KARDINYA

RISE

Design Guidelines

Welcome HOME

With elevated lots in familiar surrounds, Kardinya Rise gives you the rare opportunity to build new in a long established, sought-after neighbourhood. These design guidelines ensure that your home and landscaping complements the vision for your community and builds on the natural character of Kardinya Rise.

KARDINYA RISE

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Introduction.

Design guidelines and how they work.

These Design Guidelines relate to residential lots within Kardinya Rise.

This document is a tool to ensure a high quality of design and amenity for all residents and community members. It also seeks to minimize environmental impacts, to respect and enhance the existing natural context; and can offer ways to add to the value of your home.

Some of the guidelines are compulsory, others are suggestions. The compulsory guidelines are presented within this document as "must" and suggestions are represented as "recommendations".

Your home design must comply with the requirements of Kardinya Rise Design Guidelines. Home designers must also review and comply with other legally binding documentation, such as:

- City of Melville Town Planning Scheme No. 6
- Residential Design Codes (R-Codes)
- Local Development Plans
- Any relevant Local Planning Policies, codes and standards.

KARDINYA

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The Approval *Process.*

Before your new home can be built at Kardinya Rise , you must seek approval from the Yolk Property Group (the Developer) and the relevant local government authority by following the three steps outlined further.

Step One

Submit the following PDF plans for approval to the Developer by emailing **designreview@harrisjenkins.com**

- Site plan, floor plans and landscaping plans including fencing details (min scale 1:200)
- Elevations depicting materials and fencing details (coloured and min scale 1:200) The Developer will review your application to ensure it complies with Kardinya Rise Design Guidelines.

Step Two

Outcome A: Your application meets all the Design Guidelines' compulsory requirements. Your application will proceed to Step 3.

Outcome B: Your application needs to be modified or you need to provide more detail to meet all the compulsory Design Guidelines. The Developer will outline what is required so you can update and resubmit your plans for review.

Step Three

- The Developer approves and returns your application to you with a confirmation email. Your builder can now send your approved application and confirmation email (along with all the other information required) to the City of Melville. Please note:
- A building design approved by the Developer does not automatically guarantee building license by the City of Melville.
- The City of Melville will take the Developer's approval of a building design into account in the statutory approval process.
- Any changes to a home that do not comply with the Design Guidelines will need to be rectified at the home owner's expense.
- Development approval is not required for single dwellings that comply with the City of Melville Local Planning Policy.

Street Appeal.






The street frontage of the home plays a role in defining the form and character of the street and must be sited and oriented to directly address the main street and the pedestrian or vehicular approach.

Your home must have a front door and windows that face the street, which will contribute to street activation and passive surveillance, allowing for actual or perceived monitoring of public spaces by people as they go about their daily activities.

The presence of windows and a forward-facing entry will promote opportunities for social interaction and will enhance the street appeal of the development, reducing the likelihood of antisocial behavior. Your home must further reinforce this by the inclusion of a street facing porch, veranda or entry canopy.

Activation of the street through placement of windows and a main entry point should provide clear direct site lines from the dwelling, while maintaining appropriate privacy for residents.

Air conditioning units must not be visible from the street or visible above the fence line surrounding the dwelling. In addition, air conditioning units cannot to be installed on the roof.

Corner Lots

Corner lot homes must be designed to ensure the dwelling addresses both the primary and secondary street. The appearance of both the front and side of the home must be consistent in materiality and design quality. Your home must have at a minimum, one window within a habitable room facing the secondary street, facilitating continued passive surveillance and street activation.

Fencing and Letterboxes

To help make Kardinya Rise a friendly community with social streets, front boundary fencing must be visually permeable and comply with the City of Melville requirements.

Lots that have an elevation facing the park or POS must have vertical flat bar style aluminum fencing (black colour) with a top and bottom rail to an overall height of 1800mm. This fencing is to be broken into panels by brick piers which are also 1800mm high and Florentine Limestone or Beige in colour. Brick Pier spacing to be between 900mm – 1200mm.

Rear loaded lots must have their front elevation fencing in vertical flat bar style aluminum (black in colour) constructed to a height of 1200mm.

