



**DEW Construction**  
277 Blair Park Road, Suite 130  
Williston, Vermont 05495  
P: +18028720505

**Project: 10258.02 Charlotte Central School Phase**

**II**  
408 Hinesburg Road  
Charlotte, Vermont 05445

## Submittal #092116-6.0 - Gypsum Wall Board 092116 - Gypsum Board Assemblies

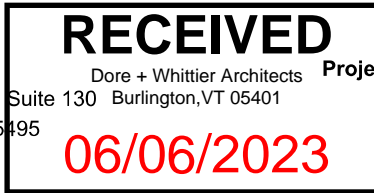
<b>Revision</b>	0	<b>Submittal Manager</b>	Becky St. George (DEW Construction)
<b>Status</b>	Open	<b>Date Created</b>	Jun 6, 2023
<b>Issue Date</b>	Jun 6, 2023	<b>Spec Section</b>	092116 - Gypsum Board Assemblies
<b>Responsible Contractor</b>	Steel Elements International	<b>Received From</b>	Peter Gauthier (Steel Elements International)
<b>Received Date</b>		<b>Submit By</b>	
<b>Final Due Date</b>	Jun 20, 2023	<b>Lead Time</b>	
		<b>Cost Code</b>	
<b>Location</b>		<b>Type</b>	
<b>Approvers</b>	Mike Wanderlich (Dore & Whittier Architects)		
<b>Ball in Court</b>	Becky St. George (DEW Construction)		
<b>Distribution</b>	Chris Giard (Champlain Valley School District), Sue Ramsey (Steel Elements International), Peter Gauthier (Steel Elements International), Kevin Cormier (Steel Elements International), Scott Speyers (DEW Construction), Dakota Stender (DEW Construction), Becky St. George (DEW Construction), Heather Gratton (Dore & Whittier Architects), Mike Wanderlich (Dore & Whittier Architects), Thomas Hengelsberg (Dore & Whittier Architects)		
<b>Description</b>	<p>The following note is from our subcontractor.</p> <p>Due to labor shortages and environmental factors affecting supply chains as of late we are submitting on 3 manufacturers (National Gypsum, Georgia Pacific, and CertainTeed) for approval just in case we have trouble acquiring any or to maintain schedule.</p>		

### Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					
Luke Keenan		Jun 6, 2023	Jun 6, 2023	Submitted	<a href="#">092116-6.0-Gypsum Wall Board-Submitted-230606.pdf</a>
Mike Wanderlich	Jun 6, 2023	Jun 20, 2023	Jun 14, 2023	Revise and Resubmit	<a href="#">092116-6.0-Gypsum Wall Board-RR.pdf (Current)</a>



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Dore + Whittier Architects  
Suite 130 Burlington, VT 05401

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General Information Attachments					
Luke Keenan		Jun 6, 2023		Pending	
Mike Wanderlich		Jun 20, 2023		Pending	

- ☐ Reviewed (No Comments)
- ☐ Reviewed (See Comments)
- ☐ Reviewed (Accepted for Record)
- ☒ Reviewed (Revise & Resubmit)
- ☐ Rejected

Checked only for conformance with the design concept of the project and with the information provided in the Contract Documents. Review of shop drawings or other submittals shall not release the Contractor from responsibility for deviations from Drawings and Specifications, errors in shop drawings or schedules, quantities, dimensions, fabrication, installation, and coordination requirements. The Contractor shall check and verify all field measurements.

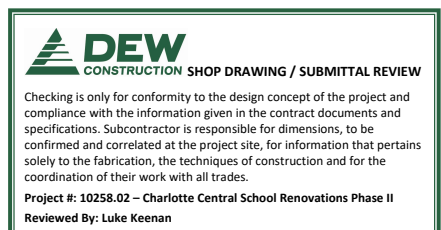
Digitally signed by Michael Wanderlich  
DN: C=US,  
E=mwanderlich@doreandwhittier.com,  
O="Dore + Whittier", CN=Michael Wanderlich  
Date: 2023.06.14 16:02:55-04'00'

Signature + Date

DORE + WHITTIER

Vermont | Massachusetts doreandwhittier.com

1. It is unclear which gypsum board type is submitted. Clarify GYP BD-# as specified.
2. Provide GYP BD-1 Impact Resistant Board as indicated in spec section 2.04-C.
3. Provide GYP BD-6 Ceiling Board as indicated in spec section 2.04-E.



