SOPRALENE® FLAM 180 FR GR PRODUCT # 03961 (WH) 05003 (SG) 03942 (ECO3)

### PRODUCT DATA SHEET

#### **DESCRIPTION & FEATURES**

SOPRALENE Flam 180 FR GR (fire retardant, granulated) is an SBS-modified bitumen cap ply for use in approved multi-ply membrane and flashing assemblies. SOPRALENE Flam 180 FR GR is composed of a proprietary formulation of elastomeric styrene-butadiene-styrene (SBS) polymer modified bitumen and is reinforced with a tough, dimensionally stable non-woven polyester mat. The topside is surfaced with ceramic coated granules and underside is surfaced with polyolefin burn-off film to optimize heat welding.

SOPRALENE Flam 180 FR GR includes the standard white granules. Contact SOPREMA® Customer Service or your sales representative for other granule color options and special order requirements.



Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRALENE Flam 180 FR GR.

#### **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 Roofing Installation Guide for additional application guidelines.



COOL ROOF RATING						
PRODUCT	SOLAR REFLECTANCE		THERMAL EMITTANCE		SRI	
SOPRALENE Flam 180 FR GR Standard white granules (WH)	0.26 initial	0.23 3 year	0.87 initial	0.90 3 year	25 initial	23 3 year
SOPRALENE Flam 180 FR GR Highly reflective white granules (SG)	0.70 initial	0.62* 3 year	0.90 initial	0.90* 3 year	86 initial	75 3 year
SOPRALENE Flam 180 FR GR Smog reducing granules (ECO <sub>3</sub> )	0.10 initial**	N/A	0.89 initial**	N/A	6 initial**	N/A

\*CRRC Rapid Ratings. Refer to Cool Roof Ratings Council (CRRC).
\*\*Calculated using internal testing

ASTM STANDARD	LENGTH (ft)	WIDTH (in)	COVERAGE* (ft²)	THICKNESS (mils)	ROLL WEIGHT (lb)	ROLLS/ PALLET (pallet weight)
D6164 Type 1, Grade G	<b>32.8</b> (10.0 m)	<b>39.4</b> (1.0 m)	<b>97.9</b> (9.1 m²)	160 (4.0 mm)	<b>118</b> (53.5 kg)	<b>25</b> (3,000 lb/ 1,361 kg)

<sup>\*</sup> Coverage rate as reported assumes installation using side and end lap recommendations.





# TECHNICAL INFORMATION & TESTING

SHEET PROPERTIES				
Reinforcement	Non-woven polyester			
Elastomeric bitumen	Proprietary blend of bitumen and SBS polymers			
Top surfacing	Ceramic coated granules			
Back surfacing	Polyolefin film			
Selvage surface	Polyolefin film			
Selvage width, in (mm)	3 in (76 mm)			
End lap, in (mm)	6 in (152 mm)			

DIMENSIONS & MASS						
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PROF	PROPERTY					
Thickness, mils (mm)	160 (4.0)	ASTM D5147				
Thickness @ selvage, mils (mm)	118 (3.0)	ASTM D5147				
Net mass per unit area, lb/100ft² (g/m²)	110 (5371)	ASTM D5147				
Bottom coating thickness, mils (mm)	≥ 40 (1.0)	ASTM D5147				

PHYSICAL PROPERTIES						
PROPERTY	MD	XMD	TEST METHOD			
Peak load @ 0°F (-18°C), lbf/in (kN/m)	115 (20.1)	90 (15.8)	ASTM D5147			
Elongation at peak load @ 0°F (-18°C), %	35	40	ASTM D5147			
Peak load @ 73.4°F (23°C), lbf/in (kN/m)	85 (14.9)	65 (11.4)	ASTM D5147			
Elongation at peak load @ 73.4°F (23°C), %	55	60	ASTM D5147			
Ultimate elongation @ 73.4°F (23°C), %	65	80	ASTM D5147			
Tear strength @ 73.4°F (23°C), lbf (N)	125 (556)	85 (378)	ASTM D5147			
Low temperature flexibility, °F (°C)	-15 (-26)	-15 (-26)	ASTM D5147			
Dimensional stability, %	< 0.5	< 0.5	ASTM D5147			
Compound stability, °F (°C)	240 (116)	240 (116)	ASTM D5147			
Granule embedment, g	< 1.5 avg;	ASTM D5147				
Cyclic fatigue, condition 5	Pa	ASTM D5849				

<sup>\*</sup> Data is represented by average values, unless noted otherwise.

## TESTING & APPROVALS







