SECUROCK® BRAND GLASS-MAT ROOF BOARD



FEATURES & BENEFITS

competitive products.

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

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

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

- 1. 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.
- 2. Consult roofing manufacturers for specific instructions on the application of their products to USG Securock Glass-Mat Roof Board.
- 3. 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.
- 4. 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
- 5. For reroof or re-cover applications, existing roofing system must be dry throughout prior to application of USG Securock Glass-Mat Roof Board.
- 6. 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.
- 7. 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.
- Butt board edges and ends loosely (1.6mm 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.
- · 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 12.7mm or 15.9mm panels should be used.
 Maximum framing spacing is 600mm.

PRODUCT DATA

- UL Classified as to Surface Burning Characteristics and Non-combustibility in accordance with ASTM E84 & E136 (CAN/ULC-S102 & S114).
 - Flame Spread O and Smoke Developed O
 - 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

COMPLIANCE

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

TECHNICAL DATA

| Property | 7.4 mm | 12.7 | 15.9 mm |
|---|----------------------|----------------------|----------------------|
| Width | 1220 mm | 1220 mm | 1220 mm |
| Length | 2440 mm | 2440 mm | 2440 mm |
| Weight, nominal kg/m² | 5.6 | 9.8 | 13.2 |
| 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 | 100 mm | 125 mm | 200 mm |
| 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 | 8.5x10 ⁻⁶ | 8.5x10 ⁻⁶ | 8.5x10 ⁻⁶ |
| Linear variation with change in moisture, inches/inch • %RH, per ASTM D1037 | 6.3x10 ⁻⁶ | 6.3x10 ⁻⁶ | 6.3x10 ⁻⁶ |
| Water absorption, % max, per ASTM C473 | 10 | 10 | 10 |
| Mold resistance per ASTM D3273* | 10 | 10 | 10 |

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.

Notice:

As we are involved in constant products development; this document information is subject to change without prior notice. Please always refer to usgme.com for the updated products information document.

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