New World City design guide – Subtropical homes for a Brisbane lifestyle
Low-to-medium density residential
Brisbane City Council is seeking feedback on two draft documents to guide quality design in our city.

The consultation document for Design-led City – a Design Strategy for Brisbane sets the overarching framework for improved design.

The draft New World City design guide: Subtropical homes for a Brisbane lifestyle will inform the quality design of low-to-medium density residential development, such as townhouses and apartments (up to five storeys).

Visit brisbane.qld.gov.au and search for ‘Brisbane Design Strategy’ to read the documents and access options to have your say.

You can provide your feedback by:
- completing the online surveys
- submitting photos of quality design outcomes
- emailing the project team at DesignStrategy@brisbane.qld.gov.au
- writing to:
  Design Brisbane
  Brisbane City Council
  GPO Box 1434
  Brisbane QLD 4001

Prior to consultation opening, you can also register for updates on these design projects by emailing DesignStrategy@brisbane.qld.gov.au
Foreword

Brisbane is a great place to live, work, and relax – it’s a safe, vibrant, green and prosperous city, valued for its friendly and optimistic character and enjoyable lifestyle.

As Brisbane continues to grow, well-designed new developments will be vital to growing our Brisbane lifestyle. Carefully planning for a growing city will ensure we, and future generations, can enjoy Brisbane’s beautiful climate and connect with family and friends in places that make our city great.

With expected population growth and demographic and lifestyle changes, we will continue to see diverse housing options being delivered in Brisbane to support residents. One in three Brisbane households already choose to live in a townhouse or apartment.

This residential design guide has been developed to protect Brisbane’s unique lifestyle, ensuring our exciting future looks familiar by retaining the things we love about our city, making better use of space and offering more choice for how residents live and relax.

This draft document demonstrates Council’s commitment to supporting design quality in our built environment under the overarching framework outlined in the consultation document Design-led City – A Design Strategy for Brisbane. This draft guide serves as additional advice and support to encourage quality design of townhouses and apartments up to five storeys.

Brisbane City Plan 2014 (City Plan) guides how land is used and developed in our city. This residential design guide complements City Plan by identifying key design processes and elements for low-to-medium density housing. The guide will help users to create a city of neighbourhoods with housing options that are appropriate for our subtropical climate, lifestyle and identity, ensuring the Brisbane of tomorrow is even better than the Brisbane of today.

This guide also demonstrates Council’s commitment to actions in Brisbane’s Future Blueprint and outlines the best practice design standards for new low-to-medium density residential developments to ensure they make good use of space, match the area in which they are built and meet residents’ expectations.
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More than one in three responses to the Plan your Brisbane survey identified that ‘improving the quality and design of new developments’ was a top priority for making Brisbane better*

*Brisbane will be a world-class, design-led city that drives and facilitates excellence in outcomes as we grow.

Council is focused on supporting quality design in Brisbane’s built environment. Well-designed built environments have many benefits in terms of liveability, prosperity, environment and health. Applying the process outlined in this document, to achieve the desired outcomes, is a step towards establishing design excellence for our city. Design excellence does not mean providing expensive finishes to buildings. It means creating functional and well-designed buildings that contribute to a sense of place. Council strongly encourages the adoption of a design-led process that is inclusive of the community, involves Council early in the process, and demonstrates how the existing context of the neighbourhood, street and site have influenced the final design.

Brisbane is expected to continue to grow by 1300 people per month*

*Source: ShapingSEQ 2017

Did you know? One in three homes in Brisbane is a unit or townhouse*

*Australian Bureau of Statistics, 2018

The purpose of this guide is to provide a best practice reference to inform the design of low-to-medium density residential development, such as townhouses and apartment buildings up to five storeys in Brisbane’s suburbs.

Quality design is both a process and an outcome.

The design process requires consideration of the:
- neighbourhood
- street
- site
- building.

The elements that quality design should achieve include:
- green and leafy neighbourhoods
- subtropical design
- liveability and function
- visual appeal and identity.

The design elements and process are illustrated in an easy-to-use format and there are checklists included in the back of this document.
Why use this guide

Brisbane is a growing city with around 1300 additional people a month living here (ShapingSEQ, 2017). Our established neighbourhoods will continue to change and adapt to ensure homes are available to cater for all types of lifestyles in our city – including families, couples, single-persons, groups and multi-generational households. Townhouses and mid-rise apartments (up to five storeys) will continue to be built in suitable locations throughout Brisbane. It is important that homes are designed to a quality that contributes to creating great places and spaces for Brisbane to be proud of, and for the community to enjoy now and into the future.