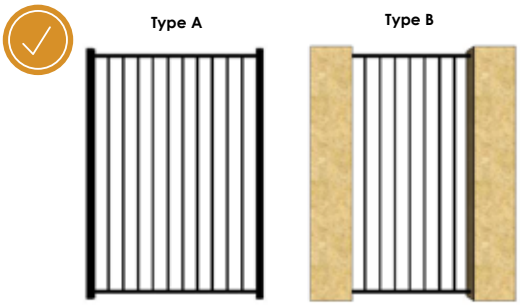
Corner lot fencing must be Colourbond after the building line.

Fencing forward of the building must be semi permeable vertical black flat bar and comply with the City of Melville requirements. The balance of the side fencing and rear fencing is to be Stratco Good Neighbour Fencing Superdek Profile. It should be 1800mm high and Slate Grey colour. All side and rear boundary gates should match your fence style.

Standard fencing is provided to purchasers by the Developer and is to be applied for by the purchaser 3 months prior to completion of their home. Fences that are provided by the Developer cannot be altered in any way. Nothing can be fixed to or change the nature of permeable fencing, other than landscaping.

Temporary screening of permeable side fences such as bamboo, shade clothes and tarps are not permitted. No advertising material or signage is permitted on dwelling fences.

All letterboxes are located at the entrance of the estate.



Retaining Walls and Levels

Any modifications to existing retaining walls must be approved by the Developer and must be constructed in the same materials and colours of existing walls.

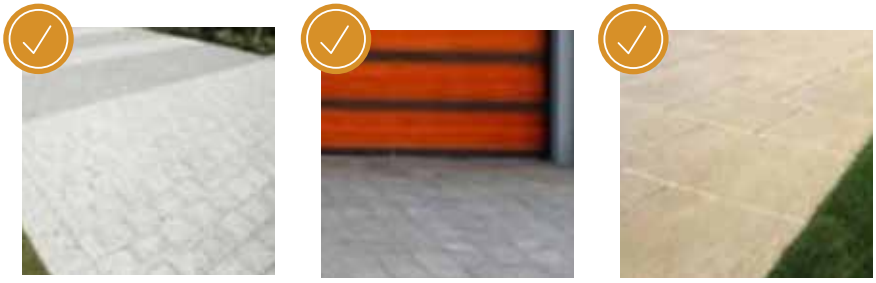
Driveways

Your garage must be positioned to maintain clear sight lines along the street and not to detract from the streetscape or appearance of dwellings; or obstruct views of dwellings from the street and vice versa. Ensure your crossover and driveway are positioned so that they do not conflict with street trees and existing service infrastructure such as light poles and power domes.

The driveway must be constructed of exposed aggregate, insitu concrete, or square profile concrete pavers, laid in stack bond. Diagonal paving arrangements are not permissible.

Permissible colour schemes must incorporate grey tones. Refrain from using red, cream, beige or Florentine Limestone colour schemes as these are not permitted. Your crossover and driveway must be completed prior to moving into your new home.

The location of crossovers and associated setback of individual dwellings are specified by the adopted LDP and should be reflected at the time of designing your home.



Your Home.

We want to ensure that Kardinya Rise is a successful residential estate, both in terms of it being a well organised and attractive estate and one that is highly sustainable.

Homes are encouraged to utilise passive solar design principles and solar technology, whilst also creating liveable, social streets and public spaces.

The street facing elevation of your home has an important visual impact on the overall streetscape of the estate. The streetscape is the visual identity of a neighbourhood and plays an important role in facilitating interaction between residents and creating a community. The design of every home should complement each other, working together to present a consolidated design approach which reinforces the design ethos of Kardinya Rise.

Well designed streetscapes encourage connection, understanding and community spirit among residents.

Facade Treatment

Ensure that the visual impact of your home is complementary to the overall street scape by choosing materials and colour schemes that are compliant with these Design Guidelines.

