

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Janak Patel Addition
 Street: 726 NW Clubview Circle
 City, State, Zip: Lake City, FL, 32055
 Owner: Janak Patel
 Design Location: FL, Gainesville

Builder Name: Janak Patel
 Permit Office: Columbia
 Permit Number:
 Jurisdiction: 221000
 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	1
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	1282
Conditioned floor area below grade (ft²)	0
7. Windows (237.0 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.47 237.00 ft²
SHGC:	SHGC=0.31
b. U-Factor:	N/A ft²
SHGC:	
c. U-Factor:	N/A ft²
SHGC:	
Area Weighted Average Overhang Depth:	8.835 ft.
Area Weighted Average SHGC:	0.310
8. Skylights	Area
c. U-Factor (AVG):	N/A ft²
SHGC (AVG):	N/A
9. Floor Types (978.7 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 580.10 ft²
b. Floor Over Other Space	R=0.0 398.60 ft²
c. N/A	R= ft²

10. Wall Types (1793.0 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=19.0 1793.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²
d. N/A	R= ft²
11. Ceiling Types (702.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=38.0 702.00 ft²
b. N/A	R= ft²
c. N/A	R= ft²
12. Ducts	R ft²
a. Sup: Attic, Ret: Attic, AH: Family Room	6 97
13. Cooling systems	kBtu/hr Efficiency
a. Central Unit	28.6 SEER:16.00
14. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	28.6 HSPF:9.00
15. Hot water systems	
a. Electric	Cap: 50 gallons
	EF: 0.945
b. Conservation features	
None	
16. Credits	CF, Pstat

Glass/Floor Area: 0.185
 Total Proposed Modified Loads: 29.35
 Total Baseline Loads: 41.09

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: John Pirkel
 DATE: 07/22/2022

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 5.19 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Janak Patel Addition	Bedrooms:	1	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1282	Lot #	
Owner Name:	Janak Patel	Total Stories:	2	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Janak Patel	Rotate Angle:	0	Street:	726 NW Clubview Circl
Permit Office:	Columbia	Cross Ventilation:	No	County:	Columbia
Jurisdiction:	221000	Whole House Fan:	No	City, State, Zip:	Lake City ,
Family Type:	Detached				FL , 32055
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	Entire House	1282	12292

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	1/2 Bath	29	298.7	No	0		1	Yes	Yes	Yes
2	Family Room	551	5675.3	No	0		1	Yes	Yes	Yes
3	Mstr Bedroom	399	3591	No	2	1	1	Yes	Yes	Yes
4	Mstr WIC	160	1440	No	0		1	Yes	Yes	Yes
5	Tlt	26	234	No	0		1	Yes	Yes	Yes
6	Mstr Bathrm	117	1053	No	0		1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	Perimeter	R-Value	Area	Joist R-Value	Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	1/2 Bath	6.5 ft		0	29.3 ft²	----	1	0	0
_____	2	Slab-On-Grade Edge Insulatio	Family Room	62.5 ft		0	550.8 ft²	----	1	0	0
_____	3	Floor Over Other Space	Mstr Bedroom	----		----	369.3 ft²	0	1	0	0
_____	4	Floor Over Other Space	Mstr Bedroom	----		----	29.3 ft²	0	1	0	0

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	759 ft²	0 ft²	Medium	N	0.9	No	0.9	No	0	22.62

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	150	701 ft²	N	N

INPUT SUMMARY CHECKLIST REPORT

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Mstr Bedroom	38	Blown	399 ft²	0.1	Wood
_____	2	Under Attic (Vented)	Mstr WIC	38	Blown	160 ft²	0.1	Wood
_____	3	Under Attic (Vented)	Tlt	38	Blown	26 ft²	0.1	Wood
_____	4	Under Attic (Vented)	Mstr Bathrm	38	Blown	117 ft²	0.1	Wood

