

USG SECUROCK® Glass-Mat Roof Board



Overview

USG SECUROCK Glass-Mat Roof Board is a high-performance roof board used in mechanically attached low-slope roofing systems. This material features a specially treated core and high-performance glass-mat facer for protection against fire, mold, and moisture.

Features and Benefits

- » Ideal for use as cover board in **mechanically attached systems**
- » Moisture- and mold-resistant core and facer
- » Provides protection from excessive foot traffic
- » Fire-resistant – ideal for use as a fire barrier and thermal barrier
- » Unmatched mat-to-core tensile bond strength makes the facer less likely to delaminate when cutting
- » High-quality mat makes for easier handling and cutting

Installation

1. 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 Carlisle's specifications. Proper fastener spacing is essential to achieving optimal wind uplift performance.
2. 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. Long, uninterrupted runs (greater than 200 feet) of USG SECUROCK Glass-Mat Roof Board may require slight gapping due to thermal expansion.

3. See properties table for maximum flute span when panels are applied directly over metal decking.
4. For vertical parapet applications, only ½" or ⅝" panels should be used. Maximum framing spacing is 24" o.c.

Review Carlisle specifications and details for complete installation information.

Precautions

- » Keep USG SECUROCK Glass-Mat Roof Board panels dry before, during, and after installation. USG SECUROCK Glass-Mat Roof Board should not be installed in rain, heavy fog, or any other conditions that deposit moisture on the surface of the board. Apply only as much USG SECUROCK Glass-Mat Roof Board as can be covered by the final roof membrane system on the same day. Avoid exposure to moisture from leaks or condensation.
- » For re-roof or re-cover applications, the existing roofing system must be dry prior to application of USG SECUROCK Glass-Mat Roof Board.
- » The plastic or poly packaging applied at the plant to protect the board during 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, off the ground, protected from the weather. If stored outdoors, a breathable, waterproof covering should be used.

Code Approvals

- » UL Classified as to Surface Burning Characteristics and Non-Combustibility in accordance with ASTM E84 & E136 (CAN/ULC-S102 & S114)
- » ¼", ½", and ⅝" thicknesses — UL Class A unlimited slope in accordance with UL790 (CAN/ULC-S107) (ASTM E108)
- » ⅝" thickness — Meets requirements of Type X per ASTM C1177 and may be used in ULP series designs as a thermal barrier
- » Meets FM Class 1 (FM 4450 and FM 4470)

USG SECUROCK Glass-Mat Roof Board

Typical Properties and Characteristics

	¼" (7.4 mm)	½" (12.7mm)	⅝" (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 (4' x 8' sheets)	42	30	30
Weight, nominal lbs./unit (4' x 8' sheets)	1613	1632	2112
Weight, nominal lbs./sq. ft.	1.2	1.7	2.2
Flexural strength, parallel, lbs. min. per ASTM C473	40	80	100
Compressive strength, psi nominal	700-1000	700-1000	700-1000
Flute spanability per ASTM E661	2-⅝"	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	8.5×10^{-6}	8.5×10^{-6}	8.5×10^{-6}
Linear variation with change in moisture, inches/inch • %RH, per ASTM D1037	6.3×10^{-6}	6.3×10^{-6}	6.3×10^{-6}
Water absorption, % max, per ASTM C473	10	10	10
Mold resistance per ASTM D3273*	10	10	10
Bending radius	4'	6'	9'

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

***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.

LEED® Information

Pre-consumer Recycled Content	0%
Post-consumer Recycled Content	0%
Manufacturing Location	Bridgeport, AL Plaster City, CA Jacksonville, FL Sperry, IA East Chicago, IN Shoals, IN Baltimore, MD Southard, OK Rainier, OR Aliquippa, PA Washingtonville, PA Galena Park, TX Sweetwater, TX Sigurd, UT Norfolk, VA
Solar Reflectance Index	N/A