

USG SHEETROCK® BRAND GYPSUM PANELS MOLD TOUGH® VHI FIRECODE® CORE VERY HIGH IMPACT



DESCRIPTION

Low-cost, high-impact-resistant panels with moisture and mold resistance

- An upgrade to abuse-resistant panels
- Superior impact resistance
- Meets ASTM C1629 Level 3 (highest) for hard- and soft-body impact
- Can be used for a tile substrate in dry locations or areas with limited water exposure

USG Sheetrock® Brand Mold Tough® VHI (Very High Impact) Firecode® Core gypsum panels are designed and tested to offer greater surface and superior impact damage resistance than standard gypsum wallboard. These abuse-resistant panels are a lower-cost alternative to other systems used in partitions that require improved impact resistance.

USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels have a noncombustible, moisture-resistant core encased in moisture- and mold-resistant, 100 percent recycled green-face and brown-back papers. The face paper is folded around the long edges to reinforce and protect the core, and the ends are cut square and finished smooth. 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. Long edges of panels are tapered, allowing joints to be reinforced and concealed with a USG joint treatment system.

Recommended for commercial and institutional construction where superior impact damage resistance is required, while providing a lower-cost alternative to other construction methods. This panel is classified by UL as to fire resistance and meets the requirement for Type X in the model building code.

LIMITATIONS

1. Do not expose to sustained temperatures exceeding 125°F (52°C).
2. Maximum framing spacing is 16" o.c.
3. Do not expose to excessive, repetitive or continuous moisture before, during or after installation. Eliminate sources of moisture immediately.
4. Not suitable for use in high-moisture areas such as tub and shower enclosures, gang showers and other areas subject to direct water exposure.
5. Non-load-bearing.
6. For abuse-resistant construction over steel framing, minimum 20-gauge drywall steel studs (0.0312" design thickness) as defined by the Steel Stud Manufacturers Association (SSMA) are required.
7. Application of USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels 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.
8. Use as a tile substrate is limited to tile installed according to the most current 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.

INSTALLATION

USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels are by design stronger and have greater surface hardness than standard 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 USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels on studs fabricated with steel thinner than true 20-gauge drywall steel studs (0.0312" design thickness) as defined by the SSMA may result in increased fastener strip-out, improper screwhead 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, USG has no specific recommendations for installing USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels on equivalent gauge steel studs.

FINISHING AND DECORATING

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

- USG Sheetrock® Brand Ready-Mixed Joint Compounds
- USG Sheetrock® Brand First Coat Primer
- USG Sheetrock® Brand Setting-Type Joint Compounds
- USG Sheetrock® Brand Paper-Faced Metal Drywall Bead and Trim
- USG Sheetrock® Brand Joint Tape
- USG Sheetrock® Brand Tuff-Hide™ Primer-Surfacer

Painting products and systems should be used that 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.

All surfaces, including applied joint compound, must be thoroughly dry, dust-free and not glossy. Prime with USG Sheetrock® Brand First Coat Primer 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 and be decorated with a gloss paint (eggshell, semigloss 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 USG Sheetrock® Brand Tuff-Hide Primer-Surfacer.

PRODUCT DATA

Size: Panels are 5/8" (15.9 mm) thick x 4' (1218 mm) wide and available in 8'-12' (2438-4267 mm) lengths

Weight: 5/8" - 2.8 lbs/sf

TEST DATA

Moisture and Mold 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 5/8" USG Sheetrock® Brand Mold Tough VHI Firecode Core panels 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 mold performance of building materials in actual use. Given unsuitable project conditions during storage, installation or after completion, any building material can be overwhelmed by mold. To manage the growth of mold, 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. For more information, please see the USG data sheet WB2325 "System Solutions to Prevent Mold," and the Responsible Solutions to Mold Coalition website, responsiblemoldsolutions.org.

ABUSE RESISTANCE

USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panels are tested in accordance with ASTM C1629 and are third-party evaluated.

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 2
Indentation Resistance ASTM C1629	A 2 lb. weight is raised to a 36" height and dropped onto a 5/8" hemispherical die that strikes the sample with 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 16" o.c. The bag is raised (in 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 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 3

Note: USG testing demonstrates that when painted with one coat of primer and two coats of semigloss latex paint, the abrasion resistance for paper-faced gypsum wallboard panels increases to Level 3.

COMPLIANCE

Each 5/8" USG Sheetrock® Brand Mold Tough VHI Firecode Core gypsum panel bears the Underwriters Laboratories, Inc. mark as evidence of UL Classifications for fire resistance, surface-burning characteristics and noncombustibility. They can be used in UL designs where type "AR" panels are listed. Class A, as defined in IBC section 803.1, flame spread is 15, smoke developed is 5, when tested in accordance with ASTM E84. The gypsum core meets code requirements for noncombustible construction. Complies with ASTM C1396.

SUBMITTAL APPROVALS

Job Name	
Contractor	Date

PRODUCT INFORMATION

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

WARNING

Dust can contain silica. Prolonged and repeated breathing of silica dust can cause lung damage and cancer. If cutting with a power tool, use a wet or vacuum saw to reduce the amount of dust generated. Dust can be corrosive to eyes, skin and respiratory tract. Contact can cause severe chemical burns. Wear eye, skin and respiratory protection. If eye contact occurs, flush immediately with water for 30 minutes. If ingested, call a physician. Product safety information: 800 507-8899 or usg.com Customer Service: 800 USG.4YOU (874-4968).

KEEP OUT OF REACH OF CHILDREN.

TRADEMARKS

The trademarks USG, FIRECODE, MOLD TOUGH, SHEETROCK, TUFF-HIDE, IT'S YOUR WORLD. BUILD IT., the USG logo, and related marks are trademarks of USG Corporation or its affiliates.

NOTE

Products described here may not be available in all geographic markets. Consult your USG 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.

800 USG.4YOU
800 (874-4968)
usg.com

Manufactured by
United States Gypsum Company
550 West Adams Street
Chicago, IL 60661

WB2529/rev. 11-14
© 2014 USG Corporation and/or
its affiliates. All rights reserved.
Printed in U.S.A.

USG
IT'S YOUR WORLD. BUILD IT.™