

# 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, we're demonstrating that we are genuine advocates of building responsibly.







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# A high performance exterior sheathing

GlasRoc® Sheathing and GlasRoc Sheathing Type X are high-performance, weather-resistant drywall sheathing panels composed of a moisture resistant core and coated, reinforcing glass mat.

GlasRoc Sheathing Type X has a specially formulated core for use in fire resistance rated designs.

Made in Canada, designed and tested for Canadian construction and climates.

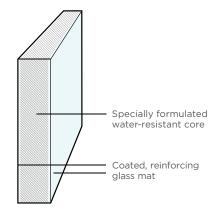
### **GLASROC SHEATHING OFFERS**

- GlasRoc Sheathing panels are a tested air barrier material in accordance with CAN/ULC-S741.
- GlasRoc Sheathing panels can be used in conjunction with air barrier components and accessories as part of an air barrier assembly (CAN/ULC-S742).
- GlasRoc Sheathing panels are approved substrates by the major EIFS manufacturers for one-coat and conventional stucco systems, traditional cladding systems, exterior ceilings, soffit systems and exterior curved applications.
- Long term protection (12 months) to weather exposure.
- A superior water resistant surface that does not inhibit water vapour permeance.
- Excellent fire resistance properties, and numerous fire rated designs.

- Mould resistance.
- Durability resists delamination due to glass mat being bonded to the drywall core.
- Strength with enough flexibility to bend to curved surfaces.
- A lightweight sheathing that cuts like regular drywall panel and is easy to handle and install — with minimal skin irritation due to coated, reinforcing glass mats.
- Conformity to design and code requirements.

The next generation GlasRoc Sheathing leads the industry standard for high-performance, weather-resistive, gypsum-based sheathing. To back it up, CertainTeed provides a:

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





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# GLASROC® SHEATHING FIRE RESISTIVE APPLICATIONS



Fire Resistance Rated
Metal Stud Systems
See Pages 12-15



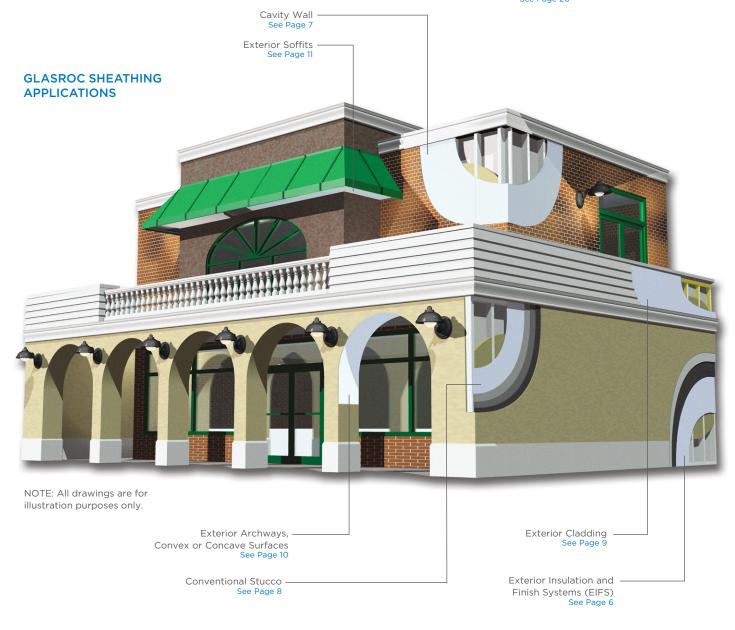
Fire Resistance Rated Wood Stud Systems See Pages 16-18



Fire Resistance Rated Floor/Ceiling Systems See Page 19



Fire Resistance Rated Steel Beam and Column See Page 20



### **Benefits**

### BETTER PHYSICAL PERFORMANCE

Tested in accordance with ASTM C1177, and applicable ASTM C1396 sections, GlasRoc® Sheathing meets or exceeds all physical property requirements.

# 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 limited warranty against exposure.

### **EXCELLENT FIRE PROTECTION**

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

GlasRoc Sheathing Type X is UL/cUL and ULC Classified for Fire Resistance for use in fire-rated designs. (UL/cUL and ULC Designations — Type EGRG or 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.
- Attaches to framing with the same fasteners used for paper-faced drywall sheathing. No special fasteners required.
- Is easier to handle because skin irritations are minimized due to the coated, reinforcing glass mats and our innovative polymer coating.
- Has uniform field and edge hardness, making trimming and fastening quick and easy.

# LONG TERM PROTECTION TO WEATHER EXPOSURE

GlasRoc Sheathing, with its homogenous water resistance throughout the panel, 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 limited warranty against exposure. GlasRoc Sheathing provides enhanced surface liquid water resistance while allowing the building's vapour drive to be unimpeded.

### **MOULD RESISTANCE**

Because GlasRoc Sheathing contains no starches or sugars, it will resist mould growth. When tested in accordance with ASTM D3273, GlasRoc Sheathing exhibited no evidence of mould or fungal growth after a period of 28 days of exposure, yielding a rating of 10.

### **INCREASED DURABILITY**

GlasRoc Sheathing resists delamination because the glass mats are bonded onto the panel, creating a more durable, dimensionally stable panel.

# STANDARDS AND CODE COMPLIANCE

GlasRoc Sheathing conforms to ASTM C1177 and applicable CAN/CSA-A82.27 and ASTM C1396 standards.

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

GlasRoc Sheathing is a compatible substrate for air/water barrier systems tested in accordance with CAN/ULC-S741.

GlasRoc Sheathing panels can be used in conjunction with air barrier components and accessories as part of an air barrier assembly (CAN/ULC-S742).



