



RESHAPING OUR REGION'S PLANNING

YOUR CLIMATE SMART LIVING GUIDELINE

The rise of the 'pre-designed home' is resulting in houses that can be cheaper to build, but more expensive to live in over a longer period. These houses can also be less private and have little to no yard space for children to play or for outdoor entertaining.

Whilst 'pre-designed homes' can exhibit good internal layouts and design features, not all 'pre-designed homes' are suited to every block's direction, size, shape, slope, breezes, and consider your neighbour's house from a privacy perspective.

However, with some small, simple tweaks a standard 'pre-designed home' can become 'your home'.

You don't always need a customised home, and for many this can be an unaffordable option, but with the help of this guideline you can build a better home -

A HOME THAT'S BETTER FOR YOU AND BETTER FOR THE CITY OF MORETON BAY.

If you are asking yourself the following, then the **Reshaping our Region's Planning** guidelines are for you:

- Is my house designed with my privacy in mind?
- Will my air conditioning and heating costs be very high, or will my windows let in cooling breezes and warming natural light?
- Is there space so I can plant a tree or grow some vegetables?
- Is there enough space for me to have my friends over for a BBQ and where will they park their cars?
- Is the backyard big enough for our child's trampoline and for the dog to run around?
- Will my home be close to shops, cafes, parks, schools and my workplace or will it become expensive to drive my car all the time?

These are great questions to ask your builder or house designer.

A CLIMATE SMART HOME IN THE CITY OF MORETON BAY THAT FOLLOWS THE ADVICE IN THIS GUIDE, CAN:

BE BUDGET FRIENDLY

- You won't need your air conditioner or lights on as much, and you could potentially save on your electrical bills.
- By selecting appropriate materials, you can save on construction costs.
- Increase the resale value of your home by making it more appealing.

IMPROVE YOUR COMFORT

- Enjoy cooling breezes throughout your home.
- Open up your home and connect with nature.
- Enjoy indoor and outdoor activities year-round.

LOOK GOOD

- Reflect a desirable 'subtropical' architectural character.
- Live in a home that reflects the City of Moreton Bay and Queensland.

We respectfully acknowledge the Traditional Country across our City. We also acknowledge and pay our respects to the Kabi Kabi, Jinibara and Turrbal Traditional Custodians, and their elders past, present and emerging.

Reshaping Our Region's Planning
Your Climate Smart Living Guideline
Revision 4.0
Commenced February 2024

Disclaimer:

1. This guideline is not a statutory document. It has been prepared as a tool to assist homeowners, designers and developers to improve the design and quality of Next Generation housing in Moreton Bay.
2. Images, graphics and other illustrations depicted in this guideline are for demonstration purposes only and are not intended to represent a specific design or existing house.
3. The specific circumstances of your chosen home design, lot and personal needs should be considered alongside design principles described in this document.
4. Submission of a development application, copying or recreating any design from the examples or illustrations in this guideline does not guarantee approval. Each development application should consider site specific elements and constraints along with street and neighbourhood context. Each application is assessed on individual merit against statutory planning and building assessment provisions.

 **THE RIGHT DIRECTION**

 **IT'S COOL IN THE SHADE**

 **ENJOY THE OUTDOORS**

 **EMBRACE THE CLIMATE**

 **MATERIALS MATTER**

THE MORETON BAY
CLIMATE

The City of Moreton Bay is located in the “humid subtropical zone”. Our subtropical climate allows us to experience hot and humid summers, mild winters, and plenty of sun all year round.

Our climate allows us to spend a lot of time outdoors comfortably, which means we can have more access to nature, water and green plant life.

You can design your house to make the most of the natural daylight, cooling breezes and the dappled shade of tall trees, allowing you to make the most of the beautiful City we live in.

WHAT DOES IT MEAN TO LIVE
CLIMATE SMART?

A Climate Smart home means that you can enjoy cooling breezes and warming natural light. You can design your home for maximum comfort inside and outside, while saving money on construction and bills.

This guide will give you tips to improve your current home, to help you select the best home to buy, building a new home, or adjusting a ‘pre-designed home’ standard design.

For extra environmental tips, refer to **Reshaping Our Region’s Planning: Your Next Generation Home Guideline.**



Create a home appropriate for our ‘subtropical’ living.

WORK WITH THE
LOCATION OF YOUR
HOUSE TO MAKE IT
MORE COMFORTABLE.

Starting in the “right direction” is the most important step in creating a climate smart home; it’s about orienting your house on your block so that it can improve your comfort and reduce your energy consumption by letting in light, controlling heat and capturing breezes.

The orientation of your home is important on any sized block. The effects of poor orientation are particularly experienced on blocks under 600 square meters; for more tips for these blocks read **Reshaping Our Region’s Planning - Your Next Generation Home Guideline.**

THE RIGHT DIRECTION



TIPS FOR DESIGNING YOUR NEW HOME

1 YOUR HOUSE ON YOUR BLOCK

Locate where north, east, south and west are on your block. You can use a compass app on a phone or check your block's survey plan to help you. This will help you decide the best location for the rooms in your house based on the sun and breezes.

