

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Jenkins Res
 Street: SE Country Club Road
 City, State, Zip: Lake City, FL,
 Owner: Chuck & Susan Jenkins
 Design Location: FL, Gainesville

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

1. New construction or existing	Addition
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms (Bedrms In Addition)	1(1)
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	1650
Conditioned floor area below grade (ft²)	0
7. Windows (230.0 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.36 230.00 ft²
SHGC:	SHGC=0.25
b. U-Factor:	N/A ft²
SHGC:	
c. U-Factor:	N/A ft²
SHGC:	
d. U-Factor:	N/A ft²
SHGC:	
Area Weighted Average Overhang Depth:	10.839 ft.
Area Weighted Average SHGC:	0.250
8. Floor Types (1650.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 1650.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²

9. Wall Types (1700.0 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=19.0 1700.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²
d. N/A	R= ft²
10. Ceiling Types (1732.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=38.0 1732.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²
11. Ducts	R ft²
a. Sup: Attic, Ret: Attic, AH: Main	6 412.5
12. Cooling systems	kBtu/hr Efficiency
a. Central Unit	17.7 SEER:14.00
13. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	25.5 HSPF:8.20
14. Hot water systems -	
a. Propane	Cap: 50 gallons
	EF: 0.590
b. Conservation features	
None	
15. Credits	CV, Pstat

Glass/Floor Area: 0.139

Total Proposed Modified Loads: 34.98

Total Baseline Loads: 42.49

PASS

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

PREPARED BY: [Signature]
 DATE: 1/10/2021

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:	Jenkins Res	Bedrooms:	1	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1650	Lot #	
Owner Name:	Chuck & Susan Jenkins	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	SE Country Club Road
Permit Office:	Columbia County	Cross Ventilation:	Yes	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City ,
Family Type:	Single-family				FL ,
New/Existing:	Addition				
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	1650	16500

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1650	16500	Yes	4	1	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulation	Main	170 ft	0	1650 ft²	----	0	0	1

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt Tested	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	1845 ft²	0 ft²	Medium	Y	0.96	No	0.9	No	0	26.6

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1650 ft²	Y	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	FramingFrac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Double Batt	1732 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	N	Exterior	Frame - Wood	Main	19	55	10	550.0 ft²		0.23	0.75	0
___ 2	W	Exterior	Frame - Wood	Main	19	30	10	300.0 ft²		0.23	0.75	0
___ 3	S	Exterior	Frame - Wood	Main	19	55	10	550.0 ft²		0.23	0.75	0
___ 4	E	Exterior	Frame - Wood	Main	19	30	10	300.0 ft²		0.23	0.75	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area
___ 1	E	Insulated	Main	None	.46	3	8	24 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	N	1	Vinyl	Low-E Double	Yes	0.36	0.25	N	18.0 ft²	1 ft 6 in	1 ft 0 in	None	None
___ 2	N	1	Vinyl	Low-E Double	Yes	0.36	0.25	N	8.0 ft²	1 ft 6 in	1 ft 0 in	None	None
___ 3	S	3	Vinyl	Low-E Double	Yes	0.36	0.25	N	108.0 ft²	12 ft 6 in	1 ft 0 in	None	None
___ 4	S	3	TIM	Low-E Double	Yes	0.36	0.25	N	96.0 ft²	11 ft 6 in	1 ft 0 in	None	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000318	1375	75.49	141.96	.1307	5

HEATING SYSTEM

✓ #	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
___ 1	Electric Heat Pump/Supplemen	None	Single	HSPF:8.2	25.54 kBtu/hr	1	sys#1

COOLING SYSTEM

✓ #	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
___ 1	Central Unit/Supplemental for a	None	Single	SEER: 14	17.69 kBtu/hr	540 cfm	0.7	1	sys#1

HOT WATER SYSTEM

✓ #	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
___ 1	Propane	None	Exterior	0.59	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			ft²		

