

Meets or exceeds the requirements of ASTM D 6878

Features and Components

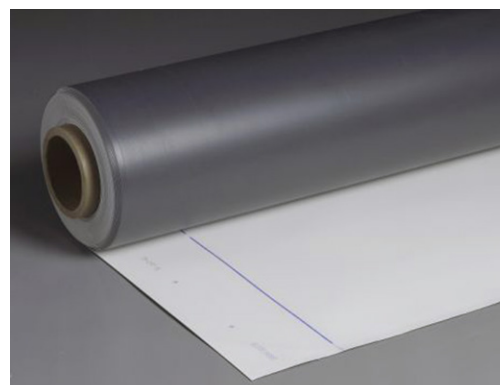
Thickness Over Scrim: Optimized and tested on a continual basis with a state-of-the-art thickness gauge to verify that the thickness valued by our customers is incorporated into the sheet.

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

M
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.

Multi-Ply	BUR		APP		SBS				
	HA	CA	HW	HA	CA	HW	SA	MF	
Do not use with Multi-Ply systems									

Single Ply	TPO				PVC			EPDM		
	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

Standard		Reflectivity		Emissivity
CRRC®	White	Initial	0.77	0.87
		3 Yr. Aged	0.70	0.86
CA Title 24	White	Pass	0.77	0.87
LEED® (SRI)	White	Initial	95	
		3 Yr. Aged	85	
Recycled Content	Post-consumer		0%	
	Post-industrial		5%	

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

Peak Advantage® Guarantee Information

Product	Guarantee Term
JM TPO 45	5, 10, or 15 years

Codes and Approvals



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.

Installation/Application



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

Packaging and Dimensions*

Roll Widths	5' (1.52 m)	6' (1.83 m)	8' (2.44 m)	10' (3.05 m)	12' (3.66 m)
Roll Lengths	100' (30.48 m)				
Roll Coverage	500 ft² (46.45 m²)	600 ft² (55.74 m²)	800 ft² (74.32 m²)	1000 ft² (92.90 m²)	1200 ft² (111.5 m²)
Rolls per Pallet	9				
Pallet Weight	1260 lb (571.5 kg)	1514 lb (686.7 kg)	2050 lb (929.9 kg)	2520 lb (1143.1 kg)	3048 lb (1382.5 kg)
Pallets per Truck**	30-36	22-28	18-22	15-19	10-12
Producing Location	Scottsboro, AL				

*Please contact your JM Sales Representative for lead times and availability of 45 mil - MIN products.

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

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.

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Tested Physical Properties

Physical Properties		ASTM Test Method	Standard for ASTM D 6878 (Min.)	JM TPO – 45 mil MIN	
				MD	CMD
Strength	Breaking Strength, min, lbf (N)	D 751	220 (976)	387 (1721)	355 (1579)
	Elongation at Break, min %	D 751	15	34%	32%
	Tearing Strength, min, lbf (N)	D 751	45 (200)	149 (662)	145 (644)
	Factory Seam Strength, min, lbf (N)	D 751	66 (290)	152 (676)	
Longevity	Thickness, min, in.	D 751	+/- 10% from Nominal	0.045 (minimum) 0.048 (tested)	
	Thickness Over Scrim, min, in. (mm)	D 7635	0.015	0.021 (0.53)	
	Water Absorption, max, % [†]	D 471	3.0	0.10%	
	Brittleness Point, max, -40°F [†]	D 2137	No Cracks	Pass	
	Ozone Resistance [†]	D 1149	No Cracks	Pass	
Heat Aged Performance	Properties after Heat Aging @ 240°F [†]	D 573	Pass/Fail	Pass	
	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/m ² •nm @ 340 nm (4,000 hrs @ 0.70 W)	>20,160 kJ/m ² (>10,000 hrs)	
	Cracking (@ 7x magnification)	G 155	No Cracks	Pass	

Supplemental Testing[†]

Physical Properties	ASTM Test Method	Standard for ASTM D 6878 (Min.)	JM TPO – 45 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
Reflectance	C 1549	N/A	78%
	E 903	N/A	80%
Emittance	C 1371	N/A	0.87
	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	363 lb (165 kg)
Moisture Vapor Transmission	E 96	N/A	0 g/m ² 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•m ²) (Pass @ <0.0001 CFM/ft ²)

*MD = Machine Direction

**CMD = Cross-Machine Direction

[†]Tested results are for the JM standard 45 mil Membrane and are representative of a 45 mil MIN product

Note: All data represents tested values.