JM TPO FB 135™
Fleece Backed Roofing Membrane

Description

JM TPO FB 135 thermoplastic polyolefin (TPO) membranes are reinforced with a polyester fabric and integral polyester fleece backing. The membrane is designed for use in mechanically fastened and fully adhered roofing applications.

Use

Install JM TPO FB 135 Membranes in new, re-roof (tear-off) and re-cover roof constructions. In re-cover constructions, if the existing roof is sound, the single ply membrane can eliminate the cost of disposing the original roof.

Colors

White, Grey* and Tan*

Standard Sizes

Color	
White, Grey* and Tan*	10' x 50' (3.05 m x 15.24 m)

* Grey and tan are special order only.

Installation

Since JM TPO FB 135 Membranes are thermoplastic, they can be rolled out onto the roof substrate and easily welded into one homogeneous sheet using hot-air welding procedures.

JM TPO FB 135 Membranes can be mechanically fastened or adhered to the structural roof deck. Application must be in accordance with JM Peak Advantage® Guarantee requirements, building codes, published standard fastening patterns or adhesives recommendations. Install JM TPO FB 135 products in accordance with current JM TPO Applicator Guides or Detail Drawings.

Approvals

JM mechanically fastened and adhered TPO FB 135 roof systems are classified by UL® (Underwriters Laboratories Inc.) and FM Global (Factory Mutual). When searching in RoofNav for a specific approval, be sure to indicate the mil thickness desired, i.e., JM TPO FB.

Energy and the Environment

CRRC®	Initial	Reflectivity: 0.77	Emissivity: 0.87
California Title 24	Pass	Reflectivity: 0.77	Emissivity: 0.87
ENERGY STAR®	Initial 3 Yr. Aged Cleaned 3 Yr.		Reflectivity: 0.78 Reflectivity: 0.68 No
LEED®	SRI of 101 as tested by ASTM E 1980. Recycled Content: Postconsumer: 0% Postindustrial: 11% Producing Locations: Scottsboro, AL		

Results shown are for the initial reflectivity and emittance for white membranes unless indicated; emissivity values for California Title 24 are tested per ASTM C 1371; LEED emissivity values are tested per ASTM E 408.

JM Peak Advantage Guarantees

Enhanced guarantees are now available on certain systems for wind and puncture. Consult your local sales representative for more information about the new Single Ply Guarantee Charges Requirements Guide for specific guarantee terms and costs.

Product	Mechanically Fastened or Fully Adhered
JM TPO FB 135	15 or 20 year

JM TPO FB 135 Membranes meet or exceed all of the requirements of ASTM D 6878.†

Tested Physical Properties

Property	ASTM Test Method	ASTM Requirements	80 Mil	
Overall Sheet Thickness	D 751	>0.039 in. (1.0 mm)	0.081 in. (2.05 mm)	
Thickness of Coating Over Fabric Weather Side	D 6878	>0.012 in. (.305 mm)	0.035 in. (.889 mm) ±10%	
			MD**	XMD**
Breaking Strength	D 751	>220 lbf (978 N)	372 lbf (1,655 N)	374 lbf (1,664 N)
Elongation at Reinforcement Break	D 751	>15%	38.53%	35.75%
Tearing Strength	D 751	>55 lbf (245 N)	81.9 lbf (364 N)	214 lbf (952 N)
Brittleness Point	D 2137	-40°C (-40°F)	Pass @ -40°C (-40°F)	
Ozone Resistance (no cracks)	D 1149		0 rating	
Heat Aging (Pass/Fail)	D 573	Pass	Pass	

** MD: Machine Direction
XMD: Cross Machine Direction

†JM TPO FB 135 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.

RS-8644 6-10 (Replaces 1-10)

JM TPO FB 135™ (Cont'd)
Fleece Backed Roofing Membrane

JM TPO FB 135 Membranes meet or exceed all of the requirements of ASTM D 6878.†

Tested Physical Properties

Property	ASTM Test Method	ASTM Requirements	80 Mil	
			MD**	XMD**
Post Heat Aged Breaking Strength	D 751	>90% retained values	361 lbf (1,606 N)	378 lbf (1,681 N)
Post Heat Aged Elongation at Reinforcement Break	D 751	>90% retained values	36.67%	34.29%
Post Heat Aged Tearing Strength	D 751	>60% retained values	80.4 lbf (357.64 N)	192.6 lbf (856.73 N)
Post Heat Aged Weight Change	D 1204	±1% max.	<1%	
Post Heat Aged Linear Dimension Change	D 6878	±1% max.	<0%	
Water Absorption	D 471	±3.0% max.	1.4%	
Factory Seam Strength	D 751	>66 lbf (294 N)	96.33 lbf (428.50 N)	
Post Xenon Visual Inspection	D 6878	Pass	Pass	

** MD: Machine Direction
XMD: Cross Machine Direction
†JM TPO FB 135 is comprised of a 80 Mil TPO membrane and an integral fleece backing. The given physical properties and supplemental testing are based on the JM TPO 80 Mil membrane.

Supplemental Testing

Property	ASTM Test Method	ASTM Requirements	80 Mil
Dynamic Puncture	D 5635	N/A	35 Joules
Static Puncture	D 5602	N/A	Pass @ 44 lb (20 kg)
Reflectance	C 1549	N/A	81.52%
Emittance	C 1371	N/A	0.86

Refer to the Material Safety Data Sheet prior to using JM TPO FB 135. Material Safety Data Sheet is available by calling (800) 922-5922 or on the Web at www.jm.com/roofing.