

Canada

Building Insulation Guide



Residential and Commercial Products

The JM Difference

When Johns Manville was founded in 1858, we believed in building relationships and providing outstanding service and support. The world has changed, but that credo holds true. Building trust with our customers is our top priority — that's why we provide a complete line of residential and commercial building insulation solutions, paired with our unparalleled service and support.

Your One-Stop-Shop

We also believe that your time matters. That's why we focus on driving convenience and efficiency to help all our valued customers get the right insulation product, for every job, every time — all from one source.

Comprehensive Insulation Expertise & Support

The JM TechConnect Program puts you in touch with our team of technical experts — in person, by phone or online — so you can quickly solve even the most challenging insulation problem. Connect with us at 800-654-3103.



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Recycled Content



Formaldehyde-free™



Air Control



Residential



Commercial

Unfaced

Thermal & Sound Control Batts and Rolls



Light-density unfaced batts for installation within wall cavities, floors and ceilings. Available for metal or wood framing. May be used with a separate vapour retarder when moisture control is required. High-performance cathedral ceiling batts also available. Available in R-values ranging from R-8 to R-50.

AVAILABLE*

RSI / R-Value	Thickness	Width
Wood Framing		
RSI-2.1 / R-12	89mm (3.5")	292mm (11.5"), 381mm (15"), 584mm (23")
RSI-2.4 / R-14	89mm (3.5")	381mm (15"), 584mm (23")
RSI-3.5 / R-20	152mm (6")	381mm (15"), 584mm (23")
RSI-3.8 / R-22	140mm (5.5")	381mm (15"), 584mm (23")
RSI-4.2 / R-24	140mm (5.5")	375mm (14.75"), 578mm (22.75")
RSI-4.9 / R-28	216mm (8.5")	292mm (11.5"), 381mm (15"), 584mm (23")
RSI-4.9 / R-28C	178mm (7")	381mm (15"), 584mm (23")
RSI-6.1 / R-35	267mm (10.5")	406mm (16"), 610mm (24")
RSI-8.8 / R-50	337mm (13.25")	610mm (24")
Metal Framing		
RSI-1.4 / R-8	64mm (2.5")	406mm (16"), 610mm (24")
RSI-2.1 / R-12	89mm (3.5")	406mm (16"), 610mm (24")
RSI-3.5 / R-20	152mm (6")	406mm (16"), 610mm (24")
RSI-4.9 / R-28	216mm (8.5")	406mm (16"), 610mm (24")
RSI-5.4 / R-31	241mm (9.5")	406mm (16"), 610mm (24")
RSI-7.0 / R-40	286mm (11.3")	406mm (16"), 610mm (24")

*Please check Product Availability Listing for latest sizing and availability. See website for North American Average Recycled Content.

SPECIFICATION COMPLIANCE

CCMC Evaluation Listing: 12276-L
 Standard for Mineral Fibre Thermal Insulation for Buildings: CAN/ULC-S702
 Surface Burning Characteristics (CAN/ULC-S102):

- Flame Spread 25 or less
- Smoke Developed 50 or less

Noncombustible: CAN4-S114-M80
 Smoulder Resistance: ULC-S129
 Corrosiveness: ASTM C665
 Fungi Resistance: ASTM C1338

Pre-Engineered Wood Framing

Batts and Rolls



Pre-Engineered Wood Framing is unfaced fibreglass insulation available in widths and thicknesses to fill the wall panel or roof cavity in pre-engineered wood buildings. The unique Johns Manville fibreglass production process gives it excellent thermal performance plus resilience, allowing a snug friction fit.

AVAILABLE*

RSI / R-Value	Thickness	Width
RSI-2.1 / R-12	76mm (3")	483mm (19")
RSI-3.5 / R-20	152mm (6")	483mm (19")
RSI-4.9 / R-28	216mm (8.5")	483mm (19")

*Please check Product Availability Listing for latest sizing and availability. See website for North American Average Recycled Content.

