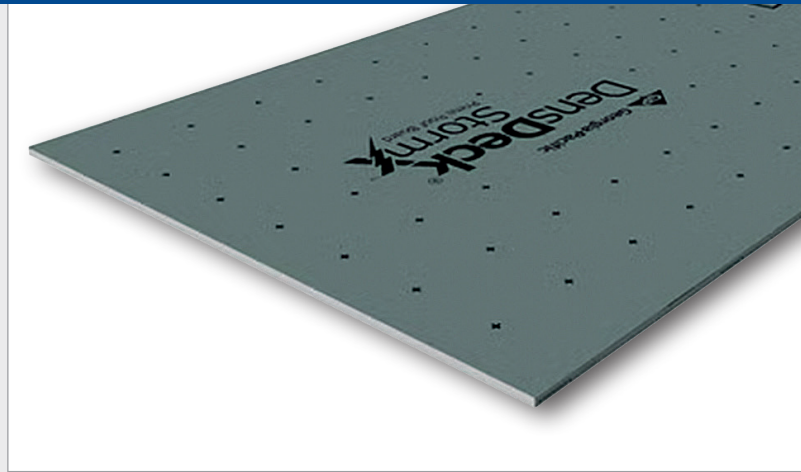


### Product Description

DensDeck® StormX® Prime Roof Board features a reinforced gypsum core with enhanced moisture resistance and primed coated glass mat facers. It is extremely durable as a substrate board, thermal barrier, or cover board in mechanically attached or adhered Kingspan roofing systems, providing excellent fire resistance, wind uplift properties, and Very Severe Hail (VSH) performance. Kingspan's system approvals can be found in FM Roofnav. DensDeck® StormX® Prime Roof Boards meet ASTM C 1177 test requirements.



### Manufactured in the U.S.A.

DensDeck® StormX® Prime Roof Board is manufactured in the U.S.A. with globally sourced materials.



### Features & Benefits

- **Extreme Durability:** approved for FM Very Severe Hail (VSH) with several Kingspan TPO roofing assemblies, providing unmatched resistance against impact.
- **Moisture Resistance:** designed with patented EONIC™ Technology for the highest level of moisture protection.
- **Improved Versatility:** ideal for multiple roofing systems such as single ply adhered and mechanically attached systems.
- **Meet ASTM C 1177 test requirements.**
- **Codes Approvals:** included in Kingspan system FM and UL assemblies. In most assemblies it will be used as an insulation overlayment (membrane underlayment) or cover board. In other assemblies it will serve both roles in the same system.
- Available in 4' x 4' and 4' x 8' board dimensions with 5/8" board thickness.

### System Installation Options

- **Mechanically Attached System (Fasteners & Plates)** – most common attachment method where fasteners and plates are used to attach TPO membrane, insulation, and / or other roofing materials to the roof deck, including DensDeck® StormX® Prime Roof Board, in accordance with Kingspan's TPO fastening rate requirements.
- **Mechanically Attached System (Induction-Welded)** – where the membrane is attached over an approved substrate, including DensDeck® StormX® Prime Roof Board and Kingspan polyiso insulation, using induction welded plates.
- **Adhered System** – where DensDeck® StormX® Prime Roof Board is used as a cover board with a Kingspan TPO membrane adhered on top of it.

### Codes & Approvals

DensDeck® StormX® Prime Roof Boards are manufactured to meet ASTM C 1177 and meet the following standards and classifications:

- UL 790 classified as a fire barrier over combustible and non-combustible roof decks, including steel decks.
- UL 1256 classified in roof deck constructions for internal (under deck) fire exposure.
- FM Class 1 Approvals: DensDeck® StormX® Prime Roof Boards are included in numerous roofing assemblies with a Factory Mutual (FM) Class 1 fire rating.

Please consult FM RoofNav for Very Severe Hail (VSH) approved assemblies.

## Codes & Approvals (continued)

- Flame Spread and Smoke Performance: When tested in accordance with ASTM E 84, DensDeck® StormX® Prime Roof Boards had Flame Spread 0, Smoke Developed 0.
- When used as part of a UL 1256 or FM 4450 classified system, no additional thermal barrier is required per IBC.
- Meets the "Type X" requirements of ASTM C 1177 for increased fire resistance beyond regular gypsum board.

