# **POWERply SA FR**

## A Fire Rated, Granule Surfaced, Polyester Reinforced, Self Adhesive SBS Modified Bitumen Membrane

**Composition:** POWERply SA FR is a self adhesive SBS Modified Bitumen membrane with fire resistant characteristics. It consists of specially blended SBS modified asphalt above the polyester reinforcement with an underlying SIS modified self adhesive bitumen blend to adhere the membrane in approved configurations. POWERply SA FR is surfaced with a factory applied ceramic granules. The bottom of POWERply SA FR is provided with a perforated and split release film to allow for easier handling and removal during installation. The selvedge is also protected with a release film to assure excellent lap adhesion. In addition, a six inch wide factory end lap with a release film is provided at the core end of each roll to assist in construction of a watertight end lap. POWERply SA FR meets the requirements of ASTM D 6164, Type I, Grade G.

**Basic Uses:** POWERply SA FR is designed for use as the top sheet in a self adhered modified bitumen membrane roof system. POWERply SA FR may also be used as the top sheet in a flashing installation. In addition POWERply SA FR may be specified as a component in a variety of roofing and waterproofing applications as specified by your local Tremco Representative.

#### Limitations:

- Not intended for application directly under a hot applied bituminous roof membrane system.
- Not intended for application over plies adhered in cold process bituminous adhesives.
- Tremprime WB (waterbased) asphaltic primer is not recommended for priming concrete (masonry) surfaces prior to the application of POWERply SA membranes.
- The following surfaces are **not** acceptable for POWERply SA FR; Perlite, Dens-Deck Prime (factory primed), Asphalt base sheets with sand surfacing, Uncoated wood fiber insulation, Organic ply sheets, foil faced insulation, light weight insulating concrete, EPS.

Product Advantages		
Features	Benefits	
SBS polymer modified asphalt	<ul> <li>Resists thermal shock and splitting</li> </ul>	
Self Adhesive modified bitu- men backing	<ul> <li>Economical application method</li> </ul>	
	<ul> <li>Reduced odors during installation</li> </ul>	
Safer application	<ul> <li>No hot adhesives or torches required:</li> </ul>	
	• Reduced risk of fire	
Clean Application	<ul> <li>No tracking of adhesive</li> </ul>	
Polyester reinforced	<ul> <li>Strong, yet pliable to resist tears, splits, and punctures</li> </ul>	
Factory applied granule surface	<ul> <li>Saves jobsite labor and reduces potential application errors</li> </ul>	
UL Classified	• Fire protection	

- Not to be applied at temperatures below 40°F (5°C). Ambient and surface temperatures must be a minimum of 40°F (5°C) and expected to rise during the day.
- All substrates must be clean and dry during application. Do not apply over pre-existing embrittled asphalt or bitumen encrustations. Substrate must be spud clean and smooth.
- Not intended to perform under ponding water conditions. Positive drainage required.
- Not to be exposed to solvents, oils, or other contaminants harmful to asphaltic materials.
- Backnail on roofs with slopes greater than 2:12 (2" per foot) (16.6%) or greater.

**Dimensions:** POWERply SA FR is available in a 3.3 mm (130 mil) thick,  $1m \times 10m (39-3/8" \times 32' 10")$  roll. Roll covers approximately 10 m<sup>2</sup> (100 sq ft) when applied. Each roll weighs approximately 95 lbs (43 kg). Selvage width is 3-3/8" (86 mm) and end lap is 6" (152 mm). Membrane is provided with a factory applied white granule surfacing. Custom colors are available upon request. Contact your local Tremco Representative for further information.

**Packaging:** POWERply SA FR is available in pallets only, with 20 rolls per pallet. Each roll is individually boxed. Do not remove roll from box until installation. Store box standing on end and protect from rain and excessive temperatures prior to application.

**Storage Life:** One year at warehouse temperatures between  $45^{\circ}F$  (7°C) and  $110^{\circ}F$  (43°C). Self Adhesive compound will lose its tack over time and cannot be stored indefinitely.

#### **General Application Data:**

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, tapered insulation, or a Tremco approved lightweight insulating concrete slope system.

**Insulation:** Insulation must be dry and kept dry. No more insulation shall be installed than 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 approved roof insulation or prepare substrate as specified.

#### Application:

Install POWERply SA FR over approved base sheet or substrate only. Substrates such as wood, concrete, metal and Dens-Deck must be primed with Tremprime QD Low Odor prior to application of POWERply Self Adhesive membranes.



