

TEST REPORT

for

Interlam
391 Hickory Street
Mount Airy, NC 27030
Bob Livengood / 336-786-6254

Sound Absorption Testing

ASTM C 423-17 / E795-16

On


**Akupanel 1 X 025
Type A Mounting**

Report Number: NGC 4020018

Assignment Number: G-1697

Test Date: 05/20/2020

Report Approval Date: 06/04/2020

Submitted by: 
Anthony J. Rivers
Test Technician

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: 06/04/2020	Original issue date: 06/04/2020 Original NGCTS report: NGC 4020018

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Report Number: NGC 4020018

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 423-17 / E795-16.

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

Specimen Description: Designated by client as: Akupanel 1 X 025

The test specimens were observed to have the following characteristics:

All weights and dimension are averaged:

Panels are: Akupanel 1 X 025

Face Finish: Wooden strips

Back Finish: White felt

Measured dimensions:

Unit Size: Four Units, 609.6 mm x 2438.4 mm (24 in. x 96 in.)
One Unit, 304.8 mm x 2438.4 mm (12 in. x 96 in.)

Measured Average Thickness of panels:

22.25 mm (0.876 in.)

Measured weight of panels:

9.52 kg/m² (1.95 PSF)

Mounting: Type A as per ASTM E795-16.

Total Sample Size: 72.00 Sq. Ft. (6.69 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 - 17					Page 4 of 5
No. of test report:		NGC 4020018		Date of test: 5/20/2020	
Temp. [°C]: 25.0		Humidity [%]: 50		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	0.02		9.08	9.30	
125	0.00		10.14	10.01	
160	0.06		7.78	8.31	
200	0.05		7.62	8.02	
250	0.07		7.87	8.51	
315	0.13		7.10	8.25	
400	0.18		6.62	8.26	
500	0.28		6.55	9.05	
630	0.43		6.36	10.19	
800	0.62		5.92	11.41	
1000	0.79		6.29	13.30	
1250	0.97		6.74	15.37	
1600	1.00		7.24	16.16	
2000	0.86		8.05	15.71	
2500	0.72		8.55	14.94	
3150	0.61		8.48	13.93	
4000	0.56		8.46	13.44	
5000	0.56		8.17	13.21	
Reverberation Room Volume:		282.1		m ³	
Noise Reduction Coefficient NRC:		0.50		Avg. 250, 500, 1000, 2000 Hz : 0.500	
Sound Absorption Average SAA:		0.51		Avg. 200 - 2500 Hz: 0.508	
NOTE: Estimates of repeatability and reproducibility for sound absorption coefficients of a specimen are referenced in ASTM C423 - 17 test method.					

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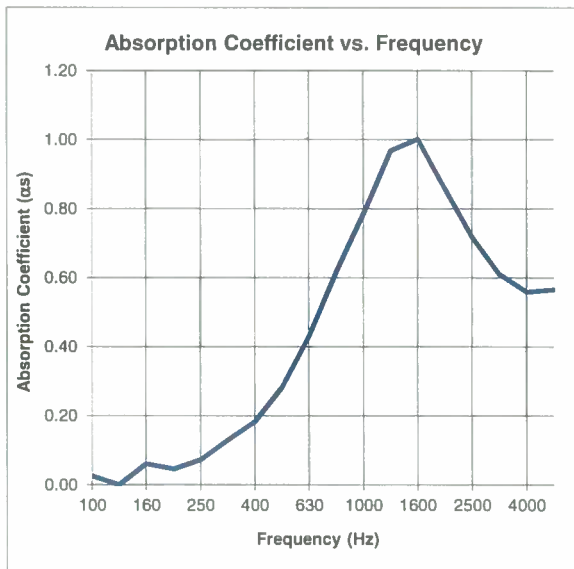
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Sound Absorption Test Data per C423 - 17

Test report: **NGC 4020018**
 Date of test: 5/20/2020
 Spec. Size [m²]: 6.689
 Room Vol.[m³]: 282.1
 Temp. [°C]: 25.0
 Humidity [%]: 50

Noise Reduction Coefficient NRC: 0.50
Sound Absorption Average SAA: 0.51

Frequency [Hz]	Absorption Coefficients α_s
100	0.02
125	0.00
160	0.06
200	0.05
250	0.07
315	0.13
400	0.18
500	0.28
630	0.43
800	0.62
1000	0.79
1250	0.97
1600	1.00
2000	0.86
2500	0.72
3150	0.61
4000	0.56
5000	0.56



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