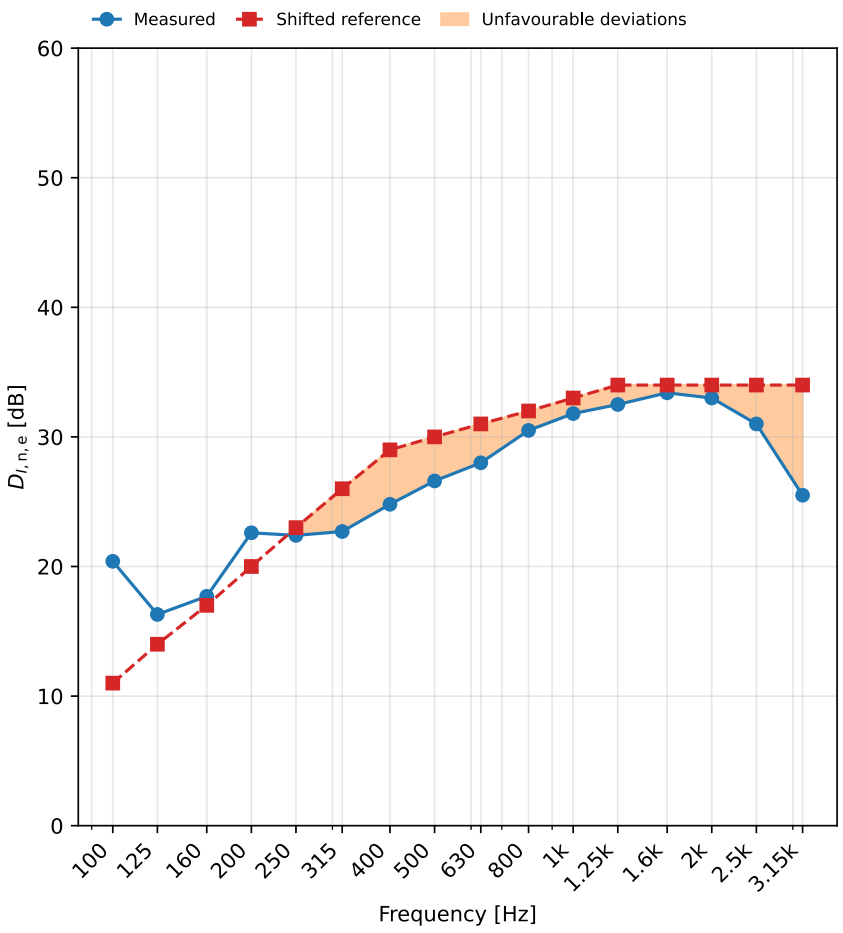
Element sound insulation by sound intensity

Element-normalized level difference $D_{I,n,e}$ measured in accordance with ISO 15186-1:2000 (transmitted sound power measured directly with an intensity probe, normalized to the reference absorption area A_0 = 10 m²). Rating per ISO 717-1:2020.

Client:	Example client	Sample area S [m²]:	0.02
Manufacturer:	Example ventilators	Description:	Trickle ventilator in a 100 mm masonry wall
Test room:	Transmission suite (example)	Date of test:	2026-07-21
Mounting:	Small-element mounting per ISO 10140-1 Annex F		

One-third-octave $D_{I,n,e}$ [dB]

Frequency f [Hz]	$D_{I,n,e}$ [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



$D_{I,n,e,w}$ (C; C_{tr}) = **30 (-2; -3) dB**

Evaluation based on laboratory measurement results obtained by the sound-intensity method (transmitted sound power measured directly over the measurement surface enclosing the element). S_m = 12 m² (ISO 15186-1:2000 Clause 8).

Result vs requirement: $D_{I,n,e,w}$ = 30 dB, required ≥ 30 dB → **PASS**

Laboratory: Phonometry reference example
Report no.: EXAMPLE-15186-1-DINE
Date: 2026-07-21
Notes: Measurement surface Sm = 12 m2, N = 1 element unit.
Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.