

CARLISLE'S **SECURSHIELD® HD EPS COMPOSITE**



Overview

SecurShield HD EPS Composite is a premium composite insulation consisting of a closed-cell, lightweight and resilient expanded polystyrene (EPS) bonded to high-density polyisocyanurate cover board. The SecurShield HD EPS Composite foam core is cut from the same high quality stock as our traditional EPS roofing insulation and upon request will meet or exceed the requirements of ASTM C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation. The polyiso cover board is manufactured at ½" thickness and 100 psi compressive strength. The EPS is available in compressive strengths from 10 - 60 psi and densities from 1 - 3 pcf. SecurShield HD EPS Composite is an excellent choice for new or retrofit applications where high-thermal efficiency and maximum durability are desired.

Features and Benefits

- Laborsaving product eliminates separate installation of a coverboard
- Provides additional resistance to misuse, abuse and adverse weather conditions, such as high winds and hail
- Contains no formaldehyde or ozone-depleting CFCs or HCFCs and contains recycled material
- 100% recyclable
- Thermal properties will remain stable over its entire service life – eligible for a 20-year thermal performance warranty
- Does not readily absorb moisture

Applications

SecurShield HD EPS Composite is acceptable for adhered, mechanically attached and ballasted Carlisle assemblies.

Installation

Under mechanically attached membranes the SecurShield HD EPS Composite should be installed using a minimum of five fasteners, with insulation plates, per 4' x 8' board prior to placement and fastening of roof membrane. Adhered membrane installation requires attachment to the deck with EPS-compatible roof insulation adhesives or fastened with a minimum of one fastener every two square feet.

Product Characteristics

SecurShield HD EPS Composite is available in several standard thicknesses ranging from 1½" to 7", and is available in custom lengths and widths with little to no impact on lead time.

SecurShield HD EPS Composite						
Typical Thicknesses and Thermal Values*						
Nominal Thicknesses (including ½" HD ISO)	1½"	2"	3"	4"	5"	6"
R-Value						
@ 25°F	6.85	9.02	13.38	17.72	22.08	26.42
@ 40°F	6.67	8.76	12.93	17.10	21.27	25.44
@ 75°F	6.37	8.30	12.13	15.98	19.83	23.68

* Values based on Type I EPS material. Also available in Types II, VIII and IX, values will vary.

Precautions

SecurShield HD EPS Composite is not a structural panel, and is suitable only for installation over fully supported structural decks.

Consult Carlisle for additional guidelines.

CARLISLE'S **SECURSHIELD® HD EPS COMPOSITE**

LEED® Info

Post-industrial Recycled Content	Up to 15% (EPS) <8% (Polyiso)
Manufacturing Locations	Anchorage, AK Aurora, CO Chino, CA Dixon, CA Kent, WA Lakeland, FL Mead, NE Phoenix, AZ

EPS

Typical Properties and Characteristics**

Property	Test Method	Value
Density (nom. pcf)	ASTM C303	1.0
Compressive Strength (psi, 10% deformation)	ASTM D1621	10 - 14
Dimensional Stability (maximum %)	ASTM D2126	2.0
Water Absorption (max. % vol.)	ASTM C272	4.0

** Values based on Type 1 EPS material. Also available in Types II, VIII and IX, values will vary.

SecurShield HD

Typical Properties and Characteristics

Property	Test Method	Value
Compressive Strength	ASTM D1621 (modified)	100 psi (kPa)
Dimensional Stability	ASTM D2126	< 0.5% linear change (7 days)
Water Absorption	ASTM C209	< 1% volume
Resistance to Mold	ASTM D3273	Passed (10)
Service Temperature		260° F or less
R-value		2.5

