

Manufacturer

Georgia-Pacific Gypsum
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Description

DensDeck® Prime Roof Board has been enhanced to provide a broader compatibility and higher performance with roofing adhesives. Face mat enhancements allow adhesives to be applied more uniformly and consistently. In adhered, single-ply membrane testing, enhanced DensDeck® Prime Roof Board demonstrated an average of 24% better bond than the original products when using solvent-based adhesives. (Average based on 60 sq.ft./gal coverage rates.) Choose DensDeck® Prime Roof Boards for adhered and self-adhered "peel & stick" roofing systems, as well as hot mopped, cold mastic and torch-applied modified bitumen roofs. Enhanced DensDeck® Prime Roof Boards create a stronger and more economical installation by reducing the amounts of mastic or adhesive used and potentially eliminates the field primer. Consult with membrane manufacturer for actual priming requirements.

DensDeck® Prime Roof Boards are the first and only fiberglass mat gypsum roof boards with a 90-day weather exposure limited warranty when applied vertically on a parapet wall**. (Limited to 1/2" and 5/8" products only.)

DensDeck® ProFast™ Prime Roof Board is an innovative, lightweight roofing solution designed to enhance performance, efficiency and cost savings in roofing applications. Approximately 20% lighter than the 1/2" DensDeck® Prime Roof Board, it offers enhanced maneuverability, making it easier to transport, handle and install without compromising strength, durability or dimensional stability when installed in a properly designed roof assembly. Specifically engineered for mechanically attached roofing systems, as well as adhered and partially adhered (hybrid) assemblies, DensDeck® ProFast™ Prime Roof Board offers exceptional resistance to fire, wind uplift, punctures and hail. By reducing the number of fasteners needed by 25–60%***, it significantly lowers material expenses and installation labor, contributing to optimized project timelines and budgets.

DensDeck® ProFast™ Prime Roof Board builds upon Georgia-Pacific's legacy of market-driven innovation, addressing the needs of contractors and designers with an ideal solution for high-performance roofing systems. Its proprietary fiberglass mat facing and gypsum core deliver reliable, noncombustible (per ASTM E136) protection and outstanding performance in adverse conditions.

Designed with usability and efficiency in mind, DensDeck® ProFast™ Prime Roof Board represents the next evolution in roof board technology, offering material and labor efficiencies alongside the trusted quality of the DensDeck® Roof Board Portfolio. Consult with your roofing system manufacturer for specific assembly requirements and fastener recommendations.

Primary Uses

Roof system manufacturers and designers have found DensDeck® Prime Roof Board to be compatible with many types of roofing systems, including: modified asphalt, single-ply, metal systems, recover board, as well as an overlay for polyisocyanurate and polystyrene insulation. DensDeck® Prime Roof Board can also be used as a form board for poured gypsum concrete deck in roof applications as well as a substrate for spray foam roofing systems. 1/2" (12.7 mm) and 5/8" (15.9 mm) DensDeck® Prime Roof Board may also be used in vertical applications as a backer board or liner for the roof side of parapet walls.

DensDeck® Prime Roof Board may allow the bonding of cold mastic modified bitumen and torching directly to the surface. *Consult with the system manufacturer for recommendations on this application.*

DensDeck® Prime Roof Board is the preferred substrate for vapor retarders.

Standards and Code Approvals

DensDeck® Prime Roof Boards are manufactured to meet ASTM C1177 and have the following approvals:

- Florida Product Approved
- Miami-Dade County Product Control Approved

Recommendations and Limitations

DensDeck® Prime Roof Boards are manufactured to act with a properly designed roof system following good roofing practices. The actual use of DensDeck® Prime Roof Board as a roofing component in any system or assembly is the responsibility of the roofing system's design authority. Consult with the appropriate system manufacturer and/or design authority for system and assembly specifications and instructions on applying other products to DensDeck® Prime Roof Board. Georgia-Pacific does not warrant and is not responsible for any systems or assemblies using DensDeck® Prime Roof Board or any component in such systems or assemblies other than DensDeck® Prime Roof Board.

The need for a separator sheet between the DensDeck® Prime Roof Board and the roofing membrane must be determined by the roof membrane manufacturer or roofing system designer.

Confirm any priming requirements with the membrane manufacturer. When applying solvent-based adhesives or primers, allow sufficient time for the solvent to flash off to avoid damage to roofing components.

DensDeck® Prime Roof Boards should not be subjected to abnormal or excessive loads or foot traffic, such as, but not limited to, use on plaza decks or under steel-wheeled equipment that may fracture or damage the panels. Provide suitable roofing system protection when required.

When using DensDeck® Prime Roof Boards for hot-mopped applications, Georgia-Pacific recommends maximum asphalt application temperatures of 425 °F (218 °C) to 450 °F (232 °C). Application temperatures above these recommended temperatures may adversely affect roof system performance. Consult and follow the roofing system manufacturer's specifications for full mopping applications and temperature requirements.

