SBS Heat-Weld Specifications
4FID-HW (Alt)

Four-Ply (Three-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 ft (250 mm/m).

Materials per 100 ft² (9.29 m²) of roof area

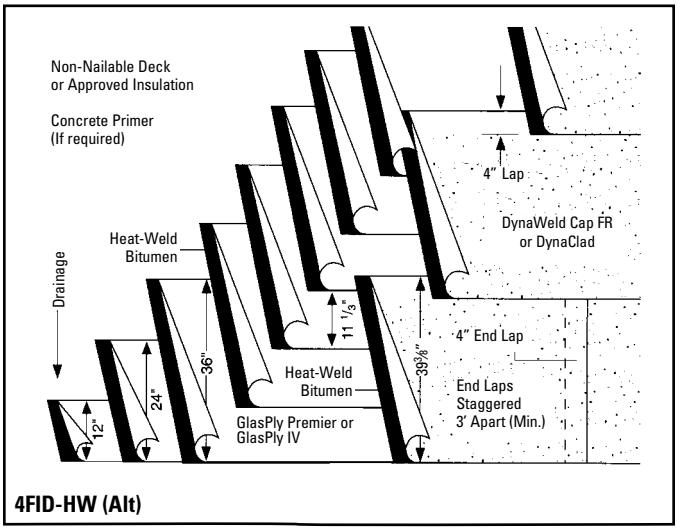
Primer (if required): JM Concrete Primer	1 gal (3.8 l)
Intermediate Felts:	
GlasPly Premier or GlasPly IV	3 layers
Cap Sheet Options:	
DynaWeld Cap FR, DynaClad*	1 layer

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

Asphalt: Trumbull®*or other JM-approved asphalt

Incline per foot	Asphalt	Total Weight
Up to ½" (41 mm/m)	190°F (88°C), Type III, Steep	92 lb (42 kg)
½" to 3" (41 to 250 mm/m)	220°F (104°C), Type IV, Special Steep	92 lb (42 kg)

Approximate installed weight: 175 - 285 lb (79 - 129 kg)



4FID-HW (Alt)

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 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 re-roofing situations. Refer to the "Re-roofing" section of the JM Commercial/Industrial Roofing Systems Manual. This specification is not to be used directly over gypsum, either poured or precast, 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 Peak Advantage 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 Section 3 of the JM Commercial/Industrial Roofing Systems Manual.

Application

On roof decks with slopes up to ½" per ft (41 mm/m), the roofing felts and modified bitumen sheets may be installed either perpendicular or parallel to the roof incline.

Roll a 12" (305 mm) wide piece of one of the intermediate felts listed into a full mopping of asphalt. Over that, apply one 24" (610 mm) wide. Over both, apply a full width piece. The remaining felts are to applied full width, overlapping the preceding felts by 242" (627 mm), so that at least 3 plies of felt cover the substrate at all locations.

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 lb/100 ft² (1.1 kg/m²). When applying over insulations, more than 23 lb/100 ft² (1.1 kg/m²) of asphalt may be needed due to the absorbency of the insulation.

Heat weld a full width piece of one of the cap sheets listed over the installed base felt. Subsequent sheets are to be applied in the same manner, with 4" (102 mm) side and end laps over the preceding sheet.

Apply all cap 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.

Preparation of the 4" (102 mm) end lap requires scuffing away all loose granules. Heat and embed all remaining granules. Apply heat to the roll being seamed while making sure both have a good compound flow to adhere the two surfaces. End laps must be checked for proper adhesion.

Preparation of the 4" (102 mm) lap of DynaClad requires the removal of 4" (102 mm) of metal surfacing, creating the selvage edge. Next, apply heat to the lap that is being seamed, making sure there is a good compound flow to adhere the two surfaces. Check all laps for good adhesion.

For special precautions for heat-weld applications, see Paragraph 31.0 of Section 3d of the JM Commercial/Industrial Roofing Systems Manual.

For cold weather application techniques, refer to Paragraph 24.0 of Section 3d of the JM Commercial/Industrial Roofing Systems Manual.

Steep Slope Requirements

Special procedures are required on inclines over 1½" per ft (125 mm/m). Refer to Paragraph 21.0 of Section 3d of the JM Commercial/Industrial Roofing Systems Manual.

Surfacing

No additional surfacing is required.

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