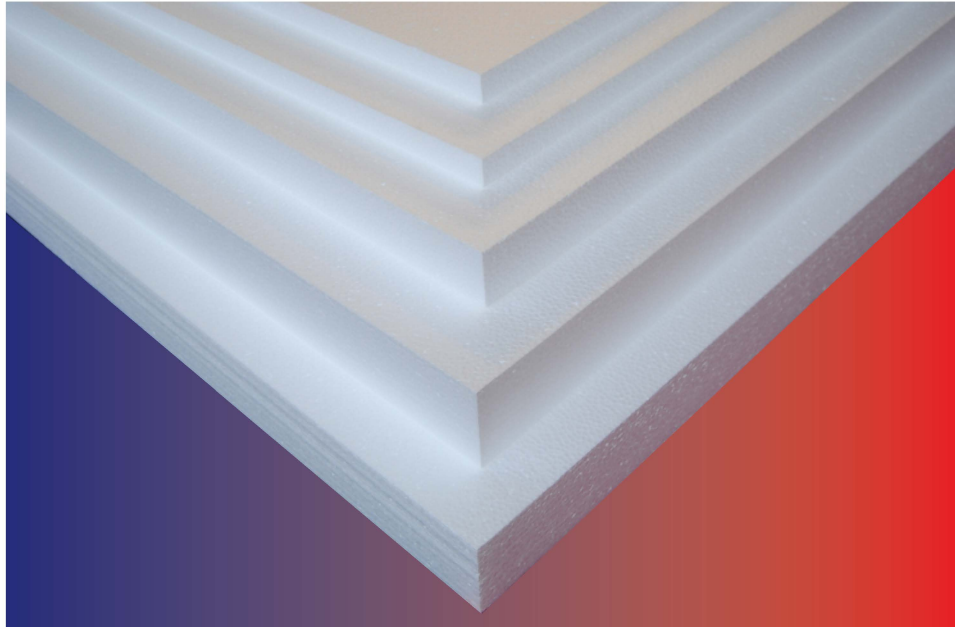


EPS Insulation



EPS (expanded polystyrene) insulation is a closed cell, lightweight and resilient rigid insulation used in construction insulation and industrial applications.

FMI-EPS manufactures a diverse line of EPS insulation products that are engineered to give you, the architect, specifier, contractor or building owner, control of the projects application: from design assistance and timelines, to material and cost options.

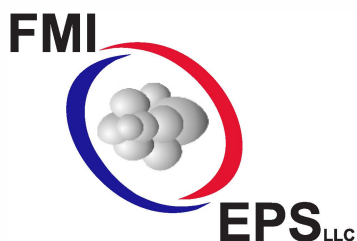
The advantages and versatility of using FMI's EPS insulation products include:

- + It has a 50 year proven history.
- + State-of-the-art equipment to produce an energy efficient insulation, that meets or exceeds R-Value Code - Requirements.
- + Variety of densities, thickness and sizes.
- + Unlimited fabrication possibilities.
- + Dimensionally stable rigid insulation, no bowing or cupping, no shrinkage and or loss of strength.
- + Mechanical and Thermal Properties have been thoroughly tested by independent 3rd party laboratories.
- + There is no Thermal Drift of EPS insulation's R-Value.
- + 20 year Thermal Performance Warranty.
- + Has no Ozone Depleting CFC's, HCFC's, HFC blowing agents, dyes or formaldehyde.
- + EPS is the only rigid insulation manufactured with recycled content that qualifies for LEED points.
- + EPS insulation can be manufactured with an inert additive that deters termites and carpenter ants.
- + EPS insulation does not sustain Mold and Mildew growth.
- + EPS is 100% recyclable.

FMI's EPS is the 1st Choice in Residential, Commercial and Industrial Insulation Applications:

- | | | |
|------------------------------|--|---------------------------|
| + Roof Insulation | + Interior Wall Insulation | + Cold Storage Insulation |
| + Exterior Wall Insulation | + Foundation Insulation | + Manufactured Housing |
| + Exterior Siding Insulation | + Under Slab & Radiant-Heated Insulation | + Door Core Insulation |

• Energy Efficient • Permanent R-Value • Consistent Performance • Versatility • Cost Effective



When you choose EPS Insulation manufactured by FMI-EPS, you're working with a team of friendly professionals, dedicated to providing you with the best service and EPS Insulation possible. We're here to answer your questions, solve your problems and do everything we can to make sure your project goes together smoothly and ends successfully. **We're small enough to know you, large enough to serve you.**

Technical Data

EPS Insulation meets or exceeds physical and thermal property standards as established in ASTM C 578

