



# GlasRoc<sup>®</sup> Sheathing

Quality Exterior Sheathing

# Reinforced Glass Mat Sheathing

## CertainTeed respects the environment through the responsible development of sustainable building products and systems.

By utilizing building science and by taking a life-cycle perspective, our products and systems are manufactured to meet the high-performance demands of today's buildings, as well as to reach even higher goals for the future. By working with others, CertainTeed demonstrates that we are genuine advocates of building responsibly.

**GlasRoc® Sheathing** is a quality, water resistant, gypsum-based exterior sheathing.

GlasRoc Sheathing's engineered glass mat facers provide a superior water and UV resistant surface for long term protection from weather exposure.

The paperless glass mat facers are incorporated with a water resistant gypsum core.



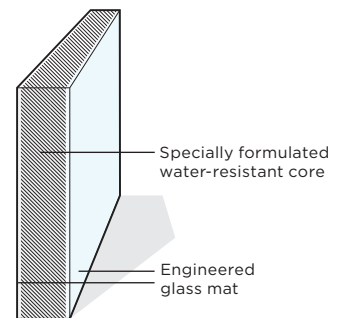
### GlasRoc Sheathing Offers:

- Long-term protection (12 months) from weather exposure.
- A superior water resistant surface that does not inhibit water vapor permeance.
- Excellent fire resistance properties, and numerous fire-rated designs.
- Mold resistance.
- Strength - with enough flexibility to bend to curved surfaces.
- Conformity to design and code requirements.

GlasRoc Sheathing led the next generation of the industry standard for quality, weather resistive, gypsum-based sheathing.

To back it up, CertainTeed provides a:

- 12 month limited warranty against exposure
- 5 year limited warranty assuring product performance
- 12 year substrate limited warranty in architecturally specified EIF Systems





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## GlasRoc® Sheathing Fire Resistive Applications:

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Steel Stud Systems  
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Fire Resistance Rated  
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Fire Resistance Rated  
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Fire Resistance Rated  
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## GlasRoc Sheathing Applications



# GlasRoc® Sheathing

## Benefits

### Dimensions

Thickness & Type	Width	Length	Edge	Standard
1/2" (12.7 mm) GlasRoc® Sheathing	4' (1220 mm)	8' (2440 mm)*	Square	ASTM C1177
5/8" (15.9 mm) GlasRoc® Sheathing Type X	4' (1220 mm)	8' (2440 mm)*	Square	ASTM C1177

\*Other lengths available. Ask your CertainTeed sales representative.

### Better Physical Performance

Tested in accordance with ASTM C1177 and applicable ASTM C1396 sections, GlasRoc® Sheathing meets or exceeds all physical property requirements. Results showed improved physical performance compared to paper-faced gypsum sheathing including:

- Reduced humidified deflections
- Superior flexural strengths
- Excellent nail-pull resistance

### Enhanced Dimensional Stability

GlasRoc Sheathing will withstand normal exposure to UV, rain, wind, ice, and snow.

It is dimensionally stable under changes in temperature and relative humidity. To back it up, CertainTeed provides a 12-month exposure limited warranty.

### Excellent Fire Protection

Testing in accordance with ASTM E136 (CAN/ULC-S114) proved that GlasRoc Sheathing is noncombustible and offers superior fire performance compared to paper-faced sheathings. It has a zero flame spread and zero smoke developed index when tested per ASTM E84 (0/0 when tested per CAN/ULC-S102) for surface burning characteristics.

GlasRoc Sheathing Type X is UL/cUL and ULC Classified for Fire Resistance for use in fire-rated designs. GlasRoc Sheathing's UL Type Designation is - Type GlasRoc.

### Easy To Handle And Install

GlasRoc Sheathing is handled and installed like regular paper-faced sheathing. In addition, it:

- Can be scored and cut with a standard utility knife. No special tools required.
- Snaps free after scoring only one face.
- Has uniform field and edge hardness, making trimming and fastening quick and easy.

### Long-Term Protection To Weather Exposure

GlasRoc Sheathing, with its uniform water resistance throughout the board, offers superior freeze/thaw resistance. It will withstand exposure to UV, rain, wind, ice and snow. To back it up, CertainTeed provides a 12-month exposure limited warranty. GlasRoc Sheathing provides enhanced surface liquid water resistance while allowing the building's vapor drive to be unimpeded.

### Mold Resistance

GlasRoc Sheathing's composition prevents and resists mold growth. When tested in accordance with ASTM D3273, GlasRoc Sheathing exhibited no evidence of mold or fungal growth after a period of 28 days of exposure, yielding the highest rating 10 out of 10.

### Increased Durability

GlasRoc Sheathing resists delamination creating a more durable, dimensionally stable panel.

### Standards And Code Compliance

GlasRoc Sheathing complies with ASTM C1177 and applicable ASTM C1396 standards.

Installation standards, where applicable, are Gypsum Association Publication GA-253, GA-216, ASTM C1280 for gypsum sheathing and soffits.

GlasRoc Sheathing is a compatible substrate for air barrier systems tested in accordance with ASTM E2357 & ASTM E2178 and CAN/ULC-S741 & CAN/ULC-S742.

### Note

GlasRoc Sheathing is not a structural product and therefore is not a replacement for plywood or structurally engineered sheathing where required for shear wall designs. Do not use GlasRoc Sheathing as a base for nailing or mechanical fastening.

## Physical Properties Quality Sheathing

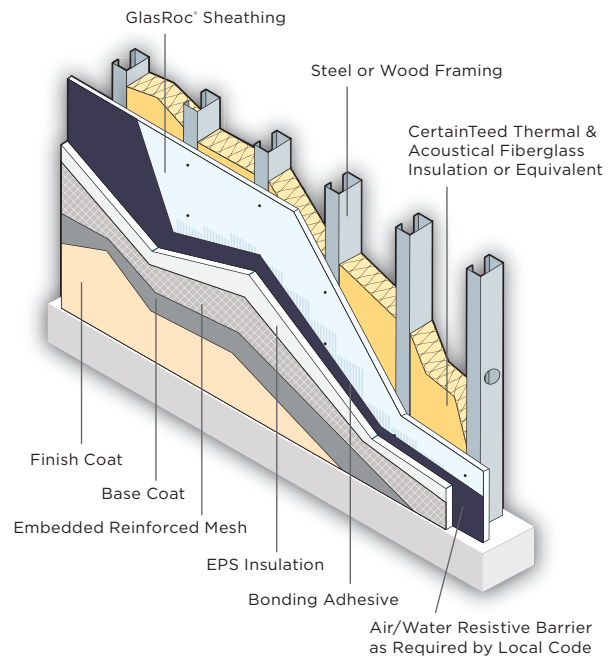
Physical Properties	$\frac{1}{2}"$ ( $12.7$ mm) GlasRoc Sheathing	$\frac{5}{8}"$ ( $15.9$ mm) GlasRoc Sheathing Type X	Test Method
Nominal Width	4' (1220 mm)	4' (1220 mm)	-
Standard Lengths	8' (2440 mm), 10' (3050 mm), 12' (3660 mm)	8' (2440 mm), 10' (3050 mm), 12' (3660 mm)	-
Face Surface	Reinforced Glass Mat	Reinforced Glass Mat	-
Weight - lb/ft <sup>2</sup> (kg/m <sup>2</sup> )	1.8 lb/ft <sup>2</sup> (8.8 kg/m <sup>2</sup> )	2.5 lb/ft <sup>2</sup> (12.1 kg/m <sup>2</sup> )	-
Edge Profile	Square	Square	-
Bending Radius - Dry, Lengthwise	6' (1829 mm)	8' (2439 mm)*	-
Surface Burning Characteristics - Flame Spread	0 (0)	0 (0)	ASTM E84 / UL 723 (CAN/ ULC-S102)
Surface Burning Characteristics - Smoke Developed	0 (0)	0 (0)	ASTM E84 / UL 723 (CAN/ ULC-S102)
Surface Burning Characteristics	Class A	Class A	ASTM E84 / UL 723 (CAN/ ULC-S102)
Mold Resistance	10 out of 10	10 out of 10	ASTM D3273
Water Absorption (% of Weight)	≤ 10%	≤ 10%	ASTM C473
Permeance - Perms (ng/Pa•s•m <sup>2</sup> )	> 26 (1500)	> 21 (1200)	ASTM E96
"R" Value - sq.ft.•h•°F/Btu (K•m <sup>2</sup> /W)	0.392 (0.069)	0.415 (0.073)	ASTM C518
Combustibility	Non-Combustible	Non-Combustible	ASTM E136 (CAN/ULC-S114)
Thermal Coefficient of Linear Expansion - in./in./°F (mm/mm/°C)	11.2 x 10 <sup>-6</sup> (20.2 x 10 <sup>-6</sup> )	10.9 x 10 <sup>-6</sup> (19.7 x 10 <sup>-6</sup> )	ASTM E228
Nail Pull	≥ 80 lbf (356 N)	≥ 90 lbf (400 N)	ASTM C473 (Method B)
Core Hardness - End	≥ 15 lbf (67 N)	≥ 15 lbf (67 N)	ASTM C473 (Method B)
Core Hardness - Edge	≥ 15 lbf (67 N)	≥ 15 lbf (67 N)	ASTM C473 (Method B)
Flexural Strength - Parallel	≥ 80 lbf (356 N)	≥ 100 lbf (445 N)	ASTM C473 (Method B)
Flexural Strength - Perpendicular	≥ 100 lbf (445 N)	≥ 140 lbf (623 N)	ASTM C473 (Method B)
Humidified Deflection	≤ 1/4" (6.4 mm)	≤ 1/8" (3.2 mm)	ASTM C473

# GlasRoc® Sheathing

## Exterior Wall Systems

As a component of an EIFS System, GlasRoc® Sheathing offers:

- Superior water shed and surface water resistance.
- Excellent total water absorption resistance.
- 12-month resistance to UV and environmental exposure.
- Improved insulation adhesion due to integrated board surface.
- Approved substrate by the major EIFS manufacturers.



