

**FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION**

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:     Montgomery Residence Street: City, State, Zip:   Lake City , FL , 32024 Owner: Design Location:    FL, Gainesville	Builder Name:   IC Construction Permit Office: Permit Number: Jurisdiction: County:           Columbia (Florida Climate Zone 2 )
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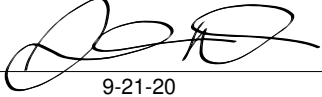

  

1. New construction or existing           New (From Plans) 2. Single family or multiple family       Single-family 3. Number of units, if multiple family     1 4. Number of Bedrooms                    4 5. Is this a worst case?                    No 6. Conditioned floor area above grade (ft²)   2386 Conditioned floor area below grade (ft²)   0 7. Windows(286.0 sqft.)                   Description                   Area a. U-Factor:                   Dbl, U=0.33                   286.00 ft² SHGC:                   SHGC=0.22 b. U-Factor:                   N/A                                 ft² SHGC: c. U-Factor:                   N/A                                 ft² SHGC: d. U-Factor:                   N/A                                 ft² SHGC: Area Weighted Average Overhang Depth:           7.920 ft. Area Weighted Average SHGC:                   0.220 8. Floor Types (2386.0 sqft.)           Insulation           Area a. Slab-On-Grade Edge Insulation           R=0.0           2386.00 ft² b. N/A                                 R=                   ft² c. N/A                                 R=                   ft²	9. Wall Types(2146.5 sqft.)                   Insulation           Area a. Frame - Wood, Exterior                 R=13.0           1936.50 ft² b. Frame - Wood, Adjacent                 R=13.0           210.00 ft² c. N/A   R=                   ft² d. N/A   R=                   ft² 10. Ceiling Types (2386.0 sqft.)           Insulation           Area a. Under Attic (Vented)                   R=30.0           2386.00 ft² b. N/A   R=                   ft² c. N/A   R=                   ft² 11. Ducts   R                   ft² a. Sup: Main, Ret: Main, AH: Main                 6   477.2  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. Propane   EF: 0.590 b. Conservation features None 15. Credits   CF, Pstat
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Glass/Floor Area: 0.120	Total Proposed Modified Loads: 57.73 Total Baseline Loads: 67.20	<h1 style="margin: 0;">PASS</h1>
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I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.  PREPARED BY:  DATE: 9-21-20  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: _____
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- 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).
- Compliance with a proposed duct leakage Qn requires a Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.030 Qn for whole house.

## INPUT SUMMARY CHECKLIST REPORT

## PROJECT

Title:	Montgomery Residence	Bedrooms:	4	Address Type:	Street Address
Building Type:	User	Conditioned Area:	2820	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	IC Construction	Rotate Angle:	0	Street:	
Permit Office:		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	Design Temp		Int Design Temp		Heating	Design	Daily Temp
			97.5 %	2.5 %	Winter	Summer	Degree Days	Moisture	Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

## BLOCKS

Number	Name	Area	Volume
1	Block1	2386	21474

## SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	2386	21474	Yes	8	4	1	Yes	Yes	Yes

## FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	235 ft	0	2386 ft²	----	0.33	0.33	0.34

## 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	Composition shingles	2764 ft²	698 ft²	Medium	N	0.85	No	0.9	No	0	30.3

## ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2386 ft²	N	N

## CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	2386 ft²	0.11	Wood

## INPUT SUMMARY CHECKLIST REPORT

## 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	14	8	9		132.0 ft²		0.23	0.75	0
___	2	W	Exterior	Frame - Wood	Main	13	2	8	9		24.0 ft²		0.23	0.75	0
___	3	N	Exterior	Frame - Wood	Main	13	7		9		63.0 ft²		0.23	0.75	0
___	4	E	Exterior	Frame - Wood	Main	13	2	8	9		24.0 ft²		0.23	0.75	0
___	5	N	Exterior	Frame - Wood	Main	13	13		9		117.0 ft²		0.23	0.75	0
___	6	E	Exterior	Frame - Wood	Main	13	13		9		117.0 ft²		0.23	0.75	0
___	7	N	Exterior	Frame - Wood	Main	13	28		9		252.0 ft²		0.23	0.75	0
___	8	E	Exterior	Frame - Wood	Main	13	34	4	9		309.0 ft²		0.23	0.75	0
___	9	S	Exterior	Frame - Wood	Main	13	14	2	9		127.5 ft²		0.23	0.75	0
___	10	E	Exterior	Frame - Wood	Main	13	4	8	9		42.0 ft²		0.23	0.75	0
___	11	S	Exterior	Frame - Wood	Main	13	7	8	10		76.7 ft²		0.23	0.75	0
___	12	E	Exterior	Frame - Wood	Main	13	4	8	10		46.7 ft²		0.23	0.75	0
___	13	S	Exterior	Frame - Wood	Main	13	14	2	10		141.7 ft²		0.23	0.75	0
___	14	W	Exterior	Frame - Wood	Main	13	5	4	10		53.3 ft²		0.23	0.75	0
___	15	S	Exterior	Frame - Wood	Main	13	5	8	10		56.7 ft²		0.23	0.75	0
___	16	W	Exterior	Frame - Wood	Main	13	39	4	9		354.0 ft²		0.23	0.75	0
___	17	S	Garage	Frame - Wood	Main	13	23	4	9		210.0 ft²		0.23	0.75	0

## DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
___	1	N	Insulated	Main	None	.4	2	8	6	8	17.8 ft²
___	2	S	Insulated	Main	None	.4	5		8		40 ft²
___	3	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	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
___	1	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	2	N	5	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	3	N	7	Vinyl	Low-E Double	Yes	0.33	0.22	N	96.0 ft²	11 ft 6 in	1 ft 4 in	None	None
___	4	N	7	Vinyl	Low-E Double	Yes	0.33	0.22	N	30.0 ft²	11 ft 6 in	1 ft 4 in	None	None
___	5	E	8	Vinyl	Low-E Double	Yes	0.33	0.22	N	20.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	6	E	8	Vinyl	Low-E Double	Yes	0.33	0.22	N	3.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	7	S	9	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft²	9 ft 6 in	1 ft 4 in	None	None
___	8	S	13	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft²	9 ft 6 in	1 ft 4 in	None	None
___	9	S	15	Vinyl	Low-E Double	Yes	0.33	0.22	N	8.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	10	W	16	Vinyl	Low-E Double	Yes	0.33	0.22	N	9.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	11	W	16	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
___	12	W	16	Vinyl	Low-E Double	Yes	0.33	0.22	N	3.0 ft²	1 ft 6 in	1 ft 4 in	None	None

**INPUT SUMMARY CHECKLIST REPORT**

GARAGE															
✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation									
_____	1	725.356 ft²	725.356 ft²	86.667 ft	9 ft	1									
INFILTRATION															
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50							
1	Wholehouse	Proposed ACH(50)	.000286	1789.5	98.24	184.76	.1128	5							
HEATING SYSTEM															
✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block		Ducts						
_____	1	Electric Heat Pump/	None	Singl	HSPF:8.5	42 kBtu/hr	1		sys#1						
COOLING SYSTEM															
✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts					
_____	1	Central Unit/	None	Singl	SEER: 14	42 kBtu/hr	1260 cfm	0.85	1	sys#1					
HOT WATER SYSTEM															
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation						
_____	1	Propane	None	Garage	0.59	40 gal	70 gal	120 deg	None						
SOLAR HOT WATER SYSTEM															
✓	FSEC Cert #	Company Name	System Model #		Collector Model #		Collector Area	Storage Volume	FEF						
_____	None	None					ft²								
DUCTS															
✓	#	---- Supply ----			---- Return ----			Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat Cool	
_____	1	Main	6	477.2 ft	Main	119.3 ft	Prop. Leak Free	Main	--- cfm	71.6 cfm	0.03	0.50	1	1	

**INPUT SUMMARY CHECKLIST REPORT****TEMPERATURES**

Programable Thermostat: Y

Ceiling Fans:

Cooling	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input checked="" type="checkbox"/>	Jun	<input checked="" type="checkbox"/>	Jul	<input checked="" type="checkbox"/>	Aug	<input checked="" type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input type="checkbox"/>	Nov	<input type="checkbox"/>	Dec
Heating	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input checked="" type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec
Venting	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input checked="" type="checkbox"/>	Apr	<input checked="" type="checkbox"/>	May	<input type="checkbox"/>	Jun	<input type="checkbox"/>	Jul	<input type="checkbox"/>	Aug	<input type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	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	78	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	68	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 ft <sup>2</sup>	0 ft	0.3	Main