

TB 550 PLUS FENCE

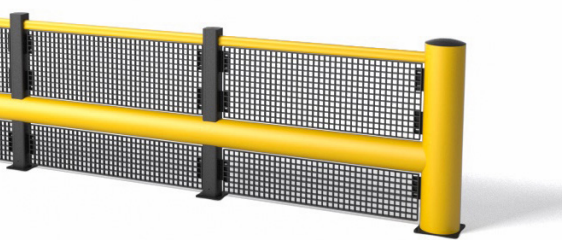
SAFETY BARRIERS






Revision: 13 April 2026 10:50 AM
Boplan reference: TA5500...

PRODUCT SPECIFICATIONS

APPLICATION	
Environment	Perimeter edge protection in Multi-Storey Car Parks / Surface Car Parks / Access Ramps etc.
MATERIAL	
Posts and rails	Extrilene® - UV resistant - Fire class E ⁺ - Non conductive - Impervious to most chemicals ^{**}
Caps	Sustainable elastomer
Mesh panel	Glass fiber reinforced composite
STANDARD COLOURS	
Mid post	Black RAL 9005
End post/ Impact tube	Yellow RAL 1003
Mesh panel	Black RAL 9005
BASEPLATES	
	ZC / Non-countersunk
Material	Steel 37
Coating	Electroplated + Laquered
Colour	Mat black

*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		M12 x 120mm	Not available
	Anchor rod (Chemical)		M12 x 120mm + Chemical resin	Not available
ALTERNATIVES	Concrete screw		Ø12mm x 100mm	Not available
	Asphalt anchor		Bolt M10 x 40mm + Screw Ø16mm	Not available
	Spit anchor		Bolt M12 x 100mm + Plug Ø20mm	Not available

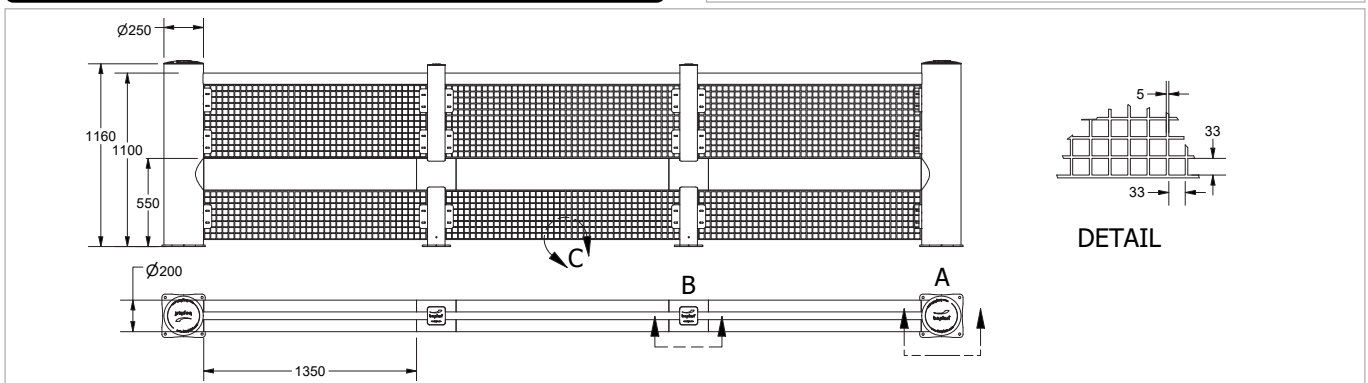
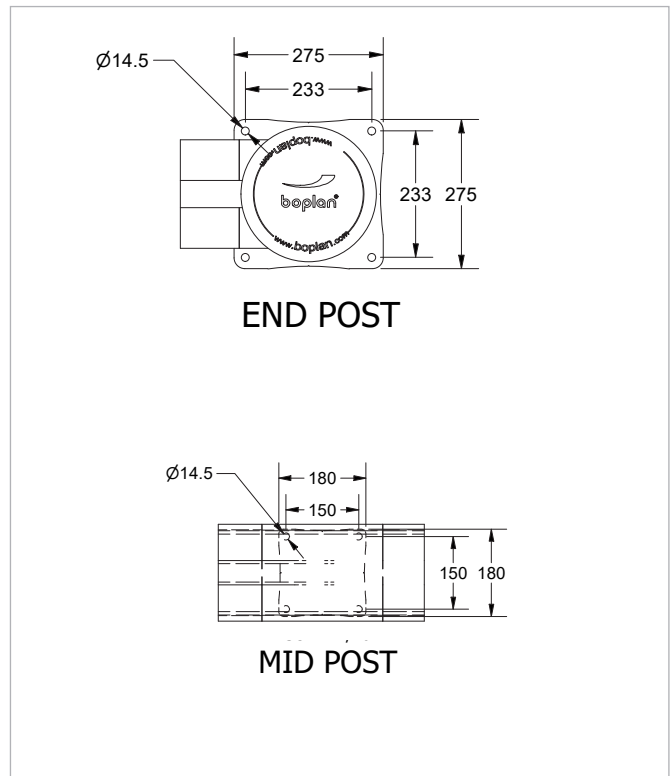