When using DensDeck® Prime Roof Boards or DensDeck® ProFast™ Prime Roof Boards as a substrate for torch applications, ensure that the product is dry and the proper torching technique is used. Limit the heat to the roof board. Maintain a majority of the torch flame directly on the roll.

Conditions beyond the control of Georgia-Pacific, such as weather conditions, dew, leaks, application temperatures and techniques may cause adverse effects with roofing systems.

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.

Moisture Management

DensDeck® Prime and DensDeck® ProFast™ Prime Roof Boards, like other components used in roofing systems, must be protected from exposure to moisture before, during and after installation.

Remove the plastic packaging from all DensDeck® Roof Board Products immediately upon receipt of delivery. Failure to remove the plastic packaging may result in entrapment of condensation or moisture. DensDeck® Roof Board Products stored outside must be stored level and off the ground and protected by a breathable waterproof covering. Provide means for air circulation around and under stored bundles of DensDeck® Roof Board Products. DensDeck® Roof Board Products must be covered the same day as installed.

Avoid application of DensDeck® Roof Board Products during rain, heavy fog and any other conditions that may deposit moisture on the surface, and avoid the overuse of non-vented, direct-fired heaters during winter months. When roofing systems are installed on new poured concrete or lightweight concrete decks, or when re-roofing over an existing concrete deck, a vapor barrier should be installed above the concrete to retard the migration of water from the concrete into the roof assembly. Always consult the roofing system manufacturer or design authority for specific instructions for applying other products to DensDeck® Roof Board Products.

Moisture vapor movement by convection must be eliminated, and the flow of water by gravity through imperfections in the roof system must be controlled. After a leak has occurred, no condensation on the upper surface of the system should be tolerated, and the water introduced by the leak must be dissipated to the building interior in a minimum amount of time.

Although DensDeck® Roof Board Products are engineered with fiberglass facings and high-density gypsum cores, the presence of free moisture can have a detrimental effect on the performance of the product and the installation of roofing membranes. For example, hot asphalt applications can blister; torched modified bitumen may not properly bond; and adhesives for single-ply membranes may not dry properly. Moisture accumulation may also significantly decrease wind uplift and vertical pull resistance in the system or assembly. DensDeck® Roof Board Products containing excessive free moisture content may need to be evaluated for structural stability to ensure wind-uplift performance.

Fire Resistance Classifications

DensDeck® Roof Board Products are excellent fire barriers over combustible and noncombustible roof decks, including steel decks.

UL 790 Classification. DensDeck® Prime Roof Boards have been classified by Underwriters Laboratories LLC (UL) for use as a fire barrier over combustible and noncombustible decks in accordance with the ANSI/UL 790 test standard. The UL classification includes a comprehensive Class A, B or C rating. For additional information concerning the UL 790 classification, consult the UL Certification Directory.

UL 1256 Classification. DensDeck® Prime Roof Boards have also been classified by UL in roof deck constructions for internal (under deck) fire exposure in accordance with the ANSI/UL 1256 Steiner Tunnel test. For additional information concerning the UL 1256 classification, consult the UL Certification Directory.

FM Class 1 Approvals. DensDeck® Prime Roof Boards are included in numerous roofing assemblies with a Factory Mutual (FM) Class 1 fire rating. 1/4" (6.4 mm) DensDeck® Prime Roof Boards have passed testing under the FM Calorimeter Standard 4450 and have been approved by FM as such for insulated steel deck roofs when installed according to the conditions identified by FM. For more information concerning FM Approvals and FM Class 1 assemblies with DensDeck® Prime Roof Boards, consult FM or RoofNav®.

Type X. 5/8" (15.9 mm) DensDeck® Prime Roof Boards are manufactured to meet the "Type X" requirements of ASTM C1177 for increased fire resistance beyond regular gypsum board.

UL Fire Resistance Ratings. 5/8" (15.9 mm) DensDeck® Prime Roof Boards are designated as **Type DD** by UL and included in assembly designs investigated by UL for hourly fire resistance ratings. 5/8" (15.9 mm) DensDeck® Prime Roof Boards may also replace any unclassified 5/8" (15.9 mm) gypsum board in an assembly in the UL Fire Resistance Directory under the prefix "P."

Flame Spread and Smoke Developed. When tested in accordance with ASTM E84, DensDeck® Prime Roof Boards had Flame Spread 0, Smoke Developed 0.

Wind Uplift

DensDeck® Prime and DensDeck® ProFast™ Prime Roof Boards are included in numerous assemblies evaluated by FM or other independent laboratories for wind-uplift performance. For information concerning such assemblies, please visit roofnav.com.

Submittal Approvals

Job Name

continued →

Contractor

Date

* Testing was done in accordance with FM approvals 4470, Appendix C: Small Scale Tests, Membrane Delamination Tests for Roofing Membranes and Substrates Using Tensile Loading.

