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SOUND ABSORPTION TESTING CONDUCTED ON a VersiPanel Partition

Versare Solutions, Inc
3236 California St. NE
Minneapolis, MN 55418

Date: October 24th, 2019
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Report Number: ESP032172P-3

Noise Reduction Coefficient (ASTM C423-17)

INTRODUCTION:

This report presents the results of acoustical testing of a VersiPanel Partition. This testing was requested by Mr. Didier Foley and was conducted on October 14, 2019.

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The results stated in this report represent only the specific construction and acoustical conditions present at the time of the test. Measurements performed in accordance with this standard on nominally identical constructions and acoustical conditions may produce different results.

TEST RESULTS SUMMARY:

ASTM C423, Type K Mount				Test Results		
Test #	**Sample Identification**	**Weight (lbs)**	**Weight (psf)**	**NRC**	**SAA**	**--**
3	VersiPanel Partition	65.5	0.40	***0.30***	***0.27***	

Tabular and graphical presentations of the data are presented under “TEST RESULTS” below.

SPECIMEN DESCRIPTION: (Also see "Test Results")

The material was identified as a VersiPanel Partition. The partition was a rollable form and covered with fabric. The edges of the partition were plastic. The core of the panel was not investigated or verified. The measured total area (both sides) of the partition excluding framing and thickness was 165.44 ft^2.

The partition was mounted in a Type K Mount and supporting itself in a partially round form (See Photo).

TEST PROCEDURE AND EQUIPMENT:

Sound Absorption Test

ASTM C 423-17, "Sound Absorption and Sound Absorption Coefficient by the Reverberation Room Method", was followed in every respect. The samples were placed on the floor in a Type K mounting method in accordance with ASTM E795-16.

NRC was calculated by rounding the sound absorption coefficients for 250, 500, 1000 and 2000 Hz to the nearest 0.05. SAA was calculated by rounding the sound absorption coefficients for the twelve frequencies from 200 Hz to 2500 Hz to the nearest 0.01. The reverberant room has a volume of 2948 ft^3 (165m^3).

TEST EQUIPMENT:

Acoustic Lab Calibrated Test Equipment For NRC Tests (Reverb Chamber Only)

Item Description	ID #	Manufacturer/Model	Serial #	Calibration Due
1/2" Pressure Condenser Microphone	PT-162-108	GRAS/46AD	167994	1/18/20
Microphone Calibrator	PT-162-076	Norsonic/1251	29144	6/18/20
Data Acquisition Module	PT-162-107	National Instruments/NI9234	1735986-1893EB3	6/4/20
Temp and Humidity Transmitter	PT-162-077	Dwyer Instruments/Series RH	M90714-E4SV-Y	6/4/20

Photo:

Ear Controlled Data

Test Data:

SOUND ABSORPTION
ASTM C423

General Information

Project No:	ESP032172P-3
Customer:	Versare Solutions Inc
Test Date:	10-14-2019
Specimen ID:	VersiPanel
Specimen Description:	Divider
Specimen Dimensions - Area:	0.00" W x 0.00" H - 165.44 ft²
Operator:	MJC

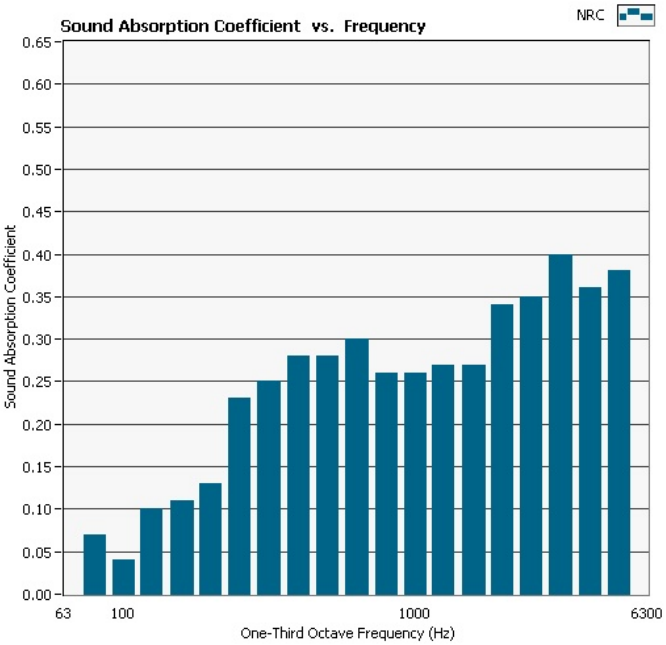
Data Table

	absorption empty (m²)	absorption * sample (m²)	Absorption Coefficient
80	4.15	1.04	0.07
100	5.56	0.57	0.04
125	3.79	1.51	0.10
160	3.47	1.64	0.11
200	4.13	1.96	0.13
250	4.08	3.57	0.23
315	3.92	3.84	0.25
400	4.02	4.26	0.28
500	4.45	4.30	0.28
630	4.66	4.67	0.30
800	5.08	4.00	0.26
1000	5.31	4.02	0.26
1250	5.84	4.12	0.27
1600	6.57	4.17	0.27
2000	7.33	5.24	0.34
2500	8.36	5.40	0.35
3150	9.43	6.19	0.40
4000	11.74	5.52	0.36
5000	13.75	5.81	0.38

* based on an extended plane area of 165.44 ft²

Room Conditions

Temperature	21.9	°C
R.H.	45	%
ATM	980	hPa



NRC	SAA
0.30	0.27

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Ear Controlled Data