2 YOUR LIVING AREAS

Your living areas are best placed on the north and east side of your house for optimal natural light and temperatures all year round. The sun rises in the east and is cooler in the morning, so it will keep your house cooler.

3 HOT AFTERNOON SUN

The afternoon sun comes from the west and can be very hot. You should place rooms on this side of your house that don't need large windows such as bathrooms, laundries and the sides of garages. Make sure that you extend your roof over the western side (this is called an eave) for extra shade.

4 LET THE BREEZES FLOW

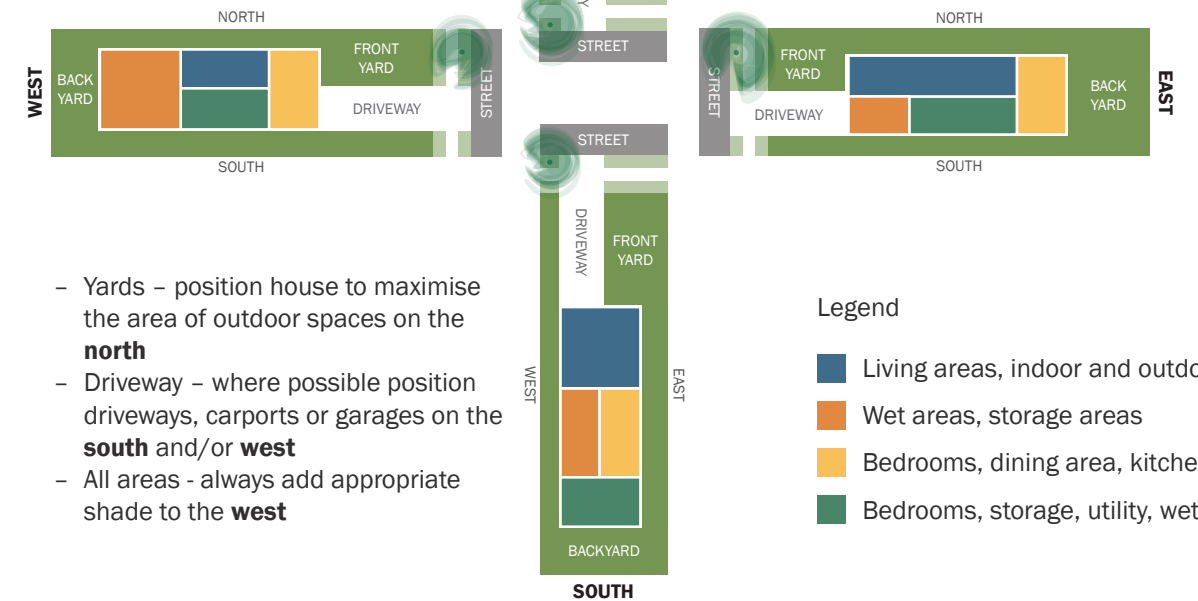
If possible, separate your house from your neighbours to encourage breezes to flow between and into your house. On narrow blocks build your house as narrow as possible to separate your house (known as a 'side setback'). This will also give you more privacy in your home.

NO MATTER HOW YOUR LOT IS ORIENTED, YOU CAN DESIGN YOUR HOUSE SO THAT IT IS COMFORTABLE FOR THE MORETON BAY CLIMATE

YOUR HOUSE ON YOUR BLOCK

Locate your:

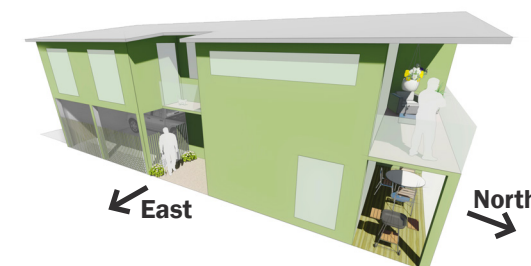
- Living areas to the **north**
- Bedrooms, storage areas, utility rooms or wet areas to the **south**
- Wet or storage and garage areas to the **west**
- Bedrooms, dining areas and kitchen to the **east**



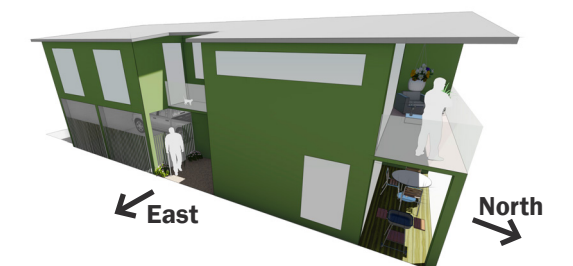
- Yards - position house to maximise the area of outdoor spaces on the **north**
- Driveway - where possible position driveways, carports or garages on the **south** and/or **west**
- All areas - always add appropriate shade to the **west**

YOUR LIVING AREAS

Position your living areas facing **north** with large windows and doors. Reduce your windows, increase the size of your eaves and provide additional shading on the **west**.



The morning sun warms the **east** face of your home. Consider bedrooms, dining and kitchen areas to the **east**.



In the afternoon the **eastern** face is shaded, cooling your home.

