

USG SECUROCK® BRAND GLASS-MAT ROOF BOARD



DESCRIPTION

USG Securock® Brand 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 provide moisture and mold resistance. Scored a maximum "10" for mold resistance on ASTM D3273.

LIMITATIONS

- USG Securock Glass-Mat Roof Board is engineered to perform within a properly designed roof system. The use of USG 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 USG 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 USG Securock Glass-Mat Roof Board panels dry before, during and after installation. USG Securock Glass-Mat Roof Board should not be installed during rain, heavy fog and any other conditions that deposit moisture on the surface of the board. Apply only as much USG 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 reroof or re-cover applications, existing roofing system must be dry throughout prior to application of USG 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.
- USG 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 USG 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 USG Securock Glass-Mat Roof Board. Butt board edges and ends loosely in typical installations.

INSTALLATION CONT.

- Butt board edges and ends loosely (minimum 1/16" 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. Please refer to USG's published physical properties below to calculate the actual gap needed for your specific project for all thicknesses.
- Roof boards should never be installed frozen.
- See product data table below 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 Noncombustibility in accordance with ASTM E84 & E136 (CAN/ULC-S102 & S114).
 - Flame Spread 0 and Smoke Developed 0
 - Noncombustible 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

USG Securock Glass-Mat Roof Board is manufactured to conform to ASTM C1177.

PHYSICAL PROPERTIES

	1/4" (7.4 mm)	1/2" (12.7 mm)	5/8" (15.9 mm)
Width, standard	4' (1,220 mm)	4' (1,220 mm)	4' (1,220 mm)
Length, standard	8' (2,440 mm)	8' (2,440 mm)	8' (2,440 mm)
Pieces per unit for 4' x 8' sheet	42	30	30
Weight, nominal lbs./unit 4' x 8' sheet	1,688	1,995	2,667
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	700-1,000	700-1,000	700-1,000
Flute spanability 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 USG Securock® Brand Gypsum-Fiber Roof Board and 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.

WARNING

Dust can contain silica. Prolonged and repeated breathing of silica dust can cause lung damage and cancer. If cutting with a power tool, use a wet or vacuum saw to reduce the amount of dust generated. Dust can be corrosive to eyes, skin and respiratory tract. Contact can cause severe chemical burns. Wear eye, skin and respiratory protection. If eye contact occurs, flush immediately with water for 30 minutes. If ingested, call a physician. Product safety information: 800 507-8899 or usg.com Customer Service: 800 USG.4YOU (874-4968). **KEEP OUT OF REACH OF CHILDREN.**

TRADEMARKS

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NOTE

Products described here may not be available in all geographic markets. Consult your USG Company sales office or representative for information.

NOTICE

We shall not be liable for incidental and 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 the 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 date it was or reasonably should have been discovered.

SAFETY FIRST!

Follow good safety/industrial hygiene practices during installation. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read SDS and literature before specification and installation.

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