



# GlasRoc<sup>®</sup> Tile Backer

Tile Substrate for Walls and Ceilings





# GlasRoc® Tile Backer

## PRODUCT OVERVIEW

GlasRoc® Tile Backer is a tile substrate for walls and ceilings, especially designed by CertainTeed to meet the demands of high-moisture areas. Because paperless tile backer boards provide increased mold resistance, GlasRoc Tile Backer is well-suited for tile and non-tile installations in wet and non-wet applications, areas of high humidity and for fire-rated assemblies.



## FEATURES

- Specially formulated water-resistant core.
- Excellent fire-resistance properties, and numerous fire-rated designs.
- Conformity to design and code requirements.
- Lifetime Limited Warranty for residential applications.
- 20 Year Limited Warranty for commercial applications.
- Meets ASTM C1178, which is recognized by the International Building Code (IBC), International Residential Code (IRC), National Building Code of Canada (NBCC), and the Tile Council of North America (TCNA).
- Reduced surface alkalinity versus conventional cement board.

## ADVANTAGES

- Achieves best possible score of 10 for mold resistance per ASTM D3273.
- Up to 30% lighter weight than conventional cement backer boards.
- Cuts like regular gypsum board and is easy to handle and install — with minimal skin irritation.
- Low VOC Emissions; GREENGUARD Gold Certified.
- Health Product Declaration (HPD) available.
- Environmental Product Declaration (EPD) available.
- Produces low dust; excluded from "Table 1" of the OSHA Crystalline Silica Rule.

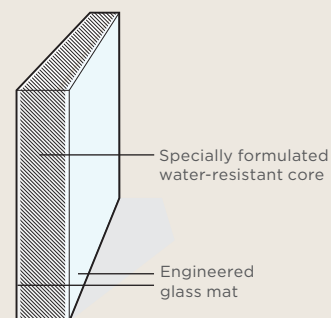


## GLASROC® PRODUCTS - ENGINEERED TECHNOLOGY

CertainTeed's GlasRoc® products feature unique engineered glass mat technology.

The GlasRoc offering provides:

- Water-resistant, paperless surface that is designed to meet the requirements of the application.
- Numerous fire-rated assembly designs for safety and performance.
- Moisture and mold resistance for protection and durability.
- Lightweight and designed to cut like regular gypsum board for ease of installation.



## TECHNICAL PROPERTIES

PROPERTIES	GLASROC® TILE BACKER 1/2" (12.7 mm)	GLASROC® TILE BACKER TYPE X 5/8" (15.9 mm)
Sizes Available*	4' x 8' (1220 mm x 2440 mm)	4' x 8' (1220 mm x 2440 mm)
Weight - lb/sq.ft. (kg/m <sup>2</sup> )	1.9 (9.28)	2.5 (12.21)
Flame Spread / Smoke Developed***	0/0	0/0
Mold Resistance Rating**	10	10
Standard Specification	ASTM C1178	ASTM C1178

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

\*\* No mold growth detected. Note that 10 is highest rating possible.

\*\*\* Tested per ASTM E84, CAN/ULC-S102.

Noncombustible per E136 and CAN/ULC-S114.

## CODE COMPLIANCE AND TESTING STANDARDS

GlasRoc® Tile Backer is IRC, IBC and National Building Code of Canada compliant in 1/2" (12.7 mm) and 5/8" (15.9 mm) thicknesses and meets ASTM C1178 as a glass mat water-resistant gypsum backing panel for use as a tile backer, as recognized by the Tile Council of North America (TCNA).

**Mold Resistance Test** – When tested in accordance with ASTM D3273, GlasRoc Tile Backer exhibited no evidence of mold or fungal growth after a period of 28 days of exposure, yielding a rating of 10, the best level of performance for mold resistance.

Under certain job site conditions, mold resistance for building products may produce different results than those achieved in a controlled, laboratory setting; however, when handled properly, using appropriate design methods and construction practices, CertainTeed's engineered glass mat technology provides increased mold resistance compared to standard moisture resistant paper faced wallboard.

