# Laneway House

Townsville

Case Study

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style and
function

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# Case Study
## Laneway House
### South Townsville QLD

**Project:** Laneway House

**Location:** South Townsville QLD

**Function:** Residential

**Architect:** 9point9 Architects

**Structural Engineer:** Steve McKenzie Consultant Engineer

**Builder:** Hurst Constructions Queensland

**Blocklayer:** Yellow Block Road

**Featured products:** Austral Masonry standard grey and smooth face grey concrete blocks

**Photography:** Matthew Gianoulis Photography & Design

# Creating a design that's outside the box.

## Responding to climate and maintaining privacy were central to this unique house design in tropical Townsville. The role of concrete masonry was also central, and quite literally so!

Raw materials add design interest and warmth

The tall blockwork walls are part of a palette of natural materials

Thinking of Townsville probably brings up visions of elevated Queenslanders with deeply-shaded balconies. However South Townsville is an older area characterised by low-set heritage cottages. Rear laneways are a feature of the area "but a lot of people don't take advantage of them," contends Zammi Rohan of 9point9 Architects.

Rohan grew up and studied in Tasmania and came to Townsville in 2004 to work for Troppo Architects. He established his practice in 2011 with two uni mates who operate under the 9point9 banner in Melbourne and Hobart. Zammi loves the tropics now: "The winters up here are absolutely amazing, just perfect."

The Laneway House sits on a block just 10 metres wide by 50 metres, with the street frontage to the west and a laneway to the east. The challenge for Rohan was to maintain privacy while maximising outdoor space in such a slender envelope. The conventional response is to compress the house to one end of the site. "People don't open up the sides of their houses when they are close to the boundaries," he observes.

This house is basically two separate but linked pavilions, leaving the centre as a large open space while maintaining privacy. The street entry is to the side rather than on the front which would have taken up some of the precious width and required a corridor.

The front pavilion progresses from two bedrooms, a laundry and bathroom, past the entrance and through to the kitchen/living area. Thanks to the (generally) benign climate, the dining area is outdoors, albeit under cover. That's right: no internal dining area.

The steel-framed link is acrylic-clad and can be secured by a fin-like succession of eight doors. It leads to the rear pavilion which houses the master bedroom, a small study and a carport accessed from the laneway. The living area and the master bedroom suite open to the central courtyard. "That sense of openness while maintaining privacy was important for my clients," Rohan explains.

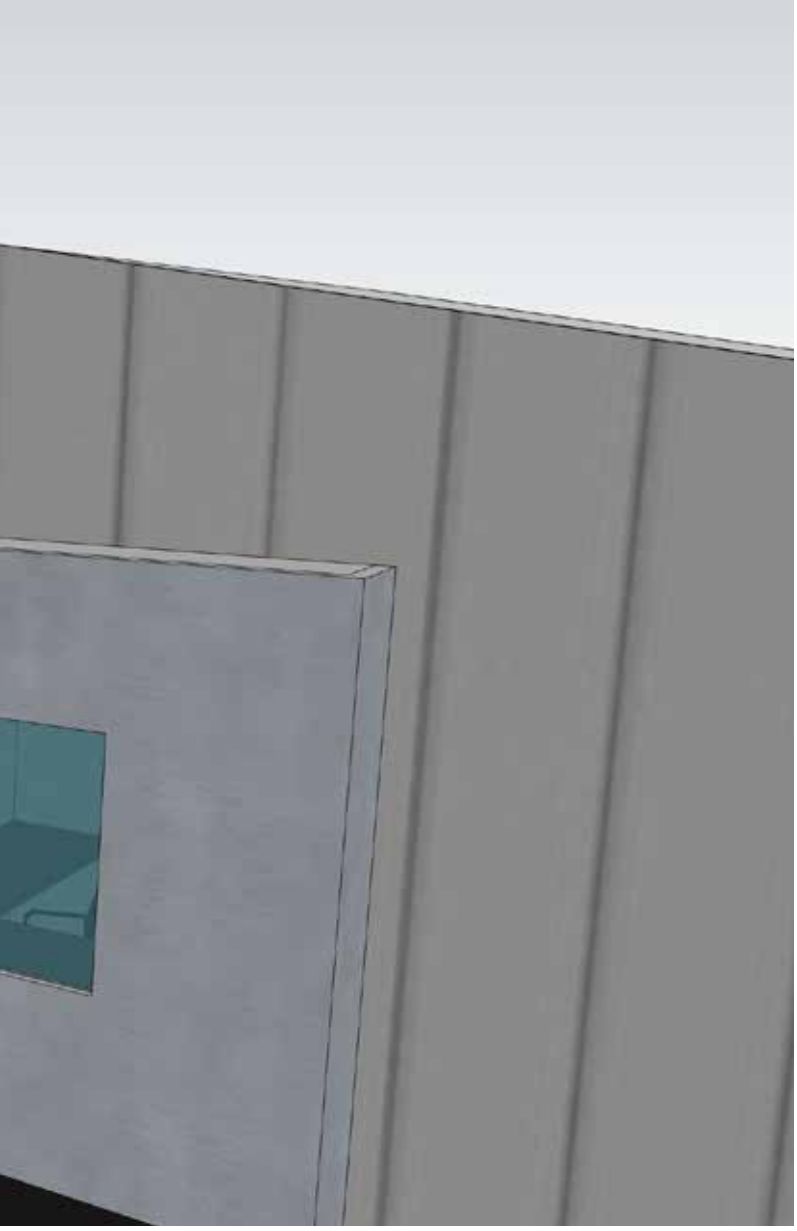
Concrete masonry walling is widely used in Queensland for its economy, speed of construction and strength. Masonry walls, brick or block, perform well in compression which helps resist projectiles in a cyclone, like trees or roofing sheets. But they don't perform as well in tension, a vital consideration in high wind areas. In Townsville and in much of Queensland it is standard practice to tie masonry walling to starter bars in the slab and tie the roof trusses to the walling. The assembly is then core-filled for maximum strength.

