

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

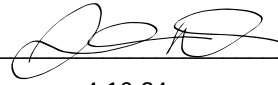
Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Castagna & West Street: City, State, Zip: , FL, Owner: Design Location: FL, Gainesville	Builder Name: 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 (ft²) 2617 Conditioned floor area below grade (ft²) 0 7. Windows(240.0 sqft.) Description Area a. U-Factor: Dbl, U=0.26 240.00 ft² SHGC: SHGC=0.20 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: 0.200 8. Skylights Description Area U-Factor:(AVG) N/A N/A ft² SHGC(AVG): N/A 9. Floor Types Insulation Area a. Slab-On-Grade Edge Insulation R= 0.0 2617.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(2410.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=19.0 2050.00 ft² b. Frame - Wood, Adjacent R=13.0 360.00 ft² c. N/A d. N/A 11. Ceiling Types(2617.0 sqft.) Insulation Area a. Single assembly, no ai (Unvented) R=30.0 2617.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Unvent) Deck R=44.0 3030 ft² 13. Ducts, location & insulation level R ft² a. Sup: Main, Ret: Main, AH: Main 6 523 b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 48.0 SEER2:16.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 48.0 HSPF2:8.50 16. Hot Water Systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None 17. Credits CF, Pstat
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Glass/Floor Area: 0.092	Total Proposed Modified Loads: 44.19	PASS
	Total Baseline Loads: 61.54	

NOTE: Proposed residence must have annual total normalized Modified Loads that are less than or equal to 95 percent of the annual total loads of the standard reference design in order to comply.

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY:  DATE: 4-16-24 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 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 4.72 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:Castagna & West

Building Type:User

Owner:

Builder Home ID:

Builder Name:

Permit Office:

Jurisdiction:

Family Type:Detached

New/Existing:New (From Plans)

Year Construct:2024

Comment:

Bedrooms:3

Conditioned Area:2617

Total Stories:1

Worst Case:No

Rotate Angle:0

Cross Ventilation:

Whole House Fan:

Terrain:Rural

Shielding:Moderate/Rural

Address type:Street Address

Lot #:---

Block/SubDivision:---

PlatBook:---

Street:

County:columbia

City, State, Zip: , FL,

CLIMATE

✓

Design Location

Tmy Site

Design Temp

97.5%2.5%

Int Design Temp

WinterSummer

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

2617

26170 cu ft

SPACES

✓

Number

Name

Area

Volume

Kitchen

Occupants

Bedrooms

Finished

Cooled

Heated

1

Main

2617

26170

Yes

6

3

Yes

Yes

Yes

FLOORS

(Total Exposed Area = 2617 sq.ft.)

✓

#

Floor Type

Space

Exposed Perim(ft)

Area

R-Value Perim.

U-Factor Joist

Slab Insul. Vert/Horiz

Tile

Wood

Carpet

1

Slab-On-Grade Edge Ins

Main

2422617 sqft

0---

0.563

0 (ft)/0 (ft)

0.20

0.60

0.20

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

3030 ft²764 ft²

DarkN

0.92

No

0.9

No

44

30.26

ATTIC

✓

#

Type

Ventilation

Vent Ratio (1 in)

Area

RBS

IRCC

1

No attic

Unvented

0

2617 ft²

N

N

CEILING

(Total Exposed Area = 2617 sq.ft.)

✓

#

Ceiling Type

Space

R-Value

Ins. Type

Area

U-Factor

Framing Frac.

