

Sanctuary

Contents

—Issue 46



HOUSE PROFILES



16 Eighties revival

A standard single-storey brick house in Brisbane sets a precedent for the way we renovate in sub-tropical climates.

22 Work the room

Sometimes redesigning and rebuilding one room is enough to improve the whole house, and it's cost-effective too!





Natural lightbox

Ingenious sustainable design plumbs natural light into the heart of an ageing terrace.

34 Material difference

Sourcing sustainable materials can be a major challenge, even for 'deep green' homeowners like Danny Mathews.





42 From fibro to fabulous

Is Australia's ubiquitous fibro shack worth keeping? We meet two families on opposite sides of the country who say 'yes'.

48 Cottage cathedralette

A flexible new house design preserves a horticulturalist's beloved inner-urban food garden.

Free-cycled style

Built to tread lightly on the land, the 'Scavenger Studio' in America's Pacific Northwest makes elegant use of salvaged materials.

3

Contents

—Issue 46



DESIGN MATTERS

62

Renovate on any budget

Experienced designer Simone Schenkel shares her tips for sustainable renovations with a starting budget of \$10,000 through to \$350,000-plus.

66

Upgrade from 1 to 7 Stars

Danie King and her partner were keen to find a way to measure the impact of their major renovation.

68

Adaptable design

Houses should be designed to match the way we live, which in the 21st century means being adaptable for ageing, climate, working from home and variable household sizes, writes Kirsty Volz.





FOCUS

78

Deconstruction: What's old is new again

Deconstructing buildings to salvage materials is less common than demolition for landfill – but could this be about to change?

82

Lessons learnt

Five years on, we revisit a Gold Coast house designed to accommodate multiple families to see how their co-housing experiment has evolved.





DESIGN WORKSHOP

74

A better beach shack

Uta Green of Green Design Architects in Tasmania offers suggestions for how a 1950s beachside shack can be renovated for better thermal efficiency, including options for a low-budget retrofit or a modest extension.





OUTDOORS

85

Shared yards

Tearing down the backyard fence or installing a gate between your house and next door sounds good in theory, but what's it like in reality?

88

Foraging: Your right to roam

Foraging-friendly landscapes can be found just about anywhere, including in the city. You just need to know where to look, writes Kirsten Bradley of Milkwood.



REGULARS

10 Products

14

Reviews

54

Renew update

92

Designers in profile

93

Marketplace

96

Ask our experts

Eighties revival

A standard, single-storey brick house in Brisbane sets a precedent for how 1980s housing stock can be renovated to suit a sub-tropical climate.

WORDS Rachael Bernstone PHOTOGRAPHY Christopher Frederick Jones

JOSH AND BEC HAVE LIVED IN THEIR

Brisbane home for 10 years, but it wasn't always the "best house on the street", as it feels now. "It was an ugly brick house, about 30-something years old, and not much had been done to it in that time," Bec explains. "We started looking at other options to buy and move – which gave us some headaches – but we knew this house had good bones and good potential. It just needed the right person to see it, and know what to do with it."

That right person was architect Paul Worrall, of Reddog Architects, whose work Bec had spotted in a magazine 12 years earlier. The couple approached him to scope out some options, despite some misgivings expressed by family and friends, who wondered whether it was wise to engage an architect, Bec recalls.

"Then, once we started, those same people said: 'I can't believe you are renovating a crusty old garage', but the proof is in the pudding," she laughs. "Now they walk in and go 'Wow!'."

Paul began by discussing the couple's needs and wants, and devised a plan to see them through the various stages of family

life; their two sons are currently aged seven and four.

"We know how important domestic environments can be for kids, because they influence your memories and your view of 'home'," Paul says. "We spoke to Bec and Josh about their brief, their kids, their lifestyle and expectations, and we asked them what they wanted in five years, and 10; we were looking at the bigger picture rather than just their immediate needs.

