

# JM TPO FB 175 Heavy-Fleece Backed Thermoplastic Polyolefin Membrane for Hot Asphalt Application

### Meets or exceeds the requirements of ASTM D 6878

## **Features and Components**

Integral Polyester Fleece Backing: In-line application of heavy fleece allows for stronger bond for polyester backing that gives flexibility and outstanding membrane protection for hot applied asphalt adhered systems.

One of the Widest Melt Windows: Promotes better welds over a wider variety of speeds and temperatures, and leads to a softer, more flexible and workable sheet.

Reinforced fabric scrim layer and top-ply thickness: Lends to durable physical properties including:

- Long-term weathering, UV resistance and heat-aging properties
- High breaking and tearing strength

Optimized TPO formulation: delivers high-performance ozone resistance, cool roof reflectivity and overall weather resistance.







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

P

Colors

White

٨lc	BUR	APP		SBS					
Aulti-F	HA	CA	HW	HA	CA	HW	SA	MF	
ž	Compatible with the selected multi-ply systems above								

Single 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**

	Standard	Reflectivity Emissivity			
CRRC <sup>®</sup>	White	Initial	0.77	0.87	
UNNU <sup>2</sup>		3 Yr. Aged	0.70	0.86	
CA Title 24	White	Pass	0.77	0.87	
LEED®	White	Initial	95		
(SRI)		3 Yr. Aged	8	5	
Recycled	Post-co	nsumer	0%		
Content	Post-industrial		5%		

The LEED® Solar Reflectance Index (SRI) is calculated per ASTM E1980

## Peak Advantage® Guarantee Information

Product	Guarantee Term		
JM TPO FB 175	15, 20, 25, or 30 years		

#### Codes and Approvals



Installation/Application

AD

**TPO** 



application only.

Refer to JM TPO application guides and detail drawings for instructions. This membrane is approved for hot asphalt

#### **Packaging and Dimensions**

Roll Width	10' (3.05 m)		
Roll Length	50' (15.24 m)		
Roll Coverage	500 ft <sup>2</sup> (46.45 m <sup>2</sup> )		
Rolls per Pallet	8		
Pallet Weight	2,114 lb (958.9 kg)		
Pallets per Truck*	16		
Producing Location	Scottsboro, AL		

\*Assumes 48' flatbed truck and does not reflect pallets of accessories or impact of mixed sizes.

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.

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## **Tested Physical Properties**

Physical Properties		ASTM	Standard for	<b>JM TPO</b> – <b>FB 175</b> <sup>1</sup>	
		Test Method	ASTM D 6878 (Min.)	MD*	XMD**
Strength	Breaking Strength, min, lbf (N)	D 751	220 (976)	545 (2,424)	508 (2,260)
	Elongation at Break, min %	D 751	15	33	33
Stre	Tearing Strength, min, lbf (N)	D 751	45 (200)	64 (285)	185 (823)
	Factory Seam Strength, min, lbf (N)	D 751	66 (290)	171 (761)	
Longevity	Thickness, min, in.	D 751	+/- 10% from Nominal	0.080 (Nominal)	
	Thickness Over Scrim, min, in. (mm)	D 7635	0.015	0.033 (0.84)	
	Water Absorption, max, %	D 471	3.0	0.4	42
Lo	Brittleness Point, max, -40°F	D 2137	No Cracks	Pass	
	Ozone Resistance	D1149	No Cracks	Pa	SS
	Properties after Heat Aging @ 240°F	D 573	Pass/Fail	Pass	
Heat Aged Performance	Breaking Strength, % (after aging)	D 751	90	>90	>90
	Elongation, % (after aging)	D 751	90	>90	>90
	Tearing Strength, % (after aging)	D 751	60	>60	>60
	Weight Change, max, % (after aging)	D 751	±1.0	0.25	
	Linear Dimensional Change, max, % (after 6 hrs @ 158°F)	D 1204	±1.0	<0.1	
Weather Performance	Accelerated Weathering, min	G 151 & G 155	10,080 kj/m²•nm @ 340 nm (4,000 hrs @ 0.70 W)	n 10,080 kj/m² (4,000 hrs)	
Wea Perfon	Cracking (@ 7x magnification)	G 155	No Cracks	Pass	

1. JM TPO FB 175 is comprised of a 80 Mil TPO membrane and an integral fleece backing.

The given physical properties are based on the JM TPO 80 Mil membrane.

\* MD = Machine Direction

\*\* XMD = Cross-Machine Direction

Note: All data represents tested values.

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