

# HP PLUS 3R HANDRAILS

Revision: 28 April 2026 12:16 PM  
Boplan reference: HP1120-...





## 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:	5500 Joule (Eq. to 2,5 ton - 7,5 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	Standard: Yellow RAL 1003 Alternative: Black RAL 9005		
Handrails	Standard: Yellow RAL 1003 Alternative: Black/Photolum; Black/Red; Black/Yellow; Yellow/black; Yellow/Photolum		
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 PLUS 3R**

SIZE	
Height end / mid posts	1150 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

<b>BOPLAN HP PLUS 3R</b>		
IMPACT RATING	45°	90°
<b>E80</b> > 80 kJ		
<b>E60</b> > 60 kJ		
<b>E50</b> > 50 kJ		
<b>E40</b> > 40 kJ		
<b>E35</b> > 35 kJ		
<b>E30</b> > 30 kJ		
<b>E25</b> > 25 kJ		
<b>E20</b> > 20 kJ		
<b>E15</b> > 15 kJ		
<b>E10</b> > 10 kJ	<b>7,8 kJ</b>	<b>5,5 kJ</b>
<b>E5</b> > 5,0 kJ		
<b>E2</b> > 2,5 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 CENTRE**

Muizelstraat 12  
8560 Moorsele  
Belgium

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

**IL-HP112-20260428**

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	<b>Steel (standard):</b> dry indoor use only. <b>Zinc coated:</b> outdoor use in most environments. <b>Stainless steel:</b> outdoor use or frequent exposure to water and humidity.

**COMPLIANCE**

The HP PLUS handrail complies with safety standard EN14122-3 chapter 7 and 8 related to the strength of the rails and posts. Tested and approved by **TUV Nord**.

### CERTIFICATE

FOR DETERMINING THE PRODUCT TYPE  
07/203/VKBÜZ/8121248350/23/KSP1(00)

According to the certification program ST11-25-KSP-UN-320 of TÜV NORD Systems GmbH & Co. KG for Plastics Products, this certificate applies to the product:

**Handrail HP Plus 20/20**  
**Handrail HD Light / Mezza**  
placed on the market under the name or brand:  
**Handrail HP Plus 20/20**  
**Handrail HD Light / Mezza**  
and produced in the manufacturing plant(s):

**Boplan BV**  
**Muizelstraat 12**  
**8560 Moorsele (Moorsele), Belgium**

This certificate attests that at least criteria for the determination of the product characteristics and for the determination of the product type described in the technical specification:

**DIN EN ISO 14122-3, especially Chapter 8.2**

**Please note:** responsibility according to the EU Machinery Directive 2006/42/EC is not part of this contract, and is mentioned in the last report: 123040322281 (ref:124836-781)

has been met, and that the manufacturer is effectively applying a quality management system with respect to the manufacture of described plastic product.

The manufacturer is responsible for the validity of the products manufactured and marked by him according to the technical specifications.

This certificate was first issued 05.05.2023 and will remain valid until 03.2026 as long as neither the specifications in the mentioned technical specifications, the plastic contact nor the supplier's supply and manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the certification body.

Muenchen, 05.05.2023

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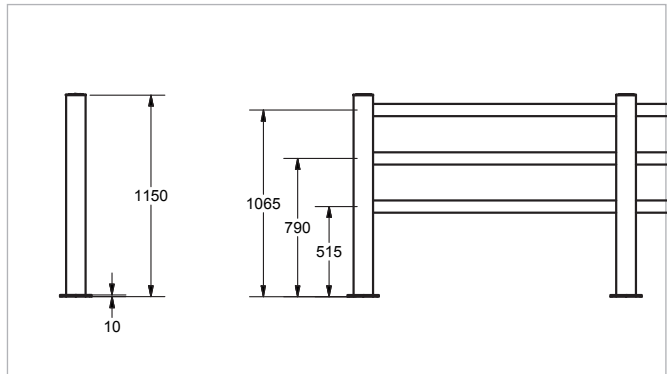
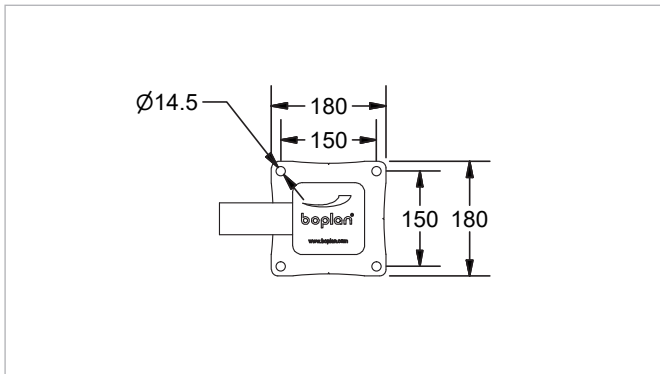
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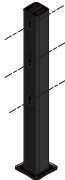

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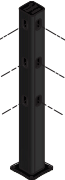

