

20

FORM R405-2020

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

<b>Project Name:</b> CRB Investment		<b>Builder Name:</b> IC Construction	
<b>Street:</b>		<b>Permit Office:</b>	
<b>City, State, Zip:</b> Ft, White , FL , 32024		<b>Permit Number:</b>	
<b>Owner:</b>		<b>Jurisdiction:</b>	
<b>Design Location:</b> FL, Gainesville		<b>County:</b> Columbia (Florida Climate Zone 2 )	

<table><tr><td>1. New construction or existing</td><td>New (From Plans)</td></tr><tr><td>2. Single family or multiple family</td><td>Detached</td></tr><tr><td>3. Number of units, if multiple family</td><td>1</td></tr><tr><td>4. Number of Bedrooms</td><td>3</td></tr><tr><td>5. Is this a worst case?</td><td>No</td></tr><tr><td>6. Conditioned floor area above grade (ft²)</td><td>1003</td></tr><tr><td>Conditioned floor area below grade (ft²)</td><td>0</td></tr><tr><td>7. Windows(106.0 sqft.)</td><td>Description Area</td></tr><tr><td>a. U-Factor:</td><td>Dbl, U=0.33 106.00 ft²</td></tr><tr><td>SHGC:</td><td>SHGC=0.22</td></tr><tr><td>b. U-Factor:</td><td>N/A ft²</td></tr><tr><td>SHGC:</td><td></td></tr><tr><td>c. U-Factor:</td><td>N/A ft²</td></tr><tr><td>SHGC:</td><td></td></tr><tr><td>Area Weighted Average Overhang Depth:</td><td>3.198 ft.</td></tr><tr><td>Area Weighted Average SHGC:</td><td>0.220</td></tr><tr><td>8. Skylights</td><td>Area</td></tr><tr><td>c. U-Factor:(AVG)</td><td>N/A ft²</td></tr><tr><td>SHGC(AVG):</td><td>N/A</td></tr><tr><td>9. Floor Types (1003.0 sqft.)</td><td>Insulation Area</td></tr><tr><td>a. Slab-On-Grade Edge Insulation</td><td>R=0.0 1003.00 ft²</td></tr><tr><td>b. N/A</td><td>R= ft²</td></tr><tr><td>c. N/A</td><td>R= ft²</td></tr></table>	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)	1003	Conditioned floor area below grade (ft²)	0	7. Windows(106.0 sqft.)	Description Area	a. U-Factor:	Dbl, U=0.33 106.00 ft²	SHGC:	SHGC=0.22	b. U-Factor:	N/A ft²	SHGC:		c. U-Factor:	N/A ft²	SHGC:		Area Weighted Average Overhang Depth:	3.198 ft.	Area Weighted Average SHGC:	0.220	8. Skylights	Area	c. U-Factor:(AVG)	N/A ft²	SHGC(AVG):	N/A	9. Floor Types (1003.0 sqft.)	Insulation Area	a. Slab-On-Grade Edge Insulation	R=0.0 1003.00 ft²	b. N/A	R= ft²	c. N/A	R= ft²	<table><tr><td>10. Wall Type(857.3 sqft.)</td><td>Insulation Area</td></tr><tr><td>a. Frame - Wood, Exterior</td><td>R=13.0 857.33 ft²</td></tr><tr><td>b. N/A</td><td>R= ft²</td></tr><tr><td>c. N/A</td><td>R= ft²</td></tr><tr><td>d. N/A</td><td>R= ft²</td></tr><tr><td>11. Ceiling Types (1003.0 sqft.)</td><td>Insulation Area</td></tr><tr><td>a. Under Attic (Vented)</td><td>R=30.0 1003.00 ft²</td></tr><tr><td>b. N/A</td><td>R= ft²</td></tr><tr><td>c. N/A</td><td>R= ft²</td></tr><tr><td>12. Ducts</td><td>R ft²</td></tr><tr><td>a. Sup: Attic, Ret: Attic, AH: Main</td><td>6 200.6</td></tr><tr><td>13. Cooling systems</td><td>kBtu/hr Efficiency</td></tr><tr><td>a. Central Unit</td><td>30.0 SEER:14.00</td></tr><tr><td>14. Heating systems</td><td>kBtu/hr Efficiency</td></tr><tr><td>a. Electric Heat Pump</td><td>30.0 HSPF:8.50</td></tr><tr><td>15. Hot water systems</td><td></td></tr><tr><td>a. Electric</td><td>Cap: 40 gallons</td></tr><tr><td>b. Conservation features</td><td>EF: 0.920</td></tr><tr><td>None</td><td></td></tr><tr><td>16. Credits</td><td>Pstat</td></tr></table>	10. Wall Type(857.3 sqft.)	Insulation Area	a. Frame - Wood, Exterior	R=13.0 857.33 ft²	b. N/A	R= ft²	c. N/A	R= ft²	d. N/A	R= ft²	11. Ceiling Types (1003.0 sqft.)	Insulation Area	a. Under Attic (Vented)	R=30.0 1003.00 ft²	b. N/A	R= ft²	c. N/A	R= ft²	12. Ducts	R ft²	a. Sup: Attic, Ret: Attic, AH: Main	6 200.6	13. Cooling systems	kBtu/hr Efficiency	a. Central Unit	30.0 SEER:14.00	14. Heating systems	kBtu/hr Efficiency	a. Electric Heat Pump	30.0 HSPF:8.50	15. Hot water systems		a. Electric	Cap: 40 gallons	b. Conservation features	EF: 0.920	None		16. Credits	Pstat
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)	1003																																																																																						
Conditioned floor area below grade (ft²)	0																																																																																						
