



Formaldehyde-free™ Thermal and Acoustical Metal Building Insulation

Microlite® "L"



PRODUCT DATA SHEET

COMPANY

Johns Manville is committed to creating more comfortable, healthier and energy-efficient indoor environments. We revolutionized the building insulation industry by pioneering the development of Formaldehyde-free™ fiber glass building insulation more than a decade ago. We continue to build on our legacy of innovation with a new Formaldehyde-free™ fiber glass insulation solution that utilizes an innovative bio-based binder, made mostly with rapidly renewable plant-based materials, which continues to offer excellent thermal and acoustical performance as well as improved handling, easier cutting and less dust than our previous product. At JM, we believe that in every detail, materials matter.

DESCRIPTION

Microlite® "L" blanket insulation is a certified Formaldehyde-free™ thermal and acoustical fiber glass insulation, specifically designed for lamination to a wide choice of custom vapor-retarding facings. The unique JM manufacturing process provides the Microlite "L" blanket with uniformity that gives the fiber glass blanket a smooth laminating surface.

Microlite "L" insulation is a NAIMA 202-96® Certified Fiber Glass Metal Building Insulation produced in a special manufacturing process to give it the structural integrity it needs to recover thickness after lamination, shipping and installation.

USE

New Construction and Retrofit: pre-engineered metal buildings – roof and walls

AVAILABLE FORMS

Rolls: wide unfaced rolls suitable for lamination. Check with your laminator/distributor for available facings.

DESIGN CONSIDERATIONS

Microlite "L" is an unfaced fiber glass blanket designed for lamination of various facings for moisture control and provides a desirable finished surface. Microlite "L" complies with NAIMA 202-96 standards to ensure post-lamination R-values. Microlite "L" is available in R-10, 11, 13, 19, 25 and 30.

INSTALLATION

Microlite "L" is typically installed between or over the purlins and girts. Microlite "L" may be used in both single and double layer metal building systems and will recover to desired thickness when used with various vapor retarders. Actual recovered thickness will depend on the lamination process. Each Microlite "L" roll is ink-jet labeled with the R-value on the top surface of each roll.

PACKAGING

Microlite "L" insulation is compression-packaged for savings in storage and freight costs.

RECOMMENDED STORAGE AND TRANSPORT

Store insulation indoors. Keep insulation clean and dry at all times. When transporting, cover completely with a waterproof tarpaulin as necessary.

LIMITATIONS OF USE

Check applicable building codes.



PERFORMANCE ADVANTAGES

Formaldehyde Free: will not off-gas formaldehyde in the indoor environment.

Thermal Efficiency: provides effective resistance to heat transfer with R-values up to R-30 (RSI 5.29).

Sound Control: reduces transmission of sound through roofs and walls of metal buildings.

Fire Resistant and Noncombustible: see Specification Compliance.

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

Durable: will not rot, mildew or otherwise deteriorate.

Resilient: bonded glass fibers will not pull apart during normal applications and resist settling, breakdown and sagging from vibration.

Flexible: forms readily around corners and curved surfaces.

ENERGY AND ENVIRONMENT



ENERGY STAR

Metal Building Insulation 202-96

PRODUCT DESCRIPTION

Basic Use: CertainTeed Fiber Glass Metal Building Insulation 202-96 is a flexible blanket insulation furnished in rolls and intended to be laminated on one side with a suitable vapor retarder. It is used as a thermal and acoustical insulation in the roofs and sidewalls of pre-engineered metal buildings and post frame construction.

Benefits: Metal Building Insulation 202-96 reduces transmission of exterior sound to the interior of the building and absorbs reverberating sounds within the building.

Composition and Materials: The product is composed of tan, uniformly textured, inorganic fibrous glass and formed with a formaldehyde-free binding agent.

Limitations: This product is designed for use in interior (weather protected) walls and roofs of pre-engineered metal buildings. It should be laminated on a first-in, first-out basis and should be kept dry at all times during processing and end use. After lamination, packaging should not exceed a 5.5:1 compression ratio. For additional information, please refer to the appendix of the NAIMA 202-96 (Rev. 2000) standard.

