Installing 1/4" High Flex Wallboard

Joint compound
Casing beads

1/4" High Flex Wallboard is easily
Control joints
Fasteners: Drywall screws, nails
Joint compound
Corner bead
Trims
Casing beads
Furring channels
Control joints
Floor and ceiling runners

Floor and ceiling runners
Furring channels
Expansion and contraction under

joint tape and

Lightweight, cost-efficient material
Corner bead

Applications
1/4" High Flex Wallboard is specifically designed for radius construction such as curved walls, archways and stairways. It can be used for both concave and convex surfaces. 1/4" High Flex is typically applied in double layers.

Features/Benefits
Lightweight, cost-efficient material that readily accepts a wide range of decorative finishes.
1/4" High Flex Wallboard is easily cut for quick installation, permitting painting or other decoration and the installation of metal or wood trim almost immediately.
The gypsum core will not support combustion.
Expansion and contraction under normal atmospheric changes is negligible.

Limitations
Exposure to extreme temperatures shall be avoided. 1/4" High Flex Wallboard is not recommended where it will be exposed to temperatures exceeding 125°F (52°C).
Installing 1/4" High Flex Wallboard panels over an insulating blanket, installed continuously across the face of the framing members, is not recommended. Blankets shall be recessed and flanges attached to the sides of the studs or joists.

Composition
Manufactured panel with a gypsum core encased with paper.

Accessories
Fasteners: Drywall screws, nails and joint tape
Joint compound
Corner bead
Trims
Casing beads
Furring channels
Control joints
Floor and ceiling runners

Installation

GridMarX®
High Flex® BRAND Wallboard comes standard with GridMarX guide marks printed on the paper surface. These guide marks align with standard building dimensions and help to quickly identify fastener lines for stud and joist framing. Using GridMarX, accurate cuts can be made without having to draw lines. The use of GridMarX also provides quick identification and uniform nail/screw patterns.

GridMarX guide marks run the machine direction of the board at five points in 4” increments. Marks run along the edge in both tapers and at 16”, 24” and 32” in the field of the board. The marks cover easily without bleed-through using standard paint products.

Vertical Application – In a vertical application, GridMarX serves as guide marks to help identify the exact location of framing members behind the gypsum board. (If framing member is located 2” to the right of GridMarX at the top edge of the board, it will be located 2” to the right down the face of the board.)

Recommendations
For best painting results, all surfaces, including joint compound, shall be clean, dust-free and not glossy. To improve fastener and joint concealment, a coat of a quality latex primer is recommended to equalize the absorption between surface paper and joint compound.

1/4" High Flex Wallboard shall be applied first to ceiling at right angles to framing members, then to walls. Boards of maximum practical length shall be used so that an absolute minimum number of end joints occur. Board edges shall be brought into contact with each other but should not be forced into place.

Wallboard joints at openings shall be located so that no end joint will align with edges of openings unless control joints will be installed at these points. End joints shall be staggered, and joints on opposite sides of a partition shall not occur on the same stud.
1/4” High Flex Wallboard is typically installed in double layer construction. To prevent flat spots, framing members shall be spaced closer together than required for typical flat wall and ceiling surfaces (see table).

1/4” High Flex Wallboard shall be held in firm contact with the framing member while fasteners are being driven.

For concave surfaces, a stop shall be applied to one end of the curve to restrain one end or edge of the board during installation. Pressure shall be applied to unrestrained end or edge of the gypsum board forcing the field of the gypsum board into firm contact with the framing. Gypsum board shall be fastened by working from the “stopped” end or edge. The gypsum board shall be held tightly against the framing while fasteners are being driven.

For convex surfaces, one end of the gypsum board shall be attached to the framing with nails or screws. The gypsum board shall be progressively pushed into contact with the framing members, working from the fixed end to the free end. The gypsum board shall be held tightly against each framing member while fasteners are being driven.

Fasteners shall be set with the heads slightly below the surface of the wallboard in a dimple formed by the hammer or power screwdriver. Care shall be taken to avoid breaking the face paper of the wallboard. Improperly driven nails or screws shall be removed.

Specifications
The following paragraphs are for insertion into sections of generic specification or generic/proprietary specifications covering Gypsum Wallboard products. The National Gypsum product name follows the generic description in parentheses.

