

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Bootle 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) 2328 Conditioned floor area below grade (ft²) 0 7. Windows(304.0 sqft.) Description Area a. U-Factor: Dbl, U=0.26 304.00 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 2328.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(2626.7 sqft.) Insulation Area a. Frame - Wood, Exterior R=19.0 2350.00 ft² b. Frame - Wood, Adjacent R=13.0 276.67 ft² c. N/A d. N/A 11. Ceiling Types(2328.0 sqft.) Insulation Area a. Single assembly, no ai (Unvented) R=30.0 2328.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Unvent) Deck R=30.0 2695 ft² 13. Ducts, location & insulation level R ft² a. Sup: Main, Ret: Main, AH: Garage 6 454 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 42.0 SEER2:14.30 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 42.0 HSPF2:7.50 16. Hot Water Systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None Pstat 17. Credits
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Glass/Floor Area: 0.131	Total Proposed Modified Loads: 48.05	PASS
	Total Baseline Loads: 63.39	
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: 6-21-24 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 with a proposed duct leakage Qn requires a PERFORMANCE 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.
- 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 4.72 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:Bootle Residence

Building Type:User

Owner:

Builder Home ID:

Builder Name:

Permit Office:

Jurisdiction:

Family Type:Detached

New/Existing:New (From Plans)

Year Construct:2024

Comment:

Bedrooms:4

Conditioned Area:2328

Total Stories:1

Worst Case:No

Rotate Angle:0

Cross Ventilation:

Whole House Fan:

Terrain:Rural

Shielding:Moderate/Rural

Address type:Street Address

Lot #:---

Block/SubDivision:---

PlatBook:---

Street:

County:Columbia

City, State, Zip: , FL,

CLIMATE

✓Design Location

Tmy Site

Design Temp97.5%2.5%

Int Design TempWinterSummer

Heating Degree Days

Design Moisture

Daily temp Range

___FL, Gainesville

FL_GAINESVILLE_REGIONA

3292

7075

1305.5

51

Medium

BLOCKS

✓Number

Name

Area

Volume

___1

Block1

2328

20952 cu ft

SPACES

✓Number

Name

Area

Volume

Kitchen

Occupants

Bedrooms

Finished

Cooled

Heated

___1

Main

2328

20952

Yes

8

4

Yes

Yes

Yes

FLOORS

(Total Exposed Area = 2328 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

269

2328 sqft

0

0.563

2 (ft)/0 (ft)

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

2695 ft²

680 ft²

Dark

N

0.92

No

0.9

No

30

30.26

ATTIC

✓#

Type

Ventilation

Vent Ratio (1 in)

Area

RBS

IRCC

___1

No attic

Unvented

0

2328 ft²

N

N

CEILING

(Total Exposed Area = 2328 sq.ft.)

✓#

Ceiling Type

Space

R-Value

Ins. Type

Area

U-Factor

Framing Frac.

Truss Type

___1

Single assembly, no airspace(Unvented)

