WESTERN ELECTRO - ACOUSTIC LABORATORY
A division of Veneklasen Associates, Inc.

TESTING • CALIBRATION • RESEARCH

25132 Rye Canyon Loop Santa Clarita, California 91355 Tel: (661) 775-3741 Fax: (661) 775-3742 www.weal.com

SOUND ABSORPTION TEST REPORT NO. AB15-115

¾" AIR-Board Acoustic
Polycarbonate Honeycomb Core with Perforated Polycarbonate Face and Back
(E-400 Mounting)

CLIENT: **CG Schmitt & Company, Inc.**
PO Box 231369
Encinitas, CA 92023

22 May 2015

TEST DATE: 6 February 2015

INTRODUCTION

The methods and procedures used for this test conform to the provisions and requirements of ASTM Procedure C 423-09a, *Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method*. Copies of the test standard are available at www.astm.org. The test chamber volume is 275 cubic meters. Western Electro-Acoustic Laboratory is accredited by the United States Department of Commerce, National Institute of Standards and Technology under the National Voluntary Accreditation Program (NVLAP) Lab Code 100256-0 for this test procedure. This test report relates only to the item(s) tested. This report must not be used to claim product certification, approval, or endorsement by WEAL, NVLAP, NIST or any agency of the federal government.

DESCRIPTION OF TEST SPECIMEN

The test specimen consisted of four AIR-board Acoustic honeycomb core panels. Each panel was 1.22 m (48 inches) by 1.22 m (48 inches) by 19.1 mm (3/4 inch) thick. The two panels were placed in an E-400 mounting jig consisting of four wooden sides around the perimeter of the specimen. The panels sat on an angle aluminum grid such that the top of the panels were flush with the top of the jig, 400 mm (15-3/4 inches) above the test chamber floor. Closed cell foam gaskets are used to provide an air tight seal between the chamber floor and the bottom of the jig. The joints and edges of the specimen were sealed with masking tape. According to the client the panels were:

3/4" AIR-board Acoustic wall and ceiling panels, Core – Polycarbonate Honeycomb, Finish – perforated polycarbonate sheets on face and back.

The overall dimensions of the specimen were 2.44 m (96 inches) by 2.44 m (96 inches) by 19.1 mm (3/4 inch) thick. The overall weight of the specimen was 23.6 kg (52 lbs.).

Respectfully submitted,
Western Electro-Acoustic Laboratory

Approved:

Stephen A. Martin, Ph.D., P.E.
Laboratory Director

Raul Martinez
Acoustical Test Technician

NVLAP LAB CODE 100256-0

SOUND ABSORPTION TEST REPORT NO. AB15-115

Test Date: 6 February 2015

22 May 2015

Mounting per ASTM E795: Type E-400
Area Tested: 64.0 sq. ft. (5.95 sq.m)
Temperature: 69.5° F
Humidity: 43.1%
Pressure: 28.73 in. of Hg

