

ACOUSTIC TEST REPORT

DATE TEST CONDUCTED: 22th, Oct. 2024

REPORT NUMBER: BVI - 221024 - 0200

TEST METHODOLOGY

Blueview Acoustical Laboratories is accredited with China's Inspection Body and Laboratory Mandatory Approval (CMA) standards, adhering to ISO 354: SAE J2883 Sound Absorption Coefficients standards. The test reported in this document conformed explicitly with Standard Test Method for Sound Absorption and Sound Absorption Coefficients.

Apparent Sound Absorption Coefficient calculated from one face per unit.

The total sound absorption yielded by the specimen is divided by the surface area of one side of one large face for each unit in the specimen (0.1246 m^2 per unit \times 24 units = 2.99 m^2 total surface area). Apparent Noise Reduction Coefficient (NRC) rating and Sound Absorption Average (SAA) figures are calculated from this data based on the methods described in ASTM C423-17.

This method is favored by some material manufacturers since it yields very high NRC figures but does not provide a fair comparison with other ceiling tile or wall panel products.

Blueview recommends that results obtained from this method be used for research and comparison purposes only; such results should not be used for marketed claims of product performance.

A description of the measurement procedure and room specifications are available upon request. The results presented in this report apply to the described sample.

SAMPLE INFORMATION

MODEL: SSSlim-3575

SPECIFICATION: 1222 x 51 x 102 mm

SPECIMEN MEASUREMENTS & TEST CONDITIONS

Through a full external visual inspection performed on the test specimen, Blueview personnel verified the following information:

Test Specimen

Materials: Acoustic Panel

Dimensions: 24 pcs @ L1222 x W51 x H102mm as installed

Construction: 9 mm thick acoustic panel notched and folded into rectangular shape, folded to create approximate 35 mm thick air cavity between acoustic panels.

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Test Environment & Method

Volume of the reverberation room:	205 Vs, M ³
Room Temperature:	25 °C ± 3 °C
Relative Humidity:	65 % ± 5%

Each sound absorbing unit had an absorptive area (all exposed surfaces) of **0.3286 m²**
The total absorptive area (all exposed surfaces) of all sound-absorbing units was **7.88 m²**
The array of units covered 0.823 m² of the horizontal test surface (total treated area.)

MOUNTING METHOD

Mounting: Application of non-acoustic surround baffle type J installation.

The side of the sound absorbing material is placed on a surface that touches the room, and no cavity is left between the side of the sound absorbing material and the room surface. The installation area of the specimen is 12.5M².

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Figure 1 - Specimen installed in test chamber.



Figure 2 - Detail of individual parts.



