



SOUND TRANSMISSION LOSS TEST REPORT NO. TL13-374 revision 1

CLIENT: **MI Windows & Doors**
7555 E State Route 69
Prescott, AZ 86314

Page 1 of 2
26 September 2013

TEST DATE: 8 July 2013

INTRODUCTION

The methods and procedures used for each test conform to the provisions and requirements of ASTM E 90-09, *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions* and ASTM E2235-04^{E1}, *Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods*. 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 the United States Department of Commerce, National Institute of Standards and Technology under the National Voluntary Accreditation Program (NVLAP) Lab Code 100256-0 for this test procedure. This test report relates only to the item(s) tested. This report must not be used to claim product certification, approval, or endorsement by WEAL, NVLAP, NIST or any agency of the federal government.

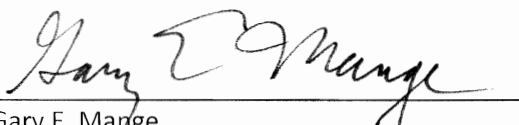
DESCRIPTION OF TEST SPECIMEN

The test specimen was a MI Windows HM-155 (also labeled as BB-155 and EC-155) vinyl fixed window assembly. The specimen was installed by fastening the mounting fin around the entire perimeter to the wood edge of the test chamber opening. The assembly was sealed into the test chamber opening with latex caulking under the mounting fin and a heavy duct seal putty around the entire perimeter on the receiving room side. The glazing consisted of a 28.6 mm (1-1/8 inch) dual glazed unit which was 5 mm (3/16 inch) monolithic exterior glass, 20 mm (13/16 inch) air space with a Superspacer, and 3 mm (1/8 inch) double strength interior glass. The unit was glazed into the main frame using glazing tape and a vinyl snap in bead. The net outside frame dimensions of the window assembly were 1.82 m (71-1/2 inches) wide by 1.21 m (47-1/2 inches) high by 82.6 mm (3-1/4 inches) deep. The overall weight of the assembly was 46.7 kg. (103 lbs.) for a calculated surface density of 21.3 kg/m² (4.37 lbs./ft²). The weep holes were normal without covers.

RESULTS OF THE MEASUREMENTS

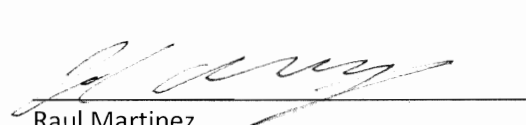
One-third octave band sound transmission loss values are plotted and tabulated on the attached sheet. ASTM minimum volume requirements are met at 80 Hz and above. The Outdoor-Indoor Transmission Class rating determined in accordance with ASTM E 1332-10a was OITC-26. The Sound Transmission Class rating determined in accordance with ASTM E 413-10 was STC-33.

Approved:



