

Single Family House Energy Report

Project Details

Project Name: Tryall Ct
Builder Name: Chris Chavez
Builder Phone: (817)819-1342
Builder Email: chris@casablueprints.com
Address: Tryall Ct
City: RUNAWAY BAY
County: WISE
Zip: xxxxx-xxxx
Certificate #: 1304864
Date Issued: 9/21/2023

Notes:

Emissions Reduction

NOx: 1 lbs.
SOx: 2 lbs.
CO2: 1,072 lbs.



4%
Above Code

This single family residential project was found to be in compliance with the performance measures described in the 2015 IECC as calculated by the Energy Systems Laboratory, a division of the Texas A&M Engineering Experiment Station using IC3 version 4.5.10



ENERGY SYSTEMS LABORATORY
TEXAS A&M ENGINEERING EXPERIMENT STATION

The values produced are generated by the DOE-2 building energy analysis program. These values do not constitute a guarantee of actual energy usage by ESL or TEES.

IC3 performs the hourly annual energy calculation in accordance with the International Energy Conservation Code Section R405, Simulated Performance Alternative. IC3 does not address the adequacy of the sizing of the heating/cooling system.

Authorized Signature:

Project Information

General

Number of Bedrooms: 4

Wall Cavity Insulation: R- 13

Wall Continuous Insulation: R- 0

Orientation: SouthWest

Windows

SHGC: 0.22

U-Factor: 0.3

Roof

Cladding Type: Composite Shingle

Radiant Barrier: Yes

Sealed Attic: No

Roof Insulation: R - 38

Attic Area: 1779 sq. ft.

Cathedral Ceiling Area: 0 sq. ft.

Flat Roof Area: 0 sq. ft.

Wall Area Next to Attic: 0 sq. ft.

Foundation

Foundation Type: Slab on Grade

Foundation Insulation: R- 0

A/C

SEER: 16

Tonnage: 3.5

Structural

Exterior Finish: Fibrous Cement Boa

Stud Type: 2 x 4

Stud Spacing: 16 in.

Mechanical

Blower Door Test: 3 @ACH50

Ventilation Type: Supply Only

Ventilation Rate: 223 CFM

Ventilation Operation: 6 hrs.

Fan Power: 25 Watts

Fraction Outside: 1

Duct Tightness Test: 0 @CFM25

Supply Duct Insulation: R - 8

Return Duct Insulation: R - 8

Heating

Heating Type: Heat Pump

Heating Efficiency: 8.5 HSPF

Water Heater

Water Heater Type: Heat Pump

Energy Factor: 2

Size: N/A

Burner Capacity: N/A

Floor 1

Floor Area: 1779 sq. ft.

Floor Wall Height: 9 ft.

Front Side Length: 49 ft

Front Side Window Area: 72 sq. ft.

Front Side Shading: 16 in

Back Side Length: 49 ft

Back Side Window Area: 144 sq. ft.

Back Side Shading: 16 in

Right Side Length: 52 ft

Right Side Window Area: 25 sq. ft.

Right Side Shading: 16 in

Left Side Length: 52 ft

Left Side Window Area: 36 sq. ft.

Left Side Shading: 16 in

Estimated Annual Energy Usage

Proposed Peak Electric Demand: 3.7 kW

Proposed Total Area Lights: 1,055 kWh

Energy Usage Category	Proposed Design		Standard Reference	
	Gas (therms)	Electric (kWh)	Gas (therms)	Electric (kWh)
Pumps and Miscellaneous	0	88	0	59
Ventilation Fans	0	773	0	806
Mechanical Ventilation	0	56	0	217
Space Cooling	0	1,700	0	1,934
Space Heating	0	2,286	0	2,140
Domestic Hot Water	0	1,495	0	1,495
Site Energy	0	6,398	0	6,651
Source Energy (MMBtu) *		68.5		71.5

* Conversion factors:
 Site to source factor: 3.16 for electric or 1.1 for natural gas (IECC 2015 R405.3)
 Unit: 1 MMBtu = 10 therms or 1 MMBtu = 293.1 kWh

Residential Energy Efficiency Certificate



Window U-Value	U- 0.3	Duct Tightness (in CFM25)	0
Window SHGC	0.22	Cooling Efficiency	SEER 16
Wall Cavity Insulation	R - 13	Heating Efficiency	8.5 HSPF
Roof/Ceiling Insulation	R - 38	Water Heater Efficiency	Heat Pump EF 2
Floor/Foundation Insulation	R - 0	Builder Email	chris@casablueprints.com
Supply Duct Insulation	R - 8	Builder Phone	(817)819-1342
Return Duct Insulation	R - 8	Date Issued	9/21/2023
Blower Door (in ACH50)	3	Certificate Number	1,304,864



Builder or Registered Design Professional

Chris Chavez

This certificate was generated by IC3 in compliance with 2015 IECC