WESTERN ELECTRO - ACOUSTIC LABORATORY
A division of Veneklasen Associates, Inc.

TESTING • CALIBRATION • RESEARCH

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. TL05-282

CLIENT: AMSCO WINDOWS
1880 South 1045 West
P.O. Box 25368
Salt Lake City, Utah 841125

TEST DATE: 19 July 2005

30 August 2005

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*. Details of the procedure will be furnished upon request. 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 an AMSCO "VLS Series with Sound Option" vinyl horizontal sliding double window assembly in a single frame. The specimen was installed by screwing the nailing fin around the entire perimeter to the wood edge of the test chamber opening. The specimen was sealed into the test chamber opening with a heavy duct seal putty around the entire perimeter on both sides. The exterior window consisted of an operable panel and a fixed panel with glazing of 3/4 inch (19.1 mm) dual glazed units which were 3/32 inch (2.4 mm) single strength glass, 9/16 inch (14.3 mm) air space, and 3/32 inch (2.4 mm) single strength glass. The interior window consisted of two operable panels with glazing of 1/4 inch (6.4 mm) monolithic glass. The nominal spacing between the windows at the fixed panel was 2-3/8 inches (60.3 mm) and at the operable panel was 2-1/2 inches (63.5 mm) glass to glass. The weather stripping used on the exterior window was 240 high 187 back (.240 in. x .187 in.) fin seal on the exterior head, sill, and jamb of the operable panel and on the fixed interlock. The weather stripping used on the interior window's left panel was 240 high 187 back fin seal on the full interior perimeter and on the exterior head, sill, and jamb. The weather stripping used on the interior window's right panel was 240 high 187 back fin seal on the full exterior perimeter and on the interior head, sill, and jamb. The net outside frame dimensions of the window assembly were 71-3/4 inches (1.82 m) wide by 47-3/4 inches (1.21 m) high by 5-1/2 inches (139.7 mm) deep. The overall weight of the assembly was 151.5 lbs. (68.7 kg) for a calculated surface density of 6.37 lbs./ft^2 (31.1 kg/m^2). The two weep holes were normal and open. The operable portion of the assembly was opened and closed five times immediately prior to the test.

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-43.

Approved:

Gary E. Mange
Laboratory Manager

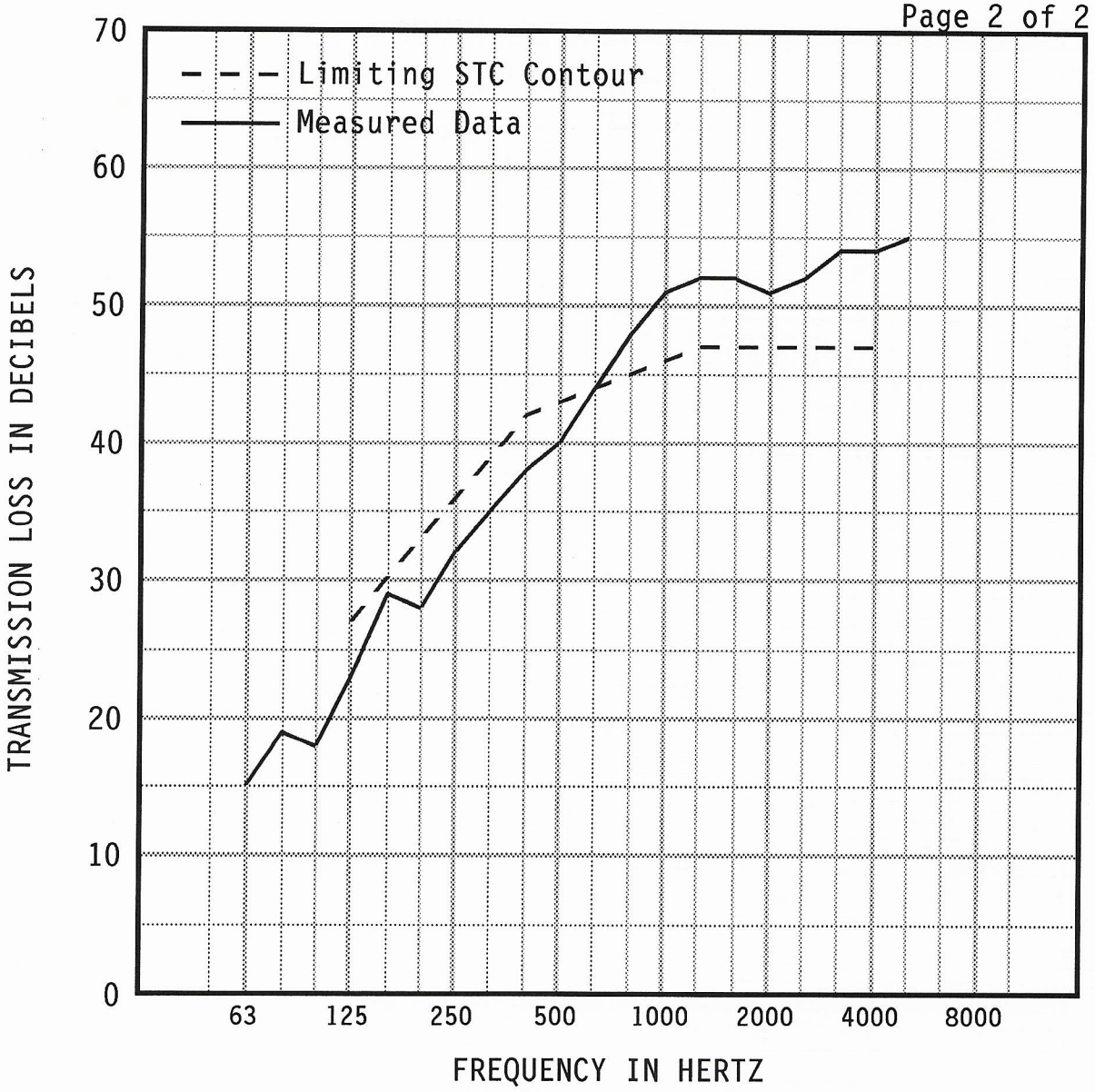
Respectfully submitted,
Western Electro-Acoustic Laboratory

Leo Amezcua
Acoustical Test Technician

NVLAP LAB CODE 100256-0

WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL05-282



1/3 OCT BND CNTR FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB	15	19	18	23	29	28	32	35	38	40
95% Confidence in dB	1.42	1.92	2.07	1.47	0.89	0.76	0.80	0.52	0.36	0.38
deficiencies				(4)	(1)	(5)	(4)	(4)	(4)	(3)

1/3 OCT BND CNTR FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB	44	48	51	52	52	51	52	54	54	55
95% Confidence in dB	0.29	0.44	0.38	0.39	0.36	0.56	0.55	0.31	0.32	0.50
deficiencies	(0)									

EWR	OITC
42	31

Specimen Area: 23.79 sq.ft.
Temperature: 77.4 deg. F
Relative Humidity: 51 %
Test Date: 19 July 2005

STC
43
(25)