

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Raphael Residence Street: City, State, Zip: , FL, Owner: Design Location: FL, Gainesville	Builder Name: Permit Office: Permit Number: Jurisdiction: County: Suwannee(Florida Climate Zone 2)
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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 5 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 3328 Conditioned floor area below grade (ft²) 0 7. Windows(265.0 sqft.) Description Area a. U-Factor: Dbl, U=0.26 265.00 ft² SHGC: SHGC=0.20 b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 1.500 ft Area Weighted Average SHGC: 0.200 8. Skylights Description Area U-Factor:(AVG) N/A N/A ft² SHGC(AVG): N/A 9. Floor Types Insulation Area a. Slab-On-Grade Edge Insulation R= 0.0 2865.00 ft² b. Floor over Garage R= 0.0 463.00 ft² c. N/A R= ft²	10. Wall Types(3024.3 sqft.) Insulation Area a. Concrete Block - Int Insul, Exterior R=13.0 2439.70 ft² b. Frame - Wood, Adjacent R=13.0 366.00 ft² c. Frame - Wood, Exterior R=13.0 218.67 ft² d. N/A 11. Ceiling Types(3328.0 sqft.) Insulation Area a. Single assembly, no ai (Unvented) R=21.0 3328.00 ft² b. N/A c. N/A 12. Roof(Metal, Unvent) Deck R=21.0 4000 ft² 13. Ducts, location & insulation level R ft² a. Sup: Main, Ret: Main, AH: Garage 6 333 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 48.0 SEER2:15.00 b. PTAC and Room Unit 12.0 EER:15.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 48.0 HSPF2:8.00 b. Electric Heat Pump 12.0 HSPF:8.00 16. Hot Water Systems a. PropaneTankless Cap: 1 gallons EF: 0.590 b. Conservation features None 17. Credits CF, Pstat
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Glass/Floor Area: 0.080	Total Proposed Modified Loads: 75.02	PASS
	Total Baseline Loads: 83.81	
NOTE: Proposed residence must have annual total normalized Modified Loads that are less than or equal to 95 percent of the annual total loads of the standard reference design in order to comply.		

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: _____ DATE: 5-6-25 I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: _____ DATE: 5/8/2025	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.
- Default duct leakage does not require a Duct Leakage Test Report.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 6.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT													
Title: RaphaelResidence		Bedrooms: 5		Address type: Street Address									
Building Type: User		Conditioned Area: 3328		Lot #: ---									
Owner:		Total Stories: 1		Block/SubDivision: ---									
Builder Home ID:		Worst Case: No		PlatBook: ---									
Builder Name:		Rotate Angle: 0		Street:									
Permit Office:		Cross Ventilation:		County: Suwannee									
Jurisdiction:		Whole House Fan:		City, State, Zip: ,									
Family Type: Detached		Terrain: Rural		FL,									
New/Existing: New (From Plans)		Shielding: Moderate/Rural											
Year Construct: 2025													
Comment:													

CLIMATE									
✓	Design Location	Tmy Site	Design Temp 97.5% 2.5%	Int Design Temp Winter Summer	Heating Degree Days	Design Moisture	Daily temp Range		
	___ FL, Gainesville	FL_GAINESVILLE_REGIONA	32 92	70 75	1305.5	51	Medium		

BLOCKS				
✓	Number	Name	Area	Volume
	___ 1	Block1	2865	25785 cu ft
	___ 2	Block2	463	3704 cu ft

SPACES										
✓	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
	___ 1	Main	2865	25785	Yes	8	4	Yes	Yes	Yes
	___ 2	bonus Room	463	3704	No	2	1	Yes	Yes	Yes

FLOORS (Total Exposed Area = 3328 sq.ft.)											
✓	#	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim. Joist	U-Factor	SlabInsul. Vert/Horiz	Tile	Wood	Carpet
	___ 1	Slab-On-Grade Edge Ins	Main	308	2865 sqft	0.0 ---	0.563	0 (ft)/0 (ft)	0.20	0.60	0.20
	___ 2	Floor over Garage	bonus Room	---	463 sqft	---	0.0 0.257	-----	0.66	0.00	0.34

ROOF														
✓	#	Type	Materials	Roof Area	Gable Area	Framing. Fract.	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
	___ 1	Gable or shed	Metal	4000 ft²	1110 ft²	0.11	Unf, Gal.	N	0.7	No	0.7	No	21	33.69

ATTIC							
✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
	___ 1	No attic	Unvented	0	3328 ft²	N	N

