CELLOFOAM® North America Inc.

POLY SHIELD® FAN-FOLD

Protect the Old from the New with Poly Shield® Fan-Fold Roofing Underlayment / Re-cover Board

Cellofoam Poly Shield® Fan-Fold is an underlayment / re-cover board that significantly reduces application labor costs. It is also lighter weight and costs much less than most other roofing re-cover boards. Cut in 24" panels along its 4' x 50' expanse, the insulation is easily transported accordion style and then rapidly unfolded flat on the roof. Poly Shield Fan-Fold is ideal for low-slope commercial and industrial roofs that employ mechanically attached or ballasted roofing systems, and may be part of Class A fire rated roof assembly. This product is often used in roof re-cover jobs, as it provides a smooth, resilient underlayment to greatly reduce the potential for "oil canning" in metal roofs.

Poly Shield® Fan-Fold is made of premium expanded polystyrene (EPS) rigid insulation that meets or exceeds the requirements of *ASTM C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.* The core EPS is composed of closed cells with excellent dimensional stability, compressive strength, and water resistance. Poly Shield Fan-Fold is faced with a tough polymeric facers on both sides for added strength and durability in storing, handling, and installation. Several different facer options are provided to meet project needs. These include clear, printed, and metalized polypropylene as well as printed or clear polyester for compatibility with different roofing membranes such as PVC. Poly Shield Fan-Fold is bundled accordion style, with each bundle covering 200 ft^2 or two squares.

ADVANTAGES

Labor & Material Savings: Covering two squares in a light weight bundle, Poly Shield Fan-Fold requires fewer attachments per square foot and weighs far less than competing 4 x 4 ft or 4 x 8 ft heavy gypsum re-cover boards. It is also typically much less expensive than other re-cover products.

Code Approvals: Underwriters Laboratory Listed, UL Classified TGFU.R7260, UL ER7260, for low slope mechanically attached or ballasted roof systems. Part of a Class A assembly over noncombustible decks. Please consult local building codes and membrane manufacturers for system requirements.

Stable R-value: The R-value of EPS is permanent because the only gas in EPS is air. Unlike Polyiso or XPS whose blowing agents outgas and therefore lose R-value, EPS R-values do not degrade over decades of use.

Moisture Resistant: Cellofoam EPS is quick drying and does not readily absorb moisture from the air. Its closed-cell structure reduces the absorption and migration of moisture.

Premium Quality: Meets or exceeds ASTM C578 specs, with excellent dimensional stability & compressive strength. Polymeric facers provide durability, water resistance, and compatibility with nearly any roof membrane.

Environmentally Friendly: Cellofoam EPS contains no formaldehyde or ozone-depleting CFCs or HCFCs. Its EPS core is 100% recyclable and may contain recycled material.

Manufactured to your Needs: Cellofoam Poly Shield Fan-Fold is available in 2 square bundles of 4 x 50 ft, in thicknesses of 1/4”, 3/8", 1/2”, and 3/4” and ASTM C578 nominal densities of 1.0, 1.25, and 1.5 lb/ft^3.

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Cellofoam® EPS Typical Physical Properties[1]		Units	ASTM Test	ASTM C578 Type I	ASTM C578 Type VIII	ASTM C578 Type II	ASTM C578 Type IX
Density (Nominal)		lb/ft³	C303 or D1622	1.0	1.25	1.5	2.0
Density (Minimum)		lb/ft³		0.90	1.15	1.35	1.80
Thermal Resistance							
R-Value [2]	**at 25° F**	(°F ft² hr) / Btu per inch	C177 or C518	4.35	4.54	4.76	5.00
	at 40° F			4.17	4.25	4.55	4.76
	at 75° F			3.85	3.92	4.17	4.35
Compressive Strength at 10% deformation		psi	D1621	10 - 14	13 - 18	15 - 21	25 - 33
Flexural Strength		psi	C203	25 - 30	30 - 38	40 - 50	50 - 75
Water Vapor Permeance 1.0 in. thickness		perm.	E96	2.0 - 3.0	1.5 - 2.8	0.9 - 2.5	0.6 - 1.5
Water Absorption by total immersion		volume %	C272 or C1763	< 1.5	< 1.5	< 1.5	< 1.5
Capillarity		--	--	none	none	none	none
Dimensional Stability maximum		change %	D2126	< 0.5	< 0.5	< 0.5	< 0.5
Coefficient of Thermal Expansion		in/(in °F)	D696	0.000035	0.000035	0.000035	0.000035
Fungus & Bacterial Resistance		-	C1338	Will not support bacterial or fungus growth; no food value			

[1] Typical physical properties are based on data provided by resin manufacturer, independent test agencies, and Cellofoam North America Inc. All data is for plain, unlaminated EPS foam.

[2] R means resistance to heat flow. The higher the R value, the greater the insulating power.

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Conyers, GA 30012

Orlando, FL
11237 Astronaut Blvd.
Orlando, FL 32837

Sallisaw, OK
1330 W. Redwood Ave
Sallisaw, OK 74955

Whiteland, IN
150 Crossroads Drive
Whiteland, IN 46184

Winchester, VA
326 McGhee Road
Winchester, VA 22603

EPS Industry Alliance Member

800-468-3626

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CLASSIFIED UL

Warning: This product is combustible and if exposed to a fire of sufficient heat and intensity may burn rapidly. It should not be left exposed or inadequately protected. Protect Cellofoam expanded polystyrene from exposure to hydrocarbons, coal tar pitch, solvents, and solvent fumes. Consult specific instructions and applicable building codes for use of this product.

Cellofoam North America Inc. is an expanded polystyrene foam manufacturer and not an engineering consulting firm. Thus, it is beyond our scope to provide design services on the specific use for our products. Users of our EPS products such as Poly Shield Fan-Fold should consult with appropriate engineering and code experts to determine the exact type and specifications of EPS required for their project. The sale of these products shall be subject to Terms and Conditions of Sale, including those limiting warranties as set forth in Cellofoam's invoices. No agent, employee, or representative of Cellofoam North America Inc. or its subsidiary or affiliated companies is authorized to modify this disclaimer.

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