

Product Data



PRODUCT DESCRIPTION

SecurShield is a rigid, roof-insulation panel composed of a closed-cell polyisocyanurate foam core laminated to coated glass fiber mat facers.

FEATURES AND BENEFITS

- Premium facer improves fire resistance, moisture resistance and dimensional stability.
- Ideal for applications directly over wood deck
 - * 3" thickness qualifies for a UL Class A rating.
 - * 1.9" thickness qualifies for a UL Class B rating.
 - * No fire-rated base sheet or thermal barrier required.
- Increase facer resistance allows for adhered applications in more severe wind zones.
- Polyiso insulation provides the highest R-value per inch of commercially available insulation products.
- Environmentally friendly construction with 0% ozone-depleting components that are CFC free and HCFC free.

SecurShield THERMAL VALUES

THICKNESS (INCHES) (MM)	LTRR R-VALUE*	FLUTE SPANABILITY
1.00" 25	6.00	2 5/8"
1.50" 38	9.00	4 3/8"
1.60" 41	9.60	4 3/8"
1.70" 43	10.30	4 3/8"
2.00" 51	12.10	4 3/8"
2.50" 64	15.30	4 3/8"
2.70" 69	16.60	4 3/8"
3.00" 76	18.50	4 3/8"
3.10" 79	19.10	4 3/8"
3.30" 84	20.40	4 3/8"
3.50" 89	21.70	4 3/8"
3.60" 91	22.40	4 3/8"
4.00" 102	25.00	4 3/8"

APPLICATIONS

* Long Term Thermal Resistance Foam Core Values are based on ASTM C1289-06 and CAN/ULC S770 which provides for a 15-year time-weighted average. All PIMA members have adopted this advanced standard for R-values measurement as of 1/1/03.

INSTALLATION

MECHANICALLY ATTACHED SINGLE-PLY SYSTEMS

- Each SecurShield panel must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to the manufacturer's specifications.

FULLY ADHERED SINGLE-PLY SYSTEMS

- Each SecurShield panel must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to the manufacturer's specifications.
- SecurShield 4' x 8' panels can be secured to the roof deck with Carlisle's FAST adhesive technology.

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PANEL CHARACTERISTICS

- Available in 4'x4' (1220mm x 1220mm) and 4'x8' (1220mm x 2440mm) panels in thickness of 1"(25mm) to 4"(102mm)
- ASTM-C 1289-06, Type II, Class 2, Grade 2, (20 psi) or Grade 3 (25 psi)
- UL Classified for Class A, B and C assemblies

SECURSHIELD CODES AND COMPLIANCES

- ASTM C1289-06, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- International Building Code (IBC) Section 2603

NOTE: Please be aware the Federal Specification HH-I-1972/GEN has been replaced.

UNDERWRITERS LABORATORIES, INC.

- Insulated metal deck assemblies - UL 1256 (nos. 120, 123, 292)
- Component of Class A roof systems. Built-up, modified bitumen and single-ply (ballasted, mechanically attached & fully adhered) (UL 790)
- Hourly Rated P series roof assemblies (UL 263) P 225, 230, 259, 302, 303, 508, 510, 514, 519, 701, 710, 713, 717, 718, 719, 720, 722, 723, 727, 728, 729, 730, 732, 734, 735, 739, 741, 742, 743, 819, 824, 827, 828.
- SecurShield classified by ULC

FACTORY MUTUAL RESEARCH

- FM Class 1 approval for steel roof-deck constructions, (FM 4450).
- FM 4470
- Can be installed to meet the perimeter and corner-pressure requirements for the FM 1-90 rated system.

(Subject to the conditions of approval described in Roofnav.com)

WARNINGS AND LIMITATIONS

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 by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site 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 & Handling Recommendations for Polyiso Roof Insulation.

TYPICAL PHYSICAL PROPERTY DATA CHART POLYISO FOAM CORE ONLY		
PROPERTY	TEST METHOD	VALUE
Compressive Strength	ASTM D 1621 ASTM 1289-06	20 psi* minimum (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·m ²)))
Water Absorption	ASTM C 209	< 1% volume
Flame Spread (foam core)	ASTM E 84	< 50
Service Temperature		-100° to 250° F (-73)C to 122°C)

* Also available in 25 psi minimum, Grade 3

OTHER POLYISO PRODUCTS BY CARLISLE:

- HP-F *POLYISO BONDED TO FOIL*
- HP-H *FLAT POLYISO*
- HP-NB *POLYISO BONDED TO ORIENTED STRAND BOARD*
- HP-WF *POLYISO BONDED TO WOOD FIBERBOARD*
- TAPERED SECURSHIELD *TAPERED POLYISO BONDED TO GLASS FIBER MAT*
- TAPERED HP-H *TAPERED POLYISO*
- TAPERED HP-H-WF *TAPERED POLYISO BONDED TO WOOD FIBERBOARD*

	Foamed plastic as roof deck construction material with resistance to an internal fire exposure only for use in construction no.(s) 120 and 123. See UL Directory of Products Certified for Canada and UL Roofing Materials and Systems Directory. 99DL.



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