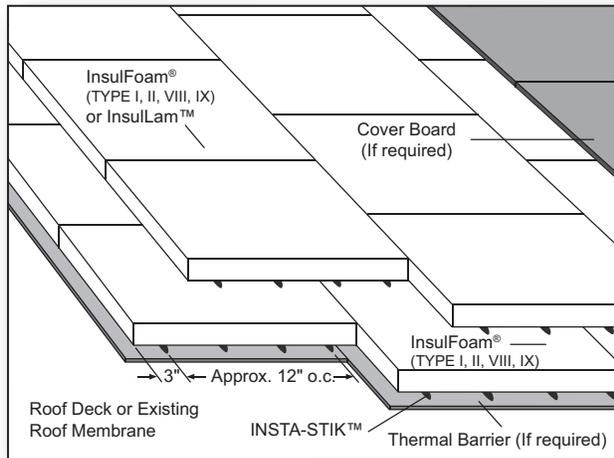
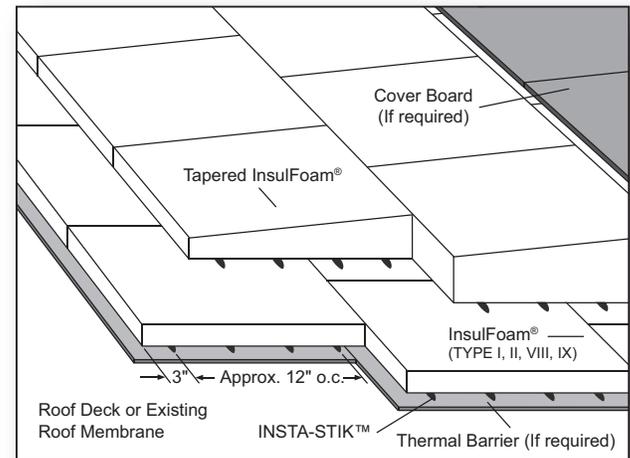


### Flat Insulation



### Tapered Insulation



### General

This specification is intended for use over any substrate suitable to receive and support an adhered roof insulation assembly and subsequent roof membrane. It is provided to serve as a guideline for designers and installers.

INSTA-STIK™ Quik Set Commercial Roofing Adhesive is offered by The Dow Chemical Company (Dow). Refer to Dow Installation Procedures and Dow literature for additional information on storage, handling and use of INSTA-STIK Quik Set Commercial Roofing Adhesive.

### Installation Considerations

- Acceptable INSTA-STIK substrates are smooth and gravel surfaced Class 1 built-up roofs, concrete, wood, minimum 22-gauge metal decks, and vapor retarders approved by The Dow Chemical Company. Please contact Dow at 866-583-BLUE for compatibility questions or concerns.
- INSTA-STIK is not approved for application when surface or ambient temperatures are below 33 °F or above 110 °F.
- INSTA-STIK is not approved for use during inclement weather.
- INSTA-STIK is not approved for use on surfaces or decks that are wet or have standing water, frost, ice or snow.
- INSTA-STIK is packaged in a single container that should be stored between 50 °F and 75 °F. The ideal chemical temperature at the time of application is 75 °F.
- When windy conditions exist, weights should be used to prevent the insulation boards from moving prior to the INSTA-STIK curing or setting.
- Applications over uneven substrates may require that the insulation boards be scored or slit to obtain full contact with the adhesive.

- InsulFoam insulations are shipped in plastic film wraps, which are intended for temporary protection during shipping. All material should be protected from the elements and stored in a dry location.
- Install only as much insulation as can be covered by a roof membrane system, and/or made watertight by the end of each day.
- InsulFoam insulations should not be exposed directly to solvent-based or petroleum-based adhesives and sealants.
- Allow approximately a 1/4" space between InsulFoam insulation and vertical surfaces or roof projections. Do not force or jam product into place.
- Review the layout of all Tapered InsulFoam systems before loading and installing panels.
- For re-cover applications, care should be taken to ensure that no moisture is trapped in the existing or new roof system.

