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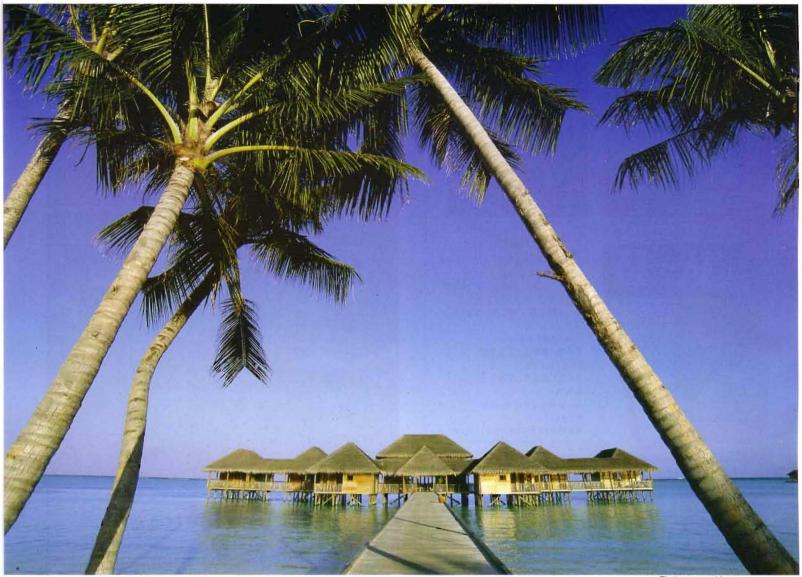


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stilted style

In our last issue of *InsideOut* we featured an article about "Designing in the 21st century". During our interview with architect John Doak we discovered he has been developing some innovative design and construction concepts for homes in the Cayman Islands.

"The design concept is not exactly new," Doak declares. "We're simply developing a contemporary lifestyle version of the traditional Caribbean Pavilion using today's materials and technologies."

In days gone by Cayman's cabin homes were built on ironwood posts set into the ground. This allowed the house to be free and clear of ground dwelling insects, set above the flood



plain or stormy seas and it permitted the breeze to pass under the house, helping to cool the interior. More significantly it was a method that allowed you to set your home above any kind of terrain so it was adaptable to the swampland or rocky parts of Cayman.

These days Doak has found that the underlying peat and swampy ground conditions in many of our residential subdivisions necessitate using a piled foundation. As a result many of his homes are designed to sit on top of concrete pile tubes that go down to the bedrock. With the cost of fill and our increasing awareness of hurricanes and storm surges there is little doubt that elevating your home above ground can be an appropriate and beneficial solution.

Doak also sees the stilted construction technique as a solution to building in the wetlands and eco-development. By the careful manicuring of the mangrove and the creation of a filled access road, the pavilion style home can be set right into the water leaving the natural environment relatively undisturbed. Pathways and access is made along boardwalks.

These pavilions are made from a set of component parts, each module sized as a bedroom suite or a living

space. The exterior can be finished any which way and even pre-cast in sections to allow the whole building to be assembled on site and hoisted onto concrete or pvc tubed piles set into the ground or the water.

"It's a very adaptable construction method that suits any ground condition whether swamp, wetland, ironshore or sand ridge," Doak explains. "In simple terms you insert a series of posts in the ground or water, set a level platform at the desired height and then build off it."

The modular pavilions retain a traditional Caribbean scale and, when grouped up together, can add up to a sizable home confirms the architect. The combinations of single and two stcrey modules and configurations for the layout of the house are almost limitless.

Doak's interest in this alternative method of building first started when he was asked to investigate the feasibility of building a restaurant and bar in the middle of North Sound, an idea that still very much appeals to him. "The prospect of building in the water presented many challenges particularly from a structural engineering standpoint. We also had to find sensible and environmentally acceptable ways to deal with

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garbage and foul drainage as well as servicing the facility with electrical power and water. The building's remoteness necessitated a number of self sufficient energy producing solutions as well as some recycling opportunities."

The proposed project was innovative for Cayman so Doak's firm researched and developed relationships with a number of developers and engineers around the world, particularly in Indonesia, Thailand and Australia where this traditional building method has been perpetuated by many exotic style hotel operators including Four Seasons, Pearl and One and Only Resorts. Readers will have seen many of these hotels built out on the water, their thatch roofed structures sitting high on wooden poles.

Beyond designing the pavilions as private residences, Doak has been commissioned to complete proposals for a boutique scaled resort on the Bluff in Cayman Brac. He is also working on a lightweight version for two student dormitory projects, one in the wilderness of East End where access is very difficult – except by 'pack mule" - and the other more idyllically sited atop a beach ridge in Little Cayman.

"For those projects we have been much inspired by technologies used at Maho Bay in St John, US Virgin Islands, which is an eco-camp that explores sustainable ways to build in virgin rainforest, and at Daniel's Head in Bermuda, a small resort comprising a number of cabins built out in the ocean on wood jetties. In both cases, the cabins are framed in a lightweight aluminium and covered over with stretched canvas. Internally the rooms are rather like small Arabian tents with swathes of fabric material. The interesting thing about these developments is that when a storm comes through, and Bermuda does have some serious hurricanes, the canvas is taken off the frames, rolled up and carried back to shore until the storm passes. The systems are tremendously mobile and ideal for the two sites in Cayman."

As we move into the 21st century, Cayman will have to consider sustainable solutions. Doak believes that his stilted pavilions may be one way to resolve many development and environment issues whilst also perpetuating a Caribbean tradition.