

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Don Wallace Residence Street: 130 SW Cooper Terrace City, State, Zip: Lake City, FL, 32038 Owner: Don Wallace Design Location: FL, Gainesville	Builder Name: Permit Office: Permit Number: Jurisdiction: Columbia County: columbia(Florida Climate Zone 2)
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1. New construction or existing Existing (Projected) 2. Single family or multiple family Attached 3. Number of units, if multiple family 1 4. Number of Bedrooms 1 5. Is this a worst case? No 6. Conditioned floor area above grade (ft ²) 1836 Conditioned floor area below grade (ft ²) 0 7. Windows(79.0 sqft.) Description Area a. U-Factor: Dbl, U=0.55 79.00 ft ² SHGC: SHGC=0.60 b. U-Factor: N/A ft ² SHGC: c. U-Factor: N/A ft ² SHGC: Area Weighted Average Overhang Depth: 1.500 ft Area Weighted Average SHGC: 0.600 8. Skylights Description Area U-Factor:(AVG) N/A N/A ft ² SHGC(AVG): N/A 9. Floor Types Insulation Area a. Slab-On-Grade Edge Insulation R= 0.0 1836.00 ft ² b. N/A R= ft ² c. N/A R= ft ²	10. Wall Types(1575.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=19.0 1507.50 ft ² b. Frame - Wood, Adjacent R=19.0 67.50 ft ² c. N/A d. N/A 11. Ceiling Types(1836.0 sqft.) Insulation Area a. Sloped ceiling under a (Vented) R=38.0 1836.00 ft ² b. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0 2053 ft ² 13. Ducts, location & insulation level R ft ² a. Sup: Attic, Ret: Attic, AH: Main 6 367 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 34.6 SEER2:15.40 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 34.6 HSPF2:7.80 16. Hot Water Systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None CF 17. Credits
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Glass/Floor Area: 0.043	Total Proposed Modified Loads: 39.35	PASS
	Total Baseline Loads: 39.69	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: _____ DATE: _____ I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: <u>Don Wallace</u> DATE: <u>11/28/23</u>	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:	Don Wallace Residence	Bedrooms:	1	Address type:	Street Address
Building Type:	User	Conditioned Area:	1836	Lot #:	---
Owner:	Don Wallace	Total Stories:	1	Block/SubDivision:	---
Builder Home ID:		Worst Case:	No	PlatBook:	---
Builder Name:		Rotate Angle:	0	Street:	130 SW Cooper Terrace
Permit Office:		Cross Ventilation:		County:	columbia
Jurisdiction:	Columbia	Whole House Fan:		City, State, Zip:	Lake City, FL, 32038
Family Type:	Attached	Terrain:	Suburban		
New/Existing:	Existing (Projected)	Shielding:	Suburban		
Year Construct:	2006				
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	1836	16524 cu ft

SPACES

✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___ 1	Main	1836	16524	Yes	2	1	Yes	Yes	Yes

FLOORS

(Total Exposed Area = 1836 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	Main		1836 sqft	0	---	0.571	0 (ft)/0 (ft)	0.30	0.00 0.70

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	2053 ft²	460 ft²	Medium	N	0.96	No	0.9	No	0	26.57

ATTIC

✓ #	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___ 1	Full attic	Vented	300	1836 ft²	N	N

CEILING

(Total Exposed Area = 1836 sq.ft.)

✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___ 1	Sloped ceiling under attic(Vented)	Main	38.0	Blown	1836.0ft²	0.024	0.11	Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 1575 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	E	Exterior	Frame - Wood	Main	19.0	51.0	0	9.0	0	459.0	0.061		0.23	0.75	0 %			
2	S	Exterior	Frame - Wood	Main	19.0	36.0	0	9.0	0	324.0	0.061		0.23	0.75	0 %			
3	N	Garage	Frame - Wood	Main	19.0	7.0	6	9.0	0	67.5	0.061		0.23	0.75	0 %			
4	N	Exterior	Frame - Wood	Main	19.0	29.0	6	9.0	0	265.5	0.061		0.23	0.75	0 %			
5	W	Exterior	Frame - Wood	Main	19.0	51.0	0	9.0	0	459.0	0.061		0.23	0.75	0 %			

DOORS												(Total Exposed Area = 60 sq.ft.)		
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
1	W(Front)	Garage	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			
3	E	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			

WINDOWS															(Total Exposed Area = 79 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	W	5	Vinyl	Low-E Double	Y	0.55	0.60	N	N	30.0	2	3.00	5.00	1.5	1.0	Drapes/blinds	None
2	W	5	Vinyl	Low-E Double	Y	0.55	0.60	N	N	6.0	1	3.00	2.00	1.5	1.0	Drapes/blinds	None
3	W	5	Vinyl	Low-E Double	Y	0.55	0.60	N	N	8.0	1	2.00	4.00	1.5	1.0	Drapes/blinds	None
4	S	2	Vinyl	Low-E Double	Y	0.55	0.60	N	N	7.5	1	2.50	3.00	1.5	1.0	Drapes/blinds	None
5	S	2	Vinyl	Low-E Double	Y	0.55	0.60	N	N	12.0	1	6.00	2.00	1.5	1.0	Drapes/blinds	None
6	E	1	Vinyl	Low-E Double	Y	0.55	0.60	N	N	7.5	1	2.50	3.00	1.5	1.0	Drapes/blinds	None
7	E	1	Vinyl	Low-E Double	Y	0.55	0.60	N	N	8.0	1	2.00	4.00	1.5	1.0	Drapes/blinds	None

INFILTRATION											
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume	
1	Wholehouse	Proposed ACH(50)	0.00034	1652	90.66	170.20	0.1232	6.0	All	16524 cu ft	

GARAGE					
✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	1080 ft²	1080 ft²	64 ft	8 ft	1

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	Split/Single		HSPF2: 7.80	34.6		0.00	0.00	0.00	sys#1 1

INPUT SUMMARY CHECKLIST REPORT

COOLING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	Split/Single		SEER2:15.4	34.6	1038	0.75	sys#1	1

HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Electric	None	Main	0.92 (0.92)	50.00 gal	40 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	Return R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
___ 1	Attic	6.0	367 ft²	Attic	6.0	92 ft²	Default Leakage	Main	(Default)	(Default)		1 1

TEMPERATURES

Programable Thermostat: N				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 2006 Reference													
✓ Schedule Type		1	2	3	4	5	6	Hours 7	8	9	10	11	12
___ Cooling (WD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 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	78 78
___ Heating (WD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68
___ Heating (WEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68