

fabric architecture

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Easy Being

GREEN

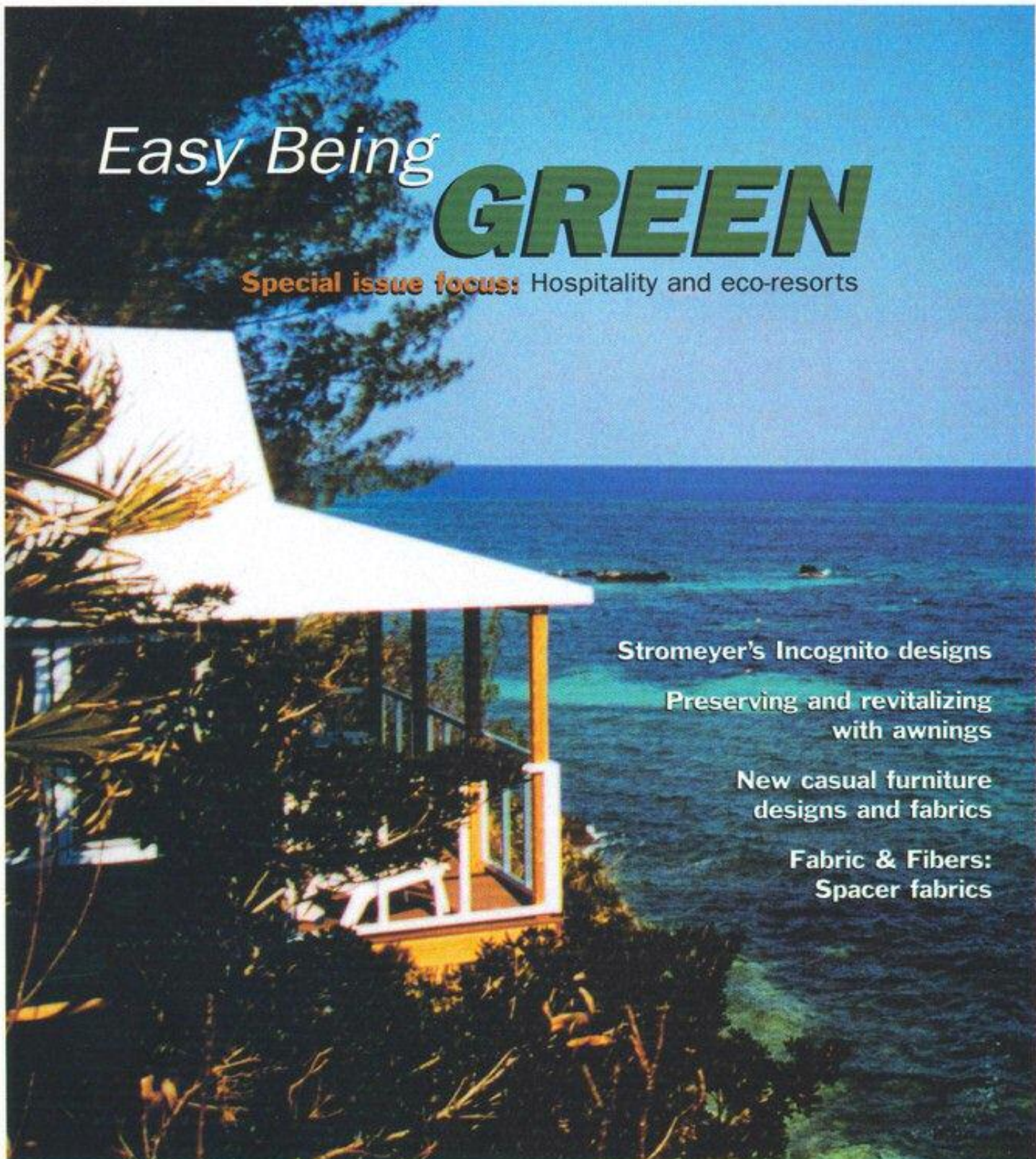
Special issue focus: Hospitality and eco-resorts

Stromeyer's Incognito designs

Preserving and revitalizing
with awnings

New casual furniture
designs and fabrics

Fabric & Fibers:
Spacer fabrics





Creating a flap

Tent-style cottages help resorts tread lightly on the earth

By Jamie Swedberg

Sometimes architects do people a disservice, jokes Honolulu architect Philip K. White. "There's an awful lot of psychological research that implies that the more you're out in nature, the better off you are, and the more relaxed you are, too," he explains. He says his wife, a psychologist, pointed out a variety of studies that show that exposure to the outdoors reduces stress and increases people's ability to concentrate—which, of course, gave him pause, since he's in the business of creating indoor spaces.

