Description
InsulRoof HD Composite (InsulFoam HD Composite) is an engineered insulation consisting of a closed-cell, lightweight and resilient expanded polystyrene (EPS) bonded to high-density polyisocyanurate cover board.
- Achieves UL Class A without gypsum or any other coverboard.
- Continuous above deck – satisfies California Title 24 requirements at lower R-value.
- Significant cost savings over other coverboards and traditional insulations.
- Effective application – installed above deck, therefore no interruption due to joists.
- Easy to install – lightweight, factory bonded panels.
- Compatible with all fully adhered or mechanically attached EPDM, PVC, TPO and CSPE membranes.
- Will meet or exceed the requirements of ASTM C578, the standard specification for rigid, cellular polystyrene thermal insulation.
- Excellent choice for new or retrofit applications where high thermal efficiency and maximum durability are desired.

Uses
- Mechanically fastened, ballasted or fully adhered EPDM, TPO or PVC.
- Low-sloped, built-up and modified bitumen membrane systems.
- Underlayment for metal roofing systems and some peel-and-stick systems.

Advantages
- System Enhancement: InsulRoof HD Composite provides additional resistance to misuse, abuse and adverse weather conditions, such as high winds and severe hail.
- Environmentally Friendly: The InsulRoof HD Composite core does not contain any ozone-depleting blowing agents, may contain recycled material and is 100% recyclable if ever removed or replaced.

- Stable R-value: 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.
- Water Resistance: The InsulRoof HD Composite core does not readily absorb moisture from the environment.
- Economical: InsulRoof HD Composite provides significant cost savings over other coverboards and traditional insulations. It is easy to install and lightweight with factory bonded panels.
- Code Approvals: InsulRoof HD Composite achieves UL Class-A without gypsum or other coverboards. And because InsulFoam HD Composite is a continuous above deck insulation, it satisfies California Title 24 requirements at a lower R-value.

Sizes
InsulRoof HD Composite is available in 4’ x 8’ sizes with overall thickness from 1.5” to 6”, and is available in custom lengths and widths with little to no impact on lead time.
R-values:

<table>
<thead>
<tr>
<th>Nominal Thicknesses (including 1/2&quot; HD ISO)</th>
<th>1.5&quot;</th>
<th>2.0&quot;</th>
<th>3.0&quot;</th>
<th>4.0&quot;</th>
<th>5.0&quot;</th>
<th>6.0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-value @ 25 °F</td>
<td>6.85</td>
<td>9.02</td>
<td>13.38</td>
<td>17.72</td>
<td>22.08</td>
<td>26.42</td>
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<tr>
<td>R-value @ 40 °F</td>
<td>6.67</td>
<td>8.76</td>
<td>12.93</td>
<td>17.10</td>
<td>21.27</td>
<td>25.44</td>
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<tr>
<td>R-value @ 75 °F</td>
<td>6.37</td>
<td>8.30</td>
<td>12.13</td>
<td>15.98</td>
<td>19.83</td>
<td>23.68</td>
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Installation Recommendations

- **Mechanically Attached:** InsulRoof HD Composite should be installed using a minimum of 5 fasteners, with insulation plates per 4' x 8' board prior to placement and fastening of roof membrane.
- **Adhered:** Requires attachment to the deck with EPS compatible roof insulation adhesives or fastened with a minimum of one fastener every two square feet.
- Recommended fastening patterns are available in the Insulfoam Roofing Manual.