

POWERply® Endure™ 320 FR

A Fire Rated, Granule Surfaced, High Tensile, Bilaminate Reinforced SBS Modified Bitumen Membrane



FEATURES

SBS elastomer enhanced with Reactive Enhanced Terpolymer (RET) and Thermoplastic Polyurethane (TPU)

Factory applied surfacing protected with GranuLock™

Roof-ID™ chip embedded into each roll

UL Classified

BENEFITS

Improves durability of the modified bitumen blend

Increases granule retention to enhance longevity of the membrane

Capability to identify the membrane and its QC data over the life of the roof system

Fire Protection

DESCRIPTION

POWERply Endure 320 FR is an asbestos free, granule surfaced, modified bitumen membrane with fire resistant characteristics. It consists of specially selected bitumens, modified with SBS rubber along with RET and urethane high performance elastomers and reinforced with a combination polyester and fiberglass mat with a scrim core. POWERply Endure 320 FR is furnished with a factory applied white granule surfacing. This product exceeds the requirements of ASTM D 6162, Type III, Grade G. POWERply Endure 320 FR roof systems are fire rated by Underwriters Laboratories for an exterior fire hazard. Refer to UL Roofing Materials and Systems Directory for applicable system configurations.

BASIC USES

POWERply Endure 320 FR is designed for roof membrane and flashing applications in cold applied asphalt adhesives over multi-ply systems where a high strength, bilaminate reinforced, granule surfaced membrane is desired. POWERply Endure 320 FR roof systems are fire rated by Underwriters Laboratories for an exterior fire hazard.

PACKAGING

POWERply Endure 320 FR is a 3.7mm (146 mil) thick membrane. A roll covers 100 sq. ft. (9.29 m²) when applied, with roll dimensions of 39-3/8" x 34'5" (1m x 10.5m). Each roll weighs approximately 109 lbs (49.4 kg).

POWERply Endure 320 FR is available in pallets only, with 20 rolls per pallet.

APPLICATION

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.

Plan the placement of POWERply Endure 320 FR to ensure that water flows over or along, but not against, the exposed edges. Starting at the low point of the roof, apply adhesive uniformly and continuously according to specifications. Embed the ply sheet(s) as specified. Avoid walking in plies during the placement.

Cut the POWERply Endure 320 FR in 16' to 18' (4.9 to 5.5 m) lengths, maximum. Allow lengths to relax for the following time period prior to installation:

Above 55° F (13° C): 30 minutes

Below 55° F (13° C): 60 minutes



POWERply® Endure™ 320 FR

APPLICATION CONTINUED

Place the POWERply Endure 320 FR in a uniform and continuous application of adhesive. Press the membrane into the adhesive using a weighted roller 35-75 lbs. (16-34 kg.) 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. Hot air welding of laps is acceptable. Offset membrane laps for 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 RATES

Cold process interply application rate: 2 gal/SQ (0.8 L/m²)

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	3.7 mm (146 mils)	ASTM D 5147
Elongation @ 0° F (-18°C)	5.0% MD 9.0%XMD	ASTM D 5147
Tensile Strength @ 0°F (-18°C)	541 lbf/in MD (94.7 kN/M) 544 lbf/in XMD (95.2 kN/M)	ASTM D 5147
Tensile Strength @ 77°F (25°C)	482 lbf/in MD (84.4 kN/M) 500 lbf/in XMD (87.5 kN/M)	ASTM D 5147
Elongation @ 77°F (25°C)	6.3% MD 6.0% XMD	ASTM D 5147
Tear Strength @ 77°F (25°C)	785 lbf MD (3490 N) 760 lbf XMD (3380 N)	ASTM D 5147
Low Temp Flex	-35°F (-37° C)	ASTM D 5147
Dimensional Stability	pass	ASTM D 5147
Compound Stability @ 215°F (102°C)	pass	ASTM D 5147

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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