



### ΠΑΡΑΓΩΓΗ & ΕΦΑΡΜΟΓΗ

- ★ ΧΡΩΜΑΤΑ ΒΕΡΝΙΚΙΑ ΚΟΛΛΕΣ
- ★ ΕΠΙΧΡΙΣΜΑΤΑ ΠΡΟΣΤΑΣΙΑΣ ΚΑΤΑΣΚΕΥΩΝ
- ★ ΥΛΙΚΑ ΔΙΑΓΡΑΜΜΙΣΗΣ ΣΗΜΑΝΣΗΣ ΟΔΩΝ
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### **PRODUCTION & APPLICATION**

- \* PAINTS VARNICHES GLUES
- \* PROTECTION COATINGS
- \* ROAD MARKINK MATERIALS & SIGNS
- **★ INDUSTRIAL & DECORATION FLOORS**
- \* SAFETY BARRIERS





# Our guardrail systems:

Containment Level			N2				H1			
	Working width	ASI	Name	Page	Working width	ASI	Name	Page	Working width	ASI
	W1	В	ESP Plus W1	6	W3	Α	EasyRail 1.33	8	W3	Α
	W2	В	B29707	7	W3	Α	SuperRail ES 1.0	9	W4	Α
	W2	Α	EasyRail 1.33	8	W4	Α	B33061	19	W4	В
	W2	Α	SuperRail ES 1.0	9	W4	Α	EasyRail 2.0	10	W4	Α
	W3	Α	EasyRail 2.0	10	W4	Α	OBB 2.0	20	W4	Α
	W4	Α	EasyRail 4.0	11	W4	Α	EDSP 1.33	21	W4	Α
Single-sided Pile-driven	W4/W5	Α	ESP 2.0	12	W4	Α	SuperRail ES 1.33	22	W5	Α
File-driveri	W5	Α	EasyRail 6.0	13	W5	Α	EDSP 2.0	23	W5	Α
	W5	Α	ESP 4.0	14					W6	Α
	W5	Α	ESP 4.0 MPS	15					W7	Α
	W5	Α	B36345	16					W8	Α
	W6	Α	B25635	17						
	W7	Α	B29711	18						
	W6	Α	B25635	17	W4	Α	OBB 2.0	20	W4	В
Double-sided					W6	Α	DDSP 4.0	24	W4	Α
Pile-driven									W4	В
									W6	Α
					W4	Α	EasyRail 1.33 OS	25	W4	Α
					W5	Α	EDSP 1.33 OS	26	W4	В
0								2.000	W4	Α
On structure									W4	Α
									W4	С
									W5	В

Containment Level	N2	Page	H1	Page	H2	Page
Transitions						
	EasyRail-ESP	68	EasyRail-EDSP	69	Flextra SR-SR ECO	75
			EasyRail-SR ECO	70	3n32539	76
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CONTRACTOR SATISFACE			Flextra SR-EDSP	73		
			3n36354	71		
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concrete					BeStCONNECT SR ECO	79
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H2				НЗ				H4-B	
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3n33880	35								
B26825	36								
3n31382	37								
SuperRail Eco DS	38	W8	A	3n22051	52	W5	В	SuperRail DS	38
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SuperRail DS	40					W8*	A	3n22053	62
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SuperRail OS	43	W6	В	3n22490	54	W4	В	3n31857	64
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\* = H4-A

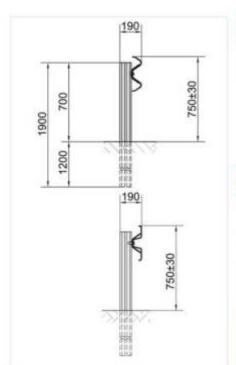
Containment Level	P2	Page
	EasyRail P2A	81
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### ESP plus wi



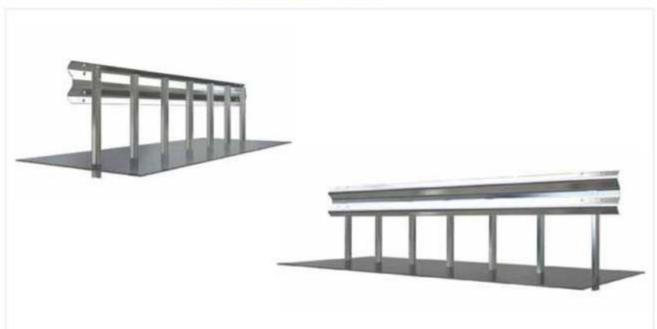


Performance				
Containment level	N2			
Acceleration Severity Index "ASI"	В			
Working width	W1			
Extreme lateral position of the vehicle	2			
Dynamic deflection	0.5 m			

Characteristics				
Height out of ground	750 mm			
Transversal overall dimensions	194/190 mm (A/B profile)			
Centre to centre between posts	666 mm			
Tested minimum length (without terminal end)	60 m			







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, reinforcement beam, thickness 4.2 mm, 4300 mm length, Sigma posts 100x55x4.2 mm, h. 1900 mm, the posts are driven into the ground every 666 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

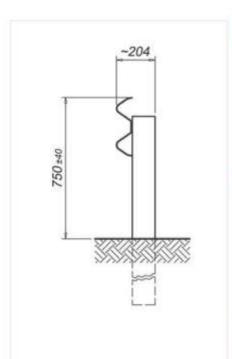
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 0176-CPD-2010



### B29707 N2-W2-b





Performance				
Containment level	N2			
Acceleration Severity Index "ASI"	В			
Working width	W2 (0.80 m)			
Extreme lateral position of the vehicle	Ť			
Dynamic deflection	0.7 m			

Characteristics				
Height out of ground	750 mm			
Transversal overall dimensions	204 mm			
Centre to centre between posts	2000 mm			
Tested minimum length (without terminal end)	54 m			







### Description

Supply and installation of 2-waves safety barrier, thickness 2.5 mm, U posts 120x80x5.0, h. 1500 mm, driven into the ground every 2000 mm, nuts and bolts and reflectors.

S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

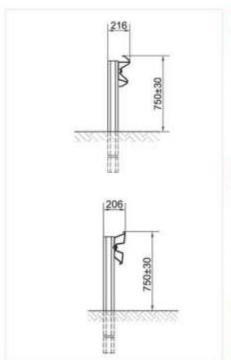
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 115/2131/CPD/2011



# Easyrail 1.33





Performance				
Containment level	N2	H1		
Acceleration Severity Index "ASI"	Α	Α		
Working width	W2 (0.8 m)	W3 (1.0 m)		
Extreme lateral position of the vehicle	7.0	2.7 m		
Dynamic deflection	0.7 m	0.9 m		

Characteristics				
Height out of ground	750 mm			
Transversal overall dimensions	216/206 mr	m (A/B profile)		
Centre to centre between posts	1333 mm			
Tested minimum length (without terminal end)	48 m	60 m		







#### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 2.5 mm, C posts 100x60x5 mm, h. 1750 mm, the posts are driven into the ground every 1333 mm, support brackets 175/185x70x5 mm, inclined by 6°, nuts and bolts, reflectors optional.

AMVR1 steel quality on the basis of DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

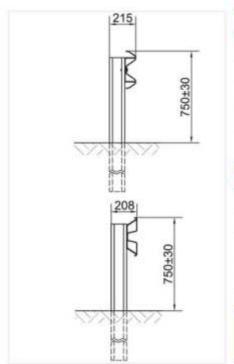
Certificate CE no. 0066-CPD-2011 for N2 and 0067-CPD-2011 for H1





# Super rail ES 1.0





Performance					
Containment level	N2	H1			
Acceleration Severity Index "ASI"	Α	A			
Working width	W2 (0.70 m)	W3(0.80 m)			
Extreme lateral position of the vehicle	-	2.70 m			
Dynamic deflection	0.50 m	0.80 m			

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	210/200 mm	(A/B profile)
Centre to centre between posts	1000 mm	
Tested minimum length (without terminal end)	60 m	60 m







#### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, posts C 125 mm, h. 1750 mm, the posts are driven into the ground every 1000 mm, support brackets 200/185x70x5 mm, nuts and bolts, reflectors optional.

S235JR/S355JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

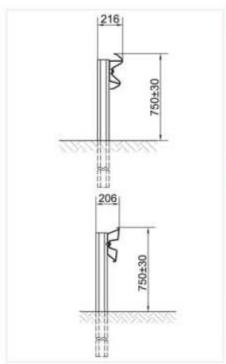
Certificate CE no. 0060-CPD-2011 for N2 and 0052-CPD-2011 for H1





### Easyrail 2.00





Performance		
Containment level	N2	H1
Acceleration Severity Index "ASI"	A	Α
Working width	W3 (1.0 m)	W4 (1.3 m)
Extreme lateral position of the vehicle	-	2.3 m
Dynamic deflection	0.7 m	1.2 m

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	216/206 mr	m (A/B profile)
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	52 m	68 m







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 2.5 mm, C posts 100x60x5 mm, h. 1750 mm, the posts are driven into the ground every 2000 mm, support brackets 175/185x70x5 mm, inclined by 6°, nuts and bolts, reflectors optional.

AMVR1 steel quality on the basis of DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

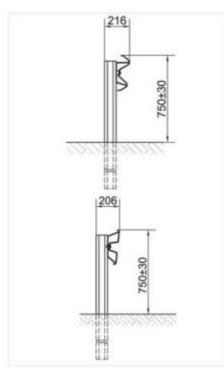
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 0068-CPD-2011 for N2 and 0069-CPD-2011 for H1



# Easyrail 4.00





Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	Α	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle	:	
Dynamic deflection	0.90 m	

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	216/206 mm (A/B profile)
Centre to centre between posts	4000 mm
Tested minimum length (without terminal end)	84 mm







#### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 2.5 mm, C posts 100x60x5 mm, h. 1750 mm, the posts are driven into the ground every 4000 mm, support brackets 175/185x70x5 mm, inclined by 6°, nuts and bolts, reflectors optional.

AMVR1 steel quality on the basis of DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

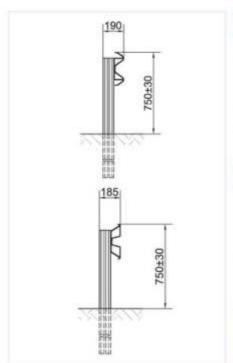
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 1826-CPD-11-02-14-DR3



### **ESP 2.00**





Performance		
Containment level	N2	N2
Acceleration Severity Index "ASI"	A	Α
Working width	A-Profile W4	B-Profile W5
Extreme lateral position of the vehicle	÷	
Dynamic deflection	A-Prof 1.3 m	B-Prof 1.6 m

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	190/185 mm (A/B profile)
Centre to centre between posts	2000 mm
Tested minimum length (without terminal end)	60 m







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, Sigma posts 100x55x4.2 mm, h. 1900 mm, the posts are driven into the ground every 2000 mm, support brackets 200/185x70x5 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

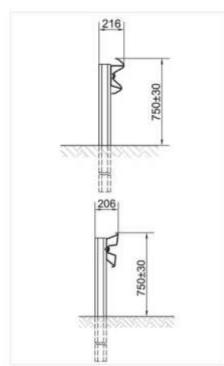
Certificate CE no. 0760-CPD-F10129 for profile A and 0760-CPD-F10130 for profile B





# Easyrail 6.00





Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	A	
Working width	W5 (1.7 m)	
Extreme lateral position of the vehicle	12	
Dynamic deflection	1.6 m	

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	216/206 mm (A/B profile)
Centre to centre between posts	6000 mm
Tested minimum length (without terminal end)	84 m







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 2.5 mm, C posts 100x60x5 mm, h. 1750 mm, the posts are driven into the ground every 6000 mm, support brackets 175/185x70x5 mm, inclined by 6°, nuts and bolts, reflectors optional.

