

Gold Bond® Durasan® Prefinished Gypsum Board

09 72 00 / NGC

Technical Information
800.NATIONAL • 800.628.4662

DESCRIPTION

Gold Bond® Durasan® Prefinished Gypsum Board consists of a fire-resistant gypsum core encased in heavy, 100% recycled paper on the face and back sides and a decorative vinyl covering over the face paper. The long edges are beveled and wrapped with decorative vinyl.

Apply Durasan directly to metal or wood studs or as a finish layer over gypsum board. It is ideal for most demountable partition systems. Durasan eliminates the need for joint treatment and paint, resulting in time and labor savings.

BASIC USES

Applications

Apply Durasan directly to studs or as a finish layer over gypsum board. It is ideal for most demountable partition systems.

Advantages

- Prefinished Durasan eliminates the need for joint treatment or paint, resulting in time and labor savings.
- Offers a wide variety of stylish patterns and colors.
- Color permanence: The high-quality vinyl surface offers good fade resistance. The vinyl films are specifically formulated with light-stable compounds and pigments to provide maximum stability and color retention under varying environmental conditions.
- Durasan Vinyl Gypsum Boards are extremely abrasion resistant when tested in accordance with ASTM D1044.
- Durasan 5/8" (15.9 mm) Type X Gypsum Board has a specially formulated core, providing superior fire-resistive performance when used in specific fire-rated assemblies.
- The gypsum core will not support combustion or transmit temperatures greatly in excess of 212°F (100°C) until completely calcined, a slow process.
- Scores and snaps easily to exact size without sawing.

Accessories

- **One-piece trims:** For 1/2" (12.7 mm) boards only. Matching vinyl laminated to an extruded vinyl form. Outside and inside corners; end cap; divider.
- **Two-piece trims:** For 1/2" (12.7 mm) and 5/8" (15.9 mm) panels. Matching vinyl laminated to extruded vinyl, which is then attached to a steel retainer. Snap-on corners; snap-on interior trims.
- **Matching vinyl roll goods.**

Abrasion Resistance

Tested in accordance with ASTM D1044, Durasan withstands over 10,000 revolutions without breaking through the vinyl film.

INSTALLATION RECOMMENDATIONS

General

- Install gypsum boards in accordance with methods described in ASTM C840 and GA-216.
- Examine and inspect framing materials to which gypsum board is to be applied. Remedy all defects before installing the gypsum board.
- Locate gypsum board joints at openings so that no joint will occur within 12" (305 mm) of the edges of the opening unless installing control joints at these locations. Stagger vertical end joints. Joints on opposite sides of a partition should not occur on the same stud.
- Hold gypsum boards in firm contact with the framing member while driving fasteners. Take care to avoid breaking the face of the gypsum board. Remove improperly driven nails or screws.
- Provide minimum 1/4" (6.4 mm) clearance between boards and adjacent concrete or masonry to minimize wicking of moisture.
- Maintain a room temperature of not less than 40°F (4°C) during application of gypsum board.
- Maintain a room temperature of not less than 50°F (10°C) when using adhesive to attach the gypsum boards, beginning 48 hours prior to application and continuously thereafter until completely dry. Maintain adequate ventilation in the working area during installation and curing period.
- Install fire-rated assemblies in accordance with the details found in the *UL Fire Resistance Directory* or *Gypsum Association, GA-600, Fire Design Manual*.

Installation of Durasan Prefinished Gypsum Board

There are several methods for installing Durasan products in order to meet specific job requirements. As in regular gypsum board construction, install ceilings first, before erecting Durasan Boards. Attach boards vertically. Do not apply Durasan to ceilings.

- **Adhesive Nail-On:** To avoid visible fasteners on exposed surfaces, apply Durasan panels to metal or wood studs or furring with adhesive. Prebow Durasan panels overnight with the vinyl surface concave.

(Continued on page 3)