## Exterior Insulation And Finish Systems (EIFS) Applications

### Superior Strength

GlasRoc® Sheathing integrally bonds its engineered glass mat to the moisture resistant core, resulting in a superior protective sheathing that will perform in all climates.

### Dimensional Stability

GlasRoc Sheathing resists delamination, rippling, buckling and sagging caused by environmental conditions, such as freeze/thaw, heat and humidity, and direct UV exposure.

### Moisture Resistance

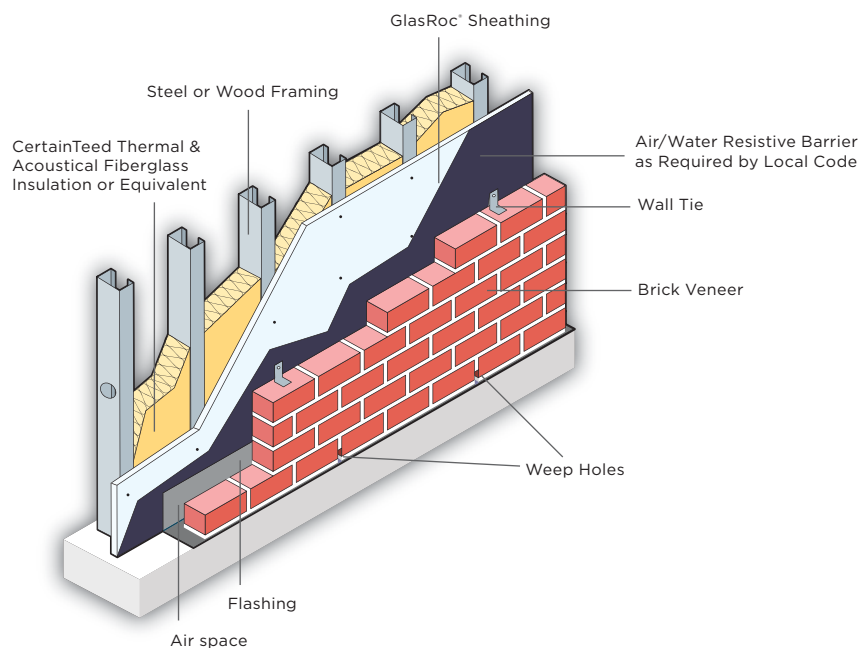
When properly installed, GlasRoc Sheathing blocks liquid water without inhibiting water vapor transmission. The result is a protective surface that is extremely resistant to water damage.

### Easy To Install

GlasRoc Sheathing is easy to handle and install. No special tools are required. Score it with a standard utility knife. Install it with standard sheathing fasteners.

### Referenced Standards

- ASTM C514: Specification for Nails for the Application of Gypsum Board
- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33" (8.4 mm) to 0.112" (2.84 mm) in Thickness
- ASTM C1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C1280: Standard Specification for Application of Gypsum Sheathing
- ASTM C1397: Practice for Application of Class PB Exterior Insulation and Finish Systems
- ASTM E84 (CAN/ULC-S102): Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96: Test Methods for Water Vapor Transmission of Materials
- ASTM E119 (CAN/ULC-S101): Test Method for Fire Tests of Building Construction and Materials



## Cavity Wall Applications

GlasRoc® Sheathing offers a protective, smooth, water-resistant application surface which will withstand water penetration into the stud cavity, so a separate weather-resistant barrier may not be necessary, unless required by local code. To best prevent air and water intrusion (when a separate weather resistive barrier is not required by local codes), the joints should be treated with exterior silicone caulk and glass mesh tape. Consult with authority having jurisdiction, prior to installation regarding local requirements.

### Installation Recommendations

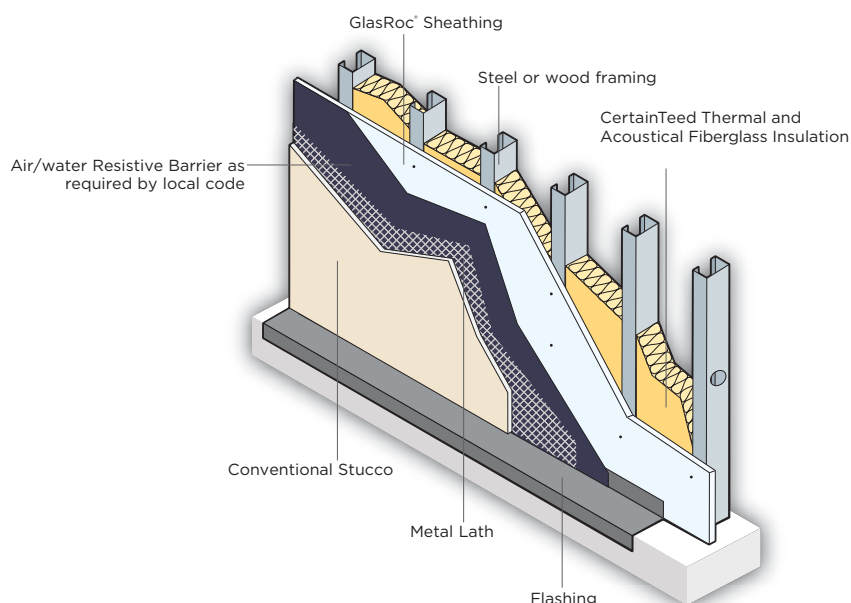
When installing a brick or stone veneer over GlasRoc Sheathing, attach the brick or masonry ties through the GlasRoc Sheathing to the structural framing supports. Consult the manufacturer or local building code authority for proper spacing and installation of brick or masonry ties.

### Referenced Standards

- ASTM C514: Specification for Nails for the Application of Gypsum Board
- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33" (8.4 mm) to 0.112" (2.84 mm) in Thickness
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# GlasRoc® Sheathing

## Exterior Wall Systems



## Conventional Stucco Applications

GlasRoc® Sheathing's engineered glass mat with its high surface bond strength provides an excellent water-resistant surface for conventional stucco applications. The treated core adds to the water-resistive performance of the product. Conventional stucco systems rely on the structural soundness of the sheathing component to which they are applied.

GlasRoc Sheathing offers physical properties superior to competitive gypsum sheathing products in the market. It is manufactured to meet or exceed the physical property requirements outlined in ASTM C1177.

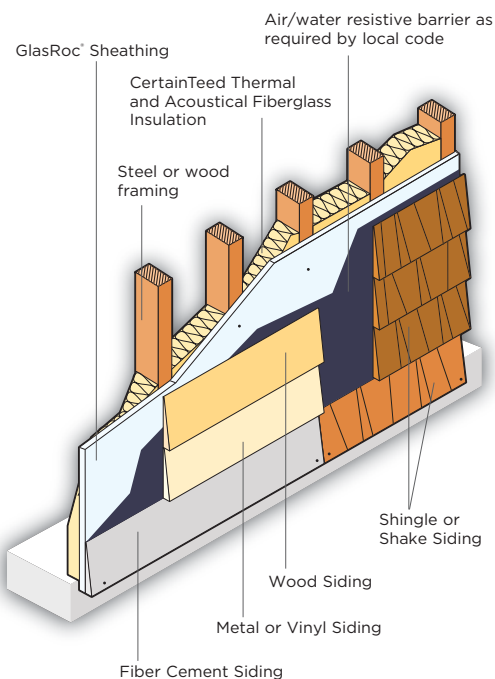
### Installation Recommendation

In a conventional stucco system, metal lath or other specified self-furring components should be attached to the framing members through the GlasRoc Sheathing, after the appropriate flashing is installed. Always use appropriate joint treatment when required. Apply the stucco, as recommended by the manufacturer.

### Referenced Standards

- ASTM C514: Specification for Nails for the Application of Gypsum Board
- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33" (0.84 mm) to 0.112" (2.84 mm) in Thickness
- ASTM C1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C1280: Standard Specification for Application of Gypsum Sheathing
- ASTM E84 (CAN/ULC-S102): Test Method for Surface Burning Characteristics of Building Materials
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## Exterior Cladding

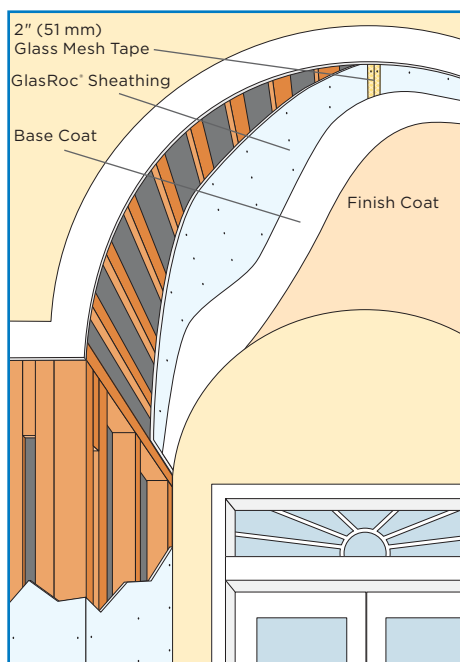
There are numerous exterior claddings available today, from shingles to shakes to a multitude of siding alternatives. GlasRoc® Sheathing is an excellent choice for any of these applications. Simply install GlasRoc Sheathing and apply the preferred exterior cladding, per the manufacturer's recommendations. Depending on local building codes, a joint treatment, building felt, or building wrap may be necessary.

### Referenced Standards

- ASTM C514: Specification for Nails for the Application of Gypsum Board
- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33" (0.84 mm) to 0.112" (2.84 mm) in Thickness
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# GlasRoc® Sheathing

## Exterior Designs/Arches & Soffits



Refer to finish system manufacturer for glass mesh reinforcement requirements.

