

HP PLUS 2R + PLINTH HANDRAILS

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Boplan reference: HS112...








PRODUCT SPECIFICATIONS

APPLICATION			
Protection	Robust handrail system for the physical demarcation of pedestrian zones.		
Impact performance at 90°	POST: 3300 Joule (Eq. to 2,5 ton - 5,8 km/h)		
	RAIL: 3500 Joule (Eq. to 2,5 ton - 6,0 km/h)		
MATERIAL			
Posts and rails	Extrilene® - UV resistant - Fire class E* - Non conductive - Impervious to most chemicals**		
Caps	Sustainable elastomer		
STANDARD COLOURS			
End post / Mid post	Black RAL 9005		
Handrails	Yellow RAL 1003		
Plinth	Yellow/Black		
BASEPLATES			
	Steel	Zinc Coated Steel	Stainless steel
Material	Steel 37	Steel 37	Stainless steel 304
Coating	Lacquered	Electroplated + Laquered	No lacquer / No coating
Colour	High gloss black	Mat black	Natural colour

*Classification according to EN 13501-1:2007 +A1:2009 - Fire classification of construction products and building elements.

**Ask your local sales office for resistance to specific chemicals.

		FIXATIONS		
			ZC (Zinc coated)	SS (Stainless steel)
STANDARD	Wedge anchor		M12 x 120mm	M12 x 120mm
	Anchor rod (Chemical)		M12 x 120mm + Chemical resin	M12 x 120mm + Chemical resin
ALTERNATIVES	Concrete screw		Ø12mm x 100mm	Not available
	Asphalt anchor		Bolt M10 x 40mm + Screw Ø16mm	Not available
	Spit anchor		Bolt M12 x 100mm + Plug Ø20mm	Not available

FEATURES AND FUNCTIONALITY - HP + PL - 2R

SIZE	
Height end / mid posts	1150 mm
Profile section handrail	50 mm x 70 mm (6 mm wall thickness)
Profile section plinth	120 mm x 120 mm (10 mm wall thickness)
Profile section posts	112 mm x 112 mm (10 mm wall thickness)
Standard rail length	Standard length: 1500 mm (center - center dimension)
Baseplate	180 mm x 180 mm (10 mm thick)

REQUIREMENTS	
Concrete quality	minimum C25/30
Concrete floor plate thickness (mm)	minimum 150 mm
Concrete slab dimension around posts (mm)	400 (h) x 400 (w) x 300 (d)
Operational temperature	-10°C up to +40°C
Water and humidity	Steel (standard): dry indoor use only. Zinc coated: outdoor use in most environments. Stainless steel: outdoor use or frequent exposure to water and humidity.

IMPACT LABEL FOR SAFETY BARRIERS

BOPLAN HP PLUS 2R		
IMPACT RATING	45°	90°
E80 > 80 kJ		
E60 > 60 kJ		
E50 > 50 kJ		
E40 > 40 kJ		
E35 > 35 kJ		
E30 > 30 kJ		
E25 > 25 kJ		
E20 > 20 kJ		
E15 > 15 kJ		
E10 > 10 kJ		
E5 > 5,0 kJ	5,0 kJ	
E2 > 2,5 kJ		3,5 kJ

TEST CONDITIONS

TEMPERATURE: 20°C / 68°F

IMPACT HEIGHT: 500 mm / 20 Inch

IMPACT ANGLE: 90°

TEST FLOOR: CONCRETE SLAB C25/30 - 160 mm / 6 Inch

MANUFACTURER ANCHOR PULL OUT: 7,9 kN

TEST VEHICLE

WEIGHT: 2300 KG / 5070.63 lbs

TYPE: COMMERCIAL FORK LIFT

SIZE (L x W x h): 1890x1020x1970 mm / 74x40x78 Inch

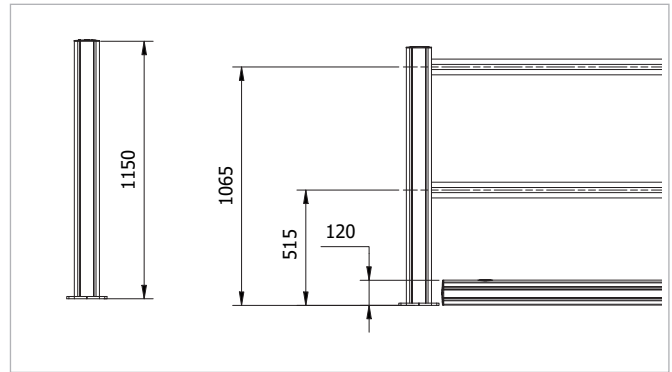
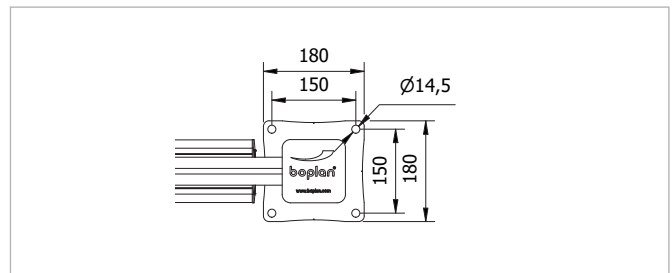
CONTACT AREA: STEEL BUMPER WIDTH: 600 mm / 24 Inch

BOPLAN TEST LAB






Muizelstraat 12
8560 Moorsele
Belgium

SUCCESS CRITERIA VEHICLE STOPPED - ASI (ACCELERATION SEVERITY INDEX) <0.5

IL-HR112-20240531



REFERENCE LIST - HP+PL 2R

POSTS			POSTS		
End post - 2R End post - 2R - ZC End post - 2R - SS	HS1120-0001-EPBL HS1120-0001-EPBLZ HS1120-0001-EPBLS		Corner post 90° - 2R Corner post 90° - 2R - ZC Corner post 90° - 2R - SS	HS1120-0001-C90BL HS1120-0001-C90BLZ HS1120-0001-C90BLS	
Mid post - 2R Mid post - 2R - ZC Mid post - 2R - SS	HS1120-0001-MPBL HS1120-0001-MPBLZ HS1120-0001-MPBLS		Corner post 135° - 2R Corner post 135° - 2R - ZC Corner post 135° - 2R - SS	HS1120-0001-C45BL HS1120-0001-C45BLZ HS1120-0001-C45BLS	
T - post - 2R T - post - 2R - ZC T - post - 2R - SS	HS1120-0001-TPBL HS1120-0001-TPBLZ HS1120-0001-TPBLS				

RAIL SETS (2R)		
Center - Center length	Plinth length	Reference
750 mm	515 mm (2 fix)	HS1120-0750-0002YE
1000 mm	765 mm (2 fix)	HS1120-1000-0002YE
1250 mm	1015 mm (2 fix)	HS1120-1250-0002YE
1500 mm	1265 mm (2 fix)	HS1120-1500-0002YE
1750 mm	1515 mm (3 fix)	HS1120-1750-0002YE
2000 mm	1765 mm (3 fix)	HS1120-2000-0002YE
750 - 1520 mm	515 - 1265 mm (2 fix)	HS1121-1520-0002YE
1521 - 2000 mm	1266 - 1765 mm (3 fix)	HS1121-2000-0002YE
CORNER RAIL SETS 90° (2R)		
Center - Center length	Plinth length	Reference
1500 mm	1265 mm (2 fix)	HS1120-1500-C91YE
750 - 1520 mm	515 - 1265 mm (2 fix)	HS1121-1520-C91YE
1521 - 2000 mm	1266 - 1765 mm (3 fix)	HS1121-2000-C91YE