AMVR1 steel quality on the basis of DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

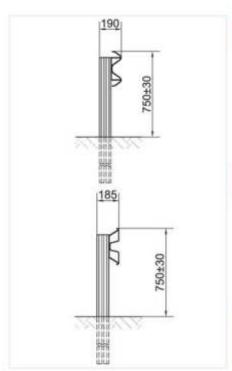
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 0070-CPD-2011



### **ESP 4.00**





Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	A	
Working width	W5	
Extreme lateral position of the vehicle	ř	
Dynamic deflection	1.6 m	

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	190/185 mm (A/B profile)
Centre to centre between posts	4000 mm
Tested minimum length (without terminal end)	60 m







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, Sigma posts 100x55x4.2 mm, h. 1900 mm, the posts are driven into the ground every 4000 mm, support brackets 200/185x70x5 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

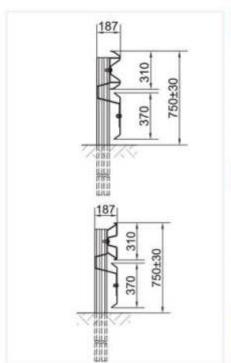
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 0177-CPD-2010



### **ESP** 4.00 Mps





Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	A	
Working width	W5	
Extreme lateral position of the vehicle	¥	
Dynamic deflection	1.5 m	

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	190/185 mm (A/B profile)
Centre to centre between posts	4000 mm
Tested minimum length (without terminal end)	60 m







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, underride protection beam, thickness 2.5 mm, Sigma posts 100x55x4.2 mm, h. 1900 mm, the posts are driven into the ground every 4000 mm, support bracket 200/185x70x5 mm, suspension brackets for underride protection, nuts and bolts. reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

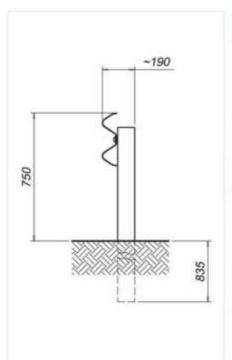
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 0760-CPD-F10132



### B36345 N2-W5-a





Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	A	
Working width	W5 (1.70 m)	
Extreme lateral position of the vehicle		
Dynamic deflection	1.60 m	

Characteristics		
Height out of ground	700 mm	
Transversal overall dimensions	180 mm	
Centre to centre between posts	2666 mm	
Tested minimum length (without terminal end)	42.64 m	







### Description

Supply and installation of a 2-wave safety barrier, thickness 4,0 mm, C100x50x25x4,0 mm H= 1500 mm, fixed to ground every 4500 mm; assembled with nuts and bolts and provided with reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025 EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

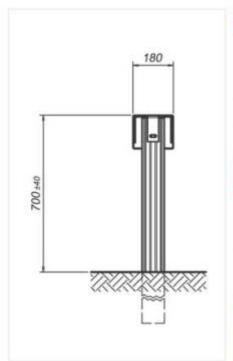
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 211/2131/CPD/2012



### B25635 N2-W6-a





Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	A	
Working width	W6 (2.10 m)	
Extreme lateral position of the vehicle	*	
Dynamic deflection	1.90 m	

Characteristics		
Height out of ground	700 mm	
Transversal overall dimensions	180 mm	
Centre to centre between posts	2666 mm	
Tested minimum length (without terminal end)	42.64 m	







### Description

Supply and installation of safety barrier consisting of C beam 180x150x25x3.5 mm with sleeve, SIGMA posts 100x55x4.2, h. 1550 mm, driven into the ground every 2666 mm, L section Ø 115x75x4 mm beam-post connection, nuts and bolts and reflectors.

S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

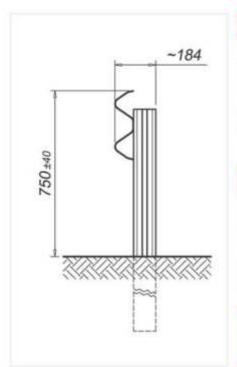
Certificate CE n. 132/2131/CPD/2011





### b29711 n2-w7-a





Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	A	
Working width	W7	
Extreme lateral position of the vehicle	2	
Dynamic deflection	2.30 m	

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	184 mm	
Centre to centre between posts	4000 mm	
Tested minimum length (without terminal end)	56 m	







#### Description

Supply and installation of 2-waves safety barrier, thickness 2.5 mm, SIGMA posts 100x55x4,0 mm h. 1500 mm, driven into the ground every 4000 mm, nuts and bolts and reflectors.

S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

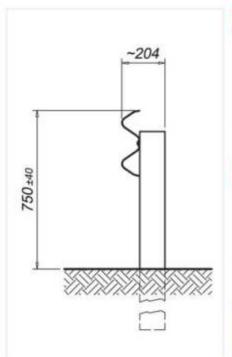
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. AISICO/042/CPD/2010



### B33061 H1-W4-a





Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	A	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle	1.60	
Dynamic deflection	1.00 m	

Characteristics		
Height out of ground	700 mm	
Transversal overall dimensions	204 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	70 m	







### Description

Supply and installation of safety barrier, with 2-waves beam thickness 2,5 mm, posts C120x80x30x5 mm h.1500 mm, driven into the ground every 2000 mm, complete with assembly bolts and reflectors. S275JR steel in quality-according EN 10025

Hot dip galvanization according to UNI EN ISO 1461

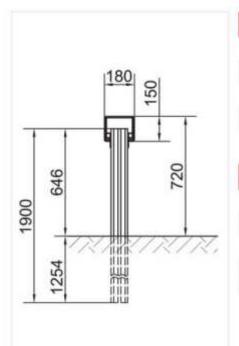
Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. AISICO/050/CPD/2010 rev.1



#### obb 2.0



Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	A	
Working width	W4	
Extreme lateral position of the vehicle	Ÿ	
Dynamic deflection		

Characteristics		
Height out of ground	720 mm	
Transversal overall dimensions	180 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	64 m	



### Description

Supply and installation of safety barrier consisting of box beam 180x150x25x4 mm with but joint, Sigma posts 100x55x4.2 mm, h. 1.900 mm, the posts are driven into the ground every 2000 mm,

Fastening brackets, welded, for box beam, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

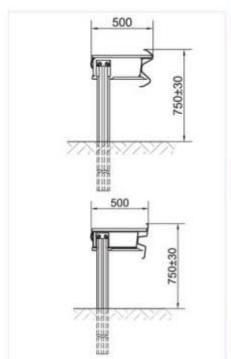
Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.



### **EDSP 1.33**





Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	A	
Working width	W4	
Extreme lateral position of the vehicle	Ÿ	
Dynamic deflection	1.1 m	

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	500 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	60 m	







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, tension coil 70x5 mm, length 4140 mm, Sigma posts 100x55x4.2 mm, h. 1900 mm, the posts are driven into the ground every 1333 mm, spacers 480 mm with post mounted brackets, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

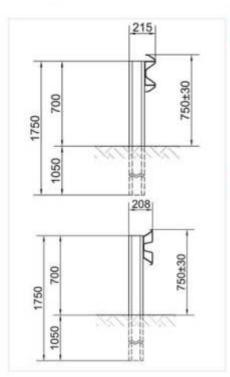
Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0760/CPD/F10134



### Super rail es 1.33



Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	Α	
Working width	W4	
Extreme lateral position of the vehicle	4	2.70 m
Dynamic deflection	0.90 m	

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	210/200 mm (A/B profile)
Centre to centre between posts	1333 mm
Tested minimum length (without terminal end)	60 m



### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, posts C 125 mm, h. 1750 mm, the posts are driven into the ground every 1333 mm, support brackets 200/185x70x5 mm, nuts and bolts, reflectors optional.

S235JR/S355JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

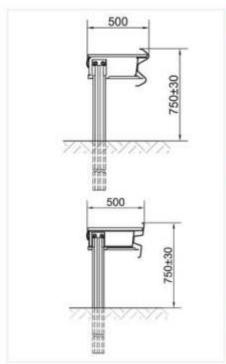
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 0087-CPD-2011 for H1



### edsp 2.00





Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	A	
Working width	W5	
Extreme lateral position of the vehicle	÷	
Dynamic deflection	1.3 m	

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	500 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	60 m	







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, tension coil 70x5 mm, length 4140 mm, Sigma posts 100x55x4.2 mm, h. 1900 mm, the posts are driven into the ground every 2000 mm, spacers 480 mm with post mounted brackets, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

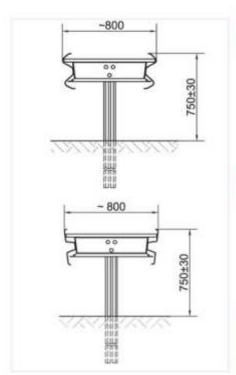
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0760/CPD/F10133



### **DDSP 4.00**



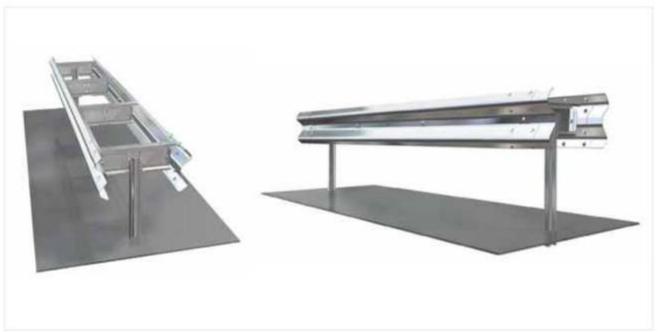


Performance	
Containment level	H1
Acceleration Severity Index "ASI"	A
Working width	W6
Extreme lateral position of the vehicle	
Dynamic deflection	A-Prof 1.6 m / B-Prof 1.8 m

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	800 mm	
Centre to centre between posts	4000 mm	
Tested minimum length (without terminal end)	60 m	







#### Description

Supply and installation of double sided 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, Sigma posts 100x55x4.2 mm, h. 1.900 mm, the posts are driven into the ground every 4000 mm, Separators 780 mm with post mounted brackets, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

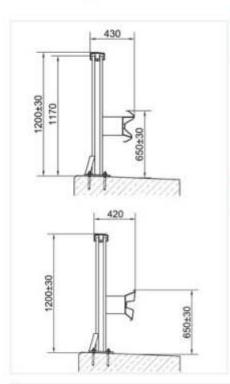
Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 132/2131/CPD/2011



### easy rail 1.33 os



Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	A	
Working width	W4	
Extreme lateral position of the vehicle		
Dynamic deflection	0.6 m	

Characteristics	
Height out of ground	1200 mm
Transversal overall dimensions	430/420 mm (A/B Profile)
Centre to centre between posts	1333 mm
Tested minimum length (without terminal end)	36 m





### Description

Supply and installation of 2-waves safety barrier on structure (Profile: German A / B), thickness 2.5 mm, profiled railing 140x74x2.5 mm, length 3.998 mm, C posts 100x60x5 mm, h. 1170 mm with base plates 250x300x12 mm, the posts are fixed on the structure every 1333 mm, Deformation elements Ø 193 mm, support brackets 175/185x70x5 inclined by 6°, nuts and bolts, reflectors optional.

AMVR1 steel quality on the basis of DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

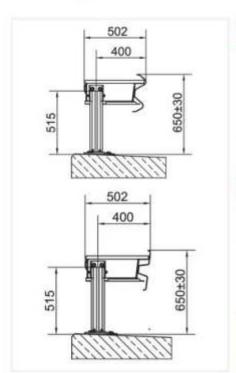
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.





