General

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

Installation Considerations

- 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.

Insulation Specifications

<table>
<thead>
<tr>
<th>InsulFoam</th>
<th>InsulFoam SP</th>
<th>Tapered InsulFoam</th>
<th>InsulLam</th>
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</thead>
<tbody>
<tr>
<td>1NIM</td>
<td>1NSM</td>
<td>1NTM</td>
<td>1NLM</td>
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<tr>
<td>1DIM</td>
<td>1DSM</td>
<td>1DTM</td>
<td>1DLM</td>
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<tr>
<td>1GIM</td>
<td>1GSM</td>
<td>1GTM</td>
<td>1GLM</td>
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<tr>
<td>1PIM</td>
<td>1PSM</td>
<td>1PTM</td>
<td>1PLM</td>
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**Note:** For mechanically attached systems that incorporate a thermal barrier, cover board and/or SecurePly with InsulFoam insulation, it is possible to attach all layers to the substrate using a single fastener of sufficient length.

Thermal Barrier Installation (If required)

Some designs require the use of a thermal barrier between the insulation and occupied areas of the building. For guidance, consult local building codes, the membrane manufacturer and the Thermal Barrier information in the Insulfoam Roofing Manual.

Mechanically Attached Insulation

Install InsulFoam insulation with continuous side joints and end joints, staggered so that they are offset by a minimum of 12" from the end joints in adjacent rows. Insulation should abut tightly against adjacent boards. Joints greater than 1/2" should be filled with the same insulation that is being used in the field of the roof. If insulation 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. Use an approved mechanical fastener of sufficient length to penetrate into or through the deck by the amount...
prescribed for the specific fastener. Fasteners should never be closer than 6” from the edges of the insulation board, and should be placed in a pattern that achieves the desired approval. Use appropriate insulation plates with the fasteners. Care must be taken to avoid over-driving or under-driving the fastener and plate assembly. 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. 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.

**SecurePly Installation (If required)**

Some specifications require the use of a slip sheet. SecurePly should be rolled out in a manner to completely cover the underlying insulation. The SecurePly must have 2” (minimum) side and end laps. To prevent movement from wind or roof top construction traffic, it may be necessary to tack SecurePly in place with a minimal quantity of mechanical fasteners.

When SecurePly is used in conjunction with these mechanically attached specifications, the insulation specification would be modified with the two-letter suffix SL, to identify that SecurePly has been loosely laid over the insulation, or SM to indicate that the fasteners have been installed through the SecurePly.

**Cover Board Installation (If required)**

Some specifications require the use of a cover board. Cover boards may be mechanically attached, asphalt attached or adhered over mechanically attached InsulFoam and Tapered InsulFoam. 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 these specifications, 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 Specifications information.