# **Product specifications**

PROPERTIES	12.7 mm (1/2") GLASROC* SHEATHING	15.9 mm (5/8") GLASROC* SHEATHING	TEST METHOD
Nominal Width	1220 mm (4')	1220 mm (4')	-
Standard Lengths*	2440 mm, 3050 mm, 3660 mm (8', 10', 12')	2440 mm, 3050 mm, 3660 mm (8', 10', 12')	-
Face Surface	Glass Mat	Glass Mat	-
Weight - kg/m² (lb/ft²)	8.8 kg/m² (1.8 lb/ft²)	12.1 kg/m² (2.5 lb/ft²)	-
Edge Profile	Square	Square	-
Bending Radius - Dry, Lengthwise	1829 mm (6')	2439 mm (8')**	-
Surface Burning Characteristics - Flame Spread	0 (0)	0 (0)	CAN/ULC-S102 (ASTM E84/UL 723)
Surface Burning Characteristics - Smoke Developed	0 (0)	0 (0)	CAN/ULC-S102 (ASTM E84/UL 723)
Mould Resistance	10 out of 10	10 out of 10	ASTM D3273
Water Resistance	≤ 10%	≤ 10%	ASTM C473
Permeance - Perms (ng/Pa•s•m²)	> 26 (1500)	> 21 (1200)	ASTM E96
Thermal Resistance - sq.ft.•h•°F/Btu (K•m²/W)	0.069 (0.392)	0.073 (0.415)	ASTM C518
Combustibility	Non-Combustible	Non-Combustible	CAN/ULC-S114 (ASTM E136)
Thermal Coefficient of Linear Expansion - mm/mm/°C (in./in./°F)	20.2 x 10-6 (11.2 x 10-6)	19.7 x 10-6 (10.9 x 10-6)	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	≥ 100 lbf (445 N)	≥ 140 lbf (623 N)	ASTM C473 (Method B)
Flexural Strength - Perpendicular	≥ 80 lbf (356 N)	≥ 100 lbf (445 N)	ASTM C473 (Method B)
Humidified Deflection	6 mm (≤ 1/4")	3 mm (≤ 1/8")	ASTM C473
Product Standard	ASTM C1177	ASTM C1177	-

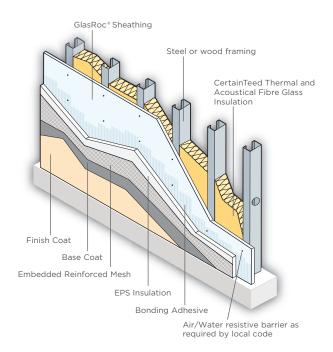
 $<sup>^{\</sup>ast}$  Other lengths available. Ask your CertainTeed sales representative.

<sup>\*\*</sup> Double fasteners on ends as needed.

### **Exterior Wall Systems**

# AS A COMPONENT OF AN EIF SYSTEM, GLASROC® SHEATHING OFFERS:

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



### Exterior insulation and finish systems (EIFS) applications

### SUPERIOR STRENGTH

GlasRoc® Sheathing integrally bonds its glass fibre to the 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. This technology, with its coated glass mats, makes GlasRoc Sheathing state-of-the-art, and will provide a flat and uniform substrate for EIFS applications.

### MOISTURE RESISTANCE

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

### **EASY TO INSTALL**

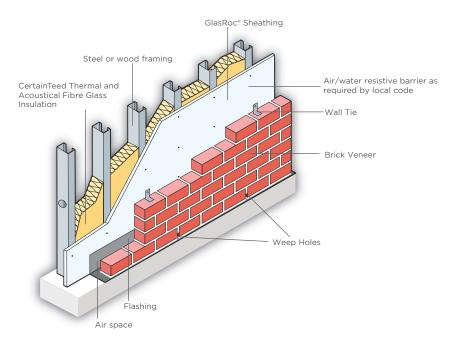
GlasRoc Sheathing is easier to handle and install. No special tools are required. Score it with a standard utility knife. Install it with standard sheathing fasteners.

- 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 0.84 mm (0.33 in.) to 2.84 mm (0.112 in.) 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

- CAN/ULC-S102 (ASTM E84): Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96: Test Methods for Water Vapour Transmission of Materials
- CAN/ULC-S101 (ASTM E119): Test Method for Fire Tests of Building Construction and Materials
- GlasRoc Sheathing panels are a tested air barrier material in accordance with CAN/ULC-S741.
- GlasRoc Sheathing panels can be used in conjunction with air barrier components and accessories as part of an air barrier assembly (CAN/ULC-S742).



### **Exterior Wall Systems**



### **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.

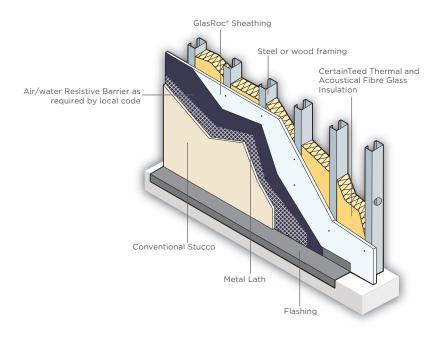
# INSTALLATION RECOMMENDATIONS

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.

- 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 0.84 mm (0.33 in.) to 2.84 mm (0.112 in.) in Thickness
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### **Exterior Wall Systems**



### **Conventional stucco applications**

GlasRoc® Sheathing's integral coated surface 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 drywall sheathing products in the market. It is manufactured to meet or exceed the physical property requirements outlined in ASTM C1177.

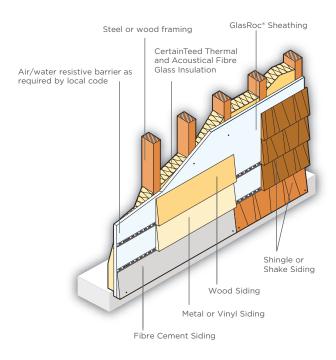
### INSTALLATION RECOMMENDATION

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.

