FORM R405-2020

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Hogue Residence	Builder Name:	
Street:	229 SW Stell Glen	Permit Office:	Columbia County
City, State, Zip:	Lake City , FL , 32024	Permit Number:	
Owner:	Adam & Carrie Hogue	Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)			
2. Single family or multiple family	Detached			
3. Number of units, if multiple family	1			
4. Number of Bedrooms	1			
5. Is this a worst case?	No			
6. Conditioned floor area above grade (ft²)	1410			
Conditioned floor area below grade (ft²)	0			
7. Windows (84.0 sqft.)	Description		Area	
a. U-Factor:	Dbl, U=0.36		84.00 ft²	
SHGC:	SHGC=0.25			
b. U-Factor:	N/A		ft²	
SHGC:				
c. U-Factor:	N/A		ft²	
SHGC:				
Area Weighted Average Overhang Depth:			1.000 ft.	
Area Weighted Average SHGC:			0.250	
8. Skylights			Area	
c. U-Factor:(AVG)	N/A		ft²	
SHGC(AVG):	N/A			
9. Floor Types (1410.0 sqft.)		Insulation	Area	
a. Slab-On-Grade Edge Insulation		R=0.0	980.00 ft²	
b. Floor Over Other Space		R=19.0	430.00 ft²	
c. N/A		R=	ft²	

10. Wall Types (2042.7 sqft.)	Insulation	Area
a. Frame - Steel, Exterior	R=19.0	2042.70 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²
11. Ceiling Types (1001.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=38.0	1001.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
12. Ducts		R ft²
13. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	12.5	SEER:14.00
14. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	19.7	HSPF:8.20
15. Hot water systems		
a. Electric		Cap: 50 gallons
		EF: 0.920
b. Conservation features		
None		
16. Credits		CV, Pstat

Glass/Floor Area: 0.060

Total Proposed Modified Loads: 37.87

Total Baseline Loads: 40.72

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: _____

DATE: 6 / 28 /2022

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____

DATE: 11-2-22

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

BUILDING OFFICIAL: _____

DATE: _____

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.

- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

- Proposed Qn of NAN exceeds the performance method default limit of 0.08 and therefore does not require duct testing. R405 .2.3

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INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Hogue Residence	Bedrooms:	1	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1410	Lot #	
Owner Name:	Adam & Carrie Hogue	Total Stories:	2	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	229 SW Stell Glen
Permit Office:	Columbia County	Cross Ventilation:	Yes	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32024
Family Type:	Detached				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1410	15200

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	1st Floor	980	11760	Yes	3	1	1	Yes	Yes	Yes
2	2nd Floor	430	3440	No	1	0	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet
____	1	Slab-On-Grade Edge Insulation	1st Floor	136 ft	0	980 ft²	----	0	0	1
____	2	Floor Over Other Space	2nd Floor	----	----	430 ft²	19	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
____	1	Gable or shed	Metal	1033 ft²	164 ft²	Light	Y	0.96	No	0.9	No	0	18.43

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	980 ft²	Y	N

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INPUT SUMMARY CHECKLIST REPORT

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	1st Floor	38	Double Batt	550 ft²	0.11	Wood
____	2	Under Attic (Vented)	2nd Floor	38	Double Batt	451 ft²	0.11	Wood

