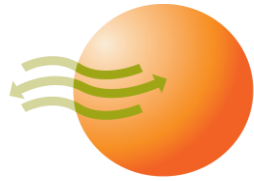
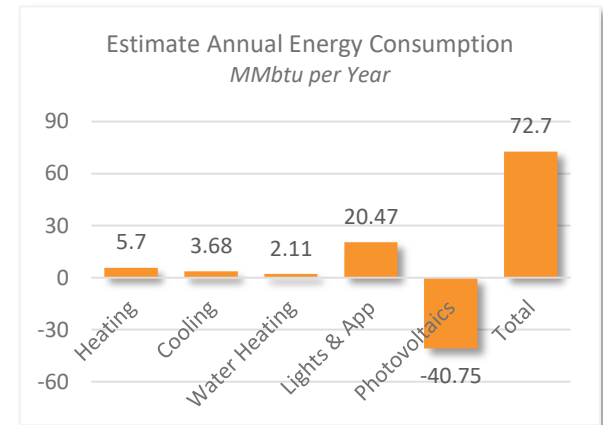
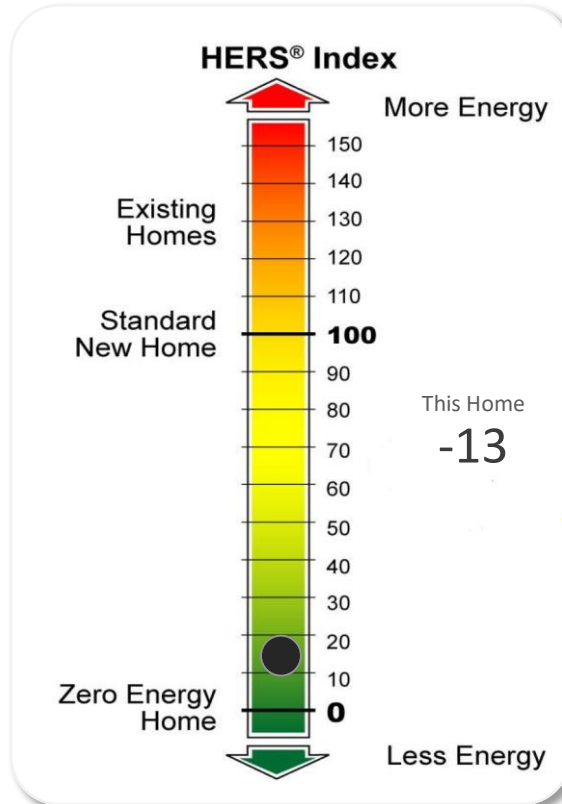
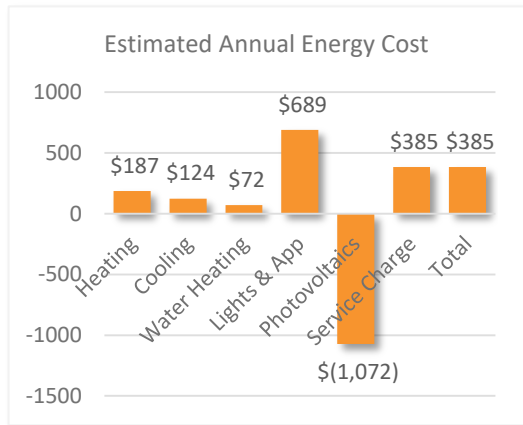


RESIDENTIAL NEW HOME ENERGY RATING CERTIFICATE



SOUTHERN ENERGY MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER



Address **1815 Arthur Minnis Road
Hillsborough, NC 27278**

House Type **SingleFamilyHouse**

Cond. Area **2,155 sq ft**

Rating ID **45546**

Issue Date **5/21/2018**

Certification **Verified**

Annual Estimates*

Electric (kWh) **9,371**

Natural gas (Therms) **-**

Propane (Gallons) **-**

CO2 emissions(Tons) **(2)**

Annual Savings** **\$4,155**

* Based on standard operating conditions

** Based on a HERS 130 Index Home

Rating Company **Southern Energy Management**

5908 Triangle Drive

Raleigh, NC 27617

Certified Rater **Sara Collier**

Rater ID **5155653**

Registry ID **332044398**

Rating Date **4/9/2018**

Ekotrope Rater

This information does not constitute any warranty of energy cost or savings.
The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

Fuel Summary



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Property

1815 Arthur Minnis Road
Hillsborough, NC 27278

1815 Arthur Minnis Road Newphire Build
1815 Arthur Minnis Road Newphire

Organization

Southern Energy Management
919-520-0152
Sara Collier

Builder

Newphire Builders

Inspection Status

2018-04-09
Rater ID (RTIN): 5155653
RESNET Registered (Confirmed)

