

Your Comprehensive Guide on Finding Green Homes in The Chapel Hill-Durham-Raleigh Metro Area

How Do You Find A Green Home?

Are you looking to buy a green home? What does “green home” mean to you? In the building world, there are actually many shades of green. When looking for a green home, it will be helpful to understand the different shades of green and where and how you can find these homes in The Triangle.

Understanding Green Homes?

So, is a home green if it has Energy Star appliances and LED lights or solar panels? Or, is a home green if it has been third-party verified and proven to meet a range of national or international green building standards? There is a long list of green features that we find in homes today and a short list of programs where homes have been evaluated and tested to ensure they meet certain standards. The recognized certification programs are: The National Green Building Standards (NGBS), Leadership in Energy and Efficient Design (LEED), ecoSelect, and Energy Star. To be considered truly “green” the house should be third party verified and found to meet at least one of these standards.

Compared to a normal code-built home, green homes are designed and constructed to be more durable and require less maintenance, have lower monthly operating costs, have better indoor air quality and overall are more environmentally friendly. From an energy efficiency standpoint, a green home should be at least 30% more energy efficient.

Green Features

There are many things that we can do to our homes to make them more energy efficient and/or more environmentally sound. Many homeowners are updating homes to make them greener and builders are incorporating some of these features into new construction.

Examples of green features are:

- Active solar design
- Energy Star appliances
- EPA WaterSense plumbing fixtures
- Electric car charging station
- Fresh air ventilation
- Geo thermal HVAC system
- High efficiency toilets
- Insulated basement walls
- LED lighting
- Locally sourced materials
- Low VOC paints/sealants
- On demand hot water heater
- Passive solar design
- Programmable thermostats
- Solar panels
- Radiant barrier roof deck
- Rainwater collection
- Sealed attic
- Sealed combustion FP
- Sealed crawl space
- Solar active heating
- Solar hot water
- Solar passive heating
- Drought resistant landscaping

How Do You Know That “Green” is “Green”

Having some green features in a home does not make the home itself green. In fact, the word green has become so over used that the Durham Chapel Hill Home Builders Association has renamed its Green Building Council the High Performance Building Council.

There are four different programs that builders can choose from to get different levels of green certification. These programs are:

- The National Green Building Standard (NGBS)
- Leadership in Energy and Efficient Design (LEED)
- ecoSelect
- Energy Star

Each of these programs has different requirements and features. What is similar across these programs is the requirement for third party verification to become certified.



	NGBS	LEED	eco SELECT	ENERGY STAR®
INDEPENDENT THIRD-PARTY VERIFICATION	✓	✓	✓	✓
HOME ENERGY RATING SYSTEM (HERS)	✓	✓	✓	✓
SITE DESIGN, PREPARATION, DEVELOPMENT	✓	✓		
WATER EFFICIENCY	✓	✓	✓	
ENERGY EFFICIENCY	✓	✓	✓	✓
INDOOR AIR/ENVIRONMENTAL QUALITY	✓	✓	✓	✓
MATERIALS AND RESOURCES	✓	✓		
HOMEOWNER OPERATION, MAINTENANCE, EDUCATION	✓	✓		

The National Green Building Standard is the only green rating system for homes and apartments developed by the American National Standards Institute (ANSI). To achieve this certification, third party verifiers ensure that the following six components are in place at every site and for each home.

- Site design, lot preparation and development
- Resource efficiency
- Energy efficiency
- Water efficiency
- Indoor air quality
- Operation, maintenance & home owner education

The NGBS certification can be achieved at the Bronze, Silver, Gold and Emerald levels.

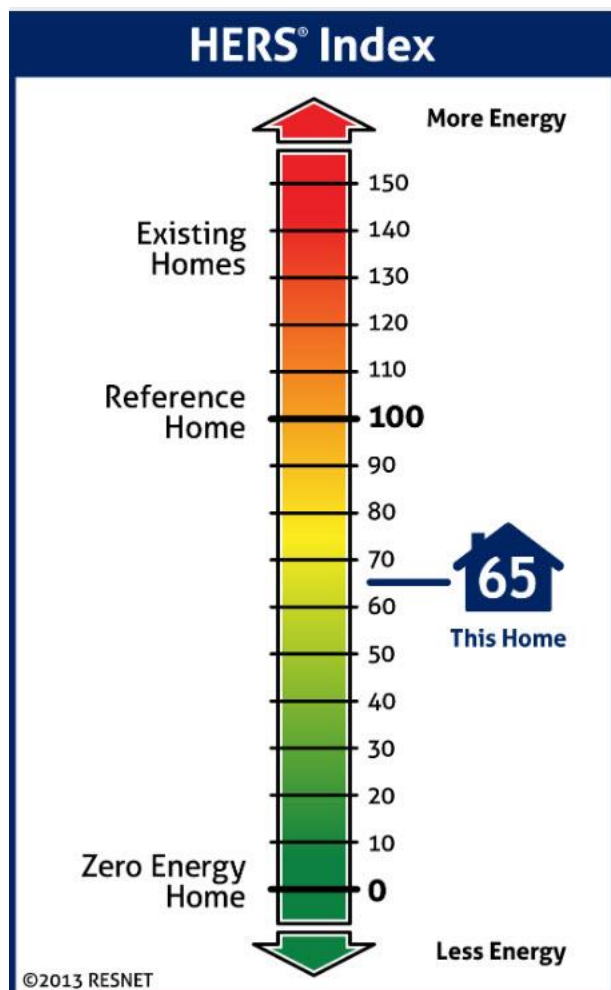
LEED is an internationally recognized certification program that requires third party verification for buildings or neighborhoods. While LEED can be applied to homes, it is more often applied to commercial buildings. LEED has three certification levels: Silver, Gold and Platinum.

Energy Star is a series of checklists and inspections, testing and verifications developed by the U.S. Environmental Protection Agency (EPA). Homes with the energy star label deliver better quality, comfort and durability compared to a typical, code-built, home.

ecoSelect is a national program whereby the standards can be measured to show improved energy efficiency. The ecoSelect program provides a basis for reducing a home's energy use while incorporating indoor air quality and water efficiency requirements.

If you are interested in green or energy efficient homes, you have probably heard of a HERS Index or score. But, what is the HERS index exactly?

The **HERS Index** (Home Energy Rating System) is the Nationally recognized system for showing a home's energy performance. The third-party certification programs listed above look beyond energy efficiency while the HERS Index is solely focused on being able to compare the energy efficiency of one home to another. The rating system is based on a rigorous inspection and testing by a certified home energy rater. Having a HERS Score for a green home does help you to put its energy efficiency in context.



The lower the HERS Score the better. A code-built home should have a HERS Score of 100 based on today's building code. An existing house could have a HERS score at 130 or higher. This means that an existing home is **30% less energy efficient** than a new home.

A home with a HERS Index Score of 70 means that the home is **30% more energy efficient** than a new home built to today's code.

What is a Net Zero Home?

Today, there is a movement to achieve a HERS Index Score of 0 which means the home uses no net energy. A home with a HERS Index Score of 0 is called a **Net Zero Home or a Net Zero Energy Home**. To achieve net zero, a home must produce as much energy as it uses and it does this by producing energy with solar or wind. In North Carolina, we are seeing net zero homes with active solar panels and battery back-up systems.

To be net zero, this does involve the energy company. Some utility companies allow what is called **Net Metering** which means the energy created by the home can be stored by the grid for use by the home during times of peak energy use.

As stated by the BPC Green Builders, “When the same amount of clean energy is put into the grid as the home uses from the grid, the HERS rating is 0.”

List of Neighborhoods by Certification Type

Provided below is a list of neighborhoods throughout the Chapel Hill-Durham-Raleigh metro area that are either totally green neighborhoods or have new homes going in that are green, e.g., Briar Chapel is totally green and Meadowmont has some green construction and Fearrington has a new section with one builder constructing green homes (Homes by Dickerson).

NGBS Certification

Briar Chapel (N. Chatham)

Fearrington (N. Chatham)

Tuscany Ridge (Chapel Hill)

751 South (Durham)

Croasdaile Farms (Durham)

Wendell Falls (Wendel – east of Raleigh)

Sunset Bluffs (Fuquay Varina)

Ethans Meadow (Raleigh)

Traditions (Wake Forest)

Moorlands Manor (Raleigh)

LEED

East 54 (Chapel Hill)

Greenbridge Condos (Chapel Hill)

Wetrock Farms (Durham Agri hood)

Ellis Crossing (Durham)

Energy Star

12 Oaks (Holly Springs)
5401 North (Raleigh)
Andrews Chapel (Durham)
Avocet (Holly Springs)
Bainbridge Place (Cary)
Belmont (Raleigh)
Blakeley (Cary)
Chapel Run (Durham)
Fiori Hills (Hillsborough)
Hasentree (Wake Forest)
The Meadows at Fleming Farm
Meadowmont (Chapel Hill)
Mason Pointe (Fuquay Varina)
Stillwater (Apex)
The Legacy at Jordan Lake (N. Chatham)
Union Station (Fuquay Varina)
Woodcreek (Apex)
Traditions (Wake Forest)
Briar Chapel (N. Chatham)
Waterstone (Hillsborough)

ecoSelect

12 Oaks (Holly Springs)
5401 North (Raleigh)
Bristol (Clayton)
Abbey Run (Apex)
Ballentine Place (Holly Springs)
Bent Tree (Fuquay Varina)
Claremont South (Chapel Hill)
Cleveland Bluffs (Clayton)
Sweetwater (Apex)
Ellis Crossing (Durham)
Fairview Park (Apex)
Holland Station Townhomes (Fuquay Varina)
751 South (Durham)
Ramsgate (Clayton)
Senter Farm (Apex)
Southern Acres (Fuquay Varina)
Siena Townes (Wake Forest)
Tuscany (Clayton)

Green Builders

Provided below is a list of green builders. Some of these builders are national and some are local custom builders. Some builders build to the HERS Index Score of 65-70 and some build Net Zero Energy Homes.

- NewPhire Building (Local custom)
- Build Sense (Local custom)
- Anchorage Building Company (Local custom)
- M Squared Builders & Design (Local custom)
- Out of the Woods (Local custom)
- Hearth Stone Luxury Homes (Arthur Rutenberg) (Local custom)
- J. Hoffman Studio & Design Build (Local custom)
- Peloquin Builders (Local)
- Garman Homes
- Trilogy
- Homes by Dickerson
- Experience One
- Riptide Builders
- Blue Heron Signature Homes
- Centricity
- Drees
- M/I Homes
- Saussy Burbank
- David Weekly
- Meritage Homes
- Guilded Homes
- Cimmarron Homes

If you want to build a custom home and want to talk to an architect, here is a list of Green Architects

Arielle Condoret Schecter
Jay Fulkerson
BuildSense
Ellen Cassilly

For more information on Green Neighborhood and Green Builders, contact Jodi Bakst at Real Estate Experts at Jodi@realestateexperts.net or give her a call at 919-928-5131 ext 2.