

Installation of Modified Bitumen Membranes Using Cold Applied Adhesives

OVERVIEW

BITEC SBS modified bitumen membranes having "H" as an ending (such as SPM-3.5H) may be installed using approved cold adhesives. BITEC recommends the use of PMA-186, or PMA-2000 adhesives to install these membranes; which are manufactured by BITEC. No cold adhesive is recommended for use with APP modified bitumen membranes, or any membrane having a film backing or surface.

Precautions

- 1) Cold adhesives may not be used to install multi-ply membrane systems.
- 2) Positive drainage must be provided. A min. roof slope of 1/4" in 12" is recommended.
- 3) Do not use cold adhesives in any area suspected of ponding water.
- 4) Do not over-apply cold adhesives. Follow the manufacturer's application instructions. Over application can cause the membrane to blister, and the mineral surfacing may dislodge.
- 5) If application of membrane is over decks with slopes greater than or equal to 1" in 12", backnailing of the membrane is recommended. Backnailing can be accomplished by using suitable fasteners installed 8" o.c. through 1" minimum tin disks.
- 6) Cold adhesives contain petroleum distillates. Avoid excessive heat and flame. Do not use open flame installation devices around membranes being installed by this method.
- 7) Do not use cold adhesives when the ambient temperature is below 55 degrees F.
- 8) Traffic over newly-applied membrane shall be kept to a minimum.

APPLICATION

The selected/approved adhesive manufacturer's application instructions shall be followed when using these adhesives.

Thoroughly stir the contents before and during use. Some cold adhesives can be applied using brush, roller and spray equipment, or by the use of a notched squeegee or trowel. Squeegee shall have notches 1/4" long, 1/8" deep and spaced 1" o.c. This configuration will provide sufficient adhesive application for most smooth surfaces being adhered to. Irregular surfaces will require the depth of notch to be 1/4" deep.

Surface Preparation

All surfaces to be adhered to must be dry, swept clean, free from oil, grease, rust, scale, loose paint, dirt or any other debris. Average application rate is approximately 1.5 gallons per 100 square feet. Sufficient adhesive shall be applied at laps to result in a visible bead of adhesive at the completed lap edge.

The modified bitumen cap sheet should be cut in maximum lengths of 18 feet and allowed to relax before installation begins. All laps must be weighted or rolled after application. This should help insure positive adhesion and even distribution of the adhesive for a smooth appearance.

It is highly recommended to aluminum coat or embed roofing granules in the exposed adhesive for UV protection.

Spray equipment, capable of delivering 3 to 5 gallons per minute of a mastic coating-type material is suitable. A pole gun with suitable spray orifice (usually 0.060") is recommended. Material hose should be heavy duty: 3/4" i.d. air hose from pump to gun. However, any adhesive should be used in strict accordance with the manufacturer's instruction as printed on the can, label or other documentation.