MODERN GREEN HOMES

Sanctuary

SMALL PROJECTS | **SPECIAL**

Top tips for a great smaller home; growing gorgeous flowers; the how and why of secondary dwellings; slab edge insulation



Celebrating simpler, smaller, smarter design



WIN

SANCTUARY.RENEW.ORG.AU

A Reclaim hot water heat pump valued at \$6,000, provided by Earthworker Energy **Manufacturing Cooperative**

Offer open to Australian residents. Details page 91

HOUSE PROFILES

16 Ahead of the field

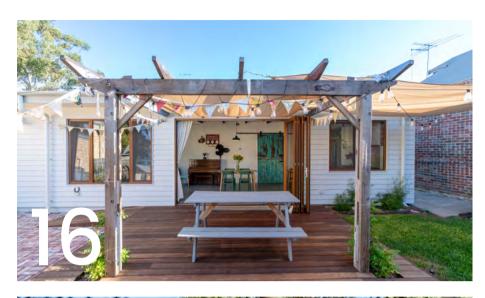
An adventure-loving couple have converted an old horse stable in Fremantle into a charming highperforming home.

22 Rear vision

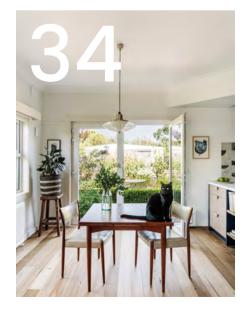
This innovative inner-Melbourne house addresses the growing need for compact yet comfortable living spaces.

28 Two for one

Studio 179 transformed one oversized, under-utilised bathroom into an interlocking bathroom and ensuite.







34 Red brick reno

After years of gradual upgrades, this leaky brick cottage in Central Victoria is now an exemplar of comfortable, efficient, low-bills living.

40 Small luxuries

This minimalist apartment renovation in Brisbane provides the efficiency of small-space living with some classy touches.

46 Studio style

Architects Uta and David Green's experimental studio in South Hobart is complete, and helping to ease the city's housing crisis.

52 Garden gem

This Brisbane couple opted for a small, carefully crafted pavilion to enhance their enjoyment of their beloved garden.







IDEAS & ADVICE

58 When less is more

We lay out the myriad benefits of opting for a smaller home, and our favourite experts offer design tips for achieving a terrific, multifunctional one that you'll love.

66 Doubling up

Secondary dwellings have a lot to offer in a tight housing market. We look at the why, how and where of building one.

70 Ticking the (small, pretty, prefab) boxes

In *On the drawing board,* architect Steele Olney tells the story of developing the Passive + Prefab Pod, a healthy, sustainable and prefabricated studio-sized home.

74 A bridge back to nature

In the first instalment of a series, architect Fiona Gray explains the origins and key elements of biophilic home design.

78 Meet the CEO

Seasoned climate campaigner and sustainability advocate Helen Oakey took over the helm at *Sanctuary's* publisher Renew early in 2024. We sat down for a chat.

82 On the edge

It may not be the sexiest of design details, but slab edge insulation is important to get right for a high-performing home.

86 A festival of flowers

Expert gardener Mara Ripani sings the praises of good old-fashioned flowers and offers her top tips on how to grow them, preserve them and use them.

REGULARS

8 Subscribe

10 Products

14 Reviews

92
Designers in profile

94 Marketplace

96 Renew update

PRODUCTS

These eight featured products are independently selected by our editorial team. If you have recommendations for products you think would be of interest we'd love to hear from you. Email: sanctuary@renew.org.au

1 Tint style

Happily, environmentally friendly paint is getting easier to source, and Tint's water-based, VOC-free range in lovely designer colours is a great addition to the market. The company has made testing colours simpler with giant peel-and-stick colour swatches and a virtual try-on facility using the Tint app. There are 70 colours to choose from, and custom colours can be mixed via the online Tint Match option. All paint is delivered, and prices start at \$45 per litre for ceiling paint and \$59 per litre for wall paint.

tintpaint.com.au



2 Magic mosaics

Glass can be recycled again and again, reducing the need for raw materials in the production of building materials like tiles. Perini's Omnia tiles are made from 98 per cent recycled glass with a mosaic look suitable for floors, walls and even pools; they are low maintenance, with a non-porous surface that does not require sealing. The square tiles come in 25mm or 50mm sizes and the range includes a variety of shades and textures. Request a sample before ordering, to check your colour choice.

