

SECUROCK® Glass-Mat Roof Board



High-performance glass-mat roof board for use in low-slope commercial roofing systems

- Ideal for use as cover board in single-ply mechanically attached systems
- Moisture and mold resistant core and facer
- Provides protection to roof system from hail and foot traffic
- Fire resistant for use as fire barrier and thermal barrier
- Unmatched mat-to-core tensile bond strength makes facer less likely to delaminate when cutting.
- High-quality tight mat makes for easier handling and cutting.

Description

SECUROCK® Glass-Mat roof board is a high-performance roof board for use in low-slope commercial roofing systems. It enhances the durability of the entire roofing system when used as cover board in single-ply mechanically attached systems. Its specially treated core and high-performance glass-mat facer provide protection against fire, mold and moisture.

Advantages

Fire Performance Meets Factory Mutual (FM) Class 1 and Underwriters Laboratories (UL) Class A fire ratings for unlimited slope in fire barrier applications per UL 790.
Easier to cut, handle and install High-quality mat produces less itchiness than competitive products.
Moisture and Mold Fiberglass face and back with treated core provides moisture and mold resistance. Scored a maximum "10" for mold resistance on ASTM D3273.

Limitations

- SECUROCK Glass-Mat roof board is engineered to perform within a properly designed roof system. The use of SECUROCK Glass-Mat roof board as a roofing component is the responsibility of the design professional.
- Consult roofing manufacturers for specific instructions on the application of their products to SECUROCK Glass-Mat roof board.
- Weather conditions, dew, application temperature, installation techniques and moisture drive can have adverse effects on the performance of the roof system and are beyond the control of USG.
- Keep SECUROCK Glass-Mat roof board panels dry before, during and after installation. SECUROCK Glass-Mat roof board should not be installed during rains, heavy fogs and any other conditions that deposit moisture on the surface of the board. Apply only as much SECUROCK Glass-Mat roof board that can be covered by final roof membrane system in the same day. Avoid exposure to moisture from leaks or condensation.
- For re-roof or re-cover applications, existing roofing system must be dry throughout prior to application of SECUROCK Glass-Mat roof board.
- Plastic or poly packaging applied at the plant to protect board during rail or other transit should be removed upon receipt to prevent condensation or trapping of moisture, which may cause application problems.
- SECUROCK Glass-Mat roof board should be stored flat and off the ground with protection from the weather. If stored outdoors, a breathable waterproof covering should be used.
- For systems not listed, please contact your local USG SECUROCK roofing sales representative.

Installation

- 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.
- Use fasteners specified in accordance with above requirements. Install approved fasteners with plates into the SECUROCK Glass-Mat roof board, flush with the surface. Fasteners should be installed in strict compliance with the roof system manufacturer's installation recommendations and FMG Loss Prevention Data Sheet 1-29. Proper fastener spacing is essential to achieve wind-uplift performance.
- Locate edge joints on, and parallel to, deck ribs. Stagger end joints of adjacent lengths of SECUROCK Glass-Mat roof board. Butt board edges and ends loosely in typical installations. Long, uninterrupted runs (greater than 200 feet) of SECUROCK Glass-Mat roof board may require slight gapping due to thermal expansion.
- See product data table for maximum flute span when panels are applied directly over metal decking.
- For vertical parapet applications, only 1/2" or 5/8" panels should be used. Maximum framing spacing is 24" o.c.

Performance

- UL Classified as to Surface Burning Characteristics and Non-Combustibility in accordance with ASTM E84 & E136 (CAN/ULC-S102 & S114).
 - Flame Spread 0 and Smoke Developed 0
 - Non-Combustible Core
- 1/4", 1/2" and 5/8" Thickness — Class A unlimited slope in accordance with UL790 (CAN/ULC-S107).
- 5/8" Thickness — Meets requirements of Type X per ASTM C1177 and may be used in P series designs as a thermal barrier.

System Performance

- FM Approved
 - Complies with requirements of FM 4450 and FM 4470
 - Meets FM Class 1

Standards Compliance

SECUROCK Glass-Mat roof board is manufactured to conform to ASTM C1177.

Physical Properties

	SECUROCK Glass-Mat Roof Board		
	1/4" (7.4 mm)	1/2" (12.7mm)	5/8" (15.9 mm)
Width, standard	4' (1220 mm)	4' (1220 mm)	4' (1220 mm)
Length, standard	8' (2440 mm)	8' (2440 mm)	8' (2440 mm)
Pieces per unit for 4' x 8' sheet	42	30	30
Weight, nominal lbs./unit 4' x 8' sheet	1688	1995	2667
Weight, nominal lbs./sq. ft.	1.2	2.0	2.7
Flexural strength, parallel, lbs. min. per ASTM C473	40	80	100
Compressive strength, psi nominal	700-1000	700-1000	700-1000
Flute spannability per ASTM E661	2-5/8"	5"	8"
Permeance, perms per ASTM E96	18	18	16
R Value per ASTM C518	0.36	0.53	0.54
Coefficient of thermal expansion, inches/inch • °F, per ASTM E831	8.5 x 10 ⁻⁶	8.5 x 10 ⁻⁶	8.5 x 10 ⁻⁶
Linear variation with change in moisture, inches/inch • %RH, per ASTM D1037	6.3 x 10 ⁻⁶	6.3 x 10 ⁻⁶	6.3 x 10 ⁻⁶
Water absorption, % max, per ASTM C473	10	10	10
Mold resistance per ASTM D3273*	10	10	10
Bending Radius	4'	6'	9'

***ASTM D3273 Mold Resistance Testing** - In independent lab tests conducted on Securock Gypsum-Fiber roof board and Securock Glass-Mat roof board at the time of manufacture per ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber, both panels scored a 10. The ASTM lab test may not accurately represent the mold performance of building materials in actual use. Given unsuitable project conditions during storage, installation or after completion, any building material can be overwhelmed by mold. To manage the growth of mold, the best and most cost-effective strategy is to protect building products from water exposure during storage and installation and after completion of the building. This can be accomplished by using good design and construction practices.

Submittal Approvals:

Job Name		
Contractor		Date

Product Information

See usg.com for the most up-to-date product information.

Trademarks

The following trademarks used herein are owned by United States Gypsum Company or a related company: SECUROCK, USG, USG in stylized letters.

Note

Products described here may not be available in all geographic markets. Consult

your U.S. Gypsum Company sales office or representative for information.

Notice

We shall not be liable for incidental or consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than their intended use. Our liability is expressly

limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from the date it was or reasonably should have been discovered.

Safety First!

Follow good safety and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions

and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

