# **POWERPly® APP FR**

### A High Elongation Granule Surfaced Polyester Reinforced APP Modified Bitumen Membrane

#### **FEATURES**

APP polymer modified bitumen

Polyester reinforced

Torch applied

Factory applied surfacing reduces application errors

#### BENEFITS

- Excellent long term weatherability
- Puncture resistant, tough and durable reinforcement
- Economical application method, versatile
- Saves jobsite labor

**DESCRIPTION** 

POWERPly® APP FR is a granule surfaced, fire rated modified bitumen membrane. It consists of specially selected asphalt, modified with a blend of APP polymers and fire retardant additives, and reinforced with a non-woven polyester mat. The back of the sheet is surfaced with a light layer of sand. POWERply APP FR is furnished with a factory applied white granule surfacing and meets the performance requirements of ASTM D 6222, Type I Grade G. POWERply APP FR is asbestos free..

**BASIC USES** 

POWERply APP FR is designed for use in torch applications. It is used in multi-ply applications where a polyester reinforced granule surfaced membrane is desired. POWERply APP FR may also be used as a flashing sheet. Refer to UL Roofing Materials & Systems Directory and/or FM Approvals RoofNav® for applicable roof system configurations.

**DIMENSIONS** 

Available in a 4.5 mm thick, 1 m.  $\times$  10 m (39-3/8"  $\times$  32' 10") roll. Roll covers 9 m2 (97 sq ft.) when applied. Each roll weighs approximately 112 lbs. (50.8 kg.). Selvage width is 3-3/8" (86 mm).

POWERply APP FR is available in pallets only, with 20 rolls 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, 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 roof insulation or nailed base sheet and multi-ply base ply system.

**Application:** Plan placement of POWERply APP FR to ensure that water flows over or along, but not against, the exposed edges. Starting at the low point of the roof, set the roll and unroll the roll up to half of the length where possible to assure proper alignment. Torch apply the flame to the surface of the coiled roll until the surface reaches the proper application temperature (330°F to 350°F [166°C to 176°C]).

The torch flame must be moved from side to side to heat the back of the sheet enough to develop a glossy sheen. In addition, the selvage and end lap areas of the previously applied

PACKAGING APPLICATION

### APPLICATION

#### **LIMITATIONS**

#### PHYSICAL PROPERTIES

### **PRODUCT PRECAUTIONS**

### **POWERply® APP FR**

sheet must be torch heated to provide proper adhesion. Heavy smoke from the torched surface indicates the surface is being overheated.

Slowly unroll the torch heated roll while applying sufficient pressure to the roll to adhere the sheet to the underlying surface. Align the next roll along the factory applied lay line at the inside of the selvage and continue application. A 1/8" to 3/8" (3 mm to 10 mm) bleed out of APP bitumen extending beyond the edge of each lap is required. Immediately apply matching granules into this bleed out along all side laps and end laps. Roll side laps and end laps with a steel lap roller and check all laps for proper adhesion.

Embed the granules on POWERply APP FR prior to adhering additional sheeting over at end laps, base flashings, and for patchwork. Heat the granule section and press the granules into the compound using a steel trowel to provide a surface capable of proper adhesion.

Side laps 3-3/8" (86mm) Minimum; end laps 6" (152mm) minimum. Offset membrane laps from base ply laps. Stagger end laps at least 36" (914 mm). Install flashings as specified.

- Not intended to perform under ponding conditions. Positive drainage required.
- Not intended for application in hot applied bituminous adhesives.
- 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.
- Special precautions are required for applications at temperatures below 40° F (4.5°C).
   Store rolls in a heated area. Do not throw or drop rolls, as this may crack the coating.
- Do not double stack rolls with or without pallets.

PROPERTY	TYPICAL VALUE	TEST METHOD
Thickness	0.180 in. (4.5 mm)	ASTM D 6222
Tensile strength @ 0°F (-18°C)	151 lbf/in. MD (26.4kN/m), 105 lbf/in. XMD (18.4kN/m)	ASTM D 6222
Elongation at 0°F (-18°C)	38% MD, 42% XMD	ASTM D 6222
Tear strength at 77°F (25°C)	175 lbf/MD (778N), 143 lbf/XMD (636N)	ASTM D 6222
Low Temperature Flexibility	12°F (-11°C)	ASTM D 6222
Dimensional Stability	0.90% MD, 0.60% XMD	ASTM D 6222

Provide written notice to the local fire department in localities where required. Obtain permits for application of roofing by torch where required.

Roofing workers should wear proper protective equipment for torch installations, including long sleeved nonsynthetic shirts, long pants with no cuffs, boots, heat resistant gloves, and a face shield.

Roofing workers must be properly trained in a safe application techniques for torch applied roofing, such as provided by the CERTA (Certified Roofing Torch Applicator) Program.

Do not torch onto or near combustible materials or surfaces. Do not torch near or into vents, openings, cracks, or penetrations into the building. Shut off power fans in the torch area. Never leave lighted torches unattended.

A fire watch never shorter than 1 hour after the torch application is required for all torch applications. A longer fire watch may be necessary due to the size or configuration of the building. Use an infra-red heat imaging device to detect hot spots or smoldering materials. If a fire is detected, contact the fire department immediately.

Tremco does not supervise contractors or any other person in the application of heat welded torch applied modified bitumens and assumes no responsibility for fire damage or any other damages.

Users must read container labels and safety data sheets for health and safety precautions prior to use.



## **POWERPly® APP FR**

**MAINTENANCE** 

**GENERAL PRECAUTIONS** 

**TECHNICAL SUPPORT** 

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.

Users must read container labels and Safety Data Sheets for health and safety precautions

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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