

# INSULFOAM®

WALL INSULATION SYSTEMS

A CARLISLE COMPANY

## Description

InsulFoam Wall Insulation is an engineered insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS). Insulfoam insulation meets or exceeds the requirements of ASTM C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. Insulfoam Insulation is available in densities ranging from 1.0 to 3.0 lb/ft<sup>3</sup>, offers a long-term, stable R-value, has excellent dimensional stability, compressive strength and water resistance properties.

## Uses

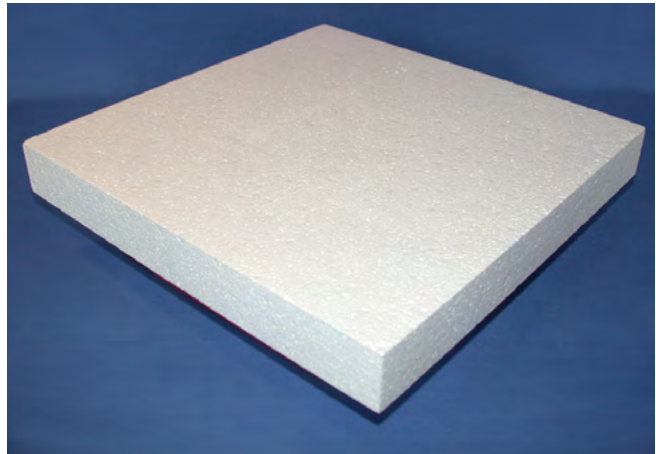
Insulfoam Wall Insulation is successfully used in numerous commercial, industrial and residential applications, including:

- Sheathing
- Interior Walls
- Tongue & Groove Insulation
- Continuous Insulation
- Stucco Systems
- Cavity Walls
- Siding Underlayment
- Exterior Insulating Finish Systems (EIFS)
- Basement Walls
- Retaining Walls
- Attics & Crawl Spaces
- Gable-Ends
- Architectural Shapes

## Advantages

- **Environmentally Friendly.** Insulfoam Wall Insulation 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 has no thermal drift, so its thermal properties will remain stable over the entire service life. Insulfoam's thermal stability makes it 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.** Insulfoam Wall Insulation does not readily absorb moisture from the environment, and offers exceptional wall system moisture management.
- **Code Approvals.** Insulfoam insulations are recognized by the International Code Council Evaluation Service (ICC-ES), and have numerous Underwriters Laboratory and Factory Mutual Approvals. They also comply with most environmental certifications, and offer significant points towards environmental credentialing programs.
- **Cost Savings.** Insulfoam Wall Insulation is typically less expensive than other rigid insulations, offers the highest R-Value per dollar over other rigid insulations, and is available in custom lengths and widths to help with installation labor savings.
- **Insect and Mold Resistance.** Insulfoam Insulation is naturally decay resistant and can be manufactured with an inert additive that deters termites.

## THE PROVEN STANDARD FOR WALLS.



## Sizes

Insulfoam Wall insulation is available in 4' x 4' and 4' x 8' standard sizes with thicknesses from 1/4" to 40", and is readily available in custom lengths, widths and densities with little to no impact on lead time. It is also available in tapered panels.

## Installation Recommendations

Please refer to the appropriate Insulfoam application sheets for recommended installation procedures.



INSULATION ENGINEERED TO MAKE A DIFFERENCE.



**Typical Properties of Insulfoam Wall Insulation\***

Property	Type I	Type VIII	Type II	Type IX	Type XIV	Type XV	Test Method
<b>Nominal Density (pcf)</b>	1.0	1.25	1.5	2.0	2.50	3.0	ASTM C518 or ASTM C177
<b>C-Value (Conductance) BTU/(hr•ft<sup>2</sup>•°F)</b>							
(per inch) @ 25° F	.230	.220	.210	.200	0.198	0.196	ASTM C518 or ASTM C177
@ 40° F	.240	.235	.220	.210	0.206	0.198	
@ 75° F	.260	.255	.240	.230	0.222	0.217	
<b>R-value (Thermal Resistance) (hr•ft<sup>2</sup>•°F)/BTU</b>							
(per inch) @ 25° F	4.35	4.55	4.76	5.00	5.05	5.10	ASTM C518 or ASTM C177
@ 40° F	4.2	4.25	4.55	4.76	4.85	5.05	
@ 75° F	3.9	3.92	4.17	4.35	4.50	4.60	
<b>Compressive Strength (psi, 10% deformation)</b>	10 - 14	13 - 18	15 - 21	25 - 33	40	60	ASTM D1621
<b>Flexural Strength (min. psi)</b>	25	30	35	50	60	75	ASTM C203
<b>Dimensional Stability (maximum %)</b>	2%	2%	2%	2%	2.0	2.0	ASTM D2126
<b>Water Vapor Permeance (max. perm., 1 inch)</b>	5.0	3.5	3.5	2.0	2.5	2.5	ASTM E96
<b>Water Absorption (max. % vol.)</b>	4.0	3.0	3.0	2.0	2.0	2.0	ASTM C272
<b>Capillarity</b>	none	none	none	none	none	none	-
<b>Flame Spread</b>	< 20	< 20	< 20	< 20	< 20	< 20	ASTM E84
<b>Smoke Developed</b>	150 - 300	150 - 300	150 - 300	150 - 300	150-300	150-300	ASTM E84

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