

Riverbank Acoustical Laboratories (RAL)TM / An Alion Science Technical Center
 Sound Absorption and Sound Absorption Coefficients
 by the Reverberation Room Method ASTM C 423-07/NVLAP 08/P03

TEST NUMBER: A08-018

TEST DATE: FEBRUARY 15, 2008

CLIENT: Acoustic Fields
 DESIGNATION: Low Frequency Diffusers
 DIMENSIONS: 108" x 96" x 8.25"
 AREA: 72.0 ft²
 WEIGHT: 1096 lbs AREA WEIGHT: 15.22 lbs/ft²
 MOUNTING: A EDGE SEAL: Unsealed
 SPECIMEN DETAILS: 8 @ 27" x 48" x 8.25"

TEST ROOM DETAILS: Room 0 Volume = 10311 ft³ Area = 2864.3 ft²
 FILE NAME: A08_018_080215_A.doc

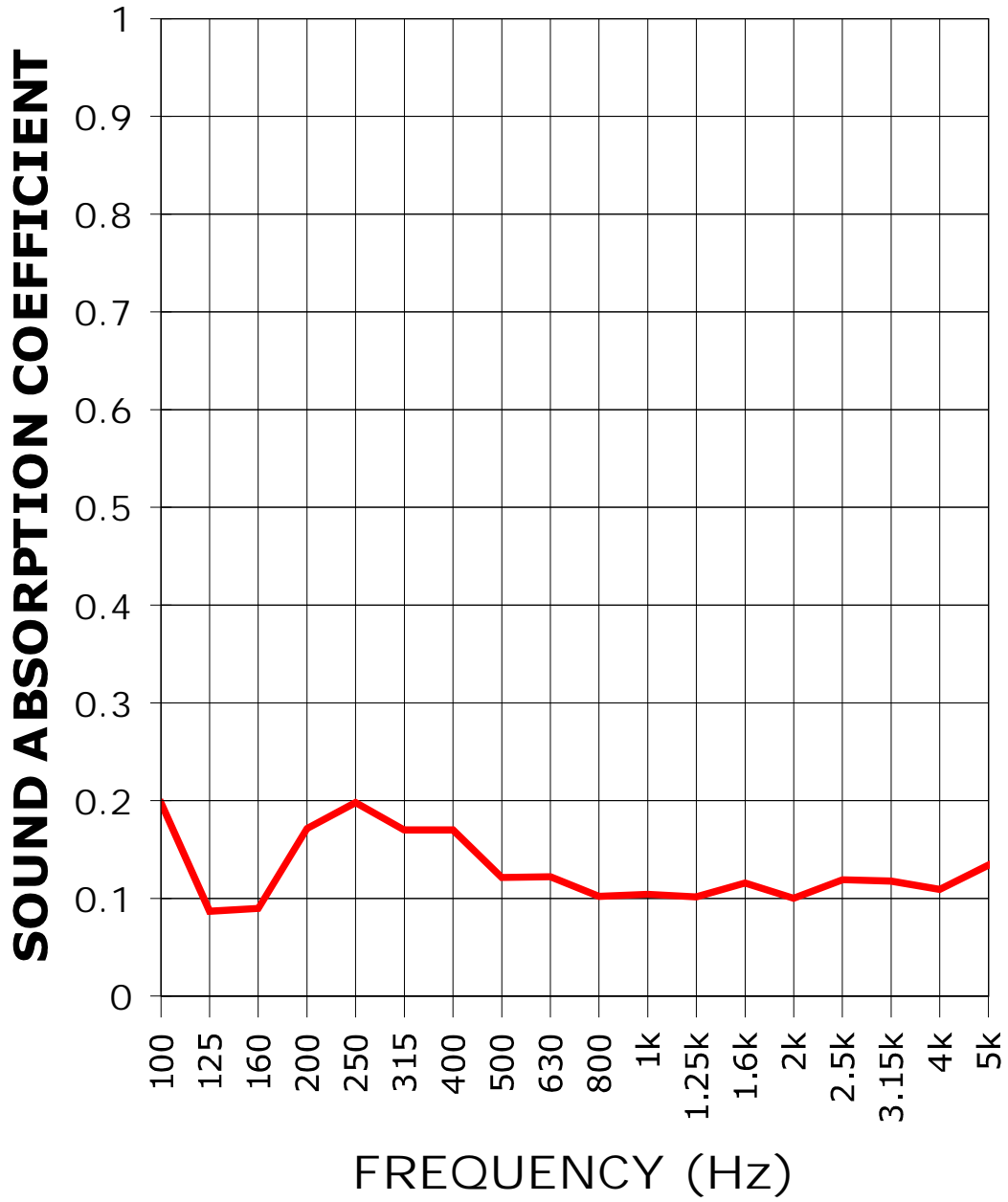
1/3 OCTAVE CENTER FREQ. (Hz)	ABSORPTION COEFFICIENT	TOTAL ABSORPTION (SABINS)
40	0.33	23.73
50	0.33	23.79
63	0.12	8.73
80	0.19	13.97
100	0.20	14.23
125	0.09	6.25
160	0.09	6.46
200	0.17	12.35
250	0.20	14.25
315	0.17	12.24
400	0.17	12.24
500	0.12	8.75
630	0.12	8.79
800	0.10	7.35
1000	0.10	7.50
1250	0.10	7.31
1600	0.12	8.33
2000	0.10	7.21
2500	0.12	8.58
3150	0.12	8.47
4000	0.11	7.86
5000	0.13	9.65
6300	0.13	9.58
8000	0.15	10.44
10000	0.17	12.35

