A hosted phone system to help control costs and increase productivity with powerful web based tools...





## The shape of things to come

Architect's AerieLoft can be used as quiet getaway in backyard or extra sleeping space at cottage

April 25, 2009

VICKY SANDERSON SPECIAL TO THE STAR

As an internationally acclaimed architect with a passion for green design, Martin Liefhebber has often rocked the boat of conventional design with his eco-friendly projects, which have included off-the-grid straw bale and healthy houses, bio-filtration systems, green roofs and a home with walls AerieLoft's design is a nod to architect Martin Liefhebber's father, who built boats built of used tires.



as a hobby, and to ships that came to Liefhebber's native Rotterdam.

So it's fitting that his latest foray into sustainable design - an off-the-grid bunkie that can serve as a quiet getaway in an urban backyard or as extra sleeping space at a cottage - has the silhouette of a boat in full sail.

The nautical theme of Liefhebber's AerieLoft, which will be unveiled at the Green Living Show (greenlivingonline.com, today and tomorrow at the Direct Energy Centre, Exhibition Place) has deeply felt personal associations. Liefhebber grew up in Rotterdam, where the ships that used to glide gracefully in the city's port fascinated him.

It's also a nostalgic nod to his father Cent, who built boats as a hobby, and who passed knowledge of the craft onto his son. On another sentimental note, the AerieLoft is a wedding gift to the woman he'll marry in May, whose family cottage in Wasaga Beach has become over-crowded as the clan has expanded over the years.

The idea for small, simple, sustainable building has been brewing with Liefhebber for some time.

"We kept saying that we needed a bunkie at the cottage – a little place to be alone – because it was getting to be like Grand Central Station. But I somehow never got around to it until January, when I started doodling around with some ideas," he says.

Before long, Rico Law, a young designer who works with Liefhebber at Breathe Architects, spied the pencil drawings.

"I said, 'you know, this could be quite good,' " says Law with a smile. "We decided early that it shouldn't be too big or too complicated. From there, it took off very quickly and now we're launching it."

At just 108 square feet, the AerieLoft won't require a building permit in most jurisdictions, including the City of Toronto. A straight vertical wall, which can be made from translucent material or mosquito netting, rises to about 18 feet when sitting on a poured concrete footing, which is

then covered in white cedar flooring, while another sail-shaped wall curves gently over about 24 feet. Liefhebber likes the idea of using willow matting on the straight side as a kind of exterior curtain. Inside, the rounded wall is lined with shelving and a ladder rises to a second story that houses a bed.

From the exterior top of the straight wall a cable is tethered to a solar panel from Solera, a Canadian company that sells utility-grid connected solar power systems. The panel can run a microwave, lighting and a computer (although Liefhebber and Law agree that users would be better off enjoying nature than surfing the Web). It also has a wood stove to provide warmth and heat water.

There's a separate but complementary structure for personal hygiene. The Fons is a 10-foot cylinder with a curved door that nicely echoes the rounded line of the loft. Inside, on a four-by-four foot centre sits a composting toilet, while two sides of the cylinder can each accommodate either a shower or sink, both of which are fed by rainwater that's stored on the top of the structure.

The AerieLoft is being built by the Old Soul Carpentry Club, a small building company owned by Matt Debeaupre and Marek Rudzinski, both of whom share Liefhebber's commitment to green design. It's constructed largely out of white cedar, which can be readily sourced throughout Ontario. The team chose white cedar over the more popular red cedar. Besides being indigenous, it has other advantages over Western red cedar, says Liefhebber; higher oil content makes it more resistant to rot. Depending on how relentlessly the sun beats down on it, the white cedar will turn a subtle weathered grey within a season or two.

Liefhebber estimates the prototypical AerieLoft will cost under \$20,000, or about \$160 a square foot, which doesn't include about \$3,000 for the solar panel. Nor does the price include insulation, although Liefhebber says it could be easily added.

Costs could dip if the team begins to pick up multiple orders for the structure, and they also plan to offer a kit for ambitious and experienced DIYers who want to build their own bunkie. The cost of the Fons has not yet been finalized.

An enthusiastic proponent of sustainable design, Liefhebber is delighted that the AerieLoft and Fons have been designed and constructed with a young team.

"Young people in design really want to build the ideas they create, but there is so little opportunity for them to do that, to see how things will work out in the real world," he says.

"That's too bad, because this is absolutely the time to encourage them to bring those ideas alive. Now, people do want to consume less. They have a new idea of wealth – it's to have less stuff, not to be laid down with it. They want to live in beautiful buildings that are sustainable, and they want to get off the grid. This is a start to being able to do that, even in the middle of the city."