

DURO-GUARD® DEXCELL[™] GLASS MAT 1/4-INCH ROOF BOARD

Description:

Duro-Guard[®] DEXcell[™] Glass Mat Roof Board is a high-performance roof board for use in low-slope Duro-Last[®] roofing systems. It enhances the durability of the roofing system when used as a cover board in mechanically attached systems. The specially treated core and high-performance glass mat facer provide protection against fire, mold and moisture.

- Manufactured to ASTM C 1177.
- Fire barrier meets FM Class 1 and UL Class A fire ratings for roofing systems up to unlimited slope per UL 790.
- Resists mold growth on the board per ASTM D 3273.
- Scores and snaps easily.
- Coated fiberglass facers for improved handling and strength.
- High density.
- Refer to Table 1 for physical properties.

Recommended Uses:

- Mechanically attached Duro-Last roofing systems.
- Duro-Bond[®] roofing systems.
- Metal retrofit roofing systems.

Underwriters Laboratories, Inc. Classifications:

 Refer to Duro-Last's UL Listings (TGFU.R10128) for assembly details.

Factory Mutual Approvals:

- FM 4450, FM 4470.
- FM Class 1.
- Refer to FM Approval's RoofNav[®] for details on FM Approved systems (www.roofnav.com).



Flat Panels:

- Available sizes:
 - o 4 ft. x 8 ft.
 - o 4 ft. x 4 ft.
 - o Thickness: 1/4 inch.

TABLE 1. PHYSICAL PROPERTIES		
Flexural Strength, Parallel	ASTM C 473 Method B	40 lbs. min.
Flute Spanability	ASTM E 661	2-5/8 inches
Permeance	ASTM E 96	25 perms
Water Absorption	ASTM C 1177	10% max.
Mold Resistance	ASTM D 3273	10
Compressive Strength	ASTM C 473	900 psi
Flame Spread, Smoke Developed	ASTM E 84, UL 723, CAN/ULC- S102	0/0
Bending Radius		4 ft.
Weight		1.2 lbs./sq. ft.

Installation:

- In steel deck applications, refer to Table 1 for flute spanability.
- Panels must be kept dry before, during and after installation. Install only as much insulation as can be covered the same day with completed roofing.
- The use of multiple layers of insulation with joints staggered a minimum of 6 inches between layers is recommended to eliminate thermal bridging.
- Abut panel edges loosely (minimum of 1/16-inch gap on all sides) and stagger joints of adjacent panels. Gaps may need to be larger depending on factors like roof deck size, membrane color, deck surface temperature and time of year the roof assembly is installed.
- Gaps must be no greater than 1/4 inch around all penetrations.
- Refer to the appropriate Duro-Last roof system specification and detail drawings for deck preparation and attachment requirements.
- Precautions must be taken to ensure that new concrete decks have fully hydrated and do not continue to release moisture.

Panel Attachment:

 Panels may be attached to the roof deck using mechanical fasteners. Utilize DEXcell FA Glass Mat Roof Board or DEXcell Cement Roof Board for adhered installations.

Mechanical Attachment

- When installing multiple layers (which may include insulation, cover boards and thermal barriers) it is acceptable to mechanically secure through all layers.
- Use fasteners and plates supplied by, or approved by Duro-Last, Inc.

Storage:

- Must be protected from open flame and kept dry at all times.
- Factory applied packaging is intended only for protection during transit. Slit or remove the packaging to prevent accumulation of condensation.
- Store elevated (at least 3 inches) and completely covered with a weatherproof covering such as a tarpaulin.
- Do not use panels which are wet or damaged.
- Refer to PIMA Technical Bulletin No. 109: Storage and Handling Recommendations for Polyiso Roof Insulation for additional guidelines (www.pima.org).

Limitations:

- Duro-Last, Inc. will not be responsible or liable for any defects or problems related to building or roof design by others, to deficiencies in construction, to dangerous conditions on the job site, or to improper storage, handling or installation by others.
- Utilize DEXcell FA Glass Mat Roof Board or DEXcell Cement Roof Board for adhered installations.
- Utilize DEXcell Cement Roof Board for covered roof installations (e.g. vegetative, paver, ballast, photovoltaic, etc.).