



**DynaClad® Polyiso NB**  
*Manufactured by Hunter Panels*

**DYNACLAD® POLYISO NB** is a rigid roof insulation composite panel composed of a closed cell polyisocyanurate foam core manufactured on-line to a fiber reinforced facer on one side and 5/8" oriented strand board (OSB) on the other. DynaClad® Polyiso NB can also be manufactured off-line bonded to 5/8" or 3/4" plywood.

#### Premium Performance Attributes

- Manufactured with NexGen Chemistry: Contains no CFCs, HFCs, HCFCs, is Zero ODP, EPA Compliant, and has virtually no GWP
- A superior combination of high insulating properties and a nailable surface
- Suitable for new construction and re-roofing on both commercial and residential projects
- Incorporates APA-TECO Rated Exposure 1 OSB and Plywood
- The edges of the wood panels are rabbeted to allow for expansion and contraction of the wood. The foam edges shall be installed tightly to achieve thermal integrity across the entire roof deck
- Available as a non-rabbeted panel upon special request
- Hail Rating: SH-1, VSH

#### Applications

- Standing Seam Metal Roof Systems

#### Panel Characteristics

- Available in two grades of compressive strengths per ASTM C1289 Type V, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)
- Also available in ASTM C1289 Type V, Class 2 (H-Shield CG), Grade 2 (20 psi) or Grade 3 (25 psi)
- Available in 47.5"x95.5" when manufactured on line in thicknesses of 1.6" (41mm) to 4.1" (104mm)
- Available in 48"x96" when manufactured off-line in thicknesses of 1.5" (38mm) to 4.0" (102mm)
- Multiple Substrate Types Available:

##### OSB:

- 5/8" or 3/4"
- Fire-Treated

##### Plywood:

- 5/8" or 3/4"
- 3/4" CDX or Fire-Treated

#### DYNACLAD® POLYISO NB THERMAL VALUES

THICKNESS†		LTTR R-VALUE*	FLUTE SPANABILITY
(INCHES)	(MM)		
1.6	38	6.3	4 3/8"
2.1	51	9.2	4 3/8"
2.6	64	12.0	4 3/8"
3.1	76	15.0	4 3/8"
3.6	89	18.0	4 3/8"
4.1	102	21.1	4 3/8"

\*Long Term Thermal Resistance Values are based on ASTM C 1289.

†Thickness is calculated with 5/8" OSB.

DynaClad® Polyiso NB is only manufactured in the sizes listed above and on our packaging and weight chart. R-values other than those listed can be achieved by installing a multi layer system consisting of an additional layer of flat polyiso under DynaClad® Polyiso NB.

#### Codes and Compliances

- ASTM C 1289 Type V, Grade 2 (20 psi) or Grade 3 (25 psi)
- International Building Code (IBC) Chapter 26
- State of Florida Product Approval Number FL 5968
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1420
- Miami Dade County Product Control Approved

#### Underwriters Laboratories Inc Classifications

- UL 1256
- Insulated Steel Deck Construction Assemblies – No. 120, 123
- UL 790
- UL 263 Hourly Rated P Series Roof Assemblies

#### UL Classified for use in Canada

- Refer to UL Directory of Products Certified for Canada for details

#### Potential LEED Credits for Polyiso Use

##### Energy and Atmosphere

- Optimize Energy Performance

##### Materials & Resources

- Building Life-Cycle Impact Reduction
- Environment Product Declaration
- Material Reuse
- Recycled Content
- Construction and Demolition Waste Management

##### Indoor Environmental Quality

- Thermal Comfort

## STANDING SEAM METAL ROOFING

DynaClad® Polyiso NB is installed, wood side up over steel, plywood or structural roof decks. Wood blocking, if necessary, should be equal in thickness to the DynaClad® Polyiso NB and should be installed along the eaves and rake edges of the roof. The roofing system is then installed according to the manufacturer's recommendations.

*All DynaClad® Polyiso NB manufactured off-line must be mechanically attached.*

## INSTALLATION

### The Use of Synthetic Underlayments

1 Install approved polypropylene sheet material in 10 square rolls equal to the product listed, applied in shingle-like application in continuous coverage from eave to ridge per roof area with approved mechanical attachment procedures.