### edsp 1.33 os





Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	A	
Working width	W5	
Extreme lateral position of the vehicle		
Dynamic deflection	1.2 m	

Characteristics		
Height out of ground	650 mm	
Transversal overall dimensions	500 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	68 m	









### Description

Supply and installation of 2-waves safety barrier on structure (Profile: German A / B), thickness 3.0 mm, tension coil 70x5 mm, length 4140 mm, Sigma posts 100x55x4.2 mm, h. 515 mm with base plates 250x300x10 mm, the posts are fixed on the structure every 1333 mm, spacers 480 mm with post mounted brackets, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

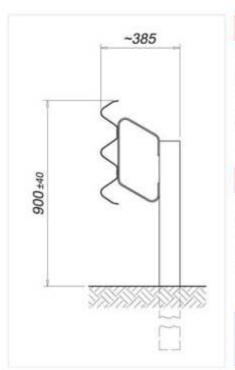
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2. Certificate CE n. 0760/CPD/F10135





### 3n36060 H2-W3-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W3 (1.00 m)	
Extreme lateral position of the vehicle	1.40 m	
Dynamic deflection	0.90 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	385 mm	
Centre to centre between posts	1000 mm	
Tested minimum length (without terminal end)	54 m	







### Description

Supply and installation of a 3-wave safety barrier, thickness 4,0 mm, C100x50x25x4,0 mm h=1700 mm, fixed to ground every 1000 mm; spacers 407x201x5.9 mm L=80 mm, assembled with nuts and bolts and provided with reflectors.

S235JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

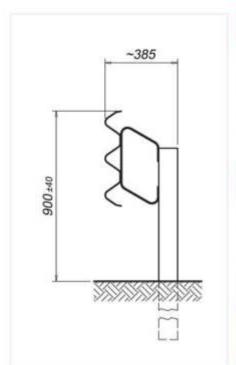
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 203/2131/CPD/2012



### 3n35975 H2-W4-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle		
Dynamic deflection	1.1 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	385 mm	
Centre to centre between posts	1500 mm	
Tested minimum length (without terminal end)	49.50 m	







#### Description

Supply and installation of a 3-wave safety barrier, thickness 2,5 mm, C100x50x25x4,0 mm h= 1700 mm, fixed to ground every 1500 mm; spacers 407x201x5.9 mm L=80 mm, assembled with nuts and bolts and provided with

S235JR-S275JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

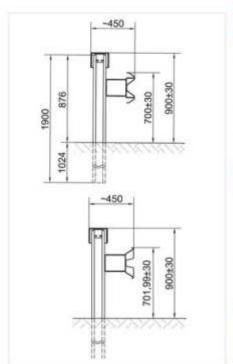
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 187/2131/CPD/2011



# super rail eco





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W4	
Extreme lateral position of the vehicle		
Dynamic deflection	0.7 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	450 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	52 m	







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, box beam 180x150x3 mm length 3.998 mm, posts C 125, h. 1.900 mm, the posts are driven into the ground every 2000 mm, deformation brackets 200 mm, nuts and bolts, reflectors optional.

S235JR/S355JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

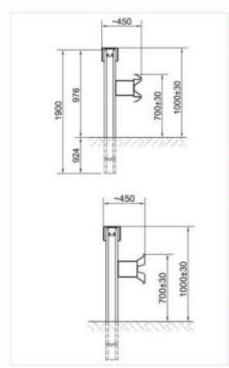
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0009/CPD/2011



### super rail eco la





Performance	
Containment level	H2
Acceleration Severity Index "ASI"	A
Working width	W4
Extreme lateral position of the vehicle	*
Dynamic deflection	1.1 m

Characteristics		
Height out of ground	1000 mm	
Transversal overall dimensions	450 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	52 m	







#### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, box beam 180x150x3 mm length 3.998 mm, posts C 125, h. 1.900 mm, the posts are driven into the ground every 2000 mm, deformation brackets 200 mm, nuts and bolts, reflectors optional.

S235JR/S355JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

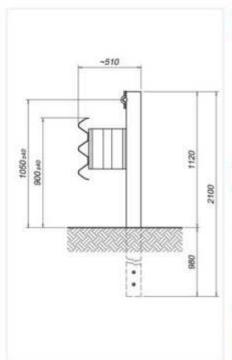
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0096/CPD/2011



### 3n32312 H2-W4-a





Performance		Ξ
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W4 (1.10 m)	
Extreme lateral position of the vehicle	1.20 m	
Dynamic deflection	0.80 m	

Characteristics	
Height out of ground	1050 mm / 900 mm
Transversal overall dimensions	510 mm
Centre to centre between posts	2250 mm
Tested minimum length (without terminal end)	78 m







### Description

Supply and installation of a 3-wave safety barrier, thickness 2,5 mm, C posts 120x80x30 mmx5,9 mm, h=2100 mm, fixed to ground every 2250 mm; spacers 310x80x5,9 mm, with an upper threaded retaining bars Ø 32 mm, assembled with nuts and bolts and provided with reflectors.

S235JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

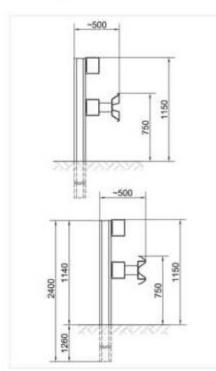
Certificate CE n. AISICO/039/CPD/2010





# super rail





Performance		
Containment level	H2	H4B
Acceleration Severity Index "ASI"	A	A
Working width	W4	W7
Extreme lateral position of the vehicle	12	
Dynamic deflection	0.8 m	2.12 m

Characteristics		
Height out of ground	1150 mm	
Transversal overall dimensions	500 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	40 m	76 m







### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, box beams 180x150x4 mm length 3.998 mm, posts C 125, h. 2.400 mm, the posts are driven into the ground every 1333 mm, Deformation elements Ø 139.7 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

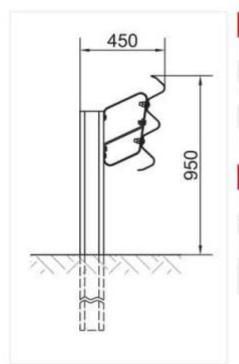
Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0139/CPD/2010



### Vr 3n Italy



Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W5	
Extreme lateral position of the vehicle	Ť	
Dynamic deflection	1.60 m	

Characteristics		
Height out of ground	950 mm	
Transversal overall dimensions	450 mm	
Centre to centre between posts	2250 mm	
Tested minimum length (without terminal end)	60 m	



### Description

Supply and installation of 3-wave safety barrier, thickness 2.7 mm, posts C 125, h. 1.600 mm, the posts are driven into the ground every 2250 mm, deformation elements with stiffener-sheets, nuts and bolts, reflectors optional. S275JR/S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

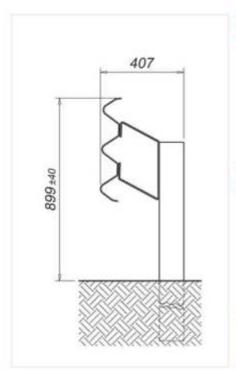
Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.



### 3n24872 H2-W5-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	Α	
Working width	W5 (1.70 m)	
Extreme lateral position of the vehicle	2.20 m	
Dynamic deflection	1.60 m	

Characteristics		
Height out of ground	899 mm	
Transversal overall dimensions	407 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	48 m	







### Description

Supply and installation of a 3-wave safety barrier, thickness 3,0 mm, C post 120x80x30x5.9 mm h= 1840 mm, fixed to ground every 2000 mm; spacers 80x5.9 mm, assembled with nuts and bolts and provided with reflectors. S235JR-S275JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

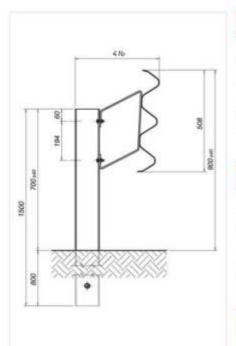
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 121/2131/CPD/2011.



### 3n33880 H2-W6-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W6 (2.10 m)	
Extreme lateral position of the vehicle	2.00 m	
Dynamic deflection	2.10 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	416 mm	
Centre to centre between posts	2250 mm	
Tested minimum length (without terminal end)	88.50 m	







### Description

Supply and installation of 3-waves safety barrier, thickness 2,5 mm, U posts 120x80x5 mm, h= 1500 mm, the posts are driven into the ground every 2250 mm, spacers 395x201x5.9 mm L=80 mm, assembled with nuts and bolts and provided with reflectors.

S235JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

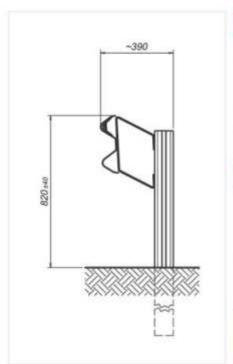
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 092/2131/CPD/2010



### B26825 H2-W7-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W7 (2.28 m)	
Extreme lateral position of the vehicle	3.25 m	
Dynamic deflection	2.10 m	

Characteristics		
Height out of ground	820 mm	
Transversal overall dimensions	390 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	84.00 m	







### Description

Supply and installation of 2-waves safety barrier, thickness 2.5 mm, SIGMA posts 100x55x4.2, h. 1900 mm, driven into the ground every 2000 mm, spacers 395x201x5.9 mm, Ø 14 mm rope passing between girder and spacer connected to the extremity supports, with nuts and bolts and and provided with reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

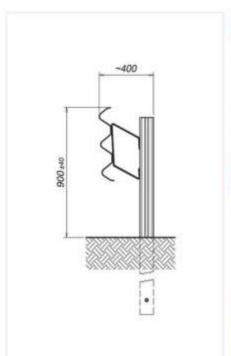
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n.AISICO/055/CPD/2010



### 3n31382 H2-W8-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W8 (2.80 m)	
Extreme lateral position of the vehicle	3.40 m	
Dynamic deflection	2.60 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	400 mm	
Centre to centre between posts	3000 mm	
Tested minimum length (without terminal end)	72.00 m	







#### Description

Supply and installation of a 3-wave safety barrier, thickness 2,5 mm, Sigma posts 100x55 mm, h. 1900 mm, driven into ground every 3000 mm, spacers 395x201x80x5.9 mm, assembled with nuts and bolts and provided with reflectors.

S235JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

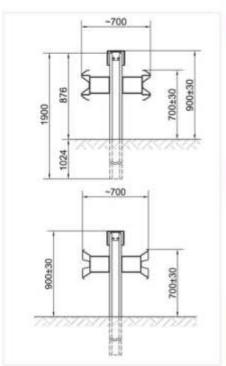
Certificate CE n. AISICO/005/CPD/2009





# super rail eco double sided



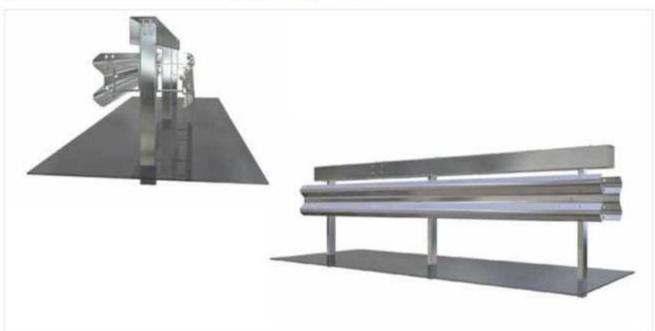


Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W4	
Extreme lateral position of the vehicle	2	
Dynamic deflection	0.7 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	700 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	52 m	







#### Description

Supply and installation of double-sided 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, box beam 180x150x3 mm length 3.998 mm, posts C 125, h. 1.900 mm, the posts are driven into the ground every 2000 mm, deformation brackets 200 mm, nuts and bolts, reflectors optional.

