

the quest for natural comfort

THERE ARE MANY GOOD REASONS FOR EMPLOYING AN ARCHITECT, FINDS ESSENTIALLY HOME EDITOR TAMARA, AFTER TALKING TO FRANS KAMERMANS.



{ "A HOUSE HAS TO BE YOUR SANCTUARY AND IT NEEDS TO STIMULATE THE SENSES." }



FRANS KAMERMANS
REGISTERED ARCHITECT, NZIA
PHONE (09) 524 9585

Delft in the Netherlands lost a great architect when Frans Kamermans decided to move to New Zealand more than 20 years ago.

After founding his Auckland practice in the early 1980's, Frans quickly rose to fame for his pioneering work in passive solar energy designs. Inspired by the thought that energy would become more costly as the world's energy reserves decline, in 1984 Frans designed four townhouses in Auckland with the support of the Ministry of Energy. The passive solar energy responsive homes were built with appropriate insulation for the geographic region, proper orientation to the sun, correct eaves for summer sun control, appropriate floor plans for heat distribution and year round comfort and carefully planned window sizes and placement for collecting solar energy (see illustrations on opposite page).

These simple design features are easy to implement, explains Frans, and the result is an evenly distributed, natural radiant heat throughout the house that is more comfortable than artificial heating systems. As an added bonus, the design also allows the homes to remain naturally cool in summer. Many moons and summers have passed since then and Frans has designed a multitude of buildings, both residential and commercial.

Inbetween lecturing at university and planning his latest environmentally-friendly research project, Frans took some time out of his busy schedule to talk to ESSENTIALLY HOME and

share some of his favourite residential designs.

EH: WHERE DO YOU FIND THE INSPIRATION FOR YOUR WORK?

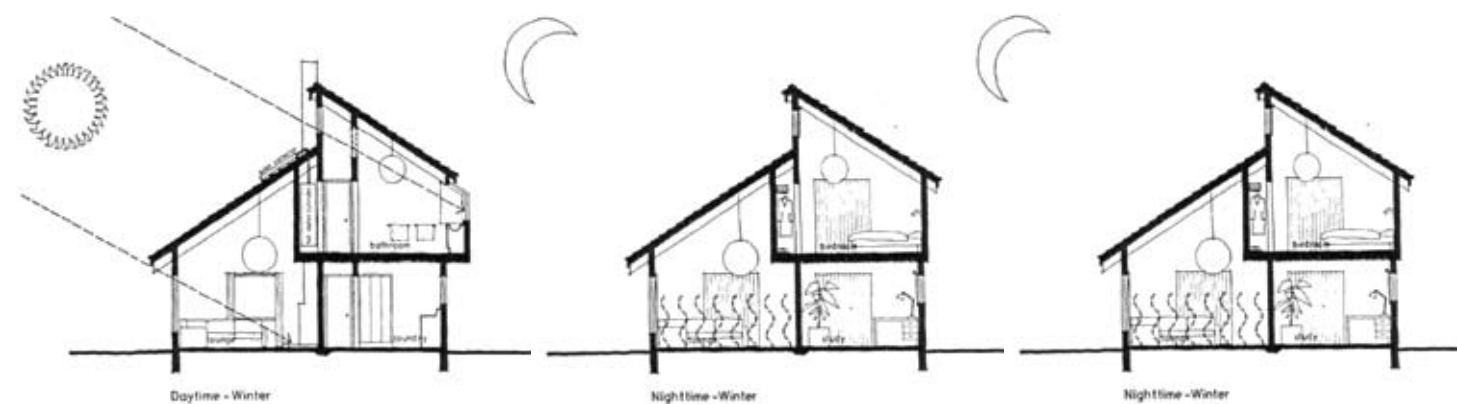
"I am inspired and guided by the client, the budget and the physical environment - meaning on a larger scale New Zealand and on a smaller scale the specific site. How I interpret these things is driven by my own views and where my priorities are - I like to give my work a sculptural quality so that it is immediately recognisable [see photo of ??? home].

Ideally, function and aesthetics should meet in complete harmony. In my view, architecture can also add another element, elevating the spirit and creating an environment that provides a sense of joy.

