

FORM R405-2020

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: DWC lot 20
Street: 174 SW Caboose DR
City, State, Zip: Fort White, FL, 32038
Owner:
Design Location: FL, Gainesville

Builder Name: DWC Contracting LLC
Permit Office:
Permit Number:
Jurisdiction:
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)	1843
Conditioned floor area below grade (ft²)	0
7. Windows (220.0 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.33 220.00 ft²
SHGC:	SHGC=0.21
b. U-Factor:	N/A ft²
SHGC:	
c. U-Factor:	N/A ft²
SHGC:	
Area Weighted Average Overhang Depth:	1.500 ft.
Area Weighted Average SHGC:	0.210
8. Skylights	Area
c. U-Factor:(AVG)	N/A ft²
SHGC(AVG):	N/A
9. Floor Types (1843.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 1843.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²

10. Wall Type (2043.0 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=13.0 1845.00 ft²
b. Frame - Wood, Adjacent	R=13.0 198.00 ft²
c. N/A	R= ft²
d. N/A	R= ft²
11. Ceiling Types (1843.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=30.0 1843.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²
12. Ducts	R ft²
a. Sup: Attic, Ret: Attic, AH: Garage	6 369
13. Cooling systems	kBtu/hr Efficiency
a. Central Unit	36.6 SEER:14.00
14. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	34.2 HSPF:8.50
15. Hot water systems	Cap: 40 gallons EF: 0.920
a. Electric	
b. Conservation features	None
16. Credits	CF, Pstat



Glass/Floor Area: 0.119 Total Proposed Modified Loads: 47.55
Total Baseline Loads: 48.88

PASS

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: _____

- 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:	DWC lot 20	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1843	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	DWC Contracting LLC	Rotate Angle:	0	Street:	174 SW Caboose DR
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	Fort White , FL , 32038
Family Type:	Detached				
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	1843	16587

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1843	16587	Yes	3	3	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
	1	Slab-On-Grade Edge Insulatio	Main	227 ft	0	1843 ft²	----	0.22	0.22	0.56

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	Composition shingles	2061 ft²	462 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	1843 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	Blown	1843 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	Garage	Frame - Wood	Main	13	22		9		198.0 ft²		0.11	0.25	0
2	N	Exterior	Frame - Wood	Main	13	32	6	9		292.5 ft²		0.11	0.25	0
3	E	Exterior	Frame - Wood	Main	13	63		9		567.0 ft²		0.11	0.25	0
4	S	Exterior	Frame - Wood	Main	13	54	6	9		490.5 ft²		0.11	0.25	0
5	W	Exterior	Frame - Wood	Main	13	55		9		495.0 ft²		0.11	0.25	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	N	Insulated	Main	None	.46	2	8	6	8	17.8 ft²
2	N	Insulated	Main	None	.46	1		8		8 ft²
3	N	Insulated	Main	None	.46	1		8		8 ft²
4	E	Insulated	Main	None	.46	1		8		8 ft²
5	E	Insulated	Main	None	.46	1		8		8 ft²
6	W	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	N	2	Vinyl	Low-E Double	Yes	0.33	0.21	N	32.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
2	N	2	Vinyl	Low-E Double	Yes	0.33	0.21	N	25.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
3	N	2	Vinyl	Low-E Double	Yes	0.33	0.21	N	3.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
4	E	3	Vinyl	Low-E Double	Yes	0.33	0.21	N	12.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
5	E	3	Vinyl	Low-E Double	Yes	0.33	0.21	N	32.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
6	S	4	Vinyl	Low-E Double	Yes	0.33	0.21	N	45.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
7	S	4	Vinyl	Low-E Double	Yes	0.33	0.21	N	50.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
8	W	5	Vinyl	Low-E Double	Yes	0.33	0.21	N	15.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None
9	W	5	Vinyl	Low-E Double	Yes	0.33	0.21	N	6.0 ft²	1 ft 6 in	1 ft 6 in	Drapes/blinds	None

GARAGE

✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	382.8 ft²	382.8 ft²	64 ft	8 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1382.3	75.83	142.37	.1027	5

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
	1	Electric Heat Pump/	None	Singl	HSPF:8.5	34.2 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	36.6 kBtu/hr	1098 cfm	0.75	1	sys#1

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
	1	Electric	None	Garage	0.92	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			ft ²		

DUCTS

✓	#	Location	Supply R-Value	Area	Location	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
	1	Attic	6	369 ft ²	Attic	92.25 ft	Default Leakage	Garage	(Default)	(Default)			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

Cooling Heating Venting	[X] Jan [X] Jan	[X] Feb [X] Feb	[X] Mar [X] Mar	[X] Apr [X] Apr	[X] May [X] May	[X] Jun [X] Jun	[X] Jul [X] Jul	[X] Aug [X] Aug	[X] Sep [X] Sep	[X] Oct [X] Oct	[X] Nov [X] Nov	[X] Dec [X] Dec
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Thermostat Schedule: HERS 2006 Reference

Hours

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

MASS

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

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 97

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

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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	1845.00 ft ²
3. Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	198.00 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 (ft ²)	1843	11. Ceiling Type and insulation level	Insulation	Area
7. Windows**	Description	a. Under Attic (Vented)	R=30.0	1843.00 ft ²
a. U-Factor:	Dbl, U=0.33	b. N/A	R=	ft ²
SHGC:	SHGC=0.21	c. N/A	R=	ft ²
b. U-Factor:	N/A	12. Ducts, location & insulation level	R	ft ²
SHGC:		a. Sup: Attic, Ret: Attic, AH: Garage	6	369
c. U-Factor:	N/A	13. Cooling systems	kBtu/hr	Efficiency
SHGC:		a. Central Unit	36.6	SEER:14.00
d. U-Factor:	N/A	14. Heating systems	kBtu/hr	Efficiency
SHGC:		a. Electric Heat Pump	34.2	HSPF:8.50
Area Weighted Average Overhang Depth:	1.500 ft.	15. Hot water systems	Cap: 40 gallons	
Area Weighted Average SHGC:	0.210	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)	CF, Pstat	
9. Floor Types	Insulation	Area		
a. Slab-On-Grade Edge Insulation	R=0.0	1843.00 ft ²		
b. N/A	R=	ft ²		
c. N/A	R=	ft ²		

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.