

#### Manufacturer

Georgia-Pacific Gypsum LLC 133 Peachtree St., Atlanta, GA 30303

Technical Service Hotline: 1-800-225-6119 (M-F 8-5 ET)

#### Description

#### ToughRock® Fireguard® Type X and Type C Moisture-Guard® Gypsum Board

have a noncombustible, dimensionally stable gypsum core. The core contains a water-resistant additive that provides increased water resistance. The core has been reinforced with the addition of glass fibers, increasing its strength. The surfaces on both facings and on the long edges are 100% recycled paper. The front facing paper, which receives the tile finish, is a green color. The ends are square cut. The product is popularly known as "Greenboard."

#### **Primary Uses**

ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board are backing materials for ceramic, plastic or metal tile used in building construction. It is designed for direct mechanical attachment to wood or metal wall and ceiling framing in building assemblies with a designated fire-resistive rating.

A specially formulated gypsum core which includes glass fibers enables ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board to resist fire, helping to protect framing members from the spread of fire. With joints covered, ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board will resist the passage of smake

ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board is designed as a backer for ceramic and guarry tile. It also can be used for non-tile applications.

#### Limitations

Both ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board are nonstructural products and should not be used as a nailing base or to support heavy wall-mounted objects. They should not be installed using only staples or adhesives.

ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board shall be installed so that tile is applied on the green side of the board.

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

Do not install vapor retarders directly behind ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board. In retrofit, old coatings or covers must be penetrated effectively or removed to prevent a double vapor barrier.

Do not use as shower floors or curbs. Do not use in conjunction with passive solar heat systems.

If ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board is to be painted or papered, it should be primed with a latex primer prior to receiving decoration.

If product is used in a ceiling application, framing spacing is 12'' o.c. maximum for 1/2'' thickness and 16'' o.c. maximum for 5/8'' thickness.

## **Applicable Standards**

ASTM C 630 and C 1396, and CSA-A82.27-M and Federal Specification SS-L-30D, Type VII Grade W, X.

#### **Building Code Conformity**

ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board conforms to the requirements of major building codes for its intended use.

#### Sizes:

	Type C	Type X
Thickness - nominal	1/2"	5/8"
Widths - nominal	48"	48"
Lengths - standard	8'-12'	8'-12'

#### **Edges**

**Tapered** 

#### **Supplemental Materials**

Fasteners: Nails, screws, staples and/or adhesive.

Finishing: Tape, ready-mix or setting type joint compound, textures, acoustical sealant, tile adhesives.

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

# **Technical Data—Surface Burning Characteristics:**

Flame spread 15 and smoke developed 0 when tested according to ASTM E 84 or CAN/ULC-S102. The core is noncombustible when tested in accordance with ASTM E 136 or CAN/ULC-S114.

## **Fire Resistance Rating**

A specially formulated gypsum core that includes glass fibers enables ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board to resist fire, helping to protect framing members and delay the spread of fire. With joints covered, ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board will resist passage of smoke. 5/8" ToughRock Fireguard Type X Moisture-Guard Gypsum Board is classified by Underwriters Laboratories and Underwriters Laboratories of Canada.

#### **Sound Control**

Sound-rated assemblies require sealing at top, bottom, intersections and other locations where sound leaks may develop.

#### **Installation—Application Standards:**

ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board may be applied according to the Gypsum Association Publication GA-216 or ASTM C 840.

For fire resistance rated construction, application regarding board orientation, fastener type and spacing shall be consistent with the tested construction details. These details are published in the Gypsum Association Fire Resistance Design Manual GA-600 and UL/ULC Fire Resistance Directory.

#### Safety

During installation involving cutting, scoring, breaking and sanding, safety glasses are recommended. If the work environment is dusty, a NIOSH-approved respirator should be worn.

#### **Handling Precaution:**

Stack ToughRock Fireguard Type X and Type C Moisture-Guard Gypsum Board flat on a level surface. As individual sheets are removed for installation, they should be raised carefully on edge and carried in a vertical position. Appropriate handling also is outlined in Gypsum Association Publications GA-216 and GA-801.

