

Meets the requirements of ASTM D 6222, Type I, Grade G

Features and Components

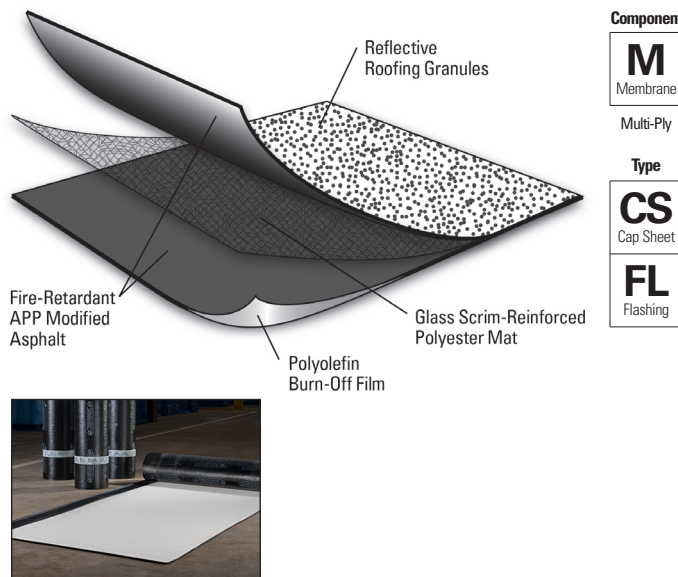
APPeX 4.5M FR CR G is used as a polyester-reinforced cool roof cap or flashing sheet in APP multi-ply roofing systems.

Reflective Roofing Granules: Specifically engineered for high reflectivity, durability and optimal embedment in the APP modified bitumen sheet.

APP (Atactic Polypropylene) Polymer and Asphalt Blend: Provides an extremely durable sheet with excellent weathering characteristics, flexibility and dimensional stability for ease of handling and quick installations.

Polyester Reinforcement Mat: Provides bidirectional glass-scrim reinforcement and offers robust tear strength and puncture resistance, allowing for high wind performance and excellent hail rating. The sheet also exhibits strong dimensional stability and enhanced elongation.

Polyolefin Burn-Off Film: Promotes ease of heat welding.



Colors: Bright white only

System Compatibility This product may be used as a component in the following systems. Please reference product application for specific installation methods and information.

Multi-Ply	BUR		APP			SBS			
	HA	CA	CA	HW	HA	CA	HW	SA	MF
Compatible with the selected multi-ply systems above									

Single Ply	TPO				PVC			EPDM		
	MF	AD	SA	IW	MF	AD	IW	MF	AD	BA
Do not use with single ply systems										

Key: HA = Hot Applied CA = Cold Applied HW = Heat Weldable SA = Self Adhered MF = Mechanically Fastened IW = Induction Weld BA = Ballasted AD = Adhered

Energy and the Environment

CRRRC®	Test	Initial	3-Year Aged**
		Reflectivity (ASTM C 1549)	0.70
	Emissivity (ASTM C 1371)	0.90	0.91
Rated Product ID: 0662-0042c Licensed Manufacturer ID: 0662 Classification: Production Line			
LEED®	Solar Reflectance Index (SRI) - E 1980	85	80
	Recycled Content	0%	

* Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building construction may vary.

Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating normal procedures.

** Tested in accordance with Rapid Ratings D7897.

CAN BE USED TO COMPLY WITH TITLE 24 PART 6 COOL ROOF REQUIREMENTS

Peak Advantage® Guarantee Information

Systems	Guarantee Term
Dependent on system*	Up to 20 years

*Contact JM Technical Services for specific system requirements or guarantee terms.

Codes and Approvals



• UL Class A ratings may be obtained in numerous constructions, both new and re-roof.

Product Application



Heat Weld

Refer to JM APP modified bitumen specifications and detail drawings for application and slope information.

Packaging and Dimensions

Roll Width	39 3/8" (1 m)
Roll Length	32' 10" (10.01 m)
Roll Coverage*	95.8 ft ² (8.9 m ²)
Roll Weight	108 lb (49 kg)
Rolls per Pallet	20
Pallets per Truck**	20

*Assumes a 4" side lap.

** Assumes a 48' flatbed truck.

Storage

Shelf Life*	12 months
Storage Conditions*	Max temperature 120°F (48.8°C) and out of direct sunlight

*Failure to follow recommended storage guidelines may lead to staining of bright white granules prior to installation.

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Tested Physical Properties

Physical Properties		ASTM Test Method	Standard for ASTM D 6222, Type I, Grade G	APPeX 4.5M FR CR G		
				MD*	XMD**	
Strength	Tear Resistance @ 73.4° F		D 4073 / 5147	≥ 70 lbf	146 lbf	97 lbf
	Peak Load at 0°F (-18°C)		D 5147	≥ 60 lbf/in-width	133 lbf/in-width	107 lbf/in-width
	Peak Load at 73.4°F (23°C)	Unconditioned	D 5147	≥ 50 lbf/in-width	102 lbf/in-width	69 lbf/in-width
		90-Day Heat Conditioned	D 5147 / 5869	≥ 50 lbf/in-width	102 lbf/in-width	67 lbf/in-width
Longevity	Low Temp. Flexibility @ 180° on 1" Mandrel (Pass-Fail)	Unconditioned	D 5147	Pass @ 32° F "none of the specimens show cracking"	Pass	
		90-Day Heat Conditioned	D 5147 / 5869		Pass	
	Low Temperature Unrolling (Pass-Fail) Unroll in 4-6s; Visual Inspection in "unrolled" position		D 5636	Pass @ 41° F "none of the specimens show cracking"	Pass	
	Compound Stability - 2 hr 15 min @ 230° F (Pass-Fail)		D 5147	Pass "no failures showing signs of flowing, dripping, or drop formation"	Pass	
	Granule Loss		D 4977/5147	2 g (0.07 oz)	0.9 g (0.03 oz)	
	Thickness		D 5147	≥ 160 mils	163 mils	
	Bottom Coating Thickness		D 5147	≥ 30 mils	44 mils	
	Water Absorption - water by distillation		D 5147 / 95	≤ 3.2 %	0.6%	
	Moisture Content - water by distillation		D 5147 / 95	≤ 1 %	0.2%	
	Ultimate Elongation at 73.4°F		D 6222	≥ 30 %	51%	59%
	Elongation at Peak Load @ 0° F		D 5147	≥ 10 %	12%	10%
	Elongation at Peak Load @ 73.4° F	Unconditioned	D 5147	≥ 23 %	49%	56%
		90-Day Heat Conditioned	D 5147 / 5869	≥ 23 %	41%	32%
	Installation	Dimensional Stability - 24 hr @ 176° F		D 5147 / 1204	≤ 1 %	0.20%
Net Mass per Unit Area		D 146	≥ 85 lb/100 ft ²	94 lb/100 ft ²		

*MD = Machine Direction

**XMD = Cross-Machine Direction

Note: All data represents tested values.

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The Safety Data Sheet is available by calling (800) 922-5922 or on the web at www.jm.com/roofing. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Check with the regional sales representative nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville roofing products and systems, visit www.jm.com/terms-conditions.