# **DURASAN®** BRAND

## The Original Prefinished Gypsum Wallboard



## MANUFACTURER

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## DESCRIPTION

Durasan® BRAND is a registered trademark of National Gypsum Properties, LLC. This prefinished product combines the timeproven characteristics of gypsum wallboard with the colors, textures and durability of a wide variety of vinyl coverings.

## **BASIC USES**

All Durasan wall panels can be applied directly to studs or as a finish layer over gypsum wallboard. Durasan panels are especially suited for most demountable partition systems. Because Durasan is prefinished, it is generally less expensive to install than building a wall and then applying a wall covering material.

## **ADVANTAGES**

- Noncombustible: Durasan gypsum wallboard is considered noncombustible since it has a structural base of noncombustible gypsum and a surface material not over 1/8" thick with a flame spread of 50 or less.
- Color permanence: The highquality vinyl surface of Durasan wall panels 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.
- Abrasion resistance: Durasan vinyl wall panel coverings are extremely abrasion resistant.
- Cleaning: To remove most common dirt and marks, simply

rub lightly with a moistened cloth, sponge or soft hair bristle brush, using a mild soap, detergent or nonabrasive cleanser. Then rinse with water and wipe dry.

More stubborn stains can be safely removed 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. (See "Recommendations")

### **LIMITATIONS**

- Vapor retarders: Durasan vinyls are vapor retarders (perm less than 1). A second vapor retarder should not be placed behind these products; for example, kraft faced insulation and polyethylene sheets. (See "Vapor-Permeance" next page)
- High heat: Durasan wall panels have the same limitations regarding heat as regular gypsum wallboard and should not be used in areas where surface temperatures will exceed 125°F (52°C).

Durasan wall panels are not suitable for use behind stoves where direct heat or steam could affect the panel covering.

- Moisture conditions: Durasan panels should not be used around bath tubs, in shower enclosures or in areas where panels will be subject to free moisture.
- Concrete surfaces: When Durasan panels abut concrete floors and/or ceilings, cut the panel to allow a minimum of 1/8" clearance between panels and floors and/or ceilings to prevent potential wicking.
- Treated lumber: If Durasan panels will be applied over treated lumber, tests should be conducted prior to application to be sure the chemical treatment of the wood does not affect the bond or color of the panel covering.
- Masonry walls: 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.
- Color variation: Since manufacturers of the vinyl film used on Durasan panels furnish to a commercial color match, minor color variations are possible. Therefore, care should be taken during application to ensure the panels applied on single

walls or visual areas are colormatched to minimize any such variations in the vinyl film.

## **COMPOSITION AND MATERIALS**

Durasan prefinished wall panels are available with regular and type X (Fire-Shield) gypsum cores.

Durasan contains no asbestos.

The long edges of all Durasan wall panels are beveled and wrapped with decorative vinyl.

### **ACCESSORIES**

Matching trims -

- 1-piece (1/2" panels only): outside and inside corners end cap divider
- 2-piece: snap on outside corner snap on interior trim

The 1-piece trims are matching vinyl laminated to an extruded vinyl form. The 2-piece trims are matching vinyl laminated to extruded vinyl which is then attached to a steel retainer.

(Continued next page)

Job Name	
Contractor	Date

Color pins Edge grip clips Adhesive - check with adhesive manufacturer's recommendations Matching vinyl roll goods

## **SIZES**

Thickness: 1/2" (12.7 mm)

5/8" (15.9 mm) Type X

Widths: 41 (1219 mm) Lengths: 8', 9' and 10' (2438,

> 2743 and 3048 mm). Other lengths between 8' (2438 mm) and 14' (4267 mm) are available by special

order.

## **FINISHES**

Vinyl Durasan: Durasan vinylcovered wall panels are available in a selection of 9 handsome colors in 3 distinctive patterns and textures. Other colors, patterns and textures can be special-ordered to meet individual design requirements.

Durasan (Reference: Durasan Pocket Vinyl Selector 708526)

**Finish** Color

Stipple Champagne,

Chiffon, Off White,

Cloud

Santa Fe Porcelain, Adobe

Harvest Cotton, Oyster White,

Rice

## **APPLICABLE STANDARDS**

**ASTM C 1396** 

Federal Specification SS-L-30D

Approved by Board of Standards and Appeals for the use in New York City under calendar Nos. 709-39-SM and 244-82-SM.

## TECHNICAL DATA

## SURFACE BURNING **CHARACTERISTICS**

ASTM E 84 - Source: Underwriters Laboratories, Inc.

Flame Spread 25 or less Smoke Developed 50 or less

#### **FIRE RATINGS**

Assemblies employing Durasan prefinished gypsum wall panels used as a wall surfacing material have been accorded fire resistance ratings by Factory Mutual Research Corp. and Underwriters Laboratories. For specific fire rated assemblies, refer to National Gypsum Co. Gypsum Construction Guide.