Take care to avoid impact, undue flexing and damage to edges, ends and corners.

# **Material Safety Data Sheet:**

Material Safety Data Sheet (MSDS) is available upon request.

continued	>
-----------	---

Submitta	
<b>Approval</b>	S

Job Name			
Contractor			
Date			



### **Physical Properties**

Properties <sup>1</sup>	1/2" Toughrock® Fireguard® Type C Moisture-Guard®†	5/8" Toughrock® Fireguard® Type X Moisture-Guard®†
Thickness, nominal	1/2" (12.7mm), ± 1/64" (0.4mm)	5/8" (15.9mm), ± 1/64" (0.4mm)
Width, nominal	4' (1220mm) ± 3/32" (2.4mm)	4' (1220mm) ± 3/32" (2.4mm)
Length, standard	8' (2440mm) to 12' (3660mm) ± 1/4" (6.4mm)	8' (2440mm) to 12' (3660mm) ± 1/4" (6.4mm)
Weight, lbs./M sq. ft., nominal	2000	2500
Edges	Tapered	Tapered
Flexural strength, minimum Parallel, lbs.f. Perpendicular, lbs.f.	40 110	50 150
R value <sup>2</sup>	.45	.56
Nail pull resistance, lbs. minimum	80	90
Hardness, lbs. force (core, edge and end)	15	15
Humidified Deflection, maximum	10/8"	5/8"
Packaging	Two pieces per bundle, face-to-face and end taped.	Two pieces per bundle, face-to-face and end taped.
Surface Burning Characteristics (per ASTM E 84 or CAN/ULC-S102) Core is noncombustible when tested in accordance with ASTM E 136.	Flame Spread 15 Smoke Developed 0	Flame Spread 15 Smoke Developed 0
Surfacing	100% recycled paper coverings on face, back and long edges; green color on face	100% recycled paper coverings on face, back and long edges; green color on face
Framing Spacing, maximum Walls Ceilings	16" o.c. 12" o.c.	24" o.c. 16" o.c.
Water absorption, % maximum	5.0	5.0
17	2T	

<sup>&</sup>lt;sup>1</sup>Tested in accordance with ASTM C 473.

Note: Specified minimum values are as in ASTM C 630 and C 1396. Other lengths and types may be available on special order. For fire safety information, visit www.gp.com/gypsum/firesafety.

<sup>&</sup>lt;sup>†</sup>This product may not be able to be used for wet area applications in jurisdictions that adopt the 2006 IBC or IRC.



#### SALES INFORMATION AND ORDER PLACEMENT

U.S.A. Midwest: 1-800-876-4746 West: 1-800-824-7503 South: 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**

Georgia-Pacific Gypsum Technical Hotline U.S.A. and Canada: **1-800-225-6119** www.gpgypsum.com

CAUTION: For product fire, safety and use information, go to gp.com/safetyinfo.

©2008 Georgia-Pacific Gypsum LLC. All rights reserved. Printed in the U.S.A. 12/08. GP-TM Lit. Item #101511.

#### **TRADEMARKS**

TOUGHROCK, FIREGUARD, MOISTURE-GUARD and the GEORGIA-PACIFIC logo are trademarks owned by or licensed to Georgia-Pacific Gypsum LLC.

# 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.

# LIMITATION OF REMEDIES AND DAMAGES

Our sole liability for any product claim shall be limited to reimbursement of the cost of repair or replacement of the affected product, up to a maximum amount of two times the original purchase price for the affected product. We shall not be responsible under any circumstances for lost profits, damage to a structure or its contents, or indirect, incidental, special or conse-

quential damages. Claims shall be deemed waived if they are not submitted to us in writing within ten (10) days after discovery of a product defect/circumstance giving rise to a claim.

# CAUTION: For product fire, safety and use information, go to gp.com/safetyinfo.

# **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. For additional product fire, safety

and use information go to www.gp.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.

<sup>&</sup>lt;sup>2</sup>Tested in accordance with ASTM C 518.