

DuPont™ Thermax™ White Finish NH Insulation

Non-Halogenated, Embossed White Acrylic Coated, Glass-Fiber Reinforced Polyiso Foam Insulation

FEATURES/BENEFITS

Description

DuPont™ Thermax™ White Finish Non-Halogen (NH) Insulation is a polyisocyanurate insulation designed as an insulation and interior finish system for interior masonry or concrete walls, plus walls and ceilings in metal, wood post frame, and concrete or masonry buildings, as governed by building codes.

The glass-fiber-reinforced polyisocyanurate foam core of Thermax™ White Finish NH is faced with nominal 1.25 mil embossed white acrylic coated aluminum on one side and 0.9 mil smooth aluminum on the other. The white embossed surface of Thermax™ White Finish NH is aesthetically pleasing and easy to clean, able to be pressure-washed up to 1,000 psi with a 15-degree or greater spray tip (at minimum 3' distance). Thermax™ White Finish NH meets the USDA requirements for "Incidental Food Contact Materials" when used as surfaces not in direct contact with food, such as floors, walls, ceilings etc.)

Thermax™ Brand insulations are created through an exclusive free-rise manufacturing process, which produces a closed-cell foam that is specially formulated for improved fire performance. The combination of the closed-cell foam core and sturdy facers produces boards that deliver high R-value* (see Table 2) plus excellent dimensional stability and moisture resistance. Used in conjunction with the appropriate joint closure system for the application, Thermax™ White Finish NH with its low perm rating helps to prevent moisture condensation within and behind the insulation.

Ease of Installation

Thermax™ White Finish NH is:

- Lightweight and easy to handle – can be sawed or cut with a knife, small hand saw or circular saw
- Composed of white acrylic facers that resist damage, are pressure-washable, and reduce light energy cost and air infiltration
- Able to be installed exposed to the interior without a thermal barrier
- Able to be adhered directly to masonry walls with a construction grade adhesive.

Sustainable Solutions

- Thermax™ White Finish NH is manufactured with a zero ozone depleting potential. The use of Thermax™ White Finish NH helps reduce the carbon footprint of commercial buildings.
- Thermax™ White Finish NH uses halogen-free flame retardants and is manufactured with zero ozone depleting potential.

Available Sizes

Sizes, R-values and edge treatment options for Thermax™ White Finish NH can be found in Table 1. Contact your local sales representative for additional sizes.

Table 1: Sizes, R-Values⁽³⁾ And Edge Treatments For Thermax™ White Finish NH Insulation

Nominal Foam Thickness, in.	R-Value ⁽¹⁾⁽²⁾	Board Size (ft.)	Edge Treatment
0.50	3.6	4 x 8	Square Edge
0.75	5.1	4 x 8	Square Edge
1.0	6.6	4 x 8	Square Edge
1.25	8.1	4 x 8	Square Edge
1.50	9.5	4 x 8	Square Edge, Shiplap
1.55	10	4 x 9	Square Edge, Shiplap
1.75	11	4 x 8	Square Edge
2.0	13	4 x 8	Square Edge, Shiplap
2.5	16	4 x 8	Square Edge
3.0	18.5	4 x 8	Square Edge, Shiplap

⁽¹⁾ Stabilized R-values of core foam @ 75°F mean temperature determined in accordance with ASTM C518.

⁽²⁾ R-values expressed in ft² · h · °F / Btu.

⁽³⁾ Thermax™ Brand insulation has a higher R-Value at lower temperatures. At 40°F and 1" board thickness, R-Value is 6.8, and for 2" board thickness, R-Value is 13.2.

* R means resistance to heat flow. The higher the R-value, the greater the insulating power.

PROPERTIES

Thermax™ White Finish NH exhibits physical properties as indicated in Tables 1 and 2 when tested as represented. For chemical resistance properties of **Thermax™ White Finish NH**, see Table 3. Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact DuPont at 1-833-338-7668 when additional guidance is required for writing specifications that include this product.

