

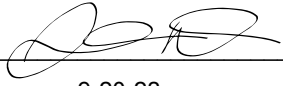
FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Miller Residence Street: City, State, Zip: Lake City, FL, Owner: Design Location: FL, Gainesville	Builder Name: Sparks Construction Permit Office: 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 3 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 2331 Conditioned floor area below grade (ft²) 0 7. Windows(250.5 sqft.) Description Area a. U-Factor: Dbl, U=0.33 243.50 ft² SHGC: SHGC=0.22 b. U-Factor: Dbl, U=0.26 7.00 ft² SHGC: SHGC=0.20 c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 3.746 ft Area Weighted Average SHGC: 0.219 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 2031.00 ft² b. Floor over Garage R= 0.0 300.00 ft² c. N/A R= ft²	10. Wall Types(2582.3 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 2207.30 ft² b. Frame - Wood, Adjacent R=13.0 375.00 ft² c. N/A d. N/A 11. Ceiling Types(2331.0 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=30.0 2031.00 ft² b. Single assembly, no ai (Vented) R=30.0 300.00 ft² c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0 2914 ft² 13. Ducts, location & insulation level R ft² a. Sup: Attic, Ret: Attic, AH: Main 6 455 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 42.0 SEER2:14.80 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 42.0 HSPF2:7.50 16. Hot Water Systems a. Electric Cap: 40 gallons EF: 0.920 b. Conservation features None 17. Credits CF, Pstat
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Glass/Floor Area: 0.107	Total Proposed Modified Loads: 54.50	PASS
	Total Baseline Loads: 60.40	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY:  DATE: 9-20-23 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: _____
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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.
- Compliance with a proposed duct leakage Qn requires a PERFORMANCE Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.030 Qn for whole house.
- 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).

PROJECT												
Title:		Miller Residence			Bedrooms:		3		Address type:		Lot	
Building Type:		User			Conditioned Area:		2331		Lot #:			
Owner:					Total Stories:		1		Block/SubDivision:			
Builder Home ID:					Worst Case:		No		PlatBook:			
Builder Name:		Sparks Construction			Rotate Angle:		0		Street:			
Permit Office:					Cross Ventilation:				County:		Columbia	
Jurisdiction:					Whole House Fan:				City, State, Zip:		Lake City, FL,	
Family Type:		Detached			Terrain:		Rural					
New/Existing:		New (From Plans)			Shielding:		Moderate/Rural					
Year Construct:		2023										
Comment:												
CLIMATE												
✓	Design Location		Tmy Site		Design Temp		97.5% 2.5%		Int Design Temp		Heating	
									Winter Summer		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		2331		20679 cu ft					
SPACES												
✓	Number		Name		Area		Volume		Kitchen		Occupants	
									Bedrooms		Finished	
									Cooled		Heated	
	___ 1		Main		2031		18279		Yes		6	
	___ 2		Bonus Room		300		2400		No		0	
									3 0		Yes Yes	
									Yes Yes		Yes Yes	
FLOORS (Total Exposed Area = 2331 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		Main		240		0		2031 ft	
	___ 2		Floor over Garage		Bonus Room		---		---		300 ft	
									0.600		0.00	
									0.173		0.00	
									---		0.33	
									0		0.33	
									1.00		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		2914 ft²		0 ft²		Medium	
							N		0.85		No	
							0.9		No		0	
							36.87					
ATTIC												
✓	#		Type		Ventilation		Vent Ratio (1 in)		Area		RBS	
							IRCC					
	___ 1		Full attic		Vented		300		2331 ft²		N	
									N			

INPUT SUMMARY CHECKLIST REPORT

CEILING														(Total Exposed Area = 2331 sq.ft.)			
✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type									
___ 1	Flat ceiling under attic(Vented)	Main	30.0	Blown	2031.0ft²	0.053	0.11	Wood									
___ 2	Single assembly, no airspace(Vented)	Bonus Room	30.0	Blown	300.0ft²	0.060	0.11	Wood									

WALLS														(Total Exposed Area = 2582 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	Main	13.0	25.0	4	9.0	0	228.0	0.087	0.625	0.23	0.75	0 %		
___ 2	E	Exterior	Frame - Wood	Main	13.0	12.0	8	9.0	0	114.0	0.087	0.625	0.23	0.75	0 %		
___ 3	N	Exterior	Frame - Wood	Main	13.0	11.0	0	10.0	0	110.0	0.087	0.625	0.23	0.75	0 %		
___ 4	E	Exterior	Frame - Wood	Main	13.0	2.0	8	10.0	0	26.7	0.087	0.625	0.23	0.75	0 %		
___ 5	N	Exterior	Frame - Wood	Main	13.0	16.0	4	10.0	0	163.3	0.087	0.625	0.23	0.75	0 %		
___ 6	W	Exterior	Frame - Wood	Main	13.0	8.0	0	9.0	0	72.0	0.087	0.625	0.23	0.75	0 %		
___ 7	N	Exterior	Frame - Wood	Main	13.0	12.0	4	9.0	0	111.0	0.087	0.625	0.23	0.75	0 %		
___ 8	E	Exterior	Frame - Wood	Main	13.0	37.0	0	9.0	0	333.0	0.087	0.625	0.23	0.75	0 %		
___ 9	S	Exterior	Frame - Wood	Main	13.0	12.0	4	9.0	0	111.0	0.087	0.625	0.23	0.75	0 %		
___ 10	W	Exterior	Frame - Wood	Main	13.0	3.0	0	9.0	0	27.0	0.087	0.625	0.23	0.75	0 %		
___ 11	S	Exterior	Frame - Wood	Main	13.0	7.0	0	10.0	0	70.0	0.087	0.625	0.23	0.75	0 %		
___ 12	E	Exterior	Frame - Wood	Main	13.0	3.0	0	10.0	0	30.0	0.087	0.625	0.23	0.75	0 %		
___ 13	S	Exterior	Frame - Wood	Main	13.0	11.0	8	10.0	0	116.7	0.087	0.625	0.23	0.75	0 %		
___ 14	W	Exterior	Frame - Wood	Main	13.0	4.0	4	10.0	0	43.3	0.087	0.625	0.23	0.75	0 %		
___ 15	S	Exterior	Frame - Wood	Main	13.0	8.0	8	9.0	0	78.0	0.087	0.625	0.23	0.75	0 %		
___ 16	N	Exterior	Frame - Wood	Main	13.0	24.0	0	9.0	0	216.0	0.087	0.625	0.23	0.75	0 %		
___ 17	S	Garage	Frame - Wood	Main	13.0	41.0	8	9.0	0	375.0	0.087	0.625	0.23	0.75	0 %		
___ 18	E	Exterior	Frame - Wood	Bonus Room	13.0	25.0	4	5.0	0	126.7	0.094		0.23	0.75	0 %		
___ 19	S	Exterior	Frame - Wood	Bonus Room	13.0	13.0	0	8.0	0	104.0	0.094		0.23	0.75	0 %		
___ 20	W	Exterior	Frame - Wood	Bonus Room	13.0	25.0	4	5.0	0	126.7	0.094		0.23	0.75	0 %		

