



Permitting and Inspections Department
Michael A. Russell, MS, Director

Permitting and Inspections Department
Approved with Conditions

12/27/2018

**FAST TRACK ELIGIBLE PROJECTS
SCHEDULE B**

(Please note: The appropriate Submission Checklist and General Building Permit Application must be submitted with any Fast Track application.)

Type of Work:

- One/two family renovations within existing shell, including interior demolition and windows.
- One/two family HVAC, including boiler, furnace, heating appliance, pellet or wood stove.
- One/two family exterior propane tank.
- Commercial HVAC for boiler, furnace, and heating appliance.
- Commercial HVAC system with structural and mechanical stamped plans.
- Commercial interior demolition – no load bearing demolition.
- Temporary outdoor tents and stages less than 750 square feet.
- Temporary construction trailer.

Zone: R3

- | | | |
|-------------------------|---------------------------|-------------------------------------|
| Shoreland zone? | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Stream protection zone? | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Historic district? | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Flood zone (if known)? | <input type="radio"/> Yes | <input checked="" type="radio"/> No |

This information may be found on the city's online map portal at:
<http://click.portlandmaine.gov/gisportal/>

I certify that (all of the following must be initialed for this application to be accepted):

- I am not expanding the building, including footprint, floor area, or dormer.
- I am the owner or authorized owner's agent of the property listed below.
- I am aware that this application will not be reviewed for determination of the zoning legal use and the use may not be in compliance with City records.
- I assume responsibility for compliance with all applicable codes, bylaws, rules and regulations.
- I assume responsibility for scheduling inspections of the work as required, and agree that the inspector may require modifications to the work completed if it does not meet applicable codes.

Initials

TL _____

TL _____

TL _____

TL _____

TL _____

Project Address: 636 ALLEN AVE

Print Name: THOMAS LANE

Date: 12/11/18

This is a legal document and your electronic initials are considered a legal signature per Maine state law.



THERMAX™ White Finish Insulation

1. PRODUCT NAME

THERMAX™ White Finish Insulation

2. MANUFACTURER

The Dow Chemical Company
Dow Building Solutions
200 Larkin Center, 1605 Joseph Drive
Midland, MI 48674
1-866-583-BLUE (2583)
Fax 1-989-832-1465
dowbuildingsolutions.com

3. PRODUCT DESCRIPTION

Basic Use

THERMAX™ White Finish (WF) 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. It can be pressure-washed up to 1,000 psi with a 15-degree or greater spray tip (at minimum 3' distance).

THERMAX™ White Finish insulation can be installed exposed to the interior without a thermal barrier.

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

15-Year Limited Thermal Warranty

THERMAX White Finish insulation is backed with a 15-year limited thermal performance warranty.

Properties

THERMAX™ insulations are created by 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 3) 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.

All Dow polyisocyanurate insulations are manufactured with hydrocarbon blowing agents, which have no ozone depletion potential.

For features and benefits of THERMAX™ White Finish insulation, refer to Table 1.

THERMAX™ White Finish insulation exhibits the properties indicated in Tables 2 and 3 when tested as represented.

For chemical resistance properties of THERMAX™ White Finish insulation, see Table 4.

TABLE 1: FEATURES AND BENEFITS OF THERMAX™ WHITE FINISH INSULATION

Feature	Benefit
High, long-term R-value	Enhances thermal efficiency, reducing energy cost
Glass-fiber-reinforced closed-cell foam with chemical modifications	Contributes to improved fire performance and enhanced dimensional stability
White acrylic facers	Resist damage, pressure-washable, provide attractive finish, reduce light energy cost, resist air infiltration
Hydrocarbon blowing agent	Environmentally friendly (no ozone depletion potential)

TABLE 2: PHYSICAL PROPERTIES OF THERMAX™ WHITE FINISH INSULATION

Property and Test Method	Value
Compressive Strength ⁽¹⁾ ASTM D 1621, 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 3: THERMAX™ WHITE FINISH R-VALUES

Nominal Foam Thickness, in.	R-Value ^(1,2)
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.



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Sizes

Width and length: 4' x 8', 4' x 9', 4' x 10'
Edge treatment: Square edge, shiplap
Product thicknesses and R-values are shown in Table 3. Not all products are available in all parts of the country. Additional product sizes are available by custom order. Contact your Dow representative about other sizes and lead-time requirements.

4. TECHNICAL DATA

Code Compliances

THERMAX™ White Finish insulation complies with the following codes:

- International Residential Code (IRC) and International Building Code (IBC); see ICC-ES 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 of Exterior Windows, Curtain Walls and Doors under specified Pressure differences across the specimen. Results were

- 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 Dow sales representative or local authorities for state and local building code requirements and related acceptances.

5. INSTALLATION

Boards of THERMAX™ White Finish are lightweight and can be sawed or cut with a knife, small hand saw or circular saw. Care should be taken not to mar the surface. THERMAX™ White Finish installs quickly to walls and ceilings – inside and outside of purlins, trusses or bar joints. Butt joints must be installed over structural members. THERMAX™ White Finish may also be adhered directly to masonry walls with a construction-grade adhesive. “Best practice” recommendations for high-humidity environments include continuously sealing the surface of the insulation at all joints with a Dow joint closure system.

