



## Provisions

### Preliminary

- Development shall be in accordance with the provisions of the City of Cockburn Town Planning Scheme No. 3, and the Residential Design Codes (R-Codes) for the relevant density code.
- This Local Development Plan (LDP) replaces the 'Deemed-to-comply' provisions of the R-Codes, where listed below or annotated on the plan.
- Lots that are not marked as subject of this LDP are shown for illustrative purposes only.

### Variations to the residential design codes

- Refer table overleaf.











### Other built form provisions

- Dwelling designs for all lots abutting a secondary street or Public Open Space shall include at least one major opening, unobstructed by fencing, facing the secondary street or Public Open Space.
- Where a garage location is specified on the LDP Map, the garage / carport / parking bays shall be provided in that location. Garages for Lots 810, 821 and 834 shall be located so as not to interfere with the bin pads shown on the LDP, unless the need for the bin pads has ceased as a result of the adjacent streets having been connected into Development Area 41 to the west.
- Bin presentation pads shall be located where specified on the LDP map for Lots 714, 737-740, 811-814, 820 and 834.
- In addition to cl.5.4.3 of the R-Codes, enclosed non-habitable structures, such as storage sheds, that are visible from the public realm are only permitted if attached to the dwelling and constructed of the same materials and finishes as the dwelling.
- In addition to cl.5.4.4 of the R-Codes, clothes drying, refuse, general storage areas and ground based hot water storage tanks are to be screened from the public view.

### Quiet house construction

- All lots are within the Jandakot Airport "Frame Area" and must incorporate 6.38mm laminated glazing to all habitable rooms, including kitchens. Plans accompanying the Building Permit applications must clearly demonstrate that 6.38mm laminated glazing is provided to all applicable rooms.
- Where specified on the LDP map, lots are subject to the Quiet House design requirements detailed on page 3 of this LDP. Where upper floors are proposed on these lots, an acoustic report shall be submitted with the Building Permit to determine the required noise treatment for the upper floor. Should the development propose variations to the recommendations of that acoustic report, this shall be assessed through a development application.
- Modifications to the Quiet House design requirements may be approved by the City through a development application, where it can be demonstrated that proposed development will be provided an acceptable level of acoustic amenity, and subject to the development application being accompanied by a Transportation Noise Assessment undertaken by a suitably qualified professional.

## Legend

-  Lots subject to LDP
-  R30
-  R40
-  Public Open Space
-  Bush Forever
-  Mandatory Garage Location
-  Bin Pad Location
-  Primary Dwelling Orientation
- Quiet House Package**
  -  Package A
  -  Package B



# Provisions

R-Code	Street setback and fences	Lot boundary setback	Open space and outdoor living areas	Garage setback and width	Parking	Overshadowing	Privacy
R30	<p>2m minimum, no average. 1.5m to porch / veranda no maximum length. 1m minimum to secondary street. Front fences within the primary street setback area being a maximum height of 1.2m (measured from the natural ground level on the primary street side of the front fence) and visually-permeable above 0.75m.</p> <p>For Lots 1, 10, 348, 353, 360 and 374 any fencing abutting Public Open Space within 6m from the front lot boundary shall be subject to the same requirement for as for front fences.</p>	<p><b>Boundary setback</b> 1.2m for wall height 3.5m or less with major openings. 1m for wall height 3.5m or less without major openings.</p> <p><b>Boundary walls</b> To both side boundaries subject to: 2/3 Length to one side boundary, 1/3 max length to second side boundary for wall height 3.5m or less.</p>	<p>An outdoor living area with an area of 10% of the lot size or 20m<sup>2</sup>, whichever is greater, directly accessible from a habitable room of the dwelling and located behind the street setback area.</p> <p>At least 70% of the OLA must be uncovered and includes areas under eaves which adjoin uncovered areas. The OLA has a minimum 3m length or width dimension. No other R-Codes site cover standards apply.</p>	<p><b>Rear load</b> 0.5m garage setback to laneway.</p> <p><b>Front load</b> 4.5m garage setback from the primary street and 1.5m from a secondary street.</p> <p>The garage setback from the primary street may be reduced to 4m where an existing or planned footpath or shared path is located more than 0.5m from the street boundary.</p> <p>For front loaded lots with street frontages between 10.5 and 12m, a double garage is permitted to a maximum width of 6m as viewed from the street subject to:</p> <ul style="list-style-type: none"> <li>Garage setback a minimum of 0.5m behind the building alignment.</li> <li>A major opening to a habitable room directly facing the primary street.</li> <li>An entry feature consisting of a porch or veranda with a minimum depth of 1.2m; and</li> <li>No vehicular crossover wider than 4.5m where it meets the street.</li> </ul> <p>Lots with a frontage less than 10.5m or not compliant with above require single or tandem garaging.</p>	Two on-site bays.	<p>No maximum overshadowing for wall height 3.5m or less.</p> <p>No maximum overshadowing for wall height greater than 3.5m where overshadowing is confined to the front half of the lot. If overshadowing intrudes into rear half of the lot, shadow cast does not exceed 35%.</p>	R-Codes clause 5.4.1 C1.1 applies, however the setback distances are 3m to bedrooms and studies, 4.5m to major openings to habitable rooms other than bedrooms and studies and 6m to unenclosed outdoor active habitable spaces.
R40	<p>2m minimum, no average. 1.5m to porch / veranda no maximum length. 1m minimum to secondary street. Front fences within the primary street setback area being a maximum height of 1.2m (measured from the natural ground level on the primary street side of the front fence) and visually-permeable above 0.75m.</p>	<p><b>Boundary setback</b> 1.2m for wall height 3.5m or less with major openings. 1m for wall height 3.5m or less without major openings.</p> <p><b>Boundary walls</b> To both side boundaries subject to: For Lots 310-318, no maximum length to one side boundary, 2/3 max length to second side boundary for wall height 7m or less. For all other lots, maximum length to one side boundary, 2/3 max length to second side boundary for wall height 3.5m or less.</p>	<p>An outdoor living area with an area of 10% of the lot size or 20m<sup>2</sup>, whichever is greater, directly accessible from a habitable room of the dwelling and located behind the street setback area.</p> <p>At least 70% of the OLA must be uncovered and includes areas under eaves which adjoin uncovered areas. The OLA has a minimum 3m length or width dimension. No other R-Codes site cover standards apply.</p>	<p><b>Rear load</b> 0.5m garage setback to laneway.</p> <p><b>Front load</b> 4.5m garage setback from the primary street and 1.5m from a secondary street.</p> <p>The garage setback from the primary street may be reduced to 4m where an existing or planned footpath or shared path is located more than 0.5m from the street boundary.</p> <p>For front loaded lots with street frontages between 10.5 and 12m, a double garage is permitted to a maximum width of 6m as viewed from the street subject to:</p> <ul style="list-style-type: none"> <li>Garage setback a minimum of 0.5m behind the building alignment.</li> <li>A major opening to a habitable room directly facing the primary street.</li> <li>An entry feature consisting of a porch or veranda with a minimum depth of 1.2m; and</li> <li>No vehicular crossover wider than 4.5m where it meets the street.</li> </ul> <p>Lots with a frontage less than 10.5m or not compliant with above require single or tandem garaging.</p>	Two on-site bays.	<p>No maximum overshadowing for wall height 3.5m or less.</p> <p>No maximum overshadowing for wall height greater than 3.5m where overshadowing is confined to the front half of the lot. If overshadowing intrudes into rear half of the lot, shadow cast does not exceed 35%.</p>	R-Codes clause 5.4.1 C1.1 applies, however the setback distances are 3m to bedrooms and studies, 4.5m to major openings to habitable rooms other than bedrooms and studies and 6m to unenclosed outdoor active habitable spaces.

