Johns Manville
A Berkshire Hathaway Company

UNITED STATES

COMMERCIAL + RESIDENTIAL

Building Insulation Guide

Here at Johns Manville, we are more than your supplier; we are your channel partner. When you do business with JM, you can count on it being a partnership for the long haul, with the support that enables you to run your business your way. With access to one of the industry's broadest ranges of insulation solutions, you can meet virtually every demand and get the most from your inventory.

A BERKSHIRE HATHAWAY COMPANY

Johns Manville is proud to be part of Berkshire Hathaway, one of the most respected, financially sound companies in the world. We operate with unquestionable integrity and stability and have unmatched resources to invest in developing future insulation solutions designed to exceed our customers' needs.

MORE THAN 160 YEARS OF EXPERIENCE AT WORK

When Johns Manville was founded in 1858, we focused on developing materials to make diverse environments stronger, durable, more energy-efficient and comfortable. We also believed in building relationships by providing outstanding service and support. The world has changed, but our principles still hold true today.

COMPREHENSIVE INSULATION EXPERTISE AND SUPPORT

JM TechConnect℠ is the single source for JM customers to access comprehensive insulation knowledge and installation advice from our dedicated technical experts – in person, by phone or online. We can help you quickly solve even the most complex insulation challenges. ***Connect with us at 800 654 3103.***

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*JM insulation products do not contain 100% recycled content. Actual recycled content will vary by product and manufacturing location. Please see specific Product Data Sheet or call 800 654 3103 for more information.

FIBERGLASS

As one of America's most common insulation materials, JM Formaldehyde-free™ thermal and acoustical fiberglass insulation is comprised of long, resilient glass fibers bonded with a thermosetting resin. ***Where to use: walls, ceilings, floors and attics.***

ComfortTherm®

BATTS AND ROLLS

Wrapped in plastic for dust-free and itch-free handling and installation.

ADVANTAGES

Thermally Efficient: Effective resistance to heat transfer, with R-values up to R-30.

Formaldehyde-Free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces sound transmission through exterior and interior walls, floor and ceiling assemblies.

Fire-Resistant: Can be left exposed where building codes permit. Flame Spread of 25 or less and Smoke Developed of 50 or less.

Resilient Inorganic Glass: No rotting, mildew or deterioration. Also noncorrosive to pipes, wiring and metal studs.

Superior Performance: Stable bonded glass fibers will not slump within the wall cavity, settle or break down during normal applications.

AVAILABILITY*

R-Values: R-13 – R-30

Widths: Wood Stud (15" and 23") Attics and Steel Stud (16" and 24")

Lengths: Batts (48" and 93") or Rolls (32″)

Thicknesses: Various. Engineered for maximum performance within the cavity.

Unfaced Fiberglass

BATTS AND ROLLS

Available for wood or steel stud framing. May be used with a separate vapor retarder when moisture control is required.

ADVANTAGES

Thermally Efficient: Effective resistance to heat transfer, with R-values up to R-49.

Formaldehyde-Free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces sound transmission through exterior and interior walls, floor and ceiling assemblies.

Fire-Resistant: Flame Spread of 25 or less and Smoke Developed of 50 or less.

Resilient Inorganic Glass: No rotting, mildew or deterioration. Also noncorrosive to pipes, wiring and metal studs.

Superior Performance: Stable bonded glass fibers will not slump within the wall cavity, settle or break down during normal applications.

AVAILABILITY*

R-Values: R-11 – R-49

Widths: Wood Stud (15" and 23") or Steel Stud (16" and 24")

Lengths: Batts (48", 93", 96" and 105") or Rolls (up to 40')

Thicknesses: Various. Engineered for maximum performance within the cavity.

See complete data sheet at* **www.jm.com. *Actual color of products may vary from image. Product image typical of material produced in the U.S.A.*

Kraft- and Foil-Faced Fiberglass

BATTS AND ROLLS

Helps control moisture in exterior walls.

ADVANTAGES

Thermally Efficient: Effective resistance to heat transfer, with R-values up to R-49 for kraft-faced and up to R-30 for foil-faced.

Formaldehyde-Free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces sound transmission through exterior and interior walls, floor and ceiling assemblies.

Fire-Resistant: ***Foil-faced:*** Flame Spread of 75 or less and Smoke Developed of 150 or less, ***Kraft-faced:*** no rating.

Resilient Inorganic Glass: No rotting, mildew or deterioration. Also noncorrosive to pipes, wiring and metal studs.

Superior Performance: Stable bonded glass fibers will not slump within the wall cavity, settle or break down during normal applications.

AVAILABILITY*

R-Values: R-11 – R-49

Widths: Wood Stud (15" and 23") or Steel Stud (16" and 24")

Lengths: Batts (48", 93", 94", 96" and 105") or Rolls (up to 70'6")

Thicknesses: Various. Engineered for maximum performance within the cavity.

Cavity-SHIELD™

BATTS

For use in multifamily construction in the concealed spaces between floors.

ADVANTAGES

Noncombustible: ASTM E 136, NFPA 13 Section 9.2.1 compliant

Simple Installation: No special equipment required.

Cost-effective: Economical alternative to blow-in insulation.

Formaldehyde-free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces transmission of sound through floor or ceiling assemblies.

Fire Resistant: Flame Spread of 25 or less and Smoke Developed of 50 or less (ASTM E84), Class A1

Durable Inorganic Glass: Will not rot, mildew or deteriorate and is noncorrosive to pipes, wiring and sheet metal ducts.

