

**FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION**

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Culverhouse Res  
 Street: 138 SW Mossy Oak Way  
 City, State, Zip: Lake City, FL, 32025  
 Owner: The Culverhouses  
 Design Location: FL, Gainesville

Builder Name: Sparks Construction  
 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 <sup>2</sup> )	2438
Conditioned floor area below grade (ft <sup>2</sup> )	0
7. Windows (396.0 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.36 396.00 ft <sup>2</sup>
SHGC:	SHGC=0.25
b. U-Factor:	N/A ft <sup>2</sup>
SHGC:	
c. U-Factor:	N/A ft <sup>2</sup>
SHGC:	
Area Weighted Average Overhang Depth:	7.253 ft.
Area Weighted Average SHGC:	0.250
8. Skylights	Area
c. U-Factor:(AVG)	N/A ft <sup>2</sup>
SHGC(AVG):	N/A
9. Floor Types (2438.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 2438.00 ft <sup>2</sup>
b. N/A	R= ft <sup>2</sup>
c. N/A	R= ft <sup>2</sup>

10. Wall Type (2346.0 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=13.0 2013.00 ft <sup>2</sup>
b. Frame - Wood, Adjacent	R=13.0 333.00 ft <sup>2</sup>
c. N/A	R= ft <sup>2</sup>
d. N/A	R= ft <sup>2</sup>
11. Ceiling Types (2560.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=38.0 2560.00 ft <sup>2</sup>
b. N/A	R= ft <sup>2</sup>
c. N/A	R= ft <sup>2</sup>
12. Ducts	R ft <sup>2</sup>
a. Sup: Attic, Ret: Attic, AH: Garage	6 609.5
13. Cooling systems	kBtu/hr Efficiency
a. Central Unit	26.5 SEER:14.00
14. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	37.8 HSPF:8.20
15. Hot water systems	
a. Propane Tankless	Cap: 1 gallons
	EF: 0.590
b. Conservation features	
None	
16. Credits	CV, Pstat

Glass/Floor Area: 0.162

Total Proposed Modified Loads: 51.11

Total Baseline Loads: 59.79

**PASS**

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

PREPARED BY: \_\_\_\_\_

DATE: 3 / 30 / 2022

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:	Culverhouse Res	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	2438	Lot #	
Owner Name:	The Culverhouses	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Sparks Construction	Rotate Angle:	0	Street:	138 SW Mossy Oak Wa
Permit Office:	Columbia County	Cross Ventilation:	Yes	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City ,
Family Type:	Detached				FL , 32025
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	2438	21942

## SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	2438	21942	Yes	6	3	1	Yes	Yes	Yes

## FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	264 ft	0	2438 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	Metal	2930 ft²	812 ft²	Medium	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	2438 ft²	Y	N

## CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Double Batt	2560 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	6		9		54.0 ft²		0.23	0.75	0
___	2	W	Exterior	Frame - Wood	Main	13	6		9		54.0 ft²		0.23	0.75	0
___	3	S	Exterior	Frame - Wood	Main	13	34		9		306.0 ft²		0.23	0.75	0
___	4	E	Exterior	Frame - Wood	Main	13	4		9		36.0 ft²		0.23	0.75	0
___	5	S	Exterior	Frame - Wood	Main	13	11	4	9		102.0 ft²		0.23	0.75	0
___	6	E	Garage	Frame - Wood	Main	13	13		9		117.0 ft²		0.23	0.75	0
___	7	S	Garage	Frame - Wood	Main	13	24		9		216.0 ft²		0.23	0.75	0
___	8	E	Exterior	Frame - Wood	Main	13	36	4	9		327.0 ft²		0.23	0.75	0
___	9	N	Exterior	Frame - Wood	Main	13	24		9		216.0 ft²		0.23	0.75	0
___	10	W	Exterior	Frame - Wood	Main	13	24		9		216.0 ft²		0.23	0.75	0
___	11	N	Exterior	Frame - Wood	Main	13	45	4	9		408.0 ft²		0.23	0.75	0
___	12	W	Exterior	Frame - Wood	Main	13	6		9		54.0 ft²		0.23	0.75	0
___	13	N	Exterior	Frame - Wood	Main	13	6		9		54.0 ft²		0.23	0.75	0
___	14	W	Exterior	Frame - Wood	Main	13	20	8	9		186.0 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

