

ToughRock™ MH 1/2" Gypsum Board

Manufacturer

G-P Gypsum Corporation
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Atlanta, GA 30303
Technical Hotline: (800) 225-6119 (ET)

Description

ToughRock™ MH 1/2" Gypsum Board has a noncombustible, dimensionally stable, gypsum core. The surfacings on both faces and on the long edges are 100% recycled paper. The front face (side to be finished) and the long edges are an ivory color; the back face paper is gray. The ends are square cut, smooth finished with no paper facing.

Primary Uses

ToughRock Gypsum Board is a wall or ceiling covering material for use in manufactured housing. It is designed for direct attachment (screws, nails or adhesive) to wood and metal framing or existing surfaces. It may also be used as a covering material for flat or curved structures; the material may be formed to a curve with a short radius.

ToughRock MH 1/2" Gypsum Board is manufactured with a white paper surface designed to receive joint treatment then paint, wall covering, textured coatings or other finish treatment.

Limitations

ToughRock MH 1/2" Gypsum Board is a nonstructural product and should not be used as a nailing base to support heavy wall-mounted objects.

It is intended for interior applications only; it must be kept dry and not used where exposure to moisture is extreme or continuous.

Do not use ToughRock MH 1/2" Gypsum Board where there is prolonged exposure to temperatures exceeding 125°F and/ or continuous exposure to extreme humidity; e.g., located adjacent to wood burning stoves, heating appliances, swimming pools, saunas or steam rooms.

Consult manufacturer's literature when water-based textures are to be used.

Applicable Standards

ASTM C 36 (Physical Properties),
ASTM C 1396, CSA-A82.27-M and Federal Specification SS-L-30D, Type III, Grade R.

Building Code Conformity

ToughRock MH 1/2" Gypsum Board conforms to the requirements of major building codes.

Sizes and Edges

Thickness nominal	Widths nominal	Lengths standard
1/2"	4'	6'-16'

Edges: 1/2" Square, tapered or tapered with round edges.

Supplemental Materials

Fasteners: Nails, screws or adhesive.

Joint System: Tape, bedding compound and topping compound.

Trims: Corner bead, edge/casing bead, control joints, floor/ceiling runners and channels.

Wall and ceiling textures.

Sealants.

Technical Data

Surface Burning Characteristics

Flame spread rating of 15 and smoke developed 0, when tested in accordance with ASTM E 84 or CAN/ULC-S102.

Fire Resistance Rating

Fire resistance ratings are derived from tests performed by independent laboratories on assemblies of specific materials. Caution must be used to ensure that each component of the construction design is assembled properly and in accordance with the specified assembly.

Sound Control

Sound rated assemblies require sealing at top, bottom, intersections and other penetrations to ensure the effectiveness of the assembly and obtain desired STC rating. Test reports are available upon request.

Installation

Application Standards

ToughRock MH 1/2" Gypsum Board shall be installed according to the Gypsum Association Publication GA-216 "Recommended Specifications for the Application and Finishing of Gypsum Board" and ASTM C 840 "Standard Specification for Application and Finishing of Gypsum Board" for non-fire rated construction.

However, to achieve a designated fire resistance rating, installation and details must be in full conformity with those assemblies published in the Gypsum Association Fire Resistance Design Manual GA-600, UL/ ULC Fire Resistance Directory and Inchcape Testing Services/ Warnock Hersey Listing Book.

Methods

For non-rated construction, installation methods for single or multi-layer construction involving attachment using mechanical fasteners, adhesive or adhesive with supplemental fasteners are numerous and varied. Refer to Gypsum Association publications for application and installation details.

The installation method selected should be planned carefully to minimize the number of end joints. ToughRock MH 1/2" Gypsum

Board can be cut to the necessary size by scoring the face paper with a sharp knife, then snapping away from the cut face. The back paper is then cut or broken by snapping the board in the opposite direction. All cut edges and ends are smoothed by rasping or other suitable methods to form tight-fitting joints when installed.

For rated assemblies, appropriate methods of installation are based on the desired fire resistance rating or specified STC value required. These ratings and values require that all details of the tested assemblies be followed. In addition to these details, the installation methods outlined in Gypsum Association Publications GA-201 and GA-216 will facilitate optimum performance through preferred construction practices.

