



# GREEN

*ECO-CONSCIOUS CONTEMPORARY NEW ZEALAND HOMES*

# MODERN

Claire McCall



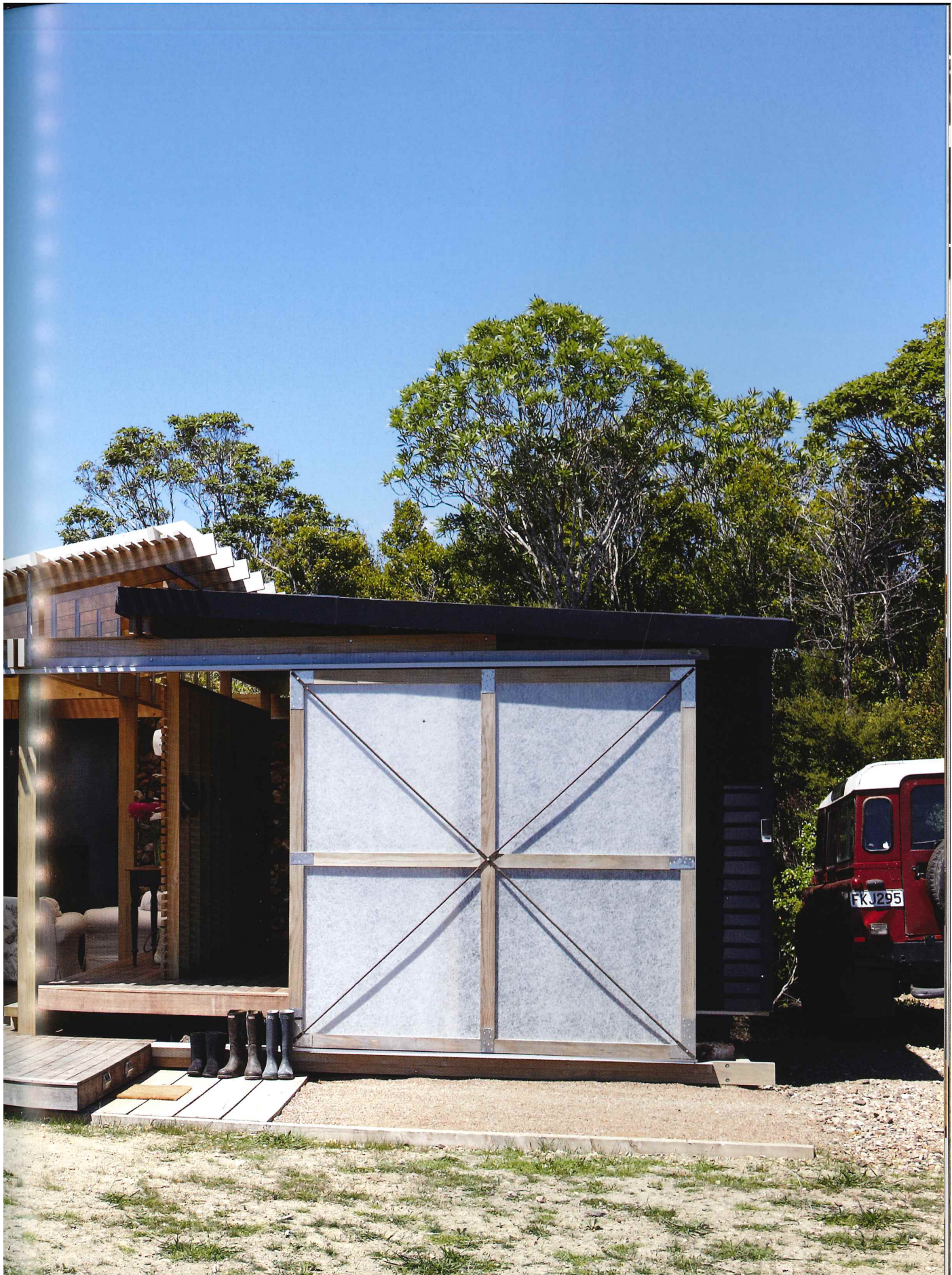
# GOGO BACH

HERBST ARCHITECTS

PHOTOGRAPHY BY JACKIE MEIRING









**Previous pages** | Two modest timber cabins were repurposed and positioned facing each other to bookend the breezeway and create a zone that is neither indoors nor out.

**Opposite page** | A butterfly roof hovers over the cabins to link the structures; translucent sheeting on the roof creates shade but allows light to permeate.

At first, when architects Lance and Nicky Herbst were shown the two small portable buildings their client had bought on a whim on the Trade Me website, their hearts sank. In front of them stood a pair of unremarkable cabins – the starting point of a commission to craft a weekend retreat. The rectangular structures were marketed as an affordable, movable option for granny flats or a beach house; their lightweight materiality meant they could readily be hooked up to a vehicle and towed. A tow-hitch was attached to the front of each one.

