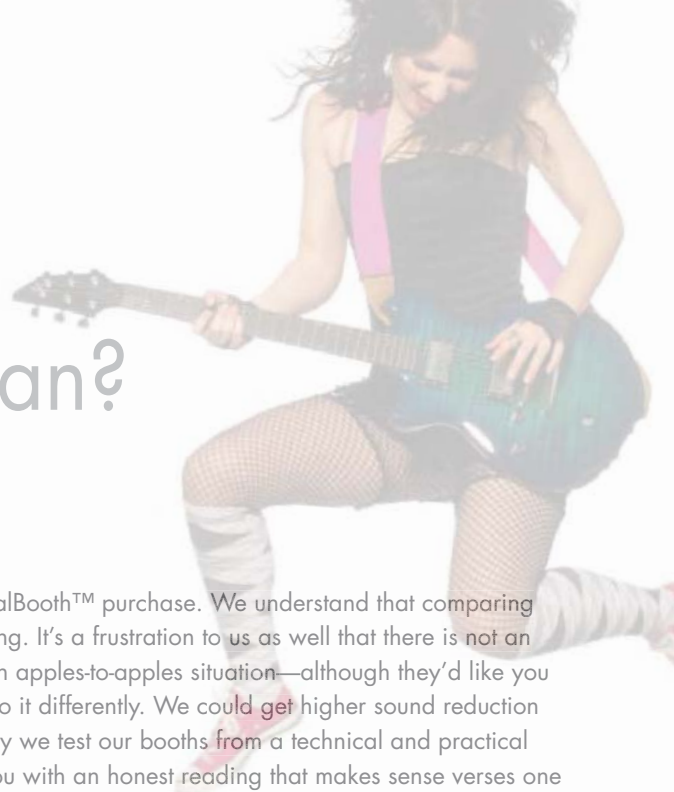




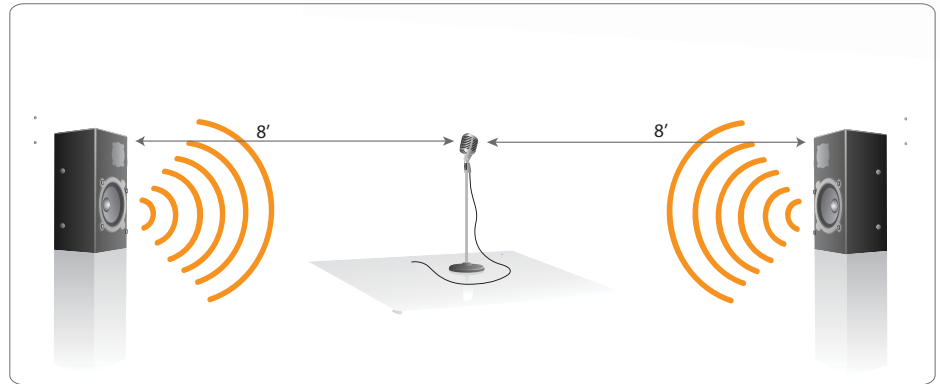
**VOCALBOOTH.com**<sup>TM</sup>  
HEAR THE DIFFERENCE

# SOUND REDUCTION NUMBERS —What Do They Mean?

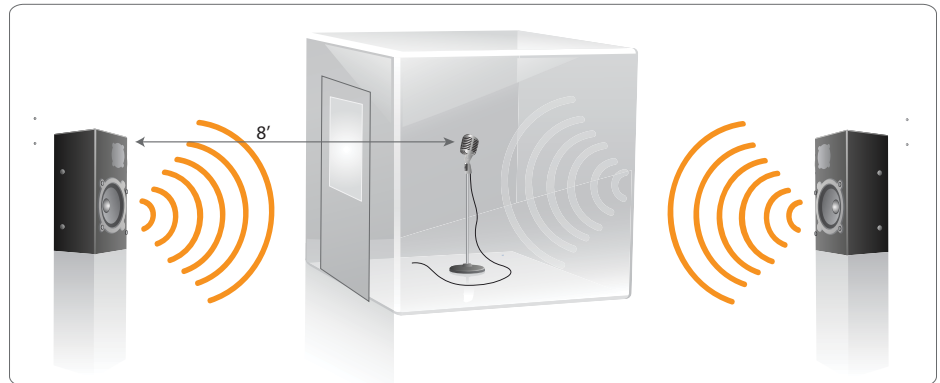


At VocalBooth<sup>TM</sup> our priority is that you are as confident as we are about your VocalBooth<sup>TM</sup> purchase. We understand that comparing sound reduction numbers with competitive products can be confusing and misleading. It's a frustration to us as well that there is not an industry standard for testing. Comparing our numbers with the competition is not an apples-to-apples situation—although they'd like you to believe it is. We'll show you how we do our testing and why. Bottom line—we do it differently. We could get higher sound reduction numbers using our competitions' methods but we choose not to. We believe the way we test our booths from a technical and practical approach is the most accurate available. At VocalBooth<sup>TM</sup> our goal is to provide you with an honest reading that makes sense verses one that just makes us look good on paper. We hope you feel the same.