Everyone needs shelter, of course. But White concluded that when people are on vacation, they might be able to relax better if they don't stay in a traditional building. And he realized that tourism—especially in environmentally sensitive areas—doesn't have to be synonymous with massive concrete structures.

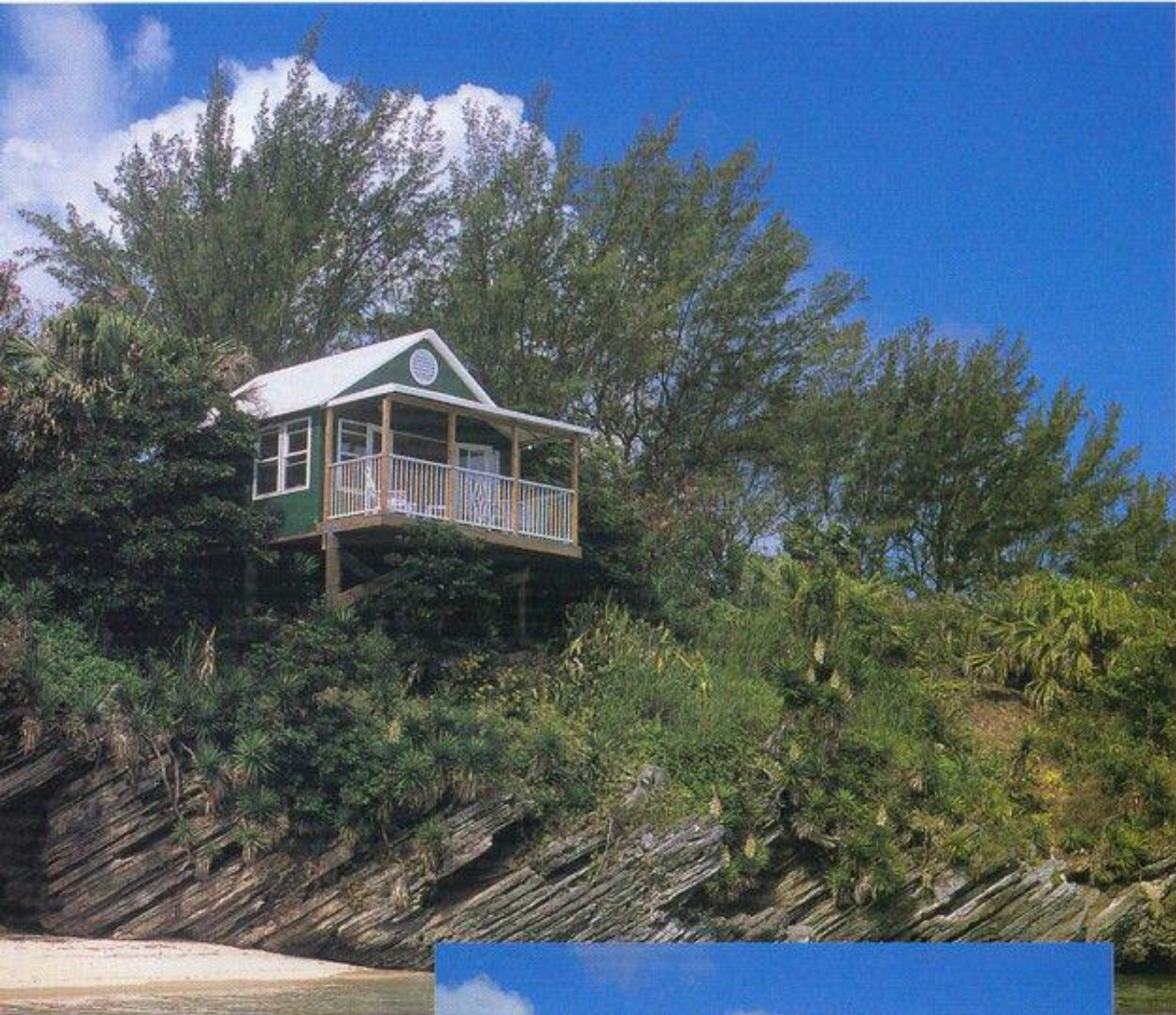
From 1996 to 1998, White designed The Camps at Molokai Ranch, a series of three environmentally friendly resort villages on the fragile, relatively untouched Hawaiian island of Molokai. The sites each host groups of 20 to 45 structures that split the difference between tents and hotel rooms. They're equipped with comfy beds and separately-housed bathrooms with composting toilets, and their water heaters, ceiling fans and electric lights are powered only by the sun.

