

## Description

Gold Bond® BRAND Durasan® Prefinished Gypsum Board consists of a fire-resistant gypsum core in a heavy, natural finish with 100-percent recycled paper on the face and back sides and an additional vinyl covering on the panel. The long edges of all Durasan Prefinished Gypsum Board 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 in. (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 in. (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 in. (12.7 mm) and 5/8 in. (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 by a Taber Abraser with CS-17 calibrate wheels and a 500-gram load in accordance with ASTM D1044, Durasan withstood over 10,000 revolutions without breaking through the vinyl film. During this testing, there was some loss of texture and overprint.

## 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 in. (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. Set fasteners with heads slightly below the surface of the boards. Take care to avoid breaking the face of the gypsum board. Remove improperly driven nails or screws.
- Provide minimum 1/4 in. (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*.

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**Job Name:** \_\_\_\_\_

**Contractor:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Submittal Approvals: (Stamps or Signatures)**

## TECHNICAL DATA

PHYSICAL PROPERTIES		
	1/2" DURASAN PREFINISHED GYPSUM BOARD	5/8" DURASAN PREFINISHED GYPSUM BOARD
<b>Thickness<sup>1</sup>, Nominal</b>	1/2" (12.7 mm)	5/8" (15.9 mm)
<b>Width<sup>1</sup>, Nominal</b>	4' (1,219 mm)	4' (1,219 mm), 54" (1,372 mm)
<b>Length<sup>1,4</sup>, Standard</b>	8' – 10' (2,438 – 3,048 mm)	8' – 10' (2,438 – 3,048 mm)
<b>Weight, Nominal</b>	1.8 lbs./sq. ft. (8.79 k/m <sup>2</sup> )	2.2 lbs./sq. ft. (10.74 k/m <sup>2</sup> )
<b>Edges<sup>1</sup></b>	Beveled	Beveled
<b>Flexural Strength<sup>1</sup>, Perpendicular</b>	≥ 107 lbf. (476 N)	≥ 147 lbf. (654 N)
<b>Flexural Strength<sup>1</sup>, Parallel</b>	≥ 36 lbf. (160 N)	≥ 46 lbf. (205 N)
<b>Humidified Deflection<sup>1</sup></b>	≤ 10/8" (31.8 mm)	≤ 5/8" (15.9 mm)
<b>Nail Pull Resistance<sup>1</sup></b>	≥ 77 lbf. (343 N)	≥ 87 lbf. (387 N)
<b>Hardness<sup>1</sup> - Core, Edges and Ends</b>	≥ 11 lbf. (49 N)	≥ 11 lbf. (49 N)
<b>Bending Radius</b>	N/A	N/A
<b>Thermal Resistance<sup>5</sup></b>	R = .45	R = .56
<b>Product Standard Compliance</b>	ASTM C1396	ASTM C1396
<b>Fire-Resistance Characteristics</b>		
<b>Core Type</b>	Regular	Type X
<b>UL Type Designation</b>	N/A	FSW
<b>Combustibility<sup>2</sup></b>	Non-combustible Core	Non-combustible Core
<b>Surface Burning Characteristics<sup>3</sup></b>	Class A	Class A
<b>Flame Spread<sup>3</sup></b>	≤ 25	≤ 25
<b>Smoke Development<sup>3</sup></b>	≤ 50	≤ 50
<b>Applicable Standards and References</b>		
ASTM C473 Standard Test Methods for Physical Testing of Gypsum Panel Products		
ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus		
ASTM C840 Standard Specification for Application and Finishing of Gypsum Board		
ASTM C1396 Standard Specification for Gypsum Board		
ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials		
ASTM E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C		
Gypsum Association, GA-214, <i>Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels</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>		
National Gypsum Company, <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.		

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## 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 Boards to metal or wood studs or furring with adhesive. Prebow Durasan Boards overnight with the vinyl surface concave.
- You may use many water-based and solvent-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 in. (6.4 mm) bead or intermittent 1/4 in. (6.4 mm) beads 3 in. (76.2 mm) long, 6 in. (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 Boards to existing surfaces with ProForm® BRAND Quick Set™ Setting Compound or ProForm® BRAND Ready Mix Joint Compounds. Joint compound is applied as nominal 5 in. (127 mm) ribbons of four 1/4 in. (6.4 mm) x 1/4 in. (6.4 mm) beads located around the perimeter and center of the boards. An alternate is 2 in. (50.8 mm) diameter daubs 1/2 in. (12.7 mm) thick, 16 in. (406 mm) o.c.
- **Demountable partitions:** Durasan Boards 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 Boards 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.

- **Patching:** Save scraps of Durasan in case patching a damaged area is necessary. When patching small rips or tears, remove the laminate from a Durasan scrap. Place this patch over the damaged area and, using a razor blade or very sharp knife, make straight cuts through both layers of laminate. Remove the damaged laminate underneath and cement the patch in its place with a good quality, vinyl-to-vinyl adhesive.

## Limitations

- Durasan Vinyls are vapor retarders (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 Boards 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

National Gypsum Company's CSI Master Format® 3-part guide specifications are downloadable as editable Microsoft® Word documents at: [nationalgypsum.com](http://nationalgypsum.com).

### LATEST INFORMATION AND UPDATES

For the latest technical information and updates, call NGC Construction Services: **1-800-NATIONAL (628-4662)** or visit our website: [nationalgypsum.com](http://nationalgypsum.com).



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