Architectural Testing

ASTM C 423 SOUND ABSORPTION TEST REPORT

Rendered to:

FABRI TRAK SYSTEMS, INC

SERIES/MODEL: Fabri Art Panel™

TYPE: Upholstered Panel

Summary of Test Results								
Sample ID Number & Sample Description	**1/3 Octave Sound Absorption at the Octave Band Frequencies (Sabines per ft²)**						**NRC**	**SAA**
	125	**250**	**500**	**1000**	**2000**	**4000**		
98794.01 Series/Model Fabri Art Panel™, upholstered panel with a digitally imprinted polyester fabric facing	0.08	0.30	0.97	1.07	0.97	0.91	0.85	0.83

Reference should be made to Architectural Testing, Inc. Report No. 98794.01-113-11 for complete test specimen description. The complete test results are listed in Appendix B.

130 Derry Court
York, PA 17406-8405
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Architectural Testing

ACOUSTICAL PERFORMANCE TEST REPORT

Rendered to:

FABRI TRAK SYSTEMS, INC
2553 Route 130, Suite 2
Cranbury, New Jersey 08512

Report No:	98794.01-113-11
Test Date:	03/04/10
Report Date:	03/19/10
Expiration Date:	03/04/14

Test Sample Identification:

Series/Model: Fabri Art Panel™

Type: Upholstered Panel

Overall Size: 8' by 9'

Project Summary: Architectural Testing, Inc. was contracted by Fabri *Trak* Systems, Inc. to conduct a sound absorption test on a Series/Model Fabri Art Panel™, upholstered panel. A summary of the results is listed in the Test Results section and the complete test data is included as Appendix B of this report. The sample was provided by the client.

Test Methods: The acoustical test was conducted in accordance with the following:

ASTM C 423-09a, *Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method*.

ASTM E 795-05, *Standard Practices for Mounting Test Specimens During Sound Absorption Tests*.

Test Equipment: The equipment used to conduct these tests meets the requirements of ASTM C 423. The microphone was calibrated before conducting the sound absorption test. The test equipment and test chamber descriptions are listed in Appendix A.

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Test Procedure: The sound absorption of the reverberation chamber was measured before the test specimen was installed. This measurement shall be referred to as the empty room test. For the Type A mounting, the test specimen was placed directly against the test surface (floor) of the reverberation room with the absorptive side exposed to the sound field. The perimeter of the sample was sealed to the floor with aluminum angles and duct tape. The sound absorption test was then re-run. The absorption measurement with the specimen inside the chamber shall be referred to as the full room test.

For the empty and full room tests, ten decay measurements were conducted at each of the five microphone positions. The sound absorption test was conducted at 1/3 octave band frequencies ranging from 80 to 5000 hertz. The air temperature and relative humidity conditions were monitored and recorded during the empty and full room measurements.

Sample Description:

Material Description	Average Thickness (inches)	Average Density (pcf)	Average Weight (psf)
Digitally imprinted polyester fabric	0.020	30.0	0.050
1" Thick fiberglass board	0.972	6.2	0.502
5/8" Gypsum wallboard	0.636	43.5	2.304

Sample Construction*: The test sample consisted of an 8' by 9' upholstered panel system assembled from two 4' by 9' panels. A simulated wall construction consisted of 1" Fabri Trak® (FR extruded vinyl locking-channel frame) mounted along the perimeter of two, 4' wide by 9' long by 5/8" thick, gypsum wallboards using staples. The assembly was fitted with 1" thick, 6 pcf density fiberglass board flush with the edge of the Fabri Trak®. The fabric facing consisted of digitally imprinted 100% polyester fabric stretched over the system and retained by the Fabri Trak®. The total weight of the sample was 218 lbs.

Comments: The sample test setup was photographed with a digital camera, and a picture is included in Appendix C. The client did not supply drawings on the Series/Model Fabri Art Panel™, upholstered panel. The specimen was disassembled, and the components will be retained by Architectural Testing for four years.

