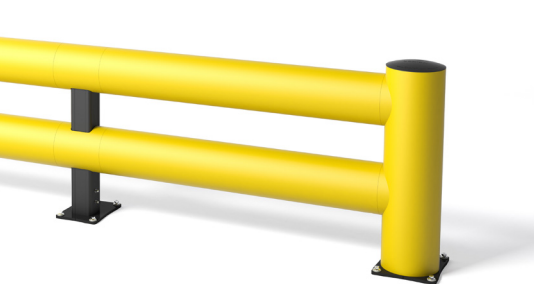


TB400 DOUBLE BOPLAN SAFETY BARRIER SPECIFICATION SHEET

Revision: 10 August 2021 4:11 PM
Boplan reference: DT4000 - ...



PRODUCT SPECIFICATIONS

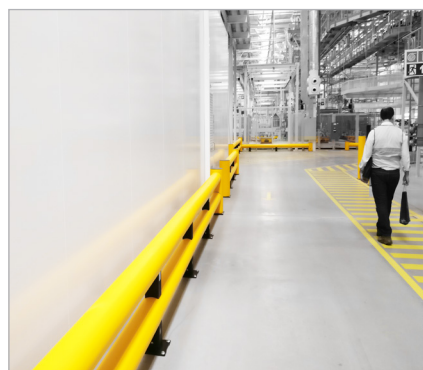
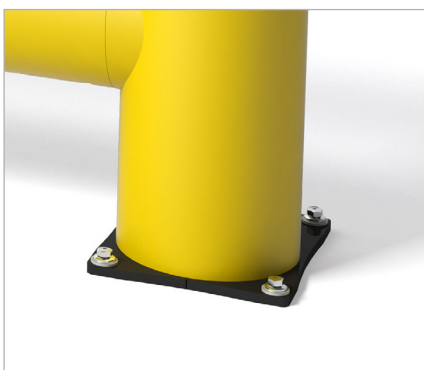
APPLICATION			
Environment	Double shielding to separate heavier vehicles from pedestrian zones.		
Impact performance at 90° (in JOULE)	POST: 30700 Joule (Eq. to 10 ton - 8,9 km/h)		
	RAIL: 39100 Joule (Eq. to 10 ton - 10,0 km/h)		
MATERIAL			
Posts and rails	Polyolefin - UV resistant - Fire class E [*] - Non conductive - Impervious to most chemicals ^{**}		
Caps	SEBS rubber		
STANDARD COLORS			
End post	Yellow		
Mid post	Yellow		
Impact tubes	Yellow		
BASEPLATES			
	Steel / Non-countersunk	ZC / Non-countersunk	SS / Non-countersunk
Material	Steel 37	Steel 37	Stainless steel (SS 304)
Coating	Lacquered	Lacquered + electro plating	No lacquer / No coating
Color	High gloss black	Matt black	Natural color

*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	 Ø20mm (M12) x 120mm	Ø20mm (M12) x 120mm
	Anchor rod (Chemical)	 M16 x 120mm + Chemical resin	M16 x 120mm + Chemical resin
ALTERNATIVES	Concrete screw	 Ø17mm x 135mm	Not available
	Asphalt anchor	 Bolt M16 x 100mm + Screw Ø22mm	Not available



FEATURES AND FUNCTIONALITY - TB400 DOUBLE

SIZE	
Height end posts	790 mm
Height mid post	750 mm
Profile section tubes	Ø200 mm (11 mm thick)
Profile section end posts	Outer tube: Ø250 mm (11 mm thick) Inner profile: 112 mm x 112 mm (10 mm thick)
Profile section mid posts	Profile: 112 mm x 112 mm (10 mm thick)
Standard rail length	1350 mm (other sizes: 750 mm - 1750 mm)
Baseplate	End Post: 320 mm x 275 mm (12 mm thick) Mid Post: 300 mm x 220 mm (12 mm thick)

REQUIREMENTS	
Concrete quality	minimum C25/30
Concrete floor plate thickness (mm)	minimum 150 mm
Concrete slab dimension around posts (mm)	800 (h) x 800 (w) x 600 (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.

