





ROLLEASE ACMEDA ACOUSTICAL PERFORMANCE TEST REPORT

SCOPE OF WORK ASTM C423 SOUND ABSORPTION TESTING ON KLEENSCREEN, SHADE FABRIC

REPORT NUMBER M5549.02-113-11-R0

TEST DATE 10/25/21

ISSUE DATE 11/17/21

PAGES 14

DOCUMENT CONTROL NUMBER RT-R-AMER-Test-2755 (01/04/21) © 2017 INTERTEK







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TEST REPORT FOR ROLLEASE ACMEDA Report No.: M5549.02-113-11-R0 Date: 11/17/21

REPORT ISSUED TO

ROLLEASE ACMEDA 750 East Main Street, 7th Floor Stamford, Connecticut 06902

SECTION 1

SCOPE

Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted by Rollease Acmeda to perform a sound absorption test. Results obtained are tested values and were secured by using the designated test methods. The complete test data is included herein. The client provided the test specimen. All measurements were conducted in the HT test chambers at Intertek B&C located in York, Pennsylvania.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends four years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for the entire test record retention period.

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SECTION 2

SUMMARY OF TEST RESULTS

SAMPLE TYPE	Shade Fabric
MOUNTING TYPE	Type G-75

SERIES/MODE	EL	Kleenscre	en-1% Ope	nness				
DATA FILE NO.			AVE SOUND ABSORPTION COEFFICIENTS AT THE BAND FREQUENCIES 250 500 1000 2000 4000					SAA
M5549.01B	0.00	0.22	0.64	0.84	0.88	0.66	0.60	0.61

SERIES/MODI	EL	Kleenscre	en-3% Ope	nness				
DATA FILE NO.		OCTAVE SOUND ABSORPTION COEFFICIENTS AT THE AVE BAND FREQUENCIES 250 500 1000 2000 4000					NRC	SAA
M5549.01C	0.00	0.05	0.15	0.33	0.22	0.27	0.20	0.20

SERIES/MODE	EL	Kleenscre	en-5% Ope	nness				
DATA FILE NO.		TAVE SOUND ABSORPTION COEFFICIENTS AT THE E BAND FREQUENCIES 250 500 1000 2000					NRC	SAA
M5549.01D	0.00	0.03	0.10	0.24	0.18	0.25	0.15	0.15

SECTION 3

TEST METHODS

The specimens were evaluated in accordance with the following:

ASTM C423-17, Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method

ASTM E795-16, Standard Practices for Mounting Test Specimens During Sound Absorption Tests

SECTION 4

SPECIMEN MOUNTING

For the Type G mounting, the test specimen was fabric hung from a solid beam parallel to the test surface. The specimen was hung 75 mm (3") from the test surface.

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SECTION 5

EQUIPMENT

The equipment listed below meets the requirements of the test methods stated in Section 3 of this report.

INSTRUMENT	MANUFACTURER	MODEL	DESCRIPTION	ASSET #	CAL DATE
Data Acquisition Card	National Instruments	PXI-4462	Data Acquisition Card	63763-3*	04/20
Data Acquisition Card	National Instruments	PXI-4462	Data Acquisition Card	65125*	05/20
Data Acquisition Card	National Instruments	PXI-4462	Data Acquisition Card	65126*	05/20
Receive Room Microphone	PBC Piezotronics	378B20	Microphone and Preamplifier	64907	01/21
Receive Room Microphone	PCB Piezotronics	378C20	Microphone and Preamplifier	64908	01/21
Receive Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64909	01/21
Receive Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64910	01/21
Receive Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	INT02427	03/21
Receive Room Environmental Indicator	Comet	T7510	Receive Room	64915	01/21
Microphone Calibrator	Norsonic	1251	Acoustical Calibrator	Y002919	04/21

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

TEST CHAMBER

	VOLUME	DESCRIPTION
RECEIVE ROOM	234 m³	Rotating vane and stationary diffusers
		Temperature and humidity controlled
		Isolation pads under the floor

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Andrew M. Johnston	Intertek B&C
Kurt A. Golden	Intertek B&C







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SECTION 7

TEST PROCEDURE

The sensitivity of the microphones was checked before measurements were conducted. Empty room sound absorption measurements were conducted before the specimen was installed. Full room sound absorption measurements were conducted after the specimen was installed.

For the empty and full room measurements, ten decay measurements were conducted at each of the five microphone positions. Data was obtained 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 measurements.

At the time of the issuance of this report, the disposition of the specimen had not yet been determined.

SECTION 8

TEST CALCULATIONS

The Sound Absorption Coefficient is the full room absorption minus the empty room absorption divided by the area of the sample in m². The Sound Absorption Coefficient is dimensionless.

The Noise Reduction Coefficient (NRC) rating is the arithmetic average of the sound absorption coefficients at 250, 500, 1000 and 2000 hertz. The average is rounded to the nearest multiple of 0.05.

The Sound Absorption Average (SAA) rating is the arithmetic average of the sound absorption coefficients at the frequencies ranging from 200 to 2500 hertz. The average is rounded to the nearest multiple of 0.01.



