## RIVERBANK ACOUSTICAL LABORATORIES

1512 BATAVIA AVENUE GENEVA, ILLINOIS 60134

### OF IIT RESEARCH INSTITUTE

708/232-0104 FOUNDED 1918 BY WALLACE CLEMENT SABINE

#### REPORT

FOR: Overly Manufacturing Company

Sound Transmission Loss Test RAL™-TL92-272

ON: Acoustical Vision Light Panel Model Number STC5292272

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CONDUCTED: 14 September 1992

### 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 STC5292272. The overall dimensions of the specimen (less adaptor frame) were 914 mm (36 in.) wide by 2.13 m (84 in.) high and 20.3 mm (8 in.) deep. The specimen was placed directly in the client's adapter frame and tested in the 1.22 m (4 ft) by 2.44 m (8 ft) test opening and was sealed on the periphery (both sides) with a dense mastic. The manufacturer's description of the specimen was as follows: A dual glazed, fixed window unit that consisted of two 6.4 mm (0.25 in.) thick laminated lights mounted in a frame assembly that incorporated neoprene seals with a 14 gauge solid steel jamb, 16 gauge loose stops, plus loose stop mud boxes. The vision light assembly was equipped with a dual purging port system to eliminate condensation between the glass. A manufacturer's description and detailed drawing file number 0667, page 1 of 13 are 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 specimen (glass and glazing only) as calculated was 65.3 kg (144 lbs). The total weight of the unit (including 4-sided frame, glass and glazing) was 113.4 kg (250 lbs) an average of 47.25 kg/m $^2$  (9.5 lbs/ft $^2$ ). The transmission area used in the calculations was 1.95 m $^2$  (21 ft $^2$ ). The source and receiving room temperatures at the time of the test were 24°C (76+2°F) and 60+2% relative humidity.



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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>	DEF.	FREQ.	<u>T.L.</u>	<u>C.L.</u>	DEF.
100	28	0.30	 0	800	55	0.28	0
125	37	0.34	0	1000	56	0.20	0
160	32	0.40		1250	58	0.25	0
200 250	37 39	0.33 0.39	5 6	1600 2000	60 61	0.19 0.19	0 0
315	43	0.30	<u>5</u>	2500	61	0.16	0
400 500	46 50	0.41	5 2	3150 4000	63 66	0.14	0
630	52	0.35	1	5000	68	0.09	0

STC = 52

#### 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

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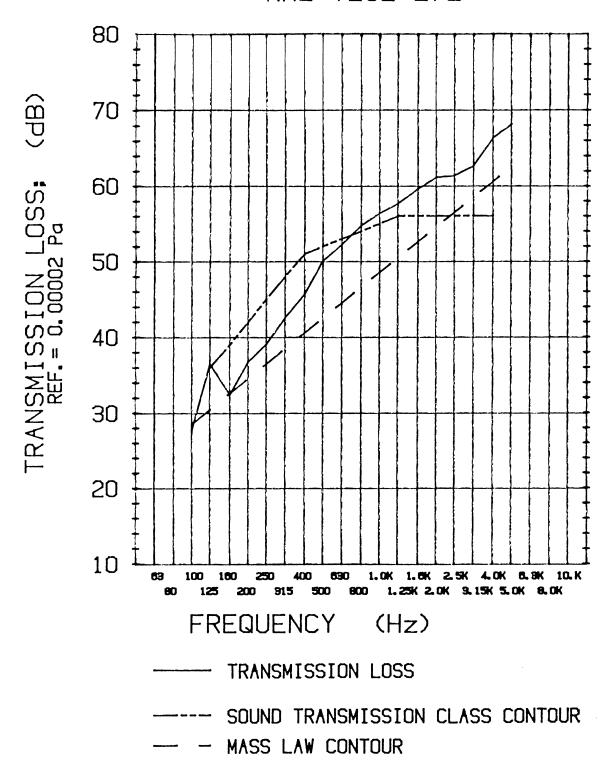
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