FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Lot 10 Rolling Meadows Street: City, State, Zip: Lake City, FL, 32025 Owner: N/A Design Location: FL, Gainesville	25.	Builder Name: Gibraltar Contracting, LLo Permit Office: Columbia County Permit Number: Jurisdiction: Columbia (Florida Climate	
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) Conditioned floor area below grade (ft²) 7. Windows (416.3 sqft.) Description a. U-Factor: Dbl, U=0.36 SHGC: SHGC=0.25 b. U-Factor: N/A SHGC: c. U-Factor: N/A SHGC: d. U-Factor: N/A SHGC: Area Weighted Average Overhang Depth: Area Weighted Average SHGC: 8. Floor Types (2145.0 sqft.) Insulatio a. Slab-On-Grade Edge Insulation R=0.0 b. N/A c. N/A	Area 416.33 ft² ft² ft² ft² 5.725 ft. 0.250		Insulation
I hereby certify that the plans and specification this calculation are in compliance with the Floric Code. PREPARED BY: DATE: I hereby certify that this building, as designed, with the Florida Energy Code. OWNER/AGENT: DATE:	ida Energy	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).

				PROJ	ECT							
Title: Building Typ Owner Name # of Units: Builder Nam Permit Office Jurisdiction: Family Type New/Existing Comment:	e: N/A 1 e: Gibraltar Contra e: Columbia Coun : Single-family	acting, LLC. ty	Bedrooms: Conditione Total Storie Worst Cas Rotate Ang Cross Ven Whole Hou	d Area: es: e: le: lilation:	4 2145 1 No 0 Yes No		Lot # Bloc Plati Stree Cou	k/Subdivis Book: et:	sion: R C c: La	ot Information of the control of the	ows	
				CLIMA	ATE							
	Design Location	TMY Site		97	Design Temp 7.5 % 2.5 %	Wint		ner Deg	leating ree Days		R	y Temp ange
-	FL, Gainesville	FL_GAINESVILLE	_REGI		32 92	70	75	1	305.5	51	M	ledium
	Manager	•	L for Loon or	BLOC	KS							
Number	Name Plack1	Area	Volume									
1	Block1	2145	19305	CDAC								
N	N.			SPAC								
Number 1	Name Main	Area 2145	Volume I	(itchen Yes	Occupants 8	Bedro	2.100-2		Finished Yes	I Cool Yes	ed	Heate Yes
		2110	10000	FLOO					100	103		103
V #	Floor Type	Space	Pari	neter	R-Value	Area				Tile Wo	ad C	arnot.
Ψ.	Slab-On-Grade Edge		ain 207.3		0	2145 ft ²	,			0 0		arpet 1
				ROC)F							
√ #	Туре	Materials	Roof Area	Gabl Area		Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pito (deç
1	Hip	Composition shing	les 2578 ft²	0 ft²	Medium	Υ	0.96	No	0.9	No	0	33.
				ATT	IC							
√ #	Туре	Ventil	ation	Vent Rat	io (1 in)	Area	RBS	IRO	cc			
1	Full attic	Ven		30		2145 ft²	Y	1	-			
				CEILI	NG							
√ #	Ceiling Type		Space	R-Valu	e Ins T	уре	Area	Fran	ning Frac	Truss	Туре	
1	Under Attic (Ve	ntad)	Main	38	Double	Dott.	2252 ft ²		0.11	Woo		

