

NANO HOUSE

INNOVATIONS FOR SMALL DWELLINGS



Thames & Hudson

PHYLLIS RICHARDSON

UNDER THE MOON

A FOREST FOR A MOON DAZZLER

Benjamin Garcia Saxe

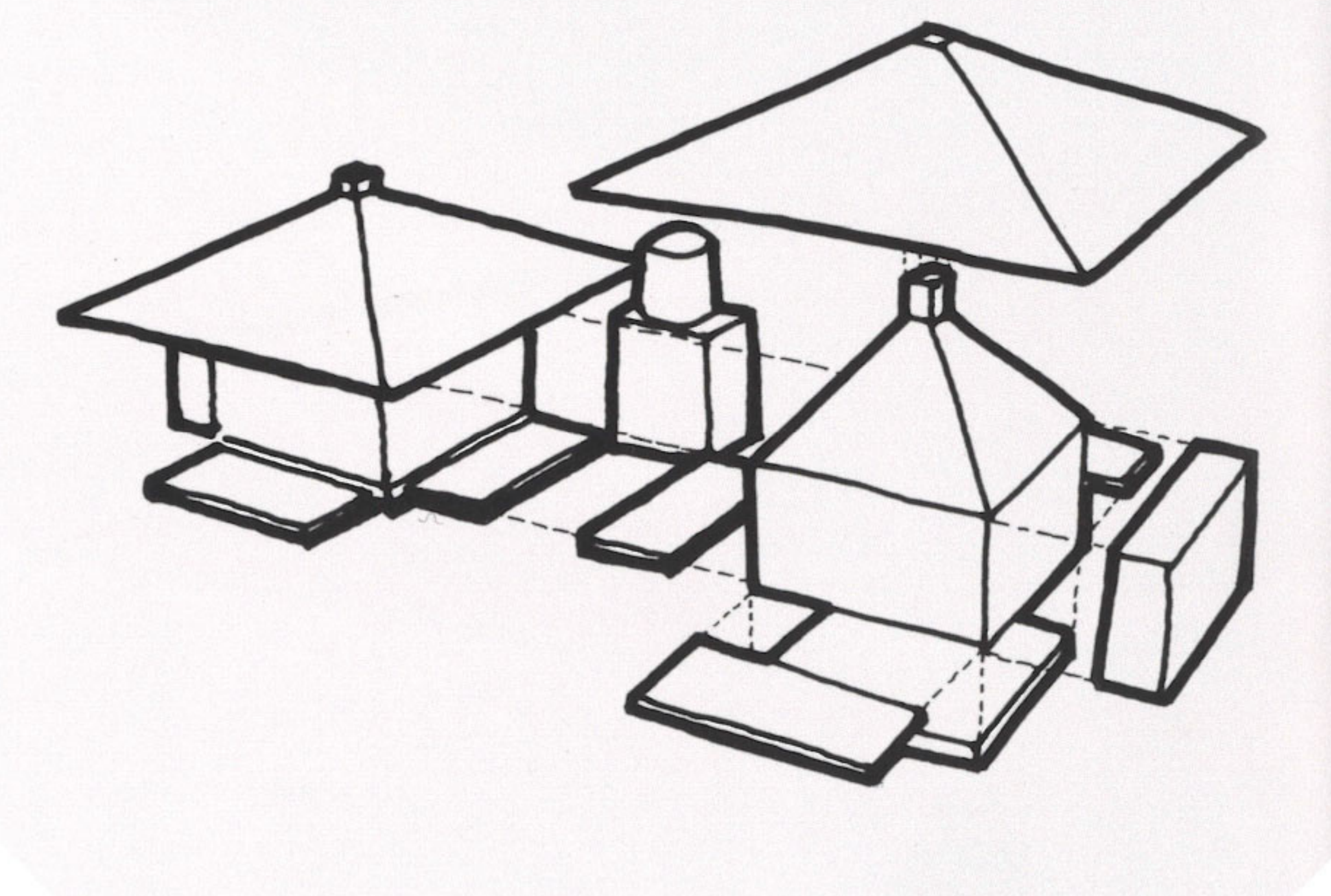
