Gold Bond® Brand High Strength Ceiling Board is a specialty gypsum board encased in 100-percent recycled paper. The increased uniformity and integrity of its gypsum core makes the sag resistance equivalent to 5/8 in. (15.9 mm) Type X Gypsum Board.

Use it for interior, non-fire-rated wall and ceiling applications.

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

Sizes: 1/2 in. (12.7 mm) thick ceiling boards are available in 4 ft. (1,219 mm) widths and in standard lengths of 12 ft. (3,658 mm).

Finishing: Long edges are tapered or square. 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.

1. 100% Recycled Paper
2. Tapered or Square Edge
3. Gypsum Core
High Strength Ceiling Board

Basic Uses

APPLICATIONS

Use High Strength Ceiling Board for ceilings in non-fire-rated construction where framing members are spaced up to 24 in. (610 mm) o.c.

ADVANTAGES

- Excellent sag resistance. In independent tests, High Strength Ceiling Board exhibited an average sag of only 0.033 in. (0.84 mm) (approx. 1/32 in.) on joists spaced to 24 in. (610 mm) o.c. with a spray texture applied.
- Exhibits sag-resistant properties equal to 5/8 in. Type X Gypsum Board when tested in accordance with ASTM C473.
- Eliminates the need for two gypsum board thicknesses on the job. Reduces the scrap from the ceiling since you can also use the material on walls.
- Install on ceilings 24 in. (610 mm) o.c. using a water-based textured finish; supports overlaid insulation.
- Lighter weight board is easy to handle.
- Excellent working properties, including improved score and snap properties, which reduce the need for rasping.
- Improved strength-to-weight ratio and greater nail-holding power.
- The gypsum core will not support combustion or transmit temperatures greatly in excess of 212°F (100°C) until completely calcined, a slow process.
- Features the GridMarX® preprinted fastening guide 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 a 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 when installing a polyethylene vapor barrier on ceilings 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.
- 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 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.
- 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.
# TECHNICAL DATA

## PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>High Strength Ceiling Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness(^1), Nominal</td>
<td>1/2” (12.7 mm)</td>
</tr>
<tr>
<td>Width(^1), Nominal</td>
<td>4’ (1,219 mm)</td>
</tr>
<tr>
<td>Length(^1), Standard</td>
<td>12’ (3,658 mm)</td>
</tr>
<tr>
<td>Weight, Nominal</td>
<td>1.8 lbs. / sq. ft. (8.79 k/m(^2))</td>
</tr>
<tr>
<td>Edges(^1)</td>
<td>Tapered or Square</td>
</tr>
<tr>
<td>Flexural Strength(^1), Perpendicular</td>
<td>≥ 107 lbf. (476 N)</td>
</tr>
<tr>
<td>Flexural Strength(^1), Parallel</td>
<td>≥ 36 lbf. (160 N)</td>
</tr>
<tr>
<td>Humidified Deflection(^1)</td>
<td>≤ 10/8” (31.8 mm)</td>
</tr>
<tr>
<td>Nail Pull Resistance(^1)</td>
<td>≥ 77 lbf. (343 N)</td>
</tr>
<tr>
<td>Hardness(^1) – Core, Edges and Ends</td>
<td>≥ 11 lbf. (49 N)</td>
</tr>
<tr>
<td>Bending Radius</td>
<td>10’ (3,048 mm)</td>
</tr>
<tr>
<td>Product Standard Compliance</td>
<td>ASTM C1396</td>
</tr>
</tbody>
</table>

## Fire-Resistance Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Type</td>
<td>Regular</td>
</tr>
<tr>
<td>UL Type Designation</td>
<td>N/A</td>
</tr>
<tr>
<td>Combustibility(^2)</td>
<td>Non-combustible Core</td>
</tr>
<tr>
<td>Surface Burning Characteristics(^3)</td>
<td>Class A</td>
</tr>
<tr>
<td>Flame Spread(^3)</td>
<td>15</td>
</tr>
<tr>
<td>Smoke Development(^3)</td>
<td>0</td>
</tr>
</tbody>
</table>

## Applicable Standards and References

- ASTM C840 Standard Specification for Application and Finishing of Gypsum Board
- ASTM C1396 Standard Specification for Gypsum Board
- ASTM E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
- 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
- National Gypsum Company, 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.  

Please consult your local sales representative for all non-standard lengths and widths. Minimum order requirements may apply.
Gold Bond® BRAND
High Strength Ceiling Board

- Maintain a room temperature of not less than 50°F (10°C) when using adhesive to attach the 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

Refer to GA-214, Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels, 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 finished characteristics is the responsibility of the architect or contractor.

Prepare and prime gypsum board prior to decoration. Prime with sealer-type latex primer and allow to dry thoroughly.

CRITICAL LIGHTING AREAS

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 paint, and dark-toned paint finishes highlight surface defects; consider the use of textures to hide these minor visual imperfections.

Limitations

- Not recommended for high moisture areas, such as baths, saunas, steam rooms, gang showers and indoor swimming pools.
- Avoid exposure to 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.
- Do not allow weight of insulation to exceed 2.2 psf (10.7 kg/m²) when installing ceiling insulation. Apply insulation and polyethylene vapor barrier (if used) before installation.
- To prevent objectionable sag in gypsum paneled ceilings, the weight of overlaid unsupported insulation should not exceed the following recommendations:

<table>
<thead>
<tr>
<th>CEILING-SUPPORTED INSULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness, Nominal</td>
</tr>
<tr>
<td>Framing Spacing</td>
</tr>
<tr>
<td>Weight of Ceiling-Supported Insulation</td>
</tr>
</tbody>
</table>

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.