# Site Considerations
## Site and Surrounds

The side walls of the Laneway House are constructed in reverse concrete masonry veneer, that is with blockwork on the inside, separated by an insulated cavity from the fibre-cement sheeted exterior. As well as the standard tie-downs, these masonry walls were reinforced by a concrete ringbeam about half way up their height.

"Response to climate is really important," says Rohan. "It's not just because it's nice to do, up here it's extremely important because of the heat and the need to control it effectively." Being built close to the boundary, eaves protection was not feasible along the northern walls. Despite this, the internal blockwork on these walls remains cool. "Even late in the day you can touch the blockwork and it's nice and cool," says Rohan. "So the blockwork doesn't just look good it also moderates the temperature internally."

The Laneway House comprises two pavilions joined by a link along the northern edge of the central courtyard

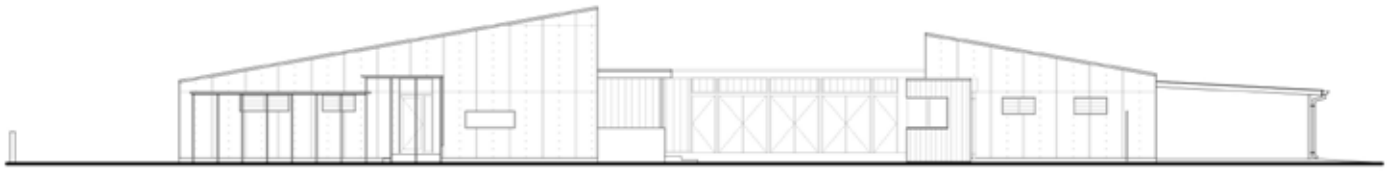


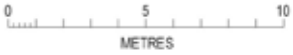
Research conducted for Think Brick Australia by The University of Newcastle concluded that although reverse brick veneer was effective at maintaining a stable and comfortable temperature range insulated cavity brickwork was superior. Both performed better than insulated lightweight construction, even when this had a higher R-value. For the Laneway House, the narrower wall thickness afforded by the fibre-cement external cladding was an over-riding consideration due to the confined site.

The blocks chosen were standard grey units with a scattering of smooth-faced grey blocks to provide a subtle variation in texture. The block faces have been left exposed, their mottled grey finish sitting comfortably with the timber surfaces, white countertops and black accents such as tapware, seating, light fixtures and painted steel. The overall effect is one of understated casual elegance as the design flows all but seamlessly from the front avenue to rear laneway.

