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: Radial Engineering LTD.
Port Coquitlam, British Columbia

Sound Absorption
RAL™-A12-219

CONDUCTED: 8 August 2012

ON: 24x48 Fiberglass Panels - Face and Edges Painted

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 24x48 Fiberglass Panels - Face and Edges Painted. The overall dimensions of the specimen as measured 2.44 m (96.00 in.) wide by 2.44 m (96.00 in.) long and 50.80 mm (2.00 in.) thick.

The manufacturer's description of the specimen was as follows: Fiberglass, 6 lbs. per cubic foot. Facing and edges coated with water based eggshell latex paint, sprayed, 0.5mm thick. A full internal inspection was performed on the test specimen by Riverbank personnel, verifying the manufacturer's description. The specimen consisted of 8 pieces. Each piece was 609.6 mm (24 in.) wide by 1219.2 mm (48 in.) long and 50.8 mm (2 in.) thick. The weight of the entire specimen as measured was 29.48 kg (65.00 lbs), an average of 4.98 kg/m^2 (1.02 lbs/ft^2). The area used in the calculations was 5.95 m^2 (64.00 ft^2).

The specimen was tested in the laboratory's 292.0 m^3 (10,311.0 ft^3) test chamber. The room temperature at the time of the test was 23±0ºC (73±0ºF) and 58±0% relative humidity. The barometric pressure was 740 mm of mercury.

MOUNTING A

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

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TEST RESULTS

1/3 Octave Center Frequency (Hz)	Absorption Coefficient	Total Absorption In Sabins
100	0.42	27.06
** 125	0.48	30.78
160	0.56	35.87
200	0.79	50.28
** 250	0.89	57.02
315	1.02	65.44
400	1.08	69.36
** 500	1.12	71.43
630	1.15	73.38
800	1.12	71.50
** 1000	1.10	70.13
1250	1.03	66.17
1600	1.00	64.06
** 2000	1.01	64.37
2500	1.00	64.15
3150	0.98	62.67
** 4000	0.92	58.90
5000	0.91	58.03

SAA = 1.03
NRC = 1.05

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.

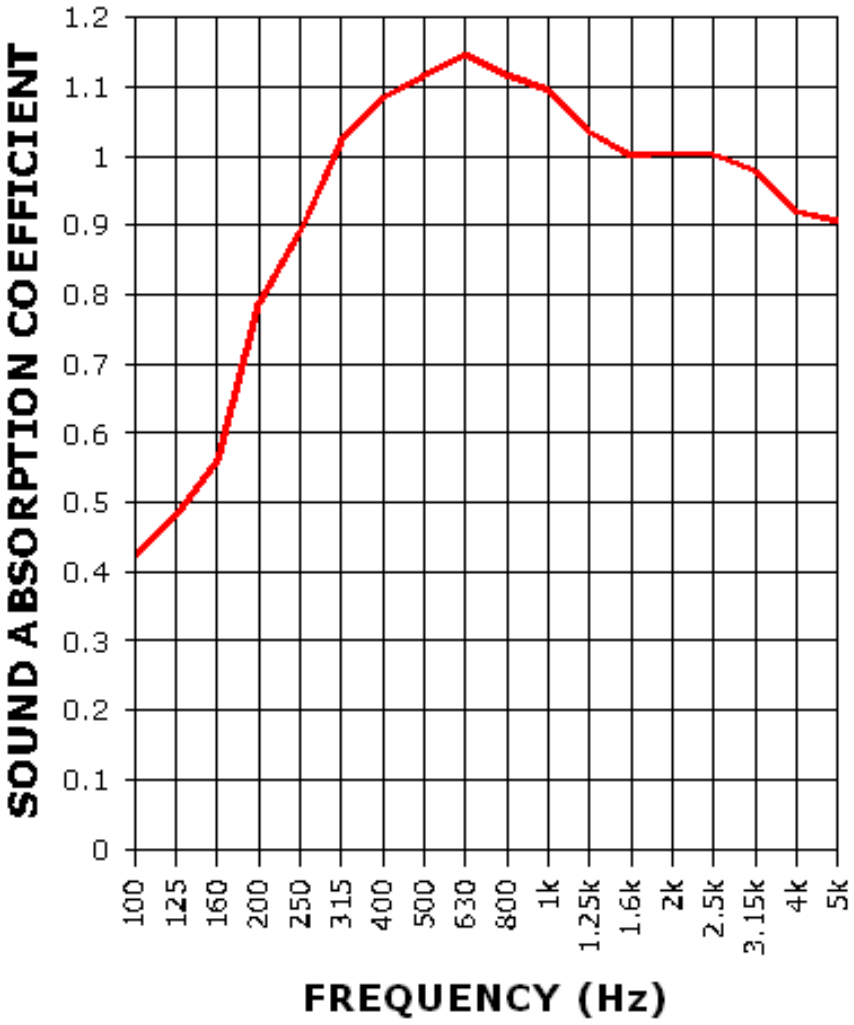
Tested by _____ Approved by _____

Marc Sciaky
Experimentalist

Eric P Wolfram
Laboratory Manager

SOUND ABSORPTION REPORT
RAL – A12-219

24x48 Fiberglass Panels - Face and edges Painted



SAA = 1.03
NRC = 1.05