VERSICO'S MP-HNB POLYISO

MP-HNB THERMAL VALUES			
Thickness (Inches)	(mm)	LTTR R-value*	Flute Spanability
1.50"	38	6.60	4 3/8"
2.00"	51	9.60	4 3/8"
2.50"	64	12.70	4 3/8"
3.00"	76	15.90	4 3/8"
3.50"	86	19.10	4 3/8"
3.70"	89	20.40	4 3/8"
4.00"	102	22.30	4 3/8"
4.50"	115	25.60	4 3/8"

* 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 01/01/03.

Overview

MP-HNB is a rigid-roof insulation composite panel composed of a closed-cell polyisocyanurate foam core bonded during the manufacturing process to fiber-reinforced facers on one side and either 7/16" or 5/8" oriented strand board (OSB) on the other.

Features and Benefits

- Environmentally friendly construction with 0% ozone-depleting components and CFC free
- A superior combination of high-insulating properties and/or nailable surface
- Higher wind uplift performance
- Resilient OSB surface ideal for high-traffic roof installations
- Composite of insulation and cover board saves handling and installation labor
- Suitable for new construction and re-roofing on commercial projects
- Incorporates APA-TECO-rated exposure 1 oriented strand board
- Manufactured on line with a routed edge to allow for expansion of the OSB
- MP-HNB is also available bonded to CDX plywood (various sizes), manufactured in an off-line process

Panel Characteristics

- Available in 4' x 8' when non-routed in thickness of 1½" (38 mm) to 4½" (115 mm)
- Available size is 47 ½" x 95 ½" when routed on line. Thickness of 1½" (38 mm) to 4½" (115 mm)
- ASTM C1289-06, Type V, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)

Applications

- Single-Ply Roof Systems - Mechanically Attached, Fully Adhered

Installation

MECHANICALLY ATTACHED SINGLE-PLY SYSTEMS

Each MP-HNB 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 4' x 4' MP-HNB panel may be secured to the roof deck with fasteners and plates (appropriate to deck type) or can be adhered using Versico's DASH™ adhesive. Butt edges and stagger joints of adjacent

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panels. Install the roof membrane according to manufacturer's specifications.

4' x 8' panels must be secured to the roof deck using Versico fasteners and plates (appropriate to deck type).

Vapor Retarders

The incorporation of a vapor barrier or retarder within the roofing assembly is highly recommended when the project is located in Zones 1, 2 or 3 of the United States. Consult a licensed design professional, architect or engineer to establish whether or not a vapor barrier is necessary and to specify its type and location. This is especially important during the construction phase where excessive moisture drive is present. Versico recommends that a dew-point calculation be performed. This calculation is based on the building's interior relative humidity, interior temperature conditions and outside temperature fluctuations. Excessive moisture migration will potentially damage the system and cause unwanted condensation.

MP-HNB Codes and Compliances

- ASTM C1289-06, Type V, Grade 2 (20 psi)
- International Building Code (IBC) Section 2603

  FLORIDA BUILDING CODE APPROVAL FL#1296
  MIAMI-DADE COUNTY, FLORIDA NOA NO: 04-1018.01

  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 (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
- MP-HNB classified by ULC

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. Versico will not be responsible for specific building and roof design by others, 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 Versico for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage& Handling Recommendations for Polyiso Roof Insulation.

Fastening Guidelines

Versico requires the use of approved Versico fasteners and 3"-diameter plates for securement of the Versico MP-HNB composite board to the substrate. See the appropriate Versico Design Criteria specification for recommended fastening patterns.

TYPICAL PROPERTIES AND CHARACTERISTICS**
POLYISO FOAM CORE ONLY

Property	Test Method	Value
Compressive Strength	ASTM D1621 ASTM 1289-06	20 psi* minimum (138 kPa, Grade 2)
Dimensional Stability	ASTM D2126	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E96 12.10	<1 perm (57.5ng/(Pa•s•m²))
Water Absorption	ASTM C209	<1% volume
Service Temperature		-100° to 250°F (-73°C to 122°C)

* Also available in 25 psi minimum, Grade 3

** 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.

Other Polyiso Products by Versico

- SECURSHIELD *POLYISO BONDED TO COATED GLASS FACER*
- MP-HCG *POLYISO BONDED TO COATED GLASS FACER*
- MP-HF *POLYISO BONDED TO FOIL*
- MP-H *POLYISO*
- MP-HWF *POLYISO BONDED TO WOOD FIBERBOARD*
- TAPERED MP-HCG *POLYISO BONDED TO COATED GLASS FACER*
- TAPERED MP-H *TAPERED POLYISO*
- TAPERED MP-HWF *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.

PIMA QualityMark℠ The Certified LTTR-value

ENERGY STAR ***