


# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Herring Residence Street: SW Magnolia Lane City, State, Zip: Ft. White , FL , 32038 Owner: Design Location: FL, Gainesville	Builder Name: G.Buzbee Permit Office: Permit Number: Jurisdiction: County: Columbia (Florida Climate Zone 2 )
---	---

<table style="width:100%; border-collapse: collapse;"> <tr> <td>1. New construction or existing</td> <td>New (From Plans)</td> </tr> <tr> <td>2. Single family or multiple family</td> <td>Detached</td> </tr> <tr> <td>3. Number of units, if multiple family</td> <td>1</td> </tr> <tr> <td>4. Number of Bedrooms</td> <td>3</td> </tr> <tr> <td>5. Is this a worst case?</td> <td>No</td> </tr> <tr> <td>6. Conditioned floor area above grade (ft²)</td> <td>1693</td> </tr> <tr> <td>Conditioned floor area below grade (ft²)</td> <td>0</td> </tr> <tr> <td>7. Windows(222.0 sqft.)</td> <td>Description Area</td> </tr> <tr> <td>a. U-Factor:</td> <td>Dbl, U=0.33 222.00 ft²</td> </tr> <tr> <td>SHGC:</td> <td>SHGC=0.23</td> </tr> <tr> <td>b. U-Factor:</td> <td>N/A ft²</td> </tr> <tr> <td>SHGC:</td> <td></td> </tr> <tr> <td>c. U-Factor:</td> <td>N/A ft²</td> </tr> <tr> <td>SHGC:</td> <td></td> </tr> <tr> <td>Area Weighted Average Overhang Depth:</td> <td>3.872 ft.</td> </tr> <tr> <td>Area Weighted Average SHGC:</td> <td>0.230</td> </tr> <tr> <td>8. Skylights</td> <td>Area</td> </tr> <tr> <td>c. U-Factor:(AVG)</td> <td>N/A ft²</td> </tr> <tr> <td>SHGC(AVG):</td> <td>N/A</td> </tr> <tr> <td>9. Floor Types (1693.0 sqft.)</td> <td>Insulation Area</td> </tr> <tr> <td>a. Slab-On-Grade Edge Insulation</td> <td>R=0.0 1693.00 ft²</td> </tr> <tr> <td>b. N/A</td> <td>R= ft²</td> </tr> <tr> <td>c. N/A</td> <td>R= ft²</td> </tr> </table>	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)	1693	Conditioned floor area below grade (ft²)	0	7. Windows(222.0 sqft.)	Description Area	a. U-Factor:	Dbl, U=0.33 222.00 ft²	SHGC:	SHGC=0.23	b. U-Factor:	N/A ft²	SHGC:		c. U-Factor:	N/A ft²	SHGC:		Area Weighted Average Overhang Depth:	3.872 ft.	Area Weighted Average SHGC:	0.230	8. Skylights	Area	c. U-Factor:(AVG)	N/A ft²	SHGC(AVG):	N/A	9. Floor Types (1693.0 sqft.)	Insulation Area	a. Slab-On-Grade Edge Insulation	R=0.0 1693.00 ft²	b. N/A	R= ft²	c. N/A	R= ft²	<table style="width:100%; border-collapse: collapse;"> <tr> <td>10. Wall Type(1899.0 sqft.)</td> <td>Insulation Area</td> </tr> <tr> <td>a. Frame - Wood, Exterior</td> <td>R=13.0 1575.00 ft²</td> </tr> <tr> <td>b. Frame - Wood, Adjacent</td> <td>R=13.0 324.00 ft²</td> </tr> <tr> <td>c. N/A</td> <td>R= ft²</td> </tr> <tr> <td>d. N/A</td> <td>R= ft²</td> </tr> <tr> <td>11. Ceiling Types (1693.0 sqft.)</td> <td>Insulation Area</td> </tr> <tr> <td>a. Under Attic (Vented)</td> <td>R=30.0 1693.00 ft²</td> </tr> <tr> <td>b. N/A</td> <td>R= ft²</td> </tr> <tr> <td>c. N/A</td> <td>R= ft²</td> </tr> <tr> <td>12. Ducts</td> <td>R ft²</td> </tr> <tr> <td>a. Sup: Attic, Ret: Attic, AH: Garage</td> <td>6 338.6</td> </tr> <tr> <td>13. Cooling systems</td> <td>kBtu/hr Efficiency</td> </tr> <tr> <td>a. Central Unit</td> <td>30.0 SEER:15.00</td> </tr> <tr> <td>14. Heating systems</td> <td>kBtu/hr Efficiency</td> </tr> <tr> <td>a. Electric Heat Pump</td> <td>29.8 HSPF:8.50</td> </tr> <tr> <td>15. Hot water systems</td> <td></td> </tr> <tr> <td>a. Electric</td> <td>Cap: 50 gallons EF: 0.950</td> </tr> <tr> <td>b. Conservation features</td> <td>None</td> </tr> <tr> <td>16. Credits</td> <td>CF, Pstat</td> </tr> </table>	10. Wall Type(1899.0 sqft.)	Insulation Area	a. Frame - Wood, Exterior	R=13.0 1575.00 ft²	b. Frame - Wood, Adjacent	R=13.0 324.00 ft²	c. N/A	R= ft²	d. N/A	R= ft²	11. Ceiling Types (1693.0 sqft.)	Insulation Area	a. Under Attic (Vented)	R=30.0 1693.00 ft²	b. N/A	R= ft²	c. N/A	R= ft²	12. Ducts	R ft²	a. Sup: Attic, Ret: Attic, AH: Garage	6 338.6	13. Cooling systems	kBtu/hr Efficiency	a. Central Unit	30.0 SEER:15.00	14. Heating systems	kBtu/hr Efficiency	a. Electric Heat Pump	29.8 HSPF:8.50	15. Hot water systems		a. Electric	Cap: 50 gallons EF: 0.950	b. Conservation features	None	16. Credits	CF, Pstat
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)	1693																																																																																				