S235JR/S355JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

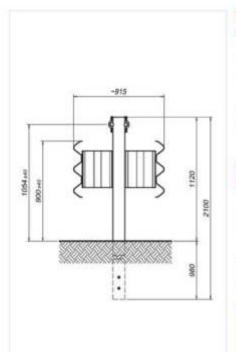
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0179/CPD/2010



### 3n32773 H2-W4-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle	1.30 m	
Dynamic deflection	0.90 m	

Characteristics	
Height out of ground	900 mm / 1054 mm
Transversal overall dimensions	910 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	76.50 m







#### Description

Supply and installation of 3-waves safety barrier, thickness 2.5 mm, posts C 120x80x30 mm, h= 2100, fixed to ground every 1500 mm, spacers 310x80x5,9 mm, with two upper threaded retaining bars Ø 32 mm, with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

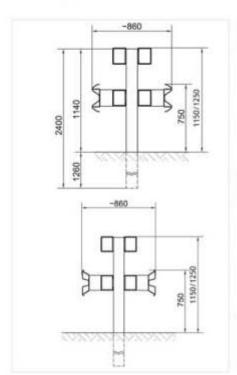
Certificate CE n. 135/2131/CPD/2011





# super rail double sided



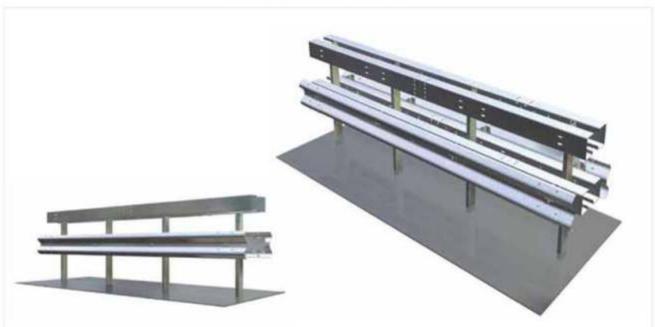


Performance		
Containment level	H2	H4B
Acceleration Severity Index "ASI"	В	В
Working width	W4	W5
Extreme lateral position of the vehicle		
Dynamic deflection	0.65 m	0.90 m

Characteristics		
Height out of ground	1150 mm	1250 mm
Transversal overall dimensions	860 mm	860 mm
Centre to centre between posts	1333 mm	1333 mm
Tested minimum length (without terminal end)	40 m	76 m







### Description

Supply and installation of double-sided 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, box beams 180x150x4 mm length 3.998 mm, posts C 125, h. 2.400 mm, the posts are driven into the ground every 1333 mm, Deformation elements Ø 139.7 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

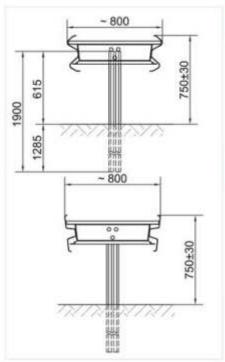
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0104/CPD/2010



# ddsp++ 2.00





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W6	
Extreme lateral position of the vehicle		
Dynamic deflection	1.8 m	

Characteristics		
Height out of ground	750 mm	1
Transversal overall dimensions	800 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	80 m	







#### Description

Supply and installation of double-sided 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, Sigma posts 100x55x4.2 mm, h. 1.900 mm, the posts are driven into the ground every 2000 mm,

Separators 780 mm with post mounted brackets, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

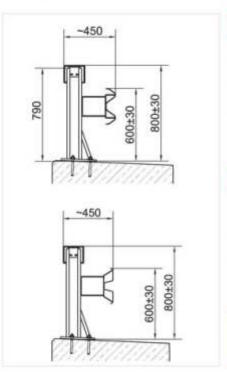
Certificate CE n. 0760-CPD-F10138





# super rail eco os





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	Α	
Working width	W4	
Extreme lateral position of the vehicle	1	
Dynamic deflection	1.00 m	

Characteristics		
Height out of ground	800 mm	
Transversal overall dimensions	450 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	60 m	









### Description

Supply and installation of 2-waves safety barrier on structure (Profile: German A / B), thickness 3.0 mm, box beam 180x150x3 mm length 3.998 mm, posts C 125, h. 790 mm with base plate 300x300x15 mm, the posts are fixed on the structure every 1333 mm, deformation brackets 200 mm, nuts and bolts, reflectors optional.

S235JR/S355JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

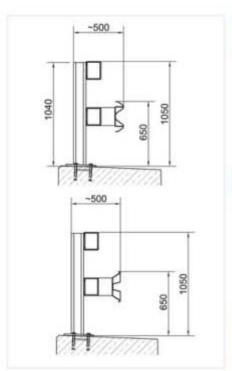
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0139/CPD/2010



# super rail os





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W4	
Extreme lateral position of the vehicle	2	
Dynamic deflection	0.65 m	

Characteristics		
Height out of ground	1050 mm	
Transversal overall dimensions	500 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	36 m	









#### Description

Supply and installation of 2-waves safety barrier on structure (Profile: German A / B), thickness 3.0 mm, box beams 180x150x4 mm length 3.998 mm, posts C 125, h. 1040 mm with base plate 300x300x15 mm, the posts are fixed on the structure every 1333 mm, deformation elements Ø 139.7 mm, nuts and bolts, reflectors optional. S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

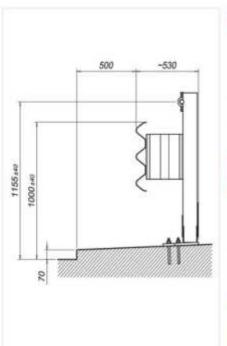
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0120/CPD/2010



### 3n32122 H2-W4-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W4 (1.10 m)	
Extreme lateral position of the vehicle	1.20 m	
Dynamic deflection	0.80 m	

Characteristics	
Height out of ground	900 mm / 1155 mm
Transversal overall dimensions	530 mm
Centre to centre between posts	2250 mm
Tested minimum length (without terminal end)	78 m







#### Description

Supply and installation of a 3-wave safety barrier, thickness 2,5 mm, C post 120x80x30x5.9 mm, h=1100 mm, fixed to ground every 2250 mm by anchor bolts, spacers 310x80x5.9 mm, with an upper threaded retaining bars  $\emptyset$  32 mm with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

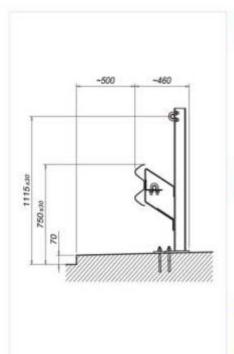
Certificate CE n. AISICO/039/CPD/2010





### B28736 H2-W4-a





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle	1.30 m	
Dynamic deflection	0.75 m	

Characteristics	
Height out of ground	750 mm / 1155 mm
Transversal overall dimensions	460 mm
Centre to centre between posts	2000 mm
Tested minimum length (without terminal end)	68 m







#### Description

Supply and installation of 2-waves safety barrier, thickness 3,0 mm, HEA posts 100, h. 1070 mm with plate 400x300x15 mm fixed to the concrete every 2000 mm by anchor bolts, spacers 250x260X5.9 mm, upper rail and lower rail threaded bars Ø 28 mm, nuts and bolts and reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

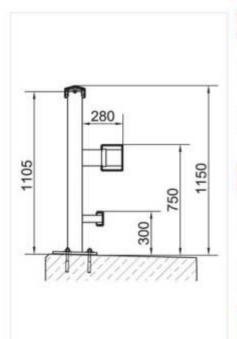
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n.146/2131/CPD/2011



# safety rail OS





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	С	
Working width	W4	
Extreme lateral position of the vehicle	Ÿ	
Dynamic deflection	0.72 m	

Characteristics		
Height out of ground	1150 mm	
Transversal overall dimensions	397 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	32 m	







### Description

Supply and installation of safety barrier on structure with box beam 180x150x4 mm, length 3.998 mm, profiled railing 140x84x4 mm, length 3.998 mm, C-100 beam, length 3.998 mm, rectangular tube posts, h. 1150 mm with base plate 300x300x15 mm, the posts are fixed on the structure every 1333 mm, deformation elements Ø273 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

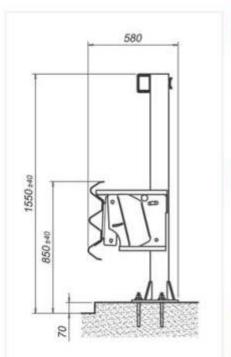
Certificate CE n. 0071/CPD/2011





# 3n24335 H2-W5-B (BW)





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W5 (1.65 m)	
Extreme lateral position of the vehicle	9	
Dynamic deflection	1.08 m	

Characteristics	
Height out of ground	750 mm / 1155 mm
Transversal overall dimensions	460 mm
Centre to centre between posts	2250 mm
Tested minimum length (without terminal end)	68 m







#### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, U posts 120x80x5.9, h. 1465 mm with plate 250x300x15 mm fixed to the concrete every 2250 mm by anchor bolts, spacers 460x392 mm, thickness 3 mm, energy releaser-bracer, U upper rail 120x80x5.9 with supports, rear rail 70x5 mm, nuts and bolts and reflectors. S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

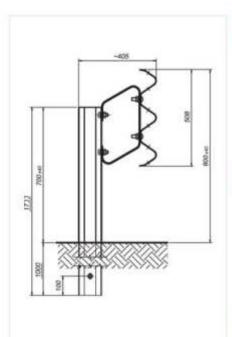
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 119/2131/CPD/2011



### 3n36450 H3-W5-a





Performance		
Containment level	H3	
Acceleration Severity Index "ASI"	A	
Working width	W5 (1,70 m)	
Extreme lateral position of the vehicle	2,10 m	
Dynamic deflection	1,40 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	405 mm	
Centre to centre between posts	1000 mm	
Tested minimum length (without terminal end)	54 m	







### Description

Supply and installation of a 3-wave safety barrier, thickness 4,0 mm,  $C120 \times 80 \times 30 \times 4,0$  mm H = 1700 mm, fixed to ground every 1000 mm; spacers 407 x 201 x 5.9 mm L = 80 mm, assembled with nuts and bolts and provided with reflectors.

S235JR - S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

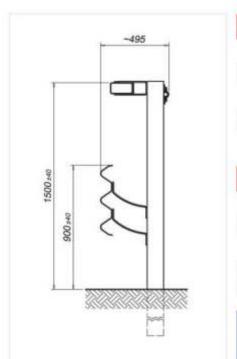
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n.209/2131/CPD/2011



## 3n33568 H3-W6-a





Performance		
Containment level	H3	
Acceleration Severity Index "ASI"	A	
Working width	W6 (1.97 m)	
Extreme lateral position of the vehicle	1.50	
Dynamic deflection	1.52 m	

Characteristics	
Height out of ground	900 mm / 1150 mm
Transversal overall dimensions	385 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	94.50 m







#### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, U posts 120x80x5.9 mm h.2700 mm are driven into the ground every 1500 mm, spacers 250x260x8 mm, upper rail 160x80x4 mm, rear rail diam. 28 mm with supports, nuts and bolts and reflectors.