- 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 0.84 mm (0.33 in.) to 2.84 mm (0.112 in.) 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
- CAN/ULC-S102 (ASTM E84): Test Method for Surface Burning Characteristics of Building Materials
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### **Exterior Wall Systems**



### **Exterior cladding**

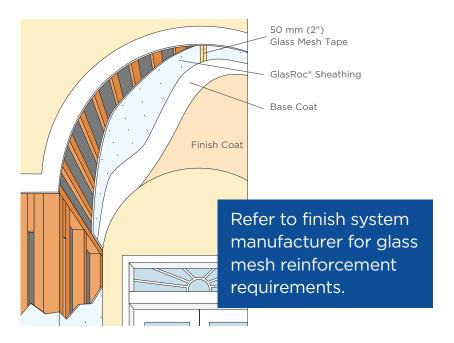
There are numerous exterior claddings available today, from shingles to shakes to a multitude of siding alternatives.

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.

- 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 0.84 mm (0.33 in.) to 2.84 mm (0.112 in.) 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
- CAN/ULC-S102 (ASTM E84): Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96: Test Methods for Water Vapour Transmission of Materials
- CAN/ULC-S101 (ASTM E119): Test Method for Fire Tests of Building Construction and Materials

### **Exterior Designs / Arches and Soffits**



### Exterior archways, exterior concave and convex surfaces

GlasRoc\* Sheathing is engineered for use in curved exterior drywall panel applications. There is no need to score or moisten the panel to bend it. To prevent flat areas in the curved surface, framing should be positioned at a maximum spacing of 150 mm (6"). 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 panel 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 200 mm (8") 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 0.84 mm (0.33 in.) to 2.84 mm (0.112 in.) in Thickness

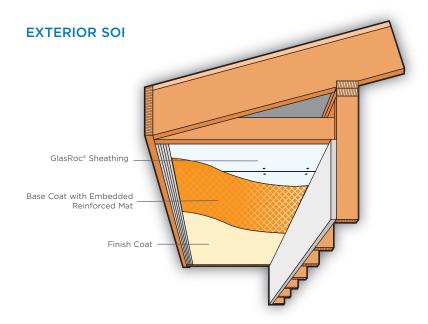
- ASTM C1002: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases
- ASTM C1177: Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
- ASTM C1280: Standard Specification for Application of Gypsum Sheathing
- ASTM C1397: Practice for Application of Class PB Exterior Insulation and Finish Systems
- CAN/ULC-S102 (ASTM E84): Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96: Test Methods for Water Vapour Transmission of Materials

### RECOMMENDED LENGTHWISE BENDING RADII

SHEATHING PANEL THICKNESS	TESTED - BENT LENGTHWISE RADII	
12.7 mm (1/2") GlasRoc® Sheathing	1829 mm (6')	
15.9 mm (5/8") GlasRoc® Sheathing Type X	2439 mm (8')**	

<sup>\*\*</sup> Double fasteners on ends as needed

### **Exterior Designs / Arches and Soffits**



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.

### Flat ceiling entryways, exterior ceilings and soffits

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 AND 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 drywall exterior soffit panel. 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 51 mm (2") glass mesh drywall tape and 90 minute setting compound, such as CertainTeed High Density 90 or M2Tech 90, on the panel joints, skim-coating the entire surface of the ceiling soffit with setting 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 0.84 mm (0.33 in.) to 2.84 mm (0.112 in.) 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
- CAN/ULC-S102 (ASTM E84): Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96: Test Methods for Water Vapour Transmission of Materials

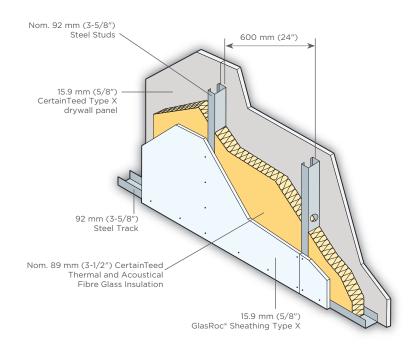
### **GLASROC® SHEATHING IN EXTERIOR CEILING AND SOFFIT APPLICATIONS**

PROPERTIES	12.7 mm (1/2") GLASROC SHEATHING		15.9 mm (5/8") GLASROC SHEATHING TYPE X	15.9 mm (5/8") GYPSUM TYPE X SOFFIT PANEL	ASTM TEST METHOD
Surface	Polymer	Paper	Polymer	Paper	
Humidified Deflection (Sag)	=< 3.2 mm (1/8")	22 mm (7/8")	=< 2.4 mm (3/32")	13 mm (1/2")	C473

### **Exterior Wall / Fire-Rated Systems**

### STEEL STUD SYSTEM





# Reference: cUL Design U465

### 1-HOUR FIRE-RESISTANCE RATING

Cavity thickness....... 92 mm (3-5/8") Wall thickness....... 124 mm (4-7/8") Weight....... 29 kg/m² (6 psf)

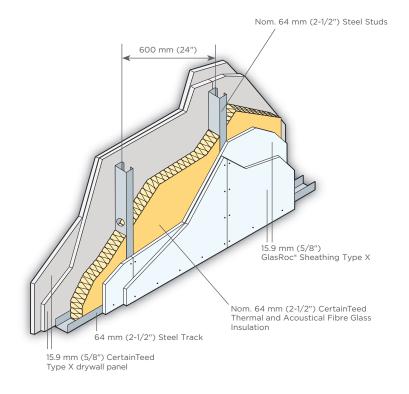
15.9 mm (5/8") panels with square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of stud. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by steel framing. Panels attached to steel studs and floor

runner with 25 mm (1") Type S steel screws spaced 200 mm (8") o.c. when applied horizontally, or 200 mm (8") o.c. along vertical and bottom edges and 300 mm (12") in the field when panels are applied vertically. When used in widths other than 1220 mm (48"), panels are to be installed horizontally.

