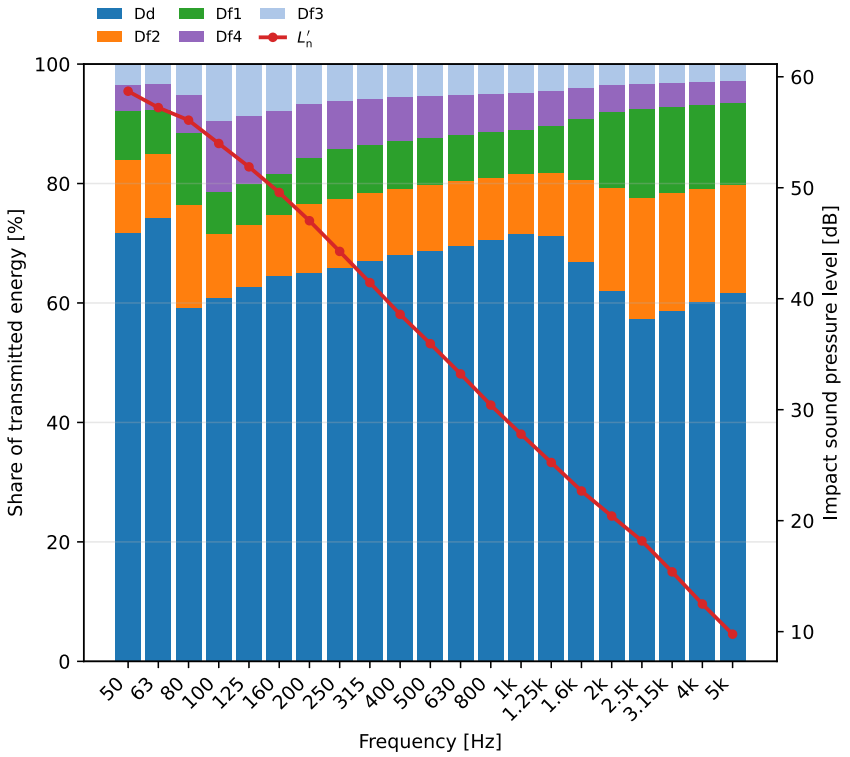
Predicted impact sound insulation of floors

Predicted apparent normalized impact sound pressure level L'_n per frequency band (direct and flanking transmission, in-situ element and junction data) estimated in accordance with ISO 12354-2:2017 (detailed model, Clause 4.2). This is a prediction from element data, not a measurement. $L'_{n,w}$ per ISO 717-2.

Client:	Example client	Sample area S [m^2]:	20
Description:	220 mm concrete floor with floating floor (Annex G)	Test room:	Dwelling above to dwelling below (example)
Date of test:	2026-08-05	Receiving room volume [m^3]:	50
Mass per unit area [kg/m^2]:	484		

Transmission paths - share of energy

Dd	65.6%
Df2	13.2%
Df1	9.5%
Df4	6.6%
Df3	5.0%



$L'_{n,w}$ = 41 dB

Predicted (estimated) result computed band by band from the building elements' performance by the EN/ISO 12354 detailed model; it is not a measurement. For buildings with homogeneous elements the prediction of the single-number rating carries no bias error and a standard deviation of 1.5 dB to 2.5 dB.

Result vs requirement: $L'_{n,w}$ = 41 dB, required ≤ 50 dB → **PASS**

Laboratory: Phonometry reference example
Report no.: EXAMPLE-12354-2-G
Date: 2026-08-05
Notes: Detailed per-band model (Clause 4.2) over the Annex L/G building: direct path plus four flanking paths, floating floor improvement from the resonance frequency of the annex.
Operator: phonometry Signature: _____

■ Predicted result: the values relate only to the modelled configuration, not to a tested specimen.

Generated by phonometry.