are in mm unless stated otherwise.

Use concrete

Wear protective gloves when handling concrete.

Contact

See the back of this manual.

T&I Technical Construction File

Heras, T&I department.

Explanation of symbols

(Noise reducer = NR / Noise reducer HA = NR HA)



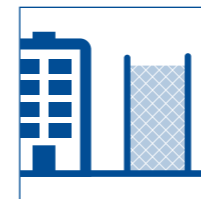
Protective gloves

Use protective gloves when working with concrete



Protective mask

Use a protective mask when working with concrete



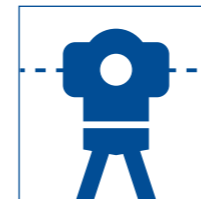
Inside terrain

Defines the inside of the terrain



Outside terrain

Defines the outside of the terrain



Laser level

Use to calculate a straight line



Shovel

Indicates that a hole needs to be dug



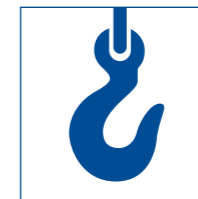
Level

Leveling



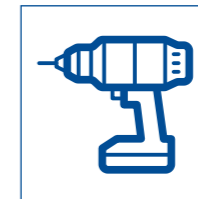
Waiting time

Time to dry



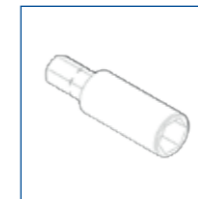
Crane

Use for heavy lifting



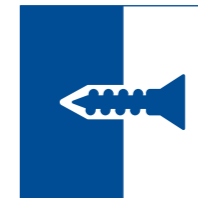
Electric screwdriver

Use an electric screwdriver



Bitargusdrive

Bitargusdrive apply for schrck840sec



Mounting side

Mount on this side

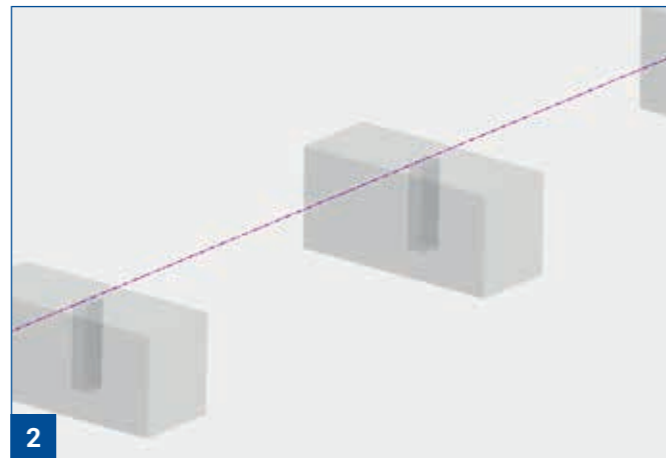