AVAILABILITY*

Widths: 16", 19" and 24"

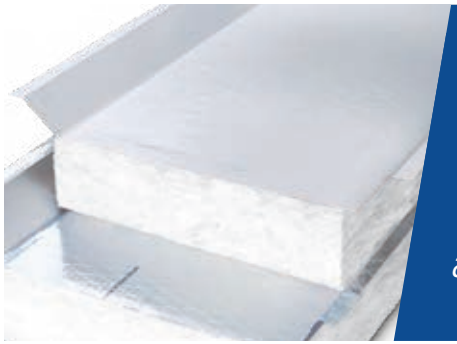
Lengths: 48"

Thicknesses: 8", 10" and 12"

FIBERGLASS

Panel Deck FSK-25 and PSK† Faced

FIBERGLASS BATTS



Extra-wide tabs extend the full length along sides for modular roof deck applications.

ADVANTAGES

Thermally Efficient: Effective resistance to heat transfer, with R-values up to R-30.

Formaldehyde-Free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces sound transmission through exterior and interior walls, floor and ceiling assemblies.

Fire-Resistant: Flame Spread of 25 or less and Smoke Developed of 50 or less. Can be left exposed where building codes permit.

Resilient Inorganic Glass: No rotting, mildew or deterioration. Also noncorrosive to pipes, wiring and metal studs.

Superior Performance: Stable bonded glass fibers will not slump, settle or break down during normal applications.

AVAILABILITY*

R-Values: R-19 and R-30

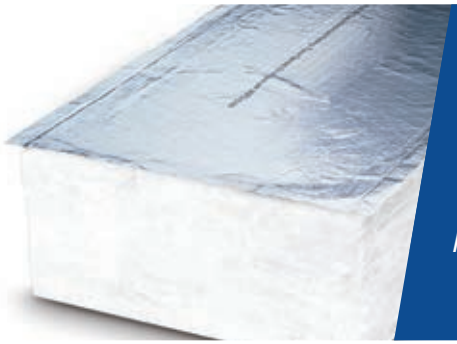
Widths: 23" and 24"

Lengths: 48" and 93"

Thicknesses: 6.5" and 10.25"

FSK-25 Faced Fiberglass

BATTS



Flame-resistant faced insulation can be used as a vapor retarder.

ADVANTAGES

Thermally Efficient: Effective resistance to heat transfer, with R-values up to R-30.

Formaldehyde-Free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces sound transmission through exterior and interior walls, floor and ceiling assemblies.

Fire-Resistant: Flame Spread of 25 or less and Smoke Developed of 50 or less. Can be left exposed where building codes permit.

Resilient Inorganic Glass: No rotting, mildew or deterioration. Also noncorrosive to pipes, wiring and metal studs.

Superior Performance: Stable bonded glass fibers will not slump, settle or break down during normal applications.

AVAILABILITY*

R-Values: R-11–R-38

Widths: 16" and 24"

Lengths: 48" and 96"

Thicknesses: Various. Engineered for maximum performance within the cavity.

See complete data sheet at* **www.jm.com. *Product image typical of material produced in the U.S.A. Actual color of products may vary from image. †Polypropylene-scrim-kraft.*

JM Climate Pro®

BLOW-IN FIBERGLASS

Fits hard-to-reach cavities and corners for easier and faster installation.

ADVANTAGES

Easy Installation: Insulates attics or spaces of all shapes and sizes without cutting or fitting.

Complete Coverage: Effective in tight spaces, areas with large amounts of cross-bridging or small gaps and voids.

Thermally Efficient: Effective resistance to heat transfer. No settling; no loss of R-value following installation.

Formaldehyde-Free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces sound transmission through exterior and interior walls, floor and ceiling assemblies.

Fire-Resistant: Flame Spread of 25 or less and Smoke Developed of 50 or less.

Resilient Inorganic Glass: No rotting, mildew or deterioration. Also noncorrosive to pipes, wiring and metal studs.

Superior Performance: Stable bonded glass fibers will not slump, settle or break down during normal applications.

AVAILABILITY*

Coverage: 73 ft²/bag at R-30

JM Spider® Plus

BLOW-IN FIBERGLASS

Fibers interlock into cavities to fill gaps and voids with no adhesive or netting.

ADVANTAGES

Fast Drying: Dries immediately once installed.

Complete Coverage: Effective in tight spaces, areas with large amounts of cross-bridging or small gaps and voids.

Thermally Efficient: Effective resistance to heat transfer, with R-values up to R-25 in a 2'x 6' steel stud cavity.

Formaldehyde-Free: Will not off-gas formaldehyde in the indoor environment.

Sound Control: Reduces sound transmission through exterior and interior walls, floor and ceiling assemblies.

Fire-Resistant: Flame Spread of 25 or less and Smoke Developed of 50 or less.

Resilient Inorganic Glass: No rotting, mildew or deterioration. Also noncorrosive to pipes, wiring and steel studs.

