



Smart Ideas. Better Insulation.

Steel Framing STC Values

Sound Control

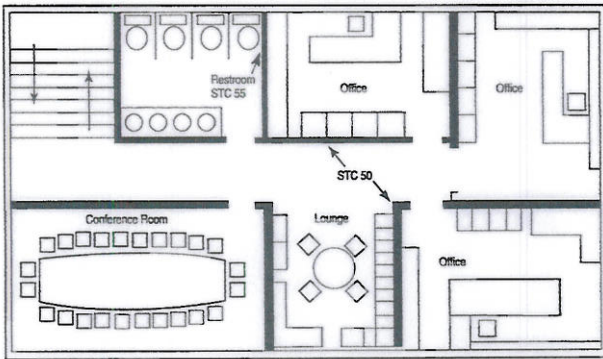
JM Formaldehyde-free insulations help reduce noise that can impact a building's comfort and continuing value.

PERFORMANCE ADVANTAGES

- Formaldehyde-free – will not off-gas formaldehyde in the indoor environment.
- Thermal Efficiency – provides effective resistance to heat transfer with R-values up to R-38 (RSI-6.7).
- Noncorrosive – does not accelerate corrosion of metal studs.
- Resilient – bonded glass fibers will not pull apart during normal applications and resist settling, breakdown and sagging from vibration.
- Durable – unaffected by moisture, oil, grease and most acids. It will not rot, mildew or otherwise deteriorate.
- Flexible – forms readily around corners and curved surfaces.
- Installs easily – pre-cut batts designed for friction-fit between steel studs.

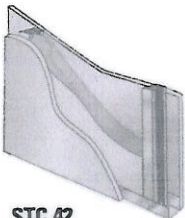
STEEL STUD CONSTRUCTIONS FOR SOUND CONTROL

Steel studs are typically found in commercial and institutional buildings in non-load-bearing walls. The floor plan is representative of either low- or high-rise structures. Illustrated are typical uses of Johns Manville sound control insulation to reduce sound transmission between adjacent rooms such as offices, conference rooms, service areas and the like.



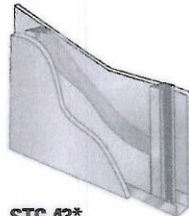
The following examples of different steel stud wall systems demonstrate improved STC values by the inclusion of Johns Manville sound control insulation between metal studs, 24" (610 mm) on center.

1 1/2" (41 mm) Steel Studs



STC 42

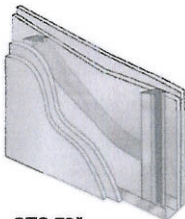
1 1/2" (41 mm) steel studs: single layer 1/2" (13 mm) Type X gypsum board each side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 43*

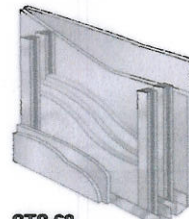
1 1/2" (41 mm) steel studs: single layer 5/8" (16 mm) Type X gypsum board each side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

R2.0 75mm HP



STC 50*

1 1/2" (41 mm) steel studs: double layer 1/2" (13 mm) Type X gypsum board each side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 60

Double 1 1/2" (41 mm) steel studs: double layer 1/2" (13 mm) Type X gypsum board each side; three thicknesses 3 3/8" (92 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

R2.5 90mm HP

*Indicates value is an estimate

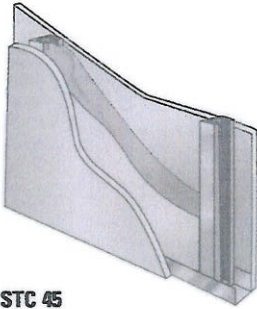
For additional information on sound control, visit our website at www.jm.com/sound.