** For complete warranty details, visit DensDeck.com. (Limited to 1/2" and 5/8" products only.)

*** Based on FM testing with multiple roofing assemblies using #15 fasteners and 3" metal flat-bottom plates in April 2025.

DensDeck® Prime Roof Board Properties

Properties	1/4" (6.4 mm)	1/2" (12.7mm)	5/8" (15.9 mm)
Thickness, nominal	1/4" (6.4 mm) ± 1/16" (1.6 mm)	1/2" (12.7 mm) ± 1/32" (.8 mm)	5/8" (15.9 mm) ± 1/32" (.8 mm)
Width, standard	4' (1219 mm) ± 1/8" (3 mm)	4' (1219 mm) ± 1/8" (3 mm)	4' (1219 mm) ± 1/8" (3 mm)
Length, standard	4' (1219 mm) and 8' (2438 mm) ± 1/4" (6.4 mm)	4' (1219 mm) and 8' (2438 mm) ± 1/4" (6.4 mm)	4' (1219 mm) and 8' (2438 mm) ± 1/4" (6.4 mm)
Weight, nominal, lbs./sq. ft. (Kg/m²)	1.2 (5.9)	2.0 (9.8)	2.5 (12.2)
Surfacing	Fiberglass mat with non-asphaltic coating	Fiberglass mat with non-asphaltic coating	Fiberglass mat with non-asphaltic coating
Flexural Strength¹, parallel, lbf. min. (N)	≥40 (178)	≥80 (356)	≥100 (444)
Flute Spanability²	2-5/8" (66.7 mm)	5' (127 mm)	8' (203 mm)
Permeance³, perms (ng/Pa • S • m²)	>30 (>1710)	>23 (>1300)	>17 (>970)
R Value⁴, ft² • °F • hr/BTU (m² • K/W)	.28	.56	.67
Linear Variation with Change in Temp., 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)
Linear Variation with Change in Moisture	6.25 x 10 ⁻⁶	6.25 x 10 ⁻⁶	6.25 x 10 ⁻⁶
Water Absorption⁵, % max	<10	<10	<10
Compressive Strength⁶, psi nominal	900	900	900
Surface Water Absorption, grams, nominal	<2.0	<2.0	<2.0
Flame Spread, Smoke Developed (ASTM E84)	0/0	0/0	0/0
Bending Radius	4' (1219 mm)	6' (1829 mm)	8' (2438 mm)

DensDeck® ProFast™ Prime Roof Board Properties

Properties	3/8" (9.5 mm)
Thickness, nominal	3/8" (9.5 mm) ± 1/32" (.8 mm)
Width, standard	4' (1219 mm) ± 1/8" (3 mm)
Length, standard	8' (2438 mm) ± 1/4" (6.4 mm)
Weight, nominal, lbs./sq. ft. (Kg/m²)¹	1.64 (8)
Surfacing	Fiberglass mat with non-asphaltic coating
Flexural Strength², parallel, lbf. min. (N)	≥100 (444)
Flute Spanability³	5" (127 mm)
Permeance⁴, perms (ng/Pa • S • m²)	>30 (>1710)
R Value⁵, ft² • °F • hr/BTU (m² • K/W)	0.33
Linear Variation with Change in Temp., in/in °F (mm/mm/°C)	8.5 x 10 ⁻⁶ (15.3 x 10 ⁻⁶)
Linear Variation with Change in Moisture	6.25 x 10 ⁻⁶
Water Absorption⁶, % max	5
Compressive Strength⁷, psi (avg)	880
Surface Water Absorption, grams, nominal	1
Mold Resistance⁸	10 (highest possible)
Product Standard Compliance	ASTM C1177

1. Represents approximate weight for design and shipping purposes. Actual weight may vary based on manufacturing location and other factors.
2. Tested in accordance with ASTM C473 method B.
3. Tested in accordance with ASTM E661.
4. Tested in accordance with ASTM E96 (dry cup method).
5. Tested in accordance with ASTM C518 (heat flow meter).
6. Specified values per ASTM C1177.
7. Tested in accordance with ASTM C473.
8. When tested, as manufactured, in accordance with ASTM D3273, DensDeck® Roof Board Products have scored a 10, the highest level of performance for mold resistance under the ASTM D3273 test method. The score of 10, in the ASTM D3273 test, indicates no mold growth in a 4-week controlled laboratory test. The mold resistance of any building product when used in actual jobsite conditions may not produce the same results as were achieved in the controlled, laboratory setting. No material can be considered mold proof. For additional information, go to buildgp.com/safetyinfo.



U.S.A. Georgia-Pacific Gypsum 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**

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WARRANTIES, REMEDIES AND TERMS OF SALE For current warranty information for this product, please go to buildgp.com/warranties and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at buildgp.com/tc.

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

CAUTION For product fire, safety and use information, go to 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.