



A

# Treading lightly in the suburbs

*Good design using recycled materials*

Ettalong on the NSW Central Coast is flat and sandy, once mainly occupied by modest fibro beach holiday houses. Now it's a desirable suburb of Gosford, which itself has become almost a commuter suburb of Sydney.

It's the last place I'd have expected to find an owner built home of such disarming simplicity, small footprint and smart use of recycled materials. In fact I almost didn't find it, tucked away as it is from the street behind large and handsome lilly pilly trees.

The stack of old bricks that first meets my eyes tell me this is definitely an owner builder project, since most such admirable humans are magpie collectors. One basic criterion was that they wanted to build as cheaply as possible, having no money left whatsoever after buying

BY SHARYN MUNRO

the block. Their idea was to see if they could do it by salvaging and stockpiling materials, and designing around those. Classic owner builder practice!

There seems to be more garden and outdoor space than house. And this proves to be so, as the 140m<sup>2</sup> house meanders unobtrusively down the side of the 490m<sup>2</sup> block, facing north instead of the street.

With neighbours on three sides and a busy street out front they wanted the house 'to back in on itself and to feel like your own little oasis when you enter.' As it does; those protective lilly pilly trees were a major reason for buying this block.

## Retaining origins

Yet as well as a home, the resulting small building space also houses *Site Studio*, an architecture and art practice that combines the talents of architect (and owner builder) Milos Obradovic, and his partner, installation artist and sculptor, Mandy Francis.

When they bought the block about five years ago, there was an old single bedroom cottage and garage on it. Milos says this was originally built to accommodate pilots in WWII, as there was an emergency airstrip here that ran to the beach. The cottage and garage are still here, albeit 'upcycled'; transformed, and given a larger 'family' of structures.

The beauty of the site was that the cottage was positioned on the side, right up the back of the block, not in the middle as is common, with a 'public' front yard. It had great proportions, about 7x5m, like a slab hut or miner's cottage, and a fairly steep roof. Milos could see a chance to keep the little old house in the corner and then join the garage to it with infills.





## Anonymous links

That garage is now the home office, connected by a glazed link to a new central open plan structure for living and kitchen, which similarly connects to the old cottage behind; it is reminiscent of train carriages and their small walkway joints. 'Each old part is still in its own right, stops and starts where they used to,' says Milos.

The spaces are separated as well as joined by the glazed links, since 'links are anonymous spaces.' For example, a door from the living space to the office would feel too close, but the metre square link creates an anteroom space.

## Japanese influence

For me the overall feeling is a cross between beach shack and Japanese; simplicity and lack of ostentation are critical in both. Milos and Mandy had spent time in Japan and loved 'the way you enter into rock areas, the floor to ceiling windows and doors and lots of light materials, yet still with intimate spaces and the sense of gardens.'

Traditional Japanese architecture has courtyards, with the separation between inside and outside very tenuous, often with paper walls and screens. The couple wanted to make outside living easy, and indeed the main living room is like an open verandah that can be closed up.

In that mode, the tiny old separate laundry/bathroom shed has been connected to the house by a longer glazed walkway, and made into an open air moonlight/sunshine bathroom that can open out to the garden. The idea was to wend the house through the site, making the most of the northern aspect, with little leftover courtyards in between keeping it feeling airy and light and long.

As their son Archy and daughter Lilla both play music, the courtyards also serve as acoustic breaks. Their bedrooms are in the original cottage, with a sunroom/sitting room added to the north. Milos removed the fibro and the ceiling, repaired and relined the building and divided it in two. A large sliding door of 'bathroom' glass in daughter Lilla's room can open towards a similar facing opening in the lower living building, like a stage when she plays music.





E



## Why and when old or new

Old shower screen safety glass panels have been used as fixed highlight panels. Opening windows were old army stock, used as hopper windows. New plywood lines the walls over new hardwood bracing. Milos notes that 7-9mm ply from the mill is inexpensive material rarely used as surface material, usually covered. Plus you can pin things on it, leaving no dents and 'it's probably better insulation than plasterboard.'

Thinner 4mm ply was used on the ceiling with beading over the joists,

painted in one room, where the slight slumps give the ceiling an almost upholstered look. In the other the ply is left natural and follows the roof line.

In general he's used high windows for flowthrough ventilation, as they get a sea breeze here. The roof was insulated with 100mm batts, and the walls with concertina cardboard, except in wet areas and on the south, where batts were used.