TABLE 4: 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.

In the U.S.

The Dow Chemical Company

Dow Building Solutions
200 Larkin Center, 1605 Joseph Drive
Midland, MI 48674

Technical Information

1-866-583-BLUE (2583)

Sales Information

1-800-232-2436

www.insulateyourhome.com

NOTICE: No freedom from any patent owned by Dow 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. Dow assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

COMBUSTIBLE: THERMAX products should be used only in strict accordance with product application instructions. THERMAX products, when used in a building containing combustible materials, may contribute to the spread of fire. For more information, consult (M)SDS and/or call Dow at 1-866-583-BLUE (2583). In an emergency, call 1-989-636-4400.

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

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



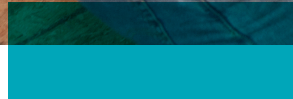
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COMFORTBATT®

Thermal Batt Insulation



ROCKWOOL COMFORTBATT® is a semi-rigid stone wool batt insulation for exterior wood and steel stud applications in both new construction and renovations.

It features a unique flexible edge designed to compress as the batt is inserted then spring back, expanding the batt against the frame studs to give a complete fill. This flexibility ensures the expected R-value is achieved and maintained.

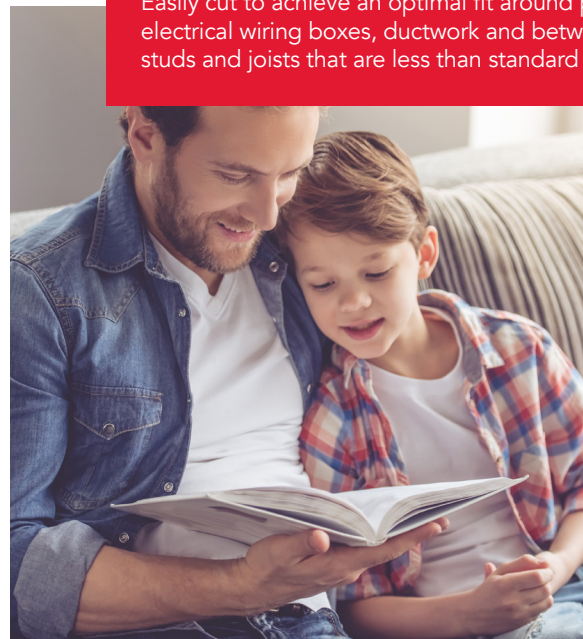
Non-combustible and fire resistant, COMFORTBATT® will not develop toxic smoke or promote flame spread, even when exposed directly to a fire. It also offers water and moisture resistance and excellent sound absorbency.

COMFORTBATT® is an effective way to improve a home's energy efficiency. It is GREENGUARD Gold Certified and contributes to a healthier indoor environment.

Learn more at rockwool.com

Easy Fit

Easily cut to achieve an optimal fit around pipes, electrical wiring boxes, ductwork and between studs and joists that are less than standard width.



COMFORTBATT®

Thermal Batt Insulation



Technical
Batt Insulation 7210*
Blanket Insulation 7211-16
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ROCKWOOL COMFORTBATT® is a mineral wool batt insulation designed for thermal resistance in wood and steel framing.

	Performance	Test Standard	
Compliance	Mineral Fiber Thermal Insulation for Buildings, Type 1 Compliant	ASTM C665	
Reaction to Fire	Flame spread index = 0; Smoke developed index = 0	ASTM E84 (UL 723)	
	Determination of Non-combustibility of Building Materials - Non-combustible	ASTM E136	
Density	> 2 lbs/ft ³ (>32 kg/m ³)	ASTM C167	
Thermal Resistance	Wood Stud	Steel Stud	ASTM C518
	R15 (RSI 2.47) - 3.5" thick (89 mm)	R10 (RSI 1.76) - 2.5" thick (64 mm)	
	R23 (RSI 3.87) - 5.5" thick (140 mm)	R15 (RSI 2.47) - 3.5" thick (89 mm)	
	R30 (RSI 4.23) - 7.25" thick (140 mm)	R24 (RSI 4.23) - 6" thick (152 mm)	

Dimensions

Wood Stud 16" (406 mm) on center: 15.25" x 47" (387 mm x 1194 mm)
 Wood Stud 24" (610 mm) on center: 23" x 47" (584 mm x 1194 mm)
 Steel Stud 16" (406 mm) on center: 16.25" x 48" (413 mm x 1219 mm)
 Steel Stud 24" (610 mm) on center: 24.25" x 48" (616 mm x 1219 mm)



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NOTE: *Master Format 1995 Edition **Master Format 2004 Edition. As ROCKWOOL has no control over installation design and workmanship, accessory materials or application conditions, ROCKWOOL does not warranty the performance or results of any installation containing ROCKWOOL's products. ROCKWOOL's overall liability and the remedies available are limited by the general terms and conditions of sale. This warranty is in lieu of all other warranties and conditions expressed or implied, including the warranties of merchantability and fitness for a particular purpose.