

DuPont™ Thermax™ Light Duty NH Insulation

Non-Halogenated Durable, Glass-Fiber-Reinforced Insulation with Aluminum Facers

FEATURES/BENEFITS

Description

DuPont™ Thermax™ Light Duty NH Insulation is designed as an insulation and interior finish system for walls and ceilings in metal, wood post frame and concrete or masonry buildings, as governed by building codes.

Thermax™ Light Duty NH consists of a glass-fiber-reinforced polyisocyanurate foam core faced with nominal 1.25 mil embossed white thermoset-coated aluminum on one side and 1.25 mil embossed aluminum on the other. The tough 1.25 mil white embossed aluminum surface makes it a durable insulation/finish choice for use in moderate-impact areas, and it can be pressure-washed up to 1,000 psi with a 15-degree or greater spray tip (at 3' minimum distance). Thermax™ Light Duty 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™ Light Duty NH also offers high, long-term thermal resistance, with facers that help prevent water and water vapor intrusion into the insulation foam allowing it to stabilize at a higher R-value². Used in conjunction with the appropriate joint closure system for the application, Thermax™ Light Duty NH – with its low perm rating – can help to reduce moisture condensation within and behind the insulation.

Ease of Installation

Thermax™ Light Duty NH:

- Installs quickly to walls and ceilings – inside and outside of purlins, trusses or bar joints
- Can be installed exposed to the interior without a thermal barrier
- Helps reduce the potential for condensation within the wall assembly
- Lightweight and easy to handle – can be sawed or cut with a knife, small hand saw or circular saw

Sustainable Solutions

- Thermax™ Light Duty NH is manufactured with a zero ozone-depleting potential. The use of Thermax™ Light Duty NH helps reduce the carbon footprint of commercial buildings.
- Thermax™ Light Duty 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™ Light Duty NH can be found in Table 1. Contact your local sales representative for additional sizes.

TABLE 1: Sizes, R-Values And Edge Treatments For Thermax™ Light Duty NH Insulation

Nominal Board Thickness ⁽¹⁾ (in.)	R-Value ⁽²⁾	Board Size (ft.)	Edge Treatment
1.0	6.6	4 x 8	Square Edge
1.5	9.5	4 x 8	Square Edge
1.55	10	4 x 8	Square Edge
2.0	13	4 x 8	Square Edge
2.5	16	4 x 8	Square Edge
3.0	18.5	4 x 8	Square Edge

¹ Contact your DuPont seller for information at different R-values and other sizes and lead time requirements. Not all product sizes are available in all regions.

² R-value means resistance to heat flow. The higher the R-value the greater the insulating power. Stabilized R-value @75°F mean temperature determined in accordance with ASTM C518, R-values expressed in ft²-h²-°F/Btu

³ Thermax™ Brand insulation has a higher R-Value at lower temperatures. At 40°F and 1" board thickness, R-Value is 71, and for 2" board thickness, R-Value is 12.2.

PROPERTIES

DuPont™ Thermax™ Light Duty NH Insulation exhibits physical properties as indicated in Table 2 when tested as represented. 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™ Light Duty NH Insulation

Property and Test Method	Value
Compressive Strength ⁽¹⁾ , ASTM D1621, psi, min.	25
Flexural Strength, ASTM C203, psi, min.	40
Dimensional Stability ⁽²⁾ , ASTM D2126	0.4 max
Water Absorption, ASTM C209, % by volume, max.	0.1
Water Vapor Permeance, ASTM E96, perm, max.	<0.02
Maximum Use Temperature, °F	250
Light Reflectance, Visual Light Spectrophotometer, %	65
Surface Burning Characteristics ⁽³⁾ , 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 at yield, whichever occurs first.

² Length and Width

³ 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™ Light Duty NH meets ASTM C1289 – Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board, Type I, Class 2. Applicable standards include:

- **C203** – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- **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™ Light Duty 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
- Intertek CCRR-0440

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

- Butt joints must be installed over structural members. The surface of the insulation at all joints must be continuously sealed with tape or with one of DuPont's joint closure systems.
- Maximum product length is 30 ft. (9.1 m) with a maximum thickness of 3 inches (76.2 mm).
- 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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43-D101129-enUS-0522 CDP