



Townhouses and terraces are a type of multiple dwelling that accommodate three or more dwellings on a single site. The dwellings can have shared common walls, open space and vehicle access. Individual entrances to each dwelling are a key feature that set townhouses and terraces apart from apartments. This type of housing is usually two to three storeys and located on larger sites within residential zones identified for high density.

TOWNHOUSES & TERRACES

Residents of townhouses and terraces enjoy a similar lifestyle to residents of both apartments and low density housing. Individual dwelling entries provide the privacy of a detached dwelling whilst shared facilities and open spaces provide for an affordable and low maintenance lifestyle.

Main streets, centre uses, public transport and functional public open space are accessible from townhouses and terraces to support higher density living.

An important consideration for townhouses or terraces along street frontages is individual dwelling design and features for visual interest to enhance the streetscape amenity.

Landscaping blends townhouses and terraces seamlessly with a variety of other housing types and reflects the tropical character of Cairns. Ensuring there is adequate space for landscaping is of particular importance for townhouses and terraces arranged in more than one row on a site.



Design Guidance

As a first step, analyse and understand the features and characteristics of the site.

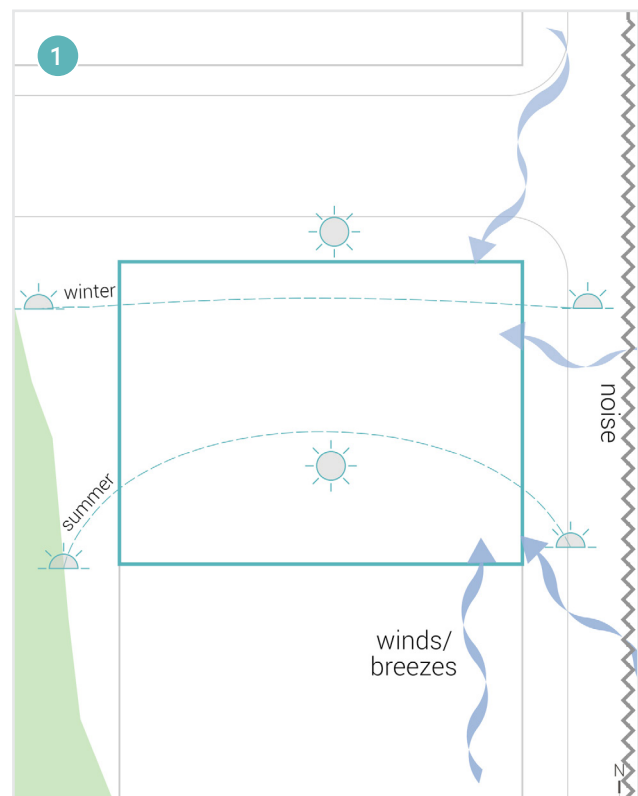


Sensory and Climatic

One of the fundamental factors of good design is to understand and respond appropriately to the site's surrounding context and climate. This is particularly the case in Cairns, where being able to enjoy indoor and outdoor living is core to the way of life. The following guidance will assist with the design of enjoyable living spaces in a tropical climate.

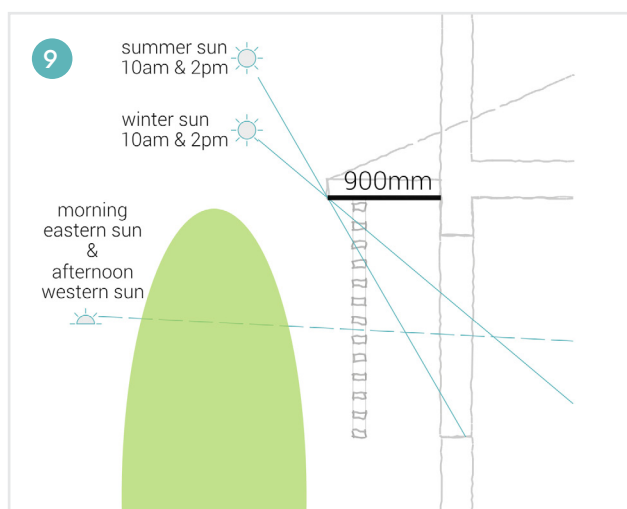
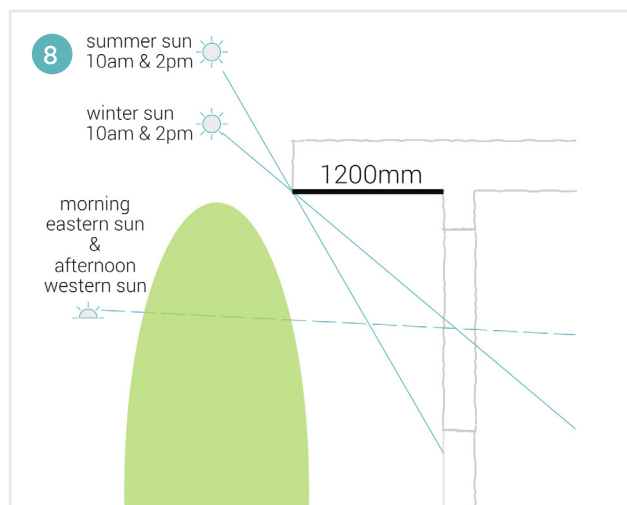
Sensory and Climatic

