Bewerteter Schallabsorptionsgrad α_w nach EN ISO 11654

AVB

Akustikkabine

BEWERTETER SCHALLABSORPTIONSGRAD

$\alpha_w = 0{,}75$

Absorberklasse

C

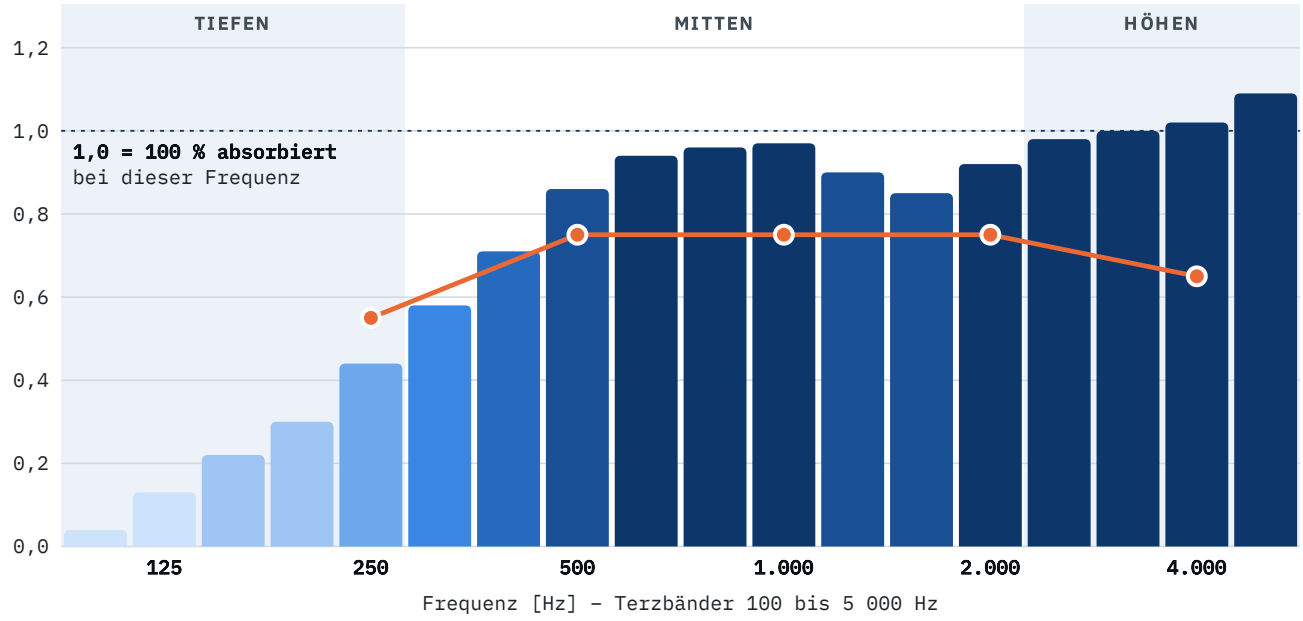
nach EN ISO 11654

1. Gemessene Absorptionsgrade in Terzbändern

F [HZ]	100	125	160	200	250	315	400	500	630	800	1.000	1.250	1.600	2.000	2.500	3.150	4.000	5.000
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

Quelle der Werte: Prüfbericht RAL™-A12-119, Seite 2 (Anlage zu diesem Dokument).

2. Schallabsorption nach Frequenz



gemessener Absorptionsgrad α_s (je dunkler, desto mehr Absorption)

Bezugskurve ISO 11654 für α_w = 0,75

3. Schallabsorberklasse

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

▲ **AVB: α_w = 0,75 → Klasse C**

4. Berechnung nach EN ISO 11654

OKTAVE [HZ]	A_S TERZEN	MITTEL	A_P	BEZUGSKURVE	UNGÜNSTIGE ABWEICHUNG
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
1.000	0,96 · 0,97 · 0,90	0,943	**0,95**	0,75	0,00
2.000	0,85 · 0,92 · 0,98	0,917	**0,90**	0,75	0,00
4.000	1,00 · 1,02 · 1,09	1,037	**1,00***	0,65	0,00
Summe der ungünstigen Abweichungen (250–4 000 Hz) — Grenzwert der Norm ≤ 0,10					**0,10**

* Mittelwert auf 0,05 gerundet und nach der Norm auf 1,00 begrenzt. Die Bezugskurve (0,80 / 1,00 / 1,00 / 1,00 / 0,90) wird in Schritten von 0,05 nach unten verschoben, bis die Summe der ungünstigen Abweichungen 0,10 nicht übersteigt. Beim Wert 0,75 im 500-Hz-Band beträgt die Summe 0,10, daher α_w = 0,75. Formindikator H: α_p übersteigt die Kurve um 0,25 oder mehr im Band 2 000–4 000 Hz (dort absorbiert das Material mehr, als α_w angibt). Nach Anhang B der Norm entspricht α_w 0,60–0,75 der Absorberklasse C.

