

TB 400 DOUBLE PLUS

SAFETY BARRIERS

Revision: 19 December 2024 3:58 PM
Boplan reference: DP4000-...



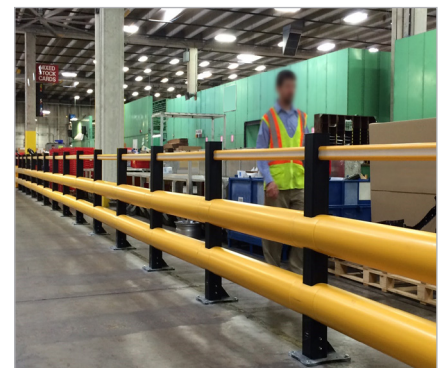
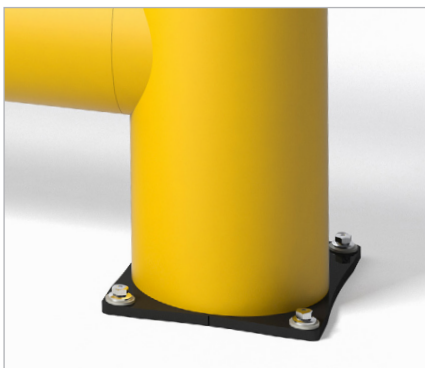
PRODUCT SPECIFICATIONS

APPLICATION			
Environment	Double guardrail with extra handrail to separate heavy vehicles from pedestrian zones.		
Impact performance at 90°	POST: 30700 Joule (Eq. to 10 ton - 5.5 mph)		
	RAIL: 39100 Joule (Eq. to 10 ton - 6.2 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	Black RAL 9005		
Impact tube	Yellow RAL 1003		
Handrails	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		3/4 in x 5 1/2 in	not available
	Wedge anchor		Ø18mm (M12) x 130mm	Ø18mm (M12) x 130mm
	Concrete screw		Ø17mm x 130mm	Not available
	Anchor rod (Chemical)		M16 x 120mm + Chemical resin	M16 x 120mm + Chemical resin

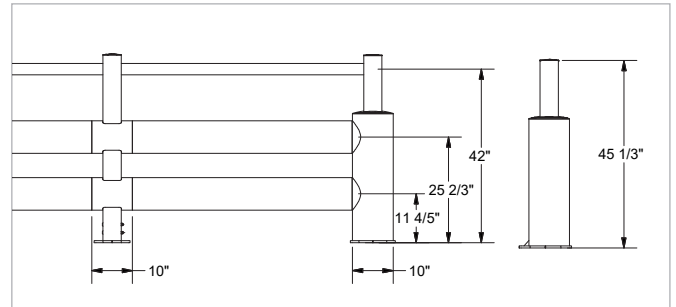
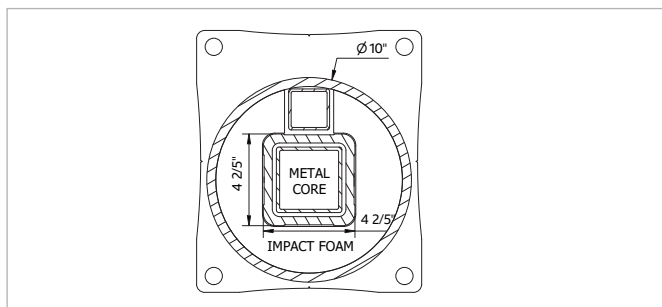
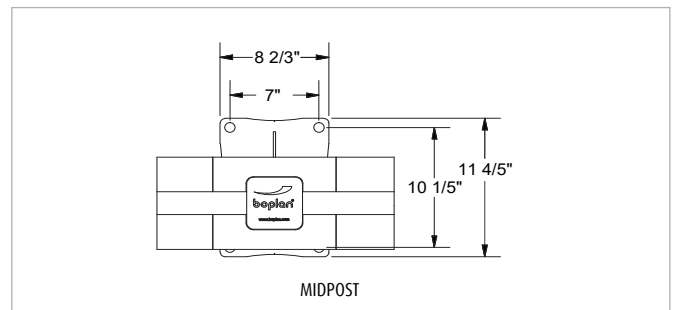
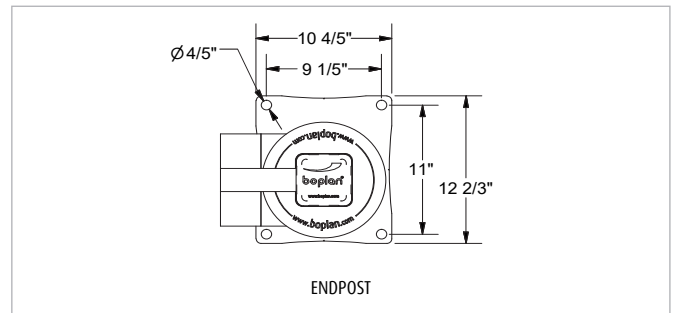