Paul's redesign transformed the three-bedroom, one-bathroom house – with bedrooms that previously opened from the dining room – into a four-bedroom, two-bathroom dwelling with better separation of public and private zones. The new open-plan kitchen, dining and living room opens on two sides: to a protected courtyard beside the new carport, and an elegant covered outdoor room in the backyard.

"That space is a toy car track and then we'll eat lunch out there," Bec says. "Because it's north-facing, different parts are in sun and shade over the course of the day, which changes how we use it."

Having grown up in the area, Bec and Josh knew they could harness breezes off

Moreton Bay for passive cooling in summer, and take advantage of the northern elevation at the rear for passive heating in winter, if only they had the right plan. So, their new living space has plenty of doors, louvres and fans to capture and direct cooling cross-flow, and concrete floors to store winter heat.

"When the doors are open – which they are all day, every day, even in the middle of winter – it's like there's no outside-inside division," Bec says. "We didn't know what exact details we wanted in the plan, but we knew we wanted that.

"And I can't imagine being confined to 900mm-wide door opening now," she adds. "We might walk outside for a few minutes to drink our coffee, and notice the clouds patterns, or that a storm is coming. That connection to the outside is what we love, and it has just become part of our day."

Where their home was originally introverted and disconnected from the garden and the street, the renovation opens up to both, and that's the most pleasing part of this project, Bec says.

"Our friends were initially concerned that passers-by would be able to see into





•

The alteration and addition retained as much of the original brick structure as possible, so it's still possible to imagine what the house was like before, when a driveway ran down the side of the house into a garage. The 'crusty old garage' is now a covered open-air terrace; the driveway has become the living room with the car now parked at the front.

G

Sliding doors completely open the house to the front and rear yards and the covered terrace. The internal and external slabs are thermally isolated to help retain an even temperature inside.



room

Shrinking the footprint and redesigning and rebuilding one part of this simple beachside house improved its layout, comfort and energy efficiency.

WORDS Rebecca Gross
PHOTOGRAPHY D'Amico Photography

SOMETIMES IT TAKES JUST ONE ROOM

to change the experience of a house.
At Board House on Sydney's Northern
Beaches, architects Buck & Simple
redesigned one corner of the house to create
a light and open kitchen and living area
that has become the new heart of the home.
Using basic passive solar design principles
and built on a \$173,000 budget, Board
House is now net-zero energy and much
more comfortable year-round.

Anina Rich and Mark Williams lived in the house with their two young children for five years before renovating. Built around the mid-twentieth century, the triple-front brick house originally faced west until the local arterial route, Pittwater Road, was expanded, cutting into the front of the suburban block. With access changing to a parallel street, the front of the house was reoriented to the north-east with multiple additions of a second living area, bathroom and laundry. This however resulted in a tight floor plan, enclosed internal rooms, cold and dark spaces and little regard for orientation or outlook. Anina and Mark engaged Kurt Crisp and Peter Ahern of

Buck & Simple to create a more liveable, sustainable home by improving the floor plan, enhancing the passive solar design and reducing the environmental impact.

The designers removed the additions and rebuilt the north-east corner to accommodate a new kitchen and living/dining area, and reconfigured the centre of the house to enlarge the main bathroom and one of the children's bedrooms. In doing so, the internal footprint was reduced to create a northeeast courtyard and a covered front entrance. "The reduction of the footprint of a house to put a courtyard in is a hard sell, but we knew it was required to make the new room work," says Kurt.

The new structure retains the northern brick wall, with some of the original bricks reused in the eastern return. A skillion roof extends into oversized eaves for rain and sun protection and high-level windows allow for light, ventilation and views. Three east-facing windows have flyscreens with internal timber hatches operated by a simple pulley system. Timber hatches also cover the corner windows, which offer views of the surrounding plants, and the



The internal floor plan was reconfigured to relocate the kitchen to the northern corner of the house; the room was reduced in size to allow for a new courtyard garden.

Laminated veneer lumber (LVL) is used for the kitchen island, the floor is bamboo recycled from the original house and the ceiling and joinery are made from plywood.