* *-As described by the client*

Test Results: A summary of the sound absorption tests is listed below:

Summary of Test Results								
Sample ID Number & Sample Description	**1/3 Octave Sound Absorption at the Octave Band Frequencies (Sabines per ft²)**						**NRC**	**SAA**
	125	**250**	**500**	**1000**	**2000**	**4000**		
98794.01 Series/Model Fabri Art Panel™, upholstered panel with a digitally imprinted polyester fabric facing	0.08	0.30	0.97	1.07	0.97	0.91	0.85	0.83

The complete test results are listed in Appendix B. The acoustical chamber is qualified down to 80 hertz. Data provided below this frequency is for reference only.

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire. Results obtained are tested values and were secured by using the designated test methods. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing.

For ARCHITECTURAL TESTING, INC:

Digitally Signed by: Daniel P. Platts

Daniel P. Platts
Technician - Acoustical Testing

Digitally Signed by: Todd D. Kister

Todd D. Kister
Laboratory Supervisor - Acoustical Testing

DPP: jmcs

Attachments (pages): This report is complete only when all attachments listed are included.
- Appendix-A: Equipment description (1)
- Appendix-B: Complete test results (2)
- Appendix-C: Photograph (1)

Revision Log

Rev. #	Date	Page(s)	Revision(s)
0	03/19/10	N/A	Original Report Issue

Appendix A

Instrumentation:

Instrument	Manufacturer	Model	Description	ATI Number	Last Calibrated
Analyzer	Agilent Technologies	35670A	Dynamic signal analyzer	004112	06/08/09*
Data Acquisition Unit	Agilent Technologies	34970A	Data Acquisition Unit	62211	07/29/09
Receive Room Microphone	G.R.A.S.	40AR	1/2", Pressure type, condenser microphone	Y003246	08/18/09
Receive Room Preamp	G.R.A.S.	26AK	1/2" Preamplifier	Y003249	08/08/09
Microphone Calibrator	Bruel & Kjaer	4228	Pistonphone calibrator	Y002816	02/18/10
Noise Source	Delta Electronics	SNG-1	Two, Uncorrelated "Pink" noise signals	Y002181	N/A
Equalizer	Rane	RPE228	Programmable EQ	Y002180	N/A
Power Amplifiers	Renkus-Heinz	P2000	Two, Amplifiers	Y002179 Y001779	N/A
Receive Room Loudspeakers	Renkus-Heinz	Trap Jr/9"	Two, Loudspeakers	Y001784 Y001785	N/A
Receiving Room Environmental Indicator	Vaisala	HMW60Y	Temperature / Humidity Indicator	Y002652	08/31/09
Weather Station	Davis Instruments	6150C	Laboratory Barometric Pressure, Temperature, and Humidity	Y003257	03/26/09

**- Note: The calibration frequency for this equipment is every two years per the manufacturer's recommendation.*

Test Chamber:

	Volume	Description
Receiving Room	234 m^3	Rotating vane and stationary diffusers Temperature and humidity controlled Isolation pads under the floor

N/A-Non Applicable

Appendix B

Complete Test Results

Architectural Testing

SOUND ABSORPTION

ASTM C 423-09a

ATI No.	98794.01
Client	Fabri Trak Systems, Inc.
Specimen	Series/Model: Fabri Art Panel™, upholstered panel with a digitally imprinted polyester fabric facing
Specimen Area	72.00 Sq Ft
Mounting	Type A
Operator	Daniel P Platts

	Empty Room	Full Room	Barometric Pressure
Date	3/4/10	3/4/10	1008 mb
Temp F	74.4	74.4	
RH %	41.6	41.2	

