

# TAPERED H-SHIELD

## Sloped Polyisocyanurate Insulation

TECHNICAL DATA SHEET

Tapered H-Shield is a sloped rigid roof insulation panel composed of a closed cell polyisocyanurate foam core manufactured on-line to a fiber reinforced facer on both sides (GRF). Tapered H-Shield is designed to promote positive drainage and prevent ponding water. For best results, request assistance from Hunter Panels Tapered Design Team.

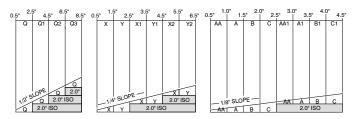
### **APPLICATIONS**

- Approved for direct application to steel decks
- Approved under major roof coverings systems BUR, Modified and Single-Ply
- Constructions requiring FM Class 1 and UL Class A ratings
- Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)
- Modified Bitumen Systems
- Built-Up Roofing: Asphalt and Coal Tar
- To achieve optimal thermal performance, Hunter Panels recommends installation of a multi-layered system with staggered joints.

### PANEL CHARACTERISTICS

- Manufactured with NexGen Chemistry: Contains no CFCs, HFC, HCFCs, is Zero ODP, EPA Complaint, and has virtually no GWP
- Available in two grades of compressive strengths per ASTM C 1289 Type II, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)
- Available slopes are ½" (3mm), ½" (6mm), ½" (10mm) and ½" (13mm) per foot
- Available in 4'x4' (1220mm x 1220mm) and 4'x8' (1220mm x 2440mm) panels in thicknesses of .5" (13mm) minimum to 4.5" (114mm) maximum in a single layer
- Other panel sizes and facers are available upon special request
- Available as Pre-Cut and Pre-Assembled hips, valleys and sumps. See the Hunter Panels Tapered Pre-Cut Brochure for more information

### **Profiles**





### POTENTIAL LEED CREDITS FOR POLYISO USE

### **Energy and Atmosphere**

Optimize Energy Performance

#### **Materials & Resources**

- Building Life-Cycle Impact Reduction
- Environment Product Declaration
- Material Reuse
- Recycled Content
- Construction and Demolition Waste Management

### **Indoor Environmental Quality**

Thermal Comfort

## **CODES AND COMPLIANCES**

- ASTM C 1289 Type II, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)
- International Building Code (IBC) Chapter 26
- State of Florida Product Approval Number FL 5968
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1420
- Miami Dade County Product Control Approved

# UNDERWRITERS LABORATORIES INC CLASSIFICATIONS

- UL 1256
- Insulated Steel Deck Construction Assemblies No. 120, 123, 292
- III 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
- CCMC 13460-L
- UL Certified for Canada, CAN/ULC-S126, CAN/ULC-S101, CAN/ULC-S107
- CAN/ULC-S704 Type 2, Class 3 (20 psi) or Type 3, Class 3 (25 psi)

### **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

### TYPICAL PHYSICAL PROPERTY DATA

Polyiso Foam Core Only

Physical Property	Test Method	Value
Compressive Strength	ASTM D 1621	20 psi* (138kPa, Grade 2)
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E 96	< 1 perm (57.5ng/(Pa•s•m²))
Water Absorption	ASTM C 209	<1% volume
Flame Spread**	ASTM E 84	< 75
Smoke Developed**	ASTM E 84	< 450
Service Temperature	-	-100° to 250° F (-73°C to 122°C)

<sup>\*</sup>Also available in 25 psi, Grade 3

### WARNINGS AND LIMITATIONS

Insulation must be protected from open flame and kept dry at all times. Store above ground on pallets and cover with breathable tarpaulins. Install only as much Polyiso as can be covered the same day with the completed roofing system. Do not leave exposed. Hunter Panels will not be responsible for specific designs by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site, or for improper storage and handling.

#### INSTALLATION - SINGLE-PLY SYSTEMS

### **Ballasted Single-Ply Systems**

Each Tapered 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 Tapered H-Shield panel must be secured to the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof covering according to the manufacturer's specifications.

### Fully Adhered Single-Ply

Each Tapered H-Shield panel must be secured to the roof deck. Maximum 4'x4' (1220mm x 1220mm) panels of Tapered H-Shield 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.

# INSTALLATION - BUILT UP, COAL TAR AND MODIFIED BITUMEN SYSTEMS (APP, SBS)

Each Tapered H-Shield panel must be secured to the roof deck. Maximum 4'x4' (1220mm x 1220mm) panels of Tapered H-Shield 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.

Review manufacturer's specifications and details for complete installation information.











<sup>\*\*</sup>Meets the requirements of the IBC code. For specific Flame Spread or Smoke Developed Ratings please contact the Hunter Panels Technical Department