



Johns Manville

SBS Self-Adhering Specifications Specification 3FID-SA1 FR

Three-Ply Self-Adhering 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. (9.29 m²) of Roof Area

Primer (if required):	
JM Concrete Primer	1 gallon (3.8 liters)
Base/Intermediate Plies:	
JMCleanBond™ SBS Base	2 layers
Cap:	
JMCleanBond™ SBS Cap	1 layer
Approximate installed weight: 170-190 lbs. (77-86 kgs.)	

General

This specification is for use over any type of approved substrate or structural deck. Poured and pre-cast concrete decks require a suitable surface to receive the roof and require priming with JM Concrete Primer.

This specification is also for use over JM roof insulations which are not nailable and which provide a suitable surface to receive the roof. 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 or to the JM web site.

Note: This specification is not to be used over poured or pre-cast gypsum decks, cementitious wood fiber decks or light-weight insulating concrete decks or fills without JM insulation.

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.

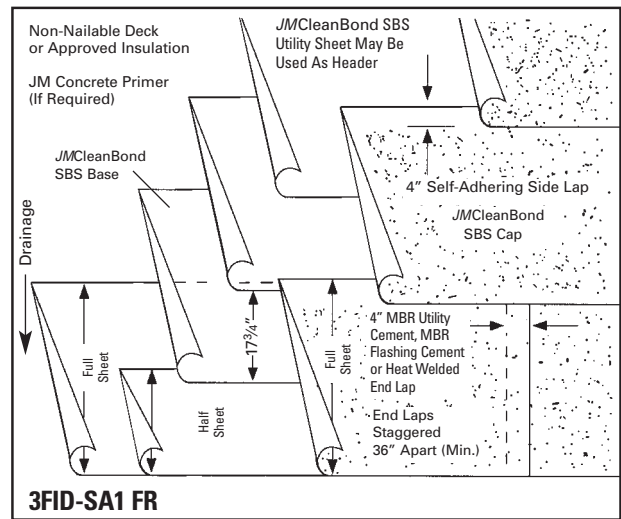
Note: All general instructions contained in the current JM Commercial/Industrial Roofing Systems Manual shall be considered part of this specification.

Flashings

Self-adhering flashing details can be found in the "Bituminous Flashings" section of the JM web site or the JM Commercial/Industrial Roofing Systems Manual.

Application

Ambient temperature should be 45°F (7°C) or greater to obtain proper adhesion. On roof decks with slopes up to 1½" per foot (125 mm/m), the modified bitumen sheets may be installed either perpendicular or parallel to the roof incline.



Base Sheet Application

Unroll the base sheet (cut to usable lengths) and allow to relax. Starting at the low point of the roof, begin the first layer of base ply by positioning a full-width piece of JMCleanBond Base Sheet over the approved substrate at the roof edge with the side lap upslope. Fold the downslope edge of the base sheet back along its length, remove the bottom release film and lower into position from the center out. Fold the other half up along the length of the sheet, remove the bottom release film and lower it back into position. To begin the second layer of base ply, start again at the low point of the roof and position a half-width JMCleanBond Base Sheet, with the bottom film intact, over the uppermost release film of the previously installed full-width base sheet. Remove the release film from the bottom of the half-width base sheet and the corresponding release film from the top of the already installed full-width base sheet. Mate the two self-adhering surfaces. Roll the base sheet with a 75 to 100 lb. (34 to 45 kg.) split-wheel, weighted roller, being sure to roll across the width of the sheet first, then lengthwise, for full adhesion. The remaining base sheets are to be installed full width in the same manner so that at least two plies cover the substrate at all locations. **Note: JMCleanBond SBS Base Sheet needs to be covered with JMCleanBond SBS Cap or Utility Sheet within 48 hours of exposure to direct sunlight. The top layer of release film on the base sheets must remain intact until the cap or utility sheet is applied.**

Cap Sheet Application

A) Unroll the cap sheet (cut to usable lengths) and allow to relax. Position the first full cap sheet (with the bottom release film intact) over the release film of the already installed base sheet (Note: The base sheet side lap should fall centered under the cap sheet). Fold the cap sheet along its length and remove the release film from the bottom of the cap sheet and the corresponding top release film on the base sheet. Mate



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the two self-adhering surfaces from the center of the cap sheet to the side lap. Fold the other half of the cap sheet back along its center and repeat the previous process. Align all subsequent cap sheets with the 4" (102 mm) side lap of the previous installed cap sheet and repeat the process as described above. After all cap sheets are installed, roll across the width first, then lengthwise with a 75 to 100 lb. (34 to 45 kg.) split-wheel, weighted roller, to ensure full adhesion.

B) Prepare all 4" (102 mm) end laps by first removing all loose granules. Then, with a hot air gun, apply heat to the 4" (102 mm) end lap making sure both sheets have a good compound flow to adhere the two surfaces. The granules on the bottom cap sheet should "sink" into the asphalt. All laps must be rolled with a rounded edge roller. A 1/8" to 3/8" (3 mm to 10 mm) bleedout of SBS compound shall be visible at the edge of all seams. All laps must be checked for good adhesion.

Or ...

C) Prepare all 4" (102 mm) end laps by removing all loose granules, then apply MBR® Utility Cement or MBR® Flashing Cement to the 4" (102 mm) end laps and mate the end lap surfaces. Apply pressure to achieve a 1/8" to 3/8" (3 mm to 10 mm) bleedout. Ensure full coverage and check for good adhesion.

Application of JM SBS Modified Bitumen Products may require the use of a hot air gun. 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.

Steep Slope Requirements

Special procedures are required on inclines over 1 1/2" per foot (125 mm/m).

Self-adhering SBS roofing membranes can be applied on inclines up to 3" per foot (250 mm/m) when proper precautions are taken. On non-nailable decks, wood nailers must be used. Nailers act as insulation stops for the roof insulation and as a facility to back nail the membrane.

On slopes up to 1 1/2" per foot (125 mm/m), the roofing sheets may be installed either perpendicular or parallel to the roof incline.

Non-Nailable Decks: On decks with a slope over 1 1/2" per foot (125 mm/m) and up to 3" per foot (250 mm/m), the JMCleanBond sheets must be installed parallel to the incline and must be back nailed. Pressure-treated wood nailers shall be attached to the deck, run perpendicular to the incline, be capable of retaining the nails securing the roofing sheets, have the same thickness as the insulation, and be at least 3 1/2" (89 mm) wide. They should be securely attached to the deck with mechanical fasteners to resist a pullout force of 200 pounds (890 N). Wood nailers shall be provided at the ridge and at the following approximate

intermediate points:

Incline (Inches per Foot)	Nailer Spacing (D)
0" - 1 1/2" (0 mm/m - 125 mm/m)	Not required
1 1/2" - 3" (125 mm/m - 250 mm/m)	32' (9.8 m) (max.) face-to-face

Nail the modified bitumen cap sheet at the end lap across the width of the sheet, with the first nail spaced 3/4" (19 mm) from the leading edge of the sheet, and the remaining nails spaced approximately 8 1/2" (216 mm) o.c. The nails shall be staggered across the width of the nailer to reduce the risk of the sheet tearing along the nail line. Nails must have an integral 1" (25 mm) (min.) diameter cap. Where capped nails are not used, fasteners must be driven through caps having a 1" (25 mm) (min.) diameter. All nails are to be at least 2" (51 mm) from the end of the overlapping sheet.

Nailers must also be used around the roof perimeter, openings and penetrations, for nailing roofing membrane, gravel stops, roof fixtures and fascia systems.

Surfacing

No additional surfacing is required.

