

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Mowry 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) 2251 Conditioned floor area below grade (ft²) 0 7. Windows(369.5 sqft.) Description Area a. U-Factor: Dbl, U=0.26 369.50 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 2251.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(2656.3 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 2300.80 ft² b. Frame - Wood, Adjacent R=13.0 355.50 ft² c. N/A d. N/A 11. Ceiling Types(2251.0 sqft.) Insulation Area a. Single assembly, no ai (Unvented) R=0.0 2251.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Unvent) Deck R=30.0 2930 ft² 13. Ducts, location & insulation level R ft² a. Sup: Main, Ret: Main, AH: Main 6 450 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 48.0 SEER2:15.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 48.0 HSPF2:8.20 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: 0.164	Total Proposed Modified Loads: 53.92	PASS
	Total Baseline Loads: 64.16	
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: 10-31-24 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 5.24 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title: Mowry 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: 3

Conditioned Area: 2251

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

2251

20259 cu ft

SPACES

✓ Number

Name

Area

Volume

Kitchen

Occupants

Bedrooms

Finished

Cooled

Heated

___ 1

Main

2251

20259

Yes

6

3

Yes

Yes

Yes

FLOORS (Total Exposed Area = 2251 sq.ft.)

✓ #

Floor Type

Space

Exposed Perim(ft)

Area

R-Value Perim. Joist

U-Factor

Slab Insul. Vert/Horiz

Tile

Wood

Carpet

___ 1

Slab-On-Grade Edge Ins

Main

284

2251 sqft

0 ---

0.563

0 (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

2930 ft²

938 ft²

Dark

N

0.92

No

0.9

No

30

39.81

ATTIC

✓ #

Type

Ventilation

Vent Ratio (1 in)

Area

RBS

IRCC

___ 1

No attic

Unvented

0

2251 ft²

N

N

CEILING (Total Exposed Area = 2251 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

2251.0ft²

0.031

0.11

Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 2656 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	12.0	0	9.0	0	108.0	0.084		0.23	0.75	0 %				
___ 2	E	Exterior	Frame - Wood	Main	13.0	12.0	0	9.0	0	108.0	0.084		0.23	0.75	0 %				
___ 3	N	Exterior	Frame - Wood	Main	13.0	28.0	8	10.0	0	286.7	0.084		0.23	0.75	0 %				
___ 4	W	Exterior	Frame - Wood	Main	13.0	2.0	4	10.0	0	23.3	0.084		0.23	0.75	0 %				
___ 5	N	Exterior	Frame - Wood	Main	13.0	11.0	4	10.0	0	113.3	0.084		0.23	0.75	0 %				
___ 6	W	Exterior	Frame - Wood	Main	13.0	24.0	8	9.0	0	222.0	0.084		0.23	0.75	0 %				
___ 7	N	Exterior	Frame - Wood	Main	13.0	24.0	0	9.0	0	216.0	0.084		0.23	0.75	0 %				
___ 8	E	Exterior	Frame - Wood	Main	13.0	35.0	10	9.0	0	322.5	0.084		0.23	0.75	0 %				
___ 9	S	Garage	Frame - Wood	Main	13.0	39.0	6	9.0	0	355.5	0.084		0.23	0.75	0 %				
___ 10	S	Exterior	Frame - Wood	Main	13.0	40.0	0	10.0	0	400.0	0.084		0.23	0.75	0 %				
___ 11	E	Exterior	Frame - Wood	Main	13.0	4.0	8	9.0	0	42.0	0.084		0.23	0.75	0 %				
___ 12	S	Exterior	Frame - Wood	Main	13.0	12.0	0	9.0	0	108.0	0.084		0.23	0.75	0 %				
___ 13	W	Exterior	Frame - Wood	Main	13.0	39.0	0	9.0	0	351.0	0.084		0.23	0.75	0 %				

DOORS										(Total Exposed Area = 96 sq.ft.)			
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area		
___ 1	N	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²		
___ 2	E	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²		
___ 3	S	Garage	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²		
___ 4	S	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²		

WINDOWS															(Total Exposed Area = 370 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	30.0	2	2.50	6.00	1.5	1.3	None	None	
___ 2	N	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None	
___ 3	N	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	24.0	1	4.00	6.00	1.5	1.3	None	None	
___ 4	N	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	1	6.00	6.00	1.5	1.3	None	None	
___ 5	N	5	Vinyl	Low-E Double	Y	0.26	0.20	N	N	24.0	1	6.00	4.00	1.5	1.3	None	None	
___ 6	W	6	Vinyl	Low-E Double	Y	0.26	0.20	N	N	18.0	1	3.00	6.00	1.5	1.3	None	None	
___ 7	N	7	Vinyl	Low-E Double	Y	0.26	0.20	N	N	24.0	2	2.00	6.00	1.5	1.3	None	None	
___ 8	N	7	Vinyl	Low-E Double	Y	0.26	0.20	N	N	6.0	1	4.00	1.50	1.5	1.3	None	None	
___ 9	E	8	Vinyl	Low-E Double	Y	0.26	0.20	N	N	12.0	1	6.00	2.00	1.5	1.3	None	None	
___ 10	E	8	Vinyl	Low-E Double	Y	0.26	0.20	N	N	7.5	1	1.50	5.00	1.5	1.3	None	None	
___ 11	S	10	Vinyl	Low-E Double	Y	0.26	0.20	N	N	72.0	4	3.00	6.00	1.5	1.3	None	None	
___ 12	S	10	Vinyl	Low-E Double	Y	0.26	0.20	N	N	32.0	2	2.00	8.00	1.5	1.3	None	None	
___ 13	S	12	Vinyl	Low-E Double	Y	0.26	0.20	N	N	30.0	2	2.50	6.00	1.5	1.3	None	None	
___ 14	W	13	Vinyl	Low-E Double	Y	0.26	0.20	N	N	12.0	1	2.00	6.00	1.5	1.3	None	None	
___ 15	W	13	Vinyl	Low-E Double	Y	0.26	0.20	N	N	6.0	1	4.00	1.50	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)	0.00030	1769	97.08	182.25	0.1076	5.2	All	20259 cu ft

INPUT SUMMARY CHECKLIST REPORT

GARAGE																								
✓	#	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation																		
__	1	576 ft²	576 ft²	62 ft	9 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	None/Single	HSPF2: 8.20	48.0	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	SEER2:15.0	48.0	1440	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	Garage	0.92 (0.92)	50.00 gal	60 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	450 ft²	Main	6.0	113 ft²	Prop. Leak Free	Main	---	---	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													Hours										
	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 80	78 80	78 80	78 80	80 78	80 78	80 78	80 78										
__	Cooling (WEH)	AM PM	78 80	78 80	78 80	78 80	78 80	78 80	78 80	78 80	80 78	80 78	80 78	80 78										

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES(Continued)

___ Heating (WD)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
___ Heating (WEH)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68