

# Sanctuary

MODERN GREEN HOMES

ISSUE  
63

HEMP BUILDING  
SPECIAL

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National Biophilic Design Awards; swap your lawn for habitat

## *Hemp Sensation*

*Seven gorgeous hempcrete homes inside*



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# All decked out

LOCATION Pascoe Vale, VIC • WORDS Jacinta Cleary • PHOTOGRAPHY Emma Cross Photographer



## At a glance

- Existing house retained with small interventions for better flow, light and ventilation
- Just 4m<sup>2</sup> added to footprint
- Deck and pergola to support shading greenery and improve indoor-outdoor connection
- Collaboration with landscape designer to maximise potential of entire site

**A mid-century gem on a steep Melbourne site becomes even cooler with a geometric deck and pergola and inspired garden design.**

Gina and David's house, nestled into a steep slope in Melbourne's northern suburbs, is an anomaly in the relatively flat city. "I know, Melbourne only has about two proper hills, right?" laughs Gina, who says that taking out the washing involved five sets of stairs before the renovation to the 1950s house.

While full of potential with its modern design and amazing views from its elevated position, the cream brick veneer house was disjointed and uncomfortable to live in. Used as a rooming house before it last sold, it had an awkward circulation path that made it difficult to get to the main kitchen, and misplaced features like a kitchenette in a downstairs passageway – perhaps added by the original Greek owners for preserving garden produce. The entry leads straight into the upper level due to the slope of the site, with west-facing living spaces that would overheat in summer. "We were always fighting the sun," says Gina.

Having done their early parenting in the house (and surviving initial shocks such as the discovery of garden hose gas piping), the couple were keen to retain as much as possible of the structure, fix it up and celebrate the home's style and history in the renovation. "We worked entirely within the constraints of the existing building," says architect Shae Parker McCashen of Green Sheep Collective, whose design enabled the mid-century gem to reach its full potential.

Shae describes the changes to the house as deliberately small "to create a large cumulative impact", and each change has been exploited for multiple benefits, including thermal efficiency and liveability. The small existing deck to the upper level has been extended to the west and north and doubles as a carport, with the striking polygonal steel structure designed to grow vines for shade and "bring the garden to the first floor," as

→ Minor layout changes opened up the living spaces, making for a more connected home with better flexibility.





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“Getting the balcony structure to fit within setbacks and comply with fire and overlooking requirements was complex – balancing all those things and more,” says designer Shae. “But it’s paid off. The whole structure with its triangular motif has really grounded the building and protects the walls exposed to the sun.”

Shae explains. The double-height form incorporates the geometric shapes of mid-century style and solves a series of design issues, including making the west-facing rooms more thermally efficient and connecting upstairs to the verdant jungle garden at ground level.

The structure works on both fronts. The downstairs bedrooms are cooler in summer thanks to the carport and deck that protect the western wall – plus new double-glazed windows. The deck stretches into the garden and gives more upstairs living and dining space, including a sunny spot in winter when the vines drop their leaves. The lush garden design, started by Gina and David in their first decade in the house and then enhanced by AKAS Landscape Architecture as part of the renovation, prioritises the bird’s-eye view from the upstairs living area and deck. The plant selection supports natural cooling for the nearby bedrooms and provides a beautiful, calming connection

to the outdoors.

Upstairs, the awkward dogleg path to the kitchen has been removed but the kitchen layout has stayed essentially the same, minimising waste. The small intervention of doubling the existing bench space has made a difference beyond the extra below-bench cupboard space it created. “The new bench has made it a brilliant kitchen that we can cook in at the same time without getting under each other’s feet. That’s been fun, because we have a new tradition of all four of us cooking together on a Sunday night,” says Gina. Natural materials have been used throughout, including renewable cork for the dining and kitchen floors, and the space has been revitalised with FSC-certified timber joinery and brick tiles.

The removal of one wall upstairs has impacted not just the functionality of the spaces, but also airflow and natural cooling – assisted by other cross ventilation strategies such as new louvre

windows adjacent to an external door downstairs. “Being able to vent hot air efficiently has made an enormous difference to the comfort of the home,” says Gina. “Having thought through how to create shade and then how to get the heat out at the end of the day has really helped evening amenity too.”

Built-in shelving now delineates the dining, living and study spaces upstairs and is made colourful with the family’s extensive book collection. Having these flexible spaces helped during Melbourne’s string of Covid lockdowns. “When it became evident that the kids were going nuts or not doing any work in their bedrooms, then one child could be at the dining table and the other could be in the study area next door. The layout provides flexibility for the different ages and stages that our kids are going through,” says Gina.

Downstairs, the quirks went beyond the hallway kitchenette: there was a bedroom and ensuite that could only

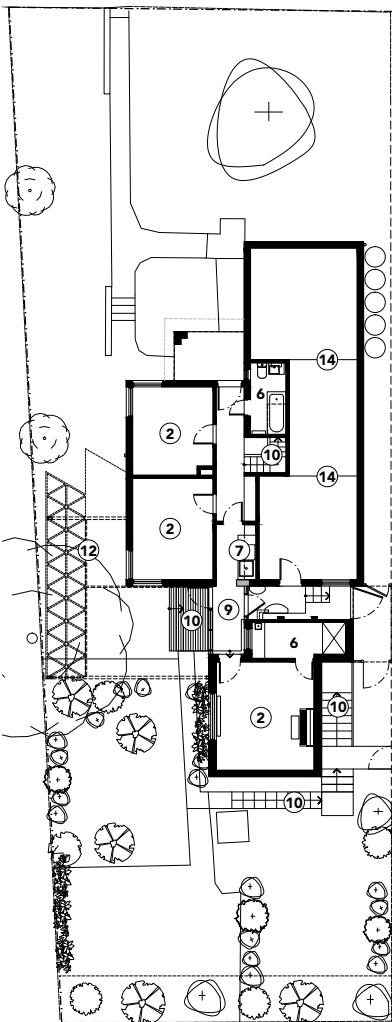


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The new kitchen is in the same location as the old one, but a larger bench has made it much more useable for the family.