### Recommended Lengthwise Bending Radii

Sheathing Board Thickness	Tested - Bent Lengthwise Radii
1/2" (12.7 mm) GlasRoc® Sheathing	6' - (1829 mm)
5/8" (15.9 mm) GlasRoc® Sheathing Type X	8' - (2438 mm)

## Exterior Archways, Exterior Concave And Convex Surfaces

GlasRoc® Sheathing is engineered for use in curved exterior gypsum board applications. There is no need to score or moisten the board to bend it. To prevent flat areas in the curved surface, framing should be positioned at a maximum spacing of 6" (152 mm).

Consult the Gypsum Association document GA-226 for framing recommendations.

### Application To Archways

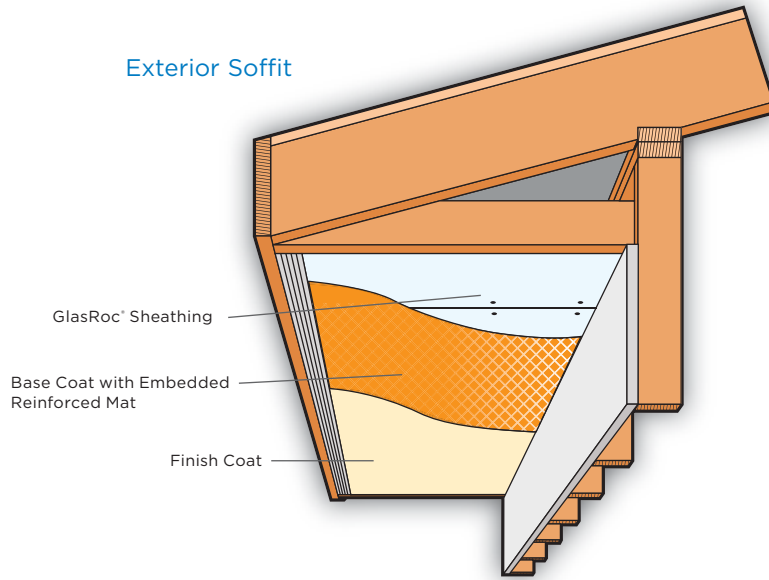
GlasRoc Sheathing can be installed in an archway or on a concave or convex surface by applying pressure onto the board to fit the radius and then holding it firmly in place while fastening it to the framing members. To best seat the product in tight radius applications, temporarily install a stop at one end of the framed radius to serve as a restraint support. Install the product with coated side out with one of the width ends placed flush against the temporary stop and secure with fasteners, one framing member at a time. Repeat until the product has been secured to all framing members. Fasteners should be spaced no greater than 8" (200 mm) apart.

### Referenced Standards

- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33" (8.4 mm) to 0.112" (2.84 mm) in Thickness
- ASTM C1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C1280: Standard Specification for Application of Gypsum Sheathing
- ASTM C1397: Practice for Application of Class PB Exterior Insulation and Finish Systems
- ASTM E84 (CAN/ULC-S102): Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96: Test Methods for Water Vapor Transmission of Materials

GlasRoc® Sheathing is a superior product for a flat ceiling entryway, exterior ceiling or a soffit assembly, due to its ability to resist the deteriorating effects of moisture and humidity.

Exterior Soffit



GlasRoc® Sheathing In Exterior Ceiling & Soffit Applications

Properties	1/2" (12.7 mm) GlasRoc Sheathing	1/2" (12.7 mm) Gypsum Soffit Board	5/8" (15.9 mm) GlasRoc Sheathing Type X	5/8" (15.9 mm) Gypsum Type X Soffit Board	ASTM Test Method
Surface	Glass Mat	Paper	Glass Mat	Paper	
Humidified Deflection (Sag)	1/4" (6.4 mm)	7/8" (22.2 mm)	1/8" (3.2 mm)	1/2" (12.7 mm)	C473

## Flat Ceiling Entryways, Exterior Ceilings, Soffits, Canopies, Carports, And Parking Garages

The industry defines the amount of permissible sagging in a horizontal application as humidified deflection. There are several ASTM standard specifications that define a maximum allowable humidified deflection including ASTM C1396 and ASTM C1177. Of these, ASTM C1177 has the most stringent requirements. Note how GlasRoc® Sheathing performs.

### Installation Recommendations For Exterior Ceilings & Soffits

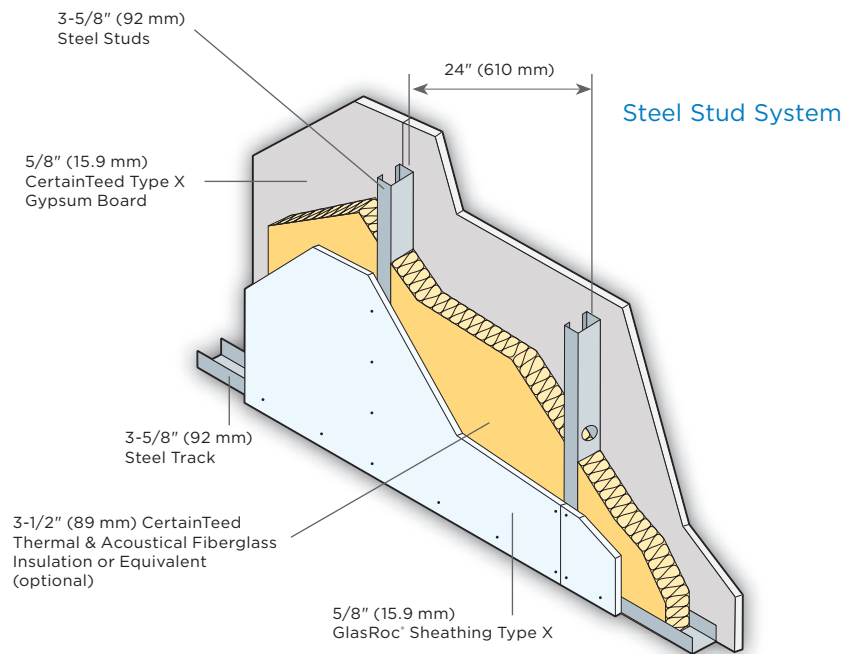
Use GlasRoc Sheathing in exterior ceiling and soffit systems where weather-resistant performance is critical, including but not limited to ceilings/soffits with finished joints and ceilings/soffits without insulation. Install the product like a standard gypsum exterior soffit board. Fasten the product to the framing members using the recommendations specified in GA-216 and ASTM C840. Finishing is accomplished with either 1) Direct-Applied Exterior Finish System (DEFS) per the manufacturer's specifications, or 2) applying nominal 2" (51 mm) glass mesh drywall tape and 90-minute setting-type joint compound, such as Rapid Joint(R), on the board joints, skim-coating the entire surface of the ceiling soffit with a setting-type compound and priming and painting with exterior grade primer and paint per the manufacturer's recommendations.

### Referenced Standards

- ASTM C514: Specification for Nails for the Application of Gypsum Board
- ASTM C931: Standard Specification for Exterior Gypsum Soffit Board
- ASTM C840: Standard Specification for Application and Finishing of Gypsum Board
- ASTM C954: Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.33" (8.4 mm) to 0.112" (2.84 mm) in Thickness
- ASTM C1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C1397: Practice for Application of Class PB Exterior Insulation and Finish Systems
- ASTM E84 (CAN/ULC-S102): Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96: Test Methods for Water Vapor Transmission of Materials

# GlasRoc® Sheathing Type X

## Exterior Wall/Fire-Rated Systems

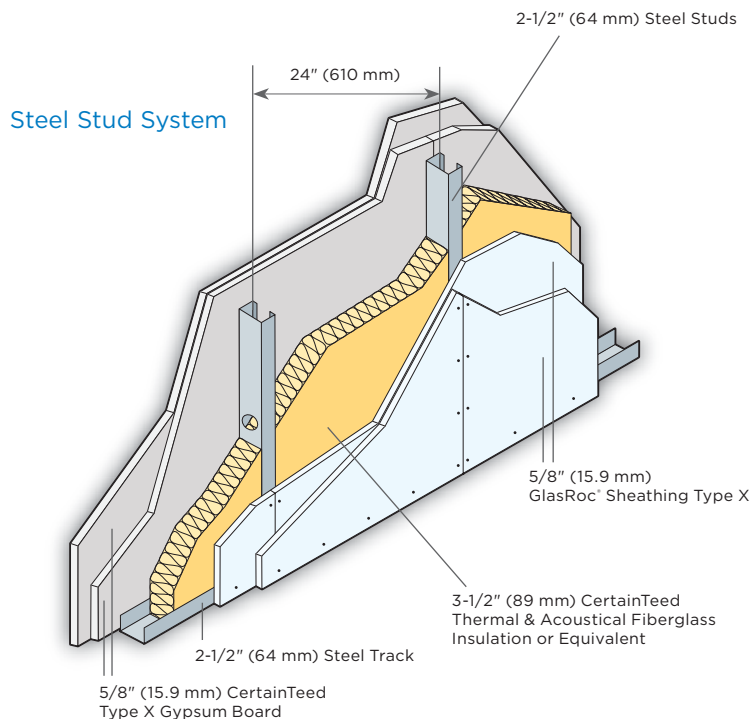


**Reference: UL Design U465**

Cavity thickness .....	3-5/8" (92 mm)
Wall thickness.....	4-7/8" (124 mm)
Weight.....	6 psf (29 kg/m <sup>2</sup> )

5/8" (15.9 mm) panels with square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of stud. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Panels attached to steel studs and floor runner with 1" (25.4 mm) Type S steel screws spaced 8" (200 mm) o.c. when applied horizontally, or 8" (200 mm) o.c. along vertical and bottom edges and 12" (300 mm) in the field when panels are applied vertically. When used in widths other than 48" (1220 mm), panels are to be installed horizontally.