AVAILABILITY*

Coverage: Wood Stud (43.6 ft²/bag at R-22)or Steel Stud40 ft²/bag at R-24

FIBERGLASS SPECIFICATION COMPLIANCE

Product	ASTM Standards	Flame Spread ASTM E84	Smoke Development ASTM E84	Critical Radiant Flux ASTM E970	Water Vapor Permeance Facing ASTM E96	Water Vapor Sorption ASTM C1104	Odor Emission ASTM C1304	Corrosiveness ASTM 665	Fungi Resistance ASTM C1388	VOC Emissions ASTM ES Section 011350	Combustion Characteristics ASTM E136
ComfortTherm Fiberglass	**ASTM C665, Type II, Class A, Category 1 or 2** [Standard ComfortTherm is Category 1 (vapor retarder). ComfortTherm for hot, humid climates is Category 2 (non-vapor retarder).]	≤25	≤50	>0.12 W/cm² (0.11 Btu/ft²s)	0.5 Perms (29 ng/Pa-s-m²)	5% or less by weight	Pass	Pass	Pass	Pass	N/A*
Unfaced Fiberglass	**ASTM C665, Type I**				N/A						Pass
Cavity-SHIELD											
Kraft-Faced Fiberglass	**ASTM C665, Type II, Class C, Category 1**	N/A	N/A		1.0 Perms (57 ng/Pa-s-m²)						N/A*
Foil-Faced Fiberglass	**ASTM C665, Type III, Class B, Category 1**	≤75	≤150		0.05 Perms (3 ng/Pa-s-m²)						
FSK-25 Faced	**ASTM C665, Type III, Class A, Category I**	≤25	≤50								
Panel Deck FSK-25											
Panel Deck PSK	**ASTM C665, Type II, Class A, Category 1**				0.1 Perms (6 ng/Pa-s-m²)						
JM Climate Pro Blow-In/ JM Attic Protector	**ASTM C764, Type I**				N/A						Pass
JM Spider Plus											

The NAIMA R-Value Certification program is a voluntary program that allows manufacturers to certify that the R-values they advertise for their products are consistent with the products' actual performance. JM Fiberglass Batts and Rolls have been tested by an independent third-party laboratory, and meet the labeled-R-value as required by the Federal Trade Commission (FTC).

NAIMA

Designed to meet the FTC's thermal performance requirements

16 C.F.R. Part 460

*Fiberglass is noncombustible.

MINERAL WOOL

Similar to fiberglass, the inorganic fibers of JM Mineral Wool are developed from basalt (a type of volcanic rock). ***Where to use: interior and exterior walls, basement walls and heated crawl spaces.***

TempControl®

BATTS

Provides thermal comfort when used in exterior walls, basements and heated crawl spaces.

ADVANTAGES

Thermally Efficient: Effective resistance to heat transfer with R-values up to R-30.

Fire-Resistant: Melting point in excess of 2000˚F (1093˚C). Flame Spread of 0 and Smoke Developed of 0.

Durable Inorganic FIbers: No growth of fungi. No sustaining of vermin.

AVAILABILITY*

R-Values: R-15, R-23 and R-30

Sizes: Wood Stud (15.25" x 47", 23" x 47") or Steel Stud (16" x 48", 24" x 48")

Thicknesses: 3.5", 5.5" and 7.25"

Sound & Fire Block®

BATTS

Reduces unwanted noise and delays fire from spreading between floors and rooms.

ADVANTAGES

Sound Control: Absorbs sound and improves wall assembly STC ratings by up to 10 dB.

Fire-Resistant: Melting point in excess of 2000˚F (1093˚C). Flame Spread of 0 and Smoke Developed of 0.

Durable Inorganic Fibers: No growth of fungi. No sustaining of vermin.

AVAILABILITY*

Size: 15.25" x 47"

Thickness: 3"

See complete data sheet at* ***www.jm.com.* *Actual color of products may vary from image. Product image typical of material produced in the U.S.A.*

MinWool® Sound Attenuation Fire Batts (SAFB)

BATTS

Reduces sound transmission with lightweight, flexible batts.

ADVANTAGES

Sound Control: Absorbs sound and can improve wall assembly STC ratings by up to 10 dB.

Fire-Resistant: Melting point in excess of 2000˚F (1093˚C). Flame Spread of 0 and Smoke Developed of 0.

Durable Inorganic Fibers: No growth of fungi. No sustaining of vermin.

Compression Packaging: Get more product per bag, saving on storage and freight costs.

AVAILABILITY*

Sizes: 16" x 48" and 24"x 48"

Thicknesses: 1.5"– 8"

(Special sizes and thicknesses available upon request. Minimum order quantities may apply.)

MinWool® Safing

BATTS

Provides a fire-rated seal when installed between spandrel panel and floor slab.

ADVANTAGES

Fire-Resistant: Melting point in excess of 2000˚F (1093˚C).
Unfaced: Flame Spread of 0 and Smoke Developed of 0.
Faced: Flame Spread of 25 or less and Smoke Developed of 5 or less.

Durable Inorganic Fibers: No growth of fungi. No sustaining of vermin.

(Available in Unfaced and Faced)

AVAILABILITY*

Size: 24" x 48"

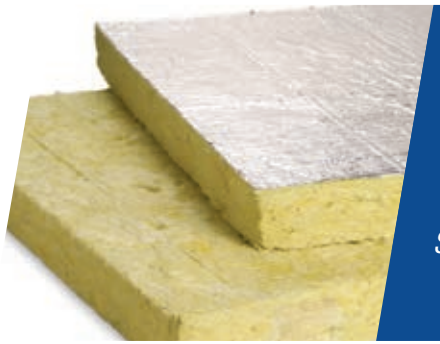
Thickness: 4"

(Special sizes and thicknesses available upon request. Minimum order quantities may apply.)

MINERAL WOOL

MinWool® Curtainwall

BOARDS



Provides superior fire resistance through curtainwall spandrel systems.

