

Southern Living

[« Return to Our Most Innovative House Ever](#)

Our Most Innovative House Ever

Now is the time to get comfortable with environmentally friendly design. Tour our South Carolina showcase home to find ideas that will work for you.



Laurey W. Glenn / Styling Scott MartinBy Derick Belden

The Cliffs Cottage

The Cliffs Cottage, our showcase home on the campus of Furman University in Greenville, South Carolina, is a project that began more than seven years ago. But it wasn't until 2006 when Furman shared their long-term commitment to the environment and sustainability that we recognized a tremendous opportunity to learn firsthand about building better houses. For the next year, we're going to use this home to look at Green topics and give you real-life advice.



Laurey W. Glenn / Styling Scott Martin By Derick Belden

Getting Started

The home's design was important to the overall mission. We had to be sensitive to how this affected material needs, the home's position on the lot, and how the house fit onto the Furman campus. And, for our readers, we wanted to ensure the home was comfortable and traditionally styled with contemporary details and that every product was readily available. Furman recruited architect Scott Johnston of Johnston Design Group and landscape architect Mark Byington of Innocenti and Webel to meet these goals. Scott's practice in Greenville is centered on Green design. Innocenti and Webel created the master plan for the "new" Furman campus 50 years ago, and the firm continues to provide landscape planning for the university. Both team members understood how to tie this new project in to the existing campus.



Laurey W. Glenn / Styling Scott Martin By Derick Belden

House Inspiration

Scott was inspired by stone bridges on campus and some of the Craftsman details on nearby student cottages. He was charged with designing a home that will eventually be transformed into Furman's Center for Sustainability. Mark's challenge was to incorporate a more casual house into the formal garden spaces on campus; he used a natural slope to step the house down into a garden filled with native plants.

With plans taking shape, Linda McDougald and Adrienne Fulmer of Postcard from Paris began pulling together the interiors. With Green as the focus, evaluating which products were applicable made the interiors as challenging as getting the architecture correct. But, again, learning was part of the process. Furman enlisted Triangle Construction, with William Trammell and Fred Lusk leading the charge, to meet the approaching deadline. The Cliffs Cottage is intended to be the ultimate in Green design. We tried to use every product that filled the bill. Our goal is to give you tools to make your home more Green and sustainable. It all starts with education.



Laurey W. Glenn / Styling Scott MartinBy Derick Belden

Efficient Energy Use

The Cliffs Cottage looks at energy use in three ways.

1. Managing power use more efficiently. Through a partnership with Charlotte-based Duke Energy, the house utilizes GridPoint technology to monitor energy. It's essentially a brain tied into the electric panel. The consumer and the power company can monitor circuits in the house to determine the most efficient use of power. For example, did you know that most electronics still draw power when they're off? With GridPoint, you can tell the computer to turn off those circuits when you're not at home.

You Can: Plug your electronics into a power strip. Switch it off when you leave home.



Laurey W. Glenn / Styling Scott MartinBy Derick Belden

2. Generating power

The site also integrates around 35kW of solar power. Panels on the south face of the garage generate 4 to 5kW, typical of a suburban home. Panels on garden structures and sculpture augment the rooftop array and offer ideas for other ways solar collectors can be added to an existing home. The power generated feeds into the GridPoint system, charging a battery for use during power outages. Because Duke Energy uses net metering, any excess power is sold back to the power company.

Solar energy is becoming more realistic every day. For our region, the most efficient use of this resource is for heating water. Tankless systems are gaining popularity, but The Cliffs Cottage has an alternative solution. With two small solar panels on the roof above the kitchen, the sun heats water before it hits the tank in the basement. That way, you're not using electricity to heat cool water; you only expend energy to heat water that falls below your preset temperature. This could mean free hot water most of the year.

You Can: Use The Solar Estimator at www.findsolar.com to determine the potential savings in your home made by installing a solar system.



Laurey W. Glenn / Styling Scott MartinBy Derick Belden

3. Building a home that requires less energy.

This should be a no-brainer, but you'd be surprised at the homes built today using less responsible products.

The Cliffs Cottage incorporates double-insulated windows and doors, Icynene insulation, and spider fiberglass insulation made from recycled material to create a draft-free home. By sealing the ductwork properly and balancing the system, Furman is not wasting energy to condition air in the basement or attic. The interiors team selected appliances for their efficiency. For aesthetics, solid shades on decorative lighting hide compact fluorescent bulbs.

You Can: Have your ductwork inspected and sealed if necessary. Balance your heating-and-cooling system. At up to a 40% energy savings by fixing an inefficient and leaking system, you'll easily offset the expense of the work.



Laurey W. Glenn / Styling Scott MartinBy Derick Belden

Material Decisions

Part of the process of designing and building a Green home is researching locally available materials and selecting those that reduce waste and help you build a better house.

Local is easy. In the case of The Cliffs Cottage, the stone on the exterior was quarried from the nearby mountains. Cabinets came from neighboring Tennessee. They were shipped flat to save on transportation costs and were assembled on-site. By buying local, you can help reduce emissions and support your local economy.

The framing of this house is a combination of products from iLevel by Weyerhaeuser. Unlike conventional lumber, iLevel reduces waste by using more of the tree, keeping the builder from having to discard or pick through bad lumber. When the experts at iLevel estimated our plans, they came up with about 9% in material savings compared to using conventional lumber. The benefit: a better built house and, with an anti-mold and mildew coating on the lumber, a healthier home.

You Can: Research, research, research. Put as much care into selecting the materials you can't see, such as lumber and insulation, as you do into those you can see, such as stone and cabinetry.



Laurey W. Glenn / Styling Scott Martin By Derick Belden

Decorative Decisions

Linda and Adrienne also wanted to link the house back to the Furman campus. They took inspiration from an adjacent Japanese garden and mixed traditional furnishings with contemporary details. The furniture comes from a number of sources. Some pieces are antique or vintage—the original recycled product—and others are made from reclaimed wood, but the majority is from nearby North Carolina furniture companies committed to manufacturing in environmentally sensitive ways.

For flooring, they chose fast-growing yet durable bamboo and then selected a dark stain to keep the house from looking too contemporary. Selecting a prefinished floor helps keep smelly stains and sealers from being used inside. Adrienne and Linda used natural tile and tile with recycled content, and they chose locally formed concrete countertops for the kitchen.

You Can: Look for furniture made with FSC- or SFI-certified lumber, soy-based cushions, organic fabrics, and recycled content.



Learn More About The Cliffs Cottage

Meet the [team and partners](#) who made The Cliffs Cottage our most innovative house ever.

Laurey W. Glenn / Styling Scott MartinBy Derick Belden

Printed from:

<http://www.southernliving.com/home-garden/idea-houses/cliffs-cottage-furman-south-carolina-00400000036459/>

Copyright © 2010 Time Inc. Lifestyle Group. All Rights Reserved. Use of this site constitutes acceptance of our [Terms of Use](#) and [Privacy Policy](#) .