FORM R405-2020

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Campbell Residence	Builder Name:	IC Construction
Street:		Permit Office:	
City, State, Zip:	, FL,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia(Florida Climate Zone 2)

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)	2902
Conditioned floor area below grade (ft²)	0

7. Windows(331.0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.60	315.00 ft²
SHGC:	SHGC=0.27	
b. U-Factor:	Dbl, U=0.60	16.00 ft²
SHGC:	SHGC=0.27	
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		6.721 ft
Area Weighted Average SHGC:		0.270

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	2592.00 ft²
b. Raised Floor	R= 30.0	310.00 ft²
c. N/A	R=	ft²

10. Wall Types(3279.2 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	2845.50 ft²
b. Frame - Wood, Adjacent	R=13.0	433.67 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

11. Ceiling Types(2902.0 sqft.)	Insulation	Area
a. Roof Deck (Unvented)	R=44.0	2902.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

12. Ducts, location & insulation level	R	ft²
a. a. Sup: Main, Ret: Main, AH: Garage	6	518.4
b.		
c.		

13. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	48.0	SEER:15.00

14. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	48.0	HSPF:8.50

15. Hot Water Systems	
a. PropaneTankless	Cap: 1 gallons EF: 0.590
b. Conservation features	None
16. Credits	CF, Pstat

Glass/Floor Area: 0.114

Total Proposed Modified Loads: 58.75

Total Baseline Loads: 75.12

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: _____

DATE: _____6-10-21_____

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: _____

- 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).

FORM R405-2020

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	CampbellResidence			Address type:	Street Address
Building Type:	User	Bedrooms:	4	Lot #:	---
Owner:		Conditioned Area:	2902	Block/SubDivision:	---
		Total Stories:	1	PlatBook:	---
Builder Name:	IC Construction	Worst Case:	No	Street:	
Permit Office:		Rotate Angle:	0	County:	Columbia
Jurisdiction:		Cross Ventilation:		City, State, Zip:	,
Family Type:	Detached	Whole House Fan:			FL,
New/Existing:	New (From Plans)	Terrain:	Rural		
Year Construct:	2021	Shielding:	Moderate/Rural		
Comment:					

CLIMATE

√	Design Location	Tmy Site	Design Temp 97.5%	Design Temp 2.5%	Int Design Temp Winter	Int Design Temp 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	2902	25808

SPACES

√	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___	1	Main	2592	23328	Yes	8	4	Yes	Yes	Yes
___	2	Bonus Room	310	2480	No	0	0	Yes	Yes	Yes

FLOORS (Total Exposed Area = 2902 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	322	0		2592 ft	0.442	---	0.00	0.75	0.25
___	2	Raised Floor	Bonus Room	---	---		310 ft	0.036	30	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	3488 ft²	968 ft²	Dark	N	0.92	No	0.9	No	44	33.69

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___	1	No attic	Unvented	0	2902 ft²	N	N

CEILING (Total Exposed Area = 2902 sq.ft.)

√	#	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___	1	Under Attic(Unvented)	Main	0.6	Blown	2902.0ft²	0.045	0.11	Wood

FORM R405-2020

INPUT SUMMARY CHECKLIST REPORT

WALLS (Total Exposed Area = 3279 sq.ft.)

√ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade
___ 1	S	Exterior	Frame - Wood	Main	13.0	18.0	4	9.0	0	165.0	0.087	0.625	0.23	0.75	0 %
___ 2	W	Exterior	Frame - Wood	Main	13.0	16.0	8	9.0	0	150.0	0.087	0.625	0.23	0.75	0 %
___ 3	S	Exterior	Frame - Wood	Main	13.0	40.0	4	10.0	0	403.3	0.087	0.625	0.23	0.75	0 %
___ 4	E	Exterior	Frame - Wood	Main	13.0	16.0	8	9.0	0	150.0	0.087	0.625	0.23	0.75	0 %
___ 5	S	Exterior	Frame - Wood	Main	13.0	16.0	10	9.0	0	151.5	0.087	0.625	0.23	0.75	0 %
___ 6	W	Exterior	Frame - Wood	Main	13.0	23.0	0	9.0	0	207.0	0.087	0.625	0.23	0.75	0 %
___ 7	S	Exterior	Frame - Wood	Main	13.0	5.0	4	9.0	0	48.0	0.087	0.625	0.23	0.75	0 %
___ 8	N	Exterior	Frame - Wood	Main	13.0	5.0	4	9.0	0	48.0	0.087	0.625	0.23	0.75	0 %
___ 9	W	Exterior	Frame - Wood	Main	13.0	8.0	0	9.0	0	72.0	0.087	0.625	0.23	0.75	0 %
___ 10	N	Exterior	Frame - Wood	Main	13.0	11.0	8	9.0	0	105.0	0.087	0.625	0.23	0.75	0 %
___ 11	E	Exterior	Frame - Wood	Main	13.0	8.0	0	9.0	0	72.0	0.087	0.625	0.23	0.75	0 %
___ 12	N	Exterior	Frame - Wood	Main	13.0	51.0	2	10.0	0	511.7	0.087	0.625	0.23	0.75	0 %
___ 13	W	Exterior	Frame - Wood	Main	13.0	5.0	6	9.0	0	49.5	0.087	0.625	0.23	0.75	0 %
___ 14	N	Exterior	Frame - Wood	Main	13.0	12.0	8	9.0	0	114.0	0.087	0.625	0.23	0.75	0 %
___ 15	E	Exterior	Frame - Wood	Main	13.0	45.0	2	9.0	0	406.5	0.087	0.625	0.23	0.75	0 %
___ 16	W	Garage	Frame - Wood	Main	13.0	16.0	4	9.0	0	147.0	0.087	0.625	0.23	0.75	0 %
___ 17	N	Exterior	Frame - Wood	Bonus Room	13.0	12.0	0	8.0	0	96.0	0.094		0.23	0.75	0 %
___ 18	W	Garage	Frame - Wood	Bonus Room	13.0	28.0	8	5.0	0	143.3	0.094		0.23	0.75	0 %
___ 19	S	Exterior	Frame - Wood	Bonus Room	13.0	12.0	0	8.0	0	96.0	0.094		0.23	0.75	0 %
___ 20	E	Garage	Frame - Wood	Bonus Room	13.0	28.0	8	5.0	0	143.3	0.094		0.23	0.75	0 %

