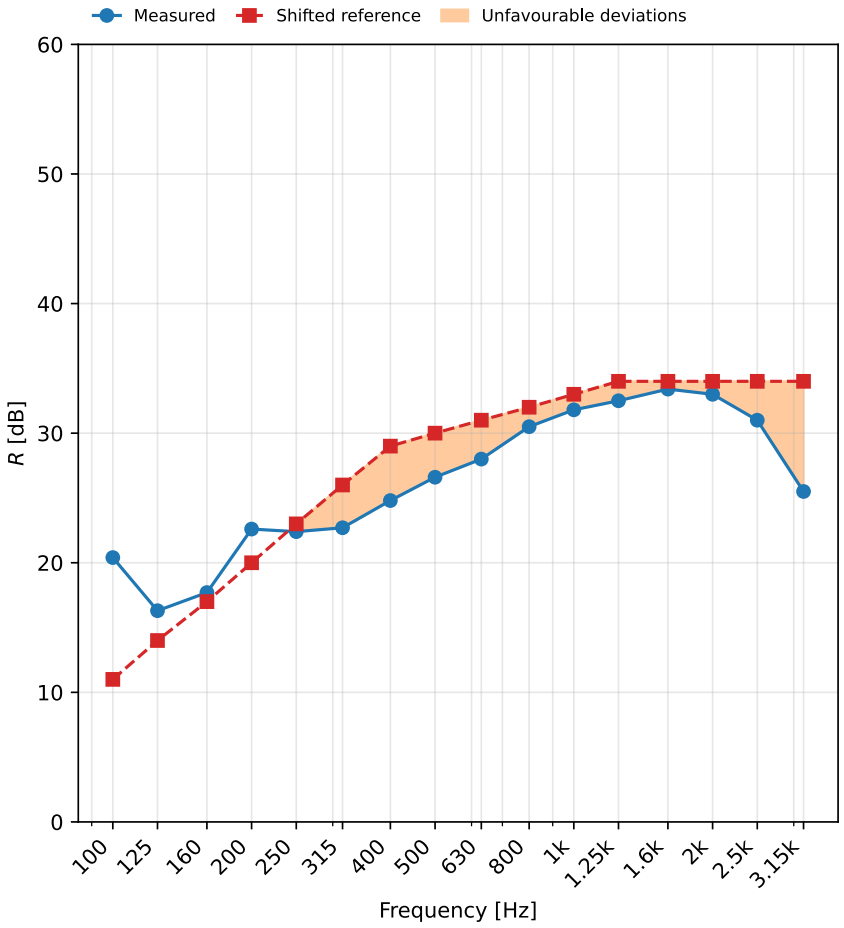
Laboratory airborne sound insulation of a building element

Sound reduction index R measured in accordance with ISO 10140-2:2010 in a laboratory suppressing flanking transmission. Rating per ISO 717-1:2020.

Client:	Example client	Sample area S [m^2]:	10
Manufacturer:	Example blockworks	Description:	100 mm autoclaved aerated concrete block wall
Test room:	Transmission suite (example)	Date of test:	2026-07-18
Source room volume [m^3]:	53	Receiving room volume [m^3]:	50
Receiving room temp. [°C]:	20.8	Receiving room humidity [%]:	46
Ambient pressure [kPa]:	101.3	Mass per unit area [kg/m^2]:	75
Mounting:	Type A mounting, mortar-bedded perimeter (ISO 10140-1)		

One-third-octave R [dB]

Frequency f [Hz]	R [dB]
100	20.4
125	16.3
160	17.7
200	22.6
250	22.4
315	22.7
400	24.8
500	26.6
630	28.0
800	30.5
1000	31.8
1250	32.5
1600	33.4
2000	33.0
2500	31.0
3150	25.5



R_w (C; C_{tr}) = **30 (-2; -3) dB**

Evaluation based on laboratory measurement results obtained by a precision method (flanking transmission suppressed).

Result vs requirement: R_w = 30 dB, required ≥ 30 dB → **PASS**

Laboratory: Phonometry reference example
Report no.: EXAMPLE-10140-2
Date: 2026-07-18
Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.

Generated by phonometry.