Quiet House Package C

63-66 dB $L_{Aeq(Day)}$ & 58-61 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	 Up to 20% floor area (R_w + C_{tr} ≥ 31): Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. Up to 40% floor area (R_w + C_{tr} ≥ 34): Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing. 	 Up to 40% floor area (R_w + C_{tr} ≥ 31): Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. Up to 60% floor area (R_w + C_{tr} ≥ 34): Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.
	Side On	As above, except R _w + C _{tr} values may be 3	B dB less or max % area increased by 20%.
	Opposite	As above, except R _w + C _{tr} values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	Not recommended.	 Doors to achieve R_w + C_{tr} ≥ 30: Fully glazed hinged door with certified R_w + C_{tr} ≥ 31 rated door and frame including seals and 10mm glass; 40mm Solid timber core side hinged door, frame and seal system certified to R_w 32 including seals. Any glass inserts to be minimum 6mm.
	Side On	As above, except $R_{\rm w}$ + $C_{\rm tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except R_w + C_{tr} values may be 6 dB less or max % area increased by 20%.	
External Walls	AII	 R_w + C_{tr} ≥ 50: Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 50mm glasswool or polyester insulation (R2.0+). Resilient ties used where required to connect leaves. Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 50mm glasswool or polyester insulation (R2.0+). Single leaf of 220mm brick masonry with 13mm cement render on each face. 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. Single leaf of 90mm clay brick masonry with:	
Roofs and Ceilings	All	 R_w + C_{tr} ≥ 40: Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibrous insulation between steel sheeting and roof battens; R3.0+ insulation batts above ceiling; 2 x 10mm plasterboard ceiling or 1 x 13mm sound-rated plasterboard affixed using steel furring channel to ceiling rafters. 	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor and/or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	