

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Farley Residence Street: SE Press Ruth Drive City, State, Zip: Lake City, FL, 32025 Owner: Gary & Lyndi Farley Design Location: FL, Gainesville	Builder Name: Permit Office: Columbia County 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 Detached 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 (ft²) 2538 Conditioned floor area below grade (ft²) 0 7. Windows(368.0 sqft.) Description Area a. U-Factor: Dbl, U=0.36 368.00 ft² SHGC: SHGC=0.25 b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 7.468 ft Area Weighted Average SHGC: 0.250 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 2538.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(2400.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=19.0 2068.50 ft² b. Frame - Wood, Adjacent R=13.0 225.00 ft² c. Frame - Wood, Exterior R=13.0 106.50 ft² d. N/A 11. Ceiling Types(2791.7 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=38.0 2791.70 ft² b. N/A c. N/A 12. Roof(Metal, Vented) Deck R=0.0 3050 ft² 13. Ducts, location & insulation level R ft² a. Sup: Attic, Ret: Attic, AH: Garage 6 635 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 30.9 SEER2:15.50 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 38.7 HSPF2:8.80 16. Hot Water Systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None 17. Credits CV, Pstat
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Glass/Floor Area: 0.145	Total Proposed Modified Loads: 56.60	PASS
	Total Baseline Loads: 64.17	

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: <u>Will C. May</u> DATE: <u>8 / 13 / 2025</u> 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.
- 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 7.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT													
Title:	Farley Residence			Bedrooms:	3	Address type:	Street Address						
Building Type:	User			Conditioned Area:	2538	Lot #:	---						
Owner:	Gary & Lyndi Farley			Total Stories:	1	Block/SubDivision:	---						
Builder Home ID:				Worst Case:	No	PlatBook:	---						
Builder Name:				Rotate Angle:	0	Street:	SE Press Ruth Drive						
Permit Office:	Columbia County			Cross Ventilation:	Yes	County:	Columbia						
Jurisdiction:				Whole House Fan:	No	City, State, Zip:	Lake City, FL, 32025						
Family Type:	Detached			Terrain:	Suburban								
New/Existing:	New (From Plans)			Shielding:	Suburban								
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	2538	22842 cu ft										
SPACES													
✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated				
___ 1	1st Floor	2538	22842	Yes	8	3	Yes	Yes	Yes				
FLOORS (Total Exposed Area = 2538 sq.ft.)													
✓ #	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim.	U-Factor Joist	Slab Insul. Vert/Horiz	Tile	Wood	Carpet			
___ 1	Slab-On-Grade Edge Ins	1st Floor	266.667	2538 sqft	0.0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00		
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	3050 ft²	474 ft²	0.11	Medium	Y	0.96	No	0.9	No	0	33.69
ATTIC													
✓ #	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC							
___ 1	Partial cathedral ceiling	Vented	300	2538 ft²	Y	N							
CEILING (Total Exposed Area = 2792 sq.ft.)													
✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type					
___ 1	Flat ceiling under attic(Vented)	1st Floor	38.0	Double Batt	2791.7ft²	0.024	0.11	Wood					

INPUT SUMMARY CHECKLIST REPORT

WALLS																(Total Exposed Area = 2400 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	SW	Exterior	Frame - Wood	1st Floor	19.0	11.0	4	9.0	0	102.0	0.061		0.23	0.75	0 %				
___ 2	N	Exterior	Frame - Wood	1st Floor	19.0	6.0	0	9.0	0	54.0	0.061		0.23	0.75	0 %				
___ 3	W	Exterior	Frame - Wood	1st Floor	19.0	32.0	8	9.0	0	294.0	0.061		0.23	0.75	0 %				
___ 4	S	Exterior	Frame - Wood	1st Floor	19.0	5.0	6	9.0	0	49.5	0.061		0.23	0.75	0 %				
___ 5	W	Exterior	Frame - Wood	1st Floor	19.0	5.0	4	9.0	0	48.0	0.061		0.23	0.75	0 %				
___ 6	S	Exterior	Frame - Wood	1st Floor	19.0	20.0	4	9.0	0	183.0	0.061		0.23	0.75	0 %				
___ 7	E	Exterior	Frame - Wood	1st Floor	19.0	5.0	4	9.0	0	48.0	0.061		0.23	0.75	0 %				
___ 8	S	Exterior	Frame - Wood	1st Floor	19.0	5.0	6	9.0	0	49.5	0.061		0.23	0.75	0 %				
___ 9	E	Exterior	Frame - Wood	1st Floor	19.0	12.0	2	9.0	0	109.5	0.061		0.23	0.75	0 %				
___ 10	S	Exterior	Frame - Wood	1st Floor	19.0	4.0	0	9.0	0	36.0	0.061		0.23	0.75	0 %				
___ 11	E	Exterior	Frame - Wood	1st Floor	19.0	31.0	10	9.0	0	286.5	0.061		0.23	0.75	0 %				
___ 12	S	Exterior	Frame - Wood	1st Floor	19.0	8.0	0	9.0	0	72.0	0.061		0.23	0.75	0 %				
___ 13	S	Exterior	Frame - Wood	1st Floor	19.0	15.0	4	9.0	0	138.0	0.061		0.23	0.75	0 %				
___ 14	E	Exterior	Frame - Wood	1st Floor	19.0	25.0	4	9.0	0	228.0	0.061		0.23	0.75	0 %				
___ 15	N	Exterior	Frame - Wood	1st Floor	19.0	41.0	2	9.0	0	370.5	0.061		0.23	0.75	0 %				
___ 16	W	Garage	Frame - Wood	1st Floor	13.0	25.0	0	9.0	0	225.0	0.084		0.23	0.75	0 %				
___ 17	N	Exterior	Frame - Wood	1st Floor	13.0	11.0	10	9.0	0	106.5	0.084		0.23	0.75	0 %				