boplan READY FOR IMPACT

IMPACT LABEL FOR SAFETY BARRIERS

BOPLAN TB400 DOUBLE		
	45°	90° <small>PAS 13:2017 compliant</small>
IMPACT RATING		
E80 < 80 kJ		
E60 < 60 kJ	55,3 kJ	
E50 < 50 kJ		
E40 < 40 kJ		39,1 kJ
E35 < 35 kJ		
E30 < 30 kJ		
E25 < 25 kJ		
E20 < 20 kJ		
E15 < 15 kJ		
E10 < 10 kJ		
E5 < 5,0 kJ		
E2 < 2,5 kJ		

TEST CONDITIONS

TEMPERATURE: 20°C
IMPACT HEIGHT: 650 mm
IMPACT ANGLE: 90°
TEST FLOOR: CONCRETE C25/30 - 160 mm
MANUFACTURER ANCHOR PULL OUT: 17 kN

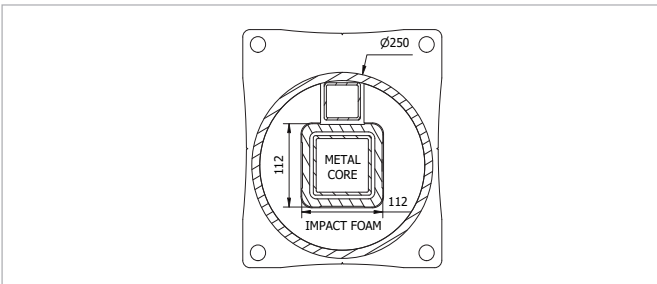
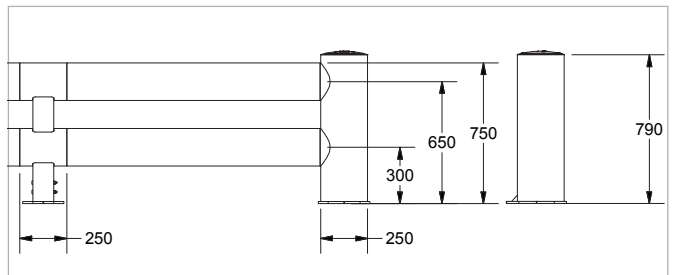
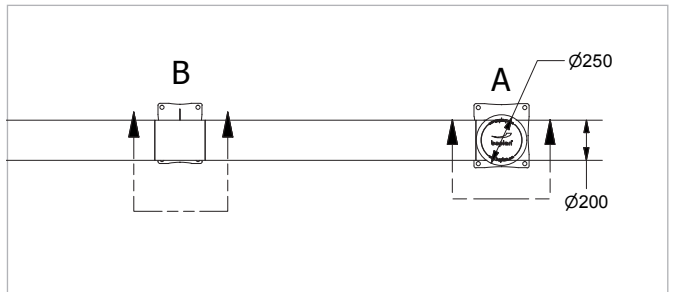
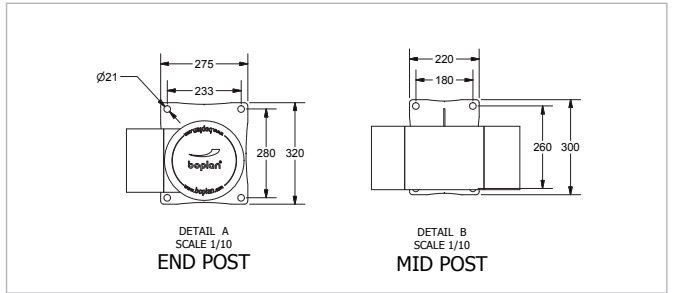
TEST VEHICLE

WEIGHT: 2300 KG
TYPE: COMMERCIAL FORK LIFT
SIZE (L x W x H): 1890 x 1020 x 1970 mm
CONTACT AREA: STEEL BUMPER WIDTH: 600 mm