Roofing & Weatherproofing Peace of Mind™

Sand surfaced base sheets, such as BURmastic Composite Ply, are not acceptable substrates. Tremco/Temple Fiberbase HD (six side coated wood fiber insulation) is the only approved wood fiber insulation for use under POWERply Self Adhesive membranes.

Plan placement of POWERply SA FR to ensure that water flows over or along, but not against the exposed edges. Offset POWERply SA FR laps from base ply laps. Starting at the low point of the roof, lay out sheet to assure all seams are straight and properly aligned with the roof edge. Align the factory applied selvedge release film on the roof field side of the sheet, **not** along the roof edge.

Fold back POWERply SA FR lengthwise, then remove the first half of the perforated release film. Carefully fold the sheet back onto the substrate and adhere the first half. Press the membrane into place with firm, even pressure to assure positive adhesion. Avoid voids, wrinkles, and buckling. After first half is adhered, fold back other half of sheet. Remove release film backing and adhere remaining portion of sheet to the substrate in the same manner.

Position and apply second roll of POWERply SA FR parallel to the first roll, fully overlapping the release film on the first roll a minimum 3.5" (89 mm). With the first and second roll properly placed, aligned, overlapped, and adhered, remove the release film from the previous sheet's selvedge. Press the selvedge to fully adhere, using firm, even pressure to assure positive adhesion. Continue application of all subsequent rolls in the same manner.

Overlap POWERply SA FR end laps 6 " minimum. Do not remove 6" (minimum) of release film from the top sheet until ready to seal end lap. Stagger end laps at least 36" (914 mm). No special end lap treatment is necessary if using the factory end lap which is at the core of each roll. When constructing end laps onto granule surfaced sections, embed granules into the membrane using a heated trowel. Alternately, seal end laps using Polyroof LV.

Roll the finished Powerply SA FR surface to assure positive adhesion. Use an 80 lb linoleum roller, water filled lawn roller, or similar weighted roller to provide sufficient pressure to finished membrane surface.

**Cool Weather Conditions:** Rooftop temperatures of 140F (60C) must be attained to fully activate the self adhesive backing and laps. Ultimate system laminate strengths are not fully achieved until POWERply SA membrane equilibrates at or above this temperature.

Under weather conditions where POWERply SA membranes will not achieve the proper heat cycle temperature, alternate heat sources are recommended to obtain positive adhesion of end laps, side laps, and other critical areas.

Heat overlap areas of POWERply SA membrane with an electric powered hot air welding tool, such as one used to weld single ply laps. Apply heated air evenly to overlap areas until surface becomes warm and glossy in appearance. Do not overheat and cause bitumen to liquefy and flow. Join heated overlap areas immediately and apply pressure using a hand seam roller. Do not allow traffic on lap areas until cool.

**Precautions:** Users must read container labels and material safety data sheets for health and safety precautions prior to 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 SA FR to be free of defects and to meet published

### **Physical Performance Characteristics**

#### **POWERply SA FR**

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Property	Typical Value	Fest Method	
Thickness	0.130 in. (3.3 mm)	ASTM D 6164-00	
Tensile Strength @ 0F (-18°C) Minimum	70 lbf (12.3 kN/m) MD 70 lbf (12.3 kN/m) XMI		
Elongation @ 0F (-18°C) Minimum	20% MD 20% XMD	ASTM D 6164-00	
	50 lbf (8.8 kN/m) MD 50 lbf (8.8 kN/m) XMD		
Elongation @ 77°F (25°C) Minimum	35% MD 35% XMD	ASTM D 6164-00	
Tear Strength at 77°F (25°C)	55 lbf MD (246 N) 55 lbf XMD (246 N)	ASTM D 6164-00	
Low Temperature Flexibility	0F (-18°C)	ASTM D 6164-00	
Dimensional Stability, max	1.0%	ASTM D 6164-00	
Compound Stability at 215°F (102°C)	no failure	ASTM D 6164-00	
Granule Embedment	2 g. max	ASTM D 6164-00	

physical properties when tested according to ASTM and Tremco standards. Under this warranty, any product 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. 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 nor its Representatives practice architecture or engineering, Tremco offers no opinion on, and expressly disclaims any responsibility for the 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.



An **RPM** Company

3735 Green Road Beachwood, OH 44122 216-292-5000

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