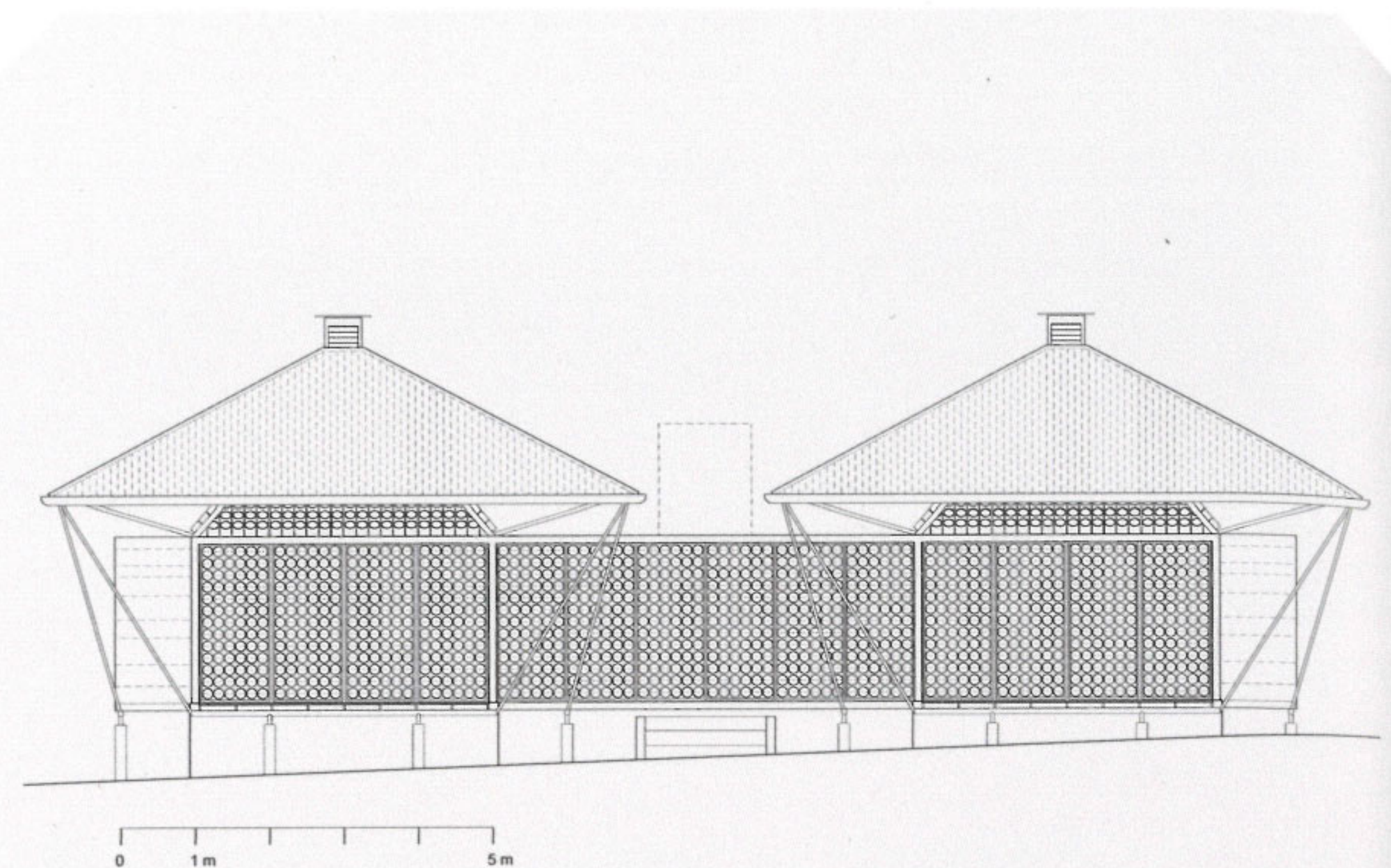
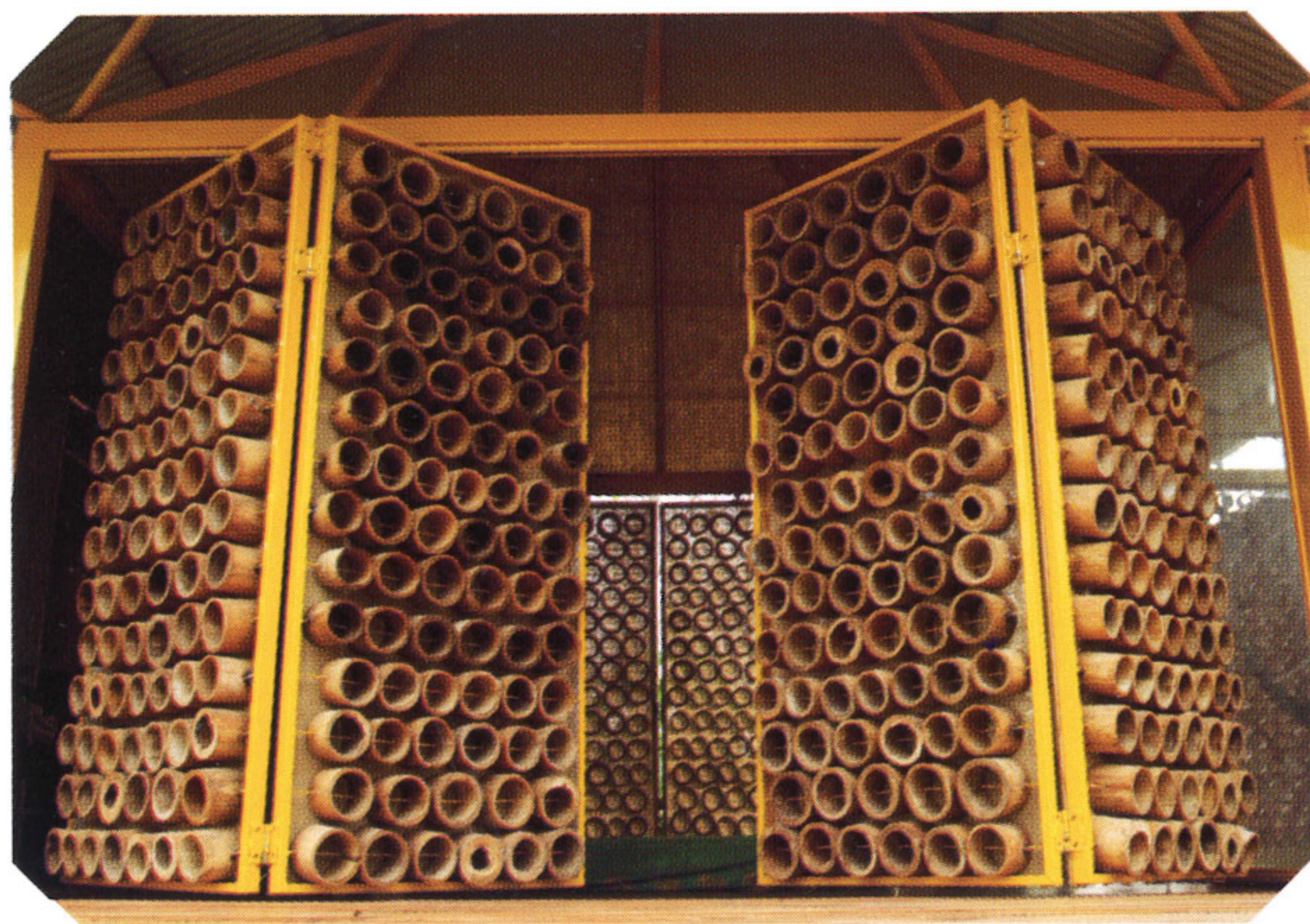
Guanacaste, Costa Rica

