



**Title: Sound Absorption Test Results**

**Product: 2" Sound Silencer**

Application: Ceiling

Testing Standard: ASTM C423 E-Mount with 16" airspace

Test Date: 10/30/2002

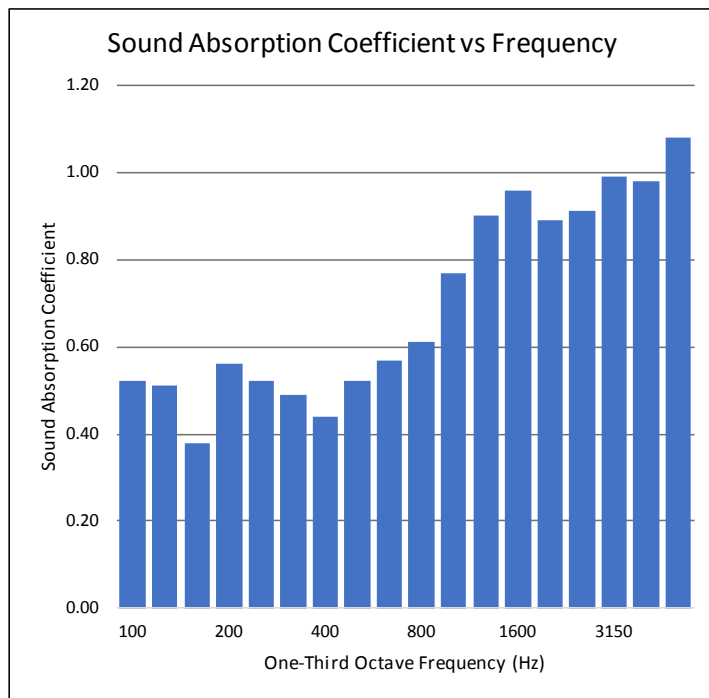
Why this test: This test evaluates a products efficiency of absorbing sound at multiple frequencies. The test simulates the product's acoustical performance for ceiling installation with a 16" airspace.

Test Result Summary: NRC - 0.70; SAA - 0.68

NRC	SAA
0.70	0.68

Frequency (Hz)	Absorption Coefficient
100	0.52
125	0.51
160	0.38
200	0.56
250	0.52
315	0.49
400	0.44
500	0.52
630	0.57
800	0.61
1000	0.77
1250	0.90
1600	0.96
2000	0.89
2500	0.91
3150	0.99
4000	0.98
5000	1.08



**ASI TEST RESULT DISCLAIMER**

ASI makes every effort to ensure the accuracy and reliability of the information provided. Laboratory testing is conducted by independent testing organizations. ASI does not guarantee that field tests or independent tests will not vary.

Filename

Test#14 - 2 PEPP

### ASTM C423 - Sound Absorption

Project Folder

Client

Product

Model #

Quantity

Comment

Acoustical Surfaces

Absorption Material

1

2" PEPP type E mounting

Sample Size - Wt

Sample Description #

72.0 in x 95.0 in x 0 lbs.

6 Panels - 2" PEPP in 16" airspace box : Type E mounting, 6 panels. :

Time Stamp

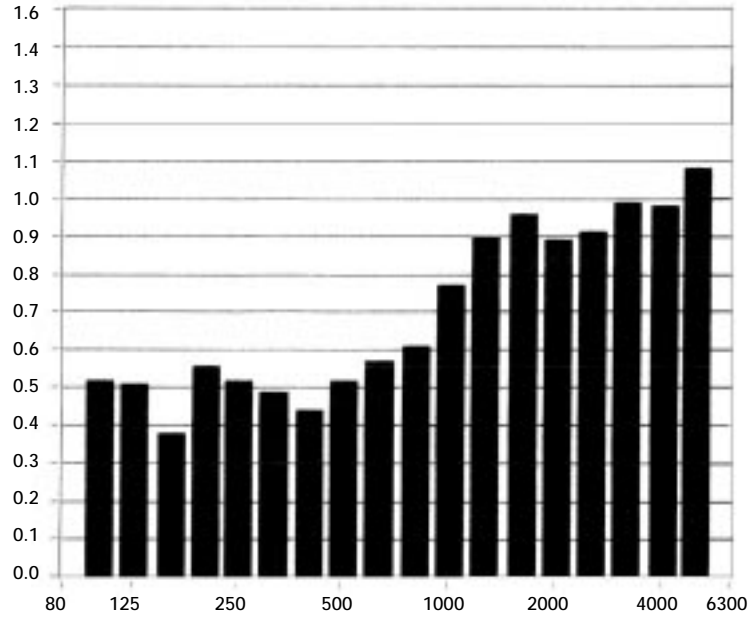
Wed. Oct. 30, 2002 - 2:42 PM

Total Sample Area 47.5 ft<sup>2</sup>

F (Hz)	Absorption Coefficient	Absorption (Sabins)*
100	0.52	24.69
125	0.51	24.26
160	0.38	17.86
200	0.56	26.48
250	0.52	24.81
315	0.49	23.38
400	0.44	20.82
500	0.52	24.58
630	0.57	26.87
800	0.61	28.93
1000	0.77	36.46
1250	0.90	42.70
1600	0.96	45.70
2000	0.89	42.16
2500	0.91	43.32
3150	0.99	46.80
4000	0.98	46.69
5000	1.08	51.12

Absorption Coefficient

#### Sound Absorption Coefficients



Temp (\*C)

R.H. (%)

ATM (mbar)

22.0

63

990

\*Total absorption based on 47.5 ft<sup>2</sup>

$SAA = 0.68$      $NRC = 0.70$