Your primary street facing elevation must incorporate a mix of a minimum of two materials and colours selected from the material and colour lists below, so that houses in the street have their own unique features to make for a visually interesting, but complementary streetscape:

- Rendered brickwork.
- Face brickwork or blockwork.
- Fibre cement sheet modular cladding –paint finish.
- Weatherboard or profiled timber lining.
- Profiled Colorbond steel cladding.
- Stone cladding.
- Feature tiling.
- Timber lined ceiling or eaves.
- Timber look garage door.
- Clear finished timber front door.
- Glazed front door.

This mix is to exclude roof, door and window treatments and each should comprise of no less than 10% of the front facade. Alternative materials to the above list are permitted to be submitted for consideration.

You must render/treat 2m on both sides of the home to ensure brickwork is not visible from the street.

We recommend the construction method of reverse brick veneer, in which the brickwork or blockwork is the inside skin tied to a conventional lightweight stud-framed construction which takes advantage of the material's thermal mass properties. It can produce high performing buildings with lower than average energy demands for both heating and cooling. We also recommend the use of foil or bulk insulation within cavities to further enhance the thermal resistance of masonry walls.

You should choose materials based on their thermal mass properties. When used appropriately, thermal mass can moderate internal temperatures by averaging day and night extremes, greatly influencing requirements for mechanical heating and cooling methods.

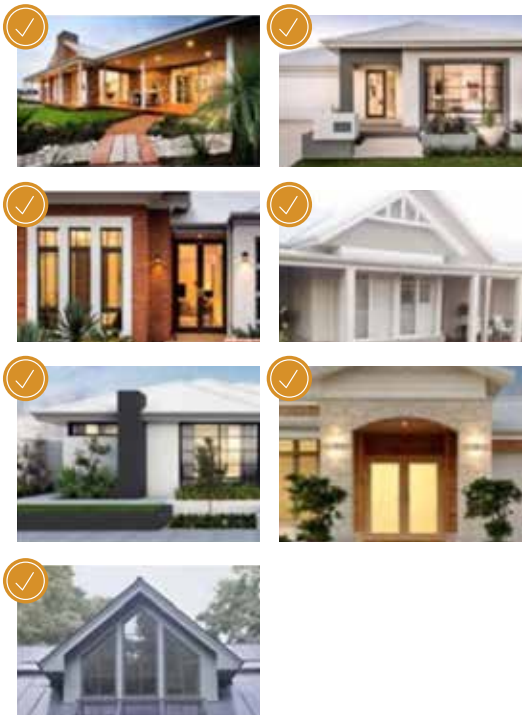
Materials with a high thermal mass should be located in areas of the home that are exposed to direct sunlight or radiant heat. We recommend that you choose materials based on their appropriate thermal mass properties while also considering how much they cost to produce.

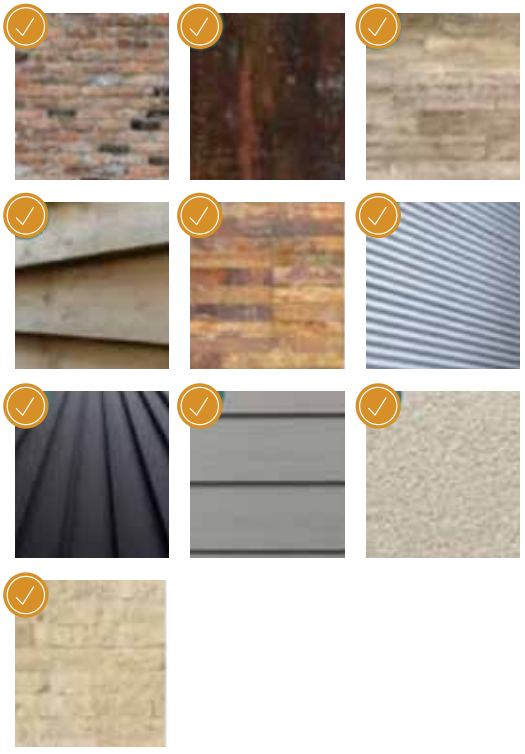
The use of non-toxic, sustainable and/or renewable materials are encouraged. Low or zero-emission volatile organic compound (VOCs) finishes are preferable, as VOCs are considered pollutants that can have adverse effects on the environment and on the health of home occupants.

No advertising material or signage is permitted on dwelling facades.

