1512 S. BATAVIA AVENUE GENEVA, ILLINOIS 60134 Alion Science and Technology

630/232-0104 FOUNDED 1918 BY WALLACE CLEMENT SABINE

#### TEST REPORT

FOR: Asona Nederland b.v.

Uithoorn, Netherlands

Sound Absorption Test RAL<sup>TM</sup>-A11-209a

ON: Sonacoustic - Seamless Acoustical Ceiling and Wall Covering

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CONDUCTED: 9 November 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 - Seamless Acoustical Ceiling and Wall Covering. The overall dimensions of the specimen as measured were nominally 2.74 m (108 in.) wide by 2.44 m (96 in.) long and 34 mm (1.35 in.) thick. The specimen consisted of nine (9) pieces. Four (4) pieces were nominally 1.12 m (44 in.) wide by 914 mm (36 in.) long. Two (2) pieces were nominally 1.12 m (44 in.) wide by 610 mm (24 in.) long. Two (2) pieces were nominally 914 mm (36 in.) wide by 508 mm (20 in.) long. One (1) piece was nominally 610 mm (24 in.) wide by 508 mm (20 in.) long. The specimen was tested in the laboratory's 292 m³ (10,311 ft³) test chamber.

The manufacturer's description of the specimen was as follows: 30 mm thick Sonaboard (mineral fiber board) covered with 3 mm Sonaplaster base and finished with 1 mm Sonaplaster finish. A visual inspection verified the manufacturer's description of the specimen.

The weight of the entire specimen as measured was 23.36 kg (51.5 lbs), an average of 3.52 kg/m<sup>2</sup> (0.72 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 59% 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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#### **TEST RESULTS**

1/3 Octave Center	Absorption Coefficient	Total Absorption In Sabins
Frequency	Coefficient	III Saulis
(Hz)		
100	0.06	4.30
** 125	0.24	17.12
160	0.35	25.36
200	0.49	35.45
** 250	0.57	40.87
315	0.83	60.02
400	0.93	67.02
** 500	0.97	69.88
630	0.98	70.87
800	1.07	76.82
** 1000	0.95	68.42
1250	0.93	67.13
1600	0.91	65.56
** 2000	0.95	68.35
2500	0.89	64.39
3150	0.85	61.52
** 4000	0.88	63.08
5000	0.89	64.34
	SAA = 0.87	
	NRC = 0.85	

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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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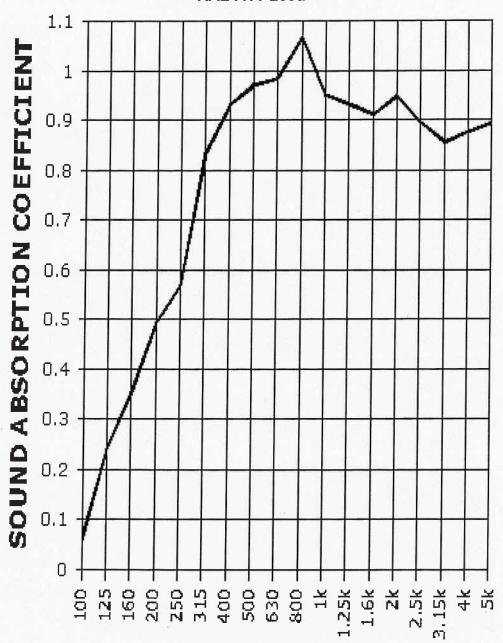
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# FREQUENCY (Hz)

**SAA=0.87** NRC=0.85

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