

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

Features and Components

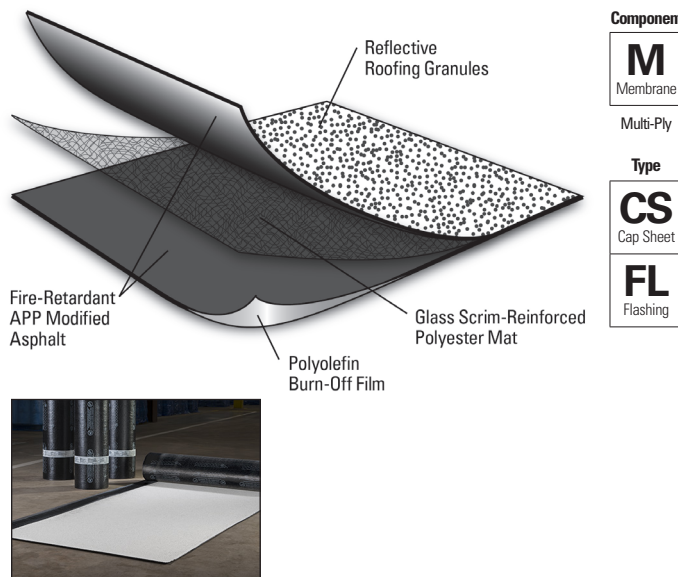
APPeX 4.5M FR CR G is used as a polyester-reinforced cool roof cap or flashing sheet in APP multi-ply roofing systems.

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 | 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

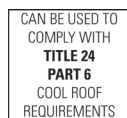
Energy and the Environment

| 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.



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* | 3 months |
| Storage Conditions* | Max temperature 120°F (48.8°C) and out of direct sunlight |

*Extended storage of CR G membranes at elevated temperatures can lead to staining 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% | 0.05% |
| | 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.