### Manufacturer

Georgia-Pacific Gypsum  
133 Peachtree Street  
Atlanta, GA 30303  
Technical Service Hotline: 1-800-225-6119

Georgia-Pacific Canada  
2180 Meadowvale Boulevard, Suite 200  
Mississauga, ON L5N 5S3

### Description

**ToughRock® Fireguard X™ and ToughRock® Fireguard C® Gypsum Board** have noncombustible (per ASTM E136 or CAN/ULC S114), dimensionally stable gypsum cores. The core has been reinforced with the addition of glass fibers, increasing its strength and its resistance to the passage of heat. The surfacings on both faces and on the long edges are 100% recycled paper. The front face paper is white; the back face paper is gray. The ends are square cut.

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 as low emitting products.

### Primary Uses

ToughRock Fireguard X and Fireguard C Gypsum Board are wall or ceiling covering materials for use in building construction. Both are designed for direct mechanical attachment to wood or metal framing for use in building assemblies with a designated fire resistance rating.

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

ToughRock Fireguard X and Fireguard C Gypsum Board are manufactured with a paper surfacing designed to be receptive to joint treatment, paint, wall covering, or textured coatings.

### Limitations

- ToughRock Fireguard X and Fireguard C Gypsum Board are nonstructural products and should not be used as a nailing base or to support heavy wall mounted objects.
- They are intended for interior applications and must be kept dry and clean and not used where exposure to moisture is extreme or continuous.
- Do not use ToughRock Fireguard X and Fireguard C 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, electric lighting and hot air flues.

### Applicable Standards

Manufactured to meet ASTM C1396 Section 5, CSA-A82.27-M; Federal SS-L-30D, Type III, Grade X and SS-6-30D.

### Building Code Conformity

ToughRock Fireguard X and Fireguard C Gypsum Board conform to the requirements of uniform IBC/IRC building codes for its intended use.

### Sizes

	Fireguard X™	Fireguard C®	Fireguard C®
Thickness, nominal	5/8" (15.9 mm)	5/8" (15.9 mm)	1/2" (12.7 mm)
Widths, nominal	48" (1220 mm)	48" (1220 mm)	48" (1220 mm)
Lengths, standard	8'-14' (2440-4270 mm)	8'-14' (2440-4270 mm)	8'-14' (2440-4270 mm)

### Edges

Tapered, square, or tapered with rounded edges.

### Supplemental Materials

Corner beads and trim, expansion joints, joint tape, joint compound.

### 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 5/8" (15.9 mm) ToughRock Fireguard X is UL classified, Type X.

The 1/2" (12.7 mm) ToughRock Fireguard C is UL Type TG-C, and ULC classified, Type C.

The 5/8" (15.9 mm) ToughRock Fireguard C is UL Type TG-C, and ULC classified, Type C.

### Fire Resistance Ratings

ToughRock Fireguard X and Fireguard C Gypsum Board meet the criteria for Type X special fire resistance, as defined in ASTM C1396. ToughRock Fireguard X and Fireguard C Gypsum Board are classified for fire-rated assemblies by Underwriters Laboratories LLC (UL).

### Sound Control

ToughRock Fireguard X and Fireguard C 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.

### Application Standards

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

For fire resistance rated construction application regarding board orientation, fastener type and spacing shall be consistent with the tested construction details for Type X Gypsum Board. These details are published in the Gypsum Association "Fire Resistance Design Manual GA-600," "UL Fire Resistance Directory," and "Intertek Testing Services/Warnock Hersey Listings Directory."

### Handling Precautions

Stack gypsum board flat on a level surface. As individual sheets are removed for installation, they should be raised up on edge carefully and carried in a vertical position. Appropriate handling is also outlined in Gypsum Association Publications GA-216 and GA-801.

