Gold Bond® XP® Hi-Abuse® Gypsum Board

Technical Information
800.NATIONAL • 800.628.4662

DESCRIPTION

Gold Bond® XP® Hi-Abuse® Gypsum Board has a mold- and moisture-resistant Type X gypsum core encased in abrasion-, mold- and moisture-resistant, 100% recycled PURPLE paper on the face side and mold- and moisture-resistant, 100% recycled gray paper on the back side.

This abuse-resistant gypsum board is ideal to use in wall assemblies where surface abrasion is a concern, such as corridors, entryways, lobby areas and warehouses.

GridMarX® are printed on the face paper surface to help installers instantly identify stud locations and make accurate cuts without having to pencil in or snap chalk lines.

Finishing: Joints between XP Hi-Abuse Gypsum Board may be finished with either paper tape and ready mix joint compound or fiberglass mesh tape or paper tape and setting compound.

BASIC USES

Applications

- Use it for interior wall and ceiling assemblies in areas where surface abrasion, indentation, mold, mildew and moisture resistance are major concerns.
- Use 5/8" (15.9 mm) Hi-Abuse XP Gypsum Board where Type X Gypsum Board is specified in certain fire-rated wall assemblies.
- Use as a tile backer board in dry areas or areas with limited water exposure, such as toilet and sink areas and wall and ceiling areas above tile in tubs and showers.

Advantages

- Provides greater resistance to surface abuse and indentation over standard gypsum board.
- Provides more protection against surface abrasion – stands up to scrapes, scratches and scuffs.
- 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.
- Features SPORGARD® technology with extra mold-inhibiting properties.
- The gypsum core will not support combustion or transmit temperatures greatly in excess of 212˚F (100˚C) until completely calcined, a slow process.
- Easily scored and snapped to exact size without sawing.
- Dimensionally stable product with negligible expansion and contraction under normal atmospheric conditions.
- Save time and money with MaX 12® and MaX 16® optimized fastener patterns for 5/8" Fire-Shield products to achieve 1-hour fire ratings using fewer fasteners. Visit **GridMarX.com** for more information.
- Features the GridMarX guidemarks on the board to allow for faster and more accurate installation.
- Achieves UL GREENGUARD Gold Certification 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: **calrecycle.ca.gov/greenbuilding/specs/section01350**.

INSTALLATION RECOMMENDATIONS

General

- Install gypsum board 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 GridMarX to make accurate cuts without drawing lines. GridMarX guide marks run the length of the board at five points, in 4" (102 mm) increments. Marks run along the edge in both tapers and at 16" (406 mm), 24" (610 mm) and 32" (813 mm) in the field of the board. GridMarX also provides quick identification and uniform nail/screw patterns. The marks cover easily with no bleed-through using standard paint products.
- Apply gypsum board first to ceilings at right angles to framing members, then to walls. 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.
- Install batt or blanket ceiling insulation ***before*** the gypsum board on ceilings when installing a vapor retarder behind the gypsum board. Install the insulation ***immediately*** after the gypsum board when using loose fill insulation. Avoid installation practices that might allow condensation to form behind boards.
- Cut gypsum board to allow for a minimum 1/4" (6.4 mm) gap between gypsum board and floor to prevent potential wicking of moisture.
- Provide minimum 1/4" (6.4 mm) clearance between boards and adjacent concrete or masonry to minimize wicking of moisture.
- Locate gypsum board joints at openings so that no joint will occur within 12" (305 mm) of the edges of the opening unless installing control joints at these points. Stagger vertical end joints. Joints on opposite sides of a partition should not occur on the same stud.

(Continued on page 3)

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

Gold Bond® XP® Hi-Abuse® Gypsum Board

TECHNICAL DATA

Physical Properties	XP Hi-Abuse
Thickness[1], Nominal	5/8" (15.9 mm)
Width[1], Nominal	4' (1,219 mm)
Length[1,4], Standard	8' – 12' (2,438 mm - 3,658 mm)
Weight, Nominal	2.8 lbs./sq. ft.(13.67 k/m^2)
Edges[1]	Tapered
Flexural Strength[1], Perpendicular	≥ 147 lbf. (654 N)
Flexural Strength[1], Parallel	≥ 46 lbf. (205 N)
Humidified Deflection[1]	≤ 5/8" (16 mm)
Nail Pull Resistance[1]	≥ 87 lbf. (387 N)
Hardness[1] – Core, Edges and Ends	≥ 11 lbf. (49 N)
Bending Radius	15' (4,572 mm)
Thermal Resistance[5]	R = .56
Permeance[6]	37 perms
Water Absorption[1] (% of Weight)	< 5%
Mold Resistance[7], ASTM D3273	Score of 10
Mold Resistance[8], ASTM G21	Score of 0
Surface Abrasion[9]	Level 3
Indentation[9]	Level 1
Soft-Body Impact[9]	Level 2
Hard-Body Impact[9]	Level 1
Product Standard Compliance	ASTM C1396
Fire-Resistance Characteristics	
Core Type	Type X
UL Type Designation	FSW
Combustibility[2]	Non-combustible Core
Surface Burning Characteristics[3]	Class A
Flame Spread[3]	15
Smoke Development[3]	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 C1629 *Standard Classification for Abuse Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels*	
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 E119 *Standard Test Methods for Fire Tests of Building Construction and 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, *Levels of Finish for Gypsum Panel Products*	
Gypsum Association, GA-216, *Application and Finishing of Gypsum Panel Products*	
Gypsum Association, GA-238, *Guidelines for Prevention of Mold Growth on Gypsum Board*	
Gold Bond Building Products, LLC Manufacturer Standards, *NGC Construction Guide*	

