

# DensArmor Plus®

Abuse-Resistant Interior Panel

### Manufacturer

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### Description

**DensArmor Plus® Abuse-Resistant Interior Panels** are interior panels that consist of a moisture-resistant, noncombustible (as defined and tested in accordance with ASTM E136 or CAN/ULC S114) dense gypsum core with coated fiberglass mat facings which provide superior abuse resistance along with protection from incidental moisture. DensArmor Plus Abuse-Resistant Interior Panels are highly resistant to the growth of mold, and have scored a 10, the highest level of performance for mold resistance under ASTM D3273 test method.

DensArmor Plus Abuse-Resistant Interior Panels resist surface abrasion, indentation and soft body 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 Interior Panels are GREENGUARD and GREENGUARD Gold Certified for low emissions of volatile organic compounds (VOCs) by a leading third-party organization, UL Environment. In addition, DensArmor Plus Interior Panels are 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 D6329, 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 are listed in the Collaborative for High Performance Schools® (CHPS®) High Performance Products Database for low emissions of VOCs. CHPS 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 Panels are 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. If there is a concern about incidental damage, such as things or people accidentally hitting the walls, then DensArmor Plus Abuse-Resistant Interior Panels are recommended.

DensArmor Plus Abuse-Resistant Interior Panels resist indentation and soft body impact. The product is ideal for use in any interior high traffic areas subject to wall or ceiling abuse and 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.

DensArmor Plus Abuse-Resistant Interior Panels are backed by a limited warranty against delamination and deterioration for up to 12 months of exposure to normal weather conditions.\*

### Limitations

DensArmor Plus Abuse-Resistant Interior Panels are 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 during storage and handling.

DO NOT use DensArmor Plus Abuse-Resistant Interior Panels where there is prolonged exposure to temperatures exceeding 125° F (52°C), e.g. adjacent to wood burning stoves, heating appliances, saunas or steam rooms.

### Abuse Resistance

*Surface Abrasion:* Level 3 Tested in accordance with ASTM C1629.

*Surface Indentation:* Level 1 Tested in accordance with ASTM C1629.

*Soft-body Impact:* Level 1 Tested in accordance with ASTM C1629.

### Technical Data

Flame spread and smoke develop rating of 0/0 when tested in accordance with ASTM E84 or CAN/ULC S102.

Noncombustible when tested in accordance with ASTM E136 or CAN/ULC S114.

5/8" DensArmor Plus® Fireguard® Abuse-Resistant Interior Panels meet Type X requirements (per ASTM C1658) when tested in accordance with ASTM E119 and are UL and ULC Classified, **Type DAP**. DensArmor Plus Fireguard Abuse-Resistant Interior Panels can be used in many assemblies where 5/8" Type X drywall is specified. Consult appropriate fire resistance directory for use.

### Product Applications

DensArmor Plus Abuse-Resistant Interior Panels shall be applied in accordance with ASTM C840 and GA-216. When installing the panels over steel studs, we recommend a minimum 20 gauge (30 mils) steel stud.\*\* 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 Panels are 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 Panels, 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 Panels 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 Panels to reduce highlighting or joint photographing. This method is also recommended in areas with severe natural or artificial side lighting.

\* For complete warranty details, visit [www.gpgypsum.com](http://www.gpgypsum.com).

\*\* For equivalent and effective gauge steel studs, we have no evaluation or installation recommendations.

*continued* →

### Submittal Approvals

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Date \_\_\_\_\_

### 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.

Stack DensArmor Plus® Abuse-Resistant Interior Panels 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 and GA 801.

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

Material Safety Data Sheet (MSDS) is available at [www.buildgp.com/safetyinfo](http://www.buildgp.com/safetyinfo) or call 1-404-652-5119.

### Applicable Standards

Manufactured to meet ASTM C1658, ASTM C1396 Section 7 and ASTM C1177. Test standard ASTM C1629.

### Sizes and Edges

DensArmor Plus Abuse-Resistant Interior Panel Thickness: 5/8" (15.9 mm); Width: 4' (1219 mm); Lengths: 8'-12' (2438 mm-3658 mm); Edges: Tapered

### Physical Properties

Properties	DensArmor Plus® Fireguard® Abuse-Resistant Interior Panel
Thickness, nominal	5/8" (15.9 mm) ± 1/64" (0.4 mm)
Width, standard	4' (1219 mm) ± 3/32" (2.4 mm)
Length, standard	8' (2438 mm) to 10' (3048 mm) ± 1/4" (6.4 mm)
Weight <sup>1</sup> , nominal, lbs./sq. ft., (Kg/m <sup>2</sup> )	2.8 (13.7)
Edges	Tapered
Permeance <sup>6</sup> , perms (ng/Pa•s•m <sup>2</sup> )	>10 (570)
Flexural strength, parallel, lbf. <sup>3,4</sup> (N)	≥100 (444)
Flexural strength, perpendicular, lbf. <sup>3,4</sup> (N)	≥140 (622)
R Value <sup>2</sup> , ft <sup>2</sup> •°F•hr/BTU (m <sup>2</sup> •K/W)	.67 (0.118)
Nail pull resistance minimum, lbf. <sup>3,4</sup> (N)	≥90 (400)
Hardness core, edges and ends, lbf. <sup>3,4</sup> (N)	≥15 (67)
Water absorption (% of weight) <sup>3,4</sup>	<5
Surface water absorption <sup>3,4</sup>	<1.6 grams
Surface burning characteristics (per ASTM E84 or CAN/ULC S102): flame spread/smoke developed	0/0
Humidified deflection <sup>3,4</sup>	<1/8" (3 mm)
Combustibility <sup>5</sup>	Noncombustible
Linear expansion with moisture change, in/in %RH (mm/mm %RH)	6.25 x 10 <sup>-6</sup>
Coefficient of thermal expansion, in/in/°F (mm/mm/°C)	8.5 x 10 <sup>-6</sup> (15.3 x 10 <sup>-6</sup> )

<sup>1</sup> Represents approximate weight for design and shipping purposes

<sup>2</sup> Tested in accordance with ASTM C518

<sup>3</sup> Tested in accordance with ASTM C473

<sup>4</sup> Specified values per ASTM C1658 and ASTM C1177

<sup>5</sup> As defined and tested in accordance with ASTM E136 or CAN/ULC S114

<sup>6</sup> Tested in accordance with ASTM E96 (dry cup method)



U.S.A. Georgia-Pacific Gypsum LLC  
Georgia-Pacific Gypsum II LLC  
Canada Georgia-Pacific Canada LP

### SALES INFORMATION AND ORDER PLACEMENT

U.S.A. West: 1-800-824-7503  
Midwest: 1-800-876-4746  
South Central: 1-800-231-6060  
Southeast: 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

U.S.A. and Canada: 1-800-225-6119, [www.gpgypsum.com](http://www.gpgypsum.com)

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**WARRANTIES, REMEDIES AND TERMS OF SALE** For current warranty information for this product, please go to [www.gpgypsum.com](http://www.gpgypsum.com) and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at [www.gpgypsum.com](http://www.gpgypsum.com).

**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.

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