EH: DO YOU ALWAYS STRIVE FOR NATURAL CLIMATE CONTROL AND PASSIVE SOLAR HEATING IN ALL OF YOUR RESIDENTIAL PROJECTS?

"Yes! But the extent to which I can realise these things also depend on the client, the budget and the location. Ideally you need a good amount of glazing on the northern side, and a solid floor slab.

I find it is important that a house is as naturally comfortable as possible, which can have the added benefit of being energy efficient. A simple example is a room that is naturally filled with sunshine. I like to use thermal break aluminium joinery and hydronic underfloor heating, where feasible.



EH: DO YOU THINK THAT OUR CLIMATE IS CHANGING? IF SO - IS THIS GOING TO INFLUENCE YOUR DESIGNS IN FUTURE?

"The weather is likely to present us with more extremes - gale-force winds for example may happen more frequently, but the design principles will stay the same. Ideally, all the houses I will design in future will have their own supplementary water supply."

EH: WHAT ARE YOUR THOUGHTS ON THE RE-EMERGENCE OF SO-CALLED ECO-ARCHITECTURE?

"Environmental considerations have been practised in subcultures in the past - they were often considered to be a 'Hippie' thing. However, eco-architecture is now becoming more and more mainstream, which is long overdue, in my opinion. It is very simple to incorporate environmental considerations and they are usually cost-efficient as well. Solar heating for example is a 'no brainer'.

EH: WHY USE AN ARCHITECT?

"Architects have at least a five-year education, so you get a professional service that includes all aspects of the project, including budget

control. I recommend that you use an experienced architect and ask for client references.

EH: HOW MUCH INFLUENCE DOES A CLIENT HAVE ON THE FINAL LOOK AND FEEL OF A HOME THAT IS DESIGNED BY AN ARCHITECT?

"My advice would be to be very specific in your brief and your functional requirements - but leave the 'how to' to the architect. It is interesting to see that some clients who have come back to me for a second or third time to have their homes designed, give me more and more freedom.

EH: IF YOU COULD BUILD YOUR DREAM HOME, WHERE WOULD IT BE AND WHAT WOULD IT LOOK LIKE?

"My dream home would be in Auckland, near the Eastern beaches. It would be quite simple, spacious but not too big, comfortable and superior quality and design. I would use natural materials to create warmth and cosiness. A house has to be your sanctuary and it needs to stimulate the senses.

The following homes were designed by Frans Kamermans. >>





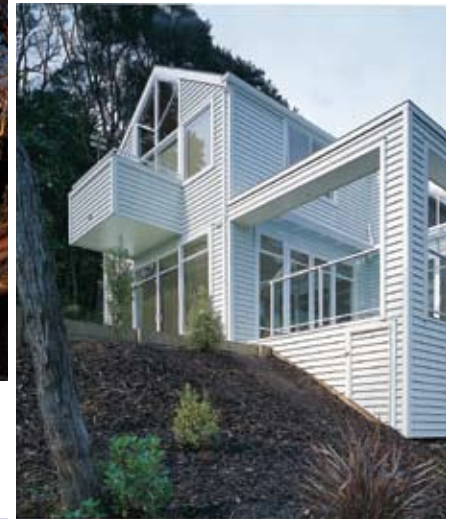
1986 PORT WAIKATO

The owners had been camping on the land for years but wanted a bit more comfort, while not losing the close contact with the rugged West Coast environment. Covering 90m² floor area, this is a true contemporary bach.



1996 TITIRANGI

Clean modern lines are softened by traditional weatherboard detailing. (Photography Studio La Gonda)



1989 COATESVILLE

The owner wanted a house that reflected its rural New Zealand location. Local silos, barns and their materials/ construction details were part of the inspiration. The “silo” became the stairwell with a sloping roof to accommodate solar panels (not yet installed at the time the photo was taken) and the “barn” became the main building with wide eaves to control summer and winter sun. (Photography Patrick Reynolds)



1998 MILFORD

During the first summer in their new house the client just called it “the coolest house in Auckland, literally and figuratively”.





