

EGLINTON VILLAGE

LOCAL DEVELOPMENT PLAN No. 23

(WAPC 163635)

PROVISIONS

Unless provided for below, the provisions of the City of Wanneroo District Planning Scheme No. 2, the Eglinton Agreed Local Structure Plan No. 82 and State Planning Policy 7.3 Residential Design Codes - Volume 1 (R-Codes) apply.




Quiet House Design

1. Quiet House Design requirements are applicable to lots identified on this LDP. Details of Quiet House Packages are specified at Tables 1, 2 and 3 of this LDP (refer sheet 2).
2. Modifications to the Quiet House Design requirements may be approved by the City where it can be demonstrated that the proposed development will be provided at an acceptable level of acoustic amenity, and subject to the development proposal being accompanied by a noise assessment undertaken by a suitably qualified professional.

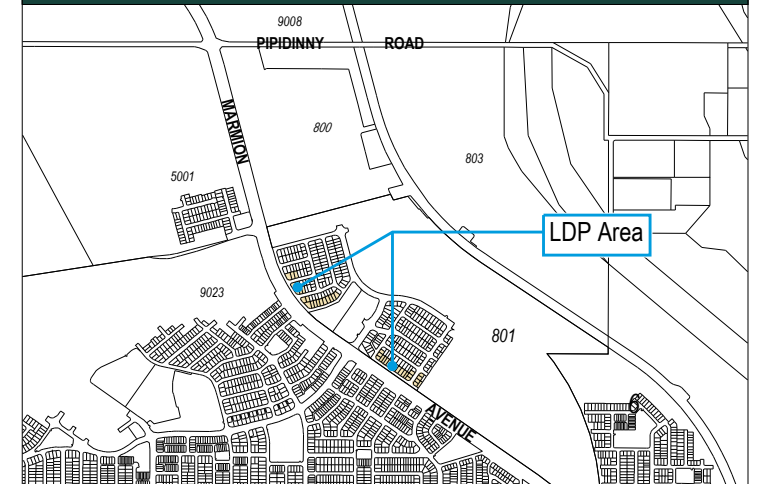
LEGEND

 Local Development Plan Area

QUIET HOUSE DESIGN

-  "Package A" Quiet House Design
-  "Package B" Quiet House Design
-  "Package C" Quiet House Design

LOCATION PLAN (NTS)



Package A			
Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External windows	Facing	<ul style="list-style-type: none"> Total external door and window system area up to 40% of room floor area: Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing (Rw+Ctr 28 dB). Sealed awning or casement windows may use 6 mm glazing instead. Up to 60% floor area: as per above but must be sealed awning or casement type windows (Rw+Ctr 31dB) 	<ul style="list-style-type: none"> Up to 40% floor area: Sliding, awning, casement or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 25dB). Up to 60% floor area: As per Bedrooms at up to 40% area (Rw+Ctr 28 dB). Up to 80% floor area: As per Bedrooms at up to 60% area (Rw+Ctr 31dB).
	Side on	As above, except Rw+Ctr values may be 3dB less, or max % area increased by 20%	
	Opposite	No specific requirements	
	External doors	Facing	<ul style="list-style-type: none"> Fully glazed hinged door with certified Rw+Ctr 28dB rated door and frame including seals and 6mm glass
	Side on	As per 'Facing' above, except Rw+Ctr values may be 3dB less, e.g. glazed sliding door with 10mm glass and weather seals for bedrooms.	
	Opposite	No specific requirements	
External walls	All	To achieve Rw+Ctr 45dB <ul style="list-style-type: none"> One row of 92mm studs at 600mm centres with: <ul style="list-style-type: none"> Resilient steel channels fixed to the outside of the studs; and 9.5mm hardboard or 9mm fibre cement sheathing or 11mm fibre cement weatherboards or one layer of 19mm board cladding fixed to the outside of the channels; and 75mm glass wool (11kg/m³) or 75mm polyester (14kg/m³) insulation, positioned between the studs; and Two layers of 16mm fire-protective grade plasterboard fixed to the inside face of the studs. Single leaf of 150mm brick masonry with 13mm cement render on each face. Double brick: two leaves of 90mm clay brick masonry with a 20mm cavity between leaves. 	
Roof and ceilings	All	To Rw+Ctr 35dB Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling.	
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 B			
Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External windows	Facing	<ul style="list-style-type: none"> Up to 40% of room floor area: Fixed sash, awning or casement with minimum 6mm single or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 31 dB). Up to 60% floor area: as per above but must be minimum 10 mm single or 6mm-12mm10mm double insulated glazing (Rw+Ctr 34dB). 	<ul style="list-style-type: none"> Up to 40% floor area: Sliding or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 28dB). Sealed awning or casement windows may use 6 mm glazing instead. Up to 60% floor area: As per Bedrooms at up to 40% area (Rw+Ctr 31 dB). Up to 80% floor area: As per Bedrooms at up to 60% area (Rw+Ctr 34dB).
	Side on	As per Quiet House A 'Facing' above (Rw+Ctr values may be 3dB less, or max % area increased by 20%).	
	Opposite	As per Quiet House A 'Side-on' above	
	External doors	Facing	<ul style="list-style-type: none"> Fully glazed hinged door with certified Rw+Ctr 31dB rated door and frame including seals and 10mm glass
	Side on	As per Quiet House A 'Facing' above (Rw+Ctr values may be 3dB less, or max % area increased by 20%).	
	Opposite	As per Quiet House A 'Side-on' above	
External walls	All	Bedroom and indoor living and work areas to Rw+Ctr 50dB <ul style="list-style-type: none"> Single leaf of 90mm clay brick masonry with: <ul style="list-style-type: none"> A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; A cavity of 25mm between leaves; 50mm glass wool or polyester cavity insulation (R2.0+) insulation between studs; and One layer of 10mm plasterboard fixed to the inside face 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 Double brick: two leaves of 90mm clay brick masonry with: <ul style="list-style-type: none"> A 50mm cavity between leaves 50mm glass wool or polyester cavity insulation (R2.0+) resilient ties where required to connect leaves Double brick: two leaves of 110mm clay brick masonry with a 50mm cavity between leaves and R2.0+ cavity insulation 	
Roof and ceilings	All	Concrete or terracotta tile or metal sheet roof, sarking and at least 10mm plasterboard ceiling, R3.0+ insulation	
Outdoor living areas		At least one outdoor living area located on the opposite side of the building from the 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.	

