

DESIGN ARCHITECTURE**Situations vacant**

That empty space under the stairs can be transformed into an addition that earns its keep, writes **Stephen Crafti**.

Staircases can be more than simply connecting rooms or spaces in a multilevel home. The undercroft below a staircase can also be used for storage, a guest toilet, or even a pantry. And when space is at a premium, these "leftover" spaces become paramount to the form of a staircase. "People often don't realise that staircases take up a considerable amount of room," says architect Aidan Halloran, a director of ITN Architects. "But if approached correctly, they can operate on a number of levels, or functions."

ITN was restricted for space when renovating a double-fronted Victorian terrace in North Fitzroy, Melbourne. The architects retained the original front two rooms, but added a two-storey wing at the rear. "The house had been poorly renovated in the 1970s, but the owners didn't want to increase the footprint as they still wanted a garden," Halloran says.

The renovation of the North Fitzroy house included a new open plan kitchen, dining and living area at ground level, with main bedroom and ensuite upstairs. While the kitchen features an island bench, there's also a galley-style arrangement worked into the staircase. The joinery below includes the same timber battens as the staircase balustrade, containing a pantry.

"We wanted to maximise storage, but also make this area recessive in the design. The stairs literally 'wrap' over the kitchen benchtops," Halloran says. The rest of the kitchen joinery is American oak veneer.

Although he appreciates the amount of room staircases require, he also sees the benefit of including them, with the double-height spaces and voids within creating a sense of space in adjacent living areas.

"We also provided highlight windows above the stairs to make the spaces below easy to explore, particularly if it's something like a pantry."

Architect Kristin Utz, co-director of Utz Sanby Architects, included staircases in her children's bedrooms, in her own home, in West Chatswood, Sydney. Built in the 1960s, the home, with its raked ceiling and picture windows, featured relatively small bedrooms by today's standards. Rather than design new bedrooms, Utz Sanby used unusual plywood joinery to provide access to a mezzanine level in both rooms.

These staircases combine steps, shelves and even a built-in desk at the lower level. Having access to the mezzanine also allowed for a double mattress above and additional floor space below.

"These stairs have a strong Japanese aesthetic, combining steps with shelves and nooks," Utz says.

Utz Sanby was fortunate to inherit high ceilings, reaching an apex of almost five metres. And, like the North Fitzroy house,



Clockwise from top: Adam Dettrick converted the space under an enclosed staircase for storage; ITN Architects transformed this undercroft into a galley; Utz Sanby maximised bedroom space by adding stairs and a mezzanine.

there are operable highlight windows for both natural light and ventilation. "When you're working with relatively small spaces, you need to combine several functions in one," says Utz, who used a soft reconstituted cardboard to create the children's desktops. "The stairs allow the bedrooms to be used more efficiently, allowing them to spread out their homework on the floor," she says.

Architect Adam Dettrick was also mindful of making the most of the space below a staircase in a house in Northcote, Melbourne. Although a relatively modestly sized house, there are four bedrooms, or three bedrooms and a flexible room that doubles as a home office.

The new two-storey house also features an enclosed staircase that separates the

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public from the more private areas. "We wanted to delineate the public and private areas, but we also realised a need for increased storage areas," Dettrick says.

While the staircase in the Northcote house features spotted gum treads and is fully enclosed on both sides, there is "invisible" storage accessed through a guest powder room adjacent to the stairs. About four square metres, this storage area doesn't impinge on the design of the staircase.

"If [storage] was on show, we would have allocated more of the budget to joinery," says Dettrick, who included built-in shelves to ensure items, big and small, could be easily found. "It's an economical way of making space and you don't have to go looking for expensive hardware, such as doorknobs." ■