This guide is for anyone interested in the design and development of low-to-medium density residential dwellings.

This guide outlines the design outcomes and approach that architects, planners and developers should consider when designing homes to reflect community expectations.

This guide is intended to be used:
• as a reference document to guide best-practice design outcomes
• by Council to inform the review of Council’s planning scheme and policy
• to prepare plans, drawings and design statements that may accompany development applications
• to guide development pre-lodgement and application discussions
• to help the community, including potential buyers, to identify quality housing design
• to encourage innovation and diversity of housing in Brisbane neighbourhoods.
**Context of the guide**

This guide does not prescribe development requirements. Instead, it is a practical framework and point of reference that supports better design outcomes. It complements the existing Australian, Queensland and local policies that regulate construction and design in the built environment.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Design guidance</th>
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<tr>
<td>National construction code</td>
<td>Your Home: Australia’s guide to environmentally sustainable homes (2013)</td>
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<tr>
<td>Brisbane City Plan 2014</td>
<td>Design-led City – A Design Strategy for Brisbane (on consultation)</td>
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<td>Multiple Dwelling Code and Brisbane City Plan 2014 Provisions</td>
<td>New World City design guide – Subtropical homes for a Brisbane lifestyle</td>
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<td>Multiple Dwelling Code and Brisbane City Plan 2014 Provisions</td>
<td>New World City Design Guide – Buildings that breathe</td>
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Residential design trends over time

Townhouses and apartments have been an important part of our city’s neighbourhoods for the last 100 years. Attached and semi-attached housing in Brisbane has evolved over time due to economic, social and lifestyle changes.

1920s-1950s
The inter-war period, including the Great Depression, saw a demand for rental properties and smaller shared housing as people moved to find work. Californian Bungalow styles were popular, as were Art Deco and Spanish Mission style apartment buildings.

1960s-1980s
Brick apartment complexes with undercroft car parking became a popular form of housing in inner-city suburbs post-World War II. They feature a long building form and generous boundary setbacks.

1980s-2000s
Semi-detached townhouses and rowhouses became popular in many suburbs of Brisbane and featured design elements such as lightweight materials and pitched roofing, complementary to existing detached housing. Similar styles are still being delivered today.

2000s to present
Contemporary design has seen a range of new materials including render, contemporary brick, sheet cladding, laser-cut screening and glass. A range of housing types is being delivered in attached and semi-attached forms.
Design process

The design process should consider the context of the development, from the neighbourhood to the building. The four key spatial scales to be considered through the design process are the:

- neighbourhood
- street
- site
- building.

Not all design considerations can be applied to every site or scale. Design and construction processes vary depending on the scope and complexity of the project. Breaking your decision-making into stages provides clarity in the design process. The following design considerations, although not exhaustive, will form the basis of an informed approach to design.
The neighbourhood

Neighbourhoods have their own unique mix of characteristics, such as the collection of building styles, parks, roads, shops, landmarks and active travel links. Quality design considers its impact on the surrounding natural and built environments by responding to the context of the location (neighbourhood).

Design considerations

- What are the characteristics of the neighbourhood and does the development reflect the characteristics?
- What are the physical attributes of the neighbourhood? Is it hilly, flat, or are areas prone to flooding? How can the development address these physical features?
- Is it an older neighbourhood with a well-defined character? Is it a newer neighbourhood with a more contemporary setting? Is it a neighbourhood going through transition? How can this development contribute to the future identity and character of the neighbourhood?
- Where are the parks, shops and businesses, public transport, pedestrian/cycle routes and schools? How will future residents access these local services? How can active travel be encouraged?
Sample: Neighbourhood analysis
The below diagram provides an indicative example of a neighbourhood analysis that could be prepared for a site.
The street

Streets provide the local setting for daily life and activity. The collective appearance of buildings, landscaping, street trees, fencing, footpaths and driveways contribute to the streetscape. The design of new development should consider the street and how the development positively contributes to the existing or potential character of the street.

