

Follow the LEEDer

Russell Campaigne, a principal of the Guilford architectural firm Campaigne & Kestner, noticed that many of his clients were becoming increasingly concerned about energy costs. So he made himself an expert on sustainable building and has great advice for his clients who care about the environmental impacts of residential building.

Campaigne built the first Leadership in Environment & Energy Design (LEED)-certified house in Connecticut in South

Architect Campaigne (with wife and partner Mary Jo Kestner) says building energy efficiency into new homes can pay off quicker than many believe.



Glastonbury, a craftsman-style bungalow called the Tall Timbers.

To qualify for LEED certification, a home's construction must meet criteria pertaining to site selection, site impact, environmental impact, efficiency and durability.

"Sustainability" is a broad term, but there has also been a broadening of the public consciousness and understanding of all things green.

"Every client is different as far as how they justify their choices from a practical level with cost-benefit analysis and return on investment," Campaigne says. "Some of our clients are trying to minimize their impact on the environment, but the vast majority are looking for practical feedback on the available technologies to see how they make sense with long-term payback."

He advises clients that many good building practices are easily justified with a short-term (less than five years) payoff period. About 90 percent of homes he has built in the last three years have utilized geo-thermal heating systems, which over the past five years have made substantial advances in functionality and affordability. This broader market segment means the equipment has better performance with

higher quality, requires less maintenance and can afford homeowners as much as a 50-percent savings on energy costs compared to an oil or other fossil fuel system.

Geo-thermal systems use a ground-source heat pump that puts water through tubing into the ground to extract heat in the winter and release heat in the summer.

"Some of the homes built in the 1980s were not built well and people feel the only solution is to tear them down and start from scratch," Campaigne says. "That's a very short life for a building."

In Connecticut one sees plenty of structures that are 200 or 300 years old and continue to be serviceable because they were built to sustain. Those homes were built on a nice-sized piece of property, close to town centers. They were built for multiple generations and with a vision for the future (see story, page 33).

"We look to very traditional detailing because we want a home to be around for a long time," Campaigne explains. "Adding size for no purpose is one of the least sustainable things you can do. [Until] the early 1900s, people thought they were going to pass their homes on to their children.

"Once a house ends up in a landfill and

you start over again, that's about the worst thing you can do," Campaigne says. "Very cost-effectively, you can use cement-based siding and solid PVC trim and higher-grade flashing and roofing materials and you can see those paybacks on one paint cycle on an exterior finish. There might be a bit more cost up front, but the lower maintenance will result in a return on investment much quicker."

But a sense of ethical responsibility to the earth needs to extend beyond home-builders and -buyers.

"Realtors, appraisers and banks need to see the value of reduced energy costs in homes and pass that feedback to speculative builders," says Campaigne. "The investment that a speculative builder has to make to bring a home up to sustainable levels is quite low, and I wish Realtors and appraisers would see the same value I see."

Campaigne points to the stark contrast between the West Coast — where some 30 percent of new homes are Energy Star-certified — and here, where the number is closer to 23 percent. Given the relatively high education of home-buyers in Connecticut, the architect is amazed that more people aren't seeing the value in the market. Instead of looking back, Campaigne looks

ahead, noting on the positive side that Connecticut has one of the highest rates of photovoltaic (PV) production and deployment.

“That is very seductive with a house that has a geothermal system, and people like the statement that PV array makes,” he says. So, looking toward the day where photovoltaic energy is more available and affordable, Campaigne designs the feature into homes, allowing for installation at a later date.

MAGAZINE

APRIL 2008

new haven

www.newhavenmagazine.com

rowland
redux
redemption
in the brass city

GOD'S
COMMANDOS
lifting the veil on
'The Legion'

silent
spring
a pro baseball
tragedy

going
green

\$3.95