

## 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. TL13-519

CLIENT:

**MI Windows & Doors** 

Page 1 of 2

7555 E State Route 69

17 October 2013

Prescott, AZ 86314

TEST DATE: 14 August 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<sup>£1</sup>, Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods. Copies of the test standard are available at <a href="www.astm.org">www.astm.org</a>. 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 5610 Polyvinyl Chloride (PVC) Vinyl Fixed Window assembly. (According to the manufacturer, this product is also produced as a Series 5900.) 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 nominal 19 mm (3/4 inch) dual glazed unit which was 3 mm (1/8 inch) double strength exterior glass, 12.4 mm (1/2 inch) air space with a Dura Lite spacer, 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 69.8 mm (2-3/4 inches) deep. The overall weight of the assembly was 36.2 kg. (80 lbs.) for a calculated surface density of 16.5 kg/m² (3.39 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-24. The Sound Transmission Class rating determined in accordance with ASTM E 413-10 was STC-29.

Approved:

Respectfully submitted,

Western Electro-Acoustic Laboratory

Gary E. Mange

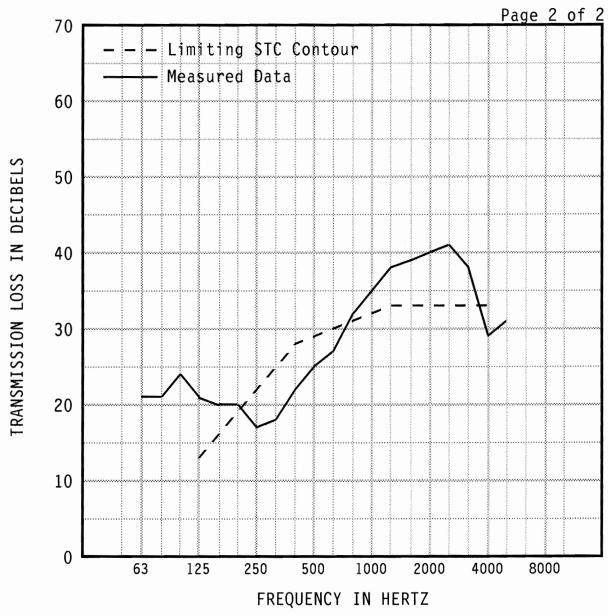
Laboratory Director

Raul Martinez

Acoustical Test Technician

# WESTERN ELECTRO-ACOUSTIC LABORATORY

Report No. TL13-519



1/3 0	CT BND	63	80	100	125	160	200	250	315	400	500	
TL in		21	21	24	21	20	20	17	18	22	25	
	onfide icienc	1.42	1.92	2.07	1.47	0.89	0.76	0.80	0.52	0.36	0.38	
1/3 0	CT BND	CNTR FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
	dB Confide Cicienc	27 0.29 (3)	32 0.44	35 0.38	38 0.39	39 0.36	40 0.56	41 0.55	38 0.31	29 0.32 (4)	31 0.50	
EWR	OITC	Specimen Area: 23.59 sq.ft.										STC
30	24	Temperature: 75.7 deg. F									29 (29)	
Relative Humidity: 48 %												(2)

Relative Humidity: 48 %

Test Date: 14 August 2013

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