Steel Framing STC Values

Sound Control

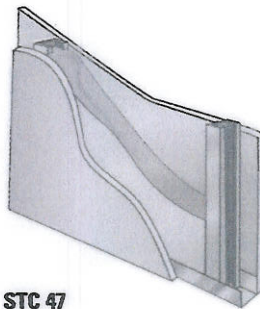
Visit our website at www.jm.com
Or call: 1-800-654-3103

2 1/2" (64 mm) Steel Studs



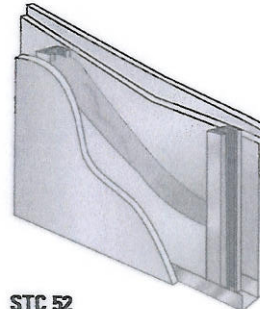
STC 45

2 1/2" (64 mm) steel studs: single layer 1/2" (13 mm) Type X gypsum board each side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 47

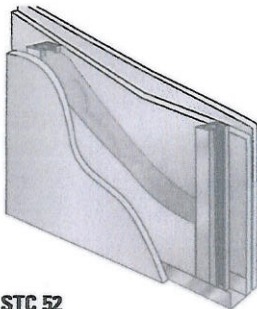
2 1/2" (64 mm) steel studs: single layer 5/8" (16 mm) Type X gypsum board each side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 52

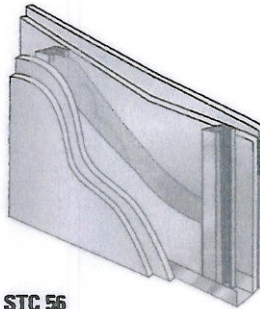
2 1/2" (64 mm) steel studs: double layer 1/2" (13 mm) Type X gypsum board one side, single layer other side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

R2.0 75mm
HP



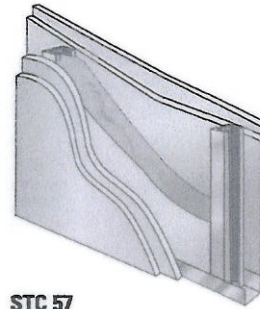
STC 52

2 1/2" (64 mm) steel studs: double layer 5/8" (16 mm) Type X gypsum board one side, single layer other side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 56

2 1/2" (64 mm) steel studs: double layer 1/2" (13 mm) Type X gypsum board each side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

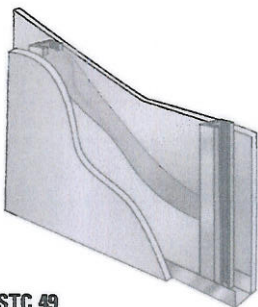


STC 57

2 1/2" (64 mm) steel studs: double layer 5/8" (16 mm) Type X gypsum board each side; one thickness 2 3/4" (70 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

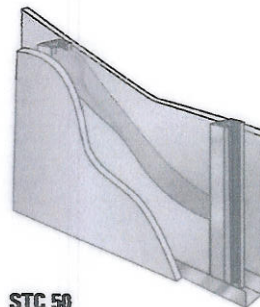
R2.0 75mm
HP

3 5/8" (92 mm) Steel Studs



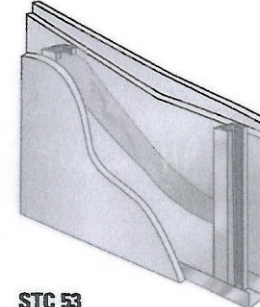
STC 49

3 5/8" (92 mm) steel studs: single layer 1/2" (13 mm) Type X gypsum board each side; one thickness 3 3/8" (92 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 50

3 5/8" (92 mm) steel studs: single layer 5/8" (16 mm) Type X gypsum board each side; one thickness 3 3/8" (92 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 53

3 5/8" (92 mm) steel studs: double layer 1/2" (13 mm) Type X gypsum board one side, single layer other side; one thickness 3 3/8" (92 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

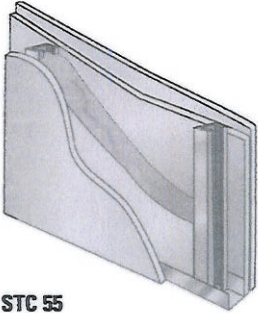
R2.5 90mm
HP.

