

## Quiet House Package C

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

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	<ul style="list-style-type: none"> <li>Up to 20% floor area (<math>R_w + C_{tr} \geq 31</math>):               <ul style="list-style-type: none"> <li>Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing.</li> </ul> </li> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 34</math>):               <ul style="list-style-type: none"> <li>Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 31</math>):               <ul style="list-style-type: none"> <li>Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing.</li> </ul> </li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 34</math>):               <ul style="list-style-type: none"> <li>Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.</li> </ul> </li> </ul>
	Side On	As above, except $R_w + C_{tr}$ 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 Doors	Facing	<ul style="list-style-type: none"> <li>Not recommended.</li> </ul>	<ul style="list-style-type: none"> <li>Doors to achieve <math>R_w + C_{tr} \geq 30</math>:               <ul style="list-style-type: none"> <li>Fully glazed hinged door with certified <math>R_w + C_{tr} \geq 31</math> rated door and frame including seals and 10mm glass;</li> <li>40mm Solid timber core side hinged door, frame and seal system certified to <math>R_w 32</math> including seals. Any glass inserts to be minimum 6mm.</li> </ul> </li> </ul>
	Side On	As above, except $R_w + C_{tr}$ 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	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 50</math>:           <ul style="list-style-type: none"> <li>Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (<math>24\text{kg/m}^3</math>). Resilient ties used where required to connect leaves.</li> <li>Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (<math>24\text{kg/m}^3</math>).</li> <li>Single leaf of 220mm brick masonry with 13mm cement render on each face.</li> <li>150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face.</li> <li>Single leaf of 90mm clay brick masonry with:               <ul style="list-style-type: none"> <li>A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres;</li> <li>A cavity of 25mm between leaves;</li> <li>50mm glasswool or polyester insulation (<math>11\text{kg/m}^3</math>) between studs; and</li> <li>One layer of 10mm plasterboard fixed to the inside face.</li> </ul> </li> </ul> </li> </ul>	
Roofs and Ceilings	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 40</math>:           <ul style="list-style-type: none"> <li>Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibrous insulation between steel sheeting and roof battens;</li> <li>R3.0+ insulation batts above ceiling;</li> <li>2 x 10mm plasterboard ceiling or 1 x 13mm sound-rated plasterboard affixed using steel furring channel to ceiling rafters.</li> </ul> </li> </ul>	
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.	