Georgia-Pacific

DensArmor Plus®

High-Performance Interior Panel

Technical Service Hotline 1.800.225.6119 or
www.gpgypsum.com

Manufacturer

Georgia-Pacific Gypsum LLC
133 Peachtree Street
Atlanta, GA 30303

Georgia-Pacific Canada LP
7070 Mississauga Road, Unit 120
Mississauga, ON L5M 7V9

Technical Service Hotline: 1-800-225-6119

Description

DensArmor Plus® High-Performance Interior Panels are noncombustible (per ASTM E 136) interior panels that consists of a moisture-resistant gypsum core with coated fiberglass mats. The fiberglass mats provide superior protection from incidental moisture. DensArmor Plus panels are highly resistant to the growth of mold, and have scored a 10, the highest level of performance for mold resistance under ASTM D 3273 test method.

The core of DensArmor Plus panels is reinforced with fiberglass, increasing the product's strength. The treated core and the coated facings made with fiberglass offer greater moisture resistance and improved dimensional stability than regular gypsum board. The product resists warping, rippling and buckling.

They have a tapered edge to receive joint treatment. The field of the board can be finished in the same manner as regular gypsum board.

DensArmor Plus 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 Interior Panels are the first drywall panels listed as GREENGUARD microbial resistant. This listing means DensArmor Plus 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 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 Interior Panels are an interior wall or ceiling covering material for use in new construction or renovation work. They are designed for direct attachment with screws or nails to wood and metal framing or existing surfaces. They may be used as a covering material for flat or curved structures. DensArmor Plus panels are manufactured with fiberglass mat surfaces. They have a tapered edge to receive joint treatment.

- Use on interiors of exterior walls, where moisture intrusion is most likely.
- Use in pre-rock areas, where the windows, doors or roof have not been installed making moisture intrusion inevitable. DensArmor Plus panels come with a limited warranty against delamination and deterioration for up to 12 months of exposure to normal weather conditions.*
- Where required by code, Georgia-Pacific Gypsum recommends the use of DensShield® Tile Backer in wet areas behind tile, such as tub and shower areas.

*For complete warranty details, visit www.gpgypsum.com.

Limitations

DensArmor Plus Interior Panels are a non-structural product and should not be used as a nailing base to support heavy wall-mounted objects.

Intended for interior applications and soffits in protected areas, DensArmor Plus panels must be kept dry during storage and handling.

Do not use DensArmor Plus® Fireguard® (per ASTM C 1658) 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.

Technical Data

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

Noncombustible as described and tested in accordance with ASTM E 136.

5/8″ DensArmor Plus® is UL and ULC Classified **Type DAP**. 1/2″ and 5/8″ DensArmor Plus® Fireguard C™ products are UL and ULC Classified **Type DAPC**.

Decoration

DensArmor Plus 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 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 panels with a quality, high solids primer/sealer before applying a final decorative material. Priming will equalize the suction variations between the joint compounds and the fiberglass surfaces. If glossy paints are used in such areas as kitchens or bathrooms, skim coat joint compound over the entire surface of DensArmor Plus panels to reduce highlighting or joint photographing. This method is also recommended in areas with severe natural or artificial side lighting.

Handling Precautions

See *Handling and Use–Caution* section at end of this document.

Stack DensArmor Plus High-Performance 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 and GA 801.

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

Note: Material Safety Data Sheet (MSDS) is available at www.gpgypsum.com or call 1-404-652-5119.

Applicable Standards

Manufactured to meet ASTM C 1658, ASTM C 1396 Section 7 and ASTM C 1177.

Sizes and Edges

DensArmor Plus Thickness: 1/2″ (12.7 mm); Width: 4′ (1219 mm); Lengths: 8′-12′ (2438 mm-3658 mm); Edges: Tapered

DensArmor Plus Fireguard C Thickness: 1/2″ (12.7 mm); Width: 4′ (1219 mm); Lengths: 8′-12′ (2438 mm-3658 mm); Edges: Tapered

DensArmor Plus Fireguard Thickness: 5/8″ (15.9 mm); Width: 4′ (1219 mm); Lengths: 8′-12′ (2438 mm-3658 mm); Edges: Tapered

DensArmor Plus Fireguard C Thickness: 5/8″ (15.9 mm); Width: 4′ (1219 mm); Lengths: 8′-12′ (2438 mm-3658 mm); Edges: Tapered

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Submittal Approvals

Job Name _____

Contractor _____

Date _____

Stamps/Signatures

Georgia-Pacific

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Installation

DensArmor Plus High-Performance Interior Panels should be installed according to the most current versions of Gypsum Association Publication GA-216 "Application and Finishing of Gypsum Board for Non-Fire-Rated Construction."