Corner Lots

Boundaries facing the side street must be treated the whole boundary.





Colour

Light colours must be used on external walls and on the roof to reduce the impact of solar heat gain on the dwelling (in particular; walls to the east and west).

Colours incorporated into the street facing facade must incorporate a minimum of two of the colours listed below. Applied paint finishes must match the below list of Colorbond finishes, with Surfmist being the highest recommended option.

Surfmist

Shale Grey

Windspray

Dune

Wallaby

Bassalt

Terrain

Where approved by the Developer, the use of an approved accent colour may be considered as an alternative to the use of two finishes listed above. The Developer, at its discretion, can install alternative colours of Colorbond to match neighbouring housing.

Any face brickwork must be in white, cream (not florentine), red, grey, brown or black, tones.

Front Door

The primary street elevation of your home must include a front door and windows that overlook the street with the front door being framed by a porch, verandah or entry canopy that is separate from your garage. Your front door can be:

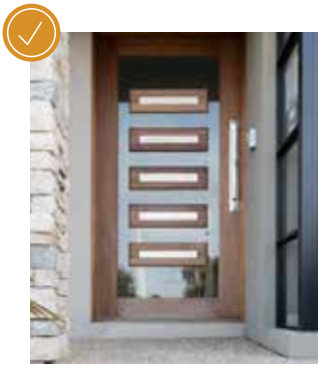
- Powder coat aluminium framed glazed door (clear or opaque).
- Clear finish timber.
- Painted timber.

The door is permitted to be a flush panel paint-finished door, external aluminium framed glazed door or a three horizontal-strip glazed feature door.

Garage Door, Gutters and Downpipes

Your garage must be located under the main roof of your house (requirement only applicable to front loaded homes) and your garage door must be a panel lift style door. Roller doors addressing the street front are not permitted.

Gutters, downpipes, capping and all flashing must be made from Colorbond steel or similar, finished in one of the Colorbond (or equivalent) colours listed under the subheading 'Colour'.



Windows

Window style must be modern and contemporary, feature bay windows are permissible.

Full height glazing down to the slab is recommended on windows at the front of the house facing the street. Windows must have powder coat aluminium frames and be in one of the colours listed under the subheading 'Colour'.

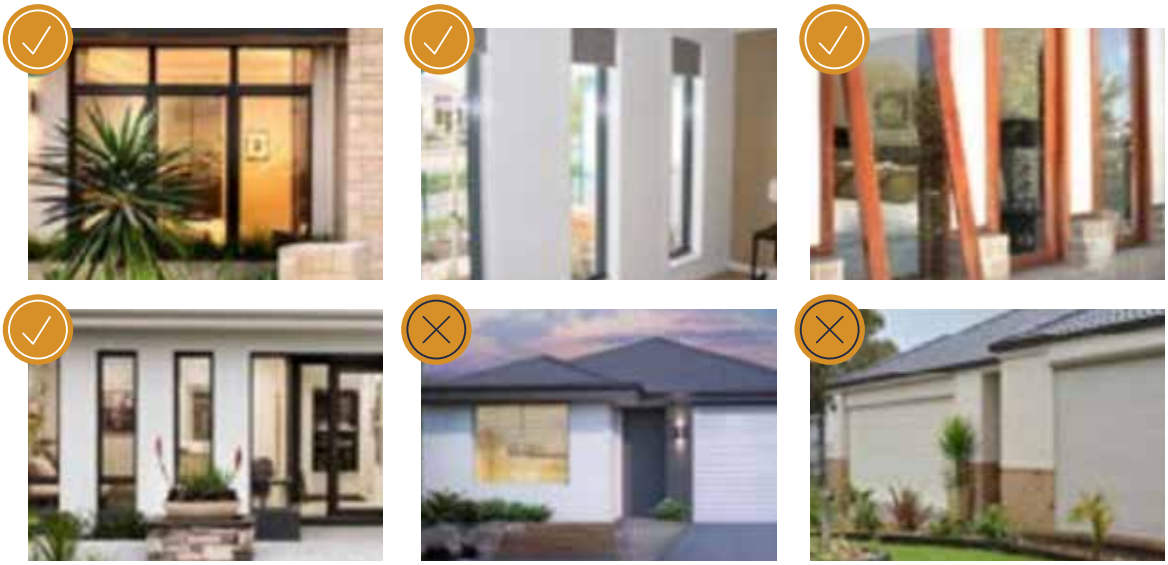
Natural ventilation can be achieved by two methods, the first being natural cross ventilation, which occurs when dwellings have openings with two different orientations so that breeze can flow through the room or building to flush out hot or stale air.

