

GOLD BOND® BRAND GYPSUM SHEATHING

MANUFACTURER

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DESCRIPTION

Gold Bond® BRAND Gypsum Sheathing is a water-resistant panel product designed for attachment to the outside of side-wall framing as a water-resistant underlayment for various exterior siding materials. The sheathing is manufactured with a wax-treated, water-resistant core faced with water-repellent paper on both face and back surfaces and on both long edges. Fire-Shield® (type X) Jumbo Sheathing has special additives in the core to enhance its fire-resistive properties.

BASIC USES

Gypsum Sheathing is designed for attachment to the outside of exterior wall framing as a water-resistant underlayment for various siding materials. Gypsum Sheathing can be used as a sheathing for wood-framed residential construction to provide fire resistance, weather protection and to add to structural strength when used under exterior finishes such as vinyl siding, clapboard, paneling, masonry veneer, stucco and shingles.

It can also serve as a sheathing for steel-stud commercial construction and as a component in curtainwall systems and exterior insulation systems and finishes.

Gypsum Sheathing can also be used as a sheathing for use in fire-rated exterior wall assemblies.

ADVANTAGES

- Low material and application costs.
- The noncombustible gypsum core of the sheathing protects framing elements even when the siding or finish material is combustible.
- Gypsum Sheathing's moisture-resistant core and water-repellent surfaces provide a barrier that resists passage of wind and water.
- Gypsum Sheathing can be scored and snapped to exact size without cutting or sawing.
- Many building codes allow the use of 4' wide panels of 1/2" Gypsum Sheathing applied vertically to be used in place of 1" by 4" wood let-in bracing, provided the shear values for Gypsum Sheathing listed in the code meet the requirements for the local wind and seismic design loads.

LIMITATIONS

- Gypsum Sheathing is not a finished surface nor is it a substrate for the direct application of stucco, paint or textures.
- The sheathing should not be used as a nailing base.
- Exterior Insulation Finish Systems (EIFS): Exterior Insulation Finish Systems incorporating Gypsum Sheathing should use mechanical fasteners. The performance of these systems and recommendation of the proper method of attachment are the sole responsibility of the EIFS manufacturer.
- Application of Gypsum Sheathing to framing by adhesive only is not recommended.
- Stud spacing must not exceed 24" o.c.
- Gypsum Sheathing is not recommended for application to exterior ceilings, soffits or sills.
- Gypsum Sheathing should be spaced not less than 1/4" from abutting masonry to minimize wicking.
- Neatly stack Gypsum Sheathing flat, taking care to prevent sagging or damage to the ends, edges and surfaces.
- Gypsum Sheathing may be stored outside for up to one month if stacked off the ground under protective covering.

- Gypsum Sheathing is designed for use as a substrate that is covered by an exterior cladding or other weather barrier and is not intended for long-term exposure. After it has been installed it shall not be exposed to the elements for more than 30 days. The Gypsum Sheathing shall be covered with building felt or equivalent within 30 days.

COMPOSITION AND MATERIALS

Gypsum Sheathing is a manufactured panel with gypsum core encased in water-repellent paper. Available with a water-resistant, wax-treated core; with a non-water-resistant untreated core; and with a type X (Fire-Shield) water-resistant core. Fire-Shield Core gypsum wallboard also contains various aggregates such as fiberglass to enhance the fire-resistive qualities. Gypsum Sheathing contains no asbestos.

ACCESSORIES

Nails should be galvanized, 11 gauge, 7/16" head, 1 1/2" long for 1/2" sheathing and 1 3/4" long for 5/8" sheathing.

(Continued next page)

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

Screws should be 1 1/4" Type W for wood framing and 1" Type S-12 for metal framing.

Staples should be galvanized 16 gauge, 7/16" crown x 1 1/2" long for 1/2" sheathing and 1 5/8" long for 5/8" sheathing.

SIZES AND TYPES

Regular: 1/2" x 2' x 8' tongue-and-groove edge (12.7 mm x 610 mm x 2438 mm).

Jumbo: 1/2" x 4' x 8', 9', 10' square edge (12.7 mm x 1219 mm x 2438 mm, 2743 mm, 3048 mm).

