

DuPont[™] Thermax[™] White Finish (WF) Insulation

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

FEATURES/BENEFITS

Description

DuPont[™] Thermax[™] White Finish (WF) 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 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™ White Finish 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 with its low perm rating helps to prevent moisture condensation within and behind the insulation.

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 1. 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.

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

Nominal Foam Thickness, in.	R-Value	Board Size (ft.)	Edge Treatment
0.50	3.3	4 x 8	Square Edge
0.75	5.0	4 x 8	Square Edge
1.0	6.5	4 x 8	Square Edge
1.25	8.0	4 x 8	Square Edge
1.50	9.8	4 x 8	Square Edge, Shiplap
1.55	10.0	4 x 9	Square Edge, Shiplap
1.75	11.4	4 x 8	Square Edge, Shiplap
2.0	13.0	4 x 8	Square Edge, Shiplap
2.5	15.0	4 x 8	Square Edge, Shiplap
3.0	18.0	4 x 8	Square Edge, Shiplap
3.5	21.0	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.

⁽⁶⁾Thermax" Brand insulation has a higher R-Value at lower temperatures. At 40°F and 1" board thickness, R-Value is 6.6, and for 2" board thickness, R-Value is 13.2.

^{*} Thermax $^{\scriptscriptstyle{\text{M}}}$ White Finish is a former product of The Dow Chemical Company.

 $^{^{\}star\star}$ R means resistance to heat flow. The higher the R-value, the greater the insulating power.

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, 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.

Table 2: Physical Properties of Thermax™ White Finish (WF) 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, ASTM D2126	0.2% max.	
Water Vapor Permeance ^(2,) ASTM E96, perms, max.	0.03	
Maximum Use Temperature, °F.	250	
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 yield, whichever occurs first.

Based on 1" thickness.
 Calculated flammability values for this or any other material are not intended to represent hazards that may be present under actual fire conditions.

TESTING

Notice

Thermax[™] White Finish complies with the following codes:

- 2018, 2015, 2012, 2009 and 2006 International Residential Code (IRC) and 2018, 2015, 2012, 2009 and 2006 International Building Code (IBC); see ICCES Evaluation Report ESR-1659
- 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
- Class A UL 723 (ASTM E84) Surface Burning Characteristics of Building Materials
- 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

- 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
- 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.

Warranty

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

 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.

Disposa

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 thermaxwallsystem.com or call 1-866-583-2583

NOTICE: No freedom from any patent owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. The buyer assumes all risks as to the use of the material. Buyer's exclusive remedy or any claim (including without limitations, negligence, strict liability, or tort) shall be limited to the refund of the purchase price of the material. Failure to strictly adhere to any recommended procedures shall release DuPont Specialty Products USA, LLC or its affiliates, of all liability with respect to the materials or the use thereof. The information herein is not intended for use by non-professional designers, applicators or other persons who do not purchase or utilize this product in the normal course of their business.

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.