But White wasn't the first to take the concept of low-impact vacationing and translate it into reality. According to Steve Gibson, head of eco-tent design and sales at Eide Industries, Cerritos, Calif., developer Stanley Selengut is the father of what's come to be known as eco-tourism. Selengut earned much of his renown by constructing an innovative tent-cottage resort at Maho Bay, St. John, U.S. Virgin Islands, in 1976. Since then, he's been the force behind the creation of other environmentally-friendly canvas-roofed resort structures, including a St. John destination called Concordia Eco-Tents.

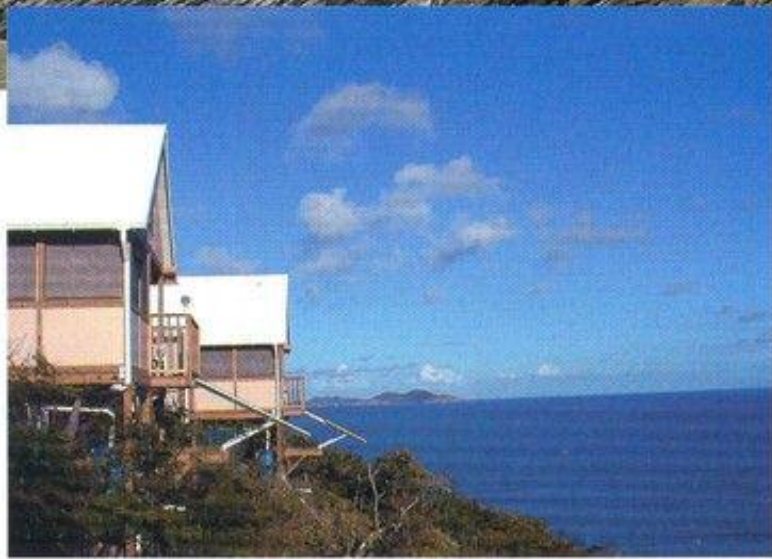
"Stanley won't use anything that is going to harm the environment," says Gibson. "From solar electric to composting toilets, everything that goes into your unit is recyclable or sustainable." →

Simplified construction allows eco-tents to be more readily integrated into their natural environments. Daniel's Head Village, Bermuda, (top) is one of the newest eco-resorts to be built. Interior views shown on pg. 38.

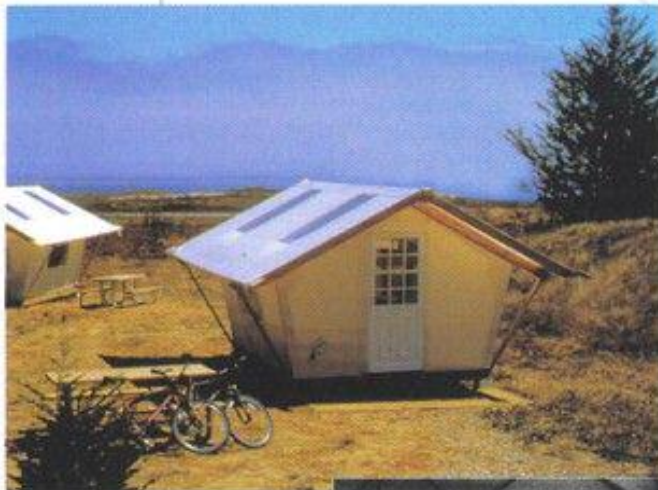




Concordia Eco-tents, Maho Bay, St. Johns.



The "canvas cabins" of Costano, south of San Francisco, Calif.



Light makes right

Eide Industries, which partnered with Honolulu fabricator Tropical J's Inc. to create Daniel's Head Village, a brand-new eco-friendly resort in Bermuda, has devoted considerable energy to Selengut's concept. "The definition of eco-tourism would be to visit an area while damaging its ecosystem as little as possible," Gibson says. "In true eco-tourism, at the end of the resort's life, everything can be removed, and the ecosystem can return to its natural state in a very short period of time."

