# ≥ 80 psi High Density TCPP-Free NH Polyiso Cover Board for Combustible Decks







#### **Description:**

EnergyGuard™ NH HD Barrier Polyiso Cover Board is made of durable coated glass fiber facers (CGF) bonded to a core of high-density TCPP-Free non-halogenated polyisocyanurate foam designed to be installed directly over a combustible deck.

#### Features and Benefits:

- EnergyGuard™ NH HD Barrier
  Polyiso Cover Board is better for the
  environment because it does not
  contain potentially hazardous flameretardant chemicals (TCPP)
- R-value 2.5. Highest R-value compared to non-polyiso cover boards of equivalent thickness.
- High compressive strength 80 psi (551 kPa) minimum up to 109 psi (751 kPa) maximum
- EnergyGuard™ NH HD Barrier Polyiso Cover Board achieves an ANSI/UL 790 Class A roofing fire-resistance rating as a component of UL Classified roofing assemblies over combustible decks with a 0.5" (12.7 mm) board thickness. Refer to UL Product iQ for specific assemblies.
- Lightweight only 11 lb. (4.9 kg) per 4' x 8' (1.22 m x 2.44 m) board, easy to cut, easy to install
- Meets the requirements of D3273 for resistance to mold growth<sup>4</sup>
- Excellent dimensional stability, high moisture resistance and low water permeability

- Ideal for low-slope roofs with high foot traffic, hail events, and retrofit applications<sup>1</sup>
- Versatile approved component in single ply, BUR, and modified bitumen systems, with a variety of attachment methods: mechanically attached, fully adhered, loose laid and ballasted

#### **Panel Characteristics:**

- Available in 0.5" (12.7 mm) thickness
- Available in 4' x 4' (1.22 m x 1.22 m) and 4' x 8' (1.22 m x 2.44 m)
- 48 pieces per bundle

## Codes & Compliance:

- Meets the requirements of ASTM C1289 Type II, Class 4, Grade 1
- Classified by UL in accordance with ANSI/UL 790 and 1256. Refer to UL Product iQ for specific assemblies
- FM Approved refer to RoofNav.com for approved assemblies
- UL Evaluation Report ER1306-03
- For additional information, contact GAF at 877-423-7663 or designservices@gaf.com





## Sustainability:

- Sustainable design projects pursuing certifications under a green building grating system such as LEED V4, or Living Building Challenge will benefit form these certifications and listings
- Manufactured with EPAcompliant blowing agents containing no CFCs or HCFCs; has zero ozone depletion potential (ODP) and negligible global warming potential (GWP)
- Potential LEED Credits for polyiso use
- GREENGUARD Gold
- Living Building Challenge Red List Approved
- Where sold compliant with State HFC regulations. More information available at www.polyiso.org
- Environmental Product Declaration (EPD)

















### Typical Physical Property Data:

Property	Test Method	Values
Compressive Strength	ASTM D1621	80 psi min (551 kPa) up to 109 psi max (751 kPa)
Dimensional Stability Change (length + width) <sup>2</sup>	ASTM D2126	< 1% linear change
Flute Spanability	ASTM E661	3.75" (93.5mm)
Flexural Strength	ASTM C203	400 psi min (2,750 kPa)
Tensile Strength	ASTM C209	2,000 psf min (95 kPa)
Water Absorption (percent by volume)	ASTM C209	4% max
Water Vapor Permeance	ASTM E96, Procedure A	1.5 perm max (85.8ng/Pa•s•m²)
Service Temperature <sup>3</sup>		260°F (126.7°C) or less
Resistance to Mold <sup>4</sup>	ASTM D3273	Pass (10)
R-value	ASTM C518	2.5

<sup>&</sup>lt;sup>1</sup> GAF warranties and guarantees do not provide coverage against traffic except where GAF walkways are applied, or hail except where additional puncture-resistance coverage is purchased on eligible jobs. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions.

# Warnings and Limitations:

- EnergyGuard™ NH HD Barrier Polyiso Cover Board is a non-structural, non load-bearing material. It is not designed for direct traffic usage unless adequately protected.
- EnergyGuard<sup>™</sup> NH HD Barrier Polyiso Cover Board should be stored protected from the elements. Bundle wrap is not for use as waterproofing for boards. No more insulation should be installed than can be completely covered with roofing on the same day.
- As unprotected polyisocyanurate will burn, fire safety precautions should be observed wherever insulation products are used.

- Direct mopping of modified bitumen roofing or built-up roofing (BUR) to EnergyGuard™ NH HD Barrier Polyiso Cover Board is not approved.
- Refer to the application specifications in the current membrane manufacturer's application and specifications manual for proper installation procedures.
- Refer to PIMA Technical Bulletin No.109 Storage and Handling Recommendations for Polyiso Roof Insulation atpolyiso.org





<sup>&</sup>lt;sup>2</sup> Stated dimensional stability tolerance: thickness shall not diminish by more than 4% max (at -40°F or 200°F at ambient RH) or by more than 4.5% max (158° F & 97% RH).

<sup>3</sup> These numerical ratings are not intended to reflect hazards presented by these or any other material under actual fire conditions.

<sup>&</sup>lt;sup>4</sup> GAF warranties and guarantees do not provide coverage against mold or other biological growth. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions.