

Full of Green Energy

Finding Your Perfect Home on the 3rd Annual Green Home Tour

By Jeanne Moyer

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Savvy prospective homebuyers want to reduce living expenses and also understand the building science that makes green homes more energy efficient and healthier places to live. They got a good peek at the 3rd Annual Green Home Tour sponsored by Triangle Green Builders with featured homes from M Squared Builders and Designers, Chandler Design-Build Creative Construction, Cimarron Homes, Anchorage Building Corporation and Habitat for Humanity.

Soaring fuel and retail prices factor into these buyers' decisions as they asked questions about the benefits of a sealed crawl space or why spray foam is a better insulator than fiberglass or the biggie, how much less would the monthly operating cost be?

Consumers are bombarded with "go green" messages from cleaning products to homes. But, what's the standard by which to judge a home's green factor?

It's a straightforward answer. Homes labeled as ENERGY STAR, www.energystar.gov and the Green Building Initiative (GBI) homes are verified by an independent Home Energy Rating System (HERS) rater. Green homes must meet these programs' guidelines so that the homes will perform as a system and be more energy efficient. Only homes that are verified as ENERGY STAR can qualify for the 5% discount from the power company. The scoring is open book and based on real science

Every tour entry is enrolled in both ENERGY STAR and GBI. Homes that are certified green have operational savings as well as a higher re-sale price.

ENERGY STAR and GBI homes are typically 15-30% more efficient than code. The article "Which Shade of Green" in *Footprint's* April/May edition explained the green home certifications prevalent in North Carolina. In short, it described that ENERGY STAR and GBI have their differences, but both have similar goals of energy efficiency, sustainability, healthier indoor air quality and reduced environmental impact.

Good design and building science can account for energy efficiency as illustrated by both the GBI Gold homes entered by Michele Myers, president of M Squared Builders and Designers and Michael Chandler, co-owner and builder of Chandler Design-Build Creative Construction. These two homes are among the first in the local area that have reached the gold level.

Michele Myers
M Squared Builders and Designers
4738 Old Lake Trail Hillsborough



Myers is known for her emphasis on indoor air quality. M Squared Builders carries this same emphasis in green renovations by focusing on low VOC (volatile organic compounds) products for the kitchen and bath.



Chandler's attention with creating a sealed home is evident in this custom home under construction in Hillsborough. He likens his process to someone picking up pennies to save serious money. Small fixes such as caulking and sealing around windows, air handlers and crawl spaces can save homeowners big bucks.

Michael Chandler (right) discusses building science with a tour visitor.
Chandler Design Build
117 Calithea Lane Hillsborough

The star of this year's show was Cimarron's 1800-square foot solar hot water and geothermal home in Mebane with an affordable price tag. According to Danny Winters, estimator/purchasing agent for Cimarron Homes, Cimarron could build this home again for the mid \$200s. Wake County folks, don't get too excited as Cimarron only builds in Orange and Durham counties. But keep your eyes open as a well known Wake County builder will be introducing features beyond the ENERGY STAR guidelines in an average price range.

The Ashbury Glen home's geothermal well housed in one corner of the garage takes about as much space as the jacketed water heater in the other corner, while leaving ample space for two cars. The solar hot water panels unobtrusively face the back of the house and this house is pre-wired to become a full photovoltaic solar powered home in the future. Cimarron's homeowners should anticipate power bills 30% less than comparable homes.



Cimarron Homes
30 Pink Dogwood Lane Mebane
Ashbury Green

BELOW:
Jacketed Solar Hot Water
Heater (left) and Geothermal
Well (right)





Solar panels are for installed solar hot water heater. Homeowners planned ahead and had the house pre-wired for future photo voltaic connections.

Cimarron was applauded time and time again during the weekend for their vision and flexibility to build green, even though are a production and not a custom builder. Here's what visitors were saying, "You built this home with all these green option for THIS price?" and "This is the only home on the tour that was within my price range."

Custom builder Anchorage Building Corporation's two homes featured solar technology: true passive, hot water and photovoltaic in convenient aging-in-place homes. According to Kevin Murphy, Anchorage's construction manager, "In the past year we have experienced a sharp trend away from the McMansion. Instead buyers want a modest size home between 2,100 and 2,800 square feet with low to no maintenance features. Empty nesters in particular are interested in renewable energy. Eliminating their energy bill by installing solar power reduces the stress on their budget during retirement."

Kudos also goes out to the Habitat for Humanity Home of Orange County and the Orange Community Housing & Land Trust in Carrboro. Both homes are certifying through the System Vision program that will result in an average monthly electric bill of under \$30 for heating and cooling. As these Habitat and the other builders' homes prove, it is possible to build energy efficient, healthy and durable home in an affordable price range.



All builders on the Triangle Green Builders' tour strive to make their homes a better place to live and cheaper to operate. But, tour visitors learned that energy efficiency is not the exclusive domain of the high-end custom builders. Production builders such as Cimarron Homes is near the average price of a home in the Triangle. For instance, just by applying good building design and properly insulating and sealing your home, you can be 30-50% above standard construction efficiency even without solar or geothermal features.

The green home market is maturing quickly in the Triangle spurred on by

an enthusiastic group of dedicated green builders. Homes are available in all price points. Think of the energy efficient home market place like the *Field of Dreams*, "if you build it, they will come". The more you want a high performance home, the more likely builders are to build them. Show your support by visiting certified green homes that display the ENERGY STAR or Green Building Initiative rating.

ABOUT THE AUTHOR

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ABOUT THE GREEN HOME TOUR

The annual Green Home Tour is a free, self-guided event that enables potential homebuyers and other interested individuals to examine a variety of green building features in homes of all price ranges and styles. Learn more about the sponsor, The Green Home Builders of the Triangle, <http://greenhomebuildersofthetriangle.com/>.



Bringing Green to the Mainstream! The green building program was launched in 2006 with the primary purpose of promoting building techniques and materials that produce homes which consume less energy and other resources, facilitate better indoor air quality, and provide a more durable product requiring less maintenance.

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