

Description

nsulFoam XIV is an engineered insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). InsulFoam XIV meets or exceeds the requirements of ASTM C578, Type XIV, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. InsulFoam XIV has a nominal density of 2.5 lb/ft³. In addition, InsulFoam XIV offers a long-term stable R-value and has excellent dimensional stability, compressive strength and water resistance properties.

Uses

InsulFoam XIV is a high-performance roof insulation and is used in numerous roofing applications requiring an insulation or fill material with a high compressive strength.

Roof Systems: InsulFoam XIV is well suited for single-ply roof applications employing mechanically fastened or ballasted TPO, PVC and EPDM, inverted roof membrane assemblies (IRMA), roof gardens, plaza decks, and hot rubber systems. Low-sloped built-up, modified bitumen and fully adhered single-ply roofs incorporating a cover board or slip sheet are also approved. InsulFoam XIV can be provided in flat and tapered panels as well as a custom cut flute-fill piece. 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. InsulFoam XIV does not readily absorb moisture from the environment.
- Code Approvals. Insulfoam insualtions 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.

PREDICTABLY CONSISTENT VALUE.



Sizes

InsulFoam XIV is available in 4' x 4' and 4' x 8' standard sizes with thickness from $\frac{1}{4}$ " 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 ($\frac{1}{8}$ " actual) to 40", and in any slope per foot.

Typical Physical Properties

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	2.50
C-Value (Conductance) - per inch BTU/(hr•ft²•°F) @ 25 °F @ 40 °F @ 75 °F	ASTM C518 or ASTM C177	0.198 0.206 0.222
R-value (Resistance) - per inch (hr•ft2•°F)/BTU @ 25 °F @ 40 °F @ 75 °F	ASTM C518 or ASTM C177	5.05 4.85 4.50
Compressive Strength (psi, 10% deformation)	ASTM D1621	40
Flexural Strength (min. psi)	ASTM C203	60
Dimensional Stability (maximum %)	ASTM D2126	2.0
Water Vapor Permeance (max. perm., 1 inch)	ASTM E96	2.5
Water Absorption (max. % vol.)	ASTM C272	2.0
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.