InsulFoam insulations are compatible with most membrane systems; however, we recommend consultation with the membrane manufacturer for any limitations or approvals for use with their products.

## DOUBLE LAYER – ADHERED

### INSTA-STIK™ Quik Set Commercial Roofing Adhesive

#### Insulation Specifications

InsulFoam	Tapered InsulFoam	InsulLam
<b>Direct-to-Deck</b>		
2NIA-IA	2NIA-TA	2NIA-LA
2NTA-IA		2NTA-LA
<b>DensDeck Thermal Barrier</b>		
2DIA-IA	2DIA-TA	2DIA-LA
2DTA-IA		2DTA-LA
<b>Gypsum Thermal Barrier</b>		
2GIL-IM	2GIA-TA	2GIA-LA
2GTA-IA		2GTA-LA
<b>Perlite Thermal Barrier</b>		
2PIA-IA	2PIA-TA	2PIA-LA
2PTA-IA		

#### Thermal Barrier (If required)

Some designs require the use of a thermal barrier between the insulation and occupied areas of the building. Thermal barriers must be securely attached to the roof deck. For guidance, consult local building codes, the membrane manufacturer and the Thermal Barrier information in the Insulfoam Roofing Manual.

#### 1<sup>st</sup> Layer – Adhered with INSTA-STIK

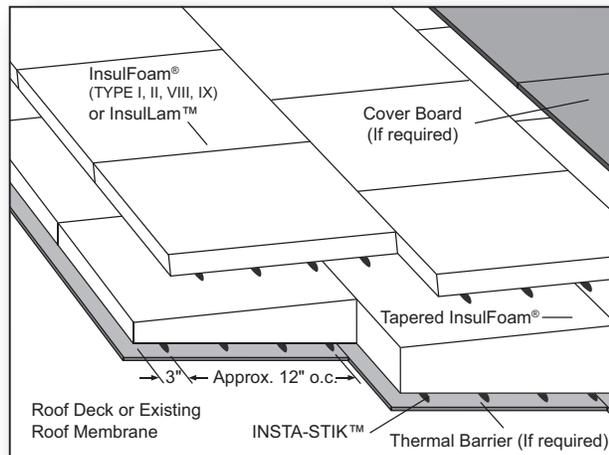
Before dispensing INSTA-STIK, the applicator must observe the following precautions: wear protective clothing, work gloves and protective eyewear.

All surfaces must be free of any debris, dirt, dust, grease, oil, diesel fuel and standing water before INSTA-STIK is applied. In addition, for installations directly to a new metal deck, the residual oil-shop coating must be removed with acetone, naphtha or a comparable cleaner. When re-roofing over an existing built-up roof, a licensed INSTA-STIK instructor, authorized to perform adhesion tests, must be onsite prior to the commencement of the project in order to determine compatibility. Contact The Dow Chemical Company, Roofing Technical Support Group at least fourteen (14) days in advance for further instructions.

Board size can be up to 4' x 8' flat or 4' x 4' taper when using this attachment method. Insulation side joints are to be continuous, and end joints staggered a minimum of 12". Joints greater than 1/2" should be filled with the same insulation that is being used in the field of the roof. If InsulFoam is being installed over a thermal barrier, an existing layer of insulation, or under a cover board, all joints must be offset a minimum of 6" between layers.

INSTA-STIK should be mixed prior to use by firmly holding the container on its side and agitating the contents, using a side-to-side motion for at least 15 seconds.

#### Flat Insulation – Alternate



The dispensing wand kit is ideal for roof decks with many penetrations. Attach the dispensing hose swivel end to the cylinder valve. Tighten the connection using an open-end wrench, being careful not to over-tighten. Verify that the on/off valve on the dispensing hose is closed. The handle should be perpendicular to the valve. Attach the dispensing wand kit to the on/off valve by screwing in until it is hand-tight.

