

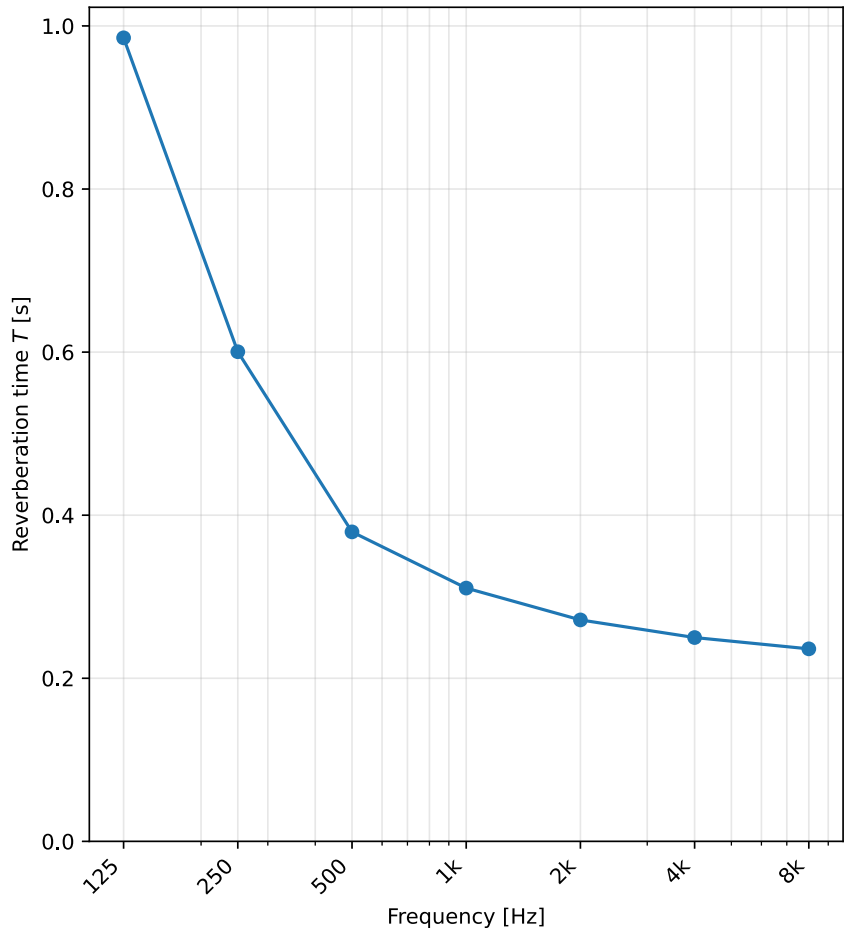
Sound absorption in an enclosed space

EN 12354-6 estimate of the equivalent sound absorption area and reverberation time of an enclosed space per EN 12354-6:2003.

Client:	Example client	Room:	Meeting room M2 (example)
Description:	Meeting room, furnished	Room volume V [m ³]:	50
Object fraction ψ :	0.032	Temperature [°C]:	20
Relative humidity [%]:	55	Ambient pressure [kPa]:	101.3
Date of prediction:	2026-07-21		

Absorption area A and reverberation time T

f [Hz]	A [m ²]	T [s]
125	7.86	0.99
250	12.90	0.60
500	20.41	0.38
1000	24.93	0.31
2000	28.52	0.27
4000	30.98	0.25
8000	32.80	0.24



T_{mid} (500-1000 Hz) = 0.35 s

A (500-1000 Hz) = 22.67 m²

■ Target reverberation time T = 0.60 s

Estimate of the equivalent sound absorption area A and the reverberation time T of an enclosed space from its surface, object and air absorption by the EN 12354-6:2003 Clause 4 model (A by Formula 1, $T = 55.3/c_0 \cdot V(1 - \psi)/A$ by Formula 5, with the object fraction $\psi = \sum V_{obj} / V$). It is an estimate for a diffuse field, not a measurement.

Laboratory: Phonometry reference example

Report no.: EXAMPLE-EN12354-6

Date: 2026-07-21

Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.
Generated by phonometry.