Coeficiente de absorción acústica ponderado α_w según EN ISO 11654

SonicVoid 1300

Cortina acústica opaca, **una capa** · código de producto 45003

COEFICIENTE DE ABSORCIÓN ACÚSTICA PONDERADO

$\alpha_w = 0,75$

Clase de absorción

C

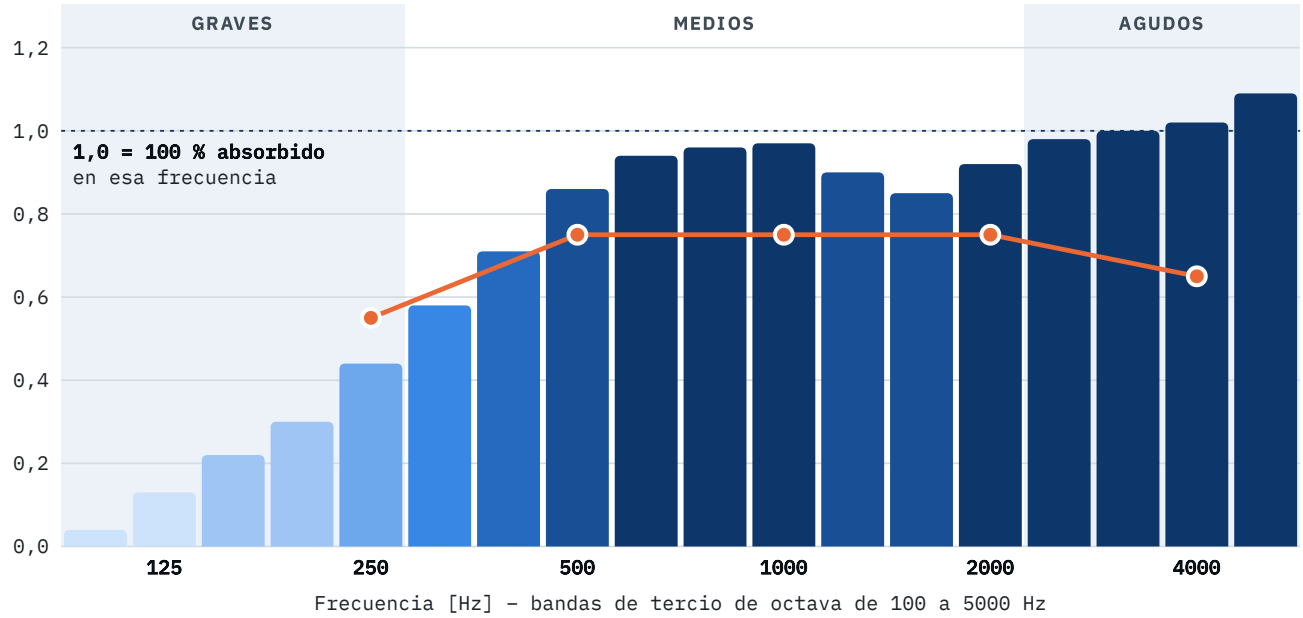
según EN ISO 11654

1. Coeficientes de absorción medidos en bandas de tercio de octava

F [HZ]	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
α_s	0,04	0,13	0,22	0,30	0,44	0,58	0,71	0,86	0,94	0,96	0,97	0,90	0,85	0,92	0,98	1,00	1,02	1,09

Fuente de los valores: informe RAL™-A12-119, página 2 (anexo de este documento).

2. Absorción por frecuencia



coeficiente de absorción medido α_s (cuanto más oscuro, más absorbe)

curva de referencia ISO 11654 para $\alpha_w = 0,75$

3. Clase de absorción acústica

E	D	C	B	A
0,15–0,25	0,30–0,55	0,60–0,75	0,80–0,85	0,90–1,00

▲ SonicVoid 1300: $\alpha_w = 0,75$ → clase C

4. Cálculo según EN ISO 11654

OCTAVA [HZ]	A_S TERCIOS	MEDIA	A_P	CURVA REF.	DESVIACIÓN DESFAVORABLE
125	0,04 · 0,13 · 0,22	0,130	**0,15**	–	–
250	0,30 · 0,44 · 0,58	0,440	**0,45**	0,55	0,10
500	0,71 · 0,86 · 0,94	0,837	**0,85**	0,75	0,00
1000	0,96 · 0,97 · 0,90	0,943	**0,95**	0,75	0,00
2000	0,85 · 0,92 · 0,98	0,917	**0,90**	0,75	0,00
4000	1,00 · 1,02 · 1,09	1,037	**1,00***	0,65	0,00
Suma de desviaciones desfavorables (250–4000 Hz) — límite de la norma ≤ 0,10					**0,10**

* Media redondeada a 0,05 y limitada a 1,00 según la norma. La curva de referencia (0,80 / 1,00 / 1,00 / 1,00 / 0,90) se desplaza en pasos de 0,05 hacia valores más bajos hasta que la suma de desviaciones desfavorables no supere 0,10. Con el valor 0,75 en la banda de 500 Hz la suma es 0,10, por lo que α_w = 0,75. Indicador de forma H: α_p supera la curva en 0,25 o más en la banda 2 000–4 000 Hz (allí el material absorbe más de lo que indica α_w). Según el anexo B de la norma, α_w 0,60–0,75 corresponde a la clase de absorción C.

