

PINEHURST[®]

MAGAZINE



Home
of the Year

2008 AWARD
WINNING HOMES

SPRING FASHION | INSPIRED SPACE | THE SPA DIARY
FITTING IN | LOCAL BANDS | INSIDE THE KITCHEN

MARCH / APRIL 2009



Inspired Space

Holistic Design, Masterful Craftsmanship and Healthy Living

Come Together in Fairwoods on Seven written by Jenni Hart



Laura and George Christophersen completed construction on their custom-built home in June 2008 and can't think of a thing they would change about it. "If I had it all to do over," Laura says, "I would have made all the same decisions and worked with all the same people. There's a feeling you get when you know your house is so thoughtfully designed that it just feels healthier – not just for you and your family but also for the environment."

The Christophersens' home is unique in that it has qualified for certification from the NC HealthyBuilt Homes program. As a collaborative effort of the North Carolina Solar Center, the State Energy Office, the NC Department of Administration and local building professional organizations, the program's aim is to promote comfortable, healthy and affordable homes that reduce energy and water use and protect the environment. Randy Vaughan, of B.E. Vaughan and Son, Inc. of High Point was the builder for the Christophersen home, and his certification as a builder was a requirement for the house to receive NC HealthyBuilt home certification. An exhaustive checklist of criteria must be met with independent verification to receive such a distinction.

The criteria are divided into eight focus areas, including site preparation with minimum disruption to existing vegetation and preservation of the soil, the utilization of efficient mechanical comfort systems and ductwork, energy-efficient appliances, lighting, and methods to improve indoor air quality, among others. Seeking to build such a home may seem daunting at first, but the number of builders who are adopting these practices is growing and many of these approaches are likely to become standard over time. The Christophersen home is an exciting peek into the future.

Enchanted by the beauty of Pinehurst and longing for gentler winters, the Christophersens relocated here from Manhattan in early 2007. Having both worked as Wall Street traders, the couple left the land of the bears and bulls and now enjoy the company of their two rescued greyhounds. Laura's parents moved to Pinehurst in 1987, so she's been coming here for many years. "Being from New England, I've always loved the way Pinehurst reminds me of a quaint New England village," she says.

Laura grew up in Connecticut, and George in Chicago, and they put ample thought and deliberation into the design of their home. "With my husband growing up in Chicago," Laura says, "he's always been drawn to the prairie style, or the craftsman style. I guess it's what you think of when you think of Frank Lloyd Wright – the clean lines, the emphasis on natural elements. And one thing we both wanted was a home that seemed like a natural fit with the land – not something that appeared obtrusive or out of place."

While driving around Pinehurst, the Christophersens found themselves drawn to several homes that were particularly appealing to them; not because of any single element or style, but there was something Laura describes as eye-catching about them. Then, while leafing through an issue of *Pinehurst Magazine*, she saw an advertisement for Stagaard and Chao Architects that featured one of the homes she and George had spotted during their drives.

"As it turns out, every single home that had appealed to us just happened to have been a Stagaard and Chao design!" she says. Thus began the partnership that took the Christophersens, their architect and their builder through a journey of learning and commitment.

"I told Alan (Stagaard) that we were children of our era," Laura says, "and that we were definitely interested in building a home that reflected that sensitivity to the environment. I think that whenever you can practically do so, taking environmental concerns into consideration is just the right way to go about things." Stagaard, who shared the Christophersens' penchant for the prairie style, also was interested in the concept of designing a home that was environmentally smart.

"This educational process [of green building] has been ongoing for us," says Stagaard. "And I would say that our firm began integrating some of these ideas into our designs as far back as the mid-1990s. When the Christophersens came in, they immediately began sharing their interest in energy conservation, indoor air quality and being mindful of the existing environment, and we talked about going down this path from the very beginning." Stagaard explains that the green "strategy" of developing a high-performance

building is best achieved through a holistic approach, beginning with site preparation and orienting the building a certain way.

"It's something a lot of builders and home buyers don't take into consideration until it's too late, but you want to work with the land and the trajectory of the sun to maximize the building's efficiency," Stagaard says. He uses the example of a lakefront home that may offer a beautiful view of the water but faces directly west. "They're going to battle the harsh glare of afternoon light and the unbearable heat that this kind of orientation gives you," he says, "and that's something that's hard to remedy once you've started building."

While Stagaard and Chao have been involved in green building concepts for well over a decade, the Christophersens' home is their first to be qualifying for certification by the NC HealthyBuilt Homes program.