S235JR-S275JR steel in quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

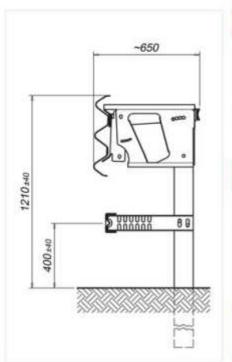
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n.131/2131/CPD/2011



### 3n21756 H3-W7-a





Performance		
Containment level	H3	
Acceleration Severity Index "ASI"	Α	
Working width	W7 (2.50 m)	
Extreme lateral position of the vehicle	2.50 m	
Dynamic deflection	2.11 m	

Characteristics	
Height out of ground	400 mm / 1210 mm
Transversal overall dimensions	615 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	90.30 m







#### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, U posts 120x80x5, h. 2200 mm, the posts are driven into the ground every 1500 mm, spacers 570x392x3mm with energy releaser-brace system, diagonal plate 70x5 mm, U 120x65x4 mm lower rail with supports, rear rail 70x5 mm, nuts and bolts and reflectors.

S235JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

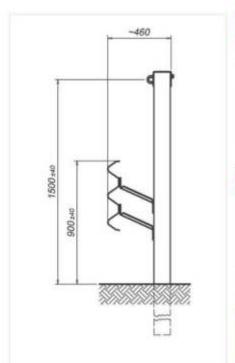
Certificate CE n. 134/2131/CPD/2011





## 3n28079 H3-W8-a





Performance		
Containment level	Н3	
Acceleration Severity Index "ASI"	A	
Working width	W8 (2.85 m)	
Extreme lateral position of the vehicle	3.14 m	
Dynamic deflection	2.40 m	

Characteristics		
Height out of ground	900 mm / 1500 mm	
Transversal overall dimensions	460 mm	
Centre to centre between posts	1500 mm	
Tested minimum length (without terminal end)	90.00 m	







#### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, U posts 120x80x5.9, h. 2700 mm, the posts are driven into the ground every 1500 mm, spacers 250x260x8 mm, upper rail with threaded bar with connectors and supports, nuts and bolts and reflectors.

S235JR-S3555JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

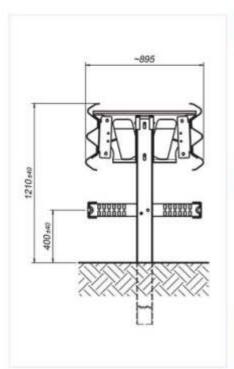
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n.062/2131/CPD/2010



#### 3n22051 H3-W8-a





Performance		
Containment level	НЗ	
Acceleration Severity Index "ASI"	A	
Working width	W8 (2.78 m)	
Extreme lateral position of the vehicle	2.20 m	
Dynamic deflection	2.78 m	

Characteristics		
Height out of ground	1210 mm	Tath
Transversal overall dimensions	895 mm	
Centre to centre between posts	1500 mm	
Tested minimum length (without terminal end)	80.00 m	







#### Description

Supply and installation of 3-waves safety barrier with 2 beams, thickness 3,0 mm, U posts 120x80x6 mm, h. 2200 mm, the posts are driven into the ground every 1500 mm, spacers 780x392x3mm with energy releaser-brace system, diagonal plate 70x5 mm, double lower rails U 120x65x4 mm with supports, nuts and bolts and reflectors. S235JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

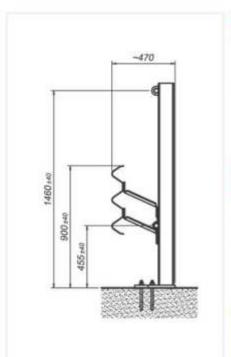
Certificate CE n.144/2131/CPD/2011





### 3n28361 H3-W5-a





Performance		
Containment level	Н3	
Acceleration Severity Index "ASI"	A	
Working width	W6 (1.80 m*)	
Extreme lateral position of the vehicle	2.00 m*	
Dynamic deflection	1.60 m	

Characteristics	
Height out of ground	455 mm / 900 mm / 1460 mm
Transversal overall dimensions	470 mm
Centre to centre between posts	2250 mm
Tested minimum length (without terminal end)	108.00 m







#### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, HEA posts 120, h. 1520 mm with plate 300x400x20 mm fixed to the concrete every 2250 mm by anchor bolts, spacers 250x260X8 mm with upper rail and lower rail threaded bars Ø 32 mm with clamps, nuts and bolts and reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. AISICO/056/CPD/2010

\* The safety barrier 3n28361 has been tested according with test TB61 by TÜV Institute of Munich (Germany) for the force measurements, Test n. X49.01.H01

the performance are following described:

Working width= W5 (1,60 m)

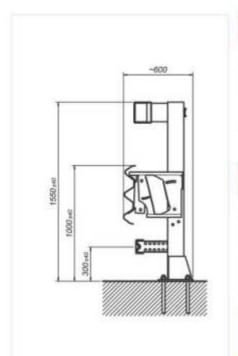
Extreme lateral position of the vehicle = 1,70 m





### 3n22490 H3-W6-B





Performance		
Containment level	H3	
Acceleration Severity Index "ASI"	В	
Working width	W6 (1.91 m)	
Extreme lateral position of the vehicle	1.91 m	
Dynamic deflection	1.71 m	

Characteristics	
Height out of ground	300 mm / 1000 mm / 1550 mm
Transversal overall dimensions	600 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	85.80 m







### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, U posts 140x70x7, h. 1535 mm with plate 250x300x15 mm fixed to the ground every 1535 mm by anchor bolts M24x330, spacers 460x392x3 mm, energy releaser-bracer, upper rail C180x150x4x3mm with supports, U120x65x4 section lower rail with bored spacers, rear rail 70x5 mm, nuts and bolts and reflectors.

S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

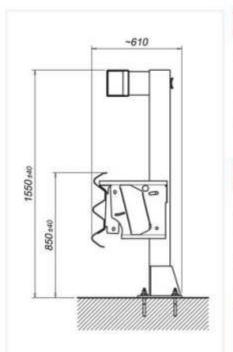
Certificate CE n. 150/2131/CPD/2010





### 3n24409 H3-W8-B





Performance		
Containment level	H3	
Acceleration Severity Index "ASI"	В	
Working width	W8 (2.80 m)	
Extreme lateral position of the vehicle	2.80 m	
Dynamic deflection	2.10 m	

Characteristics	
Height out of ground	850 mm / 1550 mm
Transversal overall dimensions	610 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	94.80 m







### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, U posts 140x70x7 mm h.1535 mm with plate 250x300x15 mm fixed to the concrete every 1500 mm by anchor bolts, spacers 460x392x3 mm with energy absorption, box upper rail C-shaped 180x150x40x3 mm with supports, and box-shaped tension rail 70x5 mm, assembled with nuts and bolts and provided with reflectors.

S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

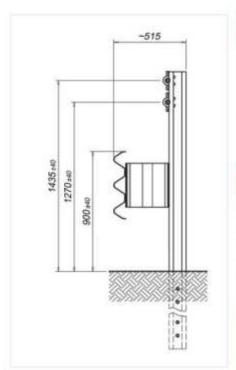
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 064/2131/CPD/2010



### 3n34352 H4-W4-B





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	В	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle	2.00 m	
Dynamic deflection	1.20 m	

Characteristics	
Height out of ground	900 mm / 1270 mm / 1435 mm
Transversal overall dimensions	515 mm
Centre to centre between posts	1000 mm
Tested minimum length (without terminal end)	90.00 m









#### Description

Supply and installation of 3-waves safety barrier, thickness 2.5 mm, C posts 120x80x30x5.9 mm; h.2500 mm the posts are driven into the ground every 1000 mm, spacers 310x80x5.9 mm, with double upper threaded retaining bars diam. 32 mm, assembled with nuts and bolts and provided with reflectors.

S235JR-S355JR steel in quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Bolts according to UNI EN ISO 898-1, UNI EN 20898-2

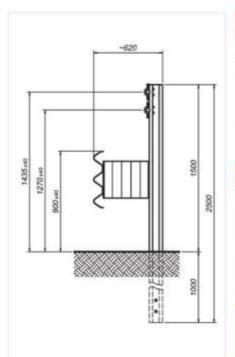
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 082/2131/CPD/2010



### 3n31679 H4-W5-a





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	A	
Working width	W5 (1.70 m)	
Extreme lateral position of the vehicle	1.60 m	
Dynamic deflection	1.10 m	

Characteristics		
Height out of ground	900 mm / 1270 mm / 1435 mm	
Transversal overall dimensions	620 mm	
Centre to centre between posts	1500 mm	
Tested minimum length (without terminal end)	81.00 m	







### Description

Supply and installation of a 3-wave safety barrier, thickness 2,5 mm, C post 120x80x30x5,9 mm h.2500 mm, fixed to ground every 1500 mm, spacers 415x80x5 mm, with an upper threaded retaining bars Ø 32 mm with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996) Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

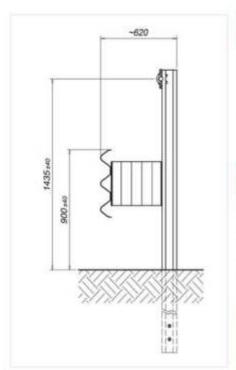
Certificate CE n. AISICO/030/CPD/2010





### 3n32818 H4-W6-B





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	В	
Working width	W6 (2.00 m)	
Extreme lateral position of the vehicle	2.10 m	
Dynamic deflection	1.60 m	

Characteristics	
Height out of ground	900 mm / 1435 mm
Transversal overall dimensions	620 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	75.50 m







### Description

Supply and installation of 2-waves safety barrier, thickness 2.5 mm, posts type C120x80x30x5,9 h.2500 mm fixed to the ground every 1500 mm, spacers 415x80x5mm L=330mm, upper rail threaded bars Ø 32 mm with welded plates, nuts and bolts and reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

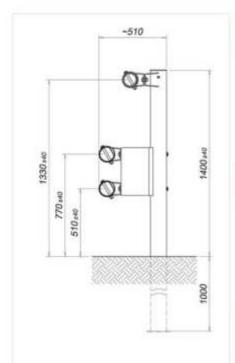
Bolts according to UNI EN ISO 898-1, UNI EN 20898-2
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. AISICO/053/CPD/2010



## B33820 H4-W6-B





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	В	
Working width	W6 (1.90 m)	
Extreme lateral position of the vehicle	2.50 m	
Dynamic deflection	1.70 m	

Characteristics		
Height out of ground	510 mm / 770 mm / 1330 mm	
Transversal overall dimensions	510 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	78.00 m	







#### Description

Supply and installation of safety barrier, arranged by welded pipes ø121 mm thicknesses 3,0 mm and 6,0 mm, tubular posts ø121 mm thk. 6,0 mm h. 2400 mm; fixed to the ground every 2000 mm; spacers ø244 mm thk 5,0 mm, assembled with nuts and bolts and provided with reflectors.

S235JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

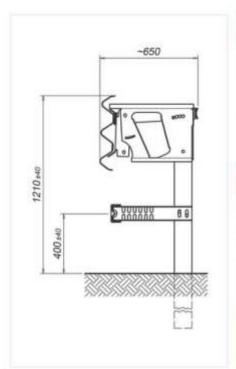
Certificate CE n. 180/2131/CPD/2011





### 3n21610 H4-W8-a





Performance		
Containment level	H4a	
Acceleration Severity Index "ASI"	A	
Working width	W8 (2.90 m)	
Extreme lateral position of the vehicle	3.25 m	
Dynamic deflection	2.60 m	

Characteristics		
Height out of ground	400 mm / 1210 mm	
Transversal overall dimensions	615 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	132.00 m	







#### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, U posts 120x80x6, h. 2200 mm, the posts are driven into the ground every 1333 mm, spacers 570x392x3mm with energy releaser-brace system, diagonal plate 70x5 mm, U 120x65x4 mm lower rail with supports, rear rail 70x5 mm, nuts and bolts and reflectors.

