



JM TPO Roofing Membrane – 60 mil

Description

JM TPO thermoplastic polyolefin (TPO) membranes are reinforced with a polyester fabric and designed for use in mechanically fastened and adhered roofing applications.

Use

Install JM TPO 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



The custom colors below are available upon request and may be subject to minimum requirements and lead times.

Standard Sizes

Color

White	5' x 100' (1.52 m x 30.48 m) 8' x 100' (2.44 m x 30.48 m) 10' x 100' (3.05 m x 30.48 m)
Grey* and Tan*	5' x 100' (1.52 m x 30.48 m) 8' x 100' (2.44 m x 30.48 m)* 10' x 100' (3.05 m x 30.48 m)

*Grey and Tan 8-ft (2.44 m) sheet lead times are subject to availability and may require an upcharge for smaller projects.

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 60	5, 10, 15 or 20 year

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

Tested Physical Properties†

Property	ASTM Test Method	ASTM Requirements	60 Mil	
			MD**	XMD**
Overall Sheet Thickness	D 751	>0.039 in. (1.0 mm)	0.060 in. (1.52 mm)	
Thickness of Coating Over Fabric Weather Side	D 6878	>0.012 in. (.305 mm)	0.027 in. (.69 mm)	
Breaking Strength	D 751	>220 lbf (978 N)	325.83 lbf (1,449.36 N)	335.73 lbf (1,493.40 N)
Elongation at Reinforcement Break	D 751	>15%	42.41%	34.93%
Tearing Strength	D 751	>55 lbf (245 N)	89.8 lbf (339.45 N)	184.6 lbf (821.14 N)
Brittleness Point	D 2137	-40°C (-40°F)	Pass @ -40°C (-40°F)	
Ozone Resistance	D 1149	No Cracks	Pass	
Heat Aging (Pass/Fail)	D 573	Pass	Pass	

** MD: Machine Direction
XMD: Cross Machine Direction

† Physical testing performed on a typical 10' (3.05 m) wide membrane

Installation

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

Approvals

JM mechanically fastened and adhered TPO 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 60.

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 otherwise indicated; emissivity values for California Title 24 are tested per ASTM C 1371; LEED emissivity values are tested per ASTM E 408.



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Tested Physical Properties†

Property	ASTM Test Method	ASTM Requirements	60 Mil	
			MD**	XMD**
Post Heat Aged Breaking Strength	D 751	>90% retained values	328.14 lbf (1,459.64 N)	334.16 lbf (1,486.42 N)
Post Heat Aged Elongation at Reinforcement Break	D 751	>90% retained values	39.10%	35.14%
Post Heat Aged Tearing Strength	D 751	>60% retained values	77.1 lbf (342.96 N)	245.0 lbf (1,089.81N)
Post Heat Aged Weight Change	D 1204	±1% max.	<0.1%	
Post Heat Aged Linear Dimension Change	D 6878	±1% max.	<0.1%	
Water Absorption	D 471	±3.0% max.	2.20%	
Factory Seam Strength	D 751	>66 (294)	140.48 lbf (624.89 N)	
Post Xenon Visual Inspection	D 6878	Pass	Pass	

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Supplemental Testing

Property	ASTM Test Method	ASTM Requirements	60 Mil
Dynamic Puncture	D 5635	N/A	27.5 Joules
Static Puncture	D 5602	N/A	Pass @ 44 lb (20 kg)
Reflectance	C 1549	N/A	80.78%
Emittance	C 1371	N/A	0.86
Resistance of Synthetic Polymer Material to Fungi	G 21	N/A	0 rating
Puncture Resistance (FTMS 101C, Method 2031)	N/A	N/A	371 lb (168 kg)
Moisture Vapor Transmission	E 96	N/A	0 g/m ² per 24 hours
Hydrostatic Resistance, Mullen	D 751	N/A	540 PSI (3723 kPa)

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