

HP GRILL HANDRAILS

Revision: 17 December 2024 2:51 PM
Boplan reference: GH...






PRODUCT SPECIFICATIONS

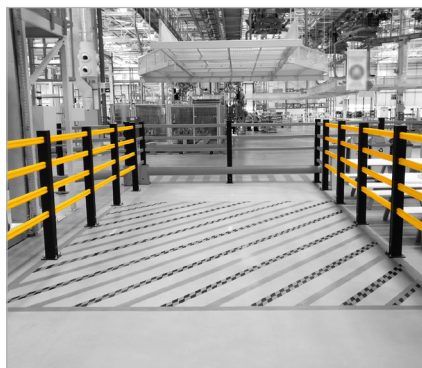
APPLICATION	
Environment	Handrail system designed to protect people against falling products in zones without forklift traffic. This separate shielding ensures a clear segregation between people and (stacked) goods. Depending on the size of the goods, one can opt for an arrangement with a centre distance between the rails of 275 mm or 550 mm. Intended for indoor use.
MATERIAL	
Posts and rails	Extrilene® - UV resistant - Fire class E ⁺ - Non conductive - Impervious to most chemicals**
STANDARD COLOURS	
End post / Mid post	Black RAL 9005
Handrails	Yellow RAL 1003
BASEPLATES	
	Steel
Material	Steel 37
Coating	Lacquered
Colour	High gloss black

*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	Concrete screw		Ø12mm x 100mm	Not available
	Anchor rod (Chemical)		M12 x 120mm + Chemical resin	Not available
ALTERNATIVES	Wedge anchor		M12 x 120mm	Not available
	Asphalt anchor		Bolt M10 x 40mm + Screw Ø16mm	Not available
	Spit anchor		Bolt M12 x 100mm + Plug Ø20mm	Not available

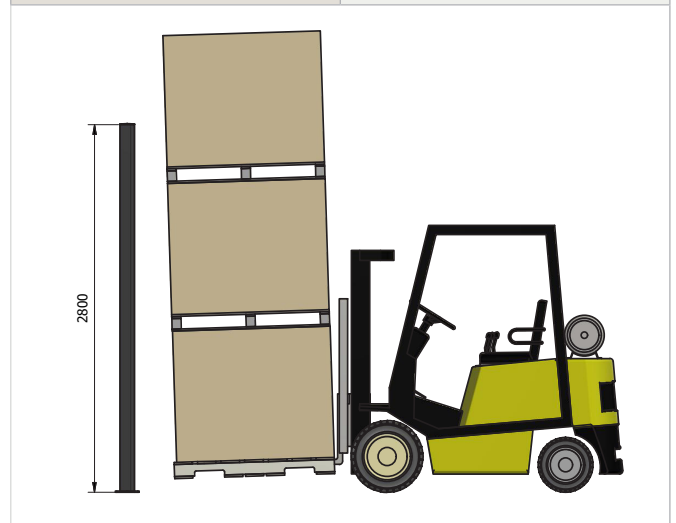


FEATURES AND FUNCTIONALITY - HP GRILL

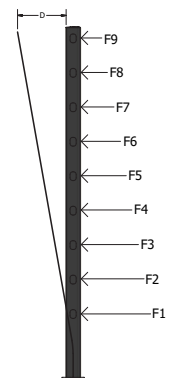
SIZE	
Height end posts	Maximum 2800 mm
Height mid post	Maximum 2800 mm
Profile section handrail	50 mm x 70 mm (6 mm wall thickness)
Profile section posts	112 mm x 112 mm (10 mm wall thickness)
Standard rail length	Standard length: 1500 mm (center - center dimension)
Baseplate	180 mm x 180 mm (10 mm thick)

 IMPACT LABEL FOR SAFETY BARRIERS		
BOPLAN HP GRILL		
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	7,8 kJ	5,5 kJ
E2 > 2,5 kJ		
TEST CONDITIONS TEMPERATURE: 20°C / 68°F IMPACT HEIGHT: 500 mm / 19 3/4 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 IL-GH-20230920
SUCCESS CRITERIA VEHICLE STOPPED - ASI (ACCELERATION SEVERITY INDEX) <0.5		

REQUIREMENTS	
Concrete quality	minimum C25/30
Concrete floor plate thickness (mm)	minimum 15mm
Concrete slab dimension around posts (mm)	not advised
Operational temperature	-10°C up to +40°C
Water and humidity	Steel (standard): dry indoor use only.



