

TB 400

SAFETY BARRIERS

Revision: 19 December 2024 4:13 PM
Boplan reference: TB400...






PRODUCT SPECIFICATIONS

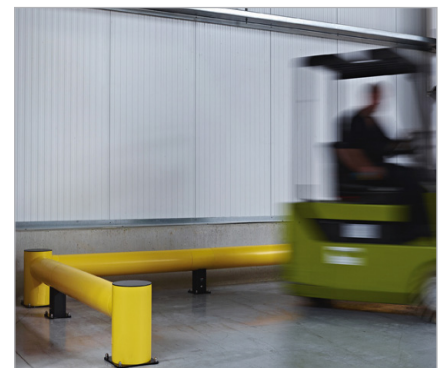
APPLICATION			
Environment	The TB400 is used for the protecting of walls, machines and infrastructure from pallet trucks, forklifts or other vehicles.		
Impact performance at 90°	POST: 16100 Joule (Eq. to 5 ton - 5.6 mph)		
	RAIL: 20100 Joule (Eq. to 5 ton - 6.3 mph)		
MATERIAL			
Posts and rails	Extrilene® - 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	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		1/2 in x 4 1/2 in	Not available
	Wedge anchor		M12 x 120 mm	M12 x 120 mm
ALTERNATIVES	Anchor rod (Chemical)		M12 x 120 mm + Chemical resin	M12 x 120 mm + Chemical resin
	Asphalt anchor		Bolt M10 x 40 mm + Screw Ø16 mm	Not available
	Spit anchor		Bolt M12 x 100 mm + Plug Ø20 mm	Not available

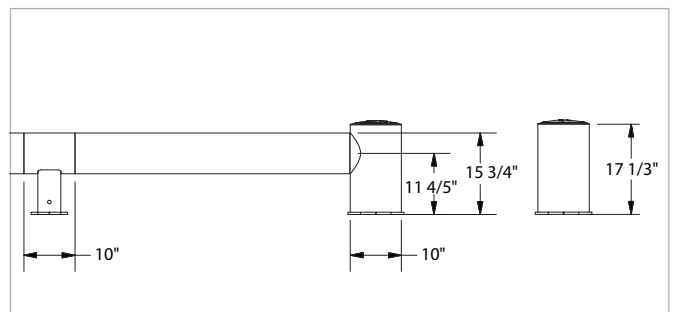
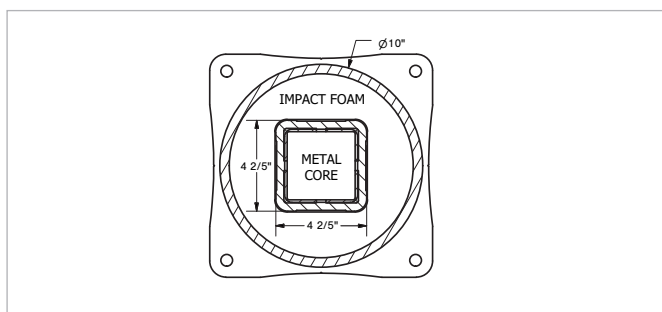
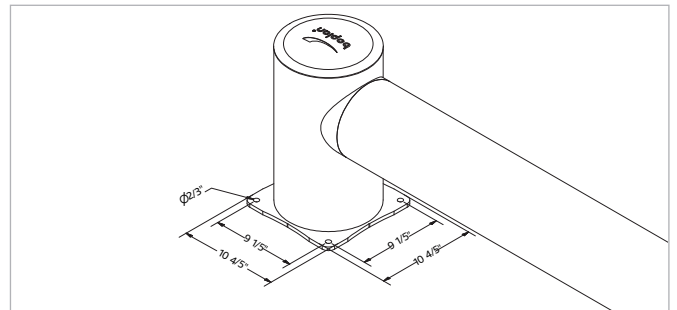
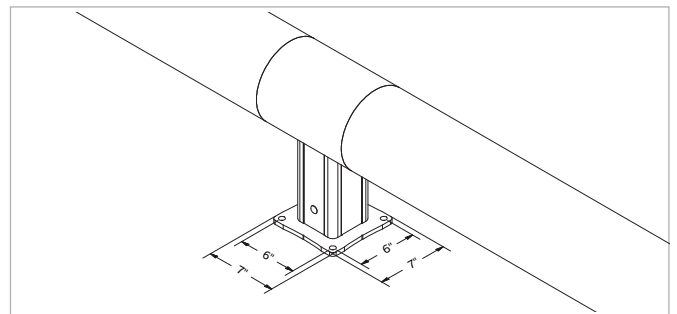


