

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Walden Residence Street: City, State, Zip: , FL, Owner: Design Location: FL, Gainesville	Builder Name: 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 Detached 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) 2092 Conditioned floor area below grade (ft²) 0 7. Windows(211.0 sqft.) Description Area a. U-Factor: Dbl, U=0.26 211.00 ft² SHGC: SHGC=0.20 b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 5.936 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 2092.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(1798.5 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 1632.00 ft² b. Frame - Wood, Adjacent R=13.0 166.50 ft² c. N/A d. N/A 11. Ceiling Types(2092.0 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=30.0 2092.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0 2514 ft² 13. Ducts, location & insulation level R ft² a. Sup: Attic, Ret: Attic, AH: Main 6 418 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 36.0 SEER:15.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 36.0 HSPF:8.50 16. Hot Water Systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None 17. Credits CF, Pstat
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Glass/Floor Area: 0.101	Total Proposed Modified Loads: 54.45	PASS
	Total Baseline Loads: 54.53	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY:  DATE: 12-13-22 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 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT												
Title: Walden Residence		Bedrooms: 4		Address type: Street Address								
Building Type: User		Conditioned Area: 2092		Lot #: ---								
Owner:		Total Stories: 1		Block/SubDivision: ---								
Builder Name:		Worst Case: No		PlatBook: ---								
Permit Office:		Rotate Angle: 0		Street:								
Jurisdiction:		Cross Ventilation:		County: Columbia								
Family Type: Detached		Whole House Fan:		City, State, Zip: , FL,								
New/Existing: New (From Plans)		Terrain: Rural										
Year Construct: 2022		Shielding: Moderate/Rural										
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	2092	18828 cu ft									
SPACES												
✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated			
___ 1	Main	2092	18828	Yes	8	4	Yes	Yes	Yes			
FLOORS (Total Exposed Area = 2092 sq.ft.)												
✓ #	Floor Type	Space	Exposed Perim	Perimeter R-Value		Area	U-Factor	Joist R-Value	Tile	Wood	Carpet	
___ 1	Slab-On-Grade Edge Ins	Main	230	0		2092 ft	0.563	---	0.20	0.60	0.20	
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	2514 ft²	698 ft²	Medium	N	0.85	No	0.9	No	0	33.69
ATTIC												
✓ #	Type	Ventilation	Vent Ratio (1 in)		Area	RBS	IRCC					
___ 1	Full attic	Vented	300		2092 ft²	N	N					
CEILING (Total Exposed Area = 2092 sq.ft.)												
✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type				
___ 1	Flat ceiling under attic(Vented)	Main	30.0	Blown	2092.0ft²	0.053	0.11	Wood				

INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 1799 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	Frame - Wood	Main	13.0	33.0	2	9.0	0	298.5	0.094		0.23	0.75	0 %				
___ 2	N	Exterior	Frame - Wood	Main	13.0	21.0	10	9.0	0	196.5	0.094		0.23	0.75	0 %				
___ 3	E	Exterior	Frame - Wood	Main	13.0	17.0	8	9.0	0	159.0	0.094		0.23	0.75	0 %				
___ 4	E	Garage	Frame - Wood	Main	13.0	18.0	6	9.0	0	166.5	0.094		0.23	0.75	0 %				
___ 5	S	Exterior	Frame - Wood	Main	13.0	13.0	8	9.0	0	123.0	0.094		0.23	0.75	0 %				
___ 6	S	Exterior	Frame - Wood	Main	13.0	6.0	0	9.0	0	54.0	0.094		0.23	0.75	0 %				
___ 7	E	Exterior	Frame - Wood	Main	13.0	1.0	0	9.0	0	9.0	0.094		0.23	0.75	0 %				
___ 8	S	Exterior	Frame - Wood	Main	13.0	38.0	4	9.0	0	345.0	0.094		0.23	0.75	0 %				
___ 9	W	Exterior	Frame - Wood	Main	13.0	9.0	2	9.0	0	82.5	0.094		0.23	0.75	0 %				
___ 10	S	Exterior	Frame - Wood	Main	13.0	6.0	0	9.0	0	54.0	0.094		0.23	0.75	0 %				
___ 11	W	Exterior	Frame - Wood	Main	13.0	12.0	4	9.0	0	111.0	0.094		0.23	0.75	0 %				
___ 12	N	Exterior	Frame - Wood	Main	13.0	6.0	0	9.0	0	54.0	0.094		0.23	0.75	0 %				
___ 13	W	Exterior	Frame - Wood	Main	13.0	16.0	2	9.0	0	145.5	0.094		0.23	0.75	0 %				

DOORS										(Total Exposed Area = 119 sq.ft.)			
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area		
___ 1	N	Exterior	Insulated	Main	None	0.40	3.00	0	8.00	0	24.0ft²		
___ 2	E	Garage	Insulated	Main	None	0.40	3.00	0	6.00	8	20.0ft²		
___ 3	E	Garage	Insulated	Main	None	0.40	4.00	0	6.00	8	26.7ft²		
___ 4	S	Exterior	Insulated	Main	None	0.40	6.00	0	8.00	0	48.0ft²		

WINDOWS															(Total Exposed Area = 211 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	15.0	1	3.00	5.00	9.5	2.3	None	None	
___ 2	N	1	Vinyl	Low-E Double	Y	0.26	0.20	N	N	30.0	2	2.50	6.00	9.5	2.3	None	None	
___ 3	N	1	Vinyl	Low-E Double	Y	0.26	0.20	N	N	18.0	3	2.00	3.00	9.5	2.3	None	None	
___ 4	N	2	Vinyl	Low-E Double	Y	0.26	0.20	N	N	30.0	2	3.00	5.00	1.5	2.3	None	None	
___ 5	E	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	16.0	1	4.00	4.00	1.5	2.3	None	None	
___ 6	S	5	Vinyl	Low-E Double	Y	0.26	0.20	N	N	15.0	1	3.00	5.00	1.5	2.3	None	None	
___ 7	S	8	Vinyl	Low-E Double	Y	0.26	0.20	N	N	72.0	4	3.00	6.00	7.5	2.3	None	None	
___ 8	W	13	Vinyl	Low-E Double	Y	0.26	0.20	N	N	15.0	1	3.00	5.00	1.5	2.3	None	None	

INFILTRATION											
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume	
___ 1	Wholehouse	Proposed ACH(50)	0.00029	1569	86.08	161.61	0.1027	5.0	All	18828 cu ft	

GARAGE					
✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	462 ft²	462 ft²	65 ft	9 ft	1

INPUT SUMMARY CHECKLIST REPORT

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

HEATING SYSTEM										
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal HeatPump---		Ducts	Block	
						Entry	Power	Volt	Current	
___ 1	Electric Heat Pump	None/Single		HSPF: 8.50	36.0		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		SEER:15.0	36.0	1080	0.85	sys#1	1

HOT WATER SYSTEM										
✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Electric	None	Garage	0.92 (0.92)	50.00 gal	70 gal	120 deg	Standard	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 #	Location	-----Supply----- R-Value	Area	Location	-----Return----- R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
___ 1	Attic	6.0	418 ft²	Attic	6.0	105 ft²	Default Leakage	Main	(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												
Schedule Type	1	2	3	4	5	6	7	8	9	10	11	12	
___ Cooling (WD)	AM PM	78 80	78 80	78 80	78 80	78 78	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 78	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