- 1 Orientate the development to optimise the number of dwellings that receive maximum daylight and capture prevailing breezes.
- 2 Dwellings should be of a depth that allows for penetration of daylight and breezes.
- 3 Consider the outlook from key habitable rooms for each dwelling.
- 4 Utilise vegetation and landscaping, as well as visual and acoustic privacy elements, to minimise impacts on adjacent development.
- 5 Use built form elements and landscaping to mitigate impacts that affect a comfortable living environment (i.e. noise, visual, urban heat island effect).
- 6 Townhouses and terraces are typically two storeys and need to consider how balconies, roof tops and topography can respond to and increase privacy between dwellings.



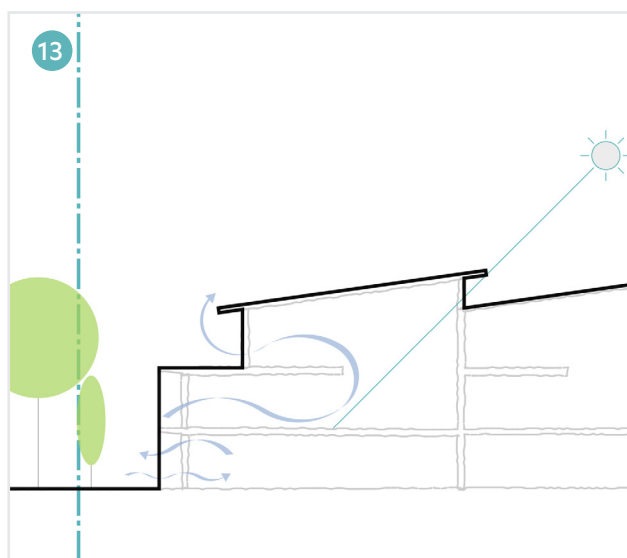
Shade and shelter

- 7 Consider how the pitch of the roof and depth of the eaves can increase shade, capture rainwater and maximise daylight.
- 8 Provide wide awnings over external openings to provide shade from the sun and shelter from the rain.
- 9 Carefully locate landscaping and vertical screening in conjunction with wide eaves to shade walls and windows, particularly to the south-west.
- 10 Verandahs and balconies that include cooling elements (i.e. fan, operable screening), should be located on facades that are exposed to direct sun.



Ventilation

- 11 Provide external openings (i.e. windows, balconies, doors) on as many facades as possible to allow for cross-ventilation.
- 12 Promote open plan living to optimise cross-ventilation (i.e. single internal living space, internal louvres).
- 13 Use mezzanines to enhance cross-ventilation and increase daylight to internal living spaces. This will also help provide variety in roof form and articulation of the skyline.
- 14 Provide facade articulation to allow for more opportunities for external openings.

