# **POWERply<sup>TM</sup> HE FR**

# A High Elongation Granule Surfaced Polyester Reinforced Modified Bitumen Membrane

# **COMPOSITION:**

POWERPLY<sup>TM</sup> HE FR is a granule surfaced, fire resistant modified bitumen membrane. It consists of specially selected bitumens, modified with compatible SBS elastomers and reinforced with a non-woven polyester mat. POWERply HE FR is furnished with a factory applied white granule surfacing. POWERply HE FR is asbestos free. POWERply HE FR was formerly known as THERM MB 4PFR.

# BASIC USES:

POWERply HE FR is designed for applications over multi-ply systems where a polyester reinforced granule surfaced membrane is desired.

# 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 HE FR is a 4.0 mm thick membrane. Roll covers 9.29 m<sup>2</sup> (100 sq. ft.) when applied, with roll dimensions of 1m x 10.5 m (39-3/8" x 34'5''). Each roll weighs approximately 50 kg (110 lbs.).

# PACKAGING:

POWERply HE FR is available in pallets only, with 20 rolls per pallet.

PRODUCT ADVANTAGES		
Features	Benefits	
Polymer modified asphalt	• Resists thermal shock and splitting	
Polyester reinforced	• Strong yet very pliable to resist tears and splits	
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 that 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 HE 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 and continuous application of adhesive according to specifications. Embed ply sheets as specified. Avoid walking on plies during placement.



Place POWERply HE FR in a uniform and continuous application of adhesive. Side laps 100mm (4") minimum; end laps 150 mm (6") minimum. Offset laps from base laps. Stagger ends 1m (36") minimum. To assure complete and uniform adhesion, adhesive should exude past lap edges. Install flashings as specified.

THERMastic, POWERply Modified Hot Melt Adhesive, and Premium IV Asphalt are recommended as adhesives for POWERply HE 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.

# **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 in Canada at 416/421-3300 or 800/263-6046 or in the U.S. call 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 HE 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 HE 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.

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 FIT-NESS 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.

#### TYPICAL PHYSICAL PERFORMANCE CHARACTERISTICS

# POWERply<sup>TM</sup> HE FR

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Property	Typical Value	Test Method
Thickness	4.0 mm (0.160 in)	ASTM D5147-91
Tensile strength @-18°C (0°F)	25.9 kN/m MD (148 lbf/in) 21.4 kN/m XMD (122 lbf/in)	ASTM D5147-91
Elongation @ -18°C (0°F)	58% MD 55% XMD	ASTM D5147-91
Tear Strength	667 N MD (150 lbf) 427 N XMD (96 lbf)	ASTM D5147-91
Low temperature flexibility	-26°C (-15°F)	ASTM D5147-91

# 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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