

## TEST REPORT

FOR: Radial Engineering Ltd.  
Port Coquitlam, British Columbia, Canada

Sound Absorption Test  
RAL™-A12-104

ON: Primacoustic Paintables™ Acoustic Panels

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CONDUCTED: 3 April 2012

### 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 Primacoustic Paintables™ Acoustic Panels. The overall dimensions of the specimen as measured were nominally 2.44 m (96 in.) wide by 2.44 m (96 in.) long and 51 mm (2 in.) thick. The specimen consisted of eight (8) pieces. Each piece was 610 mm (24 in.) wide by 1.22 m (48 in.) long. The specimen was tested in the laboratory's 292 m<sup>3</sup> (10,311 ft<sup>3</sup>) test chamber.

The manufacturer's description of the specimen was as follows: Fiberglass, 6 lbs. per cubic foot. A visual inspection verified the manufacturer's description of the specimen.

The weight of the entire specimen as measured was 29.58 kg (65 lbs), an average of 4.98 kg/m<sup>2</sup> (1.02 lbs/ft<sup>2</sup>). The area used in the calculations was 5.9 m<sup>2</sup> (64 ft<sup>2</sup>). The room temperature at the time of the test was 22°C (71°F) and 61±1% relative humidity. The barometric pressure was 745 mm of mercury.

### 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 Frequency (Hz)	Absorption Coefficient	Total Absorption In Sabins
100	0.27	17.16
** 125	0.32	20.36
160	0.50	32.12
200	0.68	43.74
** 250	0.87	55.48
315	1.03	65.99
400	1.10	70.25
** 500	1.11	70.74
630	1.12	71.84
800	1.07	68.31
** 1000	1.04	66.57
1250	0.97	62.20
1600	0.96	61.55
** 2000	0.96	61.18
2500	0.96	61.42
3150	0.94	60.27
** 4000	0.96	61.63
5000	0.91	58.51

SAA = 0.99  
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 Marc Sciaky  
Marc Sciaky  
Experimentalist

Approved by Dean Victor  
Dean Victor  
Senior Experimentalist

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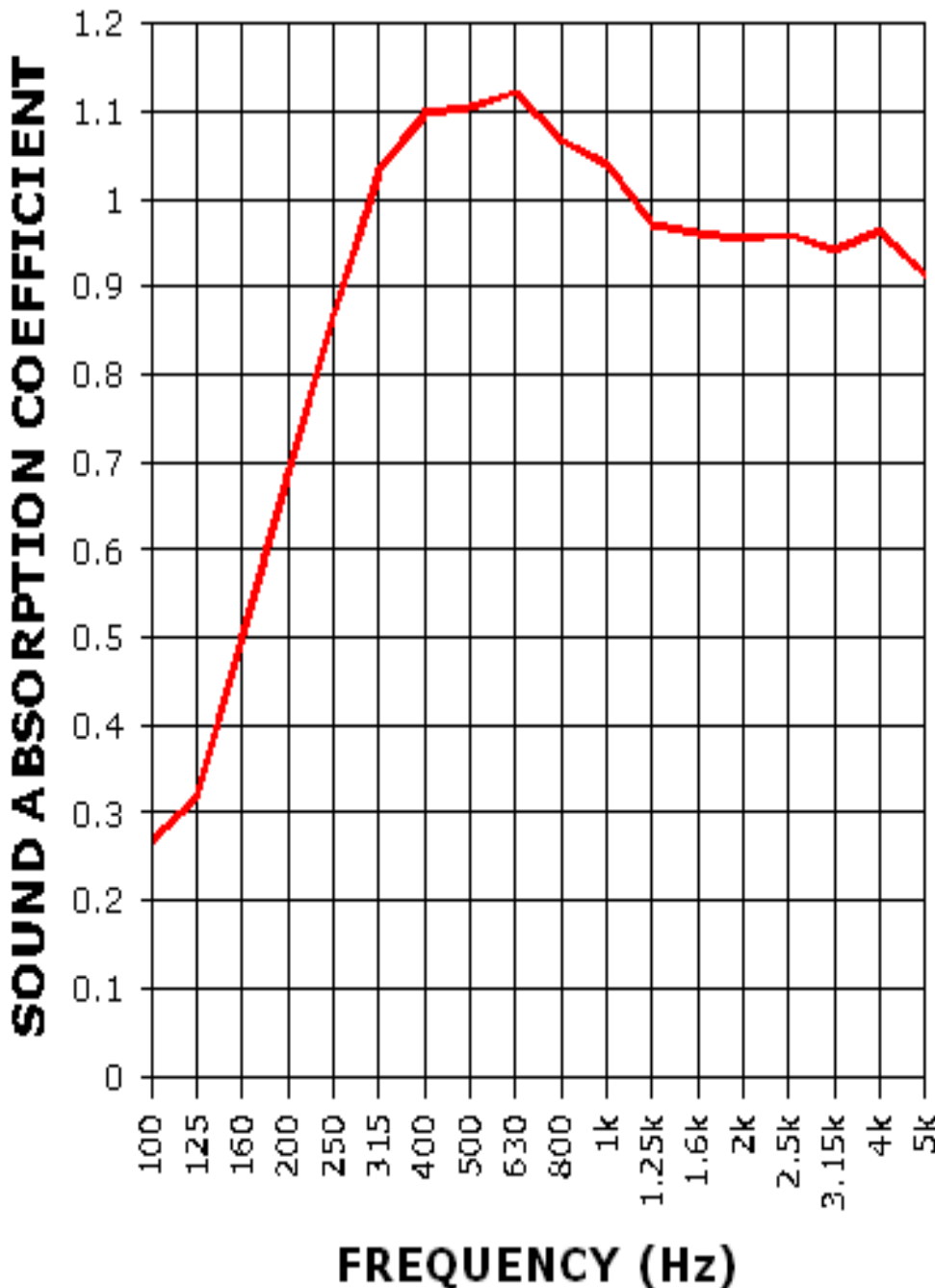


NVLAP Lab Code 100227-0

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### SOUND ABSORPTION REPORT RAL-A12-104



SAA= 0.99

NRC= 1.00

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