Acoustical Testing Laboratory

TEST REPORT

for

TMP Technologies, Incorporated
1200 Northland Avenue
Buffalo, NY 14215
Kirk Dorn / 716-895-6100

Small Scale Sound Transmission Loss Tests
ON

Simulated 3 Foot by 3 Foot Wall Section
With and Without Electrical Outlet Boxes and Outlet Seals

Report Number: NGC 3012001

Assignment Number: G-766

Test Date: 02/17/2012

Report Date: 03/22/2012

Submitted by: _____
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Test and Quality Engineer

Reviewed by: _____
Robert J. Menichetti
Director of Laboratory Facilities
& Testing Services

Report Number: NGC 3012001

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. Therefore the sound transmission data at each frequency should be utilized for comparison purposes with results from the measured values of the different samples in this test program.

Installation Description: The test specimens were mounted to the Receiving Room side of a 35-1/4 in. H x 35-1/4 in. W (895.4mm x 895.4mm) wall opening between the sound test Source and Receiving Rooms. The test samples were sealed to the perimeter of the wall opening frame with a resilient putty sealant.

It should be noted that all test specimens were manufactured by the client and tested as they were received. The following are observations that Lab personnel made with respect to the specimens.

IDENTIFICATION	DESCRIPTION
3010001-1:	Test #1 - A 35-1/4 inch by 35-1/4 inch (895.4mm x 895.4mm) panel consisting of a double layer of 5/8 inch (15.9mm) drywall on each side of a 3-1/2 inch (88.9mm) screw stud perimeter. The drywall was screwed to the perimeter using was appeared to be 2 inch (50.8mm) long Star Head screws spaced 8 inches (203.2mm) on center. The panel's thickness was 6-1/8 inches (155.6mm). The panel was un-insulated and weighed 84.7 pounds (38.4 kg). This equates to 9.8 PSF (47.8 kg/m^2).
3010001-2:	Test #2 The specimen construction was the same as used in Test #1. The specimen had nine single-gang electrical outlets mounted on each face of the panel. The outlets on one face were orientated back to back with those of the other face. Each outlet measured 2-3/4 inches (69.9mm) by 4-1/2 inches (114.3mm). There was no insulation between the backs of the outlets and there appeared to be a 1-1/2 inch (38.1mm) airspace between the backs of the boxes. For this sample, a TMP Box Seal was mounted behind each face plate of each outlet. The panel weighed 92.1 pounds (41.8 kg.). This equates to 9.8 PSF (52.2 kg/m^2).
3010001-3:	Test #3 The same specimen as used in Test #2 was used. However the TMP Box Seals were removed and the face plates were re-mounted.

The results of the tests are given on Page 3.

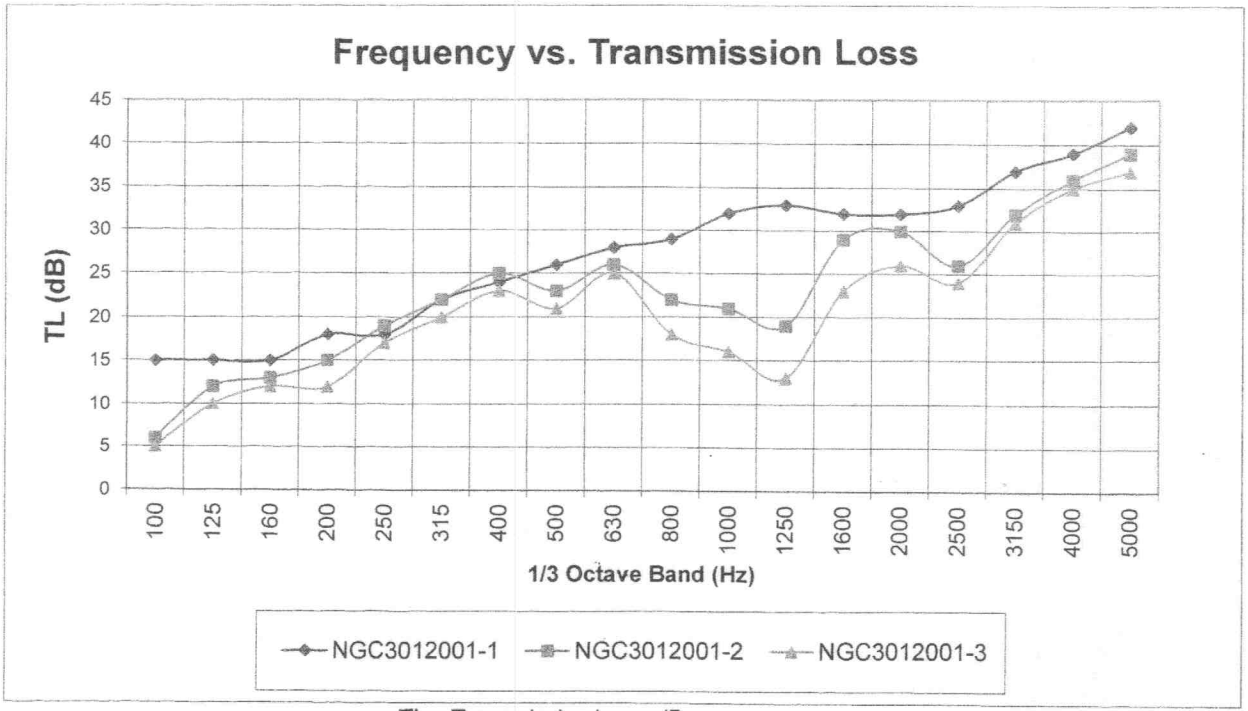
NGC Testing Services™

COMPARATIVE TEST DATA OF TRANSMISSION LOSSES
SMALL SCALE SOUND TRANSMISSION THROUGH 3 FOOT X 3 FOOT TEST OPENING

Unofficial Test based on ASTM E 90-09 test method. For comparison purposes only.

Date: 2/17/2012

Test No. >	NGC3012001-1	NGC3012001-2	NGC3012001-3
Frequency [Hz]	TL [dB]	TL [dB]	TL [dB]
100	15	6	5
125	15	12	10
160	15	13	12
200	18	15	12
250	18	19	17
315	22	22	20
400	24	25	23
500	26	23	21
630	28	26	25
800	29	22	18
1000	32	21	16
1250	33	19	13
1600	32	29	23
2000	32	30	26
2500	33	26	24
3150	37	32	31
4000	39	36	35
5000	42	39	37



TL = Transmission Loss, dB

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