


FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: 352 SW Buttercup Lane Street: 352 SW Buttercup Lane City, State, Zip: Lake City, FL, 32025 Owner: Design Location: FL, Gainesville	Builder Name: Permit Office: Columbia County Permit Number: Jurisdiction: County: 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 4 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 1841 Conditioned floor area below grade (ft²) 0 7. Windows(177.0 sqft.) Description Area a. U-Factor: Dbl, U=0.36 177.00 ft² SHGC: SHGC=0.25 b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 4.325 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 1841.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(1713.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 1477.50 ft² b. Frame - Wood, Adjacent R=13.0 235.50 ft² c. N/A d. N/A 11. Ceiling Types(1933.0 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=38.0 1933.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0 2213 ft² 13. Ducts, location & insulation level R ft² a. Sup: Attic, Ret: Attic, AH: 1st Floor 6 460 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 21.9 SEER:14.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 27.3 HSPF:8.20 16. Hot Water Systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None 17. Credits CV, Pstat
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Glass/Floor Area:0.096	Total Proposed Modified Loads: 45.68	PASS
	Total Baseline Loads: 46.63	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: <u>W. C. [Signature]</u> DATE: <u>3 / 2 / 2022</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="text-align: 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 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT													
Title:	352 SW Buttercup Lane			Bedrooms:	4	Address type:	Street Address						
Building Type:	User			Conditioned Area:	1841	Lot #:	---						
Owner:				Total Stories:	1	Block/SubDivision:	---						
Builder Name:				Worst Case:	No	PlatBook:	---						
Permit Office:	Columbia County			Rotate Angle:	0	Street:	352 SW Buttercup Lane						
Jurisdiction:				Cross Ventilation:	Yes	County:	Columbia						
Family Type:	Detached			Whole House Fan:	No	City, State, Zip:	Lake City, FL, 32025						
New/Existing:	New (From Plans)			Terrain:	Suburban								
Year Construct:	2023			Shielding:	Suburban								
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	1841	16569 cu ft										
SPACES													
✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated				
___ 1	1st Floor	1841	16569	Yes	8	4	Yes	Yes	Yes				
FLOORS (Total Exposed Area = 1841 sq.ft.)													
✓ #	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	U-Factor	Joist R-Value	Tile	Wood	Carpet			
___ 1	Slab-On-Grade Edge Ins	1st Floor	198	0	1841 ft	0.304	---	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	Hip	Composition shingles	2213 ft²	0 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		1841 ft²	Y	N						
CEILING (Total Exposed Area = 1933 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	Double Batt	1933.0ft²	0.024	0.11	Wood					

INPUT SUMMARY CHECKLIST REPORT

WALLS (Total Exposed Area = 1713 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	N	Exterior	Frame - Wood	1st Floor	13.0	32.0	2	9.0	0	289.5	0.084		0.23	0.75	0 %	
___ 2	N	Garage	Frame - Wood	1st Floor	13.0	26.0	2	9.0	0	235.5	0.084		0.23	0.75	0 %	
___ 3	W	Exterior	Frame - Wood	1st Floor	13.0	18.0	4	9.0	0	165.0	0.084		0.23	0.75	0 %	
___ 4	S	Exterior	Frame - Wood	1st Floor	13.0	3.0	6	9.0	0	31.5	0.084		0.23	0.75	0 %	
___ 5	W	Exterior	Frame - Wood	1st Floor	13.0	18.0	0	9.0	0	162.0	0.084		0.23	0.75	0 %	
___ 6	S	Exterior	Frame - Wood	1st Floor	13.0	25.0	8	9.0	0	231.0	0.084		0.23	0.75	0 %	
___ 7	E	Exterior	Frame - Wood	1st Floor	13.0	8.0	0	9.0	0	72.0	0.084		0.23	0.75	0 %	
___ 8	S	Exterior	Frame - Wood	1st Floor	13.0	16.0	6	9.0	0	148.5	0.084		0.23	0.75	0 %	
___ 9	S	Exterior	Frame - Wood	1st Floor	13.0	12.0	8	9.0	0	114.0	0.084		0.23	0.75	0 %	
___ 10	E	Exterior	Frame - Wood	1st Floor	13.0	29.0	4	9.0	0	264.0	0.084		0.23	0.75	0 %	

DOORS (Total Exposed Area = 40 sq.ft.)												
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area	
___ 1	N	Exterior	Insulated	1st Floor	None	0.46	3.00	0	6.00	8	20.0ft²	
___ 2	N	Garage	Insulated	1st Floor	None	0.46	3.00	0	6.00	8	20.0ft²	

WINDOWS (Total Exposed Area = 177 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	N	1	Vinyl	Low-E Double	Y	0.36	0.25	N	N	60.0	4	3.00	5.00	4.5	1.0	None	None
___ 2	W	3	Vinyl	Low-E Double	Y	0.36	0.25	N	N	16.0	1	4.00	4.00	1.5	1.0	None	None
___ 3	S	6	Vinyl	Low-E Double	Y	0.36	0.25	N	N	30.0	2	3.00	5.00	1.5	1.0	None	None
___ 4	S	6	Vinyl	Low-E Double	Y	0.36	0.25	N	N	12.0	1	4.00	3.00	1.5	1.0	None	None
___ 5	S	8	TIM	Low-E Double	Y	0.36	0.25	N	N	40.0	2	3.00	6.67	9.5	1.0	None	None
___ 6	S	9	Vinyl	Low-E Double	Y	0.36	0.25	N	N	15.0	1	3.00	5.00	1.5	1.0	None	None
___ 7	E	10	Vinyl	Low-E Double	Y	0.36	0.25	N	N	4.0	1	4.00	1.00	1.5	1.0	None	None

