

FLIP180B

KICK RAILS AND WHEEL STOPS

Revision: 11 February 2025 4:38 PM
Boplan reference: PL181B...

PRODUCT SPECIFICATIONS

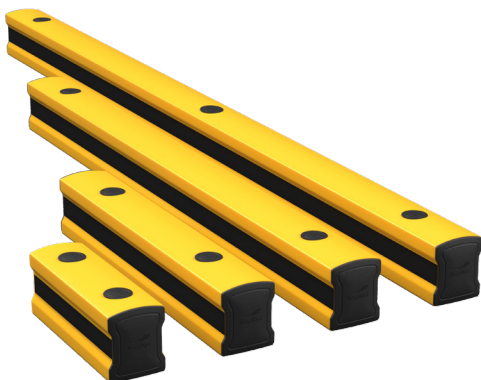
APPLICATION	
Environment	Ground level protection - Wall protection (refrigerator walls, decorative walls, sandwich panels) - Wheel guide for pallet trucks or trolleys in busy traffic lanes - Protection of machines and infrastructure - Below a Boplan traffic barrier system - Indoor and outdoor use - Food Industry
MATERIAL	
Plinth	Extrilene® - UV resistant - Fire class E ⁺ - Non conductive - Impervious to most chemicals ^{**}
Endcap	Sustainable elastomer
STANDARD COLOURS	
Plinth	Yellow/Black - Black/Yellow (Yellow RAL 1003 & Black RAL 9005)

^{*}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		Ø17mm x 130mm	Not available
	Anchor rod (Chemical)		M16 x 120mm + Chemical resin	M16 x 120mm + Chemical resin
ALTERNATIVES	Wedge Anchor		M16 x 140mm	Not available
	Asphalt anchor		Bolt M16 x 50mm + Screw Ø22 x 100mm	Not available

The anchors specified in this document are metric. Imperial anchors are available on demand.



FEATURES AND FUNCTIONALITY - FLIP180B

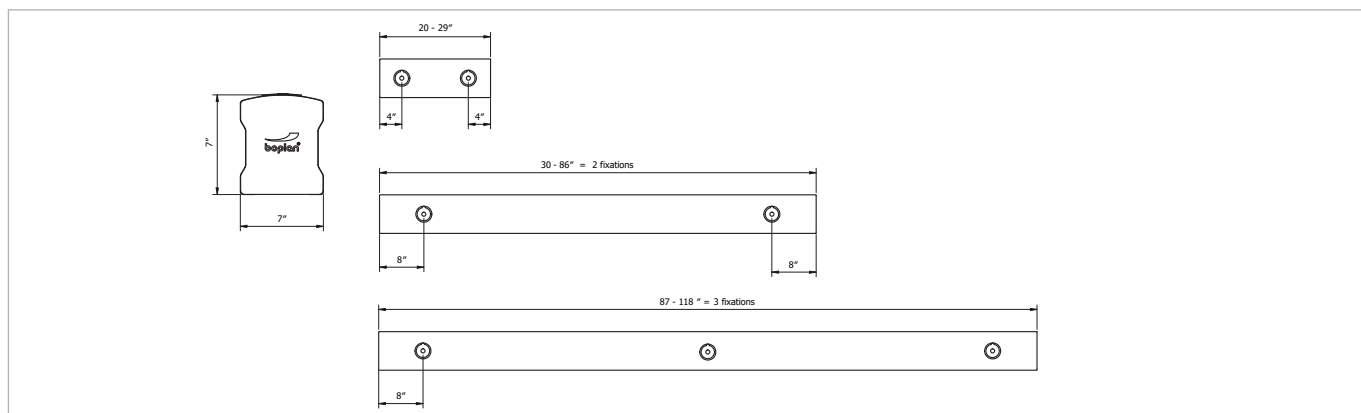
SIZE	
Height	7 in
Profile section	7 in x 6 in x (2/5 in thick)
Standard rail length	24 / 36 / 48 / 60 / 72 in (other sizes: 22 - 87 in)

REQUIREMENTS	
Concrete quality	minimum 4000 PSI (C25/30)
Concrete floor plate thickness	minimum 6 in
Operational temperature	14°F up to 104°F
Water and humidity	Zinc coated fixations: indoor and outdoor use in most environments

