



SOUND ABSORPTION TEST - ASTM C423-99a

INTRODUCTION:

This report presents the results of a Sound Absorption test conducted on PVC Baffles manufactured by All Noise Control. This test was requested by All Noise Control on August 1, 2002 with the testing completed on September 26, 2002.

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SUMMARY OF RESULTS :

When tested using the Type I mounting, the test samples obtained the following absorption values: (expressed in Sabins/Baffle)

SPECIMEN DESCRIPTION

The specimen was manufactured and identified by All Noise Control as white, 3 MIL PVC encapsulated baffles with thick 1.6-2.0 PCF fiberglass core. The dimensions of the specimens were 24"x48" x 1 weighing 2.7-lbs each or 0.34 PSF.

1/3 Oct. Band Hz	Absorption per Baffle (Sabins/Baffle)
100	4.04
125	1.74
160	2.63
200	4.15
250	6.13
315	7.44
400	9.00
500	10.39
630	12.03
800	12.13
1000	11.63
1250	10.21
1600	8.19
2000	6.32
2500	5.60
3150	5.01
4000	4.48
5000	4.36



TEST METHOD:

ASTM: C423-99a, "Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method" was followed in every respect. Four baffles were hung on two suspended cables-4' apart, two baffles per cable, spaced 24" apart. The baffles were 44.5" above the reverberation chamber floor (Type I mounting).

Absorption coefficients are the fraction of diffuse incident sound absorbed by the specimen and are expressed in Sabins per square foot for an extended plane surface or Sabins/Unit for individually suspended items,

The temperature and relative humidity of the chamber during the testing was 23, 0 C and 60%, respectively.

TEST EQUIPMENT:

<u>Manufacturer</u>	<u>Model</u>	<u>Serial #</u>	<u>Description</u>
Norwegian Electronics	NE830	11511	Real Time Spectrum Analyzer
Bruel & Kjaer	3923	815424	Rotating Microphone Boom
Larson-Davis	2560	1032	Pressure Condenser Microphone
Compaq Computer	V20 CIO	A942CZGZE580	Custom Designed Software