Weighted sound absorption coefficient α_w according to EN ISO 11654

VB70G, VB71-G, VB72-G, VB73-G, VB76-G, VB77-G, SB-VG

Acoustic blanket, **single layer** hung pleated

WEIGHTED SOUND ABSORPTION COEFFICIENT

$\alpha_w = 1.00$

Absorption class

A

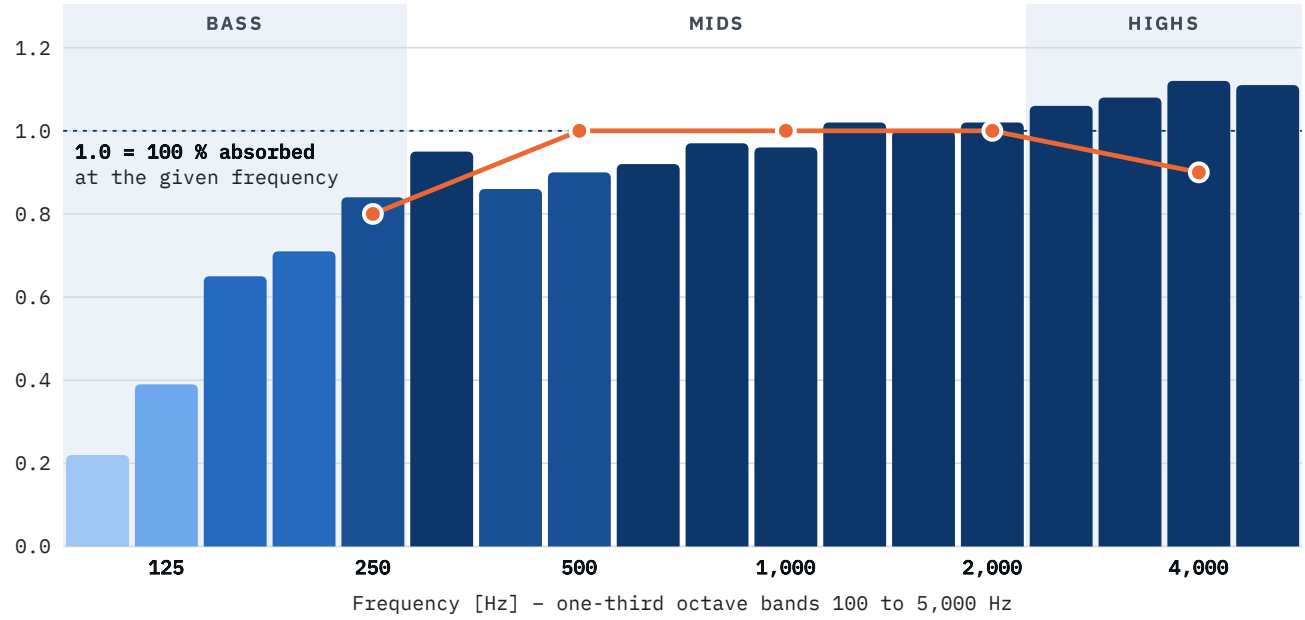
according to EN ISO 11654

1. Measured absorption coefficients in one-third octave bands

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	0.22	0.39	0.65	0.71	0.84	0.95	0.86	0.90	0.92	0.97	0.96	1.02	1.00	1.02	1.06	1.08	1.12	1.11

Source of values: report RAL™-A13-161, page 1 (annex to this document).

2. Absorption by frequency



measured absorption coefficient α_s (the darker, the more it absorbs)

ISO 11654 reference curve for α_w = 1.00

3. Sound absorption class

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

▲ VB70G, VB71-G, VB72-G, VB73-G, VB76-G, VB77-G, SB-VG: α_w = 1.00 → class A

4. Calculation according to EN ISO 11654

OCTAVE [HZ]	A_S 1/3 OCTAVES	MEAN	A_P	REF. CURVE	UNFAVOURABLE DEVIATION
125	0.22 · 0.39 · 0.65	0.420	**0.40**	–	–
250	0.71 · 0.84 · 0.95	0.833	**0.85**	0.80	0.00
500	0.86 · 0.90 · 0.92	0.893	**0.90**	1.00	0.10
1,000	0.97 · 0.96 · 1.02	0.983	**1.00**	1.00	0.00
2,000	1.00 · 1.02 · 1.06	1.027	**1.00***	1.00	0.00
4,000	1.08 · 1.12 · 1.11	1.103	**1.00***	0.90	0.00
Sum of unfavourable deviations (250–4,000 Hz) — limit of the standard ≤ 0.10					**0.10**

