



## Pan-Insul®

### Formaldehyde-free Thermal and Acoustical Fiber Glass Insulation



#### 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

Pan-Insul is unfaced fiber glass available in widths and thicknesses to fill the wall panel or roof cavity in pre-engineered metal buildings. The unique Johns Manville fiber glass production process gives Pan-Insul excellent thermal performance plus resilience, allowing a snug friction fit.

#### AVAILABLE FORMS

- Precut batts – fit standard cavities and are faster to install than roll products.
- Rolls – can be cut to fit any size cavity.

#### APPLICATIONS

##### New Construction

Pre-engineered metal construction – wall panels and roof cavities

#### INSTALLATION

Pan-Insul batts and rolls are installed into the cavity of the wall or roof, ensuring complete butting of batt-to-batt and batt-to-steel areas. In normal use, the wall or roof is completed with a vapor barrier and/or interior liner over the Pan-Insul.

JM insulation cuts easily with an ordinary utility knife, and friction fits by simply pressing in place between studs or joists in standard pre-engineered metal framing.

#### 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.

#### PACKAGING

JM insulation is compression-packaged for savings in storage and freight costs.

#### SPECIFICATION COMPLIANCE

CAN/ULC-S702-97, Type 1

#### FIRE SAFETY

CAN/ULC-S102-M88 Surface Burning Characteristics: Flame Spread = 10, Smoke Developed = 0

#### 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-25.4 (RSI-4.5).
- Fire-resistant and Non-combustible – (see Specification Compliance).
- Non-corrosive – does not accelerate corrosion of pipes, wiring or metal studs.
- Durable – unaffected by moisture, oil, grease and most acids. It 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.

## AVAILABLE FORMS\*

Pan-Insul 1.1 R-value (Nominal)		Pan-Insul 1.8** R-value (Nominal)		Reference Thickness***		Batt Width***		Batt Length		Roll Width***		Pan-Insul 1.1 Roll Length	
m <sup>2</sup> .°C/W	(hr.ft <sup>2</sup> .°F/Btu)	m <sup>2</sup> .°C/W	(hr.ft <sup>2</sup> .°F/Btu)	(mm)	in	(mm)	in	(m)	in	(m)	in	(m)	(ft)
1.4	8	1.5	8.5	51	2	813/610	32/24	1.22	48	1.22	48	21.3	70
1.8	10	1.9	10.6	64	2.5	813/610	32/24	1.22	48	1.22	48	16.5	54
2.1	12	2.2	12.7	76	3	813/610	32/24	1.22	48	1.22	48	14.0	46
2.8	16	3.0	17	102	4	813/610	32/24	1.22	48	1.22	48	10.4	34
3.5	20	3.7	21	127	5	813/610	32/24	1.22	48	1.22	48	9.8	32
4.2	24	4.5	25.4	152	6	813/610	32/24	1.22	48	1.22	48	8.5	28

\* Consult your local sales representative for other available sizes and R-values (RSI-values) or call (403) 227-7100.

\*\* 1.8 Pan-Insul products available on special product inquiry.

\*\*\* Different widths and thicknesses are available on special product inquiry; 32" width (hinged at 16").

## SHORT FORM SPECIFICATION

The Pan-Insul specified herein will consist of an R-value (RSI) of \_\_\_\_\_ manufactured by Johns Manville Canada Inc., Innisfail, Alberta. It shall be non-combustible in accordance with CAN 4-S114-M80 and smoulder-resistant in accordance with CAN/ULC-S129-95 and contain 50% recycled glass as certified by Scientific Certification Systems and Environmental Choice.



**Contains 50%  
Recycled Bottle Glass**

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.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of Pan-Insul thermal and acoustical fiber glass 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 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.



Distributed by:

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