

Carbon Rating & HERS® Certificate

Final Report

Rating Date: 2026-04-23

Registry ID: 690005697

Ekotrope ID: 26r7WD52



Carbon Index

-32

HERS® Index

-29

About these ratings:

Both ratings are relative performance scores. A lower Carbon Rating Index means fewer carbon emissions for a home. The lower the HERS Rating, the more energy efficient the home. For more info: www.resnet.us/about/resnet-carbon-rating-index www.hers.com

Home:

4637 Array Dr
Chapel Hill, NC 27516

Builder:

Newphire Builders

	CO ₂ e Emissions [tons/yr]	Annual Cost
Heating	1.0	\$304
Cooling	0.3	\$173
Hot Water	0.1	\$49
Lights/Appliances	1.8	\$657
Service Charges		\$168
Generation (e.g. Solar)	-6.4	-\$1,182
Total:	-3.1	\$168

Annual Savings*

15.5 Tons CO₂e
\$4,182

*Relative to an average U.S. home

This home meets or exceeds the criteria of the following:

ENERGY STAR v3.3

ENERGY STAR v3.2

ENERGY STAR v3.1

ENERGY STAR v3

2024 International Energy Conservation Code

2021 International Energy Conservation Code

2018 International Energy Conservation Code

Rating Completed by:

Energy Rater: Henry Hogan

RESNET ID: 3357391

Rating Company: Southern Energy Management

5908 Triangle Drive, Raleigh, NC 27617

919-836-0330

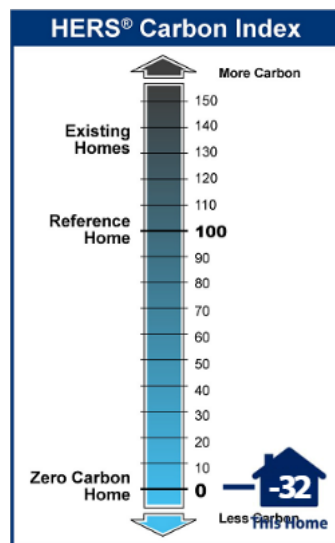
Rating Provider: Southern Energy Management

5908 Triangle Drive, Raleigh, NC 27617

919-836-0330

Henry Hogan, Certified Energy Rater

Date: 5/14/26 at 5:08 PM



Home Feature Summary:

Home Type:	Single family detached
Model:	Custom
Community:	Custom 27516
Conditioned Floor Area:	2,923 ft ²
Number of Bedrooms:	3
Primary Heating System:	Air Source Heat Pump • Electric • 9.7 HSPF2
Primary Cooling System:	Air Source Heat Pump • Electric • 21 SEER2
Primary Water Heating:	Residential Water Heater • Electric • 4.5 UEF
House Tightness:	696 CFM50 (1.21 ACH50)
Ventilation:	61 CFM • 37 Watts • ERV
Duct Leakage to Outside:	0 CFM @ 25Pa (0 / 100 ft ²)
Above Grade Walls:	R-26
Ceiling:	Vaulted Roof / Exposed Exterior, R-52
Window Type:	U-Value: 0.14, SHGC: 0.25
Foundation Walls:	R-10
Framed Floor:	N/A



Ekotrope RATER - Version:4.1.2.3862

The Energy Rating Disclosure for this home is available from the Approved Rating Provider.

This report does not constitute any warranty or guarantee.

Fuel Summary

Property
4637 Array Dr
Chapel Hill, NC 27516
Model: Custom
Community: Custom 27516

4637 Array Dr Newphire
Rajagopalan Residence

Organization
Southern Energy Management
Henry Hogan

Builder
Newphire Builders

Inspection Status
2026-04-23
Rater ID (RTIN): 3357391
RESNET Registered (Confirmed)



Annual Energy Cost

Electric	\$168
----------	-------

Annual End-Use Cost

Heating	\$359
Cooling	\$225
Water Heating	\$49
Lights & Appliances	\$633
Onsite Generation	-\$1,266
Service Charges	\$168
Total	\$168

Annual End-Use Consumption

Heating [Electric kWh]	3,409.5
Cooling [Electric kWh]	2,080.0
Hot Water [Electric kWh]	457.5
Lights & Appliances [Electric kWh]	5,923.5
Total [Electric kWh]	11,870.4
Total Onsite Generation [Electric kWh]	20,740.0

Peak Electric Consumption

Peak Winter kW	2.64
Peak Summer kW	2.04

Utility Rates

Electricity	Duke E* All Electric 2025
-------------	---------------------------