"There are a number of programs out there now; national programs like the LEED certification, and more regional programs like NC HealthyBuilt Homes," says Stagaard, "and I guess the most significant advantage in following their guidelines is that they do take a holistic approach, and it's something that most people can achieve with very little impact to their budget." Stagaard strongly believes that if a homeowner's budget is significantly higher as a result of utilizing green building practices, then they are doing something wrong.

Laura and George are both adamant that achieving a green home has never required a sacrifice of quality in the materials or the comfort of their living spaces, nor have they seen a significant price differential when compared to conventional building practices or products. "I think when you start doing your homework and you see what all of your options are, there may be an initial investment that's slightly higher due to the advanced technology or the limited availability in the market," George says, "but the long-term savings and the value that you see over time more than make up for those initial costs."

"You have so many choices in designs and materials, and I don't think people realize that you don't have to completely abandon the standard ways of doing things," Laura adds. "You can utilize certain concepts in the overall plans that are going to make a difference. Solar technology hasn't necessarily been perfected yet for widespread use, for example, but as Alan says there are ways to orient the home on the site to take advantage of the trajectory of the sun as it changes throughout the seasons. Even the overhangs on the perimeter of the roof are





A unique and well designed creation does not happen by accident.



Stagaard & Chao Architects P.L.L.C.

Over 35 years of experience in residential, light commercial, & recreational architecture with expertise in sustainable design principles and “green” building technology.

601 Cherokee Road, Pinehurst | 910-295-4800
www.stagaardchao.com



designed to improve shading during the hot summer months.”

And with the large number of windows, Laura is also pleased that their need for artificial lighting during daylight hours is almost nonexistent. Some of the windows in the home even perform double duty, creating what Stagaard calls a “thermal siphon” effect when opened. “There are motorized windows located high on the wall in a two-story section of the house,” he explains, “and when you open those windows along with other windows on the first story of the home, what you get is an air flow that can significantly improve the comfort level by venting the collected heat.” Stagaard says this not only reduces the homeowners’ reliance on their traditional HVAC system but it can even eliminate or reduce the need for ceiling fans.

The home features a lower-pitched roof that was constructed using a radiant barrier underneath, another earth-friendly design choice. A radiant barrier deflects solar heat that penetrates the roof material and keeps it from heating up the internal space, thereby reducing the need for artificial cooling. The home also includes a sealed crawlspace and sealed building “envelope” – a term that’s part of the lexicon among green building advocates. The



envelope refers to the way the conditioned air remains inside the home and outside air doesn't permeate through gaps around windows and doors and through building materials.

Other features of the home include all Energy-Star appliances and efficient lighting, as well as a special laundry system that requires no hot water and no detergent. All the paints and stains used throughout the home are low- or no-VOCs, another boon to air quality. Another cost-saving innovation is the energy management system in the house, which is something George is especially enthusiastic about. "This system takes your home's biggest energy users and puts them into a time management schedule to take advantage of the times when overall demand from the power company is lower, and rates are therefore better," he says.

Installed by Carolina Energy Consultants, a system like the Christophersens' is guaranteed to save between 25 and 50 percent on electric bills. "I think it took a little time to adjust to the system and to find a balance that was right for us," George says, "but we've been very happy with the way it works. So far in just the first seven months of occupying the house, Carolina Energy Consultants have estimated our cost savings to be around seven hundred dollars."

Now that the hum of construction has quieted and the Christophersens have settled in to their new green home, their days are spent in the pursuit of other interests that bring them health and joy. George enjoys golf and has recently taken up painting, and Laura's new yoga studio, Hot & Healthy yoga, opened in January. They also enjoy visits from George's teenage daughter, Kelsey, who was able to put her own special touches into the bedroom and bath that she uses when she's there. "Now that we've lived in the house awhile," Laura says, "I think what you get at the end of the day is a peace of mind that you've made some thoughtful choices and they are really paying off. I would absolutely do it again!" 🌱

Call Carolyn! Carolyn Cares!

PINEHURST GOLF FRONT



ONE ON ONE
CLASSIC SERVICE



SOUTHERN PINES

CAROLYN RAGONE
REAL ESTATE, LLC



Carolyn Blystone Ragone

Independent
BROKER NETWORK

910.603.4114

1.888.488.4114

Cragone1@nc.rr.com

www.CarolynRagone.com