

**FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION**

Florida Department of Business and Professional Regulation - Residential Performance Method

<b>Project Name:</b> Trent Giebig Construction Sauls residence <b>Street:</b> Highway 47 <b>City, State, Zip:</b> Lake City, FL, 32024 <b>Owner:</b> <b>Design Location:</b> FL, Gainesville	<b>Builder Name:</b> Trent Giebig Construction <b>Permit Office:</b> Columbia County <b>Permit Number:</b> <b>Jurisdiction:</b> Columbia <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      3 5. Is this a worst case?      No 6. Conditioned floor area above grade (ft²)      1944 Conditioned floor area below grade (ft²)      0 7. Windows(162.0 sqft.)      Description      Area a. U-Factor:      Dbl, U=0.55      144.00 ft² SHGC:      SHGC=0.60 b. U-Factor:      Dbl, default      18.00 ft² SHGC:      Clear, default c. U-Factor:      N/A      ft² SHGC: Area Weighted Average Overhang Depth:      6.111 ft Area Weighted Average SHGC:      0.611 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      1944.00 ft² b. N/A      R=      ft² c. N/A      R=      ft²	10. Wall Types(1602.0 sqft.)      Insulation      Area a. Frame - Wood, Exterior      R=13.0      1602.00 ft² b. N/A      R=      ft² c. N/A      R=      ft² d. N/A      R=      ft² 11. Ceiling Types(1944.0 sqft.)      Insulation      Area a. Flat ceiling under att (Vented)      R=30.0      1944.00 ft² b. N/A      R=      ft² c. N/A      R=      ft² 12. Ducts, location & insulation level      R      ft² a. Sup: Attic, Ret: Attic, AH: Attic      6      389 b. c. 13. Cooling Systems      kBtu/hr      Efficiency a. Central Unit      20.7      SEER:14.00  14. Heating Systems      kBtu/hr      Efficiency a. Electric Heat Pump      27.9      HSPF:8.20  15. Hot Water Systems a. Electric      Cap: 40 gallons EF: 0.920 b. Conservation features      None CF, Pstat 16. Credits
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Glass/Floor Area: 0.083	Total Proposed Modified Loads: 44.20	PASS
	Total Baseline Loads: 44.80	

  

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.  <b>PREPARED BY:</b> _____  <b>DATE:</b> _____  I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. <b>OWNER/AGENT:</b> _____ <b>DATE:</b> _____	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.  <b>BUILDING OFFICIAL:</b> _____ <b>DATE:</b> _____
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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 11.26 ACH50 (R402.4.1.2).

# INPUT SUMMARY CHECKLIST REPORT

PROJECT												
Title:	Trent Giebeig Construction Sauls residence					Address type:	Street Address					
Building Type:	User	Bedrooms:	3		Lot #:	---						
Owner:		Conditioned Area:	1944		Block/SubDivision:	---						
		Total Stories:	1		PlatBook:	---						
Builder Name:	Trent Giebeig Construction	Worst Case:	No		Street:	Highway 47						
Permit Office:	Columbia County	Rotate Angle:	0		County:	Columbia						
Jurisdiction:	Columbia	Cross Ventilation:			City, State, Zip:	Lake City, FL, 32024						
Family Type:	Detached	Whole House Fan:										
New/Existing:	New (From Plans)	Terrain:	Suburban									
Year Construct:	2022	Shielding:	Moderate/Rural									
Comment:												
CLIMATE												
✓ Design Location	Tmy Site	Design Temp		Int Design Temp		Heating	Design	Daily temp				
		97.5%	2.5%	Winter	Summer	Degree Days	Moisture	Range				
___ FL, Gainesville	FL_GAINESVILLE_REGIONA	32	92	70	75	1305.5	51	Medium				
BLOCKS												
✓ Number	Name	Area	Volume									
___ 1	Block1	1944	15552 cu ft									
SPACES												
✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated			
___ 1	Main	1944	15552	Yes	4	3	Yes	Yes	Yes			
FLOORS (Total Exposed Area = 1944 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	180	0	1944 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	Gable or shed	Metal	2106 ft²	406 ft²	Medium	N	0.96	No	0.9	No	0	22.62
ATTIC												
✓ #	Type	Ventilation	Vent Ratio (1 in)		Area	RBS	IRCC					
___ 1	Full attic	Vented	300		1944 ft²	N	N					
CEILING (Total Exposed Area = 1944 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	1944.0ft²	0.030	0.11	Wood				

# INPUT SUMMARY CHECKLIST REPORT

WALLS (Total Exposed Area = 1602 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	54.0	0	9.0	0	486.0	0.084		0.23	0.75	0 %	
___ 2	E	Exterior	Frame - Wood	Main	13.0	36.0	0	9.0	0	324.0	0.084		0.23	0.75	0 %	
___ 3	S	Exterior	Frame - Wood	Main	13.0	54.0	0	9.0	0	486.0	0.084		0.23	0.75	0 %	
___ 4	W	Exterior	Frame - Wood	Main	13.0	34.0	0	9.0	0	306.0	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(Front)	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²	
___ 2	S	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²	

