



FOAM PACK INSULATION COMPANY

Technical Data

FOAM PACK EPS

Foam Pack EPS insulation as manufactured by Foam Pack, Inc. is a modified expanded polystyrene. Foam Pack EPS is produced from state of the art equipment from the industry's innovator in technology. Foam Pack is a rigid foamed plastic with resilient closed cells molded in a range of densities, sizes and profiles to meet your application/specification requirements.

Foam Pack insulating products provide all of the characteristics required to long-term performance—permanent R value, inherent water resistance and excellent physical strength and dimensional stability.

The need for greater energy-efficiency in buildings today and the need for lower cost construction has made Foam Pack EPS the logical insulation for building. Foam Pack EPS provides a high R value at a comparatively low cost, and, therefore, is the insulation of choice for: o Panel Core o Cavity Wall Insulation o Roof Insulation o Non-Structural Sheathing o Perimeter Insulation o T & G Sheathing o Wall Systems o Plaster/Drywall Base o Exterior Insulation o Masonry Fill Insulation o Cold Storage Insulation o Styrofoil® Sheathing.

Typical Physical Properties of Foam Pack EPS Insulation:

Property	Units	ASTM Test					
Density (Nominal)	pcf		1.0	1.25	1.5	2.0	
Thermal Conductivity K Factor	at 40F at 75F	BTU/(hr.) (sq. ft.) (F/in.)	C177 or C518	0.24 0.26	0.235 0.255	0.22 0.24	0.21 0.23
Thermal Resistance Values (R)*	at 40F at 75F	per inch thickness	—	4.17 3.85	4.25 3.92	4.55 4.17	4.76 4.35 ➔
Strength Properties							
Compressive 10% Deformation	psi	D1621	10-14	13-18	15-21	25-33	
Flexural	psi	C203	25-30	32-38	40-50	55-75	
Tensile	psi	D1623	16-20	17-21	18-22	23-27	
Shear	psi	D732	18-22	23-25	26-32	33-37	
Shear Modulus	psi	—	280-320	370-410	460-500	600-640	
Modulus of Elasticity	psi	—	180-220	250-310	320-360	460-500	
Moisture Resistance							
WVT	perm. in.	C355	1.2-3.0	1.1-2.8	0.9-2.5	0.6-1.5	
Absorption (vol.)	%	C272	less than 2.5	less than 2.5	less than 2.0	less than 1.0	
Capillarity	—	—	none	none	none	none	
Coefficient of Thermal Expansion	in./(in.) (F)	D696	0.000035	0.000035	0.000035	0.000035	
Maximum Service Temperature	°F	—					
Long-term			167	167	167	167	
Intermittent			180	180	180	180	
Oxygen Index	%	D2863	30.4	30.4	30.4	30.4	
Dimensional Stability	% Change	D2126	max. 2.0	max. 2.0	max. 2.0	max. 2.0	
Toxicity		Laboratory Reports	Approximately the same as burning wood, paper or cardboard.				
Fungus & Bacterial Resistance		F.H.A. Test Procedures	Will not support bacterial or fungus growth; no food value.				

Advantages

- Low material and installation costs
- Available in a wide range of sizes
- Can be obtained in various densities
- Easy to handle and apply
- Simple to cut and shape with common tools
- Provides an excellent surface for laminate base
- Excellent bond with drywall and non-solvent type adhesives
- Clean, odorless, non-irritating to skin
- Restricts moisture penetration

Characteristics

- Low thermal conductivity
- Reflective white color
- Effective over wide temperature range
- High strength to weight ratio
- Will not twist or warp
- Unaffected by vibration
- Non-dusting
- Resistant to most acids and alkalis
- Does not support bacterial growth

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