

# POWERply® 300 FR

## A Fire Rated, Granule Surfaced, Bilaminate Reinforced SBS/SEBS Modified Bitumen Membrane

### FEATURES

- Polymer modified asphalt
- High strength polyester/ fiberglass reinforcing fabric
- Fire resistant
- Factory applied surfacing
- UL Classified

### BENEFITS

- Resists thermal shock and splits
- Excellent strength and toughness
- Meets building code and insurance requirements
- Saves job site labor prevents application errors
- Fire Protection

### DESCRIPTION

POWERply® 300 FR is a granule surfaced modified bitumen membrane with fire resistant characteristics. It consists of specially selected bitumens, modified with compatible SBS/SEBS elastomers and reinforced with a combination polyester and fiberglass mat and scrim core. POWERply 300 FR is furnished with a factory applied white granule surfacing. POWERply 300 FR is asbestos free. POWERply 300 FR exceeds the requirements of ASTM D6162, Type III, Grade G.

### BASIC USES

POWERply 300 FR is designed for applications in hot applied asphalt adhesives over multi-ply systems where a high strength, granule surfaced membrane is desired. In addition, POWERply 300 FR is suitable for application in a cold process modified bitumen system. POWERply 300 FR roof systems are fire rated by Underwriters Laboratories for an external fire hazard. Refer to UL Roofing Materials and Systems Directory and/or FM Approvals RoofNav for applicable system configurations.

### PACKAGING

POWERply 300 FR is available in pallets only, with 20 rolls per pallet. POWERply 300 FR is a 3.5 mm (138 mil) thick membrane. Each roll weighs approximately 102 lbs (46.3 kg).

### APPLICATION

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 lightweight insulating concrete system.

#### **Insulation:**

Insulation must be dry and kept dry. No more insulation shall be installed that can be covered that day.

**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.

For cold process applications, cut the POWERply 300 FR in 16' to 18' (4.9 to 5.5 m) lengths maximum. Allow lengths to relax for the following time length prior to installation:

Above 55°F(13°C): 30 minutes

Below 55°F(13°C): 60 minutes

# POWERply® 300 FR

## APPLICATION CONTINUED

Plan the placement of POWERply 300 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. Press the membrane into the adhesive using a minimum 75 pound weighted roller to assure full contact of the back of the membrane into the adhesive.

For hot applications, the adhesive temperature must be at the EVT or 425°F (218°C) at the point of application, whichever is greater. THERMastic, THERMastic 50, POWERply Modified Hot Melt Adhesive, and Premium IV Asphalt are recommended as hot applied adhesives for POWERply 300 FR. Hot applied modified bitumen membranes require special application techniques under cool ambient temperatures and/or moderate wind conditions.

Place the POWERply 300 FR in a uniform and continuous application of adhesive. Press the membrane into the adhesive using a minimum 75 pound weighted roller to assure full contact of the back of the membrane into the adhesive.

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

## COVERAGE

Roll covers 100 sq. ft. (9.29 m<sup>2</sup>) when applied, with roll dimensions of 39-3/8" x 34'5" (1m x 10.5m). Hot melt interply application rate: 25 lbs/ 100ft<sup>2</sup> (1.24 kg/m<sup>2</sup>) Cold process interply application rate: 2 gal/SQ (0.8 L/m<sup>2</sup>)

## 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.

## PHYSICAL PROPERTIES

PROPERTY	TYPICAL VALUE	TEST METHOD
Thickness	3.5 mm (138 mils.)	ASTM D5147
Elongation at 0°F (-18°C)	10.0% MD, 9.0% XMD	ASTM D5147
Tensile Strength @ 0°F (-18°C)	410 lbf/in MD, 370 lbf/in XMD	ASTM D5147
Elongation at 73°F (23°C)	12.0% MD, 8.0% XMD	ASTM D5147
Tensile Strength at 73°F (23°C)	345 lbf/in MD, 340 lbf/in XMD	ASTM D5147
Tear strength at 73°F (23°C)	600 lbf MD, 580 lbf XMD	ASTM D5147
Low Temp Flex	-35°F (-37°C)	ASTM D5147
Dimensional Stability	pass	ASTM D5147
Compound Satability at 215°F (102°C)	pass	ASTM D5147

## MAINTENANCE

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

## PRECAUTIONS

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

## TECHNICAL SUPPORT

Your local Tremco Roofing Sales Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications.



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