

## Description

Johns Manville (JM) Urethane Insulation Adhesive is a one part, cold-applied adhesive for bonding insulations to almost any conventional roofing substrate and insulation to insulation.

## Use

JM Urethane Insulation Adhesive is designed for bonding all insulation board products to decks of concrete, steel, gypsum and lightweight concrete. Steel requires additional cleaning and preparation.

## Advantages

- Very high strength, no mixing required.
- Fast, low applied installation cost.
- FM Global® approved.
- Eliminates mechanical fastening into concrete decks.
- Eliminates need for multiple fasteners in tapered systems.

## Application

Apply adhesive in approximately ½" (13 mm) wide liquid beads poured directly from the can. The adhesive reacts quickly with moisture in the air and on the surfaces and will form a cured bond in hours. The bond is heat, water and chemical resistant.

## Installation Preparation

- Apply adhesive when air and surface temperatures are 40°F (4°C) and above. Adhesive temperature must be at 70°F (21°C) or higher.
- Surfaces to be bonded together must be dry, clean and free of contaminants. Special steps are required to prepare metal. Contact JM Technical Services for restrictions and approval.
- Cans must be kept unopened until time of use.
- Before applying adhesive, insulation boards should be cut to size and ready to be installed. 4' x 4' (1.22 m x 1.22 m) boards or smaller are required.

For open spaces: At time of use, unscrew cap on cans and punch out moisture seal and attach plastic pour spouts to cans.

If an application cart is used, mount cans to cart according to instructions with cart and align plates properly. Adjust cans on cart to apply beads approximately 12" (305 mm) on center with outside beads placed 6" (152 mm) in from edge of board line.

Punch a vent hole in the up facing bottom edge of the cans with an awl. Cut spouts to needed opening size to apply a ½" (13 mm) bead at a pour pace needed for the desired installation speed. Adhesive will be thicker and pour more slowly in colder temperatures so a larger opening may be needed and the pace of installation may be slower.

**Cart:** Flip cans to the upside-down position and walk cart along the insulation board lay-up line, keeping outside beads along a line approximately 6" (152 mm) in from the edge of the insulation boards when they are laid in. Keep bead sizes as consistent as possible to ½" (13 mm) in width.

**Hand Pour:** Hand pour additional adhesive in areas where adhesive application is too light.

**For corners and areas with many penetrations:** Attach plastic pour spout and cut spout to desired opening size. Punch a small vent hole in can on the top surface at opposite end from spout. Hand pour adhesive from can in a pattern that fits the area with ½" (13 mm) beads 12" (305 mm) on center. Make the first bead poured a perimeter bead around all penetrations and along all edges. Then fill in remaining area. This edge bead should be 1" (25 mm) in from all board line edges.



**Perimeter and corner application:** To conform to FM Global wind uplift guidelines, the distance between strips of adhesive should be reduced to 7" (178 mm) o.c. in the FM Global defined perimeter areas and 4.6" (117 mm) o.c. in the FM Global defined corner areas.

**Laying in insulation boards:** Once adhesive beads are applied to the deck surface, insulation boards can be laid into the wet beads. Be sure additional adhesive is hand poured to even out any bead segments significantly less than ½" (13 mm). Walk insulation boards in after they are laid in place to ensure good contact with the adhesive while it is wet. High moisture level in air and deck may make it necessary to walk in boards several times as the adhesive will react and foam rapidly. Additional layers of insulation can be immediately installed over the first layer using the same procedures outlined above, except the adhesive is applied perpendicular to the preceding layer.

## Storage

The ideal storage temperature is between 50°F (10°C) to 80°F (27°C).

## Clean-up and Disposal

Uncured adhesive may be wiped up using acetone. Residual adhesive in empty cans will fully cure to an inert urethane film, and cans can be discarded in accordance with local disposal regulations.

## Precautions

Everyone handling adhesive cans should wear protective gloves and safety glasses. All adhesives in opened containers should be used immediately.

## Coverage\*

Approximately 300 lin ft/gal (24.08 lin m/l) with ½" (13 mm) bead or 300 ft<sup>2</sup>/gal (7.36 m<sup>2</sup>/l) with ½" (13 mm) bead at 12" (305 mm) o.c.

\* Coverage rates depend upon weather conditions and substrate. Refer to specific code agency Web sites for exact construction information.

## Shelf Life

The shelf life for Urethane Insulation Adhesive is nine months from the ship date.

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