Annual Energy Cost

Electric	\$385
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Annual End-Use Cost

Heating	\$187
Cooling	\$124
Water Heating	\$72
Lights & Appliances	\$689
Onsite Generation	-\$1,072
Service Charges	\$385
Total	\$385

Annual End-Use Consumption

Heating [Electric kWh]	1,672.5
Cooling [Electric kWh]	1,077.9
Hot Water [Electric kWh]	617.4
Lights & Appliances [Electric kWh]	6,003.0
Total [Electric kWh]	9,370.8
Total Onsite Generation kWh	11,952.9

Peak Electric Consumption

Peak Winter kW	1.94
Peak Summer kW	1.69

Utility Rates

Electricity	Piedmont Elec 5/16
Propane	Propane Tank 7/15

ENERGY STAR V3 Home Report



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Property

1815 Arthur Minnis Road
Hillsborough, NC 27278

1815 Arthur Minnis Road Newphire E
1815 Arthur Minnis Road Newphire

Organization

Southern Energy Manager
919-520-0152
Sara Collier

Builder

Newphire Builders

Inspection Status

2018-04-09
Rater ID (RTIN): 5155653
RESNET Registered (Confirmed)

Mandatory Requirements

- ✓ Duct leakage at post construction better than or equal to ENERGY STAR v3/3.1 requirements.
- ✓ Envelope insulation levels meet or exceed ENERGY STAR v3/3.1 requirements.
- ✓ Slab on Grade Insulation must be > R-5, and at IECC 2009 Depth for Climate Zones 4 and above.
- ✓ Envelope insulation achieves RESNET Grade I installation, or Grade II with insulated sheathing.
- ✓ Windows meet the 2009 IECC Requirements - Table 402.1.1.
- ✓ Duct insulation meets the EPA minimum requirements of R-6.
- ✓ Mechanical ventilation system is installed in the home.
- ✓ ENERGY STAR Checklists fully verified and complete.

HERS Index Target

Reference Home HERS	88
SAF (Size Adjustment Factor)	1.00
SAF Adjusted HERS Target	<u>88</u>
As Designed Home HERS	-13
As Designed Home HERS w/o PV	39

Normalized, Modified End-Use Loads (MBtu / year)

	ENERGY STAR	As Designed
Heating	41.7	8.9
Cooling	16.0	7.7
Water Heating	8.6	1.9
Lights and Appliances	22.2	20.5
Total	88.6	38.9



This home **MEETS** or **EXCEEDS** the energy efficiency requirements for designation as an **EPA ENERGY STAR Qualified Home** under Version 3.0

Pollution Prevented

Type of Emissions	Reduction
Carbon Dioxide (CO ₂) - tons/yr	20.3

Energy Cost Savings

	\$/yr
Heating	495
Cooling	54
Water Heating	219
Lights & Appliances	-14
Generation Savings	1,072
Total	1,826

The energy savings and pollution prevented are calculated by comparing the Rated Home to the ENERGY STAR Version 3.0 Reference Home as defined in the ENERGY STAR Qualified Homes HERS Index Target Procedure for National Program Requirements, Version 3.0 promulgated by the Environmental Protection Agency (EPA). In accordance with the ANSI/RESNET/ICC 301-2014 Standard, building inputs affecting setpoints infiltration rates, window shading and the existence of mechanical systems may have been changed prior to calculating loads



An ENERGY STAR[®] Qualified Home

This certifies that the home built at

1815 Arthur Minnis Road, Hillsborough, NC 27278

by Newphire Builders

and verified by Southern Energy Management

meets ENERGY STAR guidelines for energy efficiency as established by the U.S. Environmental Protection Agency.

ENERGY STAR qualified homes protect the environment by using less energy.

HERS Index: -13

Sam Rashkin
Director

ENERGY STAR for New Homes

May 21, 2018

www.energystar.gov



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF AIR AND RADIATION

May 21, 2018

1815 Arthur Minnis Road
Hillsborough, NC 27278

Built by: Newphire
Home Energy Inspection by: Southern Energy Management

Dear New ENERGY STAR Homeowner,

Congratulations on your new home!

Your home has been qualified to meet the U.S. Environmental Protection Agency's strict ENERGY STAR guidelines, which means your home is significantly more energy efficient than houses that are built to standard code. By purchasing an ENERGY STAR qualified home, you now own a home that performs better for both you and the environment. This is because they typically include energy efficient features like airtight construction and duct work, effective insulation, high-efficiency heating and cooling equipment, and high performance windows. As a result, you can expect your new home to be more comfortable, with fewer drafts, more consistent temperature levels, and better indoor air quality.

