

Description

ENRGY 3 25 PSI is a rigid roof insulation board composed of a closed cell polyisocyanurate foam core bonded in the foaming process to universal fiber glass reinforced facers.

ENRGY 3 25 PSI utilizes an environmentally compliant blowing agent containing pentane hydrocarbon to enhance the thermal performance of the foam insulation. This hydrocarbon has zero ozone depletion potential and conforms to the Montreal Protocol established in 1987.

ENRGY 3 25 PSI meets the physical property requirements of ASTM C 1289, Type II, Class I, Grade 3 and CAN/ULC S704. ENRGY 3 25 PSI specialty products are also available as tapered panels, pre-cut miters and pre-cut crickets.

Use

ENRGY 3 25 PSI provides high thermal insulation value over metal, nailable, and non-nailable roof decks in built-up, modified bitumen and single ply membrane roofing systems. It may be applied using hot bitumen, cold adhesives or mechanical fasteners. The universal facer on the top and bottom side provide a suitable surface for mechanical attachment to a structural deck as well as a suitable surface to apply hot asphalt or cold adhesives.



ENRGY 3 25 PSI has been rated in Factory Mutual 1A-60 and 1A-90 fire and wind-resistant systems for BUR, modified bitumen and single ply systems in specific constructions. It has been classified by Underwriters Laboratories Inc. as an approved roof insulation in numerous Class A roof constructions and Roof/Ceiling hourly fire-rated assemblies, and is classified by Underwriters' Laboratories of Canada.

JM also supports NRCA Bulletin #9 in recommending that a cover board of Fesco Board, Fiber Glass Roof Insulation or ½" Retro-Fit Board be installed over foam insulations in hot membrane systems.

Advantages

- High thermal efficiency
- Universal facer that is compatible with BUR, modified bitumen and single ply membrane systems
- Complies with EPA, CEPA and Montreal Protocol requirements
- Meets Clean Air Act Amendments of 1990
- Third-party certification with the PIMA Quality Mark™ for Long-Term Thermal Resistance (LTTR) values.

Typical Physical Properties

	Values	Test Method
Water Absorption	<1.0% max	ASTM D 2842
Dimensional Stability Change	<2%	ASTM D 2126
Compression Resistance		
10% Consolidation-psi (kPa)	25 (172) min.	ASTM D 1621
Moisture Vapor Permeance	<1 perm	ASTM E 96
	57.5 ng/(Pa•s•m ²)	
Service Temperature	-100°F - 200°F	
	(-73°C - 93°C)	
Tensile Strength-psf (kPa)	730 (35) nom.	ASTM D 1623

For Use over Metal Decks

The minimum thicknesses of ENRGY 3 25 PSI insulation over metal decks are as follows:

Width of Rib Opening	Up to 2½" (6.67 cm)	Up to 3¾" (8.57 cm)	Up to 4¾" (11.11 cm)
Thickness of Insulation (Minimum)	1.0" (2.54 cm)	1.2" (3.05 cm)	1.3" (3.30 cm)

Sizes

ENRGY 3 25 PSI is available in 4' x 4' (1.22 m x 1.22 m) or 4' x 8' (1.22 m x 2.44 m) boards (other sizes available by special request) and in thicknesses of 1.0" (2.54 cm) to 4.0" (10.16 cm). Some sizes are special order with minimum order quantities. Contact your JM Sales Representative for details.

Thermal Performance

Thickness (nom.)	C-Value (Conductance)	LTTR* R-Value			
in.	mm	BTU/(hr•ft ² •°F)	W/m ² •°C	(hr•ft ² •°F)/BTU	m ² •°C/W
1.0	25	0.167	0.95	6.0	1.05
1.5	38	0.111	0.63	9.0	1.59
1.6	41	0.104	0.59	9.6	1.70
1.7	43	0.098	0.55	10.3	1.81
1.8	46	0.092	0.52	10.9	1.92
2.0	51	0.082	0.47	12.1	2.14
2.3	58	0.071	0.41	14.0	2.47
2.5	64	0.063	0.37	15.3	2.69
2.7	69	0.060	0.34	16.6	2.92
3.0	76	0.054	0.31	18.5	3.26
3.2	81	0.051	0.29	19.8	3.49
3.3	84	0.049	0.28	20.4	3.60
3.4	86	0.047	0.27	21.1	3.71
3.6	91	0.045	0.25	22.4	3.94
3.8	97	0.042	0.24	23.7	4.17
4.0	102	0.040	0.23	25.0	4.40

* The Long-Term Thermal Resistance (LTTR) values were determined in accordance with CAN/ULC S770. The ultimate R-Value of these products will depend on individual installation circumstances.

Refer to the Material Safety Data Sheet and product label prior to using this product.