### **Exterior Wall / Fire-Rated Systems**

### STEEL STUD SYSTEM





# Reference: cUL Design U411

### 2-HOUR FIRE-RESISTANCE RATING

Cavity thickness....... 64 mm (2-1/2")
Wall thickness....... 127 mm (5")
Weight....... 54 kg/m² (11 psf)

### **INTERIOR**

Install insulation between studs. Apply a base layer of 15.9 mm (5/8") CertainTeed Type X drywall panel vertically to interior side with 25 mm (1") Type S steel screws spaced 400 mm (16") o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

Apply a face layer of 15.9 mm (5/8") CertainTeed Type X drywall panel vertically over base layer with 41 mm (1-5/8") Type S steel screws. Space fasteners 400 mm (16") o.c. along edges and 300 mm (12") o.c. along floor and ceiling runners. Joints must be offset from joints in the underlying layer. Tape and finish joints.

### **EXTERIOR**

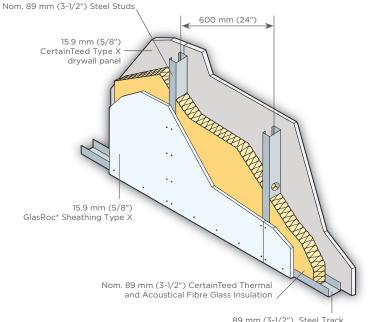
Apply a base layer of 15.9 mm (5/8") GlasRoc\* Sheathing Type X vertically to exterior side with 25 mm (1") Type S steel screws spaced 400 mm (16") o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

Apply a face layer of 15.9 mm (5/8") GlasRoc Sheathing Type X vertically over base layer with 41 mm (1-5/8") Type S steel screws. Space fasteners 400 mm (16") o.c. along edges and field and 300 mm (12") o.c. along the floor and ceiling runners. Joints must be offset from joints in the underlying layer.

### **Exterior Wall / Fire-Rated Systems**

### STEEL STUD SYSTEM





### 89 mm (3-1/2") Steel Track

### Reference: cUL Design U425

(Load-Bearing)

### 1-HOUR FIRE-RESISTANCE RATING

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

### **INTERIOR**

Install insulation between studs. Apply one layer of 15.9 mm (5/8") CertainTeed Type X drywall panel vertically to interior side with 25 mm (1") Type S-12 steel screws spaced 300 mm (12") 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 15.9 mm (5/8") GlasRoc® Sheathing Type X vertically to exterior side with 25 mm (1") screws spaced 300 mm (12") o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

### **Exterior Wall / Fire-Rated Systems**

### STEEL STUD SYSTEM





(Load-Bearing 80% of Design)

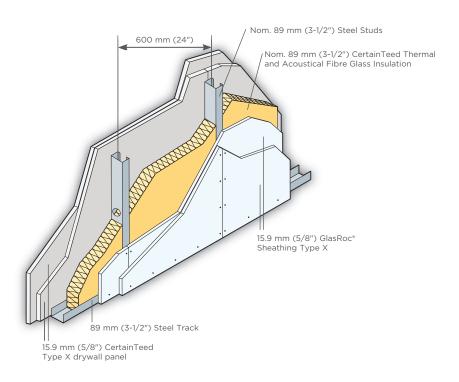
### 2-HOUR FIRE-RESISTANCE RATING

Cavity thickness....... 89 mm (3-1/2")
Wall thickness....... 150 mm (6")
Weight....... 11 psf (54 kg/m²)

### **INTERIOR**

Install insulation between studs. Apply one layer of 15.9 mm (5/8") CertainTeed Type X drywall panel vertically with 25 mm (1") Type S-12 steel screws spaced 300 mm (12") o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

Apply a face layer of 15.9 mm (5/8") CertainTeed Type X drywall panel vertically with 41 mm (1-5/8") Type S-12 steel screws spaced 300 mm (12") 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 15.9 mm (5/8") GlasRoc\* Sheathing Type X vertically with 25 mm (1") Type S-12 steel screws spaced 300 mm (12") o.c. along edges and in the field. Joints must be offset from joints on the opposite side.

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

# ADDITIONAL UL/cUL DESIGN LISTINGS FOR STEEL STUD SYSTEMS

U017, U405, U417, U418, U420, U421, 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, V469, V470, V486, W409 and W440.

# ADDITIONAL ULC DESIGN LISTINGS FOR STEEL STUD SYSTEMS

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

# ADDITIONAL GA-600 LISTINGS FOR STEEL STUD SYSTEMS

GA File No. WP 9020, WP 8006, WP 8203, WP 9200 and WP 9205.

### **Exterior Wall / Fire-Rated Systems**

# Reference: cUL Design U305

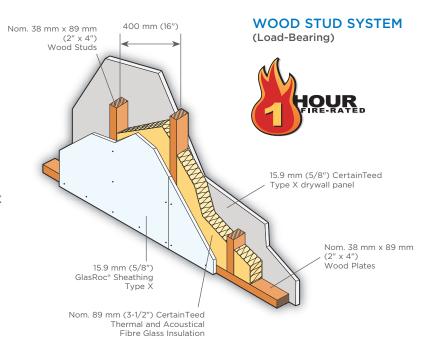
### 1-HOUR FIRE-RESISTANCE RATING

### **INTERIOR**

Install insulation between studs. Apply one layer of 15.9 mm (5/8") CertainTeed Type X drywall panel vertically or horizontally with 48 mm (1-7/8") nails spaced 175 mm (7") 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 15.9 mm (5/8") GlasRoc\* Sheathing Type X vertically or horizontally with 48 mm (1-7/8") nails spaced 175 mm (7") o.c. along edges and in the field. Joints must be offset from joints on the opposite side.



