

Sound Insulation Prediction (v8.0.9)

Program copyright Marshall Day Acoustics 2015



- Key No. 3825

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

Job Name:

Job No.:

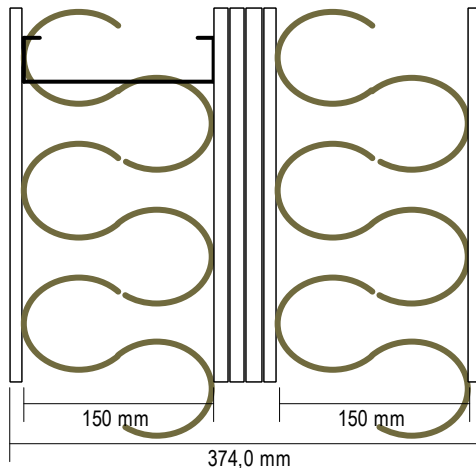
Page No.:

Notes:

Date: 31 mar 17

Initials:plsiwc

File Name: insul



R_w	81 dB	
C	-4 dB	
C_{tr}	-11 dB	
D_{nTw}	83 dB	[V: 50m3] [A: 11m2]

System description

Panel 1 : 1 x 12,0 mm Duripanel (ρ :1250 kg/m³,E:12GPa, η :0,01)

Cavity : Steel stud (1.0-1.6 mm): Stud spacing 600 mm , Infill Rockwool (50 kg/m³) Thickness 150 mm (ρ :50 kg/m³, Rf:18400 Pa.s/m²)
 Panel 2 + 4 x 12,5 mm NIDA OGIEŃ PLUS 12.5mm (ρ :895 kg/m³,E:3,6GPa, η :0,01)

Cavity : None: Stud spacing 600 mm , Infill Rockwool (50 kg/m³) Thickness 150 mm (ρ :50 kg/m³, Rf:18400 Pa.s/m²)
 Panel 3 + 1 x 12,0 mm Duripanel (ρ :1250 kg/m³,E:12GPa, η :0,01)

Mass-air-mass resonant frequency =40 Hz , 52 Hz

Panel Size 2,7x4 m; Mass 89,8 kg/m²

frequency (Hz)	R(dB)	R(dB)
50	15	
63	36	19
80	46	
100	52	
125	58	55
160	63	
200	68	
250	73	71
315	77	
400	81	
500	84	83
630	88	
800	91	
1000	93	93
1250	96	
1600	96	
2000	103	100
2500	104	
3150	111	
4000	119	115
5000	126	

