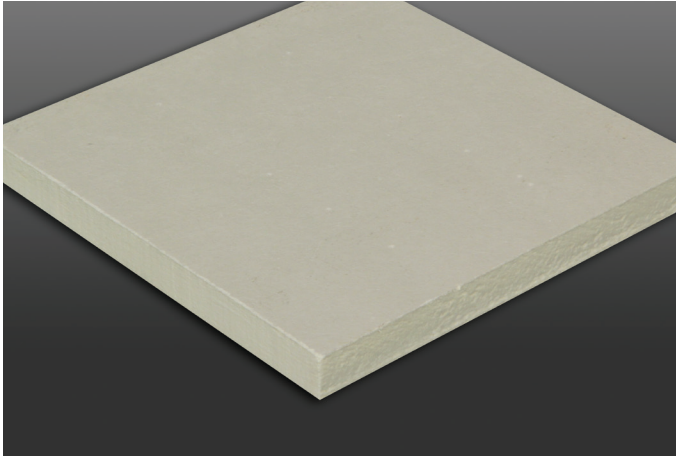# SecurShield™ HD POLYISO
Insulation

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 fiber-mat facer. 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.

Features and Benefits

» High-density insulating cover board

» Compressive strength of 100 psi

» Lightweight and easy to cut, handle, and install

» Exceptional protection against hail, rooftop traffic, mold, and moisture

» High-density formulation achieves FM severe hail rating (SH)

» 5 times higher R-value than gypsum cover boards

» 2 times higher R-value than wood fiber boards

» One-fifth the weight of gypsum cover boards

» Compatible with all Carlisle single-ply roofing systems (Except Ballast)

» Coated glass facer provides strong bond for adhered roofing applications

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

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 FAST™ and Flexible FAST adhesive, OlyBond500® insulation 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. Be certain to install boards with the proper side down, as indicated on each board. Install the membrane according to Carlisle specifications.

Review Carlisle specifications and details for complete installation information.

Code Approvals

» FM 4450 and FM 4470

» UL 790

» UL Classified

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.

SecurShield HD POLYISO
Insulation

Typical Properties and Characteristics

Physical Property	Test Method	Value
Compressive Strength	ASTM D1621 (modified)	100 psi (690 kPa)
Dimensional Stability	ASTM D2126	<0.5% linear change (7 days)
Water Absorption	ASTM C209	<1% volume
R-value	ASTM C518	2.5
Thickness		½"
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