

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Aaron Simque Homes
 Street:
 City, State, Zip: Lake City, FL, 32024
 Owner: Spec House
 Design Location: FL, Gainesville

Builder Name:
 Permit Office: Columbia County
 Permit Number:
 Jurisdiction:
 County: Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	3
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft ²)	1807
Conditioned floor area below grade (ft ²)	0
7. Windows(282.3 sqft.)	Description Area
a. U-Factor:	DbI, U=0.33 282.33 ft ²
SHGC:	SHGC=0.22
b. U-Factor:	N/A ft ²
SHGC:	
c. U-Factor:	N/A ft ²
SHGC:	
d. U-Factor:	N/A ft ²
SHGC:	
Area Weighted Average Overhang Depth:	5.014 ft.
Area Weighted Average SHGC:	0.220
8. Floor Types (1807.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 1807.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²

9. Wall Types(1834.3 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=13.0 1535.80 ft ²
b. Frame - Wood, Adjacent	R=13.0 298.50 ft ²
c. N/A	R= ft ²
d. N/A	R= ft ²
10. Ceiling Types (1807.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=30.0 1807.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²
11. Ducts	R ft ²
a. Sup: Attic, Ret: Attic, AH: Garage	8 361.4
12. Cooling systems	kBtu/hr Efficiency
a. Central Unit	42.0 SEER:14.00
13. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	42.0 HSPF:8.50
14. Hot water systems	Cap: 40 gallons
a. Electric	EF: 0.920
b. Conservation features	None
15. Credits	CF, Pstat

Glass/Floor Area: 0.156

Total Proposed Modified Loads: 52.10

Total Baseline Loads: 53.09

PASS

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

PREPARED BY: _____

DATE: _____ 4-21-17

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

OWNER/AGENT: _____

DATE: _____

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 R403.2.2.1.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and an envelope leakage test report in accordance with R402.4.1.2.

PROJECT

Title:	Aaron Simque Homes	Bedrooms:	3	Address Type:	Lot Information
Building Type:	User	Conditioned Area:	576	Lot #	
Owner:	Spec House	Total Stories:	1	Block/SubDivision:	Preserves
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	
Permit Office:	Columbia County	Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Lake City , FL , 32024
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

✓	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	2.5 %	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	2	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1807	16263

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1807	16263	Yes	6	3	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	201 ft	0	1807 ft²	----	0.33	0.33	0.34

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	2093 ft²	0 ft²	Medium	0.85	No	0.9	No	0	30.3

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1807 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	1807 ft²	0.11	Wood

WALLS

✓	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
___	1	N	Exterior	Frame - Wood	Main	13	28	6	9		256.5 ft²		0.23	0.75	0
___	2	W	Exterior	Frame - Wood	Main	13	5	8	9		51.0 ft²		0.23	0.75	0
___	3	N	Exterior	Frame - Wood	Main	13	14	4	9		129.0 ft²		0.23	0.75	0
___	4	E	Exterior	Frame - Wood	Main	13	38	8	9		348.0 ft²		0.23	0.75	0
___	5	S	Exterior	Frame - Wood	Main	13	7	4	10		73.3 ft²		0.23	0.75	0
___	6	E	Exterior	Frame - Wood	Main	13	8	6	9		76.5 ft²		0.23	0.75	0
___	7	S	Exterior	Frame - Wood	Main	13	14	10	9		133.5 ft²		0.23	0.75	0
___	8	W	Exterior	Frame - Wood	Main	13	52		9		468.0 ft²		0.23	0.75	0
___	9	S	Garage	Frame - Wood	Main	13	33	2	9		298.5 ft²		0.23	0.75	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
___	1	S	Insulated	Main	None	.4	3		6	8	20 ft²
___	2	S	Insulated	Main	None	.4	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Separation	Int Shade	Screening
___	1	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	90.0 ft²	9 ft 6 in	1 ft 4 in	None	None
___	2	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	24.0 ft²	9 ft 6 in	1 ft 4 in	None	None
___	3	W	2	Vinyl	Low-E Double	Yes	0.33	0.22	36.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	4	N	3	Vinyl	Low-E Double	Yes	0.33	0.22	24.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	5	N	3	Vinyl	Low-E Double	Yes	0.33	0.22	20.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	6	N	3	Vinyl	Low-E Double	Yes	0.33	0.22	12.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	7	S	5	Vinyl	Low-E Double	Yes	0.33	0.22	13.3 ft²	7 ft 6 in	1 ft 4 in	None	None
___	8	S	7	Vinyl	Low-E Double	Yes	0.33	0.22	36.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	9	W	8	Vinyl	Low-E Double	Yes	0.33	0.22	9.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	10	W	8	Vinyl	Low-E Double	Yes	0.33	0.22	18.0 ft²	1 ft 6 in	1 ft 4 in	None	None

GARAGE

✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___	1	433.805556 ft²	384 ft²	49 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1355.3	74.4	139.92	.2202	5

HEATING SYSTEM

☒	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
☐	1	Electric Heat Pump	None	HSPF:8.5	42 kBtu/hr	1	sys#1

COOLING SYSTEM

☒	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
☐	1	Central Unit	None	SEER: 14	42 kBtu/hr	1260 cfm	0.8	1	sys#1

HOT WATER SYSTEM

☒	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
☐	1	Electric	None	Garage	0.92	40 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

☒	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
☐	None	None			ft ²		

DUCTS

☒	#	--- Supply --- Location	R-Value	Area	--- Return --- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
☐	1	Attic	8	361.4 ft	Attic	90.35 ft	Default Leakage	Garage	(Default)	(Default)			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

Cooling	☐ Jan	☐ Feb	☐ Mar	☐ Apr	☐ May	☒ Jun	☒ Jul	☒ Aug	☒ Sep	☐ Oct	☐ Nov	☐ Dec
Heating	☒ Jan	☒ Feb	☒ Mar	☒ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☒ Oct	☒ Nov	☒ Dec
Venting	☐ Jan	☐ Feb	☒ Mar	☐ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☒ Oct	☒ Nov	☐ Dec

Thermostat Schedule: HERS 2006 Reference

Hours

Schedule Type		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