





Naturally KI – Laviv

Beauty on the beach

BY LYNDA WILSON

On first entering Roni and Cathy's holiday home at Vivonne Bay, you are immediately overwhelmed by the most amazing timber wall and ceiling. It doesn't take long to realise that this is only one of many unusual features in this home, lovingly built by a couple who are committed to living lightly on the earth.





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Some features of Laviv...

1. Circular window in bathroom.
2. Glass inlays brighten timber.
3. Individual themes on each door frame reflect local nature.
4. Stone base wall in sunroom displays more found treasures.
5. Large sliding door out to the covered verandah.
6. The open plan living area encourages family interaction.
7. Trunk and branch support.
8. Be gone, straight lines!
9. In-progress bedroom landscape.



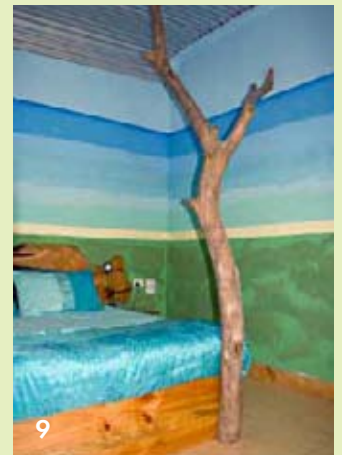
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Roni and Cathy's home...

10. A composting toilet doesn't have to be dull and boring!
11. Chaff cutter window frame.
12. Curves and copper piping were used creatively on drawers.
13. Mud brick and rammed earth combined beautifully.

Roni and Cathy moved to Kangaroo Island in 1982, making the trip over from WA in a converted bus. They bought 32 hectares of land in an area considered to be 'poor' by farmers, and set about building themselves a mud brick home. They both believe that the best way to use their lifetime sensibly is to cut corners as far as possible by not being employed by others - so they started off growing various crops, most recently garlic and honey. Cathy, a registered nurse and midwife, also works off-farm to provide some extra income. At first she used to travel up to Adelaide for short periods of work, followed by longer sessions back at home; now she works at the Kangaroo Island Health Service in Kingscote as well as on the farm.

They never had any intention of building another home. Roni says he is not a builder - although he is a welder by trade - but rather a jack-of-all-trades. He sees himself first as a father by nature, then as a farmer, and finally as a frustrated artist by soul.

Being confirmed 'greenies,' they became involved in the local action against Vivonne Bay being turned into a beachfront McMansion paradise. Local action convinced the state government to purchase all the waterfront blocks of the subdivision, thereby retaining the wild and natural state of the beach - recently voted the title of 'Best Beach in Australia.' Having a little spare cash, they decided to invest in three connected blocks of the subdivision - this was back when land in Vivonne Bay was still cheap; not so today.

They decided to build a home on the middle block, using Roni's time and expertise gained from the first build, with the intention of having his parents visit for a few months each year from Israel. Unfortunately they didn't like it, finding life on KI too quiet! So plan B was implemented, and that was to rent the house out to holidaymakers. A photographic record of the build is on display for visitors, and they hope that the stay may convince some people that owner building in an earth friendly manner is possible.

Natural build

Following the theme of their home, they wanted the house to be naturally and ecologically just, using local building materials, being well insulated and comfortable to live in. Unusual it

sure is, but it is nevertheless a 'dinkum' house, fully council approved. Roni did all the plans himself, and had them checked over by an engineer to okay the footings and structure.

Roni's mother is in a wheelchair, so access throughout the house and outside was designed with this in mind; counter heights, door openings, access widths, corners, and the bathroom all had to be carefully thought out.

Roni also hates straight lines, so many of his ideas presented challenges. However, as their policy is to never borrow money, he had time to do what he wanted rather than what could be bought or manufactured.

The house is built on the central of the three blocks, with the blocks to each side left 'wild,' thereby retaining a feeling of being in the bush.

