

ULTRAFLOOR
ACOUSTIC PERFORMANCE

ULTRAfloor®

ACOUSTIC PERFORMANCE

DETERMINATION OF SOUND TRANSMISSION LOSS

Airborne Sound Insulation

Using FC Formwork – 10mm Plasterboard Ceiling (Not less than 6.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted R _w	C _{tr}	R _w + C _{tr}	+ Insulation*
F1 130R/500	105	54	-7	47**	50
F2 150R/500	135	56	-6	50	53
F3 130C/500	105	54	-7	47**	50
F4 150C/500	135	57	-6	51	54
F5 200C/500	185	60	-6	54	57
F6 250C/500	229	61	-6	55	58

Using FC Formwork – 13mm Plasterboard Ceiling (Not less than 8.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted R _w	C _{tr}	R _w + C _{tr}	+ Insulation*
F1 130R/500	105	56	-6	50	53
F2 150R/500	135	57	-6	51	54
F3 130C/500	105	56	-6	50	53
F4 150C/500	135	59	-6	53	56
F5 200C/500	185	61	-5	56	59
F6 250C/500	229	63	-5	58	61

Using Metaldeck – 10mm Plasterboard Ceiling (Not less than 6.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted R _w	C _{tr}	R _w + C _{tr}	+ Insulation*
M1 150C/1300	135	57	-7	50	53
M2 200C/1300	185	59	-6	53	56
M3 250C/1300	229	61	-7	54	57

Using Metaldeck – 13mm Plasterboard Ceiling (Not less than 8.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted R _w	C _{tr}	R _w + C _{tr}	+ Insulation*
M1 150C/1300	135	57	-7	50	53
M2 200C/1300	185	59	-6	53	56
M3 250C/1300	229	61	-7	54	57

*Insulation is a minimum of Autex ASB4, Martini MSB4, Earthwool 3068 or CSR Bradford 75mm Glasswool Partition Batt.

**Indicates non-compliance with Building Code of Australia for airborne sound.

ACOUSTIC PERFORMANCE

Impact Sound Insulation – Bare Floor

Using FC Formwork – 10mm Plasterboard Ceiling (Not less than 6.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
F1 130R/500	105	61
F2 150R/500	135	61
F3 130C/500	105	61
F4 150C/500	135	61
F5 200C/500	185	61
F6 250C/500	229	61

Using FC Formwork – 13mm Plasterboard Ceiling (Not less than 8.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
F1 130R/500	105	60
F2 150R/500	135	60
F3 130C/500	105	60
F4 150C/500	135	60
F5 200C/500	185	60
F6 250C/500	229	60

Using Metaldeck – 10mm Plasterboard Ceiling (Not less than 6.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
M1 150C/1300	135	60
M2 200C/1300	185	60
M3 250C/1300	229	60

Using Metaldeck 13mm Plasterboard Ceiling (Not less than 8.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
M1 150C/1300	135	60
M2 200C/1300	185	60
M3 250C/1300	229	60

ACOUSTIC PERFORMANCE

Impact Sound Insulation – Carpet on Quality Underlay

Using FC Formwork–10mm Plasterboard Ceiling (Not less than 6.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
F1 130R/500	105	23
F2 150R/500	135	23
F3 130C/500	105	23
F4 150C/500	135	23
F5 200C/500	185	23
F6 250C/500	229	23

Using FC Formwork – 13mm Plasterboard Ceiling (Not less than 8.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
F1 130R/500	105	23
F2 150R/500	135	23
F3 130C/500	105	23
F4 150C/500	135	23
F5 200C/500	185	23
F6 250C/500	229	23

Using Metaldeck–10mm Plasterboard Ceiling (Not less than 6.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
M1 150C/1300	135	23
M2 200C/1300	185	23
M3 250C/1300	229	23

Using Metaldeck – 13mm Plasterboard Ceiling (Not less than 8.5 kg/m²)

Ultrafloor System	Min. Ceiling Void	Predicted L _{nw}
M1 150C/1300	135	23
M2 200C/1300	185	23
M3 250C/1300	229	23