TIPS FOR RENOVATING YOUR HOME

1 SMART WINDOW LOCATIONS

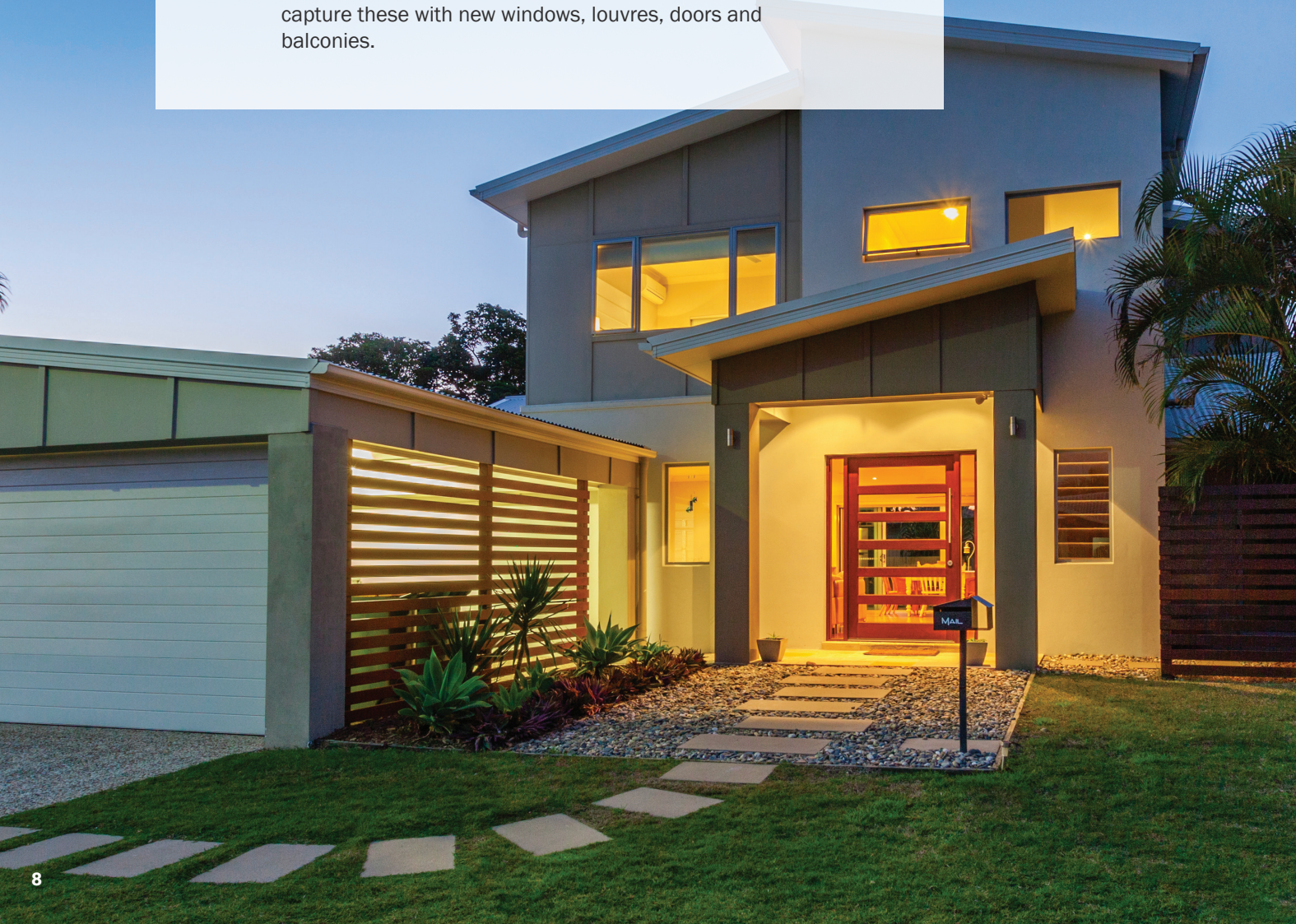
Maximise your windows on your east facing walls, where you can capture breezes and the cooler morning sun. If you have large windows on any west facing walls, these can be shaded by trees or window shades, reduced in size or placed higher up where they can be better shaded by your eaves.

2 SWAP IT FOR COMFORT

If needed, swap rooms to ensure you can be comfortable all year in your bedrooms and living areas.