**GlasRoc Tile Backer meets ASTM C1178, which is referenced by the Tile Council of North America (TCNA).**

Through the responsible development of innovative and sustainable building products, CertainTeed has helped shape the building products industry for more than 100 years. Founded in 1904 as General Roofing Manufacturing Company, the firm's slogan "Quality Made Certain, Satisfaction Guaranteed," quickly inspired the name CertainTeed. Today, CertainTeed is North America's leading brand of exterior and interior building products, including roofing, siding, fence, decking, railing, trim, insulation, gypsum and ceilings.

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# GlasRoc® Tile Backer

## BATHTUB, SHOWER WALLS AND CEILINGS

### CUTTING GLASROC TILE BACKER

GlasRoc® Tile Backer can be scored and cut with a standard utility knife and requires no special tools. Working from the printed logo side, pieces snap after scoring only one face. After cutting panels to required size, make cutouts and then snug fit ends and edges, being certain not to leave gaps between panels.

### INSTALLATION

- When used as a tile substrate for walls, install GlasRoc Tile Backer with the printed logo side facing toward the interior of the room, applied to a minimum 20-gauge (33 mil) steel or wood framing should not exceed 16" (406 mm) o.c. without blocking for 1/2" (12.7 mm); or 24" (610 mm) o.c. for 5/8" (15.9 mm). Panels can be applied horizontally or vertically.
- When used as a tile substrate for ceilings, GlasRoc Tile Backer should be applied perpendicular to framing with the printed logo side facing towards the interior of the room. Framing should be spaced no greater than 12" (300 mm) o.c. for 1/2" (12.7 mm) thickness or 16" (406 mm) o.c. for 5/8" (15.9 mm) thickness. For walls and ceilings, fasteners should be spaced 8" (200 mm) o.c. on wood or metal framing. Drive fasteners flush with the surface and do not countersink.
- Galvanized roofing nails or corrosion resistant backer panel screws may be used with wood framing. Use a minimum 1-1/2" (38 mm) long galvanized roofing nail for 1/2" (12.7 mm) and 5/8" (15.9 mm) GlasRoc Tile Backer. Use a minimum 1-1/4" (32 mm) screw length for 1/2" (12.7 mm) tile backer and a minimum screw length of 1-5/8" (41 mm) for 5/8" (15.9 mm) tile backer.

A minimum 1-1/4" (32 mm) length corrosion resistant backer panel screw should be used with steel framing for 1/2" (12.7 mm) or 5/8" (15.9 mm) GlasRoc Tile Backer.

- Using nominal 2" (50 mm) wide alkali-resistant fiber glass mesh tape on all joints and corners with material used to set tiles. Apply sealant to seal fixture and plumbing penetrations and abutments to dissimilar materials.
- If GlasRoc Tile Backer meets gypsum board outside the shower, and tiles extend beyond the gypsum board joint and GlasRoc Tile Backer, apply nominal 2" (50 mm) wide alkali-resistant fiber glass mesh tape to the joint and skim with latex-modified thinset.
- If GlasRoc Tile Backer meets gypsum board outside the shower, and tiles end before the gypsum board joint and GlasRoc Tile Backer, apply nominal 2" (50 mm) wide fiber glass mesh tape to the joint and skim with setting type joint compound, such as CertainTeed Rapid Joint® 90 Setting Compound, in order to create a smooth, paintable surface.

