

5/16" XP® Fire-Shield®

Gypsum Board

PURPLE 
EVOLVE YOUR WALLS™

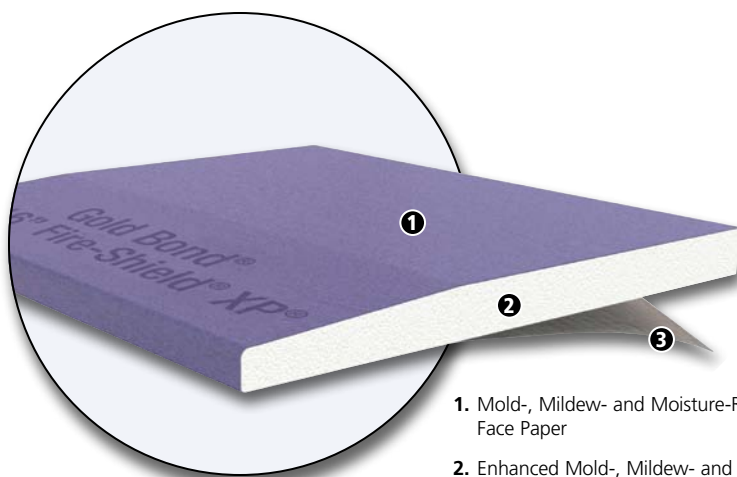
Gold Bond® BRAND 5/16" XP® Fire-Shield® Gypsum Board consists of a mold-, mildew-, moisture- and fire-resistant gypsum core with a specially designed PURPLE® paper.

The heavy PURPLE® face paper and the gray back paper are 100 percent recycled and are resistant to mold, mildew and moisture.

Use it for constructing concave and convex corners in multi-layered applications requiring a fire-rated assembly.

Sizes: 5/16 in. (7.9 mm) thick boards are available in 4 ft. (1,219 mm) widths and standard lengths of 8 ft. (2,438 mm), 10 ft. (3,048 mm) and 12 ft. (3,658 mm).

Finishing: Tapered edges allow joints to be reinforced with ProForm® BRAND Joint Tape and concealed with ProForm® BRAND Ready Mix Joint Compounds or ProForm® BRAND Quick Set® Setting Compounds. For optimum mold performance, use ProForm® BRAND XP® All Purpose or ProForm® BRAND XP® Lite Joint Compounds.



1. Mold-, Mildew- and Moisture-Resistant Face Paper
2. Enhanced Mold-, Mildew- and Moisture-Resistant Core
3. Heavy Mold-, Mildew- and Moisture-Resistant Back Paper



National 
Gypsum®

Basic Uses

APPLICATIONS

- Use in constructing concave and convex corners in multi-layered applications requiring a fire-rated assembly.

ADVANTAGES

- Use it in both wood- and metal-framed construction for curved walls providing enhanced moisture and mold resistance.
- 1- and 2-hour fire ratings available.
- Resists the growth of mold per ASTM D3273 with a score of 10, the best possible score.
- Resists the growth of mold per ASTM G21 with a score of 0, the best possible score.
- Easily scored and snapped to exact size without sawing.
- Achieves GREENGUARD and GREENGUARD Gold Certification. GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit: ul.com/gg.
- Qualifies as a low-VOC emitting material by meeting California Specification 01350. For more information, visit: <http://www.calrecycle.ca.gov/greenbuilding/specs/section01350/>.

Installation Recommendations

GENERAL

- Install gypsum boards in accordance with methods described in ASTM C840 and GA-216.
- Examine and inspect framing materials to which gypsum board is to be applied. Remedy all defects prior to installation of the gypsum board.
- Use boards of maximum practical length so that the minimum number of end joints occur. Bring board edges into contact with each other but do not force into place.
- Locate gypsum board joints at openings so that no joint will occur within 12 in. (305 mm) of the edges of the opening unless installing control joints at these locations. Stagger vertical end joints. Joints on opposite sides of a partition should not occur on the same stud.
- Hold gypsum board in firm contact with the framing member while fasteners are being driven. Fastening should proceed from center portion of the board toward the edges and ends. Set fasteners with heads slightly below the surface of the board. Take care to avoid breaking the facer of the gypsum board. Remove improperly driven nails or screws.
- Cut gypsum board to allow for a minimum 1/4 in. (6.4 mm) gap between gypsum board and floor to prevent potential wicking of moisture.
- Provide minimum 1/4 in. (6.4 mm) clearance between boards and adjacent concrete or masonry to minimize wicking of moisture.
- Maintain a room temperature of not less than 40°F (4°C) during application of gypsum board.
- Maintain a room temperature of not less than 50°F (10°C) when using adhesive to attach the gypsum boards and during joint treatment, texturing and decoration, beginning 48 hours prior to application and continuously thereafter until completely dry. Maintain adequate ventilation in the working area during installation and curing period.
- Install fire-rated assemblies in accordance with the details found in the *UL Fire Resistance Directory* or Gypsum Association *GA-600 Fire Resistance Design Manual*.
- Drive fasteners just below the surface, avoiding damage to the core and/or facer.

