

## RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

### Florida Department of Business and Professional Regulation Simulated Performance Alternative (Performance) Method

**Applications for compliance with the 2020 Florida Building Code, Energy Conservation via the Residential Simulated Performance Alternative shall include:**

- This checklist
- Form R405-2020 report
- Input summary checklist that can be used for field verification (usually four pages/may be greater)
- Energy Performance Level (EPL) Display Card (one page)
- HVAC system sizing and selection based on ACCA Manual S or per exceptions provided in Section R403.7
- Mandatory Requirements (five pages)

**Required prior to CO:**

- Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)
- A completed 2020 Envelope Leakage Test Report (usually one page); exception in R402.4 allows dwelling units of R-2 Occupancies and multiple attached single family dwellings to comply with Section C402.5
- If Form R405 duct leakage type indicates anything other than "default leakage", then a completed 2020 Duct Leakage Test Report - Performance Method (usually one page)



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# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: 210654 Stephan CMU Street: 234 SW Grassy Lane City, State, Zip: Ft White, FL, 32038 Owner: Stephan Res Design Location: FL, Gainesville	Builder Name: Permit Office: Permit Number: Jurisdiction: County: Columbia (Florida Climate Zone 2)
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Glass/Floor Area: 0.098	Total Proposed Modified Loads: 54.88	PASS
	Total Baseline Loads: 54.64	

<p>I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.</p> <p>PREPARED BY: <u>Evan Beamsley</u>                  DATE: <u>2021-08-26</u></p> <p>I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.</p> <p>OWNER/AGENT: _____                  DATE: _____</p>	<p>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.</p> <div style="text-align: center;">  </div> <p>BUILDING OFFICIAL: _____                  DATE: _____</p>
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- 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 7.00 ACH50 (R402.4.1.2).

**INPUT SUMMARY CHECKLIST REPORT**

PROJECT			
Title:	210654 Stephan CMU	Bedrooms:	4
Building Type:	User	Conditioned Area:	1962
Owner Name:	Stephan Res	Total Stories:	1
# of Units:	1	Worst Case:	No
Builder Name:		Rotate Angle:	180
Permit Office:		Cross Ventilation:	
Jurisdiction:		Whole House Fan:	
Family Type:	Detached	Address Type:	Street Address
New/Existing:	New (From Plans)	Lot #	
Comment:		Block/Subdivision:	
		PlatBook:	
		Street:	234 SW Grassy Lane
		County:	Columbia
		City, State, Zip:	Ft White , FL , 32038

CLIMATE									
<input checked="" type="checkbox"/>	Design Location	TMY Site	Design Temp	Int Design Temp	Heating	Design	Daily Temp		
	FL, Gainesville	FL_GAINESVILLE_REGI	97.5 % 2.5 %	Winter Summer	Degree Days	Moisture	Range		
			32 92	70 75	1305.5	51	Medium		

BLOCKS			
Number	Name	Area	Volume
1	Block1	1962	18246.6

SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1962	18246.6	Yes	8	4	1	Yes	Yes	Yes

FLOORS										
#	Floor Type	Space	Perimeter	R-Value	Area	Tile	Wood	Carpet		
1	Slab-On-Grade Edge Insulatio	Main	205 ft	0	1962 ft²	----	0.3	0.3	0.4	

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	2358 ft²	0 ft²	Dark	N	0.92	No	0.9	No	0	33.69

ATTIC								
#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC		
1	Full attic	Vented	300	1962 ft²	N	N		

CEILING									
#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type		
1	Under Attic (Vented)	Main	38	Blown	2044 ft²	0	Wood		

**INPUT SUMMARY CHECKLIST REPORT**

**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	N=>S	Exterior	Concrete Block - Int Insul	Main	4	18	10	9	0	169.5 ft²		0	0.600000	0
___ 2	E=>W	Exterior	Concrete Block - Int Insul	Main	4	8	10	9	0	79.5 ft²		0	0.600000	0
___ 3	N=>S	Exterior	Concrete Block - Int Insul	Main	4	21	2	9		190.5 ft²		0	0.600000	0
___ 4	N=>S	Exterior	Concrete Block - Int Insul	Main	4	21	2	9	0	190.5 ft²		0	0.600000	0
___ 5	E=>W	Exterior	Concrete Block - Int Insul	Main	4	24	4	9		219.0 ft²		0	0.600000	0
___ 6	S=>N	Garage	Frame - Wood	Main	13	3	2	9		28.5 ft²		0.23	0.01	0
___ 7	E=>W	Garage	Frame - Wood	Main	13	3	8	9	0	33.0 ft²		0.23	0.01	0
___ 8	S=>N	Garage	Frame - Wood	Main	13	19	4	9		174.0 ft²		0.23	0.01	0
___ 9	E=>W	Garage	Frame - Wood	Main	13	2	6	9		22.5 ft²		0.23	0.01	0
___ 10	S=>N	Exterior	Concrete Block - Int Insul	Main	4	10	11	10	0	109.2 ft²		0	0.600000	0
___ 11	S=>N	Exterior	Concrete Block - Int Insul	Main	4	8	6	10	0	85.0 ft²		0	0.600000	0
___ 12	E=>W	Exterior	Concrete Block - Int Insul	Main	4	2		9		18.0 ft²		0	0.600000	0
___ 13	S=>N	Exterior	Concrete Block - Int Insul	Main	4	16	6	9		148.5 ft²		0	0.600000	0
___ 14	W=>E	Exterior	Concrete Block - Int Insul	Main	4	11	6	9	0	103.5 ft²		0	0.600000	0
___ 15	S=>N	Exterior	Concrete Block - Int Insul	Main	4	2	4	9	0	21.0 ft²		0	0.600000	0
___ 16	W=>E	Exterior	Concrete Block - Int Insul	Main	4	29	10	9	0	268.5 ft²		0	0.600000	0

