



Formaldehyde-free™ Fiber Glass Insulation

Spider™

Formaldehyde-free Spray-in
Custom Fiber Glass Insulation

PRODUCT DESCRIPTION

Johns Manville Spider Spray-in Insulation and the JM Spider Insulation Delivery System offer a revolutionary way to insulate homes. Spider is lightweight fiber glass insulation bound together with a non-toxic, water-soluble adhesive that also binds to cavity surfaces for gap-free coverage. Spider's variable thickness levels can fill 2" x 4" cavities up to an R-15 thermal rating, and 2" x 6" cavities up to R-23. JM Spider fills a regular (2" x 4") cavity in 10-20 seconds and dries in 2-8 hours – six times faster than cellulose.

APPLICATIONS

Interior and Exterior Walls

- Wood-frame construction – residential homes and light commercial buildings
- Metal-frame construction – residential and commercial buildings
- Manufactured homes – modular or manufactured housing
- Engineered-wood construction – assemblies framed with 12" to 19.2" on-center cavities

INSTALLATION

Equipment for JM Spider installation is engineered for professional use. The Spider Insulation Delivery System is compatible with most fiber glass blowing machines and includes the following pieces of equipment:

- High pressure adhesive pump and hose
- Portable adhesive tank
- Vacuum fan and generator
- Blowing and vacuum hoses
- Blowing nozzle attachments
- Wall scrubber

Contact your local JM sales representative for a Spider certified contractor. Visit www.jm.com/spider for additional information on the Spider Custom Insulation System.

RECOMMENDED STORAGE AND TRANSPORT

Store insulation indoors. Keep insulation clean and dry at all times. When transporting, cover completely with a waterproof tarpaulin as necessary.

SPECIFICATION COMPLIANCE

Spider insulation meets ASTM C 764, "Standard Specification for Mineral Fiber Loose-Fill Thermal Insulation." Spider system meets all building code fire test requirements for concealed and exposed insulation. (see following page for a complete list of test results)



PERFORMANCE ADVANTAGES:

- Formaldehyde-free – Will not off-gas formaldehyde in the indoor environment.
- Energy Efficient – When professionally installed, each year Spider saves 12 times the energy required to produce it.
- Thermal Control – Provides superior resistance to heat transfer with R-values up to R-23 in a 2" x 6" cavity.
- Full Coverage – Gap-free coverage maximizes thermal performance and minimizes air leakage.
- No Settling – Revolutionary adhesive binder and lightweight fiber glass prevent settling.
- Sound Control – Reduces transmissions of sound through exterior and interior walls and floor/ceiling assemblies.
- Easy Installation – Insulates a typical 2,700 sq. ft. home in 2-3 hours, twice as fast as cellulose.
- Mold and Mildew Resistant – Preservative in the binder further protects the product from mold and mildew.
- Fire-resistant and Noncombustible – (see Specification Compliance).
- Noncorrosive – Does not accelerate corrosion of pipes, wiring or metal studs.
- Durable – Will not rot, mildew or otherwise deteriorate. Spider will not hold moisture or suffer permanent loss of R-value.
- Fast Drying – Requires less moisture than cellulose during installation; fiber glass does not absorb moisture, therefore reducing dry time.

TEST DATA

Test Method	Results	Test Method	Results
ASTM E 84 and CAN/ULC S102.2 <i>Surface Burning</i>	Flame spread less than 25, smoke developed less than 50	ASTM C 764 <i>Corrosiveness</i>	No greater than sterile cotton for steel, copper, & aluminum
ASTM E 136 <i>Combustion Characteristics</i>	Pass, indicating non-combustible material	ASTM C 518 <i>Thermal Performance – Heat Flow Meter</i>	See coverage chart for standard R-values
ASTM E 970 <i>Critical Radiant Flux</i>	Greater than 0.12 W/sq.cm., passing for exposed attic installation	ASTM C 1104/C 1104M <i>Water Vapor Sorption</i>	5% by weight or less
ASTM C 1338 <i>Fungi Resistance of Insulation Materials</i>	Pass, with no growth	ASTM C 1304 <i>Odor Emission</i>	No objectionable odor
ASTM G 21 <i>Fungi Resistance of Synthetic Polymeric Materials</i>	Pass, with no growth	ES Section 01350 <i>VOC Emissions</i>	Pass, with no hazardous emissions

EXTERIOR WALL COVERAGE FOR SPIDER SPRAY-IN CUSTOM FIBER GLASS INSULATION

Thermal Resistance R-value	Cavity Depth/ Installed Thickness inches	Minimum Installed Density lbs/ft ³	Minimum Mass Per Unit Area lbs/ft ²	Maximum Net Coverage ft ² /bag	Bags Per 1000 ft ²
13	3.50	1.00	0.29	102.9	9.7
14	(Nominal 2x4)	1.40	0.41	73.5	13.6
15		1.80	0.53	57.1	17.5
20	5.50	1.00	0.46	65.5	15.3
22	(Nominal 2x6)	1.40	0.64	46.8	21.4
23		1.80	0.83	36.4	27.5

PACKAGING

JM Spider loose-fill fiber glass insulation is available in 30-lb. bags. JM Spider adhesive comes in 330-gallon totes, 55-gallon drums and 5-gallon buckets.

SHORT FORM SPECIFICATIONS

All insulation shown on drawings or specified herein shall be "Spider Custom Insulation System" as manufactured by Johns Manville. Thermal resistance "R" (RSI) values of the insulation shall be R (RSI) _____ in walls.

LIMITATIONS OF USE

Check applicable building codes.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of Spider listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame-spread or smoke-developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the sales office nearest you for current information. All Johns Manville products are sold subject to Johns Manville's Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy or for information on other Johns Manville thermal and acoustical insulation and systems, call or write to the 800 number or address listed below.



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