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: Asona Benelux BV
Amstelveen, The Netherlands

Sound Absorption Test
RAL™-A11-166

ON: Sonacoustic Ceiling and/or Wall Construction Adhered to ½" Gypsum

CONDUCTED: 11 August 2011

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 Sonacoustic ceiling and/or wall construction adhered to ½" gypsum. The overall dimensions of the specimen as measured were nominally 2.44 m (96 in.) wide by 2.74 m (108 in.) long and 38 mm (1.5 in.) thick. The Sonacoustic consisted of six (6) pieces of rigid 19 mm (0.75 in.) thick fiberglass with a nominal 4 mm (0.15 in.) thick coating on one side. Four (4) pieces were nominally 1.21 m (47.5 in.) wide by 1.04 m (41 in.) long and two (2) pieces were nominally 1.21 m (47.5 in.) wide by 635 mm (25 in.) long. The ½" gypsum consisted of four (4) pieces. Two (2) pieces were nominally 1.22 m (48 in.) wide by 2.44 m (96 in.) long and two (2) pieces were nominally 1.22 m (48 in.) wide by 305 mm (12 in.) long. The Sonacoustic was adhered to the gypsum board with an all-purpose interior construction adhesive. The specimen was tested in the laboratory's 292 m^3 (10,311 ft^3) test chamber.

The weight of the entire specimen as measured was 70.1 kg (154.5 lbs), an average of 10.5 kg/m^2 (2.2 lbs/ft^2). The area used in the calculations was 6.7 m^2 (72 ft^2). The room temperature at the time of the test was 22ºC (71ºF) and 60% relative humidity.

MOUNTING E-400

The test specimen was mounted with an airspace behind it. The number designates the distance in mm from the exposed face of the test specimen to the test surface. The perimeter was sealed using metal framing.

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TEST RESULTS

1/3 Octave Center Frequency (Hz)	Absorption Coefficient	Total Absorption In Sabins
100	0.67	48.29
** 125	0.41	29.26
160	0.35	25.56
200	0.35	25.49
** 250	0.37	26.37
315	0.53	38.31
400	0.62	44.99
** 500	0.83	60.02
630	0.93	66.70
800	0.98	70.29
** 1000	0.98	70.60
1250	1.03	74.01
1600	0.97	69.98
** 2000	0.93	66.98
2500	0.94	67.71
3150	0.93	66.63
** 4000	0.90	64.74
5000	0.90	64.84

SAA = 0.79
NRC = 0.80

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.

Digitally signed by David Moyer
DN: cn=David Moyer, c=US, o=Riverbank Acoustical Laboratories, ou=Alionscience and Technology, email=dmoyer@alionscience.com
Date: 2011.10.06 14:06:07 -05'00'

Tested by _____ Approved by _____

Marc Sciaky
Experimentalist

David L. Moyer
Laboratory Manager

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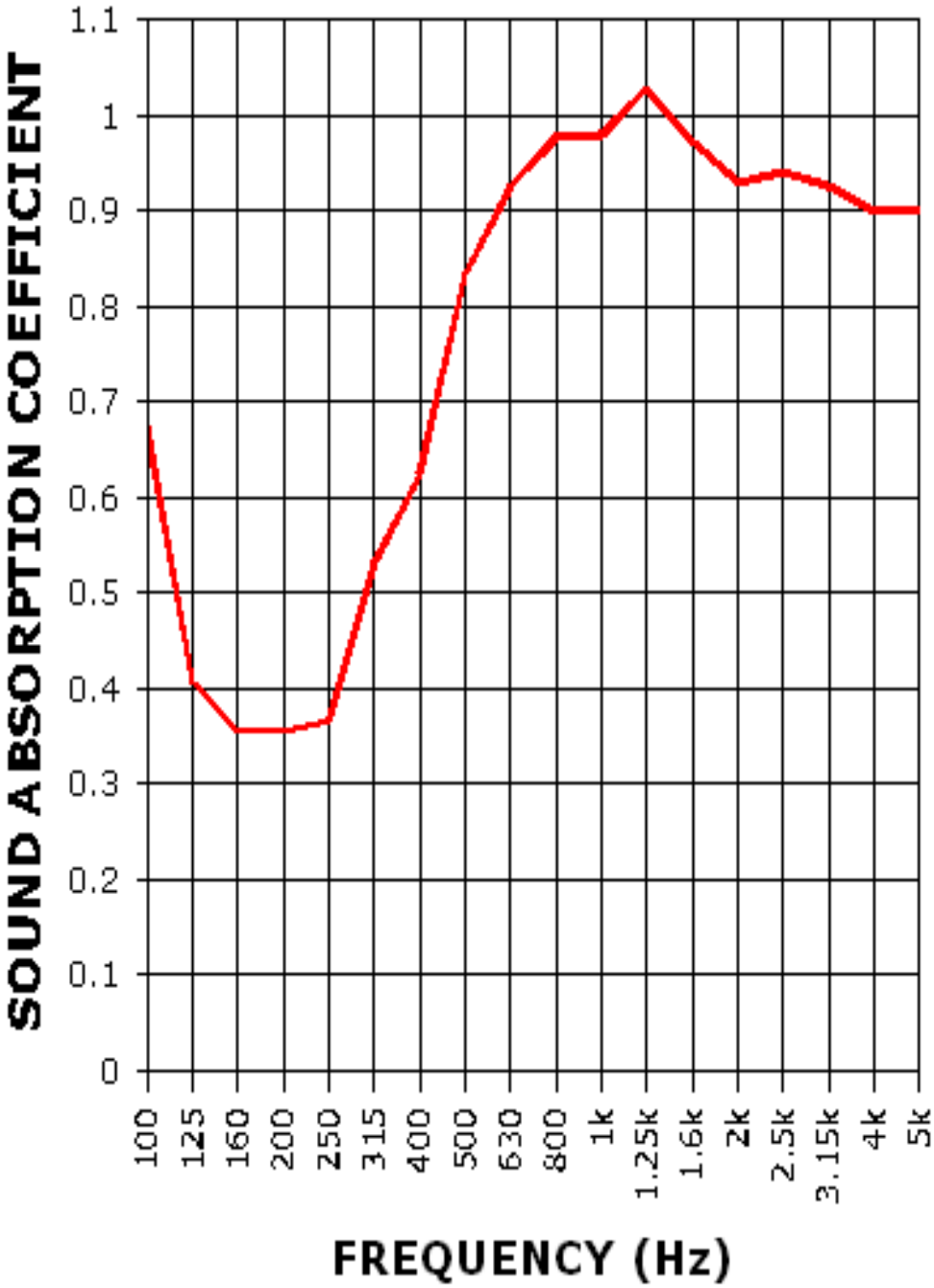

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