The second method is passive or buoyancy ventilation, which relies on the effect of rising hot air and requires high and low openings so that warm air is flushed from higher openings and cooler air is drawn in through lower openings.

To achieve the best solar orientation for your home, our recommendations are as follows:

- The development is sited and designed to optimise the number of dwellings receiving winter sunlight to private open space and via windows to habitable rooms. Ensure that the main indoor and outdoor living areas are oriented north.
- Ensure north facing windows are shaded to reduce unwanted heat gain. Fixed shading above windows should project by approximately 50% of the window height and extend 50% of the window height to either side of the window.
- West or east facing open space may require additional shading from low angle summer sun. Reduce size of windows to the east and west. Utilise fixed or adjustable vertical louvres or blades; deep verandas or pergolas with deciduous vines.
- Consider the use of low-emissivity (Low-E) laminated glazing as this glazing reduces the amount of solar heat gain while still maintaining good levels of visible light transmission.

Permanent roller shutters on windows facing towards primary or secondary street are not permitted. Alternatively, safety window treatments such as crime safe or decorative barriers are encouraged.



The Roof

Your roof makes a big impact on the overall style of your home and can also go a long way in making your home more climate- responsive. Where possible, we recommend having at least 40 square metres of roof angled towards the north, to allow for successful placement of solar panels.

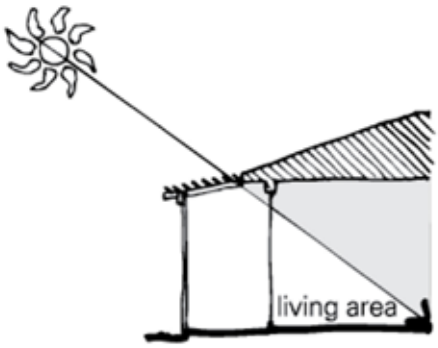
For the estate to achieve a consistent design aesthetic within Kardinya Rise, the roof of your home must be designed in accordance with the following criteria to ensure that

it is complementary to the surrounding development:

- Hip and gable roofs must have a pitch of 20-30 degrees.
- Single gable, concealed parapet roofs and skillion roof forms must have a maximum pitch of 20 degrees.
- Eaves must be provided to protect all sides of the dwelling from solar heat gain during summer (with the exception of where dwellings are built on a nil setback R-Codes clause 5.1.3 ((C3.3)).

Solar absorption ratings for the roof should be lower than 0.47. This information can be obtained from manufacturers. Metal Roofs should be a sleek, non-reflective profiled steel and therefore Zincalume and tiles are not permissible. Refer to the subheading 'Colour' listed earlier in the document for recommended appropriate colour choices.

Any colour selected from the recommended list, other than Surfmist will require additional insulation to reduce increased solar heat gain of darker colours during summer.



Note: The approving Architect may use discretion in relation to the skillion roof pitch prescribed above on the basis that the front elevation of the home achieves design excellence. As a guide please refer to renders on the estate's website that illustrates skillion roof home designs.

Outdoor Living Areas

Where possible, your outdoor living area must be designed to face north so that it is exposed to solar gain from the north during winter months, while also being protected from wind and rain. Northern facing covered areas will also offer protection from excessive solar heat gain during summer months. Where north facing outdoor living areas are not possible, east facing is also permitted.

