

JM TPO — 80 mil 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

Colors

Grey*	White	Tan*

* Grey and Tan lead times are subject to availability and may require an upcharge for smaller projects.

System (Compatibility	This product may be used as a component in the following systems. Please reference product application for specific installation methods and information.
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Ply	BUR	A	P	SBS					
ulti-l	HA	CA	HW	HA	CA	HW	SA	MF	
Ξ			Do not	use with	multi-ply s	systems			

Ply	TPO			PVC			EPDM			
gle	MF	AD	SA	IW	MF	AD	IW	MF	AD	BA
Sing	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	
White	Initial	0.77	0.87	
	3 Yr. Aged	0.70	0.86	
Tan	Initial	0.67	0.87	
	3 Yr. Aged	0.62	0.90	
Gray	Initial	0.35	0.87	
	3 Yr. Aged	0.34	0.90	
White	Pass	0.77	0.87	
Tan	Pass 3 Yr. Aged	SRI=75		
White	Initial	95		
	3 Yr. Aged	85		
Tan	Initial	8	1	
	3 Yr. Aged	75		
Gray	Initial	39		
3 Yr. Age		37		
Post-co	nsumer	0%		
Post-in	dustrial	5%		
	Tan Gray White Tan White Tan Gray Post-co Post-co	3 Yr. Aged Tan Initial 3 Yr. Aged Gray Initial 3 Yr. Aged White Pass Tan Pass 3 Yr. Aged White Initial 3 Yr. Aged Tan Initial 3 Yr. Aged Tan Initial 3 Yr. Aged Gray Initial 3 Yr. Aged Gray Initial 3 Yr. Aged Post-consumer Post-industrial	3 Yr. Aged 0.70 Tan Initial 0.67 3 Yr. Aged 0.62 Gray Initial 0.35 3 Yr. Aged 0.34 White Pass 0.77 Tan Pass 0.77 Tan Pass 0.77 White Initial 9 3 Yr. Aged 8 9 White Initial 9 3 Yr. Aged 8 8 Tan Initial 9 3 Yr. Aged 7 8 Gray Initial 3 Post-consumer 0 3	

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

Peak Advantage® Guarantee Information

Product	Guarantee Term
JM TPO 80 mil	5, 10, 15, 20, 25, or 30 yrs

Codes and Approvals





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' (2.44m)	10' (3.05m)	12' (3.66 m)
Roll Lengths	100' (30.48 m)	75' (22.86 m)	100' (30.48 m)	100' (30.48 m)	75' (22.86 m)
Roll Coverage	500 ft ² (46.45 m ²)	450 ft ² (41.81m ²)	800 ft ² (74.32 m ²)	1000 ft ² (92.9 m ²)	900 ft ² (83.61 m ²)
Rolls per Pallet	4	8	4	4	8
Pallet Weight	980 lb (444.5 kg)	1768 lb (801.9 kg)	1572 lb (713 kg)	1964 lb (890.9 kg)	3536 lb (1603.9 kg)
Pallets per Truck*	28-32	22-26	18-20	14-16	11-13
Producing Location	Scottsboro, AL				

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



JM TPO — 80 mil Thermoplastic Polyolefin Membrane

Meets or exceeds the requirements of ASTM D 6878 Tested Physical Properties

		ASTM	Standard for	JM TPO – 80 mil		
Phys	Physical Properties		ASTM D 6878 (Min.)	MD*	XMD**	
_	Breaking Strength, min, lbf (N)	D 751	220 (976)	464 (2,064)	439 (1,953)	
Strength	Elongation at Break, min %	D 751	15	29	31	
Stre	Tearing Strength, min, lbf (N)	D 751	45 (200)	65 (289)	179 (796)	
	Factory Seam Strength, min, lbf (N)	D 751	66 (290)	137	(609)	
	Thickness, min, in.	D 751	+/- 10% from Nominal	0.080 (N	lominal)	
ìty	Thickness Over Scrim, min, in. (mm)	D 7635	0.015	0.033 (0.84)		
Longevity	Water Absorption, max, %	D 471	3.0	0.0	03	
E	Brittleness Point, max, -40°F	D 2137	No Cracks	Pa	SS	
	Ozone Resistance	D1149	No Cracks	Pass		
	Properties after Heat Aging @ 240°F	D 573	Pass/Fail	Pass		
ce o	Breaking Strength, % (after aging)	D 751	90	>90	>90	
Heat Aged Performance	Elongation, % (after aging)	D 751	90	>90	>90	
eat	Tearing Strength, % (after aging)	D 751	60	>60	>60	
P H	Weight Change, max, % (after aging)	D 751	±1.0	0.1	22	
	Linear Dimensional Change, max, % (after 6 hrs @ 158°F)	D 1204	±1.0	<().1	
Weather Performance	Accelerated Weathering, min	G 151 & G 155	10,080 kj/m²•nm @ 340 nm (4,000 hrs @ 0.70 W)	>20,160 kj/m² (>8,000 hrs)		
Wea Perfori	Cracking (@ 7x magnification)	G 155	No Cracks	Ра	ISS	

*MD = Machine Direction **XMD = Cross-Machine Direction Note: All data represents tested values.

Supplemental Testing

Physical Properties	ASTM Test Method	Standard for ASTM D 6878 (Min.)	JM TPO – 80 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
Deflectores	C 1549	N/A	78%
Reflectance	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	526 lb (239 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)

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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