That means no concrete foundations or labyrinthine HVAC systems. Instead, Daniel's Head's 96 eco-cottages are built on platforms made of a recycled plastic-sawdust composite, and the structures themselves are supported by anodized-aluminum frames with stainless-steel fittings. Being on the

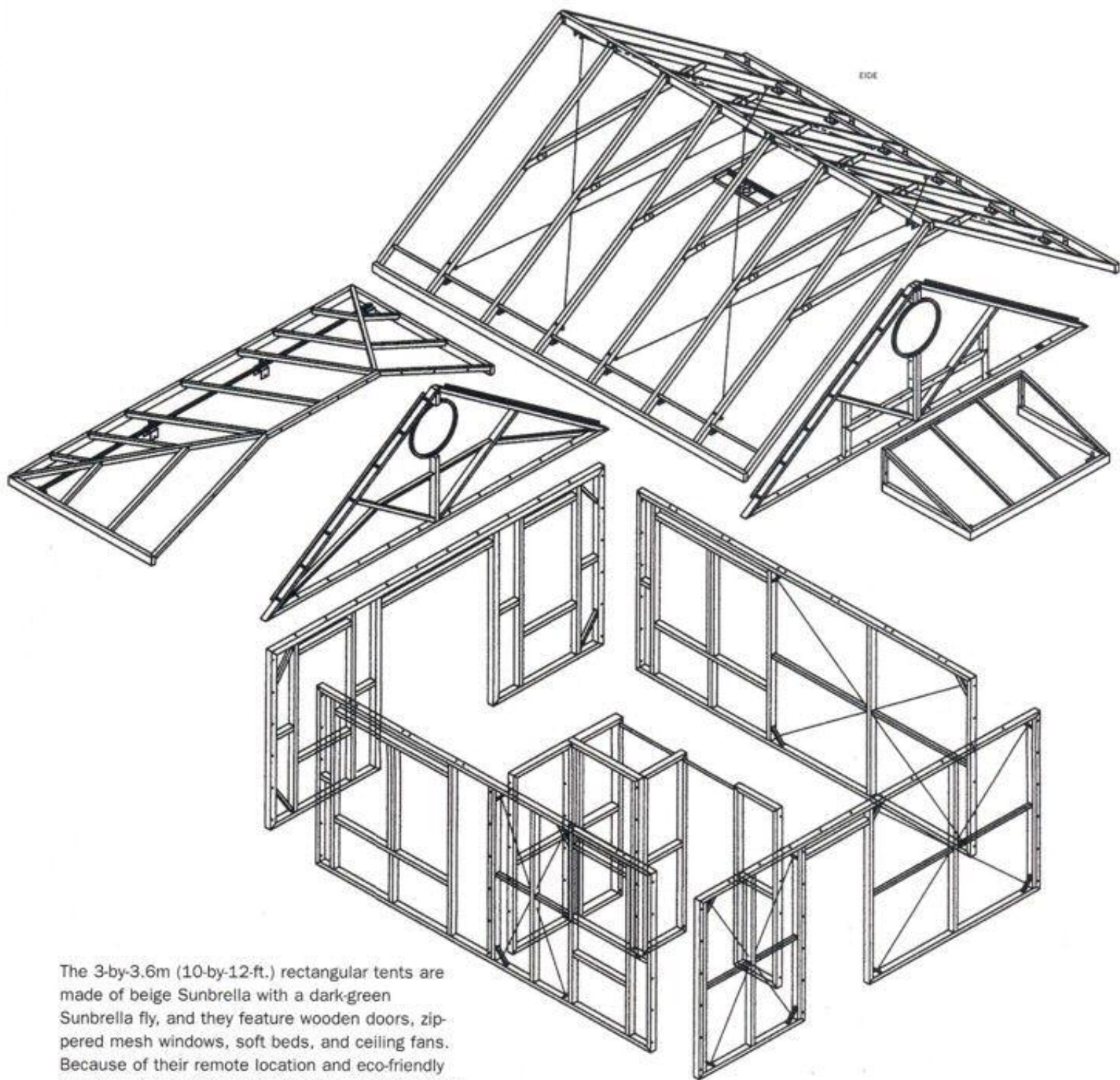
posh end of the eco-tourism spectrum, they're hooked up to standard electrical connections.

