

Unofficial Test Results & Preliminary Data Sheet

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

Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method ASTM C423

Test Number: A18-296

Test Date: 2018-09-20

Sponsor: Carnegie

Designation: Quartz Fabric 6434 over 2 inch thick fiberglass

Dimensions: 2.44 m x 2.74 m x 0.05 m

Test Conducted By: Dean Victor

Area: 6.69 m²

Test Interface: 1.2.2

Weight 35.61 kg

Area Weight: 5.32 kg/m²

Mounting: A-Mount

Edge Seal: Steel Seal

Specimen Details Quartz Fabric 108"x56" and 108x40", Fiberglass 8@48"x24"x2" and 2@48"x12"x2"

Test Room Details: Room 0

Volume: 291.98 m³

Area: 266.10 m²

1/3 Octave Band Center Frequency (Hz)	TOTAL ABSORPTION SABINS (ft ²)	TOTAL ABSORPTION m ²	Absorption Coefficient
31.5	-3.66	-0.34	-0.05
40	-14.39	-1.34	-0.20
50	-9.94	-0.92	-0.14
63	13.08	1.22	0.18
80	-0.65	-0.06	-0.01
100	16.43	1.53	0.23
125	26.36	2.45	0.37
160	37.77	3.51	0.52
200	52.22	4.85	0.73
250	68.02	6.32	0.94
315	79.61	7.40	1.11
400	80.21	7.45	1.11
500	83.68	7.77	1.16
630	85.23	7.92	1.18
800	81.07	7.53	1.13
1000	78.37	7.28	1.09
1250	78.94	7.33	1.10
1600	76.82	7.14	1.07
2000	73.76	6.85	1.02
2500	74.61	6.93	1.04
3150	73.90	6.87	1.03
4000	75.10	6.98	1.04
5000	76.64	7.12	1.06
6300	76.24	7.08	1.06
8000	77.51	7.20	1.08
10000	75.50	7.01	1.05
12500	85.21	7.92	1.18

SOUND ABSORPTION AVERAGE [SAA] = 1.06

NOISE REDUCTION COEFFICIENT [NRC] = 1.05

Calculation Date: 2018-09-20

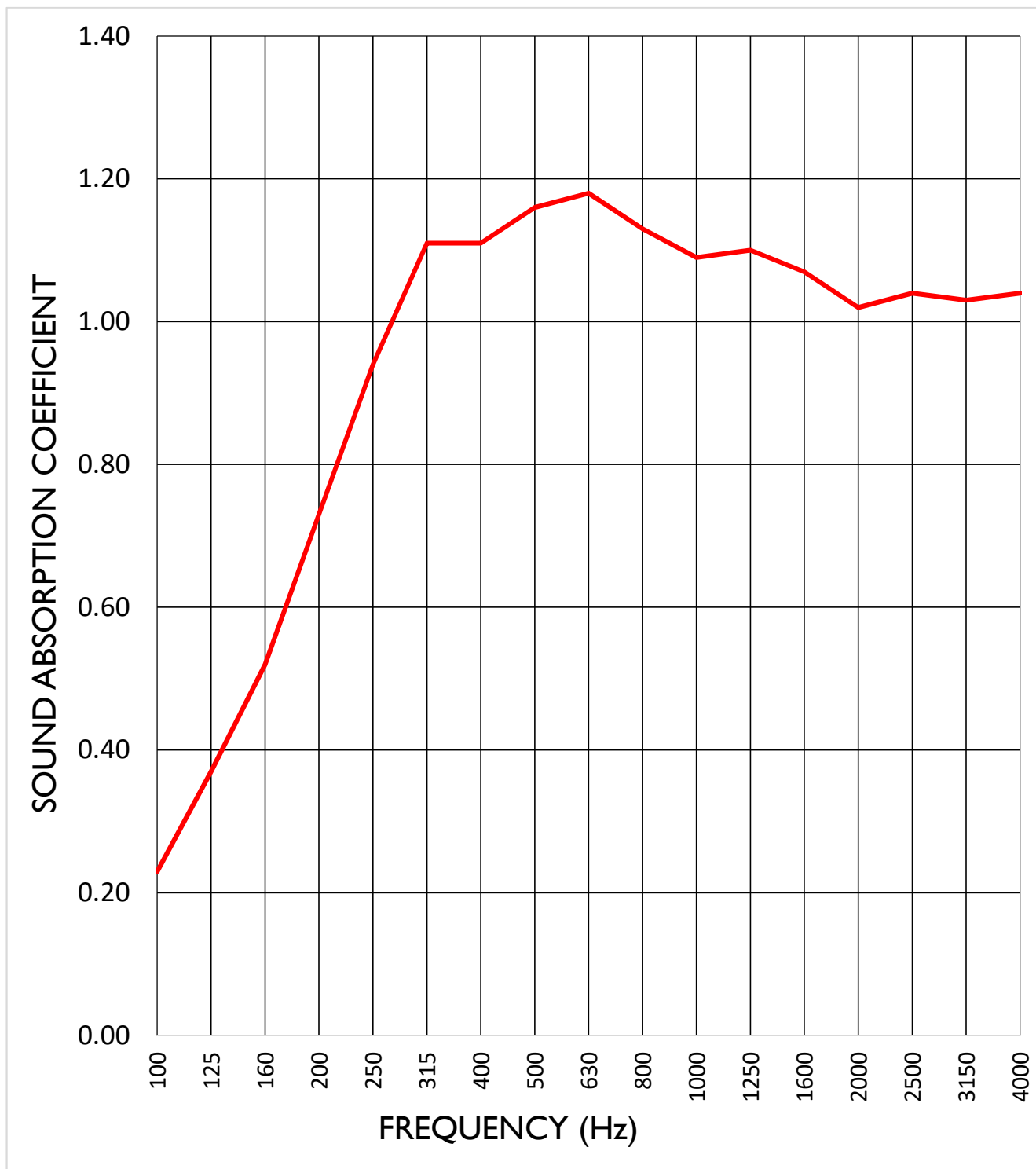
Calculated By: Dean Victor

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 Results

A18-296



SAA = 1.06

NRC = 1.05