SPECIFICATION COMPLIANCE

CCMC Evaluation Listing: 12276-L
 Standard for Mineral Fibre Thermal Insulation for Buildings: CAN/ULC-S702
 Surface Burning Characteristics (CAN/ULC-S102):

- Flame Spread 25 or less
- Smoke Developed 50 or less

Noncombustible: CAN4-S114-M80
 Smoulder Resistance: ULC-S129
 Corrosiveness: ASTM C665
 Fungi Resistance: ASTM C1338

PEBS Blanket™



JM PEBS Unfaced Filler Blanket™ is a general purpose Formaldehyde-free™ fibreglass insulation for use in both roofs and walls of pre-engineered metal buildings. As a resilient, unfaced insulating material, it provides the most economical thermal performance per R-value.

AVAILABLE*

Thickness	Blanket Width
76mm (3")	1219mm (48")
89mm (3.5")	1219mm (48")
102mm (4")	1219mm (48")
127mm (5")	1219mm (48")
152mm (6")	1219mm (48")
203mm (8")	1219mm (48")

**Please check Product Availability Listing for latest sizing and availability. See website for North American Average Recycled Content.*

SPECIFICATION COMPLIANCE

Standard for Mineral Fibre Thermal Insulation for Buildings: CAN/ULC-S702 Surface Burning Characteristics (CAN/ULC-S102):

- Flame Spread 25 or less
- Smoke Developed 50 or less

Noncombustible: CAN4-S114-M80

Smoulder Resistance: ULC-S129

Corrosiveness: ASTM C665

Fungi Resistance: ASTM C1338

UMBI®



UMBI® is a high-quality, highly resilient, Formaldehyde-free™ fibreglass blanket insulation designed for lamination to a wide choice of custom vapour-retarding facings. Laminated UMBI offers excellent insulating value along with a vapour retarder, noise reduction and an attractive appearance.

AVAILABLE*

Thickness	Blanket Width
48mm (1.9")	1219mm (48")
70mm (2.75")	1219mm (48")
100mm (3.9")	1219mm (48")

*Shown here as laminated by a third party. *Please check Product Availability Listing for latest sizing and availability. See website for North American Average Recycled Content.*

SPECIFICATION COMPLIANCE

Standard for Mineral Fibre Thermal Insulation for Buildings: CAN/ULC-S702 Surface Burning Characteristics (CAN/ULC-S102):

- Flame Spread 25 or less
- Smoke Developed 50 or less

Noncombustible: CAN4-S114-M80

Smoulder Resistance: ULC-S129

Corrosiveness: ASTM C665

Fungi Resistance: ASTM C1338

Sound-SHIELD®



JM Sound-SHIELD® batts are lightweight, sound-absorbent Formaldehyde-free™ insulation. The fibreglass batts are made to fit standard spacing and thickness of wood-frame construction in residential and light industrial construction.

AVAILABLE*

Thickness	Width	Length
102mm (4")	381mm (15"), 406mm (16")	1194mm (47"), 1219mm (48")

**Please check Product Availability Listing for latest sizing and availability.
See website for North American Average Recycled Content.*

SPECIFICATION COMPLIANCE

Standard for Mineral Fibre Thermal Insulation for Buildings: CAN/ULC-S702*
Surface Burning Characteristics (CAN/ULC-S102):

- Flame Spread 25 or less
- Smoke Developed 50 or less

Noncombustible: CAN4-S114-M80

Smoulder Resistance: ULC-S129

Corrosiveness: ASTM C665

Fungi Resistance: ASTM C1338

**Exceptions to standard: Not tested for thermal resistance.*

JM Climate Pro®

Thermal & Sound Control Blow-in Fibreglass



JM blow-in Formaldehyde-free™ loose-fill fibreglass insulation is designed for attics. It is noncorrosive and noncombustible. JM ClimatePro® insulation is for professionals using large truck-mounted, high-volume production blowing wool machines and for the Blow-In-Blanket® System (BIBS®) for blowing in to fill walls, ceilings and irregular spaces.

AVAILABLE

RSI / R-Value

RSI-2.1 / R-12 to RSI-10.5 / R-60

JM Climate Pro Insulation – Attics

Installation in attics using a professional-grade blowing machine
(See package for sq. m. coverage at each RSI (R-Value).)

