

Residential Product Selector Guide

Hybrid Insulation Solutions

Innovative Home Insulation Solutions





Air Handling Systems

- Make HVAC systems more energy efficient
- Provide acoustic comfort
- Protected from mold and mildew damage
- Fiber glass made without formaldehyde

Fiber Glass Building Insulation

- Improves indoor air quality because it's made without formaldehyde
- · Certified high recycled-glass content
- · Naturally resists fire, moisture, mold and mildew
- First complete line of certified Formaldehyde-free[™] fiber glass building insulation products

Spray Foam Insulation

- Provide superior thermal and acoustical performance
- Advanced air isolation and moisture control
- Closed-cell and open-cell solutions
- Only company to manufacturer both fiber glass and spray foam insulation

Hybrid Insulation Solutions

- · Custom insulation systems
- Adapts to construction needs
- Combining the performance of fiber glass insulation and spray foam insulation

Icon Key

_	
Thermal	嶽
Acoustical	
Fire Resistant	W
Moisture Control	1
Recycled Content	(
Mold Resistant	MR
Formaldehyde-free TM Products for improved indoor air quality	3







Build healthier, safer homes with JM quality and reliability.

Health. Safety. Quality. At JM, that's what we think about when we design and make new home insulation products. Because that's what homeowners are thinking about: the health and safety of their families and the quality of their homes. In fact, 80 percent of homeowners prefer brands that take the lead in providing a safe and healthy environment for their families.*

Whether you're using certified JM Formaldehyde-free™ fiber glass home insulation or air handling systems, it's a major step toward building safer, healthier homes by reducing your overall exposure to formaldehyde. Our innovative spray foam insulation provides an advanced air barrier that helps improve the indoor environment. Sealing air leaks and gaps with spray foam insulation provides better temperature control, minimizes sound transmission and controls moisture making homes more comfortable in a variety of ways.

Choose JM to create safer, healthier and more energy-efficient homes.

- Higher energy efficiency—Did you know that 69 percent of U.S. consumers say energy efficiency is a deciding factor in choosing one home over another? And 81 percent acknowledge that reduced energy consumption, in addition to increased energy efficiency, is the best solution to high energy prices.** All JM Formaldehyde-free™ fiber glass home insulation, air handling systems and spray foam insulation products—increase a home's energy efficiency and help reduce energy consumption.
- Improved indoor air quality—Johns Manville offers the only complete line of certified Formaldehyde-free™ fiber glass building insulation products, which improves indoor air quality by reducing your overall exposure to formaldehyde.

We believe in environmental responsibility.

- Post-consumer recycled content: JM incorporates an average of 25 percent recycled content across North America,
 20 percent certified post-consumer and the balance post-industrial glass.
- Increased sustainability: Fiber glass and spray foam insulation maintain their energy efficiency for the life of the home.

 Bonded fiber glass, dense-packed fiber glass and spray foam will not settle. Our loose-fill fiber glass will not settle when installed at our specified densities in sidewalls and will not settle appreciably when installed in attics.

Make sure the insulation and air handling systems you use enhance the health, safety, energy efficiency and sustainability of the homes you build. **Make sure it's JM**.

^{*}JM proprietary research.

^{**© 2007} Energy Pulse. energypulse.org

Air Handling System Products





















Flexible Air Duct

with Flex-Glas® PC

Flexible air duct with JM Formaldehyde-free™ Flex-Glas PC fiber glass insulation is flexible, so it's easier and faster to install, and it reduces the homeowner's energy bills because the insulation helps keep the air in the duct at a constant temperature, even if the duct is in an unconditioned space, such as an attic, basement or crawl space. The fiber glass core reduces noise, so the home stays quieter.

North American Average Recycled Content:

20% post consumer 5% pre consumer

Note: JM itself does not manufacture flexible air duct. For more information on the availability of flexible air duct made with JM Formaldehyde-freeⁿ Flex-Glas PC fiber glass insulation, contact your JM representative.

Microlite® XG™

Fiber Glass Duct Wrap

Fiber glass duct wrap insulation is used on the exterior of rectangular and round metal ducts as thermal insulation.