WALLS

✓	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
____	1	S	Exterior	Frame - Steel	1st Floor	19	30		16		480.0 ft²		0.23	0.75	0
____	2	E	Exterior	Frame - Steel	1st Floor	19	15	8	16		250.7 ft²		0.23	0.75	0
____	3	E	Exterior	Frame - Steel	1st Floor	19	4		8		32.0 ft²		0.23	0.75	0
____	4	S	Exterior	Frame - Steel	1st Floor	19	8		8		64.0 ft²		0.23	0.75	0
____	5	E	Exterior	Frame - Steel	1st Floor	19	10		8		80.0 ft²		0.23	0.75	0
____	6	N	Exterior	Frame - Steel	1st Floor	19	38		8		304.0 ft²		0.23	0.75	0
____	7	W	Exterior	Frame - Steel	1st Floor	19	14		8		112.0 ft²		0.23	0.75	0
____	8	W	Exterior	Frame - Steel	1st Floor	19	15	8	16		250.7 ft²		0.23	0.75	0
____	9	E	Exterior	Frame - Steel	2nd Floor	19	14	4	8		114.7 ft²		0.23	0.75	0
____	10	N	Exterior	Frame - Steel	2nd Floor	19	30		8		240.0 ft²		0.23	0.75	0
____	11	W	Exterior	Frame - Steel	2nd Floor	19	14	4	8		114.7 ft²		0.23	0.75	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
____	1	E	Insulated	1st Floor	None	.46	3		6	8	20 ft²
____	2	W	Insulated	1st Floor	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
____	1	S	1	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	1 ft 0 in	11 ft 0 in	None	None
____	2	N	6	Vinyl	Low-E Double	Yes	0.36	0.25	N	15.0 ft²	1 ft 0 in	10 ft 0 in	None	None
____	3	W	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	9.0 ft²	1 ft 0 in	10 ft 0 in	None	None
____	4	N	10	Vinyl	Low-E Double	Yes	0.36	0.25	N	15.0 ft²	1 ft 0 in	3 ft 0 in	None	None
____	5	S	1	Vinyl	Low-E Double	Yes	0.36	0.25	N	15.0 ft²	1 ft 0 in	4 ft 0 in	None	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000342	1266.7	69.49	130.47	.1457	5

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INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

√	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	Single	HSPF:8.2	19.67 kBtu/hr	1	Ductless

COOLING SYSTEM

√	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	Single	SEER: 14	12.47 kBtu/hr	360 cfm	0.7	1	Ductless

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	1st Floor	0.92	50 gal	40 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

TEMPERATURES

Programable Thermostat: Y Ceiling Fans:

Cooling	[ ] Jan	[ ] Feb	[ ] Mar	[ ] Apr	[ ] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[ ] Oct	[ ] Nov	[ ] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[ ] Apr	[ ] May	[ ] Jun	[ ] Jul	[ ] Aug	[ ] Sep	[ ] Oct	[X] Nov	[X] Dec
Venting	[ ] Jan	[ ] Feb	[X] Mar	[X] Apr	[ ] May	[ ] Jun	[ ] Jul	[ ] Aug	[ ] Sep	[X] Oct	[X] Nov	[ ] Dec

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

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ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 93

The lower the EnergyPerformance Index, the more efficient the home.

229 SW Stell Glen, Lake City, FL, 32024

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4. Number of Bedrooms		1	
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SHGC:	SHGC=0.25		
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SHGC:			
c. U-Factor:	N/A		ft²
SHGC:			
d. U-Factor:	N/A		ft²
SHGC:			
Area Weighted Average Overhang Depth:			1.000 ft.
Area Weighted Average SHGC:			0.250
8. Skylights	Description		Area
a. U-Factor(AVG):	N/A		ft²
SHGC(AVG):	N/A		
9. Floor Types		Insulation	Area
a. Slab-On-Grade Edge Insulation		R=0.0	980.00 ft²
b. Floor Over Other Space		R=19.0	430.00 ft²
c. N/A		R=	ft²

10. Wall Type and Insulation	Insulation	Area
a. Frame - Steel, Exterior	R=19.0	2042.70 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²
11. Ceiling Type and insulation level	Insulation	Area
a. Under Attic (Vented)	R=38.0	1001.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
12. Ducts, location & insulation level		R ft²
13. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	12.5	SEER:14.00
14. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	19.7	HSPF:8.20
15. Hot water systems		
a. Electric		Cap: 50 gallons
		EF: 0.92
b. Conservationfeatures		
None		
Credits (Performance method)		CV, Pstat

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: _____ Date: 11-2-22

Address of New Home: 229 SW Stell Gln City/FL Zip: 32024

*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.