

SecurShield HD POLYISO Insulation



Overview

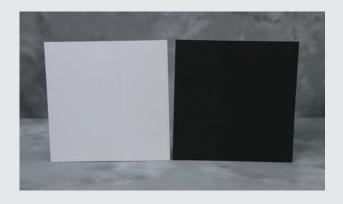
Carlisle's SecurShield HD Polyiso Insulation is a rigid roof insulation panel composed of a high-density, closed-cell polyisocyanurate foam core laminated to a premium-performance, coated-glass facer (CGF). Suitable for both re-roofing and new construction applications, SecurShield HD is specifically designed for use as a cover board over a variety of substrates. SecurShield HD delivers an R-value of 2.5, which is significantly higher than roof cover boards made with other materials such as wood fiber or gypsum. ReadyFlash® Technology is a standard feature of SecurShield HD Polyiso that allows the contractor to manipulate flash-off times by choosing which side of the insulation board to apply membrane adhesives. ReadyFlash features a dark coated-glass facer (CGF) on one side of the insulation board and a light coated-glass facer on the other. Utilizing the sun's energy, the dark facer accelerates adhesive flash-off while the light facer slows it down.

Features and Benefits

- » High-density insulating cover board
- » Achieves a UL Class A direct to combustible deck rating Maximum roof slope - 1": 12"
- » Exceptional protection against hail, rooftop traffic, mold, and moisture
- » High-density formulation achieves FM severe hail rating (SH)
- » 2 times higher R-value than wood fiber boards
- » Compatible with all Carlisle single-ply roofing systems (Except Ballast)
- » Coated glass facer provides strong bond for adhered roofing applications

Ready Flash

- » Allows the contractor to speed up or slow down adhesive flash-off time
- » Increases surface temperature of the dark facer up to 50°F above ambient temperature
- » Decreases surface temperature of the light facer up to 10°F below ambient temperature
- » Provides up to 2x faster adhesive flash-off on cooler days and up to 4x faster on warmer days when utilizing the dark facer



Product Characteristics

- » Panel sizes:
 - 4' x 8' (1220 mm x 2440 mm)
 - 4' x 4' (1220 mm x 1220 mm)
- » Panel thickness: ½" (13 mm)
- » Weight: 0.343 lbs/sq. ft.
 - 11 lbs (4.99 kg) per 4' x 8' panel
 - 5.5 lbs (2.49 kg) per 4' x 4' panel



SecurShield HD POLYISO Insulation

Productivity Boosting Features and Benefits:

- » Lightweight and easy to cut, handle, and install no crumbling of material
- » 5 times higher R-value than gypsum cover boards
- » 1/5 the weight of gypsum cover boards



Installation

Mechanically Attached Single-Ply Systems

Each SecurShield HD panel must be secured to the substrate with approved Carlisle fasteners and plates. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle specifications.

Fully Adhered Single-Ply Systems

Carlisle's SecurShield HD may be secured to the roof deck using Carlisle's Flexible FAST™ adhesive, fasteners and plates, or hot asphalt (appropriate to the deck type). For adhesive coverage or fastening patterns and requirements, please contact Carlisle's Design Services group. Butt the edges of the insulation panels and stagger the joints. Install the membrane according to Carlisle specifications.

Review Carlisle specifications and details for complete installation information.

Codes and Compliances

- » ASTM C1289, Type II, Class 4, Grade 1 (109 psi max.)
- » International Building Code (IBC) Section 2603
- » UL Standard 790, 263 and 1256: Component of Class A Roof Systems (refer to UL Roof Materials' system directory)
- » FM Standards 4450/4470: Class 1 approval for steel roof-deck constructions (refer to FM RoofNav)
- » California Codes of Regulations, Title 24, Insulation Quality Standard License #TI-1418
- » Third-party certification with PIMA Quality Mark for Long-Term Thermal Resistance (LTTR) values
- » CAN/ULC S704, Type 3, Class 2
- » Florida Building Code Approval

Precautions

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. Carlisle will not be responsible for specific building and roof design, for deficiencies in construction or workmanship, for dangerous conditions on the jobsite, 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 Carlisle for more specific details or refer to PIMA Technical Bulletin No. 109: Storage and Handling Recommendations for Polyiso Roof Insulation.

Typical Properties and Characteristics		
Physical Property	Test Method	Value
Compressive Strength	ASTM D1621	109 psi max
Dimensional Stability	ASTM D2126	<0.5% linear change (7 days)
Water Absorption	ASTM C209	<1% volume
R-value	ASTM C518	2.5
Thickness		1/2"
Service Temperature		260°F (126°C) or less
Resistance to Mold	ASTM D3273	Passed

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED® Information		
Pre-consumer Recycled Content	0%	
Post-consumer Recycled Content	9%	
Manufacturing Locations	Smithfield, PA Franklin Park, IL Tooele, UT Montgomery, NY Lake City, FL Terrell, TX, Puyallup, WA	
Solar Reflectance Index (SRI)	N/A	