S235JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

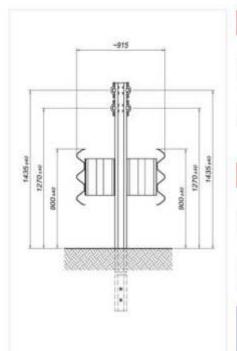
Certificate CE n. 143/2131/CPD/2011





### 3n32795 H4-W5-B





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	В	
Working width	W5 (1.70 m)	
Extreme lateral position of the vehicle	1.60 m	
Dynamic deflection	1.40 m	

Characteristics		
Height out of ground	900 mm / 1270 mm / 1435 mm	
Transversal overall dimensions	915 mm	
Centre to centre between posts	1500 mm	
Tested minimum length (without terminal end)	89.00 m	







### Description

Supply and installation of a 3-wave safety barrier, thicknes 2,5 mm, C post 120x80x30 mm, h. 2500 mm, fixed to ground every 1500 mm; spacers 310x80x5,9 mm, with an upper threaded retaining bars Ø 32 mm, with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461 Bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

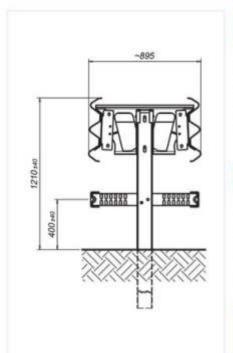
Certificate CE n. 072/2131/CPD/2010





# 3n22053 h4-w8-a





Performance		
Containment level	H4a	
Acceleration Severity Index "ASI"	A	
Working width	W8 (2.58 m)	
Extreme lateral position of the vehicle	1.60	
Dynamic deflection	2.53 m	

Characteristics		
Height out of ground	400 mm / 1210 mm	
Transversal overall dimensions	895 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	80 m	







#### Description

Supply and installation of 3-waves safety barrier with 2 beams, thickness 3,0 mm, U posts 120x80x6, h. 2200 mm, the posts are driven into the ground every 1333 mm, spacers 7800x392x3 mm with energy releaser-brace system, double lower rails U 120x65x4 mm with supports, diagonal plate 70x5 mm, nuts and bolts and reflectors. S235JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

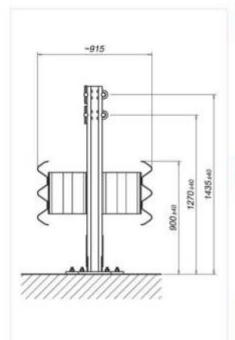
Certificate CE n.151/2131/CPD/20101





### 3n34650 L4-W4-B





Performance		
Containment level	L4b	
Acceleration Severity Index "ASI"	В	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle	2.30 m	
Dynamic deflection	0.80 m	

Characteristics	
Height out of ground	900 mm / 1270 mm / 1435 mm
Transversal overall dimensions	915 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	89.00 m







#### Description

Supply and installation of 3-waves safety barrier, thickness 3.0 mm, posts C 120x80x30x5,9 mm; h. 1480 mm, fixed to ground every 1500 mm by anchor bolts; spacers 310x80x5,9 mm, with four upper threaded retaining bars Ø 32 mm with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Bolts according to UNI EN ISO 898-1, UNI EN 20898-2

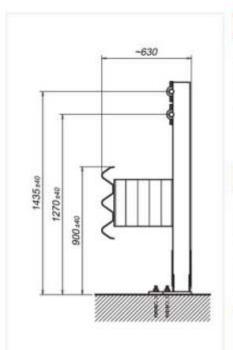
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 165/2131/CPD/2011



# 3n31857 h4-w4-b





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	В	
Working width	W4 (1.30 m)	
Extreme lateral position of the vehicle	1.20	
Dynamic deflection	0.80 m	

Characteristics	
Height out of ground	900 mm / 1270 mm / 1435 mm
Transversal overall dimensions	630 mm
Centre to centre between posts	1333 mm
Tested minimum length (without terminal end)	92.00 m







### Description

Supply and installation of a 3-wave safety barrier, thickness 3 mm, C post 120x80x30x5,9 mm h.1480 mm fixed to ground every 1333 mm by anchor bolts, spacers 415x80x5 mm L=330 mm, with double threaded retaining bars Ø 32 mm with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025 EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

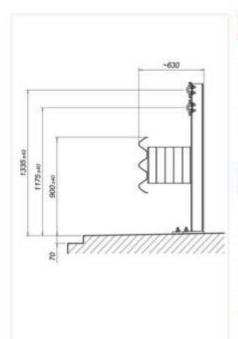
Certificate CE n. AISICO/029/CPD/2010





# 3n31622 h4-w6-a





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	A	
Working width	W6 (2.00 m)	
Extreme lateral position of the vehicle	2.30	
Dynamic deflection	1.50 m	

Characteristics	
Height out of ground	900 mm / 1175 mm / 1335 mm
Transversal overall dimensions	630 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	78.00 m







#### Description

Supply and installation of a 3-wave safety barrier, thickness 2.5 mm, HEA Posts 120 h.1350 mm with plate 300x400x20 mm fixed to ground every 1500 mm by anchor bolts, spacers 415x80x5 mm L=330 mm, with double upper threaded retaining bars Ø 32 mm with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S275JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

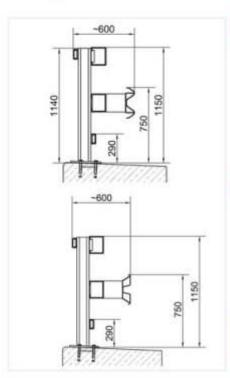
Certificate CE n. 059A/2131/CPD/2010





# super rail plus os





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	В	
Working width	W7	
Extreme lateral position of the vehicle		
Dynamic deflection	1.31 m	

Characteristics		
Height out of ground	1150 mm	
Transversal overall dimensions	600 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	80 m	









#### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, box beams 180x150x4 mm length 3.998 mm and two additional C-100 beams 3.998 mm, posts C 125, h. 1150 mm with base plate 300x300x15 mm, the posts are fixed on the structure every 1333 mm,

deformation elements Ø 193.7 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

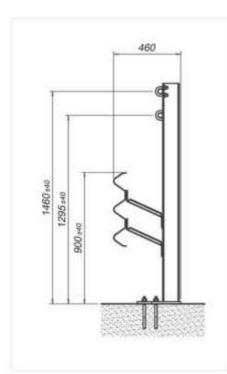
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0131/CPD/2010



## 3n28236 h4-w8-b





Performance		
Containment level	H4b	
Acceleration Severity Index "ASI"	В	
Working width	W8 (2.80 m)	
Extreme lateral position of the vehicle	1.80	
Dynamic deflection	2.60 m	

Characteristics	
Height out of ground	900 mm / 1295 mm / 1460 mm
Transversal overall dimensions	460 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	108.00 m









#### Description

Supply and installation of 3-waves safety barrier, thickness 3,0 mm, HEA posts 120, h. 1600 mm with plate 300x400x15 mm fixed to the concrete every 1500 mm by anchor bolts, spacers 250x260X8 mm, no. 2 threaded bars Ø 32 mm with upper rear and clamps, nuts and bolts and reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

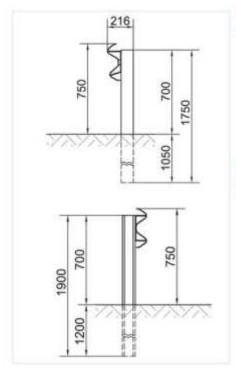
Bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 066/2131/CPD/2010



# transition Easyrail / ESP



Performance		
Containment level	N2	
Acceleration Severity Index "ASI"	A	
Working width	W3	
Extreme lateral position of the vehicle		
Dynamic deflection	0.9 m	

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	216/206 mm (A/B Profile)
Centre to centre between posts	1333 - 2000 mm
Tested minimum length (without terminal end)	12 m



#### Description

Supply and installation of transition between EasyRail and ESP (Profile: German A / B)

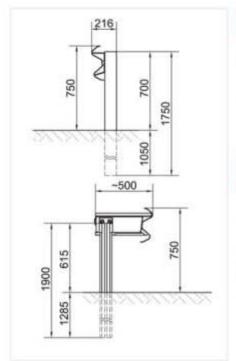
AMVR1 steel quality on the basis of DIN EN 10025, S235JR steel according to DIN EN 10025,
Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by DINV ENV 1317-4:2002.



# transition Easyrail / EDSP



Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	В	
Working width	WЗ	
Extreme lateral position of the vehicle		
Dynamic deflection	0.7 m	

Characteristics	
Height out of ground	750 mm
Transversal overall dimensions	500 mm (A/B Profile)
Centre to centre between posts	1000 - 1333 mm
Tested minimum length (without terminal end)	16 m



#### Description

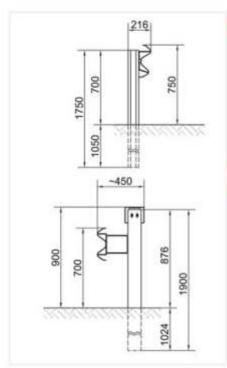
Supply and installation of transition between EasyRail and EDSP (Profile: German A / B) AMVR1 steel quality on the basis of DIN EN 10025, S235JR steel according to DIN EN 10025, Hot dip galvanization according to DIN EN ISO 1461 Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by DINV ENV 1317-4:2002.





# Transition easyrail / Sr Eco



Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W4	
Extreme lateral position of the vehicle		
Dynamic deflection	0.6 m	

Characteristics	
Height out of ground	750-900 mm
Transversal overall dimensions	589/585 mm (A/B Profile)
Centre to centre between posts	1000 - 1666 mm
Tested minimum length (without terminal end)	12 m



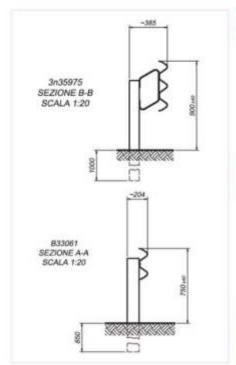
#### Description

Supply and installation of transition between EasyRail and Super Rail Eco (Profile: German A / B), AMVR1 steel quality on the basis of DIN EN 10025, S235JR/S355JR steel according to DIN EN 10025, Hot dip galvanization according to DIN EN ISO 1461 Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by DINV ENV 1317-4:2002.



# transition 3n36354 hl-w4-A



Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	A	
Working width	W4 (1,30 m)	
Extreme lateral position of the vehicle	3.00 m	
Dynamic deflection	1.20 m	

Characteristics		
Height out of ground	900 / 750 mm	
Transversal overall dimensions	385 / 204 mm	
Centre to centre between posts	1000 - 850 mm	
Tested minimum length (without terminal end)		







#### Description

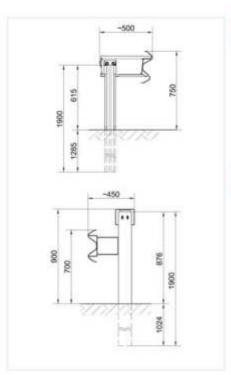
Supply and installation of transiction between 2-wave and 3-wave safety barriers, centre to centre between ports 2000 mm.

