

TB 400 DOUBLE

SAFETY BARRIERS

Revision: 30 May 2024 5:04 PM
Boplan reference: DT4000-...

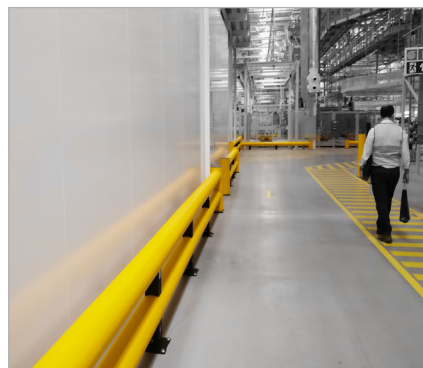


PRODUCT SPECIFICATIONS

APPLICATION			
Environment	Double shielding to separate heavier vehicles from pedestrian zones.		
Impact performance at 90°	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	Extrilene® - UV resistant - Fire class E [*] - Non conductive - Impervious to most chemicals ^{**}		
Caps	Sustainable elastomer		
STANDARD COLOURS			
End post	Yellow RAL 1003		
Mid post	Yellow RAL 1003		
Impact tube	Yellow RAL 1003		
BASEPLATES			
	Steel / Non-countersunk	ZC / Non-countersunk	SS / Non-countersunk
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		Ø18mm (M12) x 130mm	Ø18mm (M12) x 130mm	
	Anchor rod (Chemical)		M16 x 120mm + Chemical resin	M16 x 120mm + Chemical resin	
	ALTERNATIVES	Concrete screw		Ø17mm x 130mm	Not available
		Asphalt anchor		Bolt M16 x 50mm + Screw Ø22 x 100mm	Not available



FEATURES AND FUNCTIONALITY - TB 400 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: 275 mm x 320 mm (12 mm thick) Mid Post: 220 mm x 300 mm (12 mm thick)

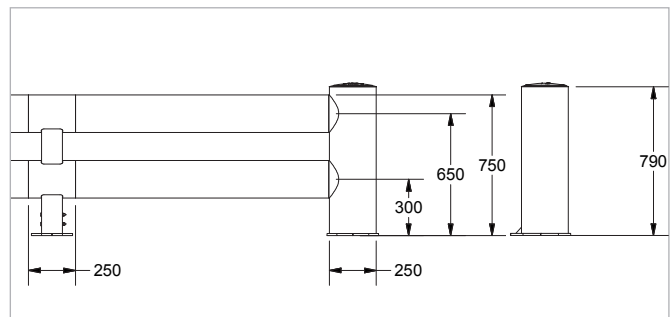
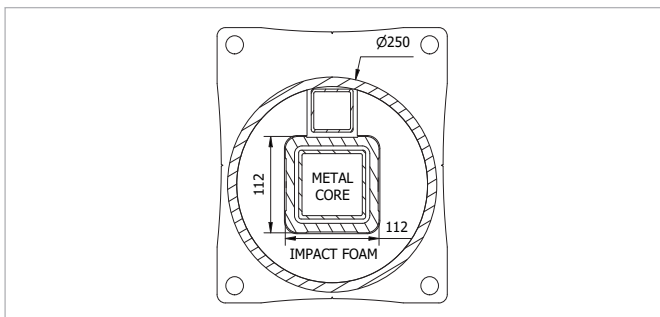
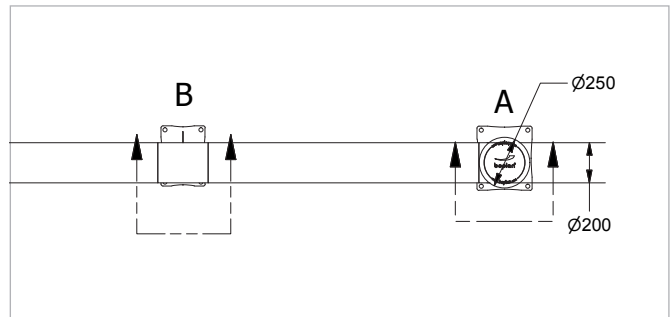
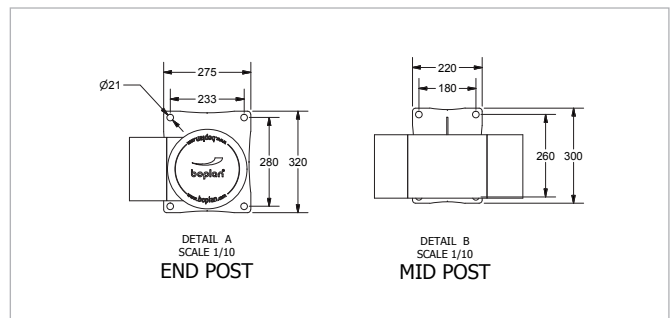
REQUIREMENTS	
Concrete quality	minimum C25/30
Concrete floor plate thickness (mm)	minimum 150 mm
Concrete slab dimension around posts (mm)	800 (h) x 800 (w) x 600 (d)
Operational temperature	-10°C up to +40°C
Water and humidity	Steel (standard): dry indoor use only. Zinc coated: outdoor use in most environments. Stainless Steel: outdoor use or frequent exposure to water and humidity.

boplan **IMPACT LABEL FOR SAFETY BARRIERS**

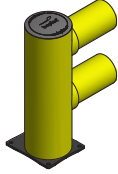
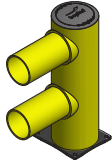
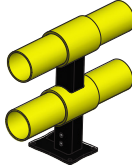
BOPLAN TB 400 DOUBLE		
IMPACT RATING	45°	90°
E80 > 80 kJ		
E60 > 60 kJ	55,3 kJ	
E50 > 50 kJ		
E40 > 40 kJ		39,1 kJ
E35 > 35 kJ		
E30 > 30 kJ		
E25 > 25 kJ		
E20 > 20 kJ		
E15 > 15 kJ		
E10 > 10 kJ		
E5 > 5,0 kJ		
E2 > 2,5 kJ		