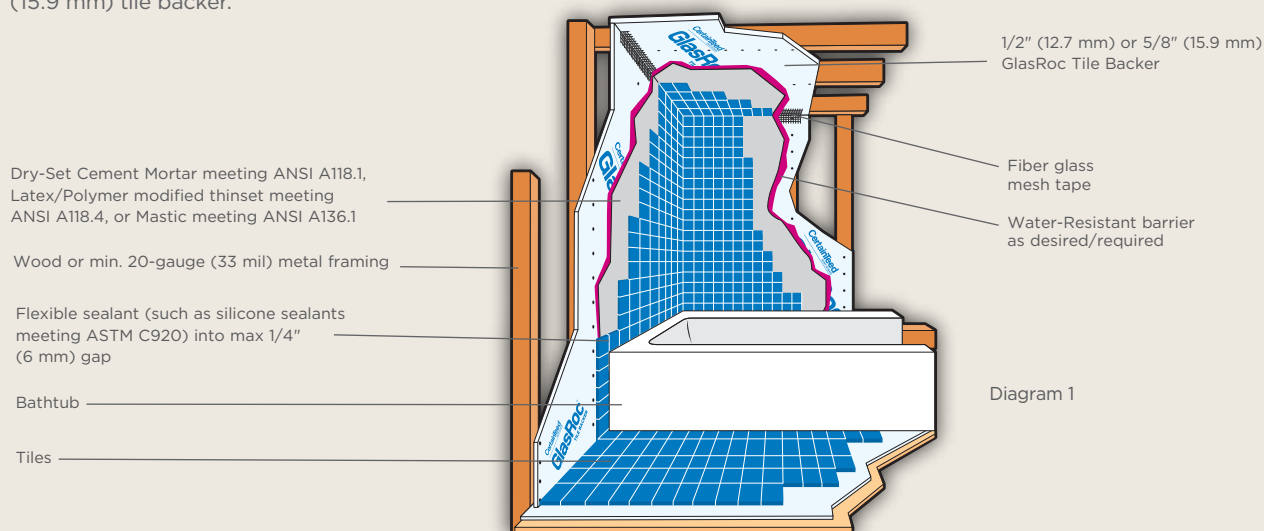
### Special Notes:

- Water-resistant barriers are optional, per the Tile Council of North America (TCNA), installation guide for glass-mat gypsum tile backer substrates meetings ASTM C1178. Water-resistant barriers can help protect a tile backer substrate if water would penetrate behind the installed tile and grout system. If a water-resistant barrier is desired or required through local building codes, water-resistant barrier meeting ANSI A118.10 should be used.

Water-resistant barriers, such as Custom Building Products RedGuard®, Laticrete HYDROBAN®, and Mapei® Mapelastic® AquaDefense are tested and approved for use with GlasRoc Tile Backer.

**If a water resistant barrier is applied, follow the water resistant barrier manufacturers installation requirements for application of the water resistant barrier and tile setting material.**

- Do not use all-purpose joint compound or paper tape in wet areas. Use nominal 2" (50 mm) wide alkali-resistant fiber glass mesh tape.
- In all corners, prior to applying the mesh tape, apply a small bead of flexible sealant meeting ASTM C920 to the joint without spreading it over the face of GlasRoc.
- Do not use GlasRoc Tile Backer as a base for nailing and mechanical fastening.
- Do not laminate GlasRoc Tile Backer directly to concrete or masonry block. Framing or furring of wall is necessary.
- The Tile Council of North America (TCNA) references period maintenance and inspection through the Approved American National Standards (ANSI) specifications. CertainTeed supports the TCNA references and recommends periodic maintenance, inspection, and repair (when necessary) of system components including, but not limited to, grout, caulking, and sealants.



## SHOWER RECEPTORS

Before installing GlasRoc® Tile Backer on walls (see Diagram 2), the shower pan or rubber membrane must be adequately sloped to the main drain or weep-hole so as not to impede proper water drainage.

For showers with curbs, a waterproof membrane must be applied up walls for a minimum of 3" (75 mm) and a maximum of 6" (152 mm) above the finished curb. GlasRoc Tile Backer should not be used in the curb.

For showers without curbs, a waterproof membrane should be applied up walls for a minimum of 6" (152 mm) and a maximum of 8" (200 mm). Satisfactory blocking should be applied at the bottom framing (e.g., wood).

### Special Notes:

- Do not place GlasRoc Tile Backer into the shower mortar bed. Leave a maximum 1/4" (6 mm) gap and fill with flexible sealant meeting ASTM C920.

If a water resistant barrier is applied, follow the water resistant barrier manufacturers installation requirement for tile setting material.

