H-SHIELD HD FR
½" High-Density Fire Rated Polyisocyanurate Panel

H-Shield HD FR

H-SHIELD HD FR THERMAL VALUES

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

*Tested in accordance with ASTM C518

PRODUCT DESCRIPTION

H-Shield HD FR is a ½" thick, high-density polyiso insulation panel specifically designed for direct application to combustible decks. It is manufactured on-line to a premium performance coated glass facer on both sides (CGF). H-Shield HD FR delivers an R-value of 2.5 in its ½" profile; significantly higher than other roof materials such as wood fiber or gypsum.

PACKAGING & WEIGHT

4X4 PANELS

7.8 lbs per 4'x4' panel   0.243 lbs/sq ft
45 pieces per ½ stack bundle   351 lbs per bundle

4X8 PANELS

15.5 lbs per 4'x8' panel   0.484 lbs/sq ft
45 pieces per ½ stack bundle   698 lbs per bundle

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

· 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

PANEL CHARACTERISTICS

· Available in ASTM C 1289 Type II, Class 4, Grade 1 (109 psi max)

· Available in 4'x4' (1220mm x 1220mm) and 4'x8' (1220mm x 2440mm) panels

ADVANTAGES

· **Achieves a UL 790 Class A combustible deck assembly rating at ½" thickness without the use of a fire-rated slip sheet or the presence of a fire barrier**

· Lightweight (15.5 lbs per 4'x8' panel); easy to cut, handle and install

· 5 times higher R-value than gypsum

· ⅕ the weight of gypsum

Codes and Compliances

· ASTM C 1289 Type II, Class 4, Grade 1 (109 psi max)

· UL 790

· California Title 24

ROOFING APPLICATIONS

· Achieve a UL Class A Rating using ½" HD FR with any thickness Hunter Panels polyisocyanurate as a base layer

· Compatible with Single-Ply Roofing Systems (fully adhered and mechanically attached)

· BUR, Modified Bitumen Systems (APP, SBS)

· Suitable for use with approved fasteners and plates, also cold applied and low-rise adhesives

· ½" per ft. maximum slope

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

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TYPICAL PHYSICAL PROPERTY DATA CHART
POLYISO FOAM CORE ONLY

PROPERTY	TEST METHOD	VALUE
Compressive Strength	ASTM D 1621	Grade 1 (109 psi max)
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		9% - pre-consumer

*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.hunterpanels.com, or refer to PIMA Technical Bulletin No. 109: *Storage & Handling Recommendations for Polyiso Roof Insulation* at www.polyiso.org.

LEED POTENTIAL CREDITS FOR POLYISO USE

Energy and Atmosphere
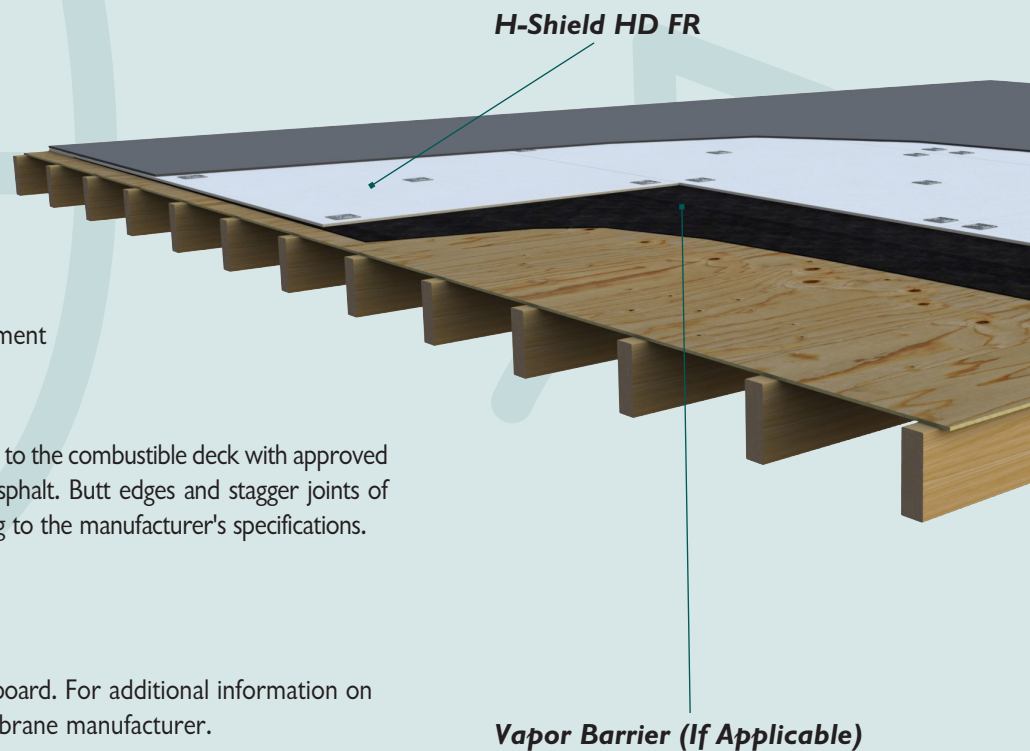· Optimize Energy Performance

Materials & Resources
· Building Life-Cycle Impact Reduction
· Environmental Product Declarations
· Materials Reuse
· Recycled Content
· Construction and Demolition Waste Management

INSTALLATION

Each H-Shield HD FR panel must be secured direct to the combustible deck with approved fasteners and plates, insulation adhesive or hot asphalt. Butt edges and stagger joints of adjacent panels. Install the roof covering according to the manufacturer's specifications.

FASTENING REQUIREMENTS

H-Shield HD FR requires 16 Fasteners per 4'x8' board. For additional information on fastening requirements please contact the membrane manufacturer.

H-Shield HD FR

Vapor Barrier (If Applicable)

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Energy Smart Polyiso

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