The roofs of the structures are fabricated from white Ferrari 702, chosen for its soft hand and eight-year warranty. It's tightly laced and is able to withstand 177kph (110-mph) winds—a crucial characteristic in hurricane country. Walls are John Boyle & Co.'s Patio 500. But except for their translucency and close-to-nature locations, the cottages don't bear much resemblance to traditional tents. Their interiors are fully lined with Glen Raven Firesist, attached with hook-and-loop material. And the amenities are better than most cabins: ceiling fans and baths are standard issue.



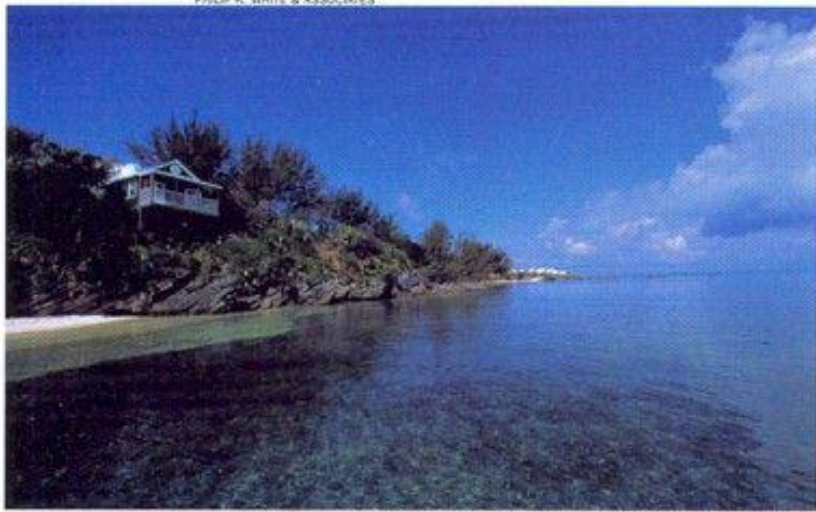
Molokai Ranch, Molokai, Hawaii, designed by architect Philip K. White.

The tent cabins at Molokai (built circa 1996-1998) are slightly more backwoods, but far from Spartan. The framed canvas dwellings—some stretched on wood frames, some on steel—are built on wooden platforms to minimize their impact on the site. Each wood deck has two tent "rooms" on it, plus a picnic table and a ceilingless bathroom. Why no roof on the bathroom? "It's camping," smiles White. "It doesn't rain a lot on Molokai, and it's awful nice to be able to sit and watch the stars. Or stand in the shower and watch the stars."



The 3-by-3.6m (10-by-12-ft.) rectangular tents are made of beige Sunbrella with a dark-green Sunbrella fly, and they feature wooden doors, zippered mesh windows, soft beds, and ceiling fans. Because of their remote location and eco-friendly purpose, there's no infrastructure: "The whole thing is solar-heated and solar-powered," White explains. "Solar water heater, photovoltaic lights. It's all battery, the whole system. The only thing that goes into each unit is water, and all that water goes straight back into the ground right there, to irrigate the plants that are right around you." Like the Bermuda structures, they were fabricated by Tropical J's. →

PHILIP K. WHITE & ASSOCIATES



Far from the madding crowd

Environmentally-friendly resorts in such locales as Kenya and Indonesia let travelers fully

experience faraway lands; other sites serve mostly as getaways for nearby city-dwellers. Costanoa, a coastal lodge and camp village about 88.5km (55 miles) south of San Francisco, is one of the latter. Its structures, dubbed "Canvas Cabins," sleep two to four and vary in atmosphere—some are family-friendly, and others are styled to accommodate romantic couples. Manufactured by Sweetwater Bungalows, Truckee, Calif., the tents are made of one-piece fabric membranes stretched on wood and steel frames. Walls and rain flies are flame-resistant white polyester/vinyl, and suspended ceilings are made of