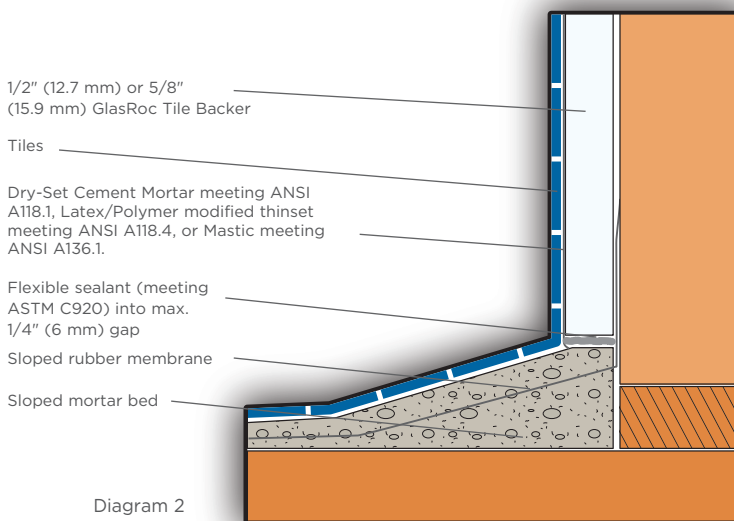


Diagram 2

## BATHTUB OR SHOWER RECEPTOR

GlasRoc Tile Backer may be applied on walls horizontally or vertically.

Thoroughly filling the space between the tile and tub with a flexible sealant will help prevent water penetration.

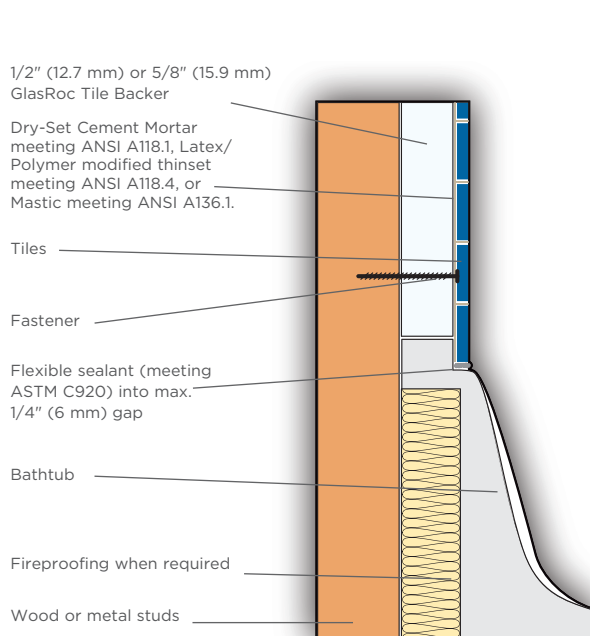


Diagram 3

## SHOWER PAN

Additional Notes: GlasRoc Tile Backer may be applied on walls horizontally or vertically.

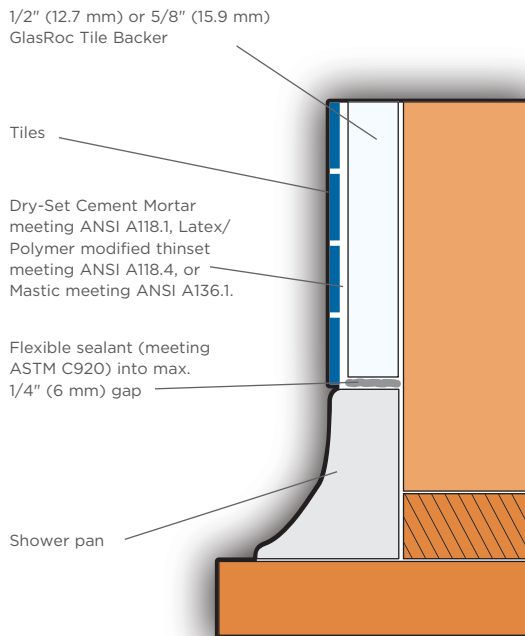


Diagram 4



# GlasRoc® Tile Backer

## COUNTERTOPS

When using GlasRoc® Tile Backer on countertops (see Diagram 5), a minimum 23/32" (18.3 mm) exterior glue plywood base must first be installed flat and level, followed by a bedding coat of latex-modified thinset on the plywood using a 1/4" x 1/4" x 1/4" (6 mm x 6 mm x 6 mm) notched trowel. Framing spacing should not exceed 24" (610 mm) o.c. Overhangs, expansion/control joints on cantilever counters must be supported to prevent movement.