Operating Temperature Limit: 250°F (121°C)

North American Average Recycled Content:

20% post consumer 5% pre consumer

TYPE	R-VALUE	TYPE	THICKNESS	R-VALUE
100 130 135	R-4.2 R-6.0 R-8.0	75 75 75 75 100 100 150	1½" 2" 2½" 3" 1½" 2" 1½" 2"	(at 75° F Mean Temp) R-4.2 R-5.6 R-6.5 R-8.3 R-4.5 R-6.0 R-4.7 R-6.3

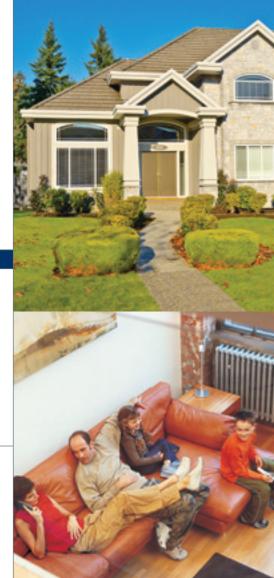
ASTM Standard C518 ASTM Standard C553, Type I UL 181 Surface Burning Characteristics (ASTM E84 and UL 723) Flame Spread 25 or less Smoke Developed Index 50 or less Recognized component label for thermal performance Fungi Resistance (ASTM C1338, UL 181): pass

Note: Specification Compliance data in this section are for the JM Formaldehyde-free $^{\text{\tiny{TM}}}$ Flex-Glas PC insulation used

SPECIFICATION COMPLIANCE

ASTM C553 Type II - Type 75, 100 and 150 Type III - Type 150 **ASTM C1290** ASTM E84, FHC 25/50 - FSK Facing ASTM C1136, Type II - FSK Facing NYC MEA # 40-75-M Canada: CGSB 51-GP-11M; CAN/ULC S102-M88





Fiber Glass Building Insulation Products



































AP[™] Foil-Faced

Polyisocyanurate Foam Sheathing

Rigid foam sheathing insulation for use in commercial and residential construction where high thermal efficiency is required—behind gypsum board, all siding types, masonry cavity walls and cathedral ceilings. Reduces thermal bridging at framing members and is noncorrosive and lightweight. Reflective foil facer on one side, nonreflective foil facer on the other.

Unfaced

Thermal & Sound Control Batts and Rolls

Light-density unfaced batts and rolls for installation within wall cavities, floors and attics. Available for standard wood or metal framing. May be used with a separate vapor retarder when vapor control is required. Comes in R-values ranging from R-11 to R-38.

North American Average Recycled Content:

20% post consumer 5% pre consumer

EasyFit®

Perforated Thermal & Sound Control Batts

Pre-cut, perforated batts come in a variety of sizes and R-values for use in nonstandard width cavities. Eliminates time-consuming hand cutting and enables a faster, easier and better-performing installation.

North American Average Recycled Content:

20% post consumer 5% pre consumer

	R-VALUE	THICKNESS	WIDTH	R-VALUE	THICKNESS	WIDTH	R-VALUE	THICKNESS	WIDTH
AVAILABLE	R-3.3 R-4.1 R-5.0 R-6.5 R-9.8 R-13.0 R-16.3 R-19.5 R-22.8		4' x 8' 5' 6' representative for additional	WOOD FRAM R-11 R-13 R-15 R-19 R-21 R-30 R-30c R-38 R-38c METAL FRAM R-11 R-13 R-19 R-30	3.50" 3.50" 3.50" 6.50" 5.50" 10.25" 8.25" 13.00" 10.25" IING 3.625" 3.50" 6.50" 10.25"	15" x 93", 23" x 93", 15" x 105" 15" x 93", 15" x 105" 15" x 93", 23" x 93", 15" x 105" 15" x 93", 23" x 93", 15" x 105" 15" x 93", 23" x 93" 16" x 48", 24" x 48" 15.5" x 48", 23.625" x 48" 16" x 48" 15.5" x 48", 23.75" x 48" 16", 24" 16", 24" 16", 19", 24" representative for additional	R-13 R-15 R-19 R-21		15" x 93," 15" x 105" 15" x 93" 15" x 93" 15" x 93"
	ASTM C1289, Ty	pe I, Class 1		ASTM Standar			ASTM C665 Typ	e I (Unfaced), Type	II, Class C,

