Description

Gold Bond® brand Gridstone® CleanRoom Gypsum Ceiling Panels consist of a non-combustible, 1/2 in. (12.7 mm) Fire-Shield® G Gypsum Core with a 2-mil. white, stipple-textured vinyl laminate face that combines high light reflectance with easy cleanability and a clear vinyl laminate back. Gridstone CleanRoom Gypsum Ceiling Panels are manufactured with the exposed edges sealed, providing a durable coating that completely seals the panel.

It is designed for areas requiring high levels of air cleanliness or airborne particulate levels, such as clean rooms and clean zones. Gridstone Panels are USDA accepted for use in food service and food processing areas. Gridstone CleanRoom Gypsum Ceiling Panels contain no asbestos.

Basic Uses

APPLICATIONS

Use Gridstone CleanRoom Gypsum Ceiling Panels for areas requiring high levels of air cleanliness or airborne particulate levels such as clean rooms and clean zones.

ADVANTAGES

- Designed for clean room use. Approved for use in systems Class 100,000, Class 10,000, Class 1,000, Class 100 per federal standard 209E “Airborne Particulate Cleanliness Classes in Clean Rooms and Clean Zones.”
- A non-combustible gypsum core assures fire safety with 1-1/2- and 2-hour fire ratings achievable depending on installation.
- Durable white vinyl laminate eliminates additional finishing.
- Gridstone CleanRoom Ceiling Panels’ rigid gypsum core prevents sagging and warping problems and is backed by a 15-year limited warranty.
- 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: calrecycle.ca.gov/greenbuilding/specs/section01350/.

Installation Recommendations

GENERAL

- Provide cross ventilation in unheated or enclosed space above ceiling panels.
- Use Gridstone CleanRoom Ceiling Panels in a gasket seal suspended grid system using hold down clips. Recommended use of Gordon DS-20 Gasket Seal System or equivalent gasket-sealed grid systems designed for clean room applications.
- Install Gridstone Panels in lay-in suspension systems with edges concealed by flanges of suspension members.
- Gridstone Panels are designed to be mounted in 15/16 in. (24 mm) exposed tee grid systems or environmental-type grids for severe conditions, with grids either 24 in. (610 mm) x 24 in. (610 mm) or 24 in. (610 mm) x 48 in. (1,219 mm). Grid installation should be conducted according to manufacturer’s specification.
- Vinyl laminate on face of Gridstone Panels is directional. Install with all factory edges parallel (same direction).
- Each panel must be continuously supported on all four edges.
- Cut panels to fit tightly at borders and penetrations so that cut edges are concealed by trim pieces and escutcheons.
- If panel cuts are required, seal exposed core to maintain performance of the system.
- Cleaning: Remove common dirt and stains on the vinyl surface with mild soap or detergent in lukewarm water. Use a light scrubbing action with a cloth, sponge or soft brush. If the suitability of any cleaning agent is unknown, check its effect on the Gridstone Panel surface in a hidden area or on a scrap piece before attempting to remove a field stain.

FIRE RATINGS BY TYPE & SIZE (ASTM E119)

