

Sound Insulation Prediction (v8.0.12)

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PechoM

Margin of error is generally within $R_w \pm 3$ dB

Date: 27 Eki 17 File Name:insul

System description:

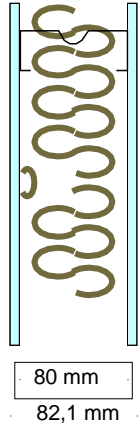
Panel 1 : 1 x 0,6 mm Steel (ρ :7800 kg/m³, E :2,1E02GPa, η :0,01, ρ_s :4,68 kg/m², f_c :2,083E4 Hz)

Cavity: Acoustic stud: Stud spacing 600 mm , PM 2013 (60kg/m³) Thickness 80 mm (ρ :60 kg/m³, R_f :22000 Pa.s/m²)

Panel 2 + 1 x 1,5 mm Steel (ρ :7800 kg/m³, E :2,1E02GPa, η :0,01, ρ_s :4,68 kg/m², f_c :2,083E4 Hz)
Mass-air-mass resonant frequency =93 Hz
Panel Size 2,7x4 m; Mass 17,4 kg/m²

R_w 40 dB

C -4 dB
C_{tr} -10 dB [V:50m³][A:11m²]
D_{nTw} 42 dB



frequency (Hz)	R(dB)	R(dB)
50	15	
63	15	15
80	15	
100	13	
125	17	16
160	22	
200	28	
250	33	31
315	37	
400	41	
500	46	44
630	50	
800	53	
1000	56	56
1250	59	
1600	61	
2000	63	63
2500	65	
3150	67	
4000	69	69
5000	70	

