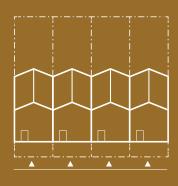
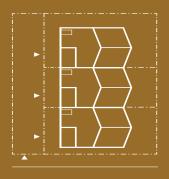


## **Types**



#### **Terrace**

A series of homes, often built at the same time, that are attached on either side to their neighbours.
Lots are often narrow and long.



#### **Row terrace**

A series of homes, often built at the same time, that are attached on either side. They may share a common driveway. Suitable lots tend to be wider and shallower than those used for terrace homes.



#### **Duplex**

Two homes built at the same time that share a central wall.

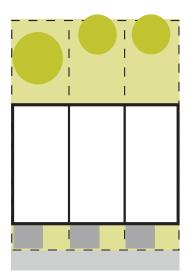


### Characteristics

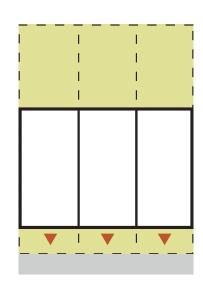
Attached homes sit alongside each other, sharing one or two walls. They often have central courtyards or skylights to bring light and air into the middle of the home, and can have generous gardens at the front and rear.

They can be single, two or three storeys, with living areas typically on the ground floor, although an attractive view might result in these being located upstairs. They are accessed from the street or from a common driveway (row terrace).

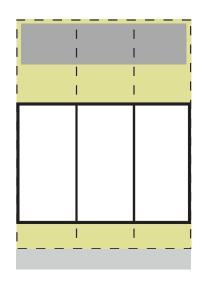
### **Benefits**



> More garden due to short driveway and compact floor plan



> Each home faces the street or a common driveway



> Flexibility to add a 'granny flat' above the garage where there is laneway access

# What to look for in an attached home

A well-designed attached home provides good connectivity between living areas and the outdoor garden, which might be located in a central courtyard or rear backyard.

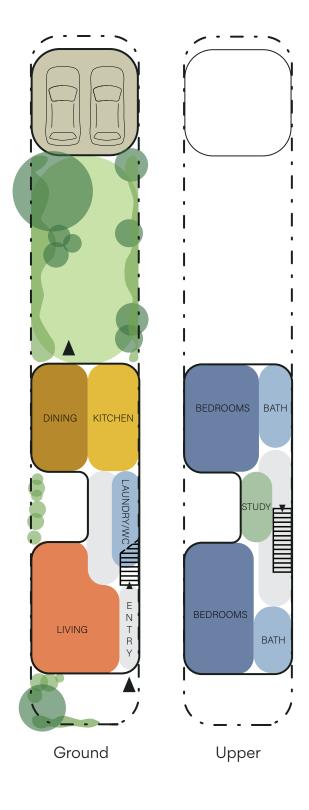
The front yard should be welcoming and encourage interaction with neighbours.

The frontage design should respond to the surrounding streetscape character and provide good sightlines between internal and external spaces, allowing passive surveillance.

Active areas such as the kitchen, dining and living room should be interconnected and located on one level, allowing for good separation from quieter spaces.

Upper levels can enable outlooks and views over gardens.

Courtyards and windows should be located to receive warming sun during winter months while being shaded in summer.



▼ Fig. 41 Stevens Street Design: Officer Woods Architects Photograph: Robert Frith, Acorn Photo



Checklist

#### Tick off as you go

Context, Scale, Aesthetics  Do the forms, materials and colours relate well to adjacent houses?	Fig. 42
Is the home attractive and inviting?	
Community, Safety  Is the common driveway attractive and inviting for social interaction?  Is there an outlook towards the street?	Fig. 43
Landscape  Do outdoor areas have sun and shade so they can be used all year-round?  Are gardens and internal living spaces connected?	Fig. 44
Sustainability  Do living areas receive direct winter sunlight, with overhead shade to keep spaces cool during summer?  Is there good natural cross-ventilation?	Fig. 45
Amenity  Does a courtyard or a garden bring light, air and an attractive view to the central areas of the home?  Is the temperature and noise level comfortable?	Fig. 46
Legibility, Functionality  Are internal spaces easy to navigate and appropriately sized for furnishing?	Fig. 47

Is there enough space for storage?

Notes	

Case Study 04

# Lincoln Street Duplex

#### Two side-by-side townhouses located in Highgate

This duplex won Western Australia's premier architectural prize in 2000 by demonstrating a high-quality housing solution 'in tight, restrictive site conditions'.

