

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Lot 43 Crosswinds
 Street:
 City, State, Zip: Lake City, FL, 32025
 Owner: N/A
 Design Location: FL, Gainesville

Builder Name: Rhett Smithey
 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)	1677
Conditioned floor area below grade (ft ²)	0
7. Windows (163.3 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.36 163.33 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:	4.737 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 (1677.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 1677.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²

10. Wall Types (1899.0 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=13.0 1620.00 ft ²
b. Frame - Wood, Adjacent	R=13.0 279.00 ft ²
c. N/A	R= ft ²
d. N/A	R= ft ²
11. Ceiling Types (1760.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=38.0 1760.00 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	6 411.5
13. Cooling systems	kBtu/hr Efficiency
a. Central Unit	18.8 SEER:14.00
14. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	28.0 HSPF:8.20
15. Hot water systems	
a. Electric	Cap: 50 gallons
	EF: 0.920
b. Conservation features	
None	
16. Credits	CV, Pstat

Glass/Floor Area: 0.097

Total Proposed Modified Loads: 41.50

Total Baseline Loads: 43.78

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 43 Crosswinds	Bedrooms:	3	Address Type:	Lot Information
Building Type:	User	Conditioned Area:	1677	Lot #	43
Owner Name:	N/A	Total Stories:	1	Block/Subdivision:	Crosswinds
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Rhett Smithy	Rotate Angle:	0	Street:	
Permit Office:	Columbia County	Cross Ventilation:	Yes	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32025
Family Type:	Detached				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

✓	Design Location	TMY Site	Design Temp		Int Design Temp		Heating	Design	Daily Temp
			97.5 %	2.5 %	Winter	Summer	Degree Days	Moisture	Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1677	15093

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1677	15093	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	218.6667 ft	0	1677 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	Gable or shed	Composition shingles	2016 ft²	560 ft²	Medium	Y	0.96	No	0.9	No	0	33.7

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1677 ft²	Y	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Double Batt	1760 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	Frame - Wood	Main	13	7	8	9		69.0 ft²		0.23	0.75	0
2	S	Exterior	Frame - Wood	Main	13	21	4	9		192.0 ft²		0.23	0.75	0
3	S	Exterior	Frame - Wood	Main	13	12	4	9		111.0 ft²		0.23	0.75	0
4	E	Exterior	Frame - Wood	Main	13	34		9		306.0 ft²		0.23	0.75	0
5	N	Exterior	Frame - Wood	Main	13	12	8	9		114.0 ft²		0.23	0.75	0
6	W	Exterior	Frame - Wood	Main	13	12		9		108.0 ft²		0.23	0.75	0
7	N	Exterior	Frame - Wood	Main	13	20	8	9		186.0 ft²		0.23	0.75	0
8	E	Exterior	Frame - Wood	Main	13	8		9		72.0 ft²		0.23	0.75	0
9	N	Exterior	Frame - Wood	Main	13	31	4	9		282.0 ft²		0.23	0.75	0
10	W	Exterior	Frame - Wood	Main	13	20		9		180.0 ft²		0.23	0.75	0
11	S	Garage	Frame - Wood	Main	13	23	4	9		210.0 ft²		0.23	0.75	0
12	W	Garage	Frame - Wood	Main	13	7	8	9		69.0 ft²		0.23	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	S	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	9.0 ft²	1 ft 6 in	1 ft 0 in	None	None
2	S	2	Vinyl	Low-E Double	Yes	0.36	0.25	N	13.3 ft²	6 ft 6 in	1 ft 0 in	None	None
3	S	2	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	6 ft 6 in	1 ft 0 in	None	None
4	S	3	Vinyl	Low-E Double	Yes	0.36	0.25	N	15.0 ft²	1 ft 6 in	1 ft 0 in	None	None
5	E	4	Vinyl	Low-E Double	Yes	0.36	0.25	N	4.0 ft²	1 ft 6 in	1 ft 0 in	None	None
6	N	5	Vinyl	Low-E Double	Yes	0.36	0.25	N	15.0 ft²	1 ft 6 in	1 ft 0 in	None	None
7	N	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	20.0 ft²	9 ft 6 in	1 ft 0 in	None	None
8	N	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	9.0 ft²	9 ft 6 in	1 ft 0 in	None	None
9	N	9	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	1 ft 6 in	1 ft 0 in	None	None
10	N	9	Vinyl	Low-E Double	Yes	0.36	0.25	N	4.0 ft²	1 ft 6 in	1 ft 0 in	None	None
11	W	10	Vinyl	Low-E Double	Yes	0.36	0.25	N	4.0 ft²	1 ft 6 in	1 ft 0 in	None	None
12	N	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	10.0 ft²	9 ft 6 in	1 ft 0 in	None	None

GARAGE

✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	598 ft²	598 ft²	65.333 ft	9 ft	1

INPUT SUMMARY CHECKLIST REPORT

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1257.8	69	129.55	.1027	5

HEATING SYSTEM

✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
✓	1	Electric Heat Pump/	None	Single	HSPF:8.2	27.95 kBtu/hr	1	sys#1

COOLING SYSTEM

✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
✓	1	Central Unit/	None	Single	SEER: 14	18.84 kBtu/hr	570 cfm	0.7	1	sys#1

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	None	Garage	0.92	50 gal	40 gal	120 deg	None

SOLAR HOT WATER SYSTEM

✓	FSEC Cert #	Company Name	System Model#	Collector Model#	Collector Area	Storage Volume	FEF
✓	None	None			ft ²		

DUCTS

✓	#	--- Supply ---			--- Return ---		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #	
✓	1	Attic	6	411.5 ft ²	Attic	82.3 ft ²	Default Leakage	Garage	(Default) c	(Default) c			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

Cooling	[] Jan	[] Feb	[] Mar	[] Apr	[] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[] Oct	[] Nov	[] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[X] 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

INPUT SUMMARY CHECKLIST REPORT

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 ft ²		0 ft		0.3		Main					

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 95

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

, Lake City, FL, 32025

1. New construction or existing	New (From Plans)	10. Wall Type and Insulation	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	1620.00 ft ²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	279.00 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)	1677	11. Ceiling Type and insulation level	Insulation	Area
7. Windows**	Description	a. Under Attic (Vented)	R=38.0	1760.00 ft ²
a. U-Factor:	Dbl, U=0.36	b. N/A	R=	ft ²
SHGC:	SHGC=0.25	c. N/A	R=	ft ²
b. U-Factor:	N/A	12. Ducts, location & insulation level		R ft ²
SHGC:		a. Sup: Attic, Ret: Attic, AH: Garage	6	411.5
c. U-Factor:	N/A			
SHGC:		13. Cooling systems	kBtu/hr	Efficiency
d. U-Factor:	N/A	a. Central Unit	18.8	SEER:14.00
SHGC:				
Area Weighted Average Overhang Depth:	4.737 ft.	14. Heating systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.250	a. Electric Heat Pump	28.0	HSPF:8.20
8. Skylights	Description			
a. U-Factor(AVG):	N/A	15. Hot water systems		
SHGC(AVG):	N/A	a. Electric	Cap: 50 gallons	EF: 0.92
9. Floor Types	Insulation	b. Conservation features		
a. Slab-On-Grade Edge Insulation	R=0.0	None		
b. N/A	R=	Credits (Performance method)		CV, Pstat
c. N/A	R=			

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.