Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/18/16

RUFUS DEERING COMPANY
383 COMMERCIAL STREET

PORTLAND, ME. 04101
PHONE: (207) 772-6505

PLEASE BE SURE TO RETURN TO THE STORE
WITH ANY CHANGES YOU MAY HAVE MADE.

SOLD TO: LAND TECH DEVELOPMENT, INC.
221 VIRGINIA STREET
PORTLAND ME 04103

SHIP TO: LAND TECH DEVELOPMENT, INC.
GENERAL ACCOUNT
221 VIRGINIA STREET
PORTLAND ME 04103

CUSTOMER NO: 72550
TERMS: NET
PURCHASE ORDER: 070116
JOB NO: 006
DELIVERY DATE: 7/1/16
DAVID DIPIETRO

DATE / TIME: 7/1/16 9:50
CLERK / TERM: JTM 557
SALESPERSON: JOHN MERRILL
TAX CODE: 001 ME SALES TAX

ORDER: 528508/1

QUANTITY	UM	ITEM	DESCRIPTION	UNITS	LOCATION	PRICE	/PER	EXTENSION
1	EA	210JHZ	EA 2X10 JOIST HANG. LUS210Z ZINC	1	YR2C			
1	EA	LRU212Z	2X12 RAFTER HANGER SLOPEABLE	1	YR2D			
16	EA	SOIM	3" 4X8 FOIL TSX R-20 FIRE RATED	16	ZZZZZ			

X _____
Received By

(STEPHEN DIPIETRO)

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Dow Building

1 PRODUCT NAME
THERMAX™ Sheathing

2 Manufacturer

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

3 Product Description

THERMAX™ Sheathing is a non-structural, rigid board insulation consisting of a glass-fiber-reinforced polyisocyanurate foam core laminated between 1.0 mil smooth, reflective aluminum foil facers on both sides. The glass-fiber reinforcement, along with chemical modifications, contributes to improved fire performance and dimensional stability. THERMAX Sheathing can be installed exposed to the interior without a thermal barrier.

BASIC USE

THERMAX™ Sheathing is specially designed to have a Class A fire rating and can be used in a range of concealed and exposed applications, above and below grade. Because of its improved fire performance, THERMAX Sheathing is especially appropriate for hourly rated assemblies. THERMAX Sheathing also has approval in exterior multistory steel stud walls with brick cladding. See IBC Section 2603.5.

SIZES

Width and length:
4' x 8', 4' x 9', 4' x 10'
Edge treatments:
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.

Consult your Dow representative about other sizes and lead-time requirements.

TABLE 1

THERMAX™ Sheathing R-Values

[illegible]	[illegible]
0.5	3.3
0.75	5.0
1.0	6.5
1.25	8.1
1.55	10.1
1.75	11.4
2.0	13.0
2.5	15.8
3.0	19.0
3.5	22.1
4.0	25.2

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

4 Technical Data

APPLICABLE STANDARDS

THERMAX™ Sheathing meets ASTM C1289 – Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board, Type I, Class 2, which includes:

- C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- C209 – Standard Test Methods for Cellulosic Fiber Insulating Board
- 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
- D1623 – Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics

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CITY OF PORTLAND, MAINE
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TABLE 2

Physical Properties of THERMAX™ Sheathing

[illegible]	[illegible]
Compressive Strength[1], ASTM D1621, psi, min.	25.0
Flexural Strength, ASTM C203, psi, min.	55.0
Dimensional Stability, ASTM D2126, % linear change, max.	0.1
Water Absorption, ASTM C209, % by volume, max.	0.05
Water Vapor Permeance, ASTM E96, perms, max.	<0.03
Maximum Use Temperature, °F	250

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

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Chemical Resistance of THERMAX™ Sheathing

Acid, inorganic	Not recommended
Acid, organic	Excellent
Alcohol	Excellent
Asphalt, water-based	Good
Bases (caustics)	Poor
Brines and other salts	Excellent
Cements and mortar	Poor
Gases, carbon dioxide (CO_2)	Excellent
Gasoline	Excellent
Hydrocarbons	Excellent
Insecticides	Excellent
Kerosene	Excellent
Mineral oil USP	Excellent
Naphtha	Excellent
Paints, alcohol-based	Excellent
Paints, water-based	Excellent
Polyglycols, including propylene glycol	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.

PHYSICAL/CHEMICAL PROPERTIES

THERMAX™ Sheathing exhibits the properties and characteristics indicated in Table 2 when tested as represented.

For chemical resistance properties of THERMAX Sheathing, see Table 3.

ENVIRONMENTAL DATA

THERMAX™ Sheathing is manufactured with hydrocarbon blowing agents, which have no ozone depletion potential.

FIRE PROTECTION

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 MSDS and/or call Dow at 1-866-583-BLUE (2583). In an emergency, call 1-989-636-4400.

CODE COMPLIANCES

THERMAX™ Sheathing complies with the following codes:

- International Residential Code (IRC) and International Building Code (IBC); see ICC-ES 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, U904, U905, U906, U907, V454
- Fire Performance Evaluation of an Exterior Masonry Wall System Incorporating THERMAX Insulation Tested in Accordance With NFPA 285, 1998 Edition (UBC 26.9, intermediate scale – multistory testing)
- FMVSS No. 302 – Flammability of Interior Materials – Passenger Cars, Multipurpose Passenger Vehicles, Trucks and Buses (Docket No. 3-3; Notice 4)
- 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

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

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5 Installation

Boards of THERMAX™ Sheathing are lightweight and can be sawed or cut with a knife. They install quickly to walls and ceilings – inside and outside of purlins, trusses or bar joints. Butt joints must be installed over structural members. "Best practice" recommendations for high-humidity environments include continuously sealing the surface of the insulation at all joints with a Dow joint closure system.

Contact a local Dow representative or access the literature library at www.dowstyrofoam.com/architect for more specific instructions.

6 Availability

THERMAX™ Sheathing is manufactured in several locations and is distributed through an extensive network. For more information, call 1-800-232-2436.

7 Warranty

Fifteen-year limited thermal warranty.

8 Maintenance

Not applicable.

9 Technical Services

Dow can provide technical information to help address questions when using THERMAX™ Sheathing. Technical personnel are available to assist with any insulation project. Call 1-866-586-BLUE (2583).

10 Filing Systems

- www.dowbuildingsolutions.com
- www.sweets.com

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IN THE U.S.:

- **For Technical Information: 1-866-583-BLUE (2583)**
- **For Sales Information: 1-800-232-2436**

THE DOW CHEMICAL COMPANY
• Building Solutions • 200 Larkin • Midland, MI 48674 • **www.dowbuildingsolutions.com**

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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 MSDS 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 building materials 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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