

SOUND INSULATION PERFORMANCE



TIMBER STUD PARTITIONS

Stud Size (mm)	Facing	Thickness of insulation (mm)	Sound insulation (R _w dB)
63x38	12.5mm standard plasterboard each side	None	35
63x38	12.5mm standard plasterboard each side	50mm Acoustic Roll	40
63x38	12.5mm Knauf Soundshield each side	50mm Acoustic Roll	44



METAL STUD PARTITIONS

Stud type	Stud spacing (mm)	Facing	Thickness of insulation (mm)	Sound insulation (R _w dB)
50mm C stud	600 c/s	12.5mm Knauf Wallboard each side	25mm Acoustic Roll	43
70mm C stud	600 c/s	15mm Knauf Fireshield each side	25mm Acoustic Roll	49
50mm C stud	600 c/s	2 layers of 12.5mm Knauf Soundshield each side	25mm Acoustic Roll	54
70mm C stud	600 c/s	2 layers of 12.5mm Knauf Fireshield each side	50mm Acoustic Roll	54



STAGGERED METAL STUD PARTITIONS

Stud type	Channel size	Facing	Thickness of insulation (mm)	Sound insulation (R _w dB)
60mm T stud	72mm	2 layers of 12.5mm Knauf Soundshield each side	50mm Acoustic Roll	57
92mm T stud	148mm	2 layers of 15mm Knauf Soundshield each side	50mm Acoustic Roll	62



TWIN METAL STUD PARTITIONS

Stud type	Facing	Thickness of insulation (mm)	Sound insulation (R _w dB)
92mm C stud	19mm Knauf Plank and two layers of 12.5mm Wallboard each side	100mm Acoustic Roll	69
146mm C stud	19mm Knauf Plank and two layers of 12.5mm Wallboard each side	100mm Acoustic Roll	74