Design considerations

- What type of street is the development on and who uses the street?
- Are the locations of the footpaths and cycle paths, street trees and driveways strengthening the continuity of the street? Are utilities (water, telecommunications and fire hydrants) shown on the drawings and are they sufficient to meet the demands of the development?
- What are the cultural and built characteristics of the street? Are there protected heritage assets or settings in the street that the built form should reflect?
- Are there any views or vistas to or from the site? How has the development been designed to capture and consider these?
- How does the roofline and roofscape treatment contribute to the visual interest from the street?
Sample: Street analysis

The below diagram provides an indicative example of factors to be considered in a street analysis.
The site

No two sites are identical and consideration should be given to the bulk, scale and orientation of development. A site-specific designed development considers and responds to opportunities and constraints unique to each site. Development should be designed in response to the features of the site, while incorporating considerations for the street and neighbourhood.

Design considerations

- Can the existing vegetation be maintained and incorporated into the development?
- Are the site levels and entrances located to facilitate safe and equitable access to the development?
- Does the site have access to all required services and utilities?
- Does the design suitably address overshadowing, noise and privacy impacts to and from surrounding sites?
- Do the buildings and landscaping respond to overland water flows and use water sensitive urban design approaches?
- Have places of heritage or cultural significance been identified and integrated into the design?

Promote indoor-outdoor use
Address overshadowing, noise and privacy impacts
Subject site

Sample: Site analysis
The below diagram provides an indicative example of factors to be considered in a site analysis.
The building

The design of the building affects occupants, how they use their living spaces, and their ability to enjoy Brisbane’s climate and relaxed lifestyle. The internal layout should be functional and designed with the end user in mind. The design of new development should consider how the building and landscaping can best suit current and future occupants and positively contribute to its surroundings.

Design considerations

- Do materials, finishes, roof form and details reflect and enhance the identity of the street and neighbourhood?
- Has the building been designed to enable cross-ventilation, reduce reliance on artificial heating and cooling, and promote indoor-outdoor use in each dwelling?
- Is the internal layout designed with the end user and purpose in mind?
- Are the entrances clear, protected and visible from the street or common area, and do they help provide identity to the dwelling?
- Are the windows and outdoor spaces located to minimise overlooking and overshadowing on adjoining sites but maximise overlooking onto public streets and communal areas for safety?
- Do building heights transition (step down/up) to complement adjoining building heights?
- Has the building been designed to allow for adaptive re-use in the long term?
Subject site

Sample: Street elevation analysis
The below diagram provides an indicative example of the type of section or illustration that could illustrate how the building design respects the context. The designs shown are for illustrative purposes only. Detailed designs would need to demonstrate how all the requirements of Brisbane City Plan 2014 are met.

Mass and articulation

<table>
<thead>
<tr>
<th>A/B</th>
<th>C/D</th>
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<tr>
<td>Vertical proportional analysis</td>
<td>Horizontal proportional analysis</td>
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Address and service

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<tr>
<td>Minimise vehicle access impact at street</td>
<td>Minimal delivery and service impact at street</td>
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Sample: Site section analysis
The diagram below provides an indicative example of the type of section or illustration that could illustrate how the building design reflects the context. The designs shown are for illustrative purposes only. Detailed designs would need to demonstrate how all the requirements of Brisbane City Plan 2014 are met.

Enhance ground plane

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<tr>
<td>Activate street</td>
<td>Deep planted at street</td>
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Amenity

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<tr>
<td>Maximises northern orientation</td>
<td>Mitigate overlooking with screens and planting</td>
</tr>
<tr>
<td>Cross ventilation</td>
<td>Views to street</td>
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Design elements

It is not expected that every design element within this guide can be applied to every site across the city. However, a clear demonstration that each element has been considered and applied where possible through the design process will result in the best outcome for an individual site.

To achieve quality design across low-to-medium density residential development, consider and apply the following four design elements.

- Green and leafy neighbourhoods
- Subtropical design
- Liveability and function
- Visual appeal and identity
Green and leafy neighbourhoods

Residents value Brisbane’s green and leafy neighbourhoods. Greenery provides cooling and shade, water capture, cleaner air and privacy, and contributes to relaxation and recreation opportunities. It is important that new development adequately contributes to our green and leafy neighbourhoods through a combination of shade trees, shrubs and greenery attached to buildings.

“The good building is not one that hurts the landscape, but one which makes the landscape more beautiful than it was before the building was built.”