JM Climate Pro Insulation – Enclosed Cavities

Blow-In-Blanket System installation in walls, ceilings and floors
(See package for RSI (R-Value) and sq. m. coverage at each cavity thickness.)

See website for North American Average Recycled Content.

SPECIFICATION COMPLIANCE

CCMC Evaluation Report: 12642-L

CAN/ULC S702-09: Type V

JM Spider® Plus

Thermal & Sound Control Blow-in Fibreglass



Custom Insulation System

JM Spider® Plus blow-in insulation, now featuring interlocking fibre technology, is the next evolution of the JM insulation family.

Interlocking fibre technology allows the fibres to spring and lock into cavities to fill all gaps and voids with no adhesive or netting. And with a simple installation that is typically faster than other spray systems and unprecedented drying times, Spider Plus saves professional installers time and money on every project.

AVAILABLE

RSI/R-Value

RSI-2.5 / R-14 to RSI-2.6 / R-15 (2x4 cavity)

RSI-4.1 / R-23 to RSI-4.2 / R-24 (2x6 cavity)

(See package for sq. m. coverage at each RSI (R-Value).)

JM Spider Plus insulation is available in:

30 lb. bags

See website for North American Average Recycled Content.

SPECIFICATION COMPLIANCE

CCMC Evaluation Report: 13212-R

CAN/ULC S702-09: Type V



TempControl® Thermal Control & Fire Delay Mineral Wool Batts



TempControl® mineral wool insulation is made from high-density, noncombustible fibres to help delay the spread of fire. It also delivers exceptional thermal performance for the life of a home, reducing heating and cooling bills to save money year-round.

AVAILABLE*

RSI / R-Value	Thickness	Width
RSI-2.5 / R-14	89mm (3.5")	387mm (15.25"), 584mm (23")
RSI-3.9 / R-22	140mm (5.5")	387mm (15.25"), 584mm (23")
RSI-4.9 / R-28	184mm (7.25")	387mm (15.25"), 584mm (23")

**Please check Product Availability Listing for latest sizing and availability.*

SPECIFICATION COMPLIANCE

CCMC Evaluation Listing: 13682-L
 CAN/ULC-S702-09, Type 1
 Thermal Resistance (ASTM C518): R-14, R-22, R-28
 Surface Burning Characteristics (CAN/ULC-S102):

- Flame Spread 5 or less
- Smoke Developed 0 or less

Smoulder Resistance: ULC-S129

Sound & Fire Block® Sound Control & Fire Delay Mineral Wool Batts



Sound & Fire Block® mineral wool insulation batts help delay the spread of fire between interior floors and rooms. Made from high-density, noncombustible materials designed for maximum sound absorption, it also reduces noise transfer in the places occupants need it most—between interior walls and in the ceilings and floors.

AVAILABLE*

Product	Thickness	Width
Sound & Fire Block	76mm (3")	387mm (15.25") 610mm (24")

**Please check Product Availability Listing for latest sizing and availability.*

SPECIFICATION COMPLIANCE

Sound Transmission Class (ASTM E90): STC-47
 Surface Burning Characteristics (CAN/ULC-S102):

- Flame Spread 5 or less
- Smoke Developed 0 or less

Smoulder Resistance: ULC-S129

MinWool® SAFB

Sound & Fire Control Mineral Wool Batts



MinWool® SAFB insulation is designed to deliver noise control and superior fire resistance in steel-stud wall cavities of interior partitions or above suspended ceiling systems. The batts do not slump or settle, retaining their sound and fire performance and RSI Value (R-Value). SAFB insulation is compression packaged for savings in storage and freight costs.

AVAILABLE*

Thickness	Width	Length
38-152mm (1.5-6")	406mm (16"), 610mm (24")	1219mm (48")

*13mm (.5") increments.
Custom sizes are available up to 152mm (6") thick.
Please see Product Availability Listing. Minimum order quantities are required.

