



designer profile

Christopher Polly
Christopher Polly Architect

style and substance

Sydney-based architect Christopher Polly is something of a renovation expert, with a series of small, stylish and sustainable homes to his credit.

Christopher Polly creates homes perfectly suited to the pages of any glossy coffee-table book. At the same time, they're homes that tread lightly on the earth, combining the best of contemporary design with sustainable building principles.

Polly set up his Sydney-based practice in 2005. Since then virtually all his work has involved extensive home renovations, so he has become something of an expert in the field.

His design philosophy is to identify the outstanding elements of an existing home and design his renovation to complement them. "Say a particular house has a fairly strong form, I'll identify the elements that I think have integrity or significance and I'll quite directly respond to those," Polly says. "That may mean extruding a form without necessarily making it complex. I'm not interested in adding anything that's not appropriate."

He is also a strong advocate of designing homes in as light a way as possible. "It's important to minimise our inputs, because building generally is a very intensive process," he explains.

For Polly, this involves adapting a home to its environmental conditions. "I try to provide as much access as possible to the prevailing climatic conditions, such as northern light, ventilation, views – all those responses that can enrich the whole."

Polly tries to re-use as many existing materials as he can, salvaging and repurposing those that are useable, and he's as diligent as he can be when specifying new materials. "I try to look for local suppliers and materials that have had low environmental impact in terms of their production and travel to the site."



renovation challenges

One of the problems that often arises when renovating existing houses, particularly in crowded parts of a city, is in the lack of access for building supplies. Polly had to confront this challenge when working on the Haines house. “It didn’t have any other access apart from the street entry, so everything had to come in from the front,” he says. “It’s a narrow street, as you might expect in Newtown, so to bring materials, especially large steel sections, through the house or over it to the back was a considerable challenge.”

“It was a case of being very careful, all of which added to the cost. And even if we hadn’t wanted to do anything to the front of the house, we couldn’t have avoided it becoming a construction site.”

HAINES HOUSE, NEWTOWN, SYDNEY

From the front, this semi-detached house in Sydney’s inner west may not look all that different to its previous incarnation. Inside, however, the home has been radically revamped, with an imaginative addition at the property rear.

The first big signal of change comes just inside the front door, in the form of a huge, vibrant orange sliding door. It opens into a bedroom that used to be the living room, beyond which are another bedroom and a study. Past that, however, is where Polly’s work moved from simply refurbishment to a total restructuring of the old part of the house. The former kitchen is now a living area, beyond which is a bathroom, and beyond that an open-plan living, kitchen and dining area that open out to a deck and garden.

The biggest challenge was bringing natural light and warmth to the rear of the home, which faces south. Here, Polly raised the entire roof and inserted a layer of highlight windows along the eastern side of the house. These wrap around to the rear to draw in as much light as possible. “They’re all high-performance grey-toned glazing, which cuts a lot of eastern glare,” says Polly, “and some sections are frosted for privacy.”

The floor of the lower part of the home’s new section is concrete, and its thermal mass absorbs heat on warm days. It also incorporates in-floor heating, a cost-effective way of warming the home in winter, and, unusually, extends outdoors to become the garden deck. Equally unusual is its colour: Polly had it mixed with CCS black oxide to so that it matches other black elements in the décor.

The floor in the upper part of the steel and timber framed new section is recycled blackbutt tongue and groove strips, finished with a Feast Watson custom charcoal-grey stain. The inside and outside walls, meanwhile, are clad with treated pine shiplap boards. “I wanted to avoid an entirely plasterboard-lined interior and to enable a modern expression of the old panelling found in cottages,” Polly says.





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COSGRIFF HOUSE, ANNANDALE, SYDNEY

While the brief for this home was similar to that of the Haines house, the solution with Cosgriff was even more radical: a whole new floor was added under the back of the house. And while the front part required only cosmetic updates, the rear of the house, which is still under construction, is where the real magic lies.

