



TPO FB Single Ply Roof System

Thermoplastic Polyolefin Single Ply Membrane System

Product Description:

The TPO FB Roof Membrane is a white single ply roof membrane which is comprised of an thermoplastic polyolefin. TPO Roof Membrane is reinforced with a high strength, wick resistant polyester fabric and backed with a wick resistant non-woven polyester 4.2 oz. fleece. TPO FB Roof Membrane is asbestos free and exceeds the performance requirements of ASTM D 6878/D6878M-11a.

Basic Uses:

TPO FB Roof Membrane is an elastomeric membrane that accepts roof movement and thermal shock. It is fully adhered in a cold applied bonding adhesive. TPO FB Roof Membrane is lapped and seamed using hot air heat welding equipment. TPO FB Roof Membrane can be used in situations where other roof systems are not practical due to weight or slope considerations. TPO FB Roof Membrane provides excellent resistance to fire exposure in a variety of roof system configurations.

Limitations:

- Positive drainage is required.

Dimensions:

Thickness	Roll Size	Coverage/as applied
• 45 mil	76" x 90'	547 sq. ft.
• 60 mil	76" x 90'	547 sq. ft.
• 80 mil	76" x 75'	456 sq. ft.

Packaging:

TPO FB Roof Membrane is available in individual rolls or by the pallet, with 10 rolls/pallet.

Membrane Color:

White. Contact your Tremco Representative for information on special colors.

References:

Factory Mutual Loss Prevention Data Sheets:

- 1-28 Design Wind Loads
- 1-29 Above Deck Roof Components
- 1-49 Perimeter Flashing

APPLICATION DATA:

Roof Replacement usually involves more complexities than new construction roofing. Contingencies such as rusted or deteriorated decks, rotted wood components, rooftop equipment which cannot be moved or shut down, and numerous other conditions are often encountered. The following application information is designed to serve as a general guide. Your local Tremco Representative will prepare detailed specifications based on the condition of your roof.

Structural Deck:

Deck must be properly designed and structurally sound.

Drainage:

Ponding conditions will adversely affect performance of any roofing system. Where positive drainage does not exist, water removal from roof surface should be facilitated by lowering drains, and/or installing additional drains, tapered insulation, or an approved lightweight insulating concrete slope system.

Insulation:

Insulation must be dry and kept dry. No more insulation shall be installed than can be covered in that day. Use Fas-n-Free® Adhesive for solvent free, fastener free insulation attachment is the preferred method of securement unless otherwise specified.

General Installation Procedures:

According to job specifications, prepare the surface to be covered:

- Remove loose aggregate.
- Replace areas of wet insulation, deteriorated deck and wood components.
- Provide air seal at perimeter, curbs, and penetration flashings.
- Attach new roof insulation according to job specifications.
- Clean insulation surface of loose dust/debris.

Membrane Placement:

Plan the placement of TPO FB Roof Membrane to facilitate the fabrication of the least number of

Product Advantages	
Features	Benefits
Thermoplastic	• Remains heat weldable through entire life
Polyester reinforcement	• Strong - puncture, tear, and wick resistant
Highly reflective surface	• Reduced roof & building temperature

		Initial	Weathered
	Solar Reflectance	0.79	0.72
Thermal Emittance	0.87	0.87	
Rated Product ID	0612-0013		
Licensed Manufacturer ID	0612		
Classification	Production		

Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary.

Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.



seams. Ensure that water flows over or along, but not against, the exposed edges.

Installation of Adhered System:

- Start at the low point of the roof and position the roll square with the roof edge. Apply adhesive in a uniform continuous application onto the approved substrate.
- Install membrane immediately into adhesive. Avoid any air entrapment.
- Do not allow adhesive to dry. Broom immediately.
- Overlap at side lap: 3" (76 mm) minimum. Overlap at end lap: 2" (51 mm) minimum.
- Do not apply adhesive over membrane in end lap area. Seal end lap using a 6" (152 mm) strip of TPO Roof Membrane (without fleece). Heat weld membrane strip over end lap. Stagger all end laps.

Cold Applied Adhesive Coverage Rate:

- 100-120 sq. ft./gal
- Apply adhesive to substrate.
- Install membrane immediately into adhesive. Avoid any air entrapment.
- Do not allow adhesive to dry.

Membrane Seaming:

- All surfaces must be clean and dry.
- For heat welding, allow the hot air welder to warm up. Insert the nozzle tip of the hot air welder into seam area. Move nozzle at a steady speed along the seam area, immediately applying pressure behind the air nozzle with a Neoprene roller or weighter wheel to ensure positive contact of heated TPO FB Membrane lap. Minimum width of all welded lap shall be 1.5" (38.1 mm) wide. Field test head welded laps to assure proper construction. Perform field test after lap area cools to ambient temperatures. Properly constructed laps will not separate at the lap interface when tested. Consult your Tremco representative for additional information.

Perimeter/Projection Attachment:

Provide mechanical attachment of roofing membrane at roof perimeter, walls, expansion joints, and all other projections. Follow the recommendations of Factory Mutual Loss Prevention Data Sheets 1-28, 1-29, and 1-49.

Availability and Cost:

Contact your local Tremco Representative for pricing and availability. For the name and number of your Representative, call the Roofing Division at 216-292-5000

Maintenance:

Your local Tremco Roofing Representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound roof program.

Guarantee/Warranty:

Tremco Inc. warrants TPO FB Single Ply Roof System to be free of defects and to meet published physical properties when tested according to ASTM and Tremco standards. Under this warranty, any product that is proved to be defective when applied in accor-

Physical Performance Characteristics		
TPO FB Single Ply Roof System		
Property	Test Method	Value
Thickness	0.045 in (1.14 mm)	ASTM D 751
	0.060 in (1.52 mm)	
	0.080 in (2.03 mm)	
Tensile strength	350 lbf (1556)N	ASTM D 751
Elongation @ fabric break	40% MD 30% XMD	ASTM D 751
Tear Strength	100 lbf (440)N	ASTM D 751
Dimensional stability @ 176° @ 6 hrs.	0.3%	ASTM D 1204
Reflectance	0.79	ASTM E 903
Emittance	0.87	ASTM C 1371
Low Temp. Flexibility (-40°C)	-40°F	ASTM D 2137
SRI (Solar Reflectance Index)	98 (Initial)	ASTM E 1980-11
	88 (3 year)	

dance to our written instructions, and in applications recommended by Tremco as suitable for this product will be replaced with like product at no charge. THIS IS BUYERS SOLE AND EXCLUSIVE REMEDY. All claims concerning product defects must be made in writing within twelve (12) months of shipment. The absence of such claims in writing during this period will constitute a waiver of all claims with respect to such product. This warranty shall be IN LIEU OF any other warranty, express or implied, including but not limited to, any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.



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