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SECTION 9

TEST SPECIMEN DESCRIPTION

SERIES/MODEL	Kleenscreen
SAMPLE TYPE	Shade Fabric
MOUNTING TYPE	Type G-75

The test specimen measured 2.46 m by 2.72 m (97" by 107").

DESCRIPTION	THICKNESS	DENSITY	WEIGHT	OVERALL WEIGHT
Kleenscreen –	0.48 mm	1125.00 kg/m ²	0.54 kg/m ²	3.6 kg
1% Openness	0.019"	69.48 lbs/ft ³	0.11 lbs/ft ²	8 lbs
Kleenscreen –	0.51 mm	960.78 kg/m ²	0.49 kg/m ²	3.2 kg
3% Openness	0.020"	60.00 lbs/ft ³	0.10 lbs/ft ²	7 lbs
Kleenscreen –	0.53 mm	924.53 kg/m ²	0.49 kg/m ²	3.2 kg
5% Openness	0.021"	57.14 lbs/ft ³	0.10 lbs/ft ²	7 lbs

Photographs are included in Section 11.

The client did not supply a report drawing of the test specimen.







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SECTION 10

TEST RESULTS

M5549.01B DATA

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SPECIMEN AREA	6.69 m²	
MOUNTING TYPE	G	
	EMPTY	FULL
TEMP °C	21.0	20.5
RH %	47	48
B.P. (mb)	985	979

FREQ	EMPTY ROOM	UNCERTAINTY	FULL ROOM	UNCERTAINTY	ABSORPTION	RELATIVE
	ABSORPTION		ABSORPTION		COEFFICIENT	UNCERTAINTY
(Hz)	(m ²)		(m ²)			
80	5.45	0.394	5.38	0.407	0.00	0.085
100	5.39	0.464	5.31	0.629	0.00	0.117
125	5.78	0.290	5.70	0.404	0.00	0.074
160	5.10	0.224	5.44	0.049	0.05	0.034
200	4.77	0.147	5.53	0.120	0.11	0.028
250	5.18	0.037	6.63	0.038	0.22	0.008
315	5.30	0.105	7.89	0.040	0.39	0.017
400	5.46	0.071	8.81	0.020	0.50	0.011
500	5.60	0.019	9.87	0.255	0.64	0.038
630	5.15	0.029	10.30	0.022	0.77	0.005
800	5.23	0.015	10.76	0.013	0.83	0.003
1000	5.29	0.034	10.90	0.022	0.84	0.006
1250	5.58	0.021	11.19	0.015	0.84	0.004
1600	5.57	0.012	10.79	0.015	0.78	0.003
2000	5.53	0.026	10.05	0.033	0.68	0.006
2500	5.83	0.015	10.62	0.162	0.72	0.024
3150	6.21	0.009	10.85	0.006	0.69	0.002
4000	6.73	0.009	11.15	0.007	0.66	0.002
5000	7.32	0.002	11.56	0.005	0.63	0.001
NRC RATING	0.60	(Noise Reductio	on Coefficient)			
SAA RATING	0.61	(Sound Absorp	tion Average)			

Notes:

1) The NRC rating is the arithmetic average of the sound absorption coefficients at 250, 500, 1000, and 2000 hertz. The average is rounded to the nearest multiple of 0.05.

2) The SAA rating is the arithmetic average of the sound absorption coefficients at the frequencies ranging from 200 to 2500 hertz. The average is rounded to the nearest multiple of 0.01.







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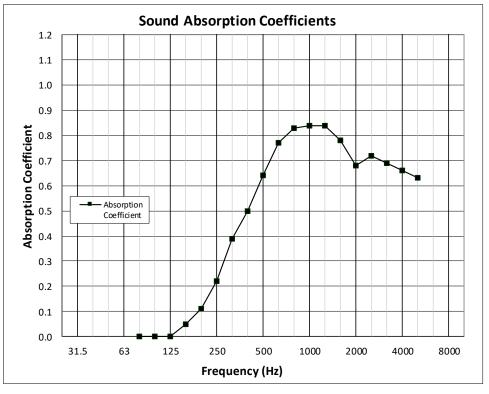
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M5549.01B GRAPH