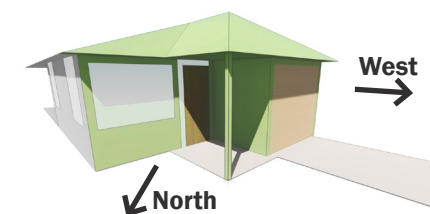
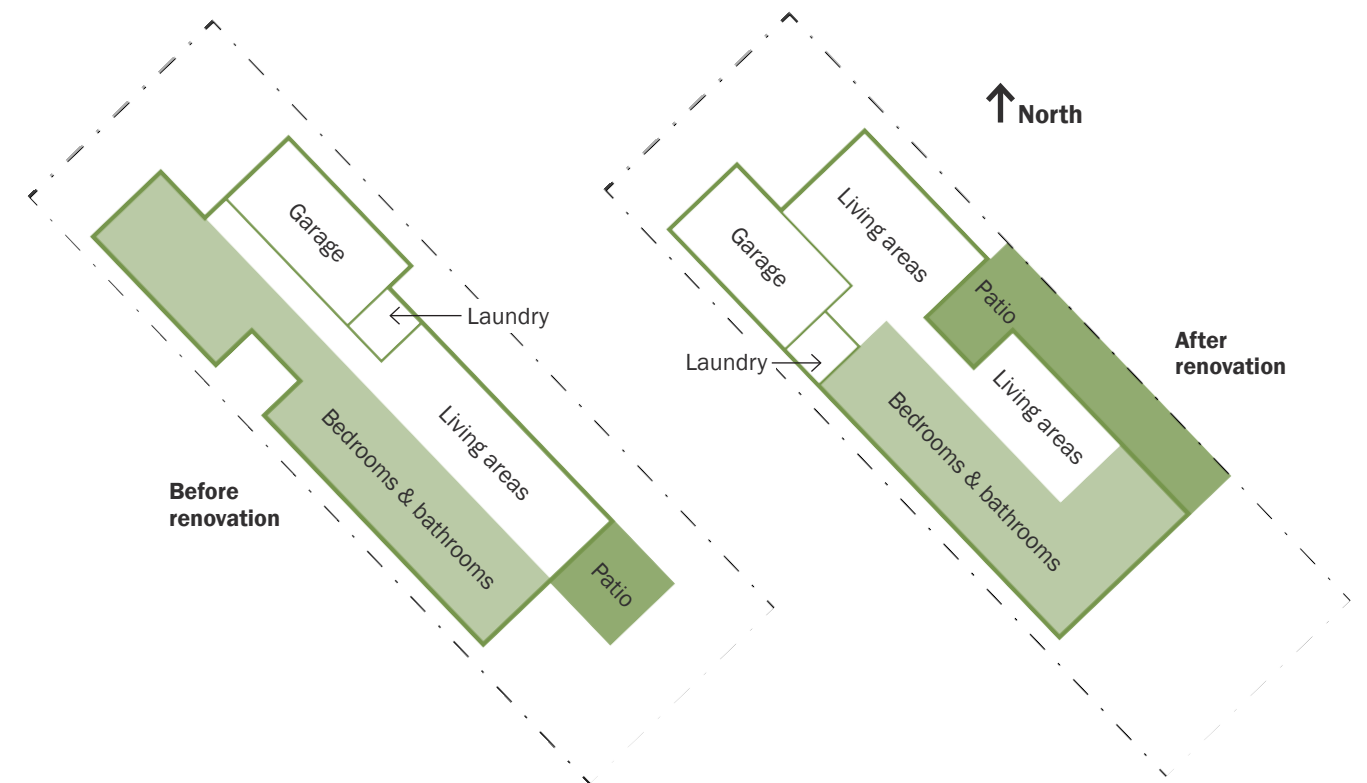
3 CAPTURE THAT BREEZE

Consider the direction of cooling breezes and capture these with new windows, louvres, doors and balconies.



SWAP IT FOR COMFORT

Before (left); After (right): By swapping the laundry and the courtyard, your house maintains the same floor area, while improving the ability to reduce the sun's impact.



Before renovation: Rooms on the **north-west** experience the most heat from the sun, all year long. Your house would be very uncomfortable and hot.



After renovation: Morning sun is partially shaded on your patio.



After renovation: Extending your eaves to the **north** and the **west** cools your rooms by reducing the impact of the sun at midday and in the afternoon which is the hottest part of the day.



After renovation: Afternoon sun is shaded on your patio to help cool your home.



IT'S COOL IN THE SHADE

MAXIMISE THE ADVANTAGES OF SHADING YOUR HOME.

Reduce direct sun by using trees, eaves, window shades and constructed shelters to shade your house. Cooling is innately more difficult than heating, and it requires significantly more energy to actively cool (such as air conditioning) your house than to actively heat.

TIPS FOR DESIGNING YOUR NEW HOME

1

ENTERTAIN IN THE SHADE

Extend your roof over your patio, deck and other outdoor entertainment spaces so that they can be shaded, and useable all year round, in any weather.

2

KEEP IT GREEN

Keep as many trees as possible on your block to naturally shade your house. It's easier to use an existing tree rather than waiting for a new tree to grow.

3

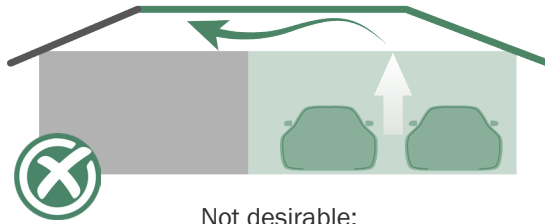
SHADE FOR YOUR CAR

Open up your garage with windows and open sides. This will reduce heat in your ceiling cavity, which is transferred from your car into your house.