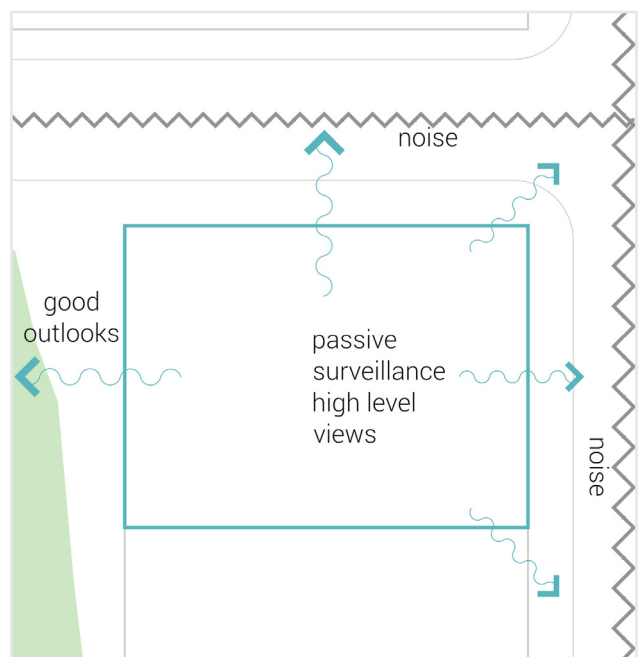


Streetscape Amenity

How development sits within the neighbourhood contributes to its overall character, appearance and visual identity. Well designed streetscapes can foster a sense of community and safety among the residents through actively encouraging interactions and connections.

Streetscape Amenity

- 15 In an infill context, address the development to the street to effectively integrate the built form with neighbouring development and respect the local context.
- 16 In new areas of development, ensure the built form addresses the street to contribute to the overall sense of place and identity of the new neighbourhood.
- 17 Townhouses and terraces need to integrate with surrounding development, which can include detached dwelling houses. Consider the most appropriate built form for the townhouses and terraces, considering building bulk and scale from the street.
- 18 Carefully consider the streetscape character of all street-facing facades. If the site is located on a corner, respond to both frontages with equal care.
- 19 Ensure habitable rooms are positioned to provide passive surveillance of the street. Facades that face the street should incorporate elements such as windows, verandahs and balconies that overlook the public realm.
- 20 Pay attention to all street frontages with consideration to:
 - » Windows, verandahs, awnings and balconies,
 - » Building and dwelling entrances,
 - » Facade articulation,
 - » Variety of materials and finishes to break up larger expanses of walls,
 - » Building scale and bulk,
 - » Vehicle entrances and car parking,
 - » Landscaping and fencing, and
 - » Passive surveillance of the street.



Landscaping

Landscaping is one of the main elements that contributes to the quality of a neighbourhood and streetscape amenity. It also plays an imperative role in ensuring development positively contributes to the Cairns tropical character.



Landscaping

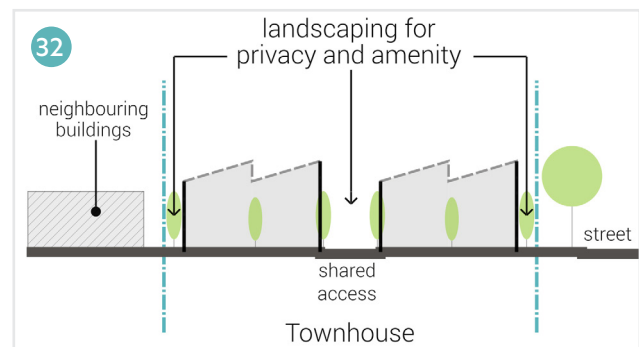
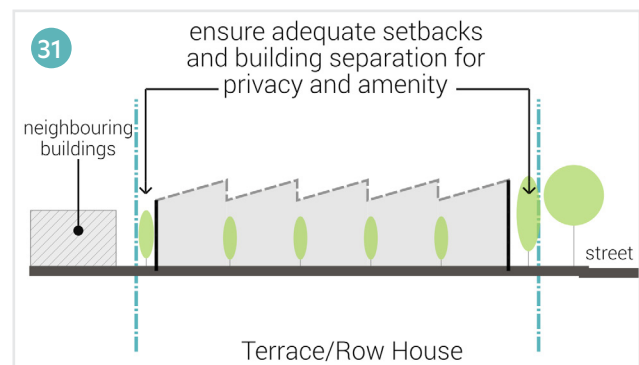
- 21 Landscaped areas need to be sufficient in size to be functional and support the establishment and growth of healthy vegetation.
- 22 Preserve existing vegetation (i.e. mature trees, planting) as part of the design to reinforce the Cairns tropical character and amenity.
- 23 Enhance development with landscaping. Encourage a diversity of species, deep planting and vertical landscaping. Avoid an over-reliance on narrow planting strips, groundcovers and grasses.
- 24 Use landscaping to enhance privacy between dwellings instead of structural screening. Plan sufficient areas for landscaping to deliver the establishment of screening shrubs.
- 25 Site specific landscape design should be considered in conjunction with fencing.
- 26 Careful attention is needed for all frontages to provide landscaping for privacy and amenity, and to soften the visual impact of the facade.
- 27 Engage a landscape specialist to assist with understanding the site constraints that will impact on the long-term establishment of landscaping (i.e. soil condition, tree suitability, light, water, maintenance).
- 28 Any proposed planting on the built form should be certified by a Registered Professional Engineer of Queensland and designed by a landscape specialist.

