





elson, in the north-west corner of New Zealand's South Island, has a heck of a lot going for it – three national parks, sweeping sandy beaches, boutique

wineries, restaurants, arts and crafts stalls and a thriving cafe culture.

It's also officially the sunniest region in New Zealand – which is what attracted Helen Richards to the place. Helen, 34, is a British-born architect who is spearheading next-generation housing that utilises solar energy to maintain a consistent temperature all year round.

After moving to New Zealand in 2000, her conviction that this was the way forward led her to form Powered Living Ltd, the first design-and-build company to integrate design flair and conventional construction techniques with specialist knowledge on energy efficiency. Two years later, she put all this to the test when she designed her own energy-efficient home, which she finally moved into in March 2004.

"Conventional buildings use a huge amount of energy," Helen explains. "In fact, buildings across the world are responsible for 50 per cent of C02 emissions. This house is designed to capture and use energy from the sun to maintain a constant internal temperature of 17-20°C (63-68°F) all year round. This is not only energy efficient, but it saves money, too."

Helen's interest in energy consumption began when she was a student at Kingston University in London. Later, working as an architect in the City of London, she tried to push aside her environmental concerns and get on with the job. "But I was very frustrated – I felt my work lacked meaning. I was designing house extensions that looked attractive, but were soulless," she recalls.

Her partner at the time felt the same, so in 2000 they took a year out to travel – and ended up in



## The house remains cool in the summer and warm in the winter





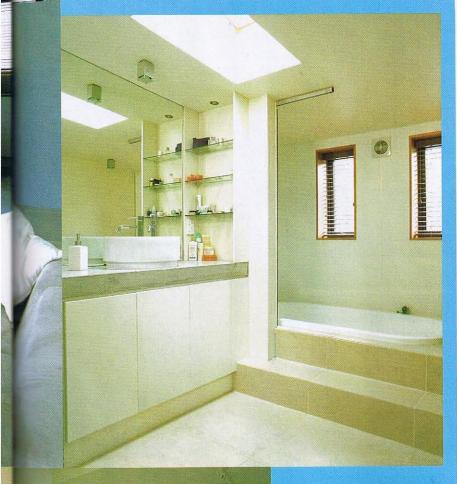
the town of Nelson in New Zealand. Here, Helen came up with a design for an adaptable, one-to-two-storey timber-framed house incorporating energy-efficient passive solar heating that was suitable for a building company to construct.

"Passive solar heating is unusual in a 'normal' house," says Helen, "so getting everything right took a lot of work. I involved Roger Walker, an architect who had a similar idea for this type of house in the 1970s." Helen had the design patented – and Roger is now her business associate.

Helen found a site on a hill in the residential suburbs of Nelson that not only captured that all-important solar energy, but also had fabulous views out across the Tasman Bay. While she didn't get any encouragement from Nelson's planning officials, they didn't make it harder for her either. In New Zealand, planners take a more laid-back approach to housing, which makes it easier for people like Helen to push the boundaries and create ecologically sustainable homes.



## Solar power is not only energyefficient, it can save money, too



areas and sunken lounge), and an office, bathroom and master bedroom with en-suite shower room on the other side. There are also two rooms at either end of the hall, one a guest bedroom with full height windows/patio doors and its own small deck, the other, a small wedge-shaped sitting room linked to the lounge. Outside, decked balconies echo the curved front exterior so Helen can maximise the sun and make the most of the views. Apart from the house's unique energy-efficient design, inside it's the concrete walls and floors that steal the show. If you thought this was a

centre with openings and sliding doors into the main living area on one side (kitchen and dining

Apart from the house's unique energy-efficient design, inside it's the concrete walls and floors that steal the show. If you thought this was a boring industrial material then think again. The panels in the hall and sitting room are *terrazzo* (multicoloured stone chips set into concrete and polished when dry).

The concrete floor throughout the kitchen, dining and living area is a warm honey colour, polished to give it a reflective sheen and scored to create the appearance of flagstones. Elsewhere, thick slabs of grey concrete form a two-sided counter top and divider in the kitchen and basin stands in bath/shower rooms.

In the sunken lounge, wood panelling, together with wooden slatted blinds and lots of leafy plants provide a softer focus to polished concrete surfaces and matt-finish neutral decor. The kitchen is a cool and contemporary work zone with grey





Above Decked balconies follow the contours of the partially curved exterior of the house, allowing Helen to make the most of the sun, and enjoy the view across flown to the pay beyond.

steel-effect base units on three sides. It's a layout that lets Helen cook and still be in contact with people in the dining or living area. The furniture is modern and minimalist – a taupe-coloured suede-effect modular corner seating unit and matching cubes that serve as seats or tables, plus another smaller suede-effect day bed and chair in the adjoining sitting room.

Equally eye-catching is the aluminium-framed opaque glass partition which partially separates her office from the central hallway. Lit from inside, it is stunning at night and is a feature in its own right.

When Helen moved in, the first thing she did was throw a party to celebrate the launch of what she unsentimentally labelled 'House One'. "Having something tangible to show people is a huge benefit for any design prototype," she says.

Although she's not looking too far ahead, Helen sees her future here with her current partner Dougal, an outdoors instructor. "New Zealand is an amazingly beautiful country," she reflects, "a place where you can make nature a big part of your life." Never has the phrase 'a place in the sun' been more strictly appropriate...

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Tahunanul Well-situated three-bedroom home on the Tahuna Hills, with wonderful views across to the west. Contact Haven Realty Ltd: 0064 3548 0200; www.havenrealty.co.nz.



Nelson Beautiful and spacious three-bed home – plus attached two-bed flat – with views over Tasman Bay, Contact Paul: 0064 3547 0000; www.prosale.biz (listing number 100254).



Port Hills Stunning four-bedroom Art Deco house with lush sloping garden in central Nelson. Contact Reno Marioni: 001 415 812 2484; e-mail rmarioni@yahoo.com.

## Solar flair

This imaginatively designed, environmentally-friendly building in the town of Nelson, New Zealand, is the creation of British-born architect, Helen Richards. Run off solar energy, the application of Multiple sign but act

48 a place in the sun