INPUT SUMMARY CHECKLIST REPORT

CEILING															(Total Exposed Area = 3328 sq.ft.)			
✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	FramingFrac.	Truss Type										
___ 1	Single assembly, no airspace(Unvented)	Main	21.0	Blown	2865.0ft²	0.025	0.11	Wood										
___ 2	Single assembly, no airspace(Unvented)	bonus Room	21.0	Blown	463.0ft²	0.025	0.11	Wood										

WALLS															(Total Exposed Area = 3024 sq.ft.)			
✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade			
___ 1	N	Exterior	Conc. Blk - Int Ins	Main	13.0	12.0	8	9.0	0	114.0	0.064	0	0	0.75	0 %			
___ 2	E	Exterior	Conc. Blk - Int Ins	Main	13.0	11.0	0	9.0	0	99.0	0.064	0	0	0.75	0 %			
___ 3	N	Exterior	Conc. Blk - Int Ins	Main	13.0	31.0	4	10.0	0	313.3	0.064		0	0.75	0 %			
___ 4	W	Exterior	Conc. Blk - Int Ins	Main	13.0	24.0	0	9.0	0	216.0	0.064		0	0.75	0 %			
___ 5	N	Exterior	Conc. Blk - Int Ins	Main	13.0	14.0	10	9.0	0	133.5	0.064		0	0.75	0 %			
___ 6	E	Exterior	Conc. Blk - Int Ins	Main	13.0	2.0	0	9.0	0	18.0	0.064		0	0.75	0 %			
___ 7	N	Exterior	Conc. Blk - Int Ins	Main	13.0	12.0	10	9.0	0	115.5	0.064		0	0.75	0 %			
___ 8	E	Exterior	Conc. Blk - Int Ins	Main	13.0	34.0	0	9.0	0	306.0	0.064		0	0.75	0 %			
___ 9	S	Garage	Frame - Wood	Main	13.0	40.0	8	9.0	0	366.0	0.084		0.23	0.75	0 %			
___ 10	S	Exterior	Conc. Blk - Int Ins	Main	13.0	10.0	8	10.0	0	106.7	0.064		0	0.75	0 %			
___ 11	E	Exterior	Conc. Blk - Int Ins	Main	13.0	4.0	0	10.0	0	40.0	0.064		0	0.75	0 %			
___ 12	S	Exterior	Conc. Blk - Int Ins	Main	13.0	20.0	8	10.0	0	206.7	0.064	0	0	0.75	0 %			
___ 13	E	Exterior	Conc. Blk - Int Ins	Main	13.0	9.0	4	9.0	0	84.0	0.064	0	0	0.75	0 %			
___ 14	S	Exterior	Conc. Blk - Int Ins	Main	13.0	12.0	8	9.0	0	114.0	0.064	0	0	0.75	0 %			
___ 15	W	Exterior	Conc. Blk - Int Ins	Main	13.0	13.0	8	9.0	0	123.0	0.064		0	0.75	0 %			
___ 16	S	Exterior	Conc. Blk - Int Ins	Main	13.0	5.0	0	9.0	0	45.0	0.064		0	0.75	0 %			
___ 17	W	Exterior	Conc. Blk - Int Ins	Main	13.0	26.0	2	9.0	0	235.5	0.064		0	0.75	0 %			
___ 18	N	Exterior	Conc. Blk - Int Ins	Main	13.0	5.0	0	9.0	0	45.0	0.064		0	0.75	0 %			
___ 19	W	Exterior	Conc. Blk - Int Ins	Main	13.0	13.0	10	9.0	0	124.5	0.064		0	0.75	0 %			
___ 20	E	Exterior	Frame - Wood	bonus Room	13.0	14.0	0	8.0	0	112.0	0.084		0.23	0.75	0 %			
___ 21	S	Exterior	Frame - Wood	bonus Room	13.0	13.0	4	8.0	0	106.7	0.084		0.23	0.75	0 %			

DOORS															(Total Exposed Area = 188 sq.ft.)			
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area							
___ 1	N	Exterior	Insulated	Main	None	0.46	6.00	0	8.00	0	48.0ft²							
___ 2	N	Exterior	Insulated	Main	None	0.46	6.00	0	8.00	0	48.0ft²							
___ 3	W	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²							
___ 4	S	Garage	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²							
___ 5	S	Exterior	Insulated	Main	None	0.46	6.00	0	8.00	0	48.0ft²							

