



Sven Maxa designed a covered deck to extend the living area of his home in an outer suburb of Melbourne. Double-glazed bifold doors help keep heat in during winter and inbuilt flyscreens enable the doors to be open on hot summer nights.

Style on a budget

WORDS Sarah Robertson

PHOTOGRAPHY Chris Neylon

KIDS HAVE A WAY OF PUSHING THOSE LINGERING HOME renovation projects along. For sustainable building designer Sven Maxa and his wife Dawn of Maxa Design, their low budget home renovation is a classic case.

The house was initially intended as a project for Sven; a chance to renovate and test out products and materials. The couple conceptualised the new design about five years ago and renovated the bathroom and laundry before their first child, Abby, was born. The impending arrival of their second child a couple of years later saw them shift ahead to stage two and quite drastically renovate the rest of the old house to better meet the needs of family life.

"We debated lots of ideas but the actual aesthetic was just borne out of a desire to be economical," explains Sven. "We really wanted to create a whole new façade in a cost-effective manner and that meant leaving the [geometric and rectangular] roof lines of the house as is." Still, the result is a complete rearrangement of the organisation and function of the old house.

Vegetation, trees and houses to the north meant Sven couldn't open their home to this aspect in accordance with passive solar design principles and there was little room on the east and west for the kids to play. "We had to insulate well and connect with the southern side of the block," explains Sven. To mitigate the loss of northern solar exposure, he restricted openings, double glazed and insulated to minimise heat loss. Tightly sealing the home also meant the couple carefully considered the materials and finishes used indoors; "that's where the long list of no VOC products came into play," says Sven.

Sven and Dawn's desire to be economical saw them watch their budget closely, particularly at the beginning of the build when they were paying tradies and for big ticket items such as the windows. Sven employed a carpenter to do the framing, cladding, plasterwork and windows. He then did a lot of the fit-out and finishing work himself.

In the final stages of the build he put extra time into reducing costs. He found recycled boards from a building wrecker for



Particular attention was paid to maintaining good indoor air quality in this tightly sealed low budget renovation. Recycled hardwood floorboards and features are finished with low VOC natural oils, super low formaldehyde emission kitchen cabinet carcasses are used, as are low VOC paints and natural materials.



Site constraints meant sustainable designer and homeowner Sven had to extend and open his three-bedroom home to the south to give his young children some space to play. To ensure the home performed as efficiently as possible, he sealed it tightly, insulated well and double glazed.

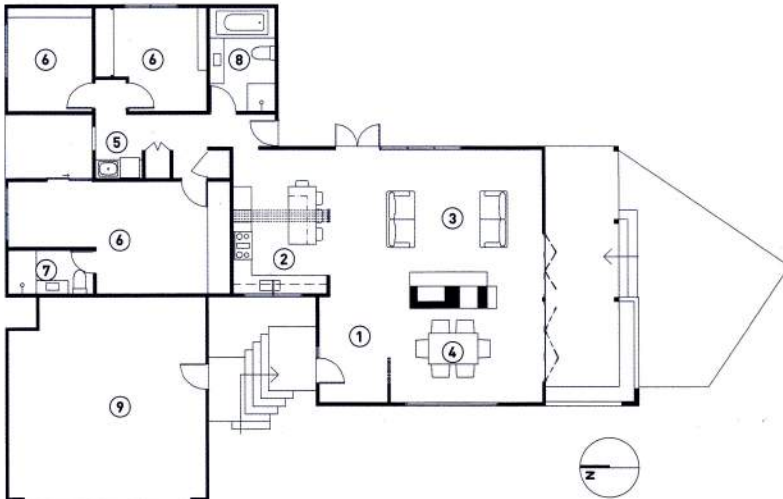
a third of their usual price. "I much prefer recycled board. I love the fact that we're not using new timber and we're making use of something that would otherwise end up being thrown away ... and encouraging that in the industry. The carpenter hated me but no one can tell."

Sven is the first to admit that keeping costs low was a challenge. Despite "some really good service and support," he says they did go over their initial budget. Still, he estimates \$80,000 to \$90,000 is a realistic price for the completed home.

Another (ongoing) challenge for the building designer was ensuring the build process remained faithful to his sustainability agenda. "It's probably the one thing that I whinge about most, how hard it is to educate builders and change their ways." But he says things do work out if you can drive those new to sustainable practices or find those who are already practicing what many sustainable design experts preach.

Despite the challenges and the limitations a low budget and poor site orientation posed to its redesign, this functional yet striking modern home is the outcome of a couple committed to good and sustainable design and living. 5

FLOOR PLAN



LEGEND

- ① Entry
- ② Kitchen
- ③ Living
- ④ Dining
- ⑤ Laundry
- ⑥ Bedroom
- ⑦ Ensuite
- ⑧ Bathroom
- ⑨ Garage

Maxa house

—Specifications

Credits

DESIGN

Maxa Design

PROJECT TYPE

Renovation

PROJECT LOCATION

Outer metro Melbourne

SIZE

House 165 sqm including covered deck

COST

Approx \$80,000–\$90,000

Features

- Recycled Tasmanian oak and Vic ash flooring sourced from a building wrecker in Echuca
- Old Tasmanian oak and Vic ash floor joists repurposed for use as feature screens
- E0 (super low formaldehyde emission) cabinet carcasses from Kitset Kitchens
- CHH Ecoply bench tops and bench seat framing
- Compact fluorescent and Brightgreen LED lighting throughout
- Livos oils to timber surfaces
- Oikos & ecolour paints
- Recycled coffee sack bench seat fabric
- Hemp and natural wool internal fabrics
- Reused existing lining internal boards
- New double-glazed hardwood windows & doors from Canterbury Windows. Built-in flyscreens on bifold doors allows them to be used at night.
- 1kW solar PV array from Enviroshop
- 9000L water tank plumbed to all toilets, washing machine & garden taps
- Drying cupboard utilising recycled hydronic radiator panel
- Existing hydronic heating scaled up with mix of secondhand & new radiators
- FSC certified CHH Shadowclad external cladding
- Insulation throughout typically included Knauff Earthwool batts
- Chooks, fruit trees and a veggie patch.