Package C			
Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External windows	Facing	<ul style="list-style-type: none"> Up to 20% of room floor area: Fixed sash, awning or casement with minimum 6mm single or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 31 dB). Up to 40% floor area: as per above but must be minimum 10 mm single or 6mm-12mm10mm double insulated glazing (Rw+Ctr 34dB). 	<ul style="list-style-type: none"> Up to 40% floor area: Sliding or double hung with minimum 6mm single pane or 6mm-12mm-6mm double insulated glazing (Rw+Ctr 31dB). Sealed awning or casement windows may use 6 mm glazing instead. Up to 60% floor area: As per Bedrooms at up to 40% area (Rw+Ctr 34 dB).
	Side on	As per Quiet House B 'Facing' above (Rw+Ctr values may be 3dB less, or max % area increased by 20%).	
	Opposite	As per Quiet House A 'Facing' above.	
External doors	Facing	<ul style="list-style-type: none"> External doors to bedrooms facing the corridor are not recommended. 	<ul style="list-style-type: none"> Doors to Rw+Ctr 30dB, e.g. <ul style="list-style-type: none"> Fully glazed hinged door with certified Rw+Ctr 31dB rated door and frame including seals and 10mm glass. 40mm solid core timber frame and door (without glass or with glass inserts not less than 6mm), side hinged with certified Rw 32dB acoustically rated door and frame system including seal
	Side on	As per Quiet House B 'Facing' above (Rw+Ctr values may be 3dB less, or max % area increased by 20%).	
	Opposite	As per Quiet House A 'Facing' above.	
External walls	All	Bedroom and indoor living and work areas to Rw+Ctr 50dB <ul style="list-style-type: none"> As per Quiet House B example above 	
Roof and ceilings	All	To Rw+Ctr 40dB <ul style="list-style-type: none"> To all bedrooms, 2 layers of 10mm plasterboard, or one layer 13 mm high density sealed plasterboard (minimum surface density of 12.5 kg/m²), affixed using steel furring channels beneath ceiling rafters / supports. R3.0+ insulation batts laid in cavity. Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibre insulation between steel sheeting and roof battens 	
Outdoor living areas		As per Quiet House B	

NOTES

Any penetrations in a part of the building envelope must be acoustically treated so as to not downgrade the performance of the building envelope. Most penetrations in external walls such as pipes, cable or ducts can be sealed through caulking gaps with non-hardening mastic or suitable mortar.

Mechanical Ventilation Requirements

Natural ventilation must be provided in accordance with F4.6 and F4.7 of Volume One and 3.8.5.2 of Volume Two of the National Construction Code. Where the noise limit is likely to be exceeded, a mechanical ventilation system is usually required. Mechanical ventilation systems will need to comply with AS 1668.2 - The use of mechanical ventilation and air-conditioning in buildings.

In implementing the acceptable treatment packages, the following must be observed:

- Evaporative air conditioning systems will meet the requirements for Packages A and B provided attenuated air vents are provided in the ceiling space and designed so that windows do not need to be opened.
- Refrigerant based air conditioning systems need to be designed to achieve fresh air ventilation requirements.
- External openings (e.g. air inlets, vents) need to be positioning facing away from the transport corridor where practicable.
- Ductwork needs to be provided with adequate silencing to prevent noise intrusion."