

# FINISHING TOUCHES

*A Victorian-period weatherboard in Melbourne gets a sustainable revamp, transforming it into a comfortable and beautiful home.*

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Reversible HPM stainless steel ceiling fans (\$149 each) were installed throughout the house. The ceiling in the dining "nook" is finished in wallpaper from Wallpaper Brokers, while the ceiling in the kitchen is finished in a textured wallpaper that replicates pressed metal. The recycled spotted gum dining table was custom made by furniture designer Adam Stewart.

→ Custom-built cupboards under the stairs make the best use of space. The cupboards are finished with a powder coated EO (low formaldehyde) MDF. The timber on the treads is recycled messmate, while the balustrades are made from Radial Timber's silvertop ash. Famco recessed CFL brick lights provide low-level wall lighting to the stairway.

### WHEN KELLY AND JOHN BOUGHT THEIR

1860s weatherboard home a stone's throw from the Yarra River in Clifton Hill, Melbourne, they knew it would be great place for their two young children to grow up. "We loved it immediately, but it needed work. The house was cute, but a little bit banged together.

"There was a gorgeous room upstairs but it wasn't insulated." Clad in old weatherboard, with unsealed windows and walls made from rotting fence posts, the room was so uncomfortable that Kelly and John were reluctant to use it. "It was just too hot or cold to be up there," says Kelly.

Architect Ande Bunbury concurs. "There were holes in the floors where you could feel the draughts coming through." Kelly and John's brief to Ande was to increase space without sacrificing the back yard, to stabilise the internal temperature without increasing energy use, and to let in more light.

"The greatest environmental achievement with this renovation was to retain the existing poorly constructed upstairs bedroom," says Ande. "It would have been easier to start from scratch, but we wanted to make the most of what was there."

The renovations began by tackling the draughty upstairs room. The builders started by dismantling the walls and building a robust timber frame, which was then clad with weatherboard to match the rest of the house.

"Original access to this room was from an outdoor stairway," says Ande, "so we relocated the stair inside the house". Polyester batts were placed above the ceiling and inside the walls, while felt underlay and heavy carpet were laid to insulate the floor. Knotholes and gaps in the wooden walls were caulked. The windows were replaced with double-glazed windows, custom-made by a local joiner, and bi-fold doors with large windows were installed on the

east side to overlook the courtyard. "When you open the doors and the windows in summer, the heat rises from downstairs and escapes through the doors and windows," says Ande. "And in winter, you can keep the door to this room closed, so that the heat downstairs isn't lost."

A small extension was built on the western side of the bedroom for an ensuite and walk-in wardrobe. As well as limiting solar access to the bedroom in summer, Ande says "it's not a bad idea to have the bathroom facing west. Moisture dries out more quickly in warm weather, and this reduces build-up of mould."

A skylight was put in above the stairs to bring natural light into the living area downstairs, and a south-facing window collects a generous amount of reflected light off the pale exterior of the neighbouring units. Artificial lighting in the renovated part of the house is entirely fluoro or compact fluoro, and is artfully placed to spotlight common activities like washing dishes, preparing food, and walking upstairs. "Lights are located for tasks, rather than illuminating everything open slather," says Ande.

Weatherboard houses, common in inner Melbourne, are notable for their lack of thermal mass. To stabilise the internal temperature, a concrete slab was laid (and is augmented by

thermal mass courtesy of the brick fireplace and brick northern wall). The floorboards placed on top of the slab impact on its heat-absorbing attributes, but Ande notes that this is a trend in new renovations and believes designers need to find a work-around. "To maximise the slab's efficiency, we placed the timber directly onto it without leaving an air gap. If you left an air gap you'd lose the benefits of the thermal mass entirely." [Ed note: timber boards will act as a thermal barrier to the concrete's performance as a heat sink, but by how much is in contention. See [www.ata.org.au/forums](http://www.ata.org.au/forums) for various discussions on this topic.]

Throughout the renovation unwanted materials were given to friends to reuse. According to Kelly, "The sinks and taps, windows and French doors were reused in a friend's house in Trentham, country Victoria, while the full-height windows have been reused in a studio in Daylesford. A chandelier was given to another friend."

"There's nothing about the renovation that I'd change," says Kelly. "We wanted to keep the big backyard and make the house feel bigger inside, and that's been achieved. Water usage is way down. We don't use the heater much in winter, and in summer the house holds its coolness. It copes pretty well in extremes."





⌚ Floorboards throughout the house are recycled messmate finished in Livos natural oil. The home is heated by a Kemian Super Nova inbuilt woodburning firebox.



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⌚ The renovated master bedroom was finished with new weatherboards and clad with corrugated iron for low maintenance. The rusted corrugated iron form jutting out is original and was retained as is for its interesting form and aesthetic.



➔ Wide span tiles combined with dark grout were chosen for low maintenance cleaning and longevity. The exhaust fan was fitted with a Draft-Stoppa duct vent to minimise heat loss. Kelly and John bucked current trends and opted for a single basin.

The daybed has clever understorey storage cupboards and a recoverable futon top, which means it's easy to clean. The east-facing window is double glazed, overlooks the garden and is protected from harsh morning summer sun by the first-floor overhang.





Chandelier from Schots Home Emporium (\$345). You can buy low-wattage compact fluorescent globes such as Envirolux's 7W candle lamps for \$12.95 from Beacon Lighting to replace incandescent candle-shaped bulbs used traditionally in chandeliers. Even better would be the 2W to 3.5W LED candle lamps you can buy from [www.ledlightingaustralia.net.au](http://www.ledlightingaustralia.net.au) or [www.worldofthought.com.au](http://www.worldofthought.com.au) at around \$25 to \$35 each - these will last longer and use less energy. The wallpaper is Osborne & Little's "Dusa" range in black and white.