Owner Mark Izzard and his partner Roanne Parker wanted to live the bucolic dream. Their 20-hectare property on Waiheke Island was a landscape where llamas grazed and bees buzzed between cabbage-tree blooms. With extensive bush, streams running through it and a view to the coast, this was the perfect holiday environment. Izzard saw the relocatables as a quick-fix solution that would allow him to use the land he had owned for seven years. One contained two bedrooms and a loo, while the other was set up with a kitchen and living area. Since they were 'temporary', modest forms on wheels, he had every confidence that he could put these second-hand bargains on the property without the need for resource consent. Job done.

'Unfortunately, the rules were that anything that isn't on a caravan site is considered a building and it needs consent,' explains Lance Herbst. This regulatory roadblock became an opportunity to create something a little more substantial.

A plan was hatched to integrate the \$40,000 purchases by linking them with a covered deck. 'The relocatables essentially became bracketing for a new space,' says Lance. The project was viewed as a way to occupy the land in an arrangement that provided an entertainment pavilion in a clearing in the bush.

The question was, how to interact architecturally with these structures? One downside of the buildings was that, at 2.8 metres deep, they didn't offer enough volume to create a proper living room. 'That made us construe these things not as spaces themselves but as adjuncts to the space we were going to make.' The cabins' decks, which flipped up to facilitate easy transportation, were another disappointment. They were under-engineered and 'like trampolines'. Aesthetically there wasn't much to celebrate in the pair of transportable buildings. 'We decided to park them, screen them off and use them to provide amenity,' says Lance.

The butterfly roof has become known as a Herbst Architects' trademark feature; one now hovers lightly over the heart of the bach. Supported by six columns, it's the most sculptural element of a timber exoskeleton that lends an industrial, no-frills nature to the design. Such is the architects' skill that it's now hard to distinguish the cabins from the whole. This composite of old and new has been named the Gogo bach. This is in reference not to the dancing that sometimes occurs spontaneously on the central platform, but to the on-the-move nature of the two original structures that bookend the home.









*'THE LAND ALREADY HAD A TRANSFORMER BOX ON IT, BUT WE PULLED OUT THE CABLING AND INSTALLED SOLAR INSTEAD. OUR SYSTEM COST \$14,000 BUT IT SUPPLIES ALL OUR POWER. THE LIGHTS MAY FLICKER A BIT WHEN RO PUTS THE HAIRDRYER ON, BUT IT WORKS WELL.'*

*- MARK IZZARD, CO-OWNER*





**Opposite page** | One cabin was redesigned as a kitchen and adjacent living room. It was lined with thick plywood veneer to give it a womb-like feel.

**Left** | A timber-batten screen separates the bedroom cabin from the central area.

**Below** | The off-grid home draws its energy from a substantial bank of PV panels sited on a container alongside the house. The fireplace set into a gabion wall allows a longer period of outdoor living throughout the year.





The process began by positioning the cabins facing each other 7 metres apart. 'To make a distinction between them and the new outdoor room, we included a level change,' says Nicky Herbst. The cabins had to be put on piles to comply with council regulations. This, usefully, raised them to be a couple of steps higher than the central zone.

This central room, neither indoors nor out, operates like a breezeway, sheltered by a translucent roof with a layer of battens to filter the sun and reveal slivers of greenery, enhancing the sense of connection to the outdoors. Shoji screens on the north side provide protection from the wind and, when opened, slide back over the cabins, which serves to mask their pedestrian nature. An internal timber-batten screen ensures privacy between the central living space and the bedrooms; and bifold doors inserted in the other cabin concertina open to link the kitchen to this area.

Anchoring the breezeway space was an important part of the thinking. 'We wanted to create a strong, solid edge,' says Nicky, 'and give the occupants something to congregate around.' They achieved this with a gabion-basket wall, filled with stones from the Waiheke quarry that runs the length of the southern end of the holiday home. A fireplace is set into the wall, backed by a sheet of metal. Behind this substantial feature is a wet room with handbasin and rainhead shower. The decks attached to the cabins were demolished and new ones built that protrude into the central area to act as bench seating.

While the first concept was to leave the original Gogos untouched, plans change. In one, a sliding wall between the kitchen and the adjacent tiny living space was removed. The entire cabin was then lined in thick plywood veneer – walls, floor and ceiling. This material wrap has changed the character of the space. 'It feels like a cave that the family could retreat to when the weather's bad,' says Lance. A woodburner was installed, the natural choice on a property where firewood is abundant.

By repurposing a pair of existing dwellings, the carbon footprint of this build is minimal. Although it's small – less than 100 square metres – it nevertheless fills big design shoes and offers this extended, blended family an escape from the everyday.

Although there was grid power, the owners opted to install a bank of PV panels on top of a shipping container elsewhere on the property. The house is almost self-sufficient: it requires only bottled gas for cooking. Fruit trees, the herb garden and honey from onsite hives augment the larder.

From the initial dismay of seeing those ordinary, bantam-sized buildings, to a result that embraces and enhances them, the journey has been one of valuable learning. As Lance Herbst points out, 'This is not just amenity; this is a place of magic.'