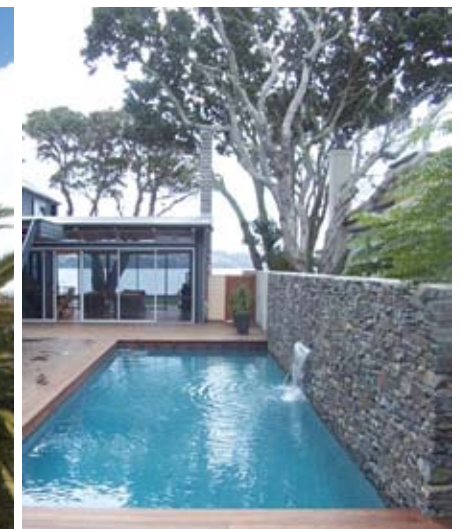
1998 OMAHA BEACH
 'Pueblo-style' escapism behind the Omaha dunes.



1999 MANGAWHAI HEADS
 This 'outdoor room' provides shelter from rain, wind and sun in most seasons and conditions. One looks through the building towards the estuary and bird reserve beyond. The design was inspired by the simple box-like shapes and mono pitch roofs of the traditional Kiwi bach. (Photography Colleen Tunicliff)



2002 TAUPAKI
 The elevated rural location required good wind protection. The main living wing protrudes to the north creating two semi-covered outdoor areas; one with a NE and the other with a NW aspect. All day (winter) sun on the polished concrete floor with a (solar) hot water underfloor heating back-up and wide eaves combined with good cross ventilation, ensure year round comfort at low energy costs.



2003 MUSICK POINT
 Designed as a series of two-storey sheds loosely grouped together. A single-storey curved roof living space is placed between the pool area and the beachfront garden. Stacked sliders on both sides of this living area seamlessly connect both garden areas and the curved roof space, blurring the boundaries between indoors and outdoors.

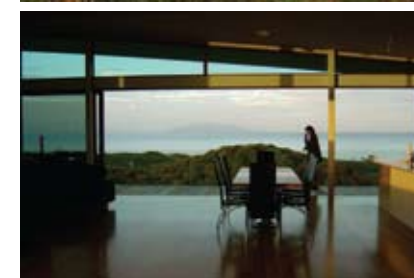


2005 HOWICK

This sun-filled house on a corner site makes the most of the restricted sea views. The outdoor room seamlessly connects the two living areas at the first floor.

2006 OMAHA BEACH

The open-plan living area and master bedroom were elevated half a storey above ground level to ensure uninterrupted views over the bay and privacy of the occupants, while not losing the connection with the dunes and beach. A stairwell connects the elevated structure to a two-storey volume behind, which accommodates a double garage and home theatre on the ground floor and more bedrooms on the first floor.



2006 WHANGAMATA

“NZ School House” meets “Cape Cod” is how the client describes her house affectionally. Located in an avocado orchard on the estuary shore, the house shines in its subtle understated design and detail.



2007 EPSOM

A wide veranda with a high ceiling permits the low angle winter sun to heat up the tiled floor in the north-facing open plan living area, while the high angle summer sun is excluded keeping the house cool in summer.