Take care to avoid impact, undue flexing, and subsequent damage to board edges, ends, and corners. Avoid scuffing the face to be finished.

### 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.

continued →

### Submittal Approvals

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Date \_\_\_\_\_

Stamps/Signatures

### Board Decoration—Application Standards

ToughRock® Fireguard X™ and Fireguard C® Gypsum Board are 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	ToughRock® Fireguard X™	5/8" ToughRock® Fireguard C®	1/2" ToughRock® Fireguard C®
Thickness, nominal inches	5/8" (15.9 mm), ± 1/64" (0.4 mm)	5/8" (15.9 mm), ± 1/64" (0.4 mm)	1/2" (12.7 mm), ± 1/64" (0.4 mm)
Width, nominal	4' (1220 mm), 54" (1372 mm), 60" (1524 mm) ± 3/32" (2.4 mm)	4' (1220 mm) ± 3/32" (2.4 mm)	4' (1220 mm) ± 3/32" (2.4 mm)
Length, Standard	8' (2440 mm) to 14' (4270 mm), ± 1/4" (6.4 mm)	8' (2440 mm) to 14' (4270 mm), ± 1/4" (6.4 mm)	8' (2440 mm) to 14' (4270 mm), ± 1/4" (6.4 mm)
Weight <sup>1</sup> , lbs./sq. ft., nominal (kg/m <sup>2</sup> )	2.2 (10.7)	2.3 (11.2)	2.0 (9.0)
Edges	Tapered, square or tapered with rounded edges	Tapered, square or tapered with rounded edges	Tapered, square or tapered with rounded edges
Flexural Strength <sup>2</sup> spacing, min.			
Parallel, lbf. (N)	≥ 46 (205)	≥ 46 (205)	≥ 36 (160)
Perpendicular, lbf. (N)	≥ 147 (654)	≥ 147 (654)	≥ 107 (476)
R Value, ft <sup>2</sup> •°F•hr/BTU (m <sup>2</sup> •K/W)	0.56 est. (0.10)	0.56 est. (0.10)	0.48 est. (0.08)
Nail Pull Resistance <sup>2</sup> , minimum, lbf. (N)	≥ 87 (387)	≥ 87 (389)	≥ 77 (343)
Hardness <sup>2</sup> , lbf. (N) (core, edges and ends)	≥ 15 (67)	≥ 15 (67)	≥ 15 (67)
Humidified Deflection <sup>2</sup> , max.	5/8" (16 mm)	5/8" (16 mm)	10/8" (32 mm)
Packaging	Two pieces per bundle, face-to-face and end taped	Two pieces per bundle, face-to-face and end taped	Two pieces per bundle, face-to-face and end taped
Surface Burning Characteristics <sup>3</sup> (per ASTM E84)			
Flame Spread	15	15	15
Smoke Developed	0	0	0
(Core is noncombustible when tested in accordance with ASTM E136.)			

<sup>1</sup> Represents approximate weight for design and shipping purposes. Actual weight may vary depending on manufacturing location and other factors.

<sup>2</sup> Specified minimum values are as defined in ASTM C1396.

<sup>3</sup> Products qualify for NFPA Class A or IBC Class 1.



**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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**WARRANTIES, REMEDIES AND TERMS OF SALE** For current warranty information for this product, please go to www.gpgypsum.com and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at www.gpgypsum.com.

**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](http://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.

# CertainTeed

## Type X

### Gypsum Board

#### Product Data and Submittal

#### Product Description

CertainTeed Type X Gypsum Board is an interior gypsum board consisting of a solid set, fire-resistive, Type X gypsum core enclosed in ivory-colored face paper and a strong liner back paper. CertainTeed Type X board features a specially formulated core providing fire resistance ratings when used in tested assemblies. Long edges are slightly tapered, allowing joints to be reinforced and concealed with joint tape and joint compound. CertainTeed Type X Gypsum Board is available in a variety of lengths and widths.

