



CGC SHEETROCK® BRAND GLASS-MAT PANELS MOLD TOUGH® VHI FIRECODE® X

High-performance, very high impact-resistant (VHI) interior panels with water and mould resistance

- Provide superior impact resistance and are an upgrade to abuse-resistant panels
- Suitable for use in pre dry-in (aka “pre-rock”) and similar applications of gypsum panels before the building envelope is fully enclosed
- For use in interior applications where glass-mat gypsum panels are desired
- Feature an inorganic fiberglass face and back
- Install and finish similar to standard drywall
- ULC Listed and cUL Classified as to fire resistance, surface burning characteristics and noncombustibility

DESCRIPTION

CGC Sheetrock® Brand Glass-Mat Panels Mold Tough® VHI are high-performance interior panels for new construction or renovation work. The panels were designed and tested to offer greater resistance to surface indentation and impact damage than standard gypsum panels. Through a proprietary process, a fiberglass reinforcing mesh is imbedded in the core adjacent to the back paper. This mesh strengthens the panels and increases resistance against impact damage. These abuse-resistant gypsum panels are recommended for commercial and institutional construction where greater resistance to indentation and impact damage are required, providing a lower-cost alternative to other impact-resistant systems for partitions from other construction methods.

The panels have a noncombustible water and mould-resistant core encased in a moisture-resistant fiberglass mat that sheds water and features tapered long edges for easy finishing. The facer mat is coloured to match traditional drywall and is treated for the application of CGC finishing systems. The back fiberglass mat features CGC’s distinctive green colour. The Firecode® X panel is ULC Listed and cUL Classified for fire resistance and can be used in any ULC and cUL designs where Type AR panels are listed.

ADVANTAGES

Mould-Resistant: Scores a 10 (highest) when tested in accordance with ASTM D3273.

Resists Water: Water-resistant gypsum core with water shedding glass-mat on both sides.

Quick Installation: Quick score-and-snap, no sawing or special tools required.

Warranted Performance: CGC Sheetrock® Glass-Mat Panels Mold Tough VHI can be exposed to weather for up to 12 months and are guaranteed for three years against manufacturing defects. See Warranty for details (EWB2752).

LIMITATIONS

1. Avoid exposure to sustained temperatures exceeding 52°C (125°F).
2. Maximum framing spacing is 406 mm (16”) o.c.
3. For abuse-resistant construction over steel framing, minimum 20-gauge drywall steel studs (0.79 mm [0.0312”] design thickness) as defined by the Steel Stud Manufacturers Association (SSMA) are recommended.
4. Non-load bearing.
5. Intended for interior applications only and must be kept dry during handling and storage. Please see GA-216, ASTM C840 and CAN/CSA A.82.31 for handling and installation guidelines including minimum 6.4 mm (1/4”) gap from floor.
6. In pre-rock applications, temporary exposure to conditions such as wind pressure and moisture may influence the selection and spacing of fasteners and/or framing.
7. CGC Sheetrock® Glass-Mat Panels Mold Tough VHI offer resistance to normal weather conditions but are not intended for constant exposure to water. Protect from immersion in water and the eroding effects of cascading water.

LIMITATIONS (CONTINUED)

8. The building must be dried-in prior to installation in soffits and other horizontal applications.
9. Wall cavities, floor cavities and other enclosed areas must be dry prior to being closed-up and application of interior finishing. Insulation in the wall or floor cavities must be dry.
10. Not suitable for use as a substrate for tile in commercial or institutional wet areas such as tubs and showers, gang showers, and other areas subject to direct water exposure. Not to be installed in areas exposed to continuous high humidity such as indoor pools or spaces subject to open or standing water. Use as a wall tile substrate is limited to tile installed according to current TTMAC, TCNA and ANSI specifications. Please consult with the adhesive and tile manufacturers for their recommendations for maximum size and weight parameters for use with gypsum drywall.