Ancillary Buildings and Building Services

For Kardinya Rise to maintain a clean uncluttered streetscape with a complementary appearance of all buildings, footpaths, gardens, services and equipment, please ensure that your home adheres to the following guidelines:

- Any outbuildings, sheds, studios or ancillary accommodation must be constructed from a material that complements your home, such as:
    - Rendered brickwork.
    - Paint-finished cement modular cladding.
    - Weatherboard and profiled timber lining.
    - Profiled Colorbond steel.
    - Face brick or blockwork.
- Other materials may be submitted for consideration but will require approval from the Developer. Any paint finishes must match Colorbond colours that are listed earlier in the document under the subheading 'Colour'. Accent colours are also acceptable.
- Sheds, storerooms and outbuildings are not permitted to be located at the front of your home addressing the streetscape and must be constructed within the back yard. They must not visually impact on adjacent parks or public open space, or adjacent roadways.
- An enclosed, lockable storage area, constructed in a design and material matching the dwelling, accessible from outside the dwelling, with a minimum dimension of 1.5m with an internal area of at least 4sqm, for each Grouped or Multiple Dwelling.
- Air conditioning units must not be visible from the street or visible above the fence line surrounding the dwelling. In addition, air conditioning units cannot to be installed on the roof.

Sustainable Design

Climate-Responsive Design

The subdivision design of Kardinya Rise orients most lots so that homeowners can benefit from using solar-passive design principles in their home design and take full advantage of opportunities for natural heating and cooling, rather than relying solely on air conditioners, fans and the like.

You should consider the following solar access and natural ventilation recommendations to improve your home's environmental performance.

Solar Access

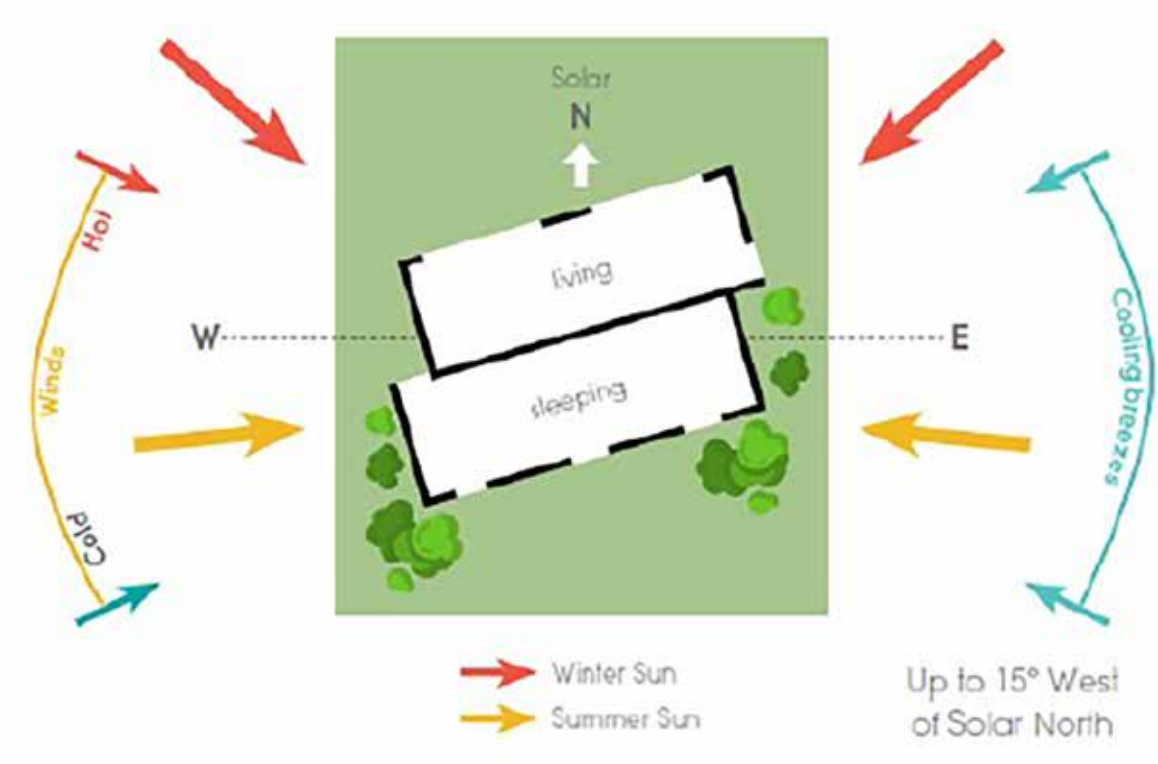
A climate-responsive design makes use of clever positioning in relation to the sun so that your home has solar access during winter for heat gain and is shaded during summer.

