

April 3, 2012

**Preliminary Report: ASC Cable Pass Thru measures at least STC 48**

A transmission loss (TL) test was done on the ASC Cable Pass Thru. By adjusting STC curves to fit the 1/3<sup>rd</sup> octave TL data points, the rating on the unit was found to be at least STC 47.5. The reason "at least" is used here to describe the results is that the test wall is lab rated STC 50. The upper limit STC for the Cable Pass Thru cannot be measured in this lab. A sound rated wall of at least STC 70 should be used. The background noise should be at least 10 dB below the test data points and it actually was at best around 1 dB below the data points.

**Procedure**

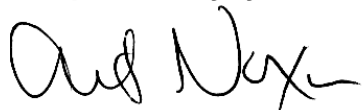
The wall was a 2x6 wood stud wall with resilient channel on one side and two layers of sheetrock on both sides, using the ASC IsoWall system for damping. IsoWall involves adding WallDamp between every contact point in the wall assembly, on studs and plates, between sheetrock layers, between stud and resilient channels and between sheetrock and resilient channel. This wall is lab rated STC 51. There was considerable leakage through the door to the lab, which could not be repaired before the test.

A hole was cut through the inner and outer walls of our test lab, 6" by 9" wide, sized to install a standard ASC Cable Pass Thru. As a reference, a square of 3/4" plywood overlaid the holes and screwed down. It registered at least STC 47. Then the standard Cable Pass Thru set was installed, with four 1/4" microphone cables running through both doors. It measured at least STC 47.5. We tested each door of the Cable Pass Thru. With the noise-side door closed, quiet-side opened, we measured STC 39 and with the noise-side open and quiet-side closed we measure STC 44.

Besides the wall construction STC limit for the test, the lab door was noticeably leaky. Additionally, the tested units were not acoustically calked around the perimeter. High frequency sound was clearly audible issuing through the felt covered back and out the edges between the wall and the back plate.

This test used a Klark-Teknik 1/4" omni mic/line preamp into a Nicolet audio spectrum analyzer output to an HP bed plotter. Third octave data was taken of the background noise floor, the inside noise and outside noise levels with the mic located 6" from the face of the wall for both tests. The sound level registering on the noise side of the wall was 113 to 114 dB,A and dB,C. The sound level inside the receiving room, near the test wall was around 52 dB,A and 70 dB,C.

Respectfully yours,



**Arthur Noxon, PE  
Acoustical Engineer\***

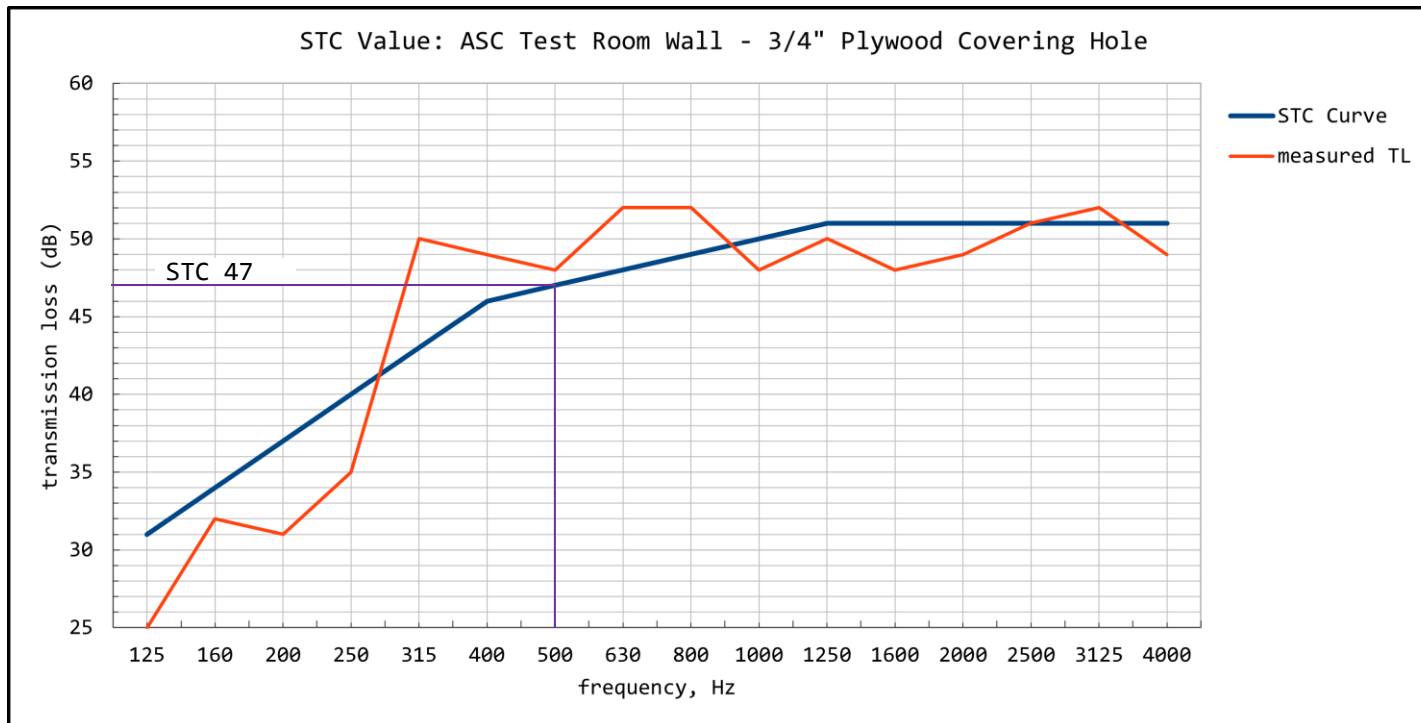




OUTSIDE TESTING ROOM  
BASELINE: 3/4" PLYWOOD



INSIDE TESTING ROOM  
BASELINE: 3/4" PLYWOOD



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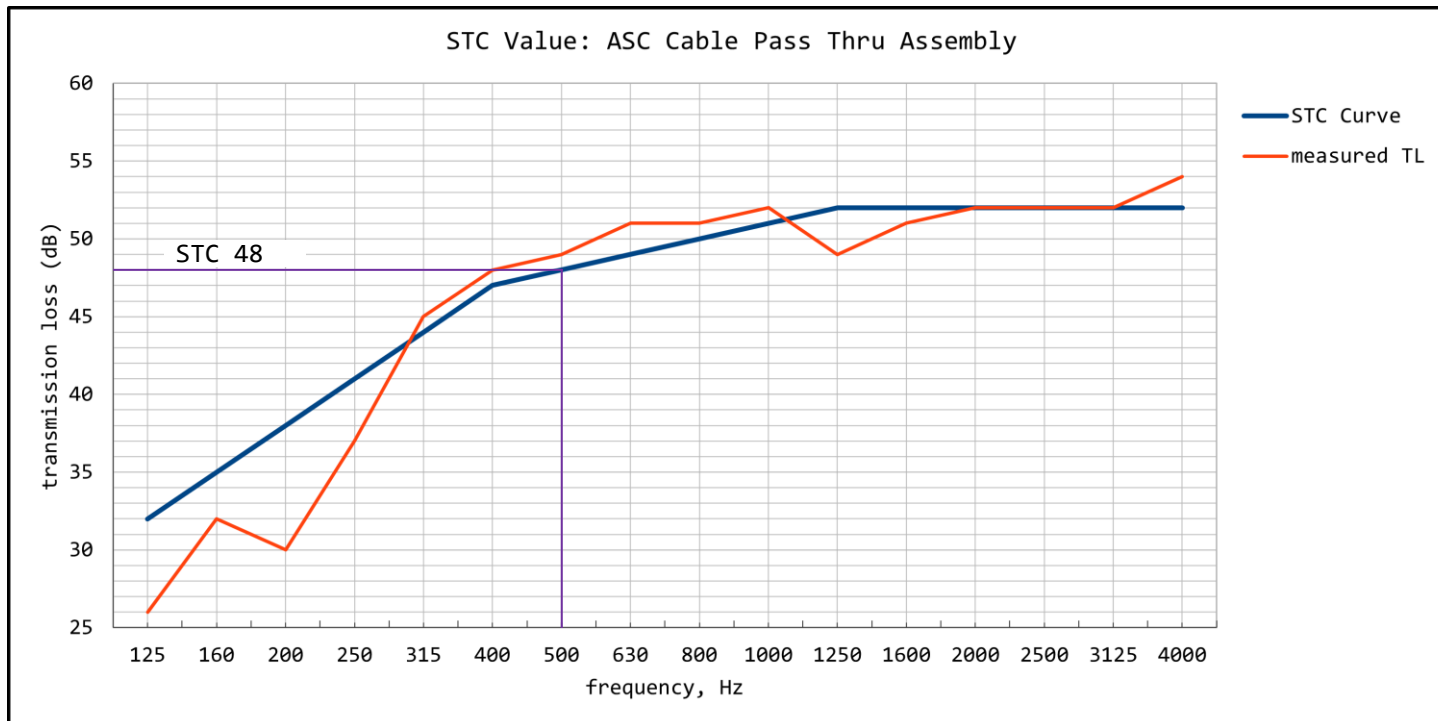




OUTSIDE TESTING ROOM  
TEST SPECIMEN: CPTC-1.0



INSIDE TESTING ROOM  
TEST SPECIMEN: CPTC-1.0



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