INSTALLATION

CGC Sheetrock® Brand Glass-Mat Panels Mold Tough® VHI are by design stronger and have greater surface hardness than standard 15.9 mm (5/8") Type X panels. Because of this, they are heavier and will be more difficult to install. Slower installation production rates should be accounted for in job planning. Installing CGC Sheetrock® Glass-Mat Panels Mold Tough VHI on studs fabricated with steel thinner than true 20-gauge drywall steel studs (0.79 mm [0.0312"] design thickness), as defined by the SSMA, may result in increased fastener strip-out, improper screw head seating or other related conditions. The equivalent gauge framing is also more sensitive to screw configuration and thread pitch. Due to the wide variety of "equivalent" or "effective" gauge studs and the variation by manufacturer in actual steel thickness, CGC has no specific recommendations for installing CGC Sheetrock® Glass-Mat Panels Mold Tough VHI on equivalent gauge steel studs.

FINISHING AND DECORATING

For high-quality finishing results, CGC recommends the following products:

- CGC/Synko® Ready-Mixed Joint Compounds
- CGC/Synko® Setting-Type Joint Compounds
- CGC/Synko® Joint Tape
- Sheetrock®/Beadex® Paper Faced Metal Drywall Bead and Trim
- Sheetrock® First Coat Primer or Synko® Pre-Coat Drywall Surface Equalizer
- Sheetrock® Tuff-Hide™ Primer-Surfacer

Panels should not be finished until building is completely enclosed. The nature of the texture and absorption properties of the panel will require an additional skim coat of the entire panel surface with joint compound in most applications. Additionally, an aesthetic benchmark or mock-up is recommended for establishing and demonstrating an approved finishing system to coordinate the expectations of the design professionals with those of the contracted workforce. The finished appearance of the constructed standard should be approved in advance of any widespread work. Please reference Sheetrock® Glass-Mat Panels Finishing Guide (MK_P_GMIPFINISHG_E) for more information.

Painting products and systems should be used which comply with recommendations and requirements in Appendices of ASTM C840. For priming and decorating with paint, texture or wall covering, follow manufacturer's directions for materials used. Gypsum Association GA-214, Recommended Specification for Levels of Gypsum Board Finish, should be referred to in order to determine the level of finishing needed to ensure a surface properly prepared to accept the final decoration.

All surfaces, including applied joint compound, must be thoroughly dry, dust-free, and not glossy. Prime with CGC Sheetrock® Brand First Coat Primer, Synko® Brand Pre-Coat Drywall Surface Equalizer or with an undiluted, interior latex flat paint with high solids content. Allow to dry before decorating.

To improve fastener concealment, where gypsum panel walls and ceilings will be subjected to severe artificial or natural side lighting, or be decorated with a gloss paint (egg shell, semi-gloss or gloss), the gypsum panel surface should be skim coated with joint compound. This equalizes suction and texture differences between the drywall face paper and the finished joint compound before painting. As an alternative to skim coating, or when a Level 5 finish is required, use CGC Sheetrock® Brand Tuff-Hide™ Primer-Surfacer.

PRODUCT DATA

Labeling: Each 15.9 mm (5/8") CGC Sheetrock® Brand Glass-Mat Panels Mold Tough® VHI Firecode® X panel bears the ULC and cUL label mark as evidence of ULC/UL Classifications for fire resistance, surface burning characteristics and noncombustibility.

Properties	CGC Sheetrock® Glass-Mat Panels Mold Tough VHI Firecode X
Thickness, mm (in.)	15.9 mm (5/8")
Lengths and widths ¹ , mm (ft.)	1220 mm x 2440 mm - 3660 mm (4' x 8'-12')
Weight ² , nominal, kg/m ² (psf)	13.7 kg/m ² (2.8 lb./ft. ²)
Linear expansion with moisture change, in./in. %RH	6.25 x 10 ⁻⁶
Coefficient of thermal expansion, mm/mm/°C (in./in./°F)	15.3 x 10 ⁻⁶ (8.5 x 10 ⁻⁶)
Permeance, perms	>10
Flexural strength, parallel, N (lbf)	>444 (100)
Flexural strength, perpendicular, N (lbf)	>786 (177)
R Value ² , ft. ² •°F•hr/BTU	0.5
Combustibility	Noncombustible to CAN/ULC S114
Nail pull resistance, N (lbf)	400 (90)
Hardness core, edges and ends, N (lbf)	≥67 (15)
Water absorption (% of weight)	<5
Surface water absorption, grams	<1.6 grams
Surface burning characteristics (per ASTM E84 and CAN/ULC-S102): flame spread/smoke developed	0/5
Humidified deflection, mm (in.)	<3 mm (1/8")
Bending radius, mm (ft.)	5486 mm (18')

1. Other sizes available by special order. Check with your local CGC representative for availability.
2. Represents approximate weight for design and shipping purposes. For specific product weight in your area, contact your local CGC representative or call the Customer Service Center at 1 800 387-2690.