# Reference: cUL Design U309

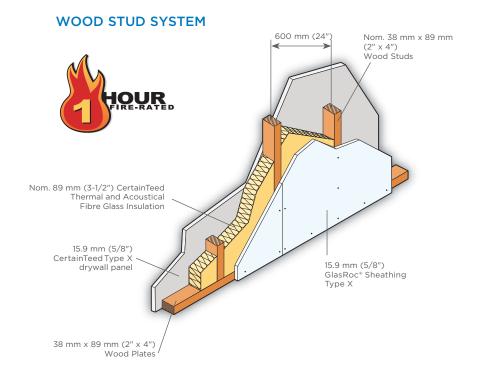
### 1-HOUR FIRE-RESISTANCE RATING

### **INTERIOR**

Install insulation between studs. Apply one layer of 15.9 mm (5/8") CertainTeed Type X drywall panel vertically or horizontally with 48 mm (1-7/8") nails spaced 175 mm (7") o.c. along edges and in the field. Joints must be offset from joints on the opposite side. Tape and finish joints.

### **EXTERIOR**

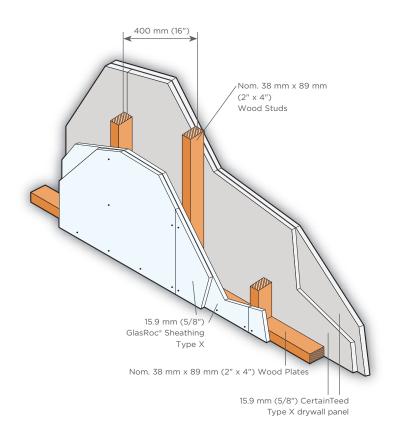
Apply one layer of 15.9 mm (5/8") GlasRoc Sheathing Type X vertically or horizontally with 48 mm (1-7/8") nails spaced 175 mm (7") o.c. along edges and in the field. Joints must be offset from joints on the opposite side.



### **Exterior Wall / Fire-Rated Systems**

### WOOD STUD SYSTEM (Load-Bearing)





# Reference: cUL Design U301

### 2-HOUR FIRE-RESISTANCE RATING

Cavity thickness......... 89 mm (3-1/2")
Wall thickness......... 152 mm (6")
Weight.................. 59 kg/m² (12 psf)

### **INTERIOR**

Apply a base layer of 15.9 mm (5/8")
CertainTeed Type X drywall panel
vertically or horizontally with 48 mm
(1-7/8") nails spaced 150 mm (6") 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 15.9 mm (5/8")
CertainTeed Type X drywall panel
vertically or horizontally with 60 mm
(2-3/8") nails spaced 200 mm (8") 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 15.9 mm (5/8") GlasRoc\* Sheathing Type X vertically or horizontally with 48 mm (1-7/8") nails spaced 150 mm (6") 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 15.9 mm (5/8") GlasRoc Sheathing Type X vertically or horizontally with 60 mm (2-3/8") nails spaced 200 mm (8") o.c. along edges and in the field. Joints must be offset from joints in the underlying layer. Tape and finish joints.

# 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, U391 and W308.

# ADDITIONAL GA-600 LISTINGS FOR WOOD STUD SYSTEMS

GA File No. WP 8105, WP 8109, WP 8111, WP 8126, WP 8130, WP 8410, WP 8415, WP 8416 and WP 8420.

### **Exterior Wall / Fire-Rated Systems**

### WOOD STUD SYSTEM



# Reference: cUL Design U302

### 2-HOUR FIRE-RESISTANCE RATING

Cavity thickness........ 89 mm (3-1/2") Wall thickness....... 254 mm (10")

### **INTERIOR**

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

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

# Nom. 89 mm (3-1/2") CertainTeed Thermal and Acoustical Fibre Glass Insulation 15.9 mm (5/8") CertainTeed Type X drywall panel Clay Face Bricks 12.7 mm (1/2") GlasRoc\* Sheathing Air Space Nom. 38 mm x 89 mm (2" x 4") Wood Plates Air/Water resistive barrier as required by local code

400 mm

(16")

### **EXTERIOR**

Apply one layer of 12.7 mm (1/2") GlasRoc\* Sheathing horizontally to the exterior side with 44 mm (1-3/4") roofing nails spaced 150 mm (6") o.c. Vertical joints must be located over framing members and staggered.

### 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

W308, W310 and W313.

# ADDITIONAL GA-600 LISTINGS FOR WOOD STUD SYSTEMS

Nom. 38 mm x 89 mm

(2" x 4")

Wood Studs

GA File No. WP 8105, WP 8109, WP 8111, WP 8126, WP 8130, WP 8410, WP 8415, WP 8416 and WP 8420.

### Fire-Rated / Floor and Ceiling Systems

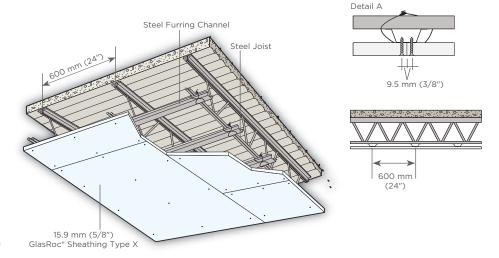


# Reference: cUL Design G501

### 1-HOUR FIRE-RESISTANCE RATING

### **FLOORING**

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



### **CEILING**

Fasten steel furring channels to joists 600 mm (24") o.c. with double tie wires, except 300 mm (12") o.c. at end joints. See Detail A. Adjoining lengths of channels lapped 750 mm (2'-6").

Apply one layer of 15.9 mm (5/8") GlasRoc\* Sheathing Type X with the long dimension perpendicular to the furring channels with 25 mm (1") Type S steel screws spaced 300 mm (12") o.c. Locate screws 12.7 mm (1/2") from edges and ends of panel.