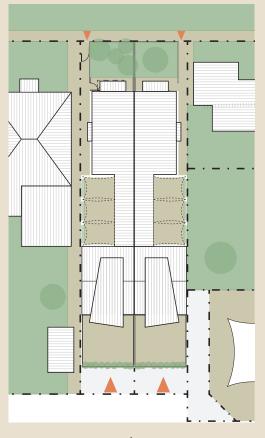
A single house lot was subdivided to make way for two long, narrow homes. Longwise (not crosswise) subdivision allowed each home to front the street rather than laneway, improving community connection and safety.

Cars are garaged at the rear, freeing up the front yard for garden space.

A generous central courtyard allows each home to enjoy ample sunlight, breeze, outdoor space, and views – all while on a narrow lot – with walls on, or close to, boundaries.

The house balances privacy and connection, making it flexible for many ways of living. The arrangement over two levels, combined with the courtyard, allows for the physical separation of different spaces while enabling visual connection, and each living area has its own outdoor space.





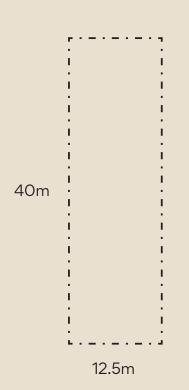


Site Plan



Aerial View





#### **Project Data**

**Dwelling type** Detached dwelling

Total site area500m²Site area per dwelling250m²

**Brief** 3 beds, 2 bath, study, 2 cars

Internal area (m²) 240m² per dwelling

**Designer** With Architecture Studio

**Developer** N/A **Builder** N/A

**Constructed** 1997 – 1999

R-Code R50

**Awards** 2000 George Temple Poole

Award

Case Study 04

## **Lincoln Street Duplex**



#### **Indoors**

Rooms are located around a large, central courtyard with floor-to-ceiling glazing, oriented to capture northern light and create visual connections between the separate living areas of the home.

Rooms are sized to allow easy furnishing.

Sustainability | Legibility | Functionality



#### **Outdoors**

Three large outdoor spaces are provided – a front garden with trees, a deck above the garage and a central two-storey courtyard that visually extends the internal living areas and provides sunlight, natural ventilation and views.

Amenity | Landscape | Aesthetics



#### Community

The central courtyard design incorporates screens along the boundary that allow views over the leafy neighbourhood while maintaining privacy for neighbours.

Both homes face the street, allowing for passive surveillance.

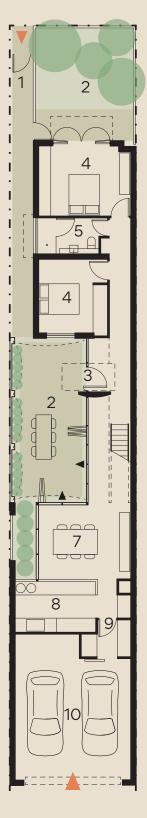
Context | Community | Scale | Safety

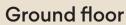
# Floor plans

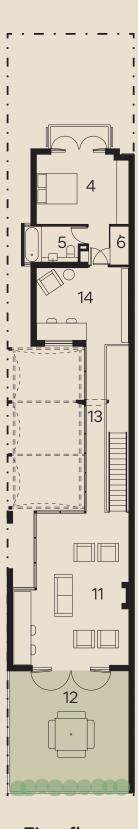


#### Key

- 1. Security gate
- 2. Courtyard
- 3. Entry
- 4. Bedroom
- 5. Bathroom
- 6. Shower
- 7. Dining
- 8. Kitchen
- 9. Laundry
- 10. Garage
- 11. Living
- 12. Rear deck
- 13. Bridge
- 14. Study







First floor

Case Study 05

# Stevens Street

#### Sustainable, adaptable homes in White Gum Valley

This group of four row terrace houses has been intelligently designed to achieve excellent sustainability and adaptability.

Large north-facing courtyards allow winter sunlight to penetrate living spaces and a thickened slab enables better heat storage, creating evening warmth that reduces the need for additional heating. During summer, south-facing windows within the roof allow natural light in while minimising solar gain.

Internal layouts are arranged so that each dwelling can be adapted into two units with ease. Bathrooms have been designed to support accessibility, accommodating changing household needs and intergenerational living.

Low maintenance and sustainable materials are used throughout. Walls are made of recycled rubble, adding warmth and texture to the street frontage and courtyard areas.