perini.com.au/collection/omnia

3 Plasterboard for a warmer home

Kingspan Kooltherm K17 insulated plasterboard can be a good option for insulating existing walls if the usual methods aren't feasible. Featuring phenolic insulation enclosed between gypsum-based plasterboard layers, the Global GreenTagcertified board is suitable for various construction types. Its lightweight nature makes it easy to transport, handle and install quickly using adhesive. R-values range from R1.15 in the 35mm board to R3.7 in the 90mm product.

kingspan.com/au/en/products/insulation



If you have recommendations for films, books, smartphone apps, podcasts, websites or anything else, email: sanctuary@renew.org.au

REVIEWS

BOOKS



Never Too Small Vol. 2: Reinventing small space living

Colin Chee, Joel Beath & Camilla Janse van Vuuren Smith Street Books, 2024 \$60

The team at Never Too Small, a media enterprise dedicated to beautiful and ingenious design for small living spaces, have made a second foray into print with *Reinventing small space living* (see *Sanctuary* 58 for our review of volume 1).

Like the first book, this one is a sumptuous hardcover filled with enticing photos and pleasing pops of colour throughout. It features 30 case studies of small homes from around the world, ranging from a diminutive 27 square metres – 'Mark II', a minimalist mid-century flat in Rushcutters Bay, Sydney – to the 70 square metres of 'IT's House', a Taipei apartment with mezzanine whose footprint was actually reduced in order to let in more light.

The featured homes are loosely divided into six sections, titled 'Addition and subtraction', 'Multifunctional spaces', 'Adaptive reuse', 'Experimental approaches', 'Sustainable solutions', and 'Family-friendly homes'. It's particularly interesting to browse the projects in the final section, as small-footprint homes are so often considered to be suitable for singles or couples only. "Small family homes can be every bit as cosy and visually pleasing as their more extensive counterparts," write the authors, and it's certainly true in these cases.

With before-and-after floor plans and plenty of photos to help explain the space-maximising design exhibited in each house, this book offers ideas and inspiration for those intent on their own compact home that's as functional as it is beautiful. Even if that's not you, the volume is well worth curling up with for a vicarious architectural world tour.

Review by Anna Cumming



Naturescapes

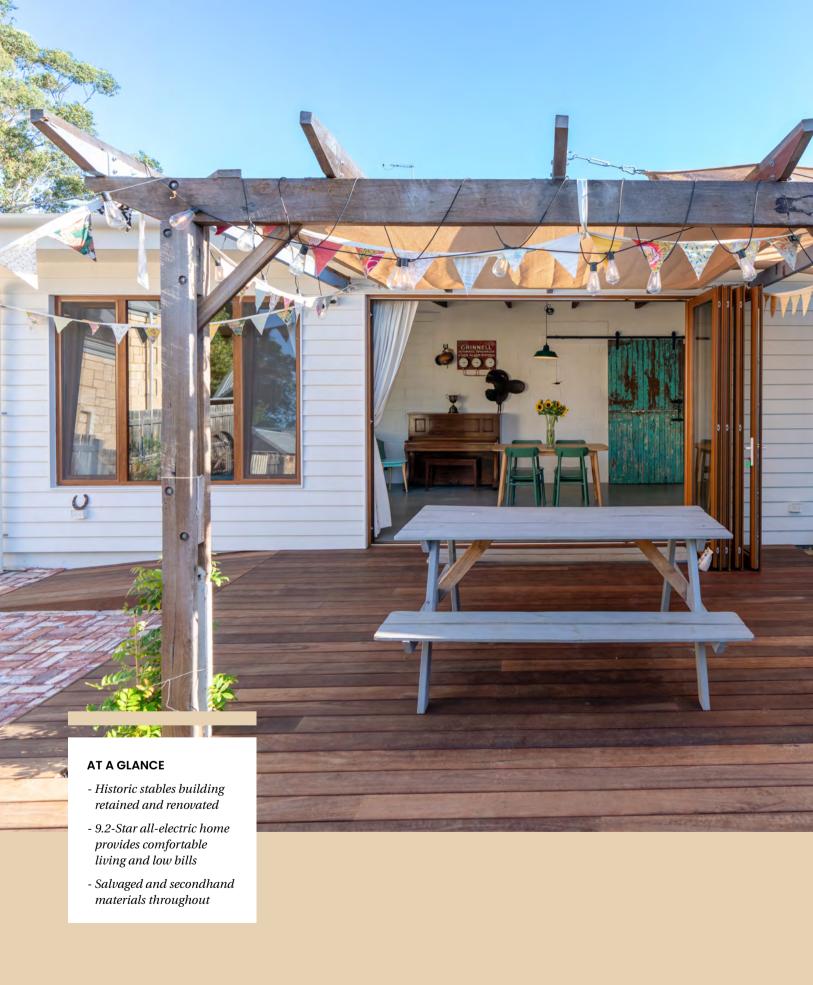
Phillip Withers & AB Bishop Thames & Hudson, 2023 \$60