ADVANTAGES

Fire-Resistant: Melting point in excess of 2000˚F (1093˚C).
Unfaced: Flame Spread of 0 and Smoke Developed of 0.
Faced: Flame Spread of 25 or less and Smoke Developed of 5 or less.

Sound Control: Excellent sound absorption to reduce sound transmission.

Durable Inorganic Fibers: No growth of fungi. No sustaining of vermin.

Densities: Curtainwall 40 (4.0 pcf) and Curtainwall 80 (8.0 pcf).

(Available in Unfaced and Faced)

AVAILABILITY*

Size: 24" x 48"

Thicknesses: 1.5" – 4"

Nominal Density: 4 pcf and 8 pcf

(Special sizes and thicknesses available upon request. Minimum order quantities may apply.)

MinWool® Window Wall

BOARDS

Provides superior fire resistance in glass and metal window wall systems.

ADVANTAGES

Fire-Resistant: Melting point in excess of 2000˚F (1093˚C).
Unfaced: Flame Spread of 0 and Smoke Developed of 0.
Faced: Flame Spread of 25 or less and Smoke Developed of 5 or less.

Sound Control: Excellent sound absorption to reduce sound transmission.

Durable Inorganic Fibers: No growth of fungi. No sustaining of vermin.

(Available in Unfaced and Faced)

AVAILABILITY*

Size: 24" x 48"

Thicknesses: 1.5" – 4"

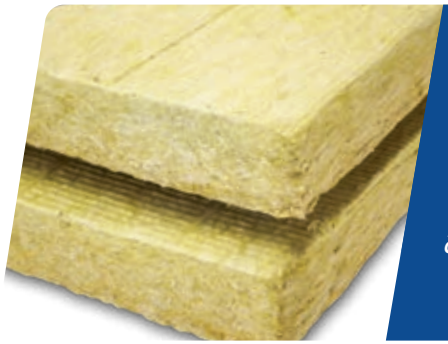
Actual Density: 3.5 pcf

(Special sizes and thicknesses available upon request. Minimum order quantities may apply.)

*See complete data sheet at **www.jm.com**. Actual color of products may vary from image. Product image typical of material produced in the U.S.A.
Available thicknesses vary based on density. Please visit **www.jm.com for more details.

JM CladStone™ Water & Fire Block

BOARDS



Flame-resistant continuous insulation for rainscreen applications.

ADVANTAGES

Water-Repellent: Repels water to ensure drainage when applied as part of a proper exterior wall cavity system.

Fire-Resistant: Melting point in excess of 2000˚F (1093˚C). Flame Spread of 0 and Smoke Developed of 0.

Durable Inorganic Fibers: No growth of fungi. No sustaining of vermin.

Densities: CladStone 45 (4.5 pcf), CladStone 60 (6.0 pcf), CladStone 80 (8.0 pcf) , and CladStone 110 (11.0 pcf)

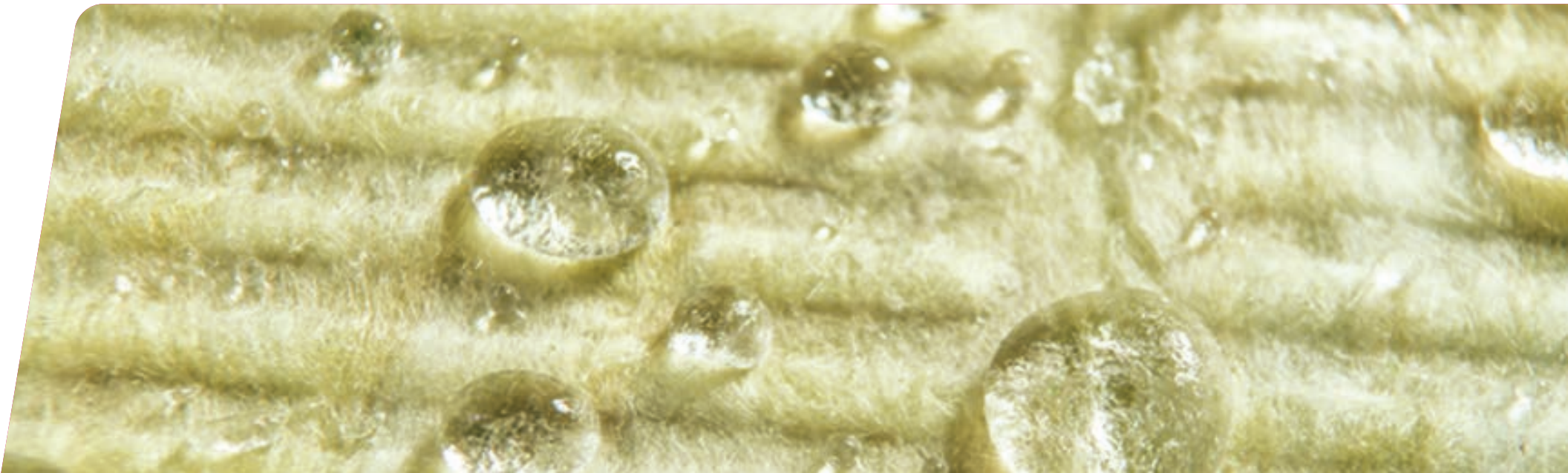
AVAILABILITY*

Sizes: 16" x 48" and 24" x 48"

Thicknesses: 1"- 7" **

Actual Density: 4.5 pcf, 6.0 pcf, 8.0 pcf, and 11.0 pcf

(Special sizes and thicknesses available upon request. Minimum order quantities may apply.)



