

WESTERN ELECTRO - ACOUSTIC LABORATORY

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

SOUND ABSORPTION TEST REPORT NO. AB07-137 revision 1

Acoustic Planks SKU 3108-2 with 1.5 mm Kerf Openings, 8 mm spacing ("E-400" mounting)

CLIENT: 9Wood

999 South A Street Springfield, OR 97477 Page 1 of 3 7 September 2010

TEST DATE: 14 March 2007

INTRODUCTION

The methods and procedures used for this test conform to the provisions and requirements of ASTM Procedure C 423-08a, *Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method*. Copies of the test standard are available at <u>www.astm.org</u>. 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. Any advertising that utilizes this test report or test data must not imply product certification or endorsement by WEAL, NVLAP, NIST or the U.S. Government.

DESCRIPTION OF TEST SPECIMEN

The test specimen was a 9Wood 3100 Acoustic Plank. Fourteen planks, approximately 19 mm (3/4 inch) thick by 200 mm (8 inches) wide by 2.44 m (8 feet) long were assembled in an E-400 jig. One additional plank, 51 mm (2 inches) wide was used to complete the assembly. The planks were kerfed along the entire length of the plank (parallel to the grain) with 1.5 mm kerf openings on 8 mm centers. Each plank contained 25.4 mm (1 in.) by 159 mm (6.25 in.) oval acoustic dadoes filled with fiberglass pills on the backside of the plank. The specimen was placed in an E-400 test jig, with the face of the specimen flush with the top of the jig, 400 mm (15-3/4 in.) above the test chamber floor. The test jig consisted of four wooden sides around the perimeter of the specimen. Closed cell foam gaskets were used to provide an air tight seal between the chamber floor and the bottom of the jig. The planks were supported on an angle aluminum grid. According to the manufacturer the specimen was:

Series 3100 SKU 3108-2 Acoustic Plank

The net dimensions of the assembly were 2.74 m (108 inches) by 2.44 m (96 inches) by 19 mm (3/4 inches) thick. The overall weight of the specimen was 63.3 kg (139.5 lbs.).

Test results are presented on the following page.

Respectfully submitted, Western Electro-Acoustic Laboratory

man Gary E. Mange

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Mounting per ASTM E 795-00: Type E-400 Area tested: $72.0 \text{ ft}^2 (6.69 \text{ m}^2)$

Temperature: 69.3° F

Humidity: 49%

TEST RESULTS

Frequency in Hz	Absorption in Sabins	Absorption Coefficients
100	74.8	1.04
125	63.9	0.89
160	75.6	1.05
200	69.5	0.96
250	63.4	0.88
315	60.5	0.84
400	53.8	0.75
500	42.7	0.59
630	55.1	0.76
800	49.6	0.69
1000	49.7	0.69
1250	50.2	0.70
1600	50.9	0.71
2000	49.5	0.69
2500	50.1	0.70
3150	51.0	0.71
4000	49.1	0.68
5000	49.0	0.68
		NRC 0.70

1/3 Octave Band Absorption Data

SAA 0.75

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Specimen Area: 72 sq.ft. Temperature: 69.3 deg. F Relative Humidity: 49 %

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