

# DensArmor Plus®

Abuse-Resistant Interior Panel

Technical Service Hotline 1.800.225.6119 or  
**www.gpgypsum.com**

## Manufacturer

Georgia-Pacific Gypsum LLC  
133 Peachtree Street NE, 8th Floor, Atlanta, GA 30303  
Technical Service Hotline 1-800-225-6119 or www.gpgypsum.com

## Description

**DensArmor Plus® Abuse-Resistant Interior Panel** (formerly DensArmor Plus® Abuse Guard®) is a patented interior panel that consists of a moisture-resistant, noncombustible dense gypsum core with abuse-resistant coated fiberglass mat facings. The fiberglass mat facings and a dense moisture resistant gypsum core provide superior abuse-resistance along with protection from incidental moisture. DensArmor Plus Abuse-Resistant Interior Panel is highly resistant to the growth of mold when tested, as manufactured, per ASTM D 3273.

DensArmor Plus Abuse-Resistant Interior Panel resists surface abrasion, indentation and impact. The moisture-resistant fiberglass mat facings and moisture resistant core resist warping, rippling and buckling. The core of the product is denser than regular gypsum wallboard and is reinforced with glass fibers, increasing the product's strength. The core and the coated facings made with fiberglass fibers also offer improved dimensional stability when compared with regular gypsum wallboard.

DensArmor Plus Abuse-Resistant Interior Panels are the first drywall panels to be GREENGUARD Indoor Air Quality Certified® and GREENGUARD Children & Schools® Certified for low emissions of volatile organic compounds (VOCs) by a leading third-party organization, GREENGUARD Environmental Institute. In addition, DensArmor Plus Abuse-Resistant Interior Panels are the first and only drywall panels listed as GREENGUARD microbial resistant. This listing means DensArmor Plus Abuse-Resistant Interior Panels, which feature fiberglass mats instead of paper facings used on the surface of traditional gypsum board products, resist mold growth. The microbial resistant test is based on ASTM Standard D 6329-98, a testing standard set by ASTM International, which develops testing guidelines and procedures for building materials, products, systems, and services.

DensArmor Plus Abuse-Resistant Interior Panels also qualifies for Collaborative for High Performance Schools (CHPS) credits. CHPS, based in California, is a national non-profit organization that works with school districts and their design teams to improve the quality of education by using products that have met requirements to receive CHPS credits.

## Primary Uses

DensArmor Plus Abuse-Resistant Interior Panel is an interior wall or ceiling covering material for use in new construction or renovation work. It is designed for use in areas requiring abuse-resistance such as corridors in hospitals, schools, dormitories and public buildings. It is designed for direct attachment with screws or nails to wood and metal framing or existing surfaces. It may be used as a covering material for flat or curved structures. DensArmor Plus Abuse-Resistant Interior Panel is manufactured with fiberglass mat facings. It has a tapered edge to receive joint treatment. The field of the board can be finished in the same steps as regular gypsum wallboard.

DensArmor Plus Abuse-Resistant Interior Panel resists indentation and impact. The product is ideal for use in any interior high traffic areas subject to wall or ceiling abuse. It withstands abrasion common in buildings with high occupancy such as schools, offices, hospitals and many public buildings.

For use in any areas likely to be exposed to incidental moisture where added abuse resistance is desired.

## Limitations

DensArmor Plus Abuse-Resistant Interior Panel is a non-structural 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 extreme moisture is continuous.

DO NOT use DensArmor Plus Abuse-Resistant Interior Panel where there is prolonged exposure to temperatures exceeding 125° F, e.g. adjacent to wood burning stoves, heating appliances, saunas or steam rooms.

## Abuse Resistance

*Surface Abrasion:* Level 3 Tested in accordance with ASTM C 1629.

*Surface Indentation:* Level 1 Tested in accordance with ASTM C 1629.

*Soft-body Impact:* Level 1 Tested in accordance with ASTM C 1629.

## Technical Data

DensArmor Plus Abuse-Resistant Interior Panel resists the growth of mold when tested, as manufactured, according to ASTM D 3273.

Flame spread and smoke develop rating of 0 when tested in accordance with ASTM E 84 or CAN/ULC S-102.

Noncombustible when tested in accordance with ASTM E 136.

5/8" DensArmor Plus® Fireguard® Type X Abuse-Resistant Interior Panel meets Type X requirements when tested in accordance with ASTM E 119 and is UL Classified. Can be used in any assembly where 5/8" Type X drywall is specified.

## Product Applications

DensArmor Plus Abuse-Resistant Interior Panel shall be applied in accordance with ASTM C 840 and GA-216. To apply the product to steel framing, use 20-gauge or Type S-12 screws for heavier gauge steel. The product also can be applied to wood framing with drywall nails or screws and with special adhesives in combination with supplemental fasteners.