#### Basic Uses

CertainTeed Type X Gypsum Board is used for interior walls and ceilings in residential and commercial applications requiring extended fire ratings. It can be used for new construction or renovations over wood or steel framing. The boards are typically nailed or screwed to studs spaced 16" (400 mm) or 24" (610 mm) o.c., but can be applied by laminating or with the use of an adhesive.

#### Advantages

- Fire ratings up to four hours.
- Consistently high quality.
- Uniformly flat, attractive appearance; no shadows.

- High edge hardness.
- No wavy edges, warps, bows or deformities.
- Uniform high-strength cores eliminate crumbling, cracking.
- Edge tapers consistent to form perfect joints.
- Excellent thermal barrier and sound attenuation qualities.

#### Limitations

- Exposure to continuous moisture or extreme temperatures should be avoided. Not recommended for continuous exposure to temperatures exceeding 125°F (52°C).
- Framing spacing should not exceed 24" (610 mm) o.c.
- Should be stored indoors and off ground surface.
- Boards should be stacked flat with care taken to prevent sagging or damage to edges, ends and surfaces.
- Storing board lengthwise, leaning against the framing is not recommended.
- Boards should be carried, not dragged, to place of installation to prevent damaging finished edges.
- Cutting and scoring should be done from the face side.

- In cold weather or during joint finishing, temperatures within the enclosure should stay within the range of 50° to 95°F (10° to 35°C) and with sufficient ventilation to carry off excess moisture.

#### Product Data

**Thicknesses:** 5/8" (15.9 mm)

**Widths:** 4' (1220 mm) standard  
54" (1370 mm)

**Lengths:** 8' to 12'  
(2440 mm to 3660 mm)

**Edges:** Tapered

**Packaging:** Two pieces per bundle, face-to-face and end-taped

Special widths, lengths or edges may be available on special order. Consult your CertainTeed sales representative.

#### Technical Data

##### Composition and Materials

Manufactured panel with gypsum core, encased in paper. Various additives are added to the core to enhance fire resistive qualities.

##### Surface Burning Characteristics

CertainTeed Type X Gypsum Board has a Flame Spread rating of 15 and Smoke Developed rating of 0, in accordance with ASTM E 84, (UL 723, UBC 8-1, NFPA 255, CAN/ULC-S102).

Continued on back

Job Name

Contractor

Date

Products Specified:

Submittal Approvals  
(Stamps or Signatures)

**CertainTeed**  
SAINT-GOBAIN

## Fire Resistance

Fire resistance tests are conducted in accordance with ASTM E 119, (ANSI/UL 263, UBC 7-1, NFPA 251, CAN/ULC-S101) and no warranty is made other than conformance to the standard under which the assembly was tested. Minor discrepancies may exist in the values of ratings, attributable to changes in materials and standards, as well as differences between testing facilities. Assemblies are listed as “combustible” (wood framing) and “noncombustible” (concrete and/or steel construction). For fire resistance ratings refer to the Gypsum Association Fire Resistance Design Manual and UL Fire Resistance Directory - Vol. 1.

## Applicable Standards and References

- ASTM C 1396 Type X Standard
- ASTM C 840
- Gypsum Association GA-216
- Gypsum Association GA-214
- ICC International Building Code (IBC)
- ICC International Residential Code (IRC)
- National Building Code of Canada (NBCC)

## Installation

### Recommendations

Installation of CertainTeed Type X Gypsum Boards should be consistent with methods described in the standards and references noted. Cutting should be from the face side of the boards for best results.

### Decoration

CertainTeed Type X Gypsum Board accepts most types of paints, texture and wall covering materials. The surface shall be primed and sealed with a full-bodied latex primer before applying a final decorative material. This will equalize the suction between the joint compounds and the paper surface.

For best painting results, all surfaces, including joint compound, should be clean, dust-free and not glossy. If glossy paints are used, a thin skim coat of compound over the entire surface, Level 5 finish, is recommended to reduce highlighting or joint photographing. This method is also recommended for areas of critical sidelighting of natural or artificial light sources.

