

Sanctuary

MODERN GREEN HOMES

ISSUE
67

SMALL PROJECTS
SPECIAL

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

Little wins

Celebrating simpler,
smaller, smarter design



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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





Above left Built on a tight budget, this small-footprint home in Bendigo, Victoria, by Wild Homes is a delightful example of well-designed urban infill. See *Sanctuary 56* for more. Image: Tatjana Plitt **Above right** Designed by Architect George and profiled in *Sanctuary 60*, Keely and Lucienne's diminutive yet beautiful Tassie home shows that a lot really can be achieved with less. Image: Max Combi

Coupled with the trend towards smaller lot sizes (due in part to the increasing cost of land), bigger houses also result in less outdoor space around us. This has multiple negative consequences: less green space increases the urban heat island effect, reduces urban biodiversity, reduces opportunities for easy outdoor play, and reduces our exposure to nature, which has a negative effect on our wellbeing in general.

ENOUGH DOOM AND GLOOM – WHAT CAN WE DO ABOUT IT?

The best place to start is to think carefully about how you and your family live, and the space requirements for each activity, and look for opportunities to make your home 'enough'. That is, enough to live a happy, well-functioning, and effective life without the added load and cost of 'an extra room, just in case'.

Some activities can happen in the same room at different times; by creating such multifunctional spaces you can replace multiple separate rooms. Some spaces can be divided at times and not at others, so you have a big room only when you need it, not one that sits empty the rest of the time. Some rooms can be just that bit smaller, when you really think about the activities they need to accommodate. A shared bathroom that is conveniently located near the bedrooms is much more cost-effective and space-efficient than building ensuites for each bedroom.

Reduce the space devoted to the service rooms in your home: for example, 'walk-ins' require space for standing in that can't be used for anything else, so I recommend built-in robes and pantry cupboards (well designed, of course) rather than walk-in robes and walk-in pantries. And as I like to say, a butler's pantry is fine as long as you have a butler – but do you really want to be ducking into a separate room all the time when you have guests to socialise with?

Consider flexible design at a whole-of-house level too, so that your home can adapt to suit changing living circumstances – design rooms so that they can transition from one use to another over time, or even make it possible to divide the house to accommodate multiple generations of family, or two sets of occupants (a neat example of this approach is Omnia House, winner of the Design Matters National inaugural True Zero

Carbon Challenge; for more, see *Sanctuary 62*). Another way of building in adaptability is to construct a small second dwelling on the same lot when you need more space, rather than extending the existing home. [*Ed note: see our article on p66 for more on this.*]

Storage is another function of our homes that requires space, and in my experience, 'more storage' is one of the most common elements of a renovation design brief. Keep in mind that more storage tends to mean you keep more stuff! Consider carefully what is being stored and design the storage to suit it: when everything has a place, much less room needs to be allocated to storage. Make use of every nook and cranny that is sitting empty; some examples are drawers built into stairs, bike hangers on walls, and overhead clothes drying racks in rooms with high ceilings. And, when large amounts of storage really are required, consider the possibility of creating a separate storage area such as a garage or a shed, which does not need to be heated and cooled.

IN SUMMARY

Living with 'just enough' is not about denying ourselves in some way, or moving the Australian population into tiny houses, or even asking families to live in spaces the size of an average European family home – around 100 square metres (though that's very possible!). It is an opportunity to think deeply about the way we live, and how we can do it just as well (if not better) in, say, 160 or 180 square metres instead of 250 – freeing up our time, money and resources and treading more lightly on the earth at the same time. [S](#)

ABOUT THE AUTHOR

Ingrid Hornung has been a building designer since 1996 and is the principal of Designs for You, a building design practice based in Melbourne. Her passion is creating homes that combine delight, practicality and sustainability for and with her clients. She has been an active member of Design Matters National and Renew for decades. designsforyou.com.au



Sally Wills

Sally Wills has been in the building industry for 40 years. She is registered in Victoria as a domestic builder and is the director of Small Change Design & Construction that specialises in small, high quality, energy-efficient homes.

What are your top tips for saving (or shaving) space and achieving a smaller home?

- Consider circulation and hallway space – these spaces can often be reduced substantially by keeping access paths short.
- Make spaces multi-use and make every millimetre work. A short hallway can often double as a study nook with the right furniture and lighting. An internal stud wall can have alcoves for books and ornaments – all without adding floor space.
- Consider access to the external environment: 'bringing the outside in' can allow smaller rooms without sacrificing a spacious feel.
- Always consider furniture layout and storage in the design process. Small spaces can work really well when there is a place for everything.