FEATURES AND FUNCTIONALITY - TB 400

SIZE	
Height end posts	17 1/3 in
Height mid post	15 3/4 in
Profile section tubes	Ø8 in (2/5 in thick)
Profile section end posts	Outer tube: Ø10 in (2/5 in thick) Inner profile: 4 2/5 x 4 2/5 in (1/3 in thick)
Profile section mid posts	Profile: 4 2/5 x 4 2/5 in (1/3 in thick)
Standard rail length	CC60 in (Tube length - 50 in)
Baseplate	End Post: 10 4/5 x 10 4/5 in (1/3 in thick) Mid Post: 7 x 7 in (1/3 in thick)


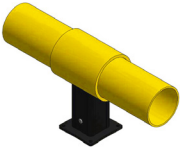
REQUIREMENTS	
Concrete quality	minimum 4000 PSI (C25/30)
Concrete floor plate thickness	minimum 6 in
Concrete slab dimension around posts (in)	23 2/3 (h) x 23 2/3 (w) x 19 3/4 (d)
Operational temperature	14°F up to 104°F
Water and humidity	Steel (standard): dry indoor use only. Zinc coated: outdoor use in most environments. Stainless Steel: outdoor use or frequent exposure to water and humidity.

 IMPACT LABEL FOR SAFETY BARRIERS		
BOPLAN TB 400		
IMPACT RATING	45°	90°
E80 > 80 kJ		
E60 > 60 kJ		
E50 > 50 kJ		
E40 > 40 kJ		
E35 > 35 kJ		
E30 > 30 kJ	28,4 kJ	
E25 > 25 kJ		20,1 kJ
E20 > 20 kJ		
E15 > 15 kJ		
E10 > 10 kJ		
E5 > 5,0 kJ		
E2 > 2,5 kJ		
TEST CONDITIONS TEMPERATURE: 20°C / 68°F IMPACT HEIGHT: 300 mm / 11 3/4 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	ACCREDITED TEST LABORATORY 620 Route des Fromentaux 01500 Saint-Maurice-de-Rémens 01360 Bèlignieux France 
SUCCESS CRITERIA VEHICLE STOPPED - ASI (ACCELERATION SEVERITY INDEX) < 0.5		IL-TB400-20230920

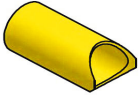
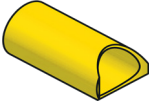
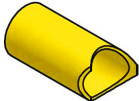
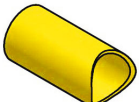
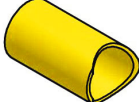


REFERENCE LIST - TB 400

POSTS

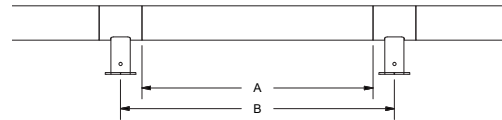
End post End post - ZC End post - SS	TB4000-0001-EPYE TB4000-0001-EPYEZ TB4000-0001-EPYES	
Mid post Mid post - ZC Mid post - SS	TB4000-0001-MPYE TB4000-0001-MPYEZ TB4000-0001-MPYES	

