



Sound-SHIELD®

Formaldehyde-free Fiber Glass Insulation For Steel Frame Construction



FORMALDEHYDE-FREE

Johns Manville has revolutionized the building insulation industry by introducing an entire line of formaldehyde-free fiber glass building insulation. JM Formaldehyde-free insulation provides the same high-quality thermal and acoustical properties as conventional JM fiber glass – just without the formaldehyde-based binder. Why? Because it's a smart thing to do for our customers and the environment. Formaldehyde has traditionally been used as part of the binder in fiber glass insulation. Although there is no health risk with the traditional product, formaldehyde at higher levels may cause irritation and sensitivity. JM Formaldehyde-free building insulation utilizes an innovative new acrylic binder that eliminates binder-related formaldehyde emissions during manufacturing and, once installed, will not off-gas formaldehyde in the indoor environment. No formaldehyde means fewer things to worry about. Visit us at www.jm.com for more information.

PRODUCT DESCRIPTION

Johns Manville Sound-SHIELD batts are lightweight, sound-absorbent insulation made of long, resilient glass fibers bonded with an acrylic thermosetting binder. The fiber glass batts are made to fit standard spacing and thickness of steel stud construction in commercial and institutional buildings.

APPLICATIONS

- Interior wall sound control – interior walls and floor/ceiling assemblies

INSTALLATION

JM Sound-SHIELD insulation cuts easily with an ordinary utility knife and installs by simply pressing in place between studs or joists. Wire rods, chicken wire or wire is needed to hold floor insulation in place. Sized to fit, 2 x 4 batts are quickly and easily laid in place over suspended ceiling panels.

Other construction practices that assist in controlling the transmitted sound through steel stud walls include:

- Caulking and sealing all sound-leakage points.
- Avoiding connecting ducts, junction boxes, piping or other sound carriers from one wall face to the other.
- Interrupting the vibration path between one wall surface to the other (i.e., staggered studs, resilient channels).

PACKAGING

JM Sound-SHIELD insulation is compression-packaged for savings in storage and freight costs.

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

CAN/ULC-S702-97, Type 1

CAN/ULC-S102-M88 Flame Spread 25 or less, Smoke Developed 50 or less

CAN/ULC-S114-M80 Non-combustible

LIMITATIONS OF USE

Check applicable building codes.

PERFORMANCE ADVANTAGES

Sound-SHIELD batts help provide a more comfortable interior environment by reducing transmission of sound through interior walls. Used in floor/ceiling assemblies, sound control batts also may help reduce transmission of impact-generated sounds between adjacent areas.

- Formaldehyde-free – will not off-gas formaldehyde in the indoor environment.
- Fire-resistant and Non-combustible – (see Specification Compliance).
- Non-corrosive – does not accelerate corrosion of pipes, wiring or metal studs.
- Durable – unaffected by moisture, oil, grease and most acids. It will not rot, mildew or otherwise deteriorate.
- Resilient – bonded glass fibers will not pull apart during normal applications and resist settling, breakdown and sagging from vibration.
- Flexible – forms readily around corners and curved surfaces.

AVAILABLE FORMS*

Specification Compliance	Thickness		Width		Length	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
CAN/ULC-S702-97, Type 1	2¾	70	16	406	48	1219
Sound-SHIELD Steel Frame	4	102	16	406	48	1219

* For thicknesses or sizes not shown above, consult your Johns Manville Canada Sales Office.

MEASURING ACOUSTICAL PERFORMANCE

STC Rating: Airborne Sound Transmission Loss

Airborne Sound Transmission Loss is measured in accordance with ASTM E 90. The test partition, which may be either a wall or floor/ceiling, is placed between two reverberation chambers identified as the "source" and "receiving" rooms. Sound at various frequencies is generated in the source room and then measured in both rooms. The difference in levels between the two rooms is used to calculate the airborne sound transmission (TL) of the panel. These values are used to calculate the rating, which compares the performance of various constructions. The rating, or Sound Transmission Class (STC), is arrived at in accordance with ASTM E 413.

The higher the STC rating, the greater the acoustic control.

STC	Speech Heard Through Walls or Floors
30	Loud speech can be understood fairly well
35	Loud speech audible but not intelligible
42	Loud speech audible as a murmur
45	Some loud speech barely audible
48	Hearing strained to note loud speech
50	Loud speech not audible

IIC Rating: Impact Sound Transmission

The Impact Sound Transmission of a floor or floor/ceiling assembly is measured in accordance with ASTM E 492. The test panel separates two reverberation rooms. A standardized tapping machine is placed on the floor and the impact-generated sound is transmitted to the room below. The sound pressure levels are electronically analyzed to establish a single number rating for the construction identified as the "Impact Isolation Class" or "IIC."

The higher the IIC rating, the greater the isolation of impact-generated sound between the two rooms.



Contains 50%
Recycled Bottle Glass

Properly insulating a structure using Johns Manville building insulation helps preserve our environment by reducing energy consumption for heating and cooling, reducing the pollution resulting from fuel burning, reducing the emission of hazardous air pollutants during manufacturing and reducing waste through the utilization of recycled materials.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of Sound-SHIELD fiber glass insulation 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.



Distributed by:

Johns Manville Canada Inc.
Building Insulation Division
4704 58th Street
Innisfail, Alberta T4G 1A2
1-800-661-9553
www.jm.com