Weighted sound reduction index R_w according to EN ISO 717-1

MLV (Mass Loaded Vinyl)

Sound insulation of the material: **reinforced MLV (Mass Loaded Vinyl)** · tested specimen “Sound Curtain – Reinforced MLV”

WEIGHTED SOUND REDUCTION INDEX

R_w = 27 dB

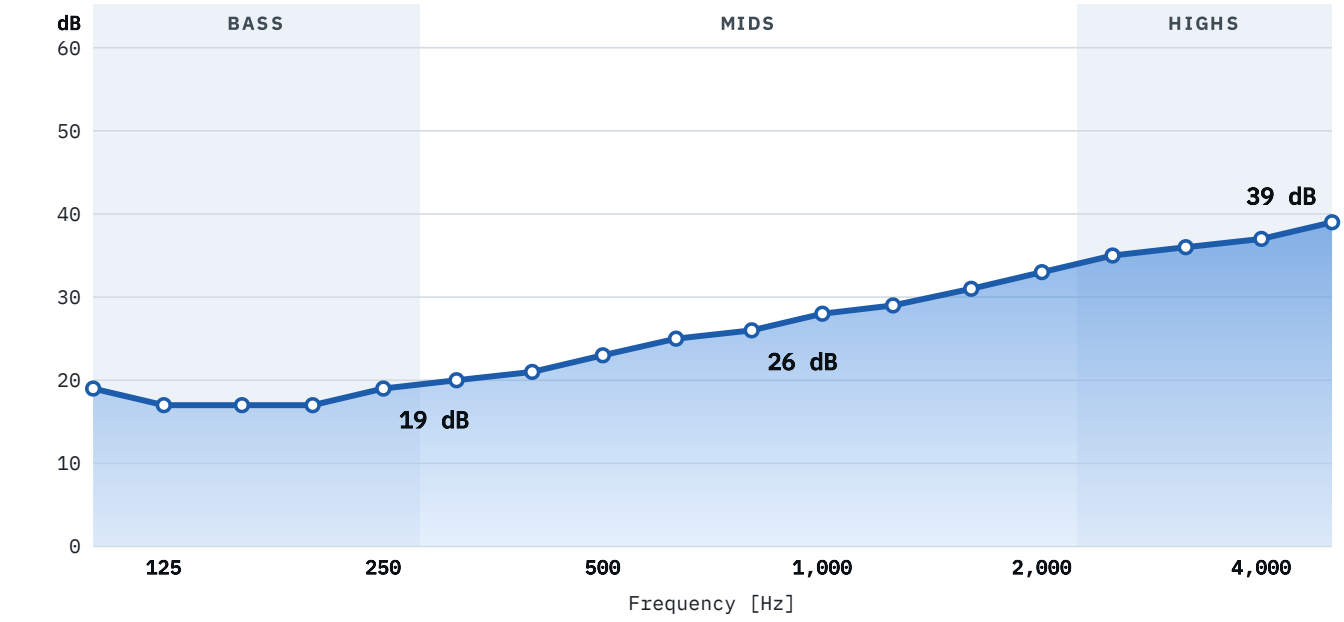
$(C; C_{tr})$ = (0; −3) dB

1. Measured sound reduction 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
R [dB]	19	17	17	17	19	20	21	23	25	26	28	29	31	33	35	36	37	39

Source of values: report RAL™-TL13-132, page 1 (annex to this document).

2. Sound reduction by frequency



sound reduction R measured in the laboratory (in decibels)

3. Calculation according to EN ISO 717-1

F [HZ]	R [DB]	SHIFTED REF. CURVE [DB]	UNFAVOURABLE DEVIATION [DB]
100	19	8	–
125	17	11	–
160	17	14	–
200	17	17	–
250	19	20	1
315	20	23	3
400	21	26	5
500	23	27	4
630	25	28	3
800	26	29	3
1,000	28	30	2
1,250	29	31	2
1,600	31	31	–
2,000	33	31	–
2,500	35	31	–
3,150	36	31	–
Sum of unfavourable deviations (100–3,150 Hz) — limit of the standard ≤ 32 dB			**23**

The reference curve of the standard is shifted in steps of 1 dB until the sum of unfavourable deviations (bands where R lies below the curve) does not exceed 32 dB. The value of the shifted curve at 500 Hz is R_w = 27 dB. Adaptation terms C = 0 dB (pink noise) and C_{tr} = −3 dB (traffic noise) express the influence of the noise source spectrum.

4. 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™-TL13-132, measured 25 Jun 2013
Method	ASTM E90-09, laboratory measurement of airborne sound insulation between two reverberation rooms
Specimen	Sound Curtain – Reinforced MLV (reinforced MLV), black faces; 1.22 × 2.44 m, thickness 3.8 mm, area 2.97 m²

5. 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 R_w value is calculated according to EN ISO 717-1 from one-third octave sound reduction values measured by the laboratory using the ASTM E90 method.

The results apply to the tested specimen of reinforced MLV. The laboratory's original report is attached unchanged as an annex.

Annex: Riverbank Acoustical Laboratories report RAL™-TL13-132 (2 pages, original).

