

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Lot 9 Creek Run Plantation
 Street:
 City, State, Zip: Lake City, FL, 32055
 Owner: Peter & Anna Lev
 Design Location: FL, Gainesville

Builder Name:
 Permit Office: Columbia County
 Permit Number:
 Jurisdiction:
 County: Columbia (Florida Climate Zone 2)

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 (ft ²)	1807
Conditioned floor area below grade (ft ²)	0
7. Windows (216.3 sqft.)	Area
a. U-Factor: Dbl, U=0.36	216.33 ft ²
SHGC: SHGC=0.25	
b. U-Factor: N/A	ft ²
SHGC:	
c. U-Factor: N/A	ft ²
SHGC:	
Area Weighted Average Overhang Depth:	2.813 ft.
Area Weighted Average SHGC:	0.250
8. Skylights	Area
c. U-Factor:(AVG) N/A	ft ²
SHGC(AVG): N/A	
9. Floor Types (1807.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 1807.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²

10. Wall Types (1751.6 sqft.)	Insulation Area
a. Concrete Block - Int Insul, Exterior	R=5.0 1477.80 ft ²
b. Frame - Wood, Adjacent	R=13.0 273.78 ft ²
c. N/A	R= ft ²
d. N/A	R= ft ²
11. Ceiling Types (1897.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=38.0 1897.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²
12. Ducts	R ft ²
a. Sup: Attic, Ret: Attic, AH: Garage	6 451.75
13. Cooling systems	kBtu/hr Efficiency
a. Central Unit	20.5 SEER:14.00
14. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	29.5 HSPF:8.20
15. Hot water systems	Cap: 50 gallons
a. Electric	EF: 0.920
b. Conservation features	
None	
16. Credits	CV, Pstat



Glass/Floor Area: 0.120

Total Proposed Modified Loads: 47.45

Total Baseline Loads: 48.60

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: _____

DATE: _____

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: _____

- 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 requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Lot 9 Creek Run Plantation	Bedrooms:	3	Address Type:	Lot Information
Building Type:	User	Conditioned Area:	1807	Lot #	9
Owner Name:	Peter & Anna Lev	Total Stories:	1	Block/Subdivision:	Creek Run Plant
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	
Permit Office:	Columbia County	Cross Ventilation:	Yes	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32055
Family Type:	Detached				
New/Existing:	New (From Plans)				
Comment:					

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_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1807	16859.3

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1807	16859.3	Yes	6	3	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulation	Main	188.67 ft	0	1807 ft²	----	0	0	1

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Metal	2172 ft²	0 ft²	Light	Y	0.96	No	0.9	No	0	33.69

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1807 ft²	Y	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Double Batt	1897 ft²	0.11	Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS

✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	S	Exterior	Concrete Block - Int Insul	Main	5	12		9	4	112.0 ft²		0	0.75	0
2	S	Exterior	Concrete Block - Int Insul	Main	5	28	8	9	4	267.6 ft²		0	0.75	0
3	E	Garage	Frame - Wood	Main	13	7	4	9	4	68.4 ft²		0.23	0.75	0
4	S	Garage	Frame - Wood	Main	13	22		9	4	205.3 ft²		0.23	0.75	0
5	E	Exterior	Concrete Block - Int Insul	Main	5	23	4	9	4	217.8 ft²		0	0.75	0
6	N	Exterior	Concrete Block - Int Insul	Main	5	62	8	9	4	584.9 ft²		0	0.75	0
7	W	Exterior	Concrete Block - Int Insul	Main	5	31	8	9	4	295.6 ft²		0	0.75	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	S	Insulated	Main	None	.46	3		6	8	20 ft²
2	E	Insulated	Main	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
1	S	1	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	1 ft 6 in	1 ft 0 in	None	None
2	S	2	TIM	Low-E Double	Yes	0.36	0.25	N	13.3 ft²	7 ft 6 in	1 ft 0 in	None	None
3	S	2	Vinyl	Low-E Double	Yes	0.36	0.25	N	25.0 ft²	7 ft 6 in	1 ft 0 in	None	None
4	S	2	Vinyl	Low-E Double	Yes	0.36	0.25	N	9.0 ft²	7 ft 6 in	1 ft 0 in	None	None
5	E	5	Vinyl	Low-E Double	Yes	0.36	0.25	N	20.0 ft²	1 ft 6 in	1 ft 0 in	None	None
6	N	6	Vinyl	Low-E Double	Yes	0.36	0.25	N	60.0 ft²	1 ft 6 in	1 ft 0 in	None	None
7	N	6	Vinyl	Low-E Double	Yes	0.36	0.25	N	6.0 ft²	1 ft 6 in	1 ft 0 in	None	None
8	N	6	Vinyl	Low-E Double	Yes	0.36	0.25	N	9.0 ft²	1 ft 6 in	1 ft 0 in	None	None
9	N	6	TIM	Low-E Double	Yes	0.36	0.25	N	40.0 ft²	1 ft 6 in	1 ft 0 in	None	None
10	W	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	4.0 ft²	1 ft 6 in	1 ft 0 in	None	None

GARAGE

✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	491.26 ft²	491.26 ft²	58.33 ft	9.33 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000296	1404.9	77.08	144.71	.1042	5