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00029	1381	75.75	142.22	0.1027	5.0	All	16569 cu ft

GARAGE					
✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	539 ft²	539 ft²	66 ft	9 ft	1

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

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Geothermal Entry	Heat Pump Power	Ducts Volt	Block Current
___ 1	Electric Heat Pump	None/Single		HSPF: 8.20	27.3		0.00	0.00	0.00 sys#1

COOLING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	None/Single		SEER:14.0	21.9	660	0.70	sys#1	1

HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Electric	None	Garage	0.92 (0.92)	50.00 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 R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
___ 1	Attic	6.0	460 ft²	Attic	6.0	92 ft²	Default Leakage	1st Floor	(Default)	(Default)		1 1

TEMPERATURES

Programable Thermostat: Y					Ceiling Fans: N									
Cooling	[] Jan	[] Feb	[] Mar	[] Apr	[] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[] Oct	[] Nov	[] Dec		
Heating	[X] Jan	[X] Feb	[X] Mar	[] 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		
Thermostat Schedule: HERS 2006 Reference														
✓ Schedule Type		1	2	3	4	5	6	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	80 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* = 98

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

352 SW Buttercup Lane,Lake City,FL,32025

1. New construction or existing	New (From Plans)	10. Wall Types(1713.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	1477.50 ft ²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	235.50 ft ²
4. Number of Bedrooms	4	c. N/A		
5. Is this a worst case?	No	d. N/A		
6. Conditioned floor area above grade (ft ²)	1841	11. Ceiling Types(1933.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft ²)	0	a. Flat ceiling under att (Vented)	R=38.0	1933.00 ft ²
7. Windows**	Description	b. N/A		
a. U-Factor:	Dbl, U=0.36	c. N/A		
SHGC:	SHGC=0.25	12. Roof(Comp. Shingles, Vented) Deck	R=0.0	2213 ft ²
b. U-Factor:	N/A	13. Ducts, location & insulation level	R	ft ²
SHGC:		a. Sup: Attic, Ret: Attic, AH: 1st Floor	6	460
c. U-Factor:	N/A	b.		
SHGC:		c.		
Area Weighted Average Overhang Depth:	4.325 ft	14. Cooling Systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.250	a. Central Unit	21.9	SEER:14.00
8. Skylights	Description	15. Heating Systems	kBtu/hr	Efficiency
U-Factor:(AVG)	N/A	a. Electric Heat Pump	27.3	HSPF:8.20
SHGC(AVG):	N/A			
9. Floor Types	Insulation	16. Hot Water Systems		
a. Slab-On-Grade Edge Insulation	R= 0.0	a. Electric	Cap: 50 gallons	
b. N/A	R=		EF: 0.920	
c. N/A	R=	b. Conservation features		
				None
		17. Credits		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: _____

Address of New Home: 352 SW Buttercup Lane

City/FL Zip: Lake City,FL,32025



*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.

Envelope Leakage Test Report (Blower Door Test)
Residential Prescriptive, Performance or ERI Method Compliance
2020 Florida Building Code, Energy Conservation, 7th Edition

Jurisdiction:	Permit #:	
Job Information		
Builder:	Community:	Lot: NA
Address: 352 SW Buttercup Lane		
City: Lake City	State: FL	Zip: 32025
Air Leakage Test Results <i>Passing results must meet either the Performance, Prescriptive, or ERI Method</i>		
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"><input type="radio"/> PRESCRIPTIVE METHOD-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.</div> <div style="border: 1px solid black; padding: 5px;"><input checked="" type="radio"/> PERFORMANCE or ERI METHOD-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2020 (Performance) or R406-2020 (ERI), section labeled as infiltration, sub-section ACH50. <div style="display: flex; justify-content: space-between; align-items: center;">ACH(50) specified on Form R405-2020-Energy Calc (Performance) or R406-2020 (ERI):<div style="border: 1px solid black; padding: 2px 10px; text-align: center;">5.000</div></div></div>		
<div style="display: flex; justify-content: space-between; align-items: flex-start;"><div style="width: 60%;">$\frac{\text{CFM}(50)}{\text{Building Volume}} \times 60 \div \frac{16569}{\text{ACH}(50)} =$<div style="border: 1px solid black; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">PASS</div><div style="margin-top: 10px;"><input type="checkbox"/> When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.</div></div><div style="width: 35%;"><p>Method for calculating building volume:</p><div style="display: flex; flex-direction: column; gap: 10px;"><div><input type="radio"/> Retrieved from architectural plans</div><div><input checked="" type="radio"/> Code software calculated</div><div><input type="radio"/> Field measured and calculated</div></div></div></div>		
<p>R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or <i>(Florida Statutes)</i> or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the <i>code official</i>. Testing shall be performed at any time after creation of all penetrations of the <i>building thermal envelope</i>.</p> <p>During testing:</p> <ol style="list-style-type: none">1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.3. Interior doors, if installed at the time of the test, shall be open.4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.5. Heating and cooling systems, if installed at the time of the test, shall be turned off.6. Supply and return registers, if installed at the time of the test, shall be fully open.		
Testing Company		
<div style="display: flex; justify-content: space-between;"><div>Company Name: _____</div><div>Phone: _____</div></div> <p>I hereby verify that the above Air Leakage results are in accordance with the 2020 7th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>Signature of Tester: _____</div><div>Date of Test: _____</div></div> <div style="margin-top: 10px;">Printed Name of Tester: _____</div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>License/Certification #: _____</div><div>Issuing Authority: _____</div></div>		