SPECIFICATION COMPLIANCE

Material Specification (ASTM C665): Type I
UL 723, CAN/ULC-S102-M: 5/0 or less
CAN4-S114-M: Pass
Nominal Density: 40kg/m³ (2.5 pcf)

MinWool® Safing

Sound & Fire Control Mineral Wool Batts



MinWool® Safing insulation provides a fire-rated seal when installed between the spandrel panel and the floor slab in commercial curtainwall systems, and around ducts and pipes. It also prevents the passage of flame and smoke in openings that penetrate fire-rated assemblies.

AVAILABLE*

Thickness	Width	Length
100mm (4")	610mm (24")	1219mm (48")

*Custom sizes are available up to 152mm (6") thick.
Please see Product Availability Listing. Minimum order quantities are required.

SPECIFICATION COMPLIANCE

Material Specification (ASTM C612): Types I-IV
Smoulder Resistance (CAN/ULC-S129): Pass
CAN/ULC-S102-M: 5/0 or less
Through-Penetration Firestop Systems (UL 1479):
Used to rate approved assemblies

MinWool® Curtainwall

Sound & Fire Control Mineral Wool Batts



MinWool® Curtainwall insulation provides superior fire resistance and thermal properties in glass, metal, and masonry curtainwall spandrel systems. The lightweight, semi-rigid mineral wool board can be placed between or over framing members, and held in place with mechanical fasteners.

AVAILABLE*

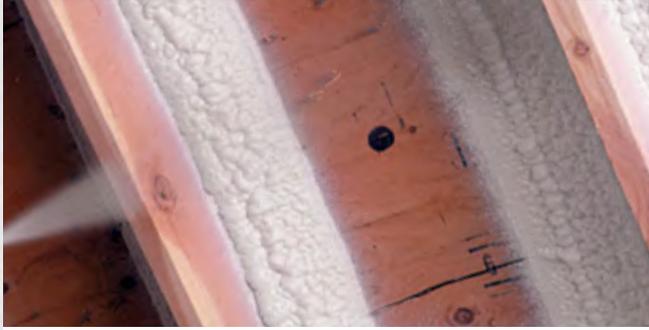
Product	Thickness
CW4	38-102mm (1.5"-4")
CW6	38-102mm (1.5"-4")
CW8	38-102mm (1.5"-4")

*Custom sizes are available.
Please see Product Availability Listing. Minimum order quantities are required.

SPECIFICATION COMPLIANCE

Material Specification (ASTM C612): Types I-IV
CAN/ULC-S102-M: 5/0 or less

JM Corbond III® Spray Polyurethane Foam



JM Corbond III® Closed-cell Spray Polyurethane Foam (SPF) is a premium insulation solution, creating an advanced thermal, air and moisture barrier. This insulation offers a maximum lift thickness of up to 50 mm in a single pass, providing an R-value of 18 at 76 mm and R-32 at 127 mm. JM Corbond III SPF has one of the highest yields of any closed-cell foam insulation and can be installed in temperatures as low as -7.0°C.

Approvals

ABAA Evaluated Material and Assembly
Greenguard, Greenguard Gold

AVAILABLE*

Conditioned R-Value		LTTR		Thickness	
RSI (°K·m²/W)	R (°F·ft²·h/BTU)	RSI (°K·m²/W)	R (°F·ft²·h/BTU)	(mm)	(in)
6.2	35	5.6	32	127	5
3.7	21	3.2	18	76	3
2.5	14	2.1	12	50	2

Substrate Application

Winter	Min. -7.0°C (19°F)	Max. 21°C (70°F)
Summer	Min. 7.2°C (45°F)	Max. 50.0°C (122°F)

May be applied in passes of uniform thickness from a minimum of 13 mm to a maximum of 51 mm.