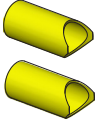
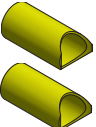
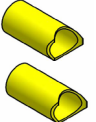
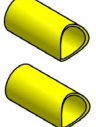
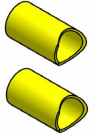
TEST CONDITIONS TEMPERATURE: 20°C IMPACT HEIGHT: 650 mm IMPACT ANGLE: 90° TEST FLOOR: CONCRETE C25/30 - 160 mm MANUFACTURER ANCHOR PULL OUT: 17 kN	TEST VEHICLE WEIGHT: 2300 KG TYPE: COMMERCIAL FORK LIFT SIZE (L x W x h): 1890 x 1020 x 1970 mm CONTACT AREA: STEEL BUMPER WIDTH: 600 mm	ACCREDITED TEST LABORATORY 620 Route des Fromentaux 01500 Saint-Maurice-de-Rémens 01360 Beligneux France
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SUCCESS CRITERIA VEHICLE STOPPED - ASI (ACCELERATION SEVERITY INDEX) < 0.5

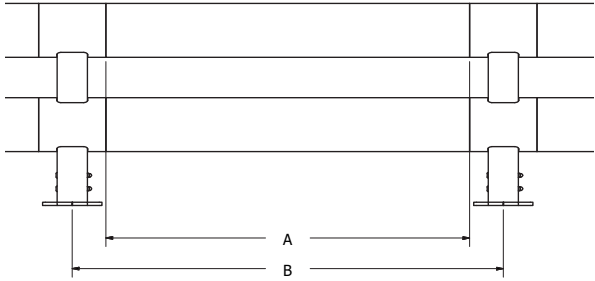


REFERENCE LIST - TB 400 DOUBLE

POSTS		
End post Left End post Left - ZC End post Left - SS	DT4000-0001-EPLYE DT4000-0001-EPLYEZ DT4000-0001-EPLYES	
End post Right End post Right - ZC End post Right - SS	DT4000-0001-EPRYE DT4000-0001-EPRYZ DT4000-0001-EPRYES	
Mid post Mid post - ZC Mid post - SS	DT4000-0001-MPYE DT4000-0001-MPYEZ DT4000-0001-MPYES	

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	

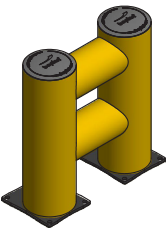
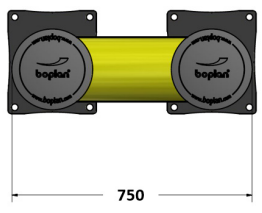
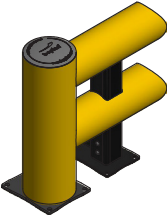
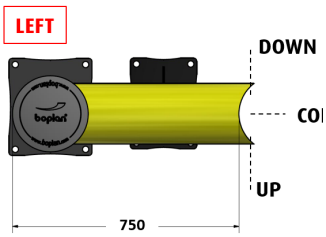
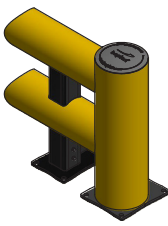
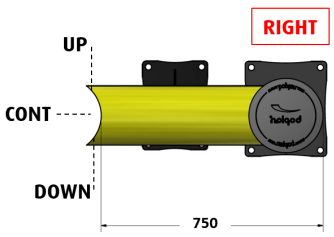
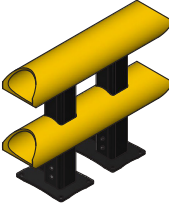
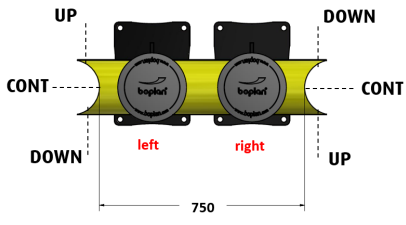
RAIL SETS			
	Tube length (A)	CC length (B)	Reference
Standard rail	750 mm	1000 mm	DT4000-0750-1000YE
Standard rail	950 mm	1200 mm	DT4000-0950-1200YE
Standard rail	1150 mm	1400 mm	DT4000-1150-1400YE
Standard rail	1350 mm	1600 mm	DT4000-1350-1600YE
Standard rail	1550 mm	1800 mm*	DT4000-1550-1800YE
Standard 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 diagram shows a cross-section of two parallel rails. Dimension A is the distance between the centers of the two rails. Dimension B is the distance between the outer edges of the two rails.

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

REFERENCE LIST - TB 400 DOUBLE

FIXED UNITS						
TYPE	LENGTH	BASE	REFERENCE YE			
no curves	na	750 mm	Steel ZC SS	DT4000-0750-FUYE DT4000-0750-FUYEZ DT4000-0750-FUYES		
	na	751-1750 mm	Steel ZC SS	DT4001-1750-FUYE DT4001-1750-FUYEZ DT4001-1750-FUYES		
1 curve	Endpost LEFT	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		
	Endpost RIGHT	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	na	750 mm	Steel ZC SS	DT4000-0750-FU2CYE DT4000-0750-FU2CYEZ DT4000-0750-FU2CYES		
	na	751-1750 mm	Steel ZC SS	DT4001-1750-FU2CYE DT4001-1750-FU2CYEZ DT4001-1750-FU2CYES		