

Tree House R&D

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A mother-and-son team builds the first home in Australia that uses structural laminated bamboo.



Step inside this sun-drenched cabin in Australia's Blue Mountains and you'll find yourself exhaling. The serene space floating above a tranquil lake invites quiet contemplation—first of the landscape and then of the structure's unique materials. The 388-square-foot home is the physical manifestation of 15 years of research into bamboo as a building material by mother-and-son team Nici and Jed Long of the Sydney-based design studio Cave Urban.

Bamboo is a sustainable, fast-growing grass, but its round, hollow form limits its use in conventional building projects. Enter structural laminated bamboo, which is made by gluing strips of the material together to create planks. "It turns it into something more legible for mainstream construction practices," explains Jed, who's been developing the product alongside several forestry organizations in Indonesia for the past six years.

To showcase its potential in Australia, Jed and Nici put laminated bamboo to use in a tiny guesthouse on their family farm, becoming the first in the country to build a home with it. "You just have to make things so people can see that you can do it," Nici says. >



Surrounded by trees and overlooking a lake (left), a cabin in Australia's Blue Mountains makes for a relaxing retreat. It's also innovative: Nici and Jed Long (opposite) built the tiny house to showcase the potential of structural laminated bamboo as a renewable building material. The home has an east–west orientation to capture the sun's path, and at sunset, the living room and deck (above) "light up," Jed says. "Wherever you are... you just want to go back to the deck to enjoy that moment."



“It’s very satisfying to make something small, so that the landscape’s the thing you’re really feeling.”

NICI LONG, DESIGNER AND RESIDENT

In addition to the laminated bamboo (below right), the cabin is made from reclaimed and recycled materials, including linseed and hemp–based Marmoleum flooring, recycled hardwood, and salvaged doors. “In our architectural practice, we’re always very interested in adaptive reuse,” Nici explains. “It’s that idea of a phoenix rising from the ashes.” It was also fun, she says, to fit together the “foraged” pieces. A photograph by Nici’s daughter, Honey Long, and Honey’s creative partner, Prue Stent, sits over the lounge (above), flanked by bamboo pendants repurposed as sconces. In the bedroom (below left), recessed niches double as extra sleeping nooks. Sheepskin rugs from Yellow Earth provide comfort in the cool mountain climate.





They spent a year developing the project with friends in construction and carpentry who worked the laminated bamboo into modular frames and tested it in comparison to wood. "We wanted to show that there are other materials that can sit alongside timber and do the heavy lifting," Jed says, "so the idea was to make sure the main structure of the house was bamboo—the columns, beams, and rafters." While they have used some bamboo for the exterior, Jed notes that "because the laminate is glued together, to maximize its durability, it's better as an internal product."

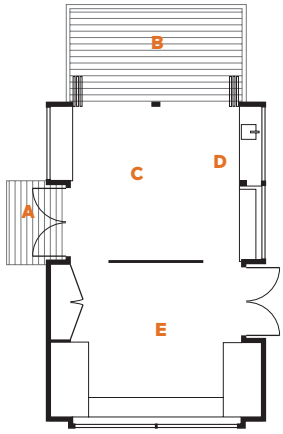
The biggest issue with laminated bamboo, Jed notes, is supply: "You can't just go to a hardware store and get it." While the bamboo was imported from China, which produces the highest quality material, the rest of the cabin is local, using trees that were cut to create a firebreak on the property, and timber and steel salvaged from nearby demolition sites.

The simple layout, with just one internal partition and recessed niches for sleeping and eating (plus an outdoor toilet and bathing area), is a nostalgic nod to Jed and Nici's family camping trips. "You'd have your tent and your campsite and the space around you that you'd occupy," Jed says. "With the cabin, we wanted to build something that was compact but also connected to the landscape." Huge windows facing east and west do just that, opening the rooms to the forest, mountains, and birdsong while capturing all-day sunlight in winter and cool breezes in summer.

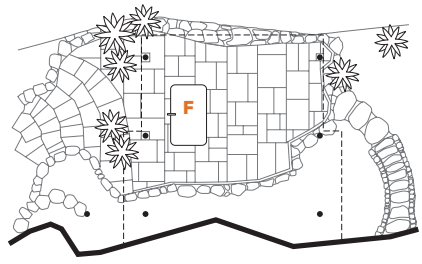
Equipped with solar panels, a battery, and a water tank, the cabin is self-supporting and designed for a relaxed pace of life. According to Jed, the builders couldn't resist casting a line in the lake during construction. "It's a place where you can come and breathe and be—and feel like you're with the landscape rather than fighting against it," adds Nici. ■

Bamboo Bathhouse N

ARCHITECT Cave Urban
LOCATION Bilpin, New South Wales, Australia



Upper Level



Lower Level

A Entrance
B Deck
C Living/Dining Area
D Kitchenette
E Bedroom
F Bathing Area



The small space is surprisingly accommodating, Jed notes, thanks to abundant built-in seating. "We wanted to make spaces where people could sit, not necessarily together, so that you could occupy different parts of the cabin," he says. Nici made the pendant light from a vintage rattan hat.

ILLUSTRATION: LOHNES+WRIGHT