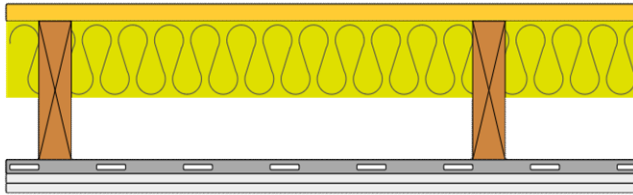


Sound Insulation Prediction (v9.0.22)



Program copyright Marshall Day Acoustics 2017
 Margin of error is generally within $L_{n,w} \pm 5$ dB
 Noisestop Systems - Key No. 6502
 Job Name: Part E Ceiling Kit Impact Test
 Job No.: Initials:
 Date: 28/02/2022
 File Name:

Notes:



$L_{n,w}$ 59 dB

Mass-air-mass resonant frequency = 45 Hz

Panel Size = 2.4 m x 2.4 m

Partition surface mass = 42.8 kg/m²

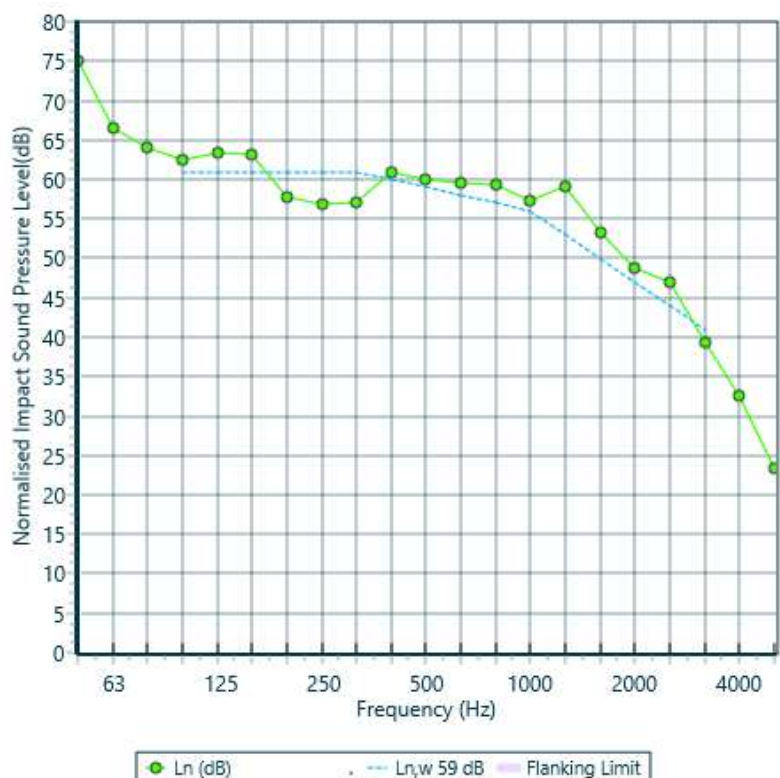
System description

Panel 1 : 1 x 22 mm Flooring Particle Board (ρ :710 kg/m³, E:3.4GPa, η :0.03, ρ_s :15.6 kg/m², f_c :1344 Hz)

Frame: Solid Joist with resilient rail (1.8E2 mm x 45 mm), Stud spacing 600 mm; Cavity Width 198 mm, 1 x Rockwool (60kg/m³) Thickness 100 mm ...

Panel 2 : 2 x 12.5 mm Gyproc SoundBloc 12.5mm (ρ :848 kg/m³, E:3.8GPa, η :0.01, ρ_s :21.2 kg/m², f_c :3482 Hz)

freq.(Hz)	L_n (dB)	L_n (dB)
50	75	
63	67	76
80	64	
100	63	
125	63	68
160	63	
200	58	
250	57	62
315	57	
400	61	
500	60	65
630	60	
800	59	
1000	57	63
1250	59	
1600	53	
2000	49	55
2500	47	
3150	39	
4000	33	40
5000	23	



● L_n (dB) - - - $L_{n,w}$ 59 dB — Flanking Limit