

# 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: Golterman & Sabo, Inc.  
St. Louis, MO

Sound Absorption Test  
RAL™-A06-277

ON: FW-ATF 2, Fabric Wall 2 Inch System Covered with  
Guilford 2100 Fabric

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CONDUCTED: 20 December 2006

### 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 C423-02a 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 FW-ATF 2, Fabric Wall 2 inch system covered with Guilford 2100 fabric. The overall dimensions of the specimen as measured were nominally 2.44 m (96 in.) wide by 2.74 m (108 in.) long and 67 mm (2.625 in.) thick. The specimen consisted of two (2) pieces. Each piece was 1.22 m (48 in.) wide by 2.74 m (108 in.) long. The 51 mm (2 in.) thick Fabric Walls were installed over nominal 16 mm (0.625 in.) thick gypsum board. Rigid plastic track was mounted on the perimeter of the 0.625 inch thick gypsum board fabric was stretched over multi density 0.125 inch thick 18# fiberglass infill. The specimen was tested in the laboratory's 292 m<sup>3</sup> (10,311 ft<sup>3</sup>) test chamber.

The weight of the entire specimen as measured was 102.6 kg (226.25 lbs), an average of 15.3 kg/m<sup>2</sup> (3.1 lbs/ft<sup>2</sup>). The area used in the calculations was 6.7 m<sup>2</sup> (72 ft<sup>2</sup>). The room temperature at the time of the test was 21°C (69°F) and 61±1% relative humidity.

### MOUNTING A

The test specimen was laid directly against the test surface. Perimeter edges were unsealed.

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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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### TEST RESULTS

1/3 Octave Center Frequency (Hz)	Absorption Coefficient	Total Absorption In Sabins
100	0.35	24.98
** 125	0.46	33.39
160	0.52	37.28
200	0.74	53.52
** 250	0.88	63.27
315	1.06	76.03
400	1.12	80.87
** 500	1.10	79.54
630	1.09	78.69
800	1.05	75.68
** 1000	1.03	73.80
1250	1.02	73.66
1600	0.98	70.26
** 2000	0.97	69.86
2500	0.95	68.12
3150	0.93	66.60
** 4000	0.94	67.34
5000	0.93	66.73

SAA = 1.00

NRC = 1.00

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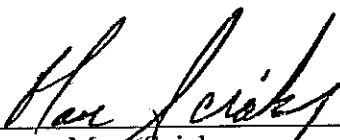
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### TEST RESULTS (Continued)

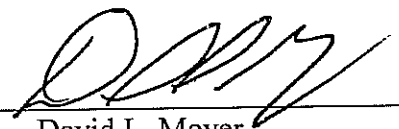
The sound absorption average (SAA) is defined as a single number rating, the average, rounded to the nearest 0.01, of the sound absorption coefficient of a material for the twelve one-third octave bands from 200 through 2500 Hz, inclusive.

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  
Experimentalist

Approved by

  
\_\_\_\_\_  
David L. Moyer  
Laboratory Manager

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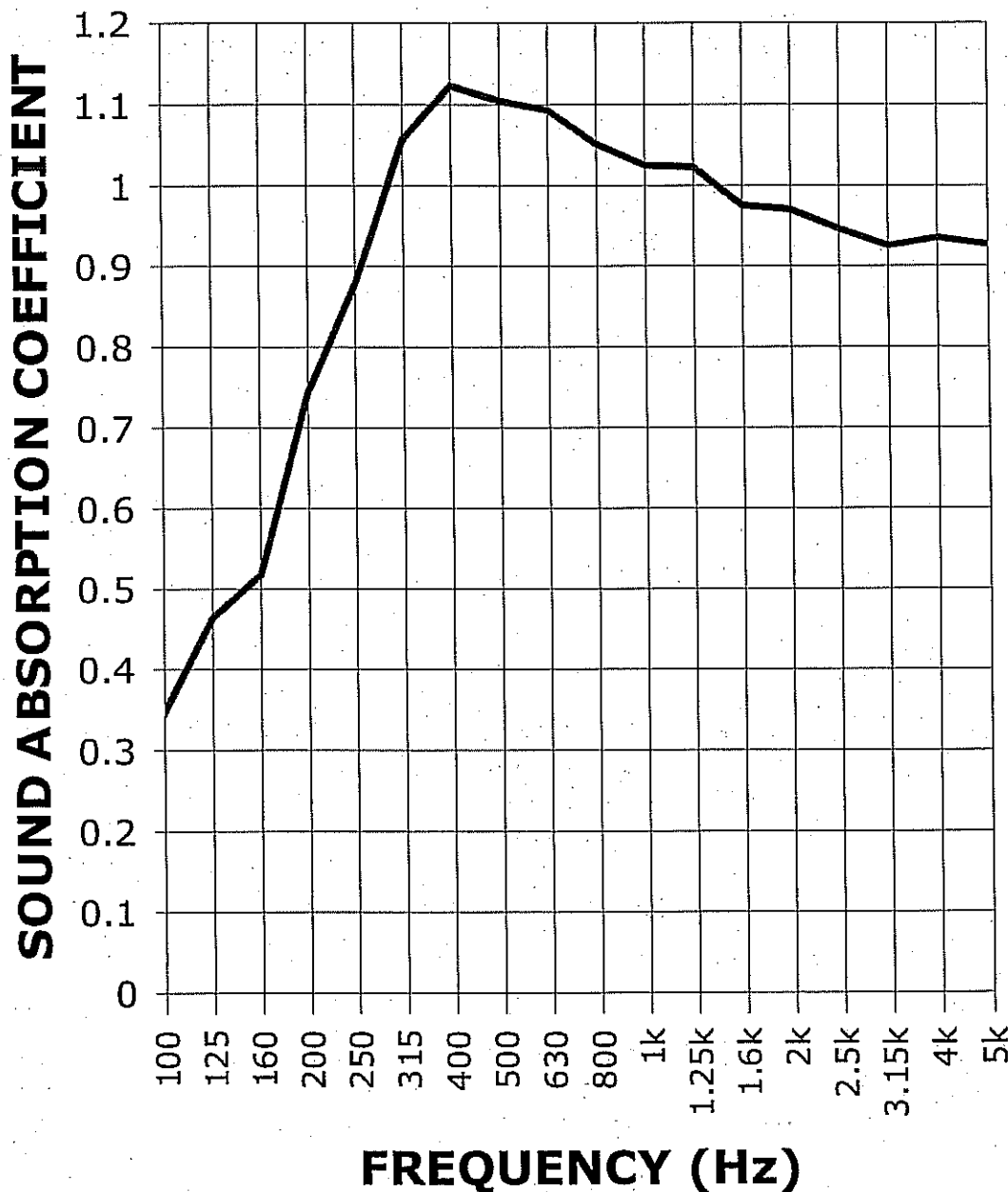
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## TEST REPORT

SOUND ABSORPTION REPORT  
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SAA = 1.00

NRC = 1.00

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