

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: SFH - Lot 1 - 695 SW Church Ave Street: 695 SE Church Ave City, State, Zip: Lake City, FL, 32025 Owner: Design Location: FL, Gainesville	Builder Name: Permit Office: Lake City Permit Number: Jurisdiction: 221200 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) 1367 Conditioned floor area below grade (ft²) 0 7. Windows(165.5 sqft.) Description Area a. U-Factor: Dbl, U=0.34 127.50 ft² SHGC: SHGC=0.21 b. U-Factor: Dbl, U=0.30 37.97 ft² SHGC: SHGC=0.19 c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 3.565 ft Area Weighted Average SHGC: 0.205 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 1367.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(1512.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 1232.00 ft² b. Frame - Wood, Adjacent R=13.0 280.00 ft² c. N/A d. N/A 11. Ceiling Types(1367.0 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=30.0 1367.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0 1528 ft² 13. Ducts, location & insulation level R ft² a. Sup: Attic, Ret: Attic, AH: Garage 6 272 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 28.4 SEER2:14.30 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 28.4 HSPF2:7.50 16. Hot Water Systems a. Electric Cap: 40 gallons EF: 0.950 b. Conservation features None Pstat 17. Credits
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Glass/Floor Area: 0.121	Total Proposed Modified Loads: 36.58	PASS
	Total Baseline Loads: 39.16	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: <u>Eric Stauble</u> E-Calcs Plus, Inc. DATE: <u>February 21, 2023</u> I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: <u>Aaron Nickelson</u> DATE: <u>4.13.23</u>	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.
- 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:	SFH - Lot 1 - 695 SW Church Ave	Address type:	Street Address
Building Type:	User	Bedrooms:	3
Owner:		Conditioned Area:	1367
		Total Stories:	1
Builder Name:		Worst Case:	No
Permit Office:	Lake City	Rotate Angle:	0
Jurisdiction:	221200	Cross Ventilation:	No
Family Type:	Detached	Whole House Fan:	No
New/Existing:	New (From Plans)	Terrain:	Suburban
Year Construct:		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	Entire House	1367	12713 cu ft

SPACES

✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___ 1	MBR	180	1674	No	2	1	Yes	Yes	Yes
___ 2	MBA	116	1079	No	0		Yes	Yes	Yes
___ 3	MTIt	28	260	No	0		Yes	Yes	Yes
___ 4	BR2	141	1311	No	1	1	Yes	Yes	Yes
___ 5	MWIC	63	586	No	0		Yes	Yes	Yes
___ 6	BR3	148	1376	No	1	1	Yes	Yes	Yes
___ 7	Lndry	73	679	No	0		Yes	Yes	Yes
___ 8	Kit Liv Din	573	5329	Yes	0		Yes	Yes	Yes
___ 9	BA2	45	419	No	0		Yes	Yes	Yes

FLOORS

(Total Exposed Area = 1367 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	MBR	27	0	180 ft	0.710	---	1.00	0.00	0.00
___ 2	Slab-On-Grade Edge Ins	MBA	21	0	116 ft	0.710	---	1.00	0.00	0.00
___ 3	Slab-On-Grade Edge Ins	MTIt	7	0	28 ft	0.710	---	1.00	0.00	0.00
___ 4	Slab-On-Grade Edge Ins	BR2	13	0	141 ft	0.710	---	1.00	0.00	0.00
___ 5	Slab-On-Grade Edge Ins	MWIC	1	0	63 ft	0.710	---	1.00	0.00	0.00
___ 6	Slab-On-Grade Edge Ins	BR3	27	0	148 ft	0.710	---	1.00	0.00	0.00
___ 7	Slab-On-Grade Edge Ins	Lndry	11	0	73 ft	0.710	---	1.00	0.00	0.00
___ 8	Slab-On-Grade Edge Ins	Kit Liv Din	56	0	573 ft	0.710	---	1.00	0.00	0.00
___ 9	Slab-On-Grade Edge Ins	BA2	1	0	45 ft	0.710	---	1.00	0.00	0.00

