

Thermax™ White Finish Insulation

White-Embossed, Glass-Fiber-Reinforced Polyiso Foam Insulation

FEATURES/BENEFITS

Description

Thermax™ White Finish (WF) Insulation* polyisocyanurate insulation is 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** 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** 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™ 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** with its low perm rating helps to prevent moisture condensation within and behind the insulation.

Sustainable Solutions

Thermax™ White Finish is manufactured with a zero ozone depleting potential. The use of **Thermax™ White Finish** helps reduce the carbon footprint of commercial buildings.

PROPERTIES

Thermax™ White Finish exhibits physical properties as indicated in Tables 1 and 2 when tested as represented. For chemical resistance properties of **Thermax™ White Finish insulation**, see Table 3. Review all instructions and (Material) Safety Data Sheet ((M) SDS) before use. Please contact DuPont at 1-866-583-2583 when additional guidance is required for writing specifications that include this product.

Ease of Installation

Thermax™ White Finish 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 take the place of a membrane or building wrap, saving installation costs
- 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.
- UV-stable– can remain uncovered up to six months

Available Sizes

Available sizes for **Thermax™ White Finish** include:

- Width and length: 4' x 8', 4' x 9' or 4' x 10'
- Edge treatment: Square edge, shiplap

Product thicknesses and R-values are shown in Table 2. Not all products are available in all parts of the country. Additional product sizes are available by custom order. Contact your DuPont representative about other sizes and lead-time requirements.

* Thermax™ White Finish (WF) Insulation is a former product of The Dow Chemical Company.

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

TABLE 1: Physical Properties of Thermax™ White Finish Insulation

Property and Test Method	Value
Compressive Strength ⁽¹⁾ ASTM D1621, psi, min.	25.0
Flexural Strength, ASTM C203, psi, min.	40.0
Water Vapor Permeance ⁽²⁾ ASTM E96, perms, max.	0.03
Maximum Use Temperature, °F.	250

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

⁽²⁾ Based on 1" thickness.

TABLE 2: Physical Properties of Thermax™ White Finish R-values

Nominal Foam Thickness, in.	Insulation
0.50.	3.3
0.75	5.0
1.0.	6.5
1.25	8.0
1.50	9.8
1.55	10.0
1.75	11.4
2.0	13.0

⁽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.

TABLE 3: Chemical Resistance of Thermax™ White Finish Insulation

Acid, inorganic.	Not recommended	Hydrocarbons	Excellent
Acid, organic	Excellent	Insecticides	Excellent
Alcohol	Excellent.	Kerosene	Excellent
Asphalt, water-based	Good	Mineral oil USP	Excellent
Bases (caustic)	Poor	Naphtha	Excellent
Brines and other salts	Excellent	Paints, alcohol-based	Excellent
Cements and mortar	Poor	Paints, water-based	Excellent
Gases, carbon dioxide (CO ₂)	Excellent	Polyglycols, including propylene glycol	Excellent
Gasoline	Excellent	Water(1)	Excellent

⁽¹⁾ Water may cause discoloration of aluminum facers. This does not impact the R-value of dry, core insulation.

NOTE: This table should be used as a guide only. For design purposes, specific test data on the intended application may be needed.

TESTING

Notice

Thermax™ White Finish complies with the following codes:

- International Residential Code (IRC) and International Building Code (IBC); see ICCES Evaluation Report NER-681
- FM 4880 – Wall-Ceiling Construction Metal-Faced – Class 1 Fire Rated to Max. 30' High, 4.25" Thick, 4' Wide, When Installed as Described in the Current Edition of FMRC Approval Guide
- Thermax™ products are classified by Underwriters Laboratories Inc. (UL)
- UL 1256 – Fire Test of Roof Deck Constructions, Roof Deck Construction No. 120 and No. 123
- UL 723 (ASTM E84) Surface Burning Characteristics of Building Materials
- The following designs are 1, 2, 3 or 4 hour wall rated assemblies as listed in the UL Fire Resistance Directory: U026, U324, U325, U326, U330, U354, U355, U460, U902, U905, U906, U907
- Fire Performance Evaluation Incorporating Thermax Insulation Tested in Accordance With NFPA 285, 1998 Edition (UBC 26.9, intermediate scale – multistory testing)
- Miami-Dade NOA 02-0703.02 Interior Insulation on CMU Block
- Miami-Dade NOA 02-0703.03 Insulated Wall
- Miami Dade NOA 02-0703.05 Insulated Roof Assembly ASTM E283 Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors under specified Pressure differences across the specimen. Results were <0.02 L/s/m²

- ASTM E2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies – no leakage
- ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference – no leakage

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

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 **Thermax™ White Finish**, care should be taken not to mar the surface.
- Butt joints must be installed over structural members. When installing **Thermax™ White Finish** 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.

Warranty

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

- 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 1-866-583-2583.

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 us at
thermaxwallssystem.com
 or call 1-866-583-2583**

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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 1-866-583-2583 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.

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplier including DuPont can give assurance that mold will not develop in any specific system.

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