

INSULROOF HD COMPOSITE

PREMIUM HIGH-DENSITY LAMINATED INSULATION

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.

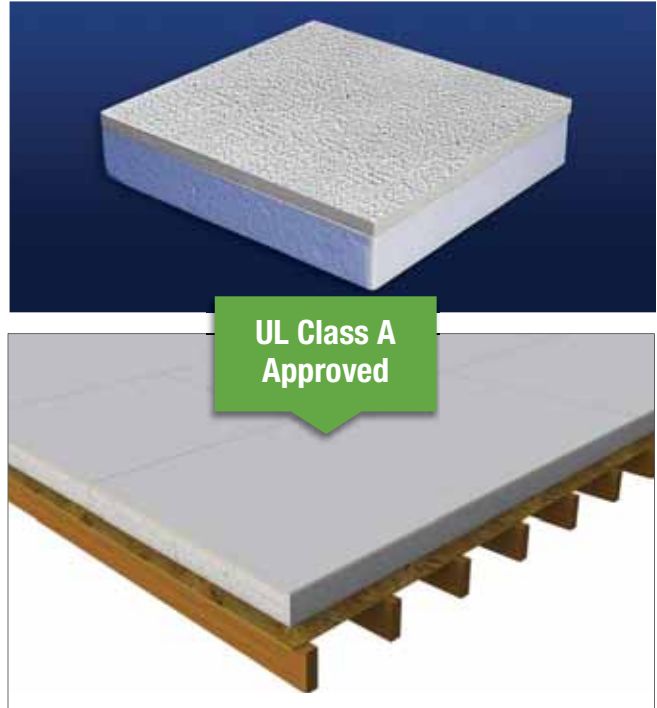
- Achieves UL Class A without gypsum or any other coverboard.
- Continuous above deck – satisfies California Title 24 requirements at lower R-value.
- Significant cost savings over other coverboards and traditional insulations.
- Effective application – installed above deck, therefore no interruption 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.

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R-values:

| Typical Thicknesses and Thermal Values for InsulFoam HD Composite | | | | | | |
|---|------|------|-------|-------|-------|-------|
| Nominal Thicknesses (including ½" HD ISO) | 1.5" | 2.0" | 3.0" | 4.0" | 5.0" | 6.0" |
| R-value | | | | | | |
| @ 25 °F | 6.85 | 9.02 | 13.38 | 17.72 | 22.08 | 26.42 |
| @ 40 °F | 6.67 | 8.76 | 12.93 | 17.10 | 21.27 | 25.44 |
| @ 75 °F | 6.37 | 8.30 | 12.13 | 15.98 | 19.83 | 23.68 |

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.