

STC Transmission Information

There are several instances where the need for an STC rated door would be required to reduce noise levels being transmitted from an outside or inside source that transmits high levels of noise. Other instances would include privacy or where specific information is to be contained within the transmission or meeting room. No matter what the circumstance is our STC products can provide your project with optimal performance.

All of our Sound Transmission Class (STC) products have been tested and approved under operable conditions by an accredited independent testing facility that specializes in testing and certification for these types of products.

Test Methods:

American Society for Testing and materials designation ASTM E90-90/99, "Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions", and classified in accordance with the American Society for Testing and Materials designation ASTM E413-87 Re-approved 1999, "Classification for Rating Sound Insulation" and ASTM Standard E1332-90 Re-approved 1998 entitled, "Standard Classification for Determination of Outdoor-Indoor Transmission Class".

Exterior and interior noise reduction for residential and commercial applications ie: Airports, Freeways, Band rooms, Sound Studios, Auditoriums, Meeting rooms, Hotel entry rooms, Training rooms etc. etc..



A sealed door and jamb system can reduce noise levels considerably but other aspects must also be taken into account to achieve maximum results. Others aspects that must be taken into consideration are the surrounding walls, windows or side-lites. There are different types of insulation and glass types that are tested and approved for these types of applications.

Our doors have STC ratings ranging from STC-32 to STC-43. The rating itself can dictate the door construction, size, sealing/gasketing system and any added options that may or may not be applicable for that particular construction. IE: Fire rating, quirks, inlays or pairs. Please refer to the individual product pages and the "800" series doors to see the options offered for each product or contact our sales department for more information.

In most cases the level of attenuation achieved does not totally eliminate but rather muffles the sound to an unintelligible level. The chart below compares the level of human speech that would be heard through a door system having the indicated active STC range. Active STC rating is for an operable system as contrasted with a sealed-in-place rating of the door only.

- STC-30: Loud speech understood.
- STC-35: Loud speech NOT understood.
- STC-40: Loud speech audible murmur.
- STC-45: Some loud speech barely audible.
- STC-48: Hearing strained to hear loud speech.
- STC-50: Loud speech NOT audible.

The higher the rating the better the performance.