FORM 405-10

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Model 1302	Builder Name:	Innovative Home Builers
Street:	Rose Point Place	Permit Office:	Columbia County
City, State, Zip:	Lake City , FL , 32024-	Permit Number:	
Owner:	N/A	Jurisdiction:	
Design Location	FL, Gainesville		

1. New construction or existing	New (From Plans)	9 Wall Types(1396.5 sqft.)	Insulation	Area
2. Single family or multiple family	Single-family	a. Frame - Wood, Exterior	R=13.0	1155.00 ft²
3 Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	241.50 ft²
4. Number of Bedrooms	3	c. N/A	R=	ft²
5. Is this a worst case?	No	d. N/A	R=	ft²
6. Conditioned floor area above grade (ft²)	1302	10. Ceiling Types (1432 0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft²)	0	a. Under Attic (Vented)	R=30.0	1432.00 ft²
7. Windows(172.0 sqft.) Description	Area	b. N/A	R=	ft²
a U-Factor: Dbl, U=0.30	172.00 ft²	c. N/A	R=	ft²
SHGC: SHGC=0.50		11. Ducts		R ft²
b. U-Factor: N/A	ft²	a. Sup: Attic, Ret: Attic, AH: Garage		6 325.5
SHGC.				
c. U-Factor: N/A	ft²	12. Cooling systems	kBtu/hr	Efficiency
SHGC.		a. Central Unit	27.1	SEER:16.50
d U-Factor: N/A	ft²			
SHGC:		13. Heating systems	kBtu/hr	Efficiency
Area Weighted Average Overhang Depth:	2.547 ft.	a. Electric Heat Pump	27 1	HSPF:7.70
Area Weighted Average SHGC:	0 500			
8. Floor Types (1302.0 sqft.) Insulation	Area	14. Hot water systems		
a Slab-On-Grade Edge Insulation R=5.0	1302.00 ft²	a. Electric		Cap: 50 gallons
b N/A R=	ft²			EF: 0.920
c. N/A R=	ft²	b. Conservation features		
		None		
		15 Credits		Petat

Glass/Floor Area: 0.132

Total Proposed Modified Loads: 26.97

Total Standard Reference Loads: 33.82

PASS

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

PREPARED BY: _____

DATE: 4/30/14

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: _____

GREAT SEAL OF THE STATE OF FLORIDA — IN GOD WE TRUST

- Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist.

COLUMBIA COUNTY BUILDING DEPARTMENT — Received for FILE COPY — Code Compliance — PLANS EXAMINER

PROJECT

Title:	Model 1302	Bedrooms:	3	Address Type:	Street Address
Building Type:	FLProp2010	Conditioned Area:	1302	Lot #	
Owner:	N/A	Total Stories:	1	Block/SubDivision.	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Innovative Home Builers	Rotate Angle:	0	Street:	Rose Point Place
Permit Office:	Columbia County	Cross Ventilation:	No	County.	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32024-
Family Type:	Single-family				
New/Existing.	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	2	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1302	11718

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	RoomsInBlock1	1302	11718	Yes	3	3	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	RoomsInBlock1	155 ft	5	1302 ft²	----	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	1565 ft²	0 ft²	Medium	0 96	No	0.9	No	0	33.7

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Partial cathedral cei	Vented	303	1302 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	RoomsInBlock1	30	1432 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
_____	1	E	Exterior	Frame - Wood	RoomsInBloc	13	14	8	9		132 ft²		0.23	0.75	0
_____	2	N	Exterior	Frame - Wood	RoomsInBloc	13	41	8	9		375 ft²		0.23	0 75	0
_____	3	W	Exterior	Frame - Wood	RoomsInBloc	13	36		9		324 ft²		0.23	0.75	0
_____	4	S	Exterior	Frame - Wood	RoomsInBloc	13	36		9		324 ft²		0.23	0.75	0
_____	5	E	Garage	Frame - Wood	RoomsInBloc	13	21	4	9		192 ft²		0.23	0.01	0
_____	6	S	Garage	Frame - Wood	RoomsInBloc	13	5	6	9		49.5 ft²		0 23	0.01	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	E	Insulated	RoomsInBloc	None	0.460000	3		6	8	20 ft²
_____	2	E	Insulated	RoomsInBloc	None	0 460000	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	E	1	Vinyl	Low-E Double	Yes	0.3	0.5	N	30 ft²	7 ft 6 in	1 ft 6 in	HERS 2006	None
_____	2	N	2	Vinyl	Low-E Double	Yes	0.3	0.5	N	60 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
_____	3	W	3	Vinyl	Low-E Double	Yes	0 3	0.5	N	30 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
_____	4	W	3	Vinyl	Low-E Double	Yes	0.3	0.5	N	16 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
_____	5	S	4	Vinyl	Low-E Double	Yes	0.3	0.5	N	6 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
_____	6	S	4	Vinyl	Low-E Double	Yes	0 3	0 5	N	30 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	511 92 ft²	511.92 ft²	64 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	BySpaces	Proposed SLA	0 000360	1229.4	67.495	126 93	0.2771	6.2952

