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FORM R405-2020

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method


Project Name: Crest Glen Model - Lot 24 Rose Pointe Street: City, State, Zip: Lake City, FL, Owner: Design Location: FL, Gainesville	Builder Name: Stanley Crawford Construction Permit Office: Permit Number: Jurisdiction: County: 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 (ft ²) 1524 Conditioned floor area below grade (ft ²) 0 7. Windows(197.0 sqft.) Description Area a. U-Factor: Dbl, U=0.33 197.00 ft ² SHGC: SHGC=0.22 b. U-Factor: N/A ft ² SHGC: c. U-Factor: N/A ft ² SHGC: Area Weighted Average Overhang Depth: 1.957 ft Area Weighted Average SHGC: 0.220 8. Skylights Description Area U-Factor:(AVG) N/A N/A ft ² SHGC(AVG): N/A 9. Floor Types Insulation Area a. Slab-On-Grade Edge Insulation R= 0.0 1524.00 ft ² b. N/A R= ft ² c. N/A R= ft ²	10. Wall Types(1680.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 1473.00 ft ² b. Frame - Wood, Adjacent R=13.0 207.00 ft ² c. N/A R= ft ² d. N/A R= ft ² 11. Ceiling Types(1524.0 sqft.) Insulation Area a. Under Attic (Vented) R=30.0 1524.00 ft ² b. N/A R= ft ² c. N/A R= ft ² 12. Ducts, location & insulation level R ft ² a. a. Sup: Attic, Ret: Attic, AH: Garage 6 304.8 b. c. 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 Cap EF a. Electric 40 gallons 0.920 b. Conservation features 16. Credits None Pstat
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Glass/Floor Area: 0.129	Total Proposed Modified Loads: 41.38	Total Baseline Loads: 43.49
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I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: _____ DATE: 10-24-21 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: _____
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Columbia County Building Department
 Plans Reviewed for Code Compliance
 State of Florida
PASS



- 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).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Crest Glen Model - Lot 24 Rose Pointe	Address type:	Lot
Building Type:	User	Lot #:	24
Owner:		Block/SubDivision:	Rose Pointe
Builder Name:	Stanley Crawford Construction	PlatBook:	
Permit Office:		Street:	
Jurisdiction:		County:	Columbia
Family Type:	Detached	City, State, Zip:	Lake City, FL,
New/Existing:	New (From Plans)		
Year Construct:	2021	Terrain:	Rural
Comment:		Shielding:	Moderate/Rural

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	1524	13716

SPACES

✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___ 1	Main	1524	13716	Yes	6	3	Yes	Yes	Yes

FLOORS

(Total Exposed Area = 1524 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	181	0	1524 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	1704 ft²	0 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	1524 ft²	N	N

CEILING

(Total Exposed Area = 1524 sq.ft.)

✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___ 1	Under Attic(Vented)	Main	30.0	Blown	1524.0ft²	0.053	0.11	Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS

(Total Exposed Area = 1680 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	11.0	4	9.0	0	102.0	0.087	0.625	0.23	0.75	0 %
___ 2	W	Exterior	Frame - Wood	Main	13.0	9.0	0	9.0	0	81.0	0.087	0.625	0.23	0.75	0 %
___ 3	N	Exterior	Frame - Wood	Main	13.0	41.0	0	9.0	0	369.0	0.087	0.625	0.23	0.75	0 %
___ 4	E	Exterior	Frame - Wood	Main	13.0	15.0	4	9.0	0	138.0	0.087	0.625	0.23	0.75	0 %
___ 5	N	Exterior	Frame - Wood	Main	13.0	3.0	4	9.0	0	30.0	0.087	0.625	0.23	0.75	0 %
___ 6	E	Exterior	Frame - Wood	Main	13.0	10.0	8	9.0	0	96.0	0.087	0.625	0.23	0.75	0 %
___ 7	S	Exterior	Frame - Wood	Main	13.0	3.0	4	9.0	0	30.0	0.087	0.625	0.23	0.75	0 %
___ 8	S	Exterior	Frame - Wood	Main	13.0	16.0	4	9.0	0	147.0	0.087	0.625	0.23	0.75	0 %
___ 9	E	Exterior	Frame - Wood	Main	13.0	9.0	4	9.0	0	84.0	0.087	0.625	0.23	0.75	0 %
___ 10	S	Exterior	Frame - Wood	Main	13.0	15.0	0	9.0	0	135.0	0.087	0.625	0.23	0.75	0 %
___ 11	W	Exterior	Frame - Wood	Main	13.0	29.0	0	9.0	0	261.0	0.087	0.625	0.23	0.75	0 %
___ 12	S	Garage	Frame - Wood	Main	13.0	23.0	0	9.0	0	207.0	0.094		0.23	0.75	0 %

DOORS

(Total Exposed Area = 80 sq.ft.)

✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
___ 1	W	Exterior	Insulated	Main	None	0.40	6.00	0	6.00	8	40.0ft²
___ 2	S	Exterior	Insulated	Main	None	0.40	3.00	0	6.00	8	20.0ft²
___ 3	S	Garage	Insulated	Main	None	0.40	3.00	0	6.00	8	20.0ft²

WINDOWS

(Total Exposed Area = 197 sq.ft.)

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp Storm	Area	Depth	Overhang Separation	Interior Shade	Screening
___ 1	N	3	Vinyl	Low-E Double	Yes	0.33	0.22	N N	90.0ft²	1.0 ft 6 in	1.0 ft 4 in	None	None
___ 2	N	3	Vinyl	Low-E Double	Yes	0.33	0.22	N N	36.0ft²	1.0 ft 6 in	1.0 ft 4 in	None	None
___ 3	E	4	Vinyl	Low-E Double	Yes	0.33	0.22	N N	20.0ft²	1.0 ft 6 in	1.0 ft 4 in	None	None
___ 4	E	6	Vinyl	Low-E Double	Yes	0.33	0.22	N N	2.0ft²	1.0 ft 6 in	1.0 ft 4 in	None	None
___ 5	S	8	Vinyl	Low-E Double	Yes	0.33	0.22	N N	15.0ft²	7.0 ft 6 in	1.0 ft 4 in	None	None
___ 6	S	10	Vinyl	Low-E Double	Yes	0.33	0.22	N N	15.0ft²	1.0 ft 6 in	1.0 ft 4 in	None	None
___ 7	W	11	Vinyl	Low-E Double	Yes	0.33	0.22	N N	4.0ft²	1.0 ft 6 in	1.0 ft 4 in	None	None
___ 8	W	11	Vinyl	Low-E Double	Yes	0.33	0.22	N N	15.0ft²	1.0 ft 6 in	1.0 ft 4 in	None	None

INFILTRATION

✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)
___ 1	Wholehouse	Proposed ACH(50)	0.00029	1143	62.71	117.73	0.1027	5.0	All

GARAGE

✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	476 ft²	476 ft²	63 ft	9 ft	1

MASS

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

INPUT SUMMARY CHECKLIST REPORT**HEATING SYSTEM**

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Geothermal HeatPump Entry Power Volt Current	Ducts	Block
1	Electric Heat Pump	None/Single		HSPF: 8.50	30.0	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:14.0	30.0	900	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)	40.00 gal	60 gal	120 deg	Standard	None	65
	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	Return R-Value Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Attic	6.0 305 ft²	Attic 6.0 76 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	1	2	3	4	5	6	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* = 95

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

,Lake City,FL,

1. New construction or existing	New (From Plans)	10. Wall Types(1680.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=13.0	1473.00 ft ²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	207.00 ft ²
4. Number of Bedrooms	3	c. N/A	R=	ft ²
5. Is this a worst case?	No	d. N/A	R=	ft ²
6. Conditioned floor area above grade (ft ²)	1524	11. Ceiling Types(1524.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft ²)	0	a. Under Attic (Vented)	R=30.0	1524.00 ft ²
7. Windows**	Description	b. N/A	R=	ft ²
a. U-Factor:	Dbl, U=0.33	c. N/A	R=	ft ²
SHGC:	SHGC=0.22	12. Ducts, location & insulation level	R	ft ²
b. U-Factor:	N/A	a. a. Sup: Attic, Ret: Attic, AH: Garage	6	304.8
SHGC:	N/A	b.		
c. U-Factor:	N/A	c.		
SHGC:		13. Cooling Systems	kBtu/hr	Efficiency
Area Weighted Average Overhang Depth:	1.957 ft	a. Central Unit	30.0	SEER:14.00
Area Weighted Average SHGC:	0.220	14. Heating Systems	kBtu/hr	Efficiency
8. Skylights	Description	a. Electric Heat Pump	30.0	HSPF:8.50
U-Factor:(AVG)	N/A			
SHGC(AVG):	N/A	15. Hot Water Systems		
9. Floor Types	Insulation	a. Electric	Cap: 40 gallons	EF: 0.920
a. Slab-On-Grade Edge Insulation	R= 0.0	b. Conservation features		None
b. N/A	R=			Pstat
c. N/A	R=	16. Credits		



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:

Stanley Ayers

Date:

12/21/2021

Address of New Home:

214 SW Cherry Blossom Way

City/FL Zip: Lake City,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.

