FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: McKenzie Residence Street: City, State, Zip: Lake City, FL, Owner: Design Location: FL, Gainesville	Builder Name: IC Construction Permit Office: Permit Number: Jurisdiction: County: Columbia (Florida Climate Zone 2)
1. New construction or existing 2. Single family or multiple family 3. Number of units, if multiple family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area above grade (ft²) 7. Windows(206.0 sqft.) 8. HGC: 8. HGC=0.22 8. U-Factor: 9. HGC: 0. U-Factor: N/A SHGC: Area Weighted Average Overhang Depth: Area Weighted Average SHGC: 0.220 8. Floor Types (2025.0 sqft.) Insulation Insulat	9. Wall Types (2007.5 sqft.) a. Frame - Wood, Exterior b. Frame - Wood, Adjacent c. N/A d. N/A d. N/A 10. Ceiling Types (2025.0 sqft.) a. Under Attic (Vented) b. N/A c. N/A c. N/A 11. Ducts a. Sup: Main, Ret: Main, AH: Main 12. Cooling systems a. Central Unit 13. Heating systems a. Electric Heat Pump 15. Credits Insulation Area R=13.0 207.00 ft² R=13.0 207.00 ft² R=16² R=16² R=16² Insulation Area R=30.0 2025.00 ft² R=17² R=16² R=10.0 2025.00 ft² R=10.0 2025.00 ft² R=13.0 207.00 ft² R=10.0 ft² R=20.0 2025.00 ft² R=20.0 2025
Glass/Floor Area: 0.102 Total Proposed Modified Total Baseline	PASS
I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: 9-21-20 I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT:	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.

- 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).

DATE:

- 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.

DATE:

				PROJEC	т							
Title: Building Type Owner Name: # of Units: Builder Name Permit Office: Jurisdiction: Family Type: New/Existing: Comment:	1 : IC Construction Single-family		Bedrooms Conditione Total Stor Worst Cas Rotate An Cross Ver Whole Ho	ed Area: 2 ies: 1 se: N gle: 0 ntilation:	140 No		Lot # Block PlatB Stree Coun	t:	on: Co	eet Addres	SS	
				CLIMAT	Έ							
	esign Location	TMY Site		97.5		Winte		er Degre		Design Moisture	Ra	nge
Fl	_, Gainesville	FL_GAINESVILLE	E_REGI	32		70	75	13	05.5	51	Me	edium
				BLOCK	S							
Number	Name	Area	Volume									
1	Block1	2025	18225	j								
				SPACE	S							
Number	Name	Area	Volume	Kitchen C	Occupants	Bedroor	ms Ir	ıfil ID F	inished	Cool	ed	Heat
1	Main	2025	18225	Yes	6	3	1	Y	'es	Yes		Yes
				FLOOR	S							
√ #	Floor Type	Space	e Per	imeter F	R-Value	Area			_	Tile Woo	od Ca	rpet
1S	lab-On-Grade Edge	Insulatio M	lain 286	6 ft	0	2025 ft ²			0	0.33 0.3	3 0.	34
				ROOF								
./			Roof	Gable	Roof	Rad	Solar		Emitt	Emitt	Deck	Pito
V #	Туре	Materials	Area	Area	Color	Barr	Absor.	Tested		Tested	Insul.	(de
1	Gable or shed	Composition shing	gles 2345 ft	² 592 ft ²	Medium	N	0.85	No	0.9	No	0	30.
				ATTIC								
√ #	Туре	Venti	lation	Vent Ratio	(1 in)	Area	RBS	IRC	С			
1	Full attic	Ver		300	. ,	2025 ft ²	N	N				
				CEILIN	G							
V #	Ceiling Type		Space	R-Value	Ins Ty	/pe	Area	Frami	ng Frac	Truss	Туре	
1	Under Attic (Ve	nted)	Main	30	Blowr	າ 2	2025 ft ²	0	.11	Woo	od	