FEATURES AND FUNCTIONALITY - TB 400 DOUBLE PLUS

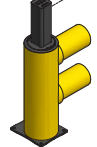
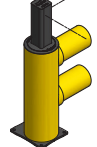
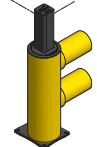
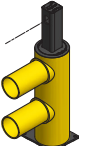
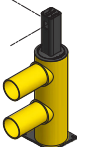
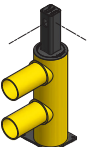
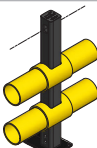
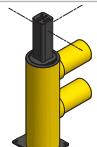
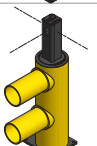
SIZE	
Height end posts	45 1/3 in
Height mid post	45 1/3 in
Profile section tubes	Ø8 in (2/5 in thick)
Profile section handrails	2 x 2 3/4 in (1/5 in thick)
Profile section end posts	Outer tube: Ø10 in (2/5 in thick) Inner profile: 4 2/5 x 4 2/5 in (1/3 in thick)
Profile section mid posts	Profile: 4 2/5 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 12 2/3 x (1/2 in thick) Mid Post: 8 2/3 x 11 4/5 x (1/2 in thick)

REQUIREMENTS	
Concrete quality	minimum 4000 PSI (C25/30)
Concrete floor plate thickness	minimum 6 in
Concrete slab dimension around posts (in)	31 1/2 (h) x 31 1/2 (w) x 23 2/3 (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.

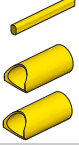
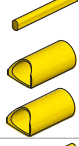
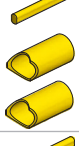
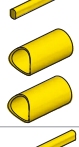
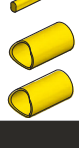
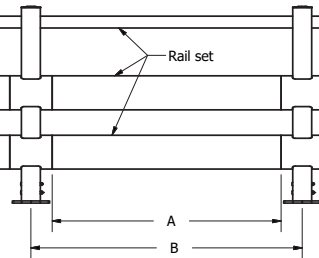
 IMPACT LABEL FOR SAFETY BARRIERS		
BOPLAN TB 400 DOUBLE PLUS		
IMPACT RATING	45°	90°
E80 > 80 kJ	55,3 kJ	
E60 > 60 kJ		
E50 > 50 kJ		
E40 > 40 kJ		39,1 kJ
E35 > 35 kJ		
E30 > 30 kJ		
E25 > 25 kJ		
E20 > 20 kJ		
E15 > 15 kJ		
E10 > 10 kJ		
E5 > 5,0 kJ		
E2 > 2,5 kJ		
TEST CONDITIONS TEMPERATURE: 20°C / 68°F IMPACT HEIGHT: 650 mm / 25 5/8 in IMPACT ANGLE: 90° TEST FLOOR: CONCRETE SLAB C25/30 - 160 mm / 6 in MANUFACTURER ANCHOR PULL OUT: 17 kN	TEST VEHICLE WEIGHT: 2300 KG / 5070.63 lbs TYPE: COMMERCIAL FORK LIFT SIZE (L x W x h): 1890x1020x1970 mm / 74x40x78 in CONTACT AREA: STEEL BUMPER WIDTH: 600 mm / 24 in	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-DP400-20250103



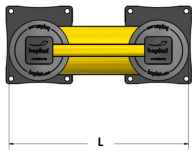
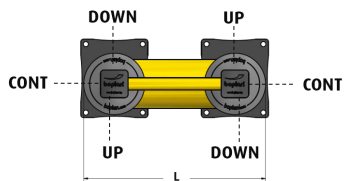
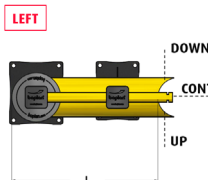
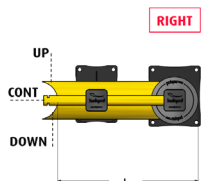
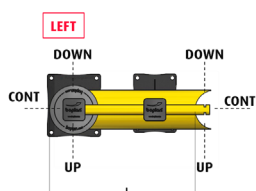
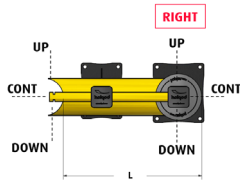
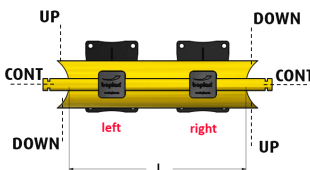
REFERENCE LIST - TB 400 DOUBLE PLUS

