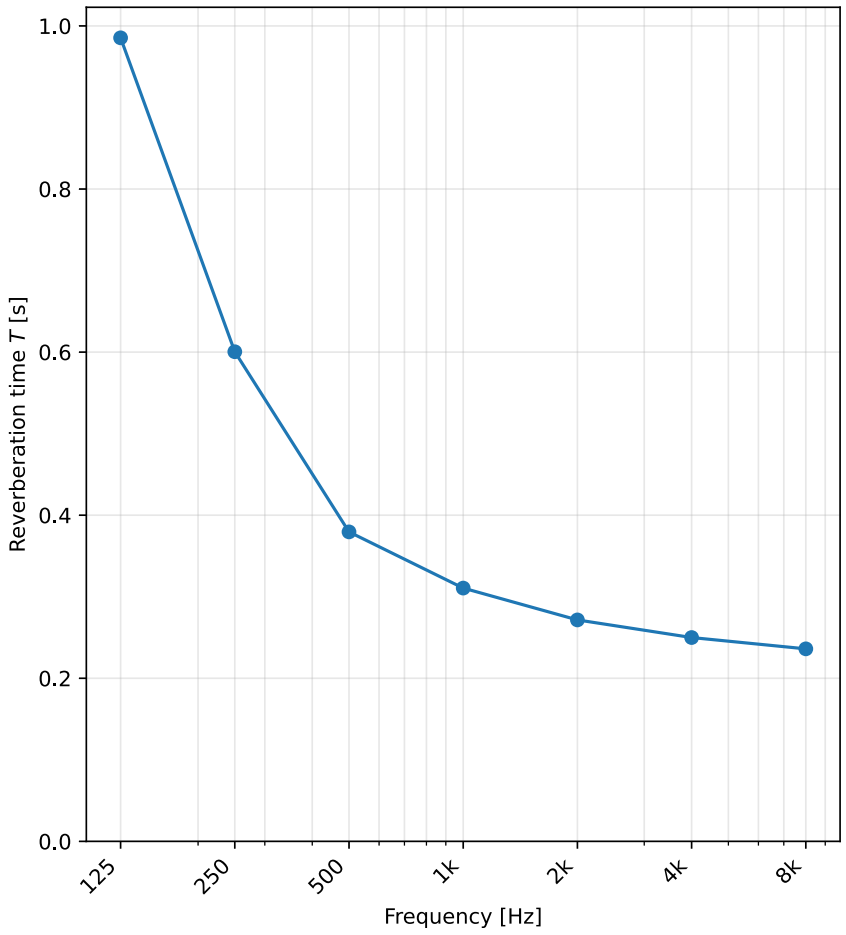
# Sound absorption in an enclosed space

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 [m³]: | 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 [m²] | 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/c0 * V(1 - psi)/A by Formula 5, with the object fraction psi = sum Vobj / 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.

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