

help create privacy in the Snel waterhouse, in which durable, humidity-resistant materials include mold-free treated wood decks, a stainless steel kitchen, and a yellow glass staircase that creates a well of light

One of Waterstudio's first projects to substantiate

In this post-Katrina age, it requires a leap of imagination to understand exactly what the Dutch mean when they say they no longer see water as a potential foe, but more as a friend. For centuries past, the Dutch have been masters of flood control, trusting the traditional defense method of building ever-higher dikes around gradually subsiding polders - but now they are developing solutions that work with the environment, not against it. The Katrina aftermath, combined with a growing awareness of global climate change, has stirred both international and local interest in the work of Waterstudio.NL, an architecture firm headed by 35year-old Koen Olthuis. His 10-person operation, housed in a former supermarket in the town of Rijswijk, is surfing a wave of water-building success; their unique approach focuses entirely on inventive solutions for living on, in and around water.

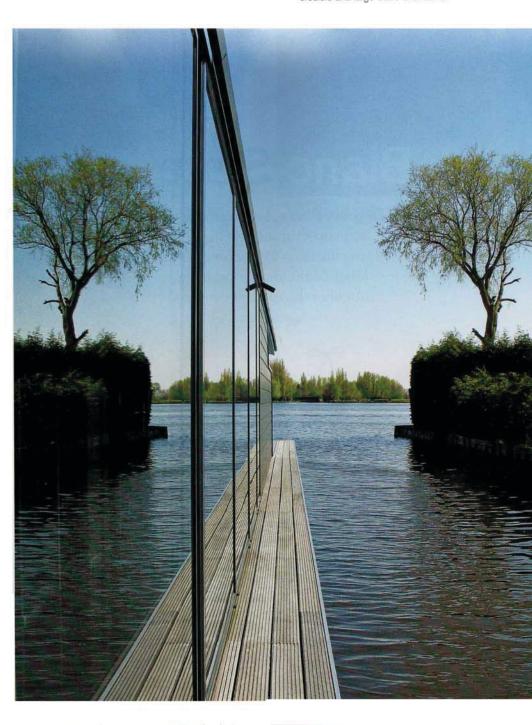
For their first two and a half years, the company had plenty of ideas but no commissions. "Now things are really picking up," Olthuis says. "For an architect, water is not simply a niche field, but an enormous potential market. The traditional typology of the houseboat has kept architects from thinking of new approaches to living on water," he says. "But I see no reason why you can't develop more creative architectural solutions." To build the foundation of his water houses, Olthuis uses a hollow concrete box that can weigh up to 500 tons (the equivalent of a Boeing 747). Like a large boat, the house is stable precisely because of its weight. Olthuis either attaches the buildings to land by cables - if the water level is stable, as in a small lake - or by means of wood, steel or concrete stilts, in the case of a tideprone body of water. He further accommodates water level instability with flexible pipes that provide sewage control, gas and electricity.

One of the biggest barriers, Olthuis discovered, is winning the trust of insurance companies, convincing them that a floating house isn't a boat, and that it employs safe, long-term building techniques. Only then can potential buyers receive mortgage approvals, allowing the market for water-housing to grow into a credible and large-scale alternative.

Olthuis' claims about the viability of living on water is a two-story, 7,000-square-foot villa that is built on Westender Lake in the northern Netherlands. The property, designed for the family of a flower farmer (Sjef Snel, his wife Agnes and their son) from the town of Aalsmeer, the property includes a 10,000-square-foot garden occupying the land adjacent to it. The lower floor, which is underwater, contains a home movie theater, a lounge, washroom and storage space. Agnes Snel did not like the idea of sleeping semi-submerged beneath the water's surface, so the family sleeps upstairs in two small bedrooms adjoined to the living room and kitchen by a transparent fireplace. The glass walls of the living space fold open, accordion-style, providing a view of the lake; the architect painted the interior black so as not to detract attention from the surrounding landscape. When the Snel family moved here from a thatched farmhouse," says Olthuis, "they marked the transition

by throwing out all their old furniture and starting over in a clean-cut, modern style. We picked it out together." The furnishings, all of the highest quality, include sofas by Italian manufacturer De Sede and an armchair by Jori. Dutch firm Boley supplied the hearth, and designer Paul van der Kooij created the kitchen using components from Gaggenau, Miele and Atag. Olthuis has also received commissions for larger projects, like a group of 70 holiday homes on a lake in

northern Netherlands developed by Kontour Vastgoeg. He also devised a number of other floating structures: a garage that can be moored wherever extra parking capacity is needed, a Pentacostal church with a 20-foot-high door in the shape of a cross, as well as a vacation camp on Aruba specifically designed for handicapped people.



The architect's true fascination, however, is developing larger systems that will allow prefab construction on the water. He recently designed and patented a new technology called "floating land." "The principle is a core of foam in a casing of concrete, which can be manufactured in sections at the factory," explains Olthuis. "These sections can then be connected quickly and easily - and therefore cheaply - to form mobile islands with a surface area measuring hundreds of square meters."

Olthuis has proposed a floating riverside boulevard for the Belgian city of Antwerp as well as new urban extensions for Ho Chi Minh City and Bombay, both using this new technology. And an even bigger project is in the making - Waterstudio.NL is now one of two finalists for

an island building project in Dubai. Using "floating land," the firm would build a string of islands that formed Arabic words as part of the second Palm Island now being built just off the coast. A project far grander in scheme than the Snel residence, but nonetheless one that will surely have all the comforts of home. TM