Gary E. Mangle
Laboratory Director

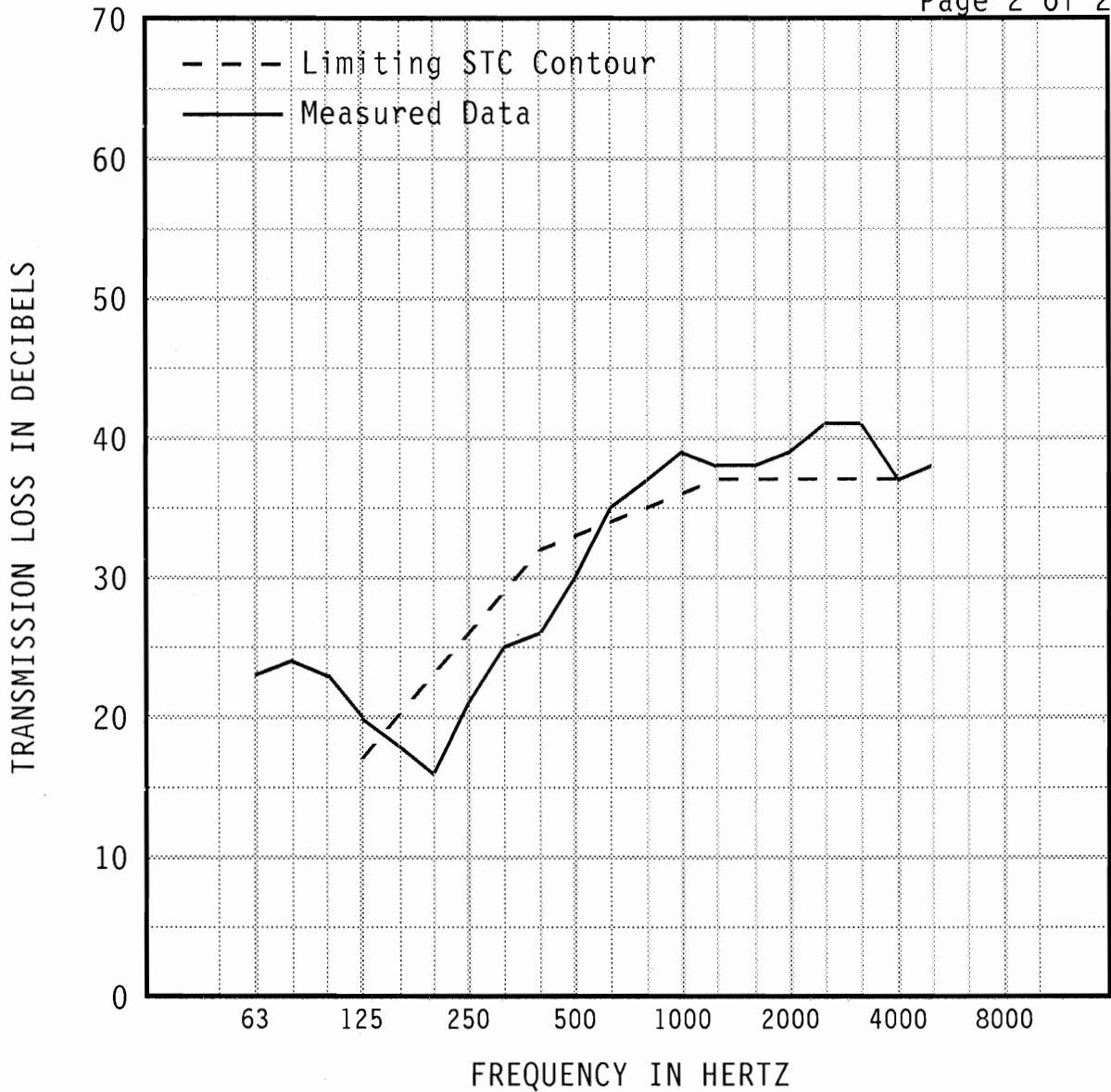
Respectfully submitted,
Western Electro-Acoustic Laboratory



Raul Martinez
Acoustical Test Technician

WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL13-374



1/3 OCT BND CNTR	FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB		*23	24	23	20	18	16	21	25	26	30
95% Confidence in dB deficiencies		1.42	1.92	2.07	1.47	0.89 (2)	0.76 (7)	0.80 (5)	0.52 (4)	0.36 (6)	0.38 (3)
1/3 OCT BND CNTR	FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB		35	37	39	38	38	39	41	41	37	38
95% Confidence in dB deficiencies		0.29	0.44	0.38	0.39	0.36	0.56	0.55	0.31	0.32 (0)	0.50

EWR	OITC	* Minimum estimate of transmission loss. Measurement limited by filler wall. Actual TL will be equal to or greater than value reported.	Specimen Area: 23.59 sq.ft. Temperature: 73.2 deg. F Relative Humidity: 40 % Test Date: 08 July 2013	STC
32	26			33 (27)

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