# **CONTINUOUS INSULATION FOR EXPOSED** INTERIOR WALLS OR CEILINGS

# **DESCRIPTION**

Johns Manville CI Max® is a high efficiency rigid foam sheathing designed for exposed interior applications. It is composed of a uniform closed-cell polyisocyanurate foam core with a glass-mat reinforced 1.5 mil embossed aluminum facer that is meant to be left exposed. Available in a white or silver finish, CI Max foam sheathing is approved for use without a thermal barrier and provides an attractive and durable interior finish. It is suitable for wall or ceiling applications in residential, commercial, agricultural and industrial buildings.

Polyiso provides a continuous layer of insulation to reduce thermal bridging and improve energy efficiency. CI Max foam sheathing passed NFPA 286 Corner Burn Test for walls only or ceiling only without joint treatment, meeting both the International Code Council's Building Code Section 2603 and Residential Code Section R316.

CI Max foam sheathing is produced with an EPA compliant hydrocarbon-based blowing agent which has zero Ozone Depletion Potential (ODP) and virtually no Global Warming Potential (GWP). It meets CFC- and HCFC-free specification requirements. It also meets acceptance criteria for individual VOCs of concern and formaldehyde for school classrooms, private offices, and single family residences. Polyiso is one of North America's most widely-used insulation products and has been cited by the EPA for its responsible impact on the environment.

## USE

CI Max foam sheathing is designed for easy installation where high thermal efficiency is required within both new and retrofit interior construction. It is an excellent interior insulation solution for both residential and Types I-V commercial construction including: masonry or framed walls or ceilings; pre-engineered metal buildings; industrial, agricultural, farm, storage, and parking structures; below-grade basement walls or ceilings; crawlspace walls or ceilings. Follow local building codes for application without a thermal barrier.

# **INSTALLATION**

CI Max foam sheathing is lightweight and can be easily cut with a utility knife or saw. Use maximum board lengths to minimize the number of joints. Butt joints should be centered over framing. Consult local building department for code requirements.

# **COMPLIANCES**

- ASTM C1289 Type 1, Class 1
- CAN/ULC S704, Type 1, Class 1
- CCRR-0444
- California State Insulation Quality Standards
- International Building Code Section 2603 and 803, (2018, 2015, 2012, 2009)
- International Residential Code Section R316 (2018, 2015, 2012, 2009)
- International Energy Conservation Code, Table C402.2, Table R402.1.1, (2018, 2015, 2012, 2009)
- ASHRAE 90.1
- Energy Star Pending

# **PERFORMANCE STANDARDS**

- ASTM C1289, Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
- CAN/ULC-S704 Standard for Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced
- ASTM E84, Test for Surface Burning Characteristics of Building Materials Class A
- CAN/ULC S102, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies
- NFPA 285, Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components
- NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
- VOC Emissions from Building Products, CDPH/EHLB/Standard Method V1.1 (Section 01350)

# **AVAILABILITY**

CI Max foam sheathing is available in the sizes shown in Table 1. For additional information or special size inquiries, please consult a sales representative at 800-654-3103.

# **COMPANY**

Johns Manville, a Berkshire Hathaway company, was founded in 1858. Our ownership by Berkshire Hathaway, one of the most admired companies in the world and one of the most financially secure, allows JM to invest for the future. This enables JM to continue delivering the broadest range of insulation products in the industry and offering innovative solutions that meet your needs.



## **PERFORMANCE ADVANTAGES**

Thermal Insulation: inch for inch, polyiso has one of the highest energy efficiencies.

R-values for CI Max Polyiso Continuous Insulation are shown in Table 1, and physical properties are shown in Table 2 (see reverse). R means resistance to heat flow. The higher the R-value, the greater the insulating power.

Noncorrosive: does not accelerate corrosion of pipes, wiring or metal studs.

Lightweight: easy to handle, can be cut with a utility knife or saw.

# **ENERGY, QUALITY & ENVIRONMENT**











# CI MAX® POLYISOCYANURATE FOAM SHEATHING CONTINUOUS INSULATION FOR EXPOSED INTERIOR WALLS OR CEILINGS

## **STORAGE**

Store CI Max foam sheathing elevated above the floor or ground and standing water. If stored outdoors, keep dry by covering completely with a waterproof tarpaulin.

## **LIMITATIONS**

CI Max foam sheathing is nonstructural. The walls must be braced in accordance with the requirements of the applicable code. This product is not marketed as a rodent or insect deterrent.

#### WARRANTY

All Johns Manville products are sold subject to Johns Manville's Limited Warranty and Limitation of Remedy. For a copy of these documents, call 800-654-3103.

# **WARNING**

Check applicable building codes. CI Max foam sheathing must be protected from open fl ame because the product is combustible. CI Max foam sheathing must be protected from outside elements like wind, rain, and sunlight and should be kept dry at all times.

## **TECHNICAL SERVICES**

Johns Manville can provide technical information to assist in addressing questions regarding CI Max foam sheathing. Please call 800-654-3103 for technical assistance.

# **PERFORMANCE DATA**

**Table 1: Thermal Performance** 

NOMINAL THICKNESS		R-VALUE <sup>1</sup>	RSI-VALUE <sup>1</sup>	BOARD SIZE <sup>2</sup>
(inches)	(millimeters)	(°F•ft²•h/BTU)	(°K∙m²/W)	(ft)
0.50	13	2.9	0.48	4 x 8
0.77	20	4.5	0.79	4 x 8
0.85	22	5.0	0.88	4 x 8
1.00	25	6.0	1.06	4 x 8
1.50	38	9.3	1.63	4 x 8
1.55	39	9.6	1.69	4 x 8
1.65	42	10	1.81	4 x 8
2.00	51	13	2.21	4 x 8
2.50	64	16	2.79	4 x 8
3.00	76	19	3.36	4 x 8
3.50	89	22	3.94	4 x 8
4.00	102	26	4.52	4 x 8

<sup>&</sup>lt;sup>1</sup>Aged R-value at 75° F in accordance with ASTM C1289.

# **Table 2: Physical Properties**

PROPERTY	UNITS	TEST METHOD	RESULT
Thermal Resistance, 1 inch	°F●ft²●hr/BTU	ASTM C518*	6.0
Compressive Strength	psi	ASTM D1621	≥ 16
Flexural Strength	psi	ASTM C203	≥ 40
Water Absorption	% by volume	ASTM C209	< 0.6
Water Vapor Permeance	perms	ASTM E96	0.02
Mold Resistance	rating	ASTM D3273	10, no defacement
Surface Burning Characteristics**			
Flame Spread	index	ASTM E84	≤ 25
Smoke Developed	index	ASTM E84	≤ 450
Service Temperature	°F		-100 to 250

<sup>\*</sup>Aged R-value at 75° F in accordance with ASTM C1289.



Visit our website at www.JM.com or call 800-654-3103 | Building Insulation Division P.O. Box 5108 | Denver, CO 80217-5108

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of AP Foil-Faced Polyisocyanurate Continuous Insulation listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the sales office nearest you for current information. All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville insulation and systems, visit www2.jm.com/terms-conditions or call 800-654-3103.

<sup>&</sup>lt;sup>2</sup>Non-standard 9' and 10' long board available as made to order.

<sup>\*\*</sup>Numerical flame spread and smoke developed ratings are not intended to reflect hazards present in actual fire conditions.