What rules of thumb do you work to in terms of dimensions and spaces?

- I try to work with standard material sizes for simplicity and to avoid waste, so generally all my homes are designed around multiples of 600 millimetres.
- A 3.6-metre-long single-wall kitchen works well if you opt for a 450-millimetre-wide dishwasher and 600-millimetre-wide fridge (both of which are readily available).
- If there is room for a breakfast bar, I usually allow 1,000 millimetres between benches. It's perfect for a galley kitchen with the classic work triangle between fridge, sink and cooktop.
- The majority of Small Change Design's off-the-shelf designs are one-bedroom, so I try to make that room generous – 4.2 metres wide allows for a robe, queen bed and bedside tables without feeling squishy, even if the depth is only 3 metres.

How do you encourage people to build smaller?

People who contact me for a new home are usually already on the small home journey, but I do sometimes have to convince them to part with oversized furniture that won't work in a smaller space. If people are just starting to contemplate downsizing, I ask them to consider how they use their current large house – what rooms sit mostly unused? What things in their cupboards have they not looked at for a year or more? What spaces do they holiday in, and do they feel comfortable in these often smaller spaces?

How do you make a small home feel spacious and generous rather than poky and tight?

I find volume is a great way to make a small room feel generous: a living room that is 3 x 3 metres with standard height ceilings can be quite claustrophobic, but add some height and the space is transformed. I don't use architraves or cornices; it's all square set, which declutters the space. I also use the same paint colour on walls and ceilings, which again helps to open up the space.

FAVOURITE PROJECT: GEELONG SMALL CHANGE HOUSE

My favourite small home project is the first Small Change Design home I built in 2014, pictured above. It is in Geelong, Victoria, and is a 56-square-metre one-bedroom (plus loft) home that I'm very proud of. It has a 7-Star energy rating and makes use of all spaces to maximise storage and amenity. I built lots of shelving into the stud walls and also managed to fit a functional study nook in the hallway. I think it epitomises my goal of building small homes that feel luxurious.

Images: Sean Fennessy

Small Change Design & Construction: smallchangedesign.com.au



Brad Swartz

Brad is a Sydney-based architect who heads up a team of six at Brad Swartz Architects, which he established in 2015 after his own Darlinghurst Apartment won a number of design awards. A small-space specialist, Brad has a background in interior design as well as architecture, giving him a strong understanding of spatial configuration.

What are your top tips for saving (or shaving) space and achieving a smaller home?

My biggest tip isn't about saving or shaving space exactly, but instead about focusing on how to increase the sense of space. There are lots of subtle tricks that do this. For example, finishing cupboards short of the ceiling so your eyes read the width of the room as larger, or furniture and joinery up on legs so you see the floor continuing underneath them. That said, I'm also always focused on trying to minimise circulation space in a small home.

What rules of thumb do you work to in terms of dimensions and spaces?

I actually like not having a rule of thumb. Everything in a small space is flexible, and I think you can throw the rules that apply to larger homes out the window. However, one thing I do often do is place joinery and furniture parallel to the shorter wall in a rectangular room – so you don't end up making the space feel narrower than it is.

How do you encourage people to build smaller?

Because we work a lot in the inner city, it's often a conversation around internal space versus external space. To me, outdoor space in the city is true luxury, and I encourage people to prioritise it. And the bonus is that it's much more cost-effective than building more house. We always try to make sure the brief is appropriate to the site and from there, for any idea that clients really have their hearts set on, we'll find a way to make it work!

FAVOURITE PROJECT: BONECA APARTMENT

Our smallest completed project at 24 square metres, every inch of this apartment in Rushcutters Bay, Sydney, works really hard. Aptly named Boneca Apartment, meaning 'doll's house' in Portuguese, it has a sense of luxury and refinement way beyond its size.

The bedroom space was reduced to bare essentials, accommodating a double bed with storage below. Kitchen, bathroom, wardrobe and more storage were placed behind the bed platform, all interlocking like Tetris pieces. This left over half the apartment for an open living and dining area.

My favourite part of the project is the beautiful hardwood sliding screen (pictured above) that defines the 'mode' of the apartment as either living space or sleeping space, partially or completely screening bedroom and kitchen while still allowing natural light and airflow. Note also the mirrored wall at the end of the tiny hallway that gives the illusion that the apartment is much larger than it is. I also love the clever space-saving cutlery drawer – it's only about 100 millimetres wide, as that is the only space we had for it. This really defines what small space design is about for me: questioning everything and breaking some norms.

