# **Technical Data Sheet**

# DensDeck® Roof Board

# IB Roof Systems®

### **Product Description:**

An exceptional fire barrier, thermal barrier, cover board and recovery board used in various roofing systems. The design employs fiberglass mat facers that are mechanically bonded to a high-density gypsum core, providing excellent fire resistance and wind uplift properties. The unique construction provides superior flute spanning that stiffens and provides increased foot traffic resistance to the roof deck. DensDeck® Roof Board has been shown to withstand delamination, deterioration, warping and job-site damage more effectively than substrates such as paper-faced gypsum board, fiberboard, and perlite. DensDeck® Roof Board is highly resistant to the growth of mold when tested, as manufactured, per ASTM D3273.

## Packaging:

DensDeck® Roof Board is available in standard thicknesses of 1/4", 1/2", and 5/8" x 4' x 4' and 4' x 8' panels.

#### Features:

- · UL code ratings available for high slopes and wood decks
- FM Approved
- · Improves resistance to foot traffic and hail damage
- Excellent wind uplift ratings
- Resistant to deterioration, warping, and jobsite Damage
- Covered component under the IB Total Systems Warranty

## **Application:**

DensDeck® Roof Board can be installed over approved substrates in mechanically attached, induction attached, or ballasted roof assemblies. Refer to IB Specifications and Construction Details for additional installation instructions.

#### **Moisture Management:**

DensDeck® 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 immediately upon receipt of delivery. Failure to remove the plastic packaging may result in entrapment of condensation or moisture.

## **Approvals:**

- ASTM C1177
- · Florida Product Approval
- · Miami-Dade County, Product Control Approved
- · UL 790 Classification
- UL 1256 Classification
- FM Standard 4450 1/4" DensDeck
- 5/8" thickness—Meets requirements of Type X per ASTM C1177 and may be used in P series designs as a thermal barrier.



Typical Physical Properties*			
Property	1/4"	1/2"	5/8"
Thickness, nominal	1/4"	1/2"	5/8"
Pieces per unit for 4' x 8' sheet	42	30	30
Weight, nominal, lb. / sq.ft.	1.2	2.0	2.5
<sup>1</sup> R-value	.28	.56	.67
Surfacing	Fiberglass Mat	Fiberglass Mat	Fiberglass Mat
<sup>2</sup> Flexural Strength, parallel, lbf, min.	≥40	≥80	≥100
<sup>3</sup> Flute Spanability	2-5/8"	5"	8"
<sup>4</sup> Permeance, Perms	>50	>35	>32
Linear Variation with Change in Temp.	8.5 x 10-6	8.5 x 10-6	8.5 x 10-6
⁵Water Absorption, %, max	<10	<10	<10
<sup>6</sup> Compressive Strength, psi, nominal	900	900	900
Surface Water Absorption, grams, nominal	<2.5	<2.5	<2.5
<sup>7</sup> Flame Spread	0	0	0
<sup>7</sup> Smoke Development	0	0	0
Bending Radius	5'	8'	12'

- 1.Tested in accordance with ASTM C518 (heat flow meter).
- 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 C1177
- 6.Tested in accordance with ASTM C473.
- 7. Numerical ratings are not intended to reflect performance under actual fire conditions. Flame spread index of ≤ 75 and smoke development.
- Physical properties shown are based on data obtained under controlled conditions and are subject to normal manufacturing tolerances.

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