Freq (Hz)	Empty Room Absorption (Sabines)	Uncert	Full Room Absorption (Sabines)	Uncert	Absorption Coefficient (Sabines/Sq.Ft.)	Uncertainty
50	41.16	0.476	45.85	0.713	0.07	0.012
63	42.01	0.152	49.38	0.771	0.10	0.011
80	49.73	0.048	52.82	0.127	0.04	0.002
100	47.82	0.862	52.17	0.038	0.06	0.012
125	44.84	0.027	50.63	0.206	0.08	0.003
160	43.31	0.116	51.80	0.191	0.12	0.003
200	45.22	0.246	62.26	0.394	0.24	0.006
250	48.88	0.279	70.68	0.147	0.30	0.004
315	50.28	0.382	90.80	0.919	0.56	0.014
400	48.28	0.013	102.34	0.187	0.75	0.003
500	51.35	0.048	121.51	0.409	0.97	0.006
630	46.89	0.116	126.33	0.373	1.10	0.005
800	49.80	0.023	122.73	0.211	1.01	0.003
1000	49.88	0.072	127.03	0.083	1.07	0.002
1250	54.83	0.108	127.52	0.220	1.01	0.003
1600	53.63	0.060	125.74	0.251	1.00	0.004
2000	53.61	0.098	123.13	0.010	0.97	0.001
2500	58.11	0.034	124.94	0.471	0.93	0.007
3150	62.89	0.238	127.36	0.008	0.90	0.003
4000	61.27	0.006	127.05	0.136	0.91	0.002
5000	69.47	0.002	131.30	0.167	0.86	0.002
6300	67.59	0.117	133.21	0.438	0.91	0.006
8000	61.61	0.156	128.49	0.069	0.93	0.002

NRC Rating = 0.85
SAA Rating = 0.83

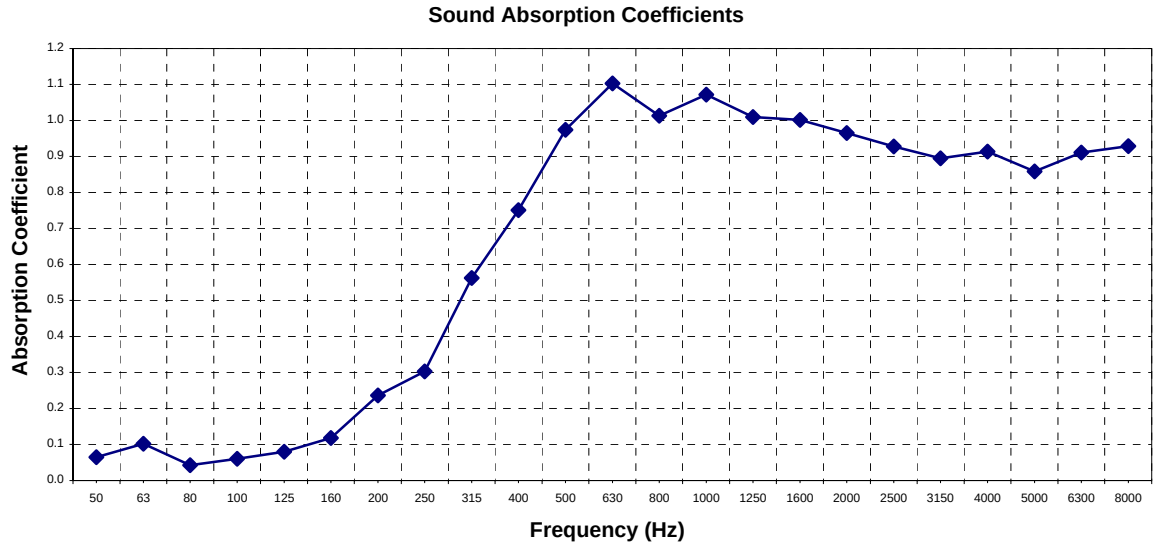
Note: *The acoustical chambers are qualified for measurements down to 80 hertz. Data reported below 80 hertz is for reference only.*