Sizes: Standard available sizes as noted in table below. Contact CertainTeed for non-standard sizes.



INSTALLATION

The vapor retarder on Metal Building Insulation 202-96 should be installed toward the conditioned spaces in the building. The insulation is normally applied over or between the structural members of the building and held in place by the covering sheets or insulation support system. When using high R-Value systems, it is recommended that the cavity between the exterior metal sheet and the faced fiber glass insulation should be completely filled.

THEMAL PERFORMANCE

Nominal Thickness (Pre-Lamination)		R-Value	
in.	mm	R	RSI
3 $\frac{3}{4}$	86	10	1.76
3 $\frac{1}{2}$	95	11	1.94
4 $\frac{1}{4}$	111	13	2.29
5 $\frac{1}{4}$	133	16	2.82
6 $\frac{1}{4}$	162	19	3.35
6 $\frac{3}{4}$	171	21	3.70
8	203	25	4.40
9 $\frac{1}{4}$	235	30	5.30

AVAILABLE SIZES

R-Value	Nominal Thickness		Width		Length	
	in.	mm	in.	mm	ft.	m
10	3 $\frac{3}{4}$	76.2	36, 48, 60, 72	914, 1219, 1524, 1829	100	30.5
11	3 $\frac{1}{2}$	88.9	36, 48, 60, 72	914, 1219, 1524, 1829	100	30.5
13	4 $\frac{1}{4}$	101.6	36, 48, 60, 72	914, 1219, 1524, 1829	75	22.9
16	5 $\frac{1}{4}$	133.35	36, 48, 60, 72	914, 1219, 1524, 1829	50	15.2
19	6 $\frac{1}{4}$	127	36, 48, 60, 72	914, 1219, 1524, 1829	50	15.2
21*	6 $\frac{3}{4}$	152.4	36, 48, 60, 72	914, 1219, 1524, 1829	45	13.7
25*	8	203.2	36, 48, 60, 72	914, 1219, 1524, 1829	30	9.1
30*	9 $\frac{1}{4}$	203.2	36, 48, 60, 72	914, 1219, 1524, 1829	25	7.6

Non-standard widths are available and subject to an upcharge on an individual basis determined by manufacturer's capability, quantity, lead times and packaging availability. *R-21, R-25 and R-30 are made to order.

Product Name	CertainTeed Metal Building Insulation 202-96
Manufacturer	CertainTeed Corporation
Address	P.O. Box 860 Valley Forge, PA 19482-0105
Phone	610-341-7000 • 800-233-8990
Fax	610-341-7571
Website	www.certainteed.com/insulation

TECHNICAL DATA

Applicable Standards

- Model Building Codes:
 - ICC
- Material Standards:
 - ASTM C991, Type I
 - NAIMA 202-96 (Rev. 2000)

Fire Resistance

- Fire Hazard Classification:
 - UL 723, ASTM E84, NFPA 255
Max. Flame Spread Index: 25
Max. Smoke Developed Index: 50
 - CAN/ULC-S102-M88
- Non-combustible:
 - ASTM E136 / Meets requirements

Physical/Chemical Properties

- Thermal Resistance:
 - ASTM C518 and/or ASTM C177 at 75°F (24°C)
mean temperature: see table at left
- Acoustical Performance: see tables on other side
- Water Vapor Sorption:
 - ASTM C1104 / No greater than 5.0% by weight
- Corrosiveness:
 - ASTM C665 / Meets requirements for steel, copper and aluminum
- Odor Emission:
 - ASTM C1304 / Pass
- Fungi Resistance:
 - ASTM C1338 / Pass Test

Quality Assurance

CertainTeed's commitment to quality and environmental management has ensured the registration of the Athens, Chowchilla and Kansas City plants to ISO 9001:2000 and ISO 14001:2004 standards.