

Home Energy Rating Certificate

PM3

10 Princeton Manor Dr
Youngsville, NC 27596



5 Stars Plus
Confirmed
HERS Index: 62
Efficient Home Comparison: 38% Better

General Information

Conditioned Area	3420 sq. ft.	House Type	Single-family detached
Conditioned Volume	30975 cubic ft.	Foundation	Conditioned crawl space
Bedrooms	4		

Mechanical Systems Features

Air-source heat pump:	Electric, Htg: 9.5 HSPF. Clg: 18.0 SEER.
Air-source heat pump:	Electric, Htg: 10.0 HSPF. Clg: 24.0 SEER.
Water Heating:	Instant water heater, Natural gas, 0.95 EF, 0.0 Gal.
Duct Leakage to Outside	1.00 CFM
Ventilation System	Supply Only: 120 cfm, 200.0 watts.
Programmable Thermostat	Heat=Yes, Cool=Yes

Building Shell Features

Ceiling Flat	N/A	Slab	None
Sealed Attic	R-29.0	Exposed Floor	R-21.0
Vaulted Ceiling	N/A	Window Type	Sgl/V/Loe/Arg0.3*
Above Grade Walls	R-15.0	Infiltration Rate	Htg: 500 Clg: 500 CFM50
Foundation Walls	R-10.0	Method	Blower door test

Lights and Appliance Features

Percent Interior Lighting	50.00	Range/Oven Fuel	Electric
Percent Garage Lighting	0.00	Clothes Dryer Fuel	Electric
Refrigerator (kWh/yr)	600.00	Clothes Dryer EF	2.67
Dishwasher Energy Factor	0.70	Ceiling Fan (cfm/Watt)	70.40

Registry ID 492883127

Rating Number PM3

Certified Energy Rater Roland Blaise

Rating Date 4/27/13

Rating Ordered For Grayson Homes

Estimated Annual Energy Cost

Use	MMBtu	Cost	Percent
Heating	15.0	\$438	24%
Cooling	6.0	\$175	10%
Hot Water	13.5	\$67	4%
Lights/Appliances	36.0	\$1056	59%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$60	3%
Total	70.5	\$1796	100%

Criteria

This home meets or exceeds the minimum criteria for the following:
ASHRAE Standard 90.2 - 1992
2006 International Energy Conservation Code
2009 International Energy Conservation Code

HERS Provider

MABTEC

21750 Red Rum Drive, # 117

Ashburn, Va. 20147

703-797-2051 x 101

Certified Energy Rater:

The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

REM/Rate - Residential Energy Analysis and Rating Software v14.2

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

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ENERGY STAR[®] CERTIFIED NEW HOME

Builder Name: Grayson Homes
Permit Date/Number:
Home Address: 10 Princeton Manor Dr
Youngsville, NC 27596

Rating Company: LiveGreen
Rater Identification Number: 2736174
Rating Date: 4/27/13
Version: 3.0

Standard Features of an ENERGY STAR Certified New Home

Your ENERGY STAR certified new home has been designed, constructed, and independently verified to meet rigorous requirements for energy efficiency set by the U.S. Environmental Protection Agency (EPA), including:

Thermal Enclosure System

A complete thermal enclosure system that includes comprehensive air sealing, quality-installed insulation and high-performing windows to deliver improved comfort and lower utility bills.



Air Infiltration Test: Htg: 500 Clg: 500 CFM50

Primary Insulation Levels:

Ceiling: R-29.0 **EndWall:** R-10.0

AGWall: R-15.0 **Floor:** R-21.0

Primary Window Efficiency:

U-Value: 0.300, **SHGC:** 0.260

Water Management System

A comprehensive water management system to protect roofs, walls, and foundations.



Flashing, a drainage plane, and site grading to move water from the roof to the ground and then away from the home.

Water-resistant materials on below-grade walls and underneath slabs to reduce the potential for water entering into the home.

