



GlasRoc® Tile Backer Infinaé™ CarbonLow™

Regular and Type X Drywall Panels

GlasRoc® Tile Backer Infinaé™ CarbonLow™ is an interior drywall panel, made with the latest technology. It has up to 60% less embodied carbon (cradle-to-gate) than a traditional equivalent product, while keeping the same quality and performance — an industry first!

GlasRoc Tile Backer Infinaé CarbonLow is used behind tiles in interior wet areas such as bathrooms, laundries, utility rooms and kitchens. It consists of a specially formulated moisture-resistant gypsum core with engineered fibre glass facers. GlasRoc Tile Backer Infinaé CarbonLow Type X has a fire-resistant gypsum core for use in fire-resistant rated assemblies. GlasRoc Tile Backer Infinaé CarbonLow and GlasRoc Tile Backer Infinaé CarbonLow Type X are available in a variety of sizes to meet various application requirements.

RECOMMENDED USE

The CarbonLow range of products is an easy choice for commercial and residential projects with sustainability goals or lower carbon emission requirements, while meeting the essential building code requirements.

GlasRoc Tile Backer Infinaé CarbonLow panels are used in interior wet areas, non-wet areas, high-humidity areas and are typically used as a ceramic tile substrate for wall applications in bathrooms, shower tubs and enclosures, kitchens, laundry rooms and utility rooms. They may be used for walls and ceilings, countertops, and as a wall backing for laminate-faced panels or fibre glass tub and shower units to provide impact, fire and sound resistance.

5/8" GlasRoc Tile Backer Infinaé CarbonLow is a Type X fire-resistant product and is UL/ULC approved for use in applicable UL and ULC fire-rated assemblies.

ADVANTAGES

SUSTAINABILITY

- Up to 60% lower CO2 emission than traditional alternatives*
- Up to 30% lighter weight than conventional cement backer boards.
- GREENGUARD Gold certified (low VOC-emitting)

*EPD to be released soon. See LCA Action Plan on carbonlowgypsum.ca.

Job Name _____

Contractor _____

Date _____

Products Specified _____

INFINAÉ 



PRODUCT DATA

PROPERTIES	
Thickness	1/2" (12.7 mm) Regular 5/8" (15.9 mm) Type X
Width	32" (813 mm), 4' (1220 mm)
Length	5' (1524 mm), 8' (2440 mm)
Weight	1/2" (12.7 mm) - 1.9 lb/ft² (9.28 kg/m²) 5/8" (15.9 mm) - 2.5 lb/ft² (12.21 kg/m²)
Edges	Square
Packaging	Stacked, no end tapes

Custom lengths may be available on special order. Consult your CertainTeed sales representative.

TECHNICAL DATA

APPLICABLE STANDARDS AND REFERENCE	
Product Standard	ASTM C1178
Installation Guidelines	ASTM C840 / GA-216
Finishing Guidelines	ASTM C840 / GA-214 / TCNA
Code References	International Building Code (IBC)
Code References	International Residential Code (IRC)
Code References	National Building Code of Canada (NBCC)
UL/ULC Designation	GlasRoc

PERFORMANCE

- Scores and snaps like standard drywall panels.
- Achieves best possible score of 10 out of 10 for mould resistance per ASTM D3273**.
- Lifetime limited warranty for residential tile installations.
- 20 year limited warranty for commercial tile installations.
- Tile can be applied directly with Dry-Set Cement Mortar, Latex/Polymer modified thinset, or Mastic, when a water-resistant barrier is not applied, and latex/polymer modified thinset when a water-resistant barrier is applied. (Water-resistant barrier manufacturer's setting material requirements shall be followed.)

** The performance of CertainTeed Moisture and Mold Resistant drywall panel in actual use may not accurately reproduce the results achieved in this ASTM laboratory test. Good design and construction practices that prevent water and moisture exposure of building products are the most effective strategy to avoid the growth of mould.