Frank Lloyd Wright (American architect)

Quality residential developments contribute to Brisbane’s green and leafy character by incorporating:

- generous landscaping areas at the front of the property, including trees that create a shade canopy
- plentiful outdoor spaces with shade trees
- landscaping that flows through the site in unison with the built form
- green walls, green roofs and other greenery above ground level
- verge planting
- street trees that shade pedestrian and cycle paths.
Subtropical design

Brisbane’s subtropical climate requires an appropriate design response. Our climate features warm, humid and wet summers and generally mild, dry winters. One of Brisbane’s greatest draw cards is the frequency of warm sunny days throughout the year. Residential development should embrace our climate by designing for natural breezes, shaded outdoor spaces and protection from harsh sun and rain.

“Designing for the climate provides opportunities for re-invention and expression.”

Brit Andresen (Australian architect and emeritus professor at the University of Queensland)

Quality residential developments respond to Brisbane’s subtropical climate by incorporating:

- shading devices and weather protection that respond to each elevation, including generous eaves and screening to east and west facades exposed to summer sun
- natural light and ventilation into communal areas such as hallways, lobbies and stairwells
- high ceilings in living areas to support natural air flow
- sun and breeze corridors between buildings
- appropriate materials and construction techniques for comfort and energy efficiency, as documented in the Australian Government Your Home design manual.
Liveability and function

Quality-designed housing meets the needs of residents and allows households to enjoy Brisbane’s unique lifestyle. Central to this is supporting indoor-outdoor living, active travel, community interaction opportunities and housing that supports all abilities and ages.

Design elements

Quality residential developments are liveable and functional by incorporating:

- connections to open space, pedestrian and cycle paths, local centres and public transport
- easily accessible, secure and undercover bicycle storage areas
- universal design features to support people of all abilities, such as those referenced in the Liveable Housing Design Guidelines
- centrally located communal outdoor areas with shade structures that can accommodate a variety of uses
- well-proportioned private outdoor areas that seamlessly connect to indoor living spaces
- shared services such as car share spaces, a bench seat at the letter box or exercise and play equipment that encourage community interactions
- building entrances that provide shelter from weather elements and are easily accessible from the street
- driveways and parking areas are designed as low-speed communal spaces that consider the needs of pedestrians and children
- durable materials that age well in Brisbane’s climate
- adaptable internal layouts to allow for flexibility and to meet changing household needs.

“I never design a building before I’ve seen the site and met the people who will be using it.”

Frank Lloyd Wright
(American architect)
Visual appeal and identity

Well-designed housing positively contributes and interacts with its natural surroundings and the unique identity of the neighbourhood it is embedded in.

Design elements

Quality residential developments are visually appealing and contribute to the identity of the area by incorporating:

- building form variation, roofscape treatments and detailing that reflects and respects the neighbourhood
- façade materials, colours and detailing that creates visual depth and interest
- building entries that are easy to identify and address the street
- building components that are well-organised and contribute to a visually appealing and coherent architectural form

- balconies and generous windows that overlook and support a visual relationship between dwellings and the street
- car parking and driveway areas that are screened behind the building line, complement the building presentation and are recessive
- refuse and recycling storage areas, pump stations and substations in basements or screened from view and do not detract from the streetscape.

“Life is not about maximising everything, it’s about giving something back – like light, space, form, serenity, joy.”

Glenn Murcutt (Australian architect)
Checklist process and elements

This section brings together the contents of the guide in a checklist form to:

- assist users in undertaking a thorough design process
- assess what design elements a particular design does or does not achieve.

By applying the design process and elements outlined in this guide, low-to-medium density residential development across the city can reflect Brisbane’s subtropical lifestyle and unique aesthetic.
Bring it all together

Well-designed built form responds and positively contributes to its context. Context is everything that has a bearing on the characteristics of an area and key natural and built features. It includes social, economic and environmental factors.

In parallel with context studies and responses, it is essential to consider how design elements contribute to ‘good’ design outcomes for the built environment of our suburbs.

This guide outlines four key design elements for residential developments in Brisbane. They should be applied across all context scales, during the design process to generate quality subtropical homes for a Brisbane lifestyle.
Now that you have worked through the design process and considered the design elements, and how they relate to a given site, you can record your findings to create a context report. Combined with the below checklists, this will assist to deliver better-quality design across the city.

### Neighbourhood
Prepare a written neighbourhood analysis in accordance with design process.

- Has a neighbourhood analysis been undertaken?

