ACOUSTIC LABORATORIES AUSTRALIA PTY LTD

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SOUND ABSORPTION COEFFICIENT

INDICATIVE TEST ONLY

ALA Test No.: ALA 18-088-2
Sample: 300 Bass Trap

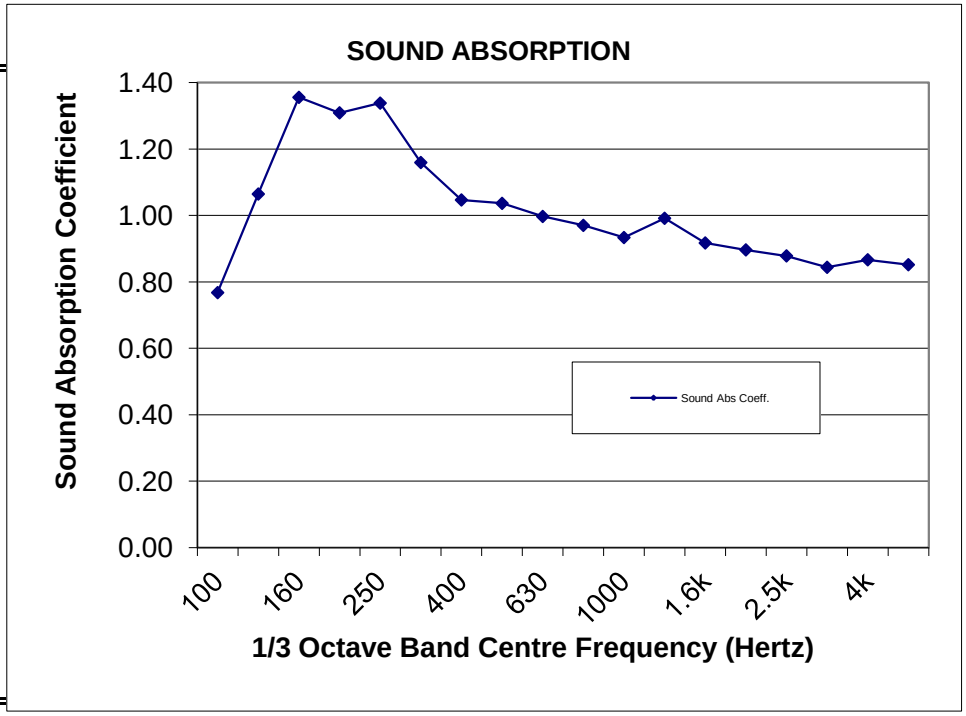
Description of Sample:
300 Bass trap
320 x 300 x 2,400mm high element
50mm Autex Quiet Space Box,
Filled with 32Kg/m3 density insulation
2 units located in corner of Reverb Room

Meas. Date:	26-May-18	
Face Area of sample:	4.2	m2
Test Specimen Mounting:	Type:	J
Air Gap behind sample:	0	mm
Location of sample:	2 Trihedral Cnrs	
Shape of Reverb Chamber:	7m x 6m x 5m	
Volume of Reverb Chamber:	208	m3
Area of Diffusers:	46.1	m2

	Sample in Room	Empty Room	
Temp:	15.2	15.1	C
RH:	60	56.8	%
Atmos. Pressure:	1007	1010	hPA

Weighted Sound Absorption Coefficient: **αw** **0.95** **L * ***
Noise Reduction coefficient: **NRC:** **1.05**

1/3 Octave Centre Frequency	RT for Empty Room	RT for room with Sample	Sound Absorption Coefficient
Hz	Sec.	Sec.	
100	4.3	3.1	0.77
125	5.4	3.1	1.06
160	6.7	3.1	1.36
200	8.1	3.5	1.31
250	8.9	3.6	1.34
315	8.8	3.9	1.16
400	8.6	4.1	1.05
500	8.0	3.9	1.04
630	7.0	3.7	1.00
800	5.8	3.4	0.97
1k	4.7	3.0	0.93
1.25k	4.2	2.7	0.99
1.6k	3.9	2.7	0.92
2k	3.7	2.6	0.90
2.5k	3.5	2.5	0.88
3.15k	3.1	2.3	0.84
4k	2.6	2.1	0.87
5k	2.1	1.7	0.85



*** NOTE:** There is no standard method for measuring absorption coefficients for spaced unit absorbers, particulary when located in trihedral corners. The sound absorption performance must not be compared to the performance of wall and ceiling absorbers.

A Sound Absorption Coefficient greater than 1.00 cannot occur in theory but can be measured for materials that are highly absorptive due to edge diffraction.