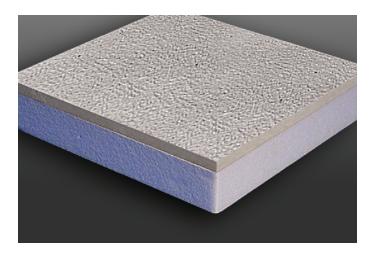


## SecurShield HD Composite EPS Insulation



### **Overview**

SecurShield HD Composite EPS is a composite insulation board consisting of a closed-cell, lightweight expanded polystyrene (EPS) bonded to high-density polyisocyanurate cover board. The polyiso cover board is manufactured at ½" thickness and minimum 80 psi compressive strength. The EPS is available in compressive strengths from 10 - 60 psi and densities from 1 - 3 pcf. SecurShield HD Composite EPS is an excellent choice for new or retrofit applications where high-thermal efficiency and maximum durability are desired.

### **Features and Benefits**

- » Labor saving product eliminates separate installation of a coverboard
- » Provides additional resistance to high winds and hail
- » Contains no formaldehyde or ozone-depleting CFCs or HCFCs and contains recycled material
- » 100% recyclable

## **Applications**

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

### Installation

Under mechanically attached membranes the SecurShield HD Composite EPS 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.

Review Carlisle specifications and details for complete installation information.

### **Product Characteristics**

SecurShield HD Composite EPS is available in several standard thicknesses ranging from  $1\frac{1}{2}$ " to 7", and is available in custom lengths and widths with little to no impact on lead time.

Typical Thicknesses and Thermal Values*							
Nominal Thicknesses (including ½" HD ISO)	1½"	2"	3"	4"	5"	6"	
<b>R-Value</b> @ 75°F	6.37	8.30	12.13	15.98	19.83	23.68	

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

## **Precautions**

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

Consult Carlisle's Technical Department for additional guidelines.



## SecurShield HD Composite EPS Insulation

# 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

Typical properties and characteristics are based on samples tested and are not guaranteed \*\* Values based on Type 1 EPS material. Also available in Types II, VIII and IX, values will vary.

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