Images: Tom Ferguson

Brad Swartz Architects: bradswartz.com.au



Duncan Hall

Duncan is part of the team at Light House Architecture & Science in Canberra. With previous experience in construction in rural Timor Leste as well as high-end residential architecture, he is a passionate believer in the value of the middle ground: modest, well-designed and delightful homes that put living life ahead of architectural statements.



What are your top tips for saving (or shaving) space and achieving a smaller home?

- Make sure every part of the home serves a function, and put storage in everywhere – great storage makes small homes sing. For example, Little Loft House (described below) features shelves for cookbooks in the laundry right next to the small kitchen, and a whole wall of bookshelves with an integrated window seat on what was previously just a blank wall with a window.
- ‘Borrow’ space to make small spaces feel more generous; this can be done by using batten screens to delineate spaces while sharing light between adjacent areas.
- Doors allow small spaces to function more flexibly. A large sliding door can allow a room to borrow light and volume from a hallway at times, while giving privacy when required. This might mean a small room can function variously as a study, a second lounge or a guest bedroom.
- Let resting areas rest! A lounge doesn’t need to be big to feel comfortable if there’s no through-traffic.
- Allow a long visual axis to increase a dwelling’s sense of volume.
- Bench seats can make tight dining spaces work, and double as casual lounging nooks at other times.

What rules of thumb do you work to in terms of dimensions and spaces?

- For dining spaces that are less than three metres in any dimension, I start considering a built-in bench seat.
- I keep the space between two facing kitchen benches to a maximum of 1,200 millimetres. 600 millimetres is a sufficient depth for window seats. 1,550 millimetre high sills are nice for bathroom windows with privacy.

How do you encourage people to build smaller?

Seeing is believing. We’re very lucky that because smaller sustainable housing is all that we do at Light House, we can show clients lots of very successful examples. Recently, several hundred people visited our 127-square-metre Yellow House when it was open for inspection prior to sale. We asked them to guess how big it was, and answers ranged from 145 to 170 square metres.

Also, we talk about money. I ask people to weigh up the value of that “must have” feature or extra room against the impact on their debt levels, quality of life and time doing the things they love. Life is bigger than the house you live in!

FAVOURITE PROJECT: LITTLE LOFT HOUSE

These Canberra homeowners were keen to breathe new life into a small home that many would consider ripe for a knockdown-rebuild. We designed a renovation (pictured above) that improved the house’s thermal performance and involved only minor changes to the layout for better flow and function, extending the footprint by just 13 square metres to create a comfortable, functional new home of just 136 square metres.

The space works hard, with features such as a study nook in the hallway, a tiny bathroom popout that enabled us to fit a second toilet in, and a clever joinery divider in the entry which is functional on both sides. The poky study was extended a little to the west to allow for a north-facing window and to fit a daybed with loft bed over, making the space useful for multiple purposes.

The result is a joyous, energy- and space-efficient, multifunctional home that achieved a 7.7-Star energy rating.

Images: Ben Wrigley

Light House Architecture & Science: lighthouseteam.com.au



Jane Hilliard

A building designer in lutruwita/Tasmania, Jane specialises in small home design focused on the concept of 'enoughness'. She operates two businesses: Designful offers custom design and adaptive reuse services, and Homeful offers small home templates for living.

What are your top tips for saving (or shaving) space and achieving a smaller home?

- Start with values. Consider what the most meaningful things in your life are, then design to support them. This alone means you are creating space for the important stuff and letting the unnecessary fall by the wayside.
- Something we often lack now is connection: to others and to the outdoors. Embrace the outside and transition spaces. What functions can be done outside or in an intermediate space such as an entryway or a laundry?
- Bathrooms are expensive, and while having two or more has become the norm, by reducing this to one flexible bathroom you save not only space but money and materials as well.

What rules of thumb do you work to in terms of dimensions and spaces?

At Designful we think about 30 square metres of house per person is 'enough' – that's roughly one third of what Australians are currently building. The majority of the floor space should be given to the heart or living areas of the home. This is where we spend the most time and these are the spaces that bring the most value to our lives.

How do you encourage people to build smaller?

Practising enoughness is our go-to and it's extremely simple: use less – just enough and no more. We originally began focusing on enoughness because it's good for individuals: it allows us to live within our means and aligned with our values, to live a good life without being financially maxed out. However, the real benefit of enoughness is more broad reaching. Using less is one of the most powerful things we can do to slow the ruining of the planet, reducing energy and resource consumption and thus carbon emissions.