Check work-site

Appendix 1



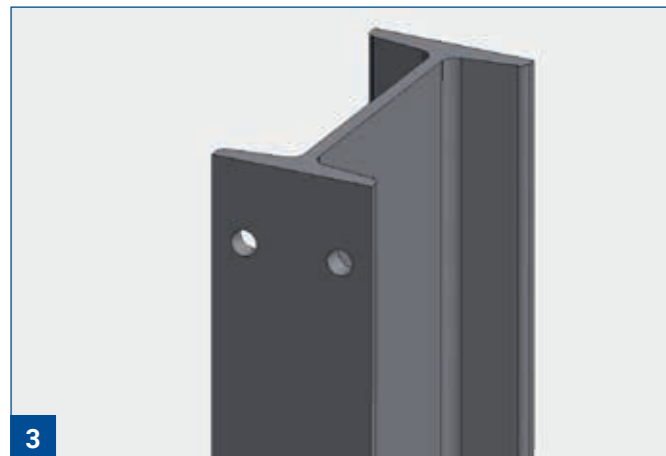
Wind zone
Appendix 1

Appendix 2

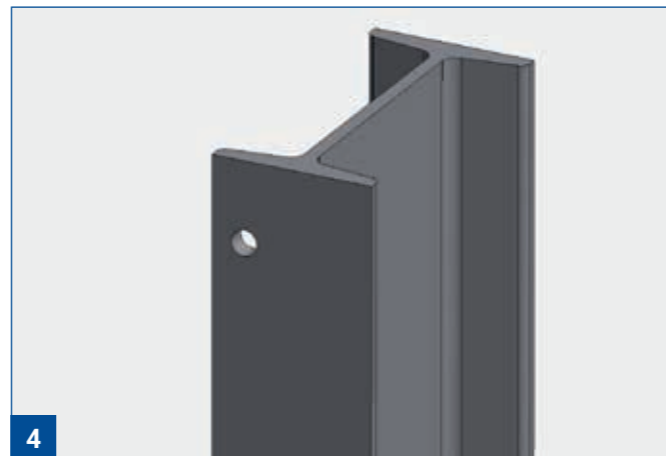


Foundation dimensions
Appendix 2

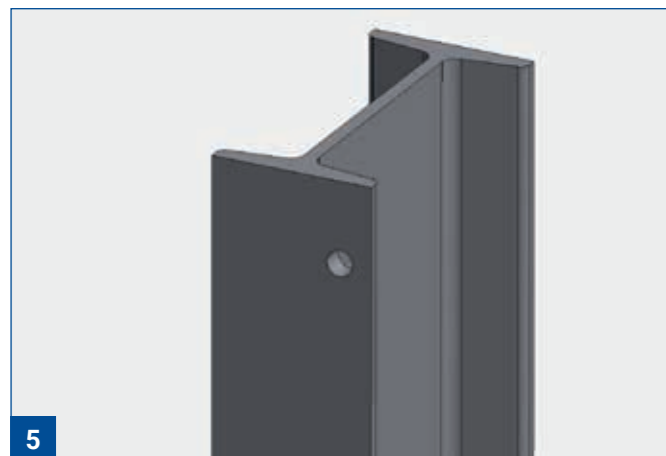
Check delivered parts



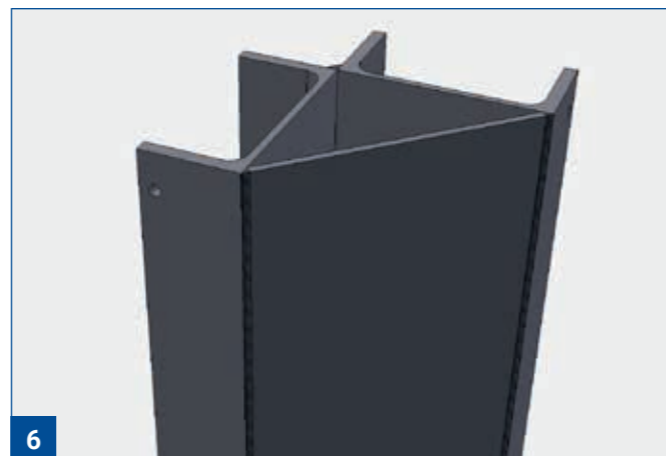
Center-post



Right-post

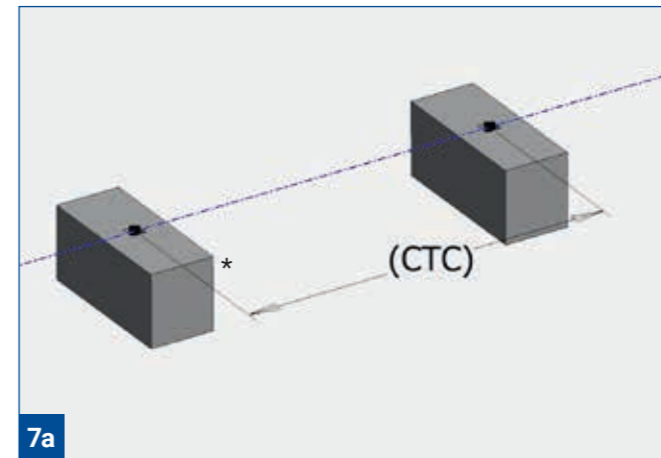


Left-post

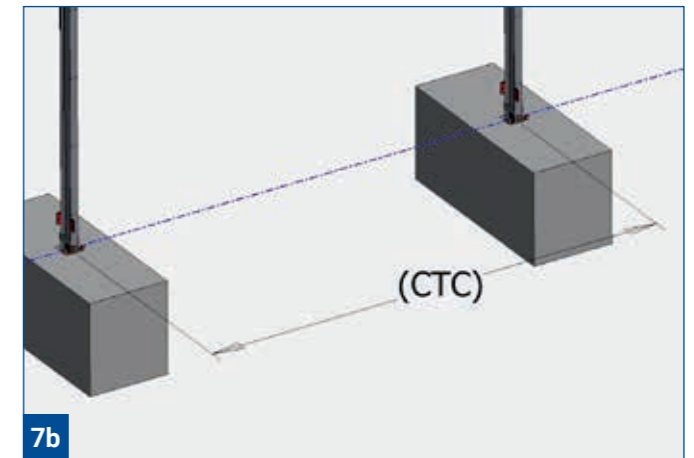


Corner-post (optional)

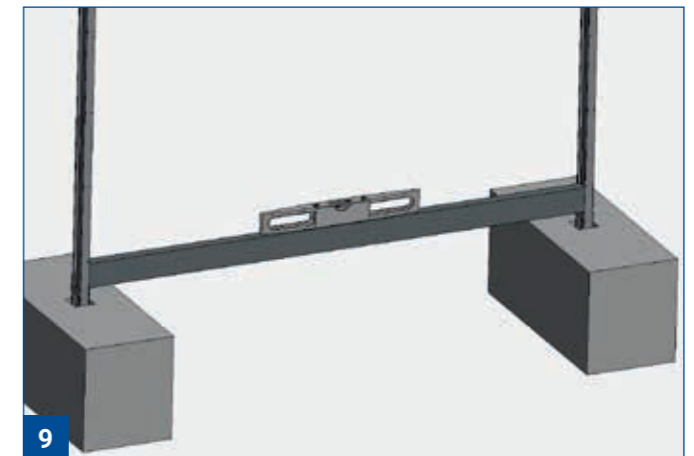
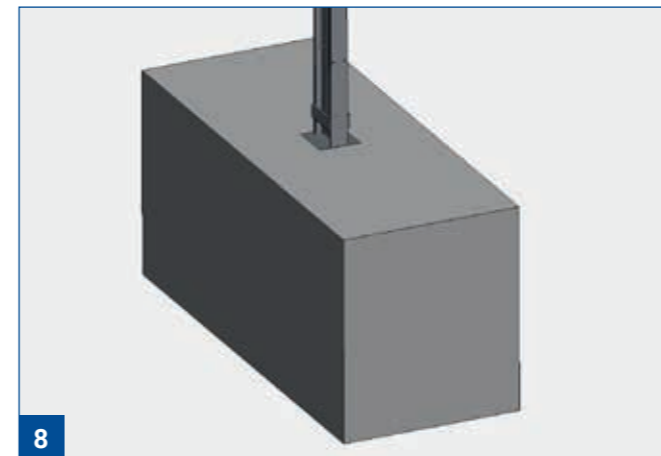
Installing posts and mounting panels



