FORM R405-2020

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Robert Coon	Builder Name:	
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			3	
5. Is this a worst case?			No	
6. Conditioned floor area above grade (ft²)			2891	
Conditioned floor area below grade (ft²)			0	
7. Windows(265.7 sqft.)	Description		Area	
a. U-Factor:	Dbl, U=0.60		265.67	ft²
SHGC:	SHGC=0.27			
b. U-Factor:	N/A			ft²
SHGC:				
c. U-Factor:	N/A			ft²
SHGC:				
Area Weighted Average Overhang Depth:			7.523	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	2891.00	ft²
b. N/A		R=		ft²
c. N/A		R=		ft²

10. Wall Types(2266.5 sqft.)	Insulation	Area	
a. Insulated Concrete Form, Exterio	R=23.5	2023.50	ft²
b. Frame - Wood, Adjacent	R=13.0	243.00	ft²
c. N/A	R=		ft²
d. N/A	R=		ft²
11. Ceiling Types(2891.0 sqft.)	Insulation	Area	
a. Under Attic (Vented)	R=30.0	2891.00	ft²
b. N/A	R=		ft²
c. N/A	R=		ft²
12. Ducts, location & insulation level		R	ft²
a. a. Sup: Attic, Ret: Attic, AH: Garage		6	578.2
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. Electric		Cap: 50 gallons	
		EF: 0.920	
b. Conservation features		None	
16. Credits		Pstat	

Glass/Floor Area: 0.092

Total Proposed Modified Loads: 55.67

Total Baseline Loads: 68.58

PASS

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

PREPARED BY: _____

DATE: 8-10-21

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).

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INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Robert Coon			Address type:	Street Address
Building Type:	User	Bedrooms:	3	Lot #:	---
Owner:		Conditioned Area:	2891	Block/SubDivision:	---
		Total Stories:	1	PlatBook:	---
Builder Name:		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	2891	26019

SPACES

√	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___	1	Main	2891	26019	Yes	6	3	Yes	Yes	Yes

FLOORS (Total Exposed Area = 2891 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	255	0	2891 ft	0.600	---	0.33	0.33	0.34

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	3232 ft²	0 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	300	2891 ft²	N	N

CEILING (Total Exposed Area = 2891 sq.ft.)

√	#	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___	1	Under Attic(Vented)	Main	30.0	Blown	2891.0ft²	0.053	0.11	Wood

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INPUT SUMMARY CHECKLIST REPORT

WALLS (Total Exposed Area = 2267 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	N	Exterior	Ins Concrete Form	Main	23.5	19.0	1	9.0	0	171.8	0.038	0	0	0.75	0 %
___2	E	Exterior	Ins Concrete Form	Main	23.5	7.0	2	9.0	0	64.5	0.038	0	0	0.75	0 %
___3	N	Exterior	Ins Concrete Form	Main	23.5	17.0	9	9.0	0	159.8	0.038	0	0	0.75	0 %
___4	W	Exterior	Ins Concrete Form	Main	23.5	7.0	2	9.0	0	64.5	0.038	0	0	0.75	0 %
___5	N	Exterior	Ins Concrete Form	Main	23.5	12.0	4	9.0	0	111.0	0.038	0	0	0.75	0 %
___6	E	Exterior	Ins Concrete Form	Main	23.5	35.0	2	9.0	0	316.5	0.038	0	0	0.75	0 %
___7	S	Exterior	Ins Concrete Form	Main	23.5	7.0	4	9.0	0	66.0	0.038	0	0	0.75	0 %
___8	E	Exterior	Ins Concrete Form	Main	23.5	2.0	0	9.0	0	18.0	0.038	0	0	0.75	0 %
___9	S	Exterior	Ins Concrete Form	Main	23.5	16.0	9	9.0	0	150.8	0.038	0	0	0.75	0 %
___10	E	Exterior	Ins Concrete Form	Main	23.5	4.0	0	9.0	0	36.0	0.038	0	0	0.75	0 %
___11	S	Exterior	Ins Concrete Form	Main	23.5	14.0	1	9.0	0	126.8	0.038	0	0	0.75	0 %
___12	W	Exterior	Ins Concrete Form	Main	23.5	4.0	0	9.0	0	36.0	0.038	0	0	0.75	0 %
___13	S	Exterior	Ins Concrete Form	Main	23.5	19.0	10	9.0	0	178.5	0.038	0	0	0.75	0 %
___14	W	Exterior	Ins Concrete Form	Main	23.5	2.0	0	9.0	0	18.0	0.038	0	0	0.75	0 %
___15	S	Exterior	Ins Concrete Form	Main	23.5	17.0	3	9.0	0	155.3	0.038	0	0	0.75	0 %
___16	W	Exterior	Ins Concrete Form	Main	23.5	38.0	11	9.0	0	350.3	0.038	0	0	0.75	0 %
___17	N	Garage	Frame - Wood	Main	13.0	27.0	0	9.0	0	243.0	0.094		0.23	0.75	0 %

