

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Weaver 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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Review for Code Compliance
 Universal Engineering Science
Signature
 Engineer/License No. PX2707

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) 1092 Conditioned floor area below grade (ft²) 0 7. Windows(138.0 sqft.) Description Area a. U-Factor: Dbl, U=0.26 138.00 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 1092.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(1088.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 936.00 ft² b. Frame - Wood, Adjacent R=13.0 152.00 ft² c. N/A d. N/A 11. Ceiling Types(1092.0 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=30.0 1092.00 ft² b. N/A c. N/A 12. Roof(Metal, Vented) Deck R=0.0 1264 ft² 13. Ducts, location & insulation level R ft² a. Sup: Attic, Ret: Attic, AH: Garage 6 218 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 24.0 SEER2:16.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 24.0 HSPF2:8.50 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: 0.126	Total Proposed Modified Loads: 34.15	PASS
	Total Baseline Loads: 36.25	

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: <u>6.6.24</u> I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: <u>Chris Parrish</u> DATE: <u>11.10.24</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. 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 5.90 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:Weaver 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:1092

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

WinterSummer

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

1092

8736 cu ft

SPACES

✓Number

Name

Area

Volume

Kitchen

Occupants

Bedrooms

Finished

Cooled

Heated

___1

Main

1092

8736

Yes

6

3

Yes

Yes

Yes

FLOORS

(Total Exposed Area = 1092 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

136

1092 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

Metal

1264 ft²

318 ft²

Unf, Gal.

N

0.7

No

0.7

No

0

30.26

ATTIC

✓#

Type

Ventilation

Vent Ratio (1 in)

Area

RBS

IRCC

___1

Full attic

Vented

300

1092 ft²

N

N

CEILING

(Total Exposed Area = 1092 sq.ft.)

✓#

Ceiling Type

Space

R-Value

Ins. Type

Area

U-Factor

Framing Frac.

Truss Type

___1

Flat ceiling under attic(Vented)

Main

30.0

Blown

1092.0ft²

0.030

0.11

Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS

(Total Exposed Area = 1088 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	26.0	0	8.0	0	208.0	0.084		0.23	0.75	0 %
___ 2	E	Exterior	Frame - Wood	Main	13.0	23.0	0	8.0	0	184.0	0.084		0.23	0.75	0 %
___ 3	E	Garage	Frame - Wood	Main	13.0	19.0	0	8.0	0	152.0	0.084		0.23	0.75	0 %
___ 4	S	Exterior	Frame - Wood	Main	13.0	26.0	0	8.0	0	208.0	0.084		0.23	0.75	0 %
___ 5	W	Exterior	Frame - Wood	Main	13.0	42.0	0	8.0	0	336.0	0.084		0.23	0.75	0 %

DOORS

(Total Exposed Area = 40 sq.ft.)

✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
___ 1	E	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

WINDOWS

(Total Exposed Area = 138 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	3.00	5.00	1.5	1.3	None	None
___ 2	E	2	Vinyl	Low-E Double	Y 0.26	0.20	N	N	15.0	1	3.00	5.00	1.5	1.3	None	None
___ 3	E	2	Vinyl	Low-E Double	Y 0.26	0.20	N	N	3.0	1	3.00	1.00	1.5	1.3	None	None
___ 4	S	4	Vinyl	Low-E Double	Y 0.26	0.20	N	N	30.0	2	3.00	5.00	1.5	1.3	None	None
___ 5	W	5	Vinyl	Low-E Double	Y 0.26	0.20	N	N	60.0	4	3.00	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)	0.00030	858	47.09	88.41	0.1155	5.9	All	8736 cu ft

GARAGE

✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	437 ft²	437 ft²	65 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 Entry	Heat Pump Power	----Heat Pump Volt	Ducts Current	Block
___ 1	Electric Heat Pump	None/Single		HSPF2: 8.50	24.0		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	24.0	720	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	Attic 6.0 218 ft²	Attic 6.0 55 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	80 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	80 78	80 78	80 78	80 78
___	Heating (WD)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	68 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	68 68	68 68	68 68	68 68	68 68

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 94

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

„FL,

1. New construction or existing	New (From Plans)	10. Wall Types(1088.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	936.00 ft ²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	152.00 ft ²
4. Number of Bedrooms	3	c. N/A		
5. Is this a worst case?	No	d. N/A		
6. Conditioned floor area above grade (ft ²)	1092	11. Ceiling Types(1092.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft ²)	0	a. Flat ceiling under att (Vented)	R=30.0	1092.00 ft ²
7. Windows**	Description	b. N/A		
a. U-Factor:	Dbl, U=0.26	c. N/A		
SHGC:	SHGC=0.20	12. Roof(Metal, Vented)	Deck R=0.0	1264 ft ²
b. U-Factor:	N/A	13. Ducts, location & insulation level	R	ft ²
SHGC:		a. Sup: Attic, Ret: Attic, AH: Garage	6	218
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:	0.200	a. Central Unit	24.0	SEER2:16.00
8. Skylights	Description	15. Heating Systems	kBtu/hr	Efficiency
U-Factor:(AVG)	N/A	a. Electric Heat Pump	24.0	HSPF2:8.50
SHGC(AVG):	N/A			
9. Floor Types	Insulation	16. Hot Water Systems		
a. Slab-On-Grade Edge Insulation	R= 0.0	a. Electric	Cap: 50 gallons	
b. N/A	R=		EF: 0.920	
c. N/A	R=	b. Conservation features		
		17. Credits	None	
			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.

Chris Parrish

Builder Signature: _____ Date: **11.13.24**

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.