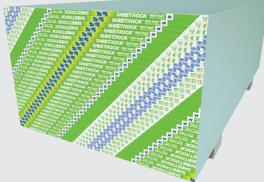


DATA SHEET



DESCRIPTION

IMPACT-RESISTANT PANELS WITH WATER AND MOULD RESISTANCE

- An upgrade to standard drywall
- Indentation resistant
- Meets ASTM C1629 level 3 for surface abrasion, 2 for soft-body impact and level 1 for indentation performance
- Can be used for a tile substrate in any location or area with limited water exposure

CGC Sheetrock® Brand Panels Mold Tough® AR Firecode® X were designed and tested to offer greater resistance to surface indentation and impact damage than standard CGC Sheetrock® Brand gypsum panels. These abuse-resistant gypsum panels are a low-cost alternative to other systems for partitions that require greater impact resistance.

CGC Sheetrock® Panels Mold Tough AR Firecode X have a noncombustible water and mould-resistant core that is encased in water and mould-resistant 100% recycled green face and brown back papers. The green face paper is folded around the long edges to reinforce and protect the core, and the ends are cut square and even. Long edges of panels are tapered, allowing joints to be reinforced and concealed with a CGC/Synko® Brand joint treatment system.

Recommended for commercial and institutional construction where greater resistance to indentation and impact damage are required, providing a low-cost alternative to other construction methods. This panel is ULC Listed and cUL Classified as to fire resistance and meets the requirement for Type X in the model building code.

Note: For projects requiring superior abuse resistance, specify CGC Sheetrock® Brand Panels Mold Tough® VHI Firecode® X.

LIMITATIONS

1. Do not expose to sustained temperatures exceeding 52 °C (125 °F).
2. Do not expose to excessive, repetitive or continuous moisture before, during or after installation. Eliminate sources of moisture immediately.
3. Not suitable for use in high-moisture areas such as tub and shower enclosures, gang showers and other areas subject to direct water exposure.
4. Non-load bearing.
5. 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 required.
6. Application of CGC Sheetrock® Panels Mold Tough AR Firecode X over insulating blanket, installed continuously across the framing members is not recommended. Blankets should be recessed and blanket flanges attached to sides of studs or joists.
7. Use as a tile substrate is limited to tile installed according to the most 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 board.
8. If panels are tiled, they should not be installed over a vapour barrier.

INSTALLATION, FINISHING AND DECORATING

CGC Sheetrock® Panels Mold Tough AR Firecode X 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 expectedly more difficult to install. Slower installation production rates should be accounted for in job planning. Installing CGC Sheetrock® Panels Mold Tough AR Firecode X 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. For fasteners, we recommend GRABBER Streaker® and Scavenger™ screws. For framing, 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® Panels Mold Tough AR Firecode X on equivalent gauge steel studs.

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
- CGC Sheetrock®/Beadex® Paper Faced Metal Drywall Bead and Trim
- CGC Sheetrock® First Coat Primer or Synko® Pre-Coat Drywall Surface Equalizer
- CGC Sheetrock® Tuff-Hide™ Primer-Surfacer

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.



**INSTALLATION, FINISHING
AND DECORATING
(CONTINUED)**
PRODUCT DATA

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.

Dimensions	15.9 mm (5/8") thick, 1220 mm (4') wide, 2440 mm – 3660 mm (8' – 12') long
Weight	13.7 kg/m ² (2.8 lb./ft. ²)

**TEST DATA WATER AND
MOULD RESISTANCE**

Per ASTM C473, the average water absorption for panels is not greater than 5% by weight after 2-hour immersion.

In independent lab tests conducted on 15.9 mm (5/8") CGC Sheetrock® Brand Panels Mold Tough® AR Firecode® X 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.

ABUSE RESISTANCE

TEST STANDARD	TEST SUMMARY	CLASSIFICATION LEVELS	TEST RESULTS
Abrasion Resistance ASTM C1629	A sample is placed under a wire brush weighted with 25 lb. 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") oc. 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.	(Structural Failure) Minimum ft.-lbs. Level 1 = 90 ft.-lb. Level 2 = 195 ft.-lb. Level 3 = 300 ft.-lb.	Level 2
Hard Body Impact ASTM C1629 Annex A.1 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.-lbs. Level 1 = 50 ft.-lb. Level 2 = 100 ft.-lb. Level 3 = 150 ft.-lb.	Level 1

Note: CGC testing demonstrates that when painted with one coat of primer and two coats of semi-gloss latex paint, the abrasion resistance for paper faced gypsum panels increases to level 3.



COMPLIANCE

Each 15.9 mm (5/8") CGC Firecode Core panel bears the Underwriters' Laboratories of Canada and the Underwriters' Laboratories, Inc. mark as evidence of ULC Listing and cUL Classifications for fire resistance, surface burning characteristics and noncombustibility. They can be used in ULC and cUL designs where type "AR" panels are listed. Flame spread is 15, smoke developed is 5, when tested in accordance with CAN/ULC S102. The gypsum core meets code requirements for noncombustible construction. Complies with CAN/CSA-A82.27 and ASTM C1396.

PRODUCT INFORMATION

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

NOTE

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

TRADEMARKS

The trademarks CGC, SHEETROCK, BEADEX, FIRECODE, MOLD TOUGH, SYNKO, TUFF-HIDE, THE CGC LOGO, and related marks are trademarks of USG Corporation or its subsidiaries or its affiliates.

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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