

CertainTeed

GlasRoc[®] ROOF BOARD

Product Data and Submittal

Product Description

GlasRoc Roof Board is a high performance, paperless, mold- and moisture-resistant gypsum cover board combining reinforcing glass mats fully embedded into a specially formulated fire- and moisture-resistant, noncombustible core.

Basic Uses

GlasRoc Roof Board is an appropriate cover board, thermal barrier and recovery board for use in mechanically attached, low-slope commercial roofing systems.

Advantages

- Superior durability – will not delaminate under normal conditions as compared to other glass mat roof boards, as the glass mats are fully embedded in the gypsum core.
- Ease of handling, less skin irritation – fully embedded glass mats reduce irritating glass fiber exposure as compared to other glass mat roof boards.
- Noncombustible
- Mold- and moisture-resistant. Achieves highest possible score of 10 in ASTM D 3273 mold test.
- Exceptional strength – improved physical performance compared to perlite insulation and fiber board. Superior resistance to damage from foot traffic and hail.
- Dimensionally stable under changes in temperature and relative humidity
- No special tools or fasteners required for installation.

Limitations

- GlasRoc Roof Board is designed for use as part of a properly designed roof system. The specification and use of GlasRoc Roof Board as a roofing component is the responsibility of the design professional. CertainTeed does not offer roofing system design services.
- For use in mechanically fastened systems only. GlasRoc Roof Board is not recommended for use in torch-down, fully adhered applications, spray foam, fluid-applied, or in hot mop applications where the hot asphalt will be applied directly to the GlasRoc Roof Board.
- Consult and follow roofing manufacturer's specific instructions for applying their products to GlasRoc Roof Board.
- The need for a separator sheet between the GlasRoc Roof Board and the roofing membrane shall be determined by the roof membrane manufacturer or roofing systems designer.

- Upon receipt of GlasRoc Roof Board, remove all plastic and poly packaging used to protect material during transit as the packaging materials may trap moisture and adversely affect applications. Provide other suitable breathable weather protection for storage to keep GlasRoc Roof Board products dry prior to installation.
- Roof boards should be kept dry before, during and after installation. Do not install more GlasRoc Roof Boards than can be covered the same day by the final roof membrane system.
- Boards should be stacked flat on a level surface, not directly on the ground.
- Avoid overuse of non-vented direct-fired heaters during winter months.
- Do not install GlasRoc Roof Boards when moisture or condensation – such as rain, snow, heavy fog or leaks – can accumulate on the boards.
- For vertical parapet applications, 1/2" (12.7 mm) GlasRoc can span 16" oc (400 mm) and 5/8" (15.9 mm) can span 24" (610 mm).
- GlasRoc Roof Board should not be subjected to abnormal excessive loads or foot traffic such as on plaza decks or under steel wheeled equipment that may fracture it. Provide suitable roofing system protection when required.
- Board edges and ends should be butted in typical installations. Long uninterrupted runs of 1/4" (6.4 mm) thick GlasRoc Roof Board may require slight gapping due to higher surface temperature gain.
- The decision to use a vapor retarding membrane is the responsibility of the design professional.
- In re-roof applications, the existing roof system must be completely dry throughout prior to installing GlasRoc Roof Boards.
- Conform to published spanability recommendations.

Composition and Materials

GlasRoc Roof Board is a paperless gypsum cover board with a water-resistant core and fully embedded glass mats which lie beneath a polymer-modified gypsum surface.

Thicknesses: 1/4" (6.4 mm), 1/2" (12.7 mm) and 5/8" (15.9 mm) Type X

Widths: 4' (1220 mm) standard

Lengths: 8' (2440 mm) and

4' (1220 mm) standard

Custom lengths available. Ask your CertainTeed sales representative.

Edges: Square

Packaging: Per piece

Technical Data

Applicable Standards

GlasRoc Roof Board meets ASTM C 1177.