Conditioned floor area below grade (ft²)	0																																																																																				
7. Windows(222.0 sqft.)	Description Area																																																																																				
a. U-Factor:	Dbl, U=0.33 222.00 ft²																																																																																				
SHGC:	SHGC=0.23																																																																																				
b. U-Factor:	N/A ft²																																																																																				
SHGC:																																																																																					
c. U-Factor:	N/A ft²																																																																																				
SHGC:																																																																																					
Area Weighted Average Overhang Depth:	3.872 ft.																																																																																				
Area Weighted Average SHGC:	0.230																																																																																				
8. Skylights	Area																																																																																				
c. U-Factor:(AVG)	N/A ft²																																																																																				
SHGC(AVG):	N/A																																																																																				
9. Floor Types (1693.0 sqft.)	Insulation Area																																																																																				
a. Slab-On-Grade Edge Insulation	R=0.0 1693.00 ft²																																																																																				
b. N/A	R= ft²																																																																																				
c. N/A	R= ft²																																																																																				
10. Wall Type(1899.0 sqft.)	Insulation Area																																																																																				
a. Frame - Wood, Exterior	R=13.0 1575.00 ft²																																																																																				
b. Frame - Wood, Adjacent	R=13.0 324.00 ft²																																																																																				
c. N/A	R= ft²																																																																																				
d. N/A	R= ft²																																																																																				
11. Ceiling Types (1693.0 sqft.)	Insulation Area																																																																																				
a. Under Attic (Vented)	R=30.0 1693.00 ft²																																																																																				
b. N/A	R= ft²																																																																																				
c. N/A	R= ft²																																																																																				
12. Ducts	R ft²																																																																																				
a. Sup: Attic, Ret: Attic, AH: Garage	6 338.6																																																																																				
13. Cooling systems	kBtu/hr Efficiency																																																																																				
a. Central Unit	30.0 SEER:15.00																																																																																				
14. Heating systems	kBtu/hr Efficiency																																																																																				
a. Electric Heat Pump	29.8 HSPF:8.50																																																																																				
15. Hot water systems																																																																																					
a. Electric	Cap: 50 gallons EF: 0.950																																																																																				
b. Conservation features	None																																																																																				
16. Credits	CF, Pstat																																																																																				