## 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	8.0 ft²	14 ft 0 in	0 ft 4 in	None	None
___	2	S	3	Vinyl	Low-E Double	Yes	0.36	0.25	N	72.0 ft²	8 ft 6 in	0 ft 4 in	None	None
___	3	S	3	TIM	Low-E Double	Yes	0.36	0.25	N	48.0 ft²	8 ft 6 in	0 ft 4 in	None	None
___	4	S	5	Vinyl	Low-E Double	Yes	0.36	0.25	N	10.0 ft²	12 ft 6 in	0 ft 4 in	None	None
___	5	E	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	8.0 ft²	1 ft 6 in	1 ft 0 in	None	None
___	6	E	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	8.0 ft²	1 ft 6 in	1 ft 0 in	None	None
___	7	E	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	10.0 ft²	1 ft 6 in	1 ft 0 in	None	None
___	8	N	9	Vinyl	Low-E Double	Yes	0.36	0.25	N	12.0 ft²	1 ft 6 in	1 ft 0 in	None	None
___	9	N	9	Vinyl	Low-E Double	Yes	0.36	0.25	N	36.0 ft²	1 ft 6 in	1 ft 0 in	None	None
___	10	W	10	TIM	Low-E Double	Yes	0.36	0.25	N	24.0 ft²	6 ft 0 in	0 ft 4 in	None	None
___	11	N	11	Vinyl	Low-E Double	Yes	0.36	0.25	N	24.0 ft²	8 ft 6 in	0 ft 4 in	None	None
___	12	N	11	Vinyl	Low-E Double	Yes	0.36	0.25	N	96.0 ft²	8 ft 6 in	0 ft 4 in	None	None
___	13	N	11	Vinyl	Low-E Double	Yes	0.36	0.25	N	36.0 ft²	8 ft 6 in	0 ft 4 in	None	None
___	14	W	14	Vinyl	Low-E Double	Yes	0.36	0.25	N	4.0 ft²	8 ft 6 in	0 ft 4 in	None	None

## INPUT SUMMARY CHECKLIST REPORT

GARAGE														
✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation								
_____	1	583.92 ft²	583.92 ft²	61.33 ft	9 ft	1								
INFILTRATION														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50						
1	Wholehouse	Proposed ACH(50)	.000286	1828.5	100.32	188.33	.1027	5						
HEATING SYSTEM														
✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block		Ducts					
_____	1	Electric Heat Pump/	None	Singl	HSPF:8.2	37.84 kBtu/hr	1		sys#1					
COOLING SYSTEM														
✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts				
_____	1	Central Unit/	None	Singl	SEER: 14	26.52 kBtu/hr	810 cfm	0.7	1	sys#1				
HOT WATER SYSTEM														
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation					
_____	1	Propane	Tankless	Exterior	0.59	1 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						
DUCTS														
✓	#	---- Supply ----			---- Return ----			Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat Cool	
_____	1	Attic	6	609.5 ft	Attic	121.9 ft	Default Leakage	Garage	(Default)	(Default)			1	1

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES													
Programable Thermostat: Y		Ceiling Fans:											
Cooling Heating Venting	<input type="checkbox"/> Jan <input checked="" type="checkbox"/> Jan <input type="checkbox"/> Jan	<input type="checkbox"/> Feb <input checked="" type="checkbox"/> Feb <input type="checkbox"/> Feb	<input type="checkbox"/> Mar <input checked="" type="checkbox"/> Mar <input checked="" type="checkbox"/> Mar	<input type="checkbox"/> Apr <input type="checkbox"/> Apr <input checked="" type="checkbox"/> Apr	<input type="checkbox"/> May <input type="checkbox"/> May <input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun <input type="checkbox"/> Jun <input type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul <input type="checkbox"/> Jul <input type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug <input type="checkbox"/> Aug <input type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep <input type="checkbox"/> Sep <input type="checkbox"/> Sep	<input type="checkbox"/> Oct <input type="checkbox"/> Oct <input checked="" type="checkbox"/> Oct	<input type="checkbox"/> Nov <input checked="" type="checkbox"/> Nov <input checked="" type="checkbox"/> Nov	<input type="checkbox"/> Dec <input type="checkbox"/> Dec <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\* = 85

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

138 SW Mossy Oak Way, 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	2013.00 ft <sup>2</sup>
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	333.00 ft <sup>2</sup>
4. Number of Bedrooms	3	c. N/A	R=	ft <sup>2</sup>
5. Is this a worst case?	No	d. N/A	R=	ft <sup>2</sup>
6. Conditioned floor area (ft <sup>2</sup> )	2438	11. Ceiling Type and insulation level	Insulation	Area
7. Windows**	Description	a. Under Attic (Vented)	R=38.0	2560.00 ft <sup>2</sup>
a. U-Factor:	Dbl, U=0.36	b. N/A	R=	ft <sup>2</sup>
SHGC:	SHGC=0.25	c. N/A	R=	ft <sup>2</sup>
b. U-Factor:	N/A	12. Ducts, location & insulation level	R	ft <sup>2</sup>
SHGC:		a. Sup: Attic, Ret: Attic, AH: Garage	6	609.5
c. U-Factor:	N/A	13. Cooling systems	kBtu/hr	Efficiency
SHGC:		a. Central Unit	26.5	SEER:14.00
d. U-Factor:	N/A	14. Heating systems	kBtu/hr	Efficiency
SHGC:		a. Electric Heat Pump	37.8	HSPF:8.20
Area Weighted Average Overhang Depth:	7.253 ft.	15. Hot water systems		Cap: 1 gallons
Area Weighted Average SHGC:	0.250	a. Propane		EF: 0.59
8. Skylights	Description	b. Conservation features		
a. U-Factor(AVG):	N/A	None		
SHGC(AVG):	N/A	Credits (Performance method)		CV, Pstat
9. Floor Types	Insulation	Area		
a. Slab-On-Grade Edge Insulation	R=0.0	2438.00 ft <sup>2</sup>		
b. N/A	R=	ft <sup>2</sup>		
c. N/A	R=	ft <sup>2</sup>		

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.