



## STC Ratings Explained

**Sound Transmission Class** (or **STC**) is an integer rating of how well a building partition attenuates airborne sound. In the United States, it is widely used to rate interior partitions, ceilings/floors, doors, windows, and exterior wall configurations.

STC Rating lets you know how well something stops noise. There are STC Ratings for all kinds of things. One nice thing about STC Ratings is that they are fairly easy to understand in a general sense... **BIGGER = BETTER**.

Another easy rule of thumb when it comes to STC Ratings is that they function in multiples of ten. For every increase of ten points in an STC Rating the perceived noise level is cut in half.

***For example:*** If an average conversation with a decibel level of 50dB is taking place outside of the average window with an STC Rating of 24, the person inside will be able to hear the conversation without any problem. If however, the STC Rating of the window is increased by ten points to 34, then to the person inside it would seem like the noisy conversation outside was half as loud as it was previously.

As a window solutions expert, Magnetite addresses noise control issues for flat glass, historic casement windows, modern dual-pane windows, and many other applications and we run into these queries all the time. With Magnetite's acrylic insulating window panels installed, your window system can have STC Ratings up to 54. If you are looking for a "soundproofing" option for your home or business, it's time to consider Magnetite.

STC Rating	Speech Audibility	Effectiveness
15 to 25	Normal Speech Understood	Poor
25 to 35	Loud Speech Understood	Marginal
35 to 45	Normal Speech Heard but not Understood	Good
45 to 55	Loud Speech Faintly Heard but not Understood	Very Good
55 and Higher	Loud Speech Usually not Heard	Excellent

Typical Sound Pressure Levels	Type	Decibel Rating
	Whisper	20 dB
	Avg. Conversation	50 dB
	Noisy Office	80 dB
	Subway Train	100 dB
	Thunder	115 dB
	Pain Threshold	120 dB