

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: D Johnson Residence-Red Door Street: Parcel 11-6S-16-03815-165 City, State, Zip: Fort White, FL Owner: Devon Johnson Design Location: FL, Gainesville	Builder Name: Red Door Homes Permit Office: Columbia County Building Dept 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 Single-family 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) 2142 Conditioned floor area below grade (ft²) 0 7. Windows (214.3 sqft.) Description Area a. U-Factor: Dbl, U=0.21 108.33 ft² SHGC: SHGC=0.31 b. U-Factor: Dbl, U=0.33 106.00 ft² SHGC: SHGC=0.27 c. U-Factor: N/A ft² SHGC: d. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 1.500 ft. Area Weighted Average SHGC: 0.290 8. Floor Types (2142.0 sqft.) Insulation Area a. Slab-On-Grade Edge Insulation R=0.0 2142.00 ft² b. N/A R= ft² c. N/A R= ft²	9. Wall Types (1872.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 1588.50 ft² b. Frame - Wood, Adjacent R=13.0 283.50 ft² c. N/A R= ft² d. N/A R= ft² 10. Ceiling Types (2142.0 sqft.) Insulation Area a. Under Attic (Vented) R=30.0 2142.00 ft² b. N/A R= ft² c. N/A R= ft² 11. Ducts R ft² a. Sup: Attic, Ret: Attic, AH: Attic 6 428.4 12. Cooling systems kBtu/hr Efficiency a. Central Unit 46.5 SEER:14.00 13. Heating systems kBtu/hr Efficiency a. Electric Heat Pump 46.5 HSPF:8.50 14. Hot water systems a. Electric Cap: 40 gallons b. Conservation features EF: 0.960 None 15. Credits Pstat
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Glass/Floor Area: 0.100	Total Proposed Modified Loads: 54.40	PASS
	Total Baseline Loads: 56.49	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: _____ DATE: _____ 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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- 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).
- Compliance with a proposed duct leakage Qn requires a 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.

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	D Johnson Residence-Red D	Bedrooms:	4	Address Type:	Street Address
Building Type:	User	Conditioned Area:	2142	Lot #	
Owner Name:	Devon Johnson	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Red Door Homes	Rotate Angle:	0	Street:	Parcel 11-6S-16-03815-
Permit Office:	Columbia County Building De	Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Fort White , 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	2142	19278

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	2142	19278	Yes	4	4	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	207 ft	0	2142 ft²	----	0.33	0.33	0.34

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt Tested	Deck Insul.	Pitch (deg)	
_____	1	Hip	Composition shingles	2396 ft²	0 ft²	Medium	N	0.96	No	0.9	No	0	26.6

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2142 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	2142 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	SE	Exterior	Frame - Wood	Main	13	17		9		153.0 ft²		0.23	0.75	0
2	NE	Exterior	Frame - Wood	Main	13	5	6	9		49.5 ft²		0.23	0.75	0
3	SE	Exterior	Frame - Wood	Main	13	13		9		117.0 ft²		0.23	0.75	0
4	SW	Exterior	Frame - Wood	Main	13	12		9		108.0 ft²		0.23	0.75	0
5	SE	Exterior	Frame - Wood	Main	13	8		9		72.0 ft²		0.23	0.75	0
6	SW	Exterior	Frame - Wood	Main	13	34		9		306.0 ft²		0.23	0.75	0
7	NW	Exterior	Frame - Wood	Main	13	58		9		522.0 ft²		0.23	0.75	0
8	NE	Exterior	Frame - Wood	Main	13	29		9		261.0 ft²		0.23	0.75	0
9	SE	Garage	Frame - Wood	Main	13	20		9		180.0 ft²		0.23	0.75	0
10	NE	Garage	Frame - Wood	Main	13	11	6	9		103.5 ft²		0.23	0.75	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	SE	Insulated	Main	None	.46	3		6	8	20 ft²
2	SE	Insulated	Main	None	.46	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	SE	1	Vinyl	Low-E Double	Yes	0.21	0.31	N	30.0 ft²	1 ft 6 in	1 ft 0 in	Drapes/blinds	Exterior 5
2	SE	3	Vinyl	Low-E Double	Yes	0.21	0.31	N	30.0 ft²	1 ft 6 in	1 ft 0 in	Drapes/blinds	Exterior 5
3	SE	5	Vinyl	Low-E Double	Yes	0.21	0.31	N	15.0 ft²	1 ft 6 in	1 ft 0 in	Drapes/blinds	Exterior 5
4	NW	7	Vinyl	Low-E Double	Yes	0.33	0.27	N	90.0 ft²	1 ft 6 in	1 ft 0 in	Drapes/blinds	Exterior 5
5	NW	7	Vinyl	Low-E Double	Yes	0.21	0.31	N	33.3 ft²	1 ft 6 in	1 ft 0 in	Drapes/blinds	Exterior 5
6	NE	8	Vinyl	Low-E Double	Yes	0.33	0.27	N	16.0 ft²	1 ft 6 in	1 ft 0 in	Drapes/blinds	Exterior 5

GARAGE

✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	400 ft²	400 ft²	48.15 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1606.5	88.19	165.86	.1128	5

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
✓	1	Electric Heat Pump/	None	Singl	HSPF:8.5	46.5 kBtu/hr	1	sys#1

COOLING SYSTEM

✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
✓	1	Central Unit/	None	Singl	SEER: 14	46.5 kBtu/hr	1550 cfm	0.85	1	sys#1

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	None	Garage	0.96	40 gal	70 gal	120 deg	None

SOLAR HOT WATER SYSTEM

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

DUCTS

✓	#	--- Supply ---	--- Return ---	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #
✓	1	Attic	Attic	Prop. Leak Free	Attic	--- cfm	64.3 cfm	0.03	0.50	1 1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

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

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	2nd Floor