

DURO-GUARD® ISO HD-MA

Description:

Duro-Guard® ISO HD-MA is a ½ inch thick high density polyisocyanurate insulation panel specifically designed for use as a cover/recover board within mechanically fastened roofing systems only. It is manufactured on-line with an integrally laminated, fiber-reinforced facer.

- R-value of 2.5.
- Lightweight (11 lbs. per 4 ft. x 8 ft. panel).
- Easy to cut, handle and install.
- Environmentally friendly construction with 0% ozone-depleting components and CFC free.
- Recycled content > 8%.
- Compressive Strength: 80 psi.
- 4 pcf density provides enhanced physical properties.
- Refer to Table 1 for physical properties.

Recommended Uses:

- Mechanically fastened roofing systems only:
 - 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.
- Refer to FM Approval’s RoofNav for details on FM Approved systems (www.roofnav.com).

Flat Panels:

- Available size:
 - 4 ft. x 8 ft.
 - 4 ft. x 4 ft.
 - Thicknesses: ½ inch.

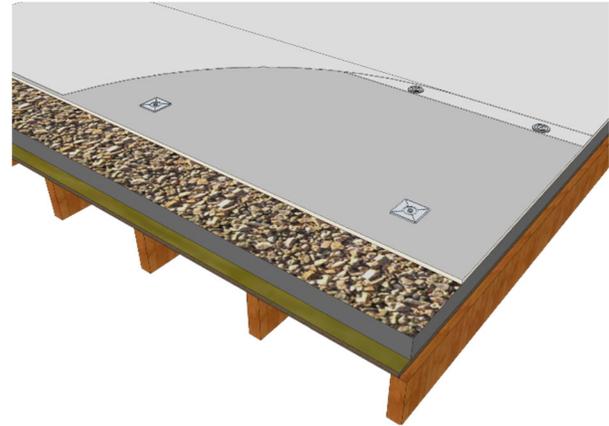


Figure 1. Duro-Guard ISO HD-MA (Shown as Recover Board)

TABLE 1. PHYSICAL PROPERTIES – COVER BOARD		
Compressive Strength	ASTM D 1621 (modified)	80 PSI (138 kPa, Grade 3)
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor Permeance	ASTM E96	< 1.5 perms (57.5 ng/(Pa•s•m ²))
Water Absorption	C1763	< 3% volume

Installation:

- In steel deck applications, Duro-Guard ISO HD-MA 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 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 together and stagger joints of adjacent panels.
- Boards must be neatly fitted to roof deck and around penetrations with no gaps greater than 1/4 inch.
- Precautions must be taken to ensure that new concrete decks have fully cured and do not continue to release moisture.

Panel Attachment:*Mechanically Fastened*

- When installing multiple layers (which may include rigid board insulations, cover boards and thermal barriers), it is acceptable to loosely lay the underlying boards and mechanically fasten through the top layer and all subsequent layers at once.
- Only use fasteners and plates supplied by or approved by Duro-Last, Inc.
- Refer to the appropriate Duro-Last Roofing System specification and detail drawings for deck preparation and fastening requirements.

Storage:

- Insulation 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.