



he New South Wales Central Coast, like most of Australia's populated coastline, was once the domain of the unobtrusive, modest fibro beach shack sitting quietly on site so that nature could speak.

Given the area's natural beauty and proximity to Sydney and Newcastle, the Central Coast was always destined for development. But need so much of the new residential work be so, well, large and unresponsive to its location? Architect Prineas understands how contemporary weekenders can meet contemporary needs in a more restrained way.

For more than 25 years, Sydney-based architect Eva-Marie Prineas visited the Central Coast, staying with family and friends in an unassuming two-bedroom fibro cement beach shack at glorious Avoca Beach. Surrounded by bush and towering eucalypts, the house sat five minutes from the beach and was the source of cherished holiday memories.

As the owners' family expanded with grandchildren, they decided to rebuild. Knowing the site intimately, Prineas was the obvious choice as architect.

"The brief was simple," she says. "Our clients loved the trees on site and wanted to feel like they were living in a really light 'treehouse'. Importantly, while the existing shack's surrounds were now significantly developed, they wanted to retain the spirit of holidays spent in the original structure." The area had become increasingly dotted with "monoliths". The neighbouring houses were clearly in one of two camps - either of the Australian beach vernacular and appropriate for their location, or not so. Prineas says it was crucial to all involved that the new house was appropriate. Her client's house needed to be relaxed, not excessively sized and very much connected to the landscape. The brief was for it to be highly adaptable and responsive - cosy for two occupants but flexible and generous enough to accommodate multiple families visiting together.

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Prineas' solution was to position the house along the site's top southern edge, where it 'camps' over the original shack footprint, minimising disruption to the land and allowing much of the block to be regenerated by bushland. She then built upwards with a compact two-storey high, one-room wide design that gently turns away from the street to the south, to open completely to the treed block and the north. Living and sleeping areas face the block, with services, bathrooms, laundry, storage and kitchen positioned against the southern service wall.

Materials and their treatment are deliberately simple and speak to the tradition of low maintenance, relaxed beach shacks. Externally, darkly painted fibre cement sheeting has been used to ensure a low profile from the street, and to acknowledge the original fibro structure. Being in a bushfire-prone area, the cladding also needed to be noncombustible. Contrasting internal white walls feature throughout, ensuring a light and open spaciousness.

While the house's spirit is firmly in the trees, this is made possible by relying on steel which is used extensively throughout – from its custommade letterbox at the arrival point, to its roofing,

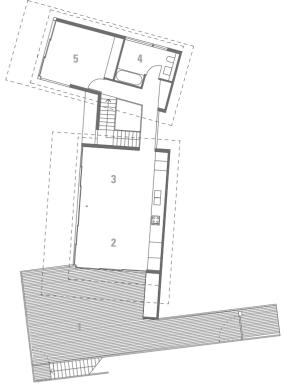
balustrades and structure. "Steel became the main structural material, and everything else fell into line with that," Prineas says.

Her 'treehouse' idea was for a slim, elegant structure and exposed steel was used to realise it. Working very closely with structural engineers, she used steel to produce a structure that was "incredibly thin" — a result not achievable with other building materials. "The detailing of exposed steel is key to the language of the architecture. The intent is a sense of camping on an edge amongst the trees and this is achieved through fine steel detailing that seemingly allows the roofs to float, detached from structure." LYSAGHT CUSTOM ORB® made from COLORBOND® steel in the colour Woodland Grey® was used for the steel roofing because of its light weight, durability and profile, ensuring the structure blended discreetly among the eucalypts.

To enhance this sense of floating through tree tops, Prineas used fully retractable floor-to-ceiling glazed doors on all north-facing rooms upstairs, which transforms those spaces into 'balconies' which connect immediately to the outside. To achieve this, a finely detailed steel balustrade wraps around







GROUND FLOOR

LEGEND

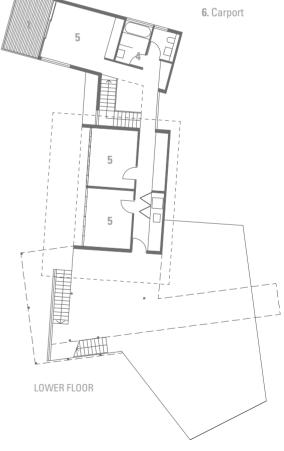
1. Deck

2. Dining/Kitchen

3. Living

4. Bathroom

5. Bedroom



TOP: A light steel bridge connects house and street, with darkly painted fibre cement sheeting used to maintain a low profile

