

**FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION**

## Florida Department of Business and Professional Regulation - Residential Performance Method

<b>Project Name:</b> Mary Johnson Res <b>Street:</b> <b>City, State, Zip:</b> Lake City, FL, 32055 <b>Owner:</b> Mary Johnson <b>Design Location:</b> FL, Gainesville	<b>Builder Name:</b> ChrisMill Homes Of Florida <b>Permit Office:</b> Columbia County <b>Permit Number:</b> <b>Jurisdiction:</b> <b>County:</b> Columbia(Florida Climate Zone 2)
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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      2 5. Is this a worst case?      No 6. Conditioned floor area above grade (ft²)      1144 Conditioned floor area below grade (ft²)      0 7. Windows(142.5 sqft.)      Description      Area a. U-Factor:      Sgl, U=0.36      142.50 ft² SHGC:      SHGC=0.25 b. U-Factor:      N/A      ft² SHGC: c. U-Factor:      N/A      ft² SHGC: Area Weighted Average Overhang Depth:      1.337 ft Area Weighted Average SHGC:      0.250 8. Skylights      Description      Area U-Factor:(AVG)      N/A      N/A ft² SHGC(AVG):      N/A 9. Floor Types      Insulation      Area a. Slab-On-Grade Edge Insulation      R= 0.0      1144.00 ft² b. N/A      R=      ft² c. N/A      R=      ft²	10. Wall Types(1120.0 sqft.)      Insulation      Area a. Frame - Wood, Exterior      R=13.0      1120.00 ft² b. N/A c. N/A d. N/A 11. Ceiling Types(1258.4 sqft.)      Insulation      Area a. Flat ceiling under att (Vented)      R=38.0      1258.40 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0      1279 ft² 13. Ducts, location & insulation level      R      ft² a. Sup: Attic, Ret: Attic, AH: 1st Floor      6      286 b. c. 14. Cooling Systems      kBtu/hr      Efficiency a. Central Unit      15.4      SEER2:16.00 15. Heating Systems      kBtu/hr      Efficiency a. Electric Heat Pump      18.8      HSPF2:8.80 16. Hot Water Systems a. Electric      Cap: 40 gallons EF: 0.920 b. Conservation features None 17. Credits      CV, Pstat
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Glass/Floor Area:0.125	Total Proposed Modified Loads:      31.11	PASS
	Total Baseline Loads:      33.07	

NOTE: Proposed residence must have annual total normalized Modified Loads that are less than or equal to 95 percent of the annual total loads of the standard reference design in order to comply.

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.  PREPARED BY: <u>Wm C. [Signature]</u> DATE: <u>8 / 1 / 2024</u>  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.  <div style="display: flex; justify-content: space-around; align-items: center;"> </div> BUILDING OFFICIAL: _____ DATE: _____
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- 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.
- Default duct leakage does not require a Duct Leakage Test Report.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 7.00 ACH50 (R402.4.1.2).

## INPUT SUMMARY CHECKLIST REPORT

PROJECT												
Title:	Mary Johnson Res			Bedrooms:	2		Address type:	Street Address				
Building Type:	User			Conditioned Area:	1144		Lot #:	---				
Owner:	Mary Johnson			Total Stories:	1		Block/SubDivision:	---				
Builder Home ID:				Worst Case:	No		PlatBook:	---				
Builder Name:	ChrisMill Homes Of Florida			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			Terrain:	Suburban							
New/Existing:	New (From Plans)			Shielding:	Suburban							
Year Construct:	2024											
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_REGIONA			32	92	70	75	1305.5	51	Medium		
BLOCKS												
✓ Number	Name	Area	Volume									
___ 1	Block1	1144	9152 cu ft									
SPACES												
✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated			
___ 1	1st Floor	1144	9152	Yes	4	2	Yes	Yes	Yes			
FLOORS (Total Exposed Area = 1144 sq.ft.)												
✓ #	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim.	U-Factor Joist	Slab Insul. Vert/Horiz	Tile	Wood	Carpet		
___ 1	Slab-On-Grade Edge Ins	1st Floor	140	1144 sqft	0	---	0.304	2 (ft)/0 (ft)	0.00	0.00	1.00	
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	1279 ft²	160 ft²	Medium	Y	0.96	No	0.9	No	0	26.57
ATTIC												
✓ #	Type	Ventilation	Vent Ratio (1 in)		Area	RBS	IRCC					
___ 1	Partial cathedral ceiling	Vented	300		1144 ft²	Y	N					
CEILING (Total Exposed Area = 1258 sq.ft.)												
✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type				
___ 1	Flat ceiling under attic(Vented)	1st Floor	38.0	Blown	1258.4ft²	0.024	0.11	Wood				



## INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 1120 sq.ft.)			
✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade			
___ 1	S	Exterior	Frame - Wood	1st Floor	13.0	44.0	0	8.0	0	352.0	0.084		0.23	0.75	0 %			
___ 2	E	Exterior	Frame - Wood	1st Floor	13.0	26.0	0	8.0	0	208.0	0.084		0.23	0.75	0 %			
___ 3	N	Exterior	Frame - Wood	1st Floor	13.0	44.0	0	8.0	0	352.0	0.084		0.23	0.75	0 %			
___ 4	E	Exterior	Frame - Wood	1st Floor	13.0	26.0	0	8.0	0	208.0	0.084		0.23	0.75	0 %			

  

DOORS											(Total Exposed Area = 38 sq.ft.)		
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area		
___ 1	S	Exterior	Insulated	1st Floor	None	0.46	3.00	0	6.00	8	20.0ft²		
___ 2	N	Exterior	Insulated	1st Floor	None	0.46	2.00	8	6.00	8	17.8ft²		

  

WINDOWS															(Total Exposed Area = 143 sq.ft.)		
✓ #	Ornt	Wall ID	Frame	Panes	NFRC U-Factor	SHGC	Imp	Storm	Total Area (ft²)	Same Units	Width (ft)	Height (ft)	--Overhang-- Depth (ft)	Sep. (ft)	Interior Shade	Screen	
___ 1	S	1	Vinyl	Low-E Single	Y	0.36	0.25	N	N	62.0	4	3.00	5.17	1.5	0.5	None	None
___ 2	E	2	Vinyl	Low-E Single	Y	0.36	0.25	N	N	15.5	1	3.00	5.17	1.0	0.5	None	None
___ 3	N	3	Vinyl	Low-E Single	Y	0.36	0.25	N	N	18.0	2	3.00	3.00	1.5	0.5	None	None
___ 4	N	3	Vinyl	Low-E Single	Y	0.36	0.25	N	N	16.0	1	4.00	4.00	1.5	0.5	None	None
___ 5	E	4	Vinyl	Low-E Single	Y	0.36	0.25	N	N	31.0	2	3.00	5.17	1.0	0.5	None	None

  

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00036	1068	58.58	109.98	0.1372	7.0	All	9152 cu ft

  

MASS					
✓ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	1st Floor

  

HEATING SYSTEM										
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump Power	Volts	Current	Block
___ 1	Electric Heat Pump	None/Single		HSPF2: 8.80	18.8		0.00	0.00	0.00	sys#1 1

  

COOLING SYSTEM									
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	None/Single		SEER2:16.0	15.4	450	0.75	sys#1	1

# INPUT SUMMARY CHECKLIST REPORT

## HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Electric	None	1st Floor	0.92 (0.92)	40.00 gal	40 gal	120 deg	Standard	None	12
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits
___ 1	No		NA	NA	NA	No	NA	NA	NA	None

## DUCTS

✓ Duct #	Location	Supply R-Value	Area	Return Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN OUT	RLF	HVAC # Heat	Cool
___ 1	Attic	6.0	286 ft²	Attic	6.0	57 ft²	Default Leakage	1st Floor	(Default)	(Default)			1	1

## TEMPERATURES

Programable Thermostat: Y				Ceiling Fans: N									
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	Hours 7	8	9	10	11	12
___ Cooling (WD)	AM PM	78 80	78 80	78 78	78 78	78 78	78 78	78 78	78 78	78 78	80 78	80 78	80 78
___ Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
___ Heating (WD)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	68 66
___ Heating (WEH)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	68 66

# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

## ESTIMATED ENERGY PERFORMANCE INDEX\* = 94

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

,Lake City,FL,32055

1. New construction or existing	New (From Plans)	10. Wall Types(1120.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	1120.00 ft <sup>2</sup>
3. Number of units, if multiple family	1	b. N/A		
4. Number of Bedrooms	2	c. N/A		
5. Is this a worst case?	No	d. N/A		
6. Conditioned floor area above grade (ft <sup>2</sup> )	1144	11. Ceiling Types(1258.4 sqft.)	Insulation	Area
Conditioned floor area below grade (ft <sup>2</sup> )	0	a. Flat ceiling under att (Vented)	R=38.0	1258.40 ft <sup>2</sup>
7. Windows**	Description	b. N/A		
a. U-Factor:	Sgl, U=0.36	c. N/A		
SHGC:	SHGC=0.25	12. Roof(Comp. Shingles, Vented)	Deck R=0.0	1279 ft <sup>2</sup>
b. U-Factor:	N/A	13. Ducts, location & insulation level	R	ft <sup>2</sup>
SHGC:		a. Sup: Attic, Ret: Attic, AH: 1st Floor	6	286
c. U-Factor:	N/A	b.		
SHGC:		c.		
Area Weighted Average Overhang Depth:	1.337 ft	14. Cooling Systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.250	a. Central Unit	15.4	SEER2:16.00
8. Skylights	Description	15. Heating Systems	kBtu/hr	Efficiency
U-Factor:(AVG)	N/A	a. Electric Heat Pump	18.8	HSPF2:8.80
SHGC(AVG):	N/A			
9. Floor Types	Insulation	16. Hot Water Systems		
a. Slab-On-Grade Edge Insulation	R= 0.0	a. Electric	Cap: 40 gallons	
b. N/A	R=		EF: 0.920	
c. N/A	R=	b. Conservation features		
		17. Credits		None
				CV, 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: 8/2/24

Address of New Home: \_\_\_\_\_ City/FL Zip: Lake City,FL,32055



\*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.