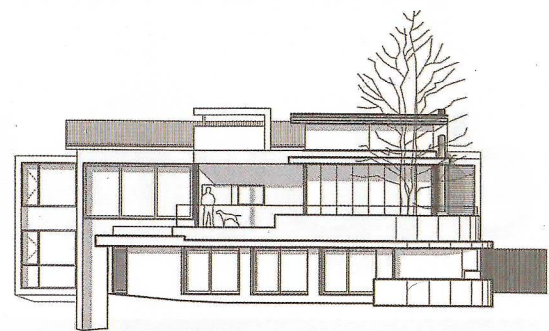
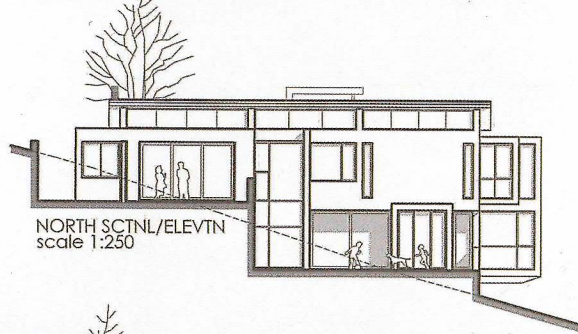


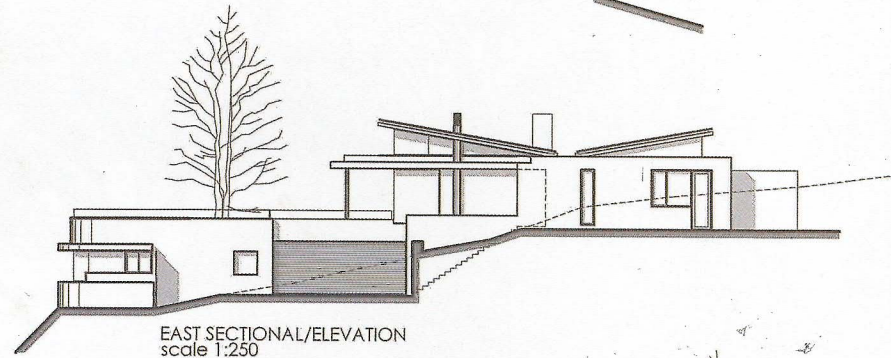
**Butterfly 3**  
 Ryterplaats Estate, Hout Bay  
 Date: 2005-2007  
 Client: private  
 Contractor: owner builder