TEST RESULTS

1/3 Octave Band Absorption Data

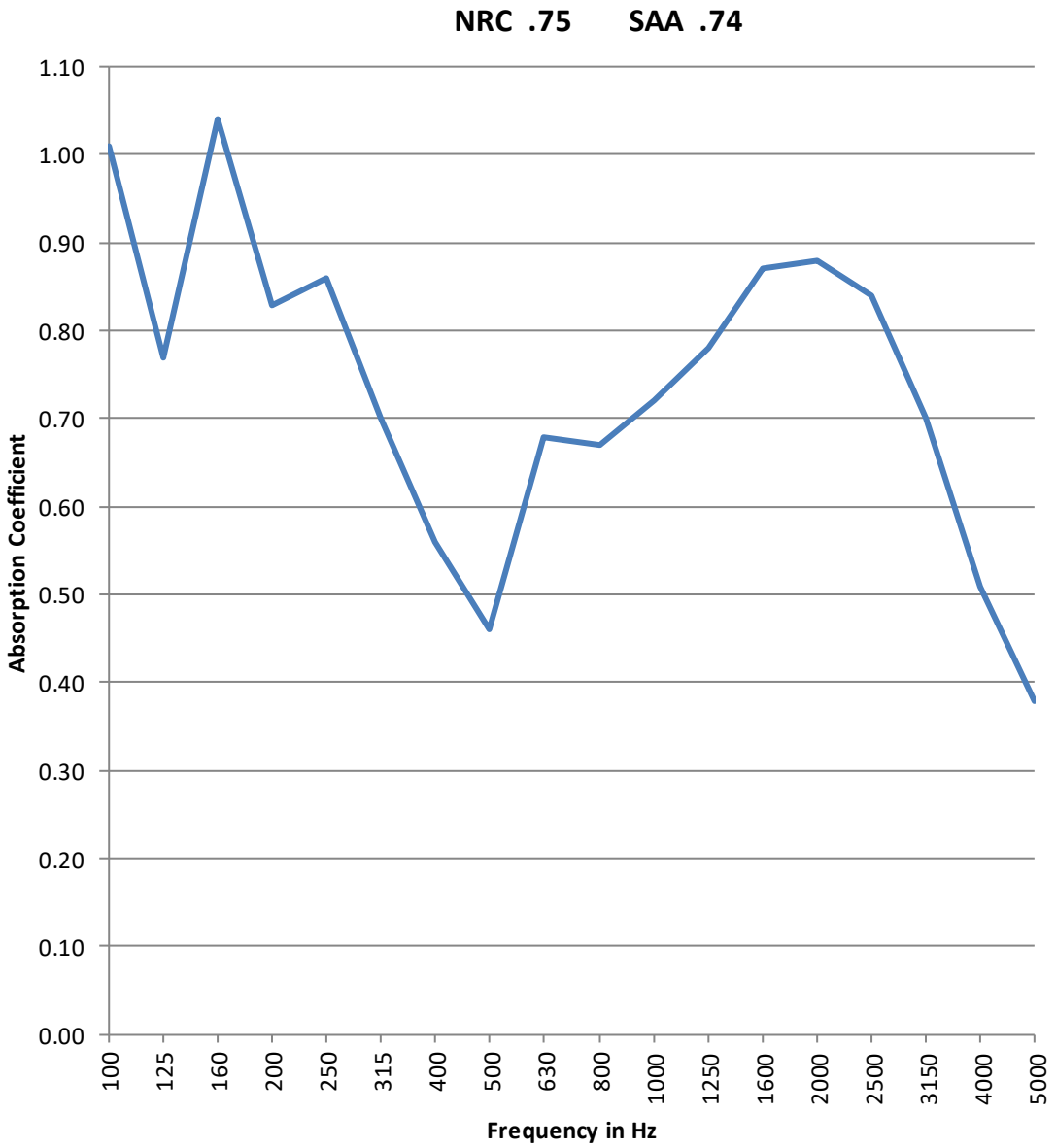
Frequency in Hz	Absorption in Sabins	Absorption Coefficients	Reproducibility R	Repeatability r
100	64.6	1.01	0.49	0.23
125	49.1	0.77	0.33	0.16
160	66.4	1.04	0.27	0.11
200	53.4	0.83	0.14	0.08
250	55.3	0.86	0.17	0.07
315	44.7	0.70	0.12	0.07
400	35.6	0.56	0.08	0.05
500	29.7	0.46	0.09	0.06
630	43.8	0.68	0.08	0.06
800	43.2	0.67	0.09	0.04
1000	45.9	0.72	0.09	0.03
1250	49.8	0.78	0.11	0.05
1600	55.5	0.87	0.13	0.04
2000	56.6	0.88	0.11	0.05
2500	53.6	0.84	0.09	0.04
3150	44.8	0.70	0.10	0.04
4000	32.8	0.51	0.10	0.07
5000	24.3	0.38	0.13	0.09

NRC 0.75
SAA 0.74

SOUND ABSORPTION TEST REPORT NO. AB15-115

Test Date: 6 February 2015

22 May 2015



Specimen Area: 64.0 sq. ft.
Temperature: 69.5° F
Relative Humidity: 43.1%
Atm. Pressure: 28.73 in. of Hg

NVLAP LAB CODE 100256-0