Technical Data Sheet

DEXcell® Glass-Mat Roof Board

IB Roof Systems®

Product Description:

DEXcell® Glass-Mat Roof Board is a high-performance mold and moisture-resistant gypsum panel is a substrate board, thermal barrier and/or cover board for use in low-slope commercial roofing systems. It enhances the durability of the entire roofing system when used as cover board in single-ply roofing systems. Its specifically treated core and high-performance glass-mat facer provide protection against fire, mold, and moisture. It combines superior strength and an ultralight core applicable for mechanically attached roof applications.

Packaging:

DEXcell® Glass-Mat 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:

- Fire Performance: Meets Factory Mutual (FM) Class 1 and Underwriters Laboratories (UL) Class A fire ratings for unlimited slope in fire barrier applications per UL 790.
- It scores and cuts easily, and is specially coated on the front, back and sides for easy handling.
- Moisture and Mold: Fiberglass face and back with treated core provides moisture and mold resistance.
 Scored a maximum "10" for mold resistance on ASTM D3273.
- Covered component under the IB Total Systems Warranty

Application:

DEXcell® Glass-Mat Roof Boards 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:

Keep DEXcell® Glass-Mat Roof Board panels dry before, during and after installation. DEXcell® Glass-Mat Roof Board should not be installed during rains, heavy fogs and any other conditions that deposit moisture on the surface of the board. Apply only as much DEXcell® Glass-Mat Roof Board that can be covered by final roof membrane system in the same day. Avoid exposure to moisture from leaks or condensation. Plastic or poly packaging applied at the plant to protect board during rail or other transit should be removed upon receipt to prevent condensation or trapping of moisture, which may cause application problems.

Approvals:

- ASTM C1177
- · UL 790 Classification
- FM Approved
- · Meets FM Class 1
- FM Standards 4450 and FM 4470
- 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"
Weight, nominal, lb. / sq. ft.	1.2	2.0	2.5
¹ R-value	.23	.43	.5
Surfacing	Fiberglass Mat	Fiberglass Mat	Fiberglass Mat
² Flexural Strength, parallel, lbf, min.	≥40	≥80	≥100
³ Flute Spanability	2-5/8"	5"	8"
⁴ Permeance, Perms	25	24	23
5Water Absorption, %, max	10	10	10
⁶ Compressive Strength, psi, nominal	900	900	900
⁷ Flame Spread	0	0	0
⁷ Smoke Development	0	0	0
Bending Radius	4'	6'	8'

- 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.
- 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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