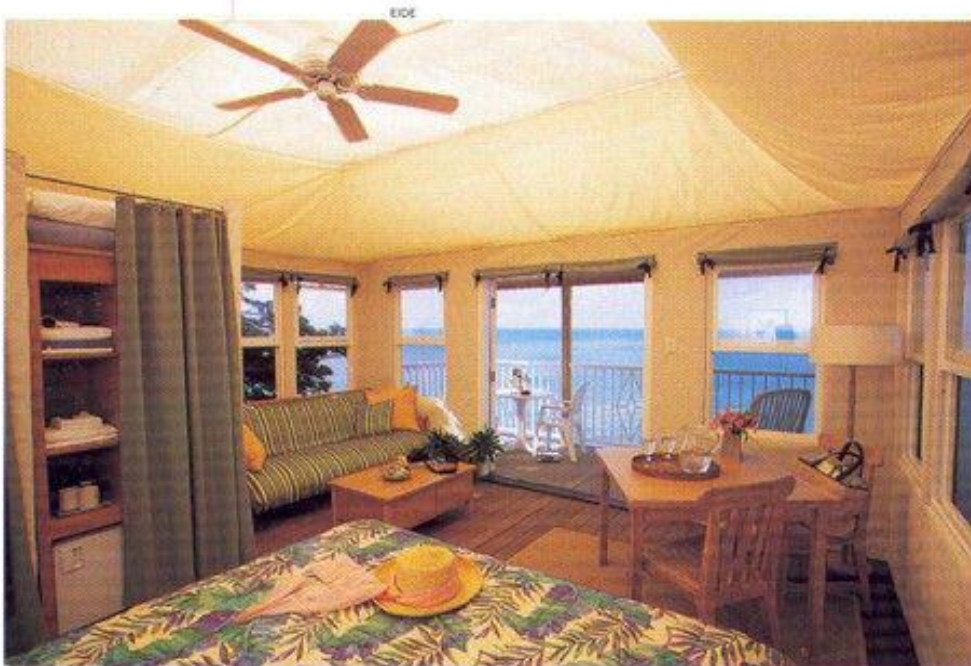
Wooden platforms, polyester walls, and suspended, cotton duck ceilings allow guests to feel connected to the outdoors while also protecting them from the elements.

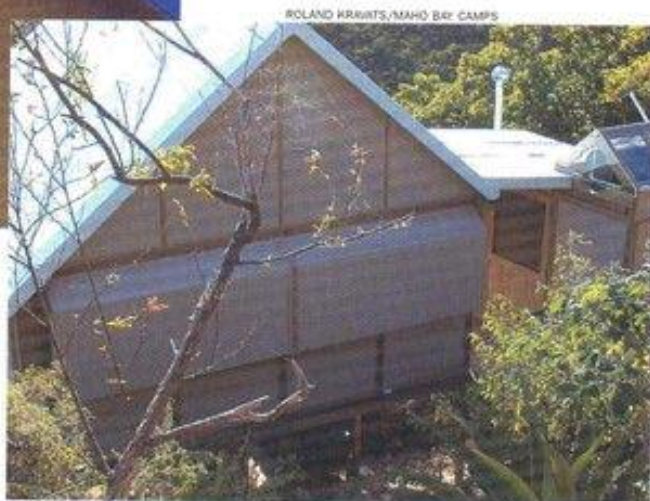
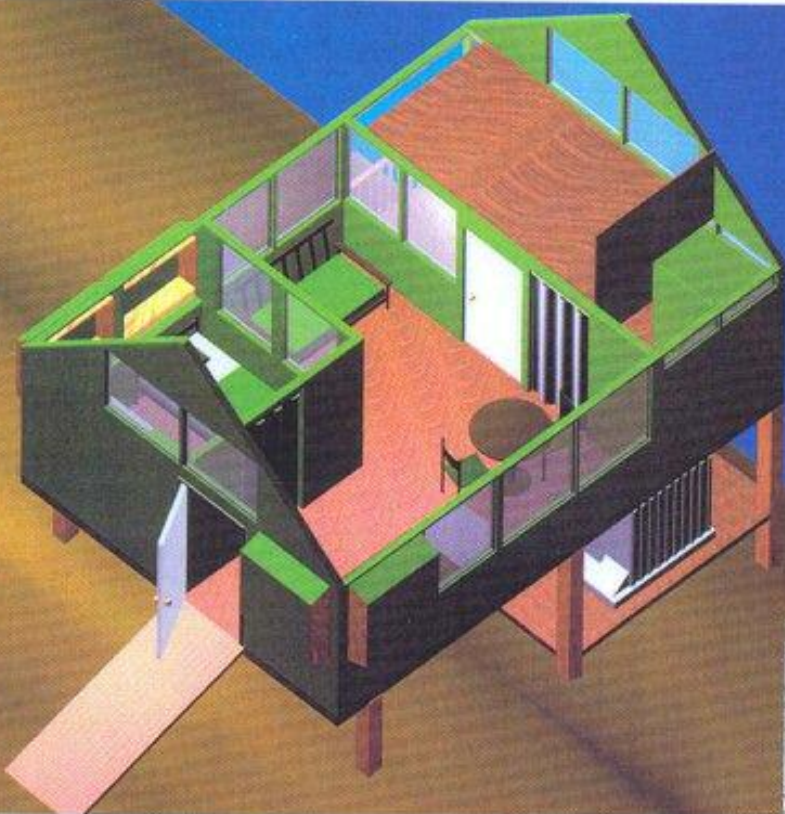
white cotton duck. Like the others, they're seated on wood platforms.