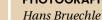
A collaboration between landscape designer Phillip Withers and habitat expert AB Bishop, *Naturescapes* celebrates the wild and varied Australian landscape and explores how it can be used as inspiration when designing gardens. The authors offer guidance on creating gardens that support local biodiversity, presenting case studies of gardens Withers has designed along with the landscapes they take cues from – all showcased beautifully with the rich photography of Amelia Stanwix.

The book presents an invitation to get to know "local everything" – that is, things like the geology, biodiversity and history of an area – and in doing so, build an appreciation of the natural systems at play around us. Withers and Bishop claim that this instills a connection to place and a greater respect for community and the environment, and that results in better gardens.

There are sections that offer advice on plant selection, soil maintenance, hard landscaping and microclimates, as well as handy plant guides that detail recommended species from groundcovers to canopy plants. While the inclusion of exotic plants like aloes and cacti did initially seem a little off-theme, in fact *Naturescapes* is a great starting point for someone looking to bring the local environment into their garden while embracing hardy plants from around the world in their design. Similar to a salon haircut made to look artfully effortless, the book illustrates how to bring home some wilderness under careful curation.

Review by Jacqui Hagen





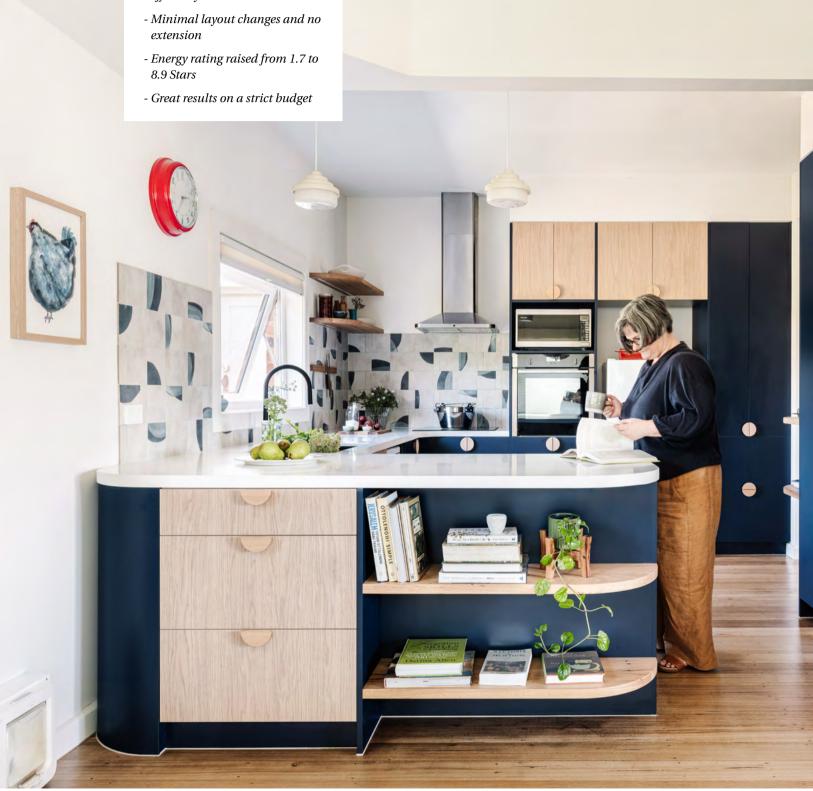


An adventure-loving couple have converted an old horse stable in Fremantle into a charming, compact and high-performing home.





