

# RIVERBANK ACOUSTICAL LABORATORIES

1512 BATAVIA AVENUE  
GENEVA, ILLINOIS 60134

OF  
IIT RESEARCH INSTITUTE

708/232-0104  
FOUNDED 1918 BY  
WALLACE CLEMENT SABINE

## REPORT

FOR: Troy Acoustics Corporation  
ON: Troy Digital Wall, 8" Steel Studs

Sound Transmission Loss  
Test RAL™-TL96-123

Page 1 of 3

CONDUCTED: 1 May 1996

### 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 871403.

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	36	0.15	0	800	77 *	0.34	0
125	44 *	0.20	8	1000	79 *	0.31	0
160	49 *	0.31	6	1250	82 *	0.21	0
200	52 *	0.28	6	1600	85 *	0.26	0
250	58 *	0.31	3	2000	86 *	0.18	0
315	66 *	0.37	0	2500	88 *	0.14	0
400	68 *	0.31	0	3150	90 *	0.12	0
500	71 *	0.34	0	4000	91 *	0.10	0
630	73 *	0.30	0	5000	93 *	0.07	0

STC = 68

### ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)

T.L. = TRANSMISSION LOSS, dB

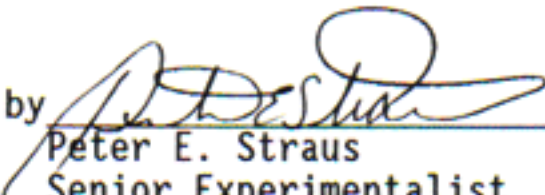
C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT

DEF. = DEFICIENCIES, dB<STC CONTOUR


STC = SOUND TRANSMISSION CLASS

\* = INDICATES A CORRECTION WAS APPLIED TO THE SPECIMEN TL BECAUSE THE SPECIMEN TL EXCEEDED THE LIMITATIONS OF THE TEST OPENING

Submitted by

  
Peter E. Straus  
Senior Experimentalist

Reviewed by

  
John W. Kopec  
Laboratory Manager

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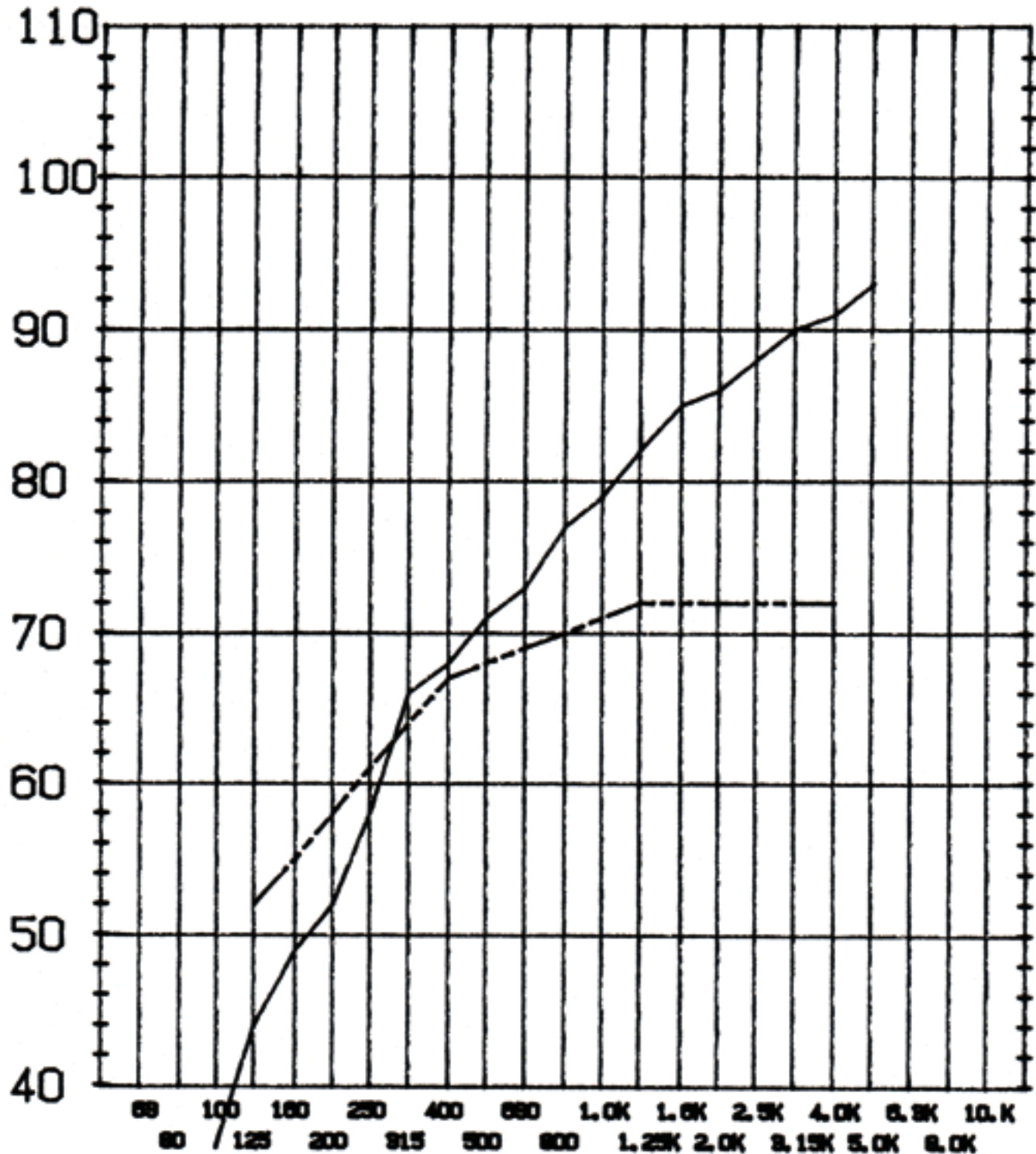
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**REPORT**

TRANSMISSION LOSS REPORT

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TRANSMISSION LOSS: (dB)  
REF. = 0.00002 Pa



FREQUENCY (Hz)

- TRANSMISSION LOSS
- - - SOUND TRANSMISSION CLASS CONTOUR

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