						WA	LLS							
/#	Ornt	Adjace To	nt Wall	Туре	Space	Cavity R-Value	Wid	th In	Height Ft In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
_ 1	S	Exterior		me - Wood	Main	13	12		9	108.0 ft ²		0.23	0.75	0
_ 2	E	Exterior	Fran	me - Wood	Main	13	6		9	54.0 ft ²		0.23	0.75	0
_ 3	S	Exterior	Fran	me - Wood	Main	13	8	4	9	75.0 ft ²		0.23	0.75	0
_ 4	E	Exterior	Fran	me - Wood	Main	13	6		9	54.0 ft ²		0.23	0.75	0
_ 5	S	Exterior	Fran	me - Wood	Main	13	13		9	117.0 ft ²		0.23	0.75	0
_ 6	Е	Exterior	Fran	me - Wood	Main	13	22		9	198.0 ft ²		0.23	0.75	0
_ 7	N	Exterior	Fran	me - Wood	Main	13	21	4	9	192.0 ft ²		0.23	0.75	0
_ 8	E	Exterior	Fran	me - Wood	Main	13	12		9	108.0 ft ²		0.23	0.75	0
_ 9	N	Exterior	Fran	me - Wood	Main	13	36	4	9	327.0 ft ²		0.23	0.75	0
_10	W	Exterior	Fran	me - Wood	Main	13	44		9	396.0 ft ²		0.23	0.75	0
_11	S	Garage	Fran	me - Wood	Main	13	24	4	9	219.0 ft ²		0.23	0.75	0
						DO	ors							
/	#	Ornt		Door Type	Space			Storms	U-Valu	ue F	Width t In	Height Ft	ln	Area
	1	S		Insulated	Main			None	.46	3				20 ft²
	2	s		Insulated	Main			None	.46	3	3	6	8 2	20 ft²
							oows							
7		\/\all		C	Prientation sho				orientation		rhang			
/	# (Wall Ornt ID	Frame	C	rientation sho		ntered, F		orientation	Ove	rhang Separation	Int Sha	de S	Screenin
/	# (Frame Vinyl	1786		wn is the e	ntered, F	roposed	1/22	Ove	200	Int Sha	10000	Screenin None
/		Ornt ID	AND DESCRIPTION OF	Panes	NFRC	U-Factor	ntered, F	roposed Imp	Area	Ove Depth	Separation	10000-000000	•	Prints
/	1	Ornt ID S 1	Vinyl	Panes Low-E Double	NFRC Yes	U-Factor 0.36	SHGC 0.25	Proposed Imp N	Area 36.0 ft²	Ove Depth 1 ft 6 in	Separation 1 ft 0 in	None)	None
/ 	1 2	S 1 S 3	Vinyl Vinyl	Panes Low-E Double Low-E Double	NFRC Yes Yes	U-Factor 0.36 0.36	SHGC 0.25 0.25	Imp N N	Area 36.0 ft ² 13.3 ft ²	Ove Depth 1 ft 6 in 8 ft 0 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in	None		None None
/	1 2 3	Drnt ID S 1 S 3 S 3	Vinyl Vinyl Vinyl	Panes Low-E Double Low-E Double Low-E Double	NFRC Yes Yes Yes	U-Factor 0.36 0.36 0.36	SHGC 0.25 0.25 0.25	Imp N N	Area 36.0 ft ² 13.3 ft ² 5.0 ft ²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in	None None None		None None None
/ 	1 2 3 4	Ornt ID S 1 S 3 S 3 S 5	Vinyl Vinyl Vinyl Vinyl	Panes Low-E Double Low-E Double Low-E Double Low-E Double	NFRC Yes Yes Yes Yes	U-Factor 0.36 0.36 0.36 0.36	SHGC 0.25 0.25 0.25 0.25	Imp N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in 1 ft 0 in	None None None		None None None
/ _ _	1 2 3 4 5	Drnt ID S 1 S 3 S 3 S 5 E 6	Vinyl Vinyl Vinyl Vinyl Vinyl	Panes Low-E Double Low-E Double Low-E Double Low-E Double Low-E Double	NFRC Yes Yes Yes Yes Yes Yes	U-Factor 0.36 0.36 0.36 0.36 0.36	SHGC 0.25 0.25 0.25 0.25 0.25 0.25	Imp N N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft² 72.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in 1 ft 6 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in 1 ft 0 in 1 ft 0 in	None None None None		None None None None
/	1 2 3 4 5	Drnt ID S 1 S 3 S 3 S 5 E 6 N 7	Vinyl Vinyl Vinyl Vinyl Vinyl Vinyl	Panes Low-E Double Low-E Double Low-E Double Low-E Double Low-E Double	NFRC Yes Yes Yes Yes Yes Yes Yes	U-Factor 0.36 0.36 0.36 0.36 0.36 0.36 0.36	SHGC 0.25 0.25 0.25 0.25 0.25 0.25 0.25	Imp N N N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft² 72.0 ft² 60.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in 1 ft 6 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in 1 ft 0 in 1 ft 0 in 1 ft 0 in	None None None None None		None None None None None
/	1 2 3 4 5 6 7	Drnt ID S 1 S 3 S 3 S 5 E 6 N 7 N 7	Vinyl Vinyl Vinyl Vinyl Vinyl Vinyl Vinyl Vinyl	Panes Low-E Double Low-E Double Low-E Double Low-E Double Low-E Double Low-E Double	NFRC Yes Yes Yes Yes Yes Yes Yes Yes Yes	U-Factor 0.36 0.36 0.36 0.36 0.36 0.36 0.36 0.36	SHGC 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	Imp N N N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft² 72.0 ft² 60.0 ft² 20.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in 13 ft 0 in 13 ft 0 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in 1 ft 0 in 1 ft 0 in 1 ft 0 in	None None None None None None		None None None None None
/	1 2 3 4 5 6 7 8	Drnt ID S 1 S 3 S 3 S 5 E 6 N 7 R 8	Vinyl	Panes Low-E Double	NFRC Yes	U-Factor 0.36 0.36 0.36 0.36 0.36 0.36 0.36 0.36	SHGC 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	Imp N N N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft² 72.0 ft² 60.0 ft² 20.0 ft² 36.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in 13 ft 0 in 13 ft 0 in 10 ft 0 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in	None None None None None None		None None None None None None
/ 	1 2 3 4 5 6 7 8 9	Drnt ID S 1 S 3 S 3 S 5 E 6 N 7 N 7 E 8 N 9	Vinyl	Panes Low-E Double	NFRC Yes	U-Factor 0.36 0.36 0.36 0.36 0.36 0.36 0.36 0.36	SHGC 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	Imp N N N N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft² 72.0 ft² 60.0 ft² 20.0 ft² 36.0 ft² 36.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in 13 ft 0 in 13 ft 0 in 10 ft 0 in 1 ft 6 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in	None None None None None None None		None None None None None None
/ 	1 2 3 4 5 6 7 8 9	Drnt ID S 1 S 3 S 3 S 5 E 6 N 7 E 8 N 9 N 9	Vinyl	Panes Low-E Double	Yes	U-Factor 0.36 0.36 0.36 0.36 0.36 0.36 0.36 0.36	SHGC 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	Imp N N N N N N N N N N N N N N N N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft² 72.0 ft² 60.0 ft² 20.0 ft² 36.0 ft² 36.0 ft² 6.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in 13 ft 0 in 13 ft 0 in 10 ft 0 in 1 ft 6 in 1 ft 6 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in	None None None None None None None None		None None None None None None None None
/ 	1 2 3 4 5 6 7 8 9 10 11	Drnt ID S 1 S 3 S 3 S 5 E 6 N 7 N 7 E 8 N 9 N 9 N 9	Vinyl	Panes Low-E Double	NFRC Yes	U-Factor 0.36 0.36 0.36 0.36 0.36 0.36 0.36 0.36	Netered, For SHGC 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	Imp N N N N N N N N N N N N N N N N N N N	Area 36.0 ft² 13.3 ft² 5.0 ft² 36.0 ft² 72.0 ft² 60.0 ft² 20.0 ft² 36.0 ft² 36.0 ft² 6.0 ft² 16.0 ft²	Ove Depth 1 ft 6 in 8 ft 0 in 8 ft 0 in 13 ft 0 in 13 ft 0 in 13 ft 0 in 10 ft 0 in 1 ft 6 in 1 ft 6 in	Separation 1 ft 0 in 1 ft 0 in 0 ft 6 in 1 ft 0 in	None None None None None None None None		None None None None None None None None

