Standard Stud Wall Assembly with Acoustiblok: Acoustical data

Riverbank Acoustical Laboratories rates this wall configuration with an STC (sound transmission class) of 52. See report graph below.

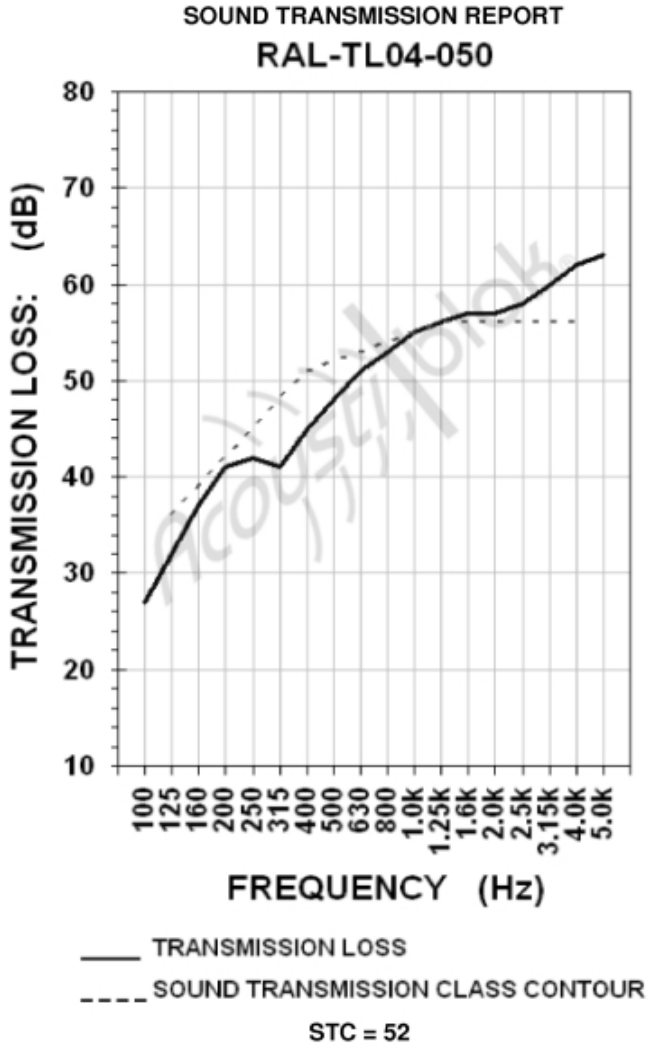
The tested assembly: 2" x 4" wood top and bottom plate and studs covered on both sides with a single layer of 16 mm (0.625 in.) thick gypsum board. The gypsum board was attached using 6d nails at 12" on center. The wood studs were spaced on 24" centers. The wall section was filled with 3" thick fiberglass insulation. A single layer of 16 Oz. Acoustiblok was attached to the studs.

SOUND TRANSMISSION CLASS is a single number that represents the sound blocking capacity of a partition such as a wall or ceiling.

STC numbers are often called out in architectural specifications, to assure that partititions will reduce noise levels. For performance similar to laboratory test numbers, it is necessary to adhere closely to the construction materials and techniques used in the tested partition.

STC calculations emphasize sound frequencies that match the human voice. A high STC partition will block the sound of human speech, and block noise that interferes with human speech. A high STC number may not indicate a partition that is effective in blocking very low or very high pitched sound. STC measures sound blocking for airborne noise source only; it does not indicate how well a partition can block impact noise (objects striking the far side of the partition), or directly transmitted noise such as machinery mounted on the far side of the wall.

STC is calculated by comparing the actual sound loss measured when 18 test frequencies pass through a partition, with fixed values for each STC level. The highest STC curve that the measured sound loss numbers fit under, determines the STC rating of the tested partition.



Acoustiblok, Inc. 6900 Interbay Blvd. Tampa, FL 33616
Ph: 813.980.1400 Fax: 813.849.6347 www.acoustiblok.com sales@acoustiblok.com