Orient the main living area such as the kitchen or family room towards the north so that the thermal mass within your floor slab can be heated by the winter sun. This thermal mass will radiate heat during the evening, reducing the requirement for mechanical heating.

Garages should be positioned to the west side of your home where possible to help insulate your home against solar heat gain from the summer sun. Where it is not possible to locate a garage on the west, locating it on the east is also beneficial.

Planting trees, shrubs and bushes alongside east and west external walls of your home will reduce heat absorption by the dwelling fa ade and will help to shade your home from the sun. Provide deeper eaves, awnings or verandahs along the west side of your home to further assist with shading from the summer sun.

Positioning laundries, bathrooms and some bedrooms should be to the south side of your home will allow for cooler, more comfortable sleeping wings. These rooms typically do not require much access to sunlight.



Natural Ventilation

Good indoor air-quality is essential for healthy and comfortable living environments, with poor indoor air-quality being a significant contributor to poor respiratory health. In most situations, optimising natural ventilation is the most affordable and effective way to manage indoor air quality. Natural ventilation is the movement of a sufficient volume of fresh air through a dwelling to refresh indoor air.

If your home is designed for good natural ventilation, this will contribute to passive cooling where there is a reduced requirement for mechanical cooling methods such as air-conditioning. Passive cooling is the least expensive means of cooling a home in both financial and environmental terms.

Thoughtfully placed windows or openings to allow for cross ventilation increases airflow to help cool your home naturally. This is particularly important for key living spaces in your home such as the kitchen, dining and family rooms.

Placing smaller windows or openings on the side of your home that gets most of the wind and larger ones on the opposite side, also helps encourage air flow.

Adding roof ventilation, like vented gables, e-vents or wind- activated mechanic ventilators help create air flow.

Thermal Efficiency

Through using the right materials and properly insulating your home, you can lower your energy consumption and in turn reduce your power bills.

We recommend:

- Making sure there are no draughts in your home by draught-sealing windows and doors to help maintain the temperature inside your home.
- Designing your home so your living and sleeping areas are compartmentalized meaning you can better control the temperature for each area.
- Appropriate use of thermal mass. To be effective, thermal mass must be integrated with sound passive design techniques.
- This means having appropriate areas of glazing facing appropriate directions with appropriate levels of shading, ventilation, insulation and thermal mass. Use of reverse brick veneer construction for external walls is an example of good use of thermal mass for external walls because the mass is located on the inside and is externally insulated.
- Ensuring that walls include insulation for improved energy and comfort – many builders include this at no additional cost but it is not always standard so be sure to ask. Insulation values should be as per recommended in the building code.

Windows

The sun shines in Western Australia for an average 3,000 plus hours a year so using solar as an energy source makes a lot of sense. As well as the environmental benefits, the solar system can help you save on your power bills.

- Increase the size of your photovoltaic system.
- Hot water systems should be as close as possible to the area of most use, such as the main bathroom.
- Install a basic energy monitor with the solar power system - a way for residents to see their energy consumption pattern in real time.
- Insulate hot water pipes.
- Electrical appliances should have a minimum 4-star rating.
- Seal downlights and exhaust fans.
- Exterior lighting should be operated via a timed sensor with a manual override switch.
- Internal tap fittings and shower fittings that use <6 litres a minute.
- Dishwasher with an energy consumption of <245kWh per annum.
- Air conditioning systems with COP of >3.20 and EER of >3.00 (see the minimum energy performance standards labelling on the device).

In-Home Energy Efficiency

In-home energy is a significant part of your total energy consumption. Choosing efficient applicants such as fridges and washing machines, and fixtures (such as ceiling fans and air conditioners) can significantly reduce your energy bills.

Peak load is the increased demand for electricity mainly during summer between 3pm and 9pm. This occurs when most people are at hime using multiple appliances such as TVs, computers and air conditioners. You can reduce your peak load demand by including smart meters and having peak load control devices fitted to fixtures and fittings.

