Manufacturer

Georgia-Pacific Gypsum
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Georgia-Pacific Canada
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Technical Service Hotline: 1-800-225-6119

Description

ToughRock® Fireguard 45® Gypsum Board has a noncombustible (per ASTM E136), dimensionally stable, gypsum core. The core is specially formulated, increasing the strength and resistance to the passage of heat. The surfacings on both facings and on the long edges are 100% recycled paper. The front facing (side to be finished) and the long edges are an ivory color; the back facing paper is gray. The ends are square cut, smooth finished with no paper facing.

Georgia-Pacific ToughRock® Gypsum Board products are GREENGUARD and GREENGUARD Gold Certified for low emissions of volatile organic compounds (VOCs). They are listed in CHPS® High Performance Product Database for low emitting products.

Primary Uses

The 1/2″ (12.7 mm) ToughRock Fireguard 45 Gypsum Board is a wall or ceiling covering material for use in new building construction or renovation. It is designed for direct attachment to wood or steel framing.

This product is 1/2″ (12.7 mm) Type X as defined by ASTM C1396, gypsum board that provides not less than 45-minute fire resistance rating for boards 1/2″ (12.7 mm) thick. It is used in select fire-rated wood-framed wall assemblies to help protect framing members from the spread of fire. With joints covered, ToughRock Fireguard 45 Gypsum Board will resist the passage of smoke. See the UL Online Certification Directory for information on fire-rated assemblies where ToughRock Fireguard 45 Gypsum Board is approved for use in the assembly.

It has also been formulated to perform like a gypsum ceiling board where improved sag resistance is desired, per ASTM C1396, section 12. It can be used on ceilings with 24″ (610 mm) o.c. frame spacing when a water based texture is applied. Always seal board with a high quality latex primer before applying texture. Insulation should not exceed 2.2 lbs/sf. (9.9 km/m2).

ToughRock Fireguard 45 Gypsum Board is manufactured with an ivory paper facing designed to receive joint treatment, paint, wall covering, textured coatings or other finish treatment.

Limitations

- ToughRock Fireguard 45 Gypsum Board is a non-structural product and should not be used as a nailing base to support heavy wall-mounted objects.

- It is intended for interior applications only and it must be kept dry and not used where exposure to moisture is extreme or continuous.

- Do not use ToughRock Fireguard 45 Gypsum Board where there is prolonged exposure to temperatures exceeding 125°F (52°C) and/or continuous exposure to extreme humidity; e.g. located adjacent to wood burning stoves, heating appliances, steam rooms, showers, gang shower rooms and swimming pools.

- Consult water-based textures manufacturer's literature if they are to be used.

Applicable Standards

Manufactured to meet ASTM C1396 Sections 5 and 12.

Building Code Conformity

ToughRock Fireguard 45 Gypsum Board conforms to requirements of the current IBC and IRC codes for its intended use.

Sizes

Thickness, nominal	1/2″ (12.7 mm)
Widths, nominal	48″ (1220 mm); 54″ (1372 mm)
Lengths, standard	8′ (2440 mm) to 16′ (4880 mm)

Edges

1/2″ (12.7 mm) tapered edges.

Supplemental Materials

Fasteners: Nails or screws.

Joint System: Tape, bedding compound and topping compound.

Trims: Corner bead, edge/casing bead, control joints, floor/ceiling runners and channels.

Walls and ceiling textures.

Sealants.

Technical Data

Flame spread rating of 15 and smoke developed 0, when tested in accordance with ASTM E84. The core is noncombustible when tested in accordance with ASTM E136.

The 1/2″ ToughRock Fireguard 45 is UL classified, Type FG.

Fire Resistance Ratings

ToughRock Fireguard 45 Gypsum Board meets the criteria for 1/2″ (12.7 mm) Type X special fire resistance, as defined in ASTM C1396. ToughRock Fireguard 45 Gypsum Board is certified for fire-rated assemblies by UL LLC. Consult UL Fire Resistance Directory for specific assemblies where ToughRock Fireguard 45 Gypsum Board is approved for use.

Sound Control

ToughRock Fireguard 45 Gypsum Board can achieve designated Sound Transmission Class (STC) values when used in properly designed constructions.

