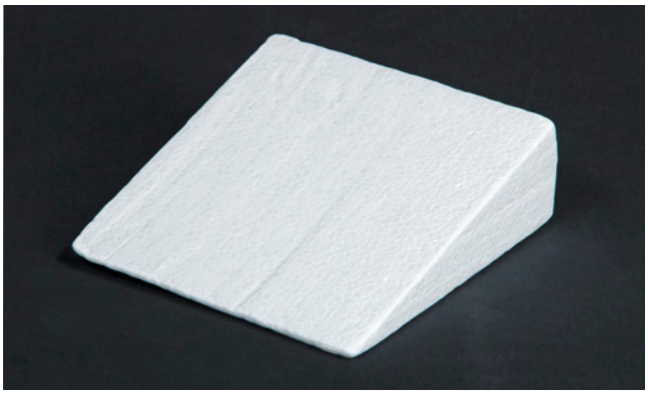
WeatherBond **EPS**

Tapered



Overview

WeatherBond's InsulFoam Tapered EPS is an engineered insulation made of closed-cell, lightweight expanded polystyrene (EPS). This product is available in a wide range of panel sizes and densities that meet or exceed the requirements of ASTM C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. InsulFoam Tapered offers a long-term, stable R-value and has excellent dimensional stability, compressive strength, and water resistance properties.

Features and Benefits

- Labor and cost savings: no complicated filler panel systems, can be installed in a single layer for thicknesses up to 40", and is significantly more cost-effective than extruded polystyrene, perlite, and isocyanurate tapered systems
- Promotes positive drainage: ideal for both new construction and re-roofing projects in which positive slope is desired or ponded water is a concern
- Environmentally friendly: contains no ozone-depleting blowing agents, may contain recycled material, and is 100% recyclable if removed or replaced
- Stable R-value: thermal properties will remain stable over the material's entire service life, no thermal drift
- Proven performance: manufactured using the same chemistry since the mid-1950s for proven performance
- Water resistance: does not readily absorb moisture from the environment

Panel Characteristics

WeatherBond's Tapered EPS is available in 4' x 4' and 4' x 8' panels with thicknesses from 0 (⅛" actual) to 40" in a single layer. There are no limitations to available slope per foot.

Applications

Tapered EPS is well-suited for a variety of single-ply roof systems, including EPDM, TPO, and PVC, and assembly types, including ballasted, mechanically fastened, and fully adhered. Consult WeatherBond Specifications and Details for more information.

Installation Considerations

1. Install only as much insulation as can be covered by a roof membrane system, and/or made watertight by the end of each day.
2. Tapered EPS should not be exposed directly to solvent- or petroleum-based adhesives and sealants.
3. Allow approximately a ¼" space between insulation and vertical surfaces or roof projections. Do not force or jam product into place.
4. Review the layout of all tapered EPS systems before loading and installing panels.
5. In re-cover applications, ensure no moisture is trapped in the new or existing roofing system.

Loose-Laid Insulation

Install tapered EPS with continuous side joints and end joints, staggered so they are offset by a minimum of 12" from the end joints in adjacent rows. Insulation should abut tightly against adjacent boards. Joints greater than ½" should be filled with the same insulation that is being used in the field of the roof. If insulation is being installed over a thermal barrier or existing layer of insulation, or under a cover board, all joints must be offset a minimum of 6" between layers. When installing tapered EPS directly to a metal deck, the edges of the insulation parallel to the deck ribs must be solidly supported and centered on the ribs. Additionally, for metal decks, ensure that the insulation has a thickness that is adequate to span the rib openings. When conditions dictate, in order to prevent wind blow-off or damage during installation, loose-laid insulation should be weighed down or tacked into place with a minimal quantity of mechanical fasteners.

REVIEW CURRENT WEATHERBOND INSTALLATION INSTRUCTIONS FOR SPECIFIC INSTALLATION REQUIREMENTS.

WEATHERBOND
ROOFING SYSTEMS

Typical Properties and Characteristics

Property	Type I	Type VIII	Type II	Type IX	Type XIV	Type XV	Test Method
Nominal Density (pcf)	1.0	1.25	1.5	2	2.5	3	ASTM C303
C-Value (Conductance) BTU/(hr·ft²·°F) (per inch)	.260	.255	.240	.230	0.222	0.217	ASTM C518 or ASTM C177
R-Value (Thermal Resistance) (hr·ft²·°F)/BTU (per inch @ 75°F)	3.85	3.92	4.17	4.50	4.50	4.60	ASTM C518 or ASTM C177
Compressive Strength (psi. 10% deformation)	10-14	13-18	15-21	25-33	40	60	ASTM D1621
Flexural Strength (min. psi)	25	30	35	50	60	75	ASTM C203
Dimensional Stability (maximum %)	2.0	2.0	2.0	2.0	2.0	2.0	ASTM D2126
Water Vapor Permeance (max. perm., 1 inch)	5.0	3.5	3.5	2.0	2.5	2.5	ASTM E96
Water Absorption (max. % vol.)	4.0	3.0	3.0	2.0	2.0	2.0	ASTM C272
Capillarity	None	None	None	None	None	None	–
Flame Spread	< 20	< 20	< 20	< 20	< 20	< 20	ASTM E84
Smoke Developed	150-300	150-300	150-300	150-300	150-300	150-300	ASTM E84

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED® Information

Pre-consumer Recycled Content	Up to 25%
Post-consumer Recycled Content	0%
Manufacturing Location	Carlisle, PA Anchorage, AK Puyallup, WA Dixon, CA Chino, CA Mead, NE Aurora, CO Phoenix, AZ Lakeland, FL

WEATHERBOND
ROOFING SYSTEMS
Single-Ply Simplified

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