

GlasRoc[®] Tile Backer





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 Tile Council of North America (TCNA).
- Reduced surface alkalinity versus conventional cement board.

ADVANTAGES

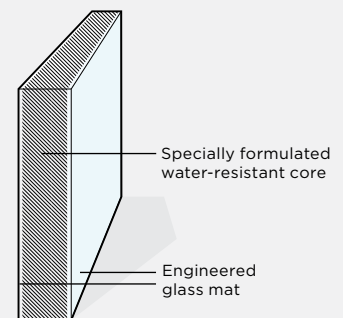
- Achieves best possible score of 10 for mold resistance per ASTM D3273.
- Up to 30% lighter weight than conventional cement backer boards.
- Cuts like regular gypsum board and is easy to handle and install — with minimal skin irritation.
- Low VOCs; GREENGUARD Gold Certified.
- Produces low dust; excluded 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 ²)	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).

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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.



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, 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, panels should be applied perpendicular to framing. 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.
- Use 1-1/2" (38 mm) galvanized roofing nails for 1/2" (12.7 mm) and 1-3/4" (44 mm) for 5/8" (15.9 mm) GlasRoc Tile Backer or for 1/2" (12.7 mm) GlasRoc Tile Backer, use 1-1/2" (38 mm) (minimum) corrosion-resistant backerboard screws. For 5/8" (15.9 mm) GlasRoc Tile Backer, use 1-5/8" (41 mm) (minimum) corrosion-resistant backerboard screws.

- Using nominal 2" (50 mm) wide alkali-resistant fiberglass mesh tape such as FibaTape® Cement Board Tape, bed 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 fiberglass mesh tape, such as FibaTape® Cement Board 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 fiberglass mesh tape such as FibaTape® Mold-X10™ Drywall Tape to the joint and skim with setting type joint compound, such as CertainTeed M2Tech® 90, in order to create a smooth, paintable surface.

Special Notes:

- A water-resistant barrier is required, before tile application, on the interior side of an exterior wall. This is especially important in tub and/or shower enclosures, due to the higher humidity levels and potential vapor drive from the interior space to the exterior. A water-resistant barrier is recommended, before tile application, when the wall is an interior wall. This includes when the tub and/or shower enclosure is an interior wall.

Water-resistant barriers, such as Custom Building Products RedGuard®, Laticrete HYDRO BAN®, 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 requirement for tile setting material.

Interior walls typically divide rooms/ areas. Exterior walls separate the interior space from the outside.

- Do not use all-purpose joint compound or paper tape in wet areas. Use nominal 2" (50 mm) wide alkali-resistant fiberglass 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.

1/2" (12.7 mm) or 5/8" (15.9 mm)
GlasRoc Tile Backer

Dry-Set Cement Mortar meeting ANSI A118.1, Latex/Polymer modified thinset meeting ANSI A118.4, or Mastic meeting ANSI A136.1.

Wood or min. 20-gauge (33 mil) metal framing

Flexible sealant (such as silicone sealants meeting ASTM C920) into max 1/4" (6 mm) gap

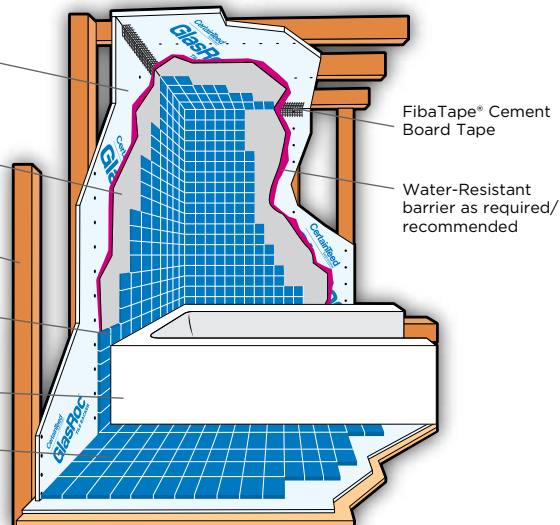
Bathtub

Tiles

FibaTape® Cement Board Tape

Water-Resistant barrier as required/recommended

Diagram 1



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.

