



Georgia-Pacific

# DensDeck Prime®

Roof Board

Technical Service Hotline 1.800.225.6119 or

[www.densdeck.com](http://www.densdeck.com)

**Manufacturer** Georgia-Pacific Gypsum LLC  
133 Peachtree Street, 8th floor, Atlanta, GA 30303  
Technical Service Hotline 1-800-225-6119 or [www.densdeck.com](http://www.densdeck.com)

**Description** DensDeck Prime® Roof Board is an exceptional fire barrier, thermal barrier and recovery board used in various commercial roofing systems. The product features a pre-primed surface to make the bond even stronger. The patented DensDeck design employs glass mat facings front and back that are embedded into a water resistant and moisture-resistant treated core, providing excellent fire resistance, moisture resistance and wind uplift properties. The unique construction of DensDeck Prime provides superior flute spanning and will help stiffen and stabilize the roof deck. Additionally, DensDeck Prime has been shown to withstand delamination, deterioration, warping and jobsite damage more effectively than roofing membrane substrates such as paper-faced gypsum board, fiberboard and perlite insulation. DensDeck Prime resists the growth of mold and mildew per ASTM D 3273.

**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 overlayment for polyisocyanurate and polystyrene insulation. DensDeck Prime 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" and 5/8" DensDeck Prime may also be used in vertical applications as a backer board or liner for the roof side of parapet walls.

DensDeck Prime Roof Board allows the bonding of cold mastic modified bitumen and torching directly to the surface. *Consult with the system manufacturer for recommendations on this application.* System manufacturers and designers have found DensDeck Prime to be compatible with bonding adhesives for fully adhered single-ply membrane applications and has been shown to extend the adhesive usage.

DensDeck Prime Roof Board's exceptional moisture resistance make it the preferred substrate for vapor retarders. An excellent fire barrier, DensDeck Prime features a noncombustible core and inorganic surface that offers greater fire protection than other conventional commercial roofing products when applied over combustible roof decks and steel decks.

**Limitations** DensDeck Prime Roof Board is designed to act with a properly designed roof system. The actual use of DensDeck Prime as a roofing component is the responsibility of the roofing system's designing authority. Georgia-Pacific does not offer roofing system design services.

Consult membrane manufacturer for specific system installation instructions.

Conditions beyond the control of Georgia-Pacific such as weather conditions, dew, application temperatures and techniques may cause adverse effects with adhered roofing systems. Always consult roofing manufacturers for their specific instructions on applying their products to DensDeck Prime Roof Board.

Panels must be kept dry before, during and after installation. Apply only as much DensDeck Prime Roof Board as can be covered by a roof membrane system in the same day.

Accumulation of water due to leaks or condensation in or on DensDeck Prime Roof Board must be avoided during construction and after construction. Avoid over-use of non-vented direct-fired heaters during winter months. Avoid application of DensDeck Prime during rains, heavy fogs and other conditions that may deposit moisture on the surface.

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

When applying solvent-based adhesives or primers, allow sufficient time for the solvent to flash off to avoid damage to roofing components.

Maximum flute span is 2-5/8" for 1/4" DensDeck Prime; 5" for 1/2" DensDeck Prime; and 8" for 5/8" DensDeck Prime Fireguard® Type X.

DensDeck roof board products may have temporary factory-applied packaging (plastic wrap) that must be removed upon receipt to prevent accumulation or entrapment of condensation or moisture which may cause application problems. Provide other suitable breathable weather protection for storage to keep DensDeck products dry.

## Submittal Approvals

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

Contractor \_\_\_\_\_

Date \_\_\_\_\_

**Stamps / Signatures**

**Technical Data**

Flame spread 0, smoke developed 0, when tested in accordance with ASTM E 84 or CAN/ULC-S102. Noncombustible when tested in accordance with ASTM E 136.

DensDeck Prime Fireguard: UL Classified when tested in accordance with ASTM E 119.

1/4" DensDeck Prime has been tested in Georgia-Pacific sponsored tests with Factory Mutual for 60 psf and 90 psf wind uplift for BUR, EPDM, thermoplastics and modified bitumen roof systems. Higher wind uplift ratings have been achieved by numerous membrane manufacturers using DensDeck Prime in their FMRC approved construction designs.