The INSTA-STIK Multi-Bead Applicator (MBA) is recommended for roof decks with open areas. The INSTA-STIK MBA uses three tanks of INSTA-STIK Quik Set Commercial Roofing Adhesive. The tanks are connected by a hose to a central inlet manifold. The INSTA-STIK MBA is rolled backward along the roof deck, as four to eight beads of adhesive flow from the center outlet tubes in a precise pattern that can be adjusted per roofing requirements. The INSTA-STIK MBA also features an ancillary manifold that can be used near the roof edge to add three interspaced beads to the pattern.

Dispense a minimum of 1 lineal foot of 3/4"-1" diameter bead of INSTA-STIK for every square foot of insulation board to be attached. A picture of a 3/4" bead is provided in the Dow operating instructions as a guide for proper bead size.

Use a parapet wall or gutter as a straight edge guide when dispensing the first bead of INSTA-STIK. Under the normal application rate, place the first bead 3" inside the outside edge of the insulation to be attached. Apply 3 additional parallel beads approximately 12" apart, so that the fourth bead is 3" inside the opposite edge of the insulation board. The result is 4 equidistant parallel beads for each insulation board (1 lineal foot of adhesive per 1 sq. ft. of insulation). When using the MBA, open the valves to dispense 4 beads of INSTA-STIK.

The application rate can vary with roof system configuration. Additional adhesive is required around all roof penetrations and drains. An increased amount of INSTA-STIK may be required at the perimeter band of the roof, depending on the building and parapet wall heights. For application rates, refer to Table 1 in Dow's Installation Procedures for INSTA-STIK Quik Set Commercial Roofing Adhesive.

When installing InsulFoam insulations directly to a metal deck, the edges of the insulation parallel to the deck ribs must be solidly supported and centered on the ribs. Apply 3/4"–1" beads of INSTA-STIK on the first full upper flange nearest the edge of the InsulFoam insulation. Continue to apply the INSTA-STIK at the prescribed rate. Additionally, for metal deck installations, ensure that the insulation has a thickness that is adequate to span the rib openings. For acceptable minimum thicknesses of InsulFoam installed directly over metal decks, refer to the Roof Decks section in the Insulfoam Roofing Manual.

**IMPORTANT:** When applying INSTA-STIK, the insulation boards must be placed onto the INSTA-STIK beads before tack-free (2 to 8 minutes depending on humidity). Walk on the boards to spread the beads for maximum contact. Continue to walk on the insulation boards every 3 to 4 minutes until the insulation is firmly attached, usually within 10 to 20 minutes. Low humidity conditions will require longer cure times.

#### 2<sup>nd</sup> Layer – Adhered with INSTA-STIK

All surfaces must be free of any debris, dirt, dust, grease, oil, diesel fuel and standing water before INSTA-STIK is applied. Board size can be up to 4' x 8' when using this attachment method. Insulation side joints are to be continuous, and end joints staggered a minimum of 12". Joints greater than 1/2" should be filled with the same insulation that is being used in the field of the roof. All joints must be offset a minimum of 6" between layers.

INSTA-STIK should be prepared and applied as indicated in the 1<sup>st</sup> Layer directions.

**IMPORTANT:** When applying INSTA-STIK, the insulation boards must be placed onto the INSTA-STIK beads before tack-free (2 to 8 minutes depending on humidity). Walk on the boards to spread the beads for maximum contact. Continue to walk on the insulation boards every 3 to 4 minutes until the insulation is firmly attached, usually within 10 to 20 minutes. Low humidity conditions will require longer cure times.

#### Cover Board Installation (If required)

Some specifications require the use of a cover board. Cover boards may be adhered with INSTA-STIK or asphalt to InsulFoam and Tapered InsulFoam that has been adhered with INSTA-STIK. For cover board installation procedures, refer to the Cover Board Specification information in the Insulfoam Roofing Manual.

When cover boards are used in conjunction with this specification, the insulation specification would be modified with a two-letter suffix to identify the cover board type and attachment method. Refer to the Cover Board Specification information.

