

High Flex[®] BRAND *Gypsum Wallboard*



National 
Gypsum[®]

High Flex[®] BRAND Gypsum Wallboard

Description

High Flex[®] BRAND Wallboard panels consist of a fire-resistive gypsum core encased in heavy natural-finish paper on the face side and liner paper on the back side. The face paper is folded around the long edges to reinforce and protect the core, and the ends are square-cut and finished smooth. Long edges of panels are slightly tapered, allowing joints to be reinforced and concealed with ProForm[®] BRAND joint tape and joint treatment.

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
- Cornerbead
- Trims
- Casing beads
- Furring channels
- Control joints
- Floor and ceiling runners

Installation

Installation of 1/4" High Flex Wallboard shall be consistent with methods described in GA216, "Application and Finishing of Gypsum Board," ASTM C 840, "Standard Specification for Application and Finishing of Gypsum Board." (Except for the application of fasteners – see Recommendations)

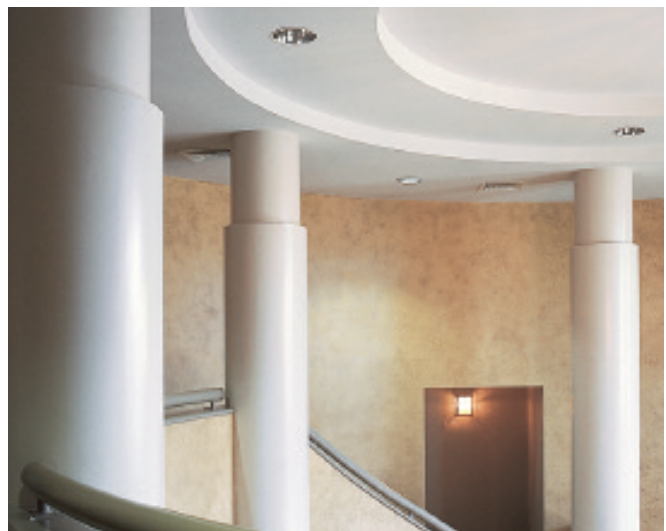
GridMarX[®]

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 with no 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 eliminating the need for field applied vertical lines.

Horizontal Application – In a horizontal application, GridMarX serves as *reference marks* to help identify the exact location of framing members



High Flex is specifically designed for radius construction such as curved wall and ceiling applications.

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.

- 1/4" High Flex Wallboard is significantly more flexible in the vertical direction (long edges parallel to the framing) than in the horizontal direction (see table).
- 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.



MINIMUM BENDING RADII 1/4" HIGH FLEX WALLBOARD

Application	Lengthwise		Widthwise	
	Bend Radii	Maximum Stud Spacing	Bend Radii	Maximum Stud Spacing
Inside (Concave) Dry	32"	9" o.c.	20"	9" o.c.
Outside (Convex) Dry	30"	9" o.c.	15"	8" o.c.
Inside (Concave) Wet	20"	9" o.c.	10"	6" o.c.
Outside (Convex) Wet	14"	6" o.c.	7"	5" o.c.

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.

- 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' (3658mm)
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."

Technical Data

PHYSICAL PROPERTIES 4' (1219 MM)	
Width:	4' (1219 mm)
Thickness:	1/4" (6.4 mm)
Standard length:	8' (2438 mm)
Special order lengths:	9' (2743 mm), 10' (3048 mm), 12' (3658 mm)
Edges:	Slightly tapered

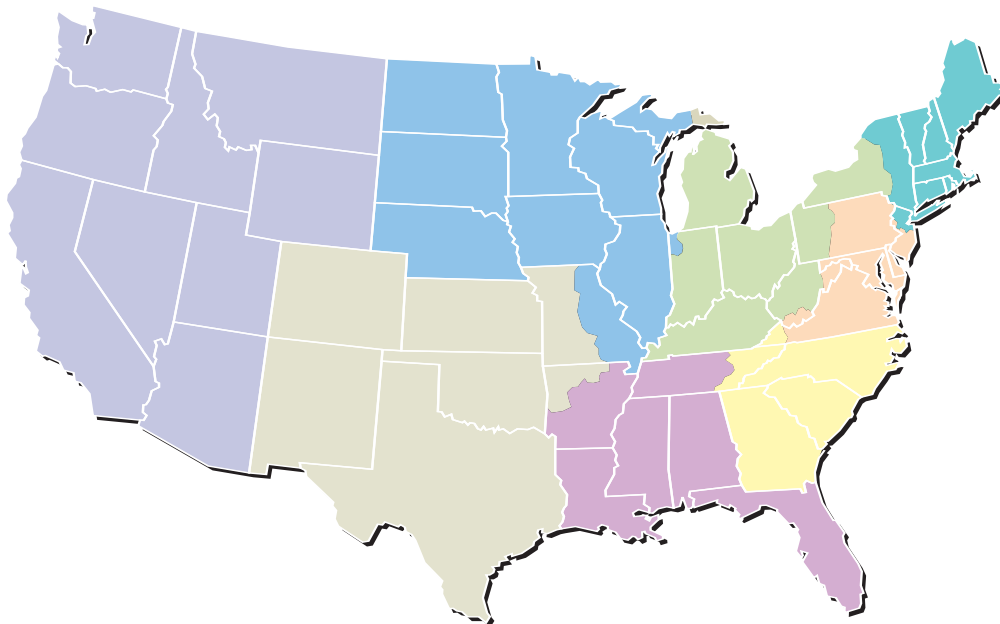
TECHNICAL DATA

Surface Burning Characteristics (Per ASTM E 84)
Flame Spread: 15 Smoke Developed: 0

PRODUCT SPECIFICATIONS

Meets ASTM C 36, ASTM C 1396
Meets Federal Specification SS-L-30D Type III (Regular)

CUSTOMER SERVICE SALES AREAS



Atlantic Area

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Fax: (800) 443-1329

Central Area

Phone: (800) 252-1065
Fax: (800) 443-1329

Gulf Area

Phone: (800) 343-4893
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Midwest Area

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Northeast Area

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Fax: (800) 443-1329

Southeast Area

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Fax: (800) 442-2793

Southwest Area

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Fax: (800) 442-2793

Western Area

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Fax: (800) 438-6266

National Accounts

Phone: (800) 440-1230
Fax: (800) 442-2793

Manufactured Housing

Phone: (800) 455-3185
Fax: (800) 639-1714

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.

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