HOLDING POWER		
	Force*	Deflection**
2800mm - 9R	F9 = 2600 N	815 mm
2525mm - 8R	F8 = 2900 N	770 mm
2250mm - 7R	F7 = 3260 N	715 mm
1975mm - 6R	F6 = 3760 N	650 mm
1700mm - 5R	F5 = 4460 N	575 mm
1425mm - 4R	F4 = 5520 N	490 mm
1150mm - 3R	F3 = 7220 N	390 mm
875mm - 2R	F2 = 10580 N	290 mm
600mm - 1R	F1 = 18400 N	160 mm

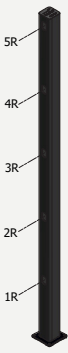

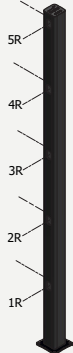
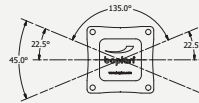
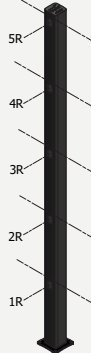


* Force acting on the center of the hand rails (between posts)


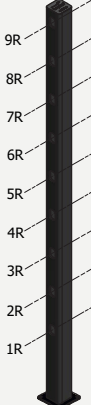

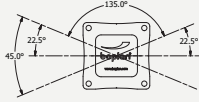

** Deflection (D) measured on top side.

REFERENCE LIST - HP GRILL

POSTS - 550 mm rail distance

	End post	Mid post	Corner post 90°	Corner post 135°	T-end post (incl. caps)
2800mm - 5R	GH550-2800-EPBL	GH550-2800-MPBL	GH550-2800-C90BL	GH550-2800-C45BL	GH550-2800-TPBL
2250mm - 4R	GH550-2250-EPBL	GH550-2250-MPBL	GH550-2250-C90BL	GH550-2250-C45BL	GH550-2250-TPBL
1700mm - 3R	GH550-1700-EPBL	GH550-1700-MPBL	GH550-1700-C90BL	GH550-1700-C45BL	GH550-1700-TPBL
					

POSTS - 275 mm rail distance

	End post	Mid post	Corner post 90°	Corner post 135°	T-end post (incl. caps)
2800mm - 9R	GH275-2800-EPBL	GH275-2800-MPBL	GH275-2800-C90BL	GH275-2800-C45BL	GH275-2800-TPBL
2250mm - 7R	GH275-2250-EPBL	GH275-2250-MPBL	GH275-2250-C90BL	GH275-2250-C45BL	GH275-2250-TPBL
1700mm - 5R	GH275-1700-EPBL	GH275-1700-MPBL	GH275-1700-C90BL	GH275-1700-C45BL	GH275-1700-TPBL
					