INPUT SUMMARY CHECKLIST REPORT

DUCTS														
✓	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
	1	Attic	6	412.5 ft²	Attic	82.5 ft²	Default Leakage	Main	(Default)	c(Default)	c		1	1
TEMPERATURES														
Programable Thermostat: Y					Ceiling Fans:									
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input 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 type="checkbox"/> Nov	<input 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 type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec		
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input type="checkbox"/> Dec		
Thermostat Schedule: HERS 2006 Reference														
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	68	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	68	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* = 82****The lower the Energy Performance Index, the more efficient the home.**

1. New home or, addition	1. <u>Addition</u>	12. Ducts, location & insulation level	
2. Single-family or multiple-family	2. <u>Single-family</u>	a) Supply ducts	R <u>6.0</u>
3. No. of units (if multiple-family)	3. <u>1</u>	b) Return ducts	R <u>6.0</u>
4. Number of bedrooms	4. <u>1</u>	c) AHU location	Main
5. Is this a worst case? (yes/no)	5. <u>No</u>	13. Cooling system:	Capacity <u>17.7</u>
6. Conditioned floor area (sq. ft.)	6. <u>1650</u>	a) Split system	SEER <u> </u>
7. Windows, type and area		b) Single package	SEER <u> </u>
a) U-factor:(weighted average)	7a. <u>0.360</u>	c) Ground/water source	SEER/COP <u> </u>
b) Solar Heat Gain Coefficient (SHGC)	7b. <u>0.250</u>	d) Room unit/PTAC	EER <u> </u>
c) Area	7c. <u>230.0</u>	e) Other	<u> </u> 14.0
8. Skylights		14. Heating system:	Capacity <u>25.5</u>
a) U-factor:(weighted average)	8a. <u>NA</u>	a) Split system heat pump	HSPF <u> </u>
b) Solar Heat Gain Coefficient (SHGC)	8b. <u>NA</u>	b) Single package heat pump	HSPF <u> </u>
9. Floor type, insulation level:		c) Electric resistance	COP <u> </u>
a) Slab-on-grade (R-value)	9a. <u>0.0</u>	d) Gas furnace, natural gas	AFUE <u> </u>
b) Wood, raised (R-value)	9b. <u> </u>	e) Gas furnace, LPG	AFUE <u> </u>
c) Concrete, raised (R-value)	9c. <u> </u>	f) Other	<u> </u> 8.20
10. Wall type and insulation:		15. Water heating system	
A. Exterior:		a) Electric resistance	EF <u> </u>
1. Wood frame (Insulation R-value)	10A1. <u>19.0</u>	b) Gas fired, natural gas	EF <u> </u>
2. Masonry (Insulation R-value)	10A2. <u> </u>	c) Gas fired, LPG	EF <u>0.59</u>
B. Adjacent:		d) Solar system with tank	EF <u> </u>
1. Wood frame (Insulation R-value)	10B1. <u> </u>	e) Dedicated heat pump with tank	EF <u> </u>
2. Masonry (Insulation R-value)	10B2. <u> </u>	f) Heat recovery unit	HeatRec% <u> </u>
11. Ceiling type and insulation level		g) Other	<u> </u>
a) Under attic	11a. <u>38.0</u>	16. HVAC credits claimed (Performance Method)	
b) Single assembly	11b. <u> </u>	a) Ceiling fans	<u> </u>
c) Knee walls/skylight walls	11c. <u> </u>	b) Cross ventilation	<u> </u> Yes
d) Radiant barrier installed	11d. <u>Yes</u>	c) Whole house fan	<u> </u> No
		d) Multizone cooling credit	<u> </u>
		e) Multizone heating credit	<u> </u>
		f) Programmable thermostat	<u> </u> Yes

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

I certify that this home has complied with the Florida Building Code, Energy Conservation, 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: SE Country Club Road City/FL Zip: Lake City, FL