



## ...ECO

by Cliff Kuang

## As I Live and Breathe Great looks, green values—a California prefab delivers on two elusive goals.

Among the prefab houses currently chewing up trees in the press, the greenest is built by a Los Angeles start-up called LivingHomes. The prototype, which is the Santa Monica residence of the firm's founder, Steve Glenn, is the first home to merit a Platinum LEED certification. Future models will carry no less than a Silver, thanks to features such as photovoltaics that help generate the home's power, systems that gather rainwater, radiant floor heating, and a host of other green building technologies. Not only is the 2,500-square-foot building made almost entirely from recycled or sustainable materials—such as wood certified by the Forest Stewardship Council and tiles of recycled glass or reclaimed porcelain—but it's also configured with sliding interior panels so that fickle homeowners need not tear down and junk entire walls to remodel. Though it seems tailored to a moment when green building is fashionable, the house is actually a blend of old interests and new technology.

After flirting with architectural studies in college, Glenn moved on to a career as a tech entrepreneur. But after realizing that the housing market wasn't addressing the environmental values of the Prius-driving, Whole Foods crowd, he set out three years ago to design one that would. Motivated by personal hero James Rouse, the shopping mall inventor and pioneer of free-market-driven philanthropy, Glenn funded the first effort with his own money: "From Rouse I learned that if you care about the quality of the environment, developers are more important than architects," he says.



Glenn did need an architect to build something beautiful, though; he approached Ray Kappe, a founder of the progressive architectural school SCI-Arc in Los Angeles, to design the first in a series of LivingHomes. Kappe had in his files a prefab system he had created 40 years before for an aborted student-housing project at Sonoma State University. Kappe's original system was based on "towers" of laminated wood; for LivingHomes, he specified steel so the components would be tough enough for transport. The four mechanical cores are rigged with plumbing and utilities and then readied for assembly on-site, with seven other modules.

Because it was created so long ago, Kappe's design wasn't especially eco-friendly. But by the time Glenn entered the picture, the house could be uncompromisingly green. The reason, says Amy Simms, the project architect who sourced the materials and systems, is that sustainable products are rapidly getting cheaper and more refined. "I'm not going to name names, but the recycled countertops from a few years ago were so rough that you could see all the stray pieces they were made from," Simms says. "Within the last two years, you've seen PaperStone, which is made of recycled newsprint and eco-resin, but really looks like slate." For the master bath, Simms specified Enviroglas, a glass terrazzo

made from visible bits of car and airplane windshields, mirrors, and beer bottles.

At \$300 per square foot, the LivingHomes model unit is no bargain (though a custom house by a name-brand architect can run \$500). Its main purpose is to demonstrate the high end of sustainable building style and efficiency, with blue-sky touches like a solar-powered hot water cistern and enough photovoltaics to take the house entirely off the grid. And the price is coming down, as LivingHomes attempts to pare back on material and labor costs.

Production versions of Kappe's model, 10 of which are now in contract, are expected to cost \$250 per square foot. That lies squarely in the realm of more conventional prefab competitors, like a three-bedroom Marmol Radziner house that carries a base price of \$240 per square foot, and Charlie Lazor's FlatPak house, which, in a similar size, runs \$175-\$300 per square foot depending on local labor costs. Future models of LivingHomes will probably run even cheaper, as the company seeks to expand its offerings with designs by L.A.-based green architect David Hertz and others. And to make green living even more widely available, the company hopes to venture into affordable housing one day.

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