



Acoustical Surfaces, Inc.

SOUNDPROOFING, ACOUSTICS, NOISE & VIBRATION CONTROL SPECIALISTS

123 Columbia Court North • Suite 201 • Chaska, MN 55318

(952) 448-5300 • Fax (952) 448-2613 • (800) 448-0121

Email: sales@acousticalsurfaces.com

Visit our Website: www.acousticalsurfaces.com

We Identify and S.T.O.P. Your Noise Problems

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: Rendered by Manufacturer and Released to:
Acoustical Surfaces, Inc.
123 Columbia Court North
Chaska, MN 55322

Sound Absorption
RAL™-A12-332
Revised Oct 29, 2012
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CONDUCTED: 22 October 2012

ON: 2'x4' - Acoustical Panels 1" Thick, Vinyl Facing with Custom Micro Perforation

TEST METHOD

The test method conformed explicitly with the requirements of the ASTM Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method: ASTM C423-09a and E795-05. 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 procedure and room qualifications is available separately.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as 2'x4' – Acoustical Panels 1" Thick, Vinyl Facing with Custom Micro Perforation. The manufacturer's description of the product was as follows: *Acoustical Panel, 1" thick, 6.0 PCF, fiberglass core, vinyl facing with custom micro perforation (vinyl side to face sound source)*. A full internal inspection was performed on the test specimen by Riverbank personnel, verifying the manufacturer's description.

The overall dimensions of the specimen as measured were 2.74 m (108.00 in.) wide by 2.44 m (96.00 in.) long and 25.40 mm (1.00 in.) thick. The specimen consisted of 10 Pieces. 8 pieces were measured 0.61 m (24 in.) wide by 1.22 m (48 in.) long and 25.40 mm (1.0 in.) thick. 2 pieces were measured 0.61 m (24 in.) wide by 1.22 m (48 in.) long and 25.40 mm (1.0 in.) thick. The weight of the entire specimen as measured was 18.26 kg (40.25 lbs), an average of 2.73 kg/m² (0.55 lbs/ft²). The area used in the calculations was 6.69 m² (72.00 ft²).

The specimen was tested in the laboratory's 292.0 m³ (10,311.0 ft³) test chamber. The room temperature at the time of the test was 21±0°C (70±0°F) and 62±0% relative humidity. The barometric pressure was 760 mm of mercury.

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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.



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MOUNTING A

The test specimen was laid directly against the test surface. The perimeter was sealed using metal framing.

TEST RESULTS

1/3 Octave Center Frequency (Hz)	Absorption Coefficient	Total Absorption In Sabins
100	-0.02	-1.48
** 125	0.10	7.23
160	0.12	8.31
200	0.15	10.87
** 250	0.33	23.65
315	0.44	31.57
400	0.56	40.33
** 500	0.75	54.31
630	0.92	66.20
800	0.93	67.27
** 1000	1.06	76.58
1250	1.04	74.84
1600	1.10	79.32
** 2000	1.09	78.78
2500	1.03	74.37
3150	1.02	73.58
** 4000	0.99	70.97
5000	0.96	68.96

SAA = 0.78 NRC = 0.80

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TEST RESULTS (Continued)

The sound absorption average (SAA) is defined as a single number rating, the average, rounded to the nearest 0.01, of the sound absorption coefficient of a material for the twelve one-third octave bands from 200 through 2500 Hz, inclusive.

The noise reduction coefficient (NRC) is defined from previous versions of this same test method as the average of the coefficients at 250, 500, 1000, and 2000 Hz, expressed to the nearest integral multiple of 0.05.

Tested by *Marc Sciaky* Approved by *Eric P Wolfram*
Marc Sciaky
Experimentalist
Eric P Wolfram
Laboratory Manager

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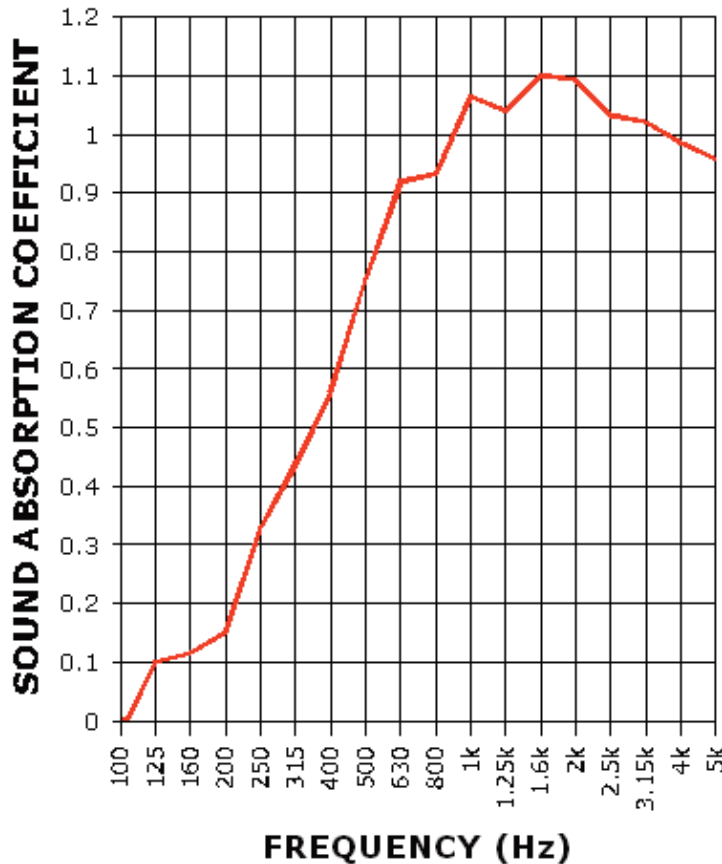
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SOUND ABSORPTION REPORT

RAL – A12-332

2'x4' - Acoustical Panels 1" Thick, Vinyl Facing with Custom Micro Perforation



SAA = 0.78

NRC = 0.80

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