SPECIFICATION COMPLIANCE

ASTM D1621 Compressive Strength, 16 psi (110.3 kPa) ASTM D2126 Dimensional Stability, 2% max, 7 days (length and width) ASTM E96 Moisture Vapor Transmission* < 0.003 Perms (1.5 mg/P·s·m2) ASTM C209 Water Absorption,* <1% volume ASTM E84 Flame Spread,* 75 Service Temperature: -100°F to 250°F (-73°C to 122°C) California State Insulation Quality Standards

*Foam core only.

ASTM Standard C665, Type I Surface Burning Characteristics (ASTM E84) Flame Spread 25 or less Smoke Developed Index 50 or less Critical Radiant Flux (ASTM E970) greater than 0.12 W/cm2 (0.11 Btu/ft2-s) Water Vapor Sorption (ASTM C1104) less than 5% by weight Odor Emission (ASTM C1304): pass Corrosiveness (ASTM C665, 13.8): pass Fungi Resistance (ASTM C1338): pass

ASTM C665 Type I (Unfaced), Type II, Class C, Category 1 (Kraft) Unfaced: ASTM 136 (noncombustible) Surface Burning Characteristics (ASTM E84) Unfaced: Flame Spread 25 or less Unfaced: Smoke Developed Index 50 or less Kraft: Unrated for Flame/Smoke Critical Radiant Flux (ASTM E970) W/cm2 (0.11 Btu /ft2-s) Water Vapor Permeance (ASTM E96) Kraft: 1.0 Perms (57nq /Pa-S-m²) Water Vapor Sorption (ASTM C1104) less than 5% by weight Odor Emission (ASTM C1304): pass Corrosiveness (ASTM C665, 13.8): pass Fungi Resistance (ASTM C1338): pass





































ComfortTherm®

Plastic-wrapped Thermal & Sound Control Batts and Rolls

Plastic-wrapped light-density batts and rolls offer easy handling and convenient installation with less itch and dust. For use in walls, floors, crawl spaces, attics and ceilings. Comes in R-values ranging from R-11 to R-30. JM ComfortTherm insulation's vapor retarder is twice as resistant to moisture as kraft-faced products.

North American Average Recycled Content:

20% post consumer 5% pre consumer

Note: JM ComfortTherm insulation is also available for several R-values with a non-vapor retarder facing for use where vapor retarders are not appropriate.

MR® Faced

Mold-resistant Thermal & Sound Control Batts

Johns Manville MR Faced insulation resists mold and mildew damage. The facing is treated with a U.S. EPA-registered agent to help protect the facing from the potential growth of mold and mildew. Both the fiber glass insulation and the facing pass the standard industry fungi resistance test (ASTM C1338). The facing also passes the more stringent fungi test (ASTM D2020) for paper and paperboard.

North American Average Recycled Content:

20% post consumer 5% pre consumer

Kraft-Faced

Thermal & Sound Control Batts and Rolls

Light-density batts and rolls with kraft-facing vapor retarder for use in wall cavities, floors and attics. Available for standard wood or steel framing. Comes in R-values ranging from R-11 to R-38.

North American Average Recycled Content:

