



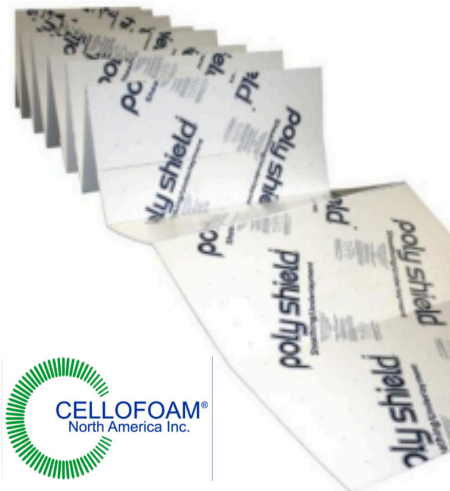
Poly Shield Fan Fold

www.SourceMountain.com

Rapidly Installed, Premium Wall Insulation

Cellofoam Poly Shield® Fan-Fold is a wall insulation and underlayment that significantly reduces application labor costs while adding R-value to your exterior walls. Cut in 24" panels along its 4' x 50' expanse, the insulation is easily transported accordion style and then rapidly unfolded flat and attached. Poly Shield Fan-Fold is typically used on exterior walls as an insulative backer board for siding, but may also be used for other applications such as insulating interior or basement walls.

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 tough polymeric laminates on both sides for added strength and durability in storing, handling, and installation. Several different poly facer options are provided to meet project needs. These include printed polypropylene and polyester facers, as well as a metalized, reflective polypropylene. Properly installed with a dead air space, the reflective facer can provide a significant R-value boost to Poly Shield Fan-Fold's thermal performance (see table). Poly Shield Fan-Fold is bundled accordion style, with each bundle covering 200 ft² or two squares.



ADVANTAGES

Labor & Material Savings: Covering 200 ft² in a light weight bundle, Poly Shield Fan-Fold can be installed far quicker than competing 4 x 8 ft insulation or backer boards.

Code Approvals: Underwriters Laboratory Listed, UL ER7260, for interior and exterior walls (as well as for low slope mechanically attached or ballasted roof systems - see related fan-fold roofing flier). 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, and the facers surfaces are nearly impervious to moisture. Not a vapor barrier.

Premium Quality: Meets or exceeds ASTM C578 specs, with excellent dimensional stability & compressive strength.

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/ft³.

Effective R-Values				
for Poly Shield EPS Insulation with a Reflective Facer and Dead Air Space*				
Insulation Thickness	Design Temperature	Effective R-Value		
		Type I	Type VIII	Type II
1/4"	25° F	3.3	3.3	3.4
	40° F	3.2	3.3	3.3
	75° F	3.2	3.2	3.2
3/8"	25° F	3.8	3.9	4.0
	40° F	3.8	3.8	3.9
	75° F	3.6	3.7	3.8
1/2"	25° F	4.4	4.5	4.6
	40° F	4.3	4.3	4.5
	75° F	4.1	4.2	4.3
3/4"	25° F	5.5	5.6	5.8
	40° F	5.3	5.4	5.6
	75° F	5.1	5.1	5.3

*For horizontal heat flow through a vertical wall with a 3/4" dead air space. See American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Handbook and Cellofoam Technical Note #105, Incremental R-Value for Cellofoam Poly Shield EPS Insulation with a Reflective Facer, for details.



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Cellofoam® EPS Typical Physical Properties ¹	Units	ASTM Test	ASTM C578 Type			
			Type I	Type VIII	Type II	Type IX
Density (Nominal)	lb/ft ³	C303 or D1622	1.0	1.25	1.5	2.0
Density (Minimum)	lb/ft ³		0.90	1.15	1.35	1.80
Thermal Resistance						
R-Value ²	at 25° F	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
Thermal Resistance Units: (°F ft ² hr) / Btu per inch						
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, un laminated EPS foam.

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



Your Local Manufacturing Supplier
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CAUTION: 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. Consult specific instructions for use accompanying 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 PermaBG+ 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.