<table>
<thead>
<tr>
<th>Type</th>
<th>Size</th>
<th>Design</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 in. (12.7 mm)</td>
<td>2’ x 2’</td>
<td>UL G222</td>
<td>2 hr.</td>
</tr>
<tr>
<td>Fire-Shield G</td>
<td></td>
<td>FM FC299</td>
<td></td>
</tr>
<tr>
<td>1/2 in. (12.7 mm)</td>
<td>2’ x 4’</td>
<td>UL G259</td>
<td>1-1/2 hr.</td>
</tr>
<tr>
<td>Fire-Shield G</td>
<td></td>
<td>FM FC300</td>
<td></td>
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</tbody>
</table>
## PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Specification</th>
<th>Gridstone CleanRoom Gypsum Ceiling Panels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thickness</strong>, Nominal</td>
<td>1/2&quot; (12.7 mm)</td>
</tr>
<tr>
<td><strong>Width</strong>, Nominal</td>
<td>2' (610 mm)</td>
</tr>
<tr>
<td><strong>Length</strong>&lt;sup&gt;1,4&lt;/sup&gt;, Standard</td>
<td>2' (610 mm) actual size is 23-3/4&quot; x 23-3/4&quot;</td>
</tr>
<tr>
<td></td>
<td>4' (1,219 mm) actual size is 23-3/4&quot; x 47-3/4&quot;</td>
</tr>
<tr>
<td><strong>Weight</strong>, Nominal</td>
<td>2.2 lbs./sq. ft. (10.74 k/m²)</td>
</tr>
<tr>
<td><strong>Edges</strong></td>
<td>Square</td>
</tr>
<tr>
<td><strong>Finish Face</strong></td>
<td>2 mil. White Stipple Vinyl Laminate</td>
</tr>
<tr>
<td><strong>Finish Back</strong></td>
<td>2-mil Clear Vinyl Laminate</td>
</tr>
<tr>
<td><strong>Predecorated Gypsum Board&lt;sup&gt;1&lt;/sup&gt;</strong></td>
<td>Class 1</td>
</tr>
<tr>
<td><strong>Ceiling Atenuation Class (CAC)&lt;sup&gt;4,5&lt;/sup&gt;</strong></td>
<td>46 dB</td>
</tr>
<tr>
<td><strong>Light Reflectance&lt;sup&gt;5&lt;/sup&gt;</strong></td>
<td>LR 1 (75% or greater)</td>
</tr>
<tr>
<td><strong>Product Standard Compliance</strong></td>
<td>ASTM C1396</td>
</tr>
<tr>
<td><strong>Fire-Resistance Characteristics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Core Type</strong></td>
<td>Type X</td>
</tr>
<tr>
<td><strong>UL Type Designation</strong></td>
<td>FSW-G</td>
</tr>
<tr>
<td><strong>Combustibility&lt;sup&gt;3&lt;/sup&gt;</strong></td>
<td>Non-combustible Core</td>
</tr>
<tr>
<td><strong>Surface Burning Characteristics&lt;sup&gt;3&lt;/sup&gt;</strong></td>
<td>Class A</td>
</tr>
<tr>
<td><strong>Flame Spread&lt;sup&gt;3&lt;/sup&gt;</strong></td>
<td>5</td>
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<tr>
<td><strong>Smoke Development&lt;sup&gt;3&lt;/sup&gt;</strong></td>
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</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
- ASTM E1264 Standard Classification for Acoustical Ceiling Board
- ASTM E1414 Standard Test Method for Airborne Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum
- Gypsum Association, GA-216, Application and Finishing of Gypsum Panel Products
- 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.
4. Tested in accordance with ASTM E1414.
5. Tested in accordance with ASTM C1264, Type XX, Patterns E and G.
6. Please consult your local sales representative for all non-standard lengths and widths. Minimum order requirements may apply.
DECORATION
Gridstone Panels are factory finished decorative products that do not require painting. However, if desired, paint Gridstone with the following products:

1. Oil primer with finish coat of oil or latex paint
2. Two coats of latex paint.

Limitations

- Do not install panels in areas exposed to extreme or continuous moisture, such as saunas, steam rooms, gang showers and indoor pool enclosures.
- Do not exceed 104°F (40°C) or 90-percent relative humidity prior to, during and after installation.
- Limit supported insulation to 1.6 psf (4.88 k/m²).
- Overlaid insulation may cause excessive panel deflection and is not recommended where high humidity is likely to occur.
- Extreme lighting conditions may distort texture appearance.
- Do not use strong organic solvents (such as ketones), harsh abrasive cleaners or steel wool. These materials may cause dulling, discoloration, softening and other permanent damage to the vinyl surface.

HANDLING AND PROJECT CONDITIONS

- Avoid water exposure during shipping, handling, storage and installation, and after installation of gypsum ceiling panels in order to avoid the formation of mold or mildew.
- Remove nonbreathable shipping wrap material upon receiving and storing gypsum panels.
- Store gypsum ceiling panels off the ground and under cover.
- Keep gypsum ceiling panels dry to minimize the potential for mold growth. Take adequate care while transporting, storing, applying and maintaining gypsum ceiling panels. For additional information, refer to GA-238, which is available at gypsum.org under the “Download Gypsum Association Publications” section.
- Protect gypsum ceiling panels from the elements and maintain in good condition prior to and following installation. Stack panels flat, with care taken to prevent sagging or damage to edges, ends or surfaces.
- Do not install gypsum ceiling panels with visible signs of mold growth. Do not apply gypsum ceiling panels over other building materials where conditions exist that are favorable to mold growth.
- Do not exceed 95°F (35°C) when using a temporary heat source.
- Refer to GA-801 for complete handling and storage instructions.

For More Information

ARCHITECTURAL SPECIFICATIONS
National Gypsum Company’s CSI Master Format® 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.