

ISOMASS

RIGID POLYISOCYANURATE INSULATION

1. Product Name

ISOMASS

Rigid Polyisocyanurate Insulation

2. Supplier

Thermomass
1000 Technology Drive
Boone, Iowa 50036

(800) 232-1748

www.thermomass.com

3. Product Description

ISOMASS insulation combines a high-performance polyisocyanurate foam core with a multiplex kraft/aluminum/poly facer. This contributes to its strength, high R-value and moisture resistance.

BASIC USE

ISOMASS insulation is designed for use in concrete walls (precast, tilt-up or cast-in-place), where it is

sandwiched between two layers of concrete with connectors holding together the finished wall. The polyisocyanurate core provides superior insulation, while the facer contributes to moisture resistance.

Because it has no exposed metal facings, the ISOMASS facer will not corrode or react chemically with the concrete wall.

SIZES

Width and length:

4' x 8' (square edge)

Thickness:

1", 1½", 2", 3", 4"

4. Applicable Standards

ISOMASS insulation meets ASTM C1289 – Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board, Type I, Class 1.

Applicable standards include:

- C518 – Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- C1289 – Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
- C1621 – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- C209 – Standard Test Methods for Cellulosic Fiber Insulating Board
- E96 – Standard Test Method for Water Vapor Transmission of Materials
- D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging

Property and Test Method	Value
Thermal Resistance(1), per inch, ASTM C518 @ 75°F mean temp., ft ² •°F/Btu, R-value, min.	6.5
Compressive Strength(2), ASTM D1621, psi, min.	25.0
Flexural Strength, ASTM C203, psi, min.	55.0
Water Absorption, ASTM C209, % by volume, max.	0.02
Water Vapor Permeability, ASTM E96, perms, max.	0.01
Maximum Use Temperature, °F	250
Dimensional Stability, ASTM 2126, %linear change.	2%

1. All test specimens were conditioned in accordance with procedures outlined in ASTM C1289-07, Section 11.1.2.1

PHYSICAL AND CHEMICAL PROPERTIES

ISOMASS insulation exhibits the properties and characteristics indicated in Table 1 when tested as represented.

ENVIRONMENTAL DATA

ISOMASS insulation is manufactured with hydrocarbon blowing agents, which have no ozone depletion potential.

FIRE PROTECTION

ISOMASS insulation is combustible; protect from high heat sources. For more information, consult MSDS, call Thermomass at (800) 232-1748 or contact your local building inspector.

CODE AND COMPLIANCES

ISOMASS insulation complies with the following codes:

- International Residential Code (IRC 2009)
- International Building Code (IBC 2009)

Application and system code requirements vary.

5. Installation

ISOMASS insulation is lightweight and easy to handle, cut and install.

In concrete wall applications, the insulation boards are sandwiched between two concrete layers and the assembly is held together with connectors.

6. Availability

ISOMASS is sold by Thermomass and shipped to job sites and warehouses via flatbed trailer.

For more information, please call (800) 232-1748.

7. Warranty

Not applicable.

8. Maintenance

Not applicable.

9. Technical Services

Thermomass can provide technical information regarding the physical properties of ISOMASS insulation.

Technical personnel are available to assist with any insulation-related question.

For assistance, please call (800) 232-1748.

10. Filing Systems

- www.thermomass.com

The logo for Thermomass, featuring the word "thermomass" in a bold, lowercase, sans-serif font. The "thermo" part is in blue and the "mass" part is in black. A registered trademark symbol (®) is located at the top right of the "s" in "mass".

IN THE U.S.:

For Information: 1-800-232-1748

THERMOMASS

1000 Technology Drive, Boone IA 50036

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COMBUSTIBLE: Protect from high heat sources. Local building codes may require a protective or thermal barrier. For more information, consult MSDS and/or call Thermomass at (800) 232-1748.

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