DOORS (Total Exposed Area = 161 sq.ft.)

√ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
___ 1	W	Exterior	Insulated	Main	None	0.21	2.00	8	8.00	0	21.3ft²
___ 2	S	Exterior	Insulated	Main	None	0.21	6.00	0	8.00	0	48.0ft²
___ 3	E	Exterior	Insulated	Main	None	0.21	3.00	0	6.00	8	20.0ft²
___ 4	N	Exterior	Insulated	Main	None	0.21	6.00	0	8.00	0	48.0ft²
___ 5	W	Garage	Insulated	Main	None	0.21	3.00	0	8.00	0	24.0ft²

WINDOWS (Total Exposed Area = 331 sq.ft.)

√ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening
___ 1	S	1	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	15.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 2	S	1	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	6.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 3	S	3	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	72.0ft²	13.0 ft 6 in	2.0 ft 4 in	None	None
___ 4	S	3	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	20.0ft²	13.0 ft 6 in	2.0 ft 4 in	None	None
___ 5	S	5	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	45.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 6	W	6	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	20.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 7	W	6	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	8.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 8	S	7	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	15.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 9	N	10	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	12.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 10	N	12	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	72.0ft²	10.0 ft 2 in	2.0 ft 4 in	None	None
___ 11	N	14	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	15.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 12	E	15	Vinyl	Low-E Double	Yes	0.60	0.27	N	N	15.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___ 13	S	19	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	16.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None

INFILTRATION

√ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)
___ 1	Wholehouse	Proposed ACH(50)	0.00028	2151	117.99	221.52	0.1022	5.0	All

FORM R405-2020

INPUT SUMMARY CHECKLIST REPORT

GARAGE

√ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	707 ft²	707 ft²	94 ft	8 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	----GeothermalHeatPump---- Entry	Power	Volt	Current	Ducts	Block
___ 1	Electric Heat Pump	None/Single		HSPF: 8.50	48.0		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		SEER:15.0	48.0	1440	0.85	sys#1	1

HOT WATER SYSTEM

√ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Propane	Tankless	Exterior	0.59 (0.59)	1.00 gal	70 gal	140 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 #	---------Supply--------- Location	R-Value	Area	---------Return--------- Location	R-Value	Area	LeakageType	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat	Cool
___ 1	Main	6.0	518 ft²	Main	6.0	130 ft²	Prop. Leak Free	Garage	---	---	0.03	0.50	1	1

TEMPERATURES

Programable Thermostat: Y Ceiling Fans: N

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

√ Thermostat Schedule: HERS 2006 Reference Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
___ Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	80	80	78	78	78	78	78	78	78	78
___ Cooling (WEH)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	80	80	78	78	78	78	78	78	78	78

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES(Continued)

___ Heating (WD)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
___ Heating (WEH)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

FORM R405-2020

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 78

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

,,FL,

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)		2902
Conditioned floor area below grade (ft²)		0

7. Windows**	Description	Area
a. U-Factor:	Dbl, U=0.60	315.00 ft²
SHGC:	SHGC=0.27	
b. U-Factor:	Dbl, U=0.60	16.00 ft²
SHGC:	SHGC=0.27	
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		6.721 ft
Area Weighted Average SHGC:		0.270

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	2592.00 ft²
b. Raised Floor	R= 30.0	310.00 ft²
c. N/A	R=	ft²

10. Wall Types(3279.2 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	2845.50 ft²
b. Frame - Wood, Adjacent	R=13.0	433.67 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

11. Ceiling Types(2902.0 sqft.)	Insulation	Area
a. Roof Deck (Unvented)	R=44.0	2902.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

12. Ducts, location & insulation level	R	ft²
a. a. Sup: Main, Ret: Main, AH: Garage	6	518.4
b.		
c.		

13. Cooling Systems	kBtu/hr	Efficiency
a. Central Unit	48.0	SEER:15.00

14. Heating Systems	kBtu/hr	Efficiency
a. Electric Heat Pump	48.0	HSPF:8.50

15. Hot Water Systems	
a. PropaneTankless	Cap: 1 gallons EF: 0.590
b. Conservation features	None
16. Credits	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: City/FL Zip: ,FL,

*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.