INPUT SUMMARY CHECKLIST REPORT

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	1528 ft²	342 ft²	Medium	N	0.85	No	0.9	No	0	26.57	

ATTIC						
✓ #	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___ 1	Full attic	Vented	150	1367 ft²	N	N

CEILING (Total Exposed Area = 1367 sq.ft.)								
✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___ 1	Flat ceiling under attic(Vented)	MBR	30.0	Blown	180.0ft²	0.053	0.10	Wood
___ 2	Flat ceiling under attic(Vented)	MBA	30.0	Blown	116.0ft²	0.053	0.10	Wood
___ 3	Flat ceiling under attic(Vented)	MTIt	30.0	Blown	28.0ft²	0.053	0.10	Wood
___ 4	Flat ceiling under attic(Vented)	BR2	30.0	Blown	141.0ft²	0.053	0.10	Wood
___ 5	Flat ceiling under attic(Vented)	MWIC	30.0	Blown	63.0ft²	0.053	0.10	Wood
___ 6	Flat ceiling under attic(Vented)	BR3	30.0	Blown	148.0ft²	0.053	0.10	Wood
___ 7	Flat ceiling under attic(Vented)	Lndry	30.0	Blown	73.0ft²	0.053	0.10	Wood
___ 8	Flat ceiling under attic(Vented)	Kit Liv Din	30.0	Blown	573.0ft²	0.053	0.10	Wood
___ 9	Flat ceiling under attic(Vented)	BA2	30.0	Blown	45.0ft²	0.053	0.10	Wood

WALLS (Total Exposed Area = 1512 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	MBR	13.0	12.0	0	9.0	4	112.0	0.094	0	0.23	0.45	0 %
___ 2	E	Exterior	Frame - Wood	MBR	13.0	15.0	0	9.0	4	140.0	0.094	0	0.23	0.45	0 %
___ 3	E	Exterior	Frame - Wood	MBA	13.0	16.0	0	9.0	4	149.3	0.094	0	0.23	0.45	0 %
___ 4	S	Exterior	Frame - Wood	MBA	13.0	5.0	0	9.0	4	46.7	0.094	0	0.23	0.45	0 %
___ 5	S	Exterior	Frame - Wood	MTIt	13.0	7.0	0	9.0	4	65.3	0.094	0	0.23	0.45	0 %
___ 6	S	Exterior	Frame - Wood	BR2	13.0	13.0	0	9.0	4	121.3	0.094	0	0.23	0.45	0 %
___ 7	S	Exterior	Frame - Wood	BR3	13.0	13.0	0	9.0	4	121.3	0.094	0	0.23	0.45	0 %
___ 8	N	Garage	Frame - Wood	BR3	13.0	2.0	0	9.0	4	18.7	0.094	0	0.23	0.01	0 %
___ 9	W	Garage	Frame - Wood	BR3	13.0	12.0	0	9.0	4	112.0	0.094	0	0.23	0.01	0 %
___ 10	W	Garage	Frame - Wood	Lndry	13.0	9.0	0	9.0	4	84.0	0.094	0	0.23	0.01	0 %
___ 11	S	Garage	Frame - Wood	Lndry	13.0	2.0	0	9.0	4	18.7	0.094	0	0.23	0.01	0 %
___ 12	N	Exterior	Frame - Wood	Kit Liv Din	13.0	31.0	0	9.0	4	289.3	0.094	0	0.23	0.45	0 %
___ 13	E	Exterior	Frame - Wood	Kit Liv Din	13.0	5.0	0	9.0	4	46.7	0.094	0	0.23	0.45	0 %
___ 14	W	Exterior	Frame - Wood	Kit Liv Din	13.0	15.0	0	9.0	4	140.0	0.094	0	0.23	0.45	0 %
___ 15	S	Garage	Frame - Wood	Kit Liv Din	13.0	5.0	0	9.0	4	46.7	0.094	0	0.23	0.01	0 %

DOORS (Total Exposed Area = 0 sq.ft.)									
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Height Ft	Area