## Reference: UL Design U411

Cavity thickness .....	2-1/2" (64 mm)
Wall thickness .....	5" (127 mm)
Weight.....	11 psf (54 kg/m <sup>2</sup> )

### Interior

Install insulation between studs. Apply a base layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically to interior side with 1" (25.4 mm) Type S steel screws spaced 16" (406 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

Apply a face layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically over base layer with 1-5/8" (41 mm) Type S steel screws. Space fasteners 16" (406 mm) o.c. along edges and 12" (300 mm) o.c. along floor and ceiling runners. Joints must be offset from joints in the underlying layer. Tape and finish joints.

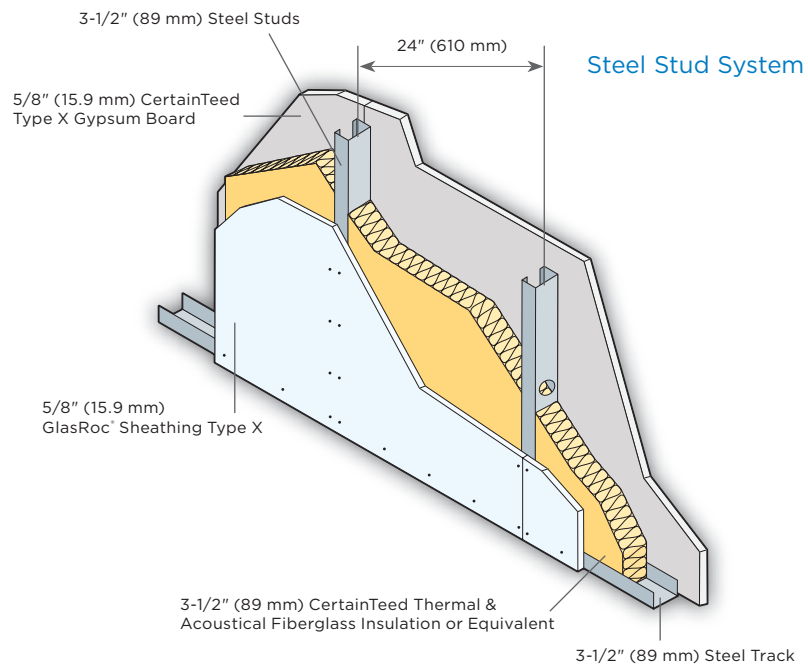
### Exterior

Apply a base layer of 5/8" (15.9 mm) GlasRoc® Sheathing Type X vertically to exterior side with 1" (25.4 mm) Type S steel screws spaced 16" (406 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

Apply a face layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X vertically over base layer with 1-5/8" (41 mm) Type S steel screws. Space fasteners 16" (406 mm) o.c. along edges and field and 12" (300 mm) o.c. along the floor and ceiling runners. Joints must be offset from joints in the underlying layer.

# GlasRoc® Sheathing Type X

## Exterior Wall/Fire-Rated Systems



**Reference: UL Design U425**

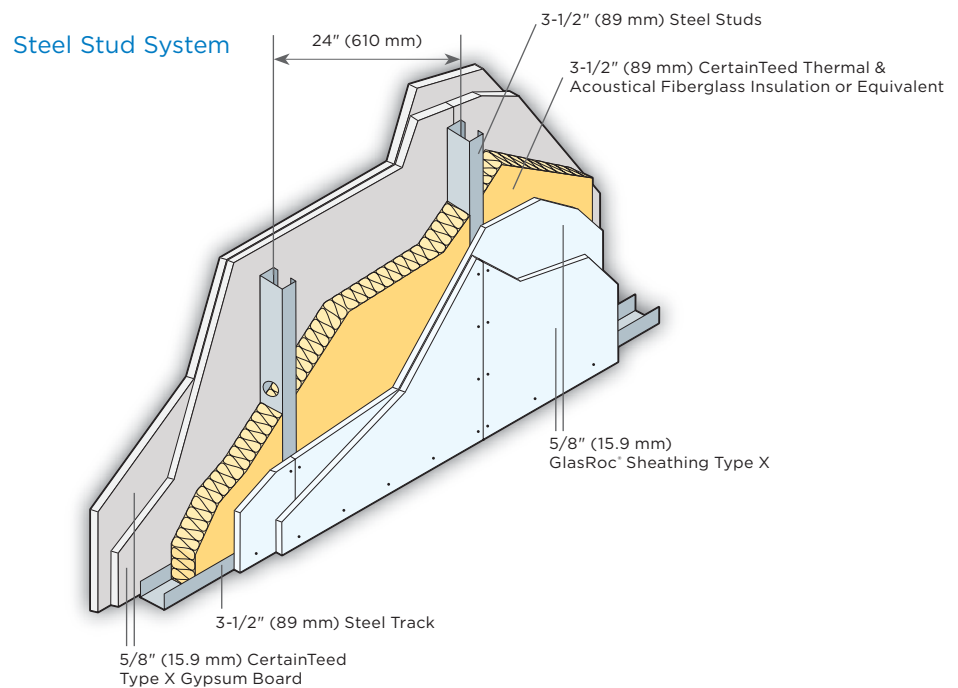
Cavity thickness..... 3-1/2" (89 mm)  
 Wall thickness..... 4-3/4" (121 mm)  
 Weight..... 6 psf (29 kg/m<sup>2</sup>)

### Interior

Install insulation between studs. Apply one layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically to interior side with 1" (25.4 mm) Type S-12 steel screws spaced 12" (300 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side. Tape and finish joints.

### Exterior

Apply one layer of 5/8" (15.9 mm) GlasRoc® Sheathing Type X vertically to exterior side with 1" (25.4 mm) screws spaced 12" (300 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side.



## Reference: UL Design W488

Cavity thickness ..... 3-1/2" (89 mm)  
 Wall thickness..... 6" (152 mm)  
 Weight..... 11 psf (54 kg/m<sup>2</sup>)

### Additional UL/cUL Design Listings for Steel Stud Systems:

U017, U405, U417, U418, U420, U421, U425, U434, U442, U445, U450, U460, U466, U467, U473, U475, U485, U487, U494, U501, U502, U504, U505, U506, U510, U512, U615, U617, U622, U623, U626, V417, V419, V450, V469, V470, V486, W409 and W440.

### Additional ULC Design Listings for Steel Stud Systems:

U418, U419, W412, W447, W449, W456 and W465.

### Interior

Install insulation between studs. Apply one layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically with 1" (25.4 mm) Type S-12 steel screws spaced 12" (300 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

Apply a face layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically with 1-5/8" (41 mm) Type S-12 steel screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints in the underlying layer. Tape and finish joints.

### Exterior

Apply a base layer of 5/8" (15.9 mm) GlasRoc® Sheathing Type X vertically with 1" (25.4 mm) Type S-12 steel screws spaced 12" (300 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

Apply a face layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X vertically with 1-5/8" (41 mm) Type S-12 steel screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints in the underlying layer.

# GlasRoc® Sheathing Type X

## Exterior Wall/Fire-Rated Systems



Reference: UL Design U305/V346

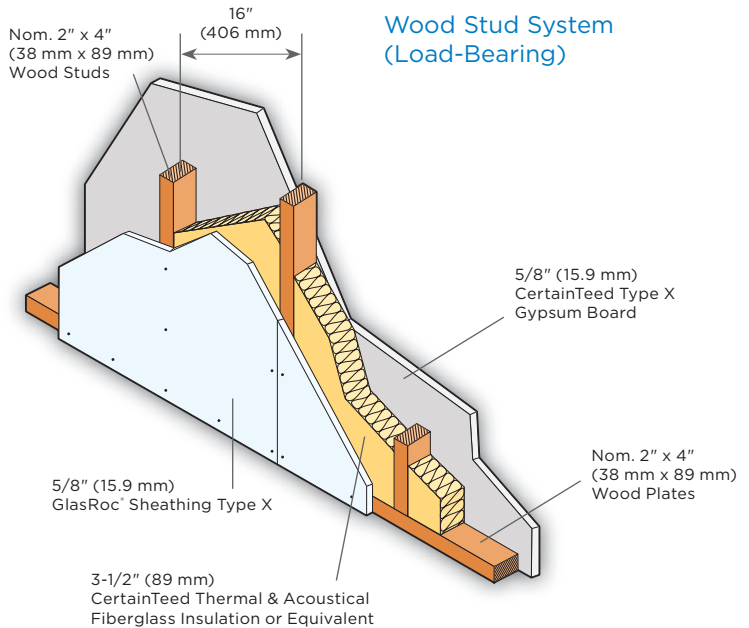
Cavity thickness..... 3-1/2" (89 mm)  
 Wall thickness..... 4-3/4" (121 mm)  
 Weight..... 7 psf (34 kg/m²)

### Interior

Install insulation between studs. Apply one layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically or horizontally with 1-1/4" (32 mm) Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side. Tape and finish joints.

### EXTERIOR

Apply one layer of 5/8" (15.9 mm) GlasRoc® Sheathing Type X vertically or horizontally with 1-1/4" (32 mm) Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side.



