

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 TechConnectSM 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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
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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*

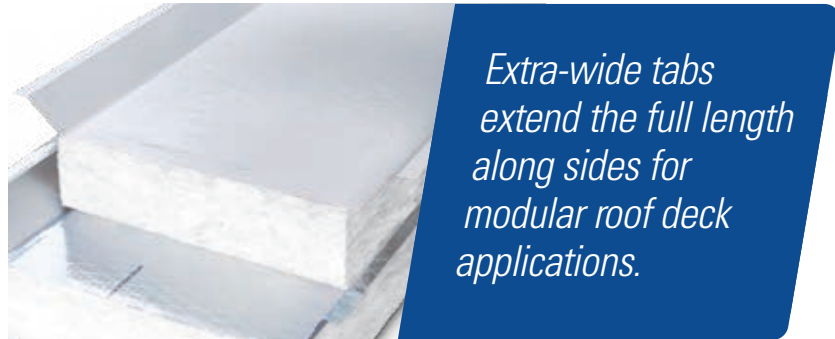
- Widths:** 16", 19" and 24"
- Lengths:** 48"
- Thicknesses:** 8", 10" and 12"

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 Stud 40 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 | | 0.5 Perms (29 ng/ Pa-s-m ²) | | | | | | N/A* |
| Unfaced Fiberglass Cavity-SHIELD | ASTM C665, Type I | | | | N/A | | | | | | Pass |
| Kraft-Faced Fiberglass | ASTM C665, Type II, Class C, Category 1 | N/A | N/A | | 1.0 Perms (57 ng/ Pa-s-m ²) | | | | | | |
| Foil-Faced Fiberglass | ASTM C665, Type III, Class B, Category 1 | ≤75 | ≤150 | >0.12 W/ cm ² (0.11 Btu/ ft ² s) | 0.05 Perms (3 ng/ Pa-s-m ²) | 5% or less by weight | Pass | Pass | Pass | Pass | N/A* |
| FSK-25 Faced Panel Deck FSK-25 | ASTM C665, Type III, Class A, Category I | | | | 0.1 Perms (6 ng/ Pa-s-m ²) | | | | | | |
| Panel Deck PSK | ASTM C665, Type II, Class A, Category 1 | ≤25 | ≤50 | | N/A | | | | | | |
| JM Climate Pro Blow-In/ JM Attic Protector | ASTM C764, Type I | | | | | | | | | | 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).



*Fiberglass is noncombustible.



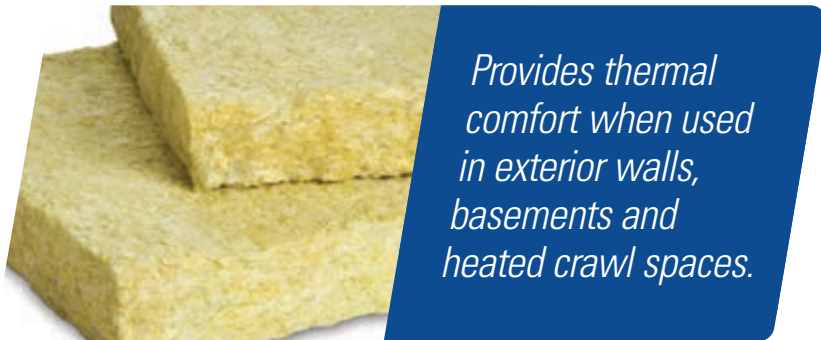
MINERAL WOOL

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.

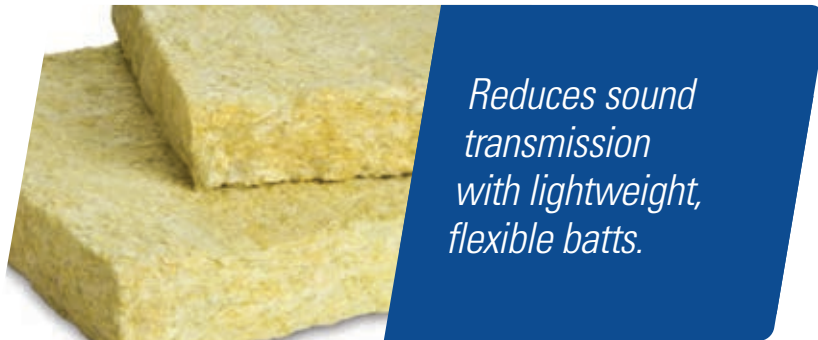
AVAILABILITY*

Size: 15.25" x 47"

Thickness: 3"