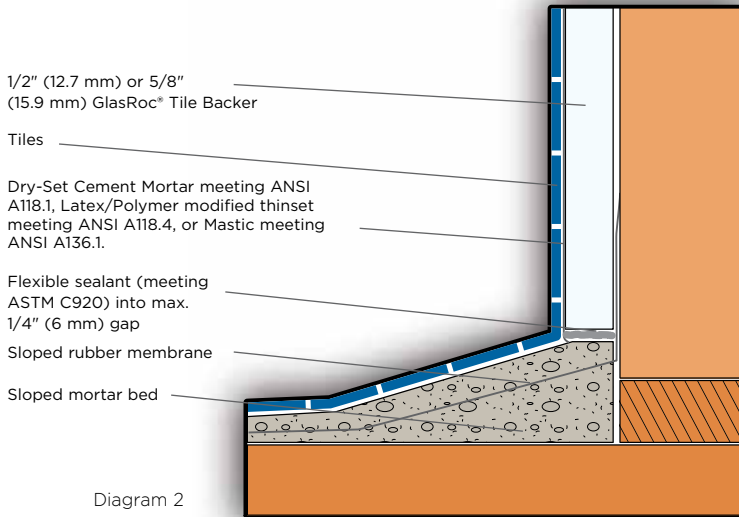
For showers with curbs, a waterproof membrane must be applied up walls for a minimum of 3" (75 mm) and a maximum of 6" (152 mm) above the finished curb. GlasRoc Tile Backer should not be used in the curb.

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.

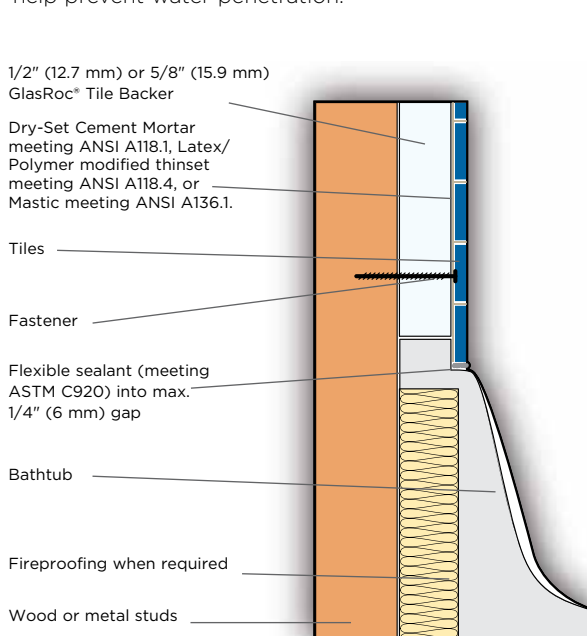
If a water resistant barrier is applied, follow the water resistant barrier manufacturers installation requirement for tile setting material.



BATHTUB OR SHOWER RECEPTOR

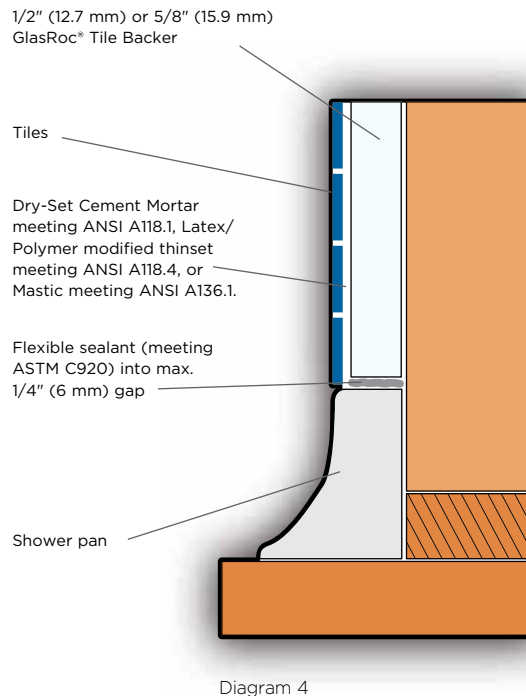
GlasRoc Tile Backer may be applied on walls horizontally or vertically.

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



SHOWER PAN

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



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 fiberglass mesh tape, such as FibaTape® Cement Board 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.