Glass/Floor Area: 0.131	Total Proposed Modified Loads: 45.27 Total Baseline Loads: 46.33	PASS
-------------------------	---	------

<p>I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.</p> <p>PREPARED BY: <u>Donna Brackeen</u>                  DATE: <u>01/08/2021</u></p> <p>I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.</p> <p>OWNER/AGENT: <u><i>Garron Buzbee</i></u>                  DATE: <u>1/18/2021</u></p>	<p>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.</p> <div style="text-align: center;">  </div> <p>BUILDING OFFICIAL: _____                  DATE: _____</p>
--	---

- 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 7.00 ACH50 (R402.4.1.2).

# INPUT SUMMARY CHECKLIST REPORT

PROJECT													
Title:	Herring Residence	Bedrooms:	3	Address Type:	Street Address								
Building Type:	User	Conditioned Area:	1693	Lot #									
Owner Name:		Total Stories:	1	Block/Subdivision:									
# of Units:	1	Worst Case:	No	PlatBook:									
Builder Name:	G.Buzbee	Rotate Angle:	0	Street:	SW Magnolia Lane								
Permit Office:		Cross Ventilation:		County:	Columbia								
Jurisdiction:		Whole House Fan:		City, State, Zip:	Ft. White , FL , 32038								
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	1693	15237									
SPACES													
	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated		
	1	Main	1693	15237	Yes	4	3	1	Yes	Yes	Yes		
FLOORS													
✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet			
_____	1	Slab-On-Grade Edge Insulatio	Main	175 ft	0	1693 ft²	----	0.25	0.75	0			
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	2038 ft²	566 ft²	Medium	N	0.85	No	0.9	No	0	33.69
ATTIC													
✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC						
_____	1	Full attic	Vented	300	1696 ft²	N	N						
CEILING													
✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type					
_____	1	Under Attic (Vented)	Main	30	Blown	1693 ft²	0.11	Wood					

**INPUT SUMMARY CHECKLIST REPORT**

<b>WALLS</b>														
✓ #	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	13	41	10	9		376.5 ft²	0.69	0.23	0.5	0
___ 2	W	Exterior	Frame - Wood	Main	13	44	7	9		401.3 ft²	0.69	0.23	0.5	0
___ 3	E	Exterior	Frame - Wood	Main	13	28	1	9		252.8 ft²	0.69	0.23	0.5	0
___ 4	S	Exterior	Frame - Wood	Main	13	32	8	9		294.0 ft²	0.69	0.23	0.5	0
___ 5	S	Exterior	Frame - Wood	Main	13	27	10	9		250.5 ft²	0.69	0.23	0.5	0
___ 6	N	Garage	Frame - Wood	Main	13	36		9		324.0 ft²		0.23	0.01	0

<b>DOORS</b>												
✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area		
___ 1	N	Insulated	Main	None	.29	2	8	6	8	17.8 ft²		
___ 2	N	Insulated	Main	None	.29	3		6	8	20 ft²		
___ 3	W	Insulated	Main	None	.29	3		6	8	20 ft²		

<b>WINDOWS</b>														
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	0.33	0.23	N	60.0 ft²	6 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5	
___ 2	W	2	Vinyl	Low-E Double	Yes	0.33	0.23	N	45.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5	
___ 3	S	4	Vinyl	Low-E Double	Yes	0.33	0.23	N	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5	
___ 4	S	4	Vinyl	Low-E Double	Yes	0.33	0.23	N	30.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5	
___ 5	S	4	Vinyl	Low-E Double	Yes	0.33	0.23	N	12.0 ft²	1 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5	
___ 6	S	5	Vinyl	Low-E Double	Yes	0.33	0.23	N	45.0 ft²	8 ft 6 in	1 ft 0 in	Drapes/blinds	Exterior 5	

