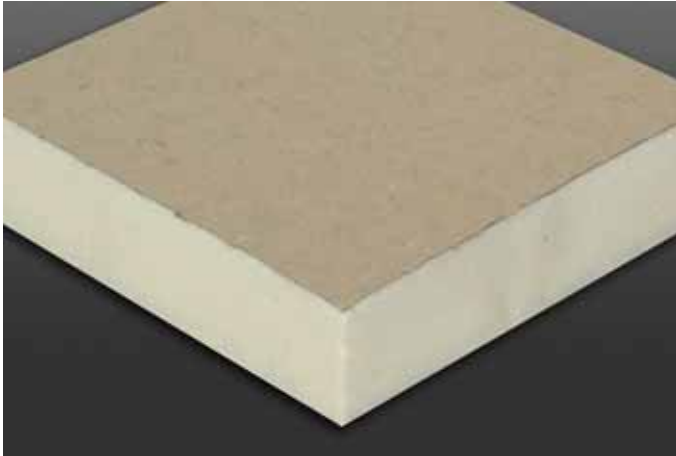


# InsulBase® NH POLYISO

## Insulation



### Overview

InsulBase NH Polyiso is an LBC “Red List Free” rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt (GRF). InsulBase NH contains zero halogenated flame retardants.

### Features and Benefits

- » Living Building Challenge “Red List Free” — Declare Label
- » Contains zero halogenated flame retardants
- » InsulBase NH polyiso insulation provides the highest R-value per inch of commercially available insulation products
- » Environmentally friendly construction with 0% ozone-depleting components and CFC free
- » Approved for direct application to steel decks

### Panel Characteristics

- » Available in 4' x 4' (1220 mm x 1220 mm) and 4' x 8' (1220 mm x 2440 mm) panels in thickness of ½" (13 mm) to 4.5" (115 mm)



### Installation

#### Ballasted Single-Ply Systems

Each InsulBase NH panel is loosely laid on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

#### Mechanically Attached Single-Ply Systems

InsulBase NH panels 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 Carlisle's specifications.

#### Fully Adhered Single-Ply Systems

InsulBase NH panels must be secured to the roof deck with fasteners and plates (appropriate to deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Carlisle's specifications.

InsulBase NH 4' x 8' panels can be secured to the roof deck with Carlisle's Flexible FAST™ Adhesive, either full coverage or bead spacing.

InsulBase NH 4' x 4' panels may be adhered to prepared concrete deck with a full mopping of Type III or IV asphalt.

*Review Carlisle specifications and details for complete installation information.*

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### InsulBase NH Polyiso Thermal Values

Thickness (inches)	Thickness (MM)	LTTR R-value	Flute Spanability
0.50	13	2.8	2 5/8"
1.00	25	5.7	2 5/8"
1.50	38	8.6	4 3/8"
2.00	51	11.4	4 3/8"
2.50	64	14.4	4 3/8"
3.00	76	17.4	4 3/8"
3.50	89	20.5	4 3/8"
4.00	102	23.6	4 3/8"
4.50	114	26.8	4 3/8"

### Codes and Compliances

- » ASTM C1289, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- » International Building Code (IBC) Section 2603
- » Constructions requiring FM Class 1 and UL Class A ratings
- » 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<sup>SM</sup>)
- » California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1418
- » Third-party certification with the PIMA Quality Mark for Long-Term Thermal Resistance (LTTR) values
- » CAN/ULC 5704, Type 2 & 3, Class 2

### 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. Protect installed product from excessive foot traffic. 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 Properties and Characteristics (ASTM C1289)

Physical Property	Test Method	Value
Compressive Strength	ASTM D1621	20 psi* minimum (138 kPa, Grade 2)
Dimensional Stability	ASTM D2126	2% linear change (7 days)
Moisture Vapor Permeance	ASTM E96	<1 perm (57.5 ng/(Pa•s•m <sup>2</sup> ))
Water Absorption	C1763	<1% volume

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.

\* Polyiso Foam Core only



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.