A sealer application under wallpaper or other wall covering is also recommended so 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-sealer application and final decoration.

## Notice

The information in this document is subject to change without notice. CertainTeed assumes no responsibility for any errors that may inadvertently appear in this document.



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CertainTeed Corporation  
P.O. Box 860  
Valley Forge, PA 19482

Professional: 800-233-8990  
Consumer: 800-782-8777

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Printed in Canada on recycled paper. CTG-2337





# GOLD BOND® BRAND FIRE-SHIELD® GYPSUM BOARD

## MANUFACTURER

National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211  
(704) 365-7300

Technical Information:  
1-800-NATIONAL  
(1-800-628-4662)

Fax: 1-800-FAX NGC1  
(1-800-329-6421)

Internet Home Page:  
nationalgypsum.com  
nationalgypsum.com/espanol

09 29 00/NGC BuyLine: 1100

## DESCRIPTION

Gold Bond® BRAND Fire-Shield® Gypsum Board panels consist of a fire-resistant gypsum core encased in heavy natural-finish, 100% recycled paper on the face and back sides. The face paper is folded around the long edges to reinforce and protect the core, and the ends are square-cut and finished smooth. For speed of installation, GridMarX® guide marks are printed on the paper surface.

Long edges of the panels are tapered or square. Tapered edges allow joints to be reinforced with ProForm® BRAND Joint Tape and concealed with ProForm® BRAND Ready Mix or ProForm® BRAND Quick Set Setting Joint Compounds.

Fire-Shield Gypsum Board features a Type X core to provide additional fire resistance ratings when used in laboratory tested systems.

Gold Bond® BRAND Fire-Shield® C Gypsum Board panels have a specially formulated Type X core to achieve superior performance when used in specific fire-rated Type C assemblies.

## BASIC USES

*1/2" Fire-Shield C* - For single- or multi-layer drywall construction for fire tested assemblies. Also used as a roofing substrate.

*5/8" Fire-Shield* - For single- or multi-layer drywall construction. The greater thickness provides increased resistance to fire and reduced sound transmission.

*5/8" Fire-Shield C* - For single- or multi-layer drywall construction. The specially formulated Type X core achieves superior performance when used in specific assemblies.

## ADVANTAGES

- Lightweight, cost-efficient material that readily accepts a wide range of decorative finishes.
- Gypsum Board is easily cut for quick installation, permitting painting or other decoration and the installation of metal or wood trim almost immediately.
- The gypsum core will not support combustion or transmit temperatures greatly in excess of 212°F (100°C) until completely calcined, a slow process.
- Expansion and contraction under normal atmospheric changes is negligible.

## GREENGUARD CERTIFIED

Fire-Shield Gypsum Board is GREEN-GUARD Children & Schools<sup>SM</sup> Certified for indoor air quality.



## LIMITATIONS

- Exposure to excessive or continuous moisture and extreme temperatures should be avoided. Gypsum Board is not recommended where it will be exposed to temperatures exceeding 125°F (52°C) for extended periods of time.
- To prevent objectionable sag in gypsum paneled ceilings, the weight of overlaid unsupported insulation should not exceed the following recommendations:

PSF (lbs./sq.ft.)	Type	Frame Spacing
1.3 (6.3 kg/M <sup>2</sup> )	1/2" Fire-Shield C	24" o.c.
2.2 (10.7 kg/M <sup>2</sup> )	1/2" Fire-Shield C	16" o.c.
2.2 (10.7 kg/M <sup>2</sup> )	5/8" Fire-Shield 5/8" Fire-Shield C	24" o.c.

- Installing Fire-Shield Gypsum Board panels over an insulating blanket, installed continuously across the face of the framing members, is not recommended. Blankets should be recessed and flanges attached to the sides of the studs or joists.
- Fire-Shield Gypsum Board must be stored off the ground and under cover. Sufficient risers must be used to assure support for the entire length of the gypsum board to prevent sagging.
- Fire-Shield Gypsum Board must be kept dry to minimize the potential for mold growth. Adequate care should be taken while transporting, storing, applying and maintaining gypsum board. For additional information, refer to the Gypsum Association publication, "Guidelines for the Prevention of Mold Growth on Gypsum Board" (GA-238-03, which is available at [www.gypsum.org](http://www.gypsum.org) under the "Download Free Gypsum Association Publications" section.