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					GA	RAGE								
V	/ #	Floor Area	C	Ceiling Area	Exposed	Wall Perime	ter	Avg. Wall	Height	Expose	ed Wall I	nsulatio	n	
	1	811.091889 ft ²	81	1.091889 ft²		94 ft		9 ft			1			
					INFILT	RATION								
#	Scope	Method		SLA	CFM 50	ELA	Eq	LA ,	ACH	ACH	1 50			
1	Wholehouse	Proposed AC	H(50)	.000286	1608.8	88.32	16	6.1 .	1128	5				
					HEATING	G SYSTE	M							
V	/ #	System Type		Subtype	Speed	Eff	iciency	Ca _l	pacity		25	Block	Di	ucts
	1	Electric Heat Pun	np/	None	Single	HS	PF:8.2	32.77	kBtu/hr			1	sy	s#1
					COOLING	G SYSTE	М							
V	/ #	System Type		Subtype	Subtype	e Effic	ciency	Capacity	Air	Flow S	HR	Block	Du	ucts
	1	Central Unit/		None	Single	SEE	R: 15	26.67 kBtu/l	nr 810	cfm 0	.7	1	sy	s#1
					HOT WAT	ER SYST	EM							
V	/ #	System Type	SubType	Location	EF	Сар		Use	SetPnt		Con	servatio	n	
_	1	Electric	None	Garage	0.92	50 gal	1	40 gal	120 deg		ı	None		
				SOL	AR HOT W	ATER S	YSTE	М						
V	FSEC Cert #		me		System Mod	lel#	Co	llector Model		ollector Area	Storag		FEF	
	None	None								ft²				
					DU	ICTS								
17	/	Supp		Reti		8 8 ×		Air	CFM 25		270	-242		AC#
V	#	Location R-	Value Area	Location	Area	LeakageT	ype	Handler	TOT	OUT	QN	RLF	Heat	Co

