RIVERBANK ACOUSTICAL LABORATORIES
OF
IIT RESEARCH INSTITUTE
1512 BATAVIA AVENUE
GENEVA, ILLINOIS 60134
708/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

REPORT

FOR: Overly Manufacturing Company

Sound Transmission Loss
Test RAL™-TL95-10

ON: Acoustical Vision Light Panel
Model Number STC429510

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 STC429510. The overall dimensions of the specimen as measured were 914 mm (36 in.) wide by 2.13 m (84 in.) high and 30 mm (1.19 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 30 mm (1.188 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 4 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 measured was 161.5 kg (356 lbs) an average of 82.8 kg/m^2 (17.0 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 19°C (67±2°F) and 54±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.	T.L.	C.L.	DEF.	FREQ.	T.L.	C.L.	DEF.
100	32	0.15	0	800	38	0.37	6
125	32	0.20	0	1000	42	0.28	3
160	37	0.38	0	1250	46	0.24	0
200	36	0.23	0	1600	49	0.15	0
250	38	0.32	0	2000	53	0.18	0
315	37	0.33	1	2500	56	0.14	0
400	36	0.38	5	3150	59	0.10	0
500	37	0.33	5	4000	61	0.09	0
630	35	0.35	8	5000	62	0.08	0

STC = 42

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

Submitted by John W. Kopec
Laboratory Manager

Tested and Reviewed by Dean Victor
Senior Experimentalist

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