The blockwork is a blend of standard units with a scattering of smooth face blocks

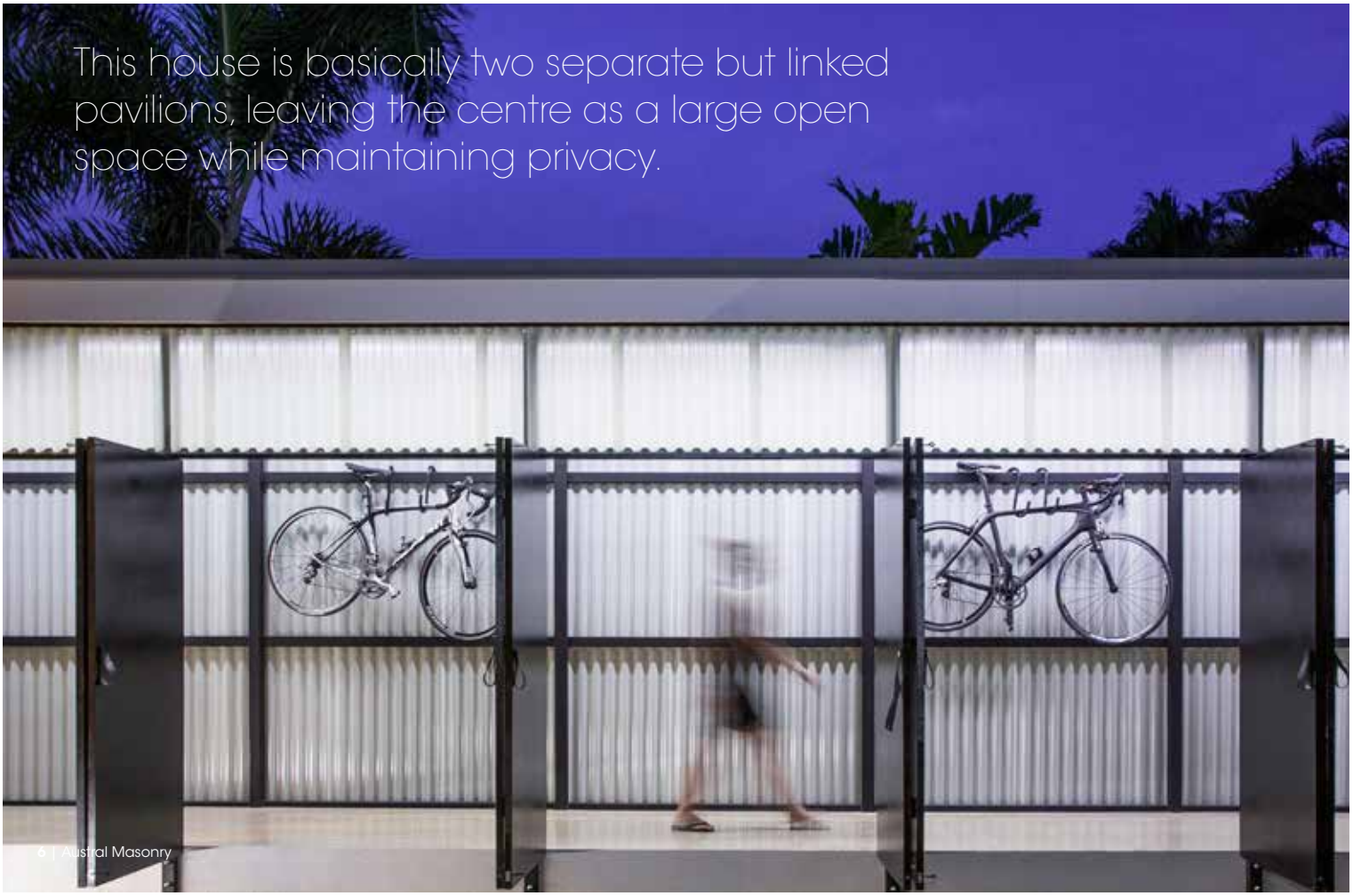
# Elevation + **Section**



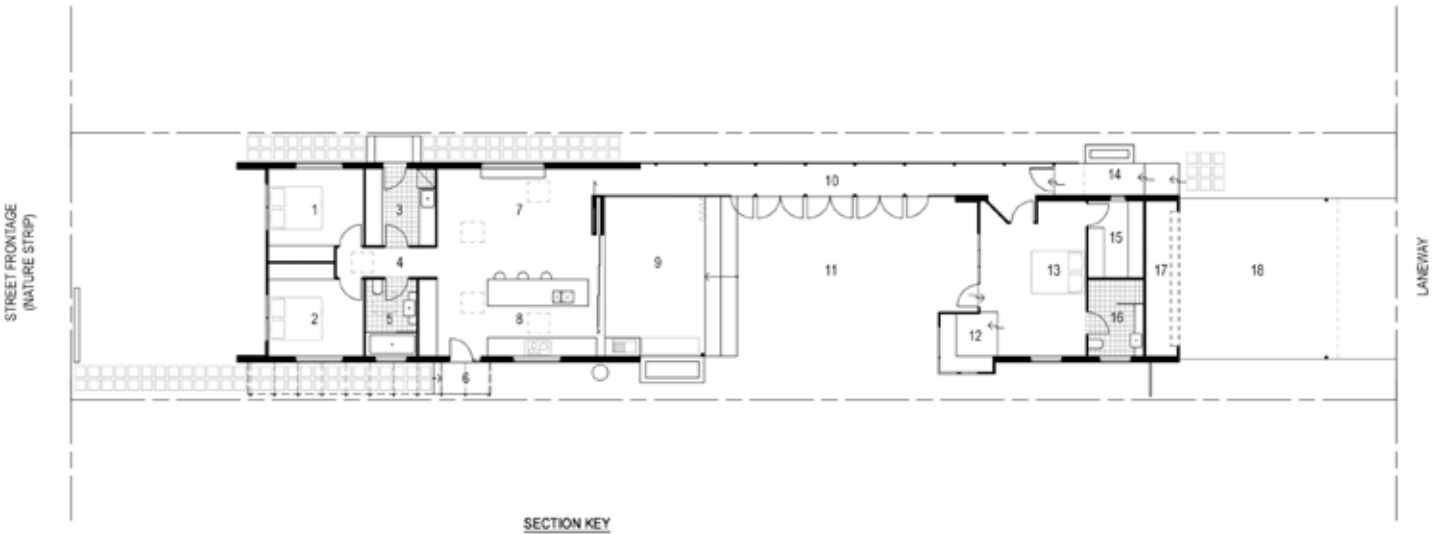

**SECTION KEY**

1 - BEDROOM 3
2 - BATHROOM
3 - KITCHEN
4 - OUTDOOR LIVING
5- COURTYARD
6 - STUDY
7 - BEDROOM 1
8 - ENSUITE
9 - STORAGE
10 - CARPORT



This house is basically two separate but linked pavilions, leaving the centre as a large open space while maintaining privacy.

# Floorplan




**SECTION KEY**

1 - BEDROOM 2
2 - BEDROOM 3
3 - LAUNDRY
4 - HALLWAY
5 - BATHROOM
6 - ENTRY
7 - LIVING
8 - KITCHEN
9 - OUTDOOR LIVING
10 - WALKWAY
11 - COURTYARD
12 - STUDY
13 - BEDROOM 1
14 - REAR ENTRY
15 - W.I.R
16 - ENSUITE
17 - STORAGE
18 - CARPORT

0 5 10
METRES


Sophistication and style

Linking corridor between the pavillions

The front entrance is located at the side, conserving valuable width

The interior enjoys a palette of natural materials

"The clients were really keen on a raw material palette. So they liked polished concrete and they really wanted to have exposed masonry for their internal wall finish.
So we ended up coming up with a strategy which allowed that aesthetic they were after but also performed extremely well thermally."

Even the letterbox is made in grey concrete blocks, sheathed in spotted gum and backlighted with strip LEDs! A blockwork planter marks the front entrance.

Rohan describes the front elevation as being "understated, a little stealth-like." Being a modern house located in a character precinct, this design is respectful of the scale and proportions of its neighbours while making its own statement.

The steel-framed link is acrylic-clad and can be secured by a fin-like succession of eight doors.

The kitchen and living area are in the front pavilion and directly address the external dining area and courtyard

The exposed blockwork works in seamlessly with the supporting natural elements of the kitchen cabinetry

The master bedroom in the rear pavilion is a study in understated elegance

Simplistic design detail

Townsville is rediscovering its laneways with a CBD development delivering Melbourne-style laneway bars and eateries. The Laneway House may be on a small site but it manages to fit three bedrooms and two bathrooms into 135 square metres under cover, and 180 square metres including the outdoor dining area, courtyard and carport.

This is a design that considers the site characteristics as well as the climate and the clients' needs instead of reaching for a standard, out-of-the-box solution. And isn't that the way it should be?

The challenge was to maintain privacy while maximising outdoor space in such a slender envelope.

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