

## **INSULROOF** XIV HIGH-PERFORMANCE 40 PSI INSULATION

### Description

InsulRoof XIV (InsulFoam XIV) is an engineered insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). InsulRoof XIV meets or exceeds the requirements of ASTM C578, Type XIV, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. InsulRoof XIV has a nominal density of 2.5 lb/ft<sup>3</sup>. In addition, InsulRoof XIV offers a long-term stable R-value and has excellent dimensional stability, compressive strength and water resistance properties.

### Uses

InsulRoof 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:** InsulRoof 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. InsulRoof 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.** InsulRoof XIV 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 XIV is available in 4' x 4' and 4' x 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 in any slope per foot.

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## Typical Physical Properties

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	2.50
C-Value (Conductance) - per inch BTU/(hr•ft <sup>2</sup> •°F)	ASTM C518	
@ 25 °F	or	0.198
@ 40 °F	ASTM C177	0.206
@ 75 °F		0.222
R-value (Resistance) - per inch (hr•ft <sup>2</sup> •°F)/BTU	ASTM C518	
@ 25 °F	or	5.05
@ 40 °F	ASTM C177	4.85
@ 75 °F		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.