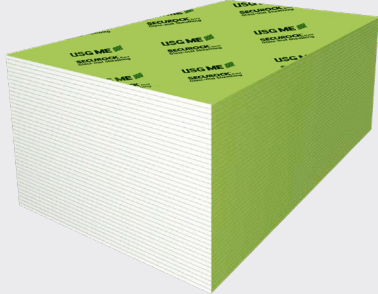


SECUROCK® BRAND GLASS-MAT SHEATHING TYPE X



FEATURES & BENEFITS

Quality, High-performance Sheathing for Warranted Protection as weather-resistant barrier

- Provide additional fire resistance over Securock® 12.7mm regular panels
- Underwriters Laboratories Inc. (UL) Classification as to fire resistance, surface-burning characteristics and noncombustibility
- Comply with ASTM C1396 physical properties for 15.9 mm Type X gypsum wallboard
- 15.9mm treated gypsum core, combined with fiberglass face and back, offers exceptional water resistance
- High resistance to mold and mildew, scoring a 10 (highest) when tested in accordance with ASTM D3273. Glass-Mat Sheathing facer on both sides' sheds water
- Quick score and snap, with neither sawing or special tools nor rapid screws or nail attachments required
- For use in most exterior systems when properly detailed by exterior finish manufacturer
- Meets or exceeds the requirements of ASTM C1177
- Can be exposed to weather for up to 12 months after application.
- USG Securock® Glass-Mat Sheathing Type X is guaranteed for five years against manufacturing defects and for 12 months of weather exposure.

DESCRIPTION

USG Securock® Brand Glass-Mat Sheathing Type X is a non-combustible, moisture- and mold-resistant panel designed to be used where the fire resistant board is required in high wet area and under exterior claddings where conventional gypsum sheathing products have traditionally been used, such as brick veneer, properly detailed Exterior Insulation Finish Systems (EIFS), Direct-applied Exterior Finishing System (DEFS), metal panel finishing, clapboard siding, shingle siding, shake siding and conventional stucco.

INTENDED FOR

- Commercial or residential applications where 15.9 mm Glass-Mat Sheathing Type X panels are required
- Exterior Cladding
- High moisture areas
- Commercial or residential applications where water resistant panels with greater resistance to surface abrasion, indentation and impact damage are required
- Areas where glass-mat panels are desired
- Load-bearing and non-load-bearing steel-framed fire-rated walls
- New or repair and remodel construction

LIMITATIONS

1. Avoid sustained exposure to temperatures exceeding 50°C.
2. Must be stored off the ground and under cover in accordance with Gypsum Association's GA-801, Handling and Storage of Gypsum Panel Products.
3. These panels offer resistance to normal weather conditions, but are not intended for constant exposure to water. Protect panels from immersion in water and the eroding effects of cascading, pooling and/or ponding water.
4. Avoid conditions during construction that result in excessive moisture load in the building. High moisture can cause condensation in the unfinished exterior walls during periods of cold weather. Forced air heaters, wet masonry, poured concrete and finishing materials introduce large volumes of water vapor into the building as they cure or dry. Use ventilation and mechanical dehumidification to reduce moisture levels to below the dew point temperature of the exterior air. Any damage resulting from insufficient interior moisture management during construction is not the responsibility of USG ME.
5. Panels are not to be used as a base for nailing or other fastening; mechanical attachment of exterior claddings must be made directly to the framing.
6. Panels are not to be directly laminated to masonry surfaces; use furring strips or framing.

7. Panels are not intended as a substrate for adhered tile applications.
8. For protected exterior ceiling and soffit applications, the panels must be protected from direct exposure to weather.
9. For parapet applications, hot mopping and torching of the roofing membrane to the panels is not recommended. The use of a synthetic rubberized membrane with an adhesive backer is recommended for this application.

DELIVERY AND STORAGE OF MATERIALS

All materials shall be stored in an enclosed shelter providing protection from damage and exposure to the elements. Damaged or deteriorated materials shall be removed from the premises. Prior to installation, panels should be stacked flat (unless the contractor in charge of site safety directs otherwise to avoid point overloading of the structure or a tripping hazard) and reasonably protected from the elements.

Warning: Store all USG Securock® Glass-Mat panels flat. Panels are heavy and can fall over, causing serious injury or death. Do not move unless authorized. Panels 3660mm in length will be in banded units. To ensure safety and performance of the product, use of a forklift truck with ship minimum (900mm) span between the forks when moving the banded units is recommended. Keep the nylon bands on each lift until individual boards are moved.

EXTERIOR INSTALLATION

Panels shall be installed in accordance with Gypsum Association's GA-253, Application of Gypsum Sheathing, ASTM C1280, Standard Specification for Application of Gypsum Sheathing. Details for construction of a specific assembly to achieve a required fire-resistance-rating shall be installed in accordance with the published design. Details and requirements pertaining to framing and application limitations shall be controlled by the weather-resistive barrier requirements, cladding, structural or fire-resistance-rated system, and must be approved by the architect, engineer or design professional of record.

