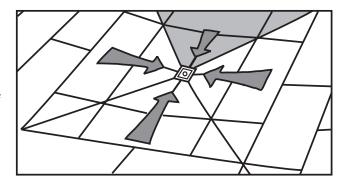




EPS Insulated Tapered Roof Systems

EPS (Expanded Polystyrene) Tapered Roof Systems are custom designed for each application, providing flexibility in design, uniform slope-to-drain and the most cost-effective Tapered Insulation on the market today. EPS Tapered Roof Systems have been used for over 35 years to help eliminate ponded water, a leading cause of premature roof deterioration, by directing water to drains to eliminate damaging water build-up. EPS also provides the most cost-effective, long-term performance per R-Value of any rigid insulation currently available for your roof. You can pay more for other insulation products, but why?



Drain and insulate in one step with EPS Tapered Roof Systems.

FIELD PANEL A' HIP PANEL CRICKET PANEL

Here's How It Works:

Factory Estimates & Detailed Shop Drawings:

Cost estimates are furnished upon receipt of plans by our design staff. Before a job is started our design staff provides a detailed shop drawing to the roofing contractor for his review and approval. Once we have approved shop drawings, we begin to fabricate the EPS Tapered Roof System and ship it to the jobsite.

Panel Label & Coating:

All EPS Tapered Roof Systems are clearly labeled to identify individual panels. Tapered Roof panels are coded, to correspond to our shop drawings.

Factory Fabricated Panels:

We offer a complete line of EPS Tapered Roof Systems. Available to achieve a slope of 1/8 inch or more.

Field panels (4' x 4' or 4' x 8') Hip and Valley panels (4' x 4') Compound panels (4' x 8') Compound Cricket panels (2' x 4')

Factory Fabricated Saddles:

Our EPS Tapered Saddles are factory cut and ready to install. We have a variety of slopes and sizes available for your next job.

Superior Value-Engineered Method:

EPS Tapered Roof Systems can be used on new dead-level roof deck. Using a EPS Tapered Roof System the roof deck is insulated and sloped to remove water at the same time. Using this method, engineering and construction costs are reduced.

The EPS Tapered Roof System can also be used for re-roofing older structures, where structural sloping would be cost prohibitive. It adds insulation value that greatly improves interior comfort while reducing the high energy costs associated with older buildings. EPS Tapered Roof Systems has a proven record, to be the most cost-effective method for draining and insulating dead-level roof decks on all types of buildings.

Why Specify EPS Tapered Roof System? EPS Tapered Roof System's flexibility to

EPS Tapered Roof System's flexibility to meet building design requirements, class rated assemblies, compatibility with roofing membranes, weight and long-term performance of EPS insulation. When you consider the predicatable insulating value, low cost, on-the-job service, custom design, system flexibility and experience. FMI-EPS is the roofing professionals choice.

FMI-EPS, LLC

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EPS (Expanded Polystyrene) Insulation is a moisture resistant closed cell foam which contains no ozone depleting CFCs, HCFCs or HFC blowing agents, dyes, or formaldehyde and is 100% recyclable.

EPS offers outstanding flexibility in design and is ideal for most construction needs, offering the best insulating value per dollar spent of any material available today. Additionally, its long-term insulation value is assured since aging has absolutely no effect upon performance.

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

Physical Properties	Units	ASTM Test	Type XI	Type I	Type VIII	Type II	Type IX	Type XIV
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)
Flexural Strength	Min psi (kPa)	C 203	10.0 (70)	25.0 (173)	30.0 (208)	35.0 (240)	50.0 (345)	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	3.1 (0.55) 3.3 (0.59)	3.85 (0.67) 4.17 (0.0)	3.92 (0.69) 4.25 (0.74)	4.17 (0.73) 4.55 (0.77)	4.35 (0.76) 4.76 (0.80)	4.2 (0.74) 4.6 (0.80)
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	0.323 (1.82) 0.303 (1.70)	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)	0.238 (1.35) 0.217 (1.25
Coefficient of Thermal Expansion	In./(In.)(F)	D 696	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
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 (115)	2.5 (115)
Oxygen Index	Min Volume %	D 2863	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
Max. Service Temperature Long Term / Intermittent	F		167 / 180	167 / 180	167 / 180	167 / 180	167 / 180	167 / 180
Flame Spread Smoke Developed		E84-81A E84-81A	20 150-300	15 @ 6" 95-125	5 @ 4" 105-190	5 @ 4" 2-235	15 @ 4" 20-145	<25 @ 4" max <450 @ 4" max
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

^{*}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.

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' moisture absorption is low. Moisture takes the path of least resistance and travels around individual beads rather than through them; the non-interconnecting cell structure prevents capillary absorption. Moisture absorption rates decrease as density increase, but 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, organisms. No nutrient value to bacterial growth including mold.
- **No Leachates:** EPS will not contaminate the surrounding environment.

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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.
- Ultraviolet Damage: Extended exposure to sunlight causes minor discoloration and surface dusting. Shield EPS from direct sunlight for prolonged periods of time.

The information in this bulletin is presented in good faith, and is believed accurate. All statements are made without warranty expressed or implied.

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