<b>GARAGE</b>						
✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation	
___ 1	425 ft²	425 ft²	51.3 ft	9 ft	1	

<b>INFILTRATION</b>								
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.0004	1777.7	97.53	183.1	.1438	7

<b>HEATING SYSTEM</b>								
✓ #	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts	
___ 1	Electric Heat Pump/	Split	Singl	HSPF:8.5	29.8 kBtu/hr	1	sys#1	

## INPUT SUMMARY CHECKLIST REPORT

COOLING SYSTEM														
✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts				
_____	1	Central Unit/	Split	Singl	SEER: 15	30 kBtu/hr	900 cfm	0.75	1	sys#1				
HOT WATER SYSTEM														
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation					
_____	1	Electric	None	Garage	0.95	50 gal	60 gal	120 deg	None					
SOLAR HOT WATER SYSTEM														
✓	FSEC Cert #	Company Name	System Model #			Collector Model #	Collector Area	Storage Volume	FEF					
_____	None	None					ft <sup>2</sup>							
DUCTS														
✓	#	---- Supply ----		---- Return ----		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat Cool		
_____	1	Attic	6	338.6 ft	Attic	84.65 ft	Default Leakage	Garage	(Default)	(Default)		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: FloridaCode 2017											Hours			
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)	AM	75	75	75	75	75	75	75	75	75	75	75	75	
	PM	75	75	75	75	75	75	75	75	75	75	75	75	
Cooling (WEH)	AM	75	75	75	75	75	75	75	75	75	75	75	75	
	PM	75	75	75	75	75	75	75	75	75	75	75	75	
Heating (WD)	AM	72	72	72	72	72	72	72	72	72	72	72	72	
	PM	72	72	72	72	72	72	72	72	72	72	72	72	
Heating (WEH)	AM	72	72	72	72	72	72	72	72	72	72	72	72	
	PM	72	72	72	72	72	72	72	72	72	72	72	72	
MASS														
Mass Type			Area	Thickness	Furniture Fraction			Space						
Default(8 lbs/sq.ft.)			0 ft <sup>2</sup>	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.

SW Magnolia Lane, Ft. White, FL, 32038

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	1575.00 ft²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	324.00 ft²
4. Number of Bedrooms	3	c. N/A	R=	ft²
5. Is this a worst case?	No	d. N/A	R=	ft²
6. Conditioned floor area (ft²)	1693	11. Ceiling Type and insulation level	Insulation	Area
7. Windows**	Description	Area	R=30.0	1693.00 ft²
a. U-Factor:	Dbl, U=0.33	222.00 ft²	R=	ft²
SHGC:	SHGC=0.23		R=	ft²
b. U-Factor:	N/A	ft²		
SHGC:				
c. U-Factor:	N/A	ft²	12. Ducts, location & insulation level	R
SHGC:		ft²	a. Sup: Attic, Ret: Attic, AH: Garage	6 338.6
d. U-Factor:	N/A	ft²		
SHGC:				
Area Weighted Average Overhang Depth:	3.872 ft.		13. Cooling systems	kBtu/hr Efficiency
Area Weighted Average SHGC:	0.230		a. Central Unit	30.0 SEER:15.00
8. Skylights	Description	Area		
a. U-Factor(AVG):	N/A	ft²	14. Heating systems	kBtu/hr Efficiency
SHGC(AVG):	N/A		a. Electric Heat Pump	29.8 HSPF:8.50
9. Floor Types	Insulation	Area		
a. Slab-On-Grade Edge Insulation	R=0.0	1693.00 ft²	15. Hot water systems	Cap: 50 gallons
b. N/A	R=	ft²	a. Electric	EF: 0.95
c. N/A	R=	ft²	b. Conservation features	
			None	
			Credits (Performance method)	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.

Builder Signature:  Date: 1/18/2021  
 Address of New Home: 468 SW Magnolia Lane City/FL Zip: Ft White, FL 32038



\*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.