

WESTERN ELECTRO - ACOUSTIC LABORATORY

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SOUND TRANSMISSION LOSS TEST REPORT NO. TL15-129

CLIENT: C.R. Laurence 2503 E. Vernon Ave. Los Angeles CA 90058 TEST DATE: 29 January 2015 Page 1 of 1 17 February 2015

INTRODUCTION

The test was performed in accordance with ASTM E 90-09, *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions* and ASTM E2235-04^{£1}, *Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods*. Copies of the test standard are available at <u>www.astm.org</u>. 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 C.R. Laurence WU1/WU3 U-channel fixed window office system assembly. The specimen came pre mounted in a wood buck. The specimen was installed by sliding it completely into the test chamber opening and capturing it with screws on both sides. The specimen was sealed into the test chamber opening with silicone caulk around the entire perimeter on both sides of the buck. The glazing consisted of two 14.3mm (9/16 inch) laminated glass units. The laminated glass utilized a 1.5mm (.060 inch) PVB interlayer. The laminated glass units were set side by side. A clear copolymer joint filler was used between the glass lites. The glass units were glazed into an aluminum rail at the head and sill using a roll in gasket. The glass units were sealed with silicone at the glass joint and against the buck. The net outside frame dimensions of the specimen were 2.00 m (78-3/4 inches) wide by 2.00 m (78-3/4 inches) high. The overall weight of the assembly was 15.6 kg (289 lbs.) for a calculated surface density of 30.4 kg/m² (6.23 lbs./ft²).

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. Flagged values are lower limits of transmission loss. Actual transmission loss will be equal to or greater than the flagged value. The energy through the filler wall was within 6 dB of the energy through the composite wall in those frequency bands. The calculated STC rating is accurate because none of the values used to calculate the STC are flagged. The Outdoor-Indoor Transmission Class rating determined in accordance with ASTM E 1332-10a was OITC-33. The Sound Transmission Class rating determined in accordance with ASTM E 413-10 was STC-36.

Approved:

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Gary E. Mange Laboratory Director

Respectfully submitted, Western Electro-Acoustic Laboratory

Raul Martinez Acoustical Test Technician

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