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. Special lengths may be available. Contact your local sales representative for more information.
5. Tested in accordance with ASTM C518.
6. Tested in accordance with ASTM E96.
7. Tested in accordance with ASTM D3273 and rated in accordance with ASTM D3274.
8. Tested in accordance with ASTM G21.
9. Tested in accordance with ASTM methods in ASTM C1629 – D4977 (Surface Abrasion), D5420 (Indentation), E695 (Soft-Body Impact), Annex A1 (Hard-Body Impact).

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(*Continued from page 1)*

- Hold gypsum board in firm contact with the framing member while driving fasteners. 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 face paper of the gypsum board. Remove improperly driven nails or screws.
- 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 gypsum board 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.
- Double nailing is an alternate method of attachment devised to minimize nailpops. This system requires doubling up on the field nails. The total quantity of nails used does not double, however, since maximum nail spacing is increased to 12" (305 mm) o.c. and conventional nailing is used on the perimeter. Application is accomplished by first single nailing the field of the board, starting at the center and working toward ends and edges. Another nail is then driven in close proximity (2" [50.8 mm] to 2-1/2" [63.5 mm]) to each of the first nails. The first series of nails are then struck again to ensure the board is drawn tightly to the framing member.
- When using adhesive to attach gypsum board, apply drywall adhesive to face of studs or joists in continuous beads. Reference ASTM C840 Section 10.

Mold and Mildew Resistance

XP Hi-Abuse Gypsum Board was designed to provide extra protection against mold and mildew compared to standard gypsum board products. When tested by an independent laboratory, XP Hi-Abuse Gypsum Board received the highest possible ratings on ASTM G21 and ASTM D3273.

No material can be considered "mold proof," nor is it certain that any material will resist mold or mildew indefinitely. When used in conjunction with good design, handling and construction practices, XP Hi-Abuse Gypsum Board can provide increased mold resistance versus standard gypsum board products. As with any building material, avoiding water exposure during handling, storage and installation, and after installation is complete, is the best way to avoid the formation of mold or mildew.

Fire Resistance 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 ensure that each component of the assembly is the one specified in the test. Further, precautions should be taken that assembly procedures are in accordance with those of the tested assembly. For copies of specific tests, call 1-800-NATIONAL.

Finishing

Refer to GA-214, *Levels of Finish for Gypsum Panel Products*, to determine the level of finishing needed to assure a surface properly prepared to accept the desired decoration.

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 texturing.

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

Ceiling areas abutting 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 ceiling 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. If necessary, finish boards to a Level 5 finish, as outlined in GA-214.

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LIMITATIONS

- To maximize impact resistance and eliminate potential screw spin-out, a minimum 20-gauge (.0312" design thickness) steel stud is required, as outlined in GA-216.
- Avoid exposure to excessive or continuous moisture and extreme temperatures. Do not expose gypsum board to temperatures exceeding 125˚F (52˚C) for extended periods of time.
- Properly ventilate or condition attic spaces to remove moisture buildup above gypsum board ceilings. If required, install a vapor retarder in exterior ceilings behind gypsum board.
- Avoid installing gypsum board directly over insulation blankets with facer flanges placed continuously across the face of the framing members; recess insulation blankets and attach flanges to the sides of framing.
- Isolate gypsum board from contact with building structure in locations where structural movement may impose direct loads on gypsum board assemblies.
- Provide control joints spaced not more than 30' (9,144 mm) where employing long continuous runs of walls, partitions or ceilings without perimeter relief.
- Avoid gypsum board joints within 12" (305 mm) of the corners of window or door frames unless installing control joints at these locations.
- In single-ply installation, all ends and edges of gypsum board should occur over framing members or other solid backing except where treated joints occur at right angles to framing or furring members.
- Do not use boards as a nailing base.
- 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 or treat joints until the building is properly enclosed. Do not install in pre-rock conditions.

FOR MORE INFORMATION

GREENGUARD GOLD
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS UL.COM/GG UL 2818

Architectural Specifications

Gold Bond Building Products CSI MasterFormat® 3-part guide specifications are downloadable as editable Microsoft® Word documents at: **goldbondbuilding.com**.

Latest Technical Information and Update

Visit **goldbondbuilding.com** or call National Gypsum Company Construction Services: 1-800-NATIONAL (628-4662).

Technical Information *Información Técnica*
1-800-NATIONAL®
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Gold Bond® Building Products

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