

TEST REPORT

FOR: Acoustiblok
Tampa, FL

Sound Transmission Loss Test
RAL™-TL04-050

ON: WSAB-129 Wood Stud Wall Section

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CONDUCTED: 4 March 2004

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-02 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.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the client as WSAB-129 wood stud wall section. The overall dimensions of the specimen as measured were 1.21 m (47.5 in.) wide by 2.43 m (95.5 in.) high and 127 mm (5 in.) thick. The specimen was placed directly in the laboratory's 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 as provided by a drawing was as follows: The panel was constructed with a two-by-four wood top and bottom plate and studs covered on both sides with a single layer of 16 mm (0.625 in.) thick gypsum board. The gypsum board was attached using 6d nails at 305 mm (12 in.) on center. The wood studs were spaced on nominal 610 mm (24 in.) centers. The receive side cavity was filled with 76 mm (3 in.) thick fiberglass. A single layer of Acoustiblok 16 oz. barrier material was attached to the studs on the source side. A visual inspection verified the manufacturer's description of the specimen.

The weight of the specimen as measured was 97.3 kg (214.5 lbs.), an average of 33.3 kg/m² (6.8 lbs/ft²). The transmission area used in the calculations was 2.9 m² (31.5 ft²). The source and receiving room temperatures at the time of the test were 23±1°C (74±1°F) and 63% relative humidity. The source and receive reverberation room volumes were 178 m³ (6298 ft³) and 134 m³ (4748 ft³), respectively.

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TEST REPORT

Acoustiblok

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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 E90-02.

<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	1.01		800	53	0.17	1
125	32	0.95	4	1000	55	0.18	
160	37	0.49	2	1250	56	0.16	
200	41	0.09		1600	57	0.13	
250	42	0.49	3	2000	57	0.09	
315	41	0.45	7	2500	58	0.09	
400	45	0.31	6	3150	60	0.07	
500	48	0.21	4	4000	62	0.07	
630	51	0.22	2	5000	63	0.04	

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 (SUM OF DEF = 30)
STC = SOUND TRANSMISSION CLASS

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Tested by _____ Approved by _____

Marc Sciaky
Senior Technician

David L. Moyer
Laboratory Manager

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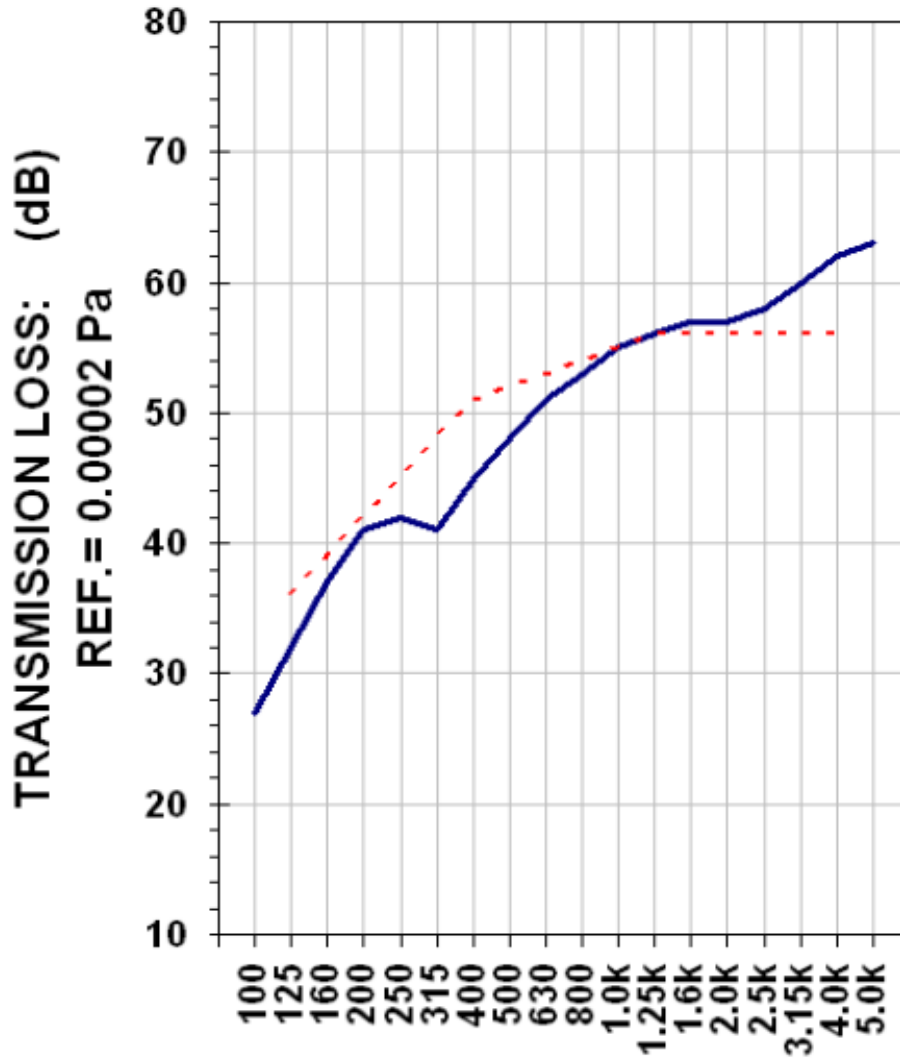


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TEST REPORT

SOUND TRANSMISSION REPORT

RAL-TL04-050



FREQUENCY (Hz)

— TRANSMISSION LOSS
- - - SOUND TRANSMISSION CLASS CONTOUR

STC = 52

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