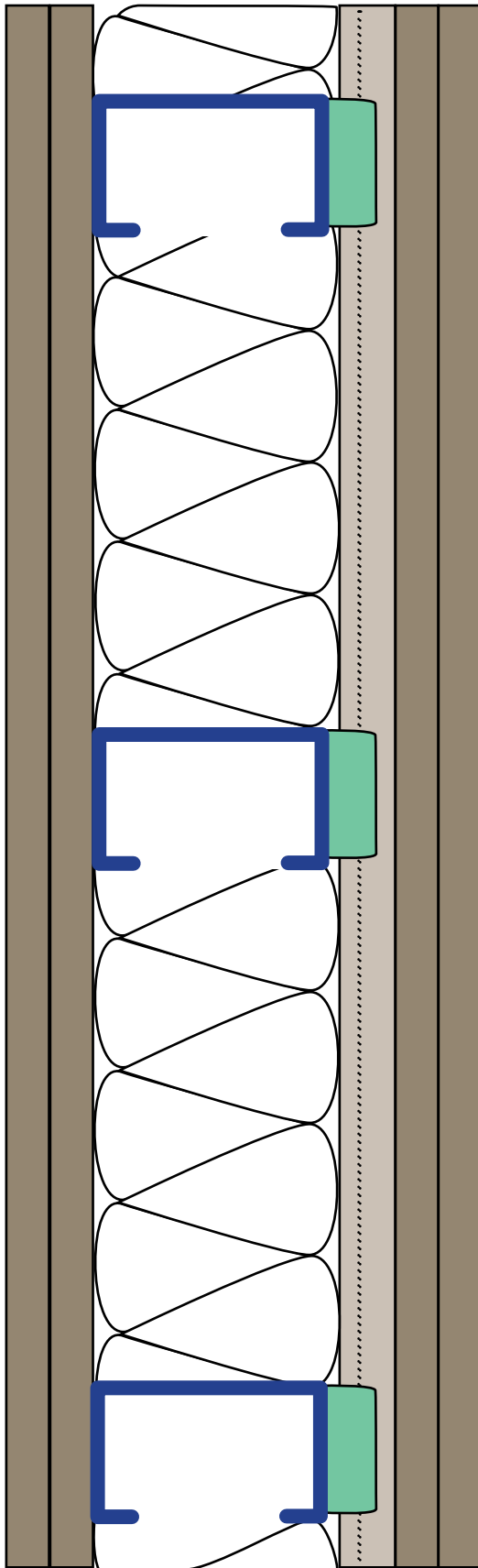


RC Assurance - 2/2 Layers - Wall Assembly



2x4

Sound Transmission Loss
Test Report No. TL07-329

STC - 59

Construction (Left to Right)

- 2 Layers 5/8" Gypsum Board
- 3 1/2" Batt Insulation
- 3 5/8" 20 Gauge Metal at 16" O.C.
- RC Assurance Clip
- Resilient Channel
- 2 Layers 5/8" Gypsum Board



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WESTERN ELECTRO - ACOUSTIC LABORATORY

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TESTING • CALIBRATION • RESEARCH

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SOUND TRANSMISSION LOSS TEST REPORT NO. TL07-329

CLIENT: **Veneklasen Associates, Inc.**
1711 16th Street
Santa Monica, CA 90404
TEST DATE: 15 May 2007

Page 1 of 2
16 May 2007

INTRODUCTION

The methods and procedures used for this test conform to the provisions and requirements of ASTM E 90-04, *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions*. Copies of the test standard are available at www.astm.org. The test chamber source and receiving room volumes are 204 and 148.4 cubic meters respectively. Western Electro-Acoustic Laboratory is accredited by NVLAP (National Voluntary Laboratory Accreditation Program) Lab Code 100256-0 for this test procedure. NVLAP is part of the United States Department of Commerce, National Institute of Standards and Technology (NIST). This test report relates only to the item(s) tested. Any advertising that utilizes this test report or test data must not imply product certification or endorsement by WEAL, NVLAP, NIST or the U.S. Government.

DESCRIPTION OF TEST SPECIMEN

The test specimen was a wall assembly constructed from metal studs, resilient channel, and type X gypsum board. The studs were 3-5/8 inch (92 mm) 20 gauge metal and were spaced horizontally at 16 inches (406 mm) O.C. The head and sill tracks were also 3-5/8 inch (92 mm) 20 gauge metal. The frame was isolated from the test opening with 1/4 inch (6.4 mm) neoprene pads. 3-1/2 inch (89 mm) thick R-13 fiberglass batts were installed in the stud space. On the source room side, Dietrich single leg deluxe resilient channels were attached to the studs with Keene RC Assurance clips. The channels were oriented horizontally with the resilient leg above the screw leg at 24 inches (610 mm) O.C. Two layers of 5/8 inch (15.9 mm) thick type X gypsum board were screwed to the channels at 12 inches (305 mm) O.C. The gypsum board was oriented vertically and the joints were staggered. On the receiving room side, two layers of 5/8 inch (15.9 mm) thick type X gypsum board were screwed to the studs at 8 inches (203 mm) O.C. around the perimeter and 12 inches (305 mm) O.C. in the field. The gypsum board was oriented vertically and the joints were staggered. All joints and perimeters were sealed with a bead of caulking and metal foil tape. Screw heads were covered with metal foil tape. The overall dimensions of the wall assembly were 96 inches (2.44 m) wide by 96 inches (2.44 m) high by 6-7/8 inches (175 mm) thick. The overall weight of the assembly was estimated to be 658 lbs (298 kg) for a calculated surface density of 10.3 lbs./ft² (50.2 kg/m²).

