

EnergyGuard® High Density Fiberboard

Information Sheet



***Quality You Can Trust Since 1886...
From North America's Largest Roofing Manufacturer™***

Product Data Sheet

EnergyGuard™

High Density Fiberboard

Description

EnergyGuard™ High Density Fiberboard Roof Insulation is an insulation board of interlocking natural, long fibers, impregnated for asphalt moisture resistance and extra strength. The top face is further treated to reduce the absorption of asphalt.

Advantages

- Strong and rigid.
- Increases strength of entire roof.
- Excellent dimensional stability.
- Withstands normal deck traffic during and after construction.
- Excellent bonding to BUR felts.
- Good insulating properties.
- Resists damage due to rough handling in shipment.
- Excellent recover board.

Uses

- EnergyGuard™ High Density Fiberboard roof insulation can be used directly over structural roof decks, see chart.
- It is also widely used as a separation board over existing roofs in recover installations. In recover applications, all wet areas of the old roof must be removed. All loose and protruding gravel must also be removed.
- Properly installed, EnergyGuard™ High Density Fiberboard roof insulation is suitable as a cover board for use under most built-up, modified bitumen and most single ply roofing systems.
- Refer to the application specifications in the current membrane manufacturer's Application and Specifications Manual for proper installation procedures for Fiberboard roof insulation.

Limitations and Potential Fire Hazard

- EnergyGuard™ High Density Fiberboard roof insulation is a non-structural, non-load bearing material.
- EnergyGuard™ High Density Fiberboard roof insulation should be stored dry and protected from the elements. No more insulation should be installed than can be covered completely with roofing on the same day.
- As unprotected fiberboard will burn, fire safety precautions should be observed whenever fiberboard product is used.
- Direct torching of modified bitumen roofing to EnergyGuard™ High Density Fiberboard is a fire hazard. DO NOT use under torch-applied modified systems.

Code Compliance

- Listed by UL, ULC for use under Class A, B, or C Roof Covering. See UL, ULC Inc. *Roofing Materials and Systems Directory* for details. Materials will have UL, ULC labels only when specified on order.
- Subject to the conditions of Approval as a roof insulation when installed as shown in the current edition of the *Factory Mutual Research Approvals Guide*.
- For details, consult current Factory Mutual Approvals Guide. ASTM C208, ASTM C209 and Federal Specification LLL-1-535B, Class E (Cancelled 4-18-85), CAN/ULC S706.

EnergyGuard™ High Density Fiberboard Roof Insulation

Thickness/Thermal Values/Flute Spanability

Nominal Thickness Inches	THERMAL VALUES		Maximum Flute Spanability
	C-Value ²	R-Value ³	
1/2" (12 mm)	0.77	1.3	1 3/8"
1" (25 mm)	0.40	2.5	2 3/8" (66.7 mm)
1 1/2" (38 mm)	0.26	3.8	4 3/8" (111.1 mm)

(2) C = BTU/°F • ft • h (3) R = °F • ft² • h/Btu

Typical Physical Properties

Property	Test Method	Value
Water Absorption	ASTM C208, C209	7% Volume Maximum
Weight/Sq. Ft., 1" (25.4 mm) Thick		1.7 lbs. Maximum
Linear Expansion	ASTM C208, C209	0.5% Maximum

(1) **Note:** Physical and thermal properties shown are based on data obtained under controlled laboratory conditions and are subject to normal manufacturing tolerances.

SAFETY WARNING: DO NOT EXPOSE TO OPEN FLAME OR EXCESSIVE HEAT, MAY BURN IF IGNITED. IF IGNITED, EXTINGUISH COMPLETELY.

NOTE: REPAIR ROOF LEAKS PROMPTLY TO AVOID ADVERSE CONDITIONS, INCLUDING MOLD.