Key Energy Efficiency elements include:

- Energy efficient, peak smart air conditioners
- Ceiling fans to living areas and bedrooms
- Energy efficient lights - LED or fluorescent (CFL's)
- Automatic lighting sensors

Landscaping and Gardens (Ecosystems)

Your front yard adds to the overall appearance of the streetscape. The trees and plants used in the landscaping throughout the estate have been chosen to suit the estate's unique style. To keep within this style, certain species have been selected for you to use in the landscaping of your home.

Your front garden must include plants of various colours, textures and sizes. Planting edible water- wise plants is also encouraged. All garden beds must be topped with mulch. Artificial turf is not permitted in the front garden.

Planting trees, shrubs and bushes alongside your home helps reduce heat absorption and helps shade your home from the sun. Landscaping near lot boundaries is encouraged to achieve additional privacy and shading.

The front landscaping packages are provided by the Developer.

Landscaping

Landscaping and Gardens

Your front yard adds to the overall look of the street. The trees and plants used in the landscaping throughout the estate have been chosen to suit Kardinya Rise unique style. To keep within this style, certain species have been selected for you to use in the landscaping of your home, and will be used in the frontg landscaping provided by the developer.

Your front garden must include plants of various colours, textures and sizes. Planting edible water-wise plants is also encouraged. All garden beds must be topped with mulch. Artificial turf is not permitted.

In addition to landscaping provided we encourage choosing native or edible ground cover instead of grass. These not only look great, they don't need as much water as grass.

We recommend that you consider the following:

- Your neighbors when planting trees
- Deciduous trees (those that drop their leaves each winter) are planted in north-facing areas
- There are no plants getting in the way of solar electricity equipment (yours or your neighbours'). Trees, bushes and hedges need to be trimmed near this equipment
- You install a water tap at both the front and rear of your home

Appendix 1 | Builder Checklist for Design Approval

The following checklists are a high-level guide to assist builders. Refer to the main document, sales contract, and LDP for details.

Criteria	Summary of Mandatory Requirements	Builder Checklist	Developer Pass	
			Yes	No
Street Appeal	Front of home faces the street			
	Home contains either: • Verandah • Entry Canopy or • Porch			
Gates	Side and rear boundary gates match fence			
Letterbox	Letterbox matches design of home			
Facade treatment	Front facade incorporates a minimum of two materials from the list below:: • Rendered brickwork • Paint-finish fibre cement sheet modular cladding • Weatherboard and profiled timber lining • Profiled Colorbond steel • Face brick or blockwork or • Other materials have been submitted for consideration • Treatment to side of home by 2m from front of building line			
	Lighter colours have been used on external walls and roofs			
	Corner lots: corner boundary to be treated entire length			
	Minimum of two colours used in front facade			
	Paint finishes match any of the below Colorbond colours: • Surfmist • Shale Grey • Dune • Windspray • Wallaby • Bassalt • Terrain			
	Any brickwork is in white, red, grey, brown or black tones			

Criteria	Summary of Mandatory Requirements	Builder Checklist	Developer Pass	
			Yes	No
Driveways	Driveway is made of exposed aggregate insitu concrete, or square profile concrete, laid in stack bond			
Front door	Front door is one of the following: • Powdercoat aluminium framed glazed door (clear or opaque) • Clear finish timber • Painted timber			
	Front door is one of the following: • Flush panel paint-finished door • External aluminium frame glazed door • A three horizontal-strip glazed feature door			
	Front door includes glazing: • Glazing within door; • Glazing / Highlight Window abutting door.			
Gates	Garage door falls under main roof of house (front loaded homes only)			
	Garage door is panel lift style door			
	Gutters, downpipes, capping and all flashing is made from Colorbond steel or similar using one of the colours below: • Surfmist • Shale Grey • Windspray • Wallaby • Bassalt • Monument			
Windows	Modern and contemporary look			
	Windows to have powder coated aluminium frames and be of the colours listed above			
The Roof	Roofs have pitch of 20+ degrees			

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