How do we just use less and be satisfied with 'enough' when we live in a system that drives us to want more?

By starting a design brief with values in mind, we remove the distraction of Instagram-worthy homes with such things as elaborate butler's pantries and media rooms. By identifying the unnecessary we make more space for the meaningful. The system we live in is constantly feeding us messages to want more, and it's keeping us in a cycle of not being satisfied. Satisfaction or a sense of 'enough' is not achieved when there is nothing left to add, but when there is nothing left to take away. When we live with enough and in a way that is aligned with our values, we naturally feel more content, because the best things about life are not 'things' at all!

FAVOURITE PROJECT: TAYLOR AND JAKE'S HOMEFUL

A small home for Taylor, Jake and their new little baby, this house in Tasmania's Huon Valley – pictured above – is a customised Homeful 'Trail' design. Its 82 square metres is enough for three bedrooms, a study space, a bathroom and laundry along with a combined living/kitchen/dining area, and there is a generous 25-square-metre deck for outdoor living. It was designed as a place for the young family to be together and connect to their beautiful property.

One key space-saving design feature is the 'functional hallway'. By adding functions to circulation spaces, they become active and useful spaces. In this home, the hallway includes the laundry, study space, linen cupboard and other storage.

Images: Jonathan Wherrett

Designful: designful.com.au

Homeful: homefulbydesignful.com.au



Jiri Lev

Jiri Lev is a registered architect, urbanist, heritage advisor and educator. His atelier focuses on sustainable, resilient and regionally appropriate residential, sacred and public architecture, as well as humanitarian work and disaster recovery.



What are your top tips for saving (or shaving) space and achieving a smaller home?

- Create flexible spaces with overlapping functions rather than a separate room for each use. For instance, a large table with comfortable chairs can serve for dining, gatherings, office or school work, kitchen bench extension or workbench.
- Along with large and well-positioned windows, consider 2.7- or 3-metre-high ceilings with pendant light fixtures, to make smaller rooms feel more generous.
- Double or triple bunk beds for the children are fun and save a lot of space. Sharing rooms with siblings teaches children accountability and develops their social skills.
- Instead of ensuite, consider a single generous bathroom and a separate toilet that may be combined with the laundry.
- One open plan living space, three bedrooms, a bathroom and a laundry with toilet really is often all a family needs. Invest the money you don't spend on building a bigger house in the outdoor spaces.
- Instead of a pergola, consider planting a deciduous tree for shading: unlike a pergola, it will increase in function and value as the years go by.

What rules of thumb do you work to in terms of dimensions and spaces?

A dedicated entryway is essential, with enough storage space for coats and shoes. An open plan kitchen and living room of about 7 x 8 metres will accommodate a family of four to eight. 4 x 4 metres is enough for a bedroom for two to four children, and bathrooms can be just 2 x 2 metres, or a bit bigger if there is a bath; the same size is good for a laundry with a toilet. For wardrobes, I allow one 90-centimetre-wide floor-to-ceiling wardrobe space per person.

How do you encourage people to build smaller?

We encourage people to consider how much space and how much stuff they really need. There is no number of rooms or amount of storage that we won't eventually fill with unnecessary stuff. Yet most of us are naturally quite good at packing only what we really need for an overseas holiday, as taking too much would prevent us from enjoying the journey. I believe that a person only needs seven to ten changes of clothes (plus a few seasonal pieces), three or four pairs of shoes, a hat or two. When new clothes are bought, others less worn can be passed on. Rather than an extensive library, perhaps a few special books on paper will do, with the rest stored as ebooks. Your kitchen doesn't need every appliance under the sun – consider that most recipes can be cooked successfully in a tiny caravan kitchenette.

What do you find most appealing about small homes?

I approach my job with the attitude that we're not just trying to design houses that meet the minimum requirements of our existing lifestyle, but houses that will also shape and inform our future life. Decluttering our immediate space opens up a world of freedom and possibilities.

FAVOURITE PROJECT: THREE-MODULE CABIN

This is a project on a steep site in Strahan, Tasmania, where access is tricky and it is extremely difficult to get builders. I've designed a three-module cabin that can be built offsite and then transported to site and installed in stages. Designed for privacy while taking in winter sun and harbour views, each module is about 50 square metres, and can be used as a separate unit or part of a larger home.

Project render: Jiri Lev
Atelier Jiri Lev: lev.au