#### VAPOR PERMEANCE

The water vapor permeance of Durasan vinyl panels is less than 1.0 perms by the Wet Cup Method and less than 0.5 perms by the Dry Cup Method at typical conditions of 73°F (23°C) and 50% relative humidity, tested in accordance with ASTM E 96. Caution: Durasan vinyls are vapor retarders and a second vapor retarder should not be placed behind these products; for example, kraft face insulation and polyethylene sheets.

## ABRASION RESISTANCE

Tested by a Taber Abraser with CS-17 Calibrase wheels and a 500 gram loading, Durasan has withstood over 10,000 revolutions without breaking through the vinyl film (ASTM Test Method D 1044). During this testing, some loss of texture and overprint resulted.

## INSTALLATION

## APPLICABLE STANDARDS AND REFERENCES

Gypsum Association GA-224 National Gypsum Co. Durasan brochure –110705

## **RECOMMENDATIONS**

Installation of Durasan panels should be consistent with methods described in the noted standards and references and as indicated below.

Several methods of installation may be used with Durasan products in order to meet specific job requirements. As in regular drywall construction, ceilings are installed first, before Durasan paneling is erected. Panels are attached vertically. Durasan should not be applied to ceilings.

Nailing: Durasan panels are easily attached to wood studs or furring with colored nails (Color Pins) which can be matched to most Durasan patterns and colors. For attaching 1/2" and 5/8" Durasan, use 1 3/8" Color Pins. When applying Durasan over existing walls, use 1 7/8" Color Pins. Space 12" o.c. and drive pins to penetrate framing a minimum of 1/2". A plasticheaded or padded hammer should be used.

Adhesive nail-on: To avoid visible fasteners on exposed surfaces, Durasan panels may be applied to metal or wood studs or furring with adhesive. Durasan panels should be prebowed overnight with the vinyl surface concave.

Many water-based and solventbased adhesives may be used to install Durasan Prefinished Gypsum Wall Panels. All adhesives used to install Durasan in nonfire-rated assemblies should meet ASTM C 557. Some solvent-based adhesives could cause delamination and/or discoloration of vinyl surfaces. Check the adhesive manufacturer's recommendations before

using with Durasan or Standard Gypsum Wallboard. Prior to application, subject adhesive should be test laminated to actual framing or backing. Test should be performed 2-3 days prior to job application.

Apply adhesive to metal or wood studs or furring in a continuous 1/4" bead or intermittent 1/4" beads 3" long, 6" apart. Where panel edges abut, apply two parallel beads, one along each edge of the framing member. Press the panel firmly in place against the freshly applied adhesive. Then tilt panel back to allow partial flash-off of solvents. Wait a minimum of 5 minutes and then reapply panel in position. Nail or screw at corners only.

Laminate with joint compound: Durasan panels can be laminated to existing surfaces with Sta-Smooth or Ready-Mix joint compounds. Joint compound is applied as nominal 5" ribbons of four 1/4" x 1/4" beads located around the perimeter and center of the panels. An alternate is 2" diameter daubs 1/2" thick, 16" o.c.

Edge grip clip: This system provides mechanical attachment and positive alignment of wallboard edges over steel framing, concrete blocks or any other sound wall surface. The clip is positioned on the back of the board and the prongs are driven into the board edges. Each clip along one edge of the board is in turn attached directly to the

## **RECOMMENDATIONS**

Cleaning

<b>Common Staining Material</b>	Recommended Solvent
Grease, tar, shoe polish, lipstick, oil paints	Kerosene or mineral spirits
Nail polish	Denatured alcohol
Ink (regular ballpoint)	1:1 mixture-Denatured alcohol and "Aromatic 150"

"Aromatic 150" is a proprietary solvent manufactured by Exxon Company USA.

### Caution

The use of strong organic solvents (such as ketones), harsh abrasive cleaners or steel wool is not recommended. These materials may cause dulling, discoloration, softening and other permanent damage to the vinyl surface.

Some proprietary solvent cleaners used for fabric spot stain removal may remove the vinyl surface overprint pattern.

If the suitability of any cleaning agent is unknown, check its effect on the Durasan surface in a hidden area or on a scrap piece before attempting to remove a field stain.

studs or wall surface. As each panel is installed, the clips become hidden by the panel edges.

Demountable partitions: Durasan panels are well-suited for use with many proprietary partition systems.

Consult systems manufacturer for compatibility and installation requirements.

Trim application: Plastic, wood or metal trim must be applied at both floor and ceiling. Trim should be applied carefully to Durasan panels to avoid creating excessive pressures which might later cause delamination of the covering.

Patching: It is suggested that scraps of Durasan be saved 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. The damaged laminate underneath is then removed and the patch cemented in its place with a good quality, vinyl-to-vinyl adhesive.

## **DECORATION**

Painting: Durasan is a factoryfinished decorative product which does not require painting. However, if desired, Durasan vinyl can be satisfactorily painted with the following products:

- 1. Two coats of an alkyd or latex semi-gloss enamel.
- 2. Oil primer with finish coat of oil paint or flat latex.
- 3. Two coats of flat oil paint.