  

WINDOWS (Total Exposed Area = 162 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	0.55	0.60	N	N	18.0	1	3.00	6.00	6.0	1.0	Drapes/blinds	None
___ 2	N	1	Vinyl	Low-E Double	Y	0.55	0.60	N	N	18.0	1	3.00	6.00	6.0	1.0	Drapes/blinds	None
___ 3	N	1	Vinyl	Low-E Double	Y	0.55	0.60	N	N	18.0	1	3.00	6.00	6.0	1.0	Drapes/blinds	None
___ 4	N	1	Vinyl	Low-E Double	Y	0.55	0.60	N	N	18.0	1	3.00	6.00	6.0	1.0	Drapes/blinds	None
___ 5	N	1	Vinyl	Low-E Double	Y	0.55	0.60	N	N	18.0	1	3.00	6.00	6.0	1.0	Drapes/blinds	None
___ 6	E	2	Vinyl	Low-E Double	Y	0.55	0.60	N	N	12.0	1	2.00	6.00	1.0	6.0	Drapes/blinds	None
___ 7	E	2	Vinyl	Low-E Double	Y	0.55	0.60	N	N	12.0	1	2.00	6.00	1.0	6.0	Drapes/blinds	None
___ 8	E	2	Vinyl	Low-E Double	Y	0.55	0.60	N	N	6.0	1	2.00	3.00	1.0	6.0	Drapes/blinds	None
___ 9	S	3	Vinyl	Low-E Double	N	0.55	0.70	N	N	18.0	1	3.00	6.00	10.0	1.0	Drapes/blinds	None
___ 10	S	3	Vinyl	Low-E Double	Y	0.55	0.60	N	N	12.0	1	3.00	4.00	10.0	1.0	Drapes/blinds	None
___ 11	S	3	Vinyl	Low-E Double	Y	0.55	0.60	N	N	12.0	1	3.00	4.00	10.0	1.0	Drapes/blinds	None

  

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed CFM(50)	0.00057	2918	160.08	300.52	0.2206	11.3	All	15552 cu ft

  

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

  

HEATING SYSTEM									
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal Entry	Heat Pump Power	----	Ducts Block
___ 1	Electric Heat Pump	None/Single		HSPF: 8.20	27.9		0.00	0.00	0.00 sys#1 1

# INPUT SUMMARY CHECKLIST REPORT

## COOLING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	Split/Single		SEER:14.0	20.7	720	0.75	sys#1	1

## HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Electric	None	Main	0.92 (0.92)	40.00 gal	60 gal	120 deg	Standard	None	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 #	Location	Supply R-Value	Area	Location	Return R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
___ 1	Attic	6.0	389 ft²	Attic	6.0	97 ft²	Prop. Leak Free	Attic	---	---	0.03	0.50	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	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	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\* = 99

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

Highway 47,Lake City,FL,32024

1. New construction or existing	New (From Plans)	10. Wall Types(1602.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	1602.00 ft <sup>2</sup>
3. Number of units, if multiple family	1	b. N/A	R=	ft <sup>2</sup>
4. Number of Bedrooms	3	c. N/A	R=	ft <sup>2</sup>
5. Is this a worst case?	No	d. N/A	R=	ft <sup>2</sup>
6. Conditioned floor area above grade (ft <sup>2</sup> )	1944	11. Ceiling Types(1944.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft <sup>2</sup> )	0	a. Flat ceiling under att (Vented)	R=30.0	1944.00 ft <sup>2</sup>
7. Windows**	Description	b. N/A	R=	ft <sup>2</sup>
a. U-Factor:	Dbl, U=0.55	c. N/A	R=	ft <sup>2</sup>
SHGC:	SHGC=0.60	12. Ducts, location & insulation level	R	ft <sup>2</sup>
b. U-Factor:	Dbl, default	a. Sup: Attic, Ret: Attic, AH: Attic	6	389
SHGC:	Clear, default	b.		
c. U-Factor:	N/A	c.		
SHGC:		13. Cooling Systems	kBtu/hr	Efficiency
Area Weighted Average Overhang Depth:	6.111 ft	a. Central Unit	20.7	SEER:14.00
Area Weighted Average SHGC:	0.611	14. Heating Systems	kBtu/hr	Efficiency
8. Skylights	Description	a. Electric Heat Pump	27.9	HSPF:8.20
U-Factor:(AVG)	N/A			
SHGC(AVG):	N/A	15. Hot Water Systems		
9. Floor Types	Insulation	a. Electric	Cap: 40 gallons	
a. Slab-On-Grade Edge Insulation	R= 0.0		EF: 0.920	
b. N/A	R=	b. Conservation features		
c. N/A	R=			
		16. Credits		None
				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: \_\_\_\_\_

Address of New Home: Highway 47

City/FL Zip: Lake City,FL,32024



\*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.