

Description

ENERGY 3 25 PSI Foil Face is a rigid roof insulation board composed of a closed cell polyisocyanurate foam core bonded in the foaming process to a tri-lam foil facer on both sides. ENERGY 3 25 PSI Foil Face meets the physical requirements of ASTM C 1289, Type I, Class I, Grade 3 and conforms to CAN/ULC S704.

Use

ENERGY 3 25 PSI Foil Face provides high thermal value over metal, nailable and non-nailable roof decks. ENERGY 3 25 PSI Foil Face, with its low vapor permeability, is an excellent choice for cold storage or metal building applications. The foil facers provide a suitable surface for mechanical attachment to a structural deck. ENERGY 3 25 PSI Foil Face has been classified by Underwriters Laboratories Inc. as an approved roof insulation component in many Class A ballasted and mechanically attached roof constructions and Roof/Ceiling hourly fire-rated assemblies.



Warning

ENERGY 3 25 PSI Foil Face cannot be used directly with any systems using hot asphalt, heat weld or any fully adhered single ply systems.

Advantages

- High thermal efficiency
- Low vapor permeability
- Excellent cold storage applications

Typical Physical Properties

	Values	Test Method
Water Absorption, % by Volume – 2 hours	1.0 max	ASTM C 209
Dimensional Stability Change: 7 days @ 158°F (70°C), 90-100% RH		
Lengthwise	<2%	ASTM D 2126
Crosswise	<2%	
Compression Resistance*		
10% Consolidation–psi (kPa)	.25 (172) min	ASTM D 1621
Moisture Vapor Transmission**	<1 perm	ASTM E 96
	57.5 ng/(Pa•s•m ²)	
Service Temperature	-100°F - 250°F (-73°C - 121°C)	

*Also available in 25 psi (172 kPa). **Foam core only.

For Use over Metal Decks

The minimum thicknesses of ENERGY 3 25 PSI Foil Face insulation over metal decks are as follows:

Width of Rib Opening	Up to 2 ⁵ / ₈ " (6.67 cm)	Up to 3 ³ / ₈ " (8.57 cm)	Up to 4 ³ / ₈ " (11.11 cm)
Thickness of Insulation (Minimum)	1.0" (2.54 cm)	1.2" (3.05 cm)	1.3" (3.30 cm)

Sizes

ENERGY 3 25 PSI Foil Face is manufactured 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).

Note: Actual length and width measurements for boards thicker than 2" (5.08 cm) can result in a 0.5" (1.27 cm) variation in these two dimensions.

Product Data

Standard Thickness (nom.)	LTRR* R-Value		Foam Core Recycled Content** Postindustrial (%)	
	(hr•ft ² •°F)/BTU	m ² •°C/W		
1.0	25.40	6.0	1.05	8.4
1.5	38.10	9.0	1.59	10.3
1.7	43.18	10.3	1.81	10.7
2.0	50.80	12.1	2.14	11.1
2.3	58.42	14.0	2.47	11.7
2.5	63.50	15.3	2.69	11.8
2.8	71.12	17.2	3.03	12.0
3.0	76.20	18.5	3.26	12.3
3.1	78.74	19.0	3.33	12.4
3.3	83.82	20.4	3.60	12.5
4.0	101.60	25.0	4.40	13.1

* The Long-Term Thermal Resistance (LTRR) values were determined in accordance with CAN/ULC S770.

** Value represents average results

Note: For nonpermeable facers, R-Value may actually be slightly higher.

Nonstandard thicknesses are available. Contact your JM sales representative for more information.

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