



# WESTERN ELECTRO - ACOUSTIC LABORATORY, INC.

RESEARCH • CONSULTING • CALIBRATION • INSTRUMENTATION

1711 Sixteenth Street, Santa Monica, California 90404 (310) 450-1733 (213) 870-9268 Fax: (310) 396-3424

Page 1 of 2

25 April 1996

## REPORT

### SOUND TRANSMISSION LOSS TEST NO. TL96-166

CLIENT: FLEETWOOD ALUMINUM PRODUCTS, INC.  
TEST DATE: 26 March 1996

#### 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 5000-T aluminum casement window assembly consisting of a fixed and an operable portion. 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 1 inch (25.4 mm) dual glazed units which were 3 mm (1/8 inch) double strength glass, 3/4 inch (19.1 mm) air space, and 3 mm (1/8 inch) double strength glass. The fixed unit was glazed directly into the main frame and the operable unit was glazed into its individual frame using glazing tape and a vinyl snap in bead. The weather stripping used on the operable panel was a Sant-o-prene bulb vinyl seal around the entire perimeter in two places, one on the frame, and one on the vent panel. The net outside frame dimensions of the window assembly were 71-1/2 inches (1.82 m) wide by 47-1/2 inches (1.21 m) high. The overall weight of the assembly was 117 lbs. (53.1 kg) for a calculated surface density of 4.96 lbs./ft<sup>2</sup> (24.2 kg/m<sup>2</sup>). The four weep holes were open and covered with plastic baffles. The operable portion of the assembly was opened and closed five times immediately prior to the test.

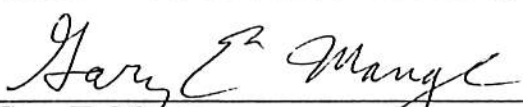
#### RESULTS OF THE MEASUREMENTS

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-30.

Approved:

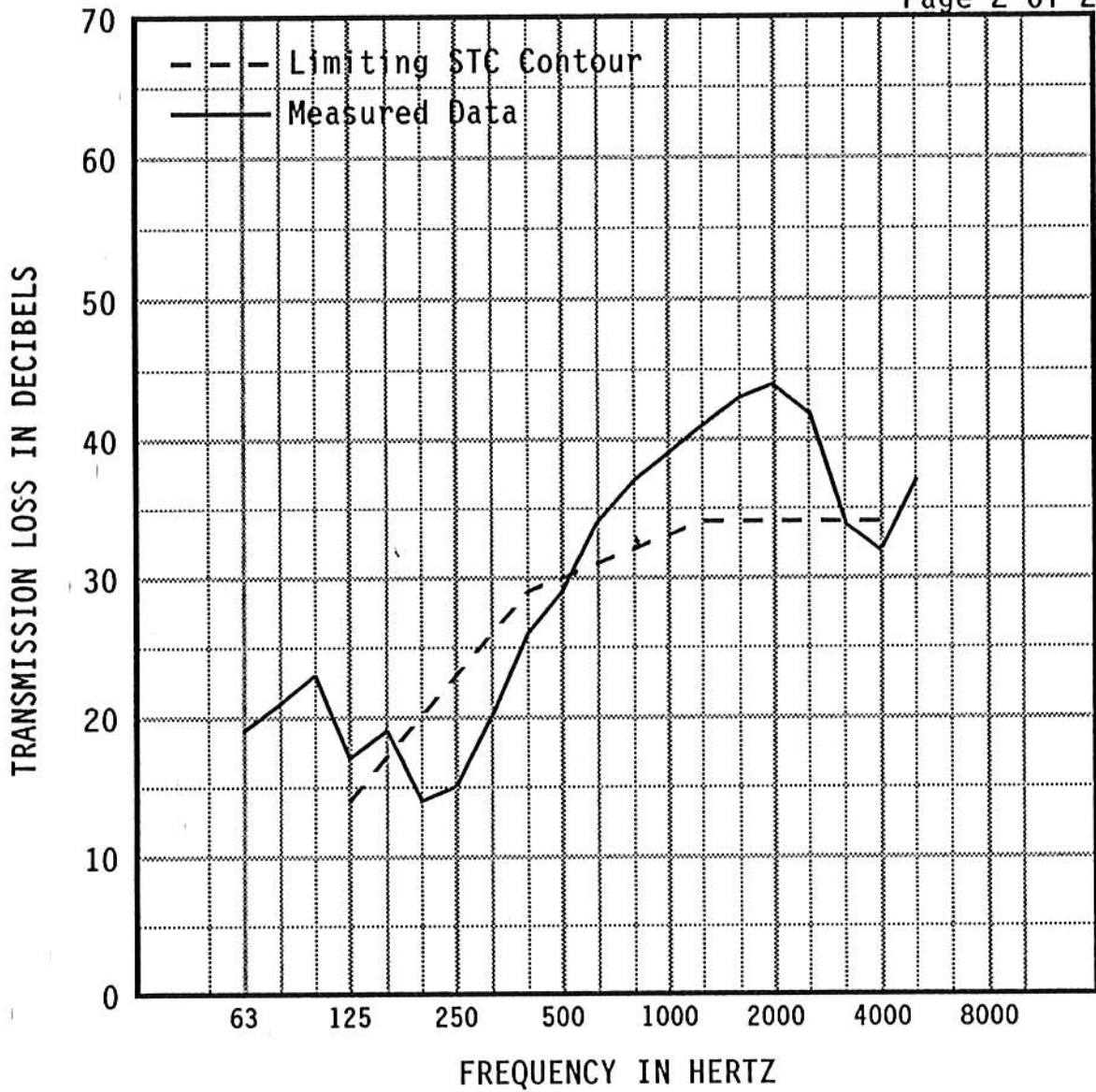
Respectfully submitted,  
Western Electro-Acoustic Laboratory, Inc.

  
\_\_\_\_\_  
Jose C. Ortega  


  
\_\_\_\_\_  
Gary E. Mange  
ACCREDITED BY THE NATIONAL BUREAU OF STANDARDS, NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.

# WESTERN ELECTRO-ACOUSTIC LABORATORY, INC.

Report No. TL96-166



1/3 OCT BND CNTR	FREQ	63	80	100	125	160	200	250	315	400	500
TL in dB		19	21	23	17	19	14	15	20	26	29
95% Confidence in dB deficiencies		2.69	1.88	2.09	2.50	1.54	1.53 (6)	1.07 (8)	0.95 (6)	0.95 (3)	0.57 (1)
1/3 OCT BND CNTR	FREQ	630	800	1000	1250	1600	2000	2500	3150	4000	5000
TL in dB		34	37	39	41	43	44	42	34	32	37
95% Confidence in dB deficiencies		0.47	0.57	0.37	0.38	0.44	0.40	0.38	0.33 (0)	0.29 (2)	0.38
EWR	OITC	Specimen Area: 23.585 sq.ft. Temperature: 70.5 deg. F Relative Humidity: 55 % Test Date: 26 March 1996									STC
30	23										30 (26)