Part 2 Products
201 Materials
A. Flexible board: A Gypsum core wallboard panel encased in heavy natural finish paper on the face side and strong liner paper on the back side and complying with ASTM C 36, ASTM C 1396 and Federal Specification SS-L-30D Type III. (1/4” High Flex Brand Wallboard)

1. Thickness: 1/4”, (6.4mm).
2. Width: 4’ (1219 mm)
3. Length: 8’ (2438 mm) through 12’ (3658 mm)
4. Edges: Slightly tapered.

Part 3 Execution
3.01 Installation
A. General: In accordance with the manufacturer’s recommendations, National Gypsum Company “Gypsum Construction Guide.”

MINIMUM BENDING RADII 1/4” HIGH FLEX WALLBOARD

<table>
<thead>
<tr>
<th>Application</th>
<th>Lengthwise Bend Radii</th>
<th>Widthwise Bend Radii</th>
<th>Lengthwise Maximum Stud Spacing</th>
<th>Widthwise Maximum Stud Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside (Concave) Dry</td>
<td>32” 9” o.c.</td>
<td>20” 9” o.c.</td>
<td>9” o.c.</td>
<td>9” o.c.</td>
</tr>
<tr>
<td>Outside (Convex) Dry</td>
<td>30” 9” o.c.</td>
<td>15” 8” o.c.</td>
<td>9” o.c.</td>
<td>8” o.c.</td>
</tr>
<tr>
<td>Inside (Concave) Wet</td>
<td>20” 9” o.c.</td>
<td>10” 6” o.c.</td>
<td>9” o.c.</td>
<td>6” o.c.</td>
</tr>
<tr>
<td>Outside (Convex) Wet</td>
<td>14” 6” o.c.</td>
<td>7” 5” o.c.</td>
<td>6” o.c.</td>
<td>5” o.c.</td>
</tr>
</tbody>
</table>

Lengthwise denotes long edges perpendicular to the framing members. Widthwise denotes long edges parallel to the framing members. The values listed above were achieved at 65°F and 45% relative humidity. Lower temperatures and lower humidity will decrease the flexibility.

Wetting the board is only required on extremely tight radii, or when temperature and humidity conditions are lower than 65°F and 45% relative humidity. When wetting the board, apply 10-15 ounces of clean water per side with a paint roller or sprayer. Allow to soak 10-15 minutes before bending.

Technical Data

<table>
<thead>
<tr>
<th>PHYSICAL PROPERTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width: 4’ (1219 mm)</td>
</tr>
<tr>
<td>Thickness: 1/4” (6.4 mm)</td>
</tr>
<tr>
<td>Standard length: 8’ (2438 mm)</td>
</tr>
<tr>
<td>Special order lengths: 9’ (2743 mm), 10’ (3048 mm), 12’ (3658 mm)</td>
</tr>
<tr>
<td>Edges: Slightly tapered</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TECHNICAL DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Burning Characteristics (Per ASTM E 84)</td>
</tr>
<tr>
<td>Flame Spread: 15</td>
</tr>
<tr>
<td>Smoke Developed: 0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRODUCT SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meets ASTM C 36, ASTM C 1396</td>
</tr>
<tr>
<td>Meets Federal Specification SS-L-30D Type III (Regular)</td>
</tr>
</tbody>
</table>
LIMITED WARRANTY AND REMEDIES

Products manufactured and sold by National Gypsum Company are warranted by National Gypsum Company to its customers to be free from defects in materials and workmanship at the time of shipment. THIS EXPRESS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO SUCH PRODUCTS, AND IS IN LIEU OF AND EXCLUDES ALL OTHER EXPRESS ORAL OR WRITTEN WARRANTIES AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

National Gypsum Company will not be liable for any incidental, indirect or consequential losses, damages or expenses. The customer’s exclusive remedy for any type of claim or action for defective products will be limited to the replacement of the products (in the form originally shipped) or, at National Gypsum’s option, to a payment or credit not greater than the original purchase price of the products.

National Gypsum Company will not be liable for products claimed to be defective where the defect resulted from causes not within National Gypsum’s control, or which arose or occurred after shipment, including but not limited to accidents, misuse, mishandling, improper installation, contamination or adulteration by other materials or goods, or abnormal conditions of temperature, moisture, dirt or corrosive matter.

Any claim that products sold by National Gypsum Company were defective or otherwise did not conform to the contract of sale is waived unless the customer submits it in writing to National Gypsum within thirty (30) days from the date the customer discovered or should have discovered the defect or nonconformance. No legal action or proceeding complaining of goods sold by National Gypsum may be brought by the customer more than one year after the date the customer discovered or should have discovered the defect or problem of which it complains.