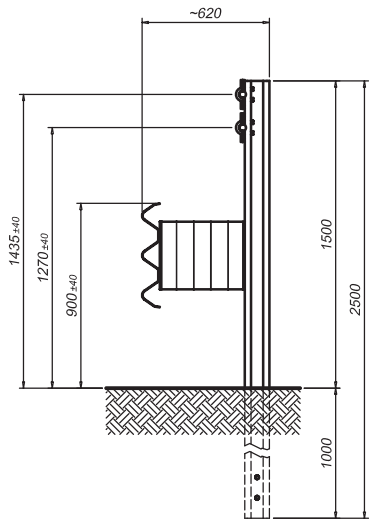
4safe® SINGLE SIDED SAFETY BARRIER ON GROUND
H4b-W5-A (3n31679)

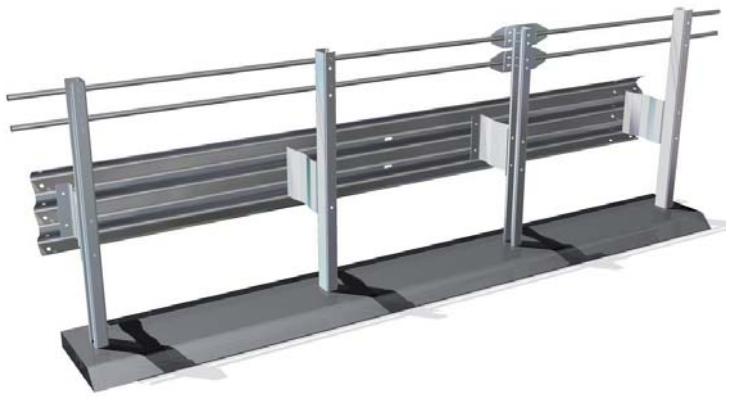


Performance

Containment level	H4b
Acceleration Severity Index “ASI”	A
Working width	W5 (1.70 m)
Extreme lateral position of the vehicle	1.60 m

Characteristics

Height out of ground	900 mm / 1435 mm
Transversal overall dimensions	620 mm
Centre to centre between posts	1,50 m
Tested minimum length	81 m



Description

Supply and erection of a 3-wave safety barrier, thicknes 2,5 mm, C post 120x80x30 mm, thk. 5,9 mm, H= 2500 mm, fixed to ground every 1500 mm, spacers 415x80x5,9 mm, with an upper threaded retaining bars Ø 32 mm, with welded plates, assembled with nuts and bolts and provided with reflectors.
S235-S275-355JR-FeB44K steel quality according to EN 10025
Hot dip galvanization according to EN ISO 1461:2009
Nuts and bolts according to EN ISO 898 – EN 20898 – UNI 3740/6
All particulars are in accordance with crash tests requirements.

