


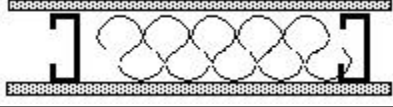
## STC RATINGS FOR VARIOUS WALL ASSEMBLIES

Below are the STC ratings of various wall assemblies, each presented to help illustrate concepts, improvements and rules of thumb. The estimated ratings are based on laboratory test results from various compendiums of STC ratings. It is recommended to consult a professional acoustician for more detailed information or to analyze the specifics of your project/assembly.

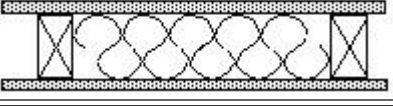
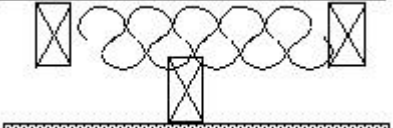

To view different wall assemblies, click on each point below that may apply to your project.

1. Insulation will noticeably improve the STC rating of an assembly.
2. Staggered or double stud walls are higher rated than single stud walls.
3. Metal stud walls perform better than wood stud walls.
4. Resilient channel can improve the STC rating of an assembly.
5. Adding additional layers of drywall can improve the STC rating of an assembly.
6. Drywall between double studs can dramatically reduce the STC rating of an assembly.

### 1. Insulation will noticeably improve the STC rating of an assembly.

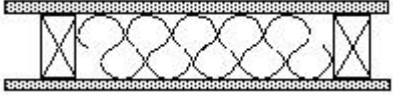
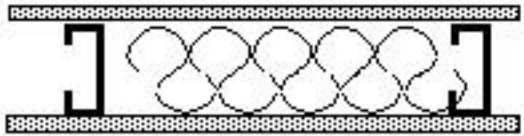
Description	Estimated STC Rating	Wall Assembly
3 5/8" metal studs, 5/8" gyp (2 layers total), No insulation	38 - 40	
3 5/8" metal studs, 5/8" gyp (2 layers total), Batt insulation	43 - 44	

### 2. Staggered or double stud walls are higher rated than single stud walls.

Description	Estimated STC Rating	Wall Assembly
2x4 stud, 5/8" gyp (2 layers total), Batt insulation	34 - 39	
Staggered studs, 5/8" gyp (2 layers total), Batt insulation	46 - 47	
2x4 studs, 5/8" gyp (2 layers total), Batt insulation	56 - 59	


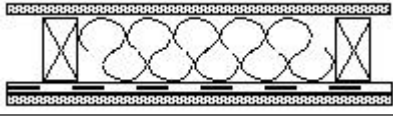
**3. Metal stud walls perform better than wood stud walls.**

(NOTE: This only applies to single stud assemblies. For double stud assemblies, there is virtually no difference.)


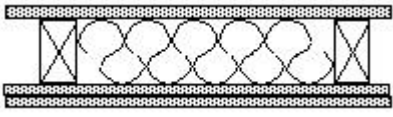

Description	Estimated STC Rating	Wall Assembly
2x4 stud, 5/8" gyp (2 layers total), Batt insulation	34 - 39	
3 5/8" metal studs, 5/8" gyp (2 layers total), Batt insulation	43 - 44	

**4. Resilient channel can improve the STC rating of an assembly.**

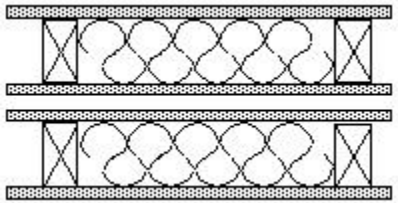

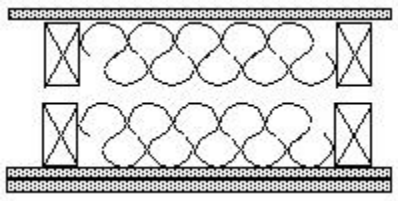
(NOTE: These ratings are based on laboratory tests. Because of the special care required when installing resilient channels, actual results could be substantially lower.)

Description	Estimated STC Rating	Wall Assembly
2x4 stud, 5/8" gyp (2 layers total), Batt insulation	34 - 39	
2x4 stud, 5/8" gyp (2 layers total), Resilient Channel, Batt insulation	45 - 52	

**5. Adding additional layers of drywall can improve the STC rating of an assembly.**

Description	Estimated STC Rating	Wall Assembly
2x4 stud, 5/8" gyp (2 layers total), Batt insulation	34 - 39	
3 5/8" metal studs, 5/8" gyp (3 layers total), Batt insulation	39 - 40	
2x4 stud, 5/8" gyp (4 layers total), Batt insulation	43 - 45	

**6. Drywall between double studs can dramatically reduce the STC rating of an assembly.**

Description	Estimated STC Rating	Wall Assembly
2x4 studs, 5/8" gyp (4 layers total), Batt insulation	44 - 45	
2x4 studs, 5/8" gyp (2 layers total), Batt insulation	56 - 59	
2x4 studs, 5/8" gyp (3 layers total), Batt insulation	59 - 60	
2x4 studs, 5/8" gyp (4 layers total), Batt insulation	58 - 63	