Setbacks

Setbacks and building separation are intended to maintain privacy for residents and neighbours, increase amenity of the streetscape, minimise noise, maximise natural daylight, increase access to breezes and reduce overshadowing.

Setbacks

- 29 Aim to align the front setback with the prevailing setbacks within the street to provide a consistent rhythm of development.
- 30 Consider how setbacks can be best utilised to improve privacy, minimise overlooking, and enhance the amenity of adjoining dwellings and neighbouring development.
- 31 Optimise building separation distances between the built form and neighbouring development. Where adjoining dwellings are not attached by a common wall, ensure adequate separation is provided.
- 32 Dwellings without adequate separation to provide visual privacy must utilise added design solutions (i.e. landscaping, screening) to achieve both privacy and outlook.
- 33 Setbacks are an opportunity to establish high quality landscaping, and setback widths should be considered in conjunction with landscape planning.
- 34 Attached dwellings incorporating common walls are an opportunity for larger side setbacks with high quality landscaping and increased separation from neighbouring development.



Residential Amenity

All the principles within the guide are designed to maximise residential amenity. When living in a higher density setting, this becomes even more important as space decreases and the quality of the amenity needs to increase.



Residential Amenity

- 35 Provide space for functional facilities for residential amenity (i.e. bicycle parking, storage, security, outdoor space for pets).
- 36 Ensure there is clarity between what is communal open space and private open space for legibility and privacy.
- 37 Use landscaping to provide delineation and additional privacy between adjoining dwellings and neighbouring development.
- 38 Site cover and siting of the development should ensure that townhouse and terrace sites provide private open space as well as communal open space amenity for residents.
- 39 Consider the proximity of adjacent dwellings and the street. Consider visual and acoustic privacy, access to daylight and outlook.



Open Space

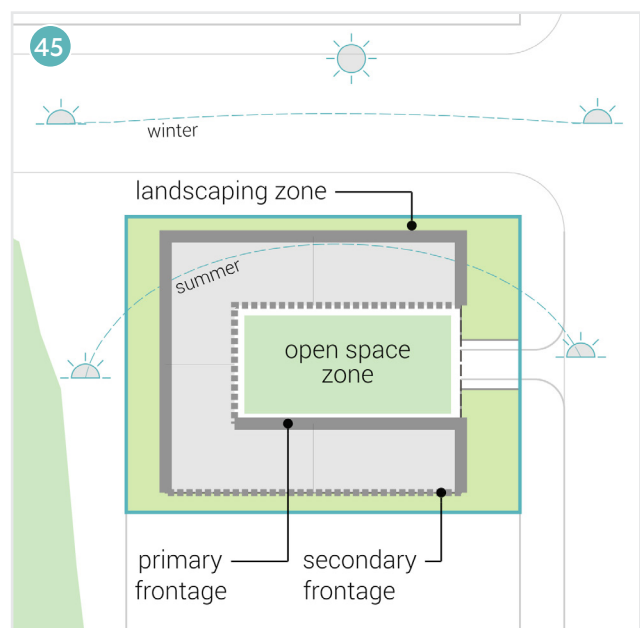
Incorporating open space into the design of development at the beginning helps achieve quality indoor and outdoor living. Well-considered open space will achieve a harmonious balance between the site's natural assets and development.