Revision 1 FT of 26/01/2010

Technical Documentation

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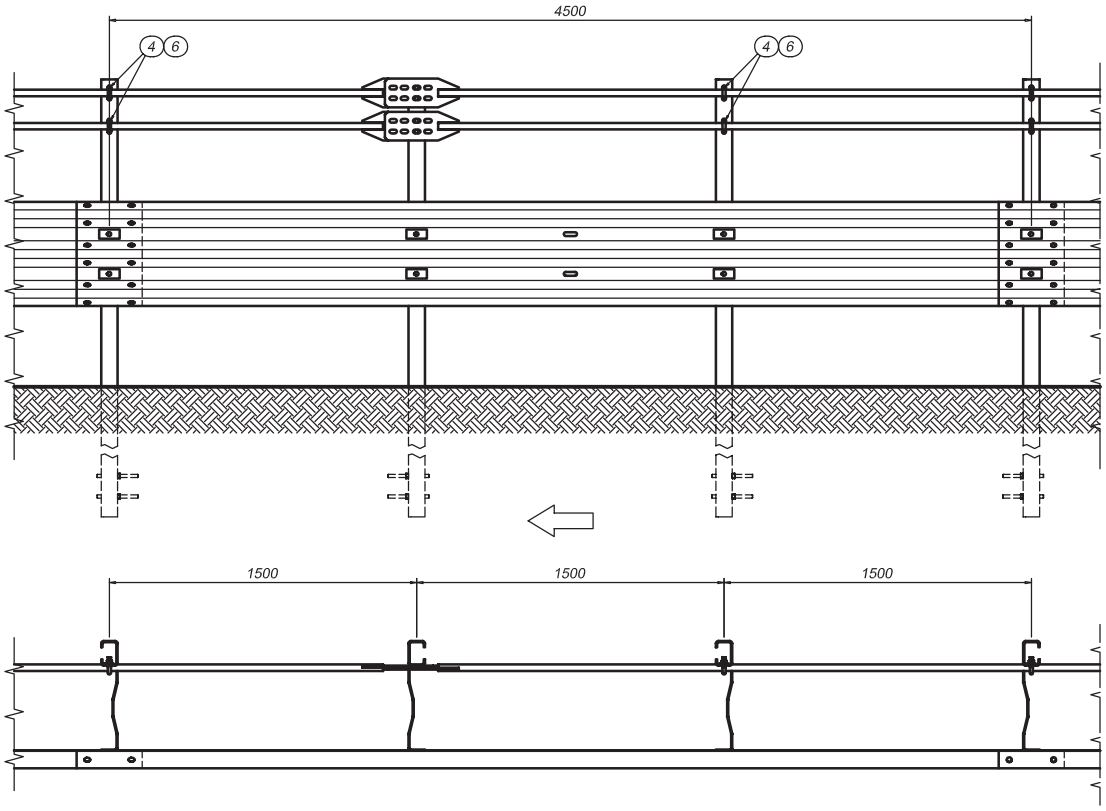
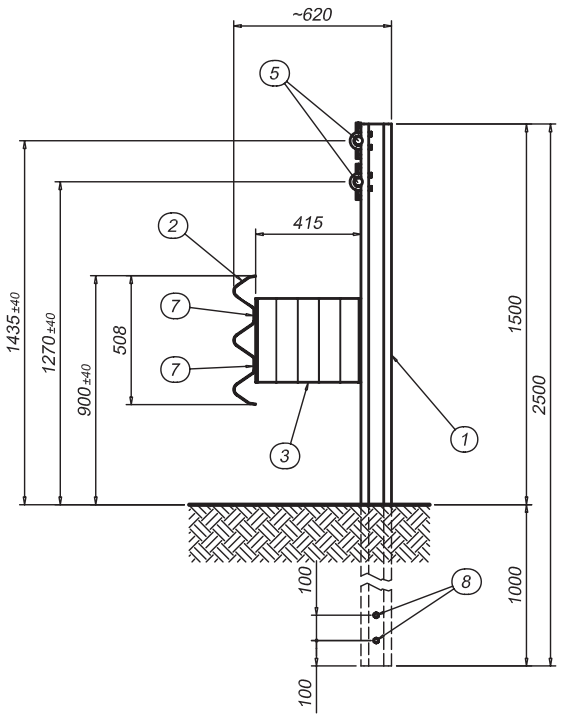
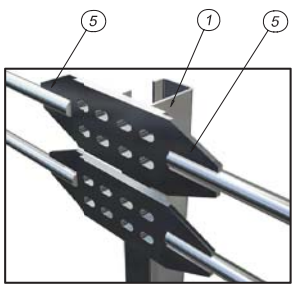
Elevation

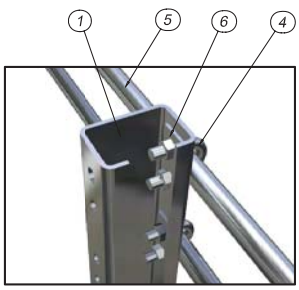


Section

	Description
1	C post 120x80x30 mm th. 5,9 mm H= 2500 mm
2	“3n” Beam c/c 4500 mm th. 2,5 mm
3	Spacers 415x80 mm L =339 mm
4	Clamp M16
5	Upper thr. ret. bars Ø 32 mm L=9250 mm with welded plate
6	Plate 100x40x5 mm
7	Cover plate 100x45x5 mm
8	Anchor bolts M16 L=200 mm