Apply clean, dry GlasRoc Tile Backer to the base prior to the leveling material setting up. Fasten panel every 6" to 8" (152 mm to 200 mm) o.c. in both directions, using 1-1/4" (32 mm) galvanized roofing nails or 1-1/4" (32 mm) corrosion-resistant backerboard screws.

Stagger joints of GlasRoc Tile Backer panels with those of the plywood base, butting joints tightly. Tape all joints and corners using nominal 2" (50 mm) wide self-adhering, alkali-resistant fiber glass mesh tape and embed the tape with latex cement mortar that meets ANSI A118.4.

Install tile using latex-modified thinset, expansion/control joints and grout in accordance with ANSI A108.

Use a waterproof membrane (ANSI A118.10) to seal edge and bottom of plywood overhang at face of counter and all other plywood surfaces and edges that will be exposed to water or moisture, especially around automatic dishwashers.

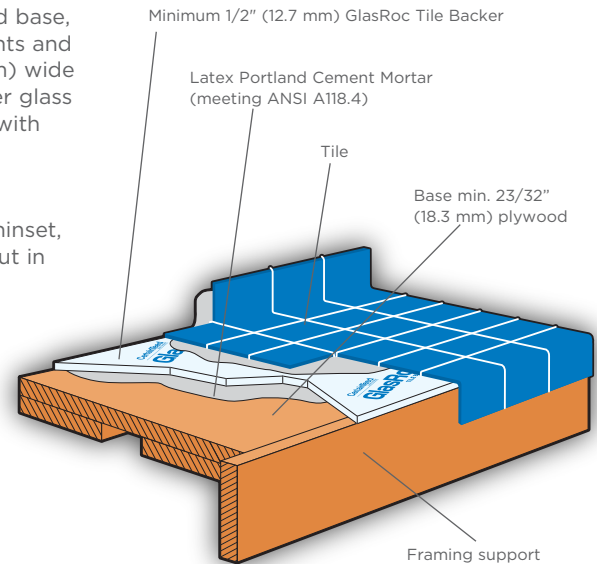


Diagram 5

## NON-TILE WALLS OR CEILINGS

### NON-TILE, NON-WET, HIGH-HUMIDITY AREAS

GlasRoc Tile Backer may also be used in interior non-tile areas that do not come in contact with water, but that experience exposure to high levels of humidity intermittently, such as areas outside tubs and showers in residential construction (see Diagram 6).

For walls, wood framing or steel (25-gauge min.) (18 mil.) should be spaced no greater than 16" (406 mm) o.c. for 1/2" (12.7 mm) GlasRoc Tile Backer and 24" (610 mm) o.c. for 5/8" (15.9 mm) GlasRoc Tile Backer. For ceilings, GlasRoc Tile Backer should be installed perpendicular to framing with framing spaced no greater than 12" (300 mm) o.c. for 1/2" (12.7 mm) thickness and 16" (406 mm) o.c. for 5/8" thickness.

Apply nominal 2" (50 mm) wide fiber glass mesh tape over joints and angles, embedding the tape in a setting-type joint compound, such as CertainTeed's Rapid Joint® Setting Compound. Using a trowel, apply a heavy skim coat to the entire panel with the compound to create a smooth surface for paint or wallpaper application. If necessary to create a suitably smooth surface, apply an additional medium skim coat of all purpose joint compound, such

as CertainTeed All-Purpose or Lite All-Purpose ready-mixed joint compounds. Before applying paint or wallpaper, the surface should be primed for high-moisture areas as recommended by the product's manufacturer for applications over setting type joint compound.