0

The addition of a 'lantern' roof in the new kitchen/ living area brings in natural light from the northeast; exposed Oregon timber eaves with polycarbonate roofing shade the clerestory windows. Although the house footprint needed to be reduced to make the new design work, the building has been reinforced to support a second storey, should that be required in the future.



Natural lightbox

With thoughtful passive solar design, ageing terraces can be sensitively revitalised to achieve high levels of sustainability – even if the party wall is along the north side.

WORDS Kulja Coulston
PHOTOGRAPHY Drew Echberg Photographer

STANDING IN HIS KITCHEN

speaking to me about the impressive transformation of his century-old terrace into an efficient, modern 6.2 Star home is about the last thing Ben Rossiter ever thought he'd be doing. "I normally abort any conversation about home renovating," he laughs, only half joking.

Talking about your 'home reno' especially when you live in Melbourne's inner north can quickly veer into the political. Northcote, where Ben's been living in the same house with his partner Sarah for almost two decades, is experiencing an unprecedented period of gentrification. In every street, houses are being tarted up and redeveloped and concerns about affordability have contributed to the area becoming a marginal seat in recent state and federal elections. "We're getting increased house sizes in the area, but not increased density. More density is what we desperately need - not larger houses with pools," he says.

Ben and Sarah recognise that

everyone's a participant in this wave of change, and are trying to make theirs a positive contribution. They don't own a car, and over the years added water tanks and solar panels to the house. In his work as a public health advocate, Ben's been a persistent voice calling for safe, walkable cities and active transport options for people living beyond the inner ring of suburbs, which already have great amenity.

He'd actually never planned to own a house. "That happened by accident. Sarah had already bought this place before I met her," he says. And then they became inadvertent home renovators, too: "Our kids – a boy and a girl – were getting a little old to share a room, and none of us wanted to move out of the area, we're embedded in the community here."

If they were going to renovate, they decided to "do it once and properly," which for them meant respecting the neighbourhood character and undertaking a complete building upgrade which could sustain the house

for the next 100 years, and them for the rest of their lives. But there were some pretty major site constraints to contend with: the narrow block is just six metres wide, there's a party wall along the north boundary that restricts solar access from that direction, and an uninspired 1970s laundry lean-to on the back blocked access to the tiny rear garden they wanted to protect. They also didn't want to increase the built footprint.

Adding another room was going to open a Pandora's box of challenges for such a hemmed-in site, so they engaged architect Ande Bunbury, whom a friend recommended for her expertise in energy efficiency.

"Theirs was probably the worst orientation," says Ande. "They also have a heritage overlay, which isn't a problem, but when you're designing for your clients you're designing for the overall community too, and it's another consideration."

With nowhere to go but up, Ande introduced a modest second level



0

Situated in the woods in rural Washington state, USA, Scavenger Studio was built using as many free-cycled materials as possible, with components salvaged from homes slated to be demolished. The facade is clad in plywood charred by the owner using the Japanese shou-sugi-ban technique, which preserves the wood and creates a darker tonal value that helps to blend the home into the surrounding forest.



Free-cycled Style Built to tread lightly on the land, this artist's home in America's Pacific Northwest makes elegant use of salvaged materials.



WORDS Elizabeth Seward PHOTOGRAPHY Benjamin Benschneider

WHEN IT COMES TO SUSTAINABLE

builds, there are various approaches that can give a structure a smaller environmental footprint. In the case of Scavenger Studio, the compact twolevel home of artist and screenwriter Anna Hoover on the Puget Sound in Washington, USA, not far from Seattle, one of the standout environmentally friendly characteristics is its use of salvaged materials.

The sleepy atmosphere of this fruitproducing region makes it an ideal place to tuck away and create. And with a temperate climate, house designs in the region can be more explorative in some ways - as long as the structure can handle being wet! But the path to a completed project that is as lovely as this one isn't necessarily a direct

one. The very nature of salvaging asks the homeowner behind a project to be flexible. Flexibility is what allows for the inclusion of random items that perhaps become a part of the plan after their discovery, not before. This kind of freeform thinking not only yielded a gorgeous result in the case of this 85-square-metre Pacific Northwestern gem, but it also contributed to a greener project all round.