Safety

During installation involving cutting, scoring and breaking, safety glasses are recommended. If the work environment is dusty, a NIOSH-approved respirator should be worn. Do not use a power saw.

Handling Precautions

Stack ToughRock MH 1/2" Gypsum Board flat on a level surface. As individual sheets are removed for installation, they should be raised up on edge carefully and carried in a vertical position. Appropriate handling is also outlined in Gypsum Association Publications GA-216 and GA-801.

Take care to avoid impact, undue flexing and subsequent damage to board edges, ends and corners. Avoid scuffing the face to be finished.

Material Safety Data Sheet

Material Safety Data Sheet (MSDS) is available upon request.

Board Decoration

ToughRock MH 1/2" Gypsum Board is designed to accept most types of paints, texture and wall covering materials. G-P Gypsum strongly recommends priming the surface with a full-bodied, quality latex primer before applying a final decorative material. Priming will equalize the suction variation between the joint compounds and the paper surface. If glossy paints are used in such areas as kitchens or bathrooms, skim coat joint compound over the entire surface to reduce highlighting or joint photographing. This method is also recommended in areas with severe natural or artificial side lighting.

G-P Gypsum recommends application of a sealer under wallpaper or other wall covering so that the board surface will not be damaged if the covering is subsequently removed during redecorating. Joint treatment must be thoroughly dry before proceeding with primer application and final decoration. (See publ. GA-216.)

TABLE I MAXIMUM FRAMING SPACING (Wood or Metal)			
	SINGLE-PLY THICKNESS	APPLICATION	O.C. SPACING
*CEILINGS	1/2" 1/2"	Parallel to Framing Right Angles to Framing	16" o.c. 24" o.c.
WALLS	1/2"	Right Angles or Parallel	24" o.c.

*When using a water-based texture on ceilings, gypsum board shall be installed at right angles to framing.
ToughRock MH 1/2" CD® Ceiling Board is recommended for spacing 24" o.c. ToughRock MH 1/2" Gypsum Board may be used for spacing 16" o.c.

TABLE II SINGLE-PLY APPLICATION ¹					
NAILS: ASTM C 514, Nails for the Application of Gypsum Board					
SCREWS: ASTM C 1002, Specification for Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Base					
Wallboard Thickness	NAIL APPLICATIONS			SCREW APPLICATIONS	
	Minimum Nail Length	Spacing Walls	Spacing Ceilings	Screw Length	Spacing Walls ² / Ceilings
1/2"	1 3/8"	8"	7"	1"	16" / 12"

¹ Also refer to local code requirements. ² Where framing members are spaced 24" o.c., screw spacing is 12" o.c.

TABLE III PHYSICAL PROPERTIES	
PROPERTIES	TOUGHROCK MH 1/2" GYPSUM BOARD
Thickness, nominal	1/2" (12.7mm), ± 1/64" (0.4mm)
Width, nominal	4' (1220mm), ± 3/32" (2.4mm)
Length, Standard	8' (2440mm) to 16' (4880mm) ± 1/4" (6.4mm)
Weight ¹ , lbs./M sq. ft. nominal	1650 ¹
Edges	Tapered, square and tapered with round edges
Surfacing back and long edges	100% recycled paper face, back and long edges
Flexural strength, min.	
Parallel, lbs.	40
Perpendicular	110
R Value ²	.45
Nail Pull Resistance	
Minimum, lbs.	80
Hardness, lbs. force	
core, edges and ends	≥15
Humidified Deflection, inches	10/8"

¹ Represents approximate weight for design and shipping purposes. For more exacting weight for your area, consult your local representative or call the G-P Gypsum Technical Hotline at 800-225-6119. ² Tested in accordance with ASTM C 518. NOTE: Specified minimum values are as defined in ASTM C 36.

For more information about these and other products, contact:
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Or visit our Web site at www.gp.com/gypsum.

For technical assistance, call the G-P Gypsum Technical Service Hotline at 1-800-225-6119.

For sales information and order placement, call:

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