

INSULWALL II

FIRE-RATED INSULATION

Description

InsulWall II (InsulFoam II) is an engineered insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). InsulWall II meets or exceeds the requirements of ASTM C578, Type II, *Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation*. InsulWall II has a nominal density of 1.5 lb/ft³. In addition, InsulWall II offers a long-term, stable R-value and has excellent dimensional stability, compressive strength and water resistance properties.

Uses

InsulWall II is a high-performance EPS product and is used in numerous building construction applications.

Roof Systems: InsulWall II 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 II 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 geofoam applications.

Advantages

- **Environmentally Friendly.** InsulWall II 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 II 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 II is available in 4' x 4' and 4' x 8' standard sizes with thickness 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.

INSULWALL II

FIRE-RATED INSULATION

Typical Tested Physical Properties*

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	1.50
C-Value (Conductance) - per inch BTU/(hr•ft ² •°F)	ASTM C518 or ASTM C177	0.210 0.220 0.240
R-value (Resistance) - per inch (hr•ft ² •°F)/BTU	ASTM C518 or ASTM C177	4.76 4.55 4.17
Compressive Strength (psi, 10% deformation)	ASTM D1621	15-21
Flexural Strength (min. psi)	ASTM C203	35
Dimensional Stability (maximum %)	ASTM D2126	2.0
Water Vapor Permeance (max. perm., 1 inch)	ASTM E96	3.5
Water Absorption (max. % vol.)	ASTM C272	3.0
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.