DOORS												(Total Exposed Area = 20 sq.ft.)		
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
___ 1	W	Garage	Insulated	1st Floor	None	0.46	3.00	0	6.00	8	20.0ft²			

WINDOWS																	(Total Exposed Area = 368 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	SW	1	Vinyl	Low-E Double	Y	0.36	0.25	N	N	8.0	1	2.00	4.00	13.5	1.0	None	None			
___ 2	W	3	Vinyl	Low-E Double	Y	0.36	0.25	N	N	60.0	4	3.00	5.00	7.5	1.0	None	None			
___ 3	W	3	TIM	Low-E Double	Y	0.36	0.25	N	N	40.0	1	6.00	6.67	7.5	1.0	None	None			
___ 4	S	6	Vinyl	Low-E Double	Y	0.36	0.25	N	N	6.0	1	2.00	3.00	7.5	1.0	None	None			
___ 5	S	4	Vinyl	Low-E Double	Y	0.36	0.25	N	N	10.0	1	2.00	5.00	12.3	1.0	None	None			
___ 6	S	8	Vinyl	Low-E Double	Y	0.36	0.25	N	N	10.0	1	2.00	5.00	12.5	1.0	None	None			
___ 7	E	9	Vinyl	Low-E Double	Y	0.36	0.25	N	N	30.0	2	3.00	5.00	13.5	1.0	None	None			
___ 8	E	11	Vinyl	Low-E Double	Y	0.36	0.25	N	N	80.0	4	3.00	6.67	9.5	1.0	None	None			
___ 9	E	11	Vinyl	Low-E Double	Y	0.36	0.25	N	N	18.0	1	6.00	3.00	9.5	1.0	None	None			
___ 10	S	12	TIM	Low-E Double	Y	0.36	0.25	N	N	20.0	1	3.00	6.67	7.5	1.0	None	None			
___ 11	S	13	Vinyl	Low-E Double	Y	0.36	0.25	N	N	20.0	2	2.00	5.00	1.5	1.0	None	None			
___ 12	E	14	Vinyl	Low-E Double	Y	0.36	0.25	N	N	30.0	2	3.00	5.00	1.0	4.0	None	None			
___ 13	E	14	Vinyl	Low-E Double	Y	0.36	0.25	N	N	6.0	1	2.00	3.00	1.0	4.0	None	None			
___ 14	N	15	Vinyl	Low-E Double	Y	0.36	0.25	N	N	6.0	1	2.00	3.00	1.5	1.0	None	None			
___ 15	N	15	Vinyl	Low-E Double	Y	0.36	0.25	N	N	16.0	1	4.00	4.00	1.5	1.0	None	None			
___ 16	N	15	Vinyl	Low-E Double	Y	0.36	0.25	N	N	8.0	2	4.00	1.00	1.5	1.0	None	None			

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00040	2665	146.20	274.48	0.1438	7.0	All	22842 cu ft

INPUT SUMMARY CHECKLIST REPORT

GARAGE													
✓ #	Floor Area	Length	Width	Roof Area	Exposed Perimeter	Area Under Uncond.	Avg. Wall Height	Exposed Wall Insulation					
___ 1	628 ft²	25.0 ft²	25.1 ft²	628 ft²	66 ft	628 ft	9 ft	1					

MASS					
✓ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	1st Floor

HEATING SYSTEM										
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal Entry	HeatPump---- Power	Ducts Volt	Block Current	
___ 1	Electric Heat Pump	None/Single		HSPF2: 8.80	38.7		0.00	0.00	0.00	sys#1 1

COOLING SYSTEM									
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	None/Single		SEER2:15.5	30.9	930	0.75	sys#1	1

HOT WATER SYSTEM											
✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixt. Flow	Trap	Pipe Ins.	Pipe length
___ 1	Electric	None	Garage	0.92 (0.92)	50.0 gal	40 gal	120 deg	Standard	Yes	None	12
	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	Attic	6.0	635 ft²	Attic	6.0	127 ft²	Default Leakage	Garage	(Default)	(Default)		1 1	

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

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES(Continued)

___ 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