



Johns Manville

APP Modified Bitumen Specifications Specification 3CIN-W/3PIN-W (Alternate)

Three Ply (Two Ply Asphalt, One Ply Heat Welded) Modified Bitumen Mineral Surfaced Roofing System. For use over Johns Manville (JM) insulation, approved decks, or other approved insulations on inclines up to 3" per foot (250 mm/m).

Materials per 100 sq. ft. (9.3 m²) of Roof Area

Primer (if required):
JM Concrete Primer 1 gallon (3.8 liters)

Intermediate Plies:
GlasPly Premier or GlasPly IV 2 layers

Cap: ♦
3CIN-W-TRICOR M FR* or BICOR M FR
3PIN-W-APPeX 4.5M FR or APPeX 4.5M 1 layer

Asphalt (Interply): Trumbull or other JM Approved Asphalt
Incline per foot Asphalt

Up to 1/2" (41.6 mm/m) 190°F (88°C) Type III Steep
1/2" to 3" (41.6 to 250 mm/m) 220°F (104°C) Type IV Special Steep

Approximate installed weight: 160 - 320 lbs. (73 - 145 kgs.)

General

This specification is for use over any type of approved structural deck which is not nailable and which provides a suitable surface to receive the roof. Poured and pre-cast concrete decks require priming with JM Concrete Primer prior to application of the asphalt. This specification is not to be used over poured or pre-cast gypsum decks, lightweight insulating concrete decks or fills without JM insulation.

This specification is also for use over JM roof insulations, or other approved roof insulations which are not nailable and which provide a suitable 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 reroofing situations. Refer to the "Reroofing" section of the JM Commercial/Industrial Roofing Systems Manual.

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 Roofing System Guarantee.

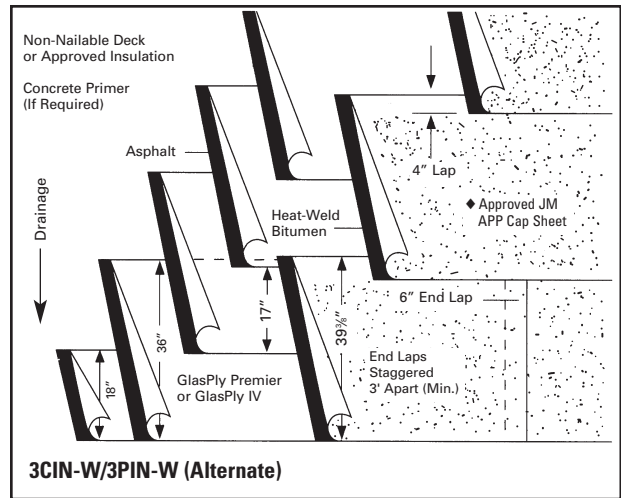
Flashings

Flashing details can be found in the "Bituminous Flashings" section of the JM Commercial/Industrial Roofing Systems Manual.

Application

Roll an 18" (457 mm) wide piece of one of the intermediate plies listed into a full mopping of bitumen. Over that, apply a full width piece. The remaining plies are to be applied full width, overlapping the previous plies by 19" (483 mm), so that at least 2 plies cover the substrate at all locations. **Do not glaze coat the felts.**

Apply all felts so that they are firmly and uniformly set, without voids, into the hot bitumen. Bitumen temperature should be the Equiviscous Temperature (EVT), ±25°F (±14°C), at the point of application. All felt edges shall be well sealed. The bitumen shall be applied just before the felt, at a nominal rate of 23 lbs. per square (1.1 kgs./m²). When



applying over insulations, more than 23 lbs. per square (1.1 kgs./m²) of bitumen may be needed due to the absorbency of the insulation.

Heat weld a full width piece of one of the cap sheets listed so that it is firmly and uniformly set. 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. All laps must be rolled with a 3" (76 mm) rounded edge roller. A 1/8" to 3/8" (3 mm - 10 mm) bleedout of APP compound shall be visible at the edge of all seams. All laps must be checked for good adhesion.

Preparation of the 6" (152 mm) end lap requires scuffing away all loose granules. Heat and embed all remaining granules. Apply heat to the roll being seamed making sure both have a good compound flow to adhere the two surfaces. End laps must be checked for proper adhesion.

Application of JM APP Modified Bitumen Products may require the use of an open flame propane 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 8A.14.

Steep Slope Requirements

Special procedures are required on inclines over 1/2" per foot (41.6 mm/m). Refer to Paragraph 8A.12.

Surfacing

No additional surfacing is required.

Asphalt

Asphalt should meet the requirements of ASTM D 312.

JM Guarantees require the use of Trumbull asphalt or another JM Approved Asphalt.

*This is a special order product. Contact your JM Sales Representative about availability and lead time.

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