Reference: UL Design U309

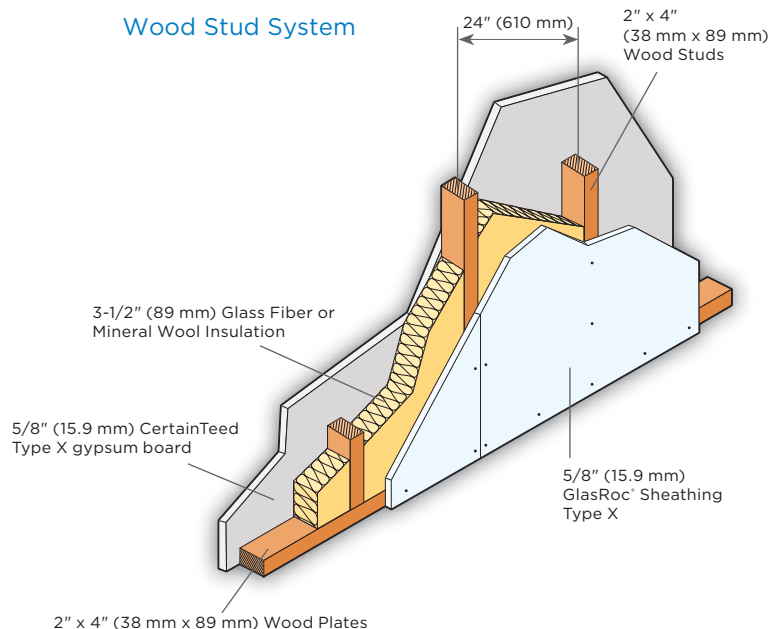
Cavity thickness..... 3-1/2" (89 mm)  
 Wall thickness..... 4-3/4" (121 mm)  
 Weight..... 7 psf (34 kg/m²)

### Interior

Install insulation between studs. Apply one layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically or horizontally with 1-1/4" (32 mm) long Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side. Tape and finish joints.

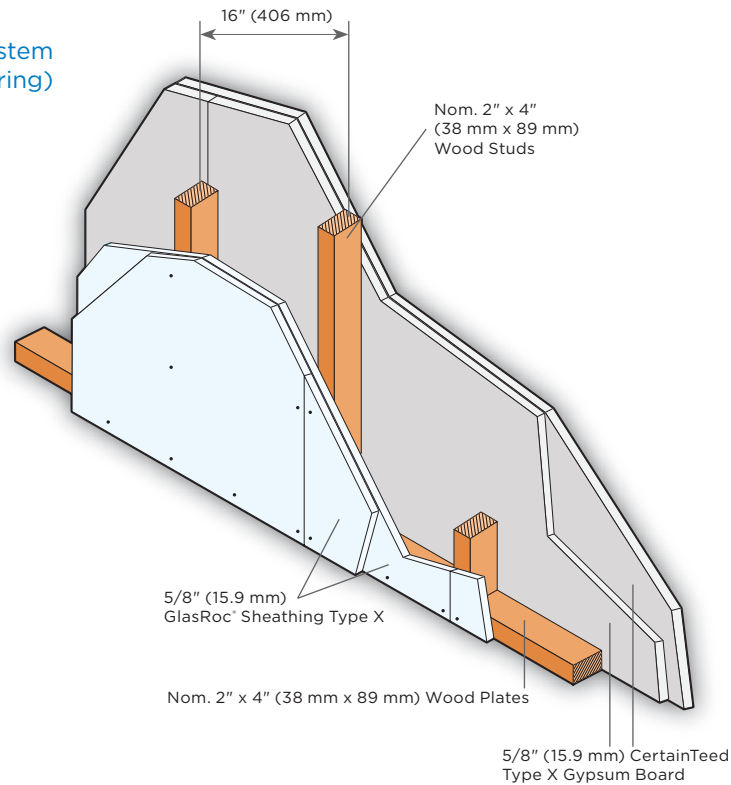
### Exterior

Apply one layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X vertically or horizontally with 1-1/4" (32 mm) long Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side.





## Wood Stud System (Load-Bearing)



## Reference: UL Design U301

Cavity thickness .....	3-1/2" (89 mm)
Wall thickness .....	6" (152 mm)
Weight.....	12 psf (59 kg/m <sup>2</sup> )

### Additional UL/cUL Design Listings for Wood Stud Systems:

U326, U329, U330, U332, U337, U338,  
U339, U341, U342, U344, U354, U355,  
U356, U357, U358, U360, U374, U376  
and U391.

### Interior

Apply a base layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically or horizontally with 1-1/4" (32 mm) long Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side. Vertical joints must be located over framing members.

Apply a face layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically or horizontally with 1-7/8" (48 mm) long Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints in the underlying layer. Tape and finish joints.

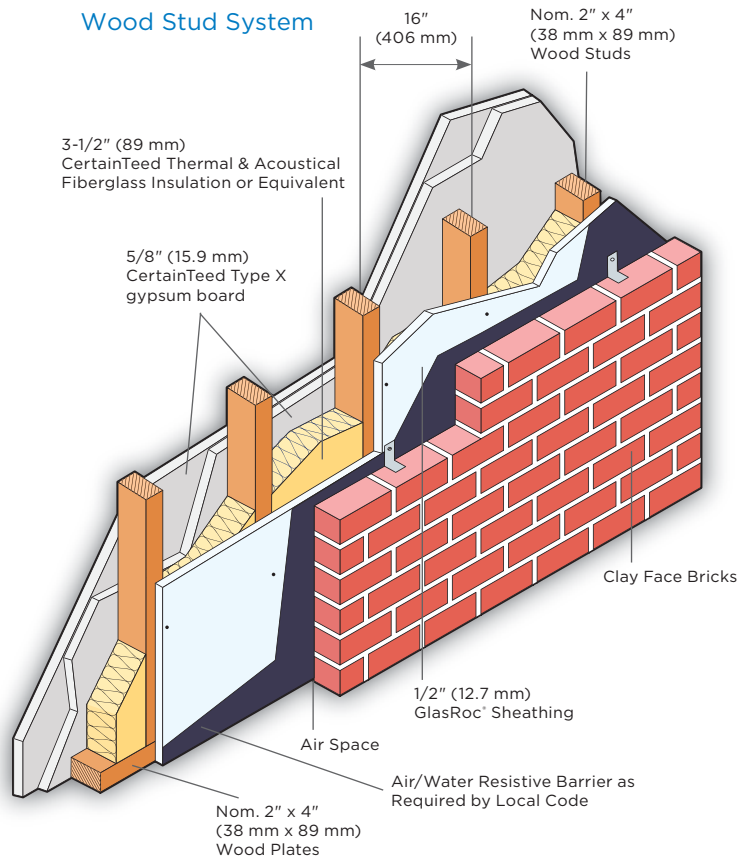
### Exterior

Apply a base layer of 5/8" (15.9 mm) GlasRoc® Sheathing Type X vertically or horizontally with 1-1/4" (32 mm) long Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints on the opposite side. Vertical joints must be located over framing members.

Apply a face layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X vertically or horizontally with 1-7/8" (48 mm) long Type W screws spaced 8" (200 mm) o.c. along edges and in the field. Joints must be offset from joints in the underlying layer. Tape and finish joints.

# GlasRoc® Sheathing Type X

## Exterior Wall/Fire-Rated Systems



### Reference: UL Design U302

Cavity thickness ..... 3-1/2" (89 mm)  
Wall thickness ..... 10" (250 mm)

#### Additional UL/cUL Design Listings for Wood Stud Systems:

U326, U329, U330, U332, U337, U338, U339, U341, U342, U344, U354, U355, U356, U357, U358, U360, U374, U376 and U391.

#### Additional ULC Design Listings for Wood Stud Systems:

W310 and W313.

### Interior

Install insulation between studs. Apply a base layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically or horizontally with 1-7/8" (48 mm) nails spaced 8" (200 mm) o.c. Vertical joints must be located over framing members.

Apply a face layer of 5/8" (15.9 mm) CertainTeed Type X gypsum board vertically or horizontally to the interior side with 2-3/8" (60 mm) nails spaced 8" (200 mm) o.c. Joints must be offset from joints in the underlying layer. Tape and finish joints.

### Exterior

Apply one layer of 1/2" (12.7 mm) GlasRoc® Sheathing horizontally to the exterior side with 1-3/4" (44 mm) roofing nails spaced 6" (152 mm) o.c. Vertical joints must be located over framing members and staggered.

# GlasRoc® Sheathing Type X

## Floor & Ceiling Systems / Fire-Rated



Reference: UL Design G501

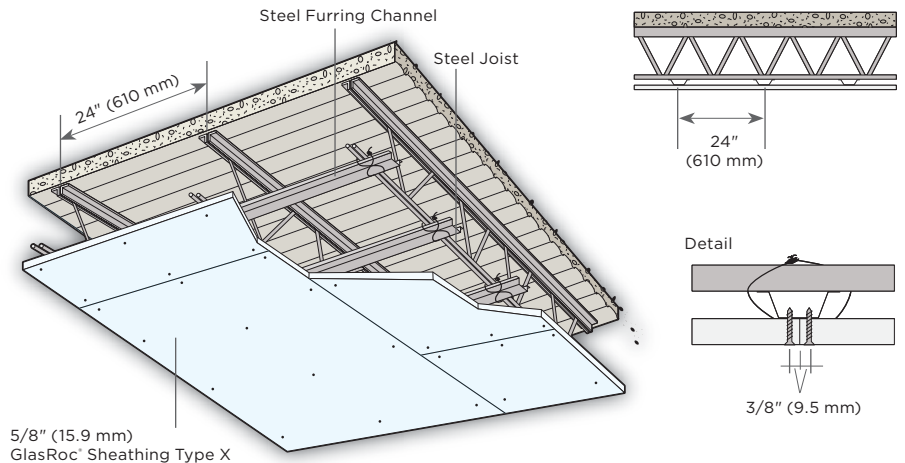
### Flooring

2" (51 mm) 3000 psi (21 MPa) compressive strength normal weight concrete poured over steel deck.

### Ceiling

Fasten steel furring channels to joists 24" (610 mm) o.c. with double tie wires, except 12" (300 mm) o.c. at end joints. See Detail. Adjoining lengths of channels lapped 2'-6" (750 mm).

Apply one layer of 5/8" (15.9 mm) GlasRoc® Sheathing Type X with the long dimension perpendicular to the furring channels with 2" (51 mm) Type S steel screws spaced 6" (152 mm) o.c. starting with a 3" (76 mm) stagger.



