

# DURO-GUARD<sup>®</sup> SECUROCK<sup>®</sup> GYPSUM-FIBER 1/2-INCH ROOF BOARD

**Description:**

Duro-Guard<sup>®</sup> Securock<sup>®</sup> Gypsum-Fiber Roof Board is a high-performance roof board for use in low-slope Duro-Last<sup>®</sup> roofing systems. The unique, fiber-reinforced, homogenous composition gives the panel strength and water resistance through to the core. Securock Gypsum-Fiber Roof Board provides exceptional bond and low absorption in adhered systems and with its homogenous composition achieves high wind-uplift ratings with no risk of facer delamination. Made from 97% recycled material, Securock Gypsum-Fiber Roof Board combines superior performance with sustainable design for all types of Duro-Last roofing systems.



- Engineered to provide superior wind-uplift performance for a wide variety of roof assemblies. Securock Gypsum-Fiber Roof Board has uniform composition providing enhanced bond strength with no risk of facer delamination.
- Provides excellent fire performance and demonstrates exceptional surface burning characteristics (ASTM E84 (CAN/ULC-S102) Flame Spread 5, Smoke Developed 0).
- Uniform water-resistant core ensures excellent moisture and mold resistance. Scored a maximum "10" for mold resistance on ASTM D3273.
- Easy to cut, handle and install.
- Recycled content > 97%.
- Refer to Table 1 for physical properties.

**Flat Panels:**

- Available sizes:
  - 4 ft. x 8 ft.
  - 4 ft. x 4 ft.
  - Thickness: 1/2 inch.

**Recommended Uses:**

- Adhered/Fully Bonded Duro-Last roof systems.
- Metal retrofit roof systems with Adhered/Fully Bonded Duro-Last roof systems.

**Underwriters Laboratories, Inc. Classifications:**

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

**Factory Mutual Approvals:**

- FM 4450, FM 4470.
- Refer to FM Approval's RoofNav<sup>®</sup> for details on FM Approved systems ([www.roofnav.com](http://www.roofnav.com)).

TABLE 1. PHYSICAL PROPERTIES		
Flexural Strength, Parallel	ASTM C 473	110 lbs. min.
Flute Spanability	ASTM E 661	8 inches
Permeance	ASTM E 96	26 perms
R Value	ASTM C 518	0.5 ft <sup>2</sup> ·°F·hr/btu
Coefficient Of Thermal Expansion	ASTM E 831	8.0 x 10 <sup>-6</sup> inches/inch·°F
Linear Variation With Change In Moisture	ASTM D 1037	8.0 x 10 <sup>-6</sup> inches/inch·%RH
Water Absorption	ASTM C 473	10% max.
Surface Water Absorption	ASTM C 473	1.6 grams
Mold Resistance	ASTM D 3273	10
Compressive Strength		1,800 psi
Bending Radius		25 ft.
Weight		2.76 lbs./sq. ft.

**Installation:**

- In steel deck applications, Securock Gypsum-Fiber Roof Board can only be used as a cover board over insulation or as recover board over an existing roof. It may be placed directly on flute filler in a metal roof retrofit application assuming the flutes are completely filled.
- 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 the roof deck's 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, insulation adhesive or hot bitumen. It is acceptable to use these products in combination.

*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.

*Adhesive Attachment*

- Insulation adhesive must be supplied by Duro-Last, Inc. Refer to the adhesive's Product Data Sheet for application guidelines. Acceptable products:
  - Duro-Grip® Insta-Stik™.
  - Duro-Grip Olybond500®.
  - Duro-Grip Millenium Weather-Tite®.

- Duro-Grip CR-20.

- Subsequent layers of insulation and approved cover boards may be attached with insulation adhesive.

*Hot Bitumen Attachment*

- When using hot bitumen on concrete decks, priming is necessary.
- Temperature of the bitumen shall be approximately 50° F below the inter-ply hand mopping EVT.
- The deck shall be dry and care must be taken to apply the bitumen in sufficient quantity to totally cover the available deck surface.
- To ensure embedment, the board shall also be "stepped in" at several points while the bitumen is still hot enough to allow positive attachment.
- Any roof membrane contaminated with bitumen must be replaced.

**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](http://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.