

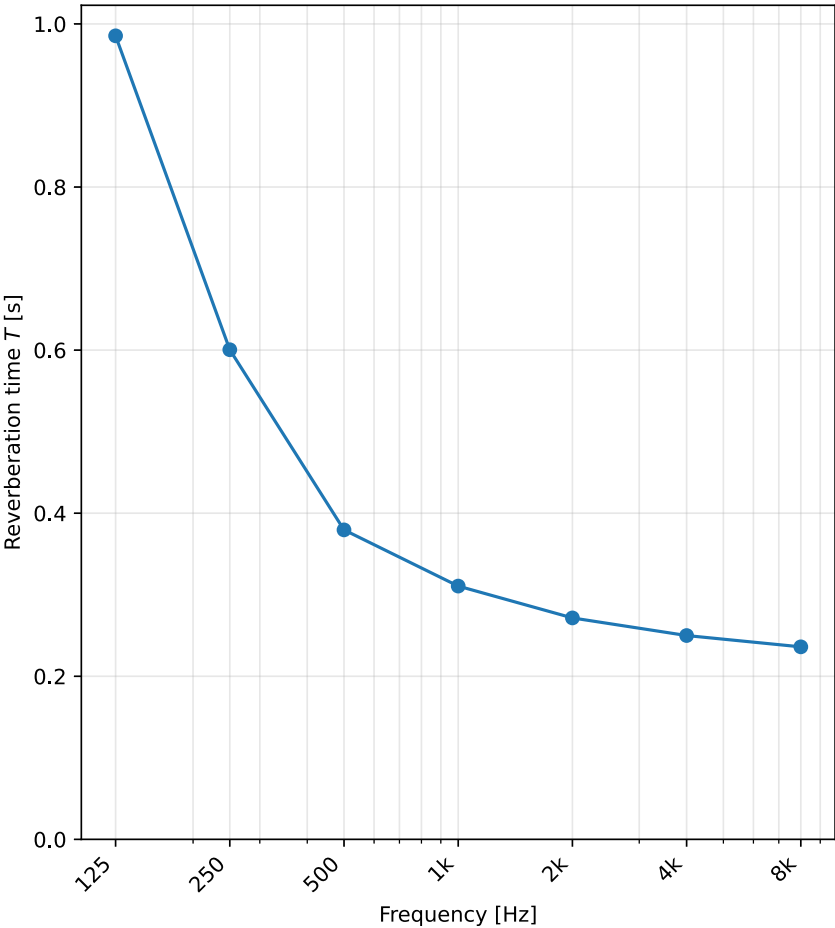
# Sound absorption in an enclosed space

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 $\psi$ : | 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  |



$T_{\text{mid}}$  (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  $\psi = \sum V_{\text{obj}} / V$ ). It is an estimate for a diffuse field, not a measurement.

**Laboratory:** Phonometry reference example

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**Date:** 2026-07-21

Operator: phonometry    Signature: \_\_\_\_\_

■ The results relate only to the tested specimen.

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