S275JR steel quality according to EN ISO 1461
Hot dip galvanization according to UNI EN ISO 1461
Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2
Certificate CE n. 208/2131/CPD/2010





# transition flextra sreco/edsp



Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	В	
Working width	W4	
Extreme lateral position of the vehicle	÷	
Dynamic deflection	1.00 m	

Characteristics	
Height out of ground	750 - 900 mm
Transversal overall dimensions	600/592 mm (A/B Profile)
Centre to centre between posts	1333 - 2000 mm
Tested minimum length (without terminal end)	12 m



### Description

Supply and installation of transition between SuperRail ECO and EDSP (Profile: German A / B) S235JR/S355JR steel according to DIN EN 10025,

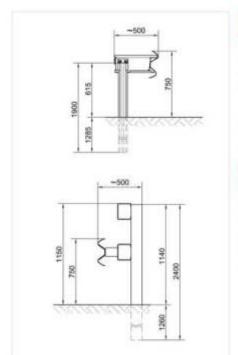
Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The transition is a modification of the transition Flextra EDSP - SuperRail which was tested successfully according to DINV ENV 1317-4:2002.



# transition flextra super rail / edsp



Performance		
Containment level	Н1	
Acceleration Severity Index "ASI"	В	
Working width	W4	
Extreme lateral position of the vehicle	Ť	
Dynamic deflection	1.00 m	

Characteristics	
Height out of ground	750-1150 mm
Transversal overall dimensions	554/549 mm (A/B Profile)
Centre to centre between posts	1333 - 2000 mm
Tested minimum length (without terminal end)	12 m



## Description

Supply and installation of transition between SuperRail and EDSP (Profile: German A / B) S235JR/S355JR steel according to DIN EN 10025,

Hot dip galvanization according to DIN EN ISO 1461

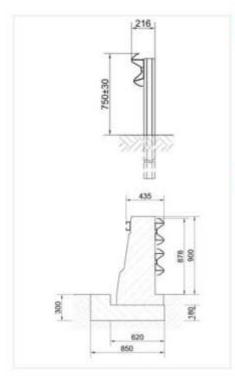
Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by DINV ENV 1317-4:2002.





# TRANSITION bestconnect er



Performance		
Containment level	H1	
Acceleration Severity Index "ASI"	С	
Working width	W1	
Extreme lateral position of the vehicle	12	
Dynamic deflection	0.2 m	

Characteristics		
Height out of ground	750 - 900 mm	
Transversal overall dimensions	206 - 610 mm	
Centre to centre between posts	500 - 2000 mm	
Tested minimum length (without terminal end)	19.60 m	



### Description

Supply and installation of transition between EasyRail (Profile: German A / B) and concrete barrier (e.g. Spengler New Jersey 93 BK)

S235JR/S355JR steel according to DIN EN 10025,

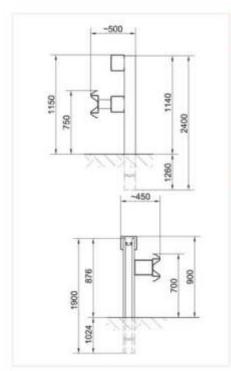
Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by ENV 1317-4:2002



### transition Flextra Sr / sr eco



Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W4	
Extreme lateral position of the vehicle	2	
Dynamic deflection	1.0 m	

Characteristics	
Height out of ground	900 - 1150 mm
Transversal overall dimensions	500 mm (A/B Profile)
Centre to centre between posts	1333 - 2000 mm
Tested minimum length (without terminal end)	12 m



#### Description

Supply and installation of transition between SuperRail and SuperRail ECO (Profile: German A / B) S235JR/S355JR steel according to DIN EN 10025,

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

According to the guidelines of the "Einsatzfreigabeverfahren" from the German BASt, there is no need to test the transition Flextra SR - SR ECO because the transition fulfills the requirements of a transition element.





# transition 3n32539 h2-w5-a (3n24872) / h2-W4-a (3n32312)





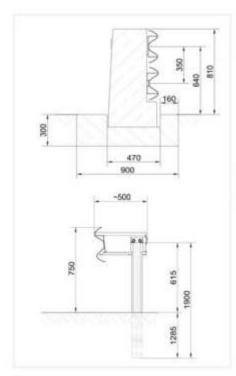
#### Description

Supply and installation of transits between guardrail 4Safe H2-W5 3n24872 and H2-W4 3n32312. The 4Safe guardrail, thanks to the extreme flexibility, permit the transit (in this case containment level H2) from one working width to another one, only using/removing a single threaded bar diam. 32 mm. S235JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996) Hot dip galvanization according to UNI EN ISO 1461 Bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 4

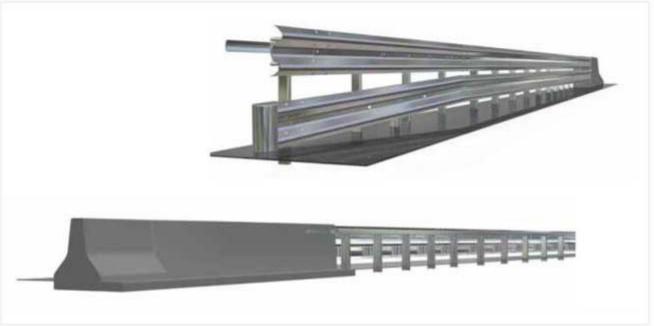


# transition bestconnect edsp



Performa	Performance	
Containment level	H2	
Acceleration Severity Index "ASI"	С	
Working width	W2	
Extreme lateral position of the vehicle		
Dynamic deflection	0.4 m	

Characteristics	
Height out of ground	750 - 810 mm
Transversal overall dimensions	500 - 610 mm
Centre to centre between posts	1000 - 2000 mm
Tested minimum length (without terminal end)	27.10 m



#### Description

Supply and installation of transition between EDSP (Profile: German A / B) and concrete barrier (e.g. Spengler New Jersey 81+12/2)

S235JR steel according to DIN EN 10025,

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by ENV 1317-4:2002.





### transition 3n34381 Safe link h2-w4-a (3n32312) / nj



Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W4 (1.10 m)	
Extreme lateral position of the vehicle	1.30 m	
Dynamic deflection	0.80 m	

Characteristics	
Height out of ground	800 mm (Concrete) / 1120 mm (H2-W4-A in Steel)
Transversal overall dimensions	600 mm (Concrete) / 515 mm (H2-W4-A in Steel)
Tested minimum length	15.36 m







#### Description

Supply and installation of transit between metal safety barrier Vernicol H2-W4-A (3n32312) and concrete barrier Deltablock DB 80 F.

S235JR-S275JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996) Hot dip galvanization according to UNI EN ISO 1461

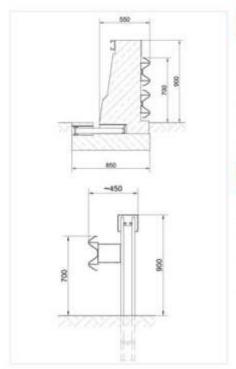
Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 4.

Certificate CE n. 182/2131/CPD/2011



#### transition bestconnect sr eco



Performa	nce	
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W4	
Extreme lateral position of the vehicle	*	
Dynamic deflection	0.6 m	

Characteristics		
Height out of ground	900 mm	
Transversal overall dimensions	450 - 540 mm	
Centre to centre between posts	2000 - 1000 mm	
Tested minimum length (without terminal end)	19.60 m	



#### Description

Supply and installation of transition between SuperRail ECO (Profile: German A / B) and concrete barrier (e.g. Spengler Step Barrier 90+12/2)

S235JR/S355JR steel according to DIN EN 10025,

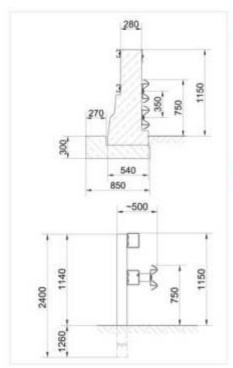
Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by ENV 1317-4:2002

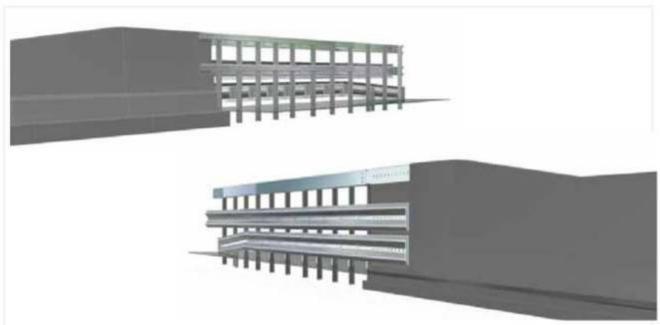


# transition bestconnect super rail



Performa	ince	
Containment level	H2	
Acceleration Severity Index "ASI"	С	
Working width	W2	
Extreme lateral position of the vehicle		
Dynamic deflection	0.4 m	

Characteristics	
Height out of ground	900 - 1150 mm
Transversal overall dimensions	500 - 540 mm
Centre to centre between posts	1000 - 1333 mm
Tested minimum length (without terminal end)	23.10 m



#### Description

Supply and installation of transition between SuperRail (Profile: German A / B) and concrete barrier (e.g. Spengler Step Barrier 90+12/2)

S235JR steel according to DIN EN 10025,

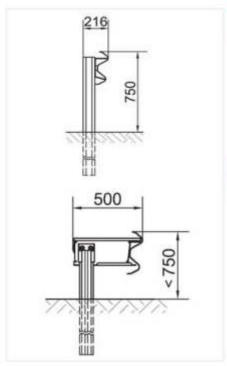
Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The safety barrier has successfully passed the tests required by ENV 1317-4:2002



# Terminal Easyrail P2a



Performa	nce	
Containment level	P2A	
Acceleration Severity Index "ASI"	A	
Exit Box	Z1	
Extreme lateral position of the vehicle	-	
Lateral Displacement	x1y1	

Characteristics	
Height out of ground	0 - 750 mm
Transversal overall dimensions	206 - 500 mm
Centre to centre between posts	1333 mm
Tested length	16.00 m



#### Description

Supply and installation of terminal P2A for EasyRail (Profile: German A / B)
AMVR1 steel quality on the basis of DIN EN 10025, S235JR Steel according to DIN EN 10025

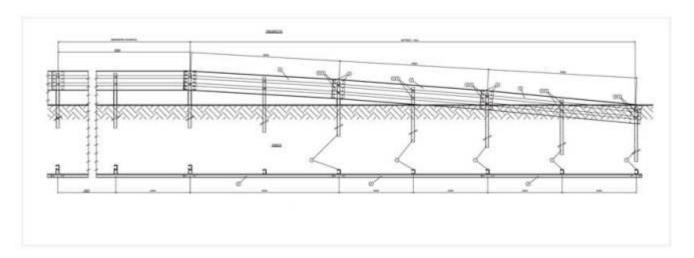
Hot dip galvanization according to DIN EN ISO 1461 Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The terminal has successfully passed the tests required by ENV 1317-4:2002



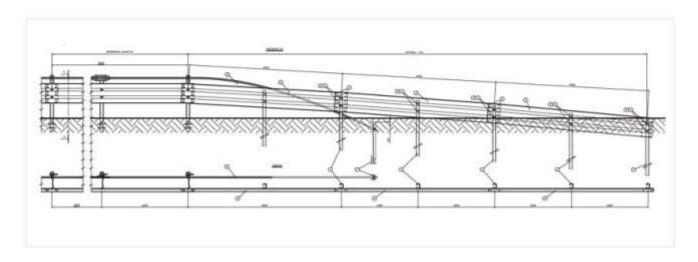
#### 3n32840

# Terminal ends for h2-w5-a (3n24872)



#### 3n32840

## Terminal ends for h2-W4-a (3n32312)



#### Description

Supply and installation of guardrail terminal ends type 4Safe L=12m starting guardrail-ending guardrail S235JR-S275JR-S355JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

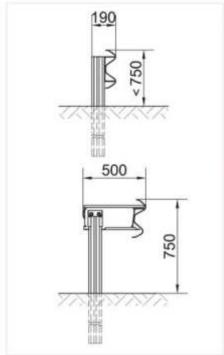
Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 4

All the elements are in accordance with crash tests requirements.