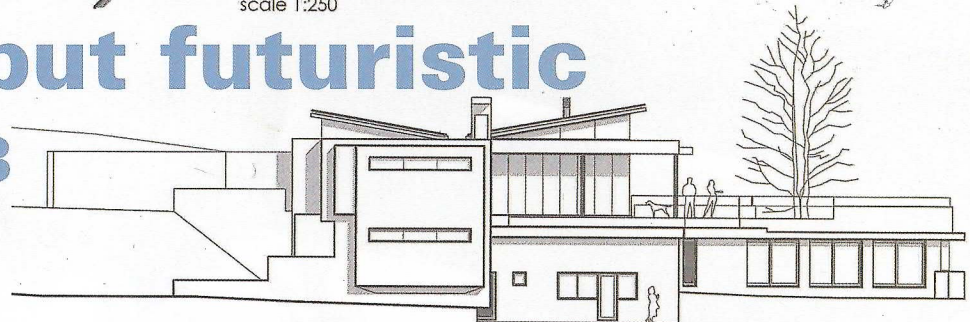
SOUTH ELEVATION  
 scale 1:250



NORTH SCTNL/ELEVTN  
 scale 1:250



EAST SECTIONAL/ELEVATION  
 scale 1:250

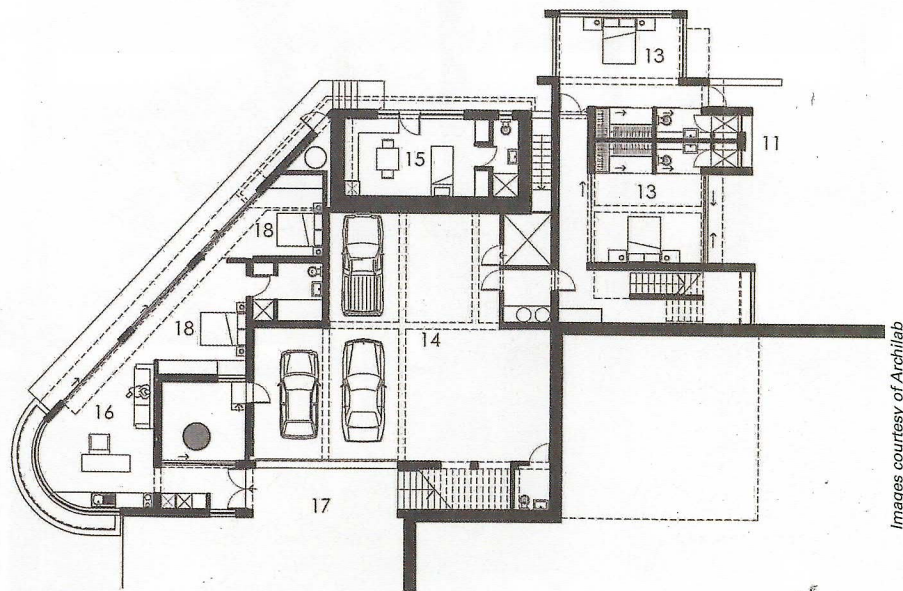


WEST ELEVATION  
 scale 1:250

## Crafted but futuristic – Butterfly 3

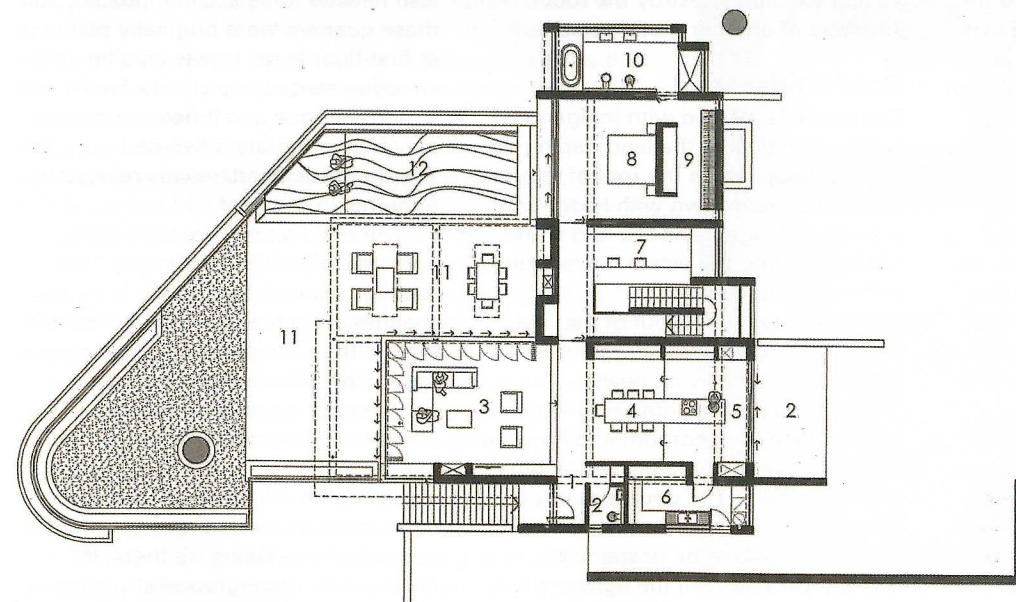
Having grown organically through the owner-build process, Butterfly 3 displays an arts-and-crafts quality. Yet this traditional approach could show the future for residential projects.

While blending with its natural surroundings, large concrete planes extend outwards from door-lintel height to form external canopies that, in turn, screen the sun. In order to preserve all the mature trees on the site, a grass-roofed terrace envelops a large mature stone-pine tree.



LOWER GROUND FLOOR  
 scale 1:250

Images courtesy of Archilab



UPPER GROUND FLOOR  
 scale 1:250

- KEY
1. ENTRANCE HALL
  2. GUEST TOILET
  3. LOUNGE
  4. DINING RM
  5. KITCHEN
  6. SCULLERY
  7. STUDY
  8. MASTER BEDRM
  9. DRESSING
  10. EN-SUITE
  11. TERRACE
  12. SWIMMING POOL
  13. BEDRM WITH EN-SUITES
  14. GARAGE
  15. MAID'S RM
  16. GUEST UNIT
  17. DRIVEWAY
  18. GUEST BEDRMS



"This is the second house we did with Archilab," says Dirk Molsen, client and owner builder. "We sold the first because we had a fantastic offer and knew that this stand was available at the time. It is much more challenging than the first site because of its steeper gradient and smaller area (around 1 000 m<sup>2</sup>) but it has wonderful views."