68m² (732 sq ft)

It's not hard to admire a well-designed shelter in the lush, unspoiled Costa Rican rainforest. But this house by Benjamin Garcia Saxe shows particular adeptness at respecting the local vernacular, while embracing modern comforts and energy-efficiency. It was the spectacular surroundings that inspired the project, says the architect, who designed and built the house for his mother. 'My mum moved away from the city and built her own home out of tree trunks, mosquito nets and tin,' he explains. 'She placed her bed in a corner to watch the moon as she went to sleep.' Having trained at Brown University and the Rhode Island School of Design, as well as at architecture school in Costa Rica, Garcia Saxe decided to improve on his mother's design, but not her vision of a simple house with a moon view.

The surface simplicity, however, belies a more complex sophistication. The materials are basic – wood and metal, with a concrete foundation – but they have been applied with no small skill. Currently working with Rogers Stirk Harbour and Partners in London, Garcia Saxe has had plenty of experience with larger and more technologically advanced buildings, but he is not inspired to use new technology merely as an end in itself. Rather, he feels that design must keep to the goal of addressing basic desires and needs. His aim, he argues, is to investigate new methods and materials 'as they relate to time and location', and to look at our human desires as a means of creating 'profound new spaces' – hence a house that was built with bamboo cut from a family farm during a full moon (then cured with diesel and dried in the shade), and capped with a corrugated tin roof of a type that has been used in the area for generations. From these





fundamentals, the house explores ideas of enclosure and openness, light and shade, transience and solidity.

Set in a small clearing but surrounded by uncut forest, the house is formed from two modules: one a private bedroom space, and the other a living area. They are joined by an indoor terrace composed of wood decking around a central garden, planted by the architect's mother, and now filled with fan and coconut palms. The two end modules are covered by separate, extended tin roofs that allow for plenty of ventilation. Inside the roof shells, screens made from short lengths of bamboo cuttings create a more enclosed environment, while still allowing for flow of light and air. Similar panels made from cut bamboo are used to create

