Description
InsulLam™ is a premium composite insulation consisting of a closed-cell, lightweight and resilient expanded polystyrene (EPS) bonded to an APA/TECO-rated oriented strand board (OSB) or plywood. The InsulLam foam core is cut from the same high-quality stock as our InsulFoam® brand roof insulation and, upon request, will meet or exceed the requirements of ASTM C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. The OSB is available in nominal thicknesses of 7/16” and 5/8”. The plywood is available in a nominal thickness of 5/8”. InsulLam has excellent dimensional stability, compressive strength and water resistant properties. InsulLam can also be manufactured with an assortment of other cover boards.

Uses
InsulLam is a high performance nailbase insulation, and is an excellent substrate for a variety of steep-and-low slope roof systems. InsulLam is acceptable for single ply roof applications that employ mechanically fastened, ballasted or adhered EPDM, TPO, PVC or CSPE membranes, as well as low-sloped built-up and modified bitumen membrane systems. InsulLam is also well-suited for vaulted and cathedral ceilings. InsulLam can also be used as an underlayment for shingle, tile, slate and metal roofing systems. InsulLam is not a structural panel, and is suitable only for installation over fully supported structural decks. Consult the roof manufacturer for additional guidelines.

Advantages
- **System-Enhancing.** The use of InsulLam in low-slope applications may make a roof system eligible for an enhanced warranty from the membrane manufacturer. InsulLam provides an additional resistance to misuse, abuse and adverse weather conditions, such as high winds and hail, that is not available with traditional foam insulations.
- **Environmentally Friendly.** The InsulFoam core contains no formaldehyde or ozone-depleting CFCs or HCFCs, contains recycled material, and is 100% recyclable if ever removed or replaced.
- **Stable R-Value.** Designers are well served knowing the product’s thermal properties will remain stable over its entire service life. There is no thermal drift, so the product is eligible for an InsulFoam 20-year thermal performance warranty.
- **Proven Performance.** The same fundamental EPS chemistry has been in use since the mid-1950s, so the actual performance of the product is well known.
- **Water-Resistant.** The InsulFoam core does not readily absorb moisture from the environment.

**Code Approvals.** InsulFoam products are recognized by the International Code Council Evaluation Service (ICC-ES), and have numerous Underwriters Laboratory and Factory Mutual Approvals. Please contact your local InsulFoam representative for details.

Sizes
InsulLam is available in 4’ x 8’ sizes with overall thickness from 1.5” to 7”, and is readily available in custom lengths and widths with little to no impact on lead time.

R-Values

<table>
<thead>
<tr>
<th>Nominal Thickness (including 7/16” OSB)</th>
<th>3.00”</th>
<th>4.00”</th>
<th>5.00”</th>
<th>6.00”</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-Value @ 75 °F</td>
<td>10.50</td>
<td>14.40</td>
<td>18.20</td>
<td>22.10</td>
</tr>
<tr>
<td>R-Value @ 40 °F</td>
<td>11.30</td>
<td>15.50</td>
<td>19.60</td>
<td>23.80</td>
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* Values are based on the use of a Type I InsulFoam. Greater R-Values will be obtained if higher density material used.

Installation Recommendations
- Install InsulLam insulation with continuous side joints and end joints staggered so they are offset by a minimum of 12” from the end joints in adjacent rows.
- A minimum of 8 fasteners per 4’ x 8’ panel should be used when attaching InsulLam to either 22-gauge (min.) metal decks or 1” wood decks. A minimum of 12 fasteners per board should be used when attaching to 1/2” wood decks. Recommended fastening patterns are available in the InsulFoam Roofing Manual. Contact the roof manufacturer for additional recommendations.