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*

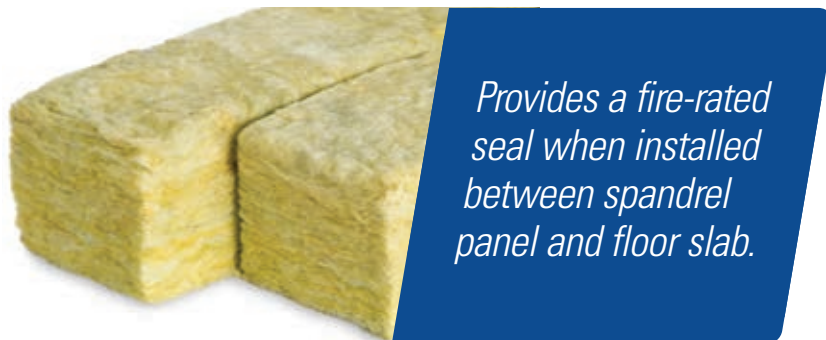
Sizes: 16" x 48" and 24" x 48"

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*

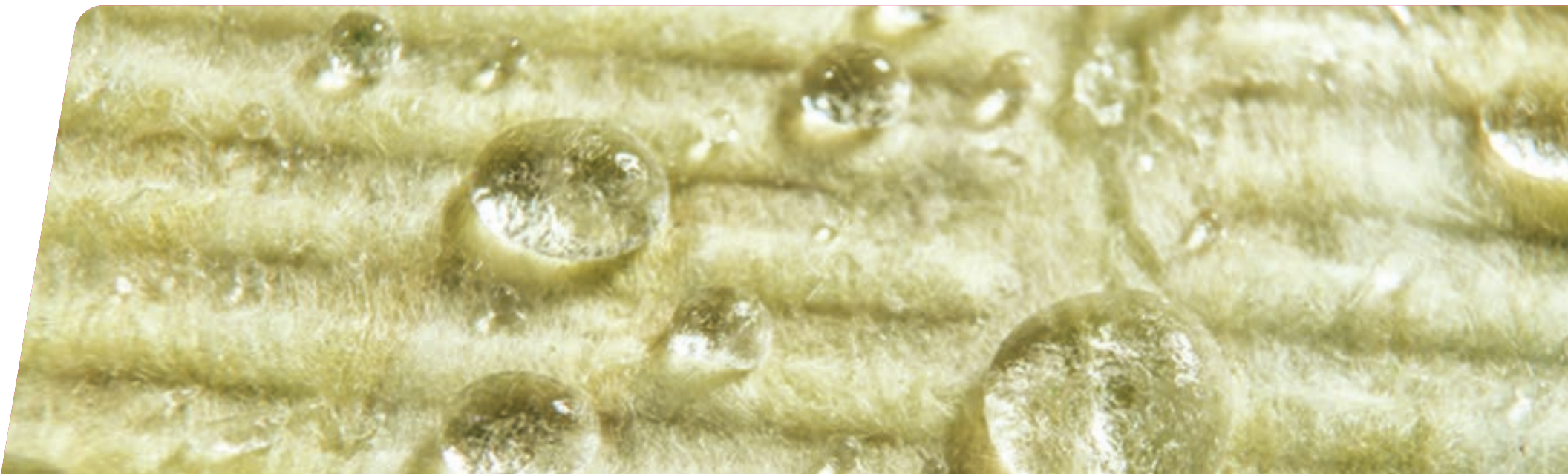
Sizes: 16" x 48" and 24" x 48"

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

Thermal Resistance ASTM C518
Flame Spread ASTM E84
Smoke Development ASTM E84
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 C1335

| Product | ASTM Standards | | | | | | | | | | | | |
|---|------------------------------|-------------------------------|----------------------|---------------------|-----------------------------|---|------|------|------|------|--------------------------------|--|----------------------------|
| TempControl® | ASTM C665, Type 1 | R-15, R-23, R-30 | 0 | 0 | N/A | 5% or less by weight | Pass | Pass | Pass | Pass | N/A | Linear shrinkage <2% 1200° F (650° C) | Shot content less than 25% |
| Sound & Fire Block® | | R-value at 75°F, 3.7 per inch | | | | | | | | | | | |
| MinWool® SAFB | | | | | | | | | | | | | |
| MinWool® Safing | ASTM C612 Type 1A-IVB | R-value R4–R-4.2 per inch | Unfaced 0; Faced ≤25 | Unfaced 0; Faced ≤5 | 0.02 perms, maximum | <1% by weight; <0.02% by volume at 120°F (49°C), 95% RH | Pass | Pass | Pass | Pass | Type 1–4 | Linear shrinkage <2% 1200° F (650° C) | Shot content less than 25% |
| MinWool® Curtainwall 40 80 | | | | | | | | | | | | | |
| MinWool® Window Wall | | | | | | | | | | | | | |
| CladStone™ Water & Fire Block 45 60 | ASTM C612 Type 1A-IVB | R-4.2 per inch | 0 | 0 | Unfaced, 50 perms as tested | Absorbs 0.03% by volume | Pass | Pass | Pass | Pass | Type IA, IB, II, III, IVA, IVB | Linear shrinkage < 2% 1200° F (650° C) | Shot content less than 25% |
| CladStone™ Water & Fire Block 80 110 | | | | | | Absorbs 0.11% by volume | | | | | | | |