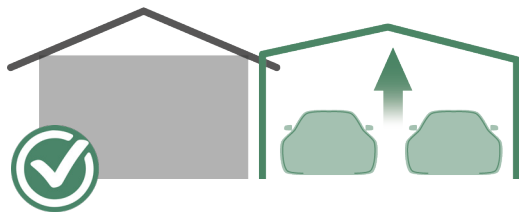
SPOONBILL RESIDENCE. ARCHITECT: BARK ARCHITECTS. PHOTOGRAPHER: CHRISTOPHER FREDERICK JONES.

SHADE FOR YOUR CAR

Opening up a conventional garage keeps the car's heat out of the house, which is often transferred through the roof space.



Not desirable:
Consider something different to a conventional garage.



More desirable:
Create a separate roof for your garage, this can be located where a conventional garage would normally sit.



ENTERTAIN IN THE SHADE

A verandah provides many benefits by cooling your house and providing a comfortable outdoor living space.



TREES AND PLANTS

PATIO ROOF / PERGOLA

WINDOW SHADES

EAVES

THERE ARE MANY WAYS
YOU CAN SHADE YOUR
HOME, TO ENSURE
MAXIMUM COMFORT
INSIDE AND OUTSIDE.

TIPS FOR RENOVATING YOUR HOME

1 SOFT SURROUNDINGS

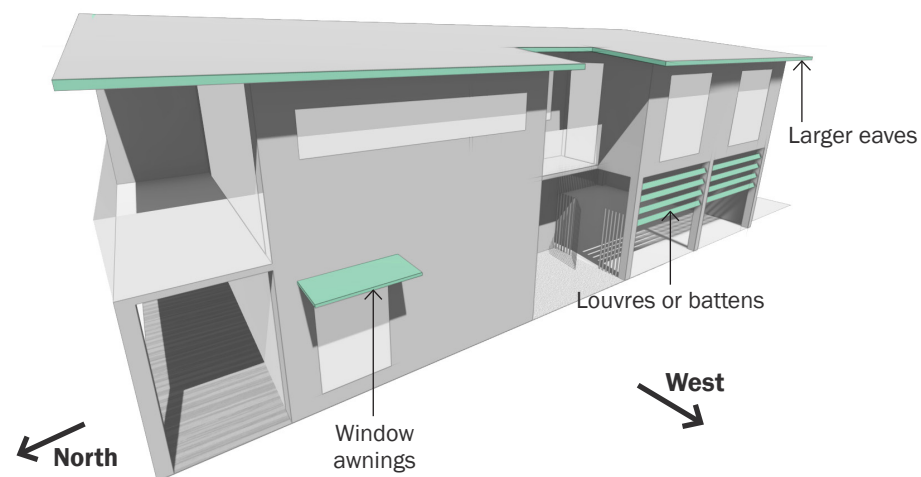
Narrow your concrete driveways and build shelters over patios to avoid the heat of these hard surfaces reflecting into your house.

2 YOUR OWN SHADE

Add external window awnings and plant shade trees to shade windows, particularly on the north and west facades.

CREATE SHADE

Multiple shading devices can be used throughout your home, suitable for the orientation and the use of the area being shaded.



ENJOY THE OUTDOORS



MAKE THE MOST OF INDOOR AND OUTDOOR LIVING

We can take our daily activities outside more frequently and more easily due to the sunny and pleasant climate in our City.

By blurring the boundary between the indoors and outdoors with integrated living areas, we extend the flexibility and comfort of our homes. Combine the inside and outside spaces of your home to savour the lifestyle that is healthy for you and the environment.

For more tips for designing functional and comfortable outdoors spaces read **Reshaping Our Region's Planning - Naturehoods: Your Next Backyard and Outdoor Spaces Guideline.**

TIPS FOR DESIGNING YOUR NEW HOME

1 YOUR OUTDOOR LIVING

Design where your rooms go so that you can easily move between the outdoor and indoor spaces to take advantage of the Moreton Bay climate. For example place the kitchen near a balcony so you can cater in an outdoor entertainment space.

2 OPEN UP TO THE OUTDOORS

Build larger windows and doors that open up into outdoor entertainment spaces so that you can capture breezes and embrace the 'subtropical' lifestyle.

