

STC-62+

The STC Box Seal™ performs at STC-62 and higher. Consider a conference room, 15' x 20' x 8' high with 347 sabins of sound absorption due to padded carpet, acoustical panel ceiling, and upholstered seating. The shared wall, 15' x 8' to an office, is constructed at STC-62 with sound attenuation blankets and has one back-to-back outlet. With no treatment for the recessed outlet the wall performs with an effective *STC-57.5* and *returns to STC-62* with the *Box Seal* installed at the outlet.

This style of presentation of product performance depends upon the STC-rating and size of the partition, the number and location of outlets, and the amount of sound absorption in the receiving room. With more sound absorption in the conference room performance could actually exceed STC-62. ***This style of presentation does not indicate the actual performance of the sealing system by itself in a consistent way.*** However, this has been the presentation style employed by other manufacturers, without the details, for their electrical outlet sound sealing products.

A better presentation of performance would indicate what the sealing system contributes as a *component* in a *composite* of construction in the same way that doors as components within partitions are evaluated and presented. Such a method provides a consistent value so that any combination of partition size, STC performance, number of outlets, and sound absorption can be analyzed and evaluated for the *effective composite STC value*.

Composite analysis adds the amount of sound coming through the wall to the amount coming through the outlets (using pressure variation, not decibels, so the amounts can be added arithmetically). The values for unsealed outlets and sealed outlets, all back-to-back, have been analyzed based upon independent testing¹:

	<u>Component STC Values</u>
Unsealed Outlets:	19.0
Outlets Sealed with the <i>Box Seal</i>:	26.2

Paul L. Battaglia, AIA, ASA, INCE
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¹NGC Testing Company No. 3012001, March 22, 2012, STC Box Seal