

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Mcleod 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 Addition 2. Single family or multiple family Detached 3. Number of units, if multiple family 1 4. Number of Bedrooms 0 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 840 Conditioned floor area below grade (ft²) 0 7. Windows(150.0 sqft.) Description Area a. U-Factor: Dbl, U=0.26 150.00 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= 0.0 840.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(849.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 849.00 ft² b. N/A c. N/A d. N/A 11. Ceiling Types(840.0 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=30.0 840.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0 973 ft² 13. Ducts, location & insulation level R ft² a. b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 18.0 SEER2:21.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 18.0 HSPF2:8.50 16. Hot Water Systems - None required a. N/A N/A b. Conservation features 17. Credits CF, Pstat
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Glass/Floor Area: 0.179	Total Proposed Modified Loads: 13.63	PASS
	Total Baseline Loads: 23.36	
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: 7-10-24 I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: <u>Chris Parrish</u> DATE: <u>10.22.24</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.  Review for Code Compliance Universal Engineering Science  BUILT BY OFFICIAL: DATE: <u>10/24/2024</u> PX2707 10/24/2024
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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.
- Homes without ducts do not require duct testing.
- Compliance requires a roof absorptance test and a roof emittance test in accordance with R405.7.2
- 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: Mcleod Residence

Building Type: User

Owner:

Builder Home ID:

Builder Name:

Permit Office:

Jurisdiction:

Family Type: Detached

New/Existing: Addition

Year Construct: 2024

Comment:

Bedrooms: 0

Conditioned Area: 840

Total Stories: 1

Worst Case: No

Rotate Angle: 0

Cross Ventilation:

Whole House Fan:

Terrain: Rural

Shielding: Moderate

Address type: Street Address

Lot #: ---

Block/SubDivision: ---

PlatBook: ---

Street:

County: Columbia

City, State, Zip: , FL

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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

840

7560 cu ft

SPACES

Number

Name

Area

Volume

Kitchen

Occupants

Bedrooms

Finished

Cooled

Heated

1

Sun Room

840

7560

No

6

Yes

Yes

Yes

FLOORS

(Total Exposed Area = 840 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

Sun Room

94.33

840 sqft

0

0.473

0 (ft)/0 (ft)

0.00

1.00

0.00

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

973 ft²

246 ft²

Dark

N

0.92

No

0.9

No

0

30.26

ATTIC

#

Type

Ventilation

Vent Ratio (1 in)

Area

RBS

IRCC

1

Full attic

Vented

300

840 ft²

N

N

CEILING

(Total Exposed Area = 840 sq.ft.)

#

Ceiling Type

Space

R-Value

Ins. Type

Area

U-Factor

Framing Frac.

Truss Type

1

Flat ceiling under attic(Vented)

Sun Room

30.0

Blown

840.0ft²

0.030

0.11

Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 849 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	W	Exterior	Frame - Wood	Sun Room	13.0	35.0	2	9.0	0	316.5	0.084		0.23	0.75	0 %				
___ 2	N	Exterior	Frame - Wood	Sun Room	13.0	24.0	0	9.0	0	216.0	0.084		0.23	0.75	0 %				
___ 3	E	Exterior	Frame - Wood	Sun Room	13.0	35.0	2	9.0	0	316.5	0.084		0.23	0.75	0 %				

DOORS												(Total Exposed Area = 20 sq.ft.)		
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
___ 1	W	Exterior	Insulated	Sun Room	None	0.46	3.00	0	6.00	8	20.0ft²			

WINDOWS															(Total Exposed Area = 150 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	1	Vinyl	Low-E Double	Y	0.26	0.33	N	N	60.0	4	3.00	5.00	1.5	2.3	None	None
___ 2	E	3	Vinyl	Low-E Double	Y	0.26	0.33	N	N	90.0	6	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)	0.00030	660	36.23	68.01	0.1076	5.2	All	7560 cu ft

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

HEATING SYSTEM										
✓ #	System Type/FI. Addition	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	Heat Pump Power	Volt	Current	Block
___ 1	Electric Heat Pump/Supplemental	Sm. Duct High Velocity/S		HSPF2: 8.50	18.0		0.00	0.00	0.00	sys#0 1

COOLING SYSTEM									
✓ #	System Type/FI. Addition	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit/Supplemental	Sm. Duct Hi Velo/Single		SEER2:21.0	18.0	540	0.75	Ductless	1



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PX2707

10/24/2024

INPUT SUMMARY CHECKLIST REPORT

HOT WATER SYSTEM

☒ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
Recirculation System		Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits

DUCTS

☒ Duct #	Location	Supply R-Value	Area	Return R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN OUT	RLF	HVAC # Heat	Cool
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TEMPERATURES

Programable Thermostat: Y													
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	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
___ Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
___ Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
___ Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66



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ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 58

The lower the EnergyPerformance Index, the more efficient the home.

„FL,

1. New construction or existing	Addition	10. Wall Types(849.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	849.00 ft ²
3. Number of units, if multiple family	1	b. N/A		
4. Number of Bedrooms	0	c. N/A		
5. Is this a worst case?	No	d. N/A		
6. Conditioned floor area above grade (ft ²)	840	11. Ceiling Types(840.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft ²)	0	a. Flat ceiling under att (Vented)	R=30.0	840.00 ft ²
7. Windows**	Description	b. N/A		
a. U-Factor:	Dbl, U=0.26	c. N/A		
SHGC:	SHGC=0.33	12. Roof(Comp. Shingles, Vented) Deck	R=0.0	973 ft ²
b. U-Factor:	N/A	13. Ducts, location & insulation level	R	ft ²
SHGC:		a.		
c. U-Factor:	N/A	b.		
SHGC:		c.		
Area Weighted Average Overhang Depth:	1.500 ft	14. Cooling Systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.330	a. Central Unit	18.0	SEER2:21.00
8. Skylights	Description	15. Heating Systems	kBtu/hr	Efficiency
U-Factor:(AVG)	N/A	a. Electric Heat Pump	18.0	HSPF2:8.50
SHGC(AVG):	N/A			
9. Floor Types	Insulation	16. Hot Water Systems - None required		
a. Slab-On-Grade Edge Insulation	R= 0.0	a. N/A		N/A
b. N/A	R=			
c. N/A	R=	b. Conservation features		
		17. Credits		CF, Pstat

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: Chris Parrish Date: 10.22.24

Address of New Home: _____ City/FL Zip: „FL,



*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.



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