

INSULWALL XIV

HIGH-PERFORMANCE INSULATION

Description

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

Uses

InsulWall XIV is a high-performance EPS product and is used in numerous applications requiring an insulation or fill material with a high compressive strength.

Roof Systems: InsulWall XIV is well suited for single-ply roof applications employing mechanically fastened or ballasted TPO, PVC and EPDM, inverted roof membrane assemblies (IRMA), 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. InsulWall 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.

Construction Applications: InsulWall XIV is used in below-slab, perimeter and plaza deck applications; road-fill, bridge approaches and numerous other geof foam applications; pre-stressed and pre-cast structural concrete panels, siding backer board, building sheathing, and numerous other construction applications.

Advantages

- **Environmentally Friendly.** InsulWall XIV 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 the 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.** InsulWall XIV does not readily absorb moisture from the environment.
- **Code Approvals.** InsulFoam insulations have numerous Underwriters Laboratory and Factory Mutual Approvals. Please contact your local Insulfoam representative for details.

Sizes

InsulFoam XIV is typically available in 4' x 4' and 4' x 8' standard sizes with thickness from 1/4" to 40" and readily available in custom lengths and widths with little or no impact on lead time.

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Typical Tested Physical Properties*

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	2.50
C-Value (Conductance) - per inch BTU/(hr•ft ² •°F)	ASTM C518 or ASTM C177	0.198 0.206 0.222
R-value (Resistance) - per inch (hr•ft ² •°F)/BTU	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.