5. Zugrunde liegende Labormessung

Labor	Riverbank Acoustical Laboratories, 1512 S Batavia Ave, Geneva, IL, USA — NVLAP-Akkreditierung (Lab Code 100227-0), ISO/IEC 17025:2017
Prüfbericht	RAL™-A12-119, Messung 13.04.2012
Methode	ASTM C423-09a und E795-05, Hallraum 292 m³, 22 °C, 63 % r. F.
Montage	Typ G-75 nach ASTM E795: eine Lage parallel zur Kammerwand im Abstand von 75 mm aufgehängt
Probe	Producer’s Choice Acoustic Blankets VB-72 (Baumwollmischung, Füllung aus recycelter Baumwolle), 2,46 × 2,74 m, Fläche 6,8 m²

6. Hinweis

Dieses Dokument wurde von der VocalBoothToGo-EU s.r.o. herausgegeben. Es ist kein Laborprüfbericht und Riverbank Acoustical Laboratories ist nicht sein Verfasser. Der α_w-Wert ist nach EN ISO 11654 aus den Terz-Absorptionsgraden berechnet, die das Labor nach der Methode ASTM C423 gemessen hat. Diese ähnelt dem Verfahren nach EN ISO 354 (Hallraum).

Die Ergebnisse gelten für die geprüfte Probe und die angegebene Montage. Der Original-Prüfbericht des Labors ist unverändert als Anlage beigefügt.

Anlage: Prüfbericht der Riverbank Acoustical Laboratories RAL™-A12-119 (4 Seiten, Original).

Erstellt von: VocalBoothToGo-EU s.r.o.

Datum: 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
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 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 _____ Approved by _____

Marc Sciaky
Experimentalist

Dean Victor
Senior Experimentalist

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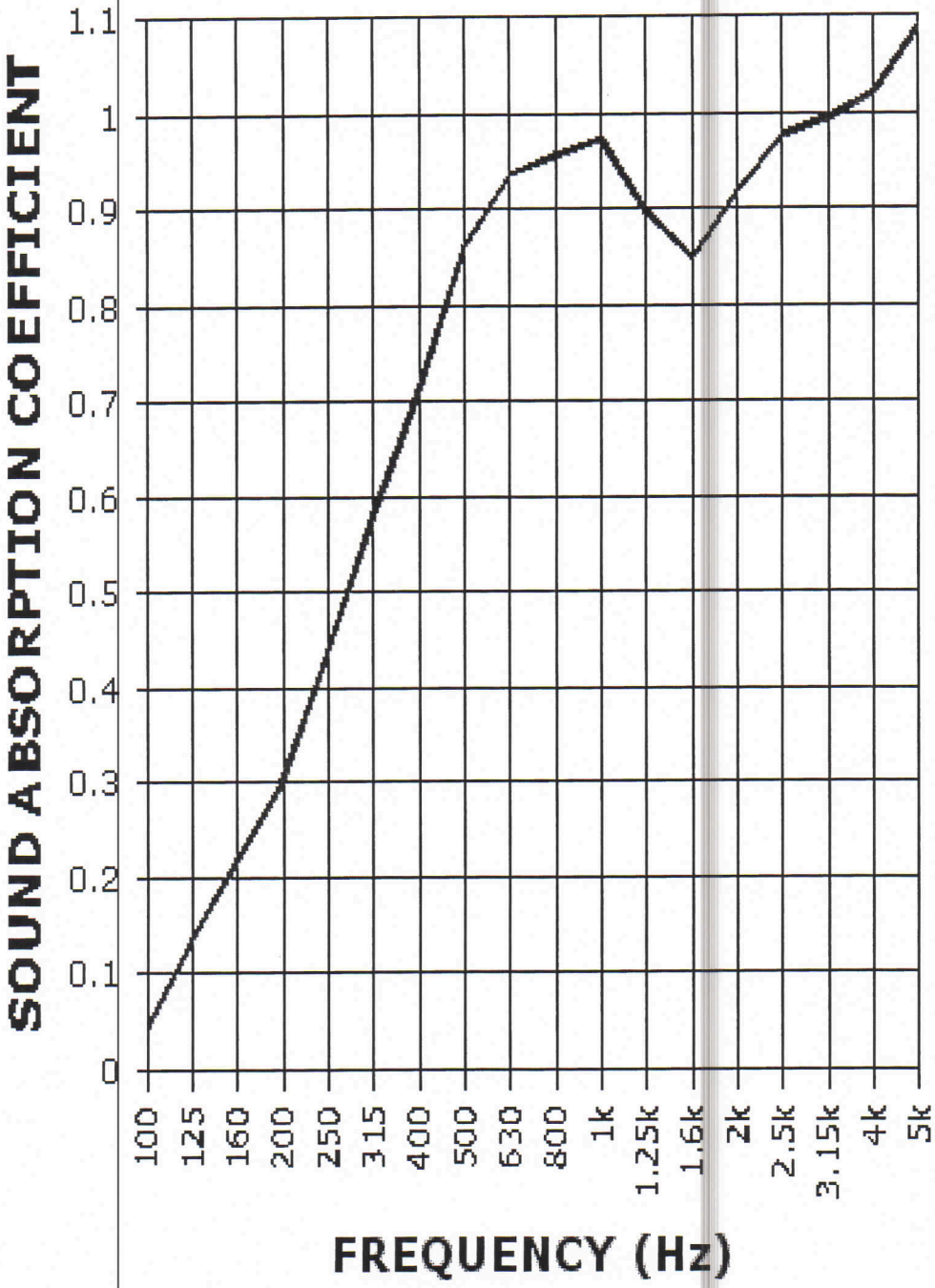
TEST REPORT

SOUND ABSORPTION REPORT
RAL-A12-119



SAA=0.78
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