SOPRALENE® FLAM 180 FR+ GR

Heat-Welded, Fire Retardant, Granulated SBS-Modified Bitumen Membrane





APPLICATIONS

ROOFING

PRODUCT DATA SHEET PDS10047 - REV 230626

PRODUCT NUMBERS:

- 01526 32.8 ft x 39.4 in (10.0 x 1.0 m) Roll Standard white granules (WH)
- 05013 32.8 ft x 39.4 in (10.0 x 1.0 m) Roll Highly reflective white granules (SG)

Contact SOPREMA® Customer Service or your sales representative for other granule color options and special order requirements.

DESCRIPTION & FEATURES:

SOPRALENE FLAM 180 FR+ GR (fire retardant+, granules) is a SBS-modified bitumen membrane approved for use in roofing assemblies as a cap ply. SOPRALENE FLAM 180 FR+ GR is reinforced with a tough, dimensionally stable non-woven polyester mat that is saturated and coated on both sides with a proprietary formulation of elastomeric styrene-butadiene-styrene (SBS) polymer modified bitumen.

- SBS rubber polymer enhances the asphalt blend adding elongation, elasticity and flexibility to the sheet
- Reinforced with a non-woven polyester mat that increases the membrane's strength and puncture resistance
- Has additional fire retardant to achieve UL and FM fire classification for steeper roof slope conditions
- Granule surfacing provides added resistance to weathering and foot traffic
- Backed with a polyolefin burn-off film to optimize heat welding
- Meets or exceeds requirements of ASTM D6164, Type I, Grade G

USES:

SOPRALENE FLAM 180 FR+ GR is used as a component in the following systems.

USE	OVERLYING MATERIAL				
Field Cap Ply ¹	N/A				
Flashing Cap Ply ¹	N/A				

¹ Refer to SOPREMA's SBS-Modified Bitumen Roofing Membrane Technical Manual

APPLICATION:



Prior to installation, unroll **SOPRALENE FLAM 180 FR+ GR** onto the roof surface and allow to relax. Position **SOPRALENE FLAM 180 FR+ GR** in desired position and back roll the product. **SOPRALENE FLAM 180 FR+ GR** is then heat welded to approved substrates.

Refer to the SOPREMA SBS-Modified Bitumen Membrane Roofing Technical Manual for complete application guidelines.

STORAGE:

Store rolls in an upright position to prevent damage. Store in a clean, dry location and cover as necessary to protect from environmental damage such as extreme cold, heat or moisture.



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TECHNICAL INFORMATION & TESTING:

SHEET PROPERTIES					
PROPERTY	VALUE				
Elastomeric bitumen	Proprietary blend of bitumen and SBS polymers				
ASTM standard	D6164, Type I, Grade G				
Reinforcement	Non-woven polyester				
Top surfacing	Ceramic coated granules				
Back surfacing	Polyolefin film				
Selvage surfacing	Polyolefin film				
Selvage width, in (mm)	3 (76)				

DIMENSIONS & MASS					
PROPERTY	VALUE	ASTM TEST METHOD			
Length, ft (m)	32.8 (10.0)	D5147			
Width, in (m)	39.4 (1.0)	D5147			
Coverage,* ft² (m²)	97.9 (9.1)	D5147			
Roll weight, lb (kg)	123 (55.7)	D5147			
Rolls per pallet	25	D5147			
Pallet weight, lb (kg)	3,125 (1,415)	D5147			
Thickness (minimum), mils (mm)	150 (3.8)	D5147			
Thickness (nominal), mils (mm)	157 (4.0)	D5147			
Thickness (selvage), mils (mm)	118 (3.0)	D5147			
Net mass per unit area, lb/100 ft² (g/m²)	110 (5,371)	D5147			
Bottom coating thickness, mils (mm)	≥ 40 (1.0)	D5147			

 $^{{\}it *Coverage\ rate\ as\ reported\ assumes\ installation\ using\ side\ and\ end\ lap\ recommendations.}$

PHYSICAL PROPERTIES						
PROPERTY	MD	XMD	ASTM TEST METHOD			
Peak load @ 0°F (-18°C), lbf/in (kN/m)	115 (20.1)	90 (15.8)	D5147			
Elongation at peak load @ 0°F (-18°C), %	35	40	D5147			
Peak load @ 73.4°F (23°C), lbf/in (kN/m)	85 (14.9)	65 (11.4)	D5147			
Elongation at peak load @ 73.4°F (23°C), $\%$	55	60	D5147			
Ultimate Elongation @ 73.4°F (23°C), %	65	80	D5147			
Tear strength @ 73.4°F (23°C), lbf (N)	125 (556)	85 (378)	D5147			
Low temperature flexibility, $^{\circ}F$ $(^{\circ}C)$	-15 (-26)	-15 (-26)	D5147			
Dimensional stability, %	< 0.5	< 0.5	D5147			
Compound stability, °F (°C)	240 (116)	240 (116)	D5147			
Granule embedment, q	1.5 avg; 2.0	D5147				

Data is represented by average values, unless noted otherwise.



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SUSTAINABILITY



COOL ROOF RATING									
PRODUCT	SOLAR REFLECTANCE		THERMAL EMITTANCE		SRI				
SOPRALENE FLAM 180 FR+ GR	0.26	0.23	0.87	0.90	25	23			
Standard white granules (WH)	initial	3 year	initial	3 year	initial	3 year			
SOPRALENE FLAM 180 FR+ GR Highly reflective white granules (SG)	0.70	0.62*	0.90	0.90*	86	75*			
	initial	3 year	initial	3 year	initial	3 year			

CRRC published results for Solar Reflectance, Thermal Emittance and SRI results were tested and evaluated in accordance with ASTM C1549, C1371, E1980, D7897 and the CRRC-1 Product Rating Program Manual.

TESTING & APPROVALS:









WARRANTY:

For more information refer to www.SOPREMA.us or contact your SOPREMA representative.



^{*} CRRC Rapid Ratings. Refer to Cool Roof Ratings Council (CRRC).