# Reference: cUL Design L501

### 1-HOUR FIRE-RESISTANCE RATING

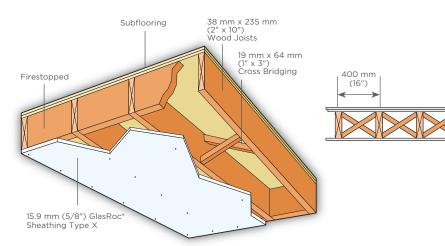
Thickness	279 mm (11")
Weight	66 kg/m <sup>2</sup> (13.5 psf)

### **FRAMING**

Set joists 400 mm (16") 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 TandG Douglas Fir plywood with face grain perpendicular to joists with joints staggered. Apply one layer of 15.9 mm (5/8") GlasRoc Sheathing Type X



with the long dimension perpendicular to joists with 48 mm (1-7/8") nails spaced 150 mm (6") 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.

# ADDITIONAL ULC DESIGN LISTINGS FOR FLOOR-CEILING SYSTEMS

Wood Joist Floor-Ceiling: M500.

### ADDITIONAL GA-600 LISTINGS FOR FLOOR-CEILING AND ROOF-CEILING SYSTEMS

Steel Joist Floor-Ceiling: GA File No. FC 1130, FC 1181, FC 2116, FC 2120, FC 4505 and FC 4750. Wood Joist Floor/Roof-Ceiling: GA File No. FC 5420, FC 5503, FC 5509, FC 5529, FC 5530, FC 5531, FC 5600, FC 5725, FC 5750, FC 5751, RC 2601, RC 2602, RC 2750 and RC 2751.

### Fire-Rated / Beam and Column Systems

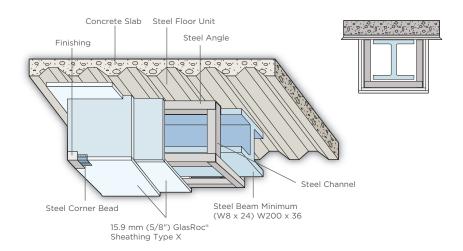


# Reference: cUL Design N502

### 2-HOUR FIRE-RESISTANCE RATING

### **STEEL BEAM**

Attach channels to steel deck with 12.7 mm (1/2") Phillips pan head screws spaced 300 mm (12") 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 12.7 mm (1/2")



clearance is required at sides and bottom of the beam.

Attach channel to angle 600 mm (24") o.c., with 12.7 mm (1/2") Phillips pan head screws. Place steel corner angle at lower corners of U-brackets. Apply a base layer of 15.9 mm (5/8") GlasRoc®

Sheathing Type X with 32 mm (1-1/4") Phillips pan head screws spaced 400 mm (16") o.c. Apply a face layer of 15.9 mm (5/8") GlasRoc Sheathing Type X with 44 mm (1-3/4") Phillips pan head screws spaced 200 mm (8") o.c. Joints must be offset from the joints in the underlaying layer. Attach corner bead to corners. Tape and finish joints.



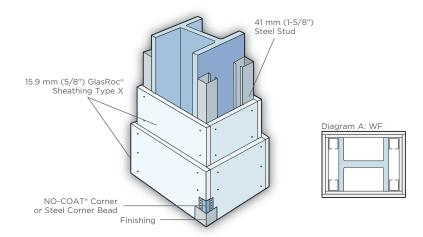
# Reference: cUL Design X528

### 2-HOUR FIRE-RESISTANCE RATING

### **STEEL COLUMNS**

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

Apply a base layer of 15.9 mm (5/8") GlasRoc Sheathing Type X vertically with 25 mm (1") Phillips pan head screws spaced 600 mm (24") o.c. Apply a face layer of 15.9 mm (5/8") GlasRoc Sheathing Type X vertically around the perimeter



with 44 mm (1-3/4") Phillips pan head screws spaced 300 mm (12") o.c. Apply corner bead with 41 mm (1-5/8") screws spaced 300 mm (12") o.c. Tape and finish joints.

### ADDITIONAL UL/cUL DESIGN LISTINGS FOR BEAM AND COLUMN SYSTEMS

Beam Protection: N501 and N505. Column Protection: X508, X516, X517, X525 and X526.

# ADDITIONAL GA-600 LISTINGS FOR BEAM AND COLUMN SYSTEMS

Beam Protection: GA File No. BM 2120 and BM 2130. Column Protection: GA File No. CM 1850, CM 1851, CM 1852, CM 1853, CM 2017, CM 2019, CM 2020, CM 2120, CM 3115, CM 3116, CM 3120, CM 4110 and CM 4600.

### **Fastening Patterns**

Fastening patterns and other detailed information for the recommended handling, storage, and application of drywall 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, 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 0.8 mm [1/32"]) the surface of GlasRoc Sheathing, without penetrating glass mat.
- Locate perimeter fasteners a minimum of 10 mm (3/8") from edges and ends with a maximum spacing of 200 mm (8") o.c.
- For shear resistance applications, space perimeter fasteners a maximum 100 mm (4") o.c.
- Space fasteners in the field of the panel a maximum of 200 mm (8") 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 3 mm (1/8").
- 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 52° C (125° F).

