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The first EarthCraft House™ in Tidewater, Virginia, built by Miller Custom Homes.

Blazing a Green Trail

By Jack McGee

MILLER CUSTOM HOMES IN VIRGINIA IS A GREEN BUILDING PIONEER

As the green movement is just now taking hold in the building industry, Miller Custom Homes has been constructing green homes for years. Owner Chuck Miller has personally built over 50 custom homes, incorporating green elements into them all.

“Chances are, if you bought a house from us in the last five years, it would qualify under a green home building program,” Miller says. He notes the most popular environmentally friendly features of his houses are high-efficiency appliances, a well-insulated home envelope and energy-saving windows.

A local leader in the green home movement, Miller Custom Homes was the first builder in Hampton Roads to participate in EarthCraft House™. When the green building program was introduced in Virginia in 2006, Miller immediately saw the benefits. “EarthCraft House gave us the opportunity for outside testing and a way to certify the quality we build into our homes,” Miller explains.

Miller Custom Homes unveiled his area’s first certified EarthCraft House at Homearama 2007, the Tidewater Builders Association’s annual custom home showcase. Featuring 17 furnished and landscaped homes by premier custom builders, Homearama was

held in Chesapeake, Virginia, and hosted 114,000 visitors during two weeks in October. The certified EarthCraft House won a Critic’s Choice award for Best Special Feature for its green roof and a People’s Choice award voted on by attendees.

“People told me they drove for hours just to come and see our green home,” Miller recalls. “One person was almost in tears thanking me for building it. They really connected with what we’re doing to build homes that are healthier and better for the environment.”

The green features in Miller’s EarthCraft certified home include ENERGY STAR® natural gas appliances; low-E double-pane windows; engineered and renewable wood flooring products; recycled carpeting; a conditioned, heated and cooled crawlspace; and energy-efficient framing methods. Two living green roofs covered with soil and vegetation reduce storm water run-off by capturing rainfall and using it to maintain the life of the plants.

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Even with its emphasis on energy efficiency, the certified EarthCraft House also encompasses all the beauty and luxury that is a Miller Custom Homes trademark. The 5,350-square-foot home sports five bedrooms and four-and-a-half baths, including upstairs and downstairs master suites, and is appointed with details like decorative inlays in the wood flooring, intricate tile work, and state-of-the-art systems and equipment. The outdoor living area has a large pool and fully-equipped kitchen.

“Building green can be beautiful,” Miller quips, noting his vision for the company is to remain a truly custom builder. “Our homes are one of a kind; we don’t reuse a plan over and over again,” Miller says. He personally supervises the construction of every home Miller Custom Homes builds, keeping in close contact with homeowners from the design stage through completion.



Living green roofs are covered with soil and vegetation to be enjoyed as an expansion of the home’s yard areas. This type of roof reduces storm water run-off and aids in filtering pollutants out of the air.

Virtually all of the houses by Miller Custom Homes are outfitted with natural gas cooktops, tankless water heaters and gas logs. Now building exclusively to Earth-Craft House standards, Miller installs natural gas heating where geothermal heating isn’t an option due to property size or conditions or expense considerations. Miller explains, “People expect a natural gas range and fireplace. Natural gas tankless water heaters are requested more and more, and we also install natural gas clothes dryers. It’s what has become the standard in the high-end market where we’re building.”

Miller says that his mission has always been to build custom green homes and maintain the highest level of customer service while doing it. “We’re showing it’s possible for builders and homeowners to make decisions that are good for the environment without sacrificing style or comfort,” Miller states. He even broadcasts his commitment to the environment on a monthly radio show called “Living in the Green.”

“Right now I’m the only custom builder in our market committed to building 100 percent green homes, but I have a feeling that won’t last long,” Miller says. “Obviously I want to keep my niche in the market, but I know that ultimately green building is better for our entire industry, and I welcome that.”

For more information, visit www.millercustomhomesonline.com. 

GOING GREEN INSIDE AND OUT

Inside, Miller Custom Homes creates a comfortable and healthy environment by insulating with spray polyurethane foam.

According to owner Chuck Miller, spray polyurethane foam is a liquid insulation pumped through a pressurized nozzle. It expands as it lands, filling cracks and seams to form a continuous insulating barrier that reduces air and moisture infiltration more effectively than fiberglass or cellulose.

Compared to traditional insulation materials, spray polyurethane foam insulation has the highest R-value per square inch. It won’t shrink or settle and keeps out dust and pollen. It’s also resistant to insects and fires and contains no formaldehyde or ozone-depleting chemicals.

Green building programs give spray polyurethane foam high marks for enhancing energy efficiency and indoor air quality, while customers enjoy how well it maintains desired temperatures and humidity levels in their homes.

“With our home envelopes so well sealed, we install natural gas water heating and furnaces that vent directly to the outside. That way our homeowners can have comfort and efficiency along with high indoor air quality,” Miller says.

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Outdoors, Miller Custom Homes uses composite decking as an alternative to traditional wood and a resource-friendly material.

Miller explains composite decking is typically made by recycling wood-industry by-products — for example, waste from the cabinet and hardwood floor industries — and blending them with some form of plastic. The plastic often contains recycled content such as milk jugs or plastic grocery bags.

“Composite decking combines the look of wood with the durability of plastic. It’s splinter-free and has excellent traction, so it’s great for high-traffic areas — like in front of the natural gas grill,” Miller says.

A long-lasting product, some composite decking can carry warranties of 25 years. Green building programs generally rate the environmental friendliness of composite decking according to the length of its life-cycle and percentage of recycled content.