



**Johns Manville**

**SBS Modified Bitumen Specifications  
Specification 3CID/3FID/3PID (Alternate)**

**Three Ply Hot Mopped 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 m<sup>2</sup>) of Roof Area**

**Primer (If required):**  
JM Concrete Primer 1 gallon (3.8 liters)

**Felts:**  
Base: DynaBase, DynaPly, GlasPly Premier, GlasPly IV, PermaPly 28, GlasBase Plus or DynaLastic 180 S 1 layer  
Intermediate: DynaBase, DynaPly, GlasPly Premier, GlasPly IV, PermaPly 28, GlasBase Plus or DynaLastic 180 S 1 layer

**Note:** DynaBase, DynaLastic 180 S and DynaPly – Full Sheet width is 39 3/4" (1 m)  
GlasBase Plus, GlasPly IV, GlasPly Premier, PermaPly 28 – Full Sheet width is 36" (0.92 m)

**Cap: ♦**  
3CID (Alt)—DynaKap or DynaKap FR  
3FID (Alt)—DynaGlas, DynaGlas FR or DynaGlas 30 FR\*  
3PID (Alt)—DynaLastic 180, DynaLastic 180 FR, DynaLastic 250 or DynaLastic 250 FR 1 layer

\*DynaGlas 30 FR must be used in conjunction with DynaBase, DynaPly or DynaLastic 180 S only.

Incline per foot	Asphalt	Total Weight
Up to 1/2" (41.6 mm/m)	190°F (88°C), Type III, Steep	69 lbs. (31 kgs.)
1/2" to 3" (41.6 to 250 mm/m)	220°F (104°C), Type IV, Special Steep	69 lbs. (31 kgs.)

Approximate installed weight: 170 - 380 lbs. (77 - 172 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 hot asphalt.

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 should 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. This specification is not to be used directly over gypsum, either poured or pre-cast, 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 Roofing System Guarantee.**

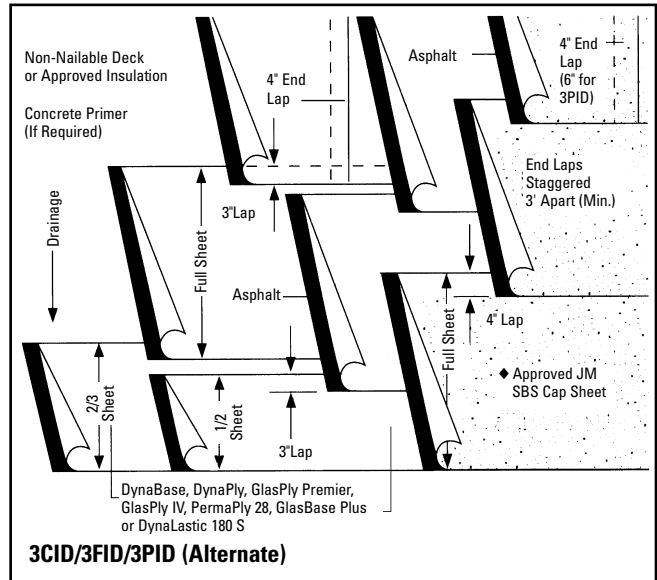
**Note:** All general instructions contained in the current JM Commercial/ Industrial Roofing Systems Manual shall be considered part of this specification.

**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 1/2" per foot (41.6 mm/m), the roofing felts and modified bitumen sheets may be installed either perpendicular or parallel to the roof incline.



Roll a 3/8 wide piece of one of the base felts listed into a full mopping of asphalt. The remaining felts are to be applied full width, in the same manner, with 3" (76 mm) side and 4" (102 mm) end laps over the preceding sheets. Roll 1/2 width piece of one of the intermediate felts listed into a full mopping of asphalt. The remaining felts are to be applied full width, in the same manner, with 3" (76 mm) side and 4" (102 mm) end laps over the preceding sheets. 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>). When applying over insulations, more than 23 lbs. per square (1.1 kgs./m<sup>2</sup>) of asphalt may be needed due to the absorbency of the insulation. 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.

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

**Base sheets and 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 1/2" 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.