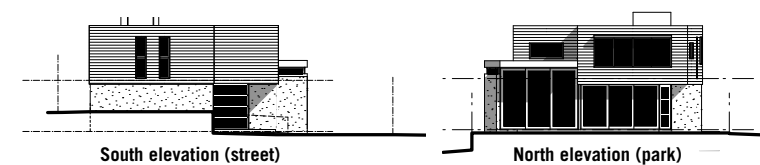
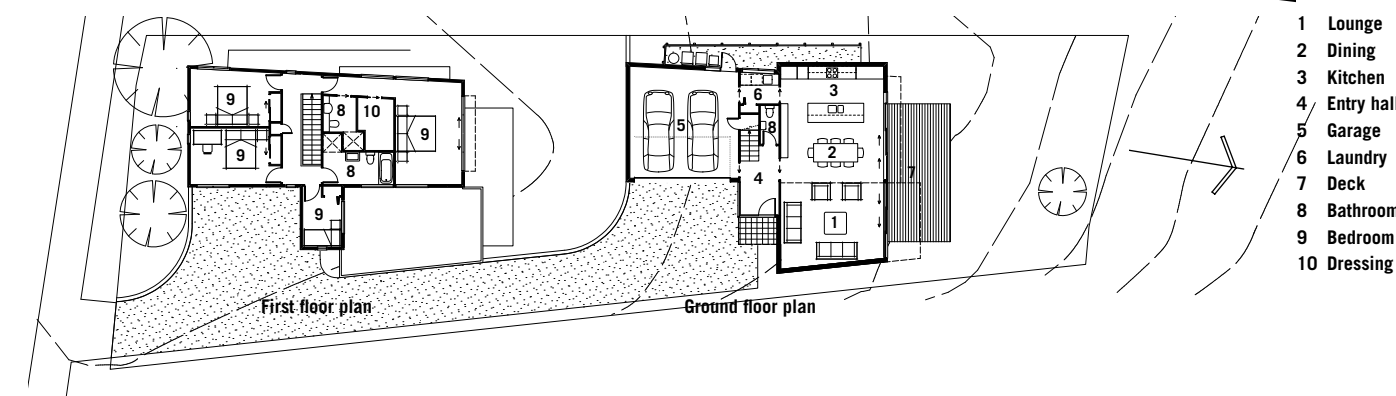
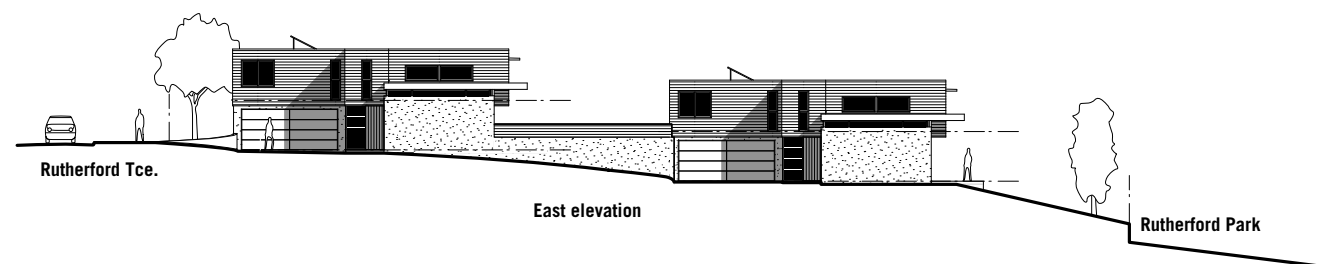
2007 ALBANY

A composition of plastered concrete block and metal-clad volumes in a new Albany subdivision.



2007 GREENHITHE

A steep sloping site with south-facing sea view is always a design challenge. By offsetting the different volumes of the building, all main living spaces were given north-facing windows as well as large glazing areas facing the sea views and main garden to the south.



2008 MEADOWBANK

This project is currently in the resource consent stage. Two LOW energy use and HIGH natural comfort townhouses to be built in Meadowbank. The compact but very spacious townhouses overlook Rutherford Park and enjoy a distant view of Rangitoto from the first floor. The houses have all day sun and their environmentally friendly features include: passive solar space heating with underfloor heating backup, natural ventilation and space cooling, solar electric hot water heating, "ultra" thermal insulation, low E double glazing, thermal break aluminium joinery, rainwater storage for toilets, laundry, car wash and garden irrigation. ●

LIST OF FEATURED HOUSES:

- 1986 Portland Road Townhouses •
- 1989 Port Waikato House •
- 1993 Coatesville House •
- 1996 Titirangi House •
- 1998 Milford House •
- 1998 Omaha House •
- 1999 Magnolia Heads House •
- 2002 Taupaki House •
- 2003 Musick Point House •
- 2005 Howick House •
- 2005 Whangamata House •
- 2006 Epsom House ••
- 2007 Greenhithe House •
- 2007 Albany House ••
- 2008 Meadowbank townhouses ••

On Tuesday 14 October at 5.45 pm Frans will give a lecture at the NZ Institute of Architects offices in the D72 building at 72 Dominion Road. The subject will be LOW energy use and HIGH natural comfort in residential design. If you wish to attend this lecture, register with:

Carolyn Savage
DU BOIS & SAUVIGNON LTD
Architectural & Building Services
PO Box 409, Waiuku
phone:
(09) 235 9061 or 021 1179 261
email carolyn@architectdbns.com

- by Frans Kamermans Architects Ltd
- by Kamermans & Co Architects Ltd