FEATURES AND FUNCTIONALITY - TB 550 PLUS FENCE

SIZE	
Height end posts	1160 mm
Height mid post	1150 mm
Profile section tubes	Ø200 mm (11 mm thick)
Profile section end posts	Outer tube: Ø250 mm (11 mm thick) Inner profile: 112mm x 112 mm (10 mm thick)
Profile section mid posts	Profile: 112 mm x 112 mm (10 mm thick)
Standard rail length	1350 mm (1600mm center - center)
Baseplate	End Post: 275 mm x 275 mm (10mm thick) Mid Post: 180 mm x 180 mm (10mm thick)
Mesh inner dimension	33 mm x 33 mm
Mesh wall thickness	5 mm
Mesh panel total thickness	15 mm

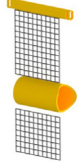
REQUIREMENTS	
Concrete quality	minimum C25/30
Concrete floor plate thickness	minimum 150 mm
Concrete slab dimension around posts (mm)	600 (h) x 600 (w) x 500 (d)
Operational temperature	-10°C up to +40°C
Water and humidity	Steel (standard): dry indoor use only. Zinc coated: outdoor use in most environments.

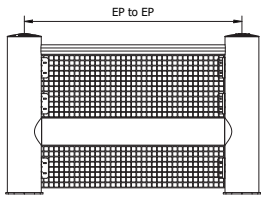
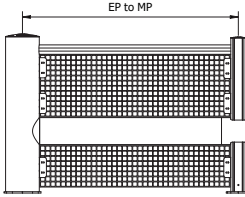
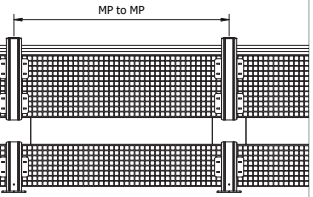
 IMPACT LABEL FOR SAFETY BARRIERS		
BOPLAN TB 550 PLUS FENCE		
IMPACT RATING	45°	90°
E80 >	< 80 kJ	
E60 >	< 60 kJ	
E50 >	< 50 kJ	
E40 >	< 40 kJ	
E35 >	< 35 kJ	
E30 >	< 30 kJ	25,9 kJ
E25 >	< 25 kJ	
E20 >	< 20 kJ	18,3 kJ
E15 >	< 15 kJ	
E10 >	< 10 kJ	
E5 >	< 5,0 kJ	
E2 >	< 2,5 kJ	
TEST CONDITIONS	TEST VEHICLE	ACCREDITED TEST LABORATORY
TEMPERATURE: 20°C / 68°F IMPACT HEIGHT: 460 mm / 18.11 Inch IMPACT ANGLE: 90° TEST FLOOR: CONCRETE SLAB C25/30 - 160 mm / 6 inch MANUFACTURER ANCHOR PULL OUT: 7,9 kN	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	620 Route des Fromentaux 01500 Saint-Maurice-de-Rémens 01360 Belgique France
SUCCESS CRITERIA VEHICLE STOPPED - ASI (ACCELERATION SEVERITY INDEX) < 0.5		IL-TA550-20230920



