H-SHIELD Flat Polyisocyanurate Insulation



PRODUCT DESCRIPTION

H-Shield is a rigid roof insulation panel composed of a closed cell polyisocyanurate foam core bonded on-line on each side to fiber reinforced facers.

FEATURES AND BENEFITS

- Manufactured with NexGen Chemistry: Contains no CFCs, HCFCs, is Zero ODP, EPA Compliant, and has virtually no GWP
- · Approved for direct application to steel decks.
- Approved under all major roof covering systems BUR, Modified and Single-Ply.

PANEL CHARACTERISTICS

- Available in 4'x4' (1220mm x 1220mm) and 4'x8' (1220mm x 2440mm) panels in thickness of 1"(25mm) to 4.0" (102mm)
- Available in two grades of compressive strengths per ASTM C1289, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi).

APPLICATIONS

- Constructions requiring FM Class 1 and UL Class A ratings
- Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)
- Standing Seam Metal Roof Systems
- Modified Bitumen Systems
- · Built-Up Roofing: Asphalt and Coal Tar

H-SHIELD THERMAL VALUES

THICK (INCHES		LTTR R VALUE*	FLUTE SPANABILITY
1.00	25	6.00	2 5/8"
1.50	38	9.00	4 3/8"
1.60	41	9.60	4 3/8"
1.70	43	10.30	4 3/8"
2.00	51	12.10	4 3/8"
2.50	64	15.30	4 3/8"
2.70	69	16.60	4 3/8"
3.00	76	18.50	4 3/8"
3.30	84	20.40	4 3/8"
3.50	89	21.70	4 3/8"
3.60	91	22.40	4 3/8"
4.00	102	25.00	4 3/8"

^{*}Long Term Thermal Resistance Values are based on ASTM C1289 and CAN/ULC S770 which provides for a 15-year time weighted average.

Codes and Compliances

- · ASTM C 1289 Type II, Class 1 Grade 2 (20 psi) Grade 3, (25 psi)
- International Building Code (IBC) Chapter 26
- · State of Florida Product Approval Number FL 5968
- Miami Dade County, FL NOA NO: 09-0915.15 Exp. 1.14.2015

Underwriters Laboratories Inc Classifications

- · UL 1256
- Insulated Metal Deck Construction Assemblies No. 120. 123, 292
- · UL 790
- UL 263 Hourly Rated P Series Roof Assemblies

UL Classified for use in Canada

 Refer to UL Directory of Products Certified for Canada for more details

Factory Mutual Approvals

- · FM 4450, FM 4470
- Approved for Class 1 insulated steel deck constructions for 1-60 to 1-270. Refer to FM Approval's RoofNav for details on specific systems.

LEED Potential credits for Polyiso use

Energy and Atmosphere

- Minimum Energy Performance Optimize Energy Performance Materials & Resources
- · Building 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	ASTM D 1621	20 psi* minimum
Strength	ASTM C 1289	(138kPa, Grade 2)
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor	ASTM E 96	< 1 perm
Transmission		(57.5ng/(Pa•s•m²))
Water Absorption	ASTM C 209	< 1% volume
Service Temperatur	re	-100° to 250° F
		(-73°C to 122°C)

^{*}Also available in 25 PSI Minimum, Grade 3

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. Call Hunter Panels for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage & Handling Recommendations for Polyiso Roof Insulation.

Single-Ply Systems

Ballasted Single-Ply Systems

Each H-Shield panel is loosely laid 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 panel must be secured to the roof deck 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

CONTRACTOR OF THE PARTY OF THE Each H-Shield panel must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Maximum 4'x4'(1220mm x 1220mm) panels of H-Shield may be adhered to a prepared concrete deck with a full mopping of hot steep asphalt. Application by insulation adhesive or cold applied mastic is also approved. Butt edges and stagger joints of adjacent panels. Install the roof covering according to the manufacturer's specifications. Approved adhesives include, but are not limited to the following:

· Carlisle FAST Adhesives · Insta Stik · Olybond · Millennium

R-30.6, two layers of 2.5" H-Shield with Single-Ply membrane

Built Up, Coal Tar And Modified Bitumen Systems

Each H-Shield panel must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Maximum 4'x4' (1220mm x 1220mm) panels of H-Shield may be adhered to a prepared concrete deck with a full mopping of hot steep asphalt. Application by insulation adhesive or cold applied mastic is also approved. Butt edges and stagger joints of adjacent panels. Install the roof covering according to the manufacturer's specifications.

INSTALLATION



HUNTERPANELS.COM

15 FRANKLIN STREET PORTLAND, ME 04101 · 888.746.1114 · FAX: 877.775.1769