WINDOWS															(Total Exposed Area = 265 sq.ft.)			
✓ #	Ornt	Wall ID	Frame	Panes	NFRC U-Factor	SHGC	Imp	Storm	Total Area (ft²)	Same Units	Width (ft)	Height (ft)	--Overhang-- Depth (ft)	Sep. (ft)	Interior Shade	Screen		
___ 1	N	1	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None	
___ 2	N	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	24.0	3	2.00	4.00	1.5	1.3	None	None	
___ 3	N	5	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None	
___ 4	N	7	Vinyl	Low-E Double	Y	0.26	0.20	N	N	12.0	1	2.00	6.00	1.5	1.3	None	None	
___ 5	E	8	Vinyl	Low-E Double	Y	0.26	0.20	N	N	8.0	2	4.00	1.00	1.5	1.3	None	None	
___ 6	E	8	Vinyl	Low-E Double	Y	0.26	0.20	N	N	8.0	2	2.00	2.00	1.5	1.3	None	None	
___ 7	S	10	Vinyl	Low-E Double	Y	0.26	0.20	N	N	8.0	1	2.00	4.00	1.5	1.3	None	None	
___ 8	S	12	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None	
___ 9	S	14	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None	
___ 10	W	17	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None	
___ 11	E	20	Vinyl	Low-E Double	Y	0.26	0.20	N	N	4.0	1	2.00	2.00	1.5	1.3	None	None	
___ 12	E	20	Vinyl	Low-E Double	Y	0.26	0.20	N	N	15.0	1	3.00	5.00	1.5	1.3	None	None	

INPUT SUMMARY CHECKLIST REPORT

WINDOWS(Continued)

___ 13S	21	Vinyl	Low-E Double	Y	0.26	0.20	N	N	6.0	1	2.00	3.00	1.5	1.3	None	None
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INFILTRATION

✓ #	Scope	Method	SLA	CFM50	ELA	EqlA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00034	2949	161.79	303.73	0.1225	6.0	All	29489 cu ft

GARAGE

✓ #	Floor Area	Length	Width	Roof Area	Exposed Perimeter	Area Under Uncond.	Avg. Wall Height	Exposed Wall Insulation
___ 1	729 ft²	26.3 ft²	27.7 ft²	729 ft²	72 ft	266 ft	9 ft	8

MASS

✓ #	Mass Type	Area	Thickness	FurnitureFraction	Space
___ 1	Default(8lbs/sq.ft.)	0 ft²	0 ft	0.30	Main
___ 2	Default(8lbs/sq.ft.)	0 ft²	0 ft	0.30	bonus Room

HEATING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----GeothermalHeatPump----				Ducts	Block
						Entry	Power	Volt	Current		
___ 1	Electric Heat Pump	None/Single		HSPF2: 8.00	48.0		0.00	0.00	0.00	sys#1	1
___ 2	Electric Heat Pump	None/Single		HSPF: 8.00	12.0		0.00	0.00	0.00	sys#0	2

COOLING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	None/Single		SEER2:15.0	48.0	1440	0.75	sys#1	1
___ 2	PTAC and Room Unit	None/Single		EER:15	12.0	360	0.75	Ductless	2

HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixt. Flow	Trap	Pipe Ins.	Pipe length
___ 1	Propane	Tankless	Exterior	0.59 (0.59)	1.0 gal	80 gal	120 deg	Standard	Yes	None	99
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits	
___ 1	No		NA	NA	NA	No	NA	NA	NA	None	

DUCTS

✓ Duct #	-----Supply----- Location R-Value Area	-----Return----- Location R-Value Area	Leakage Type	AHU Location	CFM 25 TOT OUT	QN OUT	AHU SEALED	HVAC # Heat Cool
___ 1 Main	6.0 333 ft²	Main 6.0 83 ft²	Default Leakage	Garage	(Default) (Default)			1 1

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES														
Programable Thermostat: Y					Ceiling Fans: N									
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 2066 Reference														
✓	Schedule Type	1	2	3	4	5	6	Hours	7	8	9	10	11	12
___	Cooling (WD)	AM PM	78 80	78 80	78 80	78 80	78 80	78 78	78 78	78 78	80 78	80 78	80 78	80 78
___	Cooling (WEH)	AM PM	78 80	78 80	78 80	78 80	78 80	78 78	78 78	78 78	80 78	80 78	80 78	80 78
___	Heating (WD)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68
___	Heating (WEH)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68