MINERAL WOOL SPECIFICATION COMPLIANCE

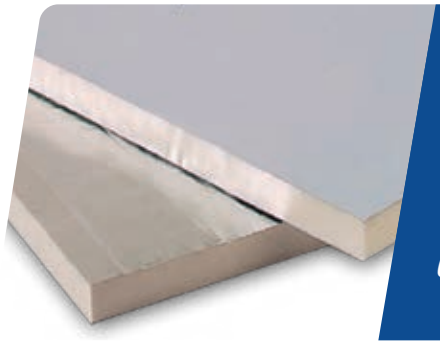
Product	ASTM Standards	Thermal Resistance ASTM C518	Flame Spread ASTM E84	Smoke Development ASTM E84	Critical Radiant Flux ASTM E970	Water Vapor Permeance Facing ASTM E96	Water Vapor Sorption ASTM C1104	Odor Emission ASTM C1304	Corrosiveness ASTM C665	Fungi Resistance ASTM C1338	Combustion Characteristics ASTM E136	ASTM C612	ASTM C356	ASTM C 1335
TempControl®	**ASTM C665, Type 1**	R-15, R-23, R-30	0	0	>0.12 W/cm² (0.11 Btu/ft²s)	N/A	5% or less by weight	Pass	Pass	Pass	Pass	N/A	N/A	N/A
Sound & Fire Block®		N/A												
MinWool® SAFB		R-value at 75°F, 3.7 per inch of thickness					<1% by weight; <0.02% by volume at 120°F (49°C), 95% RH							
MinWool® Safing	***Unfaced:*** **ASTM C665, Type 1** ***Faced:*** **ASTM C665 Type III Class A, Category 1**	N/A	*Unfaced* 0; *Faced* ≤25	*Unfaced* 0; *Faced* ≤5	N/A	0.02 perms, maxi-mum						Type 1–4		
MinWool® Curtainwall 40 | 80		R-value R4–R-4.2 per inch												
MinWool® Window Wall														
CladStone™ Water & Fire Block 45 | 60	**ASTM C665, Type 1**	R-4.3 per inch	0	0		Unfaced, 50 perms as tested	Absorbs 0.03% by volume					Type IA, IB, II, III, IVA, IVB	Linear shrinkage <2% 1200° F (650° C) Linear shrinkage < 2% 1200° F (650° C)	Shot content less than 25% Shot content less than 25%
CladStone™ Water & Fire Block 80 | 110		R-4.2 per inch					Absorbs 0.11% by volume							

One source.
One call.
One shipment.

With the industry's most complete line of insulation solutions, JM is your one-stop shop. You can receive the complete combination of products you need, all on one truckload.

It's our way of adapting our business to best serve yours.

AP™ Foil-Faced Foam Sheathing



Provides moisture, heat and air control, and eliminates major thermal bridges that cause heat loss.†

†When installed properly.

ADVANTAGES

Thermally Efficient: One of the highest energy efficiencies, inch for inch with effective resistance to heat transfer.

Water-Resistive Barrier: Meets the ICC-ES AC71 acceptance criteria.

Vapor Barrier: Class I vapor retarder at one inch.

Air Barrier: Meets the Air Barrier Association of America boardstock criteria, when properly installed.

Lightweight: Easy to handle and may be cut with a utility knife or saw.

AVAILABILITY*

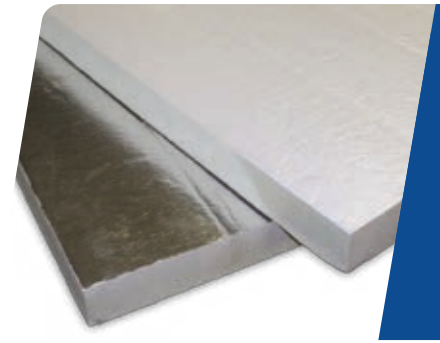
R-Values: R-2.7–R-28

Sizes: 48" x 96", 48" x 108" and 48" x 120"

Thicknesses: 0.5"– 4.5"

Facings: Silver/Opaque

CI Max® Foam Sheathing



High-performing rigid foam sheathing designed for exposed interior applications.

ADVANTAGES

Thermally Efficient: One of the highest energy efficiencies, inch for inch. Effective resistance to heat transfer, with R-values up to R-26.

Vapor Barrier: Maintains a minimum thickness of one inch and qualifies as a Class I vapor retarder.

Lightweight: Easy to handle and may be cut with a utility knife or saw.

AVAILABILITY*

R-Values: R-2.7–R-26

Size: 48" x 96"

Thicknesses: 0.5"– 4"

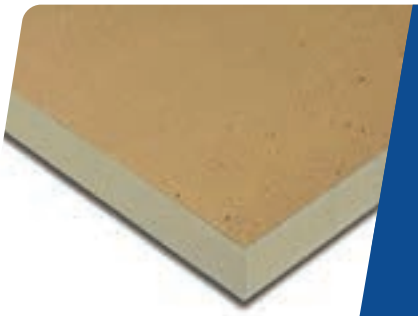
Facings: Non-Printed White/ Printed Silver, Non-Printed Silver/Printed

*See complete data sheet at **www.jm.com**. Actual color of products may vary from image. Product image typical of material produced in the U.S.A.*

SULATION

Rigid polyisocyanurate foam sheathing insulation for use in commercial and residential construction where continuous insulation and/or high thermal efficiency is required. ***Where to use: AP™ Foil: interior and exterior walls, ceilings and crawl spaces; CI Max®: exposed interiors, masonry walls and below-grade basement walls; R-Panel®: roofs.***

R-Panel® Roof Insulation



Rigid board used above the roof deck to provide high thermal efficiency.