Reference: UL Design L501

Thickness..... 11" (279 mm)  
Weight..... 13.5 psf (66 kg/m²)

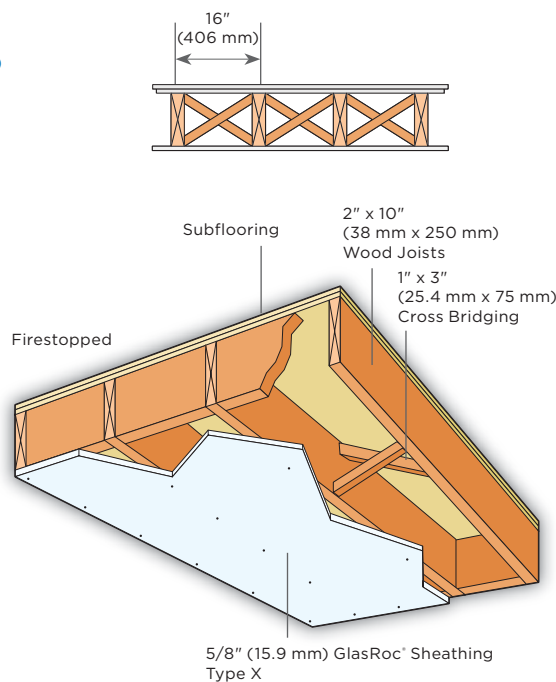
### Framing

Set joists 16" (406 mm) o.c.  
Cross-brace and firestop, as required.

### Flooring

Apply subflooring with face grain perpendicular to joist with joints staggered. Finished flooring wood structural grade T&G Douglas Fir plywood with face grain perpendicular to joists with joints staggered.

Apply one layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X with the long dimension perpendicular to joists with 1-7/8" (48 mm) nails spaced 6" (152 mm) o.c. Finish and tape joints.



#### Additional UL/cUL Design Listings for Floor-Ceiling Systems

Steel Joist Floor-Ceiling: G520 and G531.

Wood Joist Floor-Ceiling: L508, L591, M561, and M568

Wood I-Joist Floor-Ceiling: M535 and M544

# GlasRoc® Sheathing Type X

## Beam & Column Systems / Fire-Rated

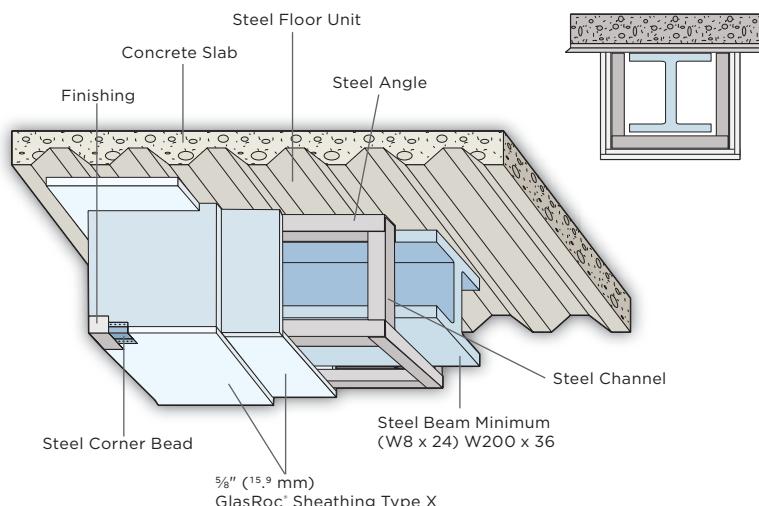


Reference: UL Design N502

### Steel Beams

Attach channels to steel deck with 1/2" (12.7 mm) Phillips pan head screws spaced 12" (300 mm) o.c. Fabricate channel brackets by cutting notches in channel at location of corners and fold channel to form U-bracket of the required size. A minimum 1/2" (12.7 mm) clearance is required at sides and bottom of the beam.

Attach channel to angle 24" (610 mm) o.c., with 1/2" (12.7 mm) Phillips pan head screws. Place steel corner angle at lower corners of U-brackets. Apply a base layer of 5/8" (15.9 mm) GlasRoc® Sheathing Type X with 1-1/4" (32 mm) Phillips pan head screws spaced 16" (406 mm) o.c. Apply a face layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X with 1-3/4" (44 mm) Phillips pan head screws spaced 8" (200 mm) o.c. Joints must be offset from the joints in the underlaying layer. Attach corner bead to corners. Tape and finish joints.

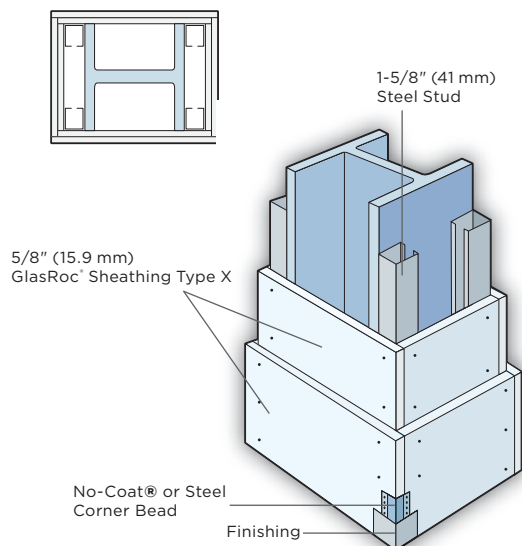


Reference: UL Design X528

### Steel Columns

Position steel studs at column corners. Steel studs should be 1/2" (12.7 mm) less than assembly height.

Apply a base layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X vertically with 1" (25.4 mm) Phillips pan head screws spaced 24" (610 mm) o.c. Apply a face layer of 5/8" (15.9 mm) GlasRoc Sheathing Type X vertically around the perimeter with 1-3/4" (44 mm) Phillips pan head screws spaced 12" (300 mm) o.c. Apply corner bead with 1-5/8" (41 mm) screws spaced 12" (300 mm) o.c. Tape and finish joints.



Additional UL/cUL Design Listings for Beam & Column Systems

Beam Protection: N501 and N505.

Column Protection: X508, X516, X517, X525 and X526.



# GlasRoc® Sheathing

## Fastening Patterns

Fastening patterns and other detailed information for the recommended handling, storage and application of gypsum sheathing can be found below and in the following GA installation specification guides: GA-253 Application of Gypsum Sheathing, GA-254 Fire Resistant Gypsum Sheathing, GA-216 Application and Finishing of Gypsum Board and GA-226 Application of Gypsum Board to Curved Surfaces.

### Fastening Guidelines

- Fasten GlasRoc® Sheathing using only recommended nails or screws.
- Always apply GlasRoc Sheathing to a flat and even framing surface.
- Drive fasteners to a point even with or slightly below [no greater than 1/32" (0.8 mm)] the surface of GlasRoc Sheathing, without penetrating glass mat.
- Locate perimeter fasteners a minimum of 3/8" (9.5 mm) from edges and ends with a maximum spacing of 8" (200 mm) o.c.
- For shear resistance applications, space perimeter fasteners a maximum of 4" (102 mm) o.c.
- Space fasteners in the field of the board a maximum of 8" (200 mm) o.c.

### Limitations

- Do not use staples or adhesives to fasten GlasRoc Sheathing to framing members.
- Do not attach GlasRoc Sheathing to framing surfaces with a plane variance greater than 1/8" (3.2 mm).
- Do not overdrive fasteners. Be careful not to break the protective surface coating, fracture the underlying core or penetrate the glass mat.
- GlasRoc Sheathing is not recommended or intended for use as a fastening base.
- Not recommended for applications where continuous exposure temperatures exceed 125°F (52°C).

Recommendations for Fasteners		Recommended Fastener Length for Board Thickness	
Framing Type	Fastener Description	1/2" (12.7 mm) GlasRoc® Sheathing	5/8" (15.9 mm) GlasRoc® Sheathing Type X
Wood	Hot dip 12 gauge, 7/16" (11 mm) head, galvanized nail	1-1/2" (38 mm)	1-3/4" (44 mm)
Wood	Hot dip 12 gauge, 7/16" (11 mm) head, galvanized nail	1-1/2" (38 mm)	1-3/4" (44 mm)
Wood/Furring	Bugle head (Type W) corrosion resistant screws with coarse threads	1-1/4" (32 mm)	1-1/4" (32 mm) to 1-5/8" (41 mm)
Steel/Furring	Bugle head (Type S) corrosion resistant screws with fine threads	1" (25.4 mm)	1-1/4" (32 mm)
Light Steel	Bugle head (Type S) corrosion resistant screws with fine threads	1-1/4" (32 mm)	1-1/4" (32 mm)
Light Steel	Bugle head (Type S, Type S-12) steel drill screws	1-1/4" (32 mm)	1-1/4" (32 mm) to 1-5/8" (41 mm)
Heavy/Light Steel	Bugle head (Type S-12, Type S) steel drill tip screws	1-1/4" (32 mm)	1-1/4" (32 mm) to 1-5/8" (41 mm)
Heavy Steel	Bugle head (Type S-12) drill tip, fine thread, rust resistant gypsum board screws	1" (25.4 mm)	1-1/4" (32 mm) to 1-5/8" (41 mm)

## Framing & Joint Treatments

### Wall Framing

Where required, diagonal let-in bracing is recommended for corners.

- 1/2" (12.7 mm) GlasRoc Sheathing should be fastened to wood or steel framing spaced no more than a maximum of 24" (610 mm) o.c.
- 5/8" (15.9 mm) GlasRoc Sheathing Type X should be fastened to wood or steel framing spaced no more than a maximum of 24" (610 mm) o.c.

### Ceiling And Soffit Framing

- 1/2" (12.7 mm) GlasRoc Sheathing should be fastened to wood or steel framing spaced no more than a maximum of 16" (406 mm) o.c. for parallel to stud framing and maximum of 24" (610 mm) o.c. for perpendicular to stud framing.
- 5/8" (15.9 mm) GlasRoc Sheathing Type X should be fastened to framing spaced no more than a maximum of 24" (610 mm) o.c. parallel or perpendicular to wood or steel framing.