* Mean rounded to 0.05 and capped at 1.00 according to the standard. The reference curve (0.80 / 1.00 / 1.00 / 1.00 / 0.90) is shifted in steps of 0.05 towards lower values until the sum of unfavourable deviations does not exceed 0.10. At the value 1.00 in the 500 Hz band the sum is 0.10, therefore α_w = 1.00. No shape indicator (L, M, H) is given – no α_p exceeds the curve by 0.25 or more. According to Annex B of the standard, α_w 0.90–1.00 corresponds to absorption class A.

5. Underlying laboratory measurement

Laboratory	Riverbank Acoustical Laboratories, 1512 S Batavia Ave, Geneva, IL, USA — NVLAP accreditation (Lab Code 100227-0), ISO/IEC 17025:2017
Report	RAL™-A13-161, measured 25 Jun 2013
Method	ASTM C423-09a and E795-05, reverberation room 292 m³
Mounting	type G: single layer pleated, 6 folds 30 cm deep, 3 pieces 2.01 × 1.83 m (≈ 5.5 m of fabric) across a width of 2.62 m (≈ 2.1× fullness), 75 mm from the chamber wall, 74 cm above the floor
Specimen	Acoustic Blanket Producer's Choice VB70, hung size 2.62 × 2.01 m × 0.30 m fold depth, calculation area 5.25 m²

6. Notice

This document was issued by VocalBoothToGo-EU s.r.o. It is not a laboratory report and Riverbank Acoustical Laboratories is not its author. The α_w value is calculated according to EN ISO 11654 from one-third octave absorption coefficients measured by the laboratory using the ASTM C423 method, which is similar to EN ISO 354 (reverberation room).

The results apply to the tested specimen and the stated mounting. The laboratory's original report is attached unchanged as an annex.

Annex: Riverbank Acoustical Laboratories report RAL™-A13-161 (2 pages, original).

Prepared by: VocalBoothToGo-EU s.r.o.

Date: 28 September 2026

Riverbank Acoustical Laboratories (RAL)™ / An Alion Science Technical Center (RALVer 11.0)
Sound Absorption and Sound Absorption Coefficients
by the Reverberation Room Method ASTM C 423-09a/E 795-08/NVLAP 08/P03

TEST NUMBER: A13-161 TEST DATE: JUNE 25, 2013

CLIENT: MoversSupplies.com
DESIGNATION: Acoustic Blanket Producers Choice VB70 - 6 (12") Pleats - Hung with 3" air space from chamber wall - 29" from test chamber floor
DIMENSIONS: 103" x 79" x 12"
AREA: 56.5 ft²
WEIGHT: 20.5 lbs AREA WEIGHT: 0.36 lbs/ft²
MOUNTING: G EDGE SEAL: Unsealed
SPECIMEN DETAILS: 3 pcs used 79"x72"

TEST ROOM DETAILS: Room 0 Volume = 10311 ft³ Area = 2864.3 ft²
FILE NAME: A13_161_130625_A.doc