INSTALLATION

LIMITATIONS

- Not recommended around fireplaces or other areas with continuous exposure to temperatures exceeding 125°F (52°C).
- Store indoors and off ground surface. Panels should be stacked flat with care taken to prevent sagging or damage to edges, ends and surfaces. Storage should be in accordance with the Gypsum Association GA-801, *Handling and Storage of Gypsum Panel Products*.
- Storing panel lengthwise leaning against the framing is not recommended.
- Panels should be carried, not dragged, to place of installation to prevent damaging edges.
- Cutting and scoring should be done from the printed coated side.
- In cold weather, temperatures within the enclosure should stay within the range of 50° to 95°F (10° to 35°C) and with sufficient ventilation to carry off excess moisture.
- Tile should be installed on the side with the GlasRoc® Tile Backer Infinaé™ CarbonLow™ logo.
- Installation limited to uses as referenced in the basic uses section. For other installation application areas, contact Technical Services.
- Not intended for exterior use.
- Limited to tile installation. If product other than tile is going to be installed, contact Technical Services for recommendations. 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.
- When storing panels for extended periods of time, cumulative pressure on unsupported lower units causes gypsum panel to sag. For 4' x 8' (1220 mm x 2440 mm) panels, 4" (100 mm) wide risers (separators) should be spaced evenly at 28" (700 mm), then 24" (610 mm) for the next lift, followed by 28" (700 mm) for the next lift spacing across the 8' (2440 mm) length of the panel. A good stock rotation and inventory control plan will help avoid minor sagging.

FRAMING

Installation of GlasRoc Tile Backer Infinaé CarbonLow and GlasRoc Tile Backer Infinaé CarbonLow Type X should be consistent with methods described in the standards and references noted. Framing members shall be plumb, true and firmly secured. If necessary, studs around tub enclosures and shower stalls should be furred so the inside lip of the fixture is flush with the face of the GlasRoc Tile Backer Infinaé CarbonLow. The top of the furring should be even with the upper edge of the tub or shower pan.

When used as a tile substrate for walls, minimum 33 mil (20 gauge) steel, not less than 3-1/2" (89 mm) deep for residential applications or not less than 3-5/8" (92 mm) deep for commercial applications, or wood framing. Spacing should not exceed 16" (406 mm) o.c. without blocking for 1/2" (12.7 mm); or 24" (610 mm) o.c. with blocking for 1/2" (12.7 mm) and 24" o.c. for 5/8" (15.9 mm). When used as a tile substrate for ceilings, apply perpendicular to framing spaced a maximum 12" (300 mm) o.c. for 1/2" (12.7 mm) and 16" (406 mm) o.c. for 5/8" (15.9 mm). Always provide appropriate blocking, headers or supports for tub, plumbing fixtures, soap dishes, grab bars, towel racks, etc.

PLACING FIXTURES

Waterproof receptors, pans, or sub pans shall have an upright lip or flange not less than 1" (25 mm) higher than the water dam or threshold of shower entry way, and shall be installed prior to erection of GlasRoc Tile Backer Infinaé CarbonLow.

Install a temporary strip or shim which, when removed, will provide a 1/4" (6 mm) clearance between the GlasRoc Tile Backer Infinaé CarbonLow and the lip of the tub or shower receptor.

APPLYING GLASROC TILE BACKER INFINAÉ CARBONLOW

Apply the GlasRoc Tile Backer Infinaé CarbonLow horizontally to minimize butt joints. Glass-reinforced edge should abut the top edge of the temporary strip or shim.

For fire or sound-rated construction, GlasRoc Tile Backer Infinaé CarbonLow should extend full height, floor-to-ceiling, behind tub and/or shower enclosures. Fasten the 1/2" (12.7 mm) panel with 1-1/2" (38 mm) galvanized roofing nails, 8" (200 mm) o.c., or 1-1/2" (38 mm) corrosion resistant backerpanel screws, 8" (200 mm) o.c. Drive nails and screws flush with surface. Do not countersink fasteners.

In areas to be tiled; joints and corners shall be treated with nominal 2" (50 mm) alkali-resistant fibre glass mesh tape embedded in a skim coat of the tile setting material. Do not use regular joint compound and paper tape.

Caulk/seal penetrations around pipes, fixtures, etc., and where GlasRoc Tile Backer Infinaé CarbonLow butts against dissimilar materials with a waterproof, flexible sealant or tile adhesive.

For more installation details, review the GlasRoc Tile Backer Infinaé CarbonLow Installation Instructions.

APPLYING TILE

Apply a tile setting material to the printed coated face using a Dry-Set Cement Mortar meeting ANSI A118.1, Latex/Polymer modified thinset meeting ANSI A118.4, or Mastic meeting ANSI A136.1.

Note if a water-resistant barrier is applied, follow the water-resistant barrier manufacturers requirement for tile setting material.

