



Description

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

Uses

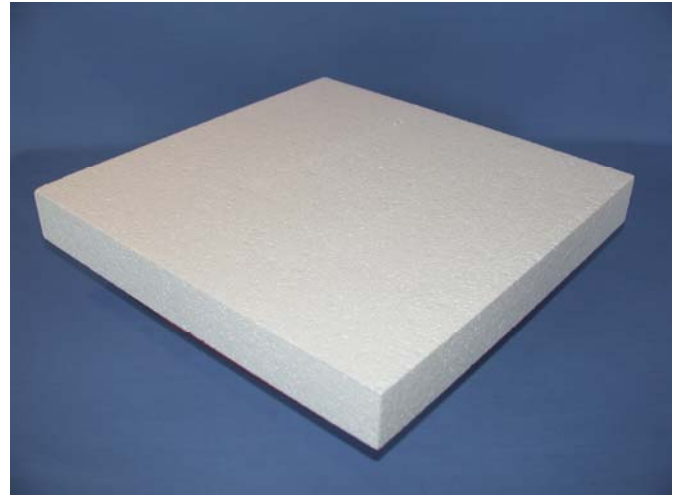
InsulFoam I is a quality EPS product and is used in numerous building construction applications.

Roofing: InsulFoam I is well suited for single ply roof applications employing mechanically fastened or ballasted TPO, PVC, EPDM and CSPE as well as low-sloped built-up, modified bitumen and fully adhered single ply roofs incorporating a coverboard or slip sheet. Please consult local building codes and membrane manufacturers for system requirements.

Other Construction Applications: InsulFoam I is used in assorted building applications including pre-stressed and pre-cast structural concrete panels, lightweight concrete deck fill, 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.** It contains no formaldehyde or ozone-depleting CFC's or HCFC's, contains recycled material and is 100% recyclable if ever removed or replaced.
- **Stable R-Value.** Designers are well served knowing 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.** The same fundamental EPS chemistry has been in use since the mid-1950s so the actual performance of the product is well known.
- **Water Resistant.** EPS is not hygroscopic (does not readily absorb moisture from the atmosphere) and does not promote migration of moisture into the insulation.
- **Code Approvals:** Insulfoam EPS is recognized by the International Code Council Evaluation Service (ICC-ES) and has numerous Underwriter Laboratory and Factory Mutual Approvals. Please contact your local Insulfoam representative for details.



Sizes

InsulFoam I is typically available in 4' x 4' and 4' x 8' sizes with thickness from 1/4" to 40" and readily available in custom lengths and widths with little or no impact on lead time. It can also be provided in tapered panels.

Typical Tested Physical Properties*

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	1.0
C-Value (Conductance) – per inch BTU/(hr•ft ² •°F)	ASTM C518 or ASTM C177	0.23 0.24 0.26
R-Value (Resistance) - per inch (hr•ft ² •°F)/BTU	ASTM C518 or ASTM C177	4.35 4.17 3.85
Compressive Strength (psi, 10% consolidation)	ASTM D161	10-14
Flexural Strength (psi)	ASTM C203	25-30
Dimensional Stability (maximum %)	ASTM D2126	< 2.0
Water Vapor Transmission (perm. In)	ASTM E96	2.0-5.0
Absorption (% vol.)	ASTM C272	< 4.0
Capillarity	--	none
Flame Spread	--	<20
Smoke Developed		150-300

* Properties based on data provided by resin manufacturers, independent test agencies and Insulfoam