Open Space

- 40 Site cover and siting of development should ensure that each dwelling has private open space and there is enough communal open space.
- 41 Establish a hierarchy of open spaces to ensure quality communal open space for recreation, landscaping and deep planting, and comfortable private open space for residents.
- 42 Communal open space needs to be both aesthetic and functional. It should be considered at the start of siting design, not just the 'leftovers' of the site.
- 43 Concentrate the built form to the southern side of the site to leave the northern side for open space with access to daylight.
- 44 Shade private and communal open space to create a comfortable living environment (i.e. trees, operable screening).
- 45 Optimise the amount of daylight and breezes reaching private and communal open space. Provide shaded elements (i.e. trees, operable screening)

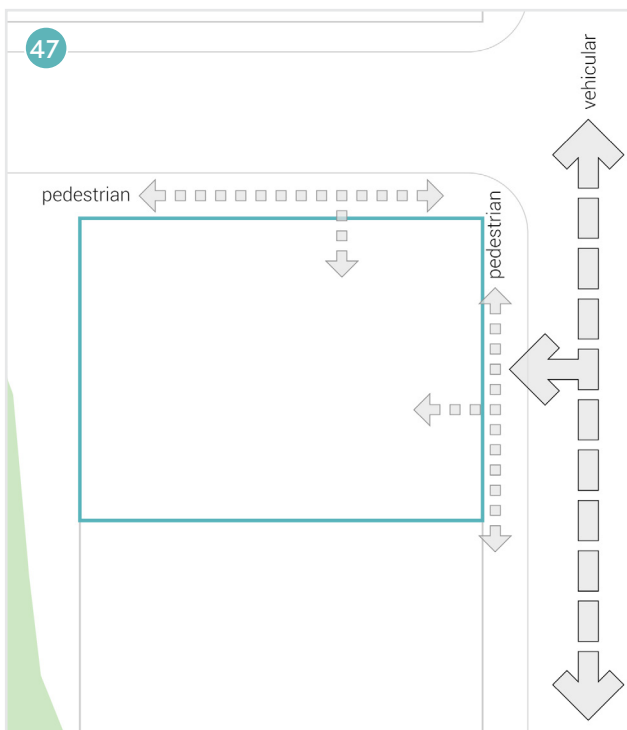
The diagram shows how to orientate built form to optimise daylight to external and internal spaces.

- » Orientate the development to take advantage of daylight, with open spaces and primary habitable rooms on the north side.
- » Understand how each dwelling has access to the outdoors and ensure outdoor areas are functional.
- » Long facades should be on an east-west axis to maximise daylight to internal living spaces.
- » Provide adequate separation between buildings to allow access to daylight.
- » Avoid narrow north-south orientation.



Access and Circulation

Access to and from the development and each individual dwelling, whether it be by vehicle or foot, is integral to the functional design of townhouses and terraces. Access has a great impact on legibility, safety, inclusionary design and streetscape amenity. This design guidance aims to minimise the dominance of garages and car parking areas, address the presence of cars on the street, and maximise accessibility.



Access and Circulation

- 46 Townhouses and terraces have a high demand for car parking, therefore a balanced car parking strategy that maintains streetscape amenity needs to be established from the outset.
- 47 Locate access points to effectively integrate with the street network and avoid existing streetscape features (i.e. street trees, power poles).
- 48 Ensure that car parking access points are designed to minimise conflicts between pedestrians and vehicles.
- 49 From the street view, ensure the pedestrian entries and car parking access are legible, and car parking is not dominant. This will ensure there is a visual connection between the dwellings and the street.
- 50 To enhance the streetscape, screen any car parking areas that are visible with landscaping and/or built form elements.
- 51 Integrate or provide a single car parking access point where practicable to minimise the number of car parking access points along the street and increase the provision for on-street car parking.
- 52 Design each dwelling pedestrian entrance to enable a sense of individuality and separate ownership.
- 53 Ensure obstruction-free and efficient access and circulation for bulk bin waste collection vehicles.

Establish the Building Zone

Once the site characteristics and dwelling requirements are understood, establish the building zone. The building zone sets the foundation for how the development will respond to its context and design elements (i.e. sensory and climatic, streetscape amenity, landscaping, setbacks, residential amenity, open space, access and circulation). Once the building zone is established, consider the architectural style and floor plan of the development.

Establish the Building Zone

- 54 When the design elements are not considered together, or one is left out, then the development cannot perform to its full potential, nor can it make a positive contribution to the streetscape and neighbourhood.

A good way to visualise this is to think of the proportions of all the development requirements on the ground plane of the site, considering:

- » Required amount of communal and private open space,
- » Maximum site cover requirements,
- » Setbacks and landscaping,
- » Minimising the appearance of car parking and vehicular access,
- » Screening of and access to refuse or services,
- » Existing water connections, sewerage infrastructure and connections to adjoining lots, and
- » On site stormwater management.

