

# RSIC-V ACOUSTIC ASSEMBLY

## WALL ASSEMBLY

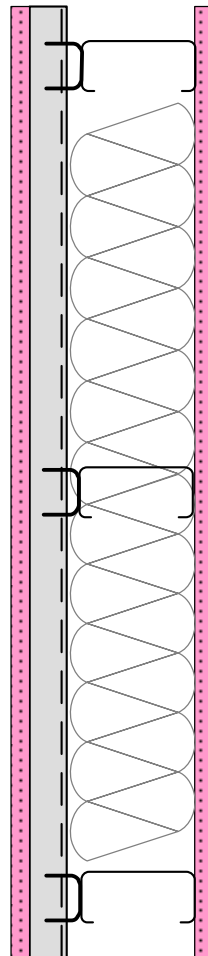


### DIRECT FIX TO STEEL STUD

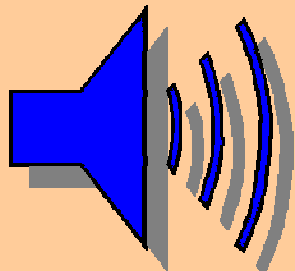
**RSIC-V TSW 090407 TL07-537 STC 54**

#### CONSTRUCTION

- \* 1 layer 5/8" FireCode Gyp.
- \* 3-5/8" x 25 Ga Dietrich Ultra Steel at 24" oc
- \* GFB Insulation nom. 6"
- \* RSIC-V @ 24" oc.
- \* Drywall Furring Channel @ 24" oc
- \* 1 layer 5/8" Firecode Gyp.



**Weal TL07-537 STC 54**



**STC 54**

**1 hour fire rating**



**UL U419**



# WESTERN ELECTRO - ACOUSTIC LABORATORY

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## SOUND TRANSMISSION LOSS TEST REPORT NO. TL07-537

CLIENT: **PAC International**  
7310 Smoke Ranch Road Suite E  
Las Vegas, NV 89128  
TEST DATE: 23 August 2007

Page 1 of 2  
29 November 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](http://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.

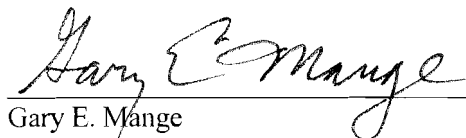
### DESCRIPTION OF TEST SPECIMEN

The test specimen was a wall assembly constructed from steel studs, isolation clips, and type "C" gypsum board. The studs were 3-5/8 inch (92.1 mm) 25 gauge Dietrich Ultra metal and were spaced at 24 inches (610mm) O.C. The head and sill tracks were also 3-5/8 inch (92.1 mm) 25 gauge Dietrich Ultra metal. The frame was isolated from the test opening with 1/4 inch (6.4 mm) neoprene pads. 6 inch (152 mm) Knauf faced fiberglass batts were installed in the stud spaces. On the receiving room side, one layer of 5/8 inch (15.9 mm) thick Fire Code type "C" gypsum board was screwed to the studs using drywall screws at 12 inches (305 mm) O.C. around the perimeter and in the field. The gypsum board was oriented vertically. On the source room side, RSIC-V claws were screwed directly to the studs using #8 x 9/16 inch (14.3 mm) needlepoint wafer head screws at a vertical and horizontal spacing of 24 inches (610 mm) O.C. 2-1/2 inch (63.5 mm) by 7/8 inch (22.2 mm) drywall furring channels were installed into the RSIC-V claws. One layer of 5/8 inch (15.9 mm) thick Fire Code type "C" gypsum board was screwed to the channels using drywall screws at 12 inches (305 mm) O.C. The gypsum board was oriented vertically. On both sides, the joints and perimeter were sealed with a bead of caulk and metal foil tape. All 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 6-1/8 inches (156 mm) thick. The overall weight of the assembly was estimated to be 344 lbs (156 kg) for a calculated surface density of 5.38lbs./ft<sup>2</sup> (26.3 kg/m<sup>2</sup>).

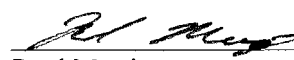
### RESULTS OF THE MEASUREMENTS

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-54.

