





APPLICATIONS

UNDERGROUND

FLAGON BSL

TECHNICAL DATA SHEET APTDS-E-28-06

DESCRIPTION

FLAGON BSL membrane is a non-reinforced, synthetic PVC-P membrane made by co-extrusion. It is highly resistant to attack by microorganisms and perforation by roots. It is a different colour on each side:

- the upper surface (light green), which accounts for less than 20% of the total thickness, forms the "signal layer".
- the underside (dark grey) is highly resistant to puncture and perforation by roots.

FLAGON BSL is not UV resistant.

MAIN ADVANTAGES

- · Excellent weldability
- Includes a signal layer
- High resistance to attack by micro-organisms and
- · perforation by roots
- · Can be used in the Flag Vacuum system

USE - APPLICATION

FLAGON BSL is a two-coloured membrane used as a waterproofing layer in civil engineering and building structures, such as:

- · Tunnels and buried galleries
- Cut and cover tunnels
- · Underground works
- Coverings of buried structures
- Underground car parks

SUGGESTED INSTALLATION EQUIPMENT

- Manual welding with hot air
- · Automatic welding machine with hot air
- Automatic welding machine with double track Saldamax

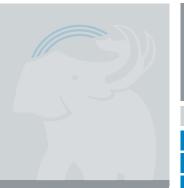
PRODUCTION STANDARDS

	FLAGON BSL			
Thickness	1.5 / 2.0 mm			
Number of rolls on each pallet	23(1.5mm) / 18(2.0mm)			
Roll length / width	20m(other lengths available on request) / 2.10m			
Surface colour	Light green			











APPLICATIONS

UNDERGROUND

FLAGON BSL

TECHNICAL DATA SHEET APTDS-E-28-06

PROPERTIES

Properties		FLAGON BSL			
		BSL 1.5	BSL 2.0	Test method	
Thickness (mm)		1.5 (±5%)	2.0 (±5%)	EN 1849-2	
Mass per unit area (kg/m²)		2.00	2.60	EN 1849-2	
Dimensional stability (%)		≤ 2	≤ 2	EN 1107-2	
Tensile strength (N/mm²)	-Longitudinal -Trasversal	> 15 > 14	> 15 > 14	EN ISO 527-3 EN 12311-2	
Elongation at break (%)	-Longitudinal -Trasversal	> 300 > 300	> 300 > 300	EN ISO 527-3 EN 12311-2	
Water permeability after 6 hrs at 0.5Mpa		Watertight < 10-6m3m-2d-1	Watertight < 10-6m3m-2d-1	EN 1928 (B) EN 14150	
Static puncture resistance(kg)		> 20	> 20	EN 12730	
Tear strength (N/mm)		≥ 45	≥ 45	ISO 34 sample fig.2	
Cold bending (°C)		≤ - 25	≤ - 25	EN 495/5	
Resistance to perforation by roots		No perforation	No perforation	CEN TS 14416	
Reaction to fire		Е	Е	EN 13501-1	
Joint peel resistance (N/50mm)		≥ 200	≥ 200	EN 12316-2	
Water vapour transmission (µ)		20,000	20,000	EN 1931	

(All values are nominal)

APPROVAL/STANDARD

FLAGON BSL is designed and manufactured to meet international standards:

Polymeric sheets for roof waterproofing according to EN 13491.

Polymeric PVC sheets for waterproofing according to GB 12952, Type H.



