

Rose Brand Acoustical Test Report for:

Rhapsody Fabric Panels

TEST REPORT

for

Rose Brand Wipers, Inc.
4 Emerson Lane
Secaucus, NJ 07094
Ulrich Tombuelt / 800-223-1624 ext. 198

Sound Absorption Testing
ASTM C 423-09a/ E795-05

On

**Rhapsody Acoustic Fabric Panels
On High Density Fiberglass Board
Type A Mounting**

Report Number: NGC 4014021

Assignment Number: G-1036

Test Date: 4/30/2014

Report Approval Date: 5/23/2014

Submitted by:  _____

Andrew E. Heuer
Senior Test Engineer

Reviewed by:  _____

Robert J. Menchem
Director

The results reported above apply to specific samples submitted for measurement. No responsibility is assumed for performance of any other specimen. The laboratory's accreditation or any of its test reports in no way constitute or imply product certification, approval, or endorsement by NVLAP or any agent of the U.S. Government. This report may not be reproduced except in full, without written approval of the laboratory.

Revision Summary:

Date	SUMMARY
Approval Date: 5/23/2014	Original issue date. Original NGCTS report: NGC 4014021

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Report Number: NGC 4014021

Test Method: This test method conforms explicitly with the American Society for Testing and Materials Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method - Designation: C 423-09a/ E795-05.

For the test, a Linear Averaging Mode is used as the Averaging Algorithm when measuring the Decay Times.

Specimen Description: Designated by client as: Rose Brands™ Rhapsody acoustic fabric panel printed using sublimation inks; the sample is installed with the textured side out on 6 PCF density fiberglass board.

The test specimens were observed to have the following characteristics:

Panels are: Fabric panels

Face Finish: Rhapsody acoustic fabric

Panel Core: High density fiberglass board

Backing Layer: Acoustic fabric

All weights and dimension are averaged:

Measured dimensions: 612.78 mm x 1219.2 mm (24-1/8 in. x 48 in.)

Overall Thickness: 53.14 mm (2.092 in.) average

Weight: 5.76 kg/m² (1.18 PSF)

Unit Size: 10 Units, 612.78 mm x 1219.2 mm (24-1/8 in. x 48 in.)

Mounting: Type A as per ASTM E795-05. Perimeter of test specimen sealed.

Total Sample Size: 80.66 Sq. Ft. (7.494 m²)

Preconditioning: Minimum 24 hours at 70°F, 55% R.H

Test Results: The results of the tests are given on pages 4 and 5 of the report.

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Sound Absorption Test Data per C423 - 09a

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No. of test report: **NGC4014021** Date of test: **4/30/2014**
 Temp. [°C]: **18.0** Humidity [%]: **62** Spec. Size [m²]: **7.494**

Frequency [Hz]	Absorption Coefficients a _s	Avg. Decay Rate	
		Empty d (empty) [dB/s]	Specimen d (specimen) [dB/s]
100	0.26	8.97	11.53
125	0.33	9.86	13.14
160	0.58	7.96	13.69
200	0.87	8.01	16.60
250	0.97	7.95	17.57
315	1.03	7.16	17.36
400	1.08	6.80	17.47
500	1.06	6.77	17.18
630	1.01	6.56	16.50
800	0.96	6.23	15.73
1000	0.95	6.58	16.00
1250	0.94	7.05	16.28
1600	0.95	7.43	16.81
2000	0.95	8.25	17.65
2500	0.93	8.80	17.96
3150	0.93	8.50	17.68
4000	0.92	8.17	17.20
5000	0.91	7.14	16.15

Reverberation Room Volume: **282.1** m³

Noise Reduction Coefficient NRC: **1.00** Avg. 250, 500, 1000, 2000 Hz : **0.984**
Sound Absorption Average SAA: **0.98** Avg. 200 - 2500 Hz: **0.976**

NOTE: Estimates of repeatability and reproducibility for sound absorption coefficients of a specimen are referenced in ASTM C423 - 09a test method.

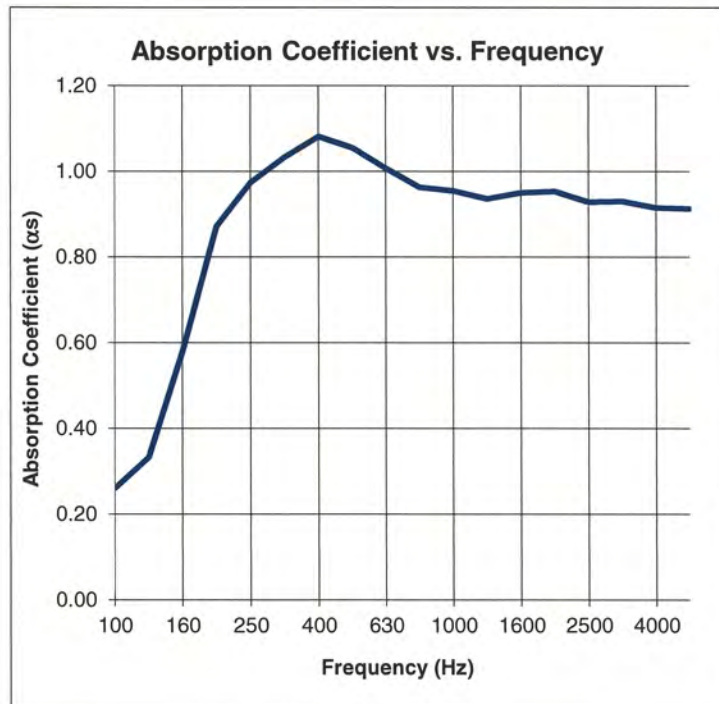
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Sound Absorption Test Data per C423 - 09a

Test report: **NGC4014021**
 Date of test: 4/30/2014
 Spec. Size [m²]: 7.494
 Room Vol.[m³]: 282.1
 Temp. [°C]: 18.0
 Humidity [%]: 62

Noise Reduction Coefficient NRC: 1.00
Sound Absorption Average SAA: 0.98

Frequency [Hz]	Absorption Coefficients α_s
100	0.26
125	0.33
160	0.58
200	0.87
250	0.97
315	1.03
400	1.08
500	1.06
630	1.01
800	0.96
1000	0.95
1250	0.94
1600	0.95
2000	0.95
2500	0.93
3150	0.93
4000	0.92
5000	0.91



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