**TUVNORD** Digitally signed by **Biel Andreas**

Certification Body for Plastic Products of TÜV NORD Systems GmbH



**REFERENCE LIST - HP PLUS 3R**

POSTS			
	BLACK	MULTI Colour 	
End post - 3R End post - 3R - ZC End post - 3R - SS End post - 3R - CH End post - 3R - CH - ZC End post - 3R - CH - SS	HP1120-0001-EPBL HP1120-0001-EPBLZ HP1120-0001-EPBLS HP1120-0001-EPBLC HP1120-0001-EPBLCZ HP1120-0001-EPBLCSS	HP1120-0001-EPMC HP1120-0001-EPMCZ HP1120-0001-EPMCS - - -	
Mid post - 3R Mid post - 3R - ZC Mid post - 3R - SS Mid post - 3R - CH Mid post - 3R - CH - ZC Mid post - 3R - CH - SS	HP1120-0001-MPBL HP1120-0001-MPBLZ HP1120-0001-MPBLS HP1120-0001-MPBLC HP1120-0001-MPBLCZ HP1120-0001-MPBLCSS	HP1120-0001-MPMC HP1120-0001-MPMCZ HP1120-0001-MPMCS - - -	
T - post - 3R T - post - 3R - ZC T - post - 3R - SS T - post - 3R - CH T - post - 3R - CH - ZC T - post - 3R - CH - SS	HP1120-0001-TPBL HP1120-0001-TPBLZ HP1120-0001-TPBLS HP1120-0001-TPBLC HP1120-0001-TPBLCZ HP1120-0001-TPBLCSS	HP1120-0001-TPMC HP1120-0001-TPMCZ HP1120-0001-TPMCS - - -	

POSTS			
	BLACK	MULTI Colour 	
Blank post - 3R Blank post - 3R - ZC Blank post - 3R - SS Blank post - 3R - CH Blank post - 3R - CH - ZC Blank post - 3R - CH - SS	HP1120-0001-BPBL HP1120-0001-BPBLZ HP1120-0001-BPBLS HP1120-0001-BPBLC HP1120-0001-BPBLCZ HP1120-0001-BPBLCSS	HP1120-0001-BPMC HP1120-0001-BPMCZ HP1120-0001-BPMCS - - -	
Corner post 90° - 3R Corner post 90° - 3R - ZC Corner post 90° - 3R - SS Corner post 90° - 3R - CH Corner post 90° - 3R - CH - ZC Corner post 90° - 3R - CH - SS	HP1120-0001-C90BL HP1120-0001-C90BLZ HP1120-0001-C90BLS HP1120-0001-C90BLC HP1120-0001-C90BLCZ HP1120-0001-C90BLCSS	HP1120-0001-C90MC HP1120-0001-C90MCZ HP1120-0001-C90MCS - - -	
Corner post 135° - 3R Corner post 135° - 3R - ZC Corner post 135° - 3R - SS Corner post 135° - 3R - CH Corner post 135° - 3R - CH - ZC Corner post 135° - 3R - CH - SS	HP1120-0001-C45BL HP1120-0001-C45BLZ HP1120-0001-C45BLS HP1120-0001-C45BLC HP1120-0001-C45BLCZ HP1120-0001-C45BLCSS	HP1120-0001-C45MC HP1120-0001-C45MCZ HP1120-0001-C45MCS - - -	

**RAIL SETS (3R)**

center - center length	BLACK / PHOTOLUM	BLACK / RED	BLACK / YELLOW	YELLOW / BLACK	YELLOW	YELLOW / PHOTOLUM
500 mm	HP1120-0500-0001BP	HP1120-0500-0001BR	HP1120-0500-0001BY	HP1120-0500-0001YB	HP1120-0500-0001YE	HP1120-0500-0001YP
750 mm	HP1120-0750-0001BP	HP1120-0750-0001BR	HP1120-0750-0001BY	HP1120-0750-0001YB	HP1120-0750-0001YE	HP1120-0750-0001YP
1000 mm	HP1120-1000-0001BP	HP1120-1000-0001BR	HP1120-1000-0001BY	HP1120-1000-0001YB	HP1120-1000-0001YE	HP1120-1000-0001YP
1250 mm	HP1120-1250-0001BP	HP1120-1250-0001BR	HP1120-1250-0001BY	HP1120-1250-0001YB	HP1120-1250-0001YE	HP1120-1250-0001YP
1500 mm	HP1120-1500-0001BP	HP1120-1500-0001BR	HP1120-1500-0001BY	HP1120-1500-0001YB	HP1120-1500-0001YE	HP1120-1500-0001YP
1750 mm	HP1120-1750-0001BP	HP1120-1750-0001BR	HP1120-1750-0001BY	HP1120-1750-0001YB	HP1120-1750-0001YE	HP1120-1750-0001YP
2000 mm	HP1120-2000-0001BP	HP1120-2000-0001BR	HP1120-2000-0001BY	HP1120-2000-0001YB	HP1120-2000-0001YE	HP1120-2000-0001YP
250-2000 mm	HP1121-2000-0001BP	HP1121-2000-0001BR	HP1121-2000-0001BY	HP1121-2000-0001YB	HP1121-2000-0001YE	HP1121-2000-0001YP

**CORNER RAIL SETS (3R)**

Corner rail 90°/135°: 500mm	-	-	-	-	HP1120-0500-C90YE	-
Corner rail 90°/135°: 750mm	-	-	-	-	HP1120-0750-C90YE	-
Corner rail 90°/135°: 1000mm	-	-	-	-	HP1120-1000-C90YE	-
Corner rail 90°/135°: 1250mm	-	-	-	-	HP1120-1250-C90YE	-
Corner rail 90°/135°: 1500 mm	HP1120-1500-C90BP	HP1120-1500-C90BR	HP1120-1500-C90BY	HP1120-1500-C90YB	HP1120-1500-C90YE	HP1120-1500-C90YP
Corner rail 90°/135°: 250-2000 mm	HP1121-2000-C45BP	HP1121-2000-C45BR	HP1121-2000-C45BY	HP1121-2000-C45YB	HP1121-2000-C45YE	HP1121-2000-C45YP

**160 <<< SPECSHEET**


**Boplan BV Headquarter** | Muizelstraat 12, 8560 Moorsele, Belgium | +32 56 20 64 20 | sales@boplan.com | www.boplan.com

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