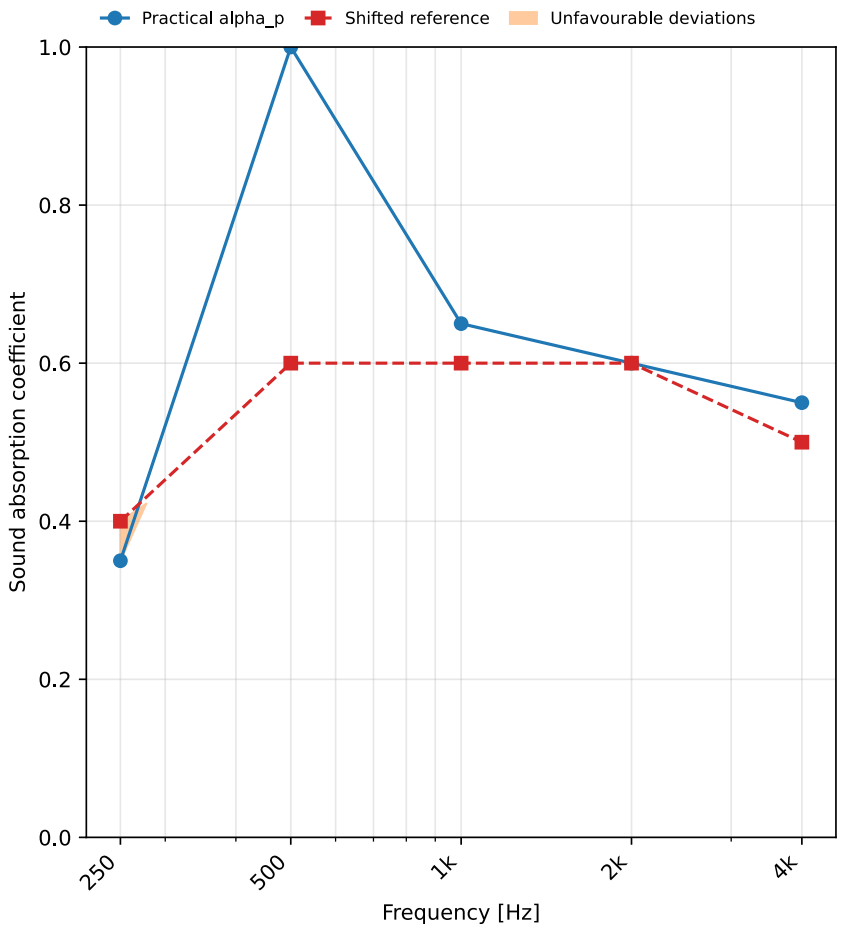
Sound absorption rating

ISO 354 laboratory measurement of sound absorption. Rating per ISO 11654:1997.

Client:	Example client	Manufacturer:	Example acoustics
Description:	50 mm porous absorber over a 100 mm air gap	Sample area S [m²]:	10.8
Mounting:	Type A (mounted directly against a rigid wall)	Test room:	Reverberation room (example)
Date of test:	2026-07-20	Temperature [°C]:	21.4
Relative humidity [%]:	54	Ambient pressure [kPa]:	101

One-third-octave α_s, octave α_p

Frequency f [Hz]	α_s	α_p
200	0.30	
250	0.35	0.35
315	0.40	
400	1.00	
500	1.00	1.00
630	1.00	
800	0.62	
1000	0.66	0.65
1250	0.67	
1600	0.58	
2000	0.60	0.60
2500	0.62	
3150	0.53	
4000	0.55	0.55
5000	0.57	



α_W = 0.60(M)

Absorption class: C
Shape indicator: M
Applied shift: 0.40

A shape indicator applies: ISO 11654 (5.3 NOTE) recommends using α_w in combination with the complete sound absorption coefficient curve, shown above.

Result vs requirement: α_w = 0.60, required ≥ 0.55 → **PASS**

Laboratory: Phonometry reference example
Report no.: EXAMPLE-11654
Date: 2026-07-20
Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.

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