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

Date: 7 October 2026

Riverbank Acoustical Laboratories (RAL)™ / An Alion Science Technical Center (RALVer 10.1)

Laboratory Measurement of Airborne Sound Transmission Loss
of Building Partitions ASTM E 90-09/NVLAP 08/P06

TEST NUMBER: TL13-132 TEST DATE: JUNE 25, 2013

CLIENT: MoversSupplies.com
DESIGNATION: Sound Curtain - Reinforced MLV - Black Faces Source

DIMENSIONS: 48" wide x 96" high x 0.15" thick
AREA: 32.0 ft²
WEIGHT: 37.5 lbs AREA WEIGHT: 1.17 lbs/ft²
SPECIMEN DETAILS:

SOURCE ROOM: Room 2 Volume = 6297.6 ft³ Area = 2066.2 ft²
RECEIVE ROOM: Room 3 Volume = 4929.46 ft³ Area = 1690.3 ft²
FILE NAME: TL13_132_130625_A.doc

FREQ. (Hz)	T.L. (dB)	UNC. (dB) 95%CL	DEF. (dB) <CONT	FREQ. (Hz)	T.L. (dB)	UNC. (dB) 95%CL	DEF. (dB) <CONT
100	**19**	0.78		800	**26**	0.11	3
125	**17**	0.58		1k	**28**	0.14	2
160	**17**	0.92		1.25k	**29**	0.12	2
200	**17**	0.46		1.6k	**31**	0.08	
250	**19**	0.63	1	2k	**33**	0.09	
315	**20**	0.34	3	2.5k	**35**	0.09	
400	**21**	0.30	5	3.15k	**36**	0.05	
500	**23**	0.27	4	4k	**37**	0.06	
630	**25**	0.18	3	5k	**39**	0.05	

Sound Transmission Class (STC) = 27

Total Deficiencies = 23

Extended Frequency Data

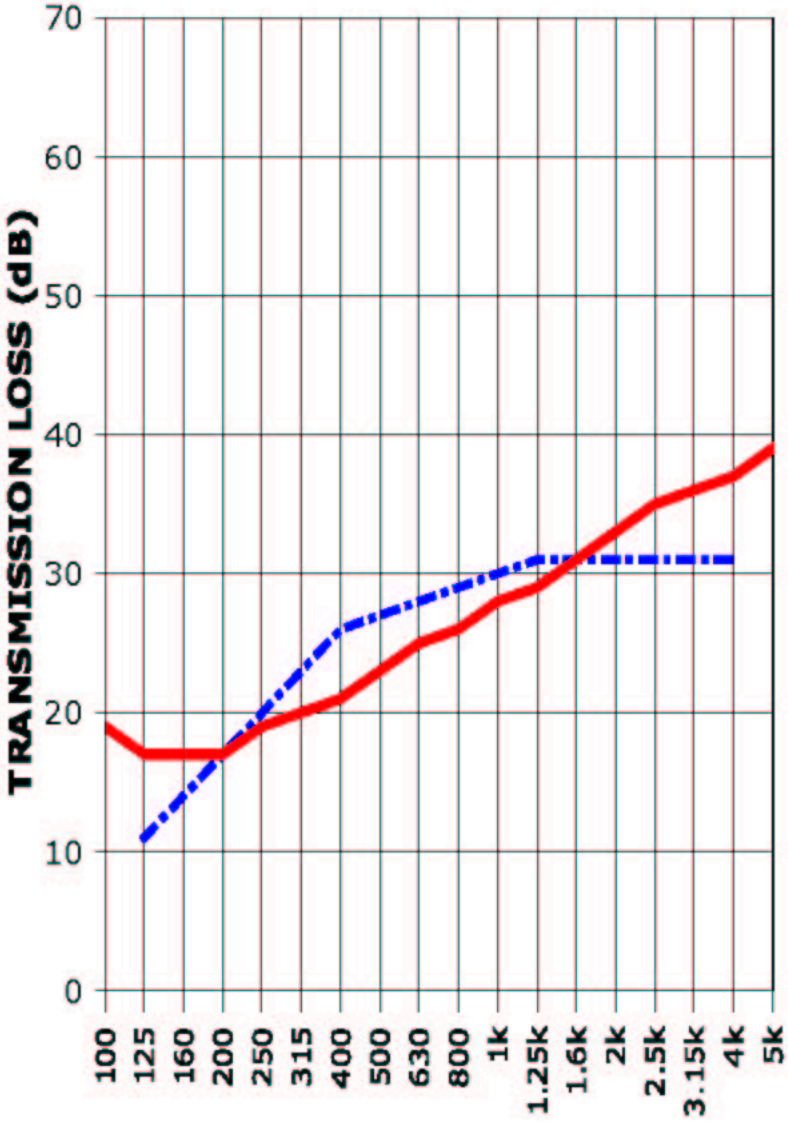
FREQ.	T.L.	UNC.	DEF.	FREQ.	T.L.	UNC.	DEF.
40	**15**	0.92		6.3k	**41**	0.04	
50	**12**	0.57		8k	**43**	0.05	
63	**6**	0.90		10k	**45**	0.07	
80	**9**	1.40					

R: 27
OITC: 22

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 TRANSMISSION REPORT
RAL - TL13-132



STC = 27

TRANSMISSION LOSS
SOUND TRANSMISSION LOSS CONTOUR