### PRODUCT DATA SHEET

#### **DESCRIPTION & FEATURES**

COLPHENE Flam 180 FR GR (fire retardant, granulated) is an SBS-modified bitumen cap ply for use in approved multi-ply waterproofing assemblies. COLPHENE 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.



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 COLPHENE Flam 180 FR GR.

#### **APPLICATION**

Prior to installation, unroll COLPHENE Flam 180 FR GR onto the surface and allow to relax. Position COLPHENE Flam 180 FR GR in desired position and back roll the product. COLPHENE Flam 180 FR GR is then heat welded to approved substrates. Refer to SOPREMA's specifications and installation instructions for additional application guidelines.







**HEAT-WELDED** 

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)	39.4 (1.0 m)	<b>97.9</b> (9.1 m²)	157 (4.0 mm)	118 (53.5 kg)	<b>25</b> (3,000 lb/ 1,361 kg)

 $<sup>^{\</sup>star}$  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						
PROF	TEST METHOD					
Thickness, mils (mm)	157 (4.0)	ASTM D5147				
Thickness @ selvage, mils (mm)	118 (3.0)	ASTM D5147				
Net mass per unit area, lb/100ft² (g/m²)	110 (5350)	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; 2.0 max SG		ASTM D5147				
Hydrostatic headpressure	Pass		ASTM D5385				
Water vapor permeance, perms (ng/s·m²·pa)	<0.004 (0.23)	<0.004 (0.23)	ASTM E96 Procedure B				
Puncture resistance, lbf (N)	215 (956)	215 (956)	ASTM E154				

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

## TESTING & APPROVALS





