



## Holistic Home Design

The Ferndale subdivision in the Kapiti Coast is among the first to demand minimum requirements for sustainability and energy efficiency, which made this architect-designed home a challenge for Space Architecture Studio.

However, the company was excited about the challenge of setting the standard for the rest to follow, at the only development in New Zealand to prescribe such stringent design and build criteria on sustainability. The minimum requirements for the home were to achieve a 6-Star Home Energy rating, in addition to a Green Home Scheme rating of 'Very Good', and the design easily met that goal. The house is designed in an L-shape to make the most of the sun and shade, and was a collaboration with Right House, to ensure it was as energy-efficient as possible.

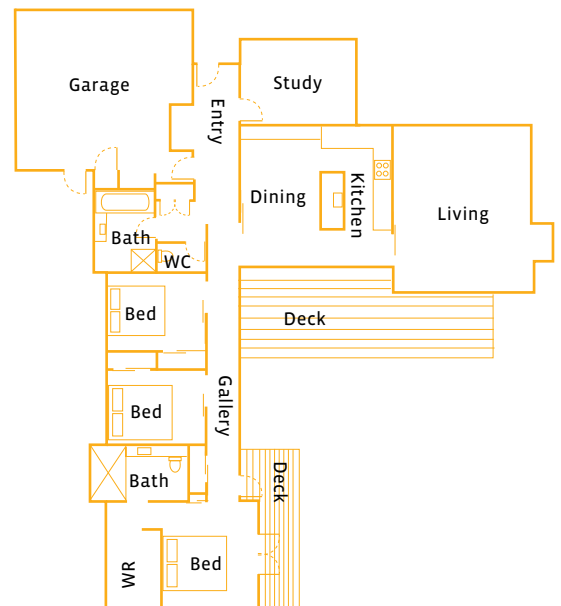
Thermal mass was one of the key design features, with the wall along the gallery operating as a "solar wall" to collect energy from the sun, and polished concrete insulated floors acting as additional solar storage. The house is highly insulated, features Low E argon filled double-glazing, solar hot-water heating technologies, and environmentally friendly heating solutions. A solid fuel wood burner heats the living area, and a heat transfer system pushes the dry, warm air into the bedrooms. There are also radiant ceiling panels in the main bedroom for additional responsive energy-efficient heating.

The house has only two bathrooms, for water conservation, and the toilet and laundry are supplied from an underground rainwater tank, which can hold up to 20,000 litres. Grey water is harvested for irrigation round the garden.

It costs substantially more to build such a highly sustainable and efficient home, but the benefits to future owners and the environment are immeasurable.

**Architect** Space Architecture Studio, 04 233 9906, [www.spacearchitecture.co.nz](http://www.spacearchitecture.co.nz)

This home design was about more than energy-efficient inclusions. The surrounding land was a factor, so design principles were balanced with environmental choices.



The sustainable approach toward this home design was about more than energy efficient inclusions. The surrounding land was an important factor, so modern design principles were balanced with responsible, healthy environmental choices.

<b>THE SPECS</b>	Kapiti Coast \$800-870,000 230 sq m	2	4	2	2