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

<input checked="" type="checkbox"/>	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
<input type="checkbox"/>	1	Electric Heat Pump/	None	Single	HSPF:8.2	29.51 kBtu/hr	1	sys#1

COOLING SYSTEM

<input checked="" type="checkbox"/>	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
<input type="checkbox"/>	1	Central Unit/	None	Single	SEER: 14	20.55 kBtu/hr	630 cfm	0.7	1	sys#1

HOT WATER SYSTEM

<input checked="" type="checkbox"/>	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
<input type="checkbox"/>	1	Electric	None	Garage	0.92	50 gal	40 gal	120 deg	None

SOLAR HOT WATER SYSTEM

<input checked="" type="checkbox"/>	FSEC Cert #	Company Name	System Model#	Collector Model#	Collector Area	Storage Volume	FEF
<input type="checkbox"/>	None	None			ft²		

DUCTS

<input checked="" type="checkbox"/>	#	--- Supply --- Location	R-Value	Area	--- Return --- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
<input type="checkbox"/>	1	Attic	6	451.75 f	Attic	90.35 ft²	Default Leakage	Garage	(Default) c	(Default) c			1	1

TEMPERATURES

ProgramableThermostat: Y														Ceiling Fans:											
Cooling	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input checked="" type="checkbox"/>	Jun	<input checked="" type="checkbox"/>	Jul	<input checked="" type="checkbox"/>	Aug	<input checked="" type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec	
Heating	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input checked="" type="checkbox"/>	Jun	<input checked="" type="checkbox"/>	Jul	<input checked="" type="checkbox"/>	Aug	<input checked="" type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec	
Venting	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" type="checkbox"/>	Mar	<input type="checkbox"/>	Apr	<input type="checkbox"/>	May	<input checked="" type="checkbox"/>	Jun	<input checked="" type="checkbox"/>	Jul	<input checked="" type="checkbox"/>	Aug	<input checked="" type="checkbox"/>	Sep	<input type="checkbox"/>	Oct	<input checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec	
Thermostat Schedule:		HERS 2006 Reference												Hours											
Schedule Type			1	2	3	4	5	6	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											

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.3	Main

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 98

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

, Lake City, FL, 32055

1. New construction or existing	New (From Plans)		10. Wall Type and Insulation	Insulation	Area
2. Single family or multiple family	Detached		a. Concrete Block - Int Insul, Exterior	R=5.0	1477.80 ft ²
3. Number of units, if multiple family	1		b. Frame - Wood, Adjacent	R=13.0	273.78 ft ²
4. Number of Bedrooms	3		c. N/A	R=	ft ²
5. Is this a worst case?	No		d. N/A	R=	ft ²
6. Conditioned floor area (ft ²)	1807		11. Ceiling Type and insulation level	Insulation	Area
7. Windows**	Description	Area	a. Under Attic (Vented)	R=38.0	1897.00 ft ²
a. U-Factor:	Dbl, U=0.36	216.33 ft ²	b. N/A	R=	ft ²
SHGC:	SHGC=0.25		c. N/A	R=	ft ²
b. U-Factor:	N/A	ft ²	12. Ducts, location & insulation level		R ft ²
SHGC:			a. Sup: Attic, Ret: Attic, AH: Garage	6	451.75
c. U-Factor:	N/A	ft ²	13. Cooling systems	kBtu/hr	Efficiency
SHGC:			a. Central Unit	20.5	SEER:14.00
d. U-Factor:	N/A	ft ²	14. Heating systems	kBtu/hr	Efficiency
SHGC:			a. Electric Heat Pump	29.5	HSPF:8.20
Area Weighted Average Overhang Depth:	2.813 ft.		15. Hot water systems		Cap: 50 gallons
Area Weighted Average SHGC:	0.250		a. Electric		EF: 0.92
8. Skylights	Description	Area	b. Conservation features		
a. U-Factor(AVG):	N/A	ft ²	None		
SHGC(AVG):	N/A		Credits (Performance method)		CV, Pstat
9. Floor Types	Insulation	Area			
a. Slab-On-Grade Edge Insulation	R=0.0	1807.00 ft ²			
b. N/A	R=	ft ²			
c. N/A	R=	ft ²			

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: _____ Date: _____

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



*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.

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance

2020 Florida Building Code, Energy Conservation, 7th Edition

Jurisdiction:

Permit #:

Job Information

Builder:

Community:

Lot: 9

Address:

City: Lake City

State: FL

Zip: 32055

Air Leakage Test Results *Passing results must meet either the Performance, Prescriptive, or ERI Method*

Passing results must meet either the Performance, Prescriptive, or ERI Method

- PRESCRIPTIVE METHOD**—The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.

☐ **PERFORMANCE or ERI METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2020 (Performance) or R406-2020 (ERI), section labeled as infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2020-Energy Calc (Performance) or R406-2020 (ERI): 5.000

CFM(50)

PASS

Method for calculating building volume:

- Retrieved from architectural plans

● Code software calculated

○ Field measured and calculated

☐ When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.

R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or *(7) Florida Statutes* or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2020 7th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____