WESTERN ELECTRO - ACOUSTIC LABORATORY
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SOUND TRANSMISSION LOSS TEST REPORT NO. TL08-291

CLIENT: **Soundproof Windows**
4673 Aircenter Circle
Reno, NV 89502
TEST DATE: 17 April 2008

6 October 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. 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 consisted of an exterior piece of glass and a Soundproof Window interior window assembly. The exterior was a blind stopped sheet of 1/4 inch (6.4 mm) monolithic annealed glass, sealed with putty around edges. The interior window assembly was manufactured by Soundproof Windows. The interior window consisted of two operable panels and was installed by screwing the frame to the wood around the perimeter of the test chamber opening. The interior window was sealed into the test chamber opening with a heavy duct seal putty around the entire perimeter on the interior side. The glazing consisted of 7/32 inch (5.6 mm) laminated glass with .030 PVB inner layer. Both lites were marine glazed with a wrap around gasket. The nominal spacing between the windows at one panel was 3-1/4 inches (83 mm) and at the other panel was 4 inches (102 mm) glass to glass. The weather stripping used on both panels of the interior window was a Qlon bulb seal at the interlock and a custom designed 3 finger vinyl seal on the frame at the sides. The sill and head were frame sealed using a custom tension sealed glide track. The net outside frame dimensions of the window assemblies were 71-1/2 inches (1.82 m) wide by 47-1/2 inches (1.21 m) high by 8 inches (203 mm) deep. The overall weight of the assembly was 146 lbs. (66.2 kg) for a calculated surface density of 6.19 lbs./ft^2 (30.2 kg/m^2). All operable portions of the assembly were 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-51.

Respectfully submitted,
Western Electro-Acoustic Laboratory

Approved:

Gary E. Mange
Laboratory Director

Raul Martinez
Acoustical Test Technician

NVLAP

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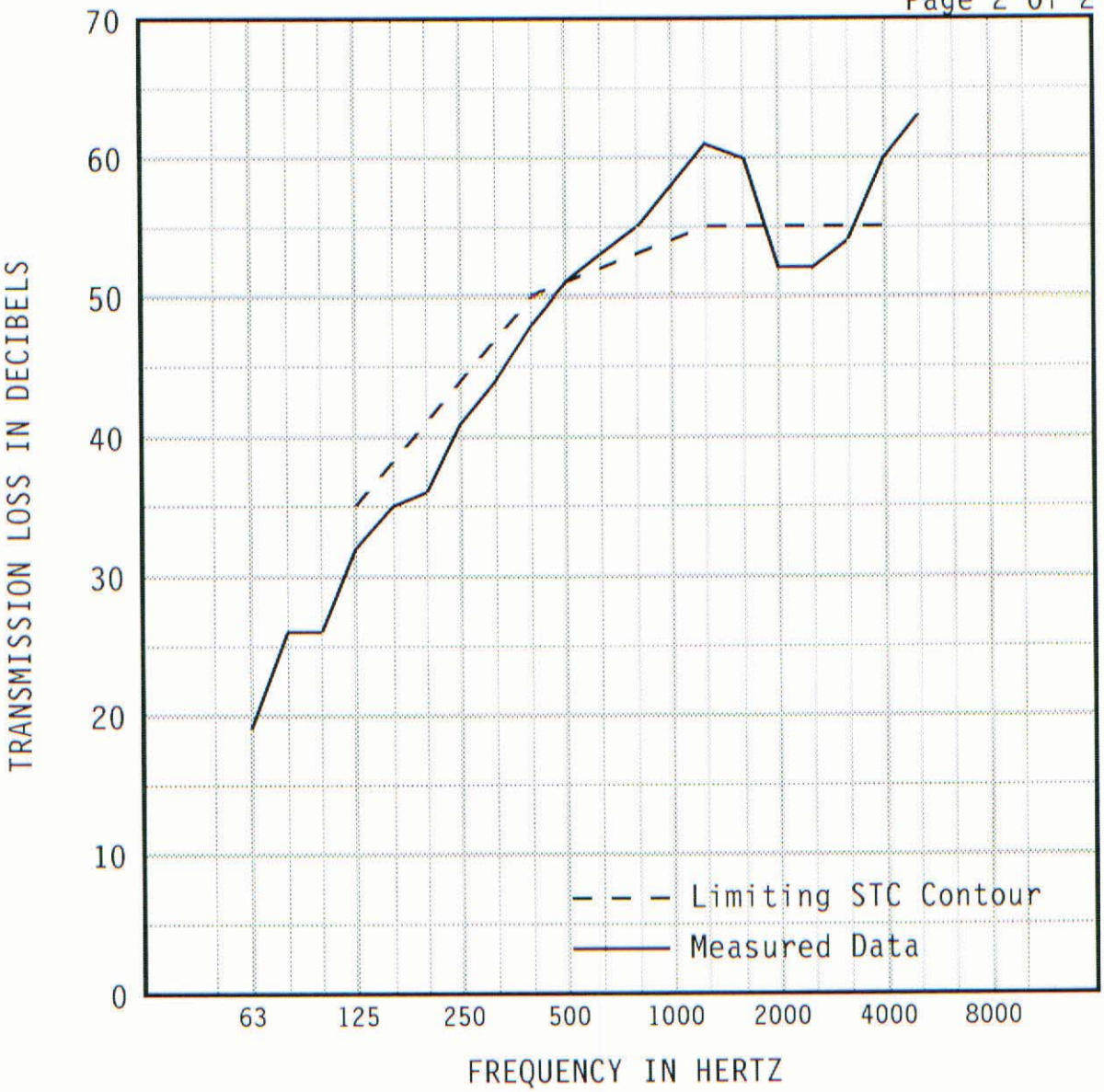

1/3 OCT BND CNTR FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB	19	26	26	32	35	36	41	44	48	51
95% Confidence in dB	1.42	1.92	2.07	1.47	0.89	0.76	0.80	0.52	0.36	0.38
deficiencies				(3)	(3)	(5)	(3)	(3)	(2)	(0)

1/3 OCT BND CNTR FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB	53	55	58	61	60	52	52	54	60	63
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						(3)	(3)	(1)		

EWR	OITC
51	39

Specimen Area: 23.59 sq.ft.
Temperature: 72.1 deg. F
Relative Humidity: 31 %
Test Date: 17 April 2008

STC
51
(26)