

# POWERply® APP SMOOTH

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

**Composition:** POWERply® APP Smooth is a smooth 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 Smooth meets the performance requirements of ASTM D 6222, Type I, Grade S. POWERply APP Smooth is asbestos free.

**Basic Uses:** POWERply APP Smooth is designed for use in torch applications. It is used in multi-ply applications where a polyester reinforced smooth surfaced membrane is desired. POWERply APP Smooth 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.

**Limitations:**

- Surfacing of either an approved coating or aggregate is required.
- Not intended for application in hot applied bituminous adhesives.
- 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.
- 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.

**Dimensions:** Available in a 4.0 mm (160mil) thick, 1 m. x 10 m (39-3/8" x 32' 10") roll. Roll covers 9 m<sup>2</sup> (97 sq ft.) when applied. Each roll weighs approximately 92 lbs. (41.8 kg.).

**Packaging:** 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.

The use of FAS-n-Free® Adhesive for solvent free fastener free insulation attachment is the preferred method of securement 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.

**Application:** Plan placement of POWERply APP Smooth 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 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

Product Advantages	
Features	Benefits
APP polymer modified bitumen	Excellent long term weatherability
Polyester reinforced	Puncture resistant Tough and durable reinforcement
Torch applied	Economical application method Versatile
Factory applied surfacing reduces application errors	Saves jobsite labor

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surface. 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. Roll side laps and end laps with a steel lap roller and check all laps for 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.

**Precautions:** 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 detection 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 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 APP Smooth to be free of defects and to meet published 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.

## Physical Performance Characteristics

### POWERply® APP Smooth

Property	Typical Value	Test Method
Thickness	0.160 in. (4.0 mm)	ASTM D 6222
Tensile strength @ 0°F (-18°C)	181 lbf/in. MD (31.7kN/m) 121 lbf/in. XMD (21.2kN/m)	ASTM D 6222
Elongation at 0°F (-18°C)	42% MD 46% XMD	ASTM D 6222
Tear strength at 77°F (25°C)	179 lbf/MD (796N) 149 lbf/XMD (662N)	ASTM D 6222
Low Temperature Flexibility	10°F (-12°C)	ASTM D 6222
Dimensional Stability	0.90% MD 0.60% XMD	ASTM D 6222

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.



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