DOORS														(Total Exposed Area = 108 sq.ft.)			
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area						
___ 1	N	Exterior	Insulated	Main	None	0.46	6.00	0	8.00	0	48.0ft²						
___ 2	S	Exterior	Insulated	Main	None	0.46	5.00	0	8.00	0	40.0ft²						
___ 3	S	Garage	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²						

WINDOWS														(Total Exposed Area = 251 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	0.33	0.22	N	N	15.0	1	2.50	6.00	1.5	1.3	None	None
___ 2	N	1	Vinyl	Low-E Double	Y	0.33	0.22	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None
___ 3	E	2	Vinyl	Low-E Double	Y	0.33	0.22	N	N	18.0	1	3.00	6.00	1.5	1.3	None	None
___ 4	N	3	Vinyl	Low-E Double	Y	0.33	0.22	N	N	20.0	2	2.50	4.00	6.8	1.3	None	None
___ 5	N	5	Vinyl	Low-E Double	Y	0.33	0.22	N	N	30.0	2	2.50	6.00	9.5	1.3	None	None
___ 6	N	7	Vinyl	Low-E Double	Y	0.33	0.22	N	N	15.0	1	3.00	5.00	1.5	1.3	None	None
___ 7	E	8	Vinyl	Low-E Double	Y	0.33	0.22	N	N	8.0	1	2.00	4.00	1.5	1.3	None	None
___ 8	S	9	Vinyl	Low-E Double	Y	0.33	0.22	N	N	15.0	1	3.00	5.00	1.5	1.3	None	None
___ 9	S	13	Vinyl	Low-E Double	Y	0.33	0.22	N	N	36.0	2	3.00	6.00	7.5	1.3	None	None
___ 10	S	15	Vinyl	Low-E Double	Y	0.33	0.22	N	N	18.0	1	3.00	6.00	1.5	1.3	None	None
___ 11	N	16	Vinyl	Low-E Double	Y	0.33	0.22	N	N	4.5	1	3.00	1.50	1.5	1.3	None	None
___ 12	N	16	Vinyl	Low-E Double	Y	0.33	0.22	N	N	8.0	1	2.00	4.00	1.5	1.3	None	None
___ 13	N	16	Vinyl	Low-E Double	Y	0.33	0.22	N	N	20.0	2	2.00	5.00	1.5	1.3	None	None
___ 14	S	19	Vinyl	Low-E Double	Y	0.26	0.20	N	N	7.0	1	2.00	3.50	1.5	2.3	None	None

INPUT SUMMARY CHECKLIST REPORT

INFILTRATION												
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume		
___ 1	Wholehouse	Proposed ACH(50)	0.00028	1723	94.54	177.49	0.1021	5.0	All	20679 cu ft		

GARAGE						
✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation	
___ 1	642 ft²	642 ft²	67 ft	9 ft	1	

MASS					
✓ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Main
___ 2	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Bonus Room

HEATING SYSTEM										
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal HeatPump----			Ducts	Block
						Entry	Power	Volt	Current	
___ 1	Electric Heat Pump	None/Single		HSPF2: 7.50	42.0		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		SEER2:14.8	42.0	1260	0.85	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)	40.00 gal	70 gal	120 deg	Standard	None	125
	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 #	-----Supply-----			-----Return-----			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
	Location	R-Value	Area	Location	R-Value	Area							
___ 1	Attic	6.0	455 ft²	Attic	6.0	114 ft²	Prop. Leak Free	Main	---	---	0.03	0.50	1 1

TEMPERATURES														
Programable Thermostat: Y							Ceiling Fans: N							
Cooling	☐ Jan	☐ Feb	☐ Mar	☐ Apr	☐ May	☒ Jun	☒ Jul	☒ Aug	☒ Sep	☐ Oct	☐ Nov	☐ Dec		
Heating	☒ Jan	☒ Feb	☒ Mar	☐ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☐ Oct	☒ Nov	☒ Dec		
Venting	☐ Jan	☐ Feb	☒ Mar	☒ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☒ Oct	☒ Nov	☐ Dec		

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES(Continued)

✓ Thermostat Schedule: HERS 2006 Reference		Hours											
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