INPUT SUMMARY CHECKLIST REPORT

	WALLS													
V #	Adjacent Ornt To Wall Type		Space	Cavity R-Value	Wid Ft	th In	Height Et In Area		Sheathing Framing R-Value Fraction		Solar Absor.	Below Grade%		
1	N	Exterio		me - Wood	Main	13	29		10	293.3 ft ²		0.23	0.75	0
2	W	Exterio	Fran	me - Wood	Main	13	11		9	99.0 ft ²		0.23	0.75	0
3	Ν	Exterio	Fran	me - Wood	Main	13	12	6	9	112.5 ft ²		0.23	0.75	0
4	Е	Exterio	Fran	me - Wood	Main	13	42		9	378.0 ft ²		0.23	0.75	0
5	S	Exterio	Fran	me - Wood	Main	13	33	2	10	331.7 ft ²		0.23	0.75	0
6	W	Exterio	Fran	me - Wood	Main	13	4		10	40.0 ft ²		0.23	0.75	0
7	S	Exterio	Fran	me - Wood	Main	13	8	8	9	78.0 ft ²		0.23	0.75	0
8	Е	Exterio	Fran	me - Wood	Main	13	4		9	36.0 ft ²		0.23	0.75	0
9	S	Exterio	Fran	me - Wood	Main	13	14		9	126.0 ft ²		0.23	0.75	0
10	W	Exterio	Fran	me - Wood	Main	13	3		9	27.0 ft ²		0.23	0.75	0
11	S	Exterio	Fran	me - Wood	Main	13	9		9	81.0 ft ²		0.23	0.75	0
12	W	Exterio	Fran	me - Wood	Main	13	22		9	198.0 ft ²		0.23	0.75	0
13	N	Garage	Fran	me - Wood	Main	13	23		9	207.0 ft ²		0.23	0.75	0
	DOORS													
\vee	#	Orn	t	Door Type	Space			Storms	U-Val	ue Ft	Width In	Height Ft	ln	Area
	1	N		Insulated	Main			None	.4	6		8	4	18 ft²
	2	S		Insulated	Main			None	.4	5		8	4	40 ft²
 	3	N		Insulated	Main			None	.4	3		8	2	24 ft²
				Ori	entation shov		OWS		d orientatio	n.				
/		Wall						•		Overl	hang			
V	# (Ornt ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Depth	Separation	Int Sha	de S	Screening
	1	N 1	Vinyl	Low-E Double	Yes	0.33	0.22	N	16.0 ft ²	11 ft 6 in	1 ft 4 in	None	;	None
	2	N 1	Vinyl	Low-E Double	Yes	0.33	0.22	N	36.0 ft ²	11 ft 6 in	1 ft 4 in	None	•	None
	3	N 3	Vinyl	Low-E Double	Yes	0.33	0.22	N	15.0 ft ²	1 ft 6 in	1 ft 4 in	None	;	None
	4	E 4	Vinyl	Low-E Double	Yes	0.33	0.22	N	6.0 ft ²	1 ft 6 in		None		None
I	5	E 4	Vinyl	Low-E Double	Yes	0.33	0.22	N	8.0 ft ²	1 ft 6 in		None		None
	6	S 5	Vinyl	Low-E Double	Yes	0.33	0.22	N	60.0 ft ²		1 ft 4 in	None		None
I	7	S 7	Vinyl	Low-E Double	Yes	0.33	0.22	N	6.0 ft ²		1 ft 4 in	None	•	None
	8	S 9	Vinyl	Low-E Double	Yes	0.33	0.22	N	30.0 ft ²		1 ft 4 in	None	•	None
	9	S 11	Vinyl	Low-E Double	Yes	0.33	0.22	N	10.0 ft ²	1 ft 6 in		None		None
I		W 12	Vinyl	Low-E Double	Yes	0.33	0.22	N	16.0 ft ²			None	•	None
	11	W 12	Vinyl	Low-E Double	Yes	0.33	0.22	N	3.0 ft ²	1 ft 6 in	1 ft 4 in	None	;	None

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INPUT SUMMARY CHECKLIST REPORT

					GA	RAGE								
V	/ #	Floor Area	С	eiling Area	Exposed Wall Perimeter			Avg. Wall	Exposed Wall Insulation			n		
	1	540.5 ft ²			69.5 ft		9 ft			1				
	INFILTRATION													
#	Scope	Method		SLA	CFM 50	ELA	Ec	ıLA /	ACH	ACH	50			
1	Wholehous	e Proposed AC	CH(50)	.000286	1518.8	83.38	15	6.8 .	1128	5				
					HEATIN	IG SYS	TEM							
V	/ #	System Type		Subtype	Speed		Efficiency	Cap	oacity			Block	Dı	ucts
	1	Electric Heat Pu	mp/	None	Singl		HSPF:8.5	36 k	Btu/hr			1	sy	/s#1
					COOLIN	IG SYS	TEM							
V	/ #	System Type		Subtype	Subtyp	ре	Efficiency	Capacity	Air F	Flow SH	IR I	Block	Dı	ucts
	1	Central Unit/		None	Singl	:	SEER: 14	36 kBtu/hr	1080	cfm 0.8	35	1	sy	/s#1
					HOT WA	TER SY	STEM							
\vee	/ #	System Type	SubType	Location	EF	Ca	ıp	Use	SetPnt		Conse	ervation	1	
	1	Electric	None	Garage	0.92	40 (gal	60 gal	120 deg		No	one		
				SOL	AR HOT	WATEF	SYSTE	M						
V	FSE Cert		ame		System Mo	odel #	Co	llector Mode		ollector Area	Storage Volume		FEF	
	Nor	ne None								ft²				
					D	UCTS								
V	/ #	Supp Location R-	oly Value Area	Ret Location	urn Area	Leaka	ge Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HV. Heat	AC #
	1	Main	6 405 ft ²	Main	101.25		eak Free	Main	cfm	60.8 cfm	0.03	0.50	1	1

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES														
Programa	able Thermo	stat: Y		Ceiling Fans:										
Cooling Heating Venting	[] Jan [X] Jan [] Jan	[] Feb [X] Feb [] Feb	[] Mar [X] Mar [X] Mar	[] Apr [Apr [X] Apr		[] May [] May [] May	[X] Jun [] Jun [] Jun	[X] Jul [] Jul [] Jul	[X] Aug [] Aug [] Aug	[X] S [ep ep ep	Oct Oct X Oct	[] Nov [X] Nov [X] Nov	Dec X Dec Dec
Thermostat Schedule T		HERS 200	6 Reference	2	3	4	5	Ho 6	urs 7	8	9	10	11	12
Cooling (W	D)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
Cooling (W	EH)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
Heating (W	'D)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68
Heating (W	EH)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68
MASS														
Mass Type				Area			Thickness Fu		Furniture Fraction			Space		
Def	fault(8 lbs/so	q.ft.		0 ft ²			0 ft		0.3			Main		