DensDeck Prime is FM tested and approved as the only 1/2" gypsum product to meet the calorimeter requirements for conventionally insulated decks.

Miami-Dade County, Florida NOA 07-0124.02.

Properties	1/4"	1/2"	5/8"
Thickness, nominal	1/4" + 1/16"	1/2" ± 1/32"	5/8" ± 1/32"
Width, standard	4' ± 1/8"	4' ± 1/8"	4' ± 1/8"
Length, standard	4' and 8' ± 1/4"	4' and 8' ± 1/4"	4' and 8' ± 1/4"
Weight, lbs./sq. ft., nominal	1.15	1.975	2.55
Surfacing	Fiberglass mat with non-asphaltic coating	Fiberglass mat with non-asphaltic coating	Fiberglass mat with non-asphaltic coating
Flexural Strength <sup>1</sup> , parallel, lbs. min.	40	80	100
Flute Spanability <sup>2</sup>	2-5/8"	5"	8"
Permeance <sup>3</sup> , Perms	50	35	32
"R" Value <sup>4</sup>	.28	.56	.67
Linear Variation with Change in Temp., in/in °F	8.5x10 <sup>-6</sup>	8.5x10 <sup>-6</sup>	8.5x10 <sup>-6</sup>
Linear Variation with Change in Moisture, in/in %RH	6.25x10 <sup>-6</sup>	6.25x10 <sup>-6</sup>	6.25x10 <sup>-6</sup>
Water Absorption <sup>5</sup> , % max	10.0	10.0	10.0
Compression Strength, psi nominal	500 - 900	500 - 900	500 - 900
Surface Water Absorption <sup>5</sup> , grams, nominal	≤2.0	≤2.0	≤2.0
Flame Spread, Smoke Developed (ASTM E 84)	0/0	0/0	0/0
Fire Classification	FM CLASS 1 (as overlayment) UL 1256, ULC S-126 UL Class A (UL 790) ULC S-107	FM Class 1 (FM 4450) UL 1256, ULC S-126 UL Class A (UL 790) ULC S-107	FM Class 1 (FM 4450) UL 1256, ULC S-126 UL Class A (UL 790) ULC S-107
Mold Resistance per ASTM D 3273 <sup>6</sup>	Mold resistant	Mold resistant	Mold resistant
ASTM Standard	C 1177	C 1177	C 1177
Uplift Standards and Testing	ANSI/UL 1897 ASCE 7 FM 4470	ANSI/UL 1897 ASCE 7 FM 4470	ANSI/UL 1897 ASCE 7 FM 4470
Bending Radius	5'	8'	12'

1. Tested in accordance with ASTM C 473.

2. Tested in accordance with ASTM E 661 (400 lb. conc. load only for 1/2" and 5/8").

3. Tested in accordance with ASTM E-96 (dry cup method).

4. Tested in accordance with ASTM C 518 (heat flow meter).

5. ASTM C 1177 minimums.

6. When tested as manufactured in accordance with ASTM D 3273.



**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**

Georgia-Pacific Gypsum Technical Hotline  
 U.S.A. and Canada: **1-800-225-6119**  
 Mon.-Fri., 8 a.m.- 5 p.m. ET

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**UPDATES AND CURRENT INFORMATION**

The information in this document may change without notice. Visit our Web site for updates and current information.

**LIMITATION OF REMEDIES AND DAMAGES**

Unless otherwise stated in our written limited warranty for this product, 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 days after discovery.

**SAFETY CAUTION:**

This product contains fiberglass. Fibers and dust may be released from this product during normal handling and may result in skin, eye and respiratory irritation. Avoid breathing dust and contact with the skin and eyes. Follow these standard work practices: Wear a loose-fitting, long-sleeved shirt and long pants, protective gloves and eye protection (goggles or safety glasses with side shields). Wear a dust mask when sanding. Additional protection may be needed when very dusty. Do not use a power saw. For Material Safety Data Sheet or additional information, call 1-800-225-6119 or visit our Web site.