POSTS		
End post Left End post Left - ZC End post Left - SS	DP4000-0001-EPLYE DP4000-0001-EPLYEZ DP4000-0001-EPLYES	
Corner post Left - 90° - Up Corner post Left - 90° - Up - ZC Corner post Left - 90° - Up - SS	DP4000-0001-CPULYE DP4000-0001-CPULYEZ DP4000-0001-CPULYES	
Corner post Left - 90° - Down Corner post Left - 90° - Down - ZC Corner post Left - 90° - Down - SS	DP4000-0001-CPDLYE DP4000-0001-CPDLYEZ DP4000-0001-CPDLYES	
End post Right End post Right - ZC End post Right - SS	DP4000-0001-EPRYE DP4000-0001-EPRYEZ DP4000-0001-EPRYES	
Corner post Right - 90° - Up Corner post Right - 90° - Up - ZC Corner post Right - 90° - Up - SS	DP4000-0001-CPURYE DP4000-0001-CPURYEZ DP4000-0001-CPURYES	
Corner post Right - 90° - Down Corner post Right - 90° - Down - ZC Corner post Right - 90° - Down - SS	DP4000-0001-CPDRYE DP4000-0001-CPDRYEZ DP4000-0001-CPDRYES	
Mid post Mid post - ZC Mid post - SS	DP4000-0001-MPYE DP4000-0001-MPYEZ DP4000-0001-MPYES	
T end post Left* T end post Left - ZC* T end post Left - SS*	DP4000-0001-TPLYE DP4000-0001-TPLYEZ DP4000-0001-TPLYES	
T end post Right* T end post Right - ZC* T end post Right - SS*	DP4000-0001-TPRYE DP4000-0001-TPRYEZ DP4000-0001-TPRYES	

*2 Caps included to close handrail hole

CURVES			
Conn.tube Ø8 in Curve 14 in - YE	DP4000-0014-C080YE		
Conn.tube Ø8 in - 45° Curve 14 in - YE	DP4000-0014-C084YE		
Conn.tube Ø8 in - 90° Curve 14 in - YE	DP4000-0014-C089YE		
Conn.tube Ø10 in Curve 14 in - YE	DP4000-0014-C100YE		
Conn.tube Ø10 in - 90° Curve 14 in - YE	DP4000-0014-C109YE		
RAIL SETS			
	Tube length (A)	CC length (B)	Reference
Standard rail	32 in	42 in	DP4000-0817-1067YE
Standard rail	38 in	48 in	DP4000-0970-1220YE
Standard rail	50 in	60 in	DP4000-1275-1525YE
Standard rail	62 in	72 in*	DP4000-1578-1828YE
Standard rail	68 in	78 in*	DP4000-1730-1980YE
Short rail	26 - 38 in	36 - 48 in	DP4009-0048-SRYE
Long rail	50 - 62 in	60 - 72 in*	DP4009-0072-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 DOUBLE PLUS

FIXED UNITS					
TYPE	LENGTH	BASE	REFERENCE YE		
no curves	Endpost	30 in	Steel ZC SS	DP4000-0750-FUYE DP4000-0750-FUYEZ DP4000-0750-FUYES	
		30 - 68 in	Steel ZC SS	DP4001-1750-FUYE DP4001-1750-FUYEZ DP4001-1750-FUYES	
	Post <i>Up</i> <i>Down</i> <i>Continu</i>	30 in	Steel ZC SS	DP4002-0750-FUYE DP4002-0750-FUYEZ DP4002-0750-FUYES	
		30 - 68 in	Steel ZC SS	DP4002-1750-FUYE DP4002-1750-FUYEZ DP4002-1750-FUYES	
1 curve	Endpost LEFT	30 in	Steel ZC SS	DP4000-0750-FU1CLYE DP4000-0750-FU1CLYEZ DP4000-0750-FU1CLYES	
		30 - 68 in	Steel ZC SS	DP4001-1750-FU1CLYE DP4001-1750-FU1CLYEZ DP4001-1750-FU1CLYES	
	Endpost RIGHT	30 in	Steel ZC SS	DP4000-0750-FU1CRYE DP4000-0750-FU1CRYEZ DP4000-0750-FU1CRYES	
		30 - 68 in	Steel ZC SS	DP4001-1750-FU1CRYE DP4001-1750-FU1CRYEZ DP4001-1750-FU1CRYES	
	Post LEFT <i>Up</i> <i>Down</i> <i>Continu</i>	30 in	Steel ZC SS	DP4002-0750-FU1CLYE DP4002-0750-FU1CLYEZ DP4002-0750-FU1CLYES	
		30 - 68 in	Steel ZC SS	DP4002-1750-FU1CLYE DP4002-1750-FU1CLYEZ DP4002-1750-FU1CLYES	
	Post RIGHT <i>Up</i> <i>Down</i> <i>Continu</i>	30 in	Steel ZC SS	DP4002-0750-FU1CRYE DP4002-0750-FU1CRYEZ DP4002-0750-FU1CRYES	
		30 - 68 in	Steel ZC SS	DP4002-1750-FU1CRYE DP4002-1750-FU1CRYEZ DP4002-1750-FU1CRYES	
2 curves	-	30 in	Steel ZC SS	DP4000-0750-FU2CYE DP4000-0750-FU2CYEZ DP4000-0750-FU2CYES	
		30 - 68 in	Steel ZC SS	DP4001-1750-FU2CYE DP4001-1750-FU2CYEZ DP4001-1750-FU2CYES	