

## **Title: Sound Absorption Test Results**

## Product: 2" CFAB (3 lb. pcf)

Application: Wall Mount

Testing Standard: ASTM C423 A-Mount

Test Date: 6/25/2009

Why this test: his test evaluates a products efficiency of absorbing sound at multiple frequencies. The test simulates the product's acoustical performance with a direct installation on a wall or ceiling.

Test Result Summary: NRC - 1.00; SAA - 1.00



Test ID: A09-140

ASI TEST RESULT DISCLAIMER

ASI makes every effort to ensure the accuracy and reliability of the information provided. Laboratory testing is conducted by independent testing organizations. ASI does not guarantee that ield tests or independent tests will not vary.

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### **TEST REPORT**

FOR: Rendered by Manufacturer and Released to: Acoustical Surfaces Inc. Sound Absorption Test RAL<sup>TM</sup>-A09-140

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CONDUCTED: 25 June 2009

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 C423-08a 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 overall dimensions of the specimen as measured were nominally 2.44 m (96 in.) wide by 2.74 m (108 in.) long and 51 mm (2 in.) thick. The specimen consisted of six (6) pieces. Each piece was 1.22 m (48 in.) wide by 914 mm (36 in.) long. 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 15.9 kg (35 lbs), an average of 2.4 kg /m<sup>2</sup> (0.5 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 22°C (71°F) and 61% relative humidity.

#### MOUNTING A

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

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



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#### TEST RESULTS

1/3 Octave Center	Absorption	Total Absorption
Frequency	Coefficient	In Sabins
(Hz)		
100	0.38	27.69
**125	0.39	27.83
160	0.36	25.84
200	0.51	36.90
**250	0.63	45.05
315	0.91	65.44
400	1.03	73.93
**500	1.18	84.67
630	1.19	85.90
800	1.16	83.56
**1000	1.11	79.57
1250	1.09	78.44
1600	1.06	76.38
**2000	1.06	76.03
2500	1.06	76.65
3150	1.05	75.42
**4000	1.09	78.32
5000	1.11	79.58

SAA = 1.00 NRC = 1.00

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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

Dean Victor Senior Experimentalist

Approved by

David L. Moyer Laboratory Manager

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#### **TEST REPORT**

SOUND ABSORPTION REPORT RAL - A09-140





SAA = 1.00NRC = 1.00

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