**Step 1:** By using two speakers 8' apart we are creating a volume sound instead of directional sound. This best mimics typical room environments where sound is distributed in all directions.



**Step 2:** Placing a booth around the microphone will show the volume reduction of the distributed sound without changing the ratio of the initial sound to microphone measurement.



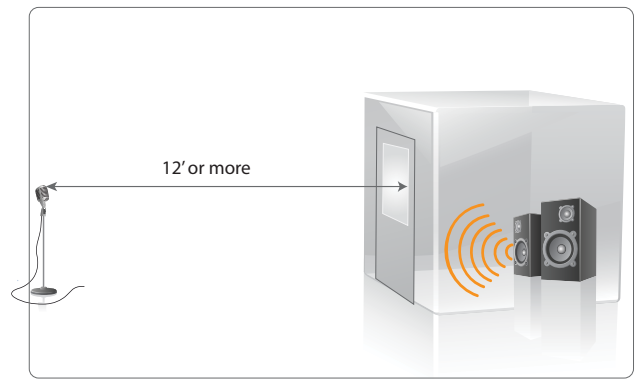
[more](#)



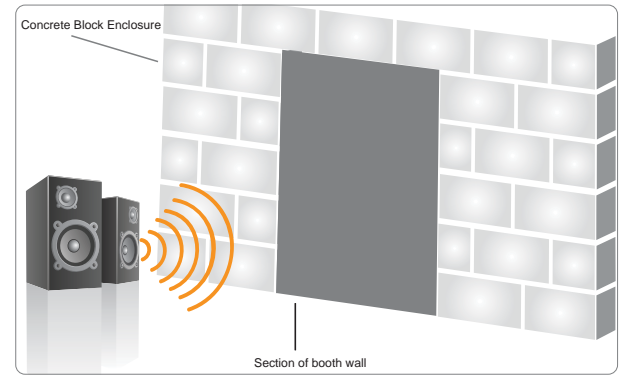
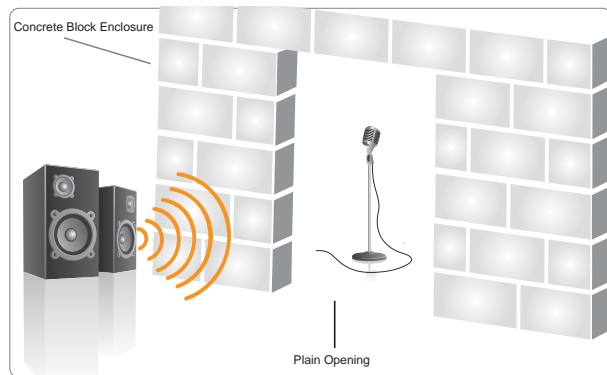
**Below are diagrams of testing methods that can increase sound reduction numbers testing methods used by other companies to inflate numbers:**



- A. Placing the microphone right next to the speaker for the initial measurement gives a direction larger value.
- B. Using a reflective small enclosed space to increase the over all volume background will create a larger measurement value.



- C. When the microphone outside of a booth is moved the environment is changed multiple ways.
  - i. The increase in distance between microphone and speaker creates an exponential reduction in sound volume.
  - ii. Sound exiting the booth is disbursed in multiple directions into a large cavernous room. This allows for the microphone to only pickup the directional measurements coming from the wall of the booth. So there is a triple loss here, dispersed sound coming through the walls, then the exponential reduction due to distance change, and that the escaping sound is not being released into a large room.



Some sound room manufacturers, especially for metal rooms, take only the STC value of parts of their booth. STC or sound transmission coefficient is an industry standard for testing parts of a product— not a full room measurement. This measurement is simply from a 2' square section of their wall that was sent to a lab that checks the sound reduction going through the product. There are no allowances for how the booth is put together. Basically these tests do not account for sound penetration through the edges of the panel connections, around doors, or through ventilation setups. Again these tests best optimize the value received for the material used, but do not reflect how the product will be used. This testing method is subpar and has limited relevance. It does follow some standards and eliminates some sound reduction improvements, but does not take into effect poor design or manufacturing aspects for the end-user.