Sound rated assemblies require sealing at top, bottom, intersections and other locations where sound leaks may develop. See the Gypsum Association Publication GA-600, Fire Resistance Design Manual, for sample sound isolation construction.

Application Standards

ToughRock Fireguard 45 Gypsum Board may be applied according to the Gypsum Association Publication GA-216 or ASTM C840 for non-fire rated construction.

For fire resistance construction application regarding board orientation, fastener type and spacing shall be consistent with the tested construction details. These details are published in the UL Online Certification Directory.

Handling and Use–Caution

This product may contain fiberglass which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/MSHA approved respirator as appropriate in dusty or poorly ventilated areas.

Material Safety Data Sheet

Material Safety Data Sheet (MSDS) is available upon request or online at www.buildgp.com/safetyinfo.

Submittal Approvals

Job Name

Contractor

Date

Stamps/Signatures

Board Decoration

ToughRock® Fireguard 45® Gypsum Board is designed to accept most types of paints, texture and wall covering materials. Georgia-Pacific Gypsum strongly recommends priming the surface with a full-bodied, quality latex primer before applying a final decorative material. Priming will equalize the suction variation between the joint compounds and the paper surface. If glossy paints are used in such areas as kitchens or bathrooms, skim coat joint compound over the entire surface to reduce highlighting or joint photographing. This method is also recommended in areas with severe natural or artificial side lighting.

Georgia-Pacific Gypsum recommends application of a sealer prior to applying wallpaper or other wall covering to the board so that the board surface will not be damaged if the covering is subsequently removed during redecorating. Joint treatment must be thoroughly dry before proceeding with primer application and final decoration. Refer to Gypsum Association Publications GA-214 and GA-216 for joint treatment and finishing recommendations.

Physical Properties

Properties	1/2″ (12.7 mm) ToughRock® Fireguard 45® Gypsum Board
Thickness, nominal inches	1/2″ (12.7 mm), ± 1/64″ (0.4 mm)
Width, nominal	4′ (1220 mm), − 3/32″ (2.4 mm); 54″ (1372 mm), − 3/32″ (2.4 mm)
Length, standard	8′ (2440 mm) to 16′ (4880 mm) ± 1/4″ (6.4 mm)
Weight[1], lbs./sq. ft. nominal (kg/m^2)	1.6 (7.8)
Edges	Tapered, square or tapered with round edges
Surfacing	100% recycled paper face, back and long edges
Flexural strength[3], min. Parallel, lbf. (N) Perpendicular, lbf. (N)	≥36 (160) ≥107 (476)
R Value[2], °F•ft^2•hr/BTU (m^2•K/W)	0.45 (0.08)
Nail Pull Resistance[3], minimum, lbf. (N)	≥77 (343)
Hardness, lbf. (N) (core, edges and ends)	≥15 (67)
Humidified deflection[3]	5/16″ (8 mm)
Surface Burning Characteristics[4] (per ASTM E84) Flame Spread Smoke Developed (The core is noncombustible when tested in accordance with ASTM E136.)	15 0

[1] Represents approximate weight for design and shipping purposes. Actual weight may vary depending on manufacturing location and other factors.

[2] Per Gypsum Association document GA-235.

[3] Specified minimum values are as defined in ASTM C1396.

[4] Products qualify for NFPA Class A or IBC Class 1.

GP Georgia-Pacific
Gypsum

U.S.A.	Georgia-Pacific Gypsum LLC
	Georgia-Pacific Gypsum II LLC
Canada	Georgia-Pacific Canada LP

SALES INFORMATION AND ORDER PLACEMENT

U.S.A.	West:	**1-800-824-7503**
	Midwest:	**1-800-876-4746**
	South Central:	**1-800-231-6060**
	Southeast:	**1-800-327-2344**
	Northeast:	**1-800-947-4497**
CANADA	Canada Toll Free:	**1-800-387-6823**
	Quebec Toll Free:	**1-800-361-0486**

TECHNICAL INFORMATION
U.S.A. and Canada: **1-800-225-6119,** www.gpgypsum.com

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UPDATES AND CURRENT INFORMATION The information in this document may change without notice. Visit our website at www.gpgypsum.com for updates and current information.

CAUTION For product fire, safety and use information, go to www.buildgp.com/safetyinfo or call 1-800-225-6119.

FIRE SAFETY CAUTION Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.