ADVANTAGES

Thermally Efficient: Effective resistance to heat transfer, with R-values up to R-23.6.

Universal Facer: Compatible with BUR, modified bitumen and single-ply membrane systems.

Clean Air: Meets Clean Air Act Amendments of 1990.

Miami-Dade County Product Control Approved: Complies with the Florida Building Code, including the High Velocity Hurricane Zone of the Florida Building Code.

Lightweight: Easy to handle and may be cut with a utility knife or saw.

AVAILABILITY*

R-Values: R-5.7 – R-23.6

Size: 48"x 96"

Thicknesses: 1"– 4"

POLYISO CONTINUOUS INSULATION SPECIFICATION COMPLIANCE

Product	ASTM Standards	Flame Spread ASTM E84	Smoke Development ASTM E84	Water Vapor Transmission ASTM E96	Compressive Strength ASTM D1621	Dimensional Stability ASTM D2126	Water Absorption ASTM C209	Service Temperature	R-Value Per Inch
AP™ Foil-Faced Foam Sheathing	**ASTM C1289, Type I, Class 1**	4": ≤25	≤ 450	0.05 perms (3 ng/Pa-s-m²)	≥16 psi (110 kPa)	N/A	0.1% volume	-100 to 250°F	6.0
CI Max® Foam Sheathing		4": ≤25		0.02 perms (1.4 ng/Pa-s-m²)			<0.6% volume		
R-Panel® Roof Insulation	**ASTM C1289-01, Type II, Class I, Grade 2**	≤75		<1 perms (57.5 ng/Pa-s-m²)	≥20 psi (138 kPa)†	2% max, 7 days (length & width)	<1% volume		5.7 LTTR

†Also available in 25 psi.

SPRAY FOAM

Johns Manville spray foam delivers high yield, superior performance and exceptional sprayability, making it an ideal choice for air-sealing and insulating energy-efficient buildings. ***Where to use: interior and exterior walls, unvented and vented attics, floors, ceilings and crawl spaces.***

JM Corbond® III *Spray Polyurethane Foam*

Premium closed-cell product delivers high R-value per inch for superior thermal performance.

ADVANTAGES

Complete Coverage: Expands and adheres without shrinking or settling.

Energy-Efficient: Reduces air and moisture infiltration to the building envelope and provides continuous coverage for high thermal performance.

Air Barrier: Prevents leaks when installed at 1" thickness or more.

Moisture Performance: Resists mold growth; meets current vapor retarder codes.

Wide Application Temperature Range: Can be applied between 20°F and 120°F, delivering consistent performance with seasonal versatility.

Faster Installation: Spray easily in a single pass from a minimum of .5" to a maximum of 3.5". Multiple immediate passes, with no wait time, may also be applied.*

Commercial Approvals: NFPA 285 assembly approvals. Appendix X approval for application in unoccupied attics and crawl spaces without a prescriptive ignition barrier or coating.

AVAILABILITY*

R-Value: R-7 per inch

Thicknesses: May be applied in passes of uniform thickness from .5" to 4"

Density: 2.0 lbs/ft^3

JM Corbond® IV *Spray Polyurethane Foam*

Premium closed-cell, HFO blown product delivers high R-value per inch for superior thermal performance.

ADVANTAGES

HFO Blowing Agent: Meets HFC Phase-Out Requirements, zero ODP, with low GWP.

Complete Coverage: Expands and adheres without shrinking or settling.

Energy-Efficient: Reduces air and moisture infiltration to the building envelope and provides continuous coverage for high thermal performance.

Air Barrier: Seals gaps and prevents leaks when installed at 1" thickness or more.

Moisture Performance: Resists mold growth; meets current vapor retarder codes as a Class II vapor retarder.

Wide Application Temperature Range: Can be applied between 20°F and 120°F, delivering consistent performance with seasonal versatility.

Faster Installation: Spray easily in a single pass from a minimum of 0.5"to a maximum of 4". Multiple immediate passes, with no waittime,may also be applied.*

Commercial Approvals: NFPA 285 assembly approvals. Appendix X approval for application in unoccupied attics and crawl spaces without a prescriptive ignition barrier or coating.

AVAILABILITY*

R-Value: R-7 per inch

Thicknesses: May be applied in a single pass from a minimum of 0.5"to a maximum of 4.0".

JM Corbond® Open-Cell *Spray Polyurethane Foam*

Lower-density, nonstructural, open-cell SPF that delivers high yield at an excellent value.

ADVANTAGES

Energy-Efficient: Helps to improve the energy efficiency by filling in gaps and cracks while creating an air seal.

Air Barrier: Expands 120 times its volume to seal voids, gaps and crevices. Air-impermeable at 3.75".

Sound Transmission: Performs well acoustically when used in an assembly.

Adhesion: Exceptional when properly installed.

