

# Terrafoam Plus I.S.

## Laminate Rigid Foam Insulation

Terrafoam Plus I.S. Rigid Insulation - is our white EPS rigid insulation board laminated on both sides with a polypropylene layer complete with Integrated 'Internal Strapping' Terrafoam Plus I.S. is a 4 ft x 8 ft (1220mm x 2438mm) insulation panel with three integrated furring strips at 16 in (406 mm) on center.

All Terrafoam Insulation products are produced from inert closed cell expanded polystyrene (EPS) and have excellent resistance to freeze/thaw, zero capillarity, low moisture absorption characteristics, zero off-gassing and zero loss in R-value over time

### Key Benefits

- Durable laminated protection
- Stable long-term thermal performance
- Versatile moisture-resistant insulation

Terrafoam Plus I.S. is a cost-effective rigid insulation board manufactured in a wide range of sizes that will meet Building Codes and specific application requirements. Terrafoam Plus does not contain CFC's or HCFC's, is non toxic, hypo-allergenic and will never rot or support mold and mildew. Terrafoam Plus I.S. EPS Rigid Insulation is available in standard 4ft x 8ft.

### Applications

- Interior wall insulation
- Ceiling Insulation

Terrafoam Plus I.S. is an engineered rigid insulation consisting of a superior closed-cell, lightweight and resilient expanded polystyrene (EPS) with advanced polypropylene laminate on both sides. The core of Terrafoam Plus I.S. is the same high quality EPS as all our trusted Terrafoam Insulation Products.

Terrafoam Plus meets or exceeds the requirements of CAN/ UL S701 Types 1. Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. Terrafoam Plus has excellent dimensional stability, compressive strength and water resistance properties and can contribute toward LEED® credits.

### Storage, Handling and Protection

Terrafoam Plus must be protected from damage during transit and from UV degradation during storage and after installation. Storage areas should minimize damage and be kept away from heat, sparks, flames, and other ignition sources.

Care should be taken to protect exposed product surfaces from reflective sunlight and prolonged solar exposure. Do not smoke in handling areas. When sawing or sanding, use approved eye protection and a dust mask, and use appropriate respiratory protection where dust levels are high.



### CLASSIFICATIONS

- CAN/ULC S701 Type 1 – 10 psi (70 kPa) compressive strength

### SIZES

	Sheet Thickness	Sheet Size
<b>Type 1</b>	2" to 4"	4' x 8' (1220 x 2440 mm)

Custom sizes are available.

### PACKAGING

Terrafoam Plus packaging and bundle sizes vary. Please contact your local Terrafoam Plus manufacturer or dealer to confirm your local packaging specifications and available bundle sizes.

### INSTALLATION

- Install products in accordance with the manufacturer's instructions for each specific application.
- Cover exposed insulation with a finish acceptable to local building authorities.

### MAINTENANCE INSTRUCTIONS AND PROCEDURES

Product incompatible with aromatic, aliphatic hydrocarbons, esters, amines, or anhydrous acids, which could cause degradation.

## TECHNICAL DATA

Physical Property	Units Imperial (Metric)	ASTM Test Procedure	Terrafoam Plus Type 1
Minimum Thermal Resistance (R-Value)	hr-ft <sup>2</sup> ·°F/BTU m <sup>2</sup> ·°C/W per 25 mm	C-177-93 @ 0°C (32°F)	4.07 (0.72)
		C-177-93 @ 24°C (75°F)	3.75 (0.65)
Compressive Strength, min.	psi (kPa)	ASTM D1621	10 (70)
Capillary Action	—	—	none
Water Vapor Permeance, max.	perm-in @ 1 in. (ng/Pa·s·m <sup>2</sup> @ 1 in.)	ASTM E96	0.13 (7.5)
Water Absorption, max.	%	ASTM D2842	1

## TECHNICAL INFORMATION

**Chemical Properties**

Expanded polystyrene should not be exposed to volatile hydrocarbons such as fuel oils, gasoline, and some alcohols. Anhydrous acids such as sulfuric, glacial, and formic acid may also attack expanded polystyrene. The product is also incompatible with aromatic or aliphatic hydrocarbons, esters, and amines.

**Flammability Characteristics**

Terrafoam Plus contains a chemical additive to inhibit accidental ignition from a small fire source. This additive, however, will not prevent burning when the material is exposed to a large continuous fire source or intense heat. Observe normal fire precautions and good housekeeping methods during application. Cover insulation with a finish acceptable to local building codes.

**Health and the Environment**

Terrafoam Plus contains no CFCs, HCFCs, or other refrigerant gases and provides stable long-term thermal performance without thermal drift. It is non-toxic, hypo allergenic, biologically inert, and will not support mould, mildew, fungus growth, or pests. It does not off-gas under normal conditions and does not irritate skin under normal handling.

## CODE EVALUATIONS APPROVALS

**CCMC 12982-L.**

## TECHNICAL SUPPORT

For technical inquiries please contact:

- [productsupport@bvrthermal.com](mailto:productsupport@bvrthermal.com)
- (888) 453-5961 Toll Free

Website:

<https://bvrthermal.com/>

## APPLICABLE STANDARDS

<b>ASTM C177</b>	Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
<b>ASTM C578</b>	Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
<b>ASTM D1621</b>	Standard Test Method for Compressive Properties of Rigid Cellular Plastics.
<b>ASTM D1623</b>	Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics.
<b>ASTM C272</b>	Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions.
<b>ASTM D2842</b>	Standard Test Method for Water Absorption of Rigid Cellular Plastics.
<b>ASTM D2863</b>	Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index).
<b>ASTM E84</b>	Standard Test Method for Surface Burning Characteristics of Building Materials.
<b>ASTM E96</b>	Standard Test Methods for Water Vapor Transmission of Materials.
<b>CAN/ULC-S701</b>	Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering.

## MANUFACTURER

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