a. DMI DynaClad® Polyiso NB Premium Roofing Underlayment

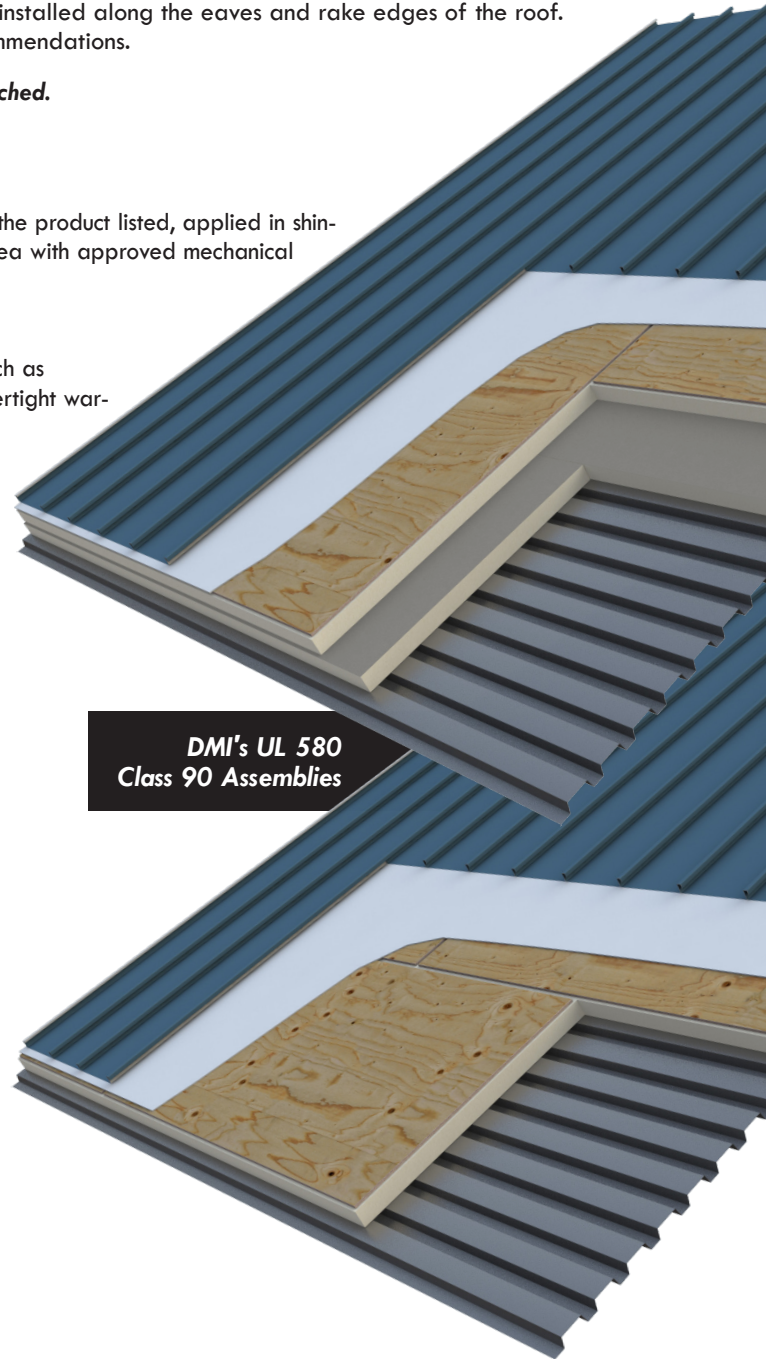
2 Install DMI Ultra HT Wind & Water Seal Underlayment in critical areas such as valleys, aprons, rakes, and penetrations, particularly as they apply to watertight warranty requirements.

*To achieve optimal thermal performance, DMI recommends installation of a multi-layered system with staggered joints.*

DYNACLAD® POLYISO NB TYPICAL PHYSICAL PROPERTY DATA CHART POLYISO FOAM CORE ONLY		
PROPERTY	TEST METHOD	VALUE
Compressive Strength	ASTM D 1621	20 psi* (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*m²))
Water Absorption	ASTM C 209	< 1% volume
Flame Spread**	ASTM E 84	< 75
Smoke Developed**	ASTM E 84	< 450
Service Temperature	—	-100° to 250° F (-73°C to 122°C)
<small>*Also available in 25 psi, Grade 3  **Meets the requirements of the IBC code. For specific Flame Spread or Smoke Developed Ratings please contact the DMI Technical Department</small>		

## 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. DMI 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. For more information refer to the Storage and Handling Technical Bulletin at [dmimetals.com](http://dmimetals.com), or refer to PIMA Technical Bulletin No. 109: *Storage & Handling Recommendations for Polyiso Roof Insulation* at [www.polyiso.org](http://www.polyiso.org).



Since 1988 Dimensional Metals, Inc. (DMI) has specialized in the manufacturing of architectural metal roof and wall panel systems as well as fabricated architectural sheet metal for the construction industry. We are backed by decades of proven metal envelope design, dependable Technical Field Services, and an Engineering Department delivering sustainable solutions. You are sure to find the product that will best enhance your design.

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