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	1/2 Bath	19	6	6	10	4	67.2 ft²	0	0.25	0.23	0
_____	2	N	Exterior	Frame - Wood	Family Room	19	13	6	10	4	139.5 ft²	0	0.25	0.23	0
_____	3	E	Exterior	Frame - Wood	Family Room	19	29	0	10	4	299.7 ft²	0	0.25	0.23	0
_____	4	S	Exterior	Frame - Wood	Family Room	19	20	0	10	4	206.7 ft²	0	0.25	0.23	0
_____	5	N	Exterior	Frame - Wood	Mstr Bedroo	19	20	0	9	0	180.0 ft²	0	0.25	0.23	0
_____	6	E	Exterior	Frame - Wood	Mstr Bedroo	19	18	0	9	0	162.0 ft²	0	0.25	0.23	0
_____	7	S	Exterior	Frame - Wood	Mstr Bedroo	19	3	6	9	0	31.5 ft²	0	0.25	0.23	0
_____	8	W	Exterior	Frame - Wood	Mstr Bedroo	19	18	0	9	0	162.0 ft²	0	0.25	0.23	0
_____	9	S	Exterior	Frame - Wood	Mstr WIC	19	14	6	9	0	130.5 ft²	0	0.25	0.23	0
_____	10	W	Exterior	Frame - Wood	Mstr WIC	19	11	0	9	0	99.0 ft²	0	0.25	0.23	0
_____	11	E	Exterior	Frame - Wood	Tlt	19	4	6	9	0	40.5 ft²	0	0.25	0.23	0
_____	12	S	Exterior	Frame - Wood	Tlt	19	6	6	9	0	58.5 ft²	0	0.25	0.23	0
_____	13	N	Exterior	Frame - Wood	Mstr Bathrm	19	11	0	9	0	99.0 ft²	0	0.25	0.23	0
_____	14	E	Exterior	Frame - Wood	Mstr Bathrm	19	6	6	9	0	58.5 ft²	0	0.25	0.23	0
_____	15	S	Exterior	Frame - Wood	Mstr Bathrm	19	6	6	9	0	58.5 ft²	0	0.25	0.23	0

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	E	3	Vinyl	Low-E Double	Yes	0.47	0.31	N	18.0 ft²	12 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	2	E	3	Vinyl	Low-E Double	Yes	0.47	0.31	N	96.0 ft²	12 ft 0 in	1 ft 0 in	None	None
_____	3	S	4	Vinyl	Low-E Double	Yes	0.47	0.31	N	36.0 ft²	2 ft 0 in	9 ft 0 in	Drapes/blinds	Exterior 5
_____	4	N	5	Vinyl	Low-E Double	Yes	0.47	0.31	N	12.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	5	E	6	Vinyl	Low-E Double	Yes	0.47	0.31	N	48.0 ft²	12 ft 0 in	1 ft 0 in	None	None
_____	6	S	9	Vinyl	Low-E Double	Yes	0.47	0.31	N	15.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	7	S	12	Vinyl	Low-E Double	Yes	0.47	0.31	N	6.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5
_____	8	E	14	Vinyl	Low-E Double	Yes	0.47	0.31	N	6.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Exterior 5

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000316	1063.3	58.33	109.51	.1443	5.19

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM																								
✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts																
_____	1	Electric Heat Pump/	Split	Singl	HSPF:9	28.6 kBtu/hr	1	sys#1																
COOLING SYSTEM																								
✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts														
_____	1	Central Unit/	Split	Singl	SEER: 16	28.6 kBtu/hr	1000 cfm	0.7	1	sys#1														
HOT WATER SYSTEM																								
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation															
_____	1	Electric	None	Family Room	0.945	50 gal	62.3 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 ----			---- Return ----			Air	CFM 25	CFM25	HVAC #													
		Location	R-Value	Area	Location	Area	Leakage Type	Handler	TOT	OUT	QN	RLF	Heat	Cool										
_____	1	Attic	6	97 ft²	Attic	41 ft²	Default Leakage	Family Roo	(Default)	(Default)			1	1										
TEMPERATURES																								
Programable Thermostat: Y					Ceiling Fans:																			
Cooling	☒	Jan	☒	Feb	☒	Mar	☒	Apr	☒	May	☒	Jun	☒	Jul	☒	Aug	☒	Sep	☒	Oct	☒	Nov	☒	Dec
Heating	☒	Jan	☒	Feb	☒	Mar	☒	Apr	☒	May	☒	Jun	☒	Jul	☒	Aug	☒	Sep	☒	Oct	☒	Nov	☒	Dec
Venting	☒	Jan	☒	Feb	☒	Mar	☒	Apr	☒	May	☒	Jun	☒	Jul	☒	Aug	☒	Sep	☒	Oct	☒	Nov	☒	Dec
Thermostat Schedule: HERS 2006 Reference																								
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	68	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	68	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				1/2 Bath											
Default(8 lbs/sq.ft.	ft²				ft				0.3				Family Room											
Default(8 lbs/sq.ft.	ft²				ft				0.3				Mstr Bedroom											
Default(8 lbs/sq.ft.	ft²				ft				0.3				Mstr WIC											
Default(8 lbs/sq.ft.	ft²				ft				0.3				Tlt											
Default(8 lbs/sq.ft.	ft²				ft				0.3				Mstr Bathrm											