The home's three bedrooms and a study will be on the ground floor, with a new staircase leading down to a massive living, dining and kitchen area, and a laundry and bathroom dug in at the back.

Polly created space for this new level by digging downwards to create a 2.6 metre ceiling height, while also lowering the rear garden. “We dug out a lot of rock and clay and it was really quite complex,” he says. “There were also water issues, requiring an additional investment of time by the builder.”

As in the Haines house, the floor here is concrete with in-floor heating, and it too extends outside to become the deck. “I wanted to expand the idea of a concrete



slab for use as an exterior deck,” Polly explains. “In this case it’s aligned with the natural ground level, as opposed to the Haines house where it’s cantilevered and hovers above the natural ground.”

And again, Polly has clad the lightweight steel and timber frame in a panelled effect, but this time used a sheet material to give a similar grooved look inside and out. “We used Scyon™ Axon™ cladding, a fibre-cement product rather than shiplap board,” he says. “The sheet solution enabled a more efficient execution for the builder due to a fold in the new interior wall and exacting alignments that were required to meet the existing finishes.”

Polly designed the roof of the new section to bring in light and warmth while making sure the neighbour's access to light and views weren't too impeded. He mirrored the roof angles of the original part of the house, folding the roof down on one side where it would otherwise affect the neighbours, yet folding it up at the rear and side to draw light from the east and north. “At the same time, it provides views of the sky and a massive jacaranda in the backyard,” Polly says. “The roof is a crowning element that’s intended to lift the spirits.”



the trials of timber

In both the Haines and Cosgriff houses, windows and doors in the new sections are framed in western red cedar, one of Polly's preferred timber species because it's grown in a sustainable way. “It's a lightweight, durable timber in this application that comes from a sustainable source,” he explains.

However, Polly finds the current certification structure frustrating, making it a challenge to specify fully certified timbers. “I try to find timber from certified sources, but the chain of custody is often broken by the time the timber is installed. For example, a particular supplier or window joiner may not have certification, and that breaks the chain. Things are changing in Australia, but it's slow.”



design ambassador's choice

“
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BLINCO HOUSE, NEWTOWN, SYDNEY

Polly's addition to this home is the most radical renovation of the three. Still at the DA-approval stage, it is innovative in both shape and style yet still reflects the local area in its materials and finishes.

Like the Cosgriff house, this is a two-storey extension that entails removing the current single storey at the home's rear. The finished home will have four bedrooms, a living, dining and kitchen area and a staircase to a new upper level.

Polly's main challenge here was to minimise any loss of sunlight for the next-door neighbour, which has led to the extension's unusual shape. He also wanted to tap into the style of the local area. "I wanted to develop a form that responded to the triangulated profiles you see in terraced roof forms around here," he explains. "The new roof picks up on that existing language and kicks back its rear elevation to minimise overshadowing onto the adjoining neighbour."

A further challenge was to make sure the house won't get too hot, as its side elevation faces directly west. Long, tall windows will be inserted on the front and side street facades, covered by sliding aluminium shutters. "The shutters are proposed as perforated metal sheets, partly for privacy but also to temper the western light," Polly explains. In addition, a concrete floor will serve as a heat sink in cooler months. "And all the walls, ceilings and roofs will be heavily insulated, well above minimum standards."

The element that Polly is most proud of is the home's external cladding, which shows an imaginative use of a lightweight yet very traditional Australian material. The entire rear addition and the home's side wall will be encased in corrugated metal. "Everything in that new section is proposed to be clad in the same material," he says. "It's going to be a full-metal jacket essentially."

Finished in a Colorbond dark grey colour, Polly says the cladding, Lysaght Custom Orb, will give the new section a strong identity. "It picks up on the triangulated roof forms, and there are lots of rear lanes around here that have old corrugated fences and back sheds, so it reflects upon that language and memory as well."



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The Magpie Project
WA

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Smith Residence
NSW

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Geilston Bay Residence
Tasmania