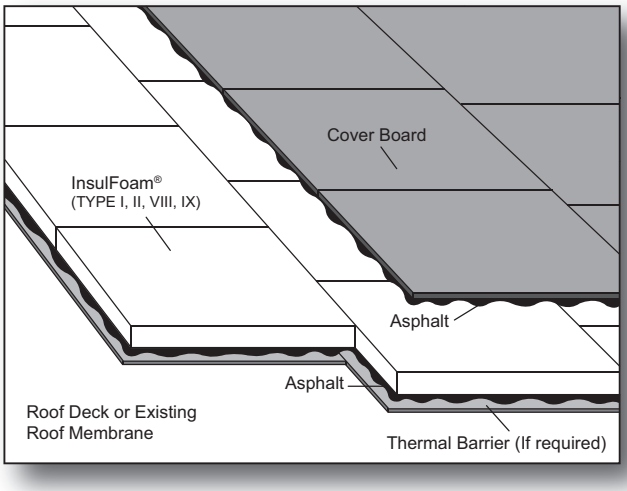
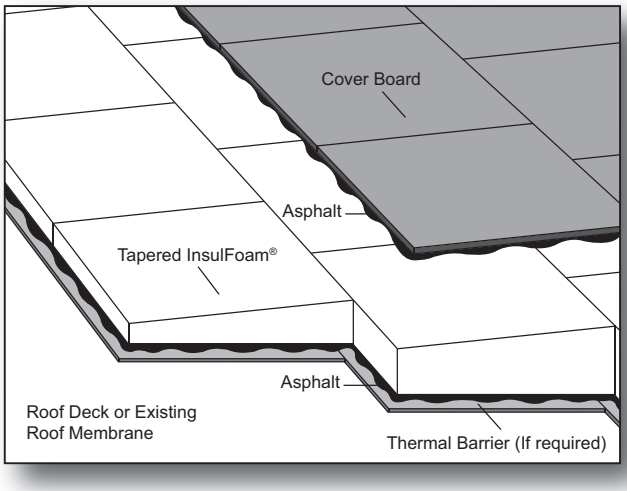
SINGLE LAYER – ALTERNATE

Asphalt Attached InsulFoam® with a Cover Board in Asphalt

Flat Insulation



Tapered Insulation



General

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

Installation Considerations

- InsulFoam insulations and cover boards are shipped in a variety of packaging materials (plastic film wraps, shrouds, etc.) intended for temporary protection during shipping. All material should be protected from the elements and stored in a dry location.
- Cover boards are typically thinner than InsulFoam insulations, and are more susceptible to damage during handling and installation. Extra care should be taken to ensure that the product is installed in a useable condition.
- 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 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.
- Applications over uneven substrates may require that the insulation boards be scored or slit to obtain full contact with the asphalt.
- Concrete decks must be primed with an appropriate primer and must be sufficiently dry before applying hot asphalt.
- Asphalt attachment of insulation directly to a metal deck is not recommended.

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.

Insulation Specifications

InsulFoam	Tapered InsulFoam		InsulFoam	Tapered InsulFoam
Direct-to-Deck			**DensDeck**	
1NIH/WH	1NTH/WH		1DIH/WH	1DTH/WH
1NIH/DH	1NTH/DH		1DIH/DH	1DTH/DH
1NIH/PH	1NTH/PH		1DIH/PH	1DTH/PH
Gypsum Thermal Barrier			**Perlite Thermal Barrier**	
1GIH/WH	1GTH/WH		1PIH/WH	1PTH/WH
1GIH/DH	1GTH/DH		1PIH/DH	1PTH/DH
1GIH/PH	1GTH/PH		1PIH/PH	1PTH/PH

Thermal Barrier Installation (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.

Asphalt Attached Insulation

Applications requiring an InsulFoam insulation attached in hot asphalt should be installed by a roofing crew fully trained for these applications. The asphalt is to be applied only to the substrate. The InsulFoam insulation is to be installed only after the asphalt has cooled adequately.

DO NOT APPLY ASPHALT DIRECTLY TO ANY INSULFOAM OR R-TECH PRODUCTS.

Board size should be limited to 4' x 4' when using this attachment method. Apply asphalt to the substrate at a rate of 30 lbs. per square and 3" to 6" beyond the edges of the board being installed. Porous substrates may require a greater amount of asphalt. Allow the asphalt to cool up to 250 °F but not less than 200 °F. The absence of visible smoke is a common indicator the asphalt has sufficiently cooled. This may not be applicable at ambient rooftop temperatures below 50 °F. In addition, it may be useful to use an infrared heat gun to measure asphalt temperatures on the substrate prior to installation of the first few boards. Weather conditions, asphalt variations and crew techniques will impact the rate at which asphalt cools. The asphalt must remain hot enough to maintain its adhesive characteristics. Firmly set boards of InsulFoam into the asphalt with continuous side joints and end joints staggered a minimum of 6". Insulation should abut tightly against adjacent boards. Joints greater than 1/2" should be filled with the same insulation being used in the field of the roof. If InsulFoam is being installed over a thermal barrier or an existing layer of insulation, all joints must be offset a minimum of 6" between layers.

Asphalt Attached Cover Board

Cover boards attached in asphalt directly to an InsulFoam insulation should be installed by a roofing crew fully trained for these applications. Asphalt is to be applied only to the backside of the cover board. The cover board is to be installed only after the asphalt has cooled adequately.

DO NOT APPLY ASPHALT DIRECTLY TO ANY INSULFOAM OR R-TECH PRODUCTS.

The cover board size is to be limited to a maximum of 4' x 4' when using this attachment method. Cover board side joints are to be continuous, and end joints staggered a minimum of 12". All cover board joints are to be offset from the base layer insulation joints by a minimum of 6".

Place the hot-asphalt-compatible cover board (bottom side up, if applicable) adjacent to the area in which it will be installed. Make certain the previously installed InsulFoam insulation is protected from any over-mopped or spilled hot asphalt. Apply a continuous, firmly bonding film of asphalt to the entire back surface of the cover board at a nominal rate of 30 lbs. per square. Porous cover boards may require greater amounts of asphalt. Allow the asphalt to cool up to 250 °F, but not less than 200 °F. The absence of visible smoke is a common indicator that the asphalt has sufficiently cooled. This may not be applicable at ambient rooftop temperatures below 50 °F. The asphalt must remain sufficiently hot to maintain its adhesive characteristics. It may be useful to use an infrared heat gun to measure the asphalt temperature on the back of the first few boards installed, as weather conditions, asphalt variations and crew techniques will impact the rate at which asphalt cools. When the asphalt has cooled to within the appropriate temperature range, the back-mopped cover board is to be flipped so the asphalt is facing down, and is to be placed over the InsulFoam insulation. The installed cover boards should be lightly stepped into place and should abut tightly against adjacent boards. Joints greater than 1/2" are to be filled with the same cover board material being used.

For cold weather applications, contact the Insulfoam Technical Center for specific instructions.