H-SHIELD HD

½" High-Density Polyisocyanurate Cover Board

H-Shield HD

PRODUCT DESCRIPTION

H-Shield HD is a ½" thick, 100 psi high-density polyiso insulation panel specifically designed for use as a cover board. It is manufactured on-line to a premium performance coated glass facer on both sides. H-Shield HD delivers an R-value of 2.5 in its ½" profile; significantly higher than roof cover boards made with other materials such as woodfiber or gypsum.

PREMIUM PERFORMANCE ATTRIBUTES

- Manufactured with NexGen Chemistry: Contains no CFCs, HCFCs, is Zero ODP, EPA Compliant, and has virtually no GWP
- 4 lbs/pcf high density foam core provides enhanced physical properties
- Lightweight (11 lbs per 4'x8' panel); easy to cut, handle and install
- Sturdy constitution and durability protects the roof system from effects of hail, roof top construction traffic and other potentially damaging elements
- Passed (10) ASTM D 3273 Resistance to Mold Test
- Hail Rating: SH-1

APPLICATION

- Compatible with Single-Ply Roofing Systems (fully adhered and mechanically attached)
- Modified Bitumen Roofing Systems
- Suitable for use with approved fasteners and plates, also cold applied and low-rise adhesives

PANEL CHARACTERISTICS

- Available in 100 psi per ASTM C 1289 Type II, Class 4
- Available in ½" 4' x 8' (1220mm x 2440mm) panels

H-SHIELD HD THERMAL VALUES

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

*Tested in accordance with ASTM C518

PACKAGING & WEIGHT

4X8 PANELS

11 lbs per 4'x8' panel	0.343 lbs/sq ft
45 pieces per bundle ½ stacks	495 lbs per bundle

Codes and Compliances

- ASTM C 1289 Type II, Class 4 (100 psi)
- UL Classified 790
- ASTM E108
- FM Approved – consult RoofNav for specific assemblies
- FM Approved 1-75

UL Classified for use in Canada

- Refer to UL Directory of Products Certified for Canada for more details
- UL Certified for Canada, CAN/ULC-S126, CAN/ULC- S107
- CAN/ULC-S704 Type 3 Class 2

LEED Potential Credits for Polyiso Use (PRE LEED V4)

For current LEED V4 contribution information go to www.PIMA.org or www.hpanels.com

Energy and Atmosphere

· Optimize Energy Performance · Measurement & Verification

Materials & Resources

· Material Reuse · Construction Waste Management
· Recycled Content · Local and Regional Materials

Innovation and Design

TYPICAL PHYSICAL PROPERTY DATA CHART
POLYISO FOAM CORE ONLY

PROPERTY	TEST METHOD	VALUE
Compressive Strength	ASTM D 1621 *(modified)*	100 psi
Dimensional Stability	ASTM D 2126	< 0.5% linear change (7 days)
Water Absorption	ASTM C 209	< 1% volume
Flame Spread*	ASTM E 84	< 75
Smoke Developed*	ASTM E 84	< 450
Service Temperature	–	260° F or less
Recycle Content		> 8%

*Meets the requirements of the IBC code. For specific Flame Spread or Smoke Developed Ratings - please contact the Hunter Panels Technical Department

WARNINGS AND LIMITATIONS

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof covering material. Hunter Panels will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. For more information refer to the Storage and Handling Technical Bulletin at www.hpanels.com, or refer to PIMA Technical Bulletin No. 109: *Storage & Handling Recommendations for Polyiso Roof Insulation* at www.polyiso.org.

FASTENING REQUIREMENTS*

FM RATING	0.5" THICKNESS	#OF FASTENERS PER 4X8 FIELD	PERIMETER	CORNER
1-75	0.5	12	16	24
1-90	0.5	16	*	*

* Contact your membrane manufacturer for their specific fastening requirements

INSTALLATION

Single-Ply Systems

Ballasted Single-Ply Systems

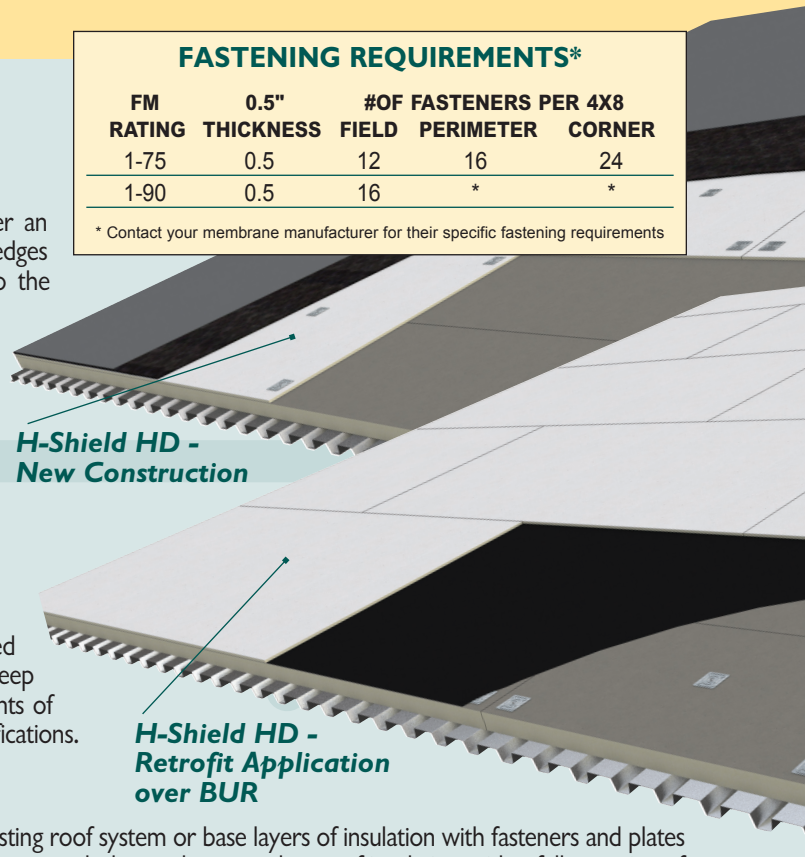
Each H-Shield HD panel should be loosely laid as a cover board over either an existing roof system or base layers of insulation on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof covering according to the manufacturer's specifications.

Mechanically Attached Single-Ply Systems

Each H-Shield HD panel should be secured as a cover board over either an existing roof system or base layers of insulation with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof covering according to the manufacturer's specifications.

Fully Adhered Single-Ply

Each H-Shield HD panel should be secured as a cover board over either an existing roof system or base layers of insulation with fasteners and plates (appropriate to the deck type). H-Shield 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.



Built Up, Coal Tar And Modified Bitumen Systems

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Re-Roofing Single-Ply Systems

H-Shield HD provides a singular and sustainable solution in retrofit applications when existing insulation is left in place. To facilitate compliance with ASHRAE 90.1 Standards for energy efficiency, H-Shield HD can be installed in a single layer on top of intact and dry insulation after the Single-Ply membrane is removed. Butt edges and stagger the joints in accordance with good roofing practice and fasten as per manufacturer's specifications. The new Single-Ply membrane can then be installed over an insulation assembly that complies with the latest energy code requirements.

HUNTER
Energy Smart Polyiso
HUNTERPANELS.COM
15 FRANKLIN STREET, PORTLAND, ME 04101 · 888.746.1114 · FAX: 877.775.1769