### **RECOMMENDATIONS FOR FASTENERS**

### RECOMMENDED FASTENER LENGTH

FRAMING TYPE	FASTENER DESCRIPTION	12.7 mm (1/2") GLASROC* SHEATHING	15.9 mm (5/8") GLASROC* SHEATHING TYPE X
Wood	Hot dip 11 gauge, 11 mm (7/16") head, galvanized nail	38 mm (1-1/2")	44 mm (1-3/4")
Wood	Hot dip 12 gauge, 11 mm (7/16") head, galvanized nail	38 mm (1-1/2")	44 mm (1-3/4")
Wood/Furring	Bugle head (Type W), corrosion resistant screws with coarse threads	32 mm (1-1/4")	32 mm (1-1/4") to 41 mm (1-5/8")
Steel/Furring	Bugle head (Type S), corrosion resistant screws with fine threads	25 mm (1")	32 mm (1-1/4")
Light Steel	Bugle head (Type S), corrosion resistant screws with fine threads	25 mm (1")	32 mm (1-1/4")
Light Steel	Bugle head (Type S, Type S-12) steel drill screws	32 mm (1-1/4")	32 mm (1-1/4") to 41 mm (1-5/8")
Heavy/Light Steel	Bugle head (Type S-12, Type S) steel drill tip screws	32 mm (1-1/4")	32 mm (1-1/4") to 41 mm (1-5/8")
Heavy Steel	Bugle head (Type S-12) drill tip, fine thread, rust resistant drywall panel screws	25 mm (1")	32 mm (1-1/4") to 41 mm (1-5/8")

### **Framing and Joint Treatments**

### **WALL FRAMING**

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

- 12.7 mm (1/2") GlasRoc Sheathing should be fastened to wood or steel framing spaced no more than a maximum of 600 mm (24") o.c.
- 15.9 mm (5/8") GlasRoc Sheathing Type X should be fastened to wood or steel framing spaced no more than a maximum of 600 mm (24") o.c.

### **CEILING AND SOFFIT FRAMING**

- 12.7 mm (1/2") GlasRoc Sheathing should be fastened to wood or steel framing spaced no more than a maximum of 400 mm (16") o.c. for parallel to stud framing and maximum of 600 mm (24") o.c. for perpendicular to stud framing.
- 15.9 mm (5/8") GlasRoc Sheathing Type X should be fastened to framing spaced no more than a maximum of 600 mm (24") o.c. parallel or perpendicular to wood or steel framing.

# GlasRoc® Sheathing GlasRoc® Sheathing Type X

### **5 Year Limited Warranty**

### WHAT IS COVERED AND FOR HOW LONG?

# Five (5) Year Limited Warranty Against Manufacturing Defects

CertainTeed Gypsum, Inc. ("CertainTeed") warrants for five (5) years from the date of purchase by the installing contractor or product applicator that its **GlasRoc\*** Sheathing ("Product") is free from manufacturing defects and meets or exceeds the manufacturing requirements and specifications of ASTM C1177.

# Twelve (12) Month Limited Warranty Against Exposure

CertainTeed warrants for up to twelve (12) months from the date of installation that the Product will withstand exposure to normal weather conditions, e.g., UV, rain, wind, ice and snow, so long as the Product is stored and installed according to CertainTeed's instructions contained in Sections 1.6 and 3.1 of the GlasRoc\* Sheathing Architectural Specifications.

The Five (5) Year Limited Warranty and the Twelve (12) Month Limited Warranty extend to dealers who sell this Product, contractors who install this Product, and the original owner of the building within the warranty period.

### **TRANSFERABILITY**

Neither the Five (5) Year Limited Warranty nor the Twelve (12) Month Limited Warranty may be assigned or transferred.

### **LIMITATIONS**

CertainTeed shall not be responsible for any loss or damage resulting from any of the following:

- Installation practices not in accordance with CertainTeed's published recommendation and specifications.
- Improper design or installation of any component or portion of the structure.
- Damage to GlasRoe\* Sheathing caused by an EIFS system not installed in accordance with the application instructions of the EIFS manufacturer, the architectural specifications or ASTM C1397, "Standard Practice for Application of Class PB Exterior Insulation and Finish Systems".
- Damage caused by animals or insects.

- Moisture intrusion including fungus and mold infestation resulting from the use of other manufacturers' products.
- Failure of the owner to maintain the building with reasonable care.
- Use of GlasRoc\* Sheathing as a substrate for any exterior or coatings that are directly applied to the panel surface (excluding soffit areas).
- Damage caused by improper handling or storage, immersion in water, floods, fires, hailstorms, earthquakes, high winds, hurricanes, acts of nature, falling objects, settling of the building, movement of the framing members, failure or distortion in the walls or foundation of the structure.
- The performance of the exterior system applied over GlasRoc\* Sheathing including but not limited to coatings, cladding and wall coverings.

### WHAT WILL CERTAINTEED DO

CertainTeed will, at its option, provide replacement Product or the reasonable cost of repairing the non-conforming Product up to a maximum of two (2) times the price paid for the Product at the time of the original purchase for installation.

### **HOW TO SUBMIT A CLAIM**

CertainTeed Gypsum

Submit all claims in writing within thirty (30) days of the discovery of any claimed defect, including a brief description of the damaged area, with a copy of the dated sales receipt, invoice and evidence of installation date, to:

20 Moores Road Malvern, PA 19355 USA Phone 800-233-8990

Attn: Product Manager, GlasRoc Sheathing

# 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.

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 GlasRoc® Sheathing sold on or after October 1, 2019.

### **Architectural Specifications**

### **SECTION 09 21 16 / 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. Sheathing Panel.
  - 2. Sheathing joint-and-penetration treatment.

### 1.3 DEFINITIONS

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

### 1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 00.
- 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 CAN/ULC-S101 (UL 263, ASTM E119) by a testing and inspecting agency acceptable to authorities having jurisdiction.
  - 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 drywall panel products, joint treatment, and accessories from single manufacturer or from manufacturers recommended by prime manufacturer of drywall panel 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.
  - Store and support CertainTeed GlasRoc\* Sheathing panel in flat stacks to prevent sagging.
  - 2. Protect materials to keep them dry and clean.
  - Protect drywall panel panels to prevent damage to edges, ends, and surfaces.