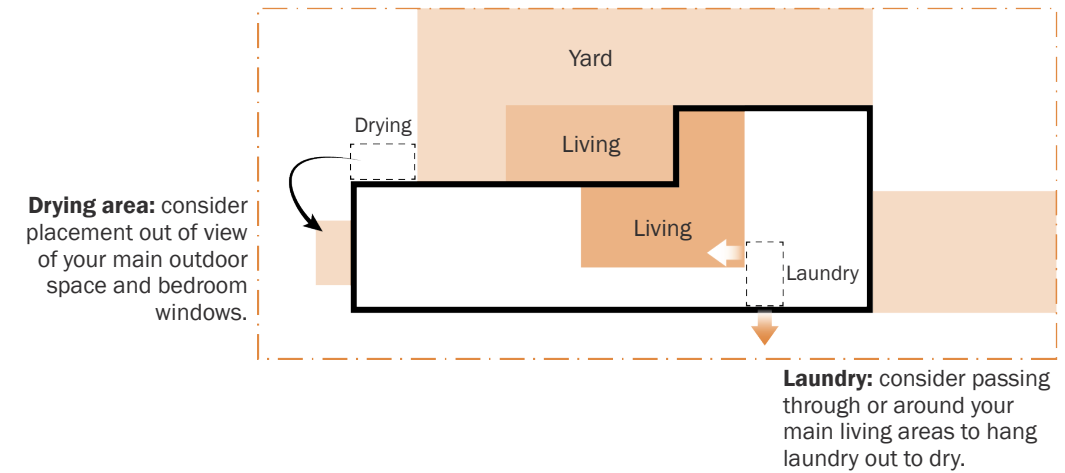
3 SPACE TO ENTERTAIN OUTSIDE

Consider the size of your outdoor entertainment areas, so that they are useable. Create enough space for a table with chairs either side, and enough room for both adults to entertain and children to play.

EASY MOVING

Consider the movement between inside and outside to make it easier moving around for day-to-day activities such as hanging laundry and bringing in the groceries.

- Ensure the main entry is visible from the street so your visitors feel comfortable arriving;
- Plan the path of travel from the driveway/garage so that you can easily enter your home or bring groceries in from your car; and
- Consider the placement of your laundry and how you can get to the outdoor drying area.



LET THE SUNSHINE IN

Make your outdoor spaces - living spaces with entertainment areas, sheltered dining, recreation space, trees and plants.



TIPS FOR RENOVATING YOUR HOME

1 LET THE SUNSHINE IN

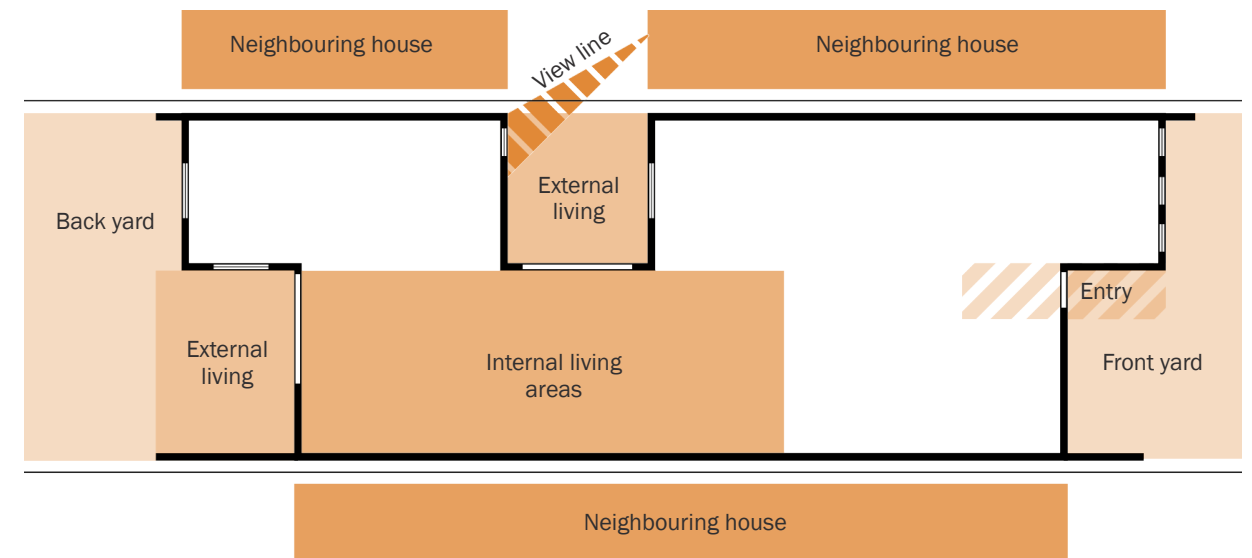
Create or add large window and doors between indoor and outdoor living areas to create a flow for breezes and light between these spaces.