Fire-Shield Jumbo: 5/8" x 4' x 8', 9', 10' square edge (15.9 mm x 1219 mm x 2438 mm, 2743 mm, 3048 mm).

APPLICABLE STANDARDS

ASTM Specification C 79/C 1396

Federal specification SS-L-30D Type II (1/2" thick)

Federal specification SS-L-30D Type II Grade X (5/8" thick)

Shear walls: Where wind or seismic forces require shear walls to resist these lateral forces, most building codes provide allowable shear values for walls having Gypsum Sheathing applied to wood framing. Specific values with construction requirements and limitations are contained in the major model building codes (International Building Code, National Building Code, Standard Building Code and Uniform Building Code).

TECHNICAL DATA

Vapor-Permeable Gypsum Sheathing typically has an average vapor permeance of 20 perms (dry cup method) which allows the passage of water vapor in both directions.

SURFACE BURNING CHARACTERISTICS

ASTM E 84

Both Regular (2' x 8') and Jumbo (4' x 8', 9', 10')

Flame Spread: 20

Smoke Developed: 0

FIRE RESISTANCE RATINGS

A one-hour fire rating can be achieved for a wood-framed wall when constructed per UL Design U305, consisting of nominal 2" x 4" wood studs 16" o.c. faced on the outside with 5/8" Fire-Shield Gypsum Sheathing and on the inside with 5/8" Fire-Shield Gypsum Wallboard.

A two-hour fire rating may be obtained per UL Design U302 with 2" x 4" wood studs 16" o.c. with two layers of 5/8" Fire-Shield Gypsum Wallboard applied to the interior side and 1/2" regular Gypsum Sheathing faced with brick veneer on the exterior side.

STRUCTURAL

In tests conducted for the Gypsum Association by an independent laboratory according to ASTM E 72, average ultimate racking load values were as follows:

	Shear Load (lbs. per linear ft.) (kg. per .3M)	
	Dry	Wet*
1/2" x 4' (12.7 mm x 1219 mm) wide sheathing	540 (243)	332 (149)
5/8" x 4' (15.9 mm x 1219 mm) wide type X	654 (294)	522 (234)

*Treated core only

Studs spaced 16" o.c., fasteners galvanized 11 ga. nails 7/16" head, 1 1/2" long for 1/2" sheathing and 1 3/4" long for 5/8"; 7" o.c. in the field and 4" o.c. on edges and ends for 5/8" Gypsum Sheathing; 8" o.c. in field and 4" o.c. on edges and ends for 1/2" Gypsum Sheathing.

INSTALLATION

APPLICABLE STANDARDS AND REFERENCES

ASTM C 1280

Gypsum Association GA-253
National Gypsum Co. *Gypsum Construction Guide*

RECOMMENDATIONS

Installation of Gold Bond Gypsum Sheathing should be consistent with methods described in the noted standards and references and as indicated below.

Fasteners (nail or screw heads or the crown of staples) should bear tightly against the face of the sheathing but should not cut into the face paper. Staples should be driven with the crown parallel to the framing.

Fasteners should be no less than 3/8" from the edges and ends of the sheathing.

Regular Gypsum Sheathing 2 ft. wide: Apply 2'-wide sheathing horizontally, face side out, with the long dimension at right angles to the framing with grooved edges down, interlocking the tongue of previously installed panels with all edges butted but not forced into place. Stagger all vertical joints and abut them over the centers of framing members. Fit sheathing snugly around all window and door openings and install flashing around all openings. Secure sheathing to studs with nails or screws spaced not over 4" o.c. along ends and 8" o.c. to intermediate framing (staples 3" and 6" respectively).

Jumbo Gypsum Sheathing 4 ft. wide: Apply Jumbo Gypsum Sheathing vertically with vertical edges butting over the center of framing members. Fit sheathing snugly around all openings. Attach sheathing with nails or screws spaced not over 4" o.c. around perimeter and 8" to intermediate studs (space staples not over 3" and 6" o.c. respectively). Horizontally applied square edge Gypsum Sheathing shall be covered with building felt or equivalent, or horizontal joints shall be sealed at time of application. Horizontal Gypsum Sheathing joints do not require back blocking.

DECORATION

Not recommended.

