

**WESTERN ELECTRO - ACOUSTIC LABORATORY, INC.**

RESEARCH • CONSULTING • CALIBRATION • INSTRUMENTATION

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7 October 1994

REPORT**SOUND TRANSMISSION LOSS TEST NO. TL94-176**

CLIENT: FLEETWOOD ALUMINUM PRODUCTS, INC.
TEST DATE: 15 September 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 Yukon 5000T 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. According to the manufacturer:


The glazing consisted of a 1 inch (25.4 mm) dual glazed unit which was 1/4 inch (6.4 mm) laminated glass, 9/16 inch (14.3 mm) air space, and 3/16 inch (4.8 mm) monolithic glass.

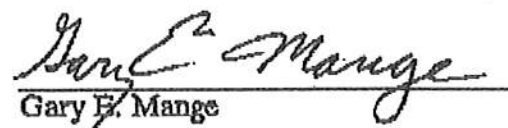
The unit was glazed into its frame using glazing tape and a snap in bead. The weather stripping used was a vinyl bulb seal around the entire perimeter of the panel in two locations. The net outside frame dimensions of the window assembly were 35-1/2 inches (0.90 m) wide by 47-1/2 inches (1.21 m) high. The overall weight of the assembly was 87 lbs. (39.4 kg) for a calculated surface density of 7.43 lbs./ft² (36.3 kg/m²). The two weep holes were normal and open. The operable portion of the assembly was opened and closed five times immediately prior to the test.

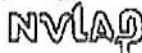
RESULTS OF THE MEASUREMENTS

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-40.

Approved:

Respectfully submitted,
Western Electro-Acoustic Laboratory, Inc.

 Jose C. Ortega

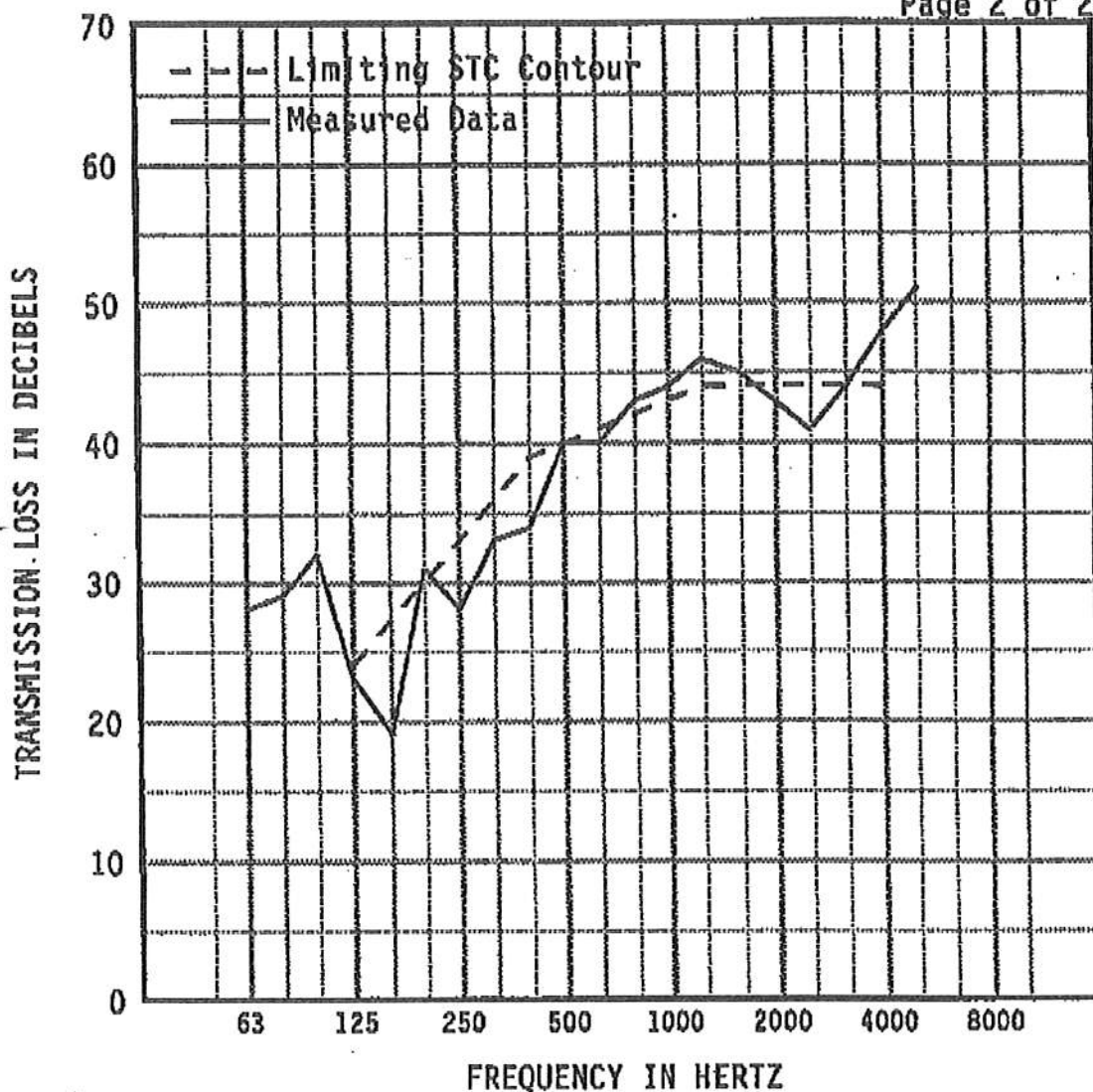

 Gary E. Mange



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Report No. TL94-176



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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 | 23 | 19 | 31 | 28 | 33 | 34 | 40 |
| 95% Confidence in dB deficiencies | 2.65 | 2.08 | 2.49 | 1.70 (1) | 1.42 (8) | 1.29 | 0.92 (5) | 0.99 (3) | 0.90 (5) | 0.43 (0) |
| 1/3 OCT BND CNTR FREQ | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 |
| TL in dB | 40 | 43 | 44 | 46 | 45 | 43 | 41 | 44 | 48 | 51 |
| 95% Confidence in dB deficiencies | 1.08 (1) | 0.50 | 0.31 | 0.37 | 0.40 | 0.31 (1) | 0.34 (3) | 0.24 (0) | 0.32 | 0.56 |
| EWR | OITC | Specimen Area: 11.71 sq. ft. | | | | | | | | STC |
| 40 | 31 | Temperature: 73.8 deg. F | | | | | | | | 40 |
| | | Relative Humidity: 56 % | | | | | | | | (27) |
| | | Test Date: 15 September 1994 | | | | | | | | |



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