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump	None	HSPF: 7.7	27 1 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit	None	SEER: 16.5	27.1 kBtu/hr	813 cfm	0 75	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	RoomsInBlock1	0.92	50 gal	60 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 ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF	HVAC # Heat	Cool
_____	1	Attic	6	325.5 ft	Attic	65.1 ft²	DSE=0.88	Garage	0.0 cfm	0.00 %	0.00	0.60	1	1

TEMPERATURES

Programable Thermostat Y

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Heating	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Venting	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	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
Cooling (WEH)	AM	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
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	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
	PM	68	68	68	68	68	68	68	68	68	68	66	66

FORM 405-10

Florida Code Compliance Checklist

Florida Department of Business and Professional Regulations
Residential Whole Building Performance Method

ADDRESS: Rose Point Place Lake City, FL, 32024-	PERMIT #:

MANDATORY REQUIREMENTS SUMMARY - See individual code sections for full details.

COMPONENT	SECTION	SUMMARY OF REQUIREMENT(S)	CHECK
Air leakage	402.4	To be caulked, gasketed, weatherstripped or otherwise sealed. Recessed lighting IC-rated as meeting ASTM E 283. Windows and doors = 0.30 cfm/sq.ft. Testing or visual inspection required. Fireplaces: gasketed doors & outdoor combustion air. Must complete envelope leakage report or visually verify Table 402.4.2.	
Thermostat & controls	403.1	At least one thermostat shall be provided for each separate heating and cooling system. Where forced-air furnace is primary system, programmable thermostat is required. Heat pumps with supplemental electric heat must prevent supplemental heat when compressor can meet the load.	
Ducts	403.2.2 403.3.3	All ducts, air handlers, filter boxes and building cavities which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section 503.2.7.2 of this code. Building framing cavities shall not be used as supply ducts.	
Water heaters	403.4	Heat trap required for vertical pipe risers. Comply with efficiencies in Table 403.4.3.2. Provide switch or clearly marked circuit breaker (electric) or shutoff (gas). Circulating system pipes insulated to = R-2 + accessible manual OFF switch.	
Mechanical ventilation	403.5	Homes designed to operate at positive pressure or with mechanical ventilation systems shall not exceed the minimum ASHRAE 62 level. No make-up air from attics, crawlspaces, garages or outdoors adjacent to pools or spas.	
Swimming Pools & Spas	403.9	Pool pumps and pool pump motors with a total horsepower (HP) of = 1 HP shall have the capability of operating at two or more speeds. Spas and heated pools must have vapor-retardant covers or a liquid cover or other means proven to reduce heat loss except if 70% of heat from site-recovered energy. Off/timer switch required. Gas heaters minimum thermal efficiency=78% (82% after 4/16/13). Heat pump pool heaters minimum COP= 4.0.	
Cooling/heating equipment	403.6	Sizing calculation performed & attached. Minimum efficiencies per Tables 503.2.3. Equipment efficiency verification required. Special occasion cooling or heating capacity requires separate system or variable capacity system. Electric heat >10kW must be divided into two or more stages.	
Ceilings/knee walls	405.2.1	R-19 space permitting.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 80

The lower the EnergyPerformance Index, the more efficient the home.

Rose Point Place, Lake City, FL, 32024-

1	New construction or existing	New (From Plans)
2.	Single family or multiple family	Single-family
3	Number of units, if multiple family	1
4	Number of Bedrooms	3
5	Is this a worst case?	No
6	Conditioned floor area (ft²)	1302

7 Windows**	Description	Area
a U-Factor: SHGC:	Dbl, U=0.30 SHGC=0 50	172.00 ft²
b U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC.	N/A	ft²
d. U-Factor: SHGC.	N/A	ft²
Area Weighted Average Overhang Depth:		2.547 ft
Area Weighted Average SHGC:		0.500

8 Floor Types	Insulation	Area
a Slab-On-Grade Edge Insulation	R=5 0	1302 00 ft²
b N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13 0	1155.00 ft²
b Frame - Wood, Adjacent	R=13 0	241 50 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=30 0	1432.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH Garage	6	325.5

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	27 1	SEER:16 50

13 Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	27.1	HSPF.7 70

14 Hot water systems	
a. Electric	Cap 50 gallons EF: 0 92
b Conservation features None	
15. Credits	Pstat

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____

*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida EnergyGauge Rating. Contact the EnergyGauge Hotline at (321) 638-1492 or see the EnergyGauge web site at energygauge.com for information and a list of certified Raters. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section 303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.