SOUND ABSORPTION AVERAGE [SAA] = 0.13
NOISE REDUCTION COEFFICIENT [NRC] = 0.15

Test Conducted by: Marc Sciaky

This single report page and accompanying graph contain the instantaneous raw data as provided to the client after testing of the specimen. This data, although accurate, is incomplete without the full specimen description, mounting details and signature pages. The full report referenced by the RAL test number above should be consulted for further information regarding these results.

SOUND ABSORPTION REPORT
RAL - A08-018



SAA = 0.13
NRC = 0.15

Riverbank Acoustical Laboratories (RAL)TM / An Alion Science Technical Center

TEST NUMBER: A08-018 TEST DATE: FEBRUARY 15, 2008

CLIENT: Acoustic Fields
 DESIGNATION: Low Frequency Diffusers

TEST ROOM DETAILS: Room 0 Volume = 10311 ft³ Area = 2864.3 ft²

SPECIMEN DATA

1/3 OCTAVE CENTER FREQ. (Hz)	DECAY TIME FOR 60 dB IN SECONDS (Rt)	DECAY RATE (dB/s)	ABSORPTION (SABINS) (w/ANSI Temp./Humid Corrections)	% UNCERTAINTY WITH 95% CONF. LIMITS FOR ABSORP. OF REV. RM.
40	4.110	14.599	122.76	3.49
50	2.694	22.275	187.30	5.93
63	3.897	15.397	129.29	6.49
80	4.034	14.874	124.71	6.21
100	4.316	13.902	116.28	4.11
125	5.281	11.362	94.52	3.67
160	5.620	10.676	88.12	3.33
200	5.701	10.524	86.03	2.30
250	5.542	10.827	87.53	2.96
315	5.703	10.521	83.58	1.40
400	5.714	10.500	81.74	1.47
500	5.635	10.647	81.29	1.40
630	5.682	10.560	78.71	1.15
800	5.475	10.959	80.04	0.78
1000	5.137	11.679	83.92	0.88
1250	4.540	13.216	94.07	0.70
1600	4.182	14.347	99.24	0.81
2000	3.748	16.008	107.29	0.77
2500	3.335	17.991	114.98	0.78
3150	3.072	19.534	113.45	0.66
4000	2.712	22.122	111.42	0.57
5000	2.262	26.531	113.56	0.69
6300	1.806	33.216	113.38	0.76
8000	1.289	46.534	133.60	1.06
10000	1.026	58.486	101.52	0.89

INPUTS:

PULSE PROGRAM TEMPLATE: Reverb Rm0 Pre.plt	AVERAGING METHOD: Exponential
FREQUENCY RANGE: 40 Hz to 10000 Hz	AVERAGING TIME: 1/32 s
	OUTPUT INTERVAL: 34 ms
Environmental Conditions:	
START: 70°F 57% RH	NUM OF SPECTRA: 200
COMPLETION: 70°F 57% RH	APPROXIMATE DECAY TIME: 6.8 sec
NOTE: ANSI TEMP/HUMID CORRECTIONS USED	NUM OF MEASUREMENTS: 80
MINIMUM # OF POINTS: 28 at 5000 Hz	NUM OF GROUPS: 1
FILE NAME: A08_018_080215_A.doc	DELAY PROCESSING: Delay

Test Conducted by: Marc Sciaky