

Rose Brand Acoustical Test Report for:

60" IFR 16 oz. Athena

100% Fullness Pleated Panel

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


**Athena 16 oz Velour, 100% IFR Polyester,
Hanging Flat with 100% Fullness, Nap Down, Unlined
Type G Mounting**


Report Number: NGC 4015050

Assignment Number: G-1187

Test Date: 06/25/2015

Report Approval Date: 07/14/2015

Submitted by: 
Andrew E. Heuer
Senior Test Engineer

Reviewed by: 
Robert J Menchetti
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: 07/14/2015 | Original issue date: 07/14/2015 Original NGCTS report: NGC 4015050 |

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Report Number: NGC 4015050

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 Brand[®] Athena 16 oz Velour, 100% IFR Polyester, hanging flat with 100% fullness, nap down, unlined.

The test specimen was observed to have the following characteristics:

Drape Identification: Athena 16 oz Velour

Drape Fabric: 100% IFR Polyester

Fullness: 100% fullness

Nap: Down

All weights and dimension are averaged:

Measured dimensions: 2743.2 mm x 2438.4 mm (108 in. x 96 in.)

Weight: 1.24 kg/m² (0.255 PSF)

Unit Size: 1 Unit, 2743.2 mm x 2438.4 mm (108 in. x 96 in.)

Mounting: Type G-100 as per ASTM E795-05. The curtain was hung by grommets spaced 304.8 mm (12 in.) o.c which were attached to a metal G Mount frame. For this testing, the frame was spaced 4 inches from the test chamber wall.

Total Sample Size: 72.00 Sq. Ft. (6.689 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 | | | | | Page 4 of 5 |
|---|--|------------------------------|------------------------------------|--|-------------|
| No. of test report: | | NGC4015050 | | Date of test: 6/25/2015 | |
| Temp. [°C]: 22.0 | | Humidity [%]: 51 | | Spec. Size [m ²]: 6.689 | |
| Frequency [Hz] | Absorption Coefficients a _s | Avg. Decay Rate | | | |
| | | Empty d (empty) [dB/s] | Specimen d (specimen) [dB/s] | | |
| 100 | 0.23 | 8.41 | 10.45 | | |
| 125 | 0.32 | 9.39 | 12.22 | | |
| 160 | 0.43 | 7.91 | 11.72 | | |
| 200 | 0.53 | 7.91 | 12.57 | | |
| 250 | 0.70 | 8.17 | 14.40 | | |
| 315 | 0.84 | 7.24 | 14.67 | | |
| 400 | 0.91 | 6.89 | 15.00 | | |
| 500 | 0.91 | 6.91 | 15.01 | | |
| 630 | 0.93 | 6.43 | 14.70 | | |
| 800 | 1.00 | 6.23 | 15.10 | | |
| 1000 | 1.05 | 6.65 | 15.92 | | |
| 1250 | 1.04 | 6.98 | 16.22 | | |
| 1600 | 1.06 | 7.36 | 16.74 | | |
| 2000 | 1.07 | 8.32 | 17.78 | | |
| 2500 | 1.07 | 9.04 | 18.49 | | |
| 3150 | 1.10 | 8.92 | 18.69 | | |
| 4000 | 1.10 | 8.54 | 18.31 | | |
| 5000 | 1.06 | 8.12 | 17.54 | | |
| Reverberation Room Volume: | | 282.1 | | m ³ | |
| Noise Reduction Coefficient NRC: | | 0.95 | | Avg. 250, 500, 1000, 2000 Hz: 0.932 | |
| Sound Absorption Average SAA: | | 0.93 | | Avg. 200 - 2500 Hz: 0.925 | |
| NOTE: Estimates of repeatability and reproducibility for sound absorption coefficients of a specimen are referenced in ASTM C423 - 09a test method. | | | | | |

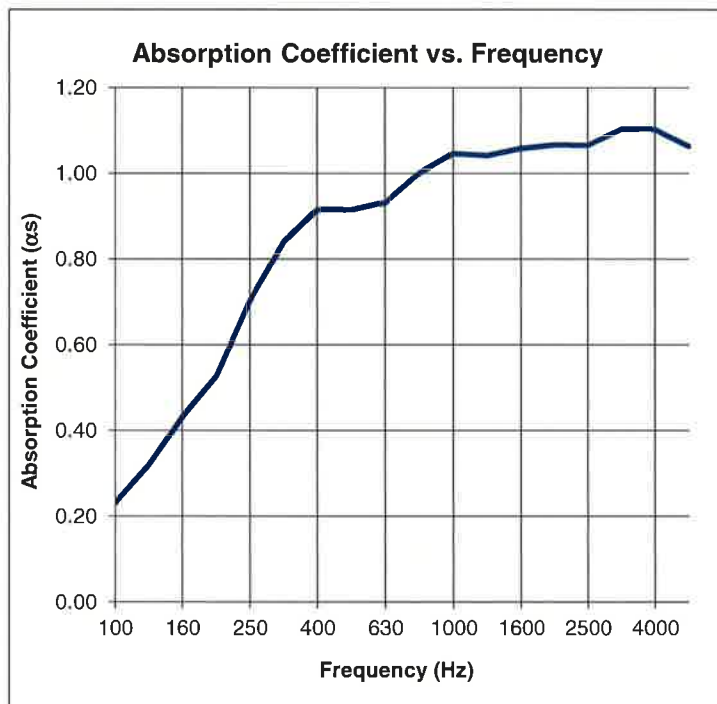
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Sound Absorption Test Data per C423 - 09a

Test report: **NGC4015050**
 Date of test: 6/25/2015
 Spec. Size [m²]: 6.689
 Room Vol.[m³]: 282.1
 Temp. [°C]: 22.0
 Humidity [%]: 51

Noise Reduction Coefficient NRC: 0.95
Sound Absorption Average SAA: 0.93

| Frequency [Hz] | Absorption Coefficients α_s |
|-------------------|--|
| 100 | 0.23 |
| 125 | 0.32 |
| 160 | 0.43 |
| 200 | 0.53 |
| 250 | 0.70 |
| 315 | 0.84 |
| 400 | 0.91 |
| 500 | 0.91 |
| 630 | 0.93 |
| 800 | 1.00 |
| 1000 | 1.05 |
| 1250 | 1.04 |
| 1600 | 1.06 |
| 2000 | 1.07 |
| 2500 | 1.07 |
| 3150 | 1.10 |
| 4000 | 1.10 |
| 5000 | 1.06 |



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