

FLAGON EP/PR Energy Plus

Description

Membrane composed of modified polyolefin (TPO) and a polyester reinforcement.

The top has a very high reflectivity.

Used as single layer waterproofing where a higher reflectivity of solar radiation is desired.

The membrane is distinguished by a very high resistance to weathering and UV-ray and with a high resistance to puncture.

Characteristics

Composition	Standard	Unit	Value				Tolerance
Material			modified polyolefin (TPO)				
Reinforcement			polyester				
Colour upper side			traffic white (RAL 9016)				
Technical characteristics							
Membrane thickness	EN 1849-2	mm	1,5	1,8	2,0	2,4	± 5 %
Mass	EN 1849-2	kg/m²	1,40	1,68	1,85	2,35	
Tensile force (L / T)	EN 12311-2	N/50 mm	≥ 1100				
Elongation at maximum tensile force (L / T)	EN 12311-2	%	≥ 15				
Tear resistance (L / T)	EN 12310-2	N	≥ 300				
Resistance to impact	EN 12691-A	mm	≥ 800	≥ 900	≥ 1250	≥ 1500	
Foldability at low temperature	EN 495-5	°C	≤ -40				
Peel resistance joint	EN 12316-2	N/50 mm	≥ 200				
Shear resistance joint	EN 12317-2	N/50 mm	≥ 600 rupture outside joint				
Watertightness	EN 1928		pass				
Dimensional stability	EN 1107-2	%	≤ 0,5				
Durability: - exposure to UV, heat and water	EN 1297		grade 0				
Resistance to root penetration	EN 13948		conform				
Resistance to static loading	EN 12730-B	kg	≥ 20				
Reaction to fire	EN 11925-2 / EN 13501-1		E				
Resistance to static puncture	EN ISO 12236	N	≥ 2600	≥ 2800	≥ 2900	≥ 3200	
Water permeability	EN 14150	m³/(m².d)	< 10 ⁻⁶				
Water vapour diffusion resistance coefficient (μ)	EN 1931		150000				± 30 %
Durability: - oxidation, variation in tensile properties	EN 14575	%	≤ 25				
- environmental stress cracking	ASTM D 5397	h	≥ 200				
- weathering, variation in tensile prop. after 10500 h	EN 12224	%	≤ 25				
SRI (Solar Reflectance Index)	ASTM E 1980-1		107				
Packing							
Length of the roll	EN 1848-2	m	≥ 20	≥ 20	≥ 20	≥ 20	
Width of the roll	EN 1848-2	m	≥ 2,10				
Mass/roll		kg	± 59	± 71	± 78	± 99	
Rolls/pallet			23	18	18	11	

NPD = no performance determined

Installation

Mechanically applied waterproofing.

The overlaps need to be welded with hot air.

The membrane is applied in conjunction with accessories from Flag.

Certifications

- BBA 00/3750 (1,2 - 1,5 mm) (UK)
 - Systems with this product (1,2 mm) as waterproofing can meet classification Broof (t4) according to EN 13501 part 5.
- See certificate for more information.

Special indications

Hygiene, Health and Environment

The product does not contain any substance which is likely to be detrimental to your health or to the environment and complies with generally admitted Health and Safety Requirements.
For more information, please refer to the relevant safety data sheet.

Quality-, Environment- and Safety Management

SOPREMA always recognises as a high level of importance the quality of the products, the environment and safety.
For this reason, we operate independently monitored Quality and Environment Assurance Systems in line with **EN ISO 9001** and **EN ISO 14001**.