

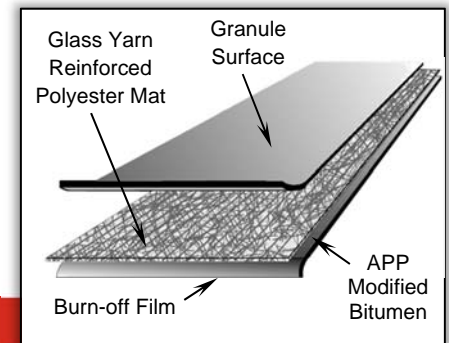
APP 180 FR

Item Description

- 1 Roll – UltraWhite™ (1 Square)
- 1 Roll – White Sheet (1 Square)
- 1 Roll – Black Sheet (1 Square)

Item Number

- W70PUWP180F
- W70PWP180F
- W70PBP180F



Meets or exceeds performance requirements of ASTM D 6222, Type I, Grade G

Product Information

Description:

Firestone APP 180 FR is a granule-surface APP modified bitumen roofing membrane designed to be heat-welded. It consists of select asphalt, modified with atactic polypropylene, and strengthened with a fiber glass reinforced polyester nonwoven mat [190 g/m² (3.9 lb/100 ft²)] made with 100% recycled PET fibers. The combination results in a flexible and durable material that exceeds the performance requirements of ASTM D 6222 Type I, Grade G. APP 180 FR is a membrane that is strong and stable, and resistant to natural forces and other factors on the roof-top. The addition of fire-retardant materials increases the fire resistance of the membrane. APP 180 FR is ideal for both new construction and re-roofing applications as a cap sheet or as a flashing sheet in single or multi-ply APP applications.

Product Packaging

Roll Width:	3' 3" (1 m)	Pallet Size:	48" x 39" (1.2 m x 1 m)
Roll Length:	32' 10" (10 m)	Rolls Per Pallet:	20
Net Coverage:	98 ft ² (9.1 m ²)	Weight per Pallet:	2,090 lb (950 kg)
Roll Weight:	102 lb (46 kg)		

Method of Application:

1. APP 180 FR membranes must be fully heat-welded to an approved substrate.
2. Please see the APP Design and Application Guide at www.firestonebpco.com for detailed application information.

Acceptable Immediate Substrates for Heat-Welded Application:

- Structural Concrete (must be clean, dry, properly cured, and primed with ASTM D-41 primer).
- Approved Firestone base sheet.
- Existing Smooth Surface BUR or APP Modified Bitumen (must be clean, smooth and primed with ASTM D-41 primer).
- DensDeck® Prime, SECUROCK® Gypsum Fiber.

NOTE: Please consult the APP Design Guide and QuickSpecs online at www.firestonebpco.com to review specific information regarding the type of deck and insulation in use.

Storage:

- All material should be stored out of the weather in a clean, dry area in its original unopened packaging at a minimum of 50 °F (10 °C) and a maximum of 100 °F (38 °C) so that it will be 50 °F (10 °C) or above at the time of application.
- Do not stack Firestone APP 180 FR membrane more than two (2) pallets high.
- If the material must be stored temporarily on the roof before application, it must be elevated from the roof surface on a pallet, stored on end, and covered from the weather with a light colored opaque tarp in a neat, safe manner that does not exceed the allowable load limit of the storage area.

TECHNICAL INFORMATION SHEET

APP 180 FR

Precautions:

- For safety information, refer to the Safety Data Sheet (SDS) for APP Membranes and Flashing.
- Take care when transporting and handling Firestone Modified Bitumen rolls to avoid punctures and other types of physical damage.
- Isolate waste products, petroleum products, grease, oil (mineral and vegetable) and animal fats from all Firestone Modified Bitumen membranes.

LEED® Information:

Post Consumer Recycled Content: 6%

Post Industrial Recycled Content: 0%

Manufacturing Location: Beech Grove, IN

*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



Typical Properties (Meets ASTM D 6222, Type I, Grade G)

Property	ASTM Standard	ASTM Standard Required Value	Typical Performance
Product Thickness:	D 5147	160 mil (4 mm)	165 mil (4.2 mm)
Net Mass:	D 146	85 lb/100 ft ² (4,150 g/m ²)	97 lb/100 ft ² (4,736 g/m ²)
Bottom Side Coating:	D 5147	30 mil (0.76 mm)	43 mil (1.10 mm)
Peak Load at 73 °F (23 °C):	D 5147	50 lbf/in, MD (8.8 kN/m, MD)	55 lbf/in, MD (9.6 kN/m, MD)
		50 lbf/in, XMD (8.8 kN/m, XMD)	55 lbf/in, XMD (9.6 kN/m, XMD)
Elongation at Peak Load at 73 °F (23 °C):	D 5147	23%, MD	30%, MD
		23%, XMD	30%, XMD
Peak Load at 0 °F (-18 °C):	D 5147	60 lbf/in, MD (10.5 kN/m, MD)	65 lbf/in, MD (11.4 kN/m, MD)
		60 lbf/in, XMD (10.5 kN/m, XMD)	65 lbf/in, XMD (11.4 kN/m, XMD)
Elongation at Peak Load at 0 °F (-18 °C):	D 5147	10%, MD	15%, MD
		10%, XMD	15%, XMD
Ultimate Elongation at 5% of Peak Load 73 °F (23 °C):	D 5147	30%, MD	40%, MD
		30%, XMD	40%, XMD
Tear Strength at 73 °F (23 °C):	D 5147, D 4073	70 lbf, MD (311 N, MD)	75 lbf, MD (334 N, MD)
		70 lbf, XMD (311 N, XMD)	75 lbf, XMD (334 N, XMD)
Low Temperature Flexibility:	D 5147	32 °F (0 °C)	32 °F (0 °C)
Dimensional Stability:	D 5147, D 1204	1% Change, MD	0.2% Change, MD
		1% Change, XMD	0.2% Change, XMD
Compound Stability:	D 5147	230 °F (110 °C)	270 °F (132 °C)
Granule Embedment, max	D 4977	2 g	0.5 g
Water Absorption:	D 5147, D 95	3.2%	0%
Moisture Content:	D 5147, D 95	1%	0%
Low Temperature Unrolling:	D 5636	41 °F (5 °C)	0 °F (-18 °C)

TECHNICAL INFORMATION SHEET

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Radiative Properties (UltraWhite Sheet Only)

<u>Cool Roof Rating Council (CRRC):</u>	<u>UltraWhite Sheet: Initial / 3 yr Simulated**</u>
Solar Reflectance	0.71 / 0.71**
Thermal Emittance	0.87 / 0.87**
Rated Product ID	0034
Licensed Manufacturer ID	0608
Classification	Production Line
Solar Reflectance Index (SRI)*	87
* SRI calculated using the ORNL (DOE) calculator, ASTM E 1980-01	
**CRRC Rapid Ratings: These are interim laboratory-aged values that simulate weathered values.	

NOTE: The initial SRI for standard white membrane is 33. The SRI for black membrane is N/A.



Please contact Quality Building Services Technical Department at 1-800-428-4511 for further information.

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