**Please check Product Availability Listing for latest sizing and availability.
See website for North American Average Recycled Content.*

SPECIFICATION COMPLIANCE

Evaluation Listing: CCMC 13478-L
Standard for Thermal Insulation – Spray Applied Rigid Polyurethane Foam, Medium Density: CAN/ULC-S705
Standard Specification for Spray-Applied Rigid Cellular Polyurethane Thermal Insulation: ASTM C1029
Nominal Density (ASTM D1622), Medium Density 33kg/m³ (2.1 lb/ft³)
Dimensional Stability, (ASTM D2126 Modified) % Vol. Change:
• -20°C, 0.3
• 80°C, 1.1
• 70°C, 97 ±3%RH, 12
Tensile Strength (ASTM 1623): 313 kPa (45 psi)
Surface Burning Characteristics (CAN/ULC-S102, CAN/ULC-S127): Pass
Compressive Strength (ASTM D1621): 245 kPa (36 psi)
Open-cell Content (ASTM D6226): 2.1%
Water Absorption (ASTM D2842): 0.88%
Water Vapour Permeance (ASTM E96): 46ng (Pa.s.m²)
Air Permeance (CCMC 07272): < 0.0002 L/S@75 Pa
Time to Occupancy (CAN/ULC-S774): 24 Hours: Pass
Sound Transmission Coefficient (STC): 36*

** 2x4 wood stud, 16" on centers, 2.76 of JM Corbond III SPF, 15/32" exterior OSB sheathing, " gypsum wallboard (ASTM E90-90 & ASTM E413-877)*

JM Corbond® Open-cell Spray Polyurethane Foam



JM Corbond® Open-cell Spray Polyurethane Foam insulation is a two component, low-density, nonstructural insulation system designed for interior commercial, residential and industrial applications. JM Corbond oc SPF is 100% water blown. The low-density nature allows for tremendous yield while providing excellent heat, air, and sound control. This multifunctionality results in high performing buildings that are energy efficient, comfortable, and have better air quality. JM Corbond oc SPF is compatible with most common construction materials.

AVAILABLE*

Conditioned R-Value		Thickness	
RSI (°K·m²/W)	R (°F·ft²·h/BTU)	(mm)	(in)
0.63	3.6	50	2

Substrate Application

Min 0°C (32°F)
Max 54°C (130°F)

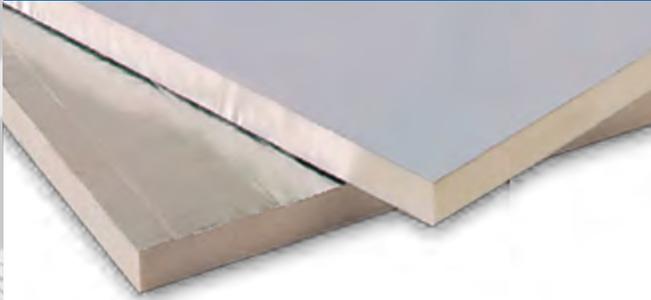
**Please check Product Availability Listing for latest sizing and availability.
See website for North American Average Recycled Content.*

SPECIFICATION COMPLIANCE

CCMC Evaluation Report: 14010-R
Standard Laboratory Guide for the Determination of Volatile Organic Compound Emissions from Thermal Insulating Systems: CAN/ULC S774
Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies: CAN/ULC S102
Standard Corner Wall Method of Test for Flammability Characteristics on Non-Melting Foam Plastic Building Materials: CAN/ULC S127
Core Density (ASTM D1622): 7.2kg/m³ nominal (0.5 lb/ft³)
Dimensional Stability (ASTM D2126)
• -29°C/Ambient RH -0.8% Volume Change
• 80°C/Ambient RH -12.1% Volume Change
• 70°C/95% ±3%RH -7.6% Volume Change
Water Vapour Permeance, 25mm Thick Core (ASTM E96): 2140 @ 50 mm (37 perm)
Sound Transmission Coefficient (ASTM E90): 39 STC*
Fungi Resistance (ASTM 1338): Pass with No Fungal Growth
Flame Spread Rating (CAN/ULC S102): 25
Smoke Developed Classification (CAN/ULC S102): 315
Flame Spread Rating (CAN/ULC S127): 315

** Residential exterior wall with 16" o.c. 2x4 wood studs, OSB sheathing, and " gypsum board. STC 40 with fibreboard siding.*

AP™ Foil-Faced Polyisocyanurate Foam Sheathing



Rigid foam sheathing insulation for use in commercial and residential construction where continuous insulation and/or high thermal efficiency is required—behind gypsum board, all siding types, above and below grade exterior walls, above and below grade interior walls, attics and cathedral ceilings, and crawl spaces. Reduces thermal bridging at framing members and is noncorrosive and lightweight. When properly installed, functions as a water-resistive barrier, vapour barrier and air barrier, eliminating the need for additional components. Reflective foil facer on one side, nonreflective foil facer on the other.