Management of moisture levels in building materials during construction.

Heating, Cooling, and Ventilation System

A high-efficiency heating, cooling system, and ventilation system that is designed and installed for optimal performance.



Total Duct Leakage:

50.00 CFM @ 25 Pascals

Duct Leakage to Outdoors:

0.00 CFM @ 25 Pascals

Primary Heating (System Type • Fuel Type • Efficiency):

Electric, Htg: 9.5 HSPF. Clg: 18.0 SEER.

Primary Cooling (System Type • Fuel Type • Efficiency):

Electric, Htg: 9.5 HSPF. Clg: 18.0 SEER.

Energy Efficient Lighting and Appliances

Energy efficient products to help reduce utility bills, while providing high-quality performance.



ENERGY STAR Qualified Lighting: 50%

ENERGY STAR Qualified Appliances and Fans:

Refrigerators: 1

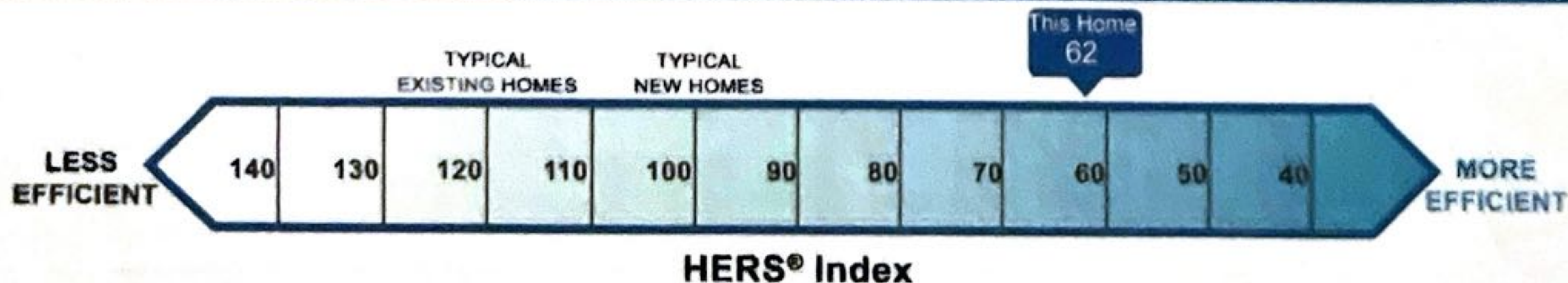
Dishwashers: 1

Ceiling Fans: 6

Exhaust Fans: 5

Primary Water Heater (System Type • Fuel Type • Efficiency):

Instant water heater, Natural gas, 0.95 EF, 0.0 Gal.



