

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

<p>Project Name: McGriff Residence</p> <p>Street:</p> <p>City, State, Zip: , FL ,</p> <p>Owner:</p> <p>Design Location: FL, Gainesville</p>	<p>Builder Name: Stanley Crawford Const</p> <p>Permit Office:</p> <p>Permit Number:</p> <p>Jurisdiction:</p> <p>County: columbia (Florida Climate Zone 2 )</p>
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<p>1. New construction or existing      New (From Plans)</p> <p>2. Single family or multiple family      Single-family</p> <p>3. Number of units, if multiple family      1</p> <p>4. Number of Bedrooms      3</p> <p>5. Is this a worst case?      No</p> <p>6. Conditioned floor area above grade (ft²)      1670</p> <p>    Conditioned floor area below grade (ft²)      0</p> <p>7. Windows(175.0 sqft.)      Description      Area</p> <p>    a. U-Factor:      Dbl, U=0.33      175.00 ft²</p> <p>        SHGC:      SHGC=0.22</p> <p>    b. U-Factor:      N/A      ft²</p> <p>        SHGC:</p> <p>    c. U-Factor:      N/A      ft²</p> <p>        SHGC:</p> <p>    d. U-Factor:      N/A      ft²</p> <p>        SHGC:</p> <p>    Area Weighted Average Overhang Depth:      5.614 ft.</p> <p>    Area Weighted Average SHGC:      0.220</p> <p>8. Floor Types (1670.0 sqft.)      Insulation      Area</p> <p>    a. Slab-On-Grade Edge Insulation      R=0.0      1670.00 ft²</p> <p>    b. N/A      R=      ft²</p> <p>    c. N/A      R=      ft²</p>	<p>9. Wall Types (1618.0 sqft.)      Insulation      Area</p> <p>    a. Frame - Wood, Exterior      R=13.0      1618.00 ft²</p> <p>    b. N/A      R=      ft²</p> <p>    c. N/A      R=      ft²</p> <p>    d. N/A      R=      ft²</p> <p>10. Ceiling Types (1670.0 sqft.)      Insulation      Area</p> <p>    a. Under Attic (Vented)      R=30.0      1670.00 ft²</p> <p>    b. N/A      R=      ft²</p> <p>    c. N/A      R=      ft²</p> <p>11. Ducts      R      ft²</p> <p>    a. Sup: Attic, Ret: Attic, AH: Main      6      334</p> <p>12. Cooling systems      kBtu/hr      Efficiency</p> <p>    a. Central Unit      30.0      SEER:15.00</p> <p>13. Heating systems      kBtu/hr      Efficiency</p> <p>    a. Electric Heat Pump      30.0      HSPF:8.50</p> <p>14. Hot water systems</p> <p>    a. Propane      Cap: 40 gallons</p> <p>    b. Conservation features      EF: 0.590</p> <p>        None</p> <p>15. Credits      CF, Pstat</p>
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Glass/Floor Area: 0.105	Total Proposed Modified Loads: 50.99	<h1 style="margin: 0;">PASS</h1>
	Total Baseline Loads: 50.84	

  

<p>I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.</p> <p>PREPARED BY: </p> <p>DATE: 11-4-20</p> <p>I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.</p> <p>OWNER/AGENT: </p> <p>DATE: 11/30/2020</p>	<p>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.</p> <div style="text-align: center;"> </div> <p>BUILDING OFFICIAL: _____</p> <p>DATE: _____</p>
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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 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 5.00 ACH50 (R402.4.1.2).

## INPUT SUMMARY CHECKLIST REPORT

## PROJECT

Title:	McGriff Residence	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1951	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Stanley Crawford Const	Rotate Angle:	0	Street:	
Permit Office:		Cross Ventilation:		County:	columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	, FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
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_REGI	32	92	70	75	1305.5	51	Medium

## BLOCKS

Number	Name	Area	Volume
1	Block1	1670	15030

## SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1670	15030	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	176 ft	0	1670 ft²	----	0.33	0.33	0.34

## ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt Tested	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Composition shingles	1868 ft²	418 ft²	Medium	N	0.85	No	0.9	No	0	26.6

## ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1670 ft²	N	N

## CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	1670 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	32	10	9		295.5 ft²	0.625	0.23	0.75	0
2	E	Exterior	Frame - Wood	Main	13	7	10	9		70.5 ft²	0.625	0.23	0.75	0
3	N	Exterior	Frame - Wood	Main	13	21	6	9		193.5 ft²	0.625	0.23	0.75	0
4	E	Exterior	Frame - Wood	Main	13	26		9		234.0 ft²	0.625	0.23	0.75	0
5	S	Exterior	Frame - Wood	Main	13	11	8	9		105.0 ft²	0.625	0.23	0.75	0
6	S	Exterior	Frame - Wood	Main	13	31		10		310.0 ft²	0.625	0.23	0.75	0
7	S	Exterior	Frame - Wood	Main	13	11	8	9		105.0 ft²	0.625	0.23	0.75	0
8	W	Exterior	Frame - Wood	Main	13	33	10	9		304.5 ft²	0.625	0.23	0.75	0

## DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Insulated	Main	None	.4	3		8		24 ft²
2	N	Wood	Main	None	.46	3		8		24 ft²
3	S	Insulated	Main	None	.4	3		8		24 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	15.0 ft²	13 ft 6 in	1 ft 4 in	None	None
2	N	1	Vinyl	Low-E Double	Yes	0.33	0.22	N	9.0 ft²	13 ft 6 in	1 ft 4 in	None	None
3	E	4	Vinyl	Low-E Double	Yes	0.33	0.22	N	16.0 ft²	1 ft 6 in	1 ft 4 in	None	None
4	S	5	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	6	Vinyl	Low-E Double	Yes	0.33	0.22	N	72.0 ft²	7 ft 6 in	1 ft 4 in	None	None
6	S	7	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft²	1 ft 6 in	1 ft 4 in	None	None
7	W	8	Vinyl	Low-E Double	Yes	0.33	0.22	N	30.0 ft²	1 ft 6 in	1 ft 4 in	None	None
8	W	8	Vinyl	Low-E Double	Yes	0.33	0.22	N	3.0 ft²	1 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)	.000286	1252.5	68.76	129.31	.1128	5

## HEATING SYSTEM

✓ #	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
1	Electric Heat Pump/	None	Singl	HSPF:8.5	30 kBtu/hr	1	sys#1

## INPUT SUMMARY CHECKLIST REPORT

## COOLING SYSTEM

✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
	1	Central Unit/	None	Singl	SEER: 15	30 kBtu/hr	900 cfm	0.85	1	sys#1

## HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
	1	Propane	None	Exterior	0.59	40 gal	60 gal	120 deg	None

## 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	334 ft²	Attic	83.5 ft²	Default Leakage	Main	(Default)	(Default)			1	1

## TEMPERATURES

Programable Thermostat: Y				Ceiling Fans:																				
Cooling	<input checked="" type="checkbox"/>	Jan	<input checked="" type="checkbox"/>	Feb	<input checked="" 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 checked="" type="checkbox"/>	Nov	<input checked="" type="checkbox"/>	Dec
Heating	<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
Venting	<input type="checkbox"/>	Jan	<input type="checkbox"/>	Feb	<input checked="" 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 checked="" type="checkbox"/>	Nov	<input type="checkbox"/>	Dec
Thermostat Schedule: HERS 2006 Reference														Hours										
Schedule Type			1	2	3	4	5	6	7	8	9	10	11	12										
Cooling (WD)	AM	78	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	78										
Cooling (WEH)	AM	78	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	78										
Heating (WD)	AM	66	66	66	66	66	66	68	68	68	68	68	68	68										
	PM	68	68	68	68	68	68	68	68	68	68	68	66	66										
Heating (WEH)	AM	66	66	66	66	66	66	68	68	68	68	68	68	68										
	PM	68	68	68	68	68	68	68	68	68	68	68	66	66										

## 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\* = 100

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. <u>New (From Plans)</u>	12. Ducts, location & insulation level
2. Single-family or multiple-family	2. <u>Single-family</u>	a) Supply ducts R <u>6.0</u>
3. No. of units (if multiple-family)	3. <u>1</u>	b) Return ducts R <u>6.0</u>
4. Number of bedrooms	4. <u>3</u>	c) AHU location <u>Main</u>
5. Is this a worst case? (yes/no)	5. <u>No</u>	13. Cooling system: Capacity <u>30.0</u>
6. Conditioned floor area (sq. ft.)	6. <u>1670</u>	a) Split system SEER <u>        </u>
7. Windows, type and area		b) Single package SEER <u>        </u>
a) U-factor:(weighted average)	7a. <u>0.330</u>	c) Ground/water source SEER/COP <u>        </u>
b) Solar Heat Gain Coefficient (SHGC)	7b. <u>0.220</u>	d) Room unit/PTAC EER <u>        </u>
c) Area	7c. <u>175.0</u>	e) Other <u>15.0</u>
8. Skylights		14. Heating system: Capacity <u>30.0</u>
a) U-factor:(weighted average)	8a. <u>NA</u>	a) Split system heat pump HSPF <u>        </u>
b) Solar Heat Gain Coefficient (SHGC)	8b. <u>NA</u>	b) Single package heat pump HSPF <u>        </u>
9. Floor type, insulation level:		c) Electric resistance COP <u>        </u>
a) Slab-on-grade (R-value)	9a. <u>0.0</u>	d) Gas furnace, natural gas AFUE <u>        </u>
b) Wood, raised (R-value)	9b. <u>        </u>	e) Gas furnace, LPG AFUE <u>        </u>
c) Concrete, raised (R-value)	9c. <u>        </u>	f) Other <u>8.50</u>
10. Wall type and insulation:		15. Water heating system
A. Exterior:		a) Electric resistance EF <u>        </u>
1. Wood frame (Insulation R-value)	10A1. <u>13.0</u>	b) Gas fired, natural gas EF <u>        </u>
2. Masonry (Insulation R-value)	10A2. <u>        </u>	c) Gas fired, LPG EF <u>0.59</u>
B. Adjacent:		d) Solar system with tank EF <u>        </u>
1. Wood frame (Insulation R-value)	10B1. <u>        </u>	e) Dedicated heat pump with tank EF <u>        </u>
2. Masonry (Insulation R-value)	10B2. <u>        </u>	f) Heat recovery unit HeatRec% <u>        </u>
11. Ceiling type and insulation level		g) Other <u>        </u>
a) Under attic	11a. <u>30.0</u>	16. HVAC credits claimed (Performance Method)
b) Single assembly	11b. <u>        </u>	a) Ceiling fans <u>        </u>
c) Knee walls/skylight walls	11c. <u>        </u>	b) Cross ventilation <u>No</u>
d) Radiant barrier installed	11d. <u>No</u>	c) Whole house fan <u>No</u>
		d) Multizone cooling credit <u>        </u>
		e) Multizone heating credit <u>        </u>
		f) Programmable thermostat <u>Yes</u>

\*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

I certify that this home has complied with the Florida Building Code, Energy Conservation, 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: Stanley Crayford Date: 11/30/2020

Address of New Home: 1558 SE CR 349 City/FL Zip: Lake City, FL