

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Lunsford 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 3 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 1605 Conditioned floor area below grade (ft²) 0 7. Windows(172.0 sqft.) Description Area a. U-Factor: Dbl, U=0.26 172.00 ft² SHGC: SHGC=0.33 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: 0.330 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 1605.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(1763.3 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 1763.30 ft² b. N/A c. N/A d. N/A 11. Ceiling Types(1605.0 sqft.) Insulation Area a. Single assembly, no ai (Unvented) R=0.0 1605.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Unvent) Deck R=21.0 1858 ft² 13. Ducts, location & insulation level R ft² a. Sup: Main, Ret: Main, AH: Main 6 321 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 30.0 SEER2:16.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 30.0 HSPF2:8.20 16. Hot Water Systems a. Electric Cap: 40 gallons EF: 0.920 b. Conservation features None 17. Credits CF
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Glass/Floor Area: 0.107	Total Proposed Modified Loads: 44.73	PASS
	Total Baseline Loads: 49.45	
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: 1-13-25 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 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title: Lunsford Residence

Building Type: User

Owner:

Builder Home ID:

Builder Name:

Permit Office:

Jurisdiction:

Family Type: Detached

New/Existing: New (From Plans)

Year Construct: 2025

Comment:

Bedrooms: 3

Conditioned Area: 1605

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 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

1605

16050 cu ft

SPACES

✓ Number

Name

Area

Volume

Kitchen

Occupants

Bedrooms

Finished

Cooled

Heated

___ 1

Main

1605

16050

Yes

6

3

Yes

Yes

Yes

FLOORS (Total Exposed Area = 1605 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

176

1605 sqft

0.0 ---

0.563

0 (ft)/0 (ft)

0.20

0.60

0.20

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

Composition shingles

1858 ft²

468 ft²

0.11

Dark

N

0.92

No

0.9

No

21

30.26

ATTIC

✓ #

Type

Ventilation

Vent Ratio (1 in)

Area

RBS

IRCC

___ 1

No attic

Unvented

0

1605 ft²

N

N

CEILING (Total Exposed Area = 1605 sq.ft.)

✓ #

Ceiling Type

Space

R-Value

Ins. Type

Area

U-Factor

Framing Frac.

Truss Type

___ 1

Single assembly, no airspace(Unvented)

Main

0.0

Blown

1605.0ft²

0.045

0.11

Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS																	(Total Exposed Area = 1763 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	32.0	10	10.0	0	328.3	0.084		0.23	0.75	0 %					
___ 2	E	Exterior	Frame - Wood	Main	13.0	10.0	10	10.0	0	108.3	0.084		0.23	0.75	0 %					
___ 3	N	Exterior	Frame - Wood	Main	13.0	21.0	6	10.0	0	215.0	0.084		0.23	0.75	0 %					
___ 4	E	Exterior	Frame - Wood	Main	13.0	23.0	0	10.0	0	230.0	0.084		0.23	0.75	0 %					
___ 5	S	Exterior	Frame - Wood	Main	13.0	54.0	4	10.0	0	543.3	0.084		0.23	0.75	0 %					
___ 6	W	Exterior	Frame - Wood	Main	13.0	33.0	10	10.0	0	338.3	0.084		0.23	0.75	0 %					

DOORS													(Total Exposed Area = 136 sq.ft.)			
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area					
___ 1	E	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²					
___ 2	N	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²					
___ 3	N	Exterior	Insulated	Main	None	0.46	6.00	0	8.00	0	48.0ft²					
___ 4	S	Exterior	Insulated	Main	None	0.46	5.00	0	8.00	0	40.0ft²					

WINDOWS																	(Total Exposed Area = 172 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	0.33	N	N	15.0	1	3.00	5.00	1.5	2.3	None	None			
___ 2	N	1	Vinyl	Low-E Double	Y	0.26	0.33	N	N	20.0	2	2.50	4.00	1.5	2.3	None	None			
___ 3	N	1	Vinyl	Low-E Double	Y	0.26	0.33	N	N	30.0	2	2.50	6.00	1.5	2.3	None	None			
___ 4	E	4	Vinyl	Low-E Double	Y	0.26	0.33	N	N	6.0	1	2.00	3.00	1.5	2.3	None	None			
___ 5	E	4	Vinyl	Low-E Double	Y	0.26	0.33	N	N	8.0	2	4.00	1.00	1.5	2.3	None	None			
___ 6	S	5	Vinyl	Low-E Double	Y	0.26	0.33	N	N	30.0	2	3.00	5.00	1.5	2.3	None	None			
___ 7	S	5	Vinyl	Low-E Double	Y	0.26	0.33	N	N	60.0	4	2.50	6.00	1.5	2.3	None	None			
___ 8	W	6	Vinyl	Low-E Double	Y	0.26	0.33	N	N	3.0	1	3.00	1.00	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)	0.00032	1338	73.38	137.76	0.1071	5.0	All	16050 cu ft

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		HSPF2: 8.20	30.0		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	None/Single		SEER2:16.0		30.0		900		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	Main		0.92 (0.92)		40.0 gal	60 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	RLF	HVAC # Heat Cool	
	1	Main	6.0	321 ft²	Main	6.0	80 ft²	Prop. Leak Free	Main	--- ---	0.030	Yes	0.50	1 1	
TEMPERATURES															
Programable Thermostat: 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		
	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		
	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		
	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		