Rob Delamater is vice president of creative services at Joie de Vivre Hospitality, the San Francisco firm that manages Costanoa. He says the project was inspired by people's objections to traditional camping. "We interviewed outdoor lovers and asked them why they didn't camp," he says. "So we thought, what if the tent was already set up? And what if it has furniture in it, and has a heated bed and has operating windows and doors? We answered all of their objections so we could provide accommodations for people who wanted to do the nature thing, but not do it themselves."

So far, Delamater says Costanoa is attracting the target audience—the crowd that "owns sport utility vehicles and mountain bikes and oversized natural cotton sweaters."... But there were two surprises. First, hardcore campers aren't interested;

Delamater posits that they object to having too much done for them. Second, there are a lot more families booking Canvas Cabins than Joie de Vivre





ROLAND KRIGITS, MAHO BAY CAMPS

Selegut's Maho Bay Camp tents are solidly built.

expected. "From a psychographic standpoint, a lot of parents feel like taking their children camping is kind of a rite of passage or like a requirement," Delamater says. "They want to introduce their children to nature and have that kind of family experience. They don't necessarily own the equipment, so this represents a way for them to do the camping thing as a family without necessarily putting in all the effort."

White's thought process was similar, though perhaps more deeply influenced by his chosen location. "Molokai is fairly pristine, and nobody's really done anything to damage it," he says. "I really didn't feel like putting a bunch of concrete and a big hotel and doing the normal resort megastructure wasn't even close to appropriate."

While he was brainstorming, White camped on the site with his three sons. His wife, however, declined to join the adventure. "So I asked her, what would it take to bring you back?" White relates. "She had a list of four items: a soft bed, a hot shower, a flush toilet, and a hair dryer." And so the Hawaiian tent resort was born, neatly splitting the difference between primitive tents and fancy hotels.

Despite its commercial appeal, the main focus of the Molokai project has always been harmony with the environment. "It's something that, should the whole world go up in smoke, there wouldn't be much left of it," White says. "Not a monument, but something completely opposite. Something that would be gobbled up by nature in short order if you weren't there to tend it."

Jamie Swedberg is a freelance writer and contributing editor for Fabric Architecture.

