



**Title: Sound Absorption Test Results**

**Product: 1" Echo Eliminator - Acoustical Backer (AKA Quiet Liner)**

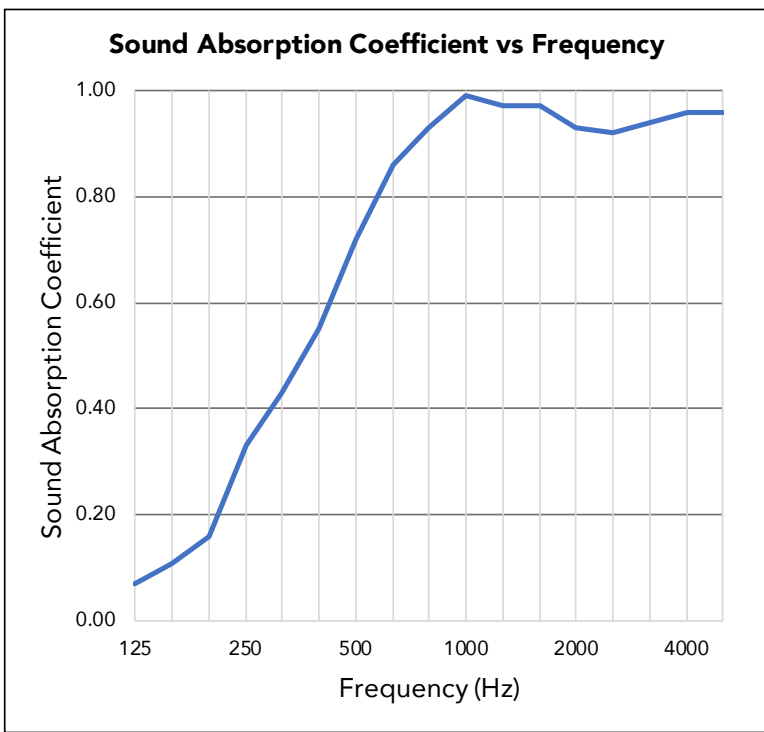
Application: Ceiling or Wall

Testing Standard: ASTM C423-07 (Type A Mount)

*Why this test:* This test evaluates a products efficiency of absorbing sound at multiple frequencies. The test simulates the product’s acoustical performance with a direct-attach ceiling or wall installation.

Test Result Summary: NRC - 0.75; SAA - 0.73

<b>NRC</b>	<b>SAA</b>
<b>0.75</b>	<b>0.73</b>
<b>Frequency (Hz)</b>	<b>Absorption Coefficient</b>
125	0.07
160	0.11
200	0.16
250	0.33
315	0.43
400	0.55
500	0.72
630	0.86
800	0.93
1000	0.99
1250	0.97
1600	0.97
2000	0.93
2500	0.92
3150	0.94
4000	0.96
5000	0.96



Test ID: AS-SA1966

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**SOUND ABSORPTION DATA**

The measured Sound Absorption [in units of area] and Sound Absorption Coefficients of the test specimen at the preferred one-third octave band center frequencies are tabulated below and then presented graphically.

**Quiet Liner – Thickness 1"  
Type A Mount**

1/3 Octave Band Center Freq. (Hz)	Sound Absorption (m <sup>2</sup> )	Uncertainty (+/-)	NOTES	Sound Absorption Coefficient	Uncertainty (+/-)
125	0.4	0.7	[a]	0.07	0.10
160	0.6	0.5		0.11	0.08
200	0.9	0.4		0.16	0.06
250	2.0	0.3		0.33	0.04
315	2.6	0.2		0.43	0.03
400	3.2	0.2		0.55	0.03
500	4.2	0.2		0.72	0.03
630	5.1	0.2		0.86	0.03
800	5.5	0.2		0.93	0.03
1000	5.8	0.2		0.99	0.03
1250	5.7	0.2		0.97	0.03
1600	5.7	0.2		0.97	0.03
2000	5.5	0.2		0.93	0.03
2500	5.4	0.2		0.92	0.03
3150	5.5	0.2		0.94	0.03
4000	5.6	0.2		0.96	0.03
5000	5.7	0.2		0.96	0.03
<b>Noise Reduction Coefficient</b>		<b>0.75</b>			

a] denotes empty room absorption was greater than 0.06 as required by ASTM C423. Round robin testing with other laboratories indicates results are nevertheless reliable at 125 Hz. [b] denotes that a significant effect due to changes in test chamber temperature and humidity was noted. Actual results in these bands are typically not greater than 1.00. [c] due to the very low absorption of the specimen tested, actual absorption values cannot be determined within the reverberation time uncertainties of the chamber itself. The result for this hand should be considered inconclusive.

During the test, environmental conditions in the reverberation chamber were 25.1C and 64.6% relative humidity. The precision values [±] tabulated above represent 95% probability that the true mean value lies within the stated range.

Respectfully Submitted,



Michael C. Black  
Laboratory Technical Director