

# DynaLastic® 180 FR

Fire-Retardant, Polvester-Reinforced, SBS Mineral-Surfaced Cap or Flashing Sheet

## Meets the requirements of ASTM D 6164, Type I, Grade G

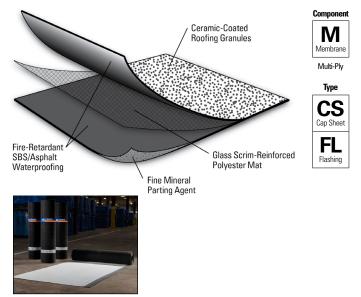
# **Features and Components**

DynaLastic 180 FR is used as a polyester-reinforced mineral-surfaced cap or flashing sheet in a variety of multi-ply roofing systems.

**Ceramic-Coated Roofing Granules:** Specifically engineered for optimal embedment in the SBS-blend sheet. The ceramic coating promotes excellent long-term adhesion. The granules, available in White or Black.

High-Quality SBS Rubber and Asphalt Blend: Lends elasticity and flexibility to the sheet. The elongation and recovery properties allow the product to easily accommodate the continual expansion and contraction experienced on all roofs. The FR blend contains additional fire-retardant additives.

Polyester-Reinforced Mat: Polyester mat with glass-scrim reinforcement offers robust tear strength and puncture resistance, allowing for high wind performance and an excellent hail rating. The sheet also exhibits strong dimensional stability and enhanced elongation.



Colors: White, Black, Tan & 3M™ Smog Reducing Granule

System Compatibility This product may be used as a component in the following systems. Please reference product application for specific installation methods and information.

₽	BUR	APP		SBS				
Aulti-I	HA	CA	HW	HA	CA		SA	MF
<b>Ž</b>	Compatible with the selected multi-ply systems above							

Key: HA = Hot Applied CA = Cold Applied HW = Heat Weldable SA = Self Adhered MF = Mechanically Fastened IW = Induction Weld BA = Ballasted AD = Adhered

문	TP0			PVC			EPDM			
gle	MF	AD	SA	IW	MF	AD	IW	MF	AD	BA
Sing	Compatible with the sele					ed singl	e ply sy	stems a	bove	

### **Energy and the Environment**

Test	Initial	3-Year Aged	
Reflectivity* (ASTM C 1549)	0.28	0.25	
Emissivity* (ASTM C 1371)	0.89	0.92	
Solar Reflectance Index* (SRI) - E 1980	29	26	
Pre-Consumer Recycled Content	0'	%	
Post-Consumer Recycled Content	0%		

<sup>\*</sup>Standard White Granule only

### **Peak Advantage® Guarantee Information**

Systems	Guarantee Term
When used in most 2-5 ply JM SBS systems.*	Up to 30 years

<sup>\*</sup>Contact JM Technical Services for specific system requirements for guarantee lengths.

#### **Codes and Approvals**







#### **Product Application**





Cold Applied

- May be installed in Type IV asphalt or in an approved JM adhesive
- · Laps may be installed using heat-welding techniques
- Refer to JM SBS modified bitumen specifications and detail drawings for application and slope information

#### **Packaging and Dimensions**

Roll Coverage*	95.8 ft <sup>2</sup> (8.9 m <sup>2</sup> )				
Roll Length	32' 10" (10.01 m)				
Roll Width	39 ¾" (1 m)				
Roll Weight	101 lb (46 kg)				
Rolls per Pallet	20				
Pallet Weight	2,198 lb (997 kg)				
Pallets per Truck**		22			
Producing Locations	South Gate, CA	Macon, GA	Plattsburgh, NY		

<sup>\*</sup>Assumes a 4" side lap \*\*Assumes 48' flatbed truck.



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# **Tested Physical Properties**

				ASTM Standard for ASTM D 6164,		DynaLastic 180 FR		
Physical Properties			Test Method	Type I, Grade G (Min.)	MD*	XMD**		
ŧ	Tensile Tear	D 5147	55 lbf (245 N)	125 lbf (556 N)	90 lbf (400 N)			
Strength	Peak Load at 0°F (-18°C)	D 5147	70 lbf/in (12 kN/m)	110 lbf/in (19.3 kN/m)	90 lbf/in (15.8 kN/m)			
St	Peak Load at 73.4°F (23°C)	D 5147	50 lbf/in (8.8 kN/m)	80 lbf/in (14.0 kN/m)	60 lbf/in (10.5 kN/m)			
	Low Tomp Flovibility	Unconditioned	D 5147	0°F (-18°C)	-20°F (-29°C)			
	Low Temp. Flexibility	90-Day Heat Conditioned	D 5147	0°F (-18°C)	-20°F (-29°C)			
	Compound Stability		D 5147	215°F (102°C)	250°F (121°C)			
. <u>≥</u> .	Granule Loss	D 4977	2 g (0.07 oz)	0.7 g (0.02 oz)				
Longevity	Thickness	D 5147	130 mil (3.3 mm)	157 mil (4.0 mm)				
2	Selvage Edge Thickness	D 5147	N/A	119 mil (3.0 mm)				
	Elongation at Peak Load at 0°F	D 5147	20%	35%	40%			
	Elongation at Peak Load at 73.4	D 5147	35%	55%	60%			
	Ultimate Elongation at 73.4°F (23°C)		D 5147	38%	70%	80%		
93	90-Day Heat-Conditioned Peak Load at 0°F (-18°C)		D 5147	70 lbf/in (12 kN/m)	110 lbf/in (19.3 kN/m)	90 lbf/in (15.8 kN/m)		
Aged Performance	90-Day Heat-Conditioned Elongation at Peak Load at 0°F (-18°C)		D 5147	20%	25%	25%		
erfor	90-Day Heat-Conditioned Peak Load at 73.4°F (23°C)		D 5147	50 lbf/in (8.8 kN/m)	85 lbf/in (14.9 kN/m)	65 lbf/in (11.4 kN/m)		
led P	90-Day Heat-Conditioned Elonga	D 5147	35%	35%	45%			
Ā	90-Day Heat-Conditioned Ultim	D 5147	38%	45%	45%			
ion	Dimensional Stability	D 5147	1.0%	0.2%	0.1%			
Installation	Net Mass per Unit Area	D 146	75 lb/100 ft² (34 kg/9.29 m²)	93 lb/100 ft <sup>2</sup> (42 kg/9.29 m <sup>2</sup> )				
Inst	Roll Weight			N/A	101 lb (46 kg)			

<sup>\*</sup>MD = Machine Direction

Note: All data represents tested values.

# **Supplemental Testing**

Physical Properties		ASTM Test Method	DynaLastic 180 FR Result
Cualia Inint Diantanana	Initial	D 5849	Pass at 500 cycles*
Cyclic Joint Displacement	After 90-Day Heat Conditioning per ASTM D 5147	D 5849	Pass at 200 cycles*
Coefficient of Friction	Static	D 1894	1.32
	Kinetic	D 1894	0.89

<sup>\*</sup>In a min 2-ply system when adhered with any combination of cold applied, hot applied and or heat-weld that is approved by JM for application.

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The Safety Data Sheet is available by calling (800) 922-5922 or on the web at www.jm.com/roofing. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Check with the regional sales representative nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville roofing products and systems, visit www.jm.com/terms-conditions.

<sup>\*\*</sup>XMD = Cross-Machine Direction