Table 2: Physical Properties of Thermax™ White Finish NH Insulation

Property and Test Method	Value
Compressive Strength ⁽¹⁾ ASTM D1621, psi, min.	25.0
Flexural Strength, ASTM C203, psi, min.	40.0
Dimensional Stability ⁽²⁾ , ASTM D2126	0.4 max.
Water Vapor Permeance ⁽³⁾ ASTM E96, perms, max.	0.02
Maximum Use Temperature, °F.	250
Surface Burning Characteristics ⁽⁴⁾ , ASTM E84 for both foam core and finished product	Class A
Flame Spread	25
Smoke Developed	<450

⁽¹⁾ Vertical compressive strength is measured at 10 percent deformation or yield, whichever occurs first.

⁽²⁾ Length and Width.

⁽³⁾ Based on 1" thickness.

⁽⁴⁾ Calculated flammability values for this or any other material are not intended to represent hazards that may be present under actual fire conditions.

TESTING

Applicable Standards

Thermax™ White Finish NH meets ASTM C1289 – Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board, Type 1, Class 2. Applicable standards include:

- **C203** – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- **C209** – Tensile Strength Perpendicular to Board Surface
- **C518** – Standard Test Method for Steady- State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- **D1621** – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- **D2126** – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging
- **E96** – Standard Test Method for Water Vapor Transmission of Materials

Notice

Thermax™ White Finish NH complies with the following codes:

- CCRR 0440 Code Compliance Through Intertek
- AC 12 Compliance
- DRJ TER NO. 1506-03
- NFPA 268 - Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source

- UL 1715 – Standard for Safety Fire Test of Interior Finish Material-Walls and/or Ceilings
- NFPA 286 – Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth-Walls or Ceilings
- 2021, 2018, 2015, 2012, 2009 International Building Code (IBC)
- 2021, 2018, 2015, 2012, 2009 International Residential Code (IRC)
- 2021, 2018, 2015, 2012, 2009 International Energy Conservation Code (IECC)
- 2021, 2018, 2015, 2012 International Green Construction Code (IGCC)
- 2019 California Green Standards Code

Contact your DuPont sales representative or local authorities for state and local building code requirements and related acceptances.

Warranty

Twenty-year limited thermal warranty is available. Visit building.dupont.com/warranties or contact your DuPont representative for details.

HANDLING

WARNING: For Professional Use Only – Read and follow the entire Handling section and the Safety Data Sheets (SDSs, formerly MSDSs or Material Safety Data Sheets) carefully before use. The information below is designed to protect the user and allow for safe use and handling of Thermax™ Brand products. Follow all applicable federal, state, local and employer regulations.

Precautionary Statements

- When cutting or sawing **DuPont™ Thermax™ White Finish NH (WF) Insulation**, care should be taken not to mar the surface.
- Butt joints must be installed over structural members. When installing **Thermax™ White Finish NH** in high-humidity environments, best practice includes continuously sealing the surface of the insulation at all joints with a DuPont joint closure system.
- Thermax™ Brand products should be used only in strict accordance with product application instructions.

- Thermax™ Brand products, when used in a building containing combustible materials, may contribute to the spread of fire. For more information, consult MSDS and/or call DuPont at 1-833-338-7668.

Disposal

Dispose of any residual Thermax™ Brand product, coated debris, or solvent in accordance with applicable federal, state, and local government regulations.



**For more information visit
building.dupont.com
or call 1-833-338-7668**

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CAUTION: This product is combustible. Protect from high heat sources. A protective barrier or thermal barrier may be required as specified in the appropriate building code. For more information, consult (Material) Safety Data Sheet ((M)SDS), call DuPont at 1-833-338-7668 or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada.

WARNING: Rigid foam insulation does not constitute a working walkable surface or qualify as a fall protection product.

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