ABUSE RESISTANCE

CGC Sheetrock® Glass-Mat Panels Mold Tough VHI are tested in accordance with ASTM C1629 and are third-party evaluated. The test procedures are summarized below:

Test Standard	Test Summary	Classification Levels	Test Results
Abrasion Resistance ASTM C1629	A sample is placed under a wire brush weighted with 25 lbs. The brush is then cycled 50 times back and forth across the surface. This creates surface wear that is measured to determine the level of abrasion resistance.	Maximum Depth Level 1 = 0.126" Level 2 = 0.059" Level 3 = 0.010"	Level 3*
Indentation Resistance ASTM C1629	A 2 lb. weight is raised to a 914 mm (36") height and dropped onto a 15.9 mm (5/8") hemispherical die that strikes the sample with 1829 mm (72")- lbs. of force. The depth of the indentation is measured to determine the level of indentation resistance.	Maximum Depth Level 1 = 0.150" Level 2 = 0.100" Level 3 = 0.050"	Level 1
Soft-Body Impact Resistance ASTM C1629	A 60 lb. leather bag is suspended on a rope and raised away angularly from a sample installed on 2" x 4" wood framing 406 mm (16" o.c.) The bag is raised (in 152 mm [6"] increments) and released to impact the sample. The impact energy is calculated based upon the bag weight and drop height where structural failure occurs.	Minimum ft.•lb (structural failure) Level 1 = 90 ft.•lb Level 2 = 195 ft.•lb Level 3 = 300 ft.•lb	Level 3
Hard-Body Impact Resistance ASTM C1629	A 2' x 2' sample is mounted vertically to a metal frame and impacted with a 70 mm (2-3/4") diameter weighted swinging ram (resembling a sledgehammer). Weight is added in 2.5 lb. increments to increase the impact force. Failure energy is determined when penetration through the face into the frame cavity occurs.	Minimum ft.•lb (structural failure) Level 1 = 50 ft.•lb Level 2 = 100 ft.•lb Level 3 = 150 ft.•lb	Level 2

*Note: Abrasion results indicative of finished product sample prepped with two coats of flat latex paint.

WATER AND MOULD RESISTANCE

CGC Sheetrock® Brand Glass-Mat Panels Mold Tough® VHI resist water and mould and comply with ASTM C1658 section 7.1.4 for water resistance. Per ASTM C473, the average water absorption for panels is not greater than 5 percent by weight after two-hour immersion.

In independent lab tests conducted on 15.9 mm (5/8") CGC Sheetrock® Glass-Mat Panels Mold Tough VHI at the time of manufacture per ASTM D3273, *"Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber,"* the panel score was 10.

This ASTM lab test may not accurately represent the mould performance of building materials in actual use. Given unsuitable project conditions during storage, installation or after completion, any building material can be overwhelmed by mould. To manage the growth of mould, the best and most cost-effective strategy is to protect building products from water exposure during storage and installation and after completion of the building. This can be accomplished by using good design and construction practices.

COMPLIANCE

- CGC Sheetrock® Glass-Mat Panels Mold Tough VHI comply with ASTM C1658, ASTM C1396 Section 7 and ASTM C1177
- Test standard ASTM C1629
- Can be used in ULC and UL designs where Type "AR" panels are listed
- Per CAN/ULC-S114, noncombustible gypsum core
- Surface Burning Characteristics per CAN/ULC-S102: flame spread is 0, smoke developed is 5

PRODUCT INFORMATION

See cgcinc.com for the most up-to-date product information.

CAUTION

Dust may cause irritation to eyes, skin, nose, throat, and upper respiratory tract. Cut and trim with a utility knife or hand saw to minimize dust levels. Power tools must be equipped with a dust collection system. Wear eye, skin, and respiratory protection if necessary. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call a physician. Do not swallow. If swallowed, call a physician. For more information call Product Safety: 800 507-8899 or see the MSDS at cgcinc.com. **KEEP OUT OF REACH OF CHILDREN.**

TRADEMARKS

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NOTE

Products described here may not be available in all geographic markets. Consult your CGC Company sales office or representative for information.

NOTICE

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

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