***One source.
One call.
One shipment.***

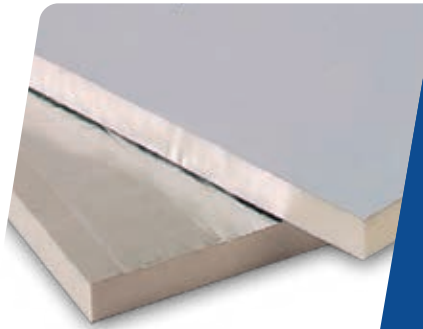
With the industry's most complete line of insulation solutions, JM is your one-stop shop. You can receive the complete combination of products you need, all on one truckload.

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



POLYISO CONTINUOUS INC.

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*

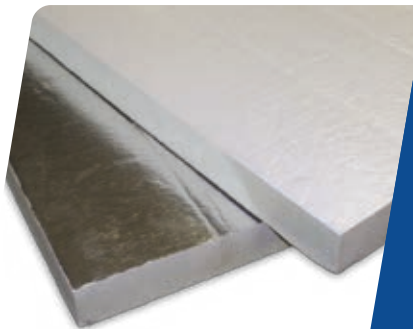
R-Values: R-2.7–R-28

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"

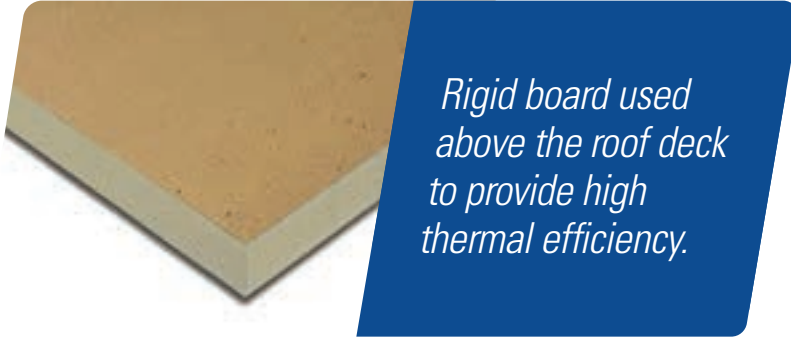
Thicknesses: 0.5"–4"

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

INSULATION

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-m ²) | ≥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-m ²) | | | <0.6% volume | | |
| R-Panel® Roof Insulation | ASTM C1289-01, Type II, Class I, Grade 2 | ≤75 | | <1 perms (57.5 ng/Pa-s-m ²) | ≥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/ft³

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 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 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.

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® High Yield Open-Cell Spray Polyurethane Foam



Lower-density, nonstructural, open-cell SPF delivers the highest yield of any JM Corbond open-cell product.

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 exceptional 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-3.6 per inch

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

SPRAY FOAM

SPRAY FOAM SPECIFICATION COMPLIANCE

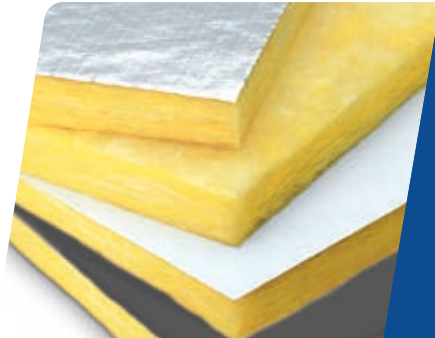
| Product | SPF Acceptance Criteria ASTM AC377 | Flame Spread ASTM E84 | Smoke Development ASTM E84 | Fungi Resistance ASTM C1388 | Dimensional Stability ASTM D2126 | Nominal Density ASTM D1622 | Open-Cell Content ASTM 1940 | Closed-Cell Content ASTM D6226 | Compressive Strength (1") ASTM D1621 | Water 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 | 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 | | | | | | 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 | | | | | | | | | | | | | | |
| JM Corbond High Yield Open-Cell | | | | | | | | | | | | | | |



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 Sorptions 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 | | | | 0.05 perms (3 ng/ Pa-s-m ²) | | | | | | |
| FSK Faced Board | | | | 250°F | N/A | | | | | N/A | |
| Black Faced Rolls | ASTM C612, Type IA, Category 1 | | | | | | | | | | |



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/ft ²) | R-Value (°F-ft ² -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 | | | | | | | Residential | |
| 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 | N/A |
| 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.

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

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)







JOHNS HANLEY



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