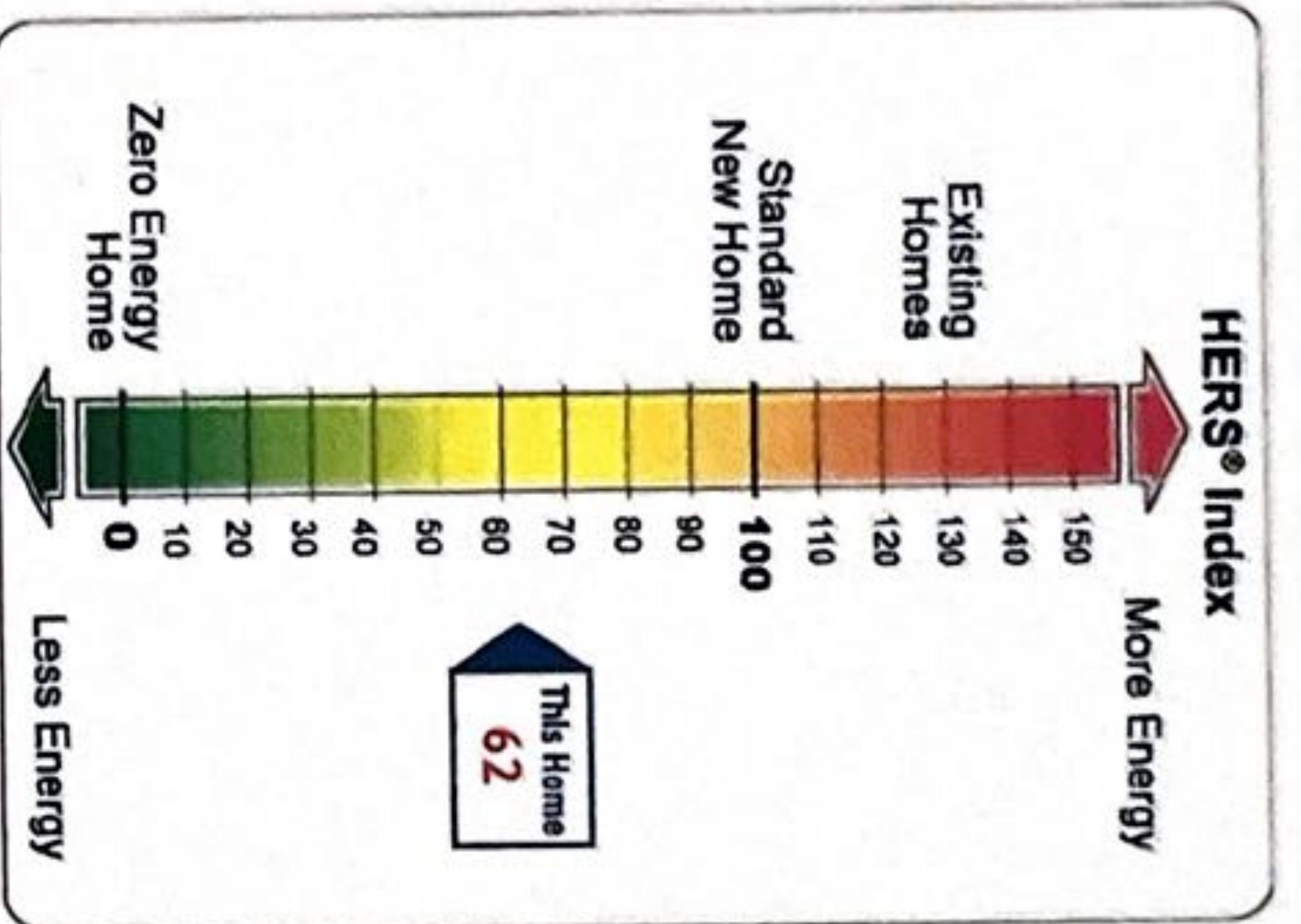
This certificate provides a summary of the major energy efficiency and other construction features that contribute to this home earning the ENERGY STAR, including its Home Energy Rating System (HERS) score, as determined through independent inspection and verification performed by a trained professional. The Home Energy Rating System is a nationally-recognized uniform measurement of the energy efficiency of homes.

Note that when a home contains multiple performance levels for a particular feature (e.g., window efficiency or insulation levels), the predominant value is shown. Also, homes may be certified to earn the ENERGY STAR using a sampling protocol, whereby one home is randomly selected from a set of homes for representative inspections and testing. In such cases, the features found in each home within the set are intended to meet or exceed the values presented on this certificate. The actual values for your home may differ, but offer equivalent or better performance.

