

# DensDeck® StormX™ Prime Roof Board



## Overview

DensDeck StormX Prime Roof Board is a reinforced gypsum cover board with an enhanced, moisture-resistant core and coated glass mat facers. DensDeck StormX is extremely durable and is approved for use in assemblies meeting FM's Very Severe Hail (VSH) Classification.

## Features and Benefits

- » Provides added protection from excessive foot traffic, wind, and hail
- » First gypsum cover board to meet FM VSH classification under single-ply membranes
- » Approved as a thermal barrier over combustible and non-combustible roof decks
- » Achieves UL 790 Class A and FM Class 1 approvals
- » Manufactured to meet the "Type X" requirements of ASTM C1177

## Installation

DensDeck StormX may be secured with Flexible FAST™ Adhesive, fastened in accordance with an approved fastening pattern, or mopped with hot asphalt. Maximum asphalt application temperatures of 425°F (218°C) to 450°F (232°C) are recommended. Application temperatures above these recommended temperatures may adversely affect roof system performance. Edge joints should be located on and parallel to deck ribs. End joints of adjacent lengths should be staggered.

1. This material shall be installed with ends and edges butted tightly.
2. When installed over combustible wood decks or insulations, all joints should be staggered.

3. In accordance with approved shop drawings, FM-approved fasteners shall be installed with plates through the roof board, flush with the surface.
4. When attaching VapAir Seal™ 725TR, use DensDeck StormX in conjunction with CCW-702, 702LV, or CAV-GRIP® III Adhesive/ Primer.

*Review Carlisle specifications and details for complete installation information.*

## Precautions

- » StormX must be kept dry before, during, and after installation. Apply only as much roof board as can be covered by roof membrane in the same day.
- » When applying solvent-based adhesives or primers, allow sufficient time for the solvents to flash off.
- » StormX 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.
- » In ballasted roofing systems, StormX is not an acceptable membrane underlayment.

## Standards and Certifications

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

# DensDeck StormX Prime Roof Board

## Typical Properties and Characteristics

|   |   |
|---|---|
| Thickness, nominal  | $\frac{5}{8}$ (15.9 mm) $\pm$ $\frac{1}{32}$ (.8 mm)          |
| Width, standard   | 4* (1219 mm) $\pm$ $\frac{1}{8}$ (3 mm)                       |
| Length, standard  | 4* (1219 mm) and<br>8* (2438 mm) $\pm$ $\frac{1}{4}$ (6.4 mm) |
| Weight, nominal, lbs./sq. ft.<br>(Kg/m <sup>2</sup> )                   | 3.0 (14.6)  |
| Surfacing   | Fiberglass mat with non-asphaltic coating                     |
| Flexural Strength <sup>1</sup> , parallel,<br>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 (m <sup>2</sup> •K/W) | .67   |
| Linear Variation with Change in<br>Temp., in/in °F (mm/mm/C°)           | $8.5 \times 10^{-6}$ ( $15.3 \times 10^{-6}$ )                |
| Linear Variation with Change<br>in Moisture                             | $6.25 \times 10^{-6}$   |
| Water Absorption <sup>5</sup> , % max                                   | <sup>5</sup>  |
| Compressive Strength <sup>6</sup> ,<br>psi nominal                      | 900   |
| Surface Water Absorption,<br>grams, nominal                             | 1.0   |
| Mold Resistance <sup>7</sup>  | 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 jobsite conditions may not produce the same results as were achieved in the controlled, laboratory setting.