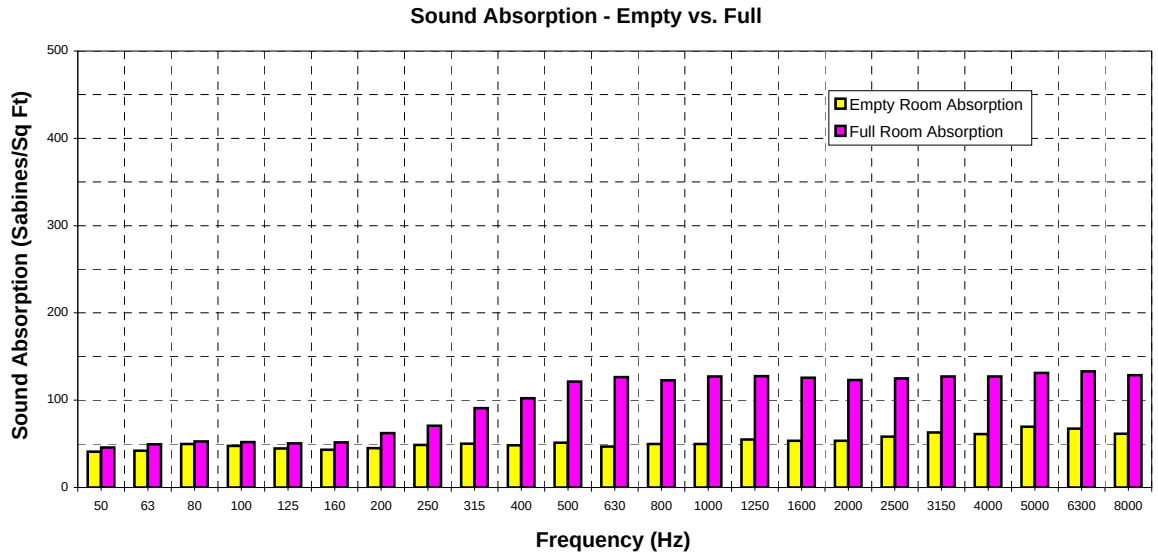
ACCREDITED

Architectural Testing, Inc. is accredited by the International Accreditation Service, Inc. (IAS) under the specific test methods listed under lab code TL-144, in accordance with the recognized International Standard ISO/IEC 17025:2005. The laboratory's accreditation or test report in no way constitutes or implies product certification, approval, or endorsement by IAS. This test report applies only to the specimen that was tested.

Architectural Testing

ATI No.	98794.01	**Date**	03/04/10
Client	Fabri Trak Systems, Inc.		
Specimen	Series/Model: Fabri Art Panel™, upholstered panel with a digitally imprinted polyester fabric facing		
Specimen Area	72.00 Sq Ft	**Mounting**	Type A
Operator	Daniel P Platts		





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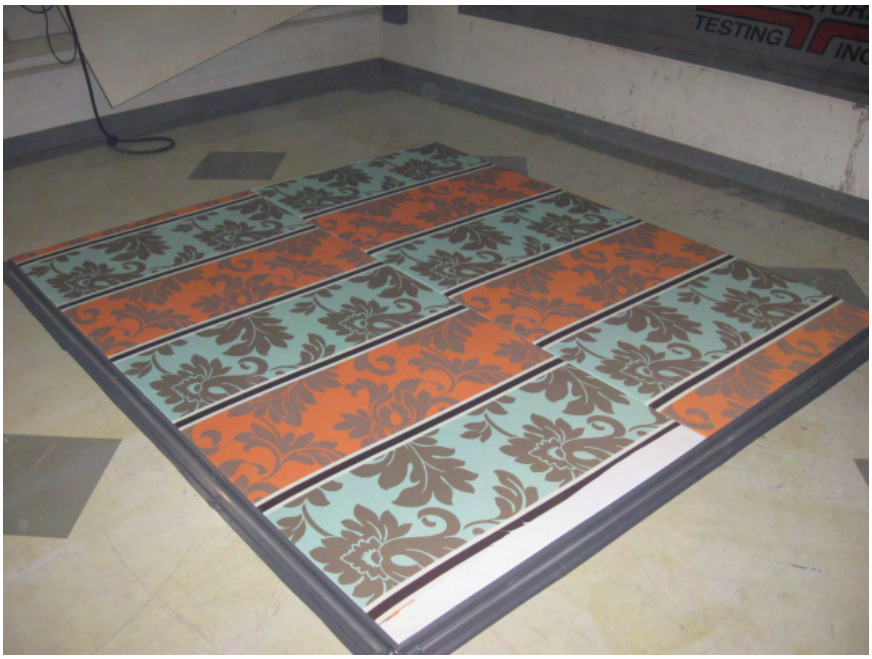
Appendix C

Photograph



View of Installed Sample