

## DynaWeld<sup>™</sup>Cap 180 FR

Fire-Retardant, Glass Scrim/Polyester-Reinforced, SBS Mineral-Surfaced Cap or Flashing Sheet

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

## **Features and Components**

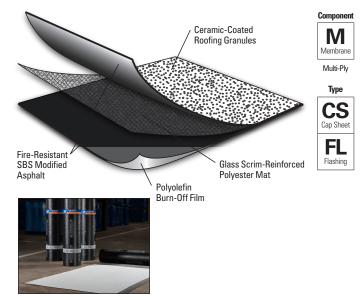
DynaWeld Cap 180 FR is used as a polyester-reinforced mineralsurfaced cap or flashing sheet in a variety of multi-ply roofing systems.

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

**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 Reinforcement 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.

Polyolefin Burn-Off Film: Promotes ease of heat welding.



**Colors:** White, Black, Tan, Brown & 3M<sup>™</sup> Smog Reducing Granule (Black and Tan may require extended lead times.)

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

Ply	BUR	APP		SBS				
Multi-F	HA	CA	HW	HA	CA	HW	SA	MF
Ĭ.	Compatible with the selected multi-ply systems above							

MF AD SA IW MF AD IW MF AD BA

Compatible with the selected single 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

#### **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

 $<sup>\</sup>hbox{$^*$Contact JM Technical Services for specific system requirements or guarantee terms.}$ 

#### **Codes and Approvals**







#### **Product Application**



Heat We

- · Must 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 ft² (8.9 m²)				
Roll Length	32' 10" (10 m)				
Roll Width	39 ¾" (1 m)				
Roll Weight	105 lb (47.6 kg)				
Rolls per Pallet	20				
Pallet Weight	2,230 lb (1,012 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**

Physical Properties			ASTM	Standard for ASTM D 6164,	DynaWeld Cap 180 FR	
			Test Method	Type I, Grade G (Min.)	MD*	XMD**
Strength	Tensile Tear		D 5147	55 lbf (245 N)	125 lbf (556 N)	90 lbf (400 N)
	Peak Load at 0°F (-18°C)	D 5147	70 lbf/in (12.3 kN/m)	110 lbf/in (19.3 kN/m)	90 lbf/in (15.8 kN/m)	
S	Peak Load at 77°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)	-10°F (-23°C)	
	Low Temp. Flexibility	90-Day Heat Conditioned	D 5147	0°F (-18°C)	-10°F (-23°C)	
	Compound Stability		D 5147	215°F (102°C)	250°F (121°C)	
Longevity	Granule Loss		D 4977	2 g (0.07 oz)	0.7 g (0.02 oz)	
	Thickness		D 5147	130 mil (3.3 mm)	157 mil (4.0 mm)	
	Selvage Edge Thickness		D 5147	N/A	110 mil (2.8 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 77°F	D 5147	38%	70%	80%	
ę,	90-Day Heat-Conditioned Peak	D 5147	70 lbf/in (12.3 kN/m)	110 lbf/in (19.3 kN/m)	90 lbf/in (15.8 kN/m)	
Aged Performance	90-Day Heat-Conditioned Elonga	D 5147	20%	25%	25%	
erfor	90-Day Heat-Conditioned Peak	D 5147	50 lbf/in (8.8 kN/m)	85 lbf/in (14.9 kN/m)	65 lbf/in (11.4 kN/m)	
Jed P	90-Day Heat-Conditioned Elonga	D 5147	35%	35%	45%	
Ag	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)	100 lb/100 ft <sup>2</sup> (45.4 kg/9.29 m <sup>2</sup> )		
lust	Roll Weight		D 146	N/A	105 lb (4	17.6 kg)

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

Note: Material tested in accordance with ASTM D 5147 Standard Test Methods for Sampling and Testing Modified Bituminous Sheet Materials.

## **Supplemental Testing**

Physical Properties		ASTM Test Method	DynaWeld Cap 180 FR Result
Cyclic Joint Dioplessment	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
Coefficient of Friction	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.

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