All tile joints shall be completely and continuously grouted.

Tile should be applied down to the top edge of the shower floor surfacing material, or the return of the shower pan, and extend over tub lip. The tile shall completely cover the following areas, including all joints and corners:

- Over tubs without shower heads — minimum of 6" (152 mm) above rim of tub.
- Over tubs with showers — minimum of 5' (1525 mm) above rim or 6" (152 mm) above shower head, whichever is higher.
- Surfacing material shall be applied to the full specified height for a distance of not less than 4" (102 mm) beyond the outside face of the tub or receptor. Areas beyond an outside corner are excluded.

Fill space between fixtures and the tile with a flexible sealant, such as silicone sealants meeting ASTM C920.

PHYSICAL PROPERTIES	1/2" (12.7 mm) GLASROC® TILE BACKER INFINAÉ™ CARBONLOW™	5/8" (15.9 mm) GLASROC® TILE BACKER INFINAÉ™ CARBONLOW™	TEST METHOD
Nominal Width	32" (813 mm), 4' (1220 mm)	4' (1220 mm)	-
Standard Lengths	5' (1524 mm), 8' (2440 mm)	8' (2440 mm)	-
Face Surface	Glass Mat	Glass Mat	-
Weight - lb/ft² (kg/m²)	1.9 lb/ft² (9.28 kg/m²)	2.5 lb/ft² (12.21 kg/m²)	-
Edge Profile	Square	Square	-
Surface Burning Characteristics - Flame Spread	0 (0)	0 (0)	CAN/ULC-102 (ASTM E84 / UL 723)
Surface Burning Characteristics - Smoke Developed	0 (0)	0 (0)	CAN/ULC-102 (ASTM E84 / UL 723)
Surface Burning Characteristics	Class A	Class A	ASTM E84 / UL 723
Mould Resistance	10 out of 10	10 out of 10	ASTM D3273
Water Absorption (% of weight)	≤ 5%	≤ 5%	ASTM C473
Surface Water Absorption	≤ 0.5 g	≤ 0.5 g	ASTM C474
Combustibility	Non-Combustible	Non-Combustible	ASTM E136 (CAN/ULC-114)
Nail Pull	≥ 70 lbf (311 N)	≥ 90 lbf (400 N)	ASTM C473 (Method B)
Core Hardness - End	≥ 15 lbf (67 N)	≥ 15 lbf (67 N)	ASTM C473 (Method B)
Core Hardness - Edge	≥ 15 lbf (67 N)	≥ 15 lbf (67 N)	ASTM C473 (Method B)
Flexural Strength - Parallel	≥ 80 lbf (356 N)	≥ 100 lbf (445 N)	ASTM C473 (Method B)
Flexural Strength - Perpendicular	≥ 100 lbf (445 N)	≥ 140 lbf (623 N)	ASTM C473 (Method B)
Humidified Deflection	≤ 1/4" (6 mm)	≤ 1/8" (3 mm)	ASTM C473

For application of plastic-finished rigid wall panels, recommendations of the panel manufacturer should be followed.

For more detailed installation instructions see GlasRoc® Tile Backer Infinaé™ CarbonLow™ installation guide.

APPLYING WATER-RESISTANT BARRIERS

A water-resistant barrier is recommended in wet areas before tile application. This is especially important in tub and/or shower enclosures due to the higher humidity levels and potential vapour drive from the interior space to the exterior.

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

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.

COUNTERTOPS

See GlasRoc Tile Backer Infinaé CarbonLow product brochure for countertop tile backer applications.

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. CertainTeed's BIM and CAD Design Studio provides BIM and CAD details to many UL fire rated assemblies and sound assemblies in easy to view experience. Plus, downloadable Revit and DWG and PDF CAD Details are available.

SUSTAINABILITY

Sustainable documentation, including recycled content, HPDs, VOC Certifications, can be found at saintgobain.ecomedes.com.

NOTICE

The information in this document is subject to change without notice. CertainTeed assumes no responsibility for any errors that may inadvertently appear in this document.

For Fire Resistance, no warranty is made other than conformance to the standard under which the assembly was tested. Minor discrepancies may exist in the values of ratings, attributable to changes in materials and standards, as well as differences between testing facilities. Assemblies are listed as "combustible" (wood framing) and "noncombustible" (concrete and/or steel construction).

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