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_ Date \_\_\_\_\_

Submittal Approvals: (Stamps or Signatures)

## COMPOSITION & MATERIALS

Fire-Shield Gypsum Board is a manufactured panel with a Type X gypsum core encased with paper. Fire-Shield core gypsum board also contains various aggregates such as fiberglass to enhance the fire resistive qualities. Fire-Shield Gypsum Board contains no asbestos.

## ACCESSORIES

- Fasteners: drywall screws, nails and/or adhesives
- ProForm Fiberglass Mesh Tape
- ProForm Joint Tape
- Cornerbead, casing beads
- ProForm Ready Mix or Pro-Form Quick Set/Quick Set Lite Setting Compound
- E-Z Strip control joints or .093 zinc control joints

## TECHNICAL DATA

### PHYSICAL PROPERTIES

Thickness, nominal	1/2" Type C (12.7 mm) 5/8" Type X or C (15.9 mm)
Width, nominal*	4' (1219 mm)
Length, standard	6' through 16' (1829-4877 mm)
Weight, lbs./sq.ft., nominal	1/2" Type C - 1.9 5/8" Type X - 2.2 5/8" Type C - 2.4
Edges	Square or Tapered

Surface Burning Characteristics (per ASTM E 84)	Flame Spread: 15 Smoke Developed: 0
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\*54" wide Gypsum Board available in 5/8" thickness

### APPLICABLE STANDARDS AND REFERENCES

ASTM C 1396

ASTM C 840

Gypsum Association GA-216

Gypsum Association GA-214

National Gypsum Company, *Gypsum Construction Guide*

## FIRE RESISTANT RATINGS

Fire resistance ratings represent the results of tests on assemblies made up of specific materials in a specific configuration. When selecting construction designs to meet certain fire resistance requirements, caution must be used to insure that each component of the assembly is the one specified in the test. Further, precaution should be taken that assembly procedures are in accordance with those of the tested assembly. (For copies of specific tests, call 1-800-NATIONAL.)

## UL CORE DESIGNATION

1/2" Fire-Shield C - FSW C  
5/8" Fire-Shield - FSW  
5/8" Fire-Shield C - FSW C

## INSTALLATION

### RECOMMENDATIONS

Installation of Fire-Shield Gypsum Board should be consistent with the methods described in the standards and references noted.

### GRIDMARX®

Fire-Shield Gypsum Board comes standard with GridMarX® guide marks, printed on the paper surface. These guide marks align with standard building dimensions and help to quickly identify fastener lines for stud and joist framing. Using GridMarX, accurate cuts can be made without having to draw lines. The use of GridMarX also provides quick identification and uniform nail/screw patterns.

GridMarX guide marks run the machine direction of the board at five points in 4" increments. Marks run along the edge in both tapers and at 16", 24" and 32" in the field of the board. The marks cover easily with no bleed-through using standard paint products.

**Vertical Application** - In a vertical application, GridMarX serve as a **guide mark** to help identify the exact location of framing members behind the gypsum board eliminating the need for field applied vertical lines.

**Horizontal Application** - In a horizontal application, GridMarX serve as a **reference mark** to help identify the location of framing members behind the gypsum board. (If framing member is located 2" to the right of the GridMarX at the top edge of the board, it will be located 2" to the right down the face of the board)

## DECORATION

For best painting results, all surfaces, including joint compound, should be clean, dust-free and not glossy. To improve fastener and joint concealment, a coat of a quality primer is recommended to equalize the porosities between surface paper and joint compound.

The selection of a paint to give the specified or desired finished characteristics is the responsibility of the architect or contractor.

Fire-Shield Gypsum Board that is to have a wallcovering applied to it should be prepared and primed as described for painting.

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 assure a surface properly prepared to accept the desired decoration.

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