

Sound Insulation Prediction (v8.0.9)

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Pyrotek Pty Ltd - Oceania - Key No. 1071

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

Job Name: The Silencer

Job No.:

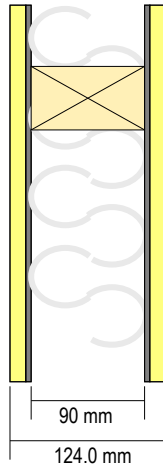
Page No.:

Notes:

Date: 19 Feb 16

Initials:

File Name: Soundproof Wall.ixl



R_w	52 dB	
C	-3 dB	
C_{tr}	-10 dB	
D_{nTw}	54 dB	[V:50m3] [A:11m2]

System description

Panel 1 : 1 x 13.0 mm CSR Gyprock 13mm Soundchek plasterboard

+ 1 x 4.0 mm Pyrotek Wavebar 8 kg/m² (ρ :2000 kg/m³,E:0.008GPa, η :0.30)

Cavity: Timber stud: Stud spacing 600 mm , Infill Polyester Thickness 90 mm (ρ :32 kg/m³, Rf:6732 Pa.s/m²)

Panel 2 + 1 x 4.0 mm Pyrotek Wavebar 8 kg/m² (ρ :2000 kg/m³,E:0.008GPa, η :0.30)

+ 1 x 13.0 mm CSR Gyprock 13mm Soundchek plasterboard

Mass-air-mass resonant frequency =53 Hz

Panel Size 2.7x4 m; Mass 44.9 kg/m²

frequency (Hz)	R(dB)	R(dB)
50	18	
63	13	15
80	15	
100	23	
125	31	27
160	36	
200	40	
250	43	42
315	46	
400	48	
500	50	50
630	52	
800	54	
1000	56	56
1250	58	
1600	60	
2000	61	61
2500	62	
3150	64	
4000	75	68
5000	79	