2 GREEN RELIEF

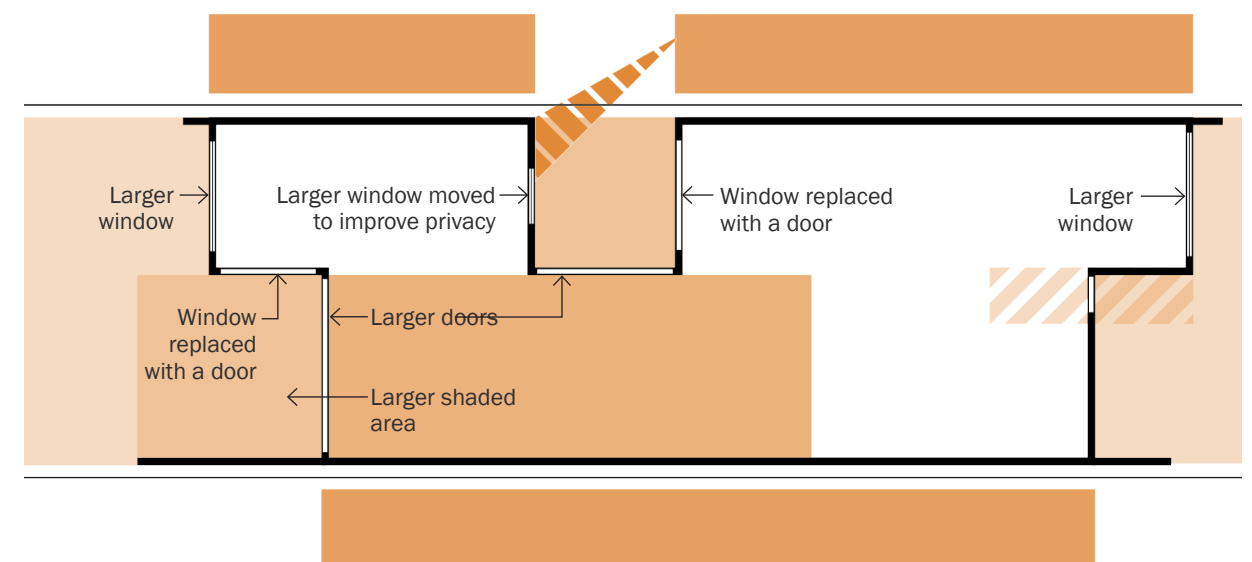
Plant flowering plants or edible plants and make the most of your outdoor space.

OUTDOOR LIVING

You can make simple changes to improve your indoor/outdoor lifestyle, such as: larger windows and doors, swap windows with doors, larger external living space and relocate windows to improve privacy.



Before renovation



After renovation



EMBRACE THE CLIMATE

THE COMFORTS AND BENEFITS OF CLIMATE-FRIENDLY LIVING

Make the most of natural cooling breezes and daylight to all rooms in your house.

TIPS FOR DESIGNING YOUR NEW HOME

1

HIGHER CEILINGS FOR FRESH AIR

Consider building a tall angular roof (also known as a skillion roof) on your house. Your indoor spaces can take advantage of the higher ceilings to take in breezes through high windows, air vents and louvres.

2

NATURAL LIGHT UP TOP

Build some windows above the standard window height just below your house's eaves; these are known as Clerestory windows and they allow additional light to enter your house.

3

OPEN UP

Keep your house plan as "open" as possible by avoiding walls where they aren't needed to encourage breezes to flow through your house.

ARK ROAD RESIDENCE. ARCHITECT: LINEBURGWANG. PHOTOGRAPHER: CHRISTOPHER FREDERICK JONES

NATURAL LIGHT

Clerestory windows are windows located above your standard ceiling height, allowing for additional light to enter your house, while being sheltered by your eaves.



LARGE WINDOWS FOR NATURAL LIGHT

Placement of large windows and doors increases the natural light inside.



ASHGROVE HOUSE. ARCHITECT:
BLIGH GRAHAM ARCHITECTS.
PHOTOGRAPHER: SCOTT BURROWS.



TOOWONG RESIDENCE. ARCHITECT: KIN ARCHITECTS.
PHOTOGRAPHER: CHRISTOPHER FREDERICK JONES

TIPS FOR RENOVATING YOUR HOME

1 OPEN YOUR GARAGE

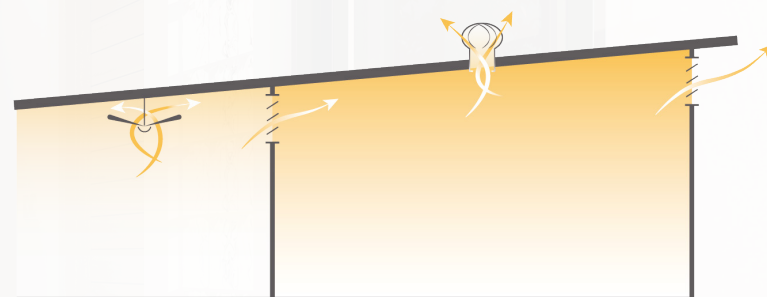
Remove walls to your garage, and add windows on one or more sides to naturally ventilate the area.

2 I'M A FAN OF COMFORT

Place ceiling fans to improve air circulation, inside and outside of your home. Additional air circulation can make a space more comfortable, particularly where there is less access to natural breezes.

3 TAKE A SPIN

Add mechanical roof ventilation such as 'whirlybirds' to reduce hot air in the ceiling cavity, helping to cool the home throughout the day.



Patio/deck

House

Fans, louvres and roof ventilation allow hot air to escape your house

ENHANCE THE APPEARANCE AND PERFORMANCE OF YOUR HOME

The structure of your home can incorporate physical and visual elements that can be beneficial to year-round comfort.

Using building and landscaping materials that suit the subtropical climate improves the quality and lifestyle you experience in your house.

MATERIALS MATTER

CAMP HILL RESIDENCE. ARCHITECT: TWOHILL AND JAMES.
PHOTOGRAPHER: CHRISTOPHER FREDERICK JONES.