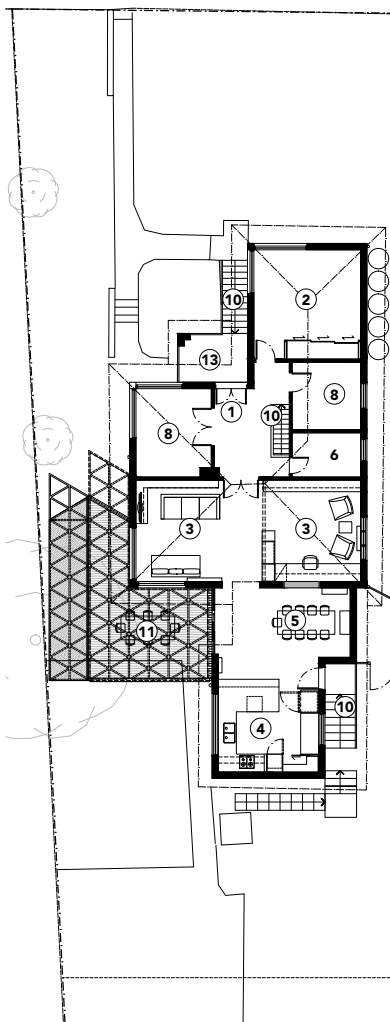
be accessed from outside and that were too cold for comfort. By adding just four square metres to the overall footprint and bringing the bedroom into the building envelope via a linking corridor, the design reused what was already there and made it more comfortable. The hallway kitchenette provided the ideal spot for a new laundry, with a rainwater connection to reduce mains water use.

“The project involved paring back and resisting the temptation to do more,” says Shae, going on to explain that simple measures like removing the different heights and steps downstairs can seem unexciting and yet improve daily life by making a clear path to the garden. Such small interventions have given this old home a second, more modern life. 🌱

LOWER FLOOR PLAN



UPPER FLOOR PLAN



LEGEND

- ① Entry
- ② Bedroom
- ③ Living
- ④ Kitchen
- ⑤ Dining
- ⑥ Bathroom
- ⑦ Laundry
- ⑧ Study
- ⑨ Glazed link
- ⑩ Stairs
- ⑪ Deck with pergola
- ⑫ Carport
- ⑬ Porch
- ⑭ Storage

# HOUSE SPECIFICATIONS

## HOT WATER

- Existing gas storage system retained (will be replaced at end of life with a heat pump)

## WATER SAVING

- Low-flow fixtures
- Existing rainwater collection system and tanks were repaired and consolidated
- Inadequate site drainage repaired to reduce stormwater runoff and protect the house's footings
- Household now uses less mains water than prior to renovating, despite a greatly increased garden area

## PASSIVE DESIGN, HEATING & COOLING

- Living spaces were reconfigured and internal walls removed to increase flexibility, improve cross ventilation and reduce inefficient circulation space
- Where feasible, dilapidated single-glazed windows were replaced with double-glazed units and wall insulation was installed
- A triangulated carport and deck structure transforms the sheer two-storey external walls into highly functional, beautiful spaces and helps blend the house into the garden
- The deck structure doubles as a support for deciduous vines to help shade the home in the hot summer months

## ACTIVE HEATING & COOLING

- Existing reverse-cycle air conditioner retained
- Existing gas hydronic heating system retained

## BUILDING MATERIALS

- Existing double-brick (downstairs) and brick veneer (upstairs) structure retained
- New glazed link: timber frame construction with rendered fibre cement sheet cladding
- New carport/deck structure: timber structure with galvanized steel posts and beams, and recycled spotted gum decking
- Bricks from the minimal demolition were retained for reuse in the renovation
- Tontine Acoustisorb 1 acoustic wall insulation (R2.5) to new and altered walls
- MJO Copenhagen cork floor tiles from The Floor Shop

## WINDOWS & GLAZING

- Windows that required replacement were upgraded to Rylock aluminium-framed double glazing with low-e coating
- Breezway louvres to maximise ventilation in the 'link' extension

## LIGHTING

- All new lighting LED

## COOKING

- Gaggenau Vario 200 Series induction cooktop
- Existing oven retained

## PAINTS, FINISHES & FLOOR COVERINGS

- Dulux EnvirO<sub>2</sub> low-VOC paints
- Dulux Intergrain Enviropro Endure to timberwork

## OTHER ESD FEATURES

- There was a clear intent to demolish only what was absolutely necessary; the design preserved valuable embodied energy by retaining the whole original building and increasing the footprint by less than 4m<sup>2</sup>
- The increase in footprint brought all internal spaces into one envelope and improved thermal efficiency
- Layout updated to be more flexible, ensuring the home can be used well into the future, adapting to various inhabitant needs
- Site waste was minimal, and was sorted for reuse or recycling
- The extensive garden positively contributes to the area's biodiversity and wildlife corridors



## DESIGNER

Green Sheep Collective

## BUILDER

James McBride + Associates

## PROJECT TYPE

Renovation

## LOCATION

Pascoe Vale, VIC  
(Wurundjeri Country)

## SIZE

House 179m<sup>2</sup>  
Land 558m<sup>2</sup>

## INSIGHTS

"The brief was to create a coherent home that not only celebrated the style and history of the existing house, but that also introduced flexibility and longevity without the need for major demolition or reconfiguration works. There was also a determination to improve the home's thermal comfort and energy efficiency."

Shae Parker McCashen,  
architect