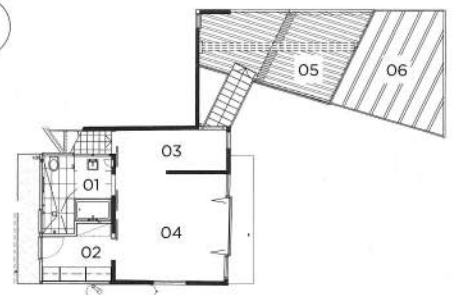
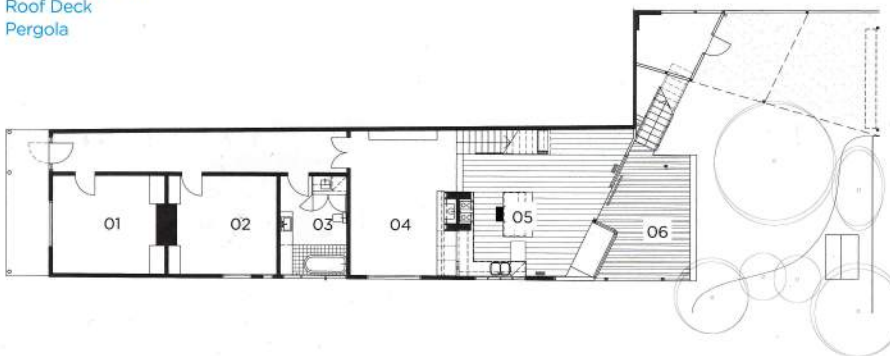


**GROUND FLOOR PLAN**

- 01 Bedroom 1
- 02 Bedroom 2
- 03 Bathroom
- 04 Living Room
- 05 Kitchen
- 06 Sundeck

**FIRST FLOOR PLAN**

- 01 En Suite
- 02 Dressing Room
- 03 Study
- 04 Master Bedroom
- 05 Roof Deck
- 06 Pergola



# Clifton Hill Residence

## Designer

Ande Bunbury Architects

## Website

[www.abarchitects.com.au](http://www.abarchitects.com.au)

## Builder

Natural Direction

## Project type

Renovation

## Project location

Clifton Hill, VIC

## Size

Building 209sqm; block 336sqm

## SUSTAINABLE FEATURES

### Rainwater

1500L BlueScope Waterpoint UltraSlim rainwater tank connected to washing machine, toilets and garden irrigation

[www.bluescopesteel.com.au](http://www.bluescopesteel.com.au)

### Passive heating & cooling

- New concrete slab installed and existing fireplace retained for internal thermal mass
- West windows minimised and service areas located to the west side of the upper storey to provide a buffer to habitable rooms

### Active heating & cooling

- Good cross ventilation
- HPM stainless steel ceiling fans with reverse switch for winter use [www.hpm.com.au](http://www.hpm.com.au)
- Draft-Stoppa duct vent to exhaust fans [www.draftstoppa.com.au](http://www.draftstoppa.com.au)

### Windows & glazing

Western cedar framed, double-glazed windows and doors custom made by McKay Joinery (ph 03 9484 5407)

### Insulation

- 10mm polystyrene slab edge insulation to concrete slab
- R3.5 Thermowool recycled polyester batts and double-sided sarking to roof; R2.5 to walls

### Building materials

- Recycled materials used throughout
- Radial Timber silvertop ash boards for timber decking and stair balustrades [www.radialtimbers.com.au](http://www.radialtimbers.com.au)
- EO (low formaldehyde) MDF by Alpine MDF Industries [www.alpinemdf.com.au](http://www.alpinemdf.com.au)
- New external cladding is Zinalume finish corrugated iron for low maintenance

### Paints, finishes & floor coverings

- Wattyl id low-VOC paint for walls [www.wattyl.com.au](http://www.wattyl.com.au)
- Livos natural oil finish for floorboards [www.livos.com.au](http://www.livos.com.au)
- Powdercoated paint finish for joinery by CSA Innovations (ph 03 9706 4600). The paint is applied as a solid powder so solvents (containing VOCs) are not required to carry the pigment. This also minimises overspray and paint waste.

### Lighting

Pendant light fittings with compact fluorescent bulbs, shades from Beacon Lighting [www.beaconlighting.com.au](http://www.beaconlighting.com.au)

## SUSTAINABLE PRODUCTS

### DOUBLE-GLAZED SKYLIGHT

According to the *Your Home Technical Manual*, "A skylight can admit more than three times as much light as a vertical window of the same size". A double-glazed skylight to bring in natural light to the stairway and the living room below was installed over the new internal stairway. (Double glazing doesn't reduce solar gain by direct radiant energy - which is the majority of solar gain - but it reduces thermal conduction and convection.) The skylight was fitted with an Issey Windfix automated external blind ([www.issey.com.au](http://www.issey.com.au)) to reduce the radiant gain. It cost approximately \$3000, including installation. The skylight was installed by Clipfit Glazing Structures (ph 03 9764 3955).

### DRAFTSTOPPING

Much of the work in this renovation went into draft stopping, especially in the upstairs bedroom (pictured). Insulation was installed in the roof, walls and floors, as well as a sarking which was overlapped at the edges to reduce air penetration. Other gaps were filled with silicone sealant or an expanding foam. A 100% wool carpet with a good quality underlay was also put down over the floorboards in the bedroom. Throughout the house Raven's EPDM Door & Window Weather Strip was used, which is a rubber strip you affix to one face of the window or door. This is a good option for inward and outward opening windows and doors, but not sliding doors or double hung sash windows. For these applications you'd be better off with the RP61 woven pile tape, providing you have a big enough gap to fill (2.5 to 5mm).

[www.raven.com.au](http://www.raven.com.au)