Anna first met architect Les Eerkes through the firm he was a part of at the time, Olson Kundig, which has a reputation for innovative designs, and that's what she wanted. Together their goal was to see how they might create an inspiring space that was light on the land. Could they do it without breaking the budget? That was one of the overarching questions. →



Tearing down the backyard fence or installing a gate between your house and next door sounds good in theory, but what's it like in reality?

Sarah Coles visits two neighbourhoods to find out.

WORDS Sarah Coles

Elizabeth Wheeler (right) and her neighbour Lizzy Skinner share their back garden space in Preston in Melbourne's inner north, and there is also a gate through to a third neighbour's yard. Along with fruit trees, vegie beds and compost, the three households share two clotheslines, a trampoline and a BBQ. Both Lizzy and Elizabeth's houses were designed by Positive Footprints; read all about Elizabeth's 9-Star home in Sanctuary 18.

OUTDOORS SHARED YARDS







0

Gateway between yards: This is Joe's Connected Garden in Elizabeth Grove South Australia. Established by neighbours Joe and Rosanne, the shared garden includes a nursery specialising in warm/dry climate fruits, succulents and bromeliads. They're growing 70 different types of fig and are planning a pomegranate collection. They've become members of the Rare Fruit Society of SA, which Rosanne describes as "eccentric people who like growing things that no one has heard of." Image top right: Jamie Ryan

SHARED BACKYARDS WERE COMMON

in Australia before the Second World War. After the war, as suburban affluence and a desire for privacy increased, fences began to appear between backyards. During the 1990s, as blocks were subdivided and larger houses were built, the size of those backyards shrank. But as more households transition to greater resilience and green space, shared yards are on the rise.

During the depressions of the 1890s and 1930s, backyards were places of food production and social cohesion, but these days, as people work longer hours and spend less time at home, the function of the backyard has lessened. In *The Life and Death of the Australian Backyard* (2010), Tony Hall writes that the "examination of aerial photos immediately reveals the clear contrast between older residential areas dominated by vegetation and newer estates that are nearly roof-to-roof." This loss of plants around houses has ecological implications—shade trees modify the microclimate, and plants sequester

carbon, increase biodiversity and reduce stormwater run-off.

But some households have been tearing down fences, putting gates between backyards, and designing from scratch so that there are no fence boundaries between properties. Tearing down opaque fences improves solar access and economies of scale – a lemon tree in full sun in one yard, and a large (read: hotter) compost in the other results in more fruit and faster composting.

People save time and money by sharing infrastructure such as water tanks and greywater systems; tools such as lawnmowers and shovels; and tasks such as summer watering or pruning. Elderly neighbours are less isolated, and children have greater space to play with shared treehouses, trampolines and chooks.

JOE'S CONNECTED GARDEN, ELIZABETH GROVE, SA

Twelve years ago neighbours Joe Kielnerowski and Rosanne Parker started Joe's Connected Garden, a project which follows permaculture and organic principles, by putting in a gate between their backyards.

When Rosanne moved to the street she hadn't gardened much, "I'd never heard of compost or anything," but Joe has qualifications in urban permaculture design. The project grew when Joe and Rosanne approached an elderly neighbour about growing plants in her backyard too. Rosanne explains, "It took us a while to get up the courage to ask. She had a jungle of weeds that turned into an orchard."

Shared yards can be the province of large fruit and nut trees. And in Joe's Connected Garden they're growing around 600 different varieties of fruit, vegetables and herbs including Mediterranean, native, subtropical and exotics. They give away excess produe from the gardens and the 150 fully mature fruit-bearing trees.

"We're quite happy for people to wander through and pick what's happening," says Rosanne. "That way even though we have