FEATURES AND FUNCTIONALITY - TB 550 PLUS FENCE

POSTS		
End post - ZC - YE	TA5500-0001-EPYEZ	
Mid post - ZC - YE	TA5500-0001-MPYEZ	
Corner post 90° - UP - YE	TA5500-0001-CPUYEZ	
Corner post 90° - DOWN - YE	TA5500-0001-CPDYEZ	

CURVES		
Conn.tube Ø250 - 90° Curve 350mm - YE	TA5500-0350-C259YE	

STANDARD RAIL SETS				
Tube length	CC length	End post to End post	End post to Mid post	Mid post to Mid post
1350 mm	1600 mm	TA5500-1350-1600YE	TA5501-1350-1600YE	TA5502-1350-1600YE
1200 mm	1450 mm	TA5500-1200-1450YE	TA5501-1200-1450YE	TA5502-1200-1450YE
1050 mm	1300 mm	TA5500-1050-1300YE	TA5501-1050-1300YE	TA5502-1050-1300YE
900 mm	1150 mm	TA5500-0900-1150YE	TA5501-0900-1150YE	TA5502-0900-1150YE
850 mm	1000 mm	TA5500-0850-1000YE	TA5501-0850-1000YE	TA5502-0850-1000YE
600 mm	850 mm	TA5500-0600-0850YE	TA5501-0600-0850YE	TA5502-0600-0850YE
				

PRODUCT COMPLIANCE - TB 550 PLUS FENCE
BS6399 - part 1: 1996

In short	This British Standard defines how to calculate the minimum horizontal force required to be withstood by a vehicle barrier.
Assumptions	Minimum car bumper height: 375 mm Width of impact vehicle: 1500 mm m: mass car: 1500 kg v: speed car: 4.5 m/s (=16.2 km/h) D _c : Deformation of car bumper: 100 mm D _b : Deformation of barrier: 500 mm
force (F)	According to the standard, two methods are described to calculate the minimum force a vehicle barrier needs to withstand: 1/ for rigid barriers 2/ for flexible barriers Since Boplan barriers are flexible, the second method is used. The formula to calculate the force: $F = (0.5 \times m \times v^2) / (D_c + D_b)$ $F = 0.5 \times 1500 \times 4.5^2 / (100 + 500)$ $F = 25 \text{ kN}$ The BS6399 describes 3 different minimum force requirements for parking barriers: 1/2 x Force: Where safety barriers protect both sides of parking ramps. 1x Force: All other safety barrier areas. 2 x Force: Where safety barriers are exposed to a potential run-up area, in a straight length, of more than 20 meters.
1 x force	25 kN
2 x force	50 kN
1/2 force	12.5 kN
CONCLUSION	The Boplan Armco barrier has been positively tested against the 3 force levels and is therefore fully compliant with BS6399.

BS6180:1995

In short	This British standard predates the BS6399 and has the below requirements.
Minimum height barrier	1100 mm
Maximum gap (where a sphere can pass through)	100 mm
Minimum handrail loading (force)	1.5 kN
Minimum infill panels loading (force)	1.5 kN
CONCLUSION	The Boplan Armco barrier is fully compliant with BS6180:1995

Other recommendations

In short	A recommendation published in 2002 by the British Institute of Civil Engineers (ICE)
Minimum impact height	445 mm
Anti-climb barrier	The barrier should be designed in such a way that it is not possible to climb it.
CONCLUSION	The Boplan Armco barrier fulfils the recommendations.

SAFETY BARRIER STRENGTH REQUIREMENTS FOR PARKINGS ACCORDING TO BS6399

-  1/2x force
-  1x force
-  2x force

