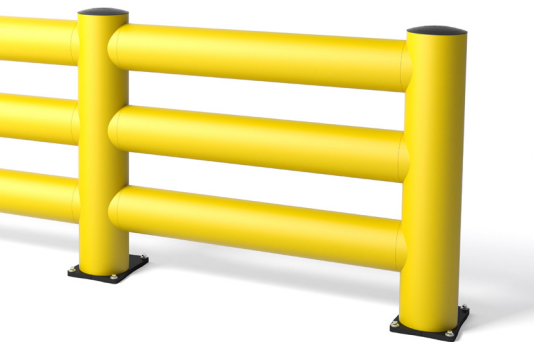


TB SUPER TRIPLE BOPLAN SAFETY BARRIER SPECIFICATION SHEET

Revision: 18 May 2021 10:46 AM
Boplan reference: TS400 ...



PRODUCT SPECIFICATIONS

APPLICATION

Environment	Extra-tough collision protection from heavy traffic with a high-impact risk.
Impact performance at 90° (in JOULE)	POST: 44500 Joule (Eq. to 10 ton - 10,7 km/h)
	RAIL: 48300 Joule (Eq. to 10 ton - 11,2 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	Zinc Coated Steel	Stainless steel
Material	Steel 37	Steel 37	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 - TB SUPER TRIPLE

SIZE	
Height end posts	1145 mm
Height mid post	1145 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	Outer tube: Ø250 mm (11 mm thick) Inner profile: 112 mm x 112 mm (10 mm thick)
Standard rail length	1350 mm (other sizes: 750mm - 1750mm)
Baseplate	End Post: 375 mm x 275 mm (20 mm thick) Mid Post: 375 mm x 275 mm (20 mm thick)

REQUIREMENTS	
Concrete quality	minimum C25/30
Concrete floor plate thickness (mm)	minimum 150 mm
Concrete slab dimension around posts (mm)	900 (h) x 900 (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.

IMPACT LABEL FOR SAFETY BARRIERS

BOPLAN TB400 SUPER TRIPLE		
IMPACT RATING	45°	90° <small>PAS 13:2017 compliant</small>
E80	68,3 kJ	
E60		48,3 kJ
E50		
E40		
E35		
E30		
E25		
E20		
E15		
E10		
E5		
E2		

TEST CONDITIONS

TEMPERATURE: 20°C
IMPACT HEIGHT: 1000 mm
IMPACT ANGLE: 90°
TEST FLOOR: CONCRETE C25/30 - 160 mm
MANUFACTURER ANCHOR PULL OUT: 17 kJ

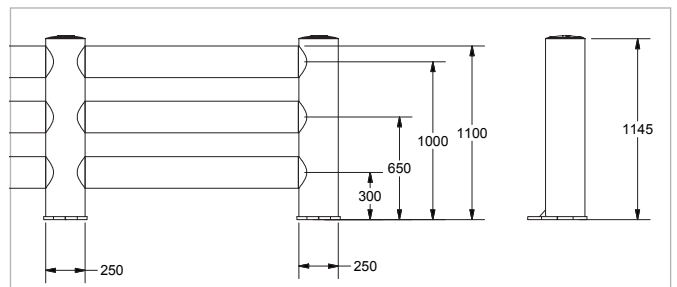
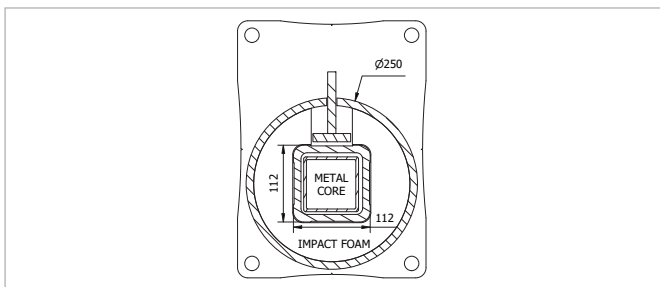
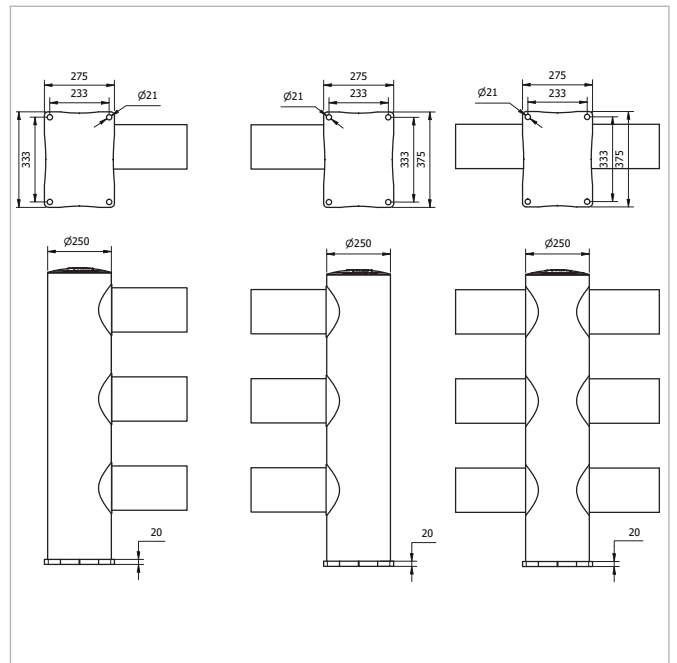
TEST VEHICLE