Main

30.0

Blown

2328.0ft²

0.032

0.11

Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 2627 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	19.0	15.0	8	10.0	0	156.7	0.071		0.23	0.75	0 %				
___ 2	E	Exterior	Frame - Wood	Main	19.0	13.0	0	10.0	0	130.0	0.071		0.23	0.75	0 %				
___ 3	N	Exterior	Frame - Wood	Main	19.0	29.0	8	10.0	0	296.7	0.071		0.23	0.75	0 %				
___ 4	N	Garage	Frame - Wood	Main	13.0	27.0	8	10.0	0	276.7	0.094		0.23	0.75	0 %				
___ 5	E	Exterior	Frame - Wood	Main	19.0	29.0	2	10.0	0	291.7	0.071		0.23	0.75	0 %				
___ 6	S	Exterior	Frame - Wood	Main	19.0	14.0	10	10.0	0	148.3	0.071		0.23	0.75	0 %				
___ 7	W	Exterior	Frame - Wood	Main	19.0	2.0	0	10.0	0	20.0	0.071		0.23	0.75	0 %				
___ 8	S	Exterior	Frame - Wood	Main	19.0	8.0	4	10.0	0	83.3	0.071		0.23	0.75	0 %				
___ 9	E	Exterior	Frame - Wood	Main	19.0	7.0	0	10.0	0	70.0	0.071		0.23	0.75	0 %				
___ 10	S	Exterior	Frame - Wood	Main	19.0	31.0	0	10.0	0	310.0	0.071		0.23	0.75	0 %				
___ 11	W	Exterior	Frame - Wood	Main	19.0	3.0	0	10.0	0	30.0	0.071		0.23	0.75	0 %				
___ 12	S	Exterior	Frame - Wood	Main	19.0	8.0	10	10.0	0	88.3	0.071		0.23	0.75	0 %				
___ 13	E	Exterior	Frame - Wood	Main	19.0	7.0	10	10.0	0	78.3	0.071		0.23	0.75	0 %				
___ 14	S	Exterior	Frame - Wood	Main	19.0	12.0	4	10.0	0	123.3	0.071		0.23	0.75	0 %				
___ 15	W	Exterior	Frame - Wood	Main	19.0	14.0	8	10.0	0	146.7	0.071		0.23	0.75	0 %				
___ 16	N	Exterior	Frame - Wood	Main	19.0	6.0	0	10.0	0	60.0	0.071		0.23	0.75	0 %				
___ 17	W	Exterior	Frame - Wood	Main	19.0	31.0	8	10.0	0	316.7	0.071		0.23	0.75	0 %				

DOORS												(Total Exposed Area = 160 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	12.00	0	8.00	0	96.0ft²			
___ 2	N	Garage	Wood	Main	None	0.40	3.00	0	8.00	0	24.0ft²			
___ 3	S	Exterior	Insulated	Main	None	0.40	5.00	0	8.00	0	40.0ft²			

WINDOWS															(Total Exposed Area = 304 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	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	12.0	1	3.00	4.00	1.5	2.3	None	None
___ 2	N	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	8.0	2	1.00	4.00	1.5	2.3	None	None
___ 3	E	5	Vinyl	Low-E Double	Y	0.26	0.20	N	N	20.0	1	4.00	5.00	1.5	2.3	None	None
___ 4	E	5	Vinyl	Low-E Double	Y	0.26	0.20	N	N	30.0	2	2.50	6.00	1.5	2.3	None	None
___ 5	S	6	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	2.3	None	None
___ 6	S	8	Vinyl	Low-E Double	Y	0.26	0.20	N	N	8.0	1	2.00	4.00	1.5	2.3	None	None
___ 7	S	10	Vinyl	Low-E Double	Y	0.26	0.20	N	N	90.0	6	2.50	6.00	1.5	2.3	None	None
___ 8	S	12	Vinyl	Low-E Double	Y	0.26	0.20	N	N	8.0	1	2.00	4.00	1.5	2.3	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	2.3	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	2.3	None	None
___ 11	N	1	Vinyl	Low-E Double	Y	0.26	0.20	N	N	20.0	2	2.00	5.00	1.5	1.3	None	None

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00027	1647	90.36	169.64	0.0969	4.7	All	20952 cu ft

GARAGE					
✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	495 ft²	495 ft²	64 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--- Entry Power Volt Current		Ducts	Block
	1	Electric Heat Pump	None/Single		HSPF2: 7.50		42.0			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		SEER2:14.3		42.0			1260	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 #	-----Supply----- Location R-Value Area		-----Return----- Location R-Value Area		Leakage Type		Air Handler	CFM 25 TOT	CFM 25 OUT	QN OUT	RLF	HVAC # Heat Cool
	1	Main	6.0 454 ft²	Main	6.0 114 ft²	Prop. Leak Free		Garage	---	---	0.030	0.50	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	Hours 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
	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
	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
	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