

SUBLIME SUSTAINABILITY



THIS EXQUISITE HOLIDAY HOME is 'sustainability' personified. The clients worked with their architect and local tradespeople and builders to create a home that truly celebrates the space it occupies and protects the spirit of Great Barrier.

Although architect Paul Clarke had pretty much free rein to come up with a suitable design, the owners, Kim and Frances, had a firm notion that the house was to be environmentally sensitive.

"This place, indeed all of Great Barrier Island, is a very special place. We wanted to ensure what we did helps keep it that way."

The house rates very highly on some key Homestar™ points including orientation to the sun, use of natural and sustainable recycled materials, energy efficiency and waste and site management. "The house, with the help of sun and rain, hums along in a perfect synergy with no assistance from the outside world," says Paul Clarke.

Focus on sustainability

The exposed and oiled cedar was supplied by Herman Pacific based in Silverdale and met FSC (Forest Stewardship Council) certification. The external open deck and internal floors were made from sustainable Vitex timber from the Solomon Islands. In July 2007 a major storm hit Auckland and Northland. Great Barrier Island was hard hit: thirteen blackwood trees were blown over. The resulting timber has been incorporated in the house in furniture and fixings.

A major feature of the house is the exterior fixed windows and sliding doors. The glass used consists of two 5mm glass sheets laminated together with 0.38mm of PVB laminate making it a safety glass manufactured with a permanent transparent coating which is glazed to the inside of the house.

The owners chose Resene Zylone Sheen VOC free painted tinted to Alabaster which is an Environmental Choice approved product.

As Great Barrier Island has no mains power or water supply, alternatives have to be found by residents. Water is heated through two roof mounted solar panels and stored in a large heavily insulated cylinder, reaching as much as 82C.



The electrical system comprises some 1050Kw of photovoltaic cells. All electrical appliances meet the criteria for low energy consumption. The Jetmaster fireplace is fuelled by trees which have been blown over or pruned. The house is lined with wool-based and other building code mandated insulation.

LED lighting is used extensively throughout the house – it's effective and keeps power consumption to a minimum.

All water used in the house comes from rainwater with filtration mechanisms including a UV sterilisation system for drinking water. The septic tank system filters effluent through a sand filter and pumps the highly purified liquid into pipelines in the regenerating bush to the north of the house. Plants and trees are irrigated using an automated irrigation system supplied by water pumped from the adjacent stream into a holding tank on the hill.

Any advice from Kim and Frances for others thinking of employing the same sustainability principles? "Oh yes, we think as owners you need to spend time to learn as much as you can about the options available and compromise only when there is no practical alternative."

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PAUL CLARKE