The house and surrounds needed to be on one level, so some digging into the slope was required. The soil structure in the area consists of a top layer of hardened 'sandstone,' with sandy soil beneath. Using his trusty rebuilt 1952 Fordson tractor 'Freddie,' Roni removed this top crust carefully so as not to smash it. These pieces were used to build the retaining wall and one of the feature house walls, and the sand below was used for the walls.

Stabilised rammed earth was chosen for the walls, as the site soil was not suitable for mud bricks. In 2002 the walls were built.

Concrete columns were cast at each corner of the house. Cast concrete window and door arches were made in formwork on the back of a trailer, backed into position and lifted into position with 'Freddie' power. The arches have different patterns on each side; one side features a raised seahorse incorporated into the formwork, with a freeform design on the other side incorporating glass nuggets and star designs. The arches were placed so that some of the seahorses are inside, others outside.

The walls were then built between these concrete sections. Roni made his own formwork; a single form 1.7m long by 600mm high was used over and over. The sand was mixed with around 10%



This page: Many features at Laviv were inspired by the practicalities of the home - recycled timber to create striking doorways, a library and framed view for the loo, concrete columns and frames provide support and beauty.



is easy due to the cut-in, allowing you to simply step on, making maintenance and access to the solar panels easy.

Cypress pine timber has been used to line the ceiling. One huge trunk was used; milled to around 17mm, sanded down to 14mm, and then pieced together like a jigsaw. The internal wall of the living area was completed in the same way. Cypress pine is readily available locally, it is very light, doesn't warp and has natural termite resistance. Pinks batts were placed under the roof, and then the lining boards put in place.

Natural heating

The house is oriented along a northeast-southwest axis, with the sunroom facing northeast. Incorporating the main entrance door, the stone base wall is topped with windows in galvanised frames. Polycarbonate roof sheets allow the sun to stream in, falling on the rear black wall for heat collection. External blinds can be lowered for summer.

Two rounded cast sections left over from the initial house build have been used to create a circular window. The ceiling is a continuation of the main living area timber lining.

Looking back into the house, detailed glasswork set into woodwork provides a myriad of dancing colours. There is a sliding window through to the kitchen area - allowing light to penetrate and providing an ideal environment for potted herbs. The top section between the internal walls and ceiling is not sealed off, allowing heat to spill into the house; Roni may install louvres here to prevent excess heat in summer.

Heat is centralised in the house by the ceiling slope, and can then be redirected to other rooms via a channel in the roof apex joining up with channels that run down behind the cornices. A small fan will be needed to circulate the air; the system has not been connected up yet as it has not proved necessary. There is also provision for underfloor heating, which will be connected up to the solid fuel fireplace when it is installed.

Natural design

Internal doors are all wide enough for a wheelchair, and slide back into a wall recess. External doors are handmade from slabs of timber, with glass inlay in most. They have two



Top: A warrior, complete with nose ring, on the front door welcomes you to this home. Above: The frustrated artist, Roni, at work on the complicated bathroom octopus tiling. Left: Found objects are incorporated - this one in the driftwood screen for the gas bottle.

cement, and a converted electric wacker packer was used for ramming. Once the walls were completed, a concrete ring beam was cast in place.

Steel rafters were placed at each end of the roof and evenly spaced for the roof structure. These were topped with untreated pine battens, sisalation and corrugated iron. Insulation and ceiling boards would be completed later.

The roof has a low angle, with a large area incorporating the back porch used for water collection. Access to the roof



L-R: Trailer-mounted mould for the concrete arches; cypress pine lining jigsaw; roof framing.



vertical halves, both opening, connected together with metal bars and self-closing mechanisms. This means that only one side of the door needs to be operated, making wheelchair access much easier. Metal sliding bolts provide the locking mechanism. While the interior face of the main door is relatively plain, the outside face has been carved and fashioned into the face of a warrior – complete with nose ring!