He had sourced all the second-hand hardwood, windows and doors, then learnt of some Californian bungalows being demolished in Sydney. He cut out their old cypress tongue and groove floors

into 15 panels, keeping the joists on the back so he could use them as units, prefab panels to build his external walls. This greatly speeded up the build.

Milos installs his finds without too much refurbishment. Apart from the cypress floorboards, the rest were all local finds. The sets of glazed western red cedar doors used for the whole of the living room northern face were on a waterfront house, so quite weathered. He is waiting for their finish to totally peel off and will then redo. Other doors all came from one house so are all the same, and with the same old doorhandles.



F



G

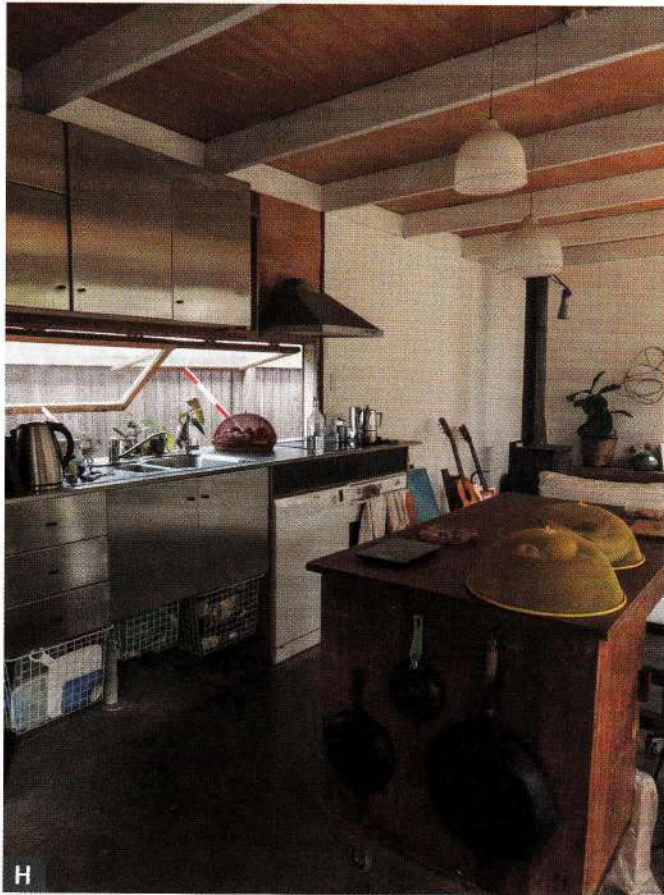
### The social space

The new main room floor is very effective burnished concrete. It looks like rock and was a lot cheaper than polished concrete. More trowelling was involved, with some off-white oxide added.

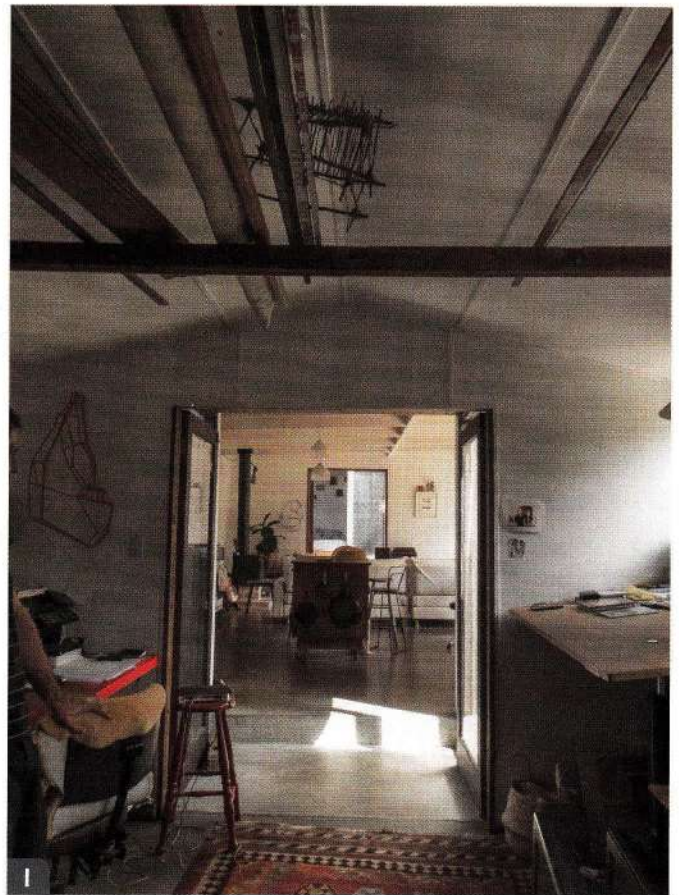
It is also a great heat sink for passive solar, to maximise the winter sun's warmth. Milos had worked out the exact overhang needed to exclude summer sun, which stops right at the edge of the concrete slab. In winter the sun comes all way in onto the concrete and warms it. The single track for the glazed doors allows them to slide out of view and leave the whole room open to the garden.