Bezzoli notes: "The site is very difficult to build on because it falls in two directions, down a very steep slope, to the south and west. And the position of the plot against the boundary of the estate meant we had a huge setback. The original intention with the first house was to create iconic imagery that fitted into the unique context of Hout Bay, which is a lot softer than the rest of the Atlantic Seaboard and quite heavily-treed. So the buildings tend to take on a more natural feel, and that needed to be respected. The end result was a house with a pitched roof in a 'butterfly' configuration, which complied with the estate guidelines that do not permit flat roofs. "Here we used a similar strategy to Cliffhanger, but with a difference," adds Bezzoli. "We extruded large concrete planes from door-lintel height outwards – these created external canopies that became sun-

shading devices." The client wanted to preserve as much of the established major vegetation as possible and put money into the structure to achieve this, Bezzoli adds. "The house is built around one of the existing trees, which defines an outdoor space for a separate flatlet. We also had to cantilever the building off the side of the slope, so that we didn't destroy the root structure of another mature tree."

#### Roof landscaped

The estate is planted with indigenous fynbos. The bulk of the landscaping on the plot happens on the roof of the flat, which is a green lawn with hedge trim around the edges, and the rest of the site blends into the estate landscaping and mountain context.

Molsen says the layout of the first house had to be reconfigured in terms of the family's evolving needs. "Previously, the children's rooms were next to the main bedroom and here we decided to keep our living space separate from theirs. The double storey allows the kids to be downstairs and the living space to be upstairs. We wanted to capture all the light and fantastic views, and we wanted a 360° rim-flow pool.

In the new design the living spaces – lounge, kitchen, study and patio – interact; creating meeting spaces for the family. The L shape of the building also helps to shield the patio from the prevailing wind.

#### Flexibility accommodated

The client's live-in domestic worker also needed to be accommodated, and these quarters were originally planned at first-floor level. However, after construction started, the client's family situation changed and it became necessary to incorporate a two-bedroom flat. The domestic quarters was relocated underneath the pool.

"The building is quite tight in its accommodation," says Bezzoli. "The footings were already going in so the changes were made within the envelope of the existing design. This project shows that you can accommodate a very flexible process if you have to."

Another challenge was accommodating the client's car collection. "The slope was an advantage and allowed us to sneak in a six-car garage without you actually realising it's there. It becomes an underground structure enveloped by the house, and only two garage doors are visible."



Photographs courtesy of Archilab

The upper level contains the living rooms and accommodation for the main house; enveloping the outdoor living spaces and providing shelter from the strong south-easterly winds.

#### House evolved in arts-and-crafts manner

Owing largely to previous experience and a desire to optimise the budget, the client decided to tackle the construction of the second house himself. "Needless to say, it was much more expensive than the highest quote we received from builders," he comments. "But the house evolved; we added a lot of quality finishes as well as the flat. There were huge price increases in materials over those three years."

Bezzoli notes: "The building was built slowly and evolved in an almost arts-and-crafts manner. In a sense, it was crafted like no other building I have seen. Every single detail was carefully considered – from how the shutters slide and how the lights are recessed to the handcrafted timber shadow-line profiles and cornices. The dining-room table, for example, is a single plane of wood that cantilevers off the kitchen island without visible support. How to make it, seemingly, float was something that evolved in a crafting process, and it involved the structural engineer, steel maker, carpenter, client and the architect."

Because it was owner-built, the construction technologies employed needed to be familiar to the labourers on site. Standard brick and plaster were used with slick, contemporary internal finishes. The only major prefabricated element was the steel support structure for the roof, which was bolted together on site like a large Meccano set.



Many elements were custom-made like the dining room table, which cantilevers off the kitchen island.



Simple building technologies have been carefully put together to create striking architectural elements.

Photographs by Archilab

### Passive solar control adopted

As a contemporary building with large glass expanses, thermal gain was dealt with through passive solar control. Bezzoli says the west setting sun is a major problem and large concrete-slab overhangs were used to protect the glass expanses.

Fireplaces were used for heating. The roof was packed with double layers of

insulation for heat and sound control, and additional insulation was provided with curtaining and purpose-made sliding timber shutters to seal off the openings. Underfloor heating and air-conditioning were installed – partly to deal with the windy climate and partly for resale value within a high-income market. Molsen notes that the biggest structural challenge was retaining the

site, including underpinning the neighbour's rim-flow pool – all very expensive and time-consuming.

"We have had overwhelmingly positive feedback on the house," he says. "It has a very tranquil feel. It is environmentally-conscious and does not intrude on the surrounding nature. If I had to do it again, there is nothing I would change."



### Key lesson learned

"By the client taking control of the process and employing his own people, he built at a pace that suited his budget and his demands," observes Bezzoli. "In a way, it was far simpler than working with the standard contract and a contractor, and having to issue change orders and site instructions. The process was far more organic and the feedback loop was far quicker. The house is full of amazing details, which give the spaces a very human touch. Rather than being technologically innovative, in a sense, it was regressive as it would have been built 100 years ago. Ironically, this is probably the building method of the future."

The steep slope enabled a six-car garage to be subtly incorporated with only a narrow two-door entrance as access.