



# Microlite® “L”

## Formaldehyde-free Thermal and Acoustical Wide Blanket Roll

### FORMALDEHYDE-FREE

Johns Manville has revolutionized the building insulation industry by introducing an entire line of formaldehyde-free fiber glass building insulation. JM Formaldehyde-free insulation provides the same high-quality thermal and acoustical properties as conventional JM fiber glass – just without the formaldehyde based-binder. Why? Because it’s a smart thing to do for our customers and the environment. Formaldehyde has traditionally been used as part of the binder in fiber glass insulation. Although there is no health risk with the traditional product, formaldehyde at higher levels may cause irritation and sensitivity. JM Formaldehyde-free building insulation utilizes an innovative new acrylic binder that eliminates binder-related formaldehyde emissions during manufacturing and, once installed, will not off-gas formaldehyde in the indoor environment. No formaldehyde means fewer things to worry about. Visit us at [www.jm.com](http://www.jm.com) for more information.

### PRODUCT DESCRIPTION

Johns Manville Microlite “L” is a highly resilient thermal and acoustical fiber glass blanket insulation 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.

### AVAILABLE FORMS

- **Rolls** – can be cut to fit any size wall cavity and are easily installed in any part of a building – especially long unobstructed areas such as attics or crawl spaces.

### AVAILABLE FACINGS

Check with your laminator/distributor for available facings.

### APPLICATIONS

#### New Construction and Retrofit

- Metal buildings – roof and wall applications

### 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.

### SPECIFICATION COMPLIANCE

ASTM C 991, Type I (Type II when faced)  
ASTM E 136 (wool only) and NAIMA Standard 202-96® (Rev. 2000)  
ASTM E 84 Flame Spread Classification of 25/50 or less flame spread/smoke developed  
(When faced by a JM laminator/distributor in accordance with the JM UL extension, the composite product also carries the FHC 25/50 UL Fire Hazard Classification label.)

### SHORT FORM SPECIFICATION

All laminated insulation specified herein will consist of \_\_\_\_\_ Faced Microlite “L” Formaldehyde-free Fiber Glass Insulation with an R-value of \_\_\_\_\_ manufactured by Johns Manville. Microlite “L” will be manufactured in accordance with ASTM Specification C 991, Type II with the exception of width tolerance; and ASTM E 136, wool only. This product will have a FHC rating of 25/50 in accordance with ASTM Specification E 84 and bear UL labels. Microlite “L” will bear the NAIMA 202-96® (Rev. 2000) Standard identification.

### LIMITATIONS OF USE

Check applicable building codes.



### PERFORMANCE ADVANTAGES

- Formaldehyde-free – will not off-gas formaldehyde in the indoor environment.
- Moisture Control – vapor-retarding facing assists in protecting the building structure and the insulation from condensation by resisting water vapor transmission through the facing (depends upon facing; contact your JM laminator/distributor for information).
- Light-reflective – when exposed, the laminated surface helps maximize light efficiency and may reduce lighting requirements (depends upon facing; contact your JM laminator/distributor for information).
- Thermal Efficiency – provides effective resistance to heat transfer with R-values up to R-19 (RSI 3.35).
- 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 – it will not rot, mildew or otherwise deteriorate.
- Resilient – bonded glass fibers will not pull apart during normal applications and will resist settling, breakdown and sagging from vibration.
- Flexible – forms readily around corners and curved surfaces.

## BUILDING CODE COMPLIANCE AND FIRE HAZARD CLASSIFICATION\*

	ICBO	SBCCI	BOCA	Flame Spread	Smoke Developed
Microlite “L”	All Types	All Types	All Types	25	50

\*Per ASTM E 84.

## AVAILABLE FORMS\*

R-VALUE (POST-LAMINATION)		THICKNESS (POST-LAMINATION)**								ROLL SIZE			
(hr-ft <sup>2</sup> ·°F)/Btu	m <sup>2</sup> ·K/W	Defiance (in) (mm)		McPherson (in) (mm)		Winder (in) (mm)		Innisfail (in) (mm)		Width (in) (mm)		Length (ft) (m)	
19	3.35	5.65	144	5.60	142			5.45	138	36, 48, 60, 72, 96	914, 1219, 1524, 1829, 2438	50	15.3
13	2.29	3.95	100	3.85	98	4.20	107	3.70	94	36, 48, 60, 72, 96	914, 1219, 1524, 1829, 2438	75	22.9
11	1.94	3.40	86	3.30	84	3.55	90	3.05	77	36, 48, 60, 72, 96	914, 1219, 1524, 1829, 2438	100***	30.5
10	1.76	3.10	79	2.95	75	3.20	81	2.80	71	36, 48, 60, 72, 96	914, 1219, 1524, 1829, 2438	100	30.5

\* Consult your local sales representative or product availability chart for other available sizes and R-values (RSI-values).

\*\* Pre-lamination thickness and R-value available on product label.

\*\*\* 75 ft. (22.9 m) @ McPherson plant only.

## NOTE ON MOISTURE CONTROL FOR METAL BUILDINGS

As metal buildings become more airtight for greater thermal efficiency, the moisture vapor that is present is less likely to migrate from the interior to the outside. With an increasing temperature differential between the roof sheet and building interior, some moisture may penetrate the insulation’s vapor retarder and condense on the roof sheet and purlins. All metal buildings should have vapor retarders with sufficient perm ratings to minimize moisture transmission. However, no vapor retarder can completely eliminate the movement of water vapor. Other techniques, such as dehumidification and building designs that reduce moisture generation, are important to prevent moisture-control problems. The single most effective way to control moisture in metal buildings is ventilation. Adequate natural or mechanically powered ventilation of interior areas and any air space above the insulation is essential.

## SOUND ABSORPTION (ASTM C 423, WITH TYPE “A” MOUNTING)

Noise Reduction Coefficient (NRC)

Type	FACED BLANKET			
	Unfaced	Vinyl	FSK	PSK
R-19	1.20	0.85	0.85	0.95
R-13	1.15	0.90	0.85	0.95
R-11	1.15	0.85	0.90	0.90
R-10	1.10	0.85	0.85	0.95

Details of absorption by octave frequency available by request.



Properly insulating a structure using Johns Manville building insulation helps preserve our environment by reducing energy consumption for heating and cooling, reducing the pollution resulting from fuel burning, reducing the emission of hazardous air pollutants during manufacturing and reducing waste through the utilization of recycled materials. Look for the cross and globe emblem on Johns Manville building insulation which indicates independent certification by Scientific Certification Systems, Inc. of 25% or more recycled glass content.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of Microlite “L” Formaldehyde-free Thermal and Acoustical Wide Blanket Roll 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 Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy or for information on other Johns Manville thermal and acoustical insulation and systems, call or write to the 800 number or address listed below. To access automated fax-on-demand services in the United States and Canada, simply call 1-888-INSULFX (1-888-467-8539) from a fax or phone.



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