Surface Burning Characteristics

GlasRoc Roof Board has a Flame Spread rating of 0 and Smoke Developed rating of 0, in accordance with ASTM E 84 and CAN/ULC-S102.

Noncombustible

Fire testing in accordance with ASTM E 136 determined that GlasRoc Roof Board 1/4" (6.4 mm), 1/2" (12.7 mm) and 5/8" (15.9 mm) thicknesses are noncombustible.

Classifications

Mechanically attached:
CAN/ULC S107/UL 790 Class A
CAN/ULC S126/ANSI/UL 1256
FM Class 1 (FM4470)

Storage

Store materials for protection against damage from weather, direct sunlight, surface contamination and construction traffic. If stored outside, stack boards flat on level supports off the ground under a breathable waterproof cover that ensures full protection from weather. Store and support boards in flat stacks to prevent sagging. Protect materials to keep them dry. Protect boards to prevent damage to edges and surfaces.

Installation

Recommendations

Comply with the roof system manufacturer's written instructions and local code requirements. Where applicable, comply with Factory Mutual Global and Underwriters Laboratories' requirements for installation techniques. Edge joints should be located on – and parallel to – deck ribs. Stagger end joints of adjacent lengths. Install approved fasteners in accordance with the roof system manufacturer's requirements. Approved fasteners with plates should be installed flush with GlasRoc Roof Board surface. GlasRoc Roof Board maximum flute span for 1/4" (6.4 mm) is 2 5/8" (67 mm); for 1/2" (12.7 mm), span is 5" (125 mm); for 5/8" (15.9 mm) Type X, is 8" (200 mm). For vertical parapet applications, 1/2" (12.7 mm) can span 16" (400 mm) oc and 5/8" (15.9 mm) can span 24" (610 mm) oc.

GlasRoc® Roof Board

Physical Properties	1/4" (6.4mm)	1/2" (12.7 mm)	5/8" (15.9 mm) Type X
Width, standard	4' (1220 mm)	4' (1220 mm)	4' (1220 mm)
Length, standard	4' (1220 mm) 8' (2440 mm)	4' (1220 mm) 8' (2440 mm)	4' (1220 mm) 8' (2440 mm)
Weight, lbs/sqft (kg/m ²)	1.25 (6.1)	1.9 (9.3)	2.4 (11.7)
Surfacing	Fiberglass mat	Fiberglass mat	Fiberglass mat
Flexural Strength, parallel, min lbf (N)	40 (178)	80 (356)	100 (445)
Permeance, Perms (ng/Pa·s·m ²)	40 (2298)	26 (1494)	21 (1206)
R Value, °F·ft ² ·hr/Btu (K·m ² /W)	0.26 (.046)	0.51 (.09)	0.51 (.09)
Flute Spanability	2-5/8" (67 mm)	5" (125 mm)	8" (200 mm)
Linear Variation with change in Temperature, in/in°F (mm/mm°C)	9.3 x 10 ⁻⁶ (16.7 x 10 ⁻⁶)	9.3 x 10 ⁻⁶ (16.7 x 10 ⁻⁶)	9.3 x 10 ⁻⁶ (16.7 x 10 ⁻⁶)
Linear Variation with change in moisture, in/in%RH or (mm/mm%RH)	6.5 x 10 ⁻⁶	6.5 x 10 ⁻⁶	6.5 x 10 ⁻⁶
Water Absorption, % max	10	10	10
Compressive Strength, psi (kPa) nominal	500-800 (3400 - 5500)	500-800 (3400 - 5500)	500-800 (3400 - 5500)
Surface Water Absorption, grams	≤2.5	≤2.5	≤2.5
Flame Spread, Smoke Developed	0/0	0/0	0/0
Fire Classification	FM Class 1; UL/ULC Class A	FM Class 1; UL/ULC Class A	FM Class 1; UL/ULC Class A
Mold Resistance per ASTM D 3273	10	10	10



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