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p . 1

						TEM	PERATU	RES						
ProgramableTI	nermos	stat: Y			C	Ceiling Fans):							
Cooling [] Heating [X] Venting []	Jan Jan Jan	[]Feb [X]Feb []Feb	[] Mar [X] Mar [X] Mar	Ap (X) Ap	or or	[] May [] May [] May	[X] Jun [] Jun [] Jun	[X] Jul [] Jul [] Jul	[X] Aug [] Aug [] Aug	[X] Sep [] Sep [] Sep		Oct Oct X Oct	[] Nov [X] Nov [X] Nov	Dec X Dec Dec
Thermostat Sche	dule:	HERS 200	6 Reference	K.				Но	urs					
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 Ty	ре			Are	а		Thickness		Furniture Fra	ction		Space		
Default(8 lbs/sq.ft.				0 ft²			0 ft		0.3			Main		

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 99

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)	12. Ducts, location & insulation level
2. Single-family or multiple-family	2. Single-family	a) Supply ducts R 6.0 b) Return ducts R 6.0
3. No. of units (if multiple-family)	31	c) AHU location Garage
4. Number of bedrooms	44	13. Cooling system: Capacity 26.7 a) Split system SEER
5. Is this a worst case? (yes/no)	5. <u>No</u>	b) Single package SEER c) Ground/water source SEER/COP
6. Conditioned floor area (sq. ft.)	6. <u>2145</u>	d) Room unit/PTAC EER
7. Windows, type and area a) U-factor:(weighted average) b) Solar Heat Gain Coefficient (SHGC) c) Area	7a. 0.360 7b. 0.250 7c. 416.3	14. Heating system: Capacity 32.8 a) Split system heat pump HSPF b) Single package heat pump HSPF
8. Skylights		c) Electric resistance COP
a) U-factor:(weighted average)b) Solar Heat Gain Coefficient (SHGC)	8a. <u>NA</u> 8b. <u>NA</u>	d) Gas furnace, natural gas AFUE e) Gas furnace, LPG AFUE f) Other 8.20
9. Floor type, insulation level:		,, 5.1.0.
a) Slab-on-grade (R-value)	9a0.0_	
b) Wood, raised (R-value)	9b	15. Water heating system
c) Concrete, raised (R-value)	9c	a) Electric resistance EF0.92 b) Gas fired, natural gas EF
10. Wall type and insulation:		c) Gas fired, LPG EF
A. Exterior:		d) Solar system with tank EF e) Dedicated heat pump with tank EF
 Wood frame (Insulation R-value) 	10A1. <u>13.0</u>	e) Dedicated heat pump with tank EF
Masonry (Insulation R-value)	10A2	f) Heat recovery unit HeatRec%
B. Adjacent:		g) Other
 Wood frame (Insulation R-value) 	10B1. 13.0	
Masonry (Insulation R-value)	10B2	
15 2 16		HVAC credits claimed (Performance Method)
11. Ceiling type and insulation level	70 20 0	a) Ceiling fans
a) Under attic	11a. <u>38.0</u>	b) Cross ventilation Yes
b) Single assembly	11b	c) Whole house fan No
c) Knee walls/skylight walls	11c	d) Multizone cooling credit
d) Radiant barrier installed	11d. <u>Yes</u>	e) Multizone heating credit
		f) Programmable thermostat Yes
*Label required by Section R303.1.3 of the F	lorida Building Code, Ene	ergy Conservation, if not DEFAULT.
I certify that this home has complied with the saving features which will be installed (or exc display card will be completed based on insta	eeded) in this home before	
Builder Signature:		Date:
Address of New Home:		City/FL Zip: Lake City FL 32025

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance 2017 Florida Building Code, Energy Conservation, 6th Edition

	Jurisdiction:	Permit #:						
Jol	b Information							
Bui	ilder: Gibraltar Contracting, LLC. Community:	Lot: 10						
Add	dress:							
City	y: Lake City State	: FL Zip: 32025						
Aiı	r Leakage Test Results Passing results must meet	either the Performance, Prescriptive, or ERI Method						
the	changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Clima	ate Zones 1 and 2. Il be tested and verified as having an air leakage rate of not exceeding						
	x 60 ÷ 19305 = ACH(50) CFM(50) PASS When ACH(50) is less than 3, Mechanical Ventilation in must be verified by building department.	Method for calculating building volume: Retrieved from architectural plans Code software calculated						
Tes 489 pro Dui 1. E cor 2. I me 3. I 4. E 5. H	R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7F/orida Statues.or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the official. Testing shall be performed at any time after creation of all penetrations of the uitding thermal envelope. During testing: 1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures. 2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures. 3. Interior doors, if installed at the time of the test, shall be open. 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed. 5. Heating and cooling systems, if installed at the time of the test, shall be turned off. 6. Supply and return registers, if installed at the time of the test, shall be fully open.							
Te	esting Company							
11	ompany Name:							
Si	gnature of Tester:	Date of Test:						
Pi	rinted Name of Tester:							
Li	cense/Certification #:	Issuing Authority:						