

TEST REPORT

FOR: Serious Materials, Inc.
Sunnyvale, CA

Sound Transmission Loss Test
RAL™-TL08-161

ON: Hollow Core Wooden Door with Damped Panel
Construction - Operable

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CONDUCTED: 10 June 2008

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-04 and E413-04, 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 (NVLAP Lab Code: 100227-0). A description of the measuring technique is available separately.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as a hollow core wooden door with damped panel construction – operable. The overall dimensions of the specimen as measured were 962 mm (37.875 in.) wide by 2.04 m (80.125 in.) high and 44.5 mm (1.75 in.) thick. The specimen was placed directly in the laboratory's adapter frame and tested in the 1.22 m (4 ft) by 2.44 m (8 ft) test opening. A substantial filler wall was used in the remaining open area. Both the filler wall and test specimen were sealed on the periphery (both sides) with dense mastic.

The manufacturer's description of the specimen was as follows: Hollow core wooden door with damped panel construction. Head and jamb #475 as the primary seal; Head and jamb #118B as the secondary seal; #564A Saddle/threshold; #364 Automatic door bottom; #Z955 Hinges. A visual inspection verified the manufacturer's description of the specimen. The specimen was opened and closed at least five times, and the test was conducted with no further adjustments.

The weight of the specimen as measured was 47 kg (103.5 lbs.), an average of 24 kg/m² (4.9 lbs/ft²). The transmission area used in the calculations was 2 m² (21 ft²). The source and receiving room temperatures at the time of the test were 24±2°C (75±2°F) and 52±1% relative humidity. The source and receive reverberation room volumes were 178 m³ (6,298 ft³) and 129 m³ (4,561 ft³), respectively.

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



NVLAP Lab Code 100227-0

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RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

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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 is within the limits set by the ASTM Standard E90-04.

<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	0.79		800	44	0.17	2
125	28	0.47		1000	45	0.15	2
160	26	0.49	5	1250	46	0.11	2
200	29	0.48	5	1600	47	0.10	1
250	34	0.43	3	2000	48	0.09	
315	37	0.24	3	2500	48	0.09	
400	40	0.29	3	3150	48	0.08	
500	42	0.19	2	4000	49	0.06	
630	44	0.26	1	5000	51	0.06	

STC=44

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 (SUM OF DEF = 29)
STC = SOUND TRANSMISSION CLASS

Tested by Marc Sciaky Approved by David L. Moyer
Marc Sciaky David L. Moyer
Experimentalist Laboratory Manager

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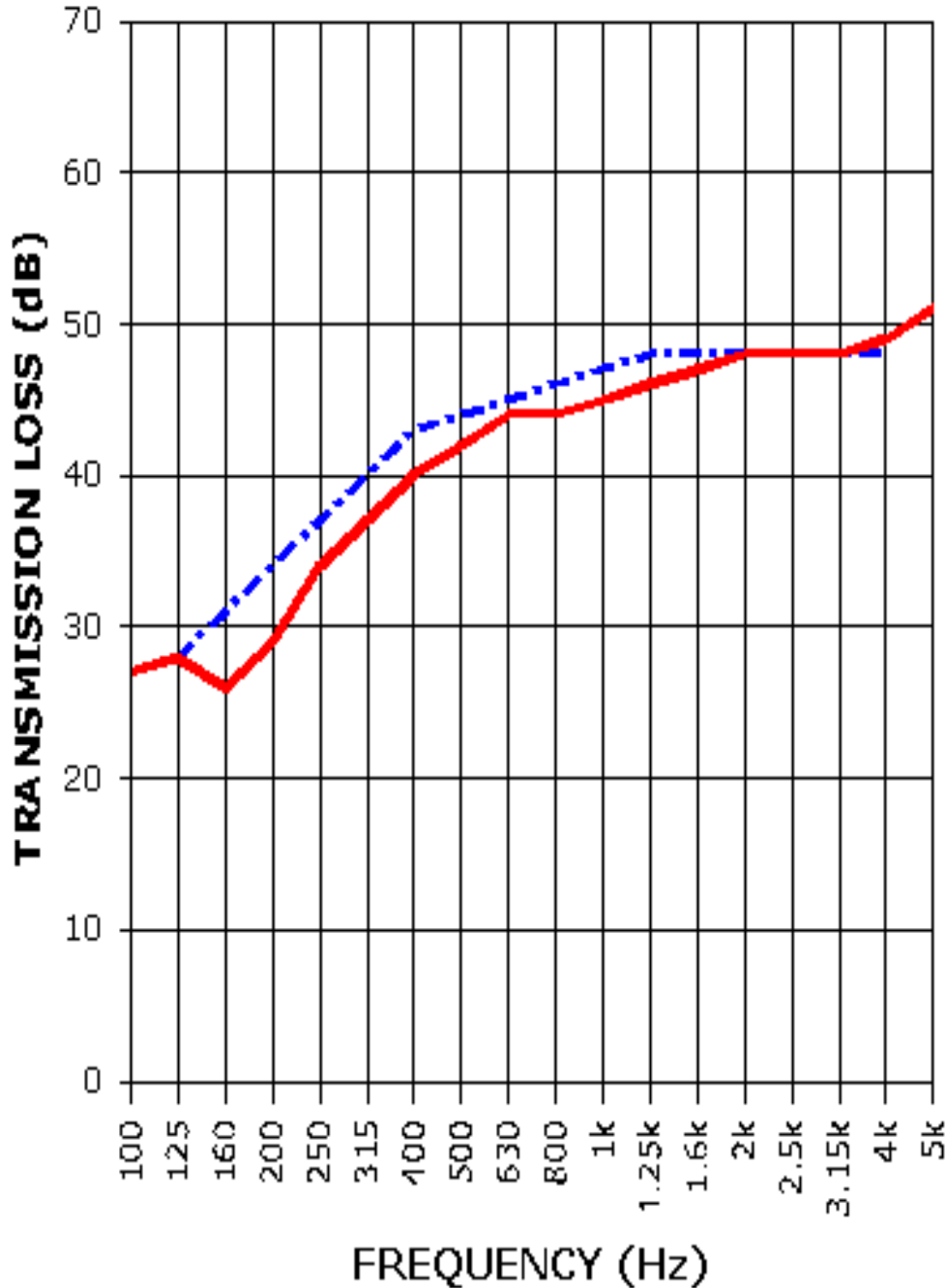


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TEST REPORT

**SOUND TRANSMISSION REPORT
RAL - TL08-161**



STC= 44



TRANSMISSION LOSS
SOUND TRANSMISSION LOSS CONTOUR

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