

DEXcell® FA GLASS MAT ROOF BOARD

Heavy-duty coated glass mat faced gypsum coverboard

DESCRIPTION

DEXcell® FA Glass Mat Roof Board is a high-performance roof board for use in low-slope roofing systems. It enhances the durability of the roofing system when used as a cover board in adhered or mechanically attached systems. The specially treated core and high-performance, heavy duty glass mat facer provide protection against fire, mold and moisture.

ADVANTAGES

- ▶ **Exceptional Strength** — Engineered to provide superior wind-uplift performance for a wide variety of roof assemblies. DEXcell® Cement Roof Board has uniform composition providing enhanced bond strength of membrane systems with no risk of facer delamination.
- ▶ **Fire Performance** — Provides excellent fire performance and demonstrates exceptional surface burning characteristics
- ▶ **Moisture and Mold** — Uniform water-resistant core ensures excellent moisture and mold resistance.
- ▶ **Versatile** — Can be for a wide variety of roofing systems, including fully adhered, mechanically attached and ballasted roofs using single-ply membranes, modified bitumen, fluid-applied, built-up roofing, spray foam and metal.

CODES AND COMPLIANCES

DEXcell® FA Glass Mat Roof Board is manufactured to conform to ASTM C1177, "Standard Test Method for Glass Mat Gypsum Substrate for Use as Sheathing."

UL Classified as to Surface Burning Characteristics and Non-Combustibility in accordance with ASTM E84 (CAN/ULC-S102)

Meets UL Class 1 and UL Class A fire ratings for roofing systems up to unlimited slope per UL 790 and ULC CAN-S107. See the UL Building Materials Directory for more information.

DEXcell® FA Glass Mat Roof Board is classified in roof deck constructions in accordance with ANSI/ UL 1256; refer to UL Certifications Directory: ul.com.

DEXcell® FA Glass Mat Roof Board complies with requirements of FM 4450 and FM 4470. Meets FM Class 1.

5/8" (15.9 mm) DEXcell® FA Glass Mat Roof Board is UL Classified for use in numerous hourly rated UL assemblies, including UL "P" roof assemblies; refer to UL Certifications Directory: ul.com. Meets Type X per ASTM C1177.

Resists the growth of mold per ASTM D3273 with a score of 10, the best possible score.

INSTALLATION

1. All board edges and ends should be loosely abutted (minimum ¼ inch gap on all edges) in typical installations. This gap may need to be larger depending on factors like the roof deck's size, membrane color, ultimate deck surface temperature and time of year the roof assembly is installed. Installations during temperatures below 50°F may require larger spacing.
2. Use fasteners or adhesives specified in accordance with system requirements. Install approved fasteners with plates into the DEXcell® Glass Mat Roof Board. Install fasteners and adhesives in compliance with the roof system manufacturer's installation recommendations and FMG Property Loss Prevention Data Sheet 1-29. Proper fastener spacing or adhesive application is essential to achieve wind-uplift performance
3. Locate edge joints on, and parallel to, deck ribs. Stagger end joints of adjacent lengths of DEXcell® FA Glass Mat Roof Board.
5. See properties table for maximum flute span when panels are applied directly over metal decking.
6. For vertical parapet applications, only ½" or ⅝" panels should be used. Maximum framing spacing is 24" o.c. for ⅝" roof boards and 16" o.c. for the ½" and 7/16" roof boards.

Refer to roof system manufacturer's written instructions, local code requirements and Factory Mutual Global (FMG) and/or Underwriters Laboratories (UL) requirements for proper installation techniques.

SAFETY & HANDLING

This product contains fiberglass facings which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/MSHA approved respirator as appropriate in dusty or poorly ventilated areas.