20% post consumer 5% pre consumer

R-VALUE	THICKNESS	WIDTH	R-VALUE	THICKNESS	WIDTH	R-VALUE	THICKNESS	WIDTH
R-11* R-13* R-19* R-25* R-30* *Available with	3.50" 3.50" 6.50" 8.25" 10.25"	15" x 40", 15" x 93", 23" x 93" 15" x 93", 15" x 32" 15" x 93", x 93", 15" x 48" 15" x 22", 23" x 22" 16" x 48", 24" x 48" s not act as a vapor retarder.	R-11 R-13 R-19 R-30	3.625" 3.50" 6.50" 10.25"	16" x 96" 15" x 93," 15" x 105" 15" x 93," x 19.25" x 48" 16" x 48," x 24" x 48"	R-11 R-13* R-15 R-19* R-21 R-30 R-30c R-38	3.50" 3.50" 3.50" 6.50" 5.50" 10.25" 8.25" 13.00"	11" x 93," 15" x 93," 23" x 93," 15" x 105" 11" x 93," 11" x 105," 15" x 93," 23" x 93," 15" x 105" 15" x 93," 23" x 93," 15" x 105" 11" x 93," x 15" x 93," 19.25" x 48," 23" x 93," 15" x 105" 15" x 93," 23" x 93," 12" x 48," 16" x 48," 24" x 48" 15.5" x 48," 24" x 48"
Please check with your local sales representative for additional R-values and sizes.			Please check v R-values and s		s representative for additional	R-38c *Also available	10.25" without stapling ta with your local sale.	15.5" x 48," 23.75" x 48"

ASTM Standard C665, Type II, Class A, Category 1 Surface Burning Characteristics (ASTM E84) Flame Spread 25 or less Smoke Developed Index 50 or less Critical Radiant Flux (ASTM E 970) greater than 0.12 W/cm² (0.11 Btu/ft²-s) Water Vapor Permeance (ASTM E96) 0.5 Perms Water Vapor Sorption (ASTM C1104) less than 5% by weight Odor Emission (ASTM C1304): pass Corrosiveness (ASTM C665, 13.8); pass

Fungi Resistance (ASTM C1338): pass

ASTM Standard C665 Kraft: Type II. Class C. Category 1 Kraft: Unrated for Flame/Smoke Water Vapor Permeance (ASTM E96) Kraft: 1.0 Perms (57 ng/Pa·s·m²) Water Vapor Sorption (ASTM C1104) less than 5% by weight Odor Emission (ASTM C1304): pass Corrosiveness (ASTM C665, 13.8): pass Fungi Resistance (ASTM C1338): pass Fungi Resistance (ASTM D2020): pass

ASTM Standard C665 Kraft: Type II, Class C, Category 1 Kraft: unrated for Flame/Smoke Water Vapor Permeance (ASTM E96) Kraft: 1.0 Perms (57 ng/Pa·s·m²) Water Vapor Sorption (ASTM C1104) less than 5% by weight Odor Emission (ASTM C1304): pass Corrosiveness (ASTM C665, 13.8): pass Fungi Resistance (ASTM C1338): pass

Fiber Glass Building Insulation Products



























Climate Pro®/ Attic Protector®

Thermal & Sound Control Blow-in Fiber Glass

JM blow-in Formaldehyde-free™ loose-fill fiber glass insulation is designed for attics. It is noncorrosive and noncombustible. JM Climate Pro insulation is for professionals using large truck-mounted, high-volume production blowing wool machines and for the Blow-In-Blanket® System for blowing in to fill walls, ceilings and irregular spaces. JM Attic Protector insulation is for the remodeling professional or do-it-yourselfer who uses a portable blowing machine.

North American Average Recycled Content:

20% post consumer 5% pre consumer

JM Spider®

Thermal & Sound Control Spray-in Fiber Glass **Custom Insulation System**

Loose-fill fiber glass insulation with a spray adhesive added at the time of installation. The system is designed to help contractors save time while reliably filling all gaps and voids in walls around electrical fixtures, pipes and other obstructions.

Installed Without Adhesive

JM Spider insulation can also be installed without adhesive in drill-and-fill and Blow-In Blanket System (BIBS®) applications. The specially designed fibers are very effective at delivering the desired performance for these types of installs.

