

COMPANY

Johns Manville, a Berkshire Hathaway company, was founded in 1858. Our ownership by Berkshire Hathaway, one of the most admired companies in the world and one of the most financially secure, allows JM to invest for the future. This enables JM to continue delivering the broadest range of insulation products in the industry and offering innovative solutions that meet your needs.

DESCRIPTION

JM CladStone™ 45 Insulation is made of inorganic fibers derived from basalt, a volcanic rock. Advanced manufacturing technology ensures consistent product quality, with high-fiber density and low shot content for excellent performance. JM CladStone 45 is inorganic, noncombustible, moisture repellent, non-deteriorating, and will not mildew or support corrosion.

USE

JM CladStone 45 is a continuous insulation mineral wool product that is specifically manufactured for superior performance in cavity wall and rain screen applications. In addition to the standard thermal and acoustical performance you would expect from Johns Manville products, JM CladStone 45 has water repellent properties that allow for the effective drainage of water from an exterior cavity wall assembly.

INSTALLATION

JM CladStone 45 Insulation can be installed with a variety of exterior cladding systems including strapping, brick ties, girts and purlins, and other exterior cladding mechanical attachment systems. Additionally, JM CladStone 45 can be mechanically fastened using impaling pins, screws & washers, insulation fasteners, plastic cap nails, or other proprietary fasteners. Please see the Installation Guide for more information.

PACKAGING

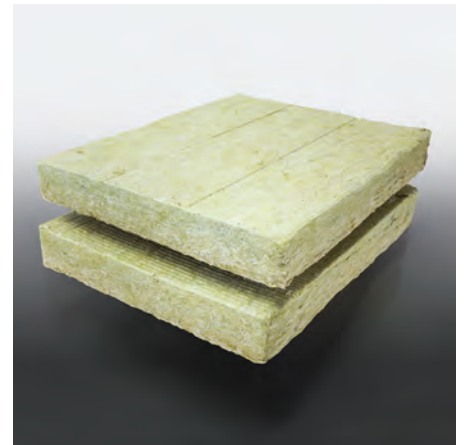
JM CladStone 45 is packaged in poly shrink wrap.

DESIGN CONSIDERATIONS

JM CladStone 45 Insulation must be installed on top of a separate weather resistive barrier (WRB). This product should not be left directly exposed to the elements; it should be covered with an appropriate finish. JM CladStone 45 is available in one density, 4.5 pcf.

LIMITATIONS OF USE

Check applicable building codes.



*Actual color of product may be lighter than image.
Product image typical of material produced in the USA.*

PERFORMANCE ADVANTAGES

Fire Safety: JM CladStone 45 has a melting point in excess of 2000° F. See Applicable Standards for details.

Noncombustible: See Applicable Standards for details.

Durable & Inorganic: JM CladStone 45 does not support growth of fungi, nor does it sustain vermin.

Water Repellent: JM CladStone 45 repels water to ensure proper wall cavity drainage when applied as part of a proper exterior wall cavity system (See Installation Guide)

ENERGY AND ENVIRONMENT



**GREENGUARD certification is not intended for residential environments. Instead, the certification is intended only for buildings meeting ASHRAE 62.1-2007 commercial building ventilation rates. This certification is proof that the product meets the GREENGUARD Environmental Institute's indoor air quality standards and product emission standards for VOCs.*

APPLICABLE STANDARDS & BUILDING APPLICATION

Test Method	Values
ASTM C 665	Non-corrosive
ASTM C 612	Type IA, IB, II, III, IVA, IVB
ASTM E 136	Non-combustible
ASTM E 96	Unfaced, 50 Perms as tested
ASTM E 84	Flame Spread 0, Smoke Developed 0
ASTM C 1104	Absorbs 0.03% by volume
ASTM C 356	Linear Shrinkage <2% 1200° F (650° C)
ASTM C 1335	Shot content less than 25%
UL 712, CAN/ULC-S102-M	Flame Spread 0, Smoke Developed 0*
CAN4-S114-M	Passes*
NFPA 285	Commercial Fire Resistance – Assembly Passed

*Based off of corresponding ASTM E84 and E136 test results

STANDARD SIZES

Density	Thickness	Widths	Length	R-Value per Inch
	in (mm)	in (mm)	in (mm)	
4.5 pcf*	1" - 6" (25 - 152 mm)	16 (406) & 24 (610)	48 (1219)	4.3

*Special sizes may be available on special order. Minimum order quantities will apply.