

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: J-9613 - C-1309 Street: City, State, Zip: Columbia County, FL, Owner: KEEN/WILLIAMS ADDITION 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 Addition 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) 720 Conditioned floor area below grade (ft²) 0 7. Windows(30.0 sqft.) Description Area a. U-Factor: Dbl, U=0.35 30.00 ft² SHGC: SHGC=0.25 b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 1.000 ft Area Weighted Average SHGC: 0.250 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= 0.0 720.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(726.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 726.00 ft² b. N/A c. N/A d. N/A 11. Ceiling Types(720.0 sqft.) Insulation Area a. Flat ceiling under att (Vented) R=38.0 720.00 ft² b. N/A c. N/A 12. Roof(Comp. Shingles, Vented) Deck R=0.0 780 ft² 13. Ducts, location & insulation level R ft² a. b. c. 14. Cooling Systems kBtu/hr Efficiency a. Central Unit 17.4 SEER:16.00 15. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 17.4 HSPF:9.00 16. Hot Water Systems - None required a. N/A N/A b. Conservation features 17. Credits Pstat
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Glass/Floor Area: 0.042

Total Proposed Modified Loads: 14.65

Total Baseline Loads: 15.50

PASS

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

PREPARED BY: Latisha FurmonDATE: March 16, 2023

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.

- Proposed Qn of NAN exceeds the performance method default limit of 0.08 and therefore does not require duct testing. R405 .2.3

- 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 6.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	J-9613 - C-1309	Bedrooms:	1	Address type:	Street Address
Building Type:	User	Conditioned Area:	720	Lot #:	---
Owner:	KEEN/WILLIAMS ADDITION	Total Stories:	1	Block/SubDivision:	---
Builder Name:		Worst Case:	No	PlatBook:	---
Permit Office:		Rotate Angle:	0	Street:	
Jurisdiction:		Cross Ventilation:	No	County:	Columbia
Family Type:	Detached	Whole House Fan:	No	City, State, Zip:	Columbia County, FL,
New/Existing:	Addition	Terrain:	Suburban		
Year Construct:		Shielding:	Suburban		
Comment:					

CLIMATE

✓ Design Location	Tmy Site	Design Temp		Int Design Temp		Heating Degree Days	Design Moisture	Daily temp Range
		97.5%	2.5%	Winter	Summer			
___ FL, Gainesville	FL_GAINESVILLE_REGIONA	32	92	70	75	1305.5	51	Medium

BLOCKS

✓ Number	Name	Area	Volume
___ 1	Entire House	720	6120 cu ft

SPACES

✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___ 1	M BED	360	3240	No	2	1	Yes	Yes	Yes
___ 2	M WIC 1	88	704	No	0		Yes	Yes	Yes
___ 3	M WIC 2	38	304	No	0		Yes	Yes	Yes
___ 4	M BATH	113	904	No	0		Yes	Yes	Yes
___ 5	HALL	53	424	No	0		Yes	Yes	Yes
___ 6	LAUNDRY	68	544	No	0		Yes	Yes	Yes

FLOORS

(Total Exposed Area = 720 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	M BED	54		360 ft	0.304	---	0.00	0.00	1.00
___ 2	Slab-On-Grade Edge Ins	M WIC 1	8.5		88 ft	0.304	---	0.00	0.00	1.00
___ 3	Slab-On-Grade Edge Ins	M WIC 2	7.5		38 ft	0.304	---	0.00	0.00	1.00
___ 4	Slab-On-Grade Edge Ins	M BATH	7.5		113 ft	0.304	---	0.00	0.00	1.00
___ 5	Slab-On-Grade Edge Ins	HALL	1		53 ft	0.304	---	0.00	0.00	1.00
___ 6	Slab-On-Grade Edge Ins	LAUNDRY	6.5		68 ft	0.304	---	0.00	0.00	1.00

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	780 ft²	0 ft²	Medium	N	0.9	No	0.9	No	0	22.62

INPUT SUMMARY CHECKLIST REPORT

ATTIC														
✓ #	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC								
___ 1	Full attic	Vented	150	720 ft²	N	N								

CEILING (Total Exposed Area = 720 sq.ft.)														
✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type						
___ 1	Flat ceiling under attic(Vented)	M BED	38.0	Blown	360.0ft²	0.049	0.10	Wood						
___ 2	Flat ceiling under attic(Vented)	M WIC 1	38.0	Blown	88.0ft²	0.049	0.10	Wood						
___ 3	Flat ceiling under attic(Vented)	M WIC 2	38.0	Blown	38.0ft²	0.049	0.10	Wood						
___ 4	Flat ceiling under attic(Vented)	M BATH	38.0	Blown	113.0ft²	0.049	0.10	Wood						
___ 5	Flat ceiling under attic(Vented)	HALL	38.0	Blown	53.0ft²	0.049	0.10	Wood						
___ 6	Flat ceiling under attic(Vented)	LAUNDRY	38.0	Blown	68.0ft²	0.049	0.10	Wood						

WALLS (Total Exposed Area = 726 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	E	Exterior	Frame - Wood	M BED	13.0	15.0	0	9.0	0	135.0	0.095	0	0.25	0.80	0 %
___ 2	S	Exterior	Frame - Wood	M BED	13.0	24.0	0	9.0	0	216.0	0.095	0	0.25	0.80	0 %
___ 3	W	Exterior	Frame - Wood	M BED	13.0	15.0	0	9.0	0	135.0	0.095	0	0.25	0.80	0 %
___ 4	W	Exterior	Frame - Wood	M WIC 1	13.0	8.0	6	8.0	0	68.0	0.095	0	0.25	0.80	0 %
___ 5	E	Exterior	Frame - Wood	M WIC 2	13.0	7.0	6	8.0	0	60.0	0.095	0	0.25	0.80	0 %
___ 6	E	Exterior	Frame - Wood	M BATH	13.0	7.0	6	8.0	0	60.0	0.095	0	0.25	0.80	0 %
___ 7	W	Exterior	Frame - Wood	LAUNDRY	13.0	6.0	6	8.0	0	52.0	0.095	0	0.25	0.80	0 %

WINDOWS (Total Exposed Area = 30 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	S	2	Metal	Low-E Double	Y	0.35	0.25	N	N	30.0	2	3.00	5.00	1.0	1.0	Drapes/blinds	Ex. 50%

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00032	612	33.58	63.04	0.1205	6.0	All	6120 cu ft

MASS					
✓ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	M BED
___ 2	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	M WIC 1
___ 3	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	M WIC 2
___ 4	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	M BATH
___ 5	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	HALL
___ 6	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	LAUNDRY

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓ #	System Type/FI. Addition	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal HeatPump----				Ducts	Block
						Entry	Power	Volt	Current		
___ 1	Electric Heat Pump/Supplementa	Split/Single		HSPF: 9.00	17.4		0.00	0.00	0.00	sys#0	1

COOLING SYSTEM

✓ #	System Type/FI. Addition	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit/Supplementa	Split/Single		SEER:16.0	17.4	0	0.80	Ductless	1

HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits

DUCTS

✓ Duct #	-----Supply-----	-----Return-----	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
	Location R-Value Area	Location R-Value Area	Leakage Type					

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	Hours 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	