TIPS FOR DESIGNING YOUR NEW HOME

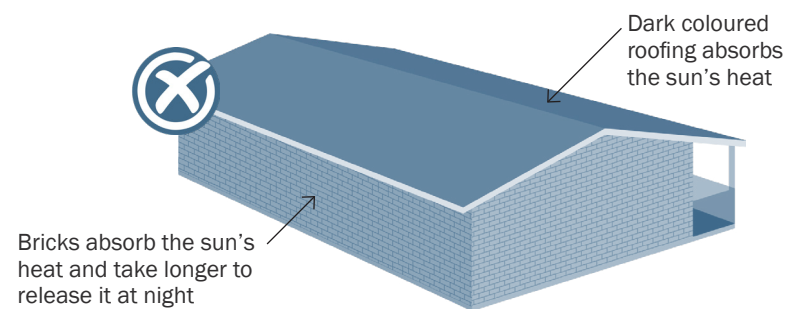
1 LIGHT AND BRIGHT

Choose a light colour scheme for your roof, exterior walls, driveway and any concrete in your outdoor spaces. Lighter colours reflect the heat from the sun, darker coloured finishes contribute to higher temperatures inside your house.

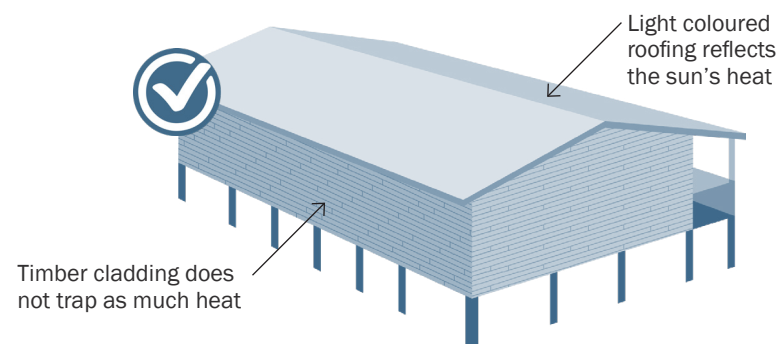
2 COOL MATERIALS

Choose lightweight building materials such as timber and fibre cement rather than brick and tile for your external finishes. Use lightweight material for decking, balustrades and fencing such as natural and composite timbers, fibre cement and metal alloys. Lightweight materials don't get as hot, making your house cooler and more comfortable.

COOL MATERIALS



Not Desirable: You can do more than a typical one storey, slab on ground house made from bricks with a tile roof.



More desirable: You can raise your house and use timber and steel materials instead.



TIPS FOR RENOVATING YOUR HOME

1 IN WITH THE NEW

Many homes can have older insulation products that are less effective at providing a thermal barrier between the inside and outside. Replacing old insulation with newer products will improve the thermal comfort of your home.

2 SAVE WITH SOLAR

Add photovoltaic solar panels for electricity or solar heated hot water to your home. Solar panels provide benefits for the home, budget and for the environment.

3 ABSORB WATER

Choose outdoor paving that 'absorbs' water (known as 'permeable paving' and 'porous surfaces') rather than concrete or tiles. This sort of paving can reduce surface temperatures and is better for the environment.



The choice of materials on the exterior of your home can impact the comfort and usability of indoor and outdoor spaces. For example, you can reduce heat by using permeable paving instead of concrete for outdoor living spaces, and tinted glass in windows that are hard to shade.

WANT MORE TIPS?

CHECK OUT:

1

YOUR HOME AUSTRALIA

‘Your Home’ is an Australian Government guide to building, buying or renovating a home. It shows how to create a comfortable home with low impact on the environment – economical to run, healthier to live in and adaptable to your changing needs. Visit yourhome.gov.au for more information and to download example housing designs.

2


LIVABLE HOUSING DESIGN GUIDELINES

The Livable housing design guide provides useful information for consumers seeking to introduce livable design features into a new home or could be readily applied within an existing home during renovation or refurbishment. The Guidelines describe livable design elements. The guideline is available to download from livablehousingaustralia.org.au

YOUR HOME AND LIVING GUIDELINES

Other guidelines in the series available to download on the Moreton Bay City Council website.

Visit mbrc.link/your-home-and-living



1

RESHAPING OUR REGION’S PLANNING – YOUR NEXT GENERATION HOME GUIDELINE

Reshaping Our Region’s Planning - Your Next Generation Home is Council’s guide to building an affordable home on a block sized under 600m².

2

RESHAPING OUR REGION’S PLANNING – YOUR FLOOD SMART BUILDING GUIDELINE

Reshaping Our Region’s Planning - Your Next Generation Home is Council’s guide to rebuilding your home or building after it has been affected by flood or is located in an area prone to flooding.

3

RESHAPING OUR REGION’S PLANNING – NATUREHOODS: YOUR BACKYARD AND OUTDOOR SPACES GUIDELINE

Reshaping Our Region’s Planning - Naturehoods: Your Backyard and Outdoor Spaces is Council’s guide to design functional and comfortable outdoors spaces including your backyard, front yards and small gardens.

For more information please contact Council

| | |
|----------|--|
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Moreton Bay Regional Council 2021

Every effort is made to ensure that the information contained in this guideline is correct at the time of printing.