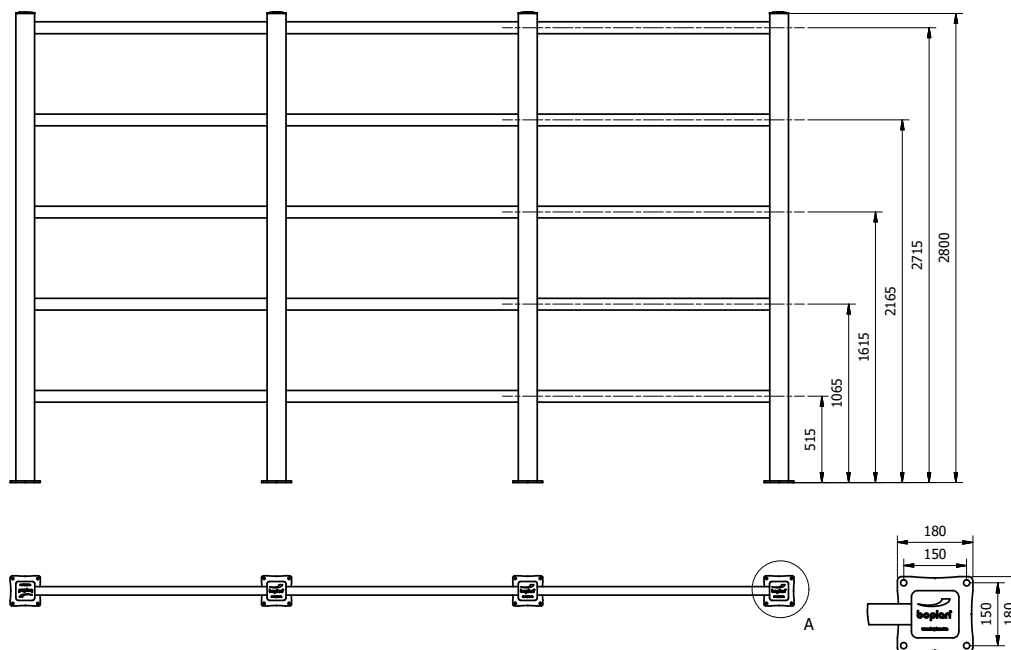
REFERENCE LIST - HP GRILL

RAIL SETS

	CC 500mm - YE Std rail SET	CC 750mm - YE Std rail SET	CC 1000mm - YE Std rail SET	CC 1250mm - YE Std rail SET	CC 1500mm - YE Std rail SET	CC 1500mm - YE corner rail SET 90°/135°	CC 1750mm - YE Std rail SET	CC 2000mm - YE Std rail SET	CC250-2000mm - YE Non-Std rail SET	CC250-2000mm - YE Non-Std Corner rail SET 90°/135°
9R	GHR900-0500-0001YE	GHR900-0750-0001YE	GHR900-1000-0001YE	GHR900-1250-0001YE	GHR900-1500-0001YE	GHR900-1500-C90YE	GHR900-1750-0001YE	GHR900-2000-0001YE	GHR901-2000-0001YE	GHR901-2000-C45YE
7R	GHR700-0500-0001YE	GHR700-0750-0001YE	GHR700-1000-0001YE	GHR700-1250-0001YE	GHR700-1500-0001YE	GHR700-1500-C90YE	GHR700-1750-0001YE	GHR700-2000-0001YE	GHR701-2000-0001YE	GHR701-2000-C45YE
5R	GHR500-0500-0001YE	GHR500-0750-0001YE	GHR500-1000-0001YE	GHR500-1250-0001YE	GHR500-1500-0001YE	GHR500-1500-C90YE	GHR500-1750-0001YE	GHR500-2000-0001YE	GHR501-2000-0001YE	GHR501-2000-C45YE
4R	GHR400-0500-0001YE	GHR400-0750-0001YE	GHR400-1000-0001YE	GHR400-1250-0001YE	GHR400-1500-0001YE	GHR400-1500-C90YE	GHR400-1750-0001YE	GHR400-2000-0001YE	GHR401-2000-0001YE	GHR401-2000-C45YE
3R	GHR300-0500-0001YE	GHR300-0750-0001YE	GHR300-1000-0001YE	GHR300-1250-0001YE	GHR300-1500-0001YE	GHR300-1500-C90YE	GHR300-1750-0001YE	GHR300-2000-0001YE	GHR301-2000-0001YE	GHR301-2000-C45YE

TECHNICAL DRAWINGS - HP GRILL

Rails 550mm center - center



TECHNICAL DRAWINGS - HP GRILL

Rails 275 mm center - center