PRODUCT INFORMATION

Thickness	1/4 INCH		1/2 INCH		5/8 INCH	
Width; ft	4		4		4	
Length; ft	4	8	4	8	4	8
Pieces per Pallet	60	44	48	30	44	30
Square Feet per pallet	960	1,408	768	960	704	960
Pallet Weight; lb	1,200	1,760	1,612	2,016	1,964	2,678

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PHYSICAL PROPERTIES

CHARACTERISTIC	ASTM	1/4 INCH (6.6 MM)	1/2 INCH (12.7 MM)	5/8 INCH (15.9 MM)
Weight; lb/sq ft		1.2	2.0	2.5
Flexural Strength (parallel); lbf	C473	≥ 40	≥80	≥100
Compressive Strength; psi	C473	900 psi	900 psi	900 psi
Bending Radius; in		4	6	8
Flute Spannability; in	E661	2 5/8	5	8
Thermal Resistances	C518	R = .23	R = .43	R = .5
Permeance; perms	E96	25	24	23
Water Absorption; % of weight	C518	≥ 5	≥ 5	≥ 5
Surface Water Absorption; g		≥ 1.0	≥ 1.0	≥ 1.0
Mold Resistance	D3273	Score of 10	Score of 10	Score of 10
Surface Burning Characteristic	E84	Class A	Class A	Class A
UL Type Designation		FSW-6	FSW-6	FSW-6
Combustibility	E136	Non-combustible	Non-combustible	Non-combustible
Flame Spread/Smoke Developed	E84	0	0	0

LIMITATIONS

- DEXcell® FA Glass Mat Roof Boards are engineered to perform within a properly designed roof system following good roofing practices. The use of DEXcell® FA Glass Mat Roof Boards as a roofing system component is the responsibility of the design professional.
- Consult with the appropriate system manufacturer and/or design authority for system and assembly specifications and instructions on applying other products to DEXcell® FA Glass Mat Roof Boards.
- Keep DEXcell® FA Glass Mat Roof Boards panels dry before, during and after installation. Moisture accumulation may significantly decrease wind uplift and vertical pull resistance in the system or assembly. DEXcell® FA Glass Mat Roof Boards that contain disproportionate free moisture content may require testing or replacement.
- Avoid application of DEXcell® FA Glass Mat Roof Boards during rain, heavy fog and any other conditions that may deposit moisture on the surface of the board. Apply only as much DEXcell® FA Glass Mat Roof Board as can be covered by a watertight roof covering the same day.
- For re-roof or re-cover applications, existing roofing system must be thoroughly dry prior to application of DEXcell® FA Glass Mat Roof Board.
- Remove the plastic packaging from all DEXcell® FA Glass Mat Roof Boards immediately upon receipt of delivery. Failure to remove the plastic packaging may result in entrapment of condensation or moisture. Material stored outside must be stored off the ground and protected by a breathable waterproof covering.
- When applying solvent-based adhesives or primers, allow sufficient time for the solvent to evaporate to avoid potential damage to the DEXcell® product or other system components. Excessive use of solvent-based adhesives increases the risk of blisters. For water-based adhesives, follow manufacturer's recommendations. Confirm any priming requirements of DEXcell® products with the membrane manufacturer.
- When roofing systems are installed on new poured concrete or lightweight concrete decks or when re-roofing over an existing concrete deck, a vapor barrier should be installed above the concrete to retard the migration of water from the concrete into the roof assembly. Always consult the roofing system manufacturer or design authority for specific instructions for applying other products to DEXcell® FA Glass Mat Roof Boards.
- DEXcell® FA Glass Mat Roof Board allows the bonding of cold mastic modified bitumen and torching directly to the surface. Consult with the system manufacturer for recommendations on this application.
- DEXcell® FA Glass Mat Roof Board is recommended for hot-mop applications. When hot mopping, follow the manufacturer's recommendations with respect to ambient temperature and humidity, optimal temperature for the asphalt and appropriate handling of the material. For application temperatures in excess of 450 °F (232 °C) and/or mopping type IV asphalt, ribbon mopping, spot mopping or installing a venting base sheet is recommended.