



BUNDEENA BEACH HOUSE

A MODEST, LIGHTWEIGHT BEACH HOUSE IN AUSTRALIA IS A
WONDERFUL STUDY OF TEXTURE AND SPACE



photography
BRETT BOARDMAN

1 /
View from the beach.
A breezeway room sits
protected from the morning
glare of the water by
operable timber louvered
walls

2 /
The main bedroom sits
perched over the living
spaces, set back from
the beach for privacy
enjoying 360 degree v
of the beach, the bay
and surrounding rem
bushland



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4

Key

- 1 Bedroom 2
- 2 Verandah
- 3 Ensuite Two
- 4 Verandah
- 5 Main Bathroom
- 6 Lobby
- 7 Laundry
- 8 Kitchen
- 9 Dining
- 10 Living Area
- 11 Fireplace
- 12 Front Deck
- 13 Breezeway
- 14 Rear Deck



Section A-A



Section B-B

0 1 5M

3 /

The house is designed to be both strong and flexible - built of a composite steel/ timber frame, clad in rough sawn plywood and corrugated iron

4 /

The main bedroom sits perched over the living spaces, set back from the beach for privacy but enjoying 360 degree views of the beach, the bay and surrounding remnant bushland

5 /

Each ground floor room has direct access to stepped timber platforms that form the entry sequence for the house



"DESIGN ME A SIMPLE, unpretentious beach house that will shelter me from the weather, but otherwise allow me to experience the surrounding environment," mentioned the client's brief for Sam Crawford Architects for the house in Bundeena, situated on the northern edge of the Royal National Park, on Sydney's southern edge.

The fragility of the site – located on a dune fronting Horderns Beach – demanded the architect's sensitivity for the place. And thus with this in mind, the architects built a house that's raised off the ground, and set

on steel posts driven into the dune to fortify it against a north-easterly sea wall that can, at times, send a surge of energy through the dune and into the building fabric. The house is designed to be both strong and flexible – built of a composite steel/timber frame, clad in rough sawn plywood and corrugated iron.

As the client had a clear view on the number and type of rooms that he needed, the architects set about to provide a framework for a different set of experiences for each room.

The living rooms are positioned on the dune ridge to make the most

of the stunning view. On the beach side, a breezeway room sits protected from the morning glare of the water by operable timber louvered walls – and on the bush side, an open deck sits protected from a sometimes-bracing breeze.

The main bedroom is perched above the living rooms, well back from the beach for privacy, commanding 360-degree views of the beach, the bay, the bush and the hamlet of Bundeena. Another bedroom and an office on the ground floor are accessed via an open, roofed timber walkway – gently forcing visitors and

occupants to experience the element

Sutherland Shire Council has a specific DCP for development within Bundeena. Whilst the controls within the DCP are fairly strict, they are not prescriptive of form or aesthetic. This allowed for a creative response to the demands of the client brief, the site and the budget – so long as the building sat within certain parameters – for example, buildings shall be raised 600mm off the ground, set back 10 metres from the beach front (20m for upper floors), and 1.5m from side boundaries, decks to be of modest dimensions, among others.

As the project deals with environmental sustainability due to the location of the site – a shifting meeting place of both land and sea – the design team gave careful consideration into its design measures.

The most obvious ones that have been implemented include natural cross-ventilation to each room, orientation of spaces and protection of openings to maximise winter solar gain and minimise summer solar gain, use of gas space and water heating in lieu of electrical, use of ceiling fans for summer cooling in lieu of air conditioning, provision of water storage tanks to reduce town water consumption, and use of renewable and recycled materials where possible.

Other measures have been implemented as much in response to the site as for environmental reasons. They form part of the environmental strategy, and yet in another project on a different site, would not be appropriate. For instance, lightweight construction was chosen, allowing the building to sit off the ground, minimising disturbance to the site and obstruction of natural sand, water and fauna movements. On another site, in different circumstances, a slab on ground might have been more appropriate – allowing for thermal mass and passive solar heating.

The house is of modest dimensions (175sqm, 2 bedrooms and an office) by today's standards, and a single car garage only has been provided. The site has no hard-paved areas, while the driveway, built of sleepers laid directly into the sand is 100% porous. The site plan incorporates a vegetable garden and chook run, reducing resource consumption and waste by a small measure.

Other measures such as grid-connected solar panels and a grey water treatment system have been planned, and may yet be implemented. There were also areas where the architects thought they could have done better. Though recycled, and plantation timbers have been used extensively, the method of fixing many timber elements (gluing) means that they will be difficult to recycle in the future. Some natural protective coatings, such as Tung oil, have been used. However, many of the protective coatings used were of relatively high toxicity.

"Working towards sustainability is complex. There is much yet to be learned," said Sam Crawford, who believes that there is always more that can be done. ▀

AWARDS WON FOR THE BUNDEENA BEACH HOUSE:

- + **Royal Australian Institute of Architects – Colorbond Award 2006**
Innovative Use of Steel
- + **Commendation – 2006 Royal Australian Institute of Architects**
Single Housing - New
- + **Winner – 2005 Australian Timber Design Awards**
Residential Class 1 - Open
- + **Highly Commended – 2005 Australian Timber Design Awards**
Major Award



6 /

Simple and direct, the material palette of timber, steel and glass imparts a sense of casualness appropriate to the coastal setting.

7 /

The house floats just over the dune – affording glimpses of water as one enters the site.



