

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

#### **Description**

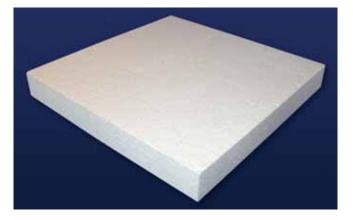
InsulRoof XIV (InsulFoam XIV) is an engineered insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). InsulRoof XIV meets or exceeds the requirements of ASTM C578, Type XIV, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. InsulRoof 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 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.

### Sizes

InsulRoof 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<br>BTU/(hr•ft²•°F)<br>@ 25 °F                      | ASTM C518                    | 0.198                |
| @ 40 °F<br>@ 75 °F  | ASTM C177                    | 0.206<br>0.222       |
| R-value (Resistance) - per inch<br>(hr•ft2•°F)/BTU<br>@ 25 °F<br>@ 40 °F<br>@ 75 °F | ASTM C518<br>or<br>ASTM C177 | 5.05<br>4.85<br>4.50 |
| Compressive Strength<br>(psi, 10% deformation)                                      | ASTM D1621                   | 40                   |
| Flexural Strength (min. psi)  | ASTM C203                    | 60                   |
| Dimensional Stability<br>(maximum %)  | ASTM D2126                   | 2.0                  |
| Water Vapor Permeance<br>(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.

**Engineered EPS** Versatile - Durable - Sustainable