

SECUROCK[®] Data Sheet

Updated: 8/15



*Quality You Can Trust...From
North America's Largest Roofing Manufacturer!™*



USG SECUROCK® BRAND Gypsum-Fiber Roof Board (1 of 2)

Description

USG Securock® Brand Gypsum-Fiber Roof Board is a high-performance roof board for use in low-slope roofing systems. Its unique fiber-reinforced, homogenous composition gives the panel strength and water resistance through to the core. USG Securock Gypsum-Fiber Roof Board provides exceptional bond and low absorption in adhered systems, and its homogenous composition achieves high wind-uplift ratings with no risk of facer delamination. Made from 97% pre-consumer recycled materials, USG Securock Gypsum-Fiber Roof Board combines superior performance with sustainable design for all types of roofing systems, including single-ply, fluid-applied, built-up, spray foam, metal, and modified bitumen roofing.

Advantages

- Exceptional Strength... Engineered to provide superior wind-uplift performance for a wide variety of roof assemblies. USG Securock Gypsum-Fiber Roof Board has uniform composition, providing enhanced bond strength of membrane systems with reduced risk of facer delamination.
 - Fire Performance... Provides excellent fire performance and demonstrates exceptional surface-burning characteristics (ASTM E84 [CAN/ULC-S102] Flame Spread 5, Smoke Developed 0).
 - Moisture and Mold... Uniform water-resistant core ensures excellent moisture and mold resistance. Scored a maximum "10" for mold resistance on ASTM D3273.
 - Versatile... Can be used as a component in single-ply, fluid-applied, built-up, spray foam, metal, and modified bitumen roofing.
 - Sustainability... Made from 97% pre-consumer recycled materials and has earned independent certification from Scientific Certification Systems for this achievement.
- ## Limitations
- USG Securock Gypsum-Fiber Roof Board is engineered to perform within a properly designed roof system. The use of USG Securock Gypsum-Fiber 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 Gypsum-Fiber 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 Gypsum-Fiber Roof Board panels dry before, during, and after installation. USG Securock Gypsum-Fiber Roof Board should not be installed during rain, heavy fog, or any other condition that deposits moisture on the surface of the board. Apply only as much USG Securock Gypsum-Fiber 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 Gypsum-Fiber 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 Gypsum-Fiber 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.
 - When applying solvent-based adhesives or primers, allow sufficient time for the solvent to evaporate to avoid damage to roofing components.
 - USG allows the bonding of cold mastic modified bitumen and torching directly to the surface. Consult with the system manufacturer for recommendations on this application.
 - USG recommends maximum asphalt application temperature for Type III asphalt of 455°F (235°C) when using USG Securock Gypsum-Fiber Roof Board. Application temperatures above these recommended temperatures may adversely affect roof system performance.

Manufactured by:



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USG SECUROCK® BRAND

Gypsum-Fiber Roof Board (2 of 2)

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® Brand Gypsum-Fiber 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.

Fire Performance

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

- Spread 5 and Smoke Developed 0
- 1/4" (6.35 mm), 3/8" (9.53 mm), 1/2" (12.7 mm), and 5/8" (15.9 mm) thickness — Class A in accordance with UL790 (CAN/ULC-S107). See the UL Building Materials Directory for more information.
- 5/8" (15.9 mm) thickness — Meets requirements of Type X per ASTM C1278 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 Gypsum-Fiber Roof Board is manufactured to conform to ASTM C1278, "Standard Specification for Fiber-Reinforced Gypsum Panel."

PHYSICAL PROPERTIES				
	1/4" (6.35 mm)	3/8" (9.53 mm)	1/2" (12.7 mm)	5/8" (15.9 mm)
Width, standard	4' (1.21 m)	4' (1.21 m)	4' (1.21 m)	4' (1.21 m)
Length, standard	4' (1.21 m) 8' (2.44 m)	4' (1.21 m) 8' (2.44 m)	4' (1.21 m) 8' (2.44 m)	4' (1.21 m) 8' (2.44 m)
Pieces per unit for 4' x 8' (1.21 m x 2.44 m) sheets	50	40	30	24
Weight, nom. lbs./unit 4' x 8' (1.21 m x 2.44 m) sheets	2,575 (1,168 kg)	2,575 (1,168 kg)	2,725 (1,236 kg)	2,525 (1,145 kg)
Weight, nom. lbs./sq. ft.	1.57 (7.66 kg/m ²)	1.96 (9.57 kg/m ²)	2.76 (13.47 kg/m ²)	3.20 (15.62 kg/m ²)
Flexural strength, parallel, lbs. min., per ASTM C473	40 (18.14 kg)	70 (31.75 kg)	110 (50 kg)	161 (73 kg)
Compressive strength, psi nominal	1800	1800	1800	1800
Flute spannability per ASTM E661	2 5/8" (66.7 mm)	5" (127 mm)	8" (203 mm)	10" (254 mm)
Permeance, perms, per ASTM E96	30	26	26	24
R-Value per ASTM C518	0.2	0.3	0.5	0.6
Coefficient of thermal expansion, inches/inch • -6°F/-21.1°C, per ASTM E831	8" x 10" (203 mm x 254 mm)	8" x 10" (203 mm x 254 mm)	8" x 10" (203 mm x 254 mm)	8" x 10" (203 mm x 254 mm)
Linear variation with change in moisture, inches/inch • %RH, per ASTM D1037	8" x 10" (203 mm x 254 mm)	8" x 10" (203 mm x 254 mm)	8" x 10" (203 mm x 254 mm)	8" x 10" (203 mm x 254 mm)
Water absorption, % max, per ASTM C473	10	10	10	10
Surface water absorption, nominal grams, per ASTM C473	1.6	1.6	1.6	1.6
Mold resistance per ASTM D3273*	10	10	10	10
Bending Radius	25' (7.62 m)	25' (7.62 m)	25' (7.62 m)	30' (9.14 m)

*ASTM D3273 Mold Resistance Testing – In independent lab tests conducted on USG Securock® Brand 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.