# Quiet House Packages

## Quiet House Package A 56-58 dB L Aeq(Day) & 51-53 dB L Aeq(Night)

Element	Orientation	Bedroom	Indoor Living & 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>): Sliding of double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing; Sealed awning or casement windows with minimum 6mm glass.</li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 31</math>): Sealed awning or casement windows with minimum 6mm glass.</li> </ul>	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 25</math>): Sliding of double hung with minimum 6mm single or 6mm-12mm-6mm double insulated glazing;</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>): 35mm Solid timber core hinged door and frame system certified to <math>R_w 28</math> including seals; Glazed sliding door with 10mm glass and weather seals.</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>: Two leaves of 90mm thick clay brick masonry with 20mm cavity; Single leaf of 150mm brick masonry with 13mm cement render on each face. 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 material wool insulation with a density of at least 11kg/m<sup>3</sup>; and</li> <li>- 2 x 16mm fire-rated plasterboard to inside.</li> </ul> </li> </ul>	
	Side On	As above, except $R_w + C_{tr}$ values may be 3 db less.	
	Opposite	No specific requirements	
Roof & Ceilings	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 35</math>: Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard.</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.	

### Mechanical ventilation/airconditioning

To achieve acceptable internal noise levels, mechanical ventilation or airconditioning is required to ensure that windows can remain closed, observing the following:

- Evaporative airconditioning systems may not meet the requirements because windows need to remain open. Where evaporative is preferred, the design is to be reviewed and approved by a suitably qualified acoustical consultant being a member firm of the Association of Australian Acoustical Consultants (AAAC);
- Refrigerative airconditioning systems need to be designed to achieve fresh air ventilation requirements;
- air inlets need to be positioned facing away from the transport corridor where practicable; and
- ductwork needs to be provided with adequate silencing to prevent noise intrusion.

## Quiet House Package B 59-62 dB L Aeq(Day) & 54-57 dB L Aeq(Night)

Element	Orientation	Bedroom	Indoor Living & Work Areas
External Windows	Facing	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 31</math>): Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing.</li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 34</math>): Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.</li> </ul>	<ul style="list-style-type: none"> <li>Up to 40% floor area (<math>R_w + C_{tr} \geq 28</math>): Sliding of double hung with minimum 6mm single or 6mm-12mm-10mm double insulated glazing; Sliding awning or casement windows with minimum 6mm glass.</li> <li>Up to 60% floor area (<math>R_w + C_{tr} \geq 31</math>);</li> <li>Up to 80% floor area (<math>R_w + C_{tr} \geq 34</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	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>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>	<ul style="list-style-type: none"> <li>Doors to achieve <math>R_w + C_{tr} \geq 28</math>: 40mm solid timber core hinged door and frame system certified to <math>R_w 32</math> including seals; 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>
	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>: Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 50mm glass wool or polyester insulation (R2.0+). Resilient ties used where required to connect leaves; Two leaves of 110mm thick clay brick masonry with minimum 50mm cavity between leaves and 50mm glass wool 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:                             <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 glass wool or polyester insulation (R2.0+) between studs; and</li> <li>- One layer of 10mm plasterboard fixed to the inside face.</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%.	
Roof & Ceilings	All	<ul style="list-style-type: none"> <li><math>R_w + C_{tr} \geq 35</math>: Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling with R3.0+ fibrous insulation.</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.	

### Mechanical ventilation/airconditioning

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- Refrigerative airconditioning systems need to be designed to achieve fresh air ventilation requirements;
- air inlets need to be positioned facing away from the transport corridor where practicable; and
- ductwork needs to be provided with adequate silencing to prevent noise intrusion.