5. Medición de laboratorio de referencia

Laboratorio	Riverbank Acoustical Laboratories, 1512 S Batavia Ave, Geneva, IL, EE. UU. — acreditación NVLAP (Lab Code 100227-0), ISO/IEC 17025:2017
Informe	RAL™-A12-119, medición 13/04/2012
Método	ASTM C423-09a y E795-05, cámara reverberante 292 m³, 22 °C, 63 % HR
Montaje	tipo G-75 según ASTM E795: una capa colgada paralela a la pared de la cámara a 75 mm
Muestra	Producer’s Choice Acoustic Blankets VB-72 (mezcla de algodón, relleno de algodón reciclado), 2,46 × 2,74 m, superficie 6,8 m²

6. Aviso

Este documento lo emitió VocalBoothToGo-EU s.r.o. No es un informe de laboratorio y Riverbank Acoustical Laboratories no es su autor. El valor α_w se calcula según EN ISO 11654 a partir de los coeficientes de absorción por tercios de octava que el laboratorio midió con el método ASTM C423, análogo a EN ISO 354 (cámara reverberante).

Los resultados se aplican a la muestra ensayada y al montaje indicado. El informe original del laboratorio se adjunta sin cambios como anexo.

Anexo: informe de Riverbank Acoustical Laboratories RAL™-A12-119 (4 páginas, original).

Elaborado por: VocalBoothToGo-EU s.r.o.

Fecha: 28/09/2026

RIVERBANK ACOUSTICAL LABORATORIES

1512 S. BATAVIA AVENUE
GENEVA, ILLINOIS 60134

Alion Science and Technology

630/232-0104
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TEST REPORT

FOR: MoversSupplies.com
Jefferson, MD

Sound Absorption Test
RAL™-A12-119

ON: Producer's Choice Acoustic Blankets VB-72

CONDUCTED: 13 April 2012

TEST METHOD

The test method conformed explicitly with the requirements of the ASTM Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method: ASTM C423-09a and E795-05. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure (NVLAP Lab Code: 100227-0). A description of the measuring procedure and room qualifications is available separately.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as Producer's Choice Acoustic Blankets VB-72. The overall dimensions of the specimen as measured were nominally 2.46 m (97 in.) wide by 2.74 m (108 in.) high and 12.7 mm (0.5 in.) thick. The specimen consisted of two (2) pieces. One (1) piece was nominally 2.46 m (97 in.) wide by 1.93 m (76 in.) high. One (1) piece was nominally 2.46 m (97 in.) wide by 812 mm (32 in.) high. The specimen was tested in the laboratory's 292 m^3 (10,311 ft^3) test chamber.

The manufacturer's description of the specimen was as follows: Producer's Choice Acoustic Blankets VB-72. Straight 2" stitching. Colors – One side black, the other side white. White thread. Woven black binding. Outer material is cotton mix fabric. Filler is recycled cotton. A visual inspection verified the manufacturer's description of the specimen.

The weight of the entire specimen as measured was 6.6 kg (14.5 lbs), an average of 0.97 kg/m^2 (0.2 lbs/ft^2). The area used in the calculations was 6.8 m^2 (72.8 ft^2). The room temperature at the time of the test was 22°C (71°F) and 63±1% relative humidity.

MOUNTING G-75

Test specimen hung parallel to the test surface. The number designates the distance in mm from the centerline of the hangers to the test surface.

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NVLAP Lab Code 100227-0

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TEST REPORT

MoversSupplies.com

RAL™-A12-119

13 April 2012

TEST RESULTS

	1/3 Octave Center Frequency (Hz)	Absorption Coefficient	Total Absorption In Sabins
	100	0.04	3.14
**	125	0.13	9.80
	160	0.22	15.76
	200	0.30	21.93
**	250	0.44	32.03
	315	0.58	42.39
	400	0.71	51.75
**	500	0.86	62.69
	630	0.94	68.17
	800	0.96	69.59
**	1000	0.97	70.80
	1250	0.90	65.42
	1600	0.85	61.76
**	2000	0.92	66.77
	2500	0.98	71.13
	3150	1.00	72.44
**	4000	1.02	74.31
	5000	1.09	79.27

SAA = 0.78
NRC = 0.80

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TEST REPORT

MoversSupplies.com

RAL™-A12-119

13 April 2012

TEST RESULTS (Continued)

The sound absorption average (SAA) is defined as a single number rating, the average, rounded to the nearest 0.01, of the sound absorption coefficient of a material for the twelve one-third octave bands from 200 through 2500 Hz, inclusive.

