



# WESTERN ELECTRO - ACOUSTIC LABORATORY

A division of Veneklasen Associates, Inc.

T E S T I N G • C A L I B R A T I O N • R E S E A R C H

25132 Rye Canyon Loop Santa Clarita, California 91355 Tel: (661) 775-3741 Fax: (661) 775-3742 www.weal.com

## SOUND TRANSMISSION LOSS TEST REPORT NO. TL08-696

CLIENT: **CEMCO**  
263 N Covina Lane  
City of Industry, CA 91744  
TEST DATE: 14 November 2008

Page 1 of 2  
29 December 2008

### 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.

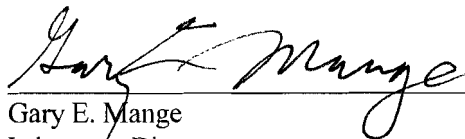
### DESCRIPTION OF TEST SPECIMEN

The test specimen was a wall assembly constructed from metal studs, resilient channel and type X gypsum board. The metal studs were 3-5/8 inch (92 mm) Cemco 20 gauge spaced at 24 inches (609 mm) O.C. The sill track was 3-5/8 inch (92 mm) Cemco 20 gauge metal. The head track was 3-5/8 inch (92 mm) Cemco FAS Track 20 gauge metal. The sill and edge studs were isolated from the test opening with 1/4 inch (6.4 mm) neoprene pads. Three and one half inch (89 mm) R-13 fiberglass batts were installed in the stud spaces. On both sides, a strip of Blaze Seal Intumescent tape was installed on the frame at the head. On the receiving room side, one layers of 5/8 inch (15.9 mm) thick type X gypsum board was 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 horizontally. On the source room side, Cemco RC-1 single leg resilient channels were attached to the studs and oriented horizontally with the resilient leg facing upward above the screwable leg at 24 inches (610 mm) O.C. The center of the top channel was 3 inches (76.2 mm) below the top of the wall and the center of the bottom channel was 3 inches (76.2 mm) above the bottom of the wall. One layer of 5/8 inch (15.9 mm) thick type X gypsum board was screwed to the channels at 12 inches (305 mm) O.C. with 1 inch (25.4 mm) drywall screws. The drywall was oriented horizontally. **On both sides, a gap was intentionally left at the head to expose the Blaze Seal Intumescent tape. On both sides, the joints and perimeters were sealed with a bead of caulking and metal foil tape except at the head.** 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 5-3/8 inches (137 mm) thick. The overall weight of the assembly was estimated to be 333 lbs. (151 kg) for a calculated surface density of 5.20 lbs./ft<sup>2</sup> (25.4 kg/m<sup>2</sup>).


### RESULTS OF THE MEASUREMENTS

One-third octave band sound transmission loss values are 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-52.

Approved:

  
Gary E. Mange  
Laboratory Director

Respectfully submitted,  
Western Electro-Acoustic Laboratory

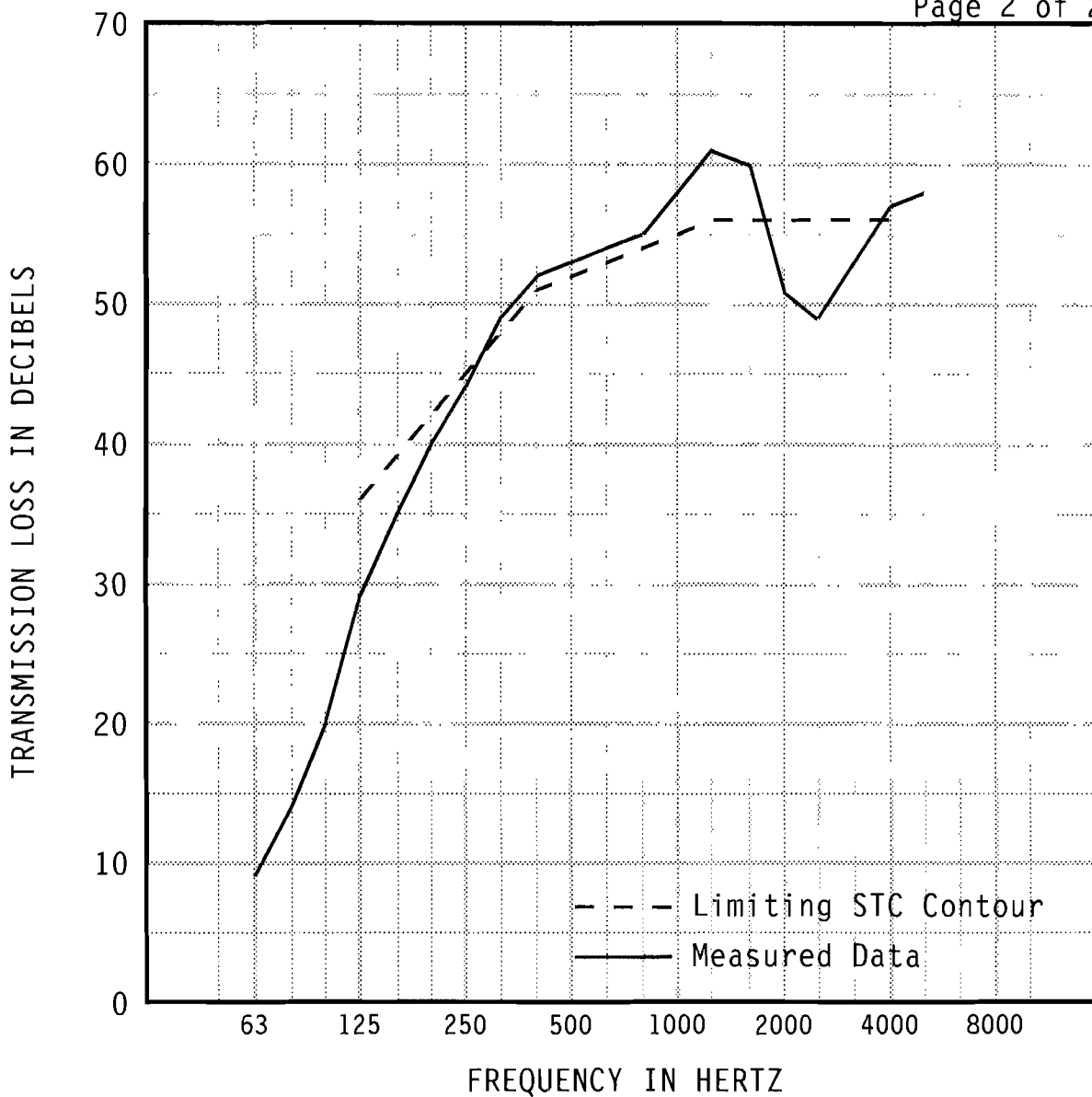
  
Raul Martinez  
Acoustical Test Technician

Report must be distributed in its entirety except with written authorization from Western Electro-Acoustic Laboratory



# WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL08-696



1/3 OCT BND CNTR FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB	9	14	20	29	35	40	44	49	52	53
95% Confidence in dB deficiencies	1.42	1.92	2.07	1.47 (7)	0.89 (4)	0.76 (2)	0.80 (1)	0.52	0.36	0.38
1/3 OCT BND CNTR FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB	54	55	58	61	60	51	49	53	57	58
95% Confidence in dB deficiencies	0.29	0.44	0.38	0.39	0.36	0.56 (5)	0.55 (7)	0.31 (3)	0.32	0.50

EWR	OITC	Specimen Area: 64 sq.ft. Temperature: 77.2 deg. F Relative Humidity: 31 % Test Date: 14 November 2008	STC
53	32		52
			(29)