

# UNFACED FORMALDEHYDE-FREE THERMAL AND ACOUSTICAL FIBER GLASS INSULATION

For Wood, Engineered Wood, and Steel Frame Construction



At Johns Manville, we are committed to helping you create more comfortable, healthier and energy efficient indoor environments. That's why we revolutionized the building insulation industry by pioneering the development of Formaldehyde-free™ fiber glass building insulation over a decade ago. JM Formaldehyde-free insulation provides excellent thermal and acoustical performance and now utilizes an innovative bio-based binder, made mostly with rapidly renewable plant-based materials, that offers improved handling, easier cutting and less dust than our previous product. Because here at JM, we believe that in every detail, materials matter.

## PRODUCT DESCRIPTION

Johns Manville Formaldehyde-free thermal and acoustical insulation for wood, engineered wood, and steel framing is made of long, resilient glass fibers bonded with our bio-based binder. A wide range of thermal resistance is available to provide thermal control for both vertical and horizontal applications.

## APPLICATIONS

### Wood Frame Insulation

#### New Construction

- Wood frame construction – residential homes and light commercial buildings
- Interior wall sound control – interior walls and floor and ceiling assemblies
- Basement wall insulation

#### Retrofit

- Re-insulating attics, crawl spaces

### Engineered Wood Frame Insulation

#### New Construction

- Engineered wood construction – assemblies framed with 19.2" on-centre cavities, wide-spaced wood trusses or I-joists
- Interior floor assemblies – thermal and sound control applications

### Steel Frame Insulation

#### New Construction

- Steel frame construction – commercial buildings
- Suspended ceiling systems – sized to fit above 2x4 ceiling panels
- Interior wall sound control – interior walls and floor and ceiling assemblies
- Basement wall insulation

#### Retrofit

- Back-fill above suspended ceiling systems



## 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-40 (RSI-7.0) for wood frames, R-28 (RSI-4.9) for engineered wood frames, or R-20 (RSI-3.5) for steel frames.

**Sound Control** – reduces transmission of sound through exterior and interior walls and floor/ceiling assemblies.

**Fire-resistant and Non-combustible** – (see Specification Compliance).

**Non-corrosive** – 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.

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## INSTALLATION

JM insulation cuts easily with an ordinary utility knife and installs by simply pressing in place between studs or joists in standard 381 mm (15") and 584 mm (23") wood framing, 488 mm (19.2") on-centre wood framing, or 406 mm (16") and 610 mm (24") steel framing. For wood or engineered wood framing, wire rods, chicken wire or wire is needed to hold floor insulation in place. For steel framing, adhesives or fasteners may be used.

## PACKAGING

JM 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 AND FIRE SAFETY

### All Products

The new products meet the following codes and standards:

CCMC Evaluation Listing: 12276-L

Standard for Mineral Fibre Thermal Insulation for Buildings: CAN/ULC-S702-09

Dimensional Tolerances: CAN/ULC-S702-09

Thermal Transmission Properties: ASTM C 518

Surface Burning Characteristics, Flame Spread 25 or less, Smoke Developed 50 or less: CAN/ULC-S102

Smoulder Resistance: ULC-S129

Corrosiveness: ASTM C 665

Fungi Resistance: ASTM C 1338

Noncombustible: ASTM E 136

## LIMITATIONS OF USE

Check applicable building codes.



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.

Visit our website at [specJM.com/canada](http://specJM.com/canada) or call **1-800-661-9553**.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of thermal and acoustical fiber glass insulation for wood, engineered wood, and steel frames 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, visit the website or call the 800 number above.

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## WOOD FRAME INSULATION\*

Specification Compliance	R-value (hr•ft <sup>2</sup> •°F/Btu)	RSI-value (m <sup>2</sup> •°K/Watts)	Thickness**		Width***	
			(mm)	(in)	(mm)	(in)
CAN/ULC-S702-09, Type 1 Wood Frame	40	7.0	286	11.25	406, 610	16, 24
	35	6.1	267	10.5	406, 610	16, 24
	31	5.4	241	9.5	406, 610	16, 24
	28	4.9	216	8.5	381, 406, 584, 610	15, 16, 23, 24
	24	4.2	152	6	381, 584	15, 23
	22	3.8	140	5.5	381, 584	15, 23
	20	3.5	152	6	381, 584	15, 23
	14	2.4	89	3.5	381, 584	15, 23
	13	2.3	89	3.5	375, 578	14.75, 22.75
	12	2.1	89	3.5	381, 584	15, 23
	10	1.7	89	3.5	381, 584	15, 23
	8	1.4	64	2.5	381, 584	15, 23

## ENGINEERED WOOD FRAME INSULATION\*

Specification Compliance	R-value (hr•ft <sup>2</sup> •°F/Btu)	RSI-value (m <sup>2</sup> •°K/Watts)	Thickness**		Width***	
			(mm)	(in)	(mm)	(in)
CAN/ULC-S702-09, Type 1 Engineered Wood Frame	28	4.9	216	8.5	483	19
	20	3.5	152	6	483	19
	12	2.1	89	3.5	483	19

## STEEL FRAME INSULATION\*

Specification Compliance	R-value (hr•ft <sup>2</sup> •°F/Btu)	RSI-value (m <sup>2</sup> •°K/Watts)	Thickness**		Width***	
			(mm)	(in)	(mm)	(in)
CAN/ULC-S702-09, Type 1 Steel Frame	20	3.5	152	6	406, 610	16, 24
	12	2.1	89	3.5	406, 610	16, 24
	10	1.7	89	3.5	406, 610	16, 24
	8	1.4	64	2.5	406, 610	16, 24

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

\*\*Thickness may vary by producing location.

\*\*\*Special widths and lengths may be available. Check with your local sales representative. The standard product lengths include 48-inch (1218 mm) batts – as well as 47-inch (1193 mm) for wood frames.

DISTRIBUTED BY:

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