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

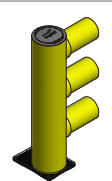
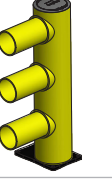
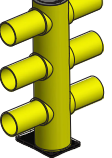
ACCREDITED TEST LABORATORY

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

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

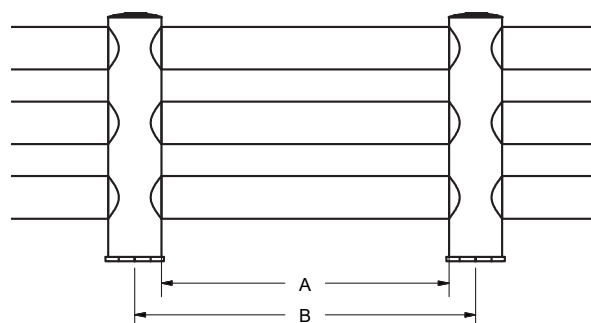


REFERENCE LIST - TB SUPER TRIPLE

POSTS		
End post Left End post Left - SS End post Left - Zinc coated	TS4000-0001-EPLYE TS4000-0001-EPLYES TS4000-0001-EPLYEZ	
End post Right End post Right - SS End post Right - Zinc coated	TS4000-0001-EPRYE TS4000-0001-EPRYES TS4000-0001-EPRYEZ	
Mid post Mid post - Stainless steel Mid post - Zinc coated	TS4000-0001-MPYE TS4000-0001-MPYES TS4000-0001-MPYEZ	

CURVES		
Conn.tube Ø200 Curve 350mm - YE	TS4000-0350-C200YE	
Conn.tube Ø200 - 45° Curve 350mm - YE	TS4000-0350-C204YE	
Conn.tube Ø200 - 90° Curve 350mm - YE	TS4000-0350-C209YE	
Conn.tube Ø250 Curve 350mm - YE	TS4000-0350-C250YE	
Conn.tube Ø250 - 90° Curve 350mm - YE	TS4000-0350-C259YE	

RAIL SETS			
	Tube length (A)	CC length (B)	Reference
Standard rail	750 mm	1000 mm	TS4000-0750-1000YE
Standard rail	950 mm	1200 mm	TS4000-0950-1200YE
Standard rail	1150 mm	1400 mm	TS4000-1150-1400YE
Standard rail	1350 mm	1600 mm	TS4000-1350-1600YE
Standard rail	1550 mm	1800 mm*	TS4000-1550-1800YE
Standard rail	1750 mm	2000 mm*	TS4000-1750-2000YE
Short rail	600-1349 mm	850-1599 mm	TS4009-1599-SRYE
Long rail	1351-1749 mm	1601-2000 mm*	TS4009-2000-LRYE



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

REFERENCE LIST - TB SUPER TRIPLE

FIXED UNITS

TYPE	LENGTH	BASE	YELLOW		
no curves	750 mm	Steel ZC SS	TS4000-0750-FUYE TS4000-0750-FUYEZ TS4000-0750-FUYES		
	751-1750 mm	Steel ZC SS	TS4001-1750-FUYE TS4001-1750-FUYEZ TS4001-1750-FUYES		
1 curve	Post LEFT	750 mm	Steel ZC SS TS4000-0750-FU1CLYE TS4000-0750-FU1CLYEZ TS4000-0750-FU1CLYES		CURVE RIGHT 1/ UP-DOWN-CONTINU 2/Ø200 - Ø250
		751-1750 mm	Steel ZC SS TS4001-1750-FU1CLYE TS4001-1750-FU1CLYEZ TS4001-1750-FU1CLYES		
	Post RIGHT	750 mm	Steel ZC SS TS4000-0750-FU1CRYE TS4000-0750-FU1CRYEZ TS4000-0750-FU1CRYES		CURVE RIGHT 1/ UP-DOWN-CONTINU 2/Ø200 - Ø250
		751-1750 mm	Steel ZC SS TS4001-1750-FU1CRYE TS4001-1750-FU1CRYEZ TS4001-1750-FU1CRYES		
2 curves	750 mm	Steel ZC SS TS4000-0750-FU2CYE TS4000-0750-FU2CYEZ TS4000-0750-FU2CYES		CURVE LEFT 1/ UP-DOWN-CONTINU 2/Ø200 - Ø250 CURVE RIGHT 1/ UP-DOWN-CONTINU 2/Ø200 - Ø250 	
	751-1750 mm	Steel ZC SS DT4001-1750-FU2CYE DT4001-1750-FU2CYEZ DT4001-1750-FU2CYES			