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M5549.01C DATA

SPECIMEN AREA	6.69 m²	
MOUNTING TYPE	G	
	EMPTY	FULL
TEMP °C	21.0	20.6
RH %	47	49
B.P. (mb)	985	978

FREQ	EMPTY ROOM	UNCERTAINTY	FULL ROOM	UNCERTAINTY	ABSORPTION	RELATIVE
	ABSORPTION		ABSORPTION		COEFFICIENT	UNCERTAINTY
(Hz)	(m ²)		(m ²)			
80	5.45	0.394	5.31	0.518	0.00	0.097
100	5.39	0.464	5.33	0.620	0.00	0.116
125	5.78	0.290	5.71	0.472	0.00	0.083
160	5.10	0.224	5.25	0.105	0.02	0.037
200	4.77	0.147	4.98	0.151	0.03	0.031
250	5.18	0.037	5.54	0.034	0.05	0.008
315	5.30	0.105	5.86	0.040	0.08	0.017
400	5.46	0.071	6.23	0.050	0.12	0.013
500	5.60	0.019	6.61	0.265	0.15	0.040
630	5.15	0.029	6.62	0.028	0.22	0.006
800	5.23	0.015	7.08	0.026	0.28	0.005
1000	5.29	0.034	7.49	0.020	0.33	0.006
1250	5.58	0.021	7.94	0.011	0.35	0.004
1600	5.57	0.012	7.59	0.027	0.30	0.004
2000	5.53	0.026	6.99	0.011	0.22	0.004
2500	5.83	0.015	7.61	0.280	0.27	0.042
3150	6.21	0.009	8.08	0.009	0.28	0.002
4000	6.73	0.009	8.52	0.005	0.27	0.002
5000	7.32	0.002	9.05	0.004	0.26	0.001
NRC RATING	0.20	(Noise Reduction Coefficient)				
SAA RATING	0.20	(Sound Absorption Average)				

Notes:

1) The NRC rating is the arithmetic average of the sound absorption coefficients at 250, 500, 1000, and 2000 hertz. The average is rounded to the nearest multiple of 0.05.

2) The SAA rating is the arithmetic average of the sound absorption coefficients at the frequencies ranging from 200 to 2500 hertz. The average is rounded to the nearest multiple of 0.01.



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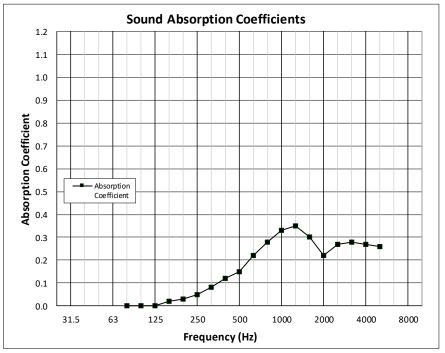


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M5549.01D DATA

SPECIMEN AREA	6.69 m²	
MOUNTING TYPE	G	
	EMPTY	FULL
TEMP °C	21.0	20.6
RH %	47	47
B.P. (mb)	985	979

FREQ	EMPTY ROOM ABSORPTION	UNCERTAINTY	FULL ROOM ABSORPTION	UNCERTAINTY	ABSORPTION COEFFICIENT	RELATIVE UNCERTAINTY
(Hz)	(m ²)		(m ²)		COEFFICIENT	UNCERTAINTY
80	5.45	0.394	5.27	0.391	0.00	0.083
100	5.39	0.464	5.47	0.654	0.01	0.120
125	5.78	0.290	5.74	0.314	0.00	0.064
160	5.10	0.224	5.15	0.037	0.01	0.034
200	4.77	0.147	4.98	0.069	0.03	0.024
250	5.18	0.037	5.41	0.054	0.03	0.010
315	5.30	0.105	5.66	0.032	0.05	0.016
400	5.46	0.071	5.96	0.069	0.08	0.015
500	5.60	0.019	6.25	0.261	0.10	0.039
630	5.15	0.029	6.19	0.026	0.16	0.006
800	5.23	0.015	6.58	0.019	0.20	0.004
1000	5.29	0.034	6.89	0.023	0.24	0.006
1250	5.58	0.021	7.33	0.006	0.26	0.003
1600	5.57	0.012	7.17	0.011	0.24	0.002
2000	5.53	0.026	6.71	0.016	0.18	0.005
2500	5.83	0.015	7.29	0.296	0.22	0.044
3150	6.21	0.009	7.74	0.010	0.23	0.002
4000	6.73	0.009	8.37	0.008	0.25	0.002
5000	7.32	0.002	8.94	0.007	0.24	0.001
	0.45	(1)	C ((; ; , ,))			
NRC RATING	0.15 (Noise Reduction Coefficient)					
SAA RATING	0.15 (Sound Absorption Average)					

Notes:

1) The NRC rating is the arithmetic average of the sound absorption coefficients at 250, 500, 1000, and 2000 hertz. The average is rounded to the nearest multiple of 0.05.

2) The SAA rating is the arithmetic average of the sound absorption coefficients at the frequencies ranging from 200 to 2500 hertz. The average is rounded to the nearest multiple of 0.01.

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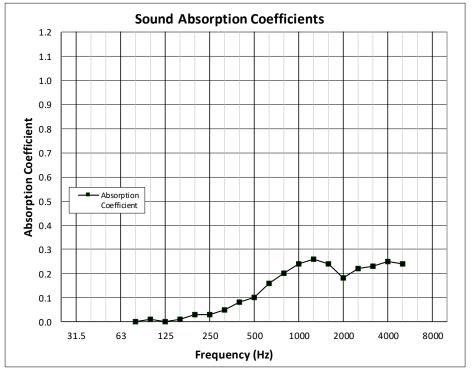


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SECTION 11 PHOTOGRAPHS



Photo No. 1 **View of Installed Test Specimen**



Photo No. 2 **Close-up View of Installed Test Specimen**

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