7. Windows(106.0 sqft.)	Description Area																																																																																						
a. U-Factor:	Dbl, U=0.33 106.00 ft²																																																																																						
SHGC:	SHGC=0.22																																																																																						
b. U-Factor:	N/A ft²																																																																																						
SHGC:																																																																																							
c. U-Factor:	N/A ft²																																																																																						
SHGC:																																																																																							
Area Weighted Average Overhang Depth:	3.198 ft.																																																																																						
Area Weighted Average SHGC:	0.220																																																																																						
8. Skylights	Area																																																																																						
c. U-Factor:(AVG)	N/A ft²																																																																																						
SHGC(AVG):	N/A																																																																																						
9. Floor Types (1003.0 sqft.)	Insulation Area																																																																																						
a. Slab-On-Grade Edge Insulation	R=0.0 1003.00 ft²																																																																																						
b. N/A	R= ft²																																																																																						
c. N/A	R= ft²																																																																																						
10. Wall Type(857.3 sqft.)	Insulation Area																																																																																						
a. Frame - Wood, Exterior	R=13.0 857.33 ft²																																																																																						
b. N/A	R= ft²																																																																																						
c. N/A	R= ft²																																																																																						
d. N/A	R= ft²																																																																																						
11. Ceiling Types (1003.0 sqft.)	Insulation Area																																																																																						
a. Under Attic (Vented)	R=30.0 1003.00 ft²																																																																																						
b. N/A	R= ft²																																																																																						
c. N/A	R= ft²																																																																																						
12. Ducts	R ft²																																																																																						
a. Sup: Attic, Ret: Attic, AH: Main	6 200.6																																																																																						
13. Cooling systems	kBtu/hr Efficiency																																																																																						
a. Central Unit	30.0 SEER:14.00																																																																																						
14. Heating systems	kBtu/hr Efficiency																																																																																						
a. Electric Heat Pump	30.0 HSPF:8.50																																																																																						
15. Hot water systems																																																																																							
a. Electric	Cap: 40 gallons																																																																																						
b. Conservation features	EF: 0.920																																																																																						
None																																																																																							
16. Credits	Pstat																																																																																						

