

15 Appendix B – Table for noise ingress and building services noise emissions

Room typology	Details	Noise levels due to noise ingress(dB)	Details	Noise levels due to building services operation (NC / NR)
Bedroom – single person	Single - bed ward, single - bed recovery areas and on - call room, relatives' overnight stay	40 $L_{Aeq, 1hr}$ daytime 35 $L_{Aeq, 1hr}$ night 45 $L_{Amax, f}$ night	Single bed, on-call rooms, overnight stay recovery rooms	NC / NR 30 NC / NR 35
Bedroom – multi-bed	Multi - bed wards, recovery areas	45 $L_{Aeq, 1hr}$ daytime 35 $L_{Aeq, 1hr}$ night 45 $L_{Amax, f}$ night	multi – bed ward	NC / NR 30
Small office-type spaces	Private offices, small treatment rooms, interview rooms, consulting rooms	40 $L_{Aeq, 1hr}$	Private offices, treatment rooms, interview rooms, consulting rooms	NC / NR 35
Open clinical areas	A & E	45 $L_{Aeq, 1hr}$	A&E	NC / NR 40
Circulation spaces	Corridors, hospital street, atria	55 $L_{Aeq, 1hr}$	Corridors, hospital street, atria	NC / NR 40
Public areas	Dining areas, waiting areas, playrooms	50 $L_{Aeq, 1hr}$	Dining areas, waiting areas, playrooms	NC / NR 40
Personal hygiene (en - suite)	Toilets, showers	45 $L_{Aeq, 1hr}$	Toilets, showers	NC / NR 40
Personal hygiene (public and staff)	Toilets, showers	55 $L_{Aeq, 1hr}$	Toilets, showers	NC / NR 45
Small food-preparation areas	Ward kitchens	50 $L_{Aeq, 1hr}$	Ward kitchens	NC / NR 40
Large food-preparation areas	Main kitchens	55 $L_{Aeq, 1hr}$	Main kitchens	NC / NR 50 and NC / NR 55 below extract hoods
Large meeting rooms (>35 m2 floor area)	Lecture theatres, meeting rooms, board rooms, seminar rooms, classrooms	35 $L_{Aeq, 1hr}$	Lecture theatres, meeting rooms, board rooms, seminar rooms, classrooms	NC / NR 30
Small meeting rooms (≤35 m2 floor area)	Meeting rooms, seminar rooms, classrooms, board rooms	40 $L_{Aeq, 1hr}$	Meeting rooms, seminar rooms, classrooms, board rooms	NC / NR 35
Operating theatres	Operating theatres	40 $L_{Aeq, 1hr}$ 50 $L_{Amax, f}$	Operating theatres	NC / NR 40
Laboratories	Laboratories	45 $L_{Aeq, 1hr}$		NR 40 when laboratory has no fume cupboards NR 60 at 1m from fume cupboards with open sash
Laminar flow theatres			Operating Theatres	NC / NR 50
Utility rooms			Clean utility / dirty utility	NR / NC 40
Plantrooms			MEP plant	NC / NR 70

Table – Criteria for noise intrusion from external sources and building services emissions

*Notes:

- Night is defined as 23:00 to 07:00.
- A $L_{Amax, f}$ limit for short-term events is included for sleeping areas and operating theatres. The intention is that this should apply to events that occur several times during the night (for example passing trains) rather than sporadic events.
- If windows have trickle vents, the criteria would normally apply with the windows closed but trickle vents open. If natural ventilation is used by means other than trickle vents, the acoustic criteria are to be met whilst the ventilation is operational.
- When the facility is built on noisy sites, acoustically treated trickle vents or mechanical ventilation may be required.

Part G: Acoustics

- High performing, suitably sealed façades may be necessary for the noisiest sites. The acoustic advisor should liaise with the building services designer for the same.