# Terminal EDSP p2a



Performance		
Containment level	P2A	
Acceleration Severity Index "ASI"	A	
Exit Box	Z2	
Extreme lateral position of the vehicle		
Lateral Displacement	x1y1	

Characteristics		
Height out of ground	0 - 750 mm	
Transversal overall dimensions	185 - 190 mm	
Centre to centre between posts	1333 - 2000 mm	
Tested length	12.00 m	



#### Description

Supply and installation of terminal P2A for EDSP (Profile: German A / B) S235JR steel according to DIN EN 10025, Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

The terminal has successfully passed the tests required by ENV 1317-4:2002



#### **■** (€

# 3n23996 twinsafe (trees and obstacle porotection)

Performance		
Containment level	P2	
Acceleration Severity Index "ASI"	A	
Working width	X1;Y1	
Extreme lateral position of the vehicle	Z1	
Dynamic deflection	0.56 m	

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	1160 mm	
Tested minimum length	5.02 m	







#### Description

Supply and installation of 3-waves safety barrier, thickness 2.5 mm, "U" posts 120x80x5,9 mm and 140x70x7 mm fixed to the ground every 4 - 2- 1- 0.75 m;

Reinforcement plate 7 mm thikness; Spacers 105x204x3 mm

S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 4.

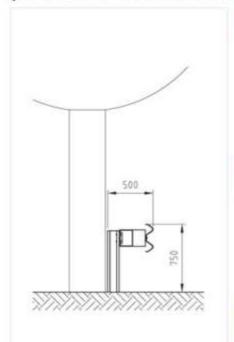
Certificate CE n. 081/2131/CPD/2010



# ESP BOS



# (tree and obstacle protection)

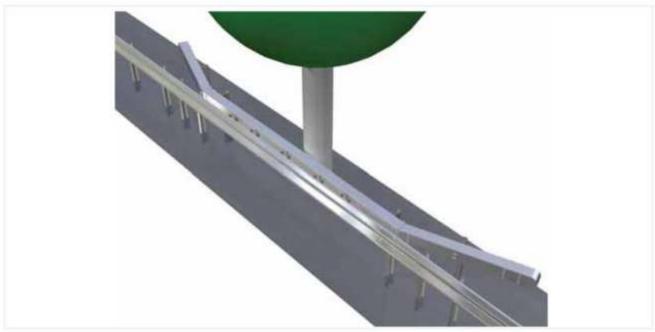


Performance	
Containment level	N2
Acceleration Severity Index "ASI"	В
Working width	W3
Extreme lateral position of the vehicle	Ÿ
Dynamic deflection	0.6 m

Characteristics		
Height out of ground	750 mm	
Transversal overall dimensions	495 mm	
Centre to centre between posts	1000 mm	
Tested minimum length (without terminal end)	20.00 m	







#### Description

Supply and installation of 2-waves safety barrier (Profile: German A / B), thickness 3.0 mm, box beams 180x150x4 mm length 3.998 mm, Sigma posts 100x55x4.2 mm, h. 1900 mm, C-125 posts, h. 2000 mm, support bracket 200/185x70x5, deformation elements Ø 139.7 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

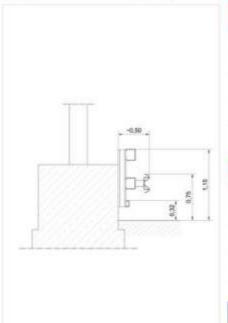
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE no. 0175-CPD-2010



# Super rail VZB (gantry protection)



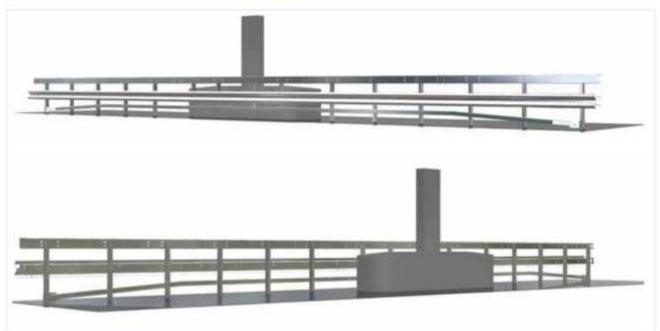


Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W3	
Extreme lateral position of the vehicle	+	
Dynamic deflection	0.55 m	

Characteristics		
Height out of ground	1150 mm	
Transversal overall dimensions	500 mm	
Centre to centre between posts	1333 mm	
Tested minimum length (without terminal end)	28.00 m	







#### Description

Supply and installation of 2-waves safety barrier gantry protection (Profile: German A / B), thickness 3.0 mm, box beam 180x150x3 mm length 3.998 mm, C-100 beam 3.998 mm, posts C 125, h. 2.400 mm, the posts are driven into the ground every 1333 mm, deformation elements Ø 139.7 mm, nuts and bolts, reflectors optional.

S235JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

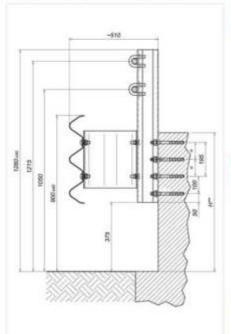
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0112/CPD/2010



# 3n33666 hf h2-w3-b (gantry protection





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	В	
Working width	W3 (0.90 m)	
Extreme lateral position of the vehicle	0.90	
Dynamic deflection	0.60 m	

Characteristics	
Height out of ground	900 mm / 1215 mm / 1280 mm
Transversal overall dimensions	510 mm
Centre to centre between posts	1500 mm
Tested minimum length (without terminal end)	27.00 m







#### Description

Supply and installation of 3-waves safety barrier, thickness 2.5 mm, utilized like of pylon and concrete basements protection. Posts C 120x80x30x5,9 mm; fixed to ground every 1500 mm (for the external parts outside the concrete basements area), 1000 mm (for the part of the pylon protection). The C 120 (L= 1070 mm) posts are fixed through bolts and nuts to the concrete structure. Spacers 415x80x5.9 mm, with two upper threaded retaining bars Ø 32 mm with welded plates, assembled with nuts and bolts and provided with reflectors.

S235JR-S355JR steel quality according to EN 10025 and FeB44k according to (D.M. 09/01/1996)

Hot dip galvanization according to UNI EN ISO 1461

Bolts according to UNI EN ISO 898-1, UNI EN 20898-2

The safety barrier has successfully passed the tests required by EN 1317, part 4

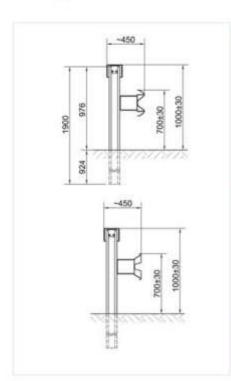
Certificate CE n. 152/2131/CPD/20101





# Super rail Eco Median Crossing





Performance		
Containment level	H2	
Acceleration Severity Index "ASI"	A	
Working width	W4	
Extreme lateral position of the vehicle		
Dynamic deflection	1.10 m	

Characteristics		
Height out of ground	1000 mm	
Transversal overall dimensions	450 mm	
Centre to centre between posts	2000 mm	
Tested minimum length (without terminal end)	52.00 m	







#### Description

Supply and installation of 2-waves safety barrier in median crossing (Profile: German A / B), thickness 3.0 mm, box beam 180x150x3 mm length 3.998 mm, posts C 125, h. 1.900 mm, the posts are driven into drilled holes in the asphalt surface every 2000 mm, deformation brackets 200 mm, nuts and bolts, reflectors optional.

S235JR/S355JR steel quality according to DIN EN 10025

Hot dip galvanization according to DIN EN ISO 1461

Nuts and bolts according to DIN EN ISO 898-1, DIN EN 20898-2

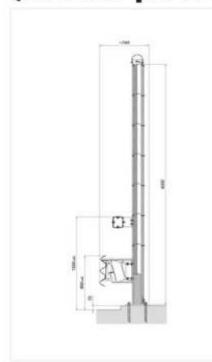
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2.

Certificate CE n. 0096/CPD/2011



# isb26482 h2-w8-b (noise protection)





Performance			
Containment level	H2		
Acceleration Severity Index "ASI"	В		
Working width	W8 (2.90 m)		
Extreme lateral position of the vehicle			
Dynamic deflection	0.70 m		

Characteristics			
Height out of ground	900 mm / 1550 mm / 4100 mm		
Transversal overall dimensions	745 mm		
Centre to centre between posts	2250 mm		
Tested minimum length (without terminal end)	72.00 m		









#### Description

Supply and installation of combined safety barrier, having 3-waves beams th. 3, 0 mm., posts HEA 160 H 4080 mm. with base plate 350x350x20 mm and anchor bolts M24x330 c/c 2250 mm., spacers 460x329x3 with energy absorber, upper beam C180x150x3 mm with supports, bolts and reflectors.

S235JR-S275JR-S355JR steel quality according to EN 10025

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

Between HEA posts, there are soundproofing panels, made of a concrete panel H 500 mm at the base, then aluminium panels th. 1,2 mm. dim. 115x500 C7C 2250 mm, up to the top of the posts. Inside the panels, a cushion of mineral wool th. 50 mm. and density of 90 kg/m3 and a protective coating on the side exposed to the traffic. Panels are fixed one another by means of steel ropes diam. 6-14 mm with clamps to avoid their falling down in case of crash.

The treatment of the panel surface is provided by a powdered coating with a fixing by fire on a high-temperature oven. The standard RAL colour is 6021.

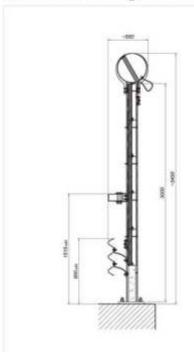
The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2. Certificate CE n. 098/2131/CPD/2010





## isb27757 h4-w7-a (noise protection)





Performance			
Containment level	H4b		
Acceleration Severity Index "ASI"	A		
Working width	W7 (2.43 m)		
Extreme lateral position of the vehicle			
Dynamic deflection	0.77 m		

Characteristics			
Height out of ground	900 mm / 1515 mm / 3450 mm		
Transversal overall dimensions	*		
Centre to centre between posts	1500 mm		
Tested minimum length (without terminal end)	90.00 m		









#### Description

Supply and installation of combined safety barrier, having 3-waves beams th. 3, 0 mm., posts HEA 160 H 4080 mm. with base plate 350x350x20 mm and anchor bolts M24x330 c/c 2250 mm., spacers 460x329x3 with energy absorber, upper beam C180x150x3 mm with supports, bolts and reflectors.

S235JR-S275JR steel quality according to EN 10025

Hot dip galvanization according to UNI EN ISO 1461

Nuts and bolts according to UNI EN ISO 898-1, UNI EN 20898-2

Between HEA posts, there are soundproofing panels, made of a concrete panel H 500 mm at the base, then aluminium panels th. 1,2 mm. dim. 115x500 C7C 2250 mm, up to the top of the posts. Inside the panels, a cushion of mineral wool th. 50 mm. and density of 90 kg/m3 and a protective coating on the side exposed to the traffic. Panels are fixed one another by means of steel ropes diam. 6-14 mm with clamps to avoid their falling down in case of crash. The treatment of the panel surface is provided by a powdered coating with a fixing by fire on a high-temperature oven. The standard RAL colour is 6021.

The safety barrier has successfully passed the tests required by EN 1317, part 1 and 2. Certificate CE n. 112/2131/CPD/2011





Note:		

# Some jobs...

















# Other products