Approvals

ENERGY STAR® Certification
ICC-ESR-3398 Thermal, Air Barrier, Water-Resistive Barrier
ABAA Evaluated Material, Assembly

AVAILABLE*

RSI / R-Value	Thickness
RSI-5.09 / R-28	114mm (4.5")
RSI-4.52 / R-26	102mm (4")
RSI-3.94 / R-22	89mm (3.5")
RSI-3.36 / R-19	76mm (3")
RSI-2.79 / R-16	64mm (2.5")
RSI-2.21 / R-13	51mm (2")
RSI-1.63 / R-9.3	38mm (1.5")
RSI-1.06 / R-6.0	25mm (1")
RSI-0.77 / R-4.4	19mm (.75")
RSI-0.62 / R-3.5	16mm (.625")
RSI-0.48 / R-2.7	13mm (.5")

*Please check Product Availability Listing for latest sizing and availability.

SPECIFICATION COMPLIANCE

CCMC Evaluation Listing: 13104-L
Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board: ASTM C1289: Type I, Class 1
Standard for Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced: CAN/ULC S704: Type I, Class 1
Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies: CAN/ULC S102**
ASHRAE 90.1
International Building Code
International Residential Code
International Energy Conservation Code

**Faced board tested at 25mm.

R-Panel® Polyisocyanurate Foam Sheathing



Rigid roof insulation board composed of a closed-cell polyisocyanurate foam core bonded in the foaming process to universal fibreglass reinforced facers. R-Panel provides high thermal insulation value over metal, nailable and non-nailable roof decks in built-up, modified bitumen and single-ply membrane roofing systems. It may be applied using hot bitumen, cold adhesives or mechanical fasteners. The universal facer on the top and bottom sides provides a suitable surface for mechanical attachment to a structural deck as well as a suitable surface to apply hot asphalt or cold adhesives.

Approvals

FM® Standards 4450/4470 Approvals (refer to FM RoofNavSM)
UL® Standard 790, 263, and 1256 (refer to UL Roofing Materials system directory)
Third-party certification with the PIMA Quality Mark™ for Long-Term Thermal Resistance (LTTR) Values

AVAILABLE*

LTTR Value**	Thickness
4.16 / 23.6	102mm (4")
3.39 / 19.2	84mm (3.3")
3.06 / 17.4	76mm (3")
2.53 / 14.4	64mm (2.5")
2.32 / 13.2	58mm (2.3")
2.01 / 11.4	51mm (2")
1.71 / 9.7	43mm (1.7")
1.51 / 8.6	38mm (1.5")
1.00 / 5.7	25mm (1")

*Please check Product Availability Listing for latest sizing and availability.
**($^{\circ}\text{K}\cdot\text{m}^2/\text{W}$), ($^{\circ}\text{F}\cdot\text{ft}^2\cdot\text{h}/\text{BTU}$) Long-term thermal resistance (LTTR) values were determined in accordance with CAN/ULC S770 at 24°C (75°F).

SPECIFICATION COMPLIANCE

CCMC Evaluation Listing: 13058-L
Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board: ASTM C1289: Type II, Class 1, Grade 2
Standard for Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced: CAN/ULC S704: Type II, Class 3
Water Absorption (ASTM C209): <1% volume
Dimensional Stability (ASTM D2126): 2% max, 7 days (length and width)
Compressive Strength 10% Consolidation (ASTM D1621):* 20 psi (138 kPa)
Moisture Vapour Transmission (ASTM E96): < 1 Perms (57.5 ng/P·s·m²)
Tensile Strength (ASTM D1623): 730 psf (35 kPa)
Service Temperature: -73°C to 121°C (-100°F to 250°F)

*Also available in 25 psi (172 kPa).



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