A neighbourhood analysis plan should show:
- parks
- shops and businesses
- public transport
- pedestrian/cycle routes
- schools and other community facilities
- built form
- topography
- character of the area
- heritage buildings and places
- anticipated growth areas (reflected in Brisbane City Plan 2014).

### Street
Prepare a written street analysis in accordance with design process.

- Has a streetscape analysis been undertaken?

A streetscape analysis plan should show:
- type of street
- pedestrian/cycle paths
- street trees
- driveways
- utilities and services
- heritage assets
- built form (including materials and key building features)
- views/vistas.

### Site
Prepare a written site analysis in accordance with design process.

- Has a site analysis been undertaken?

A site analysis plan should show:
- existing vegetation
- services and utility locations
- heritage assets
- gradient/topography/site levels
- sun path
- prevailing winds
- shadow diagrams of existing and proposed buildings
- noise-sensitive areas
- overland water flow paths.

### Building
Prepare a written building analysis in accordance with design process.

- Has a built form analysis been undertaken?

The built form analysis should show:
- height and bulk
- roof form
- materials
- utilities and services
- proposed development in the street setting
- shadow diagram
- internal layouts and communal spaces
- access points
- landscaping approach
- function/use of internal and external spaces.
Checklist – elements

Green and leafy neighbourhood

How does the proposed design contribute to Brisbane’s green and leafy character?

- Generous landscaping areas at the front of the property, including trees that create a shade canopy
- plentiful outdoor spaces with shade trees
- Landscaping that flows through the site in unison with the built form
- Green walls, green roofs and other greenery above ground level
- Verge planting
- Street trees that shade pedestrian and cycle paths

Subtropical design

How does the proposed design contribute to Subtropical living?

- Shading devices and weather protection that respond to each elevation, including generous eaves and screening to east and west façades exposed to summer sun
- Natural light and ventilation into communal areas such as hallways, lobbies and stairwells
- High ceilings in living areas to support natural air flow
- Sun and breeze corridors between buildings
- Appropriate materials and construction techniques for comfort and energy efficiency, as documented in the Australian Government Your Home design manual
### Liveability and function

How does the proposed design contribute to the liveability and function of the home?

- Connections to open space, pedestrian and cycle paths, local centres and public transport
- Easily accessible, secure and undercover bicycle storage areas
- Universal design features to support people of all abilities, such as those referenced in the Liveable Housing Design Guidelines
- Centrally located communal outdoor areas with shade structures that can accommodate a variety of uses
- Well-proportioned private outdoor areas that seamlessly connect to indoor living spaces
- Shared services such as car share spaces, a bench seat at the letter boxes or exercise and play equipment that encourage community interactions
- Building entrances that provide shelter from weather elements and are easily accessible from the street
- Driveways and parking areas are designed as low-speed communal spaces that consider the needs of pedestrians and children
- Durable materials that age well in Brisbane’s climate
- Adaptable internal layouts to allow for flexibility and to meet changing household needs

### Visual appeal and identity

How does the proposed design contribute to visual appeal and identity?

- Building form variation, roofscape treatments and detailing that reflects and respects the neighbourhood
- Façade materials, colours and detailing that creates visual depth and interest
- Building entries that are easy to identify and address the street
- Building components that are well-organised and contribute to a visually appealing and coherent architectural form
- Balconies and generous windows that overlook and support a visual relationship between dwellings and the street
- Car parking and driveway areas that are screened behind the building line, complement the building presentation and are recessive
- Refuse and recycling storage areas, pump stations and substations in basements or screened from view and do not detract from the streetscape
Disclaimer

1. This brochure is not a statutory document. It has been prepared to help improve the quality, design and sustainability of residential development.

2. The examples/illustrations used are sourced from the Brisbane City Council municipal area for the purpose of illustration only.

3. If you submit a development application, copying or recreating any design from the examples or illustrations in this guide does not guarantee approval of the application. Each proposal is assessed on an individual basis.

Further information

Brisbane City Plan 2014 and Multiple Dwelling Code, Brisbane City Council

Livable Housing Design Guidelines, Livable Housing Australia

Your Home: Australia’s Guide to environmentally sustainable housing, Australian Government


References

Australian Bureau of Statistics, 2018

National construction code, Australian Government

New World City Design Guide – Buildings that breathe, Brisbane City Council

Plan your Brisbane Citywide engagement summary report, Brisbane City Council

Planning Act 2016, Queensland development code


ShapingSEQ 2017 and Planning Act 2016, Queensland Government