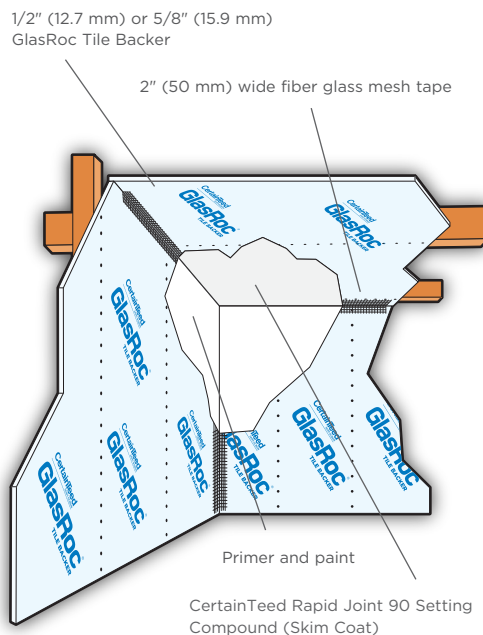


Diagram 6

### FINISHING PRODUCTS



CertainTeed  
Rapid Joint® 90



CertainTeed  
All-Purpose



CertainTeed  
MUD LITE



CertainTeed  
Lite All-Purpose



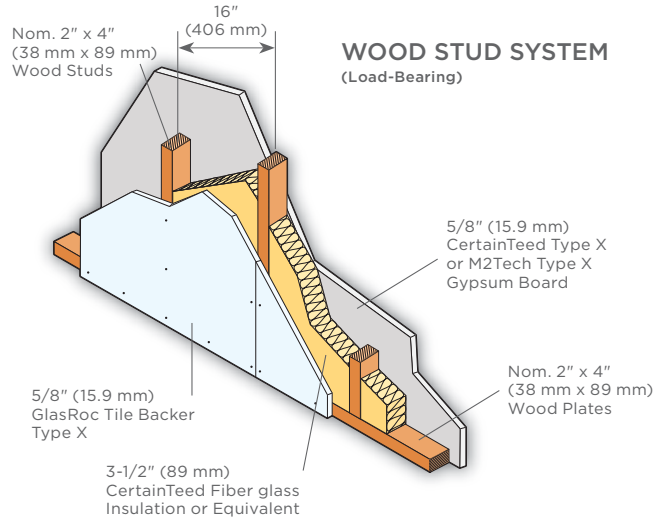
CertainTeed  
All-Purpose

# GlasRoc® Tile Backer

## FIRE-RATED ASSEMBLIES

### GLASROC® TILE BACKER TYPE X: THE ULTIMATE CHOICE

- CertainTeed offers over 180 Type X fire-rated designs in the GlasRoc® family.
- 5/8" (15.9 mm) GlasRoc Tile Backer meets Type X requirements.
- Tile installation is not required to achieve a 1- or 2-hour fire rating.
- Aligns perfectly with 5/8" (15.9 mm) CertainTeed® Type X and M2Tech® Type X gypsum board and is UL Classified.
- The UL/cUL/ULC Type Designation for 5/8" (15.9 mm) GlasRoc Tile Backer Type X is Type GlasRoc.



#### TEST REFERENCE: UL V346 OR UL U305

Partition Thickness: 4-3/4" (120.7 mm)  
Weight, lb per sq. ft.: 6.8 (33.2 kg/m²)  
5/8" (15.9 mm)

GlasRoc Tile Backer Type X applied vertically or horizontally to 2 x 4 wood studs 16" (406 mm) o.c. with 1-1/4" (32 mm) screws at 8" (200 mm) o.c. Joints staggered each side and covered with nominal 2" (50 mm) wide 10 x 10 alkali-resistant fiber glass mesh tape and tile adhesive. (Load bearing).



#### TEST REFERENCE: UL V346 OR UL U301

Partition Thickness: 6" (152 mm)  
Weight, lb per sq. ft.: 12.0 (58.6 kg/m²)  
Base Layer: 5/8" (15.9 mm)

CertainTeed Type X, M2Tech Type X or GlasRoc Tile Backer Type X gypsum board. Base layer attached horizontally or vertically to minimum 2 x 4 wood studs 16" (406 mm) o.c. with 1-1/4" (32 mm) screws at 8" (200 mm) o.c. Face Layer: 5/8" (15.9 mm) GlasRoc Tile Backer Type X applied horizontally or vertically. Face layer attached to studs over base layer with 1-7/8" (48 mm) screws spaced 8" (200 mm) o.c. Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. (Load bearing).