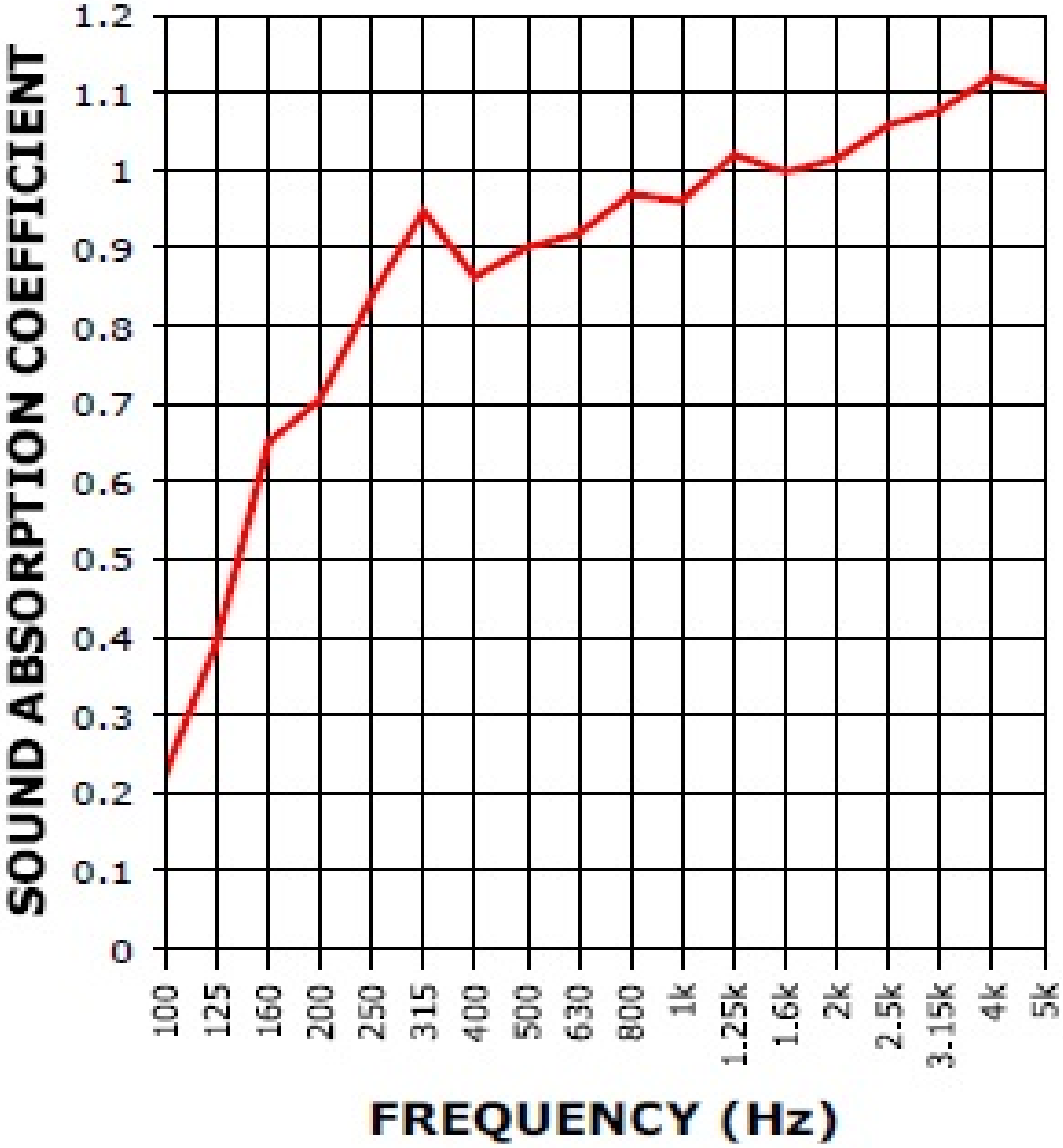
1/3 OCTAVE CENTER FREQ. (Hz)	ABSORPTION COEFFICIENT	TOTAL ABSORPTION (SABINS)
40	0.05	2.57
50	0.10	5.73
63	0.10	5.80
80	0.16	9.26
100	0.22	12.51
125	0.39	22.15
160	0.65	36.69
200	0.71	39.87
250	0.84	47.32
315	0.95	53.55
400	0.86	48.76
500	0.90	50.91
630	0.92	51.91
800	0.97	54.77
1000	0.96	54.29
1250	1.02	57.65
1600	1.00	56.41
2000	1.02	57.36
2500	1.06	59.82
3150	1.08	60.87
4000	1.12	63.34
5000	1.11	62.55
6300	1.19	66.97
8000	1.02	57.48
10000	1.08	61.09

SOUND ABSORPTION AVERAGE [SAA] = 0.93
NOISE REDUCTION COEFFICIENT [NRC] = 0.95

Test Conducted by: Marc Sciaky

This single report page and accompanying graph contain the instantaneous raw data as provided to the client after testing of the specimen. This data, although accurate, is incomplete without the full specimen description, mounting details and signature pages. The full report referenced by the RAL test number above should be consulted for further information regarding these results.

SOUND ABSORPTION REPORT
RAL - A13-161



SAA = 0.93
NRC = 0.95