IB® TPO FB MEMBRANE

IB Roof Systems®

Product Description:

IB TPO FB Membrane is a thermoplastic polyolefin (TPO) resin based single ply membrane with a weft-inserted polyester scrim, for added strength, tear resistance, and enhanced moisture resistance. Includes an integral polyester fleece backing for enhanced adhesion. Designed for premium performance in low-slope roofing, reroofing and recover applications. IB TPO FB membrane meets all the requirements of ASTM D6878 and are available in 115-mil, and 135-mil thicknesses.

Features:

- **Performance:** Meets and exceeds ASTM D 6878-21, for Thermoplastic Polyolefin (TPO) Membrane and higher than average thickness over scrim per (D7635)
- **Contractor Friendly:** Wide welding window for easier installation providing a good range of speeds and temperatures during installation.
- **Climate Resilience:** Excellent flexibility, highly reflective which helps reduce heat absorption and lowers energy costs. Excellent UV resistance and ozone resistance.
- **Energy Benefits:** Cool Roof Rating (CRRC), compliant with California Title 24 requirements for Solar Reflectance and Emissivity, and LEED (SRI)
- **Made in USA:** IB TPO FB Membranes are manufactured in the USA with globally sourced materials.

Uses:

IB TPO FB Membranes can be installed in new, recovery, and re-roof constructions as the primary field membrane and base flashing at all roofs to wall transitions. It can be adhered or mechanically attached to a properly prepared substrate with approved fasteners and membrane plates or approved membrane adhesive. All seams are heat-welded using standard hot-air welding devices. Available in 10' wide rolls and in 115 mil, and 135 mil thickness.

Available Colors:

White

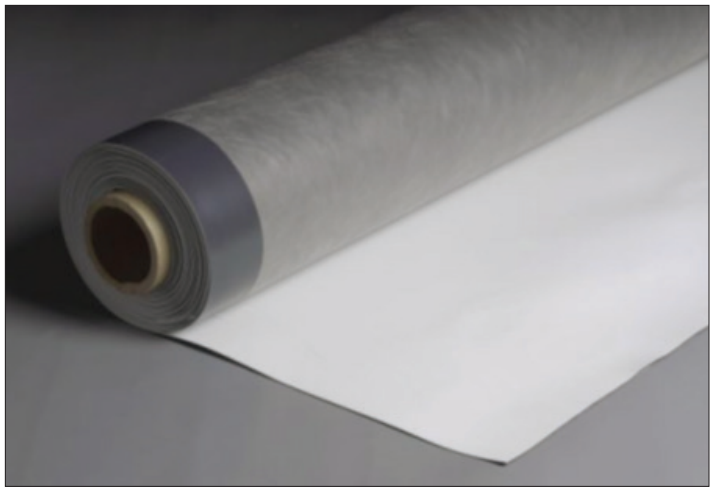
Approvals:

CRRC COOL ROOF RATING COUNCIL ®

FM APPROVED

cULus LISTED

Visit our website for links to these agencies and listings at: www.ibroof.com.



Product details stated are nominal as manufactured, and the results of tests and/or calculations and therefore are non-binding and do not represent a guarantee or warranted characteristics. User and/or designer are responsible for confirming suitable performance for specific application and conforming with all applicable laws and regulations.

Packaging:

Membrane	Dimensions	Roll (Sq. Ft.)	Rolls / Pallet	Approx. Pallet Weight
115 Mil	10' x 100'	1000 sq. ft.	6	2303 lbs.
135 Mil	10' x 50'	500 sq. ft.	8	2160 lbs.

Storage:

Store IB TPO FB membrane away from objects that could cause physical damage or create punctures as well as ignition sources. The membrane is flammable and will catch fire when exposed to open flame.

System Installation Methods:

Mechanically Attached

Adhered

Warranties:

IB TPO FB Membrane Warranty options when installed by IB Authorized Applicators subject to IB Roof Systems specifications and warranty requirements:

Membrane	Warranty Term Options
IB TPO 115 FB Membrane	10, 15, 20 Years
IB TPO 135 FB Membrane	10, 15, 20, 25

- Limited Material Warranty
- Warranty Plus Labor & Material Warranty
- Total Systems Warranty

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Application:

Install the IB TPO membranes in accordance with IB TPO Specifications and Construction Details. Refer to www.ibroof.com for additional installation instructions. Membranes must not be applied during adverse weather or without precautionary measures in temperatures below 40°F (4°C). All surfaces should be clean, dry, free of dirt, dust, debris, oils, soaps, coatings, and other contaminants that may inhibit bonding.

Safety Precautions:

Store IB TPO FB membrane away from objects that could cause physical damage or create punctures as well as ignition sources. The membrane is flammable and will catch fire when exposed to open flame.

Energy & Green Benefits:

Standard	Color	Type	Solar Reflectance	Thermal Emittance
CRRC	White	Initial	0.77	0.87
		Aged 3-Year	0.70	0.86
Title 24	White	Meets	0.77	0.87
LEED (SRI)	White	Initial	95	
		Aged 3-Year	85	
The LEED® Solar Reflectance Index (SRI) is calculated per ASTM E1980.				

Property		ASTM Method	Requirement for ASTM D6878 (Minimum)	IB TPO SM 115 Mil		IB TPO SM 135 Mil	
				MD	XMD	MD	XMD
Thickness over scrim		D7635	>30% of overall thickness	0.027		0.33	
Tensile Properties	Breaking strength, min. (lbf/in)	D751	220 lbf. (979 N)	Pass	Pass	Pass	Pass
	Elongation at the break, min. %	D751	>15%	29%	27%	33%	33%
	Tearing strength, min. (lbf)	D751	55 lbf. (245 N)	91 lbf.	146 lbf.	64 lbf.	185 lbf.
	Factory Seam Strength	D751	66 lbf. (290 N)	171 lbf.		171 lbf.	
Resilient Properties	Water Absorption, max, %	D471	3.0	Pass		Pass	
	Brittleness Point, max	D2178	-40°F (No cracks)	Pass		Pass	
	Ozone Resistance	D1149	No cracks	Pass		Pass	
Heat Aging Properties	Retention of properties after heat aging	D573	@ 240°F	Pass		Pass	
	Breaking Strength, % (after aging)	D751	90	Pass		Pass	
	Elongation, % (after aging)	D751	90	Pass		Pass	
	Tearing Strength, % (after aging)	D751	60	Pass		Pass	
	Weight Change, max, % (after aging)	D751	±1.5%	Pass		Pass	
	Linear Dimensional Change, max, % @ 158°F	D1204	±1.0% (+6 hours)	Pass		Pass	
Weathering Properties	Accelerated Weathering, min	G154 G155	10,080 kj/m^2 • nm @ 340 nm (4,000 hrs @ 0.70 W)	10,080 kj/m2 (4,000 hrs.)		10,080 kj/m^2 (4,000 hrs.)	
	Cracking after Accelerated Weathering (@ 7x magnification)	G155	No Cracks	Pass		Pass	
Impact Properties	Dynamic puncture resistance	D5635	@ 25 Joules	Pass		Pass	
	Static puncture resistance	D5602	@ 44 lb. (20 kg)	Pass		Pass	

Environmental:

Recycle Content	
Post Consumer	0%
Post Industrial	5%

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