Glass/Floor Area: 0.106

Total Proposed Modified Loads: 28.89

Total Baseline Loads: 30.08

PASS

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

PREPARED BY: [Signature]


DATE: 2-5-21

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 requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 4.90 ACH50 (R402.4.1.2).

## INPUT SUMMARY CHECKLIST REPORT

## PROJECT

Title:	CRB Investment	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1003	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	IC Construction	Rotate Angle:	0	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Ft, White , FL , 32024
Family Type:	Detached				
New/Existing:	New (From Plans)				
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_REGI	32	92	70	75	1305.5	51	Medium

## BLOCKS

Number	Name	Area	Volume
1	Block1	1003	8024

## SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1003	8024	Yes	6	3	1	Yes	Yes	Yes

## FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	140 ft	0	1003 ft²	-----	0.5	0	0.5

## 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	1086 ft²	208 ft²	Light	N	0.6	No	0.9	No	0	22.6

## ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1003 ft²	N	N

## CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	1003 ft²	0.11	Wood

## INPUT SUMMARY CHECKLIST REPORT

## WALLS

✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
1	N	Exterior	Frame - Wood	Main	13	26	9	8		214.0 ft²	0.625	0.23	0.75	0
2	E	Exterior	Frame - Wood	Main	13	43	4	8		346.7 ft²	0.625	0.23	0.75	0
3	S	Exterior	Frame - Wood	Main	13	11	8	8		93.3 ft²	0.625	0.23	0.75	0
4	W	Exterior	Frame - Wood	Main	13	10	4	8		82.7 ft²	0.625	0.23	0.75	0
5	S	Exterior	Frame - Wood	Main	13	15	1	8		120.7 ft²	0.625	0.23	0.75	0

## DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	S	Insulated	Main	None	.4	3		6	8	20 ft²

## WINDOWS

Orientation shown is the entered, Proposed orientation.

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
1	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	N	40.0 ft²	1 ft 6 in	1 ft 4 in	None	None
2	E	2	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
3	E	2	Vinyl	Low-E Double	Yes	0.33	0.22	N	6.0 ft²	1 ft 6 in	1 ft 4 in	None	None
4	S	3	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
5	S	5	Vinyl	Low-E Double	Yes	0.33	0.22	N	30.0 ft²	7 ft 6 in	1 ft 4 in	None	None

## INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000249	655.3	35.95	67.49	.096	4.9

## HEATING SYSTEM

✓ #	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
1	Electric Heat Pump/	Single	Singl	HSPF:8.5	30 kBtu/hr	1	sys#1

## COOLING SYSTEM

✓ #	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
1	Central Unit/	Single	Singl	SEER: 14	30 kBtu/hr	900 cfm	0.85	1	sys#1

## HOT WATER SYSTEM

✓ #	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
1	Electric	None	Main	0.92	40 gal	60 gal	120 deg	None

## INPUT SUMMARY CHECKLIST REPORT

## SOLAR HOT WATER SYSTEM

✓	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

## DUCTS

✓	#	--- Supply --- Location	R-Value	Area	--- Return --- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
_____	1	Attic	6	200.6 ft	Attic	50.15 ft	Default Leakage	Main	(Default)	(Default)			1	1

## TEMPERATURES

Programable Thermostat: Y				Ceiling Fans:											
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec			
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec			
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec			
Thermostat Schedule: HERS 2006 Reference															
Schedule Type	Hours														
	1	2	3	4	5	6	7	8	9	10	11	12			
Cooling (WD)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78		
Cooling (WEH)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78		
Heating (WD)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68		
Heating (WEH)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68		

## MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.3	Main



# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX\* = 95

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

, Ft, White, FL, 32024

1. New construction or existing	New (From Plans)	10. Wall Type and Insulation	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	857.33 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 (ft <sup>2</sup> )	1003	11. Ceiling Type and insulation level	Insulation	Area
7. Windows**	Description	a. Under Attic (Vented)	R=30.0	1003.00 ft <sup>2</sup>
a. U-Factor:	DbI, U=0.33	b. N/A	R=	ft <sup>2</sup>
SHGC:	SHGC=0.22	c. N/A	R=	ft <sup>2</sup>
b. U-Factor:	N/A	12. Ducts, location & insulation level		R ft <sup>2</sup>
SHGC:		a. Sup: Attic, Ret: Attic, AH: Main	6	200.6
c. U-Factor:	N/A	13. Cooling systems	kBtu/hr	Efficiency
SHGC:		a. Central Unit	30.0	SEER:14.00
d. U-Factor:	N/A	14. Heating systems	kBtu/hr	Efficiency
SHGC:		a. Electric Heat Pump	30.0	HSPF:8.50
Area Weighted Average Overhang Depth:	3.198 ft.	15. Hot water systems		Cap: 40 gallons
Area Weighted Average SHGC:	0.220	a. Electric		EF: 0.92
8. Skylights	Description	b. Conservation features		
a. U-Factor(AVG):	N/A	None		
SHGC(AVG):	N/A	Credits (Performance method)		Pstat
9. Floor Types	Insulation			
a. Slab-On-Grade Edge Insulation	R=0.0			
b. N/A	R=			
c. N/A	R=			

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: \_\_\_\_\_



\*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.