

Pretty Beach House makes a statement on sustainable building in sensitive, bushfire-prone environments

Background

A simple palette of concrete, brick and steel has helped deliver a unique holiday home on an 'unbuildable' site at Pretty Beach, on the NSW Central Coast.

Project: Pretty Beach House, NSW

Main concrete elements:

- In-situ slab floors and ceilings
- Off-floor walls (internal and retaining)
- Architect: Lahznimmo Architects

Builder: BlairBuild

Photography: Brett Boardman

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Andrew Nimmo - Lahznimmo Architects

The Challenge

It took architects Andrew Nimmo and Annabel Lahz seven years to overcome a raft of challenges in designing and building their bush retreat - not the least being a steeply sloping site in a bushfire-prone environment that also happens to be an Endangered Ecological Community.

Solution/Outcome

The payoff has been worth the investment - an elegantly simple, low-maintenance house that is fully and sympathetically immersed in its pristine natural landscape of forest gums and fern gullys.

The house has a narrow, linear footprint that runs with the contours across the steeply sloping (1:3) building envelope. When viewed from the road above, the house appears much bigger than it actually is. In fact, it's little more than one-room deep.

Building across, rather than down the slope not only reduced costs by minimising excavation, it ensured the house could be 'embedded' into the landscape and take full advantage of the bush views above and below the envelope.

The choice of materials - concrete, brick and steel - was as much about durability as it was aesthetics.



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"We made the decision very early to go down the path of totally non-combustible materials, including the roof," Nimmo says.

It meant we were able to retain the trees close to the house that otherwise would have had to be removed.

"There's no reason why this house won't be standing in 100 years."

The ground floor is a concrete slab on piers. On the downside of the slope, the edge of the slab wraps around exposed sandstone outcrops and kinks outwards at its northern end to create a large, open verandah space. (This kink is mirrored on the first-floor slab, creating a similar open space.) The corners of the slabs are rounded to soften their visual impact.



The roof is also concrete - for the most part flat, but in one particular section (over the central breezeway and adjoining enclosed spaces) folding upwards to mirror the angle of the ground slope. Taking full advantage of the extra ceiling height created by this sloping roof section, a narrow strip of glazing has been installed at the top of the adjoining wall to open up the bush views from within the living area.

"It also helps with ventilation, but really it's about the view," Nimmo says.

"Our views are all about looking through the trees, rather than over them. The idea of the sloping roof section was to expose the view behind us, which is probably the nicest."

The relationship between the building and its immediate environment is also reinforced by the exposed brick walling. All of the brickwork is non-loadbearing; the heavy-lifting is done by the exposed steel columns, supported by concrete blade walls for lateral stability.

Two types of glazed brick have been used to define different parts of the house - a glossy, greenish-coloured brick that imagines the colours of new green sprouts emerging after a bushfire or rain; and a darker, almost metallic-coloured brick that captures the grey tones of the Australian forest. The play of natural light on these darker bricks creates a wonderful and ever-changing mottled effect on the wall surfaces.

In contrast, Nimmo and Lahz have chosen to let the concrete speak for itself. For example, where the internal blade and external retaining walls are visible, the imprint left by the horizontally laid, sawn Oregon timber form boards is clearly visible. Similarly, the ply form lines on the exposed concrete soffits.

The understated simplicity of the design and its accompanying materials palette belies the meticulous and thoughtful approach taken by all involved in this project.

Nimmo reserves special praise for builder Matt Blair, describing the collaboration as paramount in overcoming the unique set of challenges presented by the site.

The proof is most certainly in the pudding - a beautiful bushland escape that sets a new standard for building on ecologically sensitive, bushfire-prone sites.

BENEFITS OF USING CONCRETE:

- Ecologically sensitive
- Durability in bushfire-prone environments
- Low-maintenance