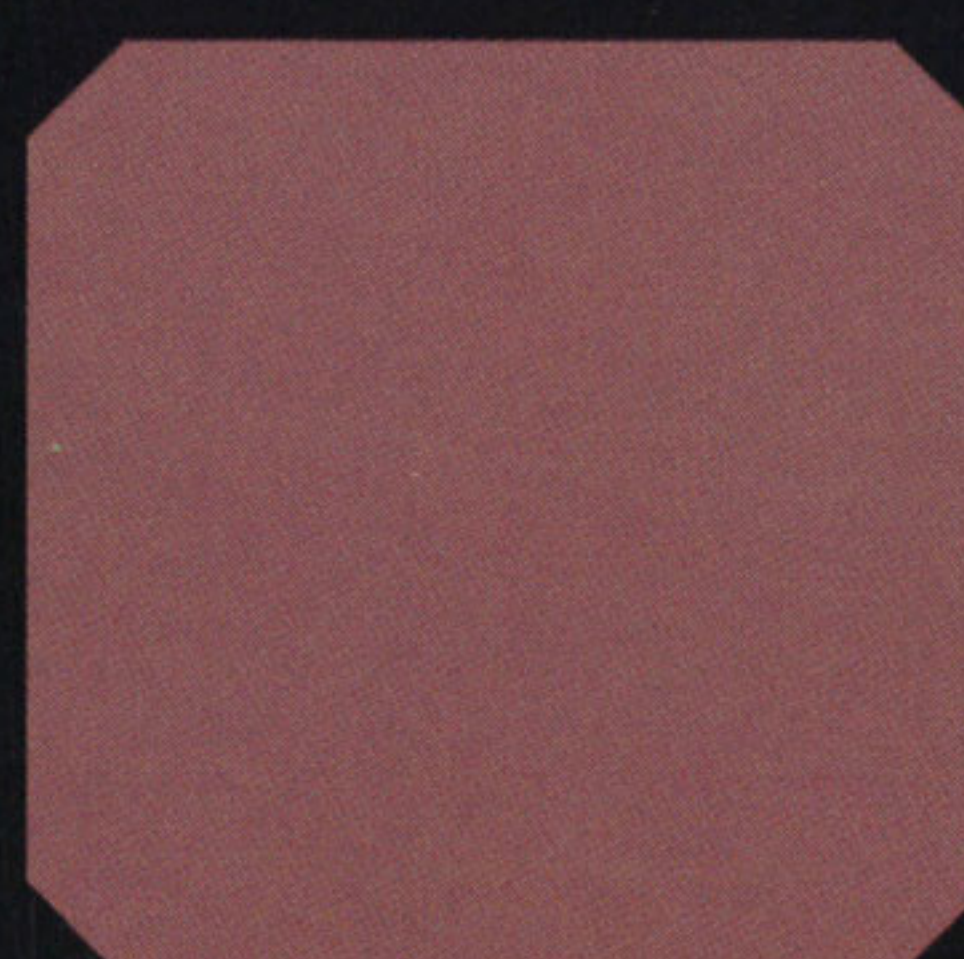
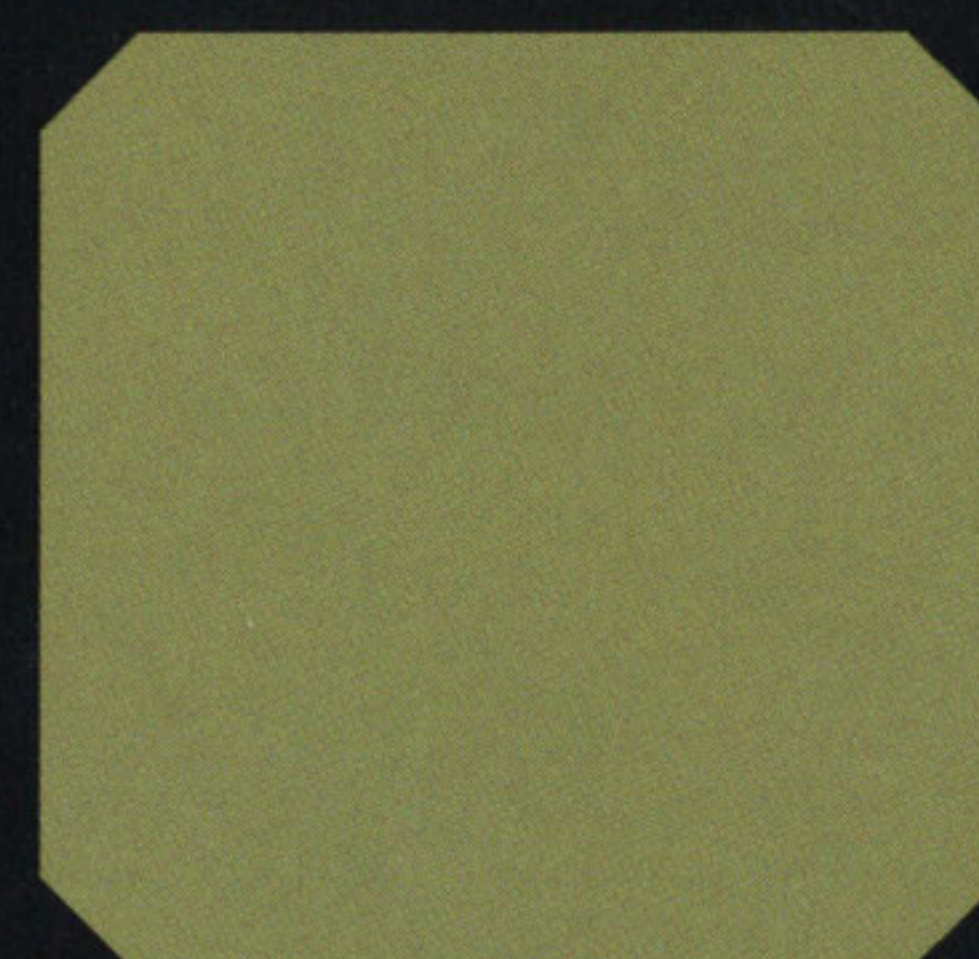
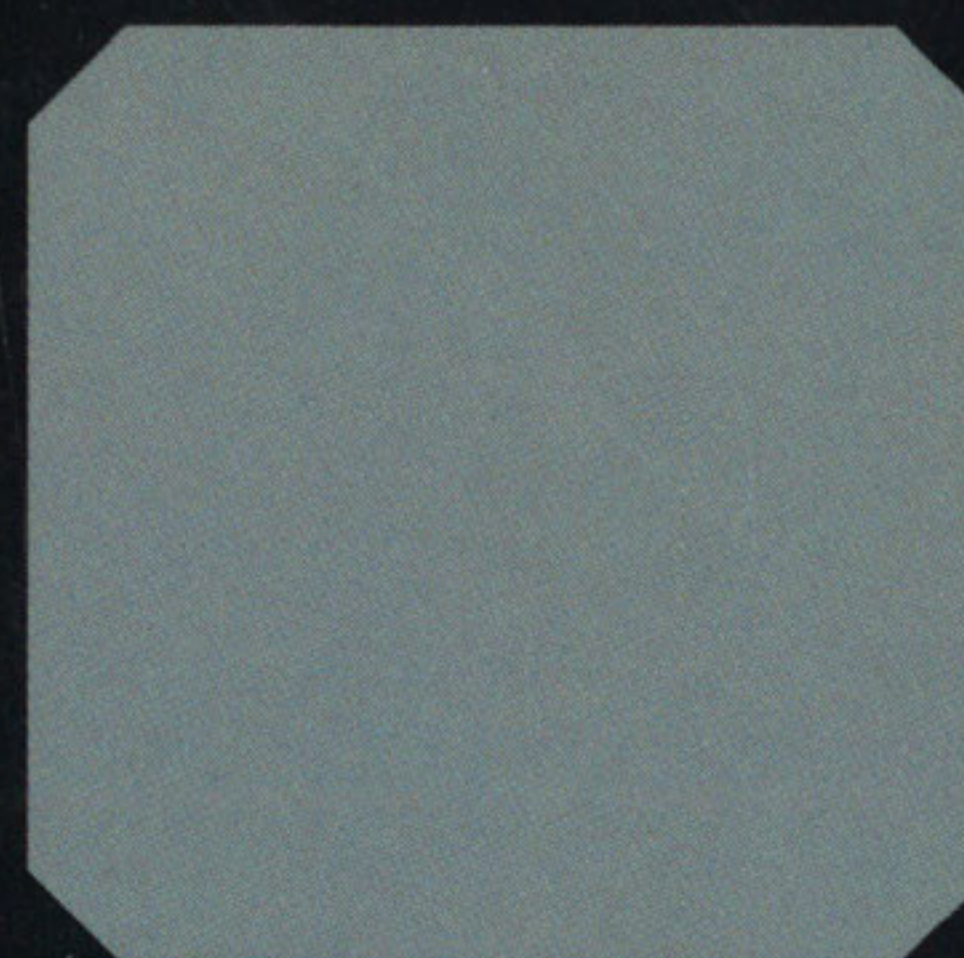
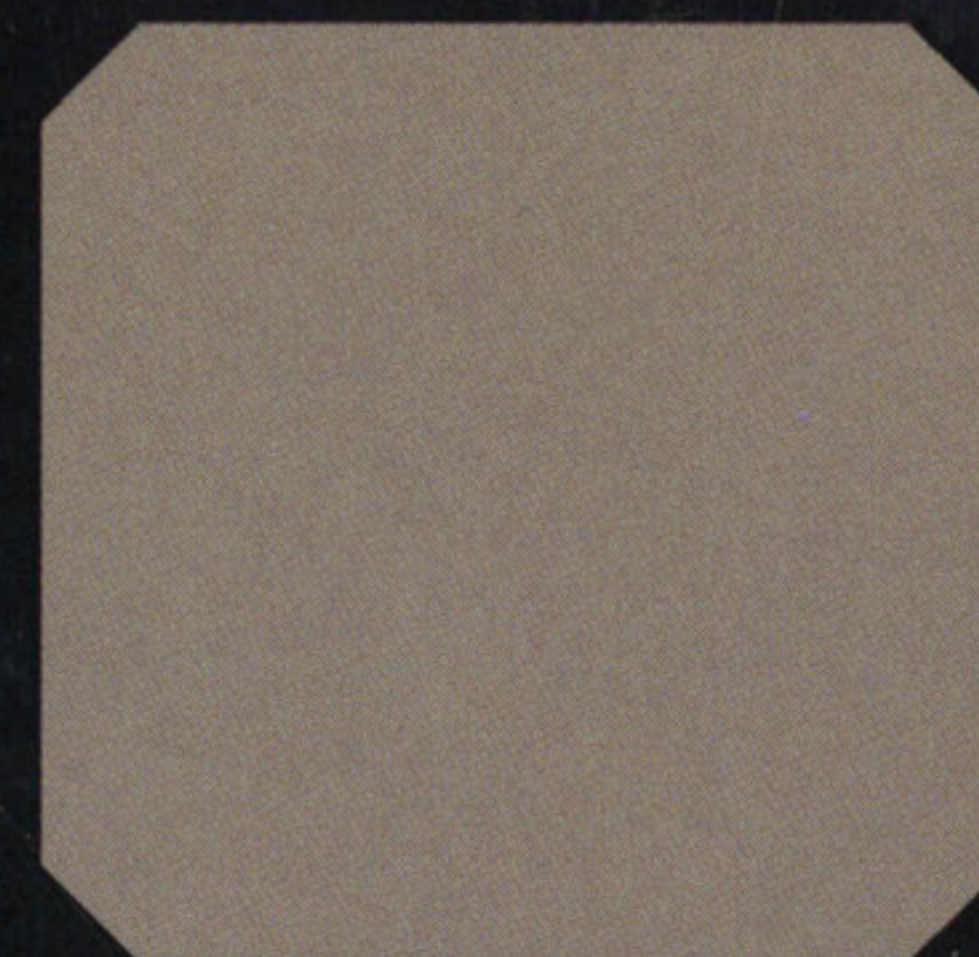
hinged screens for the large openings on the long elevations. These screens open to wide wood decks that sit partly within the shelter of the roof.

The house's open but structurally robust character is reinforced by the galvanized steel beams and columns that form the frame of the house, and the slender, angled pole supports that join the framework in an elegant and subtle geometry. The new home, Garcia Saxe says, reinterprets his mother's self-made dwelling by providing 'a view to the moon and a very open plan that captures an internal garden, while giving her security when she sleeps'. It also provides a good argument for giving old materials more advanced treatment and allowing simple desires to find extraordinary expression.

Building in his native Costa Rica, Garcia Saxe brought together modern and traditional materials: an efficient steel frame and local bamboo, which was used in a variety of forms. The house is full of neat tricks for encouraging ventilation and natural light, such as the layered roof structure.



In our growing cities, space is at a premium. In the countryside, we want to preserve the landscape and build as 'lightly' as possible. And in impoverished parts of the world, the need for sustainable, economical shelter is stronger than ever. At the same time, digital design tools, eco-materials and new prefabrication technologies have all led to an explosion in innovative ideas for our domestic spaces. Today's challenge for architects and designers is to produce small-scale habitats that are more ecological, flexible and efficient, as well as adhering to modern standards of style and comfort. Nano House offers the latest and most exciting solutions for houses where space is at a premium, nature must be preserved or accommodation created for those who need it most.



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