CURVES

Conn.tube Ø8 in Curve 14 in - YE	TB4000-0014-C080YE	
Conn.tube Ø8 in - 45° Curve 14 in - YE	TB4000-0014-C084YE	
Conn.tube Ø8 in - 90° Curve 14 in - YE	TB4000-0014-C089YE	
Conn.tube Ø10 in Curve 14 in - YE	TB4000-0014-C100YE	
Conn.tube Ø10 in - 90° Curve 14 in - YE	TB4000-0014-C109YE	

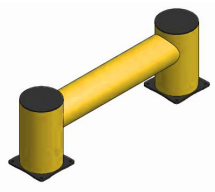
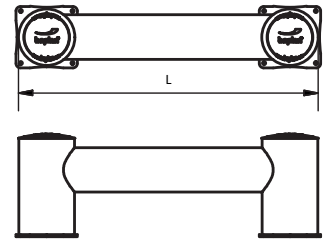
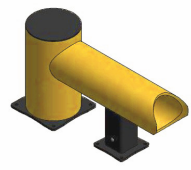
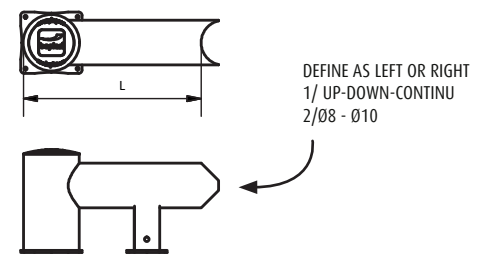
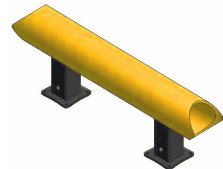
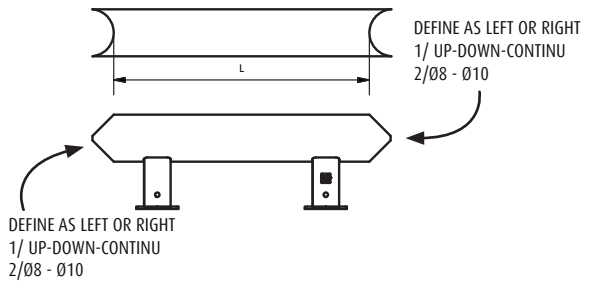
RAIL SETS

	Tube length (A)	CC length (B)	Reference
Standard rail	26 in	36 in	TB4000-0817-1067YE
Standard rail	38 in	48 in	TB4000-0970-1220YE
Standard rail	50 in	60 in	TB4000-1275-1525YE
Standard rail	62 in	72 in*	TB4000-1578-1828YE
Standard rail	68 in	78 in*	TB4000-1730-1980YE
Short rail	26 - 38 in	36 - 48 in	TB4009-0048-SRYE
Long rail	50 - 62 in	60 - 72 in*	TB4009-0072-LRYE



* The impact performance has not been tested for tube lengths > 63 in.
Only use these lengths for non - critical applications.

REFERENCE LIST - TB 400

FIXED UNITS					
TYPE	LENGTH	BASE	REFERENCE YE		
no curves	30 in	Steel ZC SS	TB4000-0750-FUYE TB4000-0750-FUYEZ TB4000-0750-FUYES		
	30 - 68 in	Steel ZC SS	TB4001-1750-FUYE TB4001-1750-FUYEZ TB4001-1750-FUYES		
1 curve	30 in	Steel ZC SS	TB4000-0750-FU1CYE TB4000-0750-FU1CYEZ TB4000-0750-FU1CYES		
	30 - 68 in	Steel ZC SS	TB4001-1750-FU1CYE TB4001-1750-FU1CYEZ TB4001-1750-FU1CYES		
2 curves	30 in	Steel ZC SS	TB4000-0750-FU2CYE TB4000-0750-FU2CYEZ TB4000-0750-FU2CYES		
	30 - 68 in	Steel ZC SS	TB4001-1750-FU2CYE TB4001-1750-FU2CYEZ TB4001-1750-FU2CYES		