Steel Framing STC Values

Sound Control

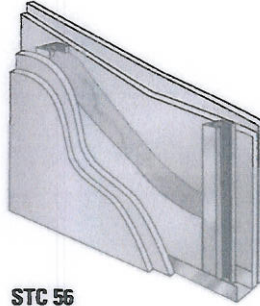
Visit our website at www.jm.com
Or call: 1-800-654-3103

3 5/8" (92 mm) Steel Studs



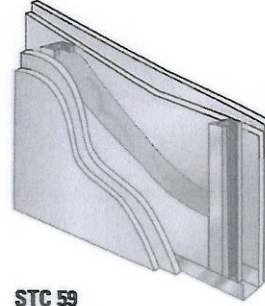
STC 55

3 5/8" (92 mm) steel studs: double layer 5/8" (16 mm) Type X gypsum board one side, single layer 5/8" (16 mm) Type X gypsum board other side; one thickness 3 5/8" (92 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 56

3 5/8" (92 mm) steel studs: double layer 1/2" (13 mm) Type X gypsum board each side; one thickness 3 5/8" (92 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

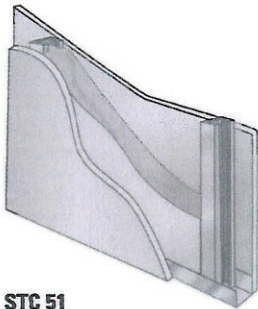


STC 59

3 5/8" (92 mm) steel studs: double layer 5/8" (16 mm) Type X gypsum board each side; one thickness 3 5/8" (92 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

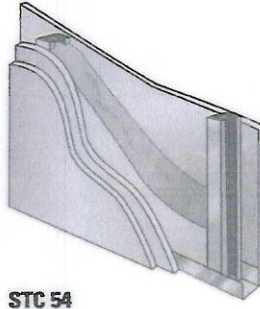
R2.5 90mm

6" (152 mm) Steel Studs



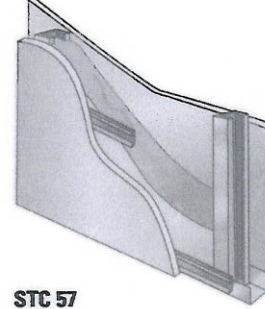
STC 51

6" (152 mm) 25 gauge steel studs: single layer 5/8" (16 mm) Type X gypsum board each side; one thickness 6 1/2" (165 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 54

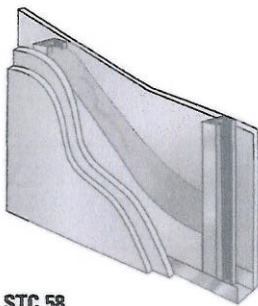
6" (152 mm) 25 gauge steel studs: double layer 5/8" (16 mm) Type X gypsum board one side, single layer 5/8" (16 mm) Type X gypsum board other side; one thickness 6 1/2" (165 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 57

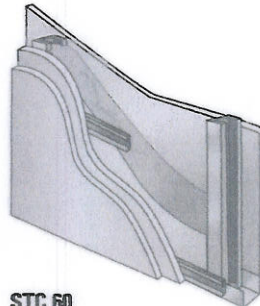
6" (152 mm) 20 gauge steel studs, resilient channel: single layer 5/8" (16 mm) Type X gypsum board each side; one thickness 6 1/2" (165 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

R3.2 165mm



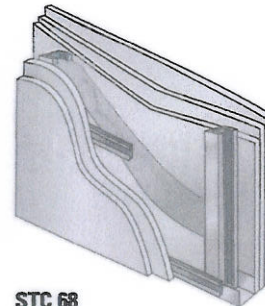
STC 58

6" (152 mm) 25 gauge steel studs: double layer 5/8" (16 mm) Type X gypsum board each side; one thickness 6 1/2" (165 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 60

6" (152 mm) 25 gauge steel studs, resilient channel: double layer 5/8" (16 mm) Type X gypsum board one side, single layer 5/8" (16 mm) Type X gypsum board other side; one thickness 6 1/2" (165 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.



STC 68

6" (152 mm) 20 gauge steel studs, resilient channel: three layers 5/8" (16 mm) Type X gypsum board one side, double layer 5/8" (16 mm) Type X gypsum board other side; one thickness 6 1/2" (165 mm) JM Formaldehyde-free thermal/acoustical fiber glass batts.

R3.2 165mm

Steel Framing STC Values

Sound Control

Visit our website at www.jm.com
Or call: 1-800-654-3103



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. Look for the cross and globe emblem on Johns Manville building insulation which indicates independent certification by Scientific Certification Systems, Inc. of 25% or more recycled glass content.

Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of Johns Manville thermal and acoustical 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:

Building Insulation Division

717 17th Street (80202)
P.O. Box 5108
Denver, CO 80217-5108
1-800-654-3103
www.jm.com

81D-0023 6/02

© 2002 Johns Manville