- Renovation focused on functionality and thermal efficiency





Redbrick

reno

After years of gradual upgrades, this leaky brick cottage in Central Victoria is now an exemplar of comfortable, efficient, low-bills living.



Left Flipping the kitchen onto the northwestern wall of the main room came at the price of internally closing one small window. Architect Brad Swartz says that it was a necessary compromise "to improve the overall feel" in this very limited space: "The result is a living area that's comparable to a much bigger apartment," he explains. Below The wall of joinery next to the front door works hard, its sliding door concealing or revealing the workspace, TV and wine rack depending on the desired use of the living area.



another touch of opulence.

As part of the retrofit, Brad added several elements to improve efficiency and temperature control, including LED lighting, water saving tapware, and ceiling fans to enhance cross ventilation. The old windows were also replaced with double glazing in new hardwood frames: allowed by the owners' corporation as long as the original architraves were retained.

The couple love their calm and luxurious city retreat. "The full wall of cabinetry with our desk, TV and wine rack is something we are still impressed by every day. It's such a good use of space and it looks great," says Andrew. "We spend a lot of time travelling, and love to just relax in the space when we're there. The apartment feels a lot bigger than it is and we never feel on top of each other."





FLOOR PLAN





LEGEND

- Entry
- 2 Bedroom
- 3 Living
- 4 Kitchen
- Dining
- **6** Bathroom
- Laundry
- Workspace
- TV nook
- 10 Wine rack
- Storage

SPECIFICATIONS

DESIGNER

Brad Swartz Architects

BUILDER

HWD Constructions

PROJECT TYPE

Renovation

LOCATION

New Farm, QLD (Turrbal Country)

COST

\$150,000 Completed 2023

SIZE

Apartment 35m²

HOT WATER

- Shared by building

WATER SAVING

 Astra Walker water-efficient tapware (WELS 6 star)

LIGHTING

 LED lighting throughout: strip lights from TecLED, Skyline Horizon from Tovo Lighting, Unios Titanium Starlight micro-downlights

BUILDING MATERIALS

- Havwoods European oak engineered floorboards
- Laminex natural finish
 (Global GreenTag certified)
 and Polytec laminate joinery

COOKING

 Fisher & Paykel induction cooktop and oven

PAINTS, FINISHES & FLOOR COVERINGS

– Dulux Wash&Wear interior paint (low odour, low-VOC)

PASSIVE DESIGN, HEATING & COOLING

- Windows to north-east and north-west provide good natural light and passive solar gain
- Good cross ventilation
- Small footprint enables efficient active heating and cooling when required

ACTIVE HEATING & COOLING

- Big Ass Fans ceiling fan to bedroom
- Daikin 5kW ducted reversecycle air conditioner to living room and bedroom

WINDOWS & GLAZING

 Double-glazed windows with hardwood frames

OTHER ESD FEATURES

- Rejuvenation of existing apartment for comfortable small-space living
- Walkable neighbourhood with easy access to services, public transport and city centre



Above "When working with a small apartment, it's all about creating a sense of space," says architect Brad. He overcame the constraints of the awkwardly shaped bedroom with a luxurious king bed built into the entire width of the space under the window.



WHEN LESS IS MORE

Above Well-designed smaller homes can be a delight. This one in Central Victoria was designed by Small Change Design and featured in Sanctuary 58. Image: Shayne Hill

The case for smaller homes

Building designer Ingrid Hornung lays out the myriad benefits of opting for a smaller home, and our favourite experts offer design tips for achieving a terrific, multifunctional one that you'll love. Australians build some of the world's largest houses: on average, larger than even American homes! It's very possible to live comfortably in a home that's much smaller than average, though; read on for inspiration that will, hopefully, lead you to consider bucking the national trend when next looking for a home – to buy or build.

HOW ON EARTH DID WE GET HERE?

In the 1960s, our homes averaged around 100 square metres. Through the next few decades, the average floor area kept growing; since the turn of the century the average new home size in Australia has hovered between 225 and 250 square metres.

This is not a worldwide, or even a first world, problem: for example, Denmark, the country with the largest houses out of nine European countries in a 2021 study by Appolloni & Alessandro, had an average dwelling size of just 118 square metres.

