

Manufacturer

Georgia-Pacific Gypsum LLC
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Atlanta, GA 30303
Technical Service Hotline: 1-800-225-6119

Description

DensDeck[®] StormX[™] Prime Roof Board is a reinforced gypsum panel with enhanced moisture resistant core and coated glass mat facers. DensDeck StormX Roof Board is extremely durable and is approved for use in assemblies meeting FM Very Severe Hail (VSH) Classification*, while still maintaining the highest level of moisture resistance through the use of GP's patented EONIC[™] Technology. In fact, DensDeck StormX was the first gypsum cover board to meet FM VSH classification under a single ply membrane, and the first to do this under a 60 mil TPO membrane (no fleece) as well. Choose DensDeck StormX Roof Boards for adhered and self-adhered "peel & stick" roofing systems, as well as hot mopped, cold mastic and torch-applied modified bitumen roofs. DensDeck StormX Roof Boards create a more resilient installation by enhancing the overall strength and wind resistance of an assembly, increasing the puncture resistance of the membrane, and providing hail protection to the membrane, insulation, and total roof system.

DensDeck StormX Roof Boards boards, along with DensDeck[®] Prime Roof Boards, are the only fiberglass mat gypsum roof boards with a 90-day weather exposure limited warranty when applied vertically on a parapet wall.**

Primary Uses

DensDeck StormX Roof Board is compatible with many types of roofing systems, including: modified asphalt, single-ply, metal systems, recover board, as well as an overlayment/cover board for polyisocyanurate and polystyrene insulation. DensDeck StormX 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. DensDeck StormX Roof Board may also be used in vertical applications as a backer board or liner for the roof side of parapet walls.

DensDeck StormX 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.*

Standards and Classifications

DensDeck StormX Roof Boards are manufactured to meet ASTM C1177 and meet the following standards and classifications:

- Type X
- ANSI/UL 790 and ULC-CAN S114 Classification – Class A (unlimited slope)
- UL 1256 Classification
- FM Class 1
- When used as part of a UL 1256 or FM 4450 classified system, no additional thermal barrier is required per IBC

Recommendations and Limitations

DensDeck StormX Roof Boards are manufactured to act with a properly designed roof system following good roofing practices. The actual use of DensDeck StormX 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 StormX Roof Board. Georgia-Pacific does not warrant and is not responsible for any systems or assemblies utilizing DensDeck StormX Roof Board or any component in such systems or assemblies other than DensDeck StormX Roof Board.

* Consult RoofNav for FM VSH rated assemblies with DensDeck StormX Roof Board.
** For complete warranty details, visit www.DensDeck.com.

The need for a separator sheet between the DensDeck StormX 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 StormX 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 StormX 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 StormX Roof Board as a substrate for torch applications, ensure that the product is dry and that the proper torching technique is used. Limit the heat to the DensDeck StormX 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

WARNING: Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH/MSHA approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

Moisture Management

DensDeck StormX 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 StormX Roof Board immediately upon receipt of delivery. Failure to remove the plastic packaging may result in entrapment of condensation or moisture. DensDeck StormX Roof Board 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 StormX Roof Board. DensDeck StormX Roof Board must be covered the same day as installed.

Avoid application of DensDeck StormX Roof Boards 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 light weight 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 StormX Roof Boards.

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.

Submittal Approvals

Job Name _____

continued →

Contractor _____

Date _____

Although DensDeck® StormX™ Roof Boards 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 and bond properly. Moisture accumulation may also significantly decrease wind uplift and vertical pull resistance in the system or assembly. DensDeck StormX Roof Boards containing excessive free moisture content may need to be evaluated for structural stability to assure wind uplift performance.

Fire Resistance Classifications

DensDeck StormX Roof Boards are excellent fire barriers over combustible and noncombustible roof decks, including steel decks.

UL 790 Classification. DensDeck StormX 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 and ULC CAN-S114 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 StormX 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 StormX Roof Boards are included in numerous roofing assemblies with a Factory Mutual (FM) Class 1 fire rating. For more information concerning FM Approvals and FM Class 1 assemblies with DensDeck StormX Roof Boards, consult FM or RoofNav®.

Type X. 5/8" (15.9 mm) DensDeck® StormX™ Fireguard® 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 StormX Fireguard 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 StormX Fireguard 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".

Wind Uplift

DensDeck StormX 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 www.roofnav.com.

Physical Properties

| Properties | 5/8" (15.9 mm) |
|---|---|
| Thickness, nominal | 5/8" (15.9 mm) ± 1/32" (.8 mm) |
| Width, standard | 4' (1219 mm) ± 1/8" (3 mm) |
| Length, standard | 4' (1219 mm) and 8' (2438 mm) ± 1/4" (6.4 mm) |
| Weight, nominal, lbs./sq. ft. (Kg/m ²) | 3.0 (14.6) |
| Surfacing | Fiberglass mat with non-asphaltic coating |
| Flexural Strength ¹ , parallel, lbf. min. (N) | ≥ 100 (444) |
| Flute Spanability ² | 8" (203 mm) |
| Permeance ³ , perms (ng/Pa•S•m ²) | >17 (>970) |
| R Value ⁴ , ft ² •°F•hr/BTU (m ² •K/W) | .67 |
| 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 Absorption ⁵ , % max | 5 |
| Compressive Strength ⁶ , psi nominal | 900 |
| Surface Water Absorption, grams, nominal | 1.0 |
| Mold Resistance ⁷ | 10 (highest possible) |
| Product Standard Compliance | ASTM C1177 |

1. Tested in accordance with ASTM C473 method B.

2. Tested in accordance with ASTM E661.

3. Tested in accordance with ASTM E96 (dry cup method).

4. Tested in accordance with ASTM C518 (heat flow meter).

5. Specified values per ASTM C1177.

6. Tested in accordance with ASTM C473.

7. When tested, as manufactured, in accordance with ASTM D3273, DensDeck Roof Boards 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 job site 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 www.buildgp.com/safetyinfo.



U.S.A. GP 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**

DENSDECK **1-855-647-3325**

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.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.