

**Three-Ply Cold Application, Base Sheet-Fastened Modified Bitumen Smooth-Surfaced Roofing System. For use over Johns Manville (JM) insulation, approved substrate or other approved insulations on inclines up to 6" per ft (500 mm/m).**

**Materials per 100 ft<sup>2</sup> (9.29 m<sup>2</sup>) of roof area**

**Base Ply:**

TRICOR S\*, BICOR S\*, JM APP Base, Ventsulation Felt or PermaPly 28 1 layer

**Intermediate Plies:**

TRICOR S, BICOR S or JM APP Base 1 layer

**Cap: ♦**

TRICOR S or BICOR S 1 layer

**Surfacing: Coverage\*/ 100 ft<sup>2</sup> (9.29 m<sup>2</sup>)**

Asphalt Emulsion (Formerly TopGard Type B)	3 - 4 gal (11 - 15 l)
TopGard Type A (Aluminum Emulsion)	1½ - 2 gal (6 - 8 l)
Fibrated Aluminum Roof Coating	1½ - 2 gal (6 - 8 l)
TopGard 4000	1 - 2 gal (4 - 8 l)
TopGard 5000	1 - 2 gal (4 - 8 l)
TopGard Base Coat	1 - 2 gal (4 - 8 l)

Approximate installed weight: 185 - 270 lb (84 - 122 kg).

\* Coverage rates depend on weather conditions and substrate. Refer to specific code agency Web sites for exact constructions that may require a specific application rate for compliance.

**General**

This specification is for use over any type of approved structural deck with insulation or approved substrate which is suitable to receive a mechanical fastener and which provides an acceptable surface to receive the roof.

Specific written approval is required for any roof insulation that is not supplied by JM. Insulation shall be installed in accordance with the appropriate JM insulation specification detailed in the JM Commercial/Industrial Roofing Systems Manual. This specification can also be used in certain re-roofing situations. Refer to the "Re-roofing" section of the JM Commercial/Industrial Roofing Systems Manual. This specification is not to be used over gypsum, either poured or precast, or lightweight insulating concrete decks or fills.

**Design and installation of the deck and/or roof substrate must result in the roof draining freely, to outlets numerous enough and so located as to remove water promptly and completely. Areas where water ponds for more than 24 hours are unacceptable and will not be eligible for a JM Peak Advantage Guarantee.**

**Flashings**

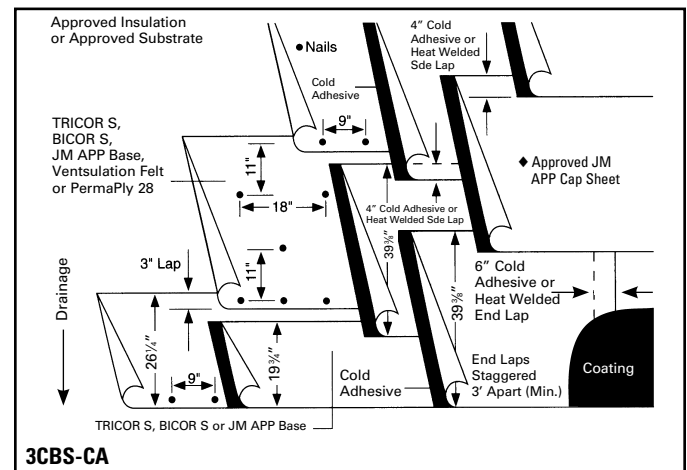
Flashing details can be found in Section 3 of the JM Commercial/Industrial Roofing Systems Manual.

**Application**

Using one of the base plies listed, mechanically fasten with an approved JM insulation fastener and plate a 26¼" (667 mm) wide piece of base ply through the insulation. The remaining base plies are to be applied full width with 3" (76 mm) side and 4" (102 mm) end laps over the preceding sheets. Fasten the laps at 9" (229 mm) centers, and down the longitudinal center of each felt ply, place two rows of fasteners, with the rows spaced approximately 11" (279 mm) apart, and fasteners staggered on approximately 18" (457 mm) centers. Use fasteners appropriate to the insulation and deck. For additional fastener information, refer to the "Roof Decks" section of the current JM Commercial/Industrial Roofing Systems Manual.

Roll an 19¾" (502 mm) wide piece of one of the intermediate felts listed into a full coating of MBR Cold Application Adhesive or MBR Bonding Adhesive. The remaining felts are to be applied full width, in the same manner. End and side laps can be done in one of the following ways:

Refer to the Material Safety Data Sheet and product label prior to using this product.



- A) Use MBR Cold Application Adhesive or MBR Bonding Adhesive on the 3" (76 mm) side and 6" (152 mm) end lap. **Or...**
- B) Use a hot air gun or torch on the 3" (76 mm) side and 6" (152 mm) end lap. All laps must be rolled with a 3" (76 mm) rounded edge roller. A ⅛" to ⅜" (3 mm to 10 mm) bleedout of APP compound shall be visible at the edge of all seams. All laps must be checked for good adhesion.

- Cap sheet application is accomplished in one of the following ways:
- A) Apply a full width piece of one of the cap sheets listed into a full coating of MBR Cold Application Adhesive or MBR Bonding Adhesive. Subsequent sheets are to be applied in the same manner, with 4" (102 mm) side and 6" (152 mm) end laps over the preceding sheets. **Or...**
- B) Apply heat to the 3" (76 mm) side and 6" (152 mm) end lap making sure both have a good compound flow to adhere the two surfaces. All laps must be rolled with a 3" (76 mm) rounded edge roller. A ⅛" to ⅜" (3 mm to 10 mm) bleedout of APP compound shall be visible at the edge of all seams. All laps must be checked for good adhesion.

Subsequent sheets are to be applied in the same manner.

**Application of JM APP modified bitumen products may require the use of a hot air gun or torch. Improper use of these materials and application equipment can result in severe burns, and/or other physical injury, as well as damage to property. In order to prevent these situations the mechanic must install the materials using the techniques recommended by JM and those found in "A Guide to Safety: Torch-On Modified Bitumens" available from the Asphalt Roofing Manufacturers Association. These techniques have been endorsed by the National Roofing Contractors Association and the United Union of Roofers, Waterproofers and Allied Workers.**

For cold weather application techniques, refer to Paragraph 14.0 of Section 3k.

**Steep Slope Requirements**

Special procedures are required on inclines over 2½" per ft (208 mm/m).

**Surfacing**

Finish the entire membrane surface with a uniform application of the selected coating. The coating chosen will depend on aesthetics and any fire rating or code approval required. Refer to paragraph 9.0 of Section 3b or the installation directions printed on the label for more specific information regarding a particular coating.

**Note:** When using metric- and English-sized sheets in the same system, care must be taken to avoid lap over lap configurations.

**Note:** For the most current information on general guidelines, please refer to the System Considerations tab under Systems Introduction & Selection on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the System Application tab.

\* This is a special order product. Contact your JM sales representative about availability and lead time.