### Joint Treatment

- Joint treatment is not required to maintain the GlasRoc Sheathing 12-month exposure warranty
- If joint treatment is required or desired, GlasRoc Sheathing is approved with many weather resistant barrier products. Glass-fiber mesh tape and silicone emulsion meeting ASTM C920 may also be used.
- Projects and applications requiring joint treatment should consult the local building code authorities, the weather resistant barrier manufacturer, or cladding manufacturer to determine appropriate joint treatment.

# GlasRoc® Sheathing

## Limited Warranty

GlasRoc® Sheathing  
GlasRoc Sheathing® Type X

### Who And What Are Covered And For How Long

#### Five (5) Year Manufacturing Defect Limited Warranty

CertainTeed® Gypsum, Inc. ("CertainTeed") warrants to the Original Owner for five (5) years from the date of purchase\*\* that GlasRoc® Sheathing ("Product") shall be free from manufacturing defects when stored and installed according to CertainTeed's published installation guide and standard gypsum industry practices, as provided in applicable Gypsum Association (GA) publications. In addition, CertainTeed warrants that the Product will meet or exceed the manufacturing requirements and specifications of ASTM C1177.

For claims submitted to CertainTeed within the five (5) year period after the purchase date\*\* of the Product, should CertainTeed determine that a manufacturing defect exists in the Product, CertainTeed will, at its sole option, provide replacement Product or refund to the Original Owner the reasonable cost of repairing the Product determined to be defective up to a maximum of two (2) times the price paid for that Product at the time of purchase for installation.

#### Twelve (12) Month Exposure Limited Warranty

CertainTeed warrants to the Original Owner for twelve (12) months from the date of installation that the Product will withstand exposure to normal weather conditions, so long as the Product is stored and installed according to CertainTeed's published installation guide and standard gypsum industry practices, as provided in applicable Gypsum Association (GA) publications.

For claims submitted to CertainTeed within twelve (12) months from the date of installation, should CertainTeed determine that the Product failed to withstand exposure to normal weather conditions, CertainTeed will, at its sole option, provide replacement Product or refund to the Original Owner the reasonable cost of repairing the Product determined to have failed up to a maximum of two (2) times the price paid for that Product at the time of purchase for installation.

### Transferability

The coverage under this limited warranty is available to the Original Owner only and is not transferable or assignable.

### What The Original Owner Must Do

To obtain performance under this limited warranty, the Original Owner must notify CertainTeed in writing within thirty (30) days of the discovery of any claimed defect or failure and must submit with such notice, proof of date of purchase and installation. Notification must be provided to:

**CertainTeed Gypsum, Inc. 20 Moores Road  
Malvern, Pennsylvania 19355 Attention:  
Gypsum Products**

CertainTeed will review the claim and, upon its request, must be provided with samples or access to the property where the Product is installed. CertainTeed shall have thirty (30) days from receipt of the claim to inspect the Product and must be granted reasonable access for the inspection. No alterations or repairs shall be made to the Product or where it is installed prior to CertainTeed's inspection.

### Limitations

This limited warranty does not provide protection against, and CertainTeed will have no liability for, any failure, defect or damage of the Product caused by events beyond its control, including but not limited to:

- Installation and finishing practices not in accordance with CertainTeed's published installation guide and standard gypsum industry practices as provided in applicable Gypsum Association (GA) publications.
- Damage due to improper design or installation of any component or portion of the structure
- Damage to the Product caused by an EIFS system not installed accordance with the applications instructions of the EIFS manufacturer, the architectural specifications or ASTM C1397, "Standard Practice for Application of Class PB Exterior Insulation and Finish Systems".
- Failure of or defects in materials to which the Product is attached or which are attached to it. This includes any damage to the Product resulting from the installation, repair or removal of any materials installed over, adjacent to, or attached to the Product.
- Failure to maintain the building with reasonable care and to protect the Product from being subjected to more than normal use and exposure, as determined by CertainTeed.
- Claims related to mold, mildew, algae, fungus, bacteria, insects or other conditions involving organic growth.
- Use of the Product as a substrate for any exterior or coatings that are directly applied to the panel surface, excluding soffit areas.
- Any misuse, acts, omissions, or negligence of the Original Owner or any third party.
- Damage or abuse caused by improper transport, handling, or storage not in accordance with standard building practices and applicable building codes.
- Damage from immersion in water or sustained pooling or cascading of water; hurricanes, floods, fires, vandalism, hailstorms, earthquakes, high winds, tornadoes, falling objects, settling of the building, movement of the framing members, failure or distortion in the walls or foundation of the structure; or other acts of God or nature.
- Damage caused by animals or insects.
- Any other cause not a result of a manufacturing defect in the Product.

CertainTeed is not responsible for the performance of the exterior system applied over the Product, including but not limited to, coatings, cladding and wall coverings.

CertainTeed reserves the right to discontinue or modify any of its Products and shall not be liable as a result of such discontinuance or modification, nor shall CertainTeed be liable in the event replacement material varies in comparison to the original Product. If CertainTeed replaces any material under this limited warranty, it may substitute products designated by CertainTeed to be of comparable quality or price range in the event the product initially installed has been discontinued or modified.

### Exclusive Warranty And Limitation of Remedies

This document constitutes the exclusive warranty and sole remedies provided by CertainTeed. The warranty and remedies contained in this document are expressly in lieu of any and all other obligations, guarantees, warranties and representations, whether written, oral, implied by statute, at law or in equity, including without limitation, the implied warranties of merchantability, fitness for use and fitness for a particular purpose. Some states or jurisdictions may not allow the exclusion of implied warranties or may determine the period of time following the sale that a purchaser may seek a remedy under implied warranties, so the above exclusion may not apply to you.

CertainTeed's obligations, responsibilities and liability shall be limited to replacing or refunding the defective product as set forth in this limited warranty. In no event shall CertainTeed be liable for any special, indirect, incidental or consequential damages of any kind, including any damage to the property, the building or its contents, or for injury to any persons, that may occur as a result of the use of CertainTeed's products or as a result of the breach of this warranty. If your state or jurisdiction does not allow exclusions or limitations of special, indirect, incidental or consequential damages, the above limitations may not apply to you.

In no event shall CertainTeed's total liability arising out of or related to the product covered under this warranty exceed two times the original purchase price of the product.

**Except by an officer of CertainTeed, this limited warranty may not be modified, altered or expanded by anyone, including product distributors, dealers, sellers, installers and/or CertainTeed field representatives.**

**This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.**

**This limited warranty is effective for Product installed on or after July 1, 2023.**

# GlasRoc® Sheathing

Substrate for Exterior Insulation  
and Finishing System (EIFS)

## Twelve Year Limited Warranty

### Who And What Are Covered And For How Long

#### Twelve (12) Year Manufacturing Defect Limited Warranty

CertainTeed Gypsum, Inc. ("CertainTeed") warrants to the Original Owner for twelve (12) years from the date of purchase that GlasRoc® Sheathing ("Product") shall be free from manufacturing defects when used as a substrate in an architecturally-specified Exterior Insulation and Finishing System (EIFS) and that it meets or exceeds the manufacturing requirements and specifications of ASTM C1177, "Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing."

For claims submitted to CertainTeed within the twelve (12) year period after the purchase date of the Product, should CertainTeed determine that a manufacturing defect exists in the Product, CertainTeed will, at its sole option, provide replacement Product or refund to the Original Owner the reasonable cost of repairing the Product determined to be defective up to a maximum of two (2) times the price paid for that Product at the time of purchase for installation.

### Transferability

The coverage under this limited warranty is available to the Original Owner only and is not transferable or assignable.

### What The Original Owner Must Do

To obtain performance under this limited warranty, the Original Owner must notify CertainTeed in writing within the stated warranty period and within thirty (30) days of the discovery of any claimed defect or failure and must submit with such notice, proof of date of purchase and installation in order to provide CertainTeed an opportunity to investigate the claim and examine the Product. Notification must be provided to CertainTeed Gypsum, Inc., 20 Moores Road, Malvern, Pennsylvania 19355, Attention: Gypsum Products. CertainTeed will review the claim and may request samples or access to the property where the Product is installed.

### Limitations

This limited warranty does not provide protection against, and CertainTeed will have no liability for, any failure, defect or damage of the Product caused by events beyond its control, including but not limited to:

- Installation and finishing practices not in accordance with CertainTeed's published installation guide and standard gypsum industry practices as provided in applicable Gypsum Association (GA) publications.
- Installation not in accordance with applicable local building code requirements.
- Damage due to improper design or installation of any component or portion of the structure.

- Damage to the Product caused by an EIFS system not installed accordance with the applications instructions of the EIFS manufacturer, the architectural specifications or ASTM C1397, "Standard Practice for Application of Class PB Exterior Insulation and Finish Systems".
- Failure of or defects in materials to which the Product is attached or which are attached to it. This includes any damage to the Product resulting from the installation, repair or removal of any materials installed over, adjacent to, or attached to the Product.
- Failure to maintain the building with reasonable care and to protect the Product from being subjected to more than normal use and exposure, as determined by CertainTeed.
- Claims related to mold, mildew, algae, fungus, bacteria, insects or other conditions involving organic growth.
- Use of the Product as a substrate for any exterior or coatings that are directly applied to the panel surface, excluding ceiling and soffit areas.
- Any misuse, acts, omissions, or negligence of the Original Owner or any third party.
- Damage or abuse caused by improper transport, handling, or storage not in accordance with standard building practices and applicable building codes.
- Damage from immersion in water or sustained pooling or cascading of water; hurricanes, floods, fires, vandalism, hailstorms, earthquakes, high winds, tornadoes, falling objects, settling of the building, movement of the framing members, failure or distortion in the walls or foundation of the structure; or other acts of God or nature.
- Damage caused by animals or insects.
- Any other cause not a result of a manufacturing defect in the Product.
- CertainTeed is not responsible for the performance of the exterior system applied over the Product, including but not limited to, coatings, cladding and wall coverings.

