



WESTERN ELECTRO - ACOUSTIC LABORATORY, INC.

PO w/ 1 1/2" IG 9/16 5/16

RESEARCH • CONSULTING • CALIBRATION • INSTRUMENTATION

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10 June 1994

REPORT SOUND TRANSMISSION LOSS TEST NO. TL94-156

CLIENT: FLEETWOOD ALUMINUM PRODUCTS, INC.
TEST DATE: 9 June 1994

INTRODUCTION

The methods and procedures used for this test conform to the provisions and requirements of ASTM Procedure E90-90, *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 volume are 79.9 and 78 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) for this test procedure. This test report relates only to the item(s) tested. Any advertising which 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 a Fleetwood 5000 Series aluminum project out window assembly. The specimen was sealed into the test chamber opening with a heavy duct seal putty around the entire perimeter on both sides. The glazing consisted of a 1-1/2 inch (38 mm) dual glazed unit which was 9/16 inch (14.3 mm) laminated glass, 5/8 inch (15.9 mm) air space, and 5/16 inch (7.9 mm) laminated glass. The 9/16 inch laminated glass was 1/4 inch (6.4 mm) glass, .060 inch (1.5 mm) interlayer, and 1/4 inch (6.4 mm) glass. The 5/16 inch laminated glass was 1/8 inch (3.2 mm) glass, .060 inch (1.5 mm) interlayer, and 1/8 inch (3.2 mm) glass. The unit was glazed into its frame using a butyl tape and aluminum snap in with hollow vinyl bulb seal. The weather stripping used was hollow vinyl bulb seal around the entire perimeter of the panel in two locations. The operable panel was held in the closed position by a single lever latch. The net outside frame dimensions of the window assembly were 35-1/2 inches (0.90 m) wide by 55-1/2 inches (1.41 m) high. The overall weight of the assembly was 140 lbs. (63.5 kg) for a calculated surface density of 10.2 lbs./ft² (50.0 kg/m²). There were two weep slots in the frame sill. 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 tabulated on the attached sheet. ASTM minimum volume requirements are met at 125 Hz and above. The Sound Transmission Class rating determined in accordance with ASTM E-413 was STC-45.

Approved:

Jose C. Ortega

Respectfully submitted,
Western Electro-Acoustic Laboratory, Inc.

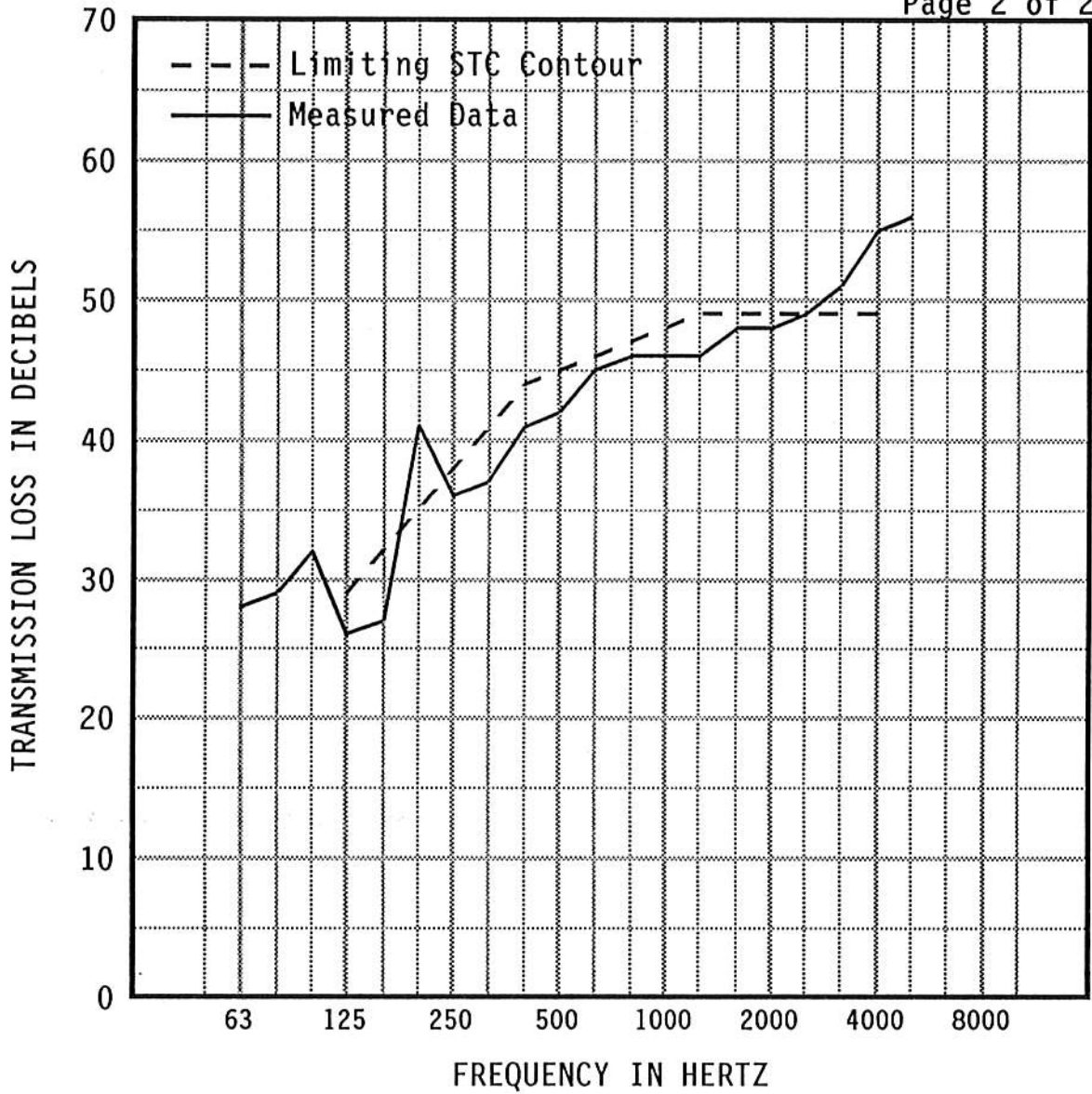
Gary E. Mange



ACCREDITED BY THE NATIONAL BUREAU OF STANDARDS, NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.

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|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1/3 OCT BND CNTR FREQ | 63 | 80 | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 |
| TL in dB | 28 | 29 | 32 | 26 | 27 | 41 | 36 | 37 | 41 | 42 |
| 95% Confidence in dB deficiencies | 3.77 | 2.69 | 3.05 | 1.97 (3) | 1.79 (5) | 0.84 | 0.94 (2) | 0.87 (4) | 0.91 (3) | 0.65 (3) |
| 1/3 OCT BND CNTR FREQ | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 |
| TL in dB | 45 | 46 | 46 | 46 | 48 | 48 | 49 | 51 | 55 | 56 |
| 95% Confidence in dB deficiencies | 0.43 (1) | 0.46 (1) | 0.38 (2) | 0.65 (3) | 0.46 (1) | 0.54 (1) | 0.44 (0) | 0.39 | 0.46 | 0.65 |

| | |
|-----|------|
| EWR | OITC |
| 45 | 37 |

Specimen Area: 13.682 sq.ft.
 Temperature: 72.8 deg. F
 Relative Humidity: 61 %
 Test Date: 09 June 1994

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|------------|
| STC |
| 45 (29) |