North American Average Recycled Content:

20% post consumer 5% pre consumer

R-VALUE

R-11 to R-60

JM Climate Pro Insulation-Attics

Installation in attics using a professional-grade blowing machine (see package for sq. ft. coverage at each R-value)

JM Climate Pro Insulation-Enclosed Cavities

Blow-In-Blanket System installation in walls, ceilings and floors (see package for R-value and sq. ft. coverage at each cavity thickness)

JM Attic Protector Insulation-Attics

Installation in attics using a portable blowing machine (see package for sq. ft. coverage at each R-value)

R-VALUE

R-13 to R-15 (2x4 cavity) R-20 to R-23 (2x6 cavity) (see package for sq. ft. coverage at each R-value)

JM Spider insulation is available in: 30 lb. bags

JM Spider adhesive is available in: 280 gallon totes 55 gallon drums

ASTM Standard C764, Type I, Category 1 Surface Burning Characteristics (ASTM E84) Flame Spread 25 or less Smoke Developed Index 50 or less Loss On Ignition (ASTM C764, 12.3) 1% or less Critical Radiant Flux (ASTM E970) 0.12 W/cm2 (0.11 Btu/ft2-s) or greater **Combustion Characteristics** (ASTM E136): pass

Water Vapor Sorption (ASTM C1104) less than 5% by weight Odor Emission (ASTM C1304): pass Corrosiveness (ASTM C665, 13.8): pass Fungi Resistance (ASTM C1338): pass

ASTM Standard C764, Type I Surface Burning Characteristics (ASTM E84 and CAN/ULC S102.2) Flame Spread 25 or less

Smoke Developed Index 50 or less Critical Radiant Flux (ASTM E970) 0.12 W/cm2 (0.11 Btu/ft2-s) or greater Combustion Characteristics (ASTM E136): pass Water Vapor Sorption (ASTM C1104) 5% by weight or less Odor Emission (ASTM C1304): pass Corrosiveness (ASTM C764): pass Fungi Resistance (ASTM C1338): pass Fungi Resistance (ASTM G21): pass VOC Emissions (ES Section 01350): pass



Spray Foam Insulation Products



















R-VALUE

SUBSTRATE APPLICATION

Min. 45°F Max. 90°F

R-11

R-19

R-38













JM Corbond III® **Climate Isolation System**®

Spray Polyurethane Foam

Closed-cell JM Corbond III spray foam is a premium insulation that offers superior thermal performance, advanced air isolation, excellent moisture control and resists mold and mildew, which improves the indoor environment. It's one of the only spray foam insulations that offers a maximum thickness up to 3 inches in a single pass and the only one that can be applied in temperatures as low as 25 degrees Fahrenheit. JM Corbond III insulation and its unique Lavender® color have become the symbol of uncompromising quality and performance.

North American Average Recycled Content:

R-VALUE THICKNESS

Summer Min. 45°F Max. 90°F

SUBSTRATE APPLICATION Winter Min. 25°F Max. 60°F

JM Corbond **Multi-Climate Solution** (MCS™)

Spray Polyurethane Foam

Closed-cell JM Corbond MCS spray foam acts as a barrier, keeping the indoors from the outside climate. The closed-cell polyurethane foam provides superior thermal performance in addition to important air and moisture isolation. JM Corbond MCS can provide an R-11 when installed at a thickness of 2 inches and R-38 at 6 inches. It offers a maximum thickness of up to 2 inches per pass and can be applied in temperatures as low as 45 degrees Fahrenheit.

North American Average Recycled Content:

13% combined post and pre consumer in Side B

THICKNESS

2" 3"

JM Open-cell

Spray Polyurethane Foam

JM ocSPF is a low-density, nonstructural open-cell spray polyurethane foam insulation that allows contractors to quickly insulate and air seal in a single step. It helps restrict moisture transmission, is mold and mildew resistant and minimizes sound transmission. JM ocSPF has a versatile range of R-values, R-3.8 when installed at a thickness of 1 inch, R-13 at 3.5 inches and R-19 at 5.5 inches. When used at a thickness of 3.5 inches. JM ocSPF is considered an effective air barrier, which improves the indoor environment and makes a home more comfortable. It can be applied when ambient air and surface temperatures are between 40 and 120 degrees Fahrenheit.