Because of termite concerns, Milos used Class 1 hardwood for the frame, and the slab is a barrier in itself. The ground slopes somewhat, so it looks very thick at the garden edge, making 'a good height to sit on.' Being a waffle slab, it uses a lot less concrete and is insulating.

They all love this communal space. Mandy says that having lived in many different places, they knew what they didn't want: a house that gets cold, not enough sun, and being left out when



H



I

cooking in the kitchen. She loves cooking and the garden, so one big open social space allows them to be 'all together all the time' – if they choose.

The kitchen itself was salvaged, with cupboards found by the side of the road, made of stainless steel, and from the University laboratory. They incorporated other things and used more form ply. Interestingly, the bench tops are 20mm thick compressed fibre cement (CFC) sheeting, waterproof and heatproof, oiled with *Livos* natural oil. The long trestle table in the living space is shared as needed for dining and working.

Plasterboard was used instead of ply to line this room because 'it was a lot easier than painting plywood.' Mandy wanted a light room, and plasterboard only needs two coats of paint as opposed to three or four on ply. They found plasterboard to be a dusty affair, and as first timers there were tricks they didn't know, plus, unlike plywood, it needed special tools. The ceiling is of naturally honey-coloured ply, with beams painted a contrasting white.

Beyond the slow combustion heater is a wide opening towards Lilla's courtyard

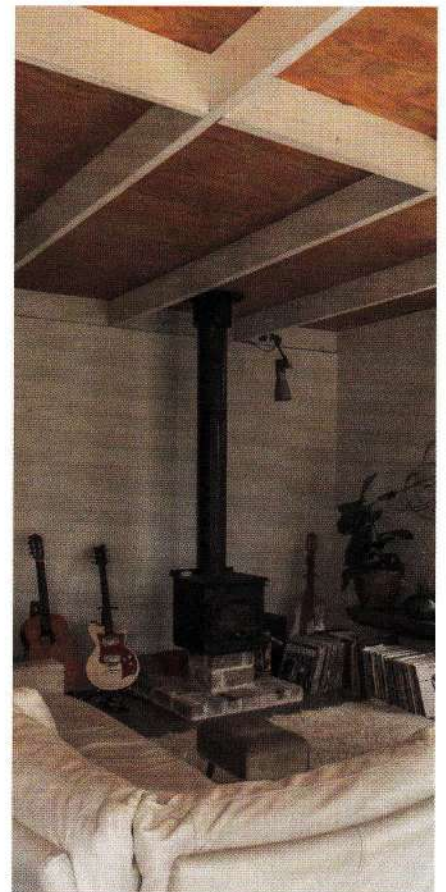
and bedroom. It seems set into deep walls; an illusion, since Milos made the door frame proud on the outside. It's like a wall door, over the half-round tallowwood log shelf/sill.

