

2018 IECC Energy Cost Compliance



Property

453 Iris Bryant Rd.
Dunn, NC 28334

Organization

Energy Modeling Agency
325 NC-42, Ahoskie, NC. 27910
Charlie Ashcom

Weather: Elizabethtown, NC

Iris Bryant Rd. Residence

Fiberglass

Iris Bryant Rd. Residence

Builder

Annual Energy Cost

\$/yr

	2018 IECC	As Designed
Heating	256	252
Cooling	104	92
Water Heating	215	215
Mechanical Ventilation Fan	21	11
SubTotal - Used to Determine Compliance	596	570
Lights & Appliances (minus MechVent)	303	294
Photovoltaics	-0	-0
Service Charge	120	120
Total	1019	984

Mandatory Requirements

Annual Energy Cost Check	PASSES
Duct Insulation R-Value Check (per Section 405.2)	PASSES
Window U-Value and SHGC Check (per Section 402.5)	PASSES
Home Infiltration (Section 402.4.1)	PASSES
Duct Testing (Section 403.3.3)	PASSES
Mechanical Ventilation (Section 403.6)	PASSES
Mechanical Ventilation Fan Efficacy (Section 403.6.1)	PASSES
Mandatory Requirements Check Box (2018 IECC)	PASSES

This home **MEETS** the annual energy cost requirements of Section 405 of the 2018 International Energy Conservation Code based on a climate zone of 3A. In fact, this home surpasses the requirements by 2.8%.

Name | Charlie Ashcom

Signature | *Charlie Ashcom*

Organization | Energy Modeling Agency

Date | 28 June 2024

In accordance with IECC, building inputs, such as setpoints, infiltration rates, and window shading may have been changed prior to calculating annual energy cost. Furthermore, the standard reference design HVAC system efficiencies are set equal to those in the design home as specified in the 2018 IECC. These standards are subject to change, and software updates should be obtained periodically to ensure the compliance calculations reflect current federal minimum standards.

REM/Design - Residential Energy Analysis Software v16.0.2

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

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HOME CERTIFIED TO MEET THE PROVISIONS OF THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE

This home built at
453 Iris Bryant Rd., Dunn, NC
by
exceeds the minimum requirements

Building Features

Ceiling Flat	R-35.0
Sealed Attic:	NA
Vaulted Ceiling	NA
Above Grade Walls	R-15.0
Foundation Walls	NA
Exposed Floor	NA
Slab	R-0.0 Edge, R-0.0 Under

Duct	NA
Duct Leakage to Outside:	RESNET/HERS default
Total Duct Leakage:	Not Applicable
Infiltration:	Htg: 2.90 Clg: 2.90 ACH50
Window	U-Value: 0.330, SHGC: 0.260
Air-Source HP	Electric, Htg: 7.5 HSPF. Clg: 14.3 SEER.
Water Heating	Instant water heater, Natural gas, 0.80 EF, 0.0 Gal.

The organization below certifies that the proposed building design described herein is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2018 IECC requirements in compliance with Chapter 4 based on Climate Zone 3A and with all mandatory requirements.

Name | Charlie Ashcom
Organization | Energy Modeling Agency

Signature | *Charlie Ashcom*
Date | 28 June 2024

The 2018 International Energy Conservation Code is a registered trademark of the International Code Council, Inc. ("ICC").
No version of this software has been reviewed or approved by ICC or its affiliates.
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2018 IECC Certificate

453 Iris Bryant Rd., Dunn, NC 28334

Building Envelope Insulation

Ceiling	R-35.0
Above Grade Walls	R-15.0
Foundation Walls	NA
Exposed Floor	NA
Slab	R-0.0 Edge, R-0.0 Under
Infiltration	Htg: 2.90 Clg: 2.90 ACH50
Duct	NA
Total Duct Leakage	Not Applicable

Window Data

	U-Factor	SHGC
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Window	0.330	0.260
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Mechanical Equipment

ASHP: Electric, Htg: 7.5 HSPF. Clg: 14.3 SEER.

DHW: Instant water heater, Natural gas, 0.80 EF, 0.0 Gal.

Builder or Design Professional

Signature *Charlie Ashcom*
