

INSULWALL I

FIRE-RATED INSULATION

Description

InsulWall I (InsulFoam I) is an engineered insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). InsulWall I meets or exceeds the requirements of ASTM C578, Type I, *Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation*. InsulWall I has a nominal density of 1.0 lb/ft³. In addition, InsulWall I offers a long-term, stable R-value and has excellent dimensional stability, compressive strength and water resistance properties.

Uses

InsulWall I is a quality EPS product and is used in numerous building construction applications.

Roof Systems: InsulWall I 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.

Other Construction Applications: InsulWall I is used in assorted building applications, including pre-stressed and pre-cast structural concrete panels, metal roof flute-fill, siding backer board, building sheathing, roads and bridge fill, below-slab and perimeter insulation, and numerous other geof foam applications.

Advantages

- **Environmentally Friendly.** InsulWall I 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 I 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

InsulWall I is available in 4' x 4' and 4' x 8' standard sizes with thicknesses from ¼" 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.

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Typical Tested Physical Properties*

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	1.00
C-Value (Conductance) - per inch BTU/(hr•ft ² •°F)	ASTM C518	
	or	0.230
	ASTM C177	0.240
@ 25 °F		0.260
@ 40 °F		
@ 75 °F		
R-value (Resistance) - per inch (hr•ft ² •°F)/BTU	ASTM C518	
	or	4.35
	ASTM C177	4.17
@ 25 °F		3.85
@ 40 °F		
@ 75 °F		
Compressive Strength (psi, 10% deformation)	ASTM D1621	10-14
Flexural Strength (min. psi)	ASTM C203	25
Dimensional Stability (maximum %)	ASTM D2126	2.0
Water Vapor Permeance (max. perm., 1 inch)	ASTM E96	5.0
Water Absorption (max. % vol.)	ASTM C272	4.0
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.