Description
InsulFoam 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: InsulFoam HD Composite provides additional resistance to misuse, abuse and adverse weather conditions, such as high winds and severe hail.
- Environmentally Friendly: The InsulFoam 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 InsulFoam HD Composite core does not readily absorb moisture from the environment.
- Economical: InsulFoam HD Composite provides significant cost savings over other coverboards and traditional insulations. It is easy to install and lightweight with factory bonded panels.

Sizes
InsulFoam 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.

Installation Recommendations
- Mechanically Attached: InsulFoam 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.
R-values:

<table>
<thead>
<tr>
<th>Nominal Thicknesses (including ½&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>
</tr>
<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>
</tr>
<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>
</tr>
</tbody>
</table>