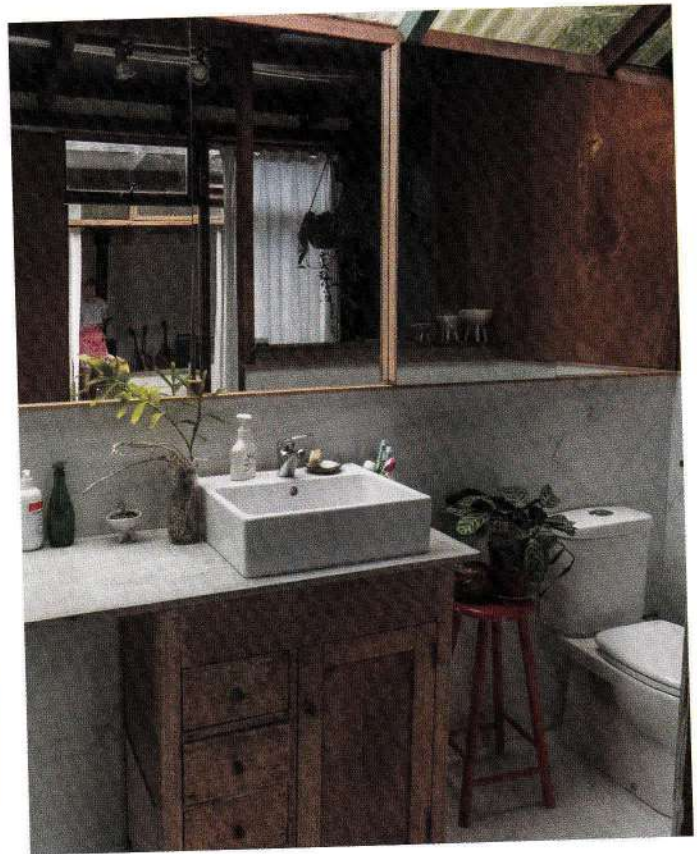
### The garage/office

The old garage was eaten out by white ants, so Milos is keeping his office space light and airy, with high visibility inside and out to find and check future attacks. The buildings are all raised and/or can be inspected. He relined the office ceilings with ply but left the stud frame exposed on the walls, as he prefers.

In a cost saving exercise, Milos direct-fixed the glass in every second bay and made the openings solid timber push-out top-hinged shutters. As he points out, 'it's always cheaper to make a shutter than an opening window.'

Currently their bedroom space is behind the office but plans have been approved for an upstairs bedroom and they are about to start building it. The office will then have barn doors from the street end and be more evident.





## Wet areas

The passage to the laundry is mainly glazed, and partly of those floor panel walls, with their joists left exposed inside, supporting occasional display shelves for found and art objects. The laundry is used like a drying conservatory with upper north light panels. In summer it actually gets too hot in here so Milos plans to mount canvas 'blinds' externally on the ridge to roll down then.

He kept half the old shed and reframed, as the termites had been so voracious he had to replace every second stud. While not quite finished, it's a lovely light bathroom now, with *Alsonite* roof panels and a mirror wall above the basin and toilet to keep it bright. Here again compressed cement sheeting has been used as the basin benchtop, over a timber cabinet found by the side of the road, rescued and given a new leg.

The shower wall tiles look like marble but are actually large porcelain tiles from a remainder tile place. Floor tiles are real marble, small hexagons, non slip. A cute grotto shelf has been cut into the wall, backed by those same hexagonal tiles for contrast. A vertical glass panel restricts the shower spray.

In the main section, a half wall separates it from the bath space, where a clearly recycled toothpaste-green bath grandly resides, open-able to nature, Japanese style. Weathered grey timber decking links it to the living space rooms externally, joining the pebbles and sandstones of the garden and adding to the beach shack/Japanese feeling.

Milos does mainly domestic architecture, where the guiding principles are providing inspiring and healthy spaces for people to live in, using natural materials, passive solar principles, and being embedded in an environment in the greenest possible sense, material-wise as well, to achieve efficient, affordable and sustainable solutions.

He and Mandy obviously 'practice what they preach,' and have been able to allow themselves free personal rein here. Talk about treading lightly on the earth! ♦

*Sharyn Munro is an author and regular contributor to The Owner Builder. She lived for decades in her solar powered, owner built mud brick cabin in the NSW Upper Hunter mountains. Now she lives in the Manning Valley.*  
[www.sharynmunro.com](http://www.sharynmunro.com)

## Livos natural oils

Compressed fibre cement sheeting is typically not very absorbent; you could use the **Livos Kunos** natural oil sealer straight onto the surface. Due to the density of the substrate, the oil coverage would be extremely economical.

If the sheeting or other substrates is extremely porous, e.g. ply or magnesium oxide board, you should first prime with **Livos Linus** priming oil.

One of the benefits of using natural penetrating oils is that you are able to rejuvenate the surface with ease if or when required. With a little care and correct maintenance, the surface will look a treat for quite some time.

See **TOB 168, 176, 183** for articles about using oil on concrete.



### Links & resources

#### ◆ Site Studio Architecture & Art

Creating inspiring, functional, timeless buildings through architecture, and thought provoking objects and spaces through installation and sculptural art.

0410 710 865 (Milos),  
0420 634 658 (Mandy),  
[www.sitestudio.net.au](http://www.sitestudio.net.au)

#### ◆ Livos Australia

Eco-friendly paints and oils.

03 9762 9181, [www.livos.com.au](http://www.livos.com.au)