DOORS (Total Exposed Area = 88 sq.ft.)

√ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
___1	N	Exterior	Insulated	Main	None	0.40	6.00	0	8.00	0	48.0ft²
___2	S	Exterior	Insulated	Main	None	0.40	3.00	0	6.00	8	20.0ft²
___3	N	Garage	Insulated	Main	None	0.40	3.00	0	6.00	8	20.0ft²

WINDOWS (Total Exposed Area = 266 sq.ft.)

√ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Area	-----Overhang----- Depth	Separation	Interior Shade	Screening
___1	N	1	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	30.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___2	N	3	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	52.0ft²	20.0 ft 6 in	2.0 ft 4 in	None	None
___3	N	5	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	36.0ft²	13.0 ft 6 in	2.0 ft 4 in	None	None
___4	E	6	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	16.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___5	E	6	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	6.7ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___6	S	9	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	30.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___7	S	11	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	30.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___8	S	13	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	30.0ft²	7.0 ft 6 in	2.0 ft 4 in	None	None
___9	S	15	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	30.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None
___10	W	16	Vinyl	Double (Tinted)	Yes	0.60	0.27	N	N	5.0ft²	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)	0.00029	2168	118.96	223.33	0.1027	5.0	All

GARAGE

√ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___1	754 ft²	754 ft²	81 ft	9 ft	19

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INPUT SUMMARY CHECKLIST REPORT

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	----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	Electric	None	Garage	0.92 (0.92)	50.00 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 #	---------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	578 ft²	Attic	6.0	145 ft²	Prop. Leak Free	Garage	---	---	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		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	78	78	78	78	78	78	78	78	78	78
___	Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
		PM	78	78	78	78	78	78	78	78	78	78	78	78
___	Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
		PM	68	68	68	68	68	68	68	68	68	68	66	66
___	Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
		PM	68	68	68	68	68	68	68	68	68	68	66	66

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ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 81

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		3
5. Is this a worst case?		No
6. Conditioned floor area above grade (ft²)		2891
Conditioned floor area below grade (ft²)		0
7. Windows**	Description	Area
a. U-Factor:	Dbl, U=0.60	265.67 ft²
SHGC:	SHGC=0.27	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		7.523 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	2891.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

10. Wall Types(2266.5 sqft.)	Insulation	Area
a. Insulated Concrete Form, Exterior	R=23.5	2023.50 ft²
b. Frame - Wood, Adjacent	R=13.0	243.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

11. Ceiling Types(2891.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=30.0	2891.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

12. Ducts, location & insulation level	R	ft²
a. a. Sup: Attic, Ret: Attic, AH: Garage	6	578.2
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. Electric	Cap: 50 gallons
	EF: 0.920
b. Conservation features	
	None
16. 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: _____ 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.

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9. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R= 0.0	2891.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

10. Wall Types(2266.5 sqft.)	Insulation	Area
a. Insulated Concrete Form, Exterior	R=23.5	2023.50 ft²
b. Frame - Wood, Adjacent	R=13.0	243.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

11. Ceiling Types(2891.0 sqft.)	Insulation	Area
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