▼ Fig. 52Photograph:Robert Frith, Acorn Photo







Site Plan



Aerial View



#### **Project Data**

Dwelling type

Total site area

Site area per dwelling

No. dwellings on site

Brief

Internal area (m²)

Designer Developer

Builder

Constructed

**R-Code** 

**Awards** 

Row terrace

1472m<sup>2</sup>

368m<sup>2</sup>

4

3 beds, 2 bath, 2 car

182m<sup>2</sup>

Officer Woods Architects

Earthcare Development

Imagin Group

2011

R25

2012 Harold Krantz Award for Multiple Residential,

Walter Greenham Sustainable

Architecture Award, AIA
(National) Multiple Housing

commendation.



Case Study 05

### **Stevens Street**



#### **Indoors**

The raked ceiling and skylights provide good natural light and ventilation. Northfacing glazing captures winter sun and a dark finish to the concrete slab allows better heat retention.

The open-plan design is easy to navigate and allows for flexibility of use.

Sustainability | Functionality | Legibility



#### **Outdoors**

Overhangs along the north facade ensure that the hot sun is kept out during summer. Multiple rooms wrap around the courtyard to allow views into the garden. The recycled rubble walls are high quality, robust and low maintenance.

Landscape | Amenity



#### Community

Retaining existing on-site trees and adding new ones benefits the wider community through urban heat island reduction. The materials used and the scale of the building responds well to its surrounds.

Balconies overlooking the common driveway offer a clear line of sight to enable passive surveillance.

Community | Context | Aesthetics | Scale | Safety

# Floor plans



#### Key

- 1. Garage
- 2. Entry
- 3. Store room
- 4. Bath/toilet
- 5. Laundry
- 6. Bedrooms
- 7. Kitchen
- 8. Dining room
- 9. Lounge
- 10. Deck
- 11. Courtyard garden
- 12. Pedestrian entry gate
- 13. Common driveway
- 14. Water tank





Adaptation 1: Extended family



Adaptation 2: Multigenerational

Case Study 06

# **Broome North**

#### A climate responsive neighbourhood in Broome

A group of climate-savvy, affordable, community-minded suburban homes were built in Broome's north for key workers, who are often priced out of the private rental market.

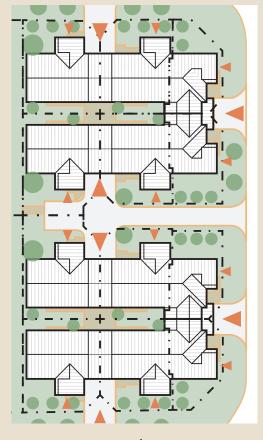
The design of these homes offers some great ideas that are applicable to infill settings.

Compact one and two-bedroom homes share a roof, allowing them to blend into the surrounding neighbourhood of larger family homes. Clever design allows for the future conversion of these units to a combined three bedroom dwelling, enabling evolving needs to be accommodated over time.

Responsiveness to Broome's tropical climate is key to the sustainability of these homes. Each unit has a well-shaded verandah with a ceiling fan and 'wind scoop' roof to enhance cooling airflow.

▼ Fig. 56 Photograph: Gary Annett Photography







Aerial View



#### Site Plan

#### **Project Data**

75m

Dwelling typeTerraceTotal site area2814m²Site area per dwelling234.5m²No. dwellings on site12

**Brief** Mix 1 & 2 bed, 1 bath, 1 car

Internal area (m²) 46m² & 76m²

**Designer** Engawa Architects with Rodrigues Bodycoat Architects

**Developer** Foundation Housing

**Builder** H&M Tracey Construction

Constructed 2013

R-Code R30/40

#### Case Study 06

### **Broome North**



#### **Indoors**

Large roof overhangs minimise direct sunlight to internal spaces to reduce the need for mechanical cooling.

Good connectivity is provided between the living room and the garden, creating an attractive green outlook. The internal arrangement is easy to navigate.

Sustainability | Landscape | Legibility



#### **Outdoors**

The veranda is well-shaded and ventilated, with a wind scoop to the roof that helps to ensure comfort during warm, humid weather.

External materials are robust and low-maintenance.

Amenity I Context I Functionality



#### Community

Generous front gardens include trees that help cool the street and reduce urban heat island impacts, providing a walkable neighbourhood and improving amenity.

The form, scale and materials used in the design respond well to the surrounds. A screened front fence provides a good balance between privacy needs and street connection.

Community | Safety | Scale | Context | Aesthetics

# Floor plan



#### Key

- 1. Garage
- 2. Store
- 3. Bedroom
- 4. Bath/toilet
- 5. Laundry
- 6. Outdoor living area
- 7. Living room
- 8. Kitchen
- 9. Dining room

