

INSULROOF INSULATION

Description

InsulRoof II (InsulFoam II) is an engineered insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). InsulRoof II meets or exceeds the requirements of ASTM C578, Type II, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. InsulRoof II has a nominal density of 1.5 lb/ft³. In addition, InsulRoof II offers a long-term, stable R-value and has excellent dimensional stability, compressive strength and water resistance properties.

Uses

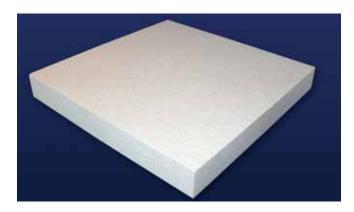
InsulRoof II is a high-performance roof insulation and is used in numerous roofing applications.

Roof Systems: InsulRoof II is well-suited for single-ply roof applications that employ mechanically fastened or ballasted TPO, PVC and EPDM, as well as low-sloped built-up, modified bitumen and fully adhered single-ply roofs that incorporate cover boards or slip sheets. Please consult local building codes and membrane manufacturers for system requirements.

System Compatibility: InsulRoof insulations are compatible with both light- and dark-colored single-ply membranes, can be applied directly to metal decks, are available in higher compressive strengths, and can be manufactured with fire-rated facers and coverboards. Please contact Insulfoam for more details.

Advantages

- Environmentally Friendly. It does not contain any 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.
- Proven Performance. EPS has been manufactured using the same chemistry since the mid-1950s, providing proven performance.
- Water Resistance. InsulRoof II does not readily absorb moisture from the environment.
- Code Approvals. Insulfoam insulations 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

InsulRoof II is available in 4' \times 4' and 4' \times 8' standard sizes with thickness from $^{1}/_{4}$ " to 40", and is readily available in custom lengths and widths with little to no impact on lead time. It is also available in tapered panels, with thickness from 0 ($^{1}/_{8}$ " actual) to 40", and any slope per foot.

Typical Physical Properties

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	1.50
C-Value (Conductance) - per inch BTU/(hr•ft²•°F) @ 25 °F @ 40 °F @ 75 °F	ASTM C518 or ASTM C177	0.210 0.220 0.240
R-value (Resistance) - per inch (hr•ft2•°F)/BTU @ 25 °F @ 40 °F @ 75 °F	ASTM C518 or ASTM C177	4.76 4.55 4.17
Compressive Strength (psi, 10% deformation)	ASTM D1621	15-21
Flexural Strength (min. psi)	ASTM C203	35
Dimensional Stability (maximum %)	ASTM D2126	2.0
Water Vapor Permeance (max. perm., 1 inch)	ASTM E96	3.5
Water Absorption (max. % vol.)	ASTM C272	3.0
Capillarity	_	none
Flame Spread	ASTM E84	< 20
Smoke Developed	ASTM E84	150-300

^{*}Properties are based on data provided by resin manufacturers, independent test agencies and Insulfoam.