

# FLAGON E 1.2, 1.5 and 2.0 mm

## PVC-P MEMBRANE FOR HYDRAULIC WORKS

### USE

FLAGON E is a thermoplastic membrane made of PVC-P, specifically designed for antipollution tanks, reservoirs used to collect wasted water and liquid manure tanks and also where the waterproofing is in contact with bacterial agents. It is extremely resistant to attacks by biological organisms such as fungus, bacteria and spores.

FLAGON E membrane is also resistant to the weather and UV rays.

The thickness of the geomembrane will be chosen depending its exposure level.

To verify the compatibility with the specific chemical liquids, please contact the technical department ([civilrock@soprema.com](mailto:civilrock@soprema.com)).



### APPLICATION

FLAGON E membrane is placed on a mechanical protection geotextile.

The sheets are welded together by applying hot air, with manual or automatic welding machine. The welding can be made either with a single track or with double track. The double track allows to perform a pneumatic test with air.

FLAGON E is compatible with all the accessories and membranes within FLAGON PVC range.

When necessary, FLAGON E geomembrane can be covered with a mechanical geocomposite protection as TILTEX.

### DESCRIPTION

FLAGON E is a synthetic membrane made by co-extrusion from plasticized PVC with high resistance to attack by micro-organism, that is dark grey in color.

SOPREMA prides itself in working with the highest quality products. We operate with quality assurance systems, and are certified ISO 9001.

✓ Chemical resistance

✓ UV resistance

✓ High mechanical resistance



## CHARACTERISTICS

ESSENTIAL CHARACTERISTIC	Standard	E 1.2 mm	E 1.5 mm	E 2.0 mm	EN 13361
Tensile strength (N/mm <sup>2</sup> )	EN ISO 527-3	≥ 17,5 (L/T)			
Static puncture resistance (N)	EN ISO 12236	> 1 450	> 1 800	> 2 450	
Water permeability	EN 14150	< 10 <sup>-6</sup> m <sup>3</sup> m <sup>-2</sup> d <sup>-1</sup>			
Durability: - Oxidation, variation in tensile properties (%) - Environmental stress cracking - Weathering, variation in tensile properties (%)	EN 14575 ASTM D 5397 EN 12224	≤ 25 not applicable ≤ 25			
Gas tightness	ASTM D 1434	not applicable			
Dangerous substances	-	none			EN 13492

ADDITIONAL CHARACTERISTICS	Standard	E 1.2 mm	E 1.5 mm	E 2.0 mm
Thickness (mm)	EN 1849-2	1.2 (±5%)	1.5 (±5%)	2.0 (±5%)
Mass per unit area (kg/m <sup>2</sup> )	EN 1849-2	1.66	1.95	2.60
Cold bending (°C)	EN 495-5	≤ - 30		
Elongation at break (%)	EN ISO 527-3	≥ 300		
Resistance to perforation by roots	CEN TS 14416	No perforation		
Resistance to micro-organism	AFNOR NFX 41514 ASTM G 21-90	No proliferation		
Tear resistance (N/mm)	EN 12310-2 ISO 34 (fig2)	≥ 80 ≥ 45		
Resistance to thermal ageing in water: - variation in tensile strength (%) - mass loss (%)	EN 14415 (A and B)	< 25 < 5		

## PACKAGING

	1.2	1.5	2.0
Thickness (mm)	1.2	1.5	2.0
Number of rolls on each pallet	28	23	18
Roll length / width (m)	20 ml / 2.10 ml (other lengths available on request)		
Color	Dark grey		

## CE MARKING

Unique identification code of the product-type: WPSIT0027. FLAGON E membranes are produced in SOPREMA factory in Chignolo d'Isola (Italy) and are CE marked n° 1085-CPR-0008 in accordance with EN 13361 and CE marked n° 1085-CPR-0559 in accordance with EN 13492.

## CERTIFICATIONS

**France:** Mentioned in CPP (Technical specifications): Basins, Tanks, Canals, Water towers and similar structures, by DEKRA.



## TECHNICAL DATA SHEET

TDS N° WPSIT0027.b  
Cancels and replaces WPSIT0027.a