CertainTeed reserves the right to discontinue or modify any of its Products and shall not be liable as a result of such discontinuance or modification, nor shall CertainTeed be liable in the event replacement material varies in comparison to the original Product. If CertainTeed replaces any material under this limited warranty, it may substitute products designated by CertainTeed to be of comparable quality or price range in the event the product initially installed has been discontinued or modified.

### Exclusive Warranty And Limitation Of Remedies

This document constitutes the exclusive warranty and sole remedies provided by CertainTeed. The warranty and remedies contained in this document are expressly in lieu of any and all other obligations, guarantees, warranties and representations, whether written, oral, implied by statute, at law or in equity, including without limitation, the implied warranties of merchantability, fitness for use and fitness for a particular purpose. Some states or jurisdictions may not allow the exclusion of implied warranties or may determine the period of time following the sale that a purchaser may seek a remedy under implied warranties, so the above exclusion may not apply to you.

CertainTeed's obligations, responsibilities and liability shall be limited to replacing or refunding the defective product as set forth in this limited warranty. In no event shall CertainTeed be liable for any special, indirect, incidental or consequential damages of any kind, including any damage to the property, the building or its contents, or for injury to any persons, that may occur as a result of the use of CertainTeed's products or as a result of the breach of this warranty. If your state or jurisdiction does not allow exclusions or limitations of special, indirect, incidental or consequential damages, the above limitations may not apply to you.

In no event shall CertainTeed's total liability arising out of or related to the product covered under this warranty exceed two times the original purchase price of the product.

**Except by an officer of CertainTeed, this limited warranty may not be modified, altered or expanded by anyone, including product distributors, dealers, sellers, installers and/or CertainTeed field representatives.**

**This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.**

**This limited warranty is effective for Product installed on or after August 1, 2020.**

# GlasRoc® Sheathing

## Architectural Specifications

Section 09253 / 06 16 00 - Sheathing

### Part 1 — General

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1. Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  1. Engineered Glass Mat Gypsum Sheathing Board.
  2. Sheathing joint-and-penetration treatment.

#### 1.3 DEFINITIONS

- A. Gypsum Board Construction Terminology Standard: Refer to ASTM C11 for definitions of terms for gypsum sheathing board construction not defined in this Section or in other referenced standards.

#### 1.4 SUBMITTALS

- A. Submit in accordance with Section 01330.
- B. Product Data: For each type of product indicated.
- C. Informational Submittals: Submit manufacturer's instructions, special procedures, and perimeter conditions requiring special attention.

#### 1.5 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: For assemblies with fire-resistance ratings, provide materials and construction identical to those of assemblies tested for fire resistance per ASTM E119 (UL 263, CAN/ULC-S101) by a testing and inspecting agency acceptable to authorities having jurisdiction.
  1. Fire-Resistance Ratings: Indicated by design designations from UL and ULC "Fire Resistance Directory" and Products Certified for Canada.
- B. Single Source Responsibility: Except where specified otherwise, obtain gypsum board products, joint treatment, and accessories from single manufacturer or from manufacturers recommended by prime manufacturer of gypsum board products.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials protected against damage from weather, direct sunlight, surface contamination, construction traffic, or other causes. Stack CertainTeed GlasRoc® Sheathing flat on leveled supports off the ground, under cover, and fully protected from weather.
  1. Store and support CertainTeed GlasRoc Sheathing board in flat stacks to prevent sagging.
  2. Protect materials to keep them dry.
  3. Protect gypsum board panels to prevent damage to edges, ends, and surfaces.

#### 1.7 COORDINATION

- A. CertainTeed GlasRoc Sheathing:
  1. Glass Mat Gypsum Sheathing Board: Intended for up to 12 (twelve) months of exposure following installation.

#### 1.8 WARRANTY

- A. Manufacturer's standard warranty for product exposed to weather without failure, when installed in accordance with manufacturer's requirements, for period of not less than 12 months.

### Part 2 — Product

#### 2.1 GYPSUM SHEATHING

- A. Glass mat gypsum sheathing meeting the requirements of ASTM C1177.
  1. CertainTeed Gypsum, Inc.
    - a. Basis of Design: "GlasRoc Sheathing"
    - b. Substitutions: Submit in accordance with Section 01600.
  2. Type and Thickness: Type X, 5/8" (15.9 mm) thick where indicated and as otherwise required to meet fire rating for specific element. [1/2" (12.7 mm) elsewhere.]
    - a. Flame spread: ASTM E84; 0; CAN/ULC-S102; 5
    - b. Smoke developed: ASTM E84; 0; CAN/ULC-S102; 5
  3. Size: 48" by not less than 96" (1219 by not less than 2438 mm); longer lengths as available to reduce number of joints.

#### 2.2 SHEATHING JOINT-AND-PENETRATION TREATMENT MATERIALS

- A. Silicone Emulsion Sealant: Meeting ASTM C920, Type S, Grade NS, compatible with glass fiber mesh tape and for covering exposed fasteners.
- B. Glass-Fiber Mesh Tape: Self-adhering glass-fiber tape, nominal 2" (51 mm) wide, of type recommended by sheathing and tape manufacturers for use with silicone emulsion sealant in sealing joints in glass mat gypsum sheathing board and with a history of successful in-service use.

#### 2.3 ACCESSORY MATERIALS

- A. Fasteners: Steel drill screws or nails, in lengths recommended by sheathing manufacturer for thickness of sheathing board to be attached, with organic-polymer or other corrosion- protective coating. For ceiling/soffit applications with Direct-Applied Exterior Finish Systems (DEFS) and painted ceilings/soffits, fasteners having a salt spray resistance of more than 800 hours according to ASTM B117 are recommended.
  1. For steel framing less than 0.0329" (0.835 mm) thick, attach sheathing with steel drill screws complying with ASTM C1002.
  2. For steel framing from 0.033 to 0.112" (8.4 to 2.84 mm) thick, attach sheathing with drill screws complying with ASTM C954.
  3. For wood framing, attach with nails or screws of type and spacing as recommended by sheathing manufacturer.

### Part 3 — Execution

#### 3.1 GYPSUM SHEATHING INSTALLATION

- A. Comply with GA-253, ASTM C1280 and manufacturer's written instructions.
- B. Install CertainTeed GlasRoc Sheathing with logo side out. Boards are also printed with "This side out" on the face side.
- C. Cut boards at penetrations, edges, and other obstructions of work; fit tightly against abutting construction, unless otherwise indicated.
  1. Install boards with a 3/8" (9.5 mm) setback where non-load-bearing construction abuts structural elements.
  2. Install boards with a 1/4" (6.4 mm) setback where they abut masonry or similar materials that might retain moisture, to prevent wicking.

3. Allow no joints greater than 1/8" (3.2 mm).
- D. Coordinate sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevents exterior moisture from passing through completed exterior wall assembly.
- E. Apply fasteners so screw heads bear tightly against face of sheathing boards but do not cut into facing.
- F. Do not bridge building expansion joints with sheathing; cut and space edges to match spacing of structural support elements.
- G. Horizontal Installation: Install sheathing with long edges in contact with edges of adjacent boards without forcing. Butt ends of boards over centers of stud flanges, and stagger end joints of adjacent boards not less than one stud spacing. Screw-attach boards at perimeter and within field of board to each steel stud.
  1. Space fasteners approximately 8" (200 mm) o.c. on framing members (or tighter spacing if recommended by manufacturer for specific application) and set back a minimum of 3/8" (9.5 mm) from edges and ends of boards.

#### 3.2 SHEATHING JOINT-AND-PENETRATION TREATMENT

- A. Seal sheathing joints, as required, according to sheathing manufacturer's written recommendations.
  1. If a weather seal is required before the application of a water-resistive barrier, apply silicone emulsion sealant on joints and trowel flat. Apply sufficient quantity of sealant to completely cover joints after troweling. Seal other penetrations and openings. Check with the water-resistive barrier manufacturer for installation instructions prior to the application of sealant.
  2. When the codes allow the application as an alternate to separate water-resistive barrier, apply glass-fiber mesh tape to glass mat gypsum sheathing board joints, and apply and trowel silicone emulsion sealant to embed sealant in entire face of tape. Apply sealant to exposed fasteners with a trowel so fasteners are completely covered. Seal other penetrations and openings.
- B. Water-Resistive Barrier:
  1. Consult building code authority having jurisdiction for requirements regarding water-resistive barrier installation, if necessary.
  2. GlasRoc Sheathing has received acceptance letters from multiple manufacturers of air/ water barrier systems.
  3. GlasRoc Sheathing is a compatible substrate for air/water barrier systems tested in accordance with CAN/ULC-S741.

#### 3.3 CEILINGS AND SOFFITS

- A. Finishing is accomplished with one of the following methods:
  1. Direct-Applied Exterior Finish System (DEFS) is applied per the manufacturer's specifications.
  2. Apply nominal 2 inch (51 mm) wide glass mesh drywall tape and 90 minute, setting-type joint compound on the board joints. Skim coat the entire surface with a setting-type compound, prime and paint with good quality exterior grade primer and paint per the manufacturer's recommendations.

### SAFETY

For more information, consult the Safety Data Sheet by contacting CertainTeed at 1-800-233-8990 or email [gethelp@saint-gobain.com](mailto:gethelp@saint-gobain.com).  
For an electronic copy of this specification, please visit [www.CertainTeed.com](http://www.CertainTeed.com).



GlasRoc® Sheathing is strong, yet flexible enough to bend to curved surfaces for project's architectural solutions.

Learn more at:  
[glasroc.com](http://glasroc.com)

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