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

**Gold
Bond®**
Gypsum Board

Gold Bond® Durasan® Prefinished Gypsum Board

TECHNICAL DATA

Physical Properties	1/2" Durasan Prefinished Gypsum Board	5/8" Durasan Prefinished Gypsum Board
Thickness¹, Nominal	1/2" (12.7 mm)	5/8" (15.9 mm)
Width¹, Nominal	4' (1,219 mm)	4' (1,219 mm), 54" (1,372 mm)
Length^{1,4}, Standard	8' – 10' (2,438 – 3,048 mm)	8' – 10' (2,438 – 3,048 mm)
Weight, Nominal	1.8 lbs./sq. ft. (8.79 k/m ²)	2.2 lbs./sq. ft. (10.74 k/m ²)
Edges¹	Beveled	Beveled
Flexural Strength¹, Perpendicular	> 107 lbf. (476 N)	> 147 lbf. (654 N)
Flexural Strength¹, Parallel	> 36 lbf. (160 N)	> 46 lbf. (205 N)
Humidified Deflection¹	< 10/8" (31.8 mm)	< 5/8" (15.9 mm)
Nail Pull Resistance¹	> 77 lbf. (343 N)	> 87 lbf. (387 N)
Hardness¹ - Core, Edges and Ends	> 11 lbf. (49 N)	> 11 lbf. (49 N)
Bending Radius	N/A	N/A
Thermal Resistance⁵	R = .45	R = .56
Product Standard Compliance	ASTM C1396	ASTM C1396
Fire-Resistance Characteristics		
Core Type	Regular	Type X
UL Type Designation	N/A	FSW
Combustibility²	Non-combustible Core	Non-combustible Core
Surface Burning Characteristics³	Class A	Class A
Flame Spread³	< 25	< 25
Smoke Development³	< 50	< 50
Applicable Standards and References		
ASTM C473 <i>Standard Test Methods for Physical Testing of Gypsum Panel Products</i>		
ASTM C518 <i>Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus</i>		
ASTM C840 <i>Standard Specification for Application and Finishing of Gypsum Board</i>		
ASTM C1396 <i>Standard Specification for Gypsum Board</i>		
ASTM E84 <i>Standard Test Method for Surface Burning Characteristics of Building Materials</i>		
ASTM E119 <i>Standard Test Methods for Fire Tests of Building Construction and Materials</i>		
ASTM E136 <i>Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C</i>		
Gypsum Association, GA-214, <i>Levels of Finish for Gypsum Panel Products</i>		
Gypsum Association, GA-216, <i>Application and Finishing of Gypsum Panel Products</i>		
Gypsum Association, GA-238, <i>Guidelines for Prevention of Mold Growth on Gypsum Board</i>		
Gold Bond Building Products, LLC Manufacturer Standards, <i>NGC Construction Guide</i>		

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. Please consult your local sales representative for all non-standard lengths and widths. Minimum order requirements may apply.
5. Tested in accordance with ASTM C518.

Gold Bond® Durasan® Prefinished Gypsum Board

(Continued from page 1)

- You may use many water-based adhesives to install Durasan Prefinished Gypsum Boards. All adhesives you use to install Durasan in non-fire-rated assemblies should meet ASTM C557. Some solvent-based adhesives could cause vinyl surfaces to delaminate and/or discolor. Check the adhesive manufacturer's recommendations before using with Durasan. Before applying, subject adhesive should be test laminated to actual framing or backing.
- Apply adhesive to metal or wood studs or furring in a continuous 1/4" (6.4 mm) bead or intermittent 1/4" (6.4 mm) beads 3" (76.2 mm) long, 6" (152 mm) apart. Where board edges abut, apply two parallel beads, one along each edge of the framing member. Press the board firmly in place against the freshly applied adhesive. Then tilt board back to allow partial flash-off of solvents. Wait a minimum of 5 minutes and then reapply board in position. Nail or screw at corners only.
- **Laminate with joint compound:** Laminate Durasan panels to existing surfaces with a quick setting compound or ready mix joint compound. Joint compound is applied as nominal 5" (127 mm) ribbons of four 1/4" (6.4 mm) x 1/4" (6.4 mm) beads located around the perimeter and center of the boards. An alternate is 2" (50.8 mm) diameter daubs 1/2" (12.7 mm) thick, 16" (406 mm) o.c.
- **Demountable partitions:** Durasan panels are well suited for use with many proprietary partition systems. Consult systems manufacturer for compatibility and installation requirements.
- **Trim application:** Apply plastic, wood or metal trim at both floor and ceiling. Apply trim carefully to Durasan panels to avoid creating excessive pressure that might later cause delamination of the covering.

Cleaning: To remove most common dirt and marks, rub lightly with a moistened cloth, sponge or soft hair bristle brush, using a mild soap, detergent or nonabrasive cleanser. Rinse with water and wipe dry. Safely remove more stubborn stains by wiping away excess material, scrubbing the stained area with a stiff bristle brush wetted with an appropriate solvent, and quickly wiping dry with a clean cloth.

LIMITATIONS

- The vinyl facer is a vapor retarder (less than 1 perm). Do not place a second vapor retarder behind these products.
- Do not use in areas where surface temperatures will exceed 125°F (52°C). Do not use Durasan behind stoves where direct heat or steam could affect the board covering.
- Do not use Durasan around bath tubs, in shower enclosures, or in areas where boards will be subject to free moisture.
- If applying Durasan over treated lumber, conduct tests prior to application to be sure the chemical treatment of the wood does not affect the bond or color of the board covering.
- Do not apply Durasan panels over wet or damp masonry walls. Mildew or staining problems could result if the walls are not dry or will not remain dry.
- Take care during application to ensure the boards applied on single walls or visual areas are color matched to minimize any such variations in the vinyl covering.

FOR MORE INFORMATION

Architectural Specifications

Gold Bond Building Products CSI MasterFormat® 3-part guide specifications are downloadable as editable Microsoft® Word documents at: goldbondbuilding.com.

Latest Technical Information and Update

Visit goldbondbuilding.com or call National Gypsum Company Construction Services: 1-800-NATIONAL (628-4662).

Technical Information Información Técnica

1-800-NATIONAL®

1-800-628-4662

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

The Gold Bond family of products is manufactured by Gold Bond Building Products, LLC.

National 
Gypsum®

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

Gold Bond®
Building Products

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
goldbondbuilding.com