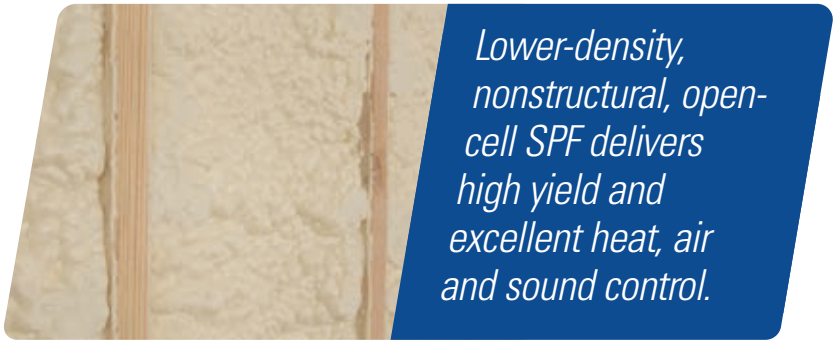
Installation: Provides high yield with superior sprayability at an exceptional value. Meets requirements for application without an ignition barrier in unoccupied and unvented attics when properly installed.

AVAILABILITY*

R-Value: R-3.8 per inch

Thicknesses: May be applied in passes of uniform thickness from a minimum of 1" to a maximum of 12".

JM Corbond® Open-Cell Appendix X *Spray Polyurethane Foam*



Lower-density, nonstructural, open-cell SPF delivers high yield and excellent heat, air and sound control.

ADVANTAGES

Energy-Efficient: Helps to improve the energy efficiency by filling in gaps and cracks while creating an air seal.

Air Barrier: Air-impermeable at 3.5".

Sound Transmission: Performs well acoustically when used in an assembly.

Installation: Provides high yield with superior sprayability at an exceptional value and low odor. Meets requirements for application without an ignition barrier in attics and crawl spaces.

AVAILABILITY*

R-Value: R-3.7 per inch

Thicknesses: May be applied in passes of uniform thickness from a minimum of 2" to a maximum of 11.5".

See complete data sheet at* **www.jm.com. *Actual color of products may vary from image. Product image typical of material produced in the U.S.A.*

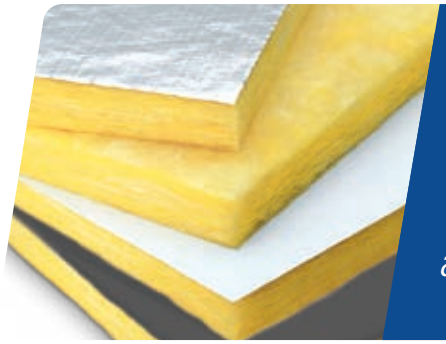
SPRAY FOAM SPECIFICATION COMPLIANCE

Product	SPF Acceptance Criteria ASTM AC377	Flame Spread ASTM E84	Smoke Development ASTM E84	Air Leakage Rate ASTM E283	Fungi Resistance ASTM C1388	Dimensional Stability ASTM D2126	Nominal Density ASTM D1622	Open-Cell Content ASTM 1940	Closed-Cell Content ASTM D6226	Compressive Strength (1") ASTM D1621	Water Absorption ASTM D2842	Water Vapor Transmission ASTM E96	Air Permeance ASTM E2178-03	Sound Transmission ASTM E90-90 & ASTM E413-87
JM Corbond III	Pass	≤ 25	≤ 450	N/A	Pass	<15% change in volume	2.0 pcf	N/A	>90%	36 psi	0.9%	0.61 perms @ 1.5"	0.00055 (L/s)/m at 75 Pa	36 (STC)
JM Corbond IV														
JM Corbond Open-Cell							0.5 pcf (normal)	>92%	N/A	N/A	N/A	26.5 perms @ 2"	< 0.02 (L/s)/m	38 (STC)
JM Corbond Open-Cell Appendix X				<0.02 (L/S/m²) @75pa				>95%				9 perms at 3.5"		

SPECIALTY

Made from inorganic glass fibers and bonded with a thermosetting resin, JM Insul-SHIELD® is a series of flexible, semi-rigid or rigid thermal and acoustical fiberglass boards for custom curtainwall applications. ***Where to use: acoustical ceilings, recording studios, curtainwall cavities, etc.***

Insul-SHIELD® Unfaced, Black, FSK Faced Boards



Thermal and acoustical fiberglass insulating boards for custom curtainwall applications.

ADVANTAGES

Acoustically Efficient: Reduces transmission of sound through roofs, ceilings, floors and walls.

Fire-Resistant and Noncombustible: Flame Spread of 25 or less and Smoke Developed of 50 or less. Unfaced I/S 300 is noncombustible.

Moisture-Resistant: Vapor-retarder facings resist water vapor transmission.

Noncorrosive: Prevents acceleration of corrosion to pipes, wiring and metal studs.

Durable: Will not rot, mildew or otherwise deteriorate, preventing slumping and uninsulated voids.

Easy to Handle: Lightweight; maintains its physical integrity during handling.

AVAILABILITY*

R-Values: R-4.3 – R-16.7, depending on thickness and density

Sizes: 24" x 48" and 48" x 96"

Thicknesses: 1" – 4"

Facings: Unfaced, FSK Faced and Black Mat

Density: 3.0 pcf and 6.0 pcf

Insul-SHIELD® Black Faced Rolls

Opaque surface absorbs light, eliminating concern about backscatter.

ADVANTAGES

Acoustically Efficient: Reduces transmission of sound through ceilings and walls.

Fire-Resistant: Flame Spread of 25 or less and Smoke Developed of 50 or less.

Noncorrosive: Prevents acceleration of corrosion to pipes, wiring and metal studs.

