

Technical Data Sheet N° WPSIT0029-17.02

# DESCRIPTION

Modified polyolefin TPO synthetic membrane obtained by coextrusion reinforced by a polyester mesh, coupled on the back sheet with a non-woven felt.

This compound contains special pigments, they confer to the membrane a white colouring and a high solar reflection index (SRI). Furthermore the membrane is featured by a very high resistance to weather agents and UV rays on all the thickness.

Manufactured in a plant certified by UNI EN ISO 9001 (Quality management system) and UNI EN ISO 14001 (environmental management system).

Setting performed by applicators approved by Flag S.p.A. Finishing and accessories composed by elements produced and approved by Flag S.p.A.

### **FEATURES**

- High solar reflection index (SRI)
- Weatherproof and UV resistance
- Resistant to wind stress
- Mechanical resistance and resistance to punching
- Adaptability to structural movements
- Excellent flexibility at low temperatures

# **AREAS OF USE**

ROOFING

- Exposed roof, with mechanical fastening system
- Roofings with high SRI (Cool Roof Effect)

	EP/PR-F 1,50 ENERGY PLUS	EP/PR-F 1,80 ENERGY PLUS	EP/PR-F 2,00 ENERGY PLUS	EP/PR-F 2,40 ENERGY PLUS	Test method
Solar reflection index (SRI)	99	99	99	99	ASTM E 1980

Tests performed at the Mechanical and Civil engineering Dept./EELab (Energy Efficiency Laboratory) – University of Modena and Reggio Emilia

### PROPERTIES

		EP/PR-F 1,50 ENERGY PLUS	EP/PR-F 1,80 ENERGY PLUS	EP/PR-F 2,00 ENERGY PLUS	EP/PR-F 2,40 ENERGY PLUS	Test method
Thickness	(mm)	1,50	1,80	2,00	2,40	EN 1849-2
Weight	(kg/m²)	1,60	1,88	2,05	2,42	EN 1849-2
Tensile strength	(N/5cm)	≥ 1100	≥ 1100	≥ 1100	≥ 1100	EN 12311-2
Elongation to break	(%)	≥ 15	≥ 15	≥ 15	≥ 15	EN 12311-2
Tear resistance	(N)	≥ 300	≥ 300	≥ 300	≥ 300	EN 12310-2
Resistance to impact	(mm)	≥ 800	≥ 900	≥ 1250	≥ 1500	EN 12691
Cold bending	(°C)	≤ - 40	≤ - 40	≤ - 40	≤ - 40	EN 495-5
Hydrostatic pressure resistance (6 hours at 0,5 Mpa)		no leakage	no leakage	no leakage	no leakage	EN 1928 met. B
Dimensional stability	(%)	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5	EN 1107-2
Resistance to artificial weathering	(U.V)	no surface cracking	no surface cracking	no surface cracking	no surface cracking	EN 1297
Resistance to static punching	(kg)	≥ 20	≥ 20	≥ 20	≥ 20	EN 12730
Fire resistance		E	E	E	E	EN ISO 11925-2 EN 13501-1

### **PRODUCTION STANDARD**

Thickness	1,50 mm	1,80 mm	2,00 mm	2,40 mm	
Width	2,10 m	2,10 m	2,10 m	2,10 m	
Number of rolls on each pallet	12	12	12	6	
Length	20 m	20 m	20 m	20 m	
Colour (surface / underside)	WHITE / TNT				

#### **CE MARKING**

Unique identification code of the product-type: WPSIT0029

FLAGON EP/PR-F Energy Plus membranes are produced by the FLAG Spa factory (SOPREMA group) in Chignolo d'Isola (Italy) and are CE marked no.1085-CPR-011 in accordance with EN 13956:2012.

Due to its formulation, the liner is NOT subject to the requirements set forth in the CLP Regulation (EC) No 1272/2008 and EU n° 487/2013 and subsequent amendments on dangerous substances. If the product should be disposed of as a waste, we recommend sending it to an authorised landfill site or to an incinerator equipped with post-combustion chamber and fumes washing system. The data herewith indicated, apart from those required by EC branding, are not exhaustive and Flag SpA may modify them without previous notice. Flag SpA, has the right to modify the product at any time and without previous notice, in any of its aspect, and to stop its production.

Flag SpA 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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