RESULTS OF THE MEASUREMENTS

One-third octave band sound transmission loss values are plotted and tabulated on the attached sheet. ASTM minimum volume requirements are met at 80 Hz and above. The Sound Transmission Class rating determined in accordance with ASTM E 413-04 was STC-59.

Respectfully submitted,
Western Electro-Acoustic Laboratory

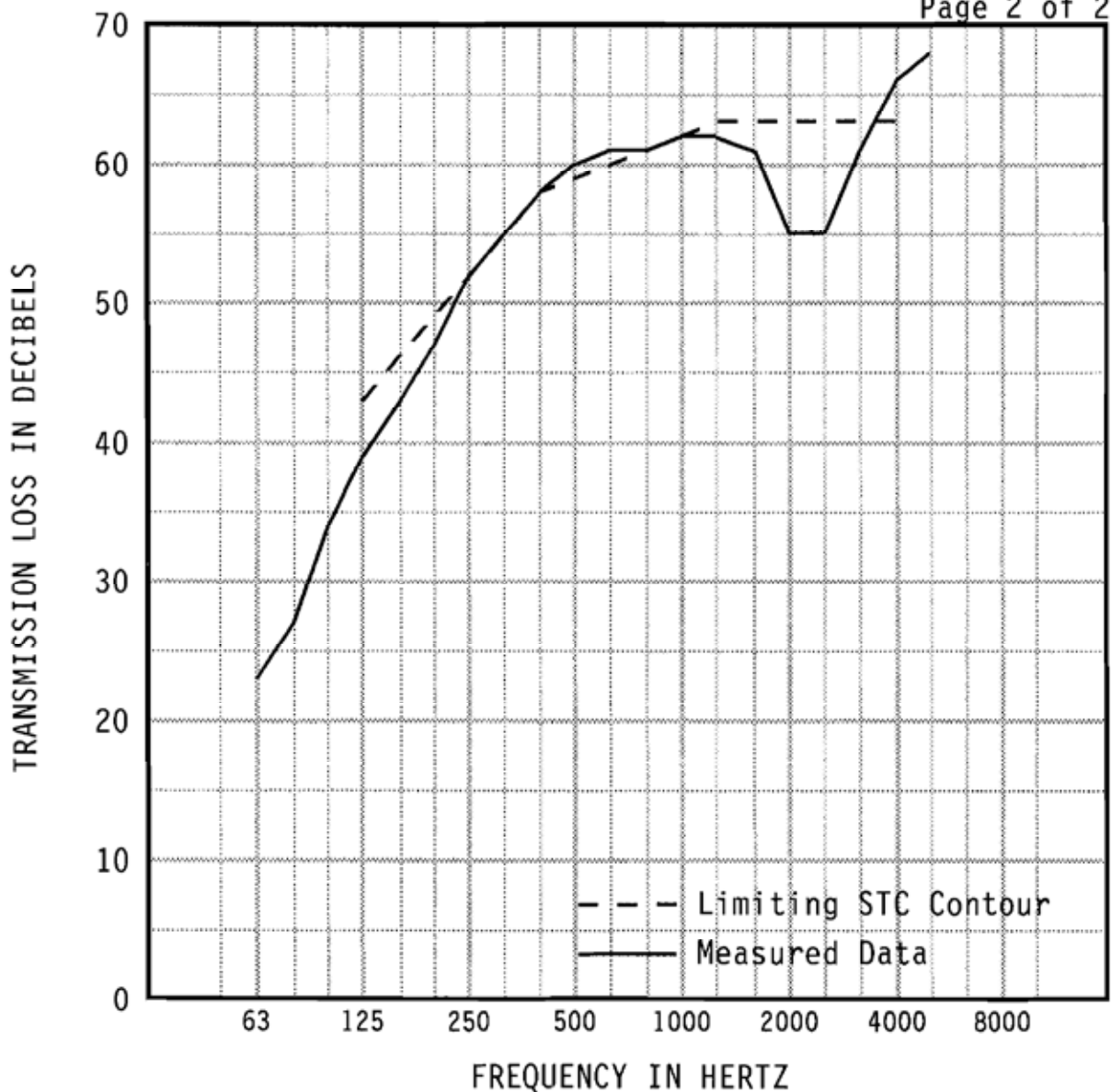

Gary E. Mange
Laboratory Director

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WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL07-329



1/3 OCT BND CNTR FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB	23	27	34	39	43	47	52	*55	*58	*60
95% Confidence in dB deficiencies	1.42	1.92	2.07	1.47 (4)	0.89 (3)	0.76 (2)	0.80 (0)	0.52 (0)	0.36 (0)	0.38
1/3 OCT BND CNTR FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB	61	61	62	62	61	55	55	61	66	68
95% Confidence in dB deficiencies	0.29	0.44 (0)	0.38 (0)	0.39 (1)	0.36 (2)	0.56 (8)	0.55 (8)	0.31 (2)	0.32	0.50

EWR	OITC
60	44

* Minimum estimate of transmission loss. Measurement limited by filler wall. Actual TL will be equal to or greater than value reported.

Specimen Area: 64 sq.ft.
 Temperature: 71.6 deg. F
 Relative Humidity: 43 %
 Test Date: 15 May 2007

STC
59
(30)

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