

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: JOnes-Goodson Residence Street: SW Lotus Glen City, State, Zip: Lake City, FL, 32055- Owner: Jones Goodson Design Location: FL, Gainesville	Builder Name: Bryan Zecher Construction Permit Office: Columbia Co Permit Number: Jurisdiction: 221000
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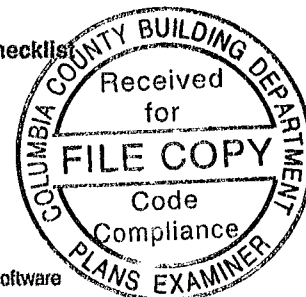
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Glass/Floor Area: 0.126	Total Proposed Modified Loads: 36.55	PASS
	Total Standard Reference Loads: 48.81	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: <u>TA Oelhere</u> DATE: <u>1/13/14</u> I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: <u>[Signature]</u> DATE: <u>1/20/14</u>	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: _____
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- Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist



PROJECT											
Title:	JOnes-Goodson Residence		Bedrooms:	3		Address Type:	Street Address				
Building Type:	User		Conditioned Area:	2351		Lot #					
Owner:	Jones Goodson		Total Stories:	1		Block/SubDivision:					
# of Units:	1		Worst Case:	No		PlatBook:					
Builder Name:	Bryan Zecher Construction		Rotate Angle:	0		Street:	SW Lotus Glen				
Permit Office:	Columbia Co		Cross Ventilation:			County:	Columbia				
Jurisdiction:	221000		Whole House Fan:			City, State, Zip:	Lake City , FL , 32055-				
Family Type:	Single-family										
New/Existing:	New (From Plans)										
Comment:											
CLIMATE											
✓	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	2.5 %	Int Design Temp Winter	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	2351	18808							
SPACES											
	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
	1	Main	2351	18808	Yes	3	3	1	Yes	Yes	Yes
FLOORS											
✓	#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet	
_____	1	Slab-On-Grade Edge Insulation	Main	210 ft	0	2071 ft²	----	0.7	0	0.3	
_____	2	Floor over Garage	Main	----	----	280 ft²	30	0	0	1	
ROOF											
✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	2316 ft²	0 ft²	Medium	0.96	No	0.9	No	26.6
ATTIC											
✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC				
_____	1	Full attic	Vented	300	2071 ft²	N	N				
CEILING											
✓	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type				
_____	1	Under Attic (Vented)	Main	30	2071 ft²	0.11	Wood				
_____	2	Under Attic (Vented)	Main	30	280 ft²	0.11	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	NW	Garage	Frame - Wood	Main	13	20	4	9		183.0 ft²	0.63	0.23	0.75	0
2	NW	Exterior	Frame - Wood	Main	13	19		9		171.0 ft²	0.63	0.23	0.75	0
3	NW	Exterior	Frame - Wood	Main	13	13	8	9		123.0 ft²	0.63	0.23	0.75	0
4	NE	Exterior	Frame - Wood	Main	13	39	5	9		354.8 ft²	0.63	0.23	0.75	0
5	SE	Exterior	Frame - Wood	Main	13	10	4	9		93.0 ft²	0.63	0.23	0.75	0
6	SE	Exterior	Frame - Wood	Main	13	15	8	9		141.0 ft²	0.63	0.23	0.75	0
7	SE	Exterior	Frame - Wood	Main	13	9	4	9		84.0 ft²	0.63	0.23	0.75	0
8	SE	Exterior	Frame - Wood	Main	13	28		9		252.0 ft²		0.23	0.75	0
9	SW	Exterior	Frame - Wood	Main	13	43		9		387.0 ft²	0.63	0.23	0.75	0
10	SW	Exterior	Frame - Wood	Main	13	20	4	9		183.0 ft²	0.63	0.23	0.75	0
11	NE	Exterior	Frame - Wood	Main	13	20	4	9		183.0 ft²	0.63	0.23	0.75	0
12	NW	Exterior	Frame - Wood	Main	13	11	8	9		105.0 ft²	0.63	0.23	0.75	0

DOORS										
✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	NW	Insulated	Main	Metal	.28	6		8		48 ft²
2	NW	Insulated	Main	Metal	.28	3		6	8	20 ft²

WINDOWS													
Orientation shown is the entered, Proposed orientation.													
✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Separation	Int Shade	Screening	
1	NW	2	Vinyl	Low-E Double	Yes	0.55	0.6	27.4 ft²	6 ft 0 in	0 ft 4 in	Drapes/blinds	None	
2	NW	3	Vinyl	Low-E Double	Yes	0.55	0.6	30.2 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
3	NE	4	Vinyl	Low-E Double	Yes	0.55	0.6	4.4 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
4	NE	4	Vinyl	Low-E Double	Yes	0.55	0.6	21.8 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
5	SE	5	Vinyl	Low-E Double	Yes	0.55	0.6	28.3 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
6	SE	6	Vinyl	Low-E Double	Yes	0.55	0.6	46.4 ft²	11 ft 4 in	0 ft 4 in	Drapes/blinds	None	
7	SE	7	Vinyl	Low-E Double	Yes	0.55	0.6	53.8 ft²	3 ft 2 in	0 ft 4 in	Drapes/blinds	None	
8	SE	8	Vinyl	Low-E Double	Yes	0.55	0.6	30.2 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
9	SE	8	Vinyl	Low-E Double	Yes	0.55	0.6	12.4 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
10	SW	9	Vinyl	Low-E Double	Yes	0.55	0.6	3.7 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
11	SW	9	Vinyl	Low-E Double	Yes	0.55	0.6	12.4 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
12	SW	9	Vinyl	Low-E Double	Yes	0.55	0.6	10.9 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	
13	NW	12	Vinyl	Low-E Double	Yes	0.55	0.6	14.2 ft²	2 ft 0 in	0 ft 4 in	Drapes/blinds	None	

GARAGE										
✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation				
✓	1	517.5 ft²	237 ft²	70.4 ft	8 ft	1				

INFILTRATION								
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Best Guess	.0005	3083.4	169.27	318.34	.385	9.8363

HEATING SYSTEM								
✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts	
✓	1	Electric Heat Pump	None	HSPF: 7.7	35 kBtu/hr	1	sys#1	

COOLING SYSTEM									
✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
✓	1	Central Unit	Split	SEER: 14	35 kBtu/hr	1050 cfm	0.75	1	sys#1

HOT WATER SYSTEM									
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	None	Garage	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 ---			--- Return ---		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #	
		Location	R-Value	Area	Location	Area							Heat	Cool
✓	1	Attic	6	470.2 ft²	Attic	117.55 ft²	Default Leakage	Main	(Default)	c(Default)	c		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

Hours

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	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	68	68
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	68	68

Florida Code Compliance Checklist

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

ADDRESS: SW Lotus Glen
Lake City, FL, 32055-

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	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.	✓
	403.3.3	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.	N/A
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.	✓

INVOICE

FROM: Tim Delbene - Residential Design
192 SW Sagewood Glen, Lake City, FL 32024
Phone: 386-755-5891 FAX: 386-961-9920
email: tdelbene@atlantic.net

DATE: 1/10/2014

TO: Bryan Zecher Const.

Jones-Goodson Residence - SW Lotus Glen, LC, FL - Columbia Co - W.O. No 14-002

1.) Florida State Energy Calculation & Report

TOTAL THIS INVOICE:\$ 125.00

THANK YOU!