For fire-rated installations, the installation and details shall be in conformity with those assemblies published in the Gypsum Association Fire Resistance Design Manual GA-600, UL and ULC Fire Resistance Directories.

Physical Properties

Properties	DensArmor Plus®	DensArmor Plus® Fireguard C™	DensArmor Plus® Fireguard®	DensArmor Plus® Fireguard C™
Thickness, nominal[4]	1/2″ (12.7 mm) ± 1/64″ (0.4 mm)	1/2″ (12.7 mm) ± 1/64″ (0.4 mm)	5/8″ (15.9 mm) ± 1/64″ (0.4 mm)	5/8″ (15.9 mm) ± 1/64″ (0.4 mm)
Width, standard[4]	4′ (1219 mm) ± 3/32″ (2.4 mm)	4′ (1219 mm) ± 3/32″ (2.4 mm)	4′ (1219 mm) ± 3/32″ (2.4 mm)	4′ (1219 mm) ± 3/32″ (2.4 mm)
Length, standard[4]	8′ (2438 mm) to 12′ (3658 mm) ± 1/4″ (6.4 mm)	8′ (2438 mm) to 12′ (3658 mm) ± 1/4″ (6.4 mm)	8′ (2438 mm) to 12′ (3658 mm) ± 1/4″ (6.4 mm)	8′ (2438 mm) to 12′ (3658 mm) ± 1/4″ (6.4 mm)
Weight[1], nominal, lbs./sq. ft., (Kg/m^2)	2.02[1] (9.9)	2.0[1] (9.8)	2.5[1] (12.2)	2.4[1] (12.1)
Permeance[7], Perms (ng/Pa•s•m^2)	>10 (570)	>10 (570)	>10 (570)	>10 (570)
Linear expansion with moisture change, in/in %RH (mm/mm %RH)	6.25 x 10^{-6}	6.25 x 10^{-6}	6.25 x 10^{-6}	6.25 x 10^{-6}
Coefficient of thermal expansion, in/in/°F (mm/mm/°C)	8.5 x 10^{-6} (15.3 x 10^{-6})	8.5 x 10^{-6} (15.3 x 10^{-6})	8.5 x 10^{-6} (15.3 x 10^{-6})	8.5 x 10^{-6} (15.3 x 10^{-6})
Flexural strength, parallel, lbf.[3, 4] (N)	>80 (356)	>80 (356)	>100 (444)	>100 (444)
Flexural strength, perpendicular, lbf.[3, 4] (N)	>100 (444)	>100 (444)	>140 (622)	>140 (622)
R Value[2], ft^2•°F•hr/BTU (m^2•K/W)	.56 (0.099)	.56 (0.099)	.67 (0.118)	.67 (0.118)
Combustibility[6]	Noncombustible	Noncombustible	Noncombustible	Noncombustible
Nail pull resistance, lbf.[3, 4] (N)	80 (356)	80 (356)	90 (400)	90 (400)
Hardness core, edges and ends, lbf. (N)	≥15 (67)	≥15 (67)	≥15 (67)	≥15 (67)
Water absorption (% of weight)[3, 4]	<5	<5	<5	<5
Surface water absorption[3, 4]	<1.6 grams	<1.6 grams	<1.6 grams	<1.6 grams
Surface burning characteristics (per ASTM E 84 or CAN/ULC-S102): flame spread/smoke developed	0/0	0/0	0/0	0/0
Humidified deflection[3, 4]	2/8″ (6.4 mm)	2/8″ (6.4 mm)	1/8″ (3 mm)	1/8″ (3 mm)
Bending radius[5]	6′ (1829 mm)	6′ (1829 mm)	8′ (2438 mm)	8′ (2438 mm)

[1] Represents approximate weight for design and shipping purposes
[2] Tested in accordance with ASTM C 518
[3] Tested in accordance with ASTM C 473
[4] Specified values per ASTM C 1658 and ASTM 1177
[5] Double fasteners on ends as needed
[6] As defined and tested in accordance with CAN/ULC-S114 in combination with ASTM E 136
[7] Tested in accordance with ASTM E 96 (dry cup method)

Georgia-Pacific Gypsum

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

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

U.S.A. and Canada: **1-800-225-6119**
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 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.

UPDATES AND CURRENT INFORMATION The information in this document may change without notice. Visit our website at www.gpgypsum.com for updates and current information.

CAUTION For product fire, safety and use information, go to www.gp.com/safetyinfo or call 1-800-225-6119.

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.

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.