ACCREDITED TEST LABORATORY

620 Route des Fromentaux
01500 Saint-Maurice-de-Rémens
01360 Beligneux
France

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

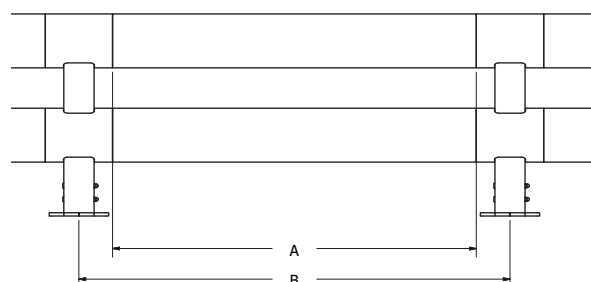


REFERENCE LIST - TB400 DOUBLE

POSTS		
End post Left End post Left - SS End post Left - Zinc coated	DT4000-0001-EPLYE DT4000-0001-EPLYES DT4000-0001-EPLYEZ	
End post Right End post Right - SS End post Right - Zinc coated	DT4000-0001-EPRYE DT4000-0001-EPRYES DT4000-0001-EPRYEZ	
Mid post Mid post - Stainless steel Mid post - Zinc coated	DT4000-0001-MPYE DT4000-0001-MPYES DT4000-0001-MPYEZ	

CURVES		
Conn.tube Ø200 Curve 350mm - YE	DT4000-0350-C200YE	
Conn.tube Ø200 - 45° Curve 350mm - YE	DT4000-0350-C204YE	
Conn.tube Ø200 - 90° Curve 350mm - YE	DT4000-0350-C209YE	
Conn.tube Ø250 Curve 350mm - YE	DT4000-0350-C250YE	
Conn.tube Ø250 - 90° Curve 350mm - YE	DT4000-0350-C259YE	

RAIL SETS			
	Tube length (A)	CC length (B)	Reference
Standard rail	750 mm	1000 mm	DT4000-0750-1000YE
Standard rail	950 mm	1200 mm	DT4000-0950-1200YE
Standard rail	1150 mm	1400 mm	DT4000-1150-1400YE
Standard rail	1350 mm	1600 mm	DT4000-1350-1600YE
Standard rail	1550 mm	1800 mm*	DT4000-1550-1800YE
Standard rail	1750 mm	2000 mm*	DT4000-1750-2000YE
Short rail	600-1349 mm	850-1599 mm	DT4009-1599-SRYE
Long rail	1351-1749 mm	1601-2000 mm*	DT4009-2000-LRYE



* The impact performance has not been tested for tube lengths > 1600 mm. Only use these lengths for non-critical applications.

REFERENCE LIST - TB400 DOUBLE

FIXED UNITS

TYPE	LENGTH	BASE	YELLOW		
no curves	750 mm	Steel ZC SS	DT4000-0750-FUYE DT4000-0750-FUYEZ DT4000-0750-FUYES		
	751-1750 mm	Steel ZC SS	DT4001-1750-FUYE DT4001-1750-FUYEZ DT4001-1750-FUYES		
1 curve	750 mm	Steel ZC SS	DT4000-0750-FU1CLYE DT4000-0750-FU1CLYEZ DT4000-0750-FU1CLYES		
	751-1750 mm	Steel ZC SS	DT4001-1750-FU1CLYE DT4001-1750-FU1CLYEZ DT4001-1750-FU1CLYES		
1 curve	750 mm	Steel ZC SS	DT4000-0750-FU1CRYE DT4000-0750-FU1CRYEZ DT4000-0750-FU1CRYES		
	751-1750 mm	Steel ZC SS	DT4001-1750-FU1CRYE DT4001-1750-FU1CRYEZ DT4001-1750-FU1CRYES		
2 curves	750 mm	Steel ZC SS	DT4000-0750-FU2CYE DT4000-0750-FU2CYEZ DT4000-0750-FU2CYES		
	751-1750 mm	Steel ZC SS	DT4001-1750-FU2CYE DT4001-1750-FU2CYEZ DT4001-1750-FU2CYES		