RIVERBANK ACOUSTICAL LABORATORIES

OF

1512 BATAVIA AVENUE GENEVA, ILLINOIS 60134 **IIT RESEARCH INSTITUTE**

708/232-0104 FOUNDED 1918 BY WALLACE CLEMENT SABINE

REPORT

FOR: Overly Manufacturing Company

Sound Transmission Loss Test RAL[™]-TL95-9

ON: Acoustical Vision Light Panel Model Number STC469509

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CONDUCTED: 10 January 1995

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-90 and E413-87, as well as other pertinent standards. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure. A description of the measuring technique is available separately. The microphone used was a Bruel & Kjaer serial number 1330658.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as an acoustical vision light panel Model number STC469509. The overall dimensions of the specimen as measured were 914 mm (36 in.) wide by 2.13 m (84 in.) high and 54 mm (2.125 in.) thick. The specimen was placed directly in the manufacturer's adapter frame and tested in the 1.22 m (4 ft) by 2.44 m (8 ft) test opening. The adapter frame was sealed on the surface faces and periphery (both sides) with a dense mastic. The manufacturer's description of the specimen was as follows: A single glazed, fixed window unit that consisted of one 54 mm (2.125 in.) thick laminated light mounted in a composite frame assembly that incorporated neoprene seals with a 14 gauge solid steel jamb, 16 gauge loose stops, plus loose stop mud boxes. A manufacturer's detailed drawing, File Number II099, page 3 of 7, is maintained on file. At the request of the manufacturer the details of the construction were purposely withheld from this report in order that the manufacturer may control full proprietary rights regarding the product. The weight of the glass as calculated was 266.3 kg (587 lbs) an average of 136.6 kg/m² (28.0 lbs/ft²). The transmission area used in the calculations was 1.95 m^2 (21 ft²). The source and receiving room temperatures at the time of the test were 19°C (67+2°F) and 64+2% relative humidity.

THE RESULTS REPORTED ABOVE APPLY ONLY TO THE SPECIFIC SAMPLE SUBMITTED FOR MEASUREMENT. NO RESPONSIBILITY IS ASSUMED FOR PERFORMANCE OF ANY OTHER SPECIMEN.



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TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the TL test data are within the limits set by the ASTM Standard E90-90.

FREQ.	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>	FREQ.	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>
						al an	
100	37	0.14	0	800	45	0.30	3
125	35	0.19	0	1000	49	0.28	0
160	37	0.15	0	1250	53	0.26	0
200	40	0.22	0	1600	56	0.25	0
250	40	0.25	0	2000	59	0.18	0
315	34	0.29	8	<u>2500</u>	62	0.14	0
400	39	0.30	6	3150	65	0.11	0
500	40	0.38	6	4000	67	0.08	0
630	43	0.38	4	5000	69	0.08	0

STC = 46

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)
T.L. = TRANSMISSION LOSS, dB
C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT
DEF. = DEFICIENCIES, dB<STC CONTOUR
STC = SOUND TRANSMISSION CLASS</pre>

Tested and Submitted by Reviewed by W. Kopec Dean Victor John Senior Experimentalist Laboratory Manager

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TRANSMISSION LOSS

MASS LAW CONTOUR



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SOUND TRANSMISSION CLASS CONTOUR