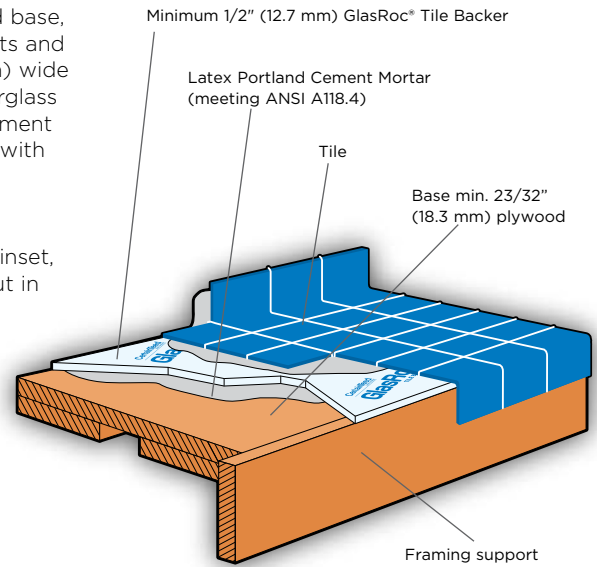


Diagram 5

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 fiberglass mesh tape, such as FibaTape® Mold-X10™ Drywall Tape, over joints and angles, embedding the tape in a setting-type joint compound, such as CertainTeed's mold resistant CertainTeed M2Tech® 90 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.

1/2" (12.7 mm) or 5/8" (15.9 mm) GlasRoc® Tile Backer

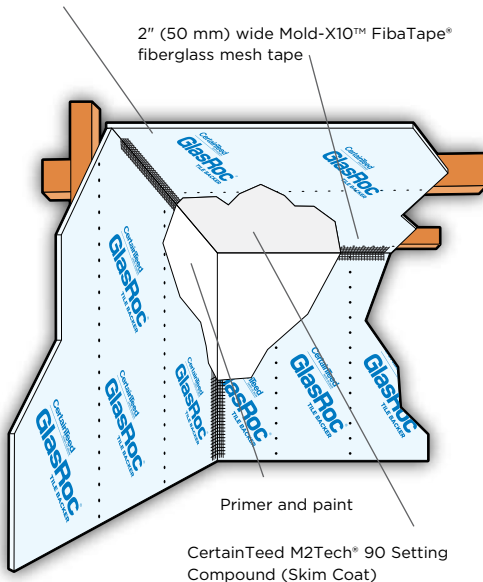


Diagram 6

FINISHING PRODUCTS



Rapid Joint® 90



Rapid Coat® All-Purpose



CertainTeed Light Sand Plus 90



CertainTeed M2Tech® 90 Setting Compound



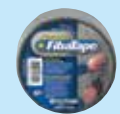
CertainTeed All-Purpose



CertainTeed Mold Resistant Lite All-Purpose



FibaTape® Mold-X10 Drywall Tape



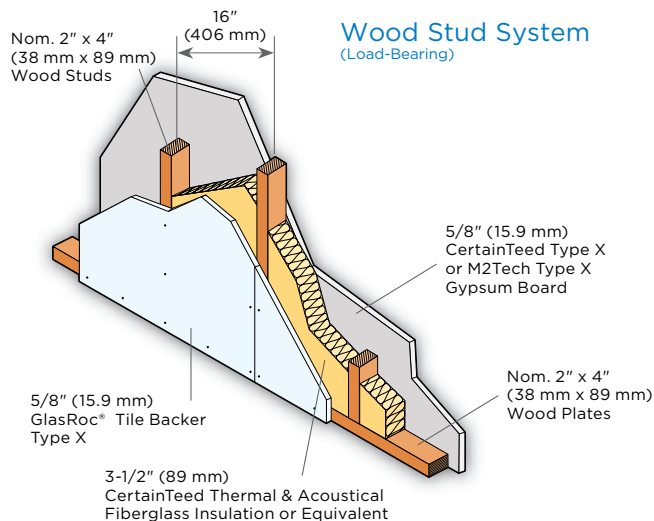
FibaTape® Cement Board Tape

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 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 parallel or at right angles to 2 x 4 wood studs 16" (406 mm) o.c. with 6d cement coated nails, 1 7/8" (48mm) long, 7" (175 mm) o.c. Joints staggered each side and covered with nominal 2" (50 mm) wide 10 x 10 alkali-resistant fiberglass mesh tape and tile adhesive. (Load bearing).



TEST REFERENCE: 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 U411

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 parallel to each side of 2-1/2" (64 mm) metal studs 24" (600 mm) o.c. with 1" (25 mm) Type S screws 16" (406 mm) o.c.

Face Layer: 5/8" (15.9 mm) GlasRoc Tile Backer Type X applied parallel to each side of studs with 1-5/8" (41 mm) Type S screws 16" (406 mm) o.c. at edge joints, 12" (300 mm) o.c. at perimeter and intermediate studs. 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 VOCS

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'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.

Learn more at: glasroc.com

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