The noise reduction coefficient (NRC) is defined from previous versions of this same test method as the average of the coefficients at 250, 500, 1000, and 2000 Hz, expressed to the nearest integral multiple of 0.05.

Tested by _____
Marc Sciaky
Experimentalist

Approved by _____
Dean Victor
Senior Experimentalist

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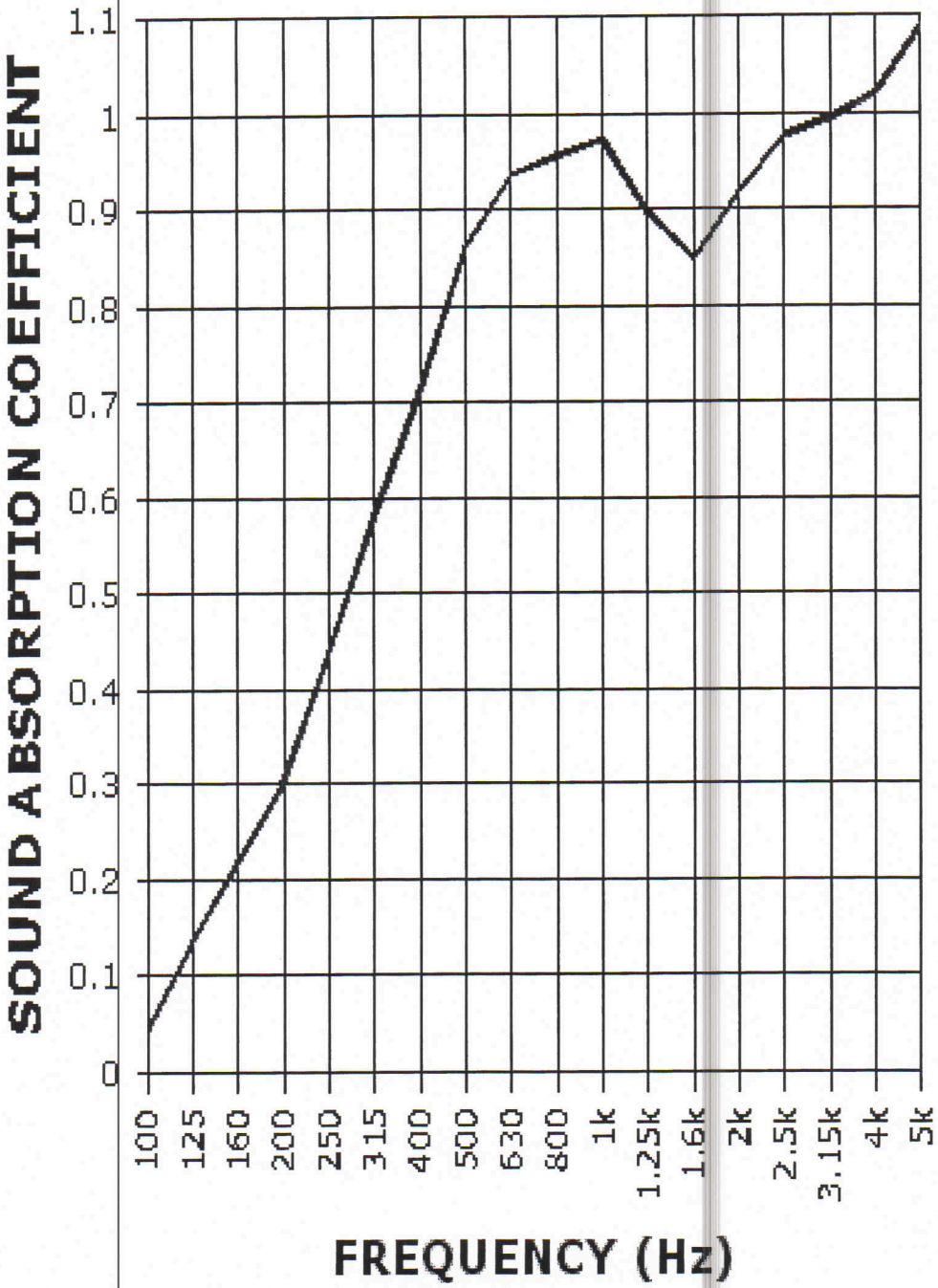
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TEST REPORT

SOUND ABSORPTION REPORT
RAL-A12-119



SAA=0.78
NRC=0.80

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