Truss Type

1

Single assembly, no airspace(Unvented)

Main

30.0Blown

2617.0ft²

0.014

0.11

Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 2410 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	19.0	14.0	0	10.0	0	140.0	0.061		0.23	0.75	0 %				
___ 2	E	Exterior	Frame - Wood	Main	19.0	11.0	10	10.0	0	118.3	0.061		0.23	0.75	0 %				
___ 3	N	Exterior	Frame - Wood	Main	19.0	50.0	0	10.0	0	500.0	0.061		0.23	0.75	0 %				
___ 4	E	Exterior	Frame - Wood	Main	19.0	39.0	6	10.0	0	395.0	0.061		0.23	0.75	0 %				
___ 5	S	Exterior	Frame - Wood	Main	19.0	15.0	2	10.0	0	151.7	0.061		0.23	0.75	0 %				
___ 6	W	Exterior	Frame - Wood	Main	19.0	4.0	0	10.0	0	40.0	0.061		0.23	0.75	0 %				
___ 7	S	Exterior	Frame - Wood	Main	19.0	35.0	4	10.0	0	353.3	0.061		0.23	0.75	0 %				
___ 8	E	Exterior	Frame - Wood	Main	19.0	4.0	0	10.0	0	40.0	0.061		0.23	0.75	0 %				
___ 9	S	Exterior	Frame - Wood	Main	19.0	15.0	10	10.0	0	158.3	0.061		0.23	0.75	0 %				
___ 10	W	Exterior	Frame - Wood	Main	19.0	10.0	0	10.0	0	100.0	0.061		0.23	0.75	0 %				
___ 11	W	Garage	Frame - Wood	Main	13.0	36.0	0	10.0	0	360.0	0.084		0.23	0.75	0 %				
___ 12	W	Exterior	Frame - Wood	Main	19.0	5.0	4	10.0	0	53.3	0.061		0.23	0.75	0 %				

DOORS												(Total Exposed Area = 251 sq.ft.)		
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area			
___ 1	E	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²			
___ 2	N	Exterior	Insulated	Main	None	0.46	20.00	0	8.00	0	160.0ft²			
___ 3	S	Exterior	Insulated	Main	None	0.46	5.00	4	8.00	0	42.7ft²			
___ 4	W	Garage	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²			

WINDOWS															(Total Exposed Area = 240 sq.ft.)		
✓ #	Ornt	Wall ID	Frame	Panes	NFRC U-Factor	SHGC	Imp	Storm	Total Area (ft²)	Same Units	Width (ft)	Height (ft)	--Overhang-- Depth (ft)	Sep. (ft)	Interior Shade	Screen	
___ 1	N	1	Vinyl	Low-E Double	Y	0.26	0.20	N	N	20.0	2	2.50	4.00	1.5	1.3	None	None
___ 2	N	3	Vinyl	Low-E Double	Y	0.26	0.20	N	N	54.0	3	3.00	6.00	1.5	1.3	None	None
___ 3	E	4	Vinyl	Low-E Double	Y	0.26	0.20	N	N	36.0	2	3.00	6.00	1.5	1.3	None	None
___ 4	E	4	Vinyl	Low-E Double	Y	0.26	0.20	N	N	10.0	1	5.00	2.00	1.5	1.3	None	None
___ 5	S	5	Vinyl	Low-E Double	Y	0.26	0.20	N	N	30.0	2	2.50	6.00	1.5	1.3	None	None
___ 6	S	7	Vinyl	Low-E Double	Y	0.26	0.20	N	N	60.0	4	2.50	6.00	1.5	1.3	None	None
___ 7	S	9	Vinyl	Low-E Double	Y	0.26	0.20	N	N	30.0	2	2.50	6.00	1.5	1.3	None	None

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00030	2057	112.86	211.88	0.1010	4.7	All	26170 cu ft

GARAGE					
✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
___ 1	810 ft²	810 ft²	81 ft	10 ft	13

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---		Ducts	Block		
		Entry	Power	Volt	Current								
___	1	Electric Heat Pump	None/Single			HSPF2: 8.50	48.0		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			SEER2:16.0	48.0	1440	0.75	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)	50.00 gal	60 gal	120 deg	Standard	None	99		
		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 #	-----Supply----- Location R-Value Area	-----Return----- Location R-Value Area			Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool	
___	1	Main 6.0 523 ft²	Main 6.0 131 ft²			Prop. Leak Free	Main	---	---	0.030	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 80	78 80	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	80 78	80 78	80 78	80 78
___	Heating (WD)	AM PM	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	68 68	68 68	68 68	68 68	68 68