

# Sound-SHIELD®

## Formaldehyde-Free Fiber Glass Insulation For Wood 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](http://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 wood frame construction in residential and light industrial construction.

### 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 wood frame 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 conversations and the sounds of televisions, stereos and ventilation systems. Used in conjunction with the caulking of joints and resilient channels for drywall attachment, insulation can increase STC ratings by 8 to 10 points.

- 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 Sound-SHIELD Wood Frame	2¾	70	16	406	47	1194
	4	102	15	381	47	1194

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

## MEASURING ACOUSTICAL PERFORMANCE

### STC Rating

The STC (Sound Transmission Class) is a single number rating used to compare various wall/ceiling/floor constructions. An uninsulated, interior wall has an STC of about 30, which means that the wall reduces the sound transmitted from an adjacent room by about 30 decibels. The National Building Code of Canada requires an STC-50 wall assembly separating multi-family units. This is also a good guideline for many interior walls in single-family homes.

### The higher the STC rating, the greater the acoustical 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

### Wall Noise Reduction Comparison

Type of Construction	STC Value
Studs/Drywall	30
+JM Sound-SHIELD	34
+Resilient Channels	46 – 50
Staggered Studs/Insulation	47 – 52
+Double Drywall Both Sides	55 – 56
Framed Double Wall/Double Insulation	57 – 60



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 for wood frame construction 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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