## Decoration

DensArmor Plus Abuse-Resistant Interior Panel is designed to accept most types of paints, textures and wall covering materials. Because of the enhanced moisture and mold resistant properties of DensArmor Plus Abuse-Resistant Interior Panel, drying times for both joint compound and wall coverings may vary. Always follow paint or wall covering manufacturer's installation instructions when applying either of these finishes. Georgia Pacific Gypsum strongly recommends priming the surface of DensArmor Plus Abuse-Resistant Interior Panel with a quality high-build primer before applying a final decorative material. Priming will equalize the texture and suction variations between the joint compounds and the fiberglass mat surfaces. If glossy paints are used in such areas as kitchens or bathrooms, skim coat joint compound over the entire surface of DensArmor Plus Abuse-Resistant Interior Panel to reduce highlighting or joint photographing. This method is also recommended in areas with severe natural or artificial side lighting.

## Handling Precautions

Stack DensArmor Plus Abuse-Resistant Interior Panel 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 for gypsum board is also outlined in Gypsum Association Publications GA-216.

Take care to avoid impact, undue flexing and subsequent damage to board edges, ends and corners.

\* Note: Material Safety Data Sheet (MSDS) is available on request.

## Applicable Standards

Appropriate sections of ASTM C 1629, ASTM C1396, ASTM C 1658, ASTM C 630 and ASTM C 1177 (Physical Properties); CSA-A82.27-M and Federal Specification SS-L-30d, Type III, Grade W

## Sizes and Edges

DensArmor Plus Abuse-Resistant Interior Panel Thickness: 5/8" – 15.9mm; Width: 4'; Lengths: 8' - 12'; Edges: Tapered

## Submittal Approvals

Job Name \_\_\_\_\_  
Contractor \_\_\_\_\_  
Date \_\_\_\_\_

continued →

**Stamps/Signatures**

## I. Maximum Framing Spacing (Wood or Metal)

Single-ply Thickness	Application	O.C. Spacing
Ceilings 5/8"	Parallel to framing	16 o.c.
	Right angles to framing	16 or 24 o.c.
Walls 5/8"	Right angles or parallel to framing	16 or 24 o.c.

## II. Single-Ply Application<sup>1</sup>

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		Nail Applications		Screw Applications		
Thickness		Minimum Nail Length	Spacing Walls	Ceilings	Screw Length	Spacings Walls <sup>2</sup> Ceilings
5/8"		1-5/8"	8	7	1-1/8"	16 12

<sup>1</sup>Also refer to local code requirements.<sup>2</sup>Where framing members are spaced 16 o.c., screw spacing is 12 o.c.

## III. Physical Properties

Properties	5/8" DensArmor Plus® Abuse-Resistant Interior Panel
Thickness, nominal	5/8" (15.9mm) ± 1/64" (0.4mm)
Width, standard	4' (1220mm) ± 3/32" (2.4mm)
Length, standard	8' (2440mm) to 12' (4880mm) ± 1/4" (6.4mm)
Weight <sup>1</sup> , lbs./M sq. ft., nominal	2800 <sup>1</sup>
Edges	Tapered
Surfacing	Coated glass mat on face, back
Flexural strength, Parallel, lbs.	>100
Perpendicular	>140
R value <sup>2</sup>	.67
Nail pull resistance, minimum, lbs.	90
Hardness, lbs. force, core, edges and ends	>15
Water absorption (% of weight)	< 5%
Surface burning characteristics (per ASTM E 84 or Can/ULC-S102): flame spread/smoke developed	0/0
Humidified deflection, inches	< 1/8"

<sup>1</sup>Represents approximate weight for design and shipping purposes.<sup>2</sup>Tested in accordance with ASTM C 518.

NOTE: Specified minimum values are as in applicable sections of ASTM C 630, ASTM C 1177 and ASTM C 1658 standards.



## SALES INFORMATION AND ORDER PLACEMENT

U.S.A. Midwest: 1-800-876-4746 West: 1-800-824-7503  
 South: 1-800-327-2344 Northeast: 1-800-947-4497

CANADA Canada Toll Free: 1-800-387-6823  
 Quebec Toll Free: 1-800-361-0486

## TECHNICAL INFORMATION

Georgia-Pacific Gypsum Technical Hotline  
 U.S.A. and Canada: 1-800-225-6119  
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## TRADEMARKS

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## UPDATES AND CURRENT INFORMATION

The information in this document may change without notice. Visit our website at [www.gpgypsum.com](http://www.gpgypsum.com) for updates and current information.

## LIMITATION OF REMEDIES AND DAMAGES

Unless otherwise stated in our written warranty for these products, our sole liability for any product claim shall be limited to reimbursement of the cost of repair or replacement of the affected product, up to a maximum amount of two times the original purchase price for the affected product. We shall not be responsible under any circumstances for lost profits, damage to a structure or its contents, or indirect,

incidental, special or consequential damages. Claims shall be deemed waived if they are not submitted to us in writing within ten (10) days after discovery of a product defect/circumstance giving rise to a claim.

**CAUTION: For product fire, safety and use information, go to [gp.com/safetyinfo](http://gp.com/safetyinfo).**

## DISCLAIMER:

Our fiberglass mat products may contain recycled material with small traces of cellulose fiber in the core, which will not affect the overall product performance or characteristics.

## HANDLING AND USE

**CAUTION:** This product contains fiberglass facings which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/MSHA

approved respirator as appropriate in dusty or poorly ventilated areas. For additional product fire, safety and use information go to [www.gp.com/safetyinfo](http://www.gp.com/safetyinfo) or call 1-800-225-6119.

## FIRE SAFETY CAUTION

Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.