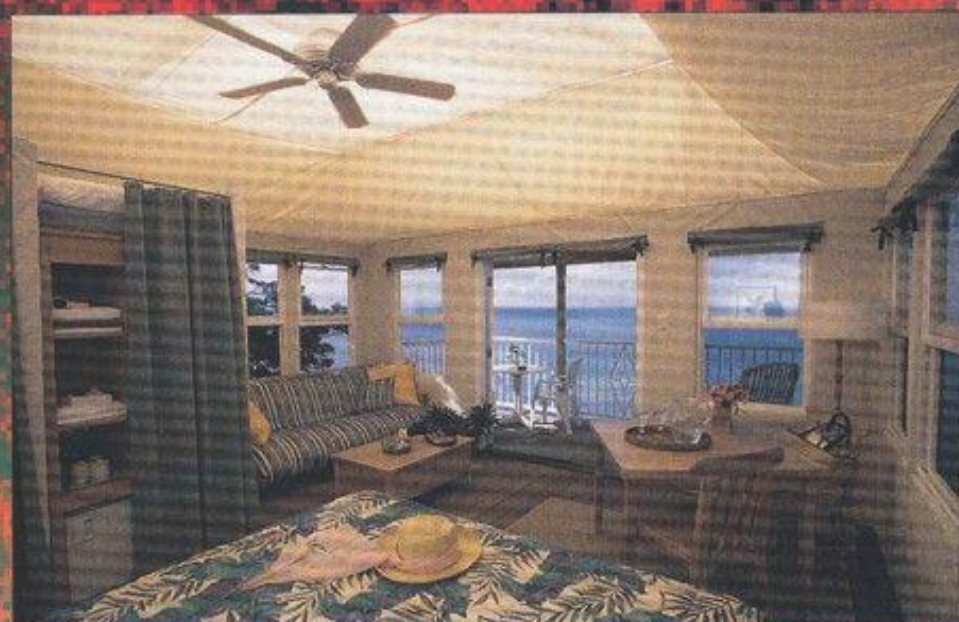
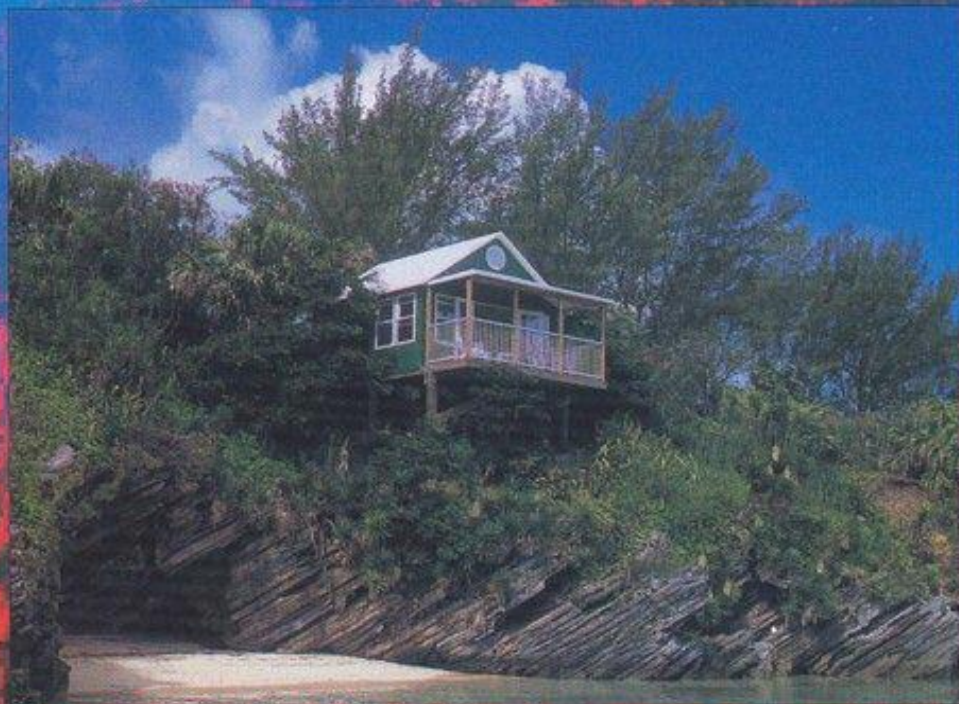
Sources:

Concordia Eco-Tents 800/392-9004, www.maho.org/ecotents.html
 Costanoa 650/879-1100, www.costanoa.com
 Eide Industries 562/402-8335, www.ecotents.com
 Maho Bay 800/392-9004, www.maho.org/maho.html
 Philip K. White & Associates (architect) 808/596-0260, www.pkwa.net

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Eco-Tent Options

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Fabric Coverings

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- Vinyl, Acrylic, Cotton

Windows

- Conventional Double-Hung
- Screens
- Roll-Up Curtains

Doors

- Conventional, Locking
- Screen Doors

Electrical Systems

- Conventional 110V
- Wind and Solar Generators
- Inverters
- Storage Batteries
- Monitoring and Controls

Water Systems

- Collection and Storage
- Pressure Systems
- Solar Heating

Waste and Disposal Water

- Composting Toilets
- Gray Water Systems

Decking

- Main Eco-Tent Decks
- System Platforms

Furnishings and Appliances

- Ceiling Fans
- Refrigerators
- Propane Stoves and Hot Plates
- Lights
- Bedding and Furniture

Destination Villages, Daniels Head Resort, Bermuda
Initial Project: 96 Deluxe Cottages
Cottage Size: 16 feet by 16 feet
Deluxe interior appointments include:
draped fabric ceiling, overhead fan,
fabric wall coverings, roll-up curtains,
standard electrical outlets and switches,
as well as conventional doors and windows.

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