All water access is centrally located, with the bathroom and kitchen backing onto each other.

The kitchen is small and compact, with a gas cooktop and microwave. Kitchen bench tops and sides are all timber slabs. The bench tops are low, with clear space beneath, and lots of low down drawers for storage. Plumbers' copper piping has been used to create handles for the drawers and the range hood is made from stainless steel sheeting.

The bathroom is both practical and a work of art. A false internal ceiling isolates the bathroom from the rest of the house, but incorporates a skylight that lets in natural light from the sunroom polycarbonate roof sheeting. Another circular window features here, with a chunky timber shelf across the centre.

All surfaces are tiled, with no lips or ledges anywhere. The shower curtain rail is made of copper piping, while stainless grab rails are placed around the shower and toilet; one of the excess pipe joiners has been used to make the toilet roll holder – no waste in this build!

An octopus undulates over three walls. The shape was drawn on the walls before the surrounding areas were tiled using full sized coloured tiles. The octopus shape was then filled in with smaller pieces. About seven shades of blue, with some cream and white, maintain the watery theme.

The whole intention of the house was to blend into nature rather than pushing it aside, and where you have to push, to do it naturally. This is especially evident in the main bedroom, where the large arched window directly in front of bed provides an uninterrupted view out to the surrounding bush. The bed headboard is a timber slab, and the foot end of bed has trunks 'growing' up into the wall and ceiling. Side tables have been fashioned from driftwood with glass tops, the clothing shelf unit is made from local natural timber, and even the hangers have been made from metal hooks with timber bars. The walls have been painted with a beach/landscape colour theme – with details still to be completed.

As an interesting contrast to the timber elsewhere, *Zincalume* has been used as a ceiling in the bedrooms.

Natural touch

Artistic touches abound. Intricate metalwork swivel light fittings over reading chairs have been shaped and welded, painted various colours, and finally had stainless steel kitchen bowls attached as reflectors/shades. Glass mosaics cast colourful shapes everywhere. Furniture is made from driftwood – much of it from the French shipwreck 'Montebello.'

The pale stone wall at the back of the living area provides a contrast to the rich timber, and contains small nooks for housing found objects. Interior walls are plasterboard but far from ordinary, having naturally edged timber skirting and using branches as handrails.

A home-made weighted self closer for the insect screen on the sliding door makes life a lot less 'bitey' in summer.

Energy saving bulbs are used throughout. Smoke detectors and light fittings have natural timber edged blocks behind to get over the problem created by the corrugations in the *Zincalume*.

Natural systems

A 33,000-litre main water tank stores rainwater. Water is pumped up from the main tank to a 200-litre header tank (automatically, thanks to a float switch), providing gravity-fed water to the house.

A 1kW grid connected photovoltaic power system supplies more power than they use, even though not quite north facing. They had considered a pivoting system, but had been advised that it wouldn't be worth it.

Solar hot water is boosted by off-peak electricity, but is only occasionally activated in winter after a prolonged cloudy period.

All wastewater goes into a septic system with soakage area. The 'treated' water filters through a drum with a submersible pump, distributing the water to the plants via in-ground drippers, each surrounded by a plastic drink bottle to prevent silting and root invasion.

A fire services volunteer, Roni fully understands the danger of bush fires. A fire sprinkler system surrounds the house, which provides the first line of defence by drenching the house and surrounding area. A fire hose is conveniently located on the verandah for further protection.

The shaded back porch area between the earth walls of the house and the stone retaining wall creates a naturally cooled oasis in summer.

This is indeed a home that can be termed 'natural' – from start to finish, and well into the future, nature has been the most important aspect of anything that is done here. ■

Laviv is available for holiday rental. Contact Roni & Cathy: 08 8559 7262, email naturallyki@bigpond.com

See the TakeABreak accommodation website (www.takeabreak.com.au) and search for Laviv in Vivonne Bay Kangaroo Island SA.