On top of all this, you can look forward to saving money each month with lower utility bills. In fact, lower utility costs are built into every ENERGY STAR qualified home. These homes use substantially less energy for heating, cooling, and water heating than minimum code homes. As a result, you can expect to save approximately \$200-400 each year on your energy bills. In addition, the quality features and performance advantages associated with an energy efficient home provide the opportunity for higher resale value.

Buying an ENERGY STAR qualified home also means that you're helping to protect the environment. You can be proud that your new home reduces air pollution and the effects of global climate change, while saving our nation's natural resources for future generations.

Now that you're the owner of an ENERGY STAR qualified home, keep an eye out for ENERGY STAR lighting, appliances, and electronics. These products can provide you with additional benefits and do more to protect the environment. On average, these products use 20 percent less energy than comparable items in the marketplace. Just look for the label! For more information visit ENERGY STAR online at www.energystar.gov.

Again - congratulations on your new ENERGY STAR qualified home!

Sincerely,

A handwritten signature in black ink that reads "Sam Rashkin".

Sam Rashkin
Director
ENERGY STAR for New Homes

RESNET Home Energy Rating Standard Disclosure

For home located at: 1815 Arthur Minnis Road

City: Hillsborough

State: NC

1. The Rater or Rater's employer is receiving a fee for providing the rating on this home.
2. In addition to the rating, the Rater or Rater's employer has also provided the following consulting services for this home.
- A. Mechanical system design
 - B. Moisture control or indoor air quality consulting
 - C. Performance testing and/or commissioning other than required for the rating itself
 - D. Training for sales or construction personnel
 - E. Other (specify below)

3. The Rater or Rater's employer is:
- A. The seller of this home or their agent
 - B. The mortgagor for some portion of the financial payments on this home
 - C. An employee, contractor or consultant of the electric and/or natural gas utility serving this home
4. The Rater or Rater's employer is a supplier or installer of products, which may include:

HVAC Systems
 Thermal Insulation Systems
 Air sealing of envelope or duct systems
 Windows or window shading systems
 Energy efficient appliances
 Construction (builder, developer, construction contractor, etc.)
 Other (specify below):

Installed in this home by:		OR	is in the business of:	
<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input type="checkbox"/> Employer
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<input type="checkbox"/> Rater	<input type="checkbox"/> Employer		<input type="checkbox"/> Rater	<input checked="" type="checkbox"/> Employer

Renewable Energy and Energy Management Systems

I attest that the above information is true and correct to the best of my knowledge. As a Rater or Rating Provider I abide by the rating quality control provisions of the Mortgage Industry National Home Energy Rating Standard as set forth by the Residential Energy Services Network (RESNET). The national rating quality control provisions of the rating standard are contained in Chapter One 4.C.8. of the standard and are posted at http://resnet.us/standards/RESNET_Mortgage_Industry_National_HERS_Standards.pdf. The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

Sara Collier

Rater's Printed Name

332044398

Certification #

Sara Collier

Rater's Signature

May 21, 2018

Date

RESNET Form 0300-2

This information does not constitute any warranty of energy cost or savings.

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HOW TO READ THE HERS® INDEX

A new home built to the 2006 IECC would score a 100. One point in either direction indicates the home is either 1% more or less efficient than the 2006 IECC reference design home. Please reference your HERS certificate for more information regarding your home's individually rated HERS Index. For more information on the Home Energy Rating System, please visit: www.resnet.us

With home energy costs continuing to increase, it only makes sense to find out how energy efficient the home you're buying really is. The U.S. Department of Energy estimates that houses built in line with today's energy code use 30-40% less energy than older homes; however by evaluating your home's HERS index, you can better assess the efficiency of the home you're buying.

A Home Energy Rating involves an analysis of a home's efficiency through a comprehensive plan review and several on-site inspections during the construction of your home. Upon completion of the home's plan review, an independent third party Home Energy Rater will work with the builder to identify energy efficiency improvements. The Rater then conducts on-site inspections which include a blower door test (to test whole-house air infiltration) and a duct test (to test for unwanted air leakage in the duct system). The results of these tests, along with inputs derived from the comprehensive plan review, are used to generate the HERS Index for the home.

The home energy rating is a widely recognized tool in the mortgage industry. Home energy ratings can also be used in a variety of ways in the housing industry. Since a rating quantifies the energy performance of a home, the HERS Index provides a means to compare the relative energy efficiency of different homes.

