

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™-TL95-163

ON: Fully Operable Dual Glazed, Full Light,
Swinging Door Model STC4695163

Page 1 of 3

CONDUCTED: 19 May 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 1440522.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as a fully operable dual glazed with full light, swinging door, Model STC4695163. The overall dimensions of the door panel were nominally 914 mm (36 in.) wide by 2.13 m (84 in.) high and 44 mm (1.75 in.) thick. 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. The adapter frame was sealed on the surface faces and the periphery (both sides) with a dense mastic. The manufacturer's description of the specimen was as follows:

The bottom of the door had a fixed felt seal and an adjustable "Super H" closed cell neoprene seal. The dual glazed portion of the door consisted of a nominal 1.12 m² (1728 in.²) view window. The 610 mm (24 in.) by 1.93 m (72 in.) view window had a 6.4 mm (0.25 in.) thick glass light followed by a 15.8 mm (0.625 in.) airspace and then a 19.1 mm (0.75 in.) thick laminated glass light. The lights were contained by an 11 gauge loose stop on both sides with neoprene gasketing. A manufacturer's description and detailed drawing 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 door panel as determined was 132.9 kg (293 lbs) an average of 68.15 kg/m² (13.95 lbs/ft²). The transmission area used in the calculations was 1.95 m² (21 ft²). The specimen was opened and closed at least five times, and the test was conducted with no further adjustments. The source and receiving room temperatures at the time of the test were 21°C (69±2°F) and 63±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.

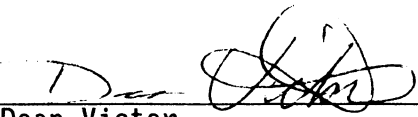
<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>	<u>FREQ.</u>	<u>T.L.</u>	<u>C.L.</u>	<u>DEF.</u>
100	27	0.14	0	800	46	0.22	2
125	27	0.22	3	1000	48	0.24	1
160	35	0.30	0	1250	50	0.19	0
200	35	0.24	1	1600	53	0.15	0
250	33	0.38	6	2000	54	0.17	0
315	35	0.31	7	2500	54	0.11	0
400	41	0.27	4	3150	54	0.12	0
500	44	0.32	2	4000	52	0.09	0
630	45	0.24	2	5000	53	0.08	0

STC = 46

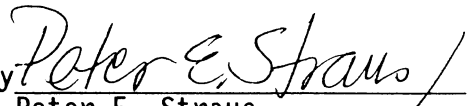
ABBREVIATION INDEX

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

Tested &
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Revision 13 June 1995

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NVLAQ

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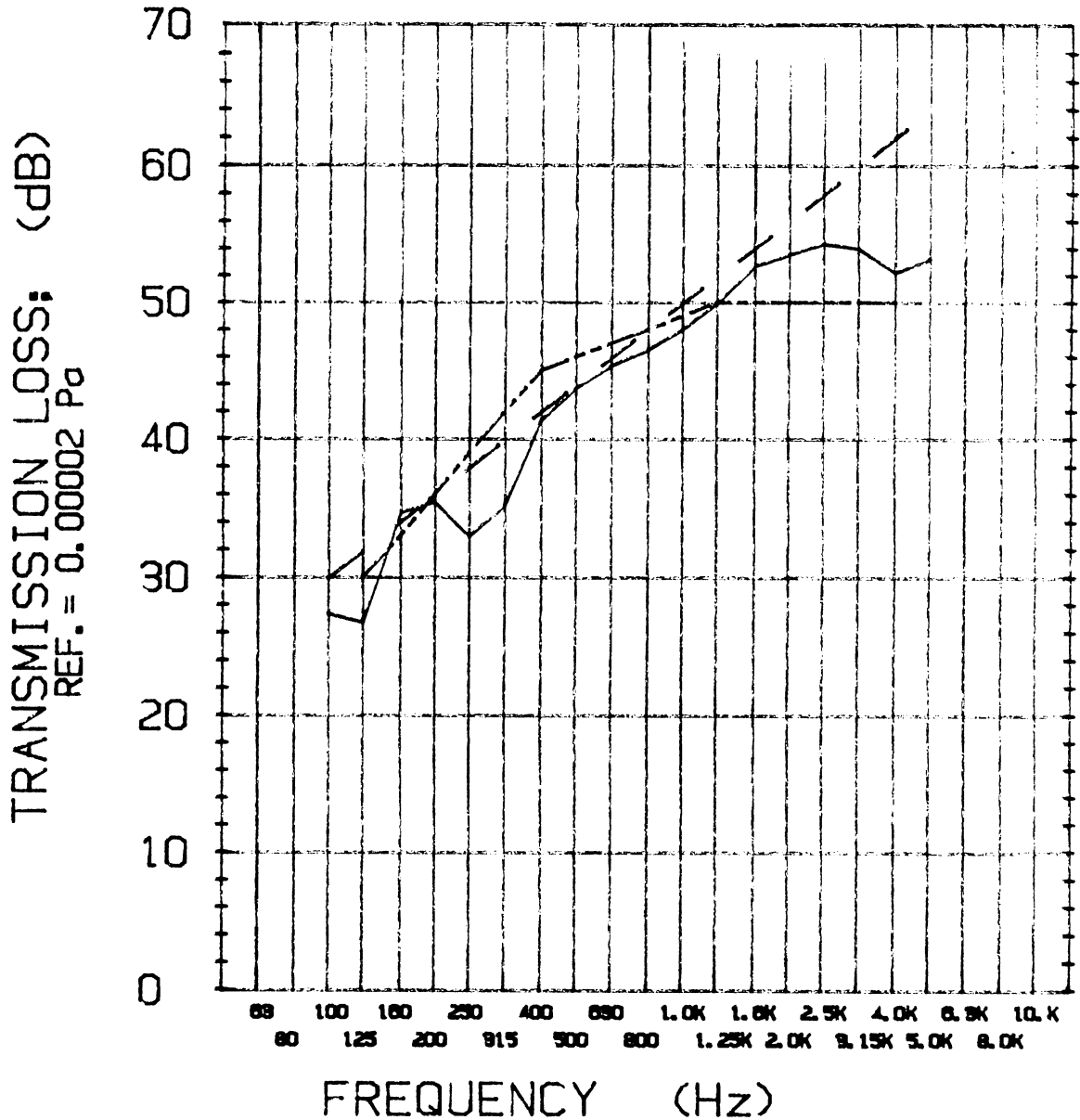
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TRANSMISSION LOSS REPORT

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- TRANSMISSION LOSS
- SOUND TRANSMISSION CLASS CONTOUR
- - - - MASS LAW CONTOUR

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