#### TEST REFERENCE: UL W440

Partition Thickness: 5" (127 mm)  
Weight, lb per sq. ft.: 11 (53.7 kg/m²)  
Base Layer: 5/8" (15.9 mm)

CertainTeed Type X, M2Tech Type X or GlasRoc Tile Backer Type X gypsum board applied vertically or horizontally to 2-1/2" (64 mm) metal studs 24" (600 mm) o.c. with 1" (25 mm) Type S screws 16" (406 mm) o.c. for horizontal applications and 12" (300 mm) o.c. for vertical applications

Face Layer: 5/8" (15.9 mm) GlasRoc Tile Backer Type X applied vertically or horizontally to studs with 1-5/8" (41 mm) Type S screws 16" (406 mm) o.c. for horizontal applications and 12" (300 mm) o.c. for vertical applications. Stagger joints 24" (600 mm) o.c. each layer and side. (Non-load bearing)

See "UL Fire Resistance Directory" for additional fire-rated assemblies.





# GlasRoc® Tile Backer Benefits

## BETTER PHYSICAL PERFORMANCE

Tested in accordance with ASTM C1178, GlasRoc® Tile Backer meets or exceeds all physical property requirements.

## ENHANCED DIMENSIONAL STABILITY

GlasRoc Tile Backer resists delamination, rippling, buckling and sagging related to environmental conditions, such as changes in temperature and relative humidity. GlasRoc Tile Backer will provide a flat and uniform substrate for tile applications. To back it up, CertainTeed provides a lifetime limited warranty for residential applications and a 20 year limited warranty for commercial applications.

## ENHANCED FIRE PROTECTION

Testing in accordance with ASTM E136 and CAN/ULC-S114 proved that GlasRoc Tile Backer Type X is noncombustible and offers superior fire performance. It achieves a flame-spread/smoke developed rating of 0/0 when tested per ASTM E84, CAN/ULC-S102. GlasRoc Tile Backer Type X is UL Classified for Fire resistance for use in fire rated designs. (UL Designation – GlasRoc).

## EASY TO HANDLE AND INSTALL

GlasRoc Tile Backer is handled and installed like regular paper-faced gypsum. In addition, it:

- Is significantly lighter than conventional cement board, resulting in lower installation cost.

- Can be scored and cut with a standard utility knife. No power tools required, reducing the amount of particle dust versus conventional cement board.
- Snaps free after scoring only one face
- Is easier to handle because skin irritations are minimized due to embedded glass mats and our innovative coating on the face.
- Has uniform field and edge hardness, making trimming and fastening quick and easy, as well as, reducing occurrence of overdriven fasteners.

## LOW VOC EMISSIONS

GlasRoc Tile Backer is GREENGUARD Gold Certified.

## MOISTURE AND MOLD RESISTANCE

When tested in accordance with ASTM D3273, GlasRoc Tile Backer exhibited no evidence of mold after a period of 28 days of exposure, yielding a rating of 10, the best rating possible.

## INCREASED DURABILITY

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

## STANDARDS AND CODE COMPLIANCE

GlasRoc Tile Backer conforms to ASTM C1178 standards for glass mat water-resistant gypsum backing panel for use as a tile backer. Installation standards, where applicable, are per the Tile Council of North America Inc.'s TCNA Handbook for Ceramic, Glass and Stone Tile Installation for glass mat water-resistant gypsum backer board.

## BIM/CAD INFORMATION

The BIM and CAD UL fire rated assemblies and sound assemblies can be found on CertainTeed's BIM and CAD Design Studio at [bimlibrary.saint-gobain.com/certainteed](http://bimlibrary.saint-gobain.com/certainteed). CertainTeed's BIM and CAD Design Studio provides BIM and CAD details to many UL fire rated assemblies and sound assemblies in an easy to view experience. Plus, downloadable Revit and DWG and PDF CAD Details are available.

## SUSTAINABILITY

Can contribute to the U.S. Green Building Council's LEED Credit Qualification in several credit categories to assist in obtaining LEED certification. Sustainable documentation, including recycled content, EPD's, HPD's, VOC Certifications, can be found at [saintgobain.ecomedes.com](http://saintgobain.ecomedes.com).

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## CertainTeed

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