Where resistance to racking shear and/or transverse wind load is required, system design capacities shall be obtained from USG ME technical department, engineering evaluations and/or test reports of a specific assembly where mandated by local code requirements.

PRODUCT DATA

	Securock® Brand Glass-Mat Sheathing Type X
Thickness	15.9 mm
Lengths	2400 mm
Width ¹	1200 mm
Weight ² , nominal	13.5 kg/m ²
Edges	Square edges
Packaging	Two panels per bundle

Notes:

1. Other sizes available by special order.
2. Represents approximate weight for design and shipping purposes.

TEST DATA

Property	ASTM Method	Securock® Brand Glass-Mat Sheathing Type X
Non-combustibility	E 136	Meets
Surface burning characteristics	E 84	Class A
Core hardness ³ (Field, End, Edge)	C473 (B)	Meets
Flexural strength ³	C473 (B)	Meets
Humidified deflection	C473	Meets
Nail pull resistance ⁵	C473 (B)	Meets
Bending radius (dry) ⁴		2.7 m (9 ft.)
R-Value	C518	0.09 K•m ² /W
Water vapor performance	E96	28.6 perms (1609 ng/Pa.s.m ²)
Linear expansion with moisture changes ⁵		11.25 x 10 ⁻⁶ mm/mm %RH
Coefficient of thermal expansion	D4535	15.3 mm/mm/°C

Notes:

3. Per ASTM C1177 for 5/8 in. (15.9 mm) glass-mat gypsum substrate.
4. Due to the variability in environmental conditions of each installation, the framing and fastener spacing of curved walls should be reduced as the radius approaches the minimum allowed. At the minimum radius, it is recommended that fastener and frame spacing be 150 mm OC.
5. Per GA-235, Gypsum Board Typical Mechanical and Physical Properties.

DESIGN SHEAR CAPACITIES⁶

Panel Orientation to Framing	Frame Spacing (OC)	Fastener Type	Fastener Spacing (OC)		Design Shear
			Perimeter	Field	
Parallel	600mm	#6 Bugle Head Screw	100	200	268.1 kg/m
Parallel	600mm	Hot Dipped Galv. Roofing Nail	100	200	220.7 kg/m

Notes:

6. Based on testing per ASTM E72, Standard Test Methods of Conducting Strength Tests of Panels for Building Construction. Capacities represent the ultimate capacity divided by a 3.0 Safety Factor.

WIND LOAD DESIGN CAPACITIES⁷

Frame Spacing	Fastener Spacing	Allowable Pressure
300mm	100mm	96 psf (4.6 kPa)
	150mm	70 psf (3.4 kPa)
	200mm	50 psf (2.4 kPa)
400mm	100mm	75 psf (3.6 kPa)
	150mm	50 psf (2.4 kPa)
	200mm	46 psf (2.2 kPa)
600mm	100mm	36 psf (1.7 kPa)
	150mm	27 psf (1.3 kPa)
	200mm	25 psf (1.2 kPa)

Notes:

7. Based on testing per ASTM E330, Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference. Applicable for both wood and steel framing. Allowable capacities are based on a maximum deflection of L/360. Allowable capacities represent the ultimate capacity of the panel to resist fastener pull-through and/or flexural failure using a 3.0 Safety Factor. The withdrawal resistance of fasteners from framing is different on several factors, including but not limited to, fastener type, fastener length and framing properties. The specification of fasteners is the responsibility of the designer of record.

MOISTURE AND MOLD RESISTANCE

Based on testing per ASTM C473, Test Methods for Physical Testing of Gypsum Panel Products, the average water absorption for USG Securock® Brand Glass-Mat Sheathing Type X is not greater than 10% by weight after two-hour immersion. In independent lab tests conducted per ASTM D3273 at the time of manufacture, the panels score a “10”, meeting ASTM C1177 specifications. This 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.

COMPLIANCE

Securock® Brand Glass-Mat Sheathing Type X comply with:

- Comply with ASTM C1177 for 5/8 in. (15.9 mm) Type X and glass-mat water-resistant gypsum substrate
- Classified as a Class A Interior Finish Material per the International Building Code® (IBC®)
- UL Classification of 5/8 in. (15.9 mm) Type X as to surface burning characteristics and noncombustibility
- Meets or exceeds the requirements for an Air Barrier Material when tested in accordance with ASTM E2178, Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials, and defined in the 2021 International Energy Conservation Code®
- Third-party performance evaluations with most commonly specified fasteners and finishing systems for the requirements of extreme weather applications

Notice:

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