10% combined post and pre consumer in Side B

ASTM Standard C1029
Surface Burning Characteristics (ASTM E84)
Flame Spread 25 or less
Smoke Developed Index 450 or less
Flame and Smoke (ASTM E84)
Passes @ 6"
Water Absorption (ASTM D2842)
0.020 (gm/cc)
Water Vapor Transmission (ASTM E96)
0.61 perms @ 1.5"
Air Infiltration (ASTM E283-04)
75 Pa 0.001 L/S/m² (1.57 psf) (<0.001cfm/ft²)
300 Pa 0.001 L/S/m² (6.24 psf) (<0.001 cfm/ft²)
Air Permeance (ASTM E ² 178-03)
75 Pa 0.000055 L/S.m ² .Pa
0.000117 ft³/min.m².Pa
300 Pa 0.000024 L/S.m ² Pa
0.000051 ft³/min.m².Pa
Sound Transmission Coefficient (STC) (ASTM E90-90 & E413-87)

May be applied in passes of uniform thickness from a

minimum of a half inch to a maximum of three inches

of a half inch to a maximum of two inches. ASTM Standard C1029 Surface Burning Characteristics (ASTM F84) Flame Spread 25 or less Smoke Developed Index 450 or less Water Absorption (ASTM D2842) 0.020 (am/cc) Water Vapor Transmission (calculated) (ASTM E96) 0.9 perms @ 2" Air Infiltration (ASTM F283-04) 75 Pa 0.001 L/S/m² (1.57 psf) (<0.001cfm/ft²) 300 Pa 0.001 L/S/m2 (6.24 psf) (<0.001 cfm/ft2) Air Permeance (ASTM E2178-03) 75 Pa 0 000055 L/S m²Pa 0.000117 ft3/min.m22Pa 300 Pa 0 000024 L/S m²Pa 0.000051 ft3/min.m2Pa

May be applied in passes of uniform thickness from a minimum

Min. 40°F Max. 120°F May be applied in passes of uniform thickness up to a maximum of six inches. ASTM Standard C1029 Surface Burning Characteristics (ASTM E84) Flame Spread 25 or less Smoke Developed Index 450 or less Fungi Resistance (ASTM G21) Zero Rating Air Leakage Rate (ASTM E283) < 0.02 (L/s)/m² Compressive Strength (ASTM D1621) Apparent Density (ASTM D1622) 0.5 pcf (Normal) Open-cell Content (ASTM D2856) Tensile Strength (ASTM D1623) Permeability (ASTM E96) 21 perm-in Dimensional Stability (ASTM D2126) <15% Change in Volume

THICKNESS

3 5"

5.5"

SUBSTRATE APPLICATION

R-VALUE

R-3.8

R-13

R-19

R-19

36 (STC)

abaa

Hybrid Insulation Solutions









Hybrid Insulation Solutions

Hybrid insulation solutions offer custom insulation systems that adapt to your construction needs. The innovative systems can be created by applying multiple products in the same cavity or by separately installing both fiber glass and spray polyurethane foam insulation in the right areas of a home. Combining the proven performance of fiber glass insulation and the innovative product benefits of spray foam insulation creates flexible insulation systems that provide premium performance at an economical price.

Spray Foam and Batts/Rolls

- Fiber glass batts or rolls and spray polyurethane foam
- Superior thermal performance and advanced air isolation
- Layered application offers easy hybrid installation

Spray Foam and JM Spider Spray-in Insulation

- Premium hybrid insulation solution
- Easy spray-in for any shaped cavity
- Adaptable to almost any home design

BIBS® HP

- Closed-cell spray foam and fiber glass insulation
- BIBS mesh
- Innovative, adaptable application











5% Pre-consumer 20% Post-consumer SCIENTIFIC CERTIFICATION SYSTEM



PLUS FORMALDEHYDE FREE SCIENTIFIC CERTIFICATION SYSTEMS



PLUS FORMALDEHYDE FREE SCIENTIFIC CERTIFICATION SYSTEMS SCS-IAQ-02107





Better Living from the Inside Out®

Johns Manville Insulation Systems 717 17th Street Denver, CO 80202 (800) 654-3103 specJM.com

BIC-564 03/12 (Replaces 03/11) © 2012 Johns Manville. Printed in USA.