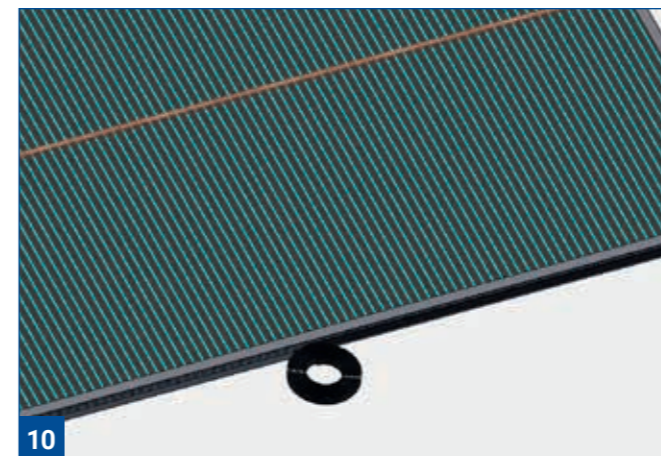
*Optional foundation



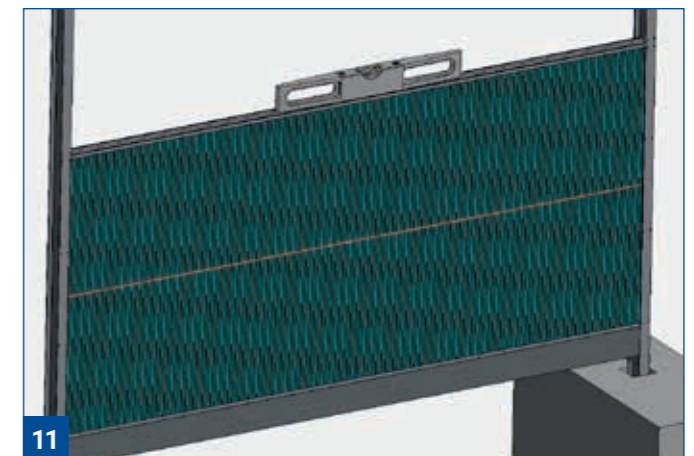
NR post CTC = panel size + 10 mm
NR HA post CTC = panel size + 40 mm



Optional: support beam



Sealing tape bottom side



Bill of Materials

Item Drawing	Picture	Name	Heras code
3		Post	See pricelist
11		Panel	See pricelist
11		LZ Bolt	2023359
10		LZ Masking tape	2024875
9		Support beam (optional)	2031661
7,8		Pre cast foundation (optional)	
8		Foundation	

Appendix 1

Static calculations Noise reducers



Noise reducer

Maximum height of wall

3000 mm

Maximum width of panel

2500 mm

Conditions of static calculation

Wind loads according to load assumption DIN 1991 / EC1

- wind zone 2, inland: $h \leq 10 \text{ m} \rightarrow q = 0.65 \text{ kN} / \text{m}^2$
- snow and ice loads can be neglected
- impact loads are not the subject of this design

Foundation design according to basic construction DIN EN 1997 / EC7 assumptions

- bedding module $KS = 25000 \text{ kN} / \text{m}^3$ for foundations $KS = ES / d$
- bedding module $KS = 90000 \text{ kN} / \text{m}^3$ for rammed IPE supports $KS = (ES / b) * 0.5$ permissible $EB > 200 \text{ kN} / \text{m}^2$
- soil class 3 - 5 (grown viable soil)
- ground water level is lower than underside of post supports
- slopes do not influence the post support sizes



Noise reducer HA

Maximum height of wall

6000 mm

Maximum width of panel

4000 mm

Conditions of static calculation

Wind loads according to load assumption DIN 1991 / EC1

- wind zone 2, inland: $h \leq 10 \text{ m} \rightarrow q = 0.65 \text{ kN} / \text{m}^2$
- snow and ice loads can be neglected
- impact loads are not the subject of this design

Foundation sizes according to soil engineering DIN EN 1997 / EC7

- soil class 3 and 4
- valid ground pressure $> 200 \text{ kN} / \text{m}^2$
- ground water level is lower than underside of post supports
- slopes do not influence the post support sizes

Appendix 2a

Post & foundation dimensions Noise reducer

Noise reducer

Posts and foundation dimensions (panel length max. up to 2500 mm).

Total height in mm	Post-profile	Length in mm	Post foundation dimensions	
			Diameter in mm	Depth in mm
1800	IPE 120	2700	600	1000
2000	IPE 120	2700	600	1000
2500	IPE 120	3200	600	1000
3000	IPE 120	3700	700	1000

All data is based on locations with heights under 800 m above sea level within wind zones 1 and 2 (NL).

Appendix 2b

Post & foundation dimensions Noise reducer HA

Noise reducer HA

Post and foundation dimensions (panel length max. up to 2960 mm).

Total height in mm	Post-profile	Length in mm	Post foundation dimensions		
			Length in mm	Width in mm	Depth in mm
2000	IPE 140	2400	700	1700	800
3000	HEA 140	3500	800	2150	800
4000	HEA 160	4500	1000	2300	1000
5000	HEA 240	5600	1300	2800	1200
6000	HEA 240	6600	1300	2800	1200

Panel length > 2960 mm to max. 3960 mm

Total height in mm	Post-profile	Length in mm	Post support sizes		
			Length in mm	Width in mm	Depth in mm
2000	IPE 160	2400	800	1700	800
3000	HEA 160	3500	1000	2200	800
4000	HEA 200	4500	1200	2300	1200

All data is based on locations with heights under 800 m above sea level within wind zones 1 and 2 (NL).

Appendix 3

Support beam Noise reducer HA

Noise reducer

HA Support beam

