



**LOCAL DEVELOPMENT PROVISIONS**

**PRELIMINARY**

Unless provided for below, the provisions of the City of Wanneroo District Planning Scheme No.2, the Western Precinct Local Structure Plan No. 102 or the Residential Design Codes (R-Codes) apply.

**QUIET HOUSE DESIGN**

(Lots 91-117, 347-350, 395, 396, 400, 401, 406, 415-417, 442-444 and 446)

1. Quiet House Design requirements are applicable to lots as identified on this LDP. Details of Quiet House Design requirements are included in Sheet 2 of the LDP, as per Lloyd George Acoustics Assessment, dated 25 May 2023 (WAPC reference 155700).

**QUIET HOUSE DESIGN**

- Upper Floor - Package A  
Ground Floor - Not Required
- Upper Floor - Package C  
Ground Floor - Package A

**LEGEND**

- Local Development Plan Area
- Public Open Space

This Local Development Plan has been approved by Council under clause 52(1)(a) of the Deemed Provisions in District Planning Scheme No.2

1 August 2023  
Date

Manager, Approval Services  
City of Wanneroo

**Package A Acoustic Treatments**

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 28</math>):                             <ul style="list-style-type: none"> <li>Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing;</li> <li>Sealed awning or casement windows with minimum 6mm glass.</li> </ul> </li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 31</math>):                             <ul style="list-style-type: none"> <li>Sealed awning or casement windows with minimum 6mm glass.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 25</math>):                             <ul style="list-style-type: none"> <li>Sliding or double hung with minimum 6mm single or 6mm-12mm-6mm double insulated glazing;</li> </ul> </li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 28</math>);</li> <li>Up to 80% floor area (<math>R_w + C_{tr} \geq 31</math>).</li> </ul>
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	No specific requirements	
External Doors	Facing	<ul style="list-style-type: none"> <li>Fully glazed hinged door with certified <math>R_w + C_{tr} \geq 28</math> rated door and frame including seals and 6mm glass.</li> </ul>	<ul style="list-style-type: none"> <li>Doors to achieve <math>R_w + C_{tr} \geq 25</math>:                             <ul style="list-style-type: none"> <li>35mm Solid timber core hinged door and frame system certified to <math>R_w 28</math> including seals;</li> <li>Glazed sliding door with 10mm glass and weather seals.</li> </ul> </li> </ul>
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less.	
	Opposite	No specific requirements	
External Walls	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 45</math>:                             <ul style="list-style-type: none"> <li>Two leaves of 90mm thick clay brick masonry with minimum 20mm cavity; or</li> <li>Single leaf of 150mm brick masonry with 13mm cement render on each face; or</li> <li>One row of 92mm studs at 600mm centres with:                                     <ul style="list-style-type: none"> <li>Resilient steel channels fixed to the outside of the studs; and</li> <li>9.5mm hardboard or fibre cement sheeting or 11mm fibre cement weatherboards fixed to the outside;</li> <li>75mm thick mineral wool insulation with a density of at least <math>11\text{kg/m}^3</math>; and</li> <li>2 x 16mm fire-rated plasterboard to inside.</li> </ul> </li> </ul> </li> </ul>	
Roofs and Ceilings	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 35</math>:                             <ul style="list-style-type: none"> <li>Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard.</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 metres height above ground level.	

**Package C Acoustic Treatments**

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 28</math>):                             <ul style="list-style-type: none"> <li>Sliding or double hung 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 31</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>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> <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> </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 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.	