Durable: Will not rot, mildew or otherwise deteriorate, preventing slumping and uninsulated voids.

Easy to Handle: Maintains its physical integrity during handling.

AVAILABILITY*

R-Values: R-4.2 at 1", R-8 at 2"

Sizes: 48" x 50' and 48" x 100'

Thicknesses: 1" and 2"

Facing: Black

See complete data sheet at* ***www.jm.com**. Actual color of products may vary from image. Product image typical of material produced in the U.S.A.*

INSUL-SHIELD® SPECIFICATION COMPLIANCE

Product	ASTM Standards	Flame Spread ASTM E84	Smoke Development ASTM E84	Max Use Temp ASTM C411	Water Vapor Permeance Facing ASTM E96	Water Vapor Sorption ASTM C1104	Odor Emission ASTM C1304	Corrosiveness ASTM C665	Fungi Resistance ASTM C1388	Combustion Characteristics ASTM E136	10% Linear Shrinkage ASTM C356
Unfaced Board	**ASTM C612, Type IA or Type IB (IS150, IS300, IS600)**	≤25	≤50	350°F	N/A	5% or less by weight	Pass	Pass	Pass	*IS300,* Pass ***Black:*** IS300: Pass	None
Black Faced Board	**ASTM C612, Type IA or Type IB**										
FSK Faced Board					0.05 perms (3 ng/ Pa-s-m²)						
Black Faced Rolls	**ASTM C612, Type IA, Category 1**			250°F	N/A					N/A	

SPECIALTY

GoBoard® is an ultra-lightweight yet durable, waterproof alternative to cement and other heavy tile backer boards. ***Where to use: floors, countertops, walls, showers, ceilings, tub surrounds, and vanities.***

GoBoard® Tile Backer Board

Durable, ultra-lightweight, waterproof tile backer board.

ADVANTAGES

Fast Installation: Complete shower tile projects in half the time or less.

Ultra-Lightweight: Up to 80% lighter than cement boards, yet engineered for strength and durability.

Easy to Cut, Handle and Install: Can be quickly cut right where it's installed with a basic utility knife without crumbling or disintegrating.

Waterproof: Seal only the board joints and fastener locations with a waterproof sealant for a waterproof tile assembly.

AVAILABILITY*

R-Values: R-1.2 – R-10

Sizes: 3' x 5' and 4' x 8'

Board Weight: 0.4psf to 1psf (psf is lbs/ft²)

Thicknesses: 0.25" (floors and countertops), 0.5" and 0.625" (walls, showers, ceilings and floors), 1", 1.5" and 2" (benches, shelves, tub surrounds, vanities and countertops)

GOBOARD SPECIFICATION COMPLIANCE

Product	Dimensions (feet) ASTM C473	Thickness (inches) ASTM C473	Board Weight (lbs/ft²)	R-Value (°F-ft²-h/BTU) ASTM C518	Compressive Strength (avg. psi) ASTM D2394	Moisture Movement (%) ASTM D1037	Surface Burning Characteristics[1] ASTM E84	Waterproof ASTM D4068	WVT Permeance (perms) ASTM E96	Resistance to Fungi/Bacteria ASTM G21/G22	Freeze Thaw ASTM C666	Robinson Floor Test ASTM C627
GoBoard® (.25")	3' x 5', 4' x 8'	0.26	0.40	1.2	250	<0.07	Pass	Pass[2]	<1	No growth	>25	Light commercial
GoBoard® (.5")	3' x 5', 4' x 8'	0.47	0.50	2.3	200							
GoBoard® (.625")	4' x 8'	0.60	0.58	2.9								N/A
GoBoard® (1", 1.5", 2")	4' x 8'	1.0, 1.5, 2.0	0.62, 0.81, 1.0	5, 7.5, 10	125			Pass[3]				
GoBoard® Wedge	4'x4'	0.60	0.58	2.9	200			Pass[2]				Residential
GoBoard® Curb	4'x4'	1.0, 1.5, 2.0, 2.5	0.62, 0.81, 1.0, 1.19	5, 7.5, 10, 12.5	125			Pass[3]				N/A

See complete data sheet at* ***www.jm.com**. Actual color of products may vary from image. Product image typical of material produced in the U.S.A.*

[1]Per International Building Code Requirements, [2]ANSI 118.10 certified, [3]Pending

GoBoard® Shower System

Time saving versatile shower system that offers easy to do on-site shower pan customization.

ADVANTAGES

Fast Installation: Complete shower tile projects in half the time or less.

Ultra-Lightweight: Up to 80% lighter than cement boards, yet engineered for strength and durability.

Easy to Cut, Handle and Install: Can be quickly cut right where it's installed with a basic utility knife without crumbling or disintegrating.

Waterproof: Seal only the board joints and fastener locations with a waterproof sealant for a waterproof tile assembly.

AVAILABILITY*

R-Values: R-1.2 – R-10

Sizes: 3' x 5' and 4' x 8'

Board Weight: 0.4psf to 1psf (psf is lbs/ft²)

Thicknesses: 0.25" (floors and countertops), 0.5" and 0.625" (walls, showers, ceilings and floors), 1", 1.5" and 2" (benches, shelves, tub surrounds, vanities and countertops)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JOHNS MANVILLE

Johns Manville
A Berkshire Hathaway Company

JM Insulation Systems | 717 17th Street | Denver, CO 80202 | 800 654 3103 | www.jm.com

HIG-1224 03/24/21 (Replaces HIG-1224 06/20)