

POWERply™ PREMIUM FR

A Fire Rated, Granule Surfaced Bilaminate Reinforced Modified Bitumen Membrane

Composition: POWERply™ Premium FR is a granule surfaced, fire resistant modified bitumen membrane. It consists of specially selected bitumens, modified with compatible SBS/SEBS/SIS elastomers and reinforced composite polyester/glass core. POWERply Premium FR is furnished with a factory applied white granule surfacing. POWERply Premium FR is asbestos free. POWERply Premium FR was formerly known as THERM MB 3C25FR. POWERply Premium FR exceeds the requirements of ASTM D 6162-00, Type III, Grade G.


Basic Uses: POWERply Premium FR is designed for applications in hot applied asphalt adhesives over multi-ply systems where a high strength bilaminate reinforced, granule surface membrane is desired. In addition, POWERply Premium FR is suitable for application in a cold process modified bitumen system. Fire rated by Underwriters Laboratory for an external fire hazard. POWERply Premium FR may also be used as a part of the membrane flashing system.

Limitations:

- Not intended to perform under ponding conditions. Positive drainage required.
- Not to be exposed to solvents, oils, or other contaminants harmful to asphaltic materials.
- Backnail on roofs with slopes 2:12 (2" per foot) (16.6%) or greater.
- Not intended for phased construction.

Dimensions: POWERply Premium FR is a 3.8mm thick membrane. Roll covers 9.29 m² (100 sq. ft.) when applied, with roll dimensions of 1m x 10.5 m (39 3/8" x 34' 5" ft). Each roll weighs approximately 47.7 kg (105 lbs).

Packaging: POWERply Premium FR is available in pallets only, with 20 rolls per pallet.

Product Advantages	
Features	Benefits
Polymer modified bitumen	• Resists thermal shock and splitting
High strength polyester/glass reinforcement	• Exceptional strength and toughness • Puncture resistant
No torch flame	• Reduced risk of fire
Factory applied surfacing	• Saves job site labor and application errors
UL Classified 	• Fire Protection

General Application Data:

Roof replacement usually involves more complexities than new construction roofing. Often encountered are situations such as rusted/deteriorated decks, rotted wood components, rooftop equipment which cannot be moved or shut down, and numerous other conditions.

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 Decks:

Must be properly designed and structurally sound.

Drainage:

Ponding conditions are unacceptable and will adversely affect the performance of any roofing system. If positive drainage does not exist, water removal from the roof surface must be facilitated by lowering drains, and/or installing additional drains tapered insulation, or Tremco approved cellular concrete system .

Insulation :

Insulation must be dry and kept dry. No more insulation shall be installed that can be covered that day. The use of the FAS-n-FREE Adhesive for solvent free, fastener free insulation attachment is the preferred method of attachment unless otherwise specified.

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

- Replace areas of wet insulation, deteriorated deck and wood components.
- Install roof insulation or nailed base sheet and multi-ply base ply system.

Plan the placement of POWERply Premium FR to ensure that water flows over or along, but not against, the exposed edges. Starting at the low point of the roof, apply a uniform continuous application of adhesive according to specifications. Embed the ply sheet(s) as specified. Avoid walking on plies during the placement.

Phased construction is not permitted. POWERply Premium FR must be installed the same day as the base ply system.

Installation Procedures (continued): For cold process applications, cut POWERply Premium FR in 4.9-5.5m (16' to 18') lengths maximum. Allow lengths to relax as follows:

- Above 13°C (55°F):30 minutes minimum
- Below 13°C (55°F):60 minutes minimum

For hot applications, the adhesive temperature must be at the EVT or 218°C (425°F) at the point of application - whichever is greater. THERMastic, POWERply Modified Hot Melt Adhesive, and Premium IV Asphalt are recommended as hot applied adhesives for POWERply Premium FR. Hot applied modified bitumen membranes require special application techniques under cool ambient temperatures and/or moderate wind conditions. Consult your local Tremco Representative for specific recommendations.

Place the POWERply Premium FR in a uniform continuous application of adhesive. Broom the membrane into the adhesive.

Side laps 102 mm (4") minimum; end laps 152 mm (6") minimum. Offset membrane laps from the ply sheet laps. Stagger end laps at least 914mm (36"). To assure complete adhesion at lap edges, adhesive should be visible past lap edges. Install flashings as specified.

Coverage Rates:

Hot melt interply application rate: 1.24kg/m² (25lb/100ft²)

Cold process interply application rate: 0.6 - 0.8L/m² (1.5 - 2 gal/sq.)

Precautions:

User must read container labels and Material Safety Data Sheets for health and safety precautions prior to use.

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 416/421-3300 or 800/263-6046 or in the U.S. at 216/292-5000 or 800/852-6013.

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 Incorporated warrants POWERply Premium FR to be free of defects and to meet published physical properties when cured and tested according to ASTM and Tremco Standards. Under this warranty, any POWERply Premium FR that is proved to be defective when applied in accordance with 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.

Physical Performance Characteristics

POWERply™ Premium FR

Property	Typical Value	Test Method
Thickness	3.8mm (0.153 in)	ASTM D 5147-02
Tensile Strength @25°C (77°F)	318 lbf/in MD 349 lbf/in XMD	ASTM D 5147-02
Elongation @25°C (77°F)	10% MD 10% XMD	ASTM D 5147-02
Tensile Strength @-18°C (0°F)	319 lbf/in MD 354 lbf/in XMD	ASTM D 5147-02
Elongation @-18°C (0°F)	5% MD 4% XMD	ASTM D 5147-02
Tear Strength @25°C (77° F)	475 lbf MD 478 lbf XMD	ASTM D 5147-02
Low Temperature Flexibility	-37°C (-35°F)	ASTM D 5147-02

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 is IN LIEU of any and all other warranties expressed or implied, including but not limited to, any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Technical Services:

Your local Tremco Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications. The services of the Tremco Research Center, which has earned a unique reputation in weatherproofing technology, complement and extend the services of the Tremco Technical Service staff.

Statement of Policy and Responsibility: Tremco takes responsibility for the furnishing of quality roofing materials, and providing specifications and recommendations for their proper installation. As neither Tremco itself nor its Representatives practice architecture or engineering, Tremco offers no opinion on, and expressly disclaims any responsibility for soundness of any structure on which its products may be applied. If questions arise as to the soundness of a structure or its ability to support a planned installation properly, the Owner should obtain the opinion of competent structural engineers before proceeding. Tremco accepts no liability for any structural failure or for resultant damages, and no Tremco Representative is authorized to vary this disclaimer.

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