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Acoustical Testing Laboratory

TEST REPORT

For

STC Architectural Products
1200 Northland Ave.
Buffalo, NY 14215
Paul L. Battaglia / 716-392-3831

Small Scale Sound Transmission Loss Tests

On

Mullion Seal and Open Joint Test Assemblies

Report Number: NGC 3016001

Assignment Number: G-1319

Test Date: 09/20/2016

Report Approval Date: 10/03/2016

Submitted by: _____
Anthony J. Rivers
Test Technician

Reviewed by: _____
Robert J. Merichetti
Director

Revision Summary:

Date	SUMMARY
Approval Date: 10/03/2016	Original issue date. Original NGCTS report #: NGC 3016001

Report Number: NGC 3016001

Test Method: This test method conforms generally with the American Society for Testing and Materials Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements - Designation: E 90 – 09 with the exception that the test specimen is small scale and does not meet E 90 – 09 test specimen minimum size requirements. The sound transmission data at each frequency, should be used for comparison purposes with results from the measured values of the different samples in this test program.

Installation Description: The test samples were mounted to the sound test Receiving Room side of a 35-1/2 in. x 35-1/2 in. wall opening between the sound test Source and Receiving Rooms.
The test samples were sealed to the perimeter of the wall opening with resilient putty sealant.

IDENTIFICATION	DESCRIPTION

Wall Panel: Mullion Seal Assembly

Panel face layer:	2 layers of wallboard
Panel Core:	Fiberglass Insulation
Panel backing layer:	2 layers of wallboard

Sample was observed to be: 895.4 mm x 895.4 mm (35-1/4 in. x 35-1/4 in.)
Measured weight: 48.54 kg/m^2 (9.94 PSF)

Wall Panel: Open Joint Assembly

Panel face layer:	2 layers of wallboard
Panel Core:	Fiberglass Insulation
Panel backing layer:	2 layers of wallboard

Sample was observed to be: 895.4 mm x 895.4 mm (35-1/4 in. x 35-1/4 in.)
Measured weight: 48.25 kg/m^2 (9.88 PSF)

Preconditioning: Test Samples were conditioned a minimum of 24 hours at 70° F, 55% R.H.

All samples were received from client and tested as received.

The results of the tests are given on page 4.

Small Scale Sound Transmission Loss Test Data

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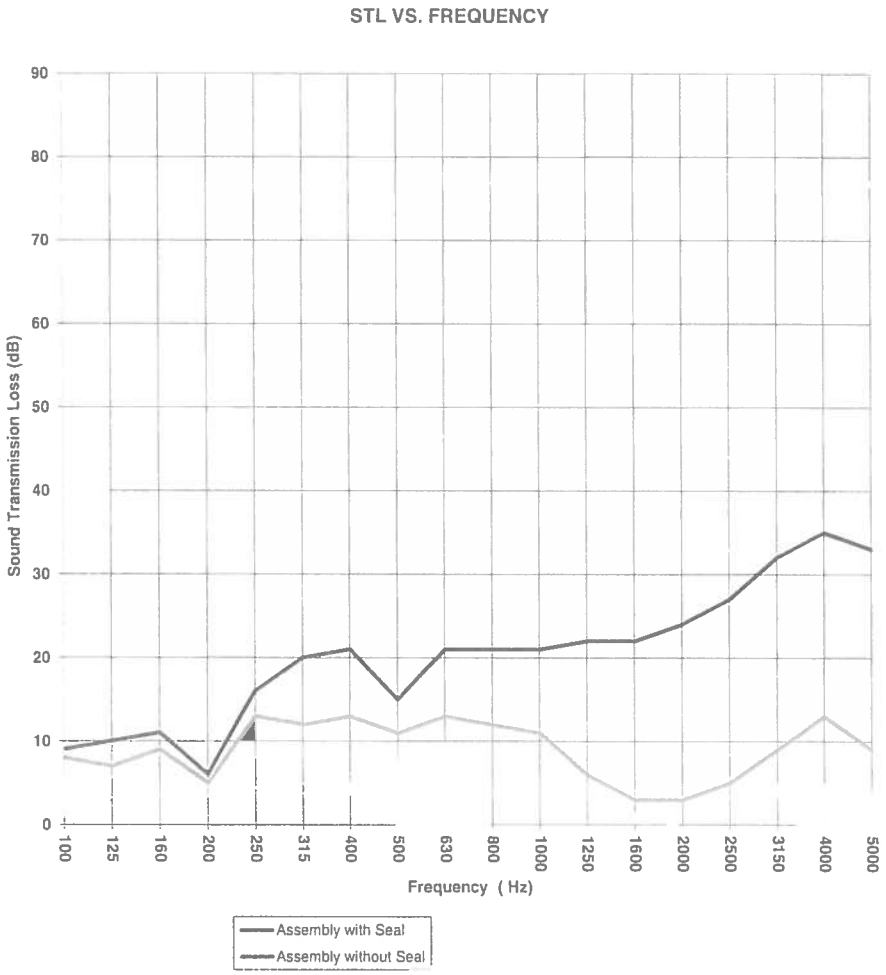
Src Rm Temp [°C]:	21.0
Src Rm Humidity [%]:	59.0
Rcv Rm Temp [°C]:	23.0
Rcv Rm Humidity [%]:	49.0
Specimen Area (m^2):	0.8
Composite Area (m^2):	11.7
Src Rm Vol (m^3):	86.7
Rcv Rm Vol (m^3):	282.1

Frequency [Hz]	STL [dB]	Δ STL [dB]
100	9	2.8
125	10	2.1
160	11	1.9
200	6	1.8
250	16	1.9
315	20	1.9
400	21	1.7
500	15	1.8
630	21	1.8
800	21	1.6
1000	21	1.6
1250	22	1.6
1600	22	1.3
2000	24	1.4
2500	27	1.1
3150	32	1.4
4000	35	1.1
5000	33	1.3



* The STL difference between the test specimen and the filler wall is less than 6 dB, therefore the reliabilty of the data at these frequencies is limited Per ASTM E90 Section 7 3 1 7

Δ STL = Uncertainty for 95% Confidence Level
STL = Sound Transmission Loss, dB