

## SBS Modified Bitumen Specifications Specification 4CND/4FND/4PND

**Four Ply Hot Mopped Modified Bitumen Mineral Surfaced Roofing System. For use over plywood or other nailable decks on inclines up to 3" per foot (250 mm/m).**

**Materials per 100 sq. ft. (9.3 m<sup>2</sup>) of Roof Area**

**Sheathing Paper:**

Wood board decks only 1 layer

**Felts:**

Base: GlasBase Plus, DynaBase or PermaPly 28 1 layer

Intermediate: GlasPly Premier or GlasPly IV 2 layers

**Cap: ♦**

4CND—DynaKap or DynaKap FR

4FND—DynaGlas, DynaGlas FR or DynaGlas 30 FR

4PND—DynaLastic 180, DynaLastic 180 FR, DynaLastic 250 or DynaLastic 250 FR 1 layer

**Asphalt** (Refer to Para. 7A.8): Trumbull®\* or other JM Approved Asphalt

Incline per foot	Asphalt	Total Weight
Up to ½" (41.6 mm/m)	190°F (88°C), Type III, Steep	69 lbs. (31 kgs.)
½" to 3" (41.6 to 250 mm/m)	220°F (105°C), Type IV, Special Steep	69 lbs. (31 kgs.)

Approximate installed weight: 195 - 410 lbs. (88 - 186 kgs.).

**General**

This specification is for use over any type of approved structural deck (without insulation) which can receive and adequately retain nails or other mechanical fasteners that may be recommended by the deck manufacturer. Examples of these decks are wood, plywood, and approved oriented strand board (OSB). This specification is not for use directly over lightweight, insulating concrete decks.

**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.**

**Note:** All general instructions contained in the current JM Commercial/Industrial Roofing Systems Manual shall be considered part of this specification.

**Flashings**

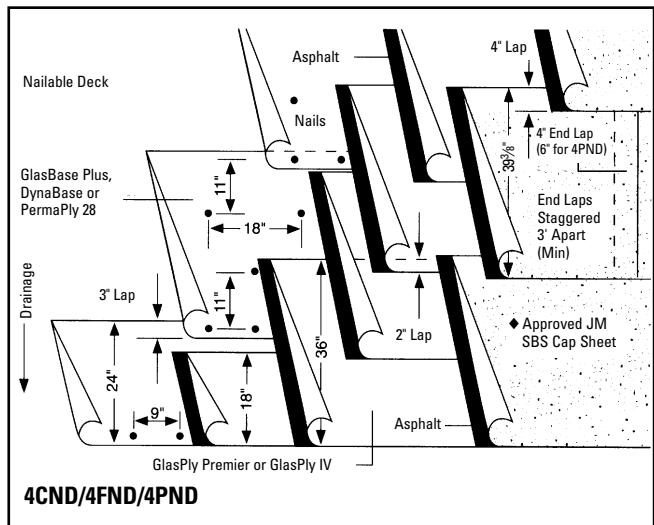
Flashing details can be found in the "Bituminous Flashings" section of the JM Commercial/Industrial Roofing Systems Manual.

**Application**

On roof decks with slopes up to ½" per foot (41.6 mm/m), the roofing felts and modified bitumen sheets may be installed either perpendicular or parallel to the roof incline.

Over wood board decks, one ply of sheathing paper must be used under the base felt, next to the deck.

Using one of the base felts listed, start with a piece 24" (610 mm) wide. The remaining felts are to be applied full width with 3" (76 mm) side and 4" (102 mm) end laps over the preceding sheets. Nail the laps at 9" (229 mm) centers, and down the longitudinal center of each felt place two rows of nails, with the rows spaced approximately 11" (279 mm) apart, and nails staggered on approximately 18" (457 mm) centers. Use nails or fasteners appropriate to the type of deck, with 1" (25 mm) minimum diameter caps. For additional fastener information, refer to the fastener data in the "Roof Decks" section of the current JM Commercial/Industrial Roofing Systems Manual.



Roll an 18" (457 mm) wide piece of one of the intermediate felts listed into a full mopping of asphalt. Over that, apply a full width piece. The remaining felts are to be applied full width, overlapping the preceding felts by 19" (483 mm), so that at least 2 plies of felt cover the base felt at all locations.

Apply a full width piece of one of the cap sheets listed into a full mopping of asphalt. Subsequent sheets are to be applied in the same manner, with 4" (102 mm) side and end laps over the preceding sheets (6" [152 mm] end laps for DynaLastic products).

Apply all felts so that they are firmly and uniformly set, without voids, into the hot asphalt. Asphalt temperature should be at the Equiviscous Temperature (EVT), ±25°F (±14°C), at the point of application. All felt edges shall be well sealed. The asphalt shall be applied just before the felt, at a nominal rate of 23 lbs. per square (1.1 kgs./m<sup>2</sup>). For modified bitumen sheets, the asphalt temperature shall be at a minimum of 400°F (204°C) when the sheet is set into it. This higher temperature maximizes the bonding of the modified bitumen sheet.

**Cap sheets with polyester reinforcement must be allowed to relax in an unrolled position prior to installation.**

For cold weather application techniques, refer to **Paragraph 7A.24**.

**Steep Slope Requirements**

Special procedures are required on inclines over ½" per foot (41.6 mm/m). Refer to **Paragraph 7A.21**.

**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.

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

\* Trumbull is a registered trademark of Owens Corning.