

JM TPO — 60 mil

MIN — Thermoplastic Polyolefin Membrane

Meets or exceeds the requirements of ASTM D 6878

Features and Components

Thickness Over Scrim: Optimized and tested on a continual basis with a state-of-the-art thickness gauge to verify that the thickness valued by our customers is incorporated into the sheet.

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.



Component Membrane

Single Ply

Colors

White

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





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®	White	Initial	0.77	0.87	
Unnu "		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-consumer		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 60 mil	5, 10, 15, or 20 years

Codes and Approvals







Installation/Application



Adhered





Mechanically

Hot Air Weld

Refer to JM TPO application guides and detail drawings for instructions.

Packaging and Dimensions*

Dall Maddle	5'	6'	8'	10'	12'
Roll Widths	(1.52 m)	(1.83 m)	(2.44 m)	(3.05 m)	(3.66 m)
Roll Lengths	100' (30.48 m)				
Roll Coverage	500 ft ²	600 ft ²	800 ft ²	1000 ft ²	1200 ft ²
	(46.45 m²)	(55.74 m ²)	(74.32 m ²)	(92.90 m ²)	(111.5 m ²)
Rolls per Pallet	8				
Pallet Weight	1384 lb	1680 lb	2200 lb	2760 lb	3240 lb
	(627.8 kg)	(762.0 kg)	(997.9 kg)	(1251.9 kg)	(1469.6 kg)
Pallets per Truck**	28-32	22-26	18-20	12-16	12-14
Producing Location	Scottsboro, AL				

^{*}Please contact your JM Sales Representative for lead times and availability of 60 mil- MIN products.

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.

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



JM TPO — 60 mil

MIN — Thermoplastic Polyolefin Membrane

Meets or exceeds the requirements of ASTM D 6878

Tested Physical Properties

Physical Properties		ASTM Test Method	Standard for	JM TPO – 60 mil	
			ASTM D 6878 (Min.)	MD*	CMD**
Strength	Breaking Strength, min, lbf (N)	D 751	220 (976)	424 (1886)	400 (1779)
	Elongation at Break, min %	D 751	15	33%	32%
Stre	Tearing Strength, min, lbf (N)	D 751	45 (200)	121 (543)	115 (511)
	Factory Seam Strength, min, lbf (N)	D 751	66 (290)	174 (774)	
	Thickness, min, in.	D 751	+/- 10% from Nominal	0.060 (minimum) 0.062 (tested)	
j <u>ē</u>	Thickness Over Scrim, min, in. (mm)	D 7635	0.015	0.028 (0.66)	
Longevity	Water Absorption, max, %†	D 471	3.0	0.11%	
_ 3	Brittleness Point, max, -40°F†	D 2137	No Cracks	Pass	
	Ozone Resistance	D 1149	No Cracks	Pass	
	Properties after Heat Aging @ 240°F†	D 573	Pass/Fail	Pass	
بو _	Breaking Strength, % (after aging)†	D 751	90	> 90%	> 90%
Heat Aged Performance	Elongation, % (after aging)†	D 751	90	> 90%	> 90%
Heat	Tearing Strength, % (after aging)†	D 751	60	> 60%	> 60%
_ ~	Weight Change, max, % (after aging) †	D 751	±1.0	0.19%	
	Linear Dimensional Change, max, % (after 6 hrs @ 158°F)†	D 1204	±1.0	<0.1%	
Weather	Accelerated Weathering, min†	G 151 & G 155	10,080 kj/m²•nm @ 340 nm (4,000 hrs @ 0.70 W)	>20,160 kj/m² (>10,000 hrs)	
Wea	Cracking (@ 7x magnification)†	G 155	No Cracks	Pass	

Supplemental Testing[†]

Physical Properties	ASTM Test Method	Standard for ASTM D 6878 (Min.)	JM TPO – 60 mil Result
Dynamic Puncture	D 5635	N/A	Pass @ 25 Joules
Static Puncture	D 5602	N/A	Pass @ 44 lb (20 kg)
Impact Resistance of Bituminous Roofing Systems	D 3746	N/A	Pass - minor indentations
Deficetors	C 1549	N/A	78%
Reflectance	E 903	N/A	80%
Forthern	C 1371	N/A	0.87
Emittance	E 408	N/A	0.96
SRI	E 1980	N/A	95
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/m² per 24 hours
Hydrostatic Resistance, Mullen	D 751	N/A	474 PSI (3268 kPa)
Standard Test Method for Air Permeance of Building Materials	E 2178	N/A	Pass @ <0.0005 L/(s·m²) (Pass @ <0.0001 CFM/ft²)

^{*}MD = Machine Direction **XMD = Cross-Machine Direction