# POWERply<sup>TM</sup> Modified Hot Melt Adhesive

# A Hot Applied Elastomeric Roof Membrane Adhesive

**Composition:** POWERply™ Modified Hot Melt Adhesive is a high quality asphalt modified with SEBS polymers. POWERply Modified Hot Melt Adhesive is asbestos free.

**Basic Uses:** POWERply Modified Hot Melt Adhesive is designed for application as an elastomeric hot-melt adhesive in the POWERply Modified Bitumen Roof System. It can also be used as an interply and surfacing adhesive for high performance built up roof systems.

#### 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.
- Not for use over expanded polystyrene (EPS) or EPS composite insulations installed in any configuration unless EPS is encapsulated within lightweight insulating cellular concrete.
- Not for direct use over isocyanurate insulation. Isocyanurate insulations must be overlayed with either 1/2" (13mm) fiberboard, 3/4" (19mm) fibrous glass, or 1" (25mm) perlite (minimum thicknesses).
- Not for use over phenolic insulations installed in any configuration.
- Backnail felts on roofs with slopes 2:12 (2" per foot) (17%) or greater. Do not install on roofs with slopes greater than 3:12 (3" per foot) (25%).
- Do not install when ambient temperatures are below 50°F (10° C) unless special cold weather application procedures are followed. Consult your local Tremco Representative for details.

Product Advantages			
Features	Benefits		
Hot Elastomeric Roof Membrane Adhesive	Provides good elongation and recovery		
300% elongation	<ul> <li>Good cold weather per- formance characteris- tics</li> </ul>		
	<ul> <li>Reduces likelihood of thermal shock induced splitting</li> </ul>		
Maintainable	<ul> <li>Long service life.         Modification to roof top areas readily accommodated     </li> </ul>		
UL classified & FM approved	• Fire/wind protection		

**Packaging:** Available in 60 lb.(27.2kg) containers, 9 containers per pallet.

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 upon your roof's conditions.

**Structural Deck:** Must be properly designed and structurally sound.

**Drainage:** Ponding conditions are unacceptable and will adversely affect performance of any roofing system. If positive drainage does not exist, water removal must be facilitated by lowering drains, and/or installing additional drains or tapered insulating systems.

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

## Acceptable insulations:

Acceptable insulations:			
Type	Minimum	Facer	
Thickness*			
Top Layer			
Fiberboard	1/2" (13mm)	None	
Fibrous glass	3/4" (19mm)	Paper	
Perlite	1" (25mm)	None	
Sublayer			
Fiberboard	1" (25mm)	None	
Fibrous glass	3/4" (19mm)	Paper	
Perlite	1" (25mm)	None	
Isocyanurate	1" (25mm)	Black	

Maximum size: 4' x 8' (1219 x 2438mm)

\* Minimum thickness for application of POWERply Modified Hot Melt Adhesive. Follow insulation manufacturer's instructions to obtain minimum thickness for spanning metal deck corrugations.

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

- Replace areas of wet insulation, deteriorated deck, and wood components.
- Install roof insulation or a base sheet by mechanical attachment or in a uniform continuous mopping of POWERply Modified Hot Melt Adhesive applied at 30 lb/100 ft<sup>2</sup> (1.5 kg/m<sup>2</sup>). Insulation may also be installed using Tremco's FAS-n-FREE® insulation adhesive



Plan placement of roofing ply sheets to ensure that water will flow over or along, but not against exposed edges. Use standard kettle equipped with circulating pump. Do not heat POWERply Modified Hot Melt Adhesive above its flash point. Application temperature range: 415-465°F (213-240° C). Starting at low point of roof, apply a uniform continuous mopping of POWERply Modified Hot Melt Adhesive using standard roofing mop or Tremco approved felt layer.

Use ply sheets to start and finish roof membrane along edges, terminations and projections as specified. Install ply sheets, overlapping each previous ply the specified width. Embed each ply in uniform and continuous mopping of POWERply Modified Hot Melt Adhesive.

Interply application rate:

25 lbs/100 sq ft (1.2kg/m²) ± 20% tolerance. Ply shall never touch ply. Apply POWERply Modified Hot Melt Adhesive no more than ten feet (3m) ahead of each roll. Lightly broom plies from unmopped side to assure complete adhesion. Tie in previous work 24"(610mm). Lap ply sheet ends 6"(152mm). Stagger end laps. Avoid walking on plies until POWERply Modified Hot Melt Adhesive has cooled. Install flashings as specified.

#### **SURFACING OPTIONS:**

**Gravel:** Apply POWERply Modified Hot Melt Adhesive over roof surface at 50 lb/100 ft<sup>2</sup> 20%(2.4kg/m<sup>2</sup>)  $\pm$ . Immediately broadcast 400 lb/100 ft<sup>2</sup> (19.6kg/m<sup>2</sup>) of new, clean gravel or 300 lb/100 ft<sup>2</sup> (14.6 kg/m<sup>2</sup>) of slag into adhesive. Aggregate shall conform to ASTM D 1863-93.

**Smooth Surface:** Consult your local Tremco Representative for specific applications suitable for your geographic area.

**Application Rates:** POWERply Modified Hot Melt Adhesive quantities for waterstop/tie-offs, flashings, miscellaneous detail applications and minimum kettle capacity are not included in interply and flood coat application rates.

**Precautions:** Users must read and follow container labels and Material Safety Data Sheets for instructions and health and safety precautions prior to and during use.

**Availability and Cost:** Contact your local Tremco Roofing 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 Incorporated warrants POWERply Modified Hot Melt Adhesive to be free of defects and to meet published physical properties when tested according to ASTM and Tremco standards. Under this warranty, any POWERply Modified Hot Melt Adhesive that is proved to be defective when applied in accordance 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.

#### **Physical Performance Characteristics**

### POWERply<sup>TM</sup> Modified Hot Melt Adhesive

Property	Typical Value	Test Method
Elongation @ 77°F (25°C)	300%	ASTM D 412-98a
Softening point	195-205°F (90-96°C)	ASTM D 36-95
Equiviscous temperature (125 cP)	440°F (226°C)	ASTM D 4402-87 (2000)
Density @ 77°F (25°C)	8.2 lb/gal (982 kg/m <sup>3</sup> )	ASTM D 70-97
Flash point	525°F (274°C) minimum	ASTM D 92-90

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.

**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 furnishing quality materials and for providing specifications and recommendations for their proper installation.

As neither Tremco itself or its Representatives practice architecture or engineering, Tremco offers no opinion on, and expressly disclaims any responsibility for the soundness of any structure or any components below the building structure on which its products may be applied. If questions arise as to the soundness of a structure, its ability to support a planned installation properly, or whether material below the structure will be disturbed, the Owner should obtain the opinion of competent structural engineers before proceeding. Tremco accepts no liability for any failure of the structure or material below the structure or for resultant damages, and no Tremco Representative is authorized to vary this disclaimer.





Beachwood, OH 44122 216-292-5000

3735 Green Road



220 Wicksteed Ave Toronto, ONT M4H 1G7 416-421-3300