**DOORS**

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
___ 1	N=>S	Insulated	Main	None	.4	1		8		8 ft²
___ 2	S=>N	Insulated	Main	None	.4	2	8	6	8	17.8 ft²
___ 3	S=>N	Insulated	Main	None	.4	2		8		16 ft²

**WINDOWS**

Orientation shown is the entered orientation (=>) changed to As Built (rotated 180 degrees).

✓ #	Ornt	Wall		NFRC	U-Factor	SHGC	Imp	Area	Overhang		Int Shade	Screening	
		ID	Frame						Panels	Depth			Separation
___ 1	N=>S	1	Metal	Low-E Double	Yes	0.33	0.23	N	15.0 ft²	1 ft 6 in	2 ft 0 in	None	None
___ 2	N=>S	3	Metal	Low-E Double	Yes	0.33	0.23	N	18.0 ft²	8 ft 6 in	0 ft 4 in	None	None
___ 3	N=>S	3	Metal	Low-E Double	Yes	0.33	0.23	N	13.3 ft²	8 ft 6 in	0 ft 4 in	None	None
___ 4	N=>S	3	Metal	Low-E Double	Yes	0.33	0.23	N	12.0 ft²	8 ft 6 in	0 ft 4 in	None	None
___ 5	N=>S	4	Metal	Low-E Double	Yes	0.33	0.23	N	30.0 ft²	1 ft 6 in	2 ft 0 in	None	None
___ 6	E=>W	5	Metal	Low-E Double	Yes	0.33	0.23	N	16.0 ft²	1 ft 6 in	2 ft 0 in	None	None
___ 7	S=>N	10	Metal	Low-E Double	Yes	0.33	0.23	N	30.0 ft²	6 ft 0 in	0 ft 4 in	None	None
___ 8	S=>N	11	Metal	Low-E Double	Yes	0.33	0.23	N	24.0 ft²	8 ft 0 in	1 ft 0 in	None	None
___ 9	S=>N	13	Metal	Low-E Double	Yes	0.33	0.23	N	15.0 ft²	1 ft 6 in	2 ft 0 in	None	None
___ 10	W=>E	16	Metal	Low-E Double	Yes	0.33	0.23	N	15.0 ft²	1 ft 6 in	2 ft 0 in	None	None
___ 11	W=>E	16	Metal	Low-E Double	Yes	0.33	0.23	N	3.0 ft²	1 ft 6 in	2 ft 0 in	None	None

**INPUT SUMMARY CHECKLIST REPORT**

<b>GARAGE</b>														
✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation								
	1	620.1 ft²	620.1 ft²	80 ft	9 ft	1								
<b>INFILTRATION</b>														
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50						
1	Wholehouse	Proposed ACH(50)	.000413	2128.8	116.79	219.26	.1457	7						
<b>HEATING SYSTEM</b>														
✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block		Ducts					
	1	Electric Heat Pump/	None	Singl	HSPF:8.6	35 kBtu/hr	1		sys#1					
<b>COOLING SYSTEM</b>														
✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts				
	1	Central Unit/	None	Singl	SEER: 15	35 kBtu/hr	1050 cfm	0.75	1	sys#1				
<b>HOT WATER SYSTEM</b>														
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation					
	1	Electric	None	Garage	0.95	50 gal	70 gal	120 deg	None					
<b>SOLAR HOT WATER SYSTEM</b>														
✓	FSEC Cert #	Company Name	System Model #			Collector Model #	Collector Area	Storage Volume	FEF					
	None	None					ft²							
<b>DUCTS</b>														
✓	#	--- Supply ---			--- Return ---		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat Cool	
	1	Attic	6	375 ft²	Attic	93.75 ft	Default Leakage	Main	(Default)	(Default)			1	1

**INPUT SUMMARY CHECKLIST REPORT**

**TEMPERATURES**

Programable Thermostat: Y

Ceiling Fans:

Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> 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	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

**MASS**

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft <sup>2</sup>	0 ft	0.3	Main