

# Sound Insulation Prediction (v7.0.6)

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- Key No. 2503



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

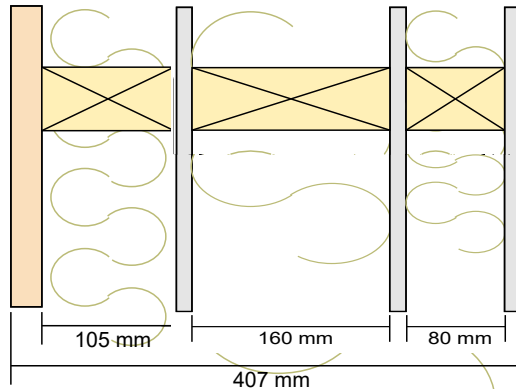
Job Name Streif Walls, Acoustic Modelling

Job No.: 4852

Date: 18 Aug 20

Initials: PD

File Name: Wall Type 3C.ixl



**$R_w$  52 dB**

**C -1 dB**

**$C_{tr}$  -5 dB**

## System description

Panel 1 Outer layer: 1 x 25.0 mm Pine- ( $m=12.3$  kg/m<sup>2</sup>,  $f_c=816$  Hz, Damping=0.04) Profile

Cavity: None @ 600 mm , Infill Mineral Wool (22Kg/m<sup>3</sup>) Thickness 60 mm

Panel 2 Inner layer: 1 x 12.5 mm Gypsum Rigidur H 12.5mm- ( $m=15.0$  kg/m<sup>2</sup>,  $f_c=4009$  Hz, Damping=0.01) Profile

Cavity: Timber stud @ 600 mm , Infill Sound absorber Thickness 160 mm

Panel 3 Inner layer: 1 x 12.5 mm Gypsum Rigidur H 12.5mm- ( $m=15.0$  kg/m<sup>2</sup>,  $f_c=4009$  Hz, Damping=0.01) Profile

Cavity: None @ 600 mm , Infill Mineral Wool (22Kg/m<sup>3</sup>) Thickness 80 mm

Panel 4 Inner layer: 1 x 12.5 mm Gypsum Rigidur H 12.5mm- ( $m=15.0$  kg/m<sup>2</sup>,  $f_c=4009$  Hz, Damping=0.01) Profile

Mass-air-mass resonant frequency =31 Hz , 75

Panel Size 2.7x4 m

frequency (Hz)	TL(dB)	TL(dB)
50	22	
63	26	25
80	30	
100	34	
125	36	36
160	39	
200	41	
250	43	43
315	45	
400	47	
500	48	48
630	49	
800	50	
1000	51	51
1250	54	
1600	56	
2000	59	58
2500	58	
3150	59	
4000	59	59
5000	61	