INPUT SUMMARY CHECKLIST REPORT

WINDOWS														(Total Exposed Area = 165 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	0.34	0.21	N	N	12.5	1	2.50	5.00	6.0	0.5	None	None
___ 2	E	2	Vinyl	Low-E Double	Y	0.34	0.21	N	N	20.0	2	2.00	5.00	0.8	0.5	None	None
___ 3	E	3	Vinyl	Low-E Double	Y	0.34	0.21	N	N	16.0	1	4.00	4.00	0.8	0.5	None	None
___ 4	S	5	Vinyl	Low-E Double	Y	0.34	0.21	N	N	4.0	1	2.00	2.00	0.8	0.5	None	None
___ 5	S	6	Vinyl	Low-E Double	Y	0.34	0.21	N	N	12.5	1	2.50	5.00	0.8	0.5	None	None
___ 6	S	7	Vinyl	Low-E Double	Y	0.34	0.21	N	N	12.5	1	2.50	5.00	0.8	0.5	None	None
___ 7	N	12	Vinyl	Low-E Double	Y	0.34	0.21	N	N	25.0	1	5.00	5.00	0.8	0.5	None	None
___ 8	E	13	Vinyl	Low-E Double	Y	0.30	0.19	N	N	17.9	1	2.67	6.67	12.0	0.5	None	None
___ 9	W	14	Vinyl	Low-E Double	Y	0.34	0.21	N	N	25.0	1	5.00	5.00	5.0	0.5	None	None
___ 10	W	14	Vinyl	Low-E Double	Y	0.30	0.19	N	N	20.1	1	3.00	6.67	5.0	0.5	None	None

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00041	1483	81.37	152.77	0.1457	7.0	All	12713 cu ft

GARAGE					
✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	499 ft²	499 ft²	64 ft	8 ft	1

MASS					
✓ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	MBR
___ 2	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	MBA
___ 3	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	MTlt
___ 4	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	BR2
___ 5	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	MWIC
___ 6	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	BR3
___ 7	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Lndry
___ 8	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Kit Liv Din
___ 9	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	BA2

HEATING SYSTEM											
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBTu/hr	---Geothermal HeatPump--- Entry Power Volt Current			Ducts	Block	
___ 1	Electric Heat Pump	Split/Single		HSPF2: 7.50	28.4		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	Split/Single		SEER2:14.3	28.4	0	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	Garage	0.95 (0.93)	40.00 gal	60 gal	120 deg	Standard	=>R-3	99
	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----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
___ 1	Attic	6.0	272 ft²	Attic	6.0	68 ft²	Default Leakage	Garage	(Default)	(Default)			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	
✓	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	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
___	Heating (WD)	AM PM	66 68	66 68	66 68	66 68	66 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 66	68 66

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 93

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

695 SE Church Ave,Lake City,FL,32025

1. New construction or existing	New (From Plans)	10. Wall Types(1512.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	1232.00 ft ²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	280.00 ft ²
4. Number of Bedrooms	3	c. N/A		
5. Is this a worst case?	No	d. N/A		
6. Conditioned floor area above grade (ft ²)	1367	11. Ceiling Types(1367.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft ²)	0	a. Flat ceiling under att (Vented)	R=30.0	1367.00 ft ²
7. Windows**	Description	b. N/A		
a. U-Factor:	Dbl, U=0.34	c. N/A		
SHGC:	SHGC=0.21	12. Roof(Comp. Shingles, Vented) Deck	R=0.0	1528 ft ²
b. U-Factor:	Dbl, U=0.30	13. Ducts, location & insulation level	R	ft ²
SHGC:	SHGC=0.19	a. Sup: Attic, Ret: Attic, AH: Garage	6	272
c. U-Factor:	N/A	b.		
SHGC:		c.		
Area Weighted Average Overhang Depth:	3.565 ft	14. Cooling Systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.205	a. Central Unit	28.4	SEER2:14.30
8. Skylights	Description	15. Heating Systems	kBtu/hr	Efficiency
U-Factor:(AVG)	N/A	a. Electric Heat Pump	28.4	HSPF2:7.50
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: 0.950
c. N/A	R=	b. Conservation features		
				None
		17. Credits		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: Aaron Nickelson Date: 4.13.23

Address of New Home: 695 SE Church Ave 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.