

APP Heat-Weld Specifications 3CIS-W/3PIS-W (Alternate)

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

Materials per 100 ft² (9.29 m²) of roof area

Primer (if required):
Asphalt Primer ½ to 1 gal (2 to 4 l)

Intermediate Plies:
GlasPly Premier or GlasPly IV 2 layers

Cap: ♦
3CIS-W—TRICOR S* or BICOR S*
3PIS-W—APPeX 4S 1 layer

Surfacing: Coverage*/ 100 ft² (9.29 m²)

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)

Asphalt (Interply): Trumbull®** or other JM-approved asphalt

Incline per foot	Asphalt
Up to ½" (41 mm/m)	190°F (88°C) Type III Steep
½" to 3" (41 to 250 mm/m)	220°F (104°C) Type IV Special Steep

Approximate installed weight: 225 - 270 lb (102 - 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 which is not nailable and which provides a suitable surface to receive the roof. Poured and precast concrete decks require priming with Asphalt Primer prior to application of the asphalt. This specification is not to be used over poured or precast 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 re-roofing situations. Refer to the "Re-roofing" 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 Peak Advantage Guarantee.

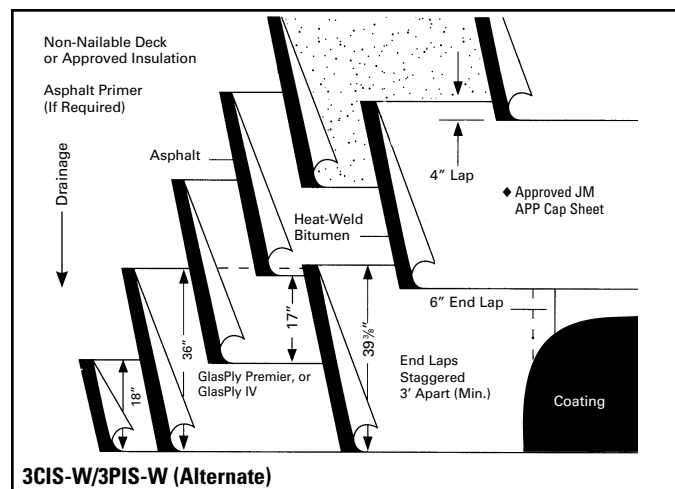
Flashings

Flashing details can be found in Section 3 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 felts.**

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



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 lb/100 ft² (11 kg/9.29 m²). When applying over insulations, more than 23 lb/100 ft² (11 kg/9.29 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 ¼" 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.

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 14.0 of Section 3k of the JM Commercial/Industrial Roofing Systems Manual.

Steep Slope Requirements

Special procedures are required on inclines over ½" per ft (41 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.

Asphalt

Asphalt should meet the requirements of ASTM D 312. JM guarantees require the use of Trumbull®** asphalt or another JM-approved asphalt.

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.

** Trumbull is a registered trademark of Owens Corning.