

Description

InsulFoam I Below Grade is an engineered 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. Insulfoam Below Grade Insulation can contribute toward environmental credentialing including LEED® credits.

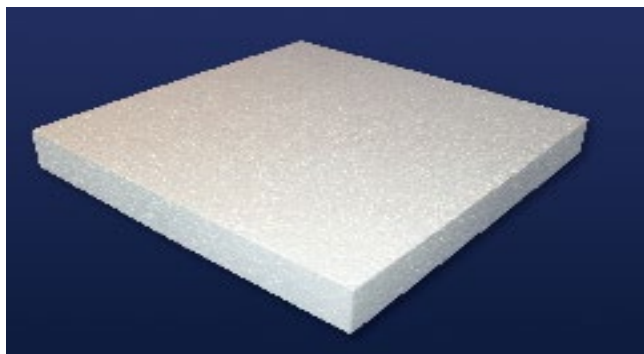
Uses

Insulfoam Below Grade Insulation is successfully used in numerous commercial, industrial and residential applications. It is designed to insulate the foundation wall or slab and protect the waterproofing or damp proofing, especially during backfilling. Additional building applications include pre-stressed and pre-cast structural concrete panels, siding backer board, building sheathing, roads and bridge fill, below-slab and perimeter insulation, architectural shapes, docks and piers, void fill, foundations, retaining walls and numerous other geofoam applications.

Advantages

- **Environmentally Friendly.** Insulfoam Below Grade Insulation does not contain any ozone-depleting blowing agents, may contain recycled material and is 100% recyclable.
- **Moisture Resistance.** Insulfoam Below Grade Insulation does not readily absorb moisture from the environment.
- **Insect and Mold Resistance.** Insulfoam Below Grade Insulation does not sustain mold and mildew growth and can be manufactured with an inert additive that deters termites and carpenter ants.
- **Stable R-value.** The product's thermal properties will remain stable over its entire service life.
- **Long Term Warranty.** With no thermal drift, Insulfoam warrants this product with a 20-year Thermal Performance Warranty.
- **Proven Performance.** EPS has been manufactured using the same chemistry since the mid-1950s.
- **Large Variety of Compressive Strengths.** More available compressive strengths than comparable below grade products.
- **Cost Effective.** Insulfoam Below Grade is typically less expensive than comparable insulation products.
- **Code Approvals.** Insulfoam insulations are recognized by the International Code Council Evaluation Service (ICC-ES), for numerous applications. Please contact your local Insulfoam representative for details.

TIME TESTED PROTECTION.



Sizes

InsulFoam 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.

Installation Recommendations

Please refer to the appropriate Insulfoam Below Grade installation guidelines for recommended installation procedures, available at www.insulfoam.com or by asking your local Representative.

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	0.230
	@ 25 °F	
	or ASTM C177	0.240
R-value (Resistance) - per inch (hr•ft ² •°F)/BTU	@ 40 °F	0.260
	@ 75 °F	
	ASTM C518	4.35
Compressive Strength (psi, 10% deformation)	or ASTM C177	4.17
		3.85
Flexural Strength (min. psi)	ASTM D1621	10-14
Dimensional Stability (maximum %)	ASTM C203	25
Water Vapor Permeance (max. perm., 1 inch)	ASTM D2126	2.0
Water Absorption (max. % vol.)	ASTM E96	5.0
Capillarity	ASTM C272	4.0
Flame Spread	–	none
Smoke Developed	ASTM E84	< 20
	ASTM E84	150-300

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