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TEST RESULTS

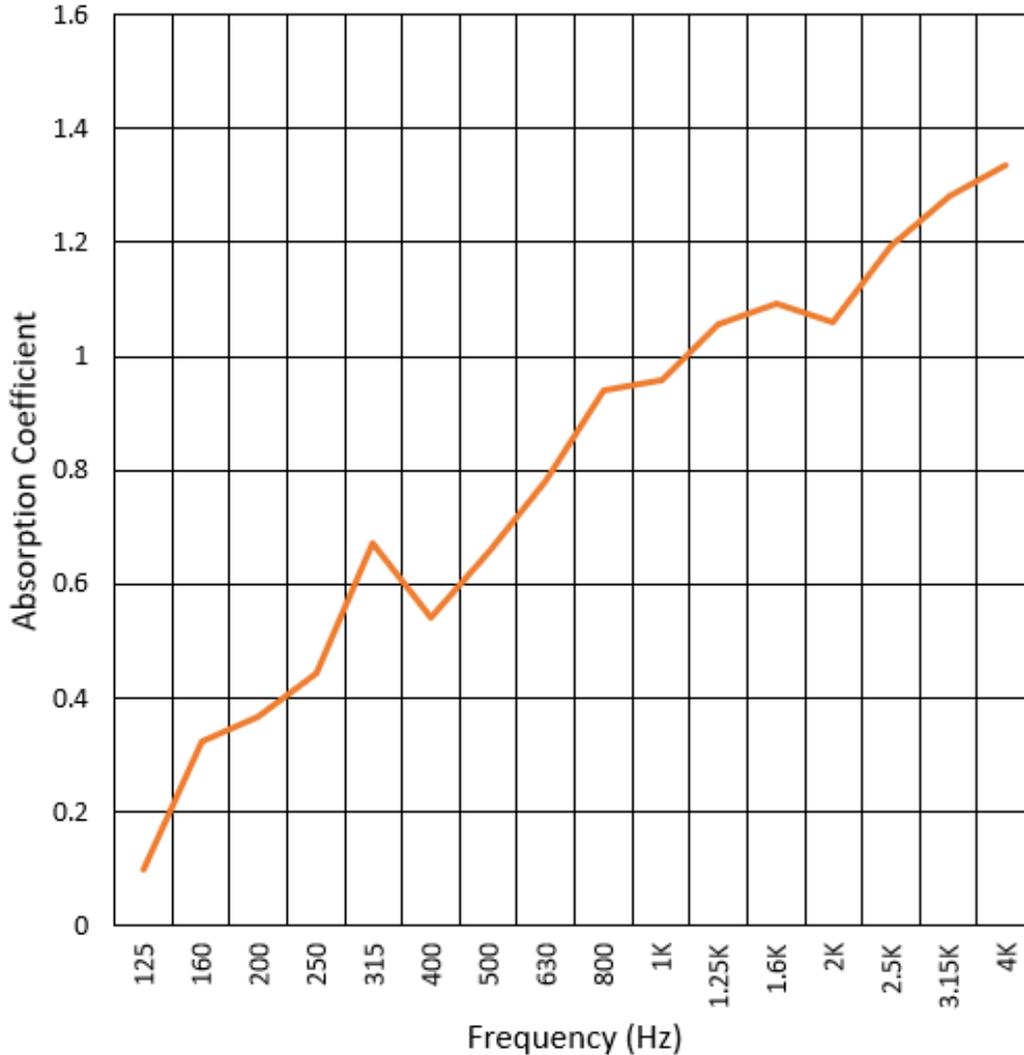
Note: There is currently no standardized method for calculating Absorption Coefficients from spaced object absorbers. The sound absorption performance of spaced object absorbers should not be compared directly with specimens tested as a single rectangular area (e.g. mounting types etc.).

Frequency (Hz)	Total Absorption		Absorption per Unit		Absorption Coefficient
	m ²	Sabins	m ²	Sabins	
125	0.30	3.18	0.01	0.13	0.099
160	0.97	10.48	0.04	0.44	0.325
200	1.10	11.87	0.05	0.49	0.367
250	1.34	14.38	0.06	0.60	0.445
315	2.02	21.71	0.08	0.90	0.673
400	1.63	17.54	0.07	0.73	0.543
500	1.97	21.16	0.08	0.88	0.656
630	2.34	25.19	0.10	1.05	0.78
800	2.82	30.32	0.12	1.26	0.939
1000	2.87	30.92	0.12	1.29	0.958
1250	3.17	34.09	0.13	1.42	1.056
1600	3.28	35.27	0.14	1.47	1.093
2000	3.19	34.28	0.13	1.43	1.062
2500	3.58	38.50	0.15	1.60	1.193
3150	3.85	41.37	0.16	1.72	1.282
4000	4.01	43.12	0.17	1.80	1.336

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Sound Absorption Coefficient

SSHSlim-3575, L1222 x W51 x H102mm – spaced 1200mm apart, ceiling mounting simulated.



Tested by Qian Xueyi (Lead Experimentalist)

Report by Qian Xueyi (Lead Experimentalist)

Approved by Laurence Lv (Operation Manager)

Date 10.22.2024

Revision Original report issued

END

THIS REPORT SHALL NOT BE MODIFIED WITHOUT THE WRITTEN APPROVAL OF BV THE RESULTS REPORTED APPLY ONLY TO THE SPECIFIC SAMPLE SUBMITTED FOR TESTING: BV ASSUMES NO RESPONSIBILITY FOR THE PERFORMANCE OF ANY OTHER SAMPLE.