Why *are* Australian homes so large? Over the years researchers have outlined numerous factors that contribute to the Australian desire for a 'spacious' home. Mainstream media raises our expectations: think about the homes featured in Better Homes and Gardens, The Block and Renovation Rescue, to name a few. Similarly, increasing penetration of social media also feeds into this cycle of keeping up with the Joneses. Visiting a display home can also change our perception of what's desirable in terms of living space. The floor areas of many volume builders' homes – even their base ranges – are so large; when I did a quick online search of three major volume builders' offerings I found only one home that was less than 160 square metres.

Another factor is money: Australians' love affair with property as an investment vehicle can distort the choices people make when building their own home. This often results in designing for what future buyers might want rather than what you actually need now, with the expectation that more space will generate a higher return when selling.

Also, it can be hard to imagine how we could use space differently, to understand actual patterns of use and see how we could design a smaller home that still meets our needs (a good designer can help with this process). Without deeper consideration, houses are so often designed with a dedicated room for every conceivable function: home theatre, study, playroom, craft room, guest room, cellar – even a room for the mud! (I jest – in fact, a well-designed mudroom is a very handy and hardworking space.) Similarly, these days an ensuite to every bedroom, plus a powder room for guests, is no longer considered an unusual feature in a home.

SO, WHAT ARE SOME OF THE DOWNSIDES OF LIVING IN SUCH LARGE HOMES?

Building extra space means using extra materials, with all the extra financial cost, resource use and embodied carbon that entails. It also means that the build will take longer and therefore cost more, which does nothing to improve the affordability of our housing stock. Larger spaces also cost more to furnish and require more energy to heat and cool – and who really wants to vacuum more rooms and clean multiple bathrooms?

Right With a footprint of just 60 square metres, this compact family home in Wanaka, New Zealand, still boasts two bedrooms and a flexible mezzanine area that can serve as an office space or play area. Designers Condon Scott Architects included storage everywhere, including in the mezzanine wall and under the stair treads. Read the full story in Sanctuary 58. Image: Simon Devitt









There's nothing lovelier than a bouquet of blooms, except perhaps one picked fresh from your own garden. Expert gardener Mara Ripani sings the praises of good old-fashioned flowers and offers her top tips on how to grow them, preserve them and use them.

Once, suburban gardens full of flowers were commonplace, but with the increasing density of our cities, shrinking outdoor spaces, and garden design trends shifting to favour lawns and low-maintenance trees and shrubs, flower growing seems to be fading.

WHY GROW FLOWERS?

It's easy to take flowers for granted, or think of them as frivolous beauty. But think again, for flowers of all types are an important food source for bees and other pollinators as well as many birds and other wildlife. Growing flowers is an easy way to increase the biodiversity in our cities, and their beauty brings joy – which is a precious thing! In addition, flowers

are expensive to buy but generally easy and cheap to grow, and make wonderful decorations and gifts.

Anyone with access to a garden, a nature strip or even a balcony can celebrate those spaces with flowers.

WHAT TO GROW

There are so many choices for flowers, both native and exotic. If you have a larger garden, you can grow a wide variety in the form of flowering trees, shrubs, annuals, and herbaceous and woody perennials to provide beauty and food for wildlife all year round. Trees include corymbia, angophora, magnolias, lilacs, banksias, fruit trees and any number of eucalypt species. Great flowering shrubs



A BRIDGE BACK TO NATURE

The essence of biophilic home design

Biophilic design goes beyond merely incorporating greenery indoors; it offers a holistic approach aimed at reconnecting modern living with our innate bond to nature. In this first instalment of a four-part series, architect Fiona Gray explains the origins and key elements of biophilic design.



Subscribe to Sanctuary or join Renew by 5pm AEDT on Thursday, 31 Oct 2024 and go into the draw to win a Earthworker-Reclaim heat pump hot water system worth \$6,000, from the Earthworker Energy Manufacturing Cooperative. Open to Australian residents. Terms and conditions apply.

This prize comes from Australia's first communityowned clean-energy manufacturer. Located in the heart of Victoria's Latrobe Valley, the Earthworker Energy Manufacturing Cooperative is part of ensuring a just transition for communities affected by the move from fossil fuels to renewable sources of energy.