TECHNICAL DATA

PHYSICAL PROPERTIES	
5/16" XP Fire-Shield Gypsum Board	
Thickness¹, Nominal	5/16" (7.9 mm)
Width¹, Nominal	4' (1,219 mm)
Length¹, Standard	8' (2,438 mm), 10' (3,048 mm), 12' (3,658 mm)
Weight, Nominal	1.3 – 1.4 lbs. / sq. ft. (6.35 – 6.84 k/m ²)
Edges¹	Tapered
Flexural Strength¹, Perpendicular	≥ 62 lbf. (276 N)
Flexural Strength¹, Parallel	≥ 21 lbf. (93 N)
Humidified Deflection¹	N/A
Nail Pull Resistance¹	≥ 46 lbf. (205 N)
Hardness¹ – Core, Edges and Ends	≥ 11 lbf. (49 N)
Bending Radius	2' (610 mm)
Thermal Resistance⁴	N/A
Permeance⁵	22 perms
Water Absorption¹ (% of Weight)	< 5%
Mold Resistance⁶, ASTM D3273	Score of 10
Mold Resistance⁷, ASTM G21	Score of 0
Product Standard Compliance	ASTM C1396
Fire-Resistance Characteristics	
Core Type	N/A
UL Type Designation	FSW
Combustibility²	Non-combustible Core
Surface Burning Characteristics³	Class A
Flame Spread³	15
Smoke Development³	0
Applicable Standards and References	
ASTM C473 Standard Test Methods for Physical Testing of Gypsum Panel Products	
ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	
ASTM C840 Standard Specification for Application and Finishing of Gypsum Board	
ASTM C1396 Standard Specification for Gypsum Board	
ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber	
ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials	
ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	
ASTM E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C	
ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi	
Gypsum Association, GA-214, <i>Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels</i>	
Gypsum Association, GA-216, <i>Application and Finishing of Gypsum Panel Products</i>	
Gypsum Association, GA-238, <i>Guidelines for Prevention of Mold Growth on Gypsum Board</i>	
National Gypsum Company, <i>NGC Construction Guide</i>	

1. Specified values per ASTM C1396, tested in accordance with ASTM C473.

2. Tested in accordance with ASTM E136.

3. Tested in accordance with ASTM E84.

4. Tested in accordance with ASTM C518.

5. Tested in accordance with ASTM E96.

6. Tested in accordance with ASTM D3273.

7. Tested in accordance with ASTM G21.

Please consult your local sales representative for all non-standard lengths and widths. Minimum order requirements may apply.

FINISHING

Perform finishing of 5/16" XP® Fire-Shield® Gypsum Board in accordance with GA-214. Joints between boards may be finished with either paper tape and ready mix joint compound or fiberglass mesh or paper tape and setting compound, such as ProForm® BRAND Interior Finishing Products.

DECORATION

Ensure gypsum board surfaces, including finished joints, are clean, dust-free and gloss-free to achieve best painting results. Apply a coat of a quality drywall primer to equalize the porosities between surface paper and joint compound, improving fastener and joint concealment.

Selection of a paint to provide desired finish characteristics is the responsibility of the architect or contractor.

Prepare and prime gypsum boards prior to decoration.

Refer to GA-214 to determine the level of finishing needed to assure a surface properly prepared to accept the desired decoration.

CRITICAL LIGHTING AREAS

Wall areas abutting window mullions or skylights, long hallways, and atriums with large surface areas washed with artificial or natural lighting are a few examples of critical lighting areas. Strong side lighting from windows or surface-mounted light fixtures may reveal minor surface imperfections. Light striking the surface obliquely, at a slight angle, exaggerates surface irregularities. If you cannot avoid critical lighting, minimize the effects by skim coating the gypsum board surfaces, by decorating the surface with medium to heavy textures, or by the use of draperies and blinds, which soften shadows. In general, paints with sheen levels other than flat, enamel paints and dark-toned paint finishes highlight surface defects; consider using textures to hide these minor visual imperfections. Finish boards to a Level 5 finish, as outlined in GA-214.

Limitations

- Do not use for exterior applications. 5/16" XP Fire-Shield Gypsum Board is intended for interior use only.
- Do not use boards as a nailing base as they are nonstructural.
- Avoid exposure to excessive or continuous moisture and extreme temperatures. Do not expose gypsum boards to temperatures exceeding 125°F (52°C) for extended periods of time.
- Avoid using in areas subject to constant and/or excessive moisture and high humidity, such as gang showers, saunas, steam rooms or swimming pool enclosures.
- Avoid using as a backer board directly behind tile in tub and shower areas.
- Do not install in pre-rock conditions.
- Do not finish joints until building is properly closed in and conditioned.

For More Information

ARCHITECTURAL SPECIFICATIONS

National Gypsum Company's CSI MasterFormat® 3-part guide specifications are downloadable as editable Microsoft® Word documents at: nationalgypsum.com.

LATEST INFORMATION AND UPDATES

For the latest technical information and updates, call NGC Construction Services: **1-800-NATIONAL (628-4662)** or visit our website: nationalgypsum.com.