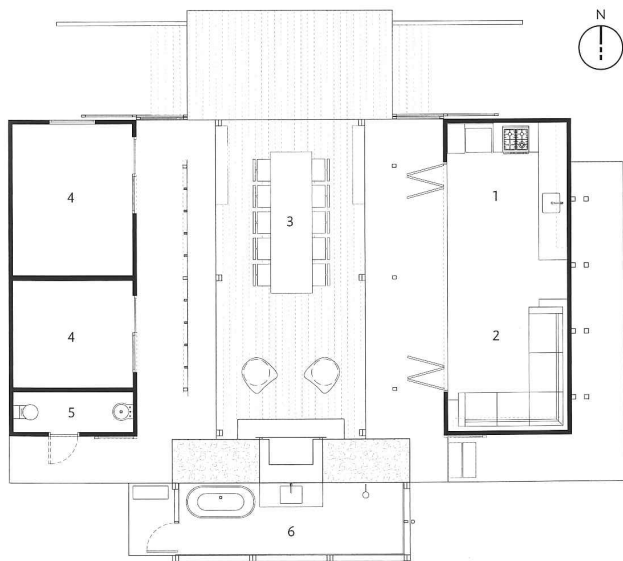
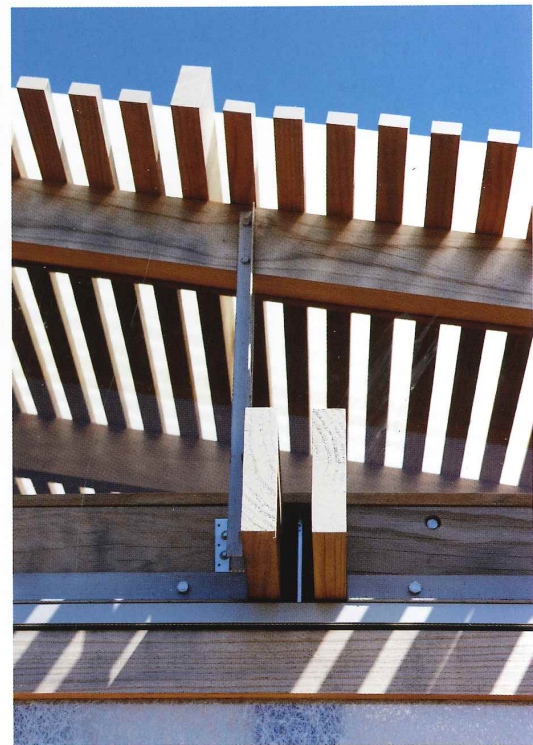




**Left** | The wet room is backed by the gabion wall filled with stone from the local quarry. Rainwater for showering is collected from the roof.

**Below** | Exposed structure is in keeping with the honest aesthetic.

**Next page** | Sliding Shoji screens with stainless cross-braces offer protection from the weather, but peel back over the cabins to disguise the less-than-handsome footings.



**Legend**

- 1 kitchen
- 2 living
- 3 covered deck
- 4 bedroom
- 5 WC
- 6 bathroom





# Q&A

| IN CONVERSATION WITH: NICKY AND LANCE HERBST, ARCHITECTS

- Q** | CM: You used pine for the structure but kwila for decking and western red cedar for the fine batten work in the bach. The latter two are imported timbers, so not 'green' in that respect. Tell me about your timber choices and the reasons behind them.
- A** | NH: New Zealand pine has a provenance that is sustainable in that it is totally renewable.
- A** | LH: But the downside to pine is that, in order to make it suitable for building, they poison the hell out of it. Macrocarpa, which can be left [untreated], is anecdotally okay for using externally, but you won't get anyone to guarantee it for 50 years. There are very few hardwoods that can be left outside. In my opinion, Vitex has been inappropriately used on the outside and it's failing in this application. Australian eucalypts are touted as the future but there's still a long way to go. Kwila outperforms every timber we have investigated by a long shot. We specify it from suppliers that have provenance and certification. Western red cedar is a definitely certified sustainable resource. Because it's imported from Canada, it has the mileage footprint of an elephant; but nothing else comes close to its performance on walls, screens and ceilings. It stays straight and naturally weathers. We have to make a call: do we use a lesser wood and rebuild in 30 years, or one that comes from Canada and that will be here in 100 years?
- Q** | CM: The heat-pump industry has flourished in recent years. You feel this is a bit of 'greenwashing'. Could you explain why?
- A** | LH: We used to have something called 'air-conditioning'. Then the industry rebranded itself and started selling heatpumps into the domestic market. A heatpump is the most economical way to get heat from electricity, but the industry sold them as a means to cool a house, too. All of a sudden, we have moved from houses that are naturally ventilated to ones where a heatpump is used instead. Our energy footprint is immediately bigger. From our point of view, if you are designing for the north of New Zealand, you should be designing for ventilation, not for insulation. When you seal up a house, you have to introduce mechanical means to make up air. If you open the window, you ruin the air-conditioning. It's a crazy system we should not be considering in this country.
- Q** | CM: Which aspects of sustainable design do you incorporate into your buildings?
- A** | NH: We ameliorate the comfort levels in various ways. In the Gogo bach, we use the make-up and structure of the roof to provide optimal light penetration, balanced against radiant heat gain. The breezeway can also be opened at both ends with shutters that slide away on the front and back face, which allows through-ventilation.



