FLAGON CSL 1.2, 1.5, 1.8 and 2.0 mm

PVC-P MEMBRANE FOR HYDRAULIC WORKS

USE - APPLICATION

FLAGON CSL is a thermoplastic membrane made of PVC-P, specifically designed for waterproofing of basins, tanks, canals and similar structures.

This membrane can contain salt or fresh water and low-concentration liquid chemicals. To verify the compatibility with the specific chemical liquids, please contact the technical office CIVILROCK (tech-office@flag.it).

The sheets are welded together by applying hot air or using hot wedge, with manual or automatic welder. The welding can be made either with a track that with double track. The double track allow to perform a pneumatic test with air.

FLAGON CSL is compatible with all the accessories and membranes in the FLAGON PVC range.

DESCRIPTION

FLAGON CSL membrane is a synthetic membrane made by co-extrusion from plasticised PVC. It has different physical-chemical properties on each side:

- the upper surface is treated against UV rays
- the underside is highly resistant to puncture and perforation by roots

Any tears in the upper layer of the membrane can be seen immediately due to the difference in colour between the two sides (signal layer).

CIVILROCK attaches the highest importance to the quality of its products. This is why we operate a quality assurance system according to ISO 9001 BSI certified.

MAIN ADVANTAGES

- High resistance to weathering and UV rays
- High elongation at break
- High mechanical resistance
- High puncture resistance
- Resistance to perforation by roots
- Includes a signal layer

SUGGESTED INSTALLATION EQUIPMENT

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

CIVILROCK reserves the right, as technology and know-how progress, to modify without warning the composition and conditions of use of its materials, and subsequently their price. As a result, orders shall only be accepted on the basis of the terms and technical specifications applicable at the time of receipt.

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Technical data sheet No. WPSIT0023-14.01

Cancels and replaces N° 2001-501 (ENG)

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PVC-P MEMBRANE FOR HYDRAULIC WORKS

CHARACTERISTICS

	Standard	CSL 1.2	CSL 1.5	CSL 1.8	CSL 2.0
Thickness (mm)	EN 1849-2	1.2 (±5%)	1.5 (±5%)	1.8 (±5%)	2.0 (±5%)
Mass per unit area (kg/m²)	EN 1849-2	1.56	1.95	2.34	2.60
Tensile strength (N/mm²)	EN 527-3	≥ 17.5 (L/T)			
Breaking strength (%)	EN 527-3	≥ 300			
Cold bending (°C)	EN 495-5	≤ - 30			
Water permeability after 6 hrs at 0.5Mpa	EN 1928 (B) EN 14150	Watertight $< 10^{-6} m^3 m^{-2} d^{-1}$			
Resistance to perforation by roots	CEN TS 14416	No perforation			
Tear resistance (N/mm)	EN 12310-2	≥ 80			
	ISO 34 sample fig.2	≥ 45			
Static puncture resistance (N)	EN 12236	> 1 450	> 1 800	> 2 160	> 2 450
Durability: Oxidation, variation in tensile properties (%) Weathering, variation in tensile properties (%)	 EN 14575 EN 12224	 ≤ 25 ≤ 25			
Resistance to thermal ageing in water: variation in tensile strength (%) mass loss (%)	 EN 14415 (A and B)	 < 25 < 5			

PRODUCTION STANDARD

Thicknesses	1.2 mm	1.5 mm	1.8 mm	2.0 mm
Number of rolls on each pallet	28	23	18	18
Roll length / width	20ml (other lengths available on request) / 2.10ml			
Colours available	Light grey (top surface) / Dark grey (underside) Basalt grey (top surface) / Dark grey (underside) (on request)			

CE MARKING

Unique identification code of the product-type: WPSIT0023
FLAGON CSL membranes are produced by the FLAG Spa factory (SOPREMA group) in Chignolo d'Isola (Italy) and are CE marked no. 1085-CPD-007 in accordance with EN 13361:2004+A1:2006 and EN 13362:2005.

CERTIFICATION

FLAGON CSL has obtained the following certifications:

France:

- Mentioned in CPP (Technical specifications): Basins, Tanks, Canals, Water towers and similar structures, by DEKRA.
- Certification ASQUAL for FLAGON CSL 1.2 mm and FLAGON CSL 1.5 mm

Russia:

- NPO Fire Center Certification

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