FM Very Severe Hail (VSH) Classification - check RoofNav for approved assemblies.

## Application

- Avoid application of DensDeck® StormX® Prime 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 Kingspan TPO roofing systems are installed on new poured concrete or light weight concrete decks or when re-roofing over an existing concrete deck, the Kingspan Vapor Barrier SAR should be installed above the concrete to limit the migration of water from the concrete into the roof assembly.
- Always consult the Kingspan Application Guide to install DensDeck® StormX® Prime Roof Board in accordance with Kingspan's TPO specifications and requirements.

## Safety Precautions

- Use proper equipment and assistance when moving, lifting, handling, or transporting DensDeck® StormX® Prime Roof Board to avoid personal injuries as well as damage to the material.
- Reference the Kingspan product Safety Data Sheet for additional safety information.

## Storage & Moisture Management

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

- Remove the plastic packaging from all DensDeck® StormX® Prime Roof Boards immediately upon receipt of delivery. Failure to remove the plastic packaging may result in entrapment of condensation or moisture.
- DensDeck® StormX® Prime Roof Boards 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® Prime Roof Boards.
- DensDeck® StormX® Prime Roof Boards must be covered the same day as installed.
- Moisture accumulation may also significantly decrease wind uplift and vertical pull resistance in the system or assembly. DensDeck® StormX® Prime Roof Boards containing excessive free moisture content may need to be evaluated for structural stability to assure wind uplift performance.

## Typical Physical Properties

Properties	<sup>5</sup> / <sub>8</sub> "
Thickness, nominal	<sup>5</sup> / <sub>8</sub> " (15.9 mm) ± <sup>1</sup> / <sub>32</sub> " (0.8 mm)
Width, standard	4 ft. (1,219 mm) ± <sup>1</sup> / <sub>8</sub> " (3 mm)
Length, standard	4 ft. (1,219 mm) ± <sup>1</sup> / <sub>8</sub> " (3 mm) and 8 ft. (2,438 mm) ± <sup>1</sup> / <sub>4</sub> " (6.4 mm)
Weight, nominal lbs./sq. ft. (kg/m <sup>2</sup> )	3.0 (14.6)
Surfacing	Fiberglass mat with non-asphaltic coating
Flexural Strength <sup>1</sup> , parallel, lbf. min. (N)	≥100 (444)
Flute Spanability <sup>2</sup>	8" (203 mm)
Permeance <sup>3</sup> , Perms (ng/Pa·S·m <sup>2</sup> )	>17 (>970)
R Value <sup>4</sup> , ft <sup>2</sup> ·°F·hr/BTU	0.67
Linear Variation with Change in Temperature, in/in °F (mm/ mm/°C)	8.5 x 10 <sup>-6</sup> (15.3 x 10 <sup>-6</sup> )
Linear Variation with Change in Moisture	6.25 x 10 <sup>-6</sup>
Water Absorption <sup>5</sup> , % max.	5
Compressive Strength <sup>6</sup> , psi nominal	900
Surface Water Absorption, grams, nominal	1.0
Mold Resistance <sup>7</sup>	10 (highest possible)
Product Standard Compliance	ASTM C 1177

1 Tested in accordance with ASTM C 473 method B.

2 Tested in accordance with ASTM E 661.

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

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

5 Specified values in accordance with ASTM C 1177.

6 Tested in accordance with ASTM C 473.

7 When tested, as manufactured, in accordance with ASTM D 3273, DensDeck® StormX® Prime Roof Boards have scored a 10, the highest level of performance for mold resistance under the ASTM D 3273 test method. The score of 10, in the ASTM D 3273 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.

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## Product & Packaging Information

Ordering SKU	Board Thickness	Board Dimensions
600000001381	<sup>5</sup> / <sub>8</sub> "	4 ft. x 4 ft.
600000001371	<sup>5</sup> / <sub>8</sub> "	4 ft. x 8 ft.