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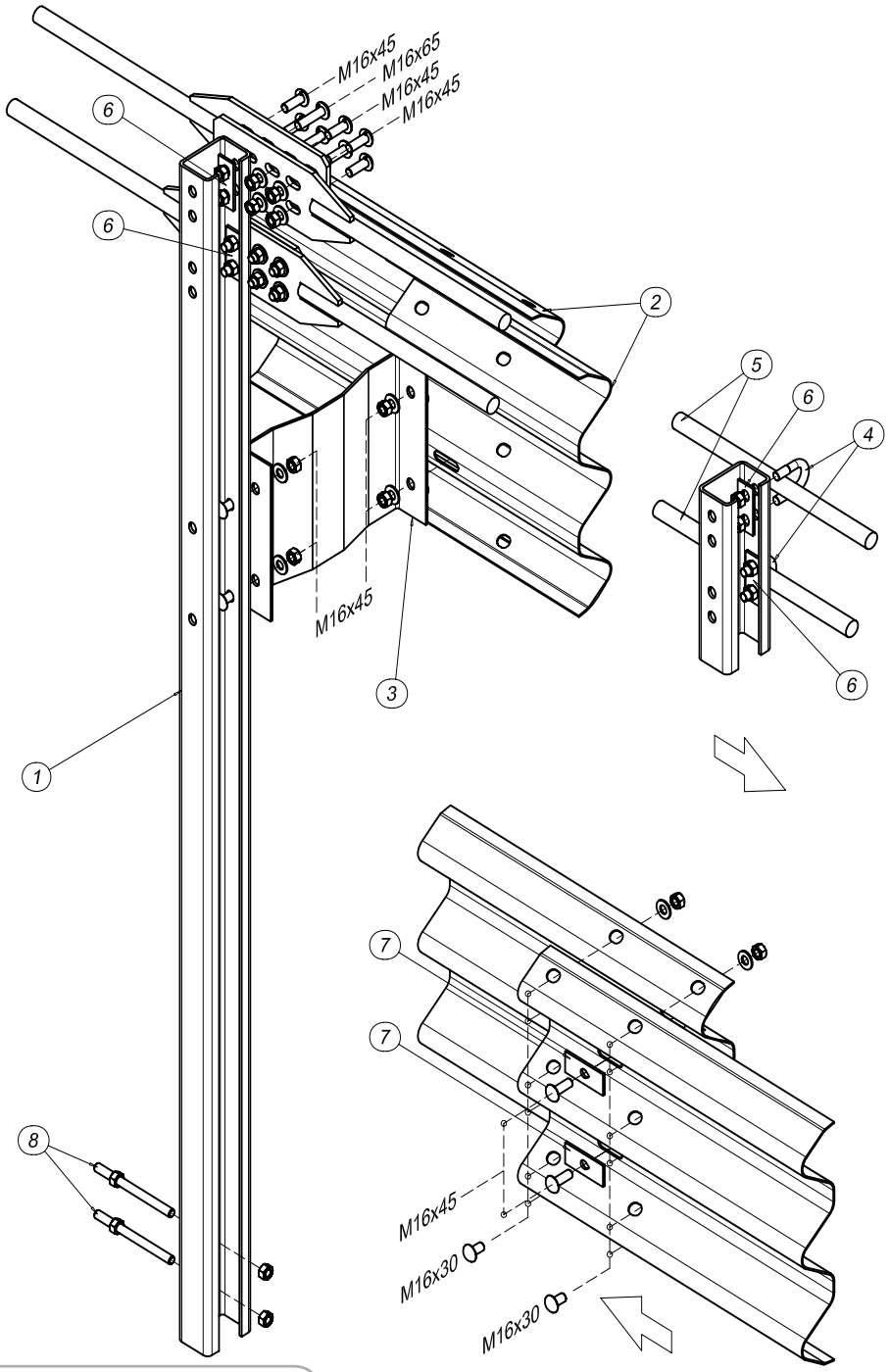

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Torque value	
M16 x 30	90 Nm
M16 x 45	90 Nm
M16 x 65	90 Nm
M18	40 Nm

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INSTALLATION CRITERIA FOR 4Safe BARRIER H4B-W5-A 3n31679

Along with the general assembly instructions specified in the introduction chapter, please observe the following guidelines to install barrier 3n31679.

Preliminary operations

Where installation is to be carried out in traffic, all necessary road signs must be set up in order to direct traffic and protect workers from vehicles, in accordance with safety regulations.
The parts making up the road barrier can be unloaded from the transport vehicles by means of a crane fitted to the vehicle, or forklift truck, in accordance with current safety regulations.
Workers must be supplied with all required equipment, including safety shoes, gloves and goggles and - where necessary - helmets, safety harnesses and all else specifically needed for the site and required by current safety regulations.

Installation sequence

The assembly diagram provides instructions for correct barrier installation. Fully and completely follow these instructions.

Main steps:

1. Trace out a full line of reference on the ground, which will serve to align mounts and beams.
2. Place the beams (2) along the traced line taking into account the direction of traffic.
3. Poles C 120x80x30x5.9 mm h=2500mm (1) are to be lifted vertically and planted in the ground 1000 mm deep at the holes in the tap and spaced 1500 mm apart. A mechanical pile-driver is generally used. During this phase, please check: alignment and level of poles, distance between poles, that they are vertical, and distance from the embankment, all in accordance with the measurements and tolerances specified in the applicable drawing of reference.
4. Apply the upper barrier (5) on the upright using the clamps (4). At the joint between the two subsequent barrier elements, connect the plates between them using 8 bolts: 6 M16x45 mm bolts and 2 M16x65 mm bolts, which are also used to connect the plates to the corresponding upright.
5. Apply the lower barrier (5) on the upright following the instructions above and keeping joints between barriers at the same pole.
6. Assemble the spacers (3) to the uprights using the M16x45 mm bolts;
7. Assemble the beams (2) that have been laid on the ground, attaching them to the spacers (3) and themselves, by means of the bolts supplied and the set plates.
8. Use the calibrated pneumatic screwdrivers to fasten all nuts and bolts into place, checking levels and alignments.
9. Installation must always take place under the surveillance of a specialist technician, and in full compliance with the final drawing and current safety regulations.

INSTALLATION CRITERIA FOR 4Safe BARRIER H4B-W5-A 3n31679

Inspection of installation conformity

The technician responsible for the installation shall, at the very least, control conformity of the following, prior to beginning assembly, during work and upon conclusion, by using all measurement instruments necessary and in his possession:

1. Full compliance of the installation with the final drawings of reference.

2. Pole spacing and height of upper beam and current edge in accordance with that specified on the final drawings of the barrier, dilation joints and ends.

3. Length and alignment of the installation on the basis of the final drawings and the road layout and altimetry.

4. Final coupling bolt torque according to that set in the assembly diagram.

5. Compliance with all applicable safety regulations.

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