

Shugart Is Building Green

by Paul C. Clark

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A lot of homebuilders are talking "green" these days, but Shugart Enterprises is doing something about energy efficiency.

In a breakthrough for the triad, every home the company has started since April 1 will be dually certified for energy efficiency and sustainability with the National Green Building Certification from the National Association of Home Builders and the Energy Star certification from the US Environmental Protection Agency and the US Department of Energy. Shugart Enterprises calls the combination the Shugart Second-Generation Home.

Shugart Enterprises' shift to energy efficiency will benefit the full spectrum of homebuyers, as the company will certify all its houses, which start at \$120,000.

"We are building green at an affordable price," said Shugart spokeswoman Marina Scholten. "Now a first-time buyer can afford to buy a green home."

Building only certified green houses isn't an easy transition for a homebuilder. Some builders are content with "greenwashing" - just adding a green element into a new house, or using an unverified claim of energy efficiency. Shugart Enterprises wasn't content to have the image without the substance.

Working with the certifying agencies and third-party verifiers such as Southern Energy Management, Shugart Enterprises has, in a short time, completely changed the way it builds houses. The builder will shortly be delivering houses that will be healthier, less expensive to heat and cool and that will have higher resale values. It has 18 dually certified green homes now under construction.

"We were building a solid, safe, sturdy home," said Les Frye, Shugart's "green guru." "But this taught us a lot. We've gone a long way toward improving our knowledge as to the best way to build our homes. This is the second-generation Shugart home, where we've gone to the next level of building science."

The company calls its new homes second-generation homes because they've adopted the next generation of construction technology - and because the 43-year-old company has been a fixture in the triad long enough for the sons and daughters of its original customers to be buying houses.

The dual certifications require that each house be inspected and tested twice by third-party verifiers - once after the insulation is installed but before the drywall goes up, and once after the house is complete.

Going to company-wide energy efficiency required changes in how Shugart Enterprises, and all its suppliers and contractors, do business. The Energy Star and National Green Building Certification requires insulation installers to be more precise, framers to do additional air blocking to prevent air from entering houses from garages or crawl spaces, and HVAC installers to carefully apply additional seals to all ductwork. It takes the builder at least eight hours more to install ducts for a certified house than for an old-style house.

The certifications also require high-efficiency appliances and paints, carpets and other materials that don't exude chemicals. The safer, certified materials and well-filtered fresh air mean the homes will be healthier for kids and adults alike.

The final test uses a blower door, a special door with a large fan and pressure-measuring equipment that tests the airtightness of the house. A more airtight house is a more efficient.

Most houses built using traditional construction methods have 10 to 15 percent leakage when tested with a blower door. Shugart Enterprises aims for 5 percent leakage, and has been achieving 2 percent.

The result of all that high-precision construction, installation and testing is a house that costs about \$3,000 more, but is healthier, cheaper to run and will hold its value better. Frye said the houses will save enough in three years to pay for the additional cost, and after that, it's all savings.

"I don't think we're going to ever see energy bills in the range we're used to," Frye said. "So using more efficient building and equipment is going to have a payback for the homeowner."

More efficient heating and cooling is the first thing that people think about when it comes to green houses. But the certifications go much further, specifying that lot designs should create as little runoff as possible, construction materials should be locally produced to reduce the use of energy in transportation and all homes should have programmable thermostats so homeowners can schedule heating and cooling to maximize both comfort and cost savings.

One benefit of the Energy Star certification is that Duke Energy and Progress Energy give a 2 to 3 percent discount off monthly energy bills to houses with the certification.

Efficient heating and air conditioning is a start, but teaching homeowners to understand and properly use the energy-efficient features of their new homes increases the savings even further, and is part of Shugart Enterprises' new way of doing business.

The company walks each new homeowner through the house and educates them on its features, as well as providing a detailed manual explaining how to use them.

Frye said that going green at this time is, for Shugart Enterprises and its contractors, not just a feel-good exercise during a down economy - it's good business.

"Our trades have been tremendous in stepping up," he said. "We wouldn't have been able to do it without our trades realizing that, as an industry, we have to do more to build better homes at a lower cost to encourage people to buy more homes."

The shift to all green-certified houses is just one of the latest chapters in the story of Shugart's relationship with triad homebuyers since 1966. Another recent chapter was the creation of the Shugart Design Gallery at 510 Hickory Ridge Dr. in Greensboro. The 10,000-square-foot showroom gives homebuyers a one-stop place to choose from over 5,000 options and upgrades such as carpets, vinyl flooring, hardwoods, ceramic tile, appliances, kitchen sinks, faucets and cabinets.