### 1.7 COORDINATION

- A. CertainTeed GlasRoc\* Sheathing:
  - 1. 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 and CAN/ULC-S741
  - 1. CertainTeed Canada, Inc.
    - i. Basis of Design: "GlasRoc" Sheathing"
    - ii. Substitutions: Submit in accordance with Section 01600.

- Type and Thickness: Type X, 15.9 mm (5/8 inch) thick where indicated and as otherwise required to meet fire rating for specific element. (12.7 mm [1/2 inch] elsewhere.)
  - i. Flame spread: CAN/ULC-S102: 0; ASTM E84: 0
  - ii. Smoke developed: CAN/ULC-S102: 0; ASTM E84: 0
- 3. Mould Resistance: ASTM D3273 rating of 10
- 4. Size: 1220 mm by not less than 2438 mm (48 by not less than 96 inches); 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. SBS modified bitumen or acrylic self-adhered membranes for joint treatment. Minimal width of 100 mm (4 inches)
- C. Glass-Fiber Mesh Tape: Self-adhering glass-fiber tape, nominal 50 mm (2 inches) wide, of type recommended by sheathing and tape manufacturers for use with silicone emulsion sealant in sealing joints in glass-mat gypsum sheathing panel 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 panel 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.
  - For steel framing less than 0.835 mm (0.0329 inch) thick, attach sheathing with steel drill screws complying with ASTM C1002.
  - For steel framing from 0.84 to 2.84 mm (0.033 to 0.112 inch) thick, attach sheathing with drill screws complying with ASTM C954.
  - 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 polymer coated side (logo side) out. Panels are also printed with "This side out" on the face side.
- C. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction, unless otherwise indicated.
  - Install panels with a 10 mm (3/8 inch) setback where non-load-bearing construction abuts structural elements.
  - Install panels with a 6 mm (1/4 inch)setback where they abut masonry or similar materials that might retain moisture, to prevent wicking.
  - 3. Allow no joints greater than 3 mm (1/8 inch)
- 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 panels 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 panels without forcing. Abut ends of panels over centers of stud flanges, and stagger end joints of adjacent panels not less than one stud spacing. Screw-attach panels at perimeter and within field of panel to each steel stud.
- Space fasteners approximately 200 mm (8 inches)
   o.c. (or tighter spacing if recommended by
   manufacturer for specific application) and set back
   a minimum of 10 mm (3/8 inch) from edges and
   ends of panels.

### 3.2 SHEATHING JOINT-AND-PENETRATION TREATMENT

- A. Seal sheathing joints, as required, according to sheathing manufacturer's written recommendations.
  - 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.
  - When permissible, a compatible self-adhered membrane can be applied. Store and install as per membrane manufacturer instruction.
  - 3. When the codes allow the application as an alternate to separate water-resistive barrier. Apply glass-fiber mesh tape to fiberglass reinforced gypsum sheathing panel 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:

- Consult building code authority having jurisdiction for requirements regarding waterresistive barrier installation, if necessary.
- C. Air-Barrier Assemblies
  - GlasRoc Sheathing can be incorporated into an air-barrier system in accordance with CAN/ULC-S742. Detail as per Code/Testing in order to maintain the integrity.

### 3.3 Ceilings and Soffits

- A. Finishing is accomplished with one of the following methods:
  - Direct-Applied Exterior Finish System (DEFS) is applied per the manufacturer's specifications.
  - Apply nominal 50 mm (2 inch) wide glass mesh drywall tape and 90 minute, setting-type joint compound on the panel joints. Skim coat the entire surface with a setting-type compound, prime and paint with high quality exterior grade primer and paint per the manufacturer's recommendations.

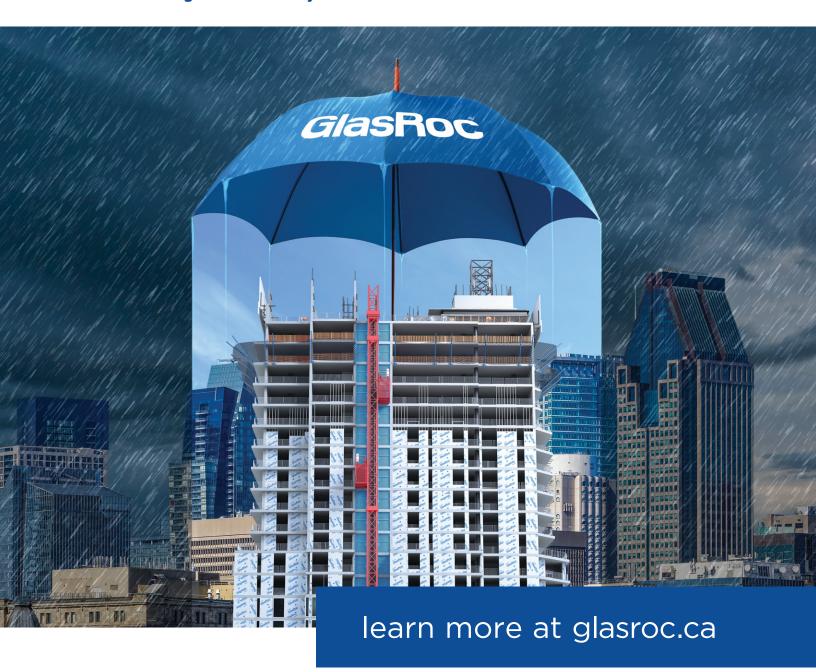
### SAFETY

For more information, consult the Safety Data Sheet by contacting CertainTeed at 1-800-233-8990 or email: building.solutions@certainteed.com.

For an electronic copy of this specification, please visit: www.certainteed.ca

# **CertainTeed**SAINT-GOBAIN

GlasRoc® Sheathing. All weather drywall for all weather construction.









The Health Product Declaration\*
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the United States and in other
countries and is being used
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