RENZO TONIN & ASSOCIATES 17 NOVEMBER 2020

Table 14: Estimated performance of UB-CR750-3MM with 8.5mm SPC flooring (floating)

ID	Description	Estimated sound insulation performance	Expected NCC compliance?
49	 8.5mm SPC flooring atop UB-CR750-3MM underlay (floating) 150mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 50$	√
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 54	✓
50	 8.5mm SPC flooring atop UB-CR750-3MM underlay (floating) 200mm thick concrete slab 	Airborne: $R_W+C_{tr} \ge 55$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 52	✓
51	 8.5mm SPC flooring atop UB-CR750-3MM underlay (floating) 200mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 60$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity and 50mm 11kg/m³ glasswool insulation 	Impact: L _{n,w} 47	✓
52	 8.5mm SPC flooring atop UB-CR750-3MM underlay (floating) 200mm thick concrete slab 	Airborne: $R_W+C_{tr} \ge 65$	✓
	 Two (2) layers of 13mm standard plasterboard suspended on a light ceiling grid incorporating <u>resilient</u> ceiling hangers with minimum 150mm cavity and 100mm thick 11kg/m³ glasswool insulation 	Impact: L _{n,w} 44	✓

Notes:

- All advices in in relation to acoustics only. The expected performances have regard to the assumptions that the consultant can be reasonably expected to make in accordance with professional industry practice and on the assumption that the consultant is exercising the level of skill, care and attention required of a consultant practicing in their professional industry.
- It is generally expected that the estimated performance to with ±3dB of the on-site performance. To obtain a more accurate indication of weighted sound reduction index performance, we recommend that the systems are laboratory tested.
- 8.5mm SPC flooring including 1.5mm EVA underlayment

Table 15: Estimated performance of UB-CR750-5MM with 8.5mm SPC flooring (floating)

ID	Description	Estimated sound insulation performance	Expected NCC compliance?
53	 8.5mm SPC flooring atop UB-CR750-5MM underlay (floating) 150mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 50$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 52	✓
54	 8.5mm SPC flooring atop UB-CR750-5MM underlay (floating) 200mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 55$	√
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 50	✓
55	 8.5mm SPC flooring atop UB-CR750-5MM underlay (floating) 200mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 60$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity and 50mm 11kg/m³ glasswool insulation 	Impact: L _{n,w} 45	✓
56	 8.5mm SPC flooring atop UB-CR750-5MM underlay (floating) 200mm thick concrete slab 	Airborne: $R_W+C_{tr} \ge 65$	✓
	 Two (2) layers of 13mm standard plasterboard suspended on a light ceiling grid incorporating <u>resilient</u> ceiling hangers with minimum 150mm cavity and 100mm thick 11kg/m³ glasswool insulation 	Impact: L _{n,w} 42	✓

Notes:

• Notes per Table 14.

RENZO TONIN & ASSOCIATES 17 NOVEMBER 2020

Table 16: Estimated performance of UB-CR750-3MM with 8.5mm SPC flooring (glued)

ID	Description	Estimated sound insulation performance	Expected NCC compliance?
57	 8.5mm SPC flooring atop UB-CR750-3MM underlay (glued) 150mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 50$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 57	✓
58	 8.5mm SPC flooring atop UB-CR750-3MM underlay (glued) 200mm thick concrete slab 	Airborne: $R_W+C_{tr} \ge 55$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 55	✓
59	 8.5mm SPC flooring atop UB-CR750-3MM underlay (glued) 200mm thick concrete slab 	Airborne: $R_W+C_{tr} \ge 60$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity and 50mm 11kg/m³ glasswool insulation 	Impact: L _{n,w} 50	✓
60	 8.5mm SPC flooring atop UB-CR750-3MM underlay (glued) 200mm thick concrete slab 	Airborne: $R_W+C_{tr} \ge 65$	✓
	 Two (2) layers of 13mm standard plasterboard suspended on a light ceiling grid incorporating <u>resilient</u> ceiling hangers with minimum 150mm cavity and 100mm thick 11kg/m³ glasswool insulation 	Impact: L _{n,w} 47	✓

Notes:

- All advices in in relation to acoustics only. The expected performances have regard to the assumptions that the consultant can be reasonably expected to make in accordance with professional industry practice and on the assumption that the consultant is exercising the level of skill, care and attention required of a consultant practicing in their professional industry.
- It is generally expected that the estimated performance to with ±3dB of the on-site performance. To obtain a more accurate indication of weighted sound reduction index performance, we recommend that the systems are laboratory tested.
- Use only appropriate adhesives and construction methods, that are recommended by the manufacturer to not diminish acoustic performance of the underlay. Use of incorrect adhesives, adhesion methods, and edge detailing may result in significantly decreased acoustic performance.
- 8.5mm SPC flooring including 1.5mm EVA underlayment

Table 17: Estimated performance of UB-CR750-5MM with timber flooring double bonded (glued)

ID	Description	Estimated sound insulation performance	Expected NCC compliance?
61	8.5mm SPC flooring atop UB-CR750-5MM underlay (glued)150mm thick concrete slab	Airborne: $R_W + C_{tr} \ge 50$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 55	✓
62	 8.5mm SPC flooring atop UB-CR750-5MM underlay (glued) 200mm thick concrete slab 	Airborne: $R_W+C_{tr} \ge 55$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 53	✓
63	 8.5mm SPC flooring atop UB-CR750-5MM underlay (glued) 200mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 60$	✓
	 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity and 50mm 11kg/m³ glasswool insulation 	Impact: L _{n,w} 48	✓
64	 8.5mm SPC flooring atop UB-CR750-5MM underlay (glued) 200mm thick concrete slab 	Airborne: $R_W + C_{tr} \ge 65$	✓
	 Two (2) layers of 13mm standard plasterboard suspended on a light ceiling grid incorporating <u>resilient</u> ceiling hangers with minimum 150mm cavity and 100mm thick 11kg/m³ glasswool insulation 	Impact: L _{n,w} 45	✓

Notes: • Notes per Table 16.

Table 18: Estimated performance of 8.5mm SPC flooring (including 1.5mm EVA underlayment)

ID	Description	Estimated sound insulation performance	Expected NCC compliance?
65	8.5mm SPC flooring (including 1.5mm EVA underlayment) in floating configuration	Airborne: $R_W + C_{tr} \ge 50$	✓
	 150mm thick concrete slab 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 57	✓
66	8.5mm SPC flooring (including 1.5mm EVA underlayment) in floating configuration	Airborne: $R_W+C_{tr} \ge 55$	✓
	 150mm thick concrete slab 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity and 50mm thick 11kg/m³ glasswool insulation 	Impact: L _{n,w} 53	√
67	8.5mm SPC flooring (including 1.5mm EVA underlayment) in floating configuration	Airborne: $R_W + C_{tr} \ge 55$	✓
	 200mm thick concrete slab 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity (no insulation) 	Impact: L _{n,w} 55	✓
68	8.5mm SPC flooring (including 1.5mm EVA underlayment) in floating configuration	Airborne: $R_W + C_{tr} \ge 60$	✓
	 200mm thick concrete slab 13mm standard plasterboard suspended on a light ceiling grid with minimum 150mm cavity and 50mm thick 11kg/m³ glasswool insulation 	Impact: L _{n,w} 50	√
69	8.5mm SPC flooring (including 1.5mm EVA underlayment) in floating configuration	Airborne: $R_W + C_{tr} \ge 65$	✓
	 200mm thick concrete slab Two (2) layers of 13mm standard plasterboard suspended on a light ceiling grid incorporating <u>resilient</u> ceiling hangers with minimum 150mm cavity and 100mm thick 11kg/m³ glasswool insulation 	Impact: L _{n,w} 45	*

Notes:

- All advices in in relation to acoustics only. The expected performances have regard to the assumptions that the consultant can be reasonably expected to make in accordance with professional industry practice and on the assumption that the consultant is exercising the level of skill, care and attention required of a consultant practicing in their professional industry.
- It is generally expected that the estimated performance to with ±3dB of the on-site performance. To obtain a more accurate indication of weighted sound reduction index performance, we recommend that the systems are laboratory tested.