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Learn more at www.energystar.gov/homefeatures

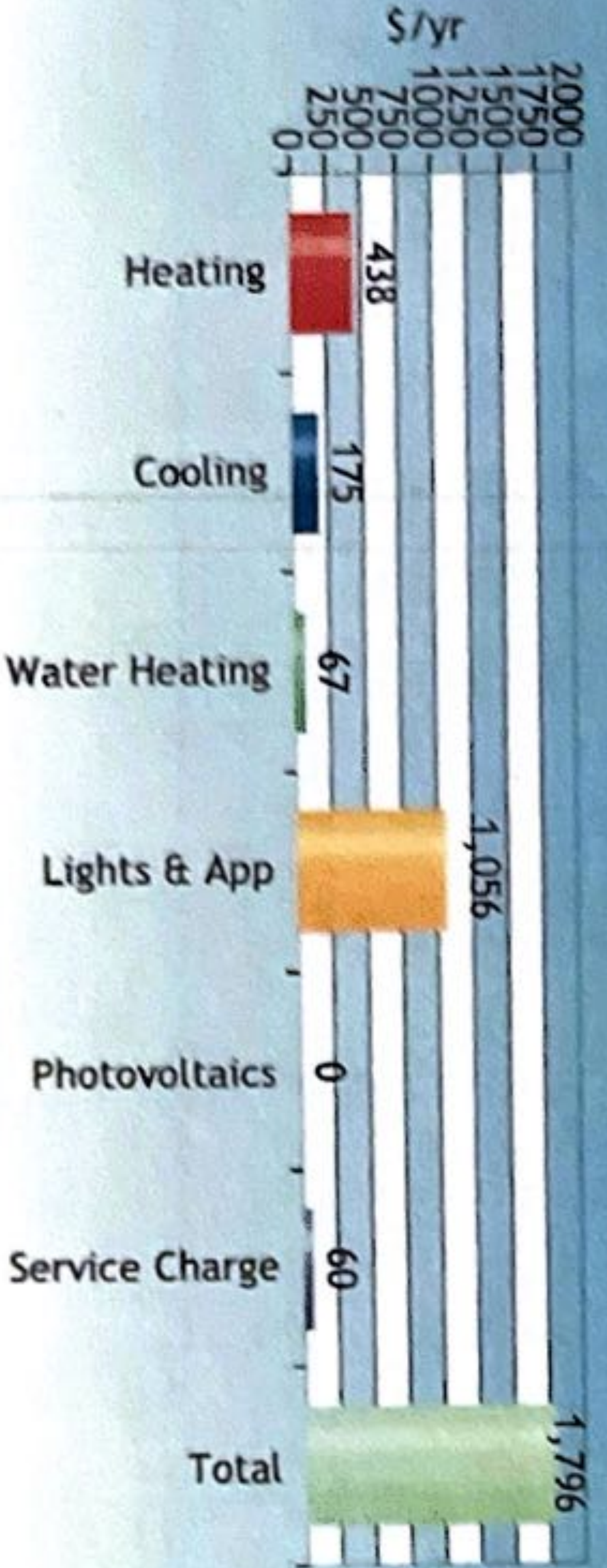
Home Energy Rating



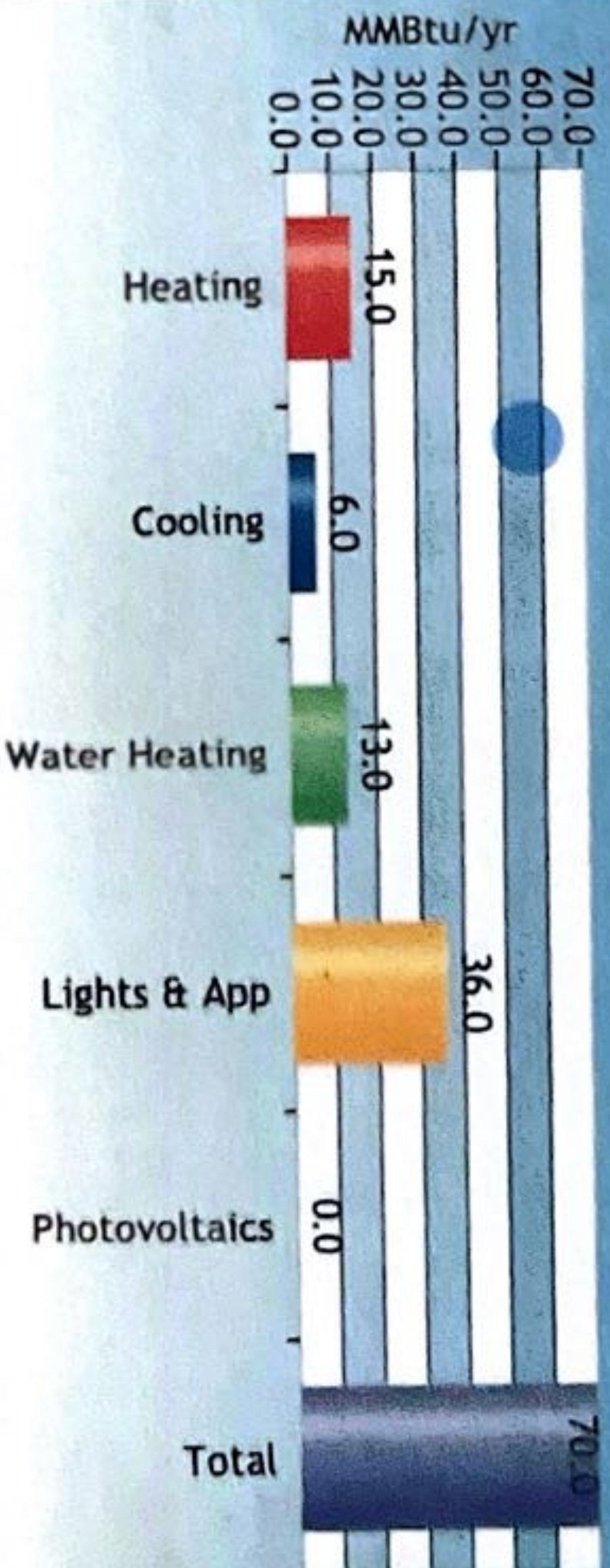
ENERGY RATING CERTIFICATE



Estimated Annual Energy Cost



Estimated Annual Energy Consumption



Name

PM3

Address

10 Princeton Manor Dr
Youngsville, NC 27596

House Type

Single-family detached

Cond. Area

3420 sq. ft.

Rating No.

PM3

Issue Date

May 08, 2013

Certification

Verified

Annual Estimates*

Electric(kWh): 16696

Natural gas(Therms): 135

CO2 emissions(Tons): 11

Annual Savings**: \$1294

* Based on standard operating conditions

** Based on a HERS 130 Index Home

HERS Provider

MABTEC

21750 Red Rum Drive, # 117

Certified Rater Roland Blaise

Rater ID 2736174

Registry ID 492883127

Rating Date 4/27/13

Signature

REM/Rate - Residential Energy Analysis and Rating Software v14.2

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The Home Energy Rating Standard Disclosure for this home is available from the rating provider.

RESNET Home Energy Rating Standard Disclosure



For home located at: 10 Princeton Manor Dr

City: Youngsville

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:

- | | | | |
|--------------------------------|-----------------------------------|--------------------------------|-----------------------------------|
| ☐ Rater | ☐ Employer | ☐ Rater | ☐ Employer |
| ☐ Rater | ☐ Employer | ☐ Rater | ☐ Employer |
| ☐ Rater | ☐ Employer | ☐ Rater | ☐ Employer |
| ☐ Rater | ☐ Employer | ☐ Rater | ☐ Employer |
| ☐ Rater | ☐ Employer | ☐ Rater | ☐ Employer |
| ☐ Rater | ☐ Employer | ☐ Rater | ☐ Employer |
| ☐ Rater | ☐ Employer | ☐ Rater | ☐ Employer |

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://www.natresnet.org/accred/standards.pdf>. This home may have been verified under the provisions of Chapter Six, Section 603, "Technical Requirements for Sampling" of the Standard.

Roland Blaise

Rater's Printed Name

2736174

Certification #

Rater's Signature

May 08, 2013

Date

RESNET Form 0300-2