

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

FOR: Acoustiblok, Inc.
Tampa, FL

Sound Transmission Loss Test
RAL™-TL07-365

ON: Acoustiblok Hurricane Model All Weather Sound Panel

Page 1 of 3

CONDUCTED: 16 November 2007

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 client as Acoustiblok Hurricane Model All Weather Sound Panel. The overall dimensions of the specimen as measured were nominally 2.44 m (96 in.) wide by 2.44 m (96 in.) high and 64 mm (2.5 in.) thick. The specimen was installed directly into the laboratory's 2.74 m (9 ft) by 4.27 m (14 ft) wood-lined steel frame. 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: Acoustiblok Hurricane Model All Weather Sound Panel: Part #HAWSP48: Frame Materials: Welded 6063-T5 Aluminum, 0.125" thick with 18 - 6061-T5 Aluminum 0.375" id Mounting Eyelets. Face Material: 5052-H32 Aluminum 0.040" thick, Perforated 3/32" round holes staggered on 5/32" centers. Back Material: 5052-H32 Aluminum 0.032" thick solid sheet. Internal Components Composite: 2" Acoustiblok Absorption Core with a layer of 16 oz. Acoustiblok Sound Isolation Membrane on the back side. A visual inspection verified the manufacturer's description of the specimen.

The weight of the specimen as measured was 98.9 kg (218 lbs.), an average of 16.6 kg/m² (3.4 lbs/ft²). The transmission area used in the calculations was 6 m² (64 ft²). The source and receiving room temperatures at the time of the test were 22±1°C (72±1°F) and 53±2% relative humidity. The source and receive reverberation room volumes were 178 m³ (6,298 ft³) and 177 m³ (6,255 ft³), respectively.

This report shall not be reproduced except in full, without the written approval of RAL.

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

ACCREDITED BY DEPARTMENT OF COMMERCE, NATIONAL VOLUNTARY LABORATORY
ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.
THE LABORATORY'S ACCREDITATION OR ANY OF ITS TEST REPORTS IN NO WAY CONSTITUTES
OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NIST.

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

Acoustiblok, Inc.

RAL™-TL07-365

16 November 2007

Page 2 of 3

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	12	0.68		800	29	0.14	2
125	14	0.51		1000	34	0.13	
160	15	0.67	1	1250	38	0.11	
200	16	0.44	3	1600	40	0.12	
250	18	0.46	4	2000	40	0.10	
315	21	0.48	4	2500	43	0.11	
400	22	0.32	6	3150	47	0.05	
500	23	0.22	6	4000	50	0.05	
630	25	0.19	5	5000	47	0.06	

STC=29

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)

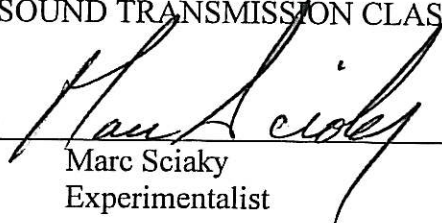
T.L. = TRANSMISSION LOSS, dB

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

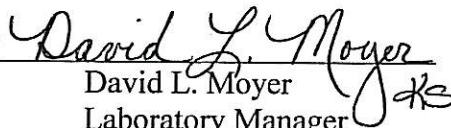
DEF. = DEFICIENCIES, dB<STC CONTOUR (SUM OF DEF = 31)

STC = SOUND TRANSMISSION CLASS

Tested by


Marc Sciaky
Experimentalist

Approved by


David L. Moyer
Laboratory Manager

This report shall not be reproduced except in full, without the written approval of RAL.

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

ACCREDITED BY DEPARTMENT OF COMMERCE, NATIONAL VOLUNTARY LABORATORY
ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.
THE LABORATORY'S ACCREDITATION OR ANY OF ITS TEST REPORTS IN NO WAY CONSTITUTES
OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NIST.

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

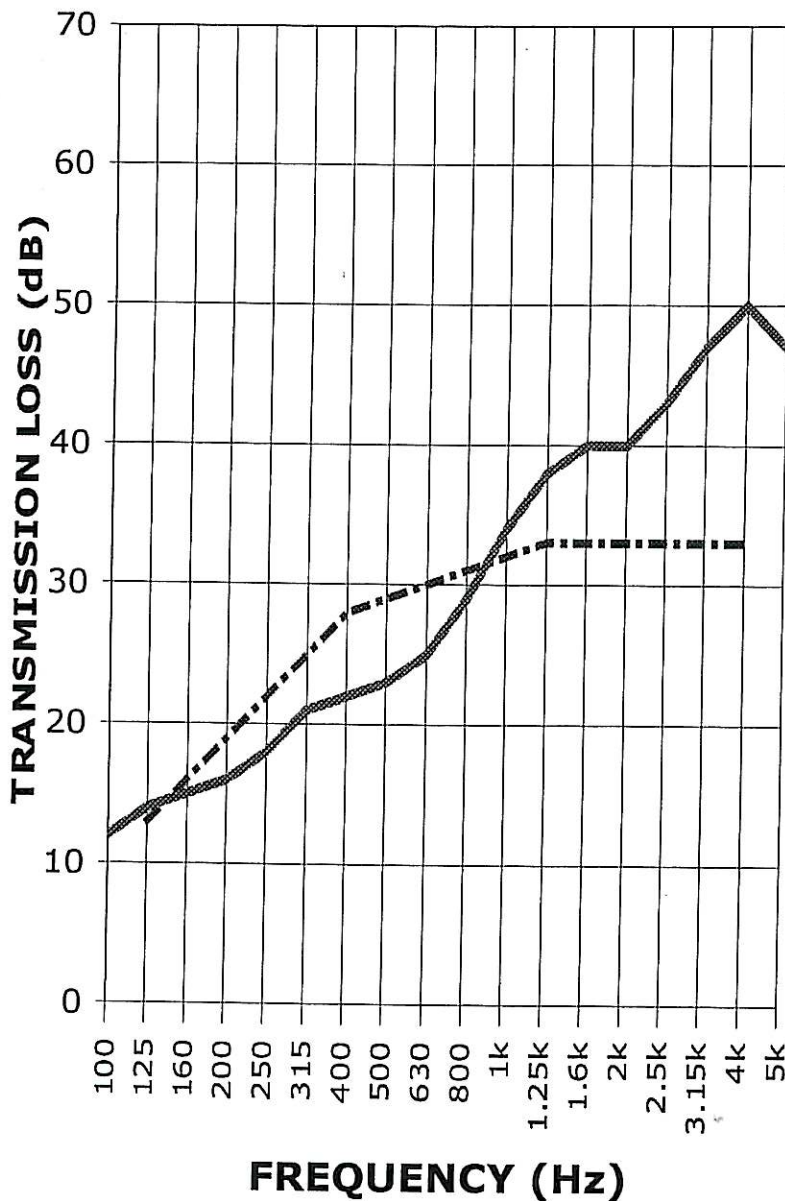
Alion Science and Technology

630/232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

TEST REPORT

SOUND TRANSMISSION REPORT
RAL - TL07-365

PAGE 3 OF 3



FREQUENCY (Hz)

STC = 29



TRANSMISSION LOSS
SOUND TRANSMISSION LOSS CONTOUR

This report shall not be reproduced except in full, without the written approval of RAL.
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

ACCREDITED BY DEPARTMENT OF COMMERCE, NATIONAL VOLUNTARY LABORATORY
ACCREDITATION PROGRAM FOR SELECTED TEST METHODS FOR ACOUSTICS.
THE LABORATORY'S ACCREDITATION OR ANY OF ITS TEST REPORTS IN NO WAY CONSTITUTES
OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NIST.