



Acoustical Testing Laboratory



Accredited by the National Voluntary
Laboratory Accreditation Program
for the specific scope of accreditation
under Lab Code 200291

TEST REPORT

for

Atkar (N.A.) Inc.
1276 Osprey Drive
Ancaster, ON L9G 4V5
Graham Manning / 905-648-7580

Sound Absorption Test
ASTM C 423 - 09a / E 795 - 05

On

Au.diGroove Panel AGP-10/26

On E-400 Mount

Report Number: NGC 4013021

Page 1 of 4

Assignment Number: G-890


Test Date: 3/14/2013

Report Date: 3/14/2013

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.



Acoustical Testing Laboratory



Accredited by the National Voluntary
Laboratory Accreditation Program
for the specific scope of accreditation
under Lab Code 200291

Page 2 of 4

Report Number: NGC 4012021

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 / E 795 - 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:

Au.diGroove Panel AGP-10/26

The test specimens were observed to have the following characteristics:

Panels were observed to be 2 inch thick acoustical wood panels.

Face Finish – Grooved Wood. Groove width measured at 2.18mm (0.086 in.) and spaced 7.94mm (0.301 in.) on center.

Panel Core – Wood with perforations nominally 7.6 mm (0.301 inch) in diameter.

Back Finish – Black membrane.

All weights and dimensions are averaged:

Thickness: Panel 50.8 mm (2.0 in.) average.

Weight: Panel 12.1 kg/m² (2.48 PSF)

Unit Size: Three Units 2438.4 mm x 914.4 mm (96 in. x 36 in)

Mounting: Type E-400 Mount per ASTM E795 edges sealed with aluminum bars.

Sample Size: 6.689 m² (72 ft²) nominal

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

Test Results: The results of the tests are given on pages 3 and 4.

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.

Sound Absorption Test Data per C423 - 09a

Page 3 of 4

No. of test report: **NGC4013021** Date of test: 3/15/2013
 Temp. [°C]: 17.5 Humidity [%]: 57 Spec. Size [m²]: 6.689

| Frequency [Hz] | Absorption Coefficients a _s | Avg. Decay Rate | |
|----------------|--|------------------------|------------------------------|
| | | Empty d (empty) [dB/s] | Specimen d (specimen) [dB/s] |
| 100 | 0.55 | 9.26 | 14.10 |
| 125 | 0.69 | 9.21 | 15.31 |
| 160 | 0.70 | 7.61 | 13.80 |
| 200 | 0.74 | 7.70 | 14.20 |
| 250 | 0.75 | 7.93 | 14.56 |
| 315 | 0.78 | 7.02 | 13.84 |
| 400 | 0.67 | 6.75 | 12.68 |
| 500 | 0.69 | 6.70 | 12.80 |
| 630 | 0.73 | 6.62 | 13.05 |
| 800 | 0.70 | 6.24 | 12.43 |
| 1000 | 0.71 | 6.53 | 12.78 |
| 1250 | 0.72 | 6.85 | 13.17 |
| 1600 | 0.74 | 7.13 | 13.62 |
| 2000 | 0.75 | 7.65 | 14.29 |
| 2500 | 0.76 | 7.77 | 14.44 |
| 3150 | 0.77 | 6.74 | 13.49 |
| 4000 | 0.76 | 5.13 | 11.80 |
| 5000 | 0.73 | 2.87 | 9.25 |

Reverberation Room Volume: 282.1 m³

Noise Reduction Coefficient NRC: 0.75 Avg. 250, 500, 1000, 2000 Hz : **0.728**
Sound Absorption Average SAA: 0.73 Avg. 200 - 2500 Hz: **0.729**

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

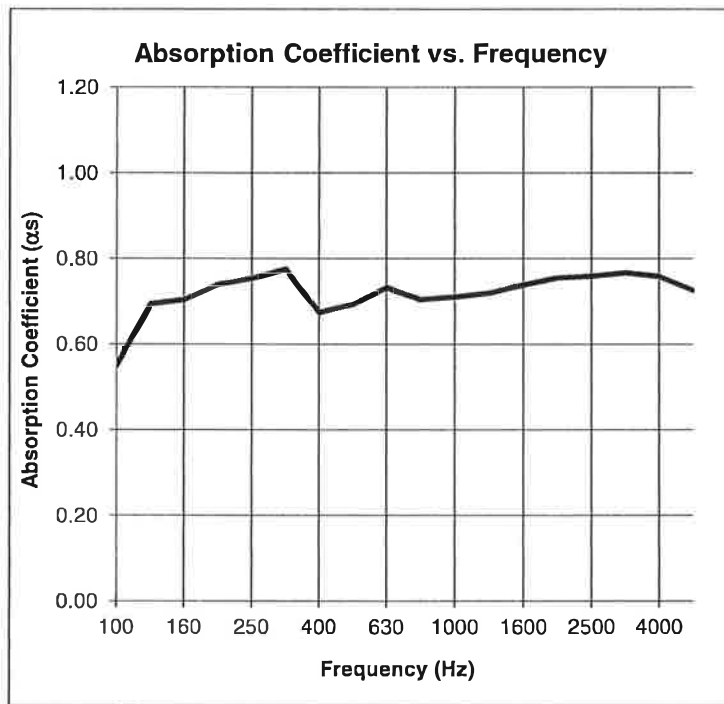
The results reported above apply to specific samples submitted for measurement. No responsibility is assumed for performance of any other specimen. The laboratory's accreditation or any of its test reports in no way constitute or imply product certification, approval, or endorsement by NVLAP or any agent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

Sound Absorption Test Data per C423 - 09a

Test report: **NGC4013021**
 Date of test: 3/15/2013
 Spec. Size [m²]: 6.689
 Room Vol.[m³]: 282.1
 Temp. [°C]: 17.5
 Humidity [%]: 57

Noise Reduction Coefficient NRC: 0.75
Sound Absorption Average SAA: 0.73

| Frequency [Hz] | Absorption Coefficients α_s |
|----------------|------------------------------------|
| 100 | 0.55 |
| 125 | 0.69 |
| 160 | 0.70 |
| 200 | 0.74 |
| 250 | 0.75 |
| 315 | 0.78 |
| 400 | 0.67 |
| 500 | 0.69 |
| 630 | 0.73 |
| 800 | 0.70 |
| 1000 | 0.71 |
| 1250 | 0.72 |
| 1600 | 0.74 |
| 2000 | 0.75 |
| 2500 | 0.76 |
| 3150 | 0.77 |
| 4000 | 0.76 |
| 5000 | 0.73 |



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.