**Hi-Impact® XP® Gypsum Board**

**Gold Bond® BRAND Hi-Impact® XP® Gypsum Board** consists of a mold-, mildew-, moisture- and fire-resistant Type X gypsum core with a specially designed PURPLE® paper. The PURPLE face paper is a heavy paper that is 100-percent recycled and offers superior abrasion, mold, mildew and moisture resistance. The 100-percent recycled gray back paper is also mold-, mildew- and moisture-resistant. Additionally, it has a fiberglass mesh embedded into the core, providing more impact and penetration resistance.

Use it for interior wall and ceiling applications and in areas with limited water exposure.

For speed of installation, GridMarX® guide marks are printed on the paper surface.

**Sizes:** 5/8 in. (15.9 mm) thick boards are available in 4 ft. (1,219 mm) widths and standard lengths of 8 ft. (2,438 mm) to 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 Joint Compound or ProForm® BRAND XP® Lite Joint Compound.

**Note:** For abuse and impact test (ASTM C1629) results, see page 388.
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 in. (15.9 mm) Hi-Impact® XP® Gypsum Board where Type X Gypsum Board is specified in certain fire-rated wall assemblies.
- Use it as a tile backer board in dry areas or areas with limited moisture, such as toilet and sink areas and wall and ceiling areas above tile in tubs and showers.

ADVANTAGES

- Specially designed gypsum core with a built-in fiberglass mesh offers superior protection against impact and penetrations into the wall cavity.
- Provides greater resistance to surface abrasion, indentation, impact and penetration over standard gypsum board.
- 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.
- 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.
- Features the GridMarX® guidemarks on the board to allow for faster and more accurate installation.
- 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 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.
- GridMarX provides quick identification and uniform nail/screw patterns. Use GridMarX to make accurate cuts without drawing lines. GridMarX guide marks run the length of the board at five points in 4 in. (102 mm) increments. Marks run along the edge in both tapers and at 16 in. (406 mm), 24 in. (610 mm) and 32 in. (813 mm) in the field of the board. 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 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.
- 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 points. Stagger vertical end joints. Joints on opposite sides of a partition should not occur on the same stud.
## TECHNICAL DATA

### PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Hi-Impact XP Gypsum Board</th>
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<tbody>
<tr>
<td><strong>Thickness</strong>, Nominal</td>
<td>5/8” (15.9 mm)</td>
</tr>
<tr>
<td><strong>Width</strong>, Nominal</td>
<td>4’ (1,219 mm)</td>
</tr>
</tbody>
</table>
| **Length**
  | Standard                                      | 8’ – 12’ (2,438 mm – 3,658 mm) |
| **Weight**, Nominal                           | 2.8 lbs. / sq. ft. (13.67 k/m²) |
| **Edges**                                     | Tapered                   |
| **Flexural Strength**, Perpendicular          | ≥ 147 lbf. (654 N)        |
| **Flexural Strength**, Parallel               | ≥ 46 lbf. (205 N)         |
| **Humidified Deflection**                     | ≤ 5/8” (15.9 mm)          |
| **Nail Pull Resistance**                      | ≥ 87 lbf. (387 N)         |
| **Hardness** – Core, Edges and Ends           | ≥ 11 lbf. (49 N)          |
| **Bending Radius**                            | 15’ (4,572 mm)            |
| **Thermal Resistance**                        | R = .56                   |
| **Permeance**                                 | 37 perms                  |
| **Water Absorption** (% of Weight)            | < 5%                      |
| **Mold Resistance**, ASTM D3273               | Score of 10               |
| **Mold Resistance**, ASTM G21                 | Score of 0                |
| **Surface Abrasion**                          | Level 3                   |
| **Indentation**                               | Level 1                   |
| **Soft-Body Impact**                          | Level 3                   |
| **Hard-Body Impact**                          | Level 3                   |
| **Product Standard Compliance**               | ASTM C1396                |
| **Fire-Resistance Characteristics**           |                           |
| **Core Type**                                 | Type X                    |
| **UL Type Designation**                       | FSW                       |
| **Combustibility**                            | Non-combustible Core      |
| **Surface Burning Characteristics**           | Class A                   |
| **Flame Spread**                              | 15                        |
| **Smoke Development**                         | 0                         |

### Applicable Standards and References

- 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 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, Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels
- Gypsum Association, GA-216, Application and Finishing of Gypsum Panel Products
- Gypsum Association, GA-238, Guidelines for Prevention of Mold Growth on Gypsum Board

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. Please consult your local sales representative for all non-standard lengths and widths. Minimum order requirements may apply.
5. Tested in accordance with ASTM C518.
6. Tested in accordance with ASTM E96.
7. Tested in accordance with ASTM D3273.
8. Tested in accordance with ASTM G21.
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.

FINISHING

Perform finishing of Hi-Impact® XP® Gypsum Board in accordance with GA-214. Joints between Hi-Impact XP Gypsum Board may be finished with either paper tape and ready mix joint compound or fiberglass mesh tape and setting compound, such as ProForm® brand Interior Finishing Products. In most areas to receive final decoration, skim coat the entire surface.

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

Wall and ceiling 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

- To maximize impact resistance and eliminate potential screw spin-out, a minimum 20-gauge (.0312 in. 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 ft. (9,144 mm) where employing long continuous runs of walls, partitions or ceilings without perimeter relief.

- Avoid gypsum board joints within 12 in. (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 as they are nonstructural.

- 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.
Gold Bond® BRAND
Hi-Impact® XP® Gypsum Board

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.