SOPRALENE® FLAM 180 FR GR

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





APPLICATIONS

ROOFING

PRODUCT DATA SHEET PDS10007 - REV 230802

PRODUCT NUMBERS:

- 03961 32.8 ft x 39.4 in (10.0 x 1.0 m) Roll
 Standard white granules (WH)
- 05003 32.8 ft x 39.4 in (10.0 x 1.0 m) Roll Highly reflective white granules (SG)
- 03942 **32.8** ft x **39.4** in (**10.0** x **1.0** m) Roll Smog reducing granules (ECO₃)

Standard granule colors also include grey, tan and TV ALU. Non-standard granule colors include black, brown, dark tan, sienna, light grey, red, green and light blue. Non-standard granule colors require a 650-roll minimum order and extended lead times. Please contact your SOPREMA representative for details.

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
- 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)	109-118 (49.3-53.4)	D5147			
Rolls per pallet	25	D5147			
Pallet weight, lb (kg)	2,775-3,000 (1,255-1,358)	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			

^{*}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), %	40	35	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	0.70	0.62*	0.90	0.90*	86	75*			
Highly reflective white granules (SG)	initial	3 year	initial	3 year	initial	3 year			
SOPRALENE FLAM 180 FR GR	0.10 **	N/A	0.89**	N/A	6**	N/A			
Smog reducing granules (ECO ₃)	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:



HUD MR 1340







NOA # 20-0825.11

WARRANTY:

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



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

^{**} Calculated using internal testing.