IMPACT LABEL FOR SAFETY BARRIERS		
BOPLAN FLIP180B		
IMPACT RATING	45°	90°
E50 < 50 kJ		
E40 < 40 kJ		
E30 < 30 kJ		
E25 < 25 kJ		
E20 < 20 kJ		
E15 < 15 kJ		
E12 < 12 kJ		
E10 < 10 kJ	10.3 kJ	8.1 kJ
E7 < 7.5 kJ		
E5 < 5.0 kJ		
E2 < 2.5 kJ		
E1 < 1.0 kJ		
IMPACT RESULTS Deflection:  D = 250 mm / 9.84 inch At maximum impact energy		
TEST CONDITIONS TEMPERATURE: 20°C / 68°F IMPACT HEIGHT: 88 mm / 3.46 inch → D: 250 mm / 9.84 inch TEST FLOOR: CONCRETE SLAB C25/30 - 150 mm / 6 inch		
TEST VEHICLE: TYPE: BOPLAN IMPACT TEST VEHICLE WEIGHT: 3775 kg / 8322.45 lbs SIZE (L x W x h): 3100 x 1100 x 1150 mm / 122 x 43 1/4 x 45 1/4 inch CONTACT AREA, STEEL BUMPER WIDTH: 1000 mm / 39 1/4 inch		
SUCCESS CRITERIA VEHICLE STOPPED ASI (ACCELERATION SEVERITY INDEX) < 0.5		
BOPLAN TEST CENTRE Muizelstraat 12 8560 Moorsele Belgium 		
IL-PL181-20240711		

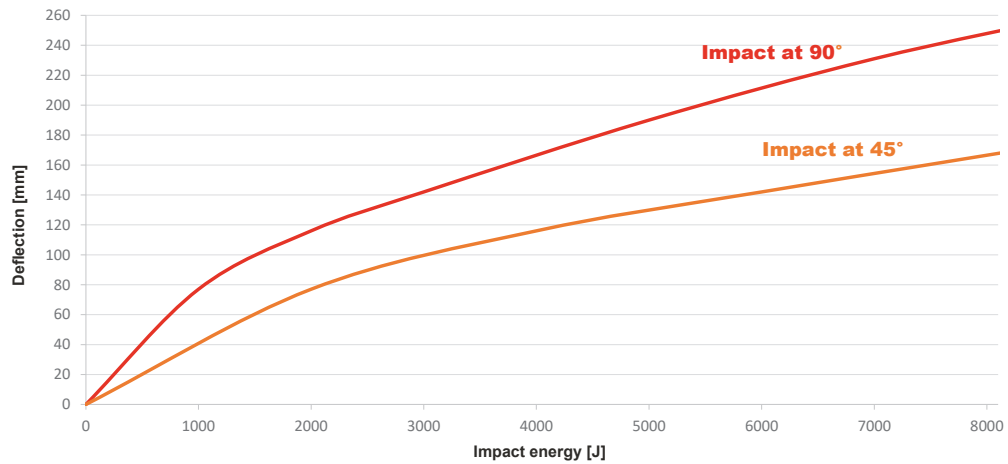
REFERENCE LIST - FLIP180B

	YELLOW/Black	BLACK/Yellow
24 in (2fix)	PL181B0-0610-0002YB	PL181B0-0610-0002BY
36 in (2fix)	PL181B0-0915-0002YB	-
37 in (2fix)	PL181B0-0950-0002YB	-
48 in (2fix)	PL181B0-1220-0002YB	-
60 in (3fix)	PL181B0-1525-0002YB	-
72 in (3fix)	PL181B0-1828-0002YB	-
78 in (3fix)	PL181B0-1980-0002YB	PL181B0-1980-0002BY
120 in (4fix)	PL181B0-3048-0002YB	PL181B0-3048-0002BY
20 - 29 in (2fix)	PL181B1-0749-0002YB	PL181B1-0749-0002BY
30 - 86 in (2fix)	PL181B1-2200-0002YB	PL181B1-2200-0002BY
87 - 118 in (3fix)	PL181B1-2999-0002YB	PL181B1-2999-0002BY



FEATURES AND FUNCTIONALITY - FLIP180B

Deflection curve



See impact label for detailed information on the test conditions.