



Johns Manville

**SBS Heat-Weld Specifications
Specification 3FBD-HW**

Three Ply Heat Welded, Base Sheet Fastened Modified Bitumen Mineral Surfaced Roofing System. For use over Johns Manville (JM) insulation, approved substrate or other approved insulations on inclines up to 6" per foot (500 mm/m).

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

Base Ply: DynaWeld Base or PermaPly 28	1 layer
Intermediate Plies: DynaWeld Base	1 layer
Cap Sheet Options: DynaWeld Cap FR or DynaClad*	1 layer

*DynaClad cannot be used for a membrane on any roof that will have significant foot traffic.

Approximate installed weight: 185 - 270 lbs. (84 - 122 kgs.)

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 reroofing situations. Refer to the "Reroofing" section of the JM Commercial/Industrial Roofing Systems Manual. This specification is not to be used 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.

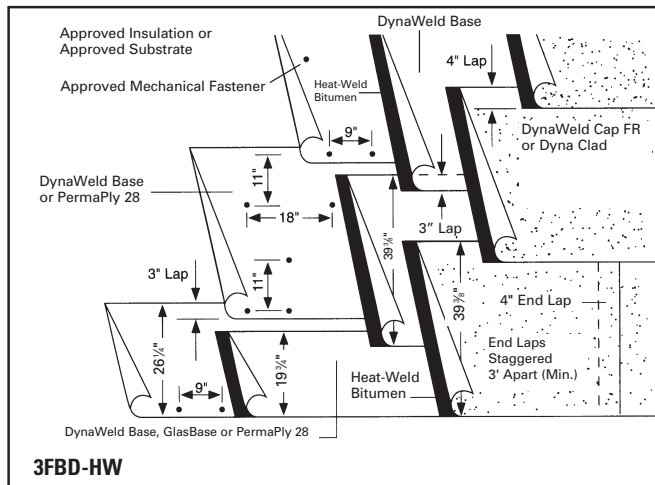
Flashings

Flashing details can be found in the "Bituminous Flashings" section 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 26 1/4" (665 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 fastener data in the "Roof Decks" section of the current JM Commercial/Industrial Roofing Systems Manual.

Over the fastened base ply, heat weld a 19 3/4" (500 mm) piece of one of the intermediate plies listed with a 3" (76 mm) side and 4" (102 mm) end laps. The remaining plies are to be applied full width, in the



same manner, with 3" (76 mm) side and 4" (102 mm) end laps over the preceding sheet.

Over the existing two plies, heat weld a full width piece of one of the cap sheets listed. Subsequent sheets are to be applied in the same manner, with a 4" (102 mm) side and 4" (102 mm) end laps over the preceding sheets.

Apply all sheets so that they are firmly and uniformly set, without voids. Using a propane torch, apply the flame to the surface of the coiled portion of the roll. Torch across the full width of the roll and along the lap area. As the surface is heated, it will develop a sheen and the burn-off will disappear. The generation of smoke is an indication that the material is being overheated. Repeat the operation with subsequent rolls, maintaining proper side laps and end laps. A healthy compound flow will simplify seaming the laps. This is done by keeping the flame directed at the adhered ply and in front of the roll. At the end laps, soften the bitumen by heating the granule surface with the torch. When the granules start to sink into the bitumen, stop torching and with a hot trowel, embed the granules into the bitumen. All laps must be checked for good adhesion.

For special precautions for heat weld application see Paragraph 7A.31 of the JM Roofing Systems Manual.

For cold weather application techniques, refer to Paragraph 7A.24 of the JM Roofing Systems Manual.

Steep Slope Requirements

Special procedures are required on inclines over 1 1/2" per foot (125 mm/m). Refer to Paragraph 7A.21 of the JM Roofing Systems Manual.

Surfacing

No additional surfacing is required.

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

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