

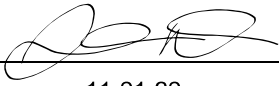
FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Brooks Residence Street: City, State, Zip: , FL, Owner: Design Location: FL, Gainesville	Builder Name: Permit Office: Permit Number: Jurisdiction: County: Columbia(Florida Climate Zone 2)
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1. New construction or existing New (From Plans) 2. Single family or multiple family Detached 3. Number of units, if multiple family 1 4. Number of Bedrooms 4 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 2702 Conditioned floor area below grade (ft²) 0 7. Windows(338.5 sqft.) Description Area a. U-Factor: Dbl, U=0.26 338.50 ft² SHGC: SHGC=0.20 b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 6.906 ft Area Weighted Average SHGC: 0.200 8. Skylights Description Area U-Factor:(AVG) N/A N/A ft² SHGC(AVG): N/A 9. Floor Types Insulation Area a. Slab-On-Grade Edge Insulation R= 0.0 2702.00 ft² b. N/A R= ft² c. N/A R= ft²	10. Wall Types(2334.0 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 2334.00 ft² b. N/A R= ft² c. N/A R= ft² d. N/A R= ft² 11. Ceiling Types(2702.0 sqft.) Insulation Area a. Cathedral/Single Assembly (Unvented) R=30.0 2702.00 ft² b. N/A R= ft² c. N/A R= ft² 12. Ducts, location & insulation level R ft² a. a. Sup: Main, Ret: Main, AH: Main 6 570 b. c. 13. Cooling Systems kBtu/hr Efficiency a. Central Unit 36.0 SEER:15.00 14. Heating Systems kBtu/hr Efficiency a. Electric Heat Pump 36.0 HSPF:8.50 15. Hot Water Systems a. Propane Tankless Cap: 1 gallons EF: 0.590 b. Conservation features None CF, Pstat 16. Credits
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Glass/Floor Area: 0.125	Total Proposed Modified Loads: 52.34	PASS
	Total Baseline Loads: 67.19	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY:  DATE: 11-21-22 I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT:  DATE: 1-2-23	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 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 with a proposed duct leakage Qn requires a PERFORMANCE Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.000 Qn for whole house.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

PROJECT																									
Title:		Brooks Residence				Address type:		Street Address																	
Building Type:		User		Bedrooms:		4		Lot #:		---															
Owner:				Conditioned Area:		2702		Block/SubDivision:		---															
				Total Stories:		1		PlatBook:		---															
Builder Name:				Worst Case:		No		Street:																	
Permit Office:				Rotate Angle:		0		County:		Columbia															
Jurisdiction:				Cross Ventilation:				City, State, Zip:		, FL,															
Family Type:		Detached		Whole House Fan:																					
New/Existing:		New (From Plans)		Terrain:		Rural																			
Year Construct:		2022		Shielding:		Moderate/Rural																			
Comment:																									
CLIMATE																									
✓	Design Location	Tmy Site		Design Temp		97.5% 2.5%		Int Design Temp		Heating		Design	Daily temp												
	___ FL, Gainesville	FL_GAINESVILLE_REGIONA		32 92		70 75		1305.5		51		Medium													
BLOCKS																									
✓	Number	Name		Area		Volume																			
	___ 1	Block1		2702		24318																			
SPACES																									
✓	Number	Name		Area		Volume		Kitchen		Occupants		Bedrooms		Finished		Cooled		Heated							
	___ 1	Main		2702		24318		Yes		6		4		Yes		Yes		Yes							
FLOORS													(Total Exposed Area = 2702 sq.ft.)												
✓	#	Floor Type		Space		Exposed Perim		Perimeter R-Value		Area		U-Factor		Joist R-Value		Tile		Wood		Carpet					
	___ 1	Slab-On-Grade Edge Ins		Main		259		0		2702 ft		0.556		---		0.20		0.50		0.30					
ROOF																									
✓	#	Type		Materials		Roof Area		Gable Area		Roof Color		Rad Barr		Solar Absor.		SA Tested		Emitt Tested		Emitt Tested		Deck Insul.		Pitch (deg)	
	___ 1	Gable or shed		Metal		3128 ft²		788 ft²		Finished, Galvanized		N		0.7		No		0.7		No		0		30.26	
ATTIC																									
✓	#	Type		Ventilation		Vent Ratio (1 in)		Area		RBS		IRCC													
	___ 1	No attic		Unvented		0		2702 ft²		N		N													
CEILING													(Total Exposed Area = 2702 sq.ft.)												
✓	#	Ceiling Type		Space		R-Value		Ins. Type		Area		U-Factor		Framing Frac.											
	___ 1	Cathedral/Single Assembly(Unvented)		Main		30.0		Blown		2702.0ft²		0.060		0.11										Wood	

INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 2334 sq.ft.)			
✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade			
___ 1	N	Exterior	Frame - Wood	Main	13.0	52.0	4	9.0	0	471.0	0.094		0.23	0.75	0 %			
___ 2	W	Exterior	Frame - Wood	Main	13.0	17.0	0	9.0	0	153.0	0.094		0.23	0.75	0 %			
___ 3	N	Exterior	Frame - Wood	Main	13.0	22.0	10	9.0	0	205.5	0.094		0.23	0.75	0 %			
___ 4	E	Exterior	Frame - Wood	Main	13.0	47.0	4	9.0	0	426.0	0.094		0.23	0.75	0 %			
___ 5	S	Exterior	Frame - Wood	Main	13.0	5.0	2	9.0	0	46.5	0.094		0.23	0.75	0 %			
___ 6	E	Exterior	Frame - Wood	Main	13.0	2.0	0	9.0	0	18.0	0.094		0.23	0.75	0 %			
___ 7	S	Exterior	Frame - Wood	Main	13.0	37.0	10	9.0	0	340.5	0.094		0.23	0.75	0 %			
___ 8	W	Exterior	Frame - Wood	Main	13.0	2.0	0	9.0	0	18.0	0.094		0.23	0.75	0 %			
___ 9	S	Exterior	Frame - Wood	Main	13.0	8.0	0	9.0	0	72.0	0.094		0.23	0.75	0 %			
___ 10	E	Exterior	Frame - Wood	Main	13.0	5.0	2	9.0	0	46.5	0.094		0.23	0.75	0 %			
___ 11	S	Exterior	Frame - Wood	Main	13.0	14.0	8	9.0	0	132.0	0.094		0.23	0.75	0 %			
___ 12	E	Exterior	Frame - Wood	Main	13.0	2.0	0	9.0	0	18.0	0.094		0.23	0.75	0 %			
___ 13	S	Exterior	Frame - Wood	Main	13.0	9.0	6	9.0	0	85.5	0.094		0.23	0.75	0 %			
___ 14	W	Exterior	Frame - Wood	Main	13.0	33.0	6	9.0	0	301.5	0.094		0.23	0.75	0 %			

DOORS															(Total Exposed Area = 88 sq.ft.)			
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area							
___ 1	N	Exterior	Insulated	Main	None	0.40	3.00	0	8.00	0	24.0ft²							
___ 2	W	Exterior	Insulated	Main	None	0.40	3.00	0	8.00	0	24.0ft²							
___ 3	S	Exterior	Insulated	Main	None	0.40	5.00	0	8.00	0	40.0ft²							

WINDOWS															(Total Exposed Area = 339 sq.ft.)			
✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Area	-----Overhang-----		Interior Shade	Screening				
											Depth	Separation						
___ 1	N	1	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	15.0ft²	11.0 ft 6 in	2.0 ft 4 in	None	None				
___ 2	N	1	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	96.0ft²	11.0 ft 6 in	2.0 ft 4 in	None	None				
___ 3	N	3	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	3.5ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				
___ 4	N	3	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	36.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				
___ 5	E	4	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	36.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				
___ 6	E	4	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	10.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				
___ 7	S	7	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	72.0ft²	11.0 ft 6 in	2.0 ft 4 in	None	None				
___ 8	S	11	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	30.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				
___ 9	S	13	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	12.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				
___ 10	W	14	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	20.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				
___ 11	W	14	Vinyl	Low-E Double	Yes	0.26	0.20	N	N	8.0ft²	1.0 ft 6 in	2.0 ft 4 in	None	None				

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	
___ 1	Wholehouse	Proposed ACH(50)	0.00029	2027	111.18	208.73	0.1027	5.0	All	

MASS					
✓ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq.ft.)	0 ft²	0 ft	0.30	Main

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	---Geothermal Entry	HeatPump--- Power	Volts Current	Ducts	Block
___ 1	Electric Heat Pump	None/Single		HSPF: 8.50	36.0		0.00	0.00	0.00	sys#1 1

COOLING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	None/Single		SEER:15.0	36.0	1080	0.85	sys#1	1

HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Propane	Tankless	Exterior	0.59 (0.59)	1.00 gal	70 gal	120 deg	Standard	None	99
	Recirculation System	Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits
___ 1	No		NA	NA	NA	No	NA	NA	NA	None

DUCTS

✓ Duct #	-----Supply----- Location	R-Value	Area	-----Return----- Location	R-Value	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
___ 1	Main	6.0	570 ft²	Main	6.0	143 ft²	Default Leakage	Main	(Default)	(Default)			1 1

TEMPERATURES

Programable Thermostat: Y				Ceiling Fans: N									
Cooling	[] Jan	[] Feb	[] Mar	[] Apr	[] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[] Oct	[] Nov	[] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[] Apr	[] May	[] Jun	[] Jul	[] Aug	[] Sep	[] Oct	[X] Nov	[X] Dec	
Venting	[] Jan	[] Feb	[X] Mar	[X] Apr	[] May	[] Jun	[] Jul	[] Aug	[] Sep	[X] Oct	[X] Nov	[] Dec	
Thermostat Schedule: HERS 2006 Reference													
✓ Schedule Type		1	2	3	4	5	6	Hours 7	8	9	10	11	12
___ Cooling (WD)	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 (WEH)	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 (WD)	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 (WEH)	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