Physical Properties	Units	ASTM Test	Type XI	Type I	Type VIII	Type II	Type IX	Type XIV	Type XV
Compressive Resistance at 10% Strain Deformation (2" cube)	Min psi (kPa)	D 1621, C 165	5.0 (35)	10.0 (69)	13.0 (90)	15.0 (104)	25.0 (173)	40.0 (276)	60.0 (414)
Flexural Strength	Min psi (kPa)	C 203	10.0 (69)	25.0 (173)	30.0 (208)	35.0 (240)	60.0 (414)	60.0 (414)	75.0 (517)
Thermal Resistance (R-Value)* 75 ± 2° F (24 ± 1° C) 40 ± 2° F (4.4 ± 1° C)	Min R* for 1" thickness	C 177, C518	3.22 (0.57) 3.43 (0.60)	3.85 (0.67) 4.17 (0.73)	3.92 (0.69) 4.25 (0.75)	4.17 (0.73) 4.55 (0.80)	4.35 (0.77) 4.76 (0.84)	4.35 (0.77) 4.76 (0.84)	4.45 (0.78) 4.85 (0.85)
Thermal Conductivity (K-Value)* 75 ± 2° F (24 ± 1° C) 40 ± 2° F (4.4 ± 1° C)	BTU/(hr)(Sg.Ft.)(F/in.)	C 177, C518	0.310 (1.76) 0.292 (1.67)	0.260 (1.48) 0.240 (1.37)	0.255 (1.46) 0.235 (1.35)	0.240 (1.37) 0.220 (1.26)	0.230 (1.31) 0.210 (1.20)	0.230 (1.31) 0.210 (1.20)	0.225 (1.28) 0.206 (1.18)
Coefficient of Thermal Expansion	In./(In.)(F)	D 696	0.000035	0.000035	0.000035	0.000035	0.000035	0.000035	0.000035
Moisture Resistance Water Absorption by total immersion	% by volume Max	C 272	<4.0	<4.0	<3.0	<3.0	<2.0	<2.0	<2.0
Water Vapor Permeability of 1" (25.4 mm) thickness max perm	Max perm/in (ng/PA*s*m²)	E 96	5.0 (287)	5.0 (287)	3.5 (201)	3.5 (201)	2.5 (143)	2.5 (143)	2.5 (143)
Oxygen Index	Min Volume %	D 2863	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Dimensional Stability (Change in dimensions)	Max %	D 2126	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max. Service Temperature Long Term / Intermittent	F		167 / 180	167 / 180	167 / 180	167 / 180	167 / 180	167 / 180	167 / 180
Density, minimum Density, nominal	Min lb/ft³ (kg/m³) lb/ft³	C 303	0.70 (12) 0.75	0.90 (15) 1.00	1.15 (18) 1.25	1.35 (22) 1.50	1.80 (29) 2.00	2.40 (38) 2.50	2.85 (46) 3.00

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

Federal Trade Commission requires using the R-Value publication at 75°F temperature when calculating R-Values of all insulations

Aged R-Values of alternative products should be

compared to determine long-term benefit. Some types of insulation lose their R-Value over time.

FMI-EPS has a flame spread index of 20 and a smoke developed index of 150-300 when tested in accordance with ASTM E84/UL 723 for densities from 0.7 - 3.0 lb/ft³.

Insulation Consideration:

- **DO NOT COMPARE** polyisocyanurate conditioned R-Values by RIC-TIMA and PIMA to EPS R-Values as per ASTM C-578.
- Ask for a **20 year 100% R-Value Warranty**.
- EPS Insulation offers the **Best Insulating Value Per Dollar** than any material available today.

Features:

- **Low Moisture Absorption:** EPS insulations closed cell structure prevents capillary absorption of water and moisture. As density is increased, moisture resistance decreases, but it is still minimal.
- **Permeability:** EPS has a low permeability, but is not considered a vapor barrier.
- **Inert:** EPS experiences no physical or chemical breakdowns over time. No nutrient value to animals, insects, or organisms. No nutrient value to bacterial growth including mold.
- **No Leachates:** EPS will not contaminate the surrounding environment.
- **Design Flexibility:** EPS can be fabricated into various shapes and sizes as needed.

Design Cautions:

- **Flammability:** EPS is combustible and should not be exposed to flame or other ignition sources. EPS should be covered with a thermal barrier or otherwise installed in accordance with applicable code requirements.
- **Solvent Damage:** EPS is susceptible to damage by petroleum based solvents and their vapors. Protect with vapor barrier covering and or use compatible adhesives when applicable.



The information in this bulletin is presented in good faith, and is believed to be accurate. All statements