LEFT: By exposing tapered rafters externally and lining the underside of roof purlins, the roofs appear to float lightly into the treetops

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LEFT A finely detailed steel balustrade allows all living spaces to be opened fully to the outdoors

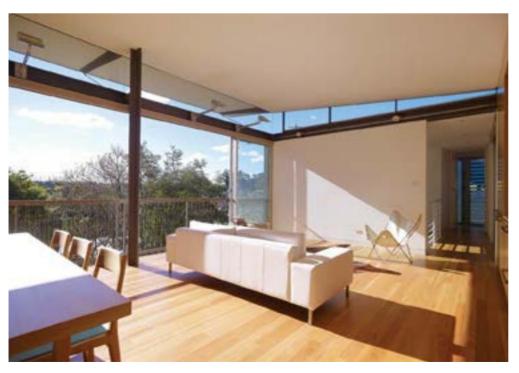
BELOW LEFT: Living and bedroom spaces face east, with fully retractable windows and doors heightening the sensation of treetop living

BELOW RIGHT: Stainless steel wire run vertically in a zigzag pattern is used for the balusters, creating the impression of strength, security and gossamer fineness

## **PANEL SAYS**

This beach house is a fine piece of work.

We found it simple, straightforward, and elegant – the detailing of exposed steel is key to the architectural language. Steel is used effectively in the entry bridge, structural posts and roof sheeting, with fine steel members seemingly allowing roofs to float detached from structure. Sympathetic attention to detail includes steel balustrades, stainless steel balusters and micaceous iron oxide coating, used to blur the threshold between internal spaces and the landscape beyond. This project demonstrates a delightful spatially light feel, the kind only achievable through the large spans that steel allows.







## "Attached to the main living area, this deck simply and directly extends a sense of space and is capable of accommodating large gatherings while the house retains its intimacy"

all full-height windows on the top storey, allowing those windows to fully open behind the permeable safety barrier the balustrade provides. Balusters are made of stainless steel wire and run vertically in a zigzag configuration. The effect is ethereal — as if deft, light hands have cast a fine web to protect those inside. Despite having a roof overhead, the resulting feeling is of being outside among the trees, truly that of being in a tree house.

To best provide a clear, open span to the northern glazing, and allow doors to open unencumbered, Prineas placed the main steel column supporting the living area roof within the living room,

away from the glass line. It also enables the highlight windows to the north to be clear of any structural posts. Exposing the depth of the tapered rafters externally beyond the glass line and lining the underside of the roof purlins creates a thin roof edge, which is finished off with a welded steel angle. Steel angles used as posts and beams provide recesses and shadows in the facade, adding to the lightness of the building.

A large deck and bridge to the street cantilever off the living area and heighten the sensation of being outdoors. "Attached to the main

living area, this deck simply and directly extends a sense of space and is capable of accommodating large gatherings while the house retains its intimacy," she says.

Mindful of the house's environmental responsibilities, two 5000-litre water tanks occupy the undercroft and retain water for toilets, washing machine and garden irrigation. Its siting maximises a northern solar exposure moderated by extended roof overhangs. The deep roof overhangs and cross-flow ventilation through operable louvres and doors allow the house to be cooled naturally while heat from glazing to the north can be retained.

The landscape design was a collaboration with Rolf Den Besten and has a sense of informality that complements the house. Cleverly, the landscape is capable of sustaining itself while the occupants are absent for long periods.

This is a thoughtful, relaxed Australian weekender that floats among the eucalypts in a gentle, unobtrusive way. It sends all the right messages about beach living, without saying a word. SP

PROJECT Avoca Beach House ARCHITECT Architect Prineas PROJECT TEAM Eva-Marie Prineas, David Parsons, Laura Antiohos, Sophie Solomon, Helen Stumbaum STRUCTURAL & CIVIL ENGINEER James Prineas & Stephen Giblett of Robert Bird Associates BUILDER AND CLADDING CONTRACTOR Cochran Constructions STEEL FABRICATOR AND SHOP DRAWING CONTRACTOR Bob Edmonds LANDSCAPE ARCHITECTS Rolf Den Besten PRINCIPAL STEEL COMPONENTS Roofing: LYSAGHT CUSTOM ORB® profile made from COLORBOND® steel in the colour Woodland Grey®; Structural: columns, expressed steel angles, I-beams and tapered rafters PROJECT TIMEFRAME Documentation: 12 months; Construction: 12 months BUILDING SIZE Floor area: 160m²; Site area: 930m² TOTAL PROJECT COST \$1.2 million