Approved:

  
Gary E. Mange  
Laboratory Manager

Respectfully submitted,  
Western Electro-Acoustic Laboratory

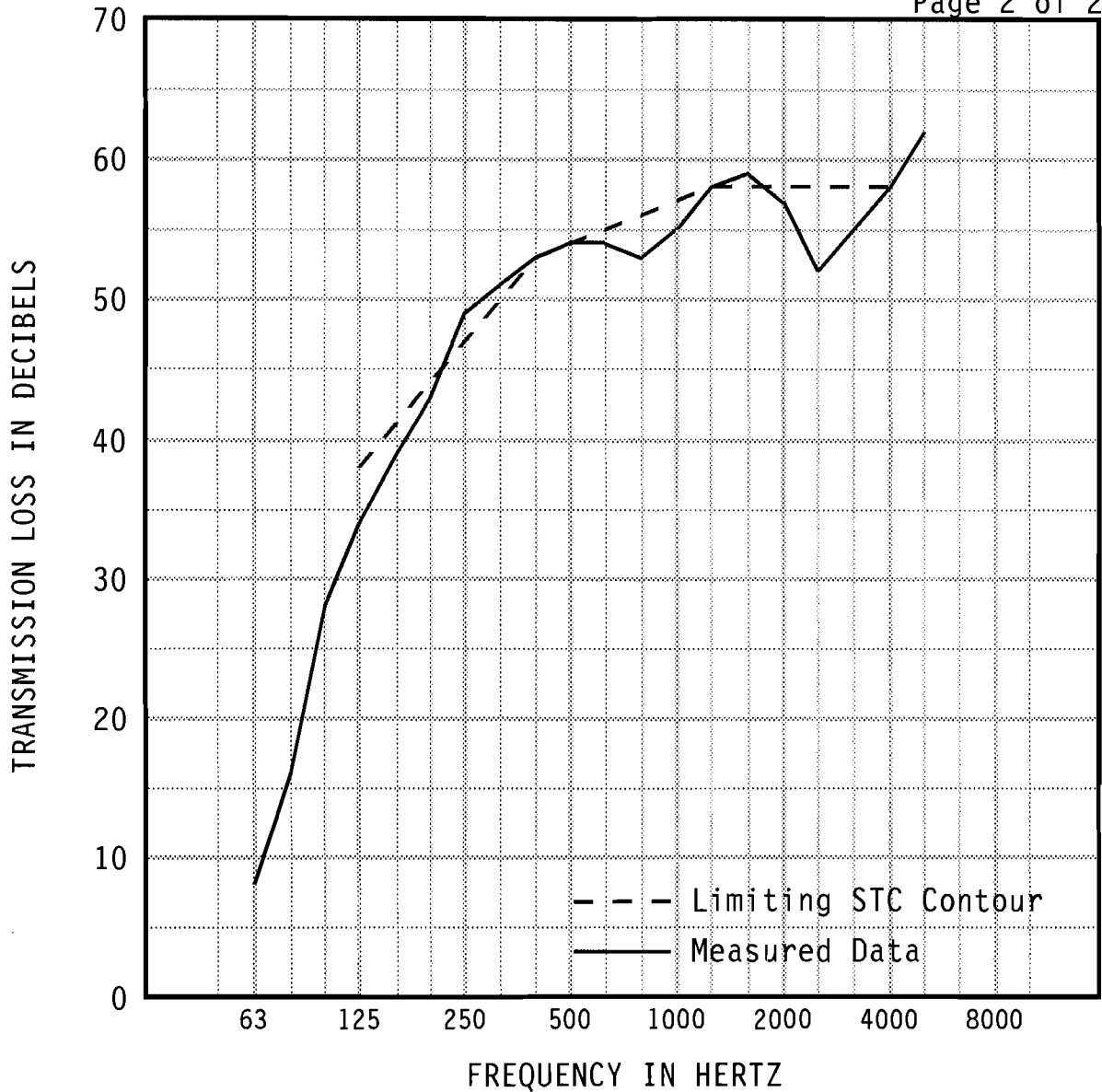
  
Raul Martinez  
Acoustical Test Technician

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# WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL07-537



1/3 OCT BND CNTR	FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB		8	16	28	34	39	43	49	51	53	54
95% Confidence in dB deficiencies		1.42	1.92	2.07	1.47 (4)	0.89 (2)	0.76 (1)	0.80	0.52	0.36 (0)	0.38 (0)
1/3 OCT BND CNTR	FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB		54	53	55	58	59	57	52	55	58	62
95% Confidence in dB deficiencies		0.29 (1)	0.44 (3)	0.38 (2)	0.39 (0)	0.36	0.56 (1)	0.55 (6)	0.31 (3)	0.32 (0)	0.50

EWR	OITC
55	35

Specimen Area: 64 sq.ft.  
 Temperature: 77.9 deg. F  
 Relative Humidity: 53 %  
 Test Date: 23 August 2007

STC
54
(23)