

POLYTHERM® HD

HIGH DENSITY POLYISOCYANURATE INSULATION COVER BOARD

PRODUCT DESCRIPTION

Polytherm HD is a high-density polyisocyanurate (iso) insulation panel which has been specifically designed for use as a cover board and has been manufactured with a premium performance coated glass facer on both sides. The 1/2" thick material provides an R-Value of 2.5 which is significantly higher than cover boards made with other materials. (Also available in 5/8" thickness – Western Regions only.)

USES

- New and re-roofing applications
- Compatible with most roofing systems
- Suitable for use with Polyglass self-adhered and cold process modified bitumen roofing systems

FEATURES AND BENEFITS

- EPA compliant
- Core is 4 lbs./pcf. density which enhances physical properties
- Dimensionally stable
- Optimizes building energy performance
- Lightweight – Easy to handle, cut and install
- Sturdy -Enhances roof system performance by reducing the effects of hail, roof top construction traffic and other potentially damaging elements
- Mold resistant
- Can be installed using approved fasteners and plates as well as cold applied and low-rise adhesives

THERMAL PROPERTIES

| THICKNESS (INCHES) | THICKNESS (MM) | R-VALUE* |
|--------------------|----------------|----------|
| 0.5 | 13 | 2.5 |
| 0.625** | 16 | 2.5 |

*Tested in accordance with ASTM C518

** Only available in Western regions in addition to 1/2" board

TECHNICAL DESCRIPTION

| TEST METHOD | PROPERTY | TYPICAL RESULTS |
|-------------|-----------------------|-------------------------------|
| ASTM D1621 | Compressive Strength | Grade 1 (109 psi max) |
| ASTM D2126 | Dimensional Stability | < 0.5% linear change (7 days) |
| ASTM C209 | Water Absorption | < 1% volume |
| ASTM E84 | Flame Spread* | < 75 |
| ASTM E84 | Smoke Developed* | < 450 |
| | Service Temperature | 260°F or less |
| | Recycle Content | 9% – pre-consumer |

*Meets the requirements of the IBC code. For Specific Flame Spread or Smoke Developed Ratings please contact the Polyglass Technical Department.



PRODUCT DATA

Available Sizes:

- 1/2" x 4' x 4'
- 1/2" x 4' x 8'
- 5/8" x 4' x 4'*
- 5/8" x 4' x 8'*

* Only available in Western regions in addition to 1/2" board.

APPLICABLE STANDARDS

- ASTM C1289 Type II, Class 4, Grade 1 (109 psi max)



PRODUCT CODES

- 7PTAHS – 1/2" x 4' x 4' board
- 7TPTA050 – 1/2" x 4' x 8' board
- 7PTAHS0625* – 5/8" x 4' x 4' board
- 7TPTA0625* – 5/8" x 4' x 8' board

* Western Regions only



www.polyglass.us

POLYTHERM® HD

HIGH DENSITY POLYISOCYANURATE INSULATION COVER BOARD

GENERAL CONDITIONS

Descriptions, specifications, and recommendations described herein are subject to change without notice. Consult with Polyglass for the latest information. The design and construction of the roof deck, and supporting structure are the responsibility of the project architect, engineer, general contractor, and the building owner. The selection and use of Polyglass insulation and other roofing system components to meet the requirements for a project is at the sole discretion of the owner or his designated agent or representative. Polyglass will provide information that is requested by the designer to aid in this decision process. The selection and use of any Polyglass product should be based on the quality of the product and on the specific requirements for the entire roof system rather than any economic considerations. Refer to the information contained in this brochure and to Polyglass specific information on the use and installation of Polyglass roofing insulations.

APPLICATION INSTRUCTIONS

Modified Bitumen Systems (APP, SBS):

Each Polytherm HD panel should be secured as a cover board over either an existing roof system or base layers of insulation. Polytherm HD may be adhered to a prepared concrete deck or subsequent layers of insulation with a full mopping of hot steep asphalt, insulation adhesive or cold applied mastic. Butt edges and stagger joints of adjacent panels. Install the roof covering according to the manufacturer's specifications.

| FASTENING REQUIREMENTS* | | | |
|--|-----------|--------|--------|
| Wind Uplift Rating | | 75 psf | 90 psf |
| 0.5" THICKNESS | | 0.5 | 0.5 |
| 0.625" THICKNESS** | | 0.625 | 0.625 |
| # OF FASTENERS PER 4'X8' | FIELD | 12 | 16 |
| | PERIMETER | 16 | * |
| | CORNER | 24 | * |
| *Contact Polyglass Technical Services for specific fastening requirements. ** Only available in Western regions in addition to 1/2" board | | | |

LIMITATIONS

Install only as much insulation as can be covered with roof covering material the same day.

HANDLING AND STORAGE

Insulation must always be protected from open flame and kept dry.

Polyglass insulation is shipped in polyethylene wrapped and strapped bundles, approximately 22.5" high. These wrapping materials are not adequate for weather protection of the insulation. Stacked bundles shall be covered by a tarpaulin or suitable "breathable" protection cover. DO NOT use wet insulation products within a roofing assembly. Installation of wet insulation or other roofing system components shall cause the Polyglass warranties to become void. Any wet boards shall be removed from the roof and properly disposed of.

WARNING

Polyisocyanurate is an organic material which will burn when exposed to an ignition source of sufficient heat and intensity and may contribute to flames spreading. Note: Polyglass does not assume any responsibility or liability for the performance of any products other than those manufactured and sold by Polyglass.

MANUFACTURING FACILITIES

- Fernley, NV
- Hazleton, PA
- Waco, TX
- Winter Haven, FL

CORPORATE HEADQUARTERS

Polyglass U.S.A., Inc.
1111 West Newport Center Drive
Deerfield Beach, FL 33442
www.polyglass.us

General Line: (888) 410-1375
(954) 233-1330

Customer Service: (800) 222-9782
Technical Service: (866) 802-8017

Questions? technical@polyglass.com

Product Disclaimer: Unless otherwise incorporated into or part of a supplemental manufacturer's warranty, Polyglass warrants its product(s) against manufacturing defects in its product that directly results in leakage for a period of 1 year.

Refer to safety data sheet (SDS) for specific data and handling of our products. All data furnished refers to standard production and is given in good faith within the applicable manufacturing and testing tolerances.

Polyglass U.S.A., Inc., reserves the right to improve and change its products at any time without prior notice. Polyglass U.S.A., Inc. cannot be held responsible for the use of its products under conditions beyond its own control. For most current product data and warranty information, visit www.polyglass.us