

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

<p>Project Name: Fleming Residence Street: 2009 SW Wilson Springs ROAD City, State, Zip: Fort White, FL 32038 Owner: Fleming Residence Design Location: FL, Ocala</p>	<p>Builder Name: Permit Office: Marion County Permit Number: Jurisdiction: 521000 County: Columbia (Florida Climate Zone 2)</p>
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<p>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 2 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 1649.61 Conditioned floor area below grade (ft²) 0 7. Windows (96 ft²) Description Area (ft²) a. U-Factor: Dbl, 0.470 96.00 SHGC: 0.41 b. U-Factor: SHGC: c. U-Factor: SHGC: d. U-Factor: SHGC: Area Weighted Average Overhang Depth: 7.000 ft Area Weighted Average SHGC: 0.410 8. Floor types (1652.61 ft²) Insulation (R) Area (ft²) a. Bg floor, heavy dry or light dam 0.0 1649.61 b. N/A c. N/A</p>	<p>9. Wall types (1497 ft²) Insulation (R) Area (ft²) a. Frm wall, mtl ext, r-13 cav ins, 13.0 1201.50 b. Frm wall, 1/2" gyp.bd ext, r-13 13.0 295.50 c. N/A d. N/A 10. Ceiling types (1653 ft²) Insulation (R) Area (ft²) a. Rf/clg ceiling, mtl roof mat, mt 30.0 1649.61 b. N/A c. N/A 11. Ducts R Area (ft²) a. b. 12. Cooling systems kBtu/hr Efficiency a. Split air source heat pump 22.4 18 SEER2 b. Split air source heat pump 12.0 18 SEER2 13. Heating systems kBtu/hr Efficiency a. Split air source heat pump 23.0 9 HSPF2 b. Split air source heat pump 11.3 9 HSPF2 14. Hot water systems Cap: 40 gal UEF: 0.93 a. Electric conventional (40 gal) b. Conservation features (None) 15. Credits Ceiling Fan; Cross Vent; Pstat</p>
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Glass/Floor area: 0.058 Total Proposed Modified Loads: 48.17
 Total Baseline Loads: 50.73

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.
 Prepared By Iron Shield Heating and Air LLC
 Signature victor oquendo Date 4/09/2026

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.
 Owner/Agent Name David Wallace
 Signature [Signature] Date 5/4/26

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 Name _____
 Signature _____ 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 7.0 ACH50 (R402.4.1.2).

Building Input Summary Report

PROJECT			
Title:	Fleming Residence	Bedrooms:	2
Building Type:	FLAsBuilt	Bathrooms:	2
Owner:	Fleming Residence	Conditioned Area:	1650
# of Units:	1	Total Stories:	1
Builder Name:		Worst Case:	No
Permit Office:	Marion County	Rotate Angle:	0
Jurisdiction:	521000	Cross Ventilation:	No
Family Type:	Single-Family	Whole House Fan:	No
New/Existing:	New (From Plans)	Terrain:	Suburban
Year Construct:	2025	Shielding:	Suburban
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, Ocala	FL_Gainesville_Rgn	2	34	91	70	75	1011	44	Medium

BLOCKS			
#	Name	Area	Volume
1	a	1177.62 ft ²	10598.62 ft ³
2	b	471.99 ft ²	4274.88 ft ³

SPACES										
#		Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	W.I.C.	104.14 ft ²	937.25 ft ³	No	0	0	1	Yes	Yes	Yes
2	Wtr CL	14.00 ft ²	126.00 ft ³	No	0	0	1	Yes	Yes	Yes
3	Master Bath	130.89 ft ²	1178.00 ft ³	No	0	0	1	Yes	Yes	Yes
4	Master Bedroom	225.96 ft ²	2033.62 ft ³	No	2	1	1	Yes	Yes	Yes
5	Mud Room	60.67 ft ²	546.00 ft ³	No	0	0	1	Yes	Yes	Yes
6	Bedroom 2	200.81 ft ²	1807.25 ft ³	No	1	1	1	Yes	Yes	Yes
7	CL	24.44 ft ²	220.00 ft ³	No	0	0	1	Yes	Yes	Yes
8	Living Space	735.56 ft ²	6620.06 ft ³	Yes	0	0	1	Yes	Yes	Yes
9	Bath	96.33 ft ²	867.00 ft ³	No	0	0	1	Yes	Yes	Yes
10	Pantry	59.81 ft ²	538.31 ft ³	No	0	0	1	Yes	Yes	Yes

FLOORS (Total Exposed Area = 1650 sq.ft.)										
✓ #	Floor Type	Space	Perimeter	R-Value	Area	U-Factor	Tile	Wood	Carpet	
1	Bg floor, heavy dry or light damp soil, on grade	W.I.C.	21 ft	0	104.14 ft ²	1.180	0	1.0	0	
2	Bg floor, heavy dry or light damp soil, on grade	Wtr CL	0 ft	0	14.00 ft ²	1.180	0	1.0	0	
3	Bg floor, heavy dry or light damp soil, on grade	Master Bath	11 ft	0	130.89 ft ²	1.180	0	1.0	0	
4	Bg floor, heavy dry or light damp soil, on grade	Master Bedroom	30 ft	0	225.96 ft ²	1.180	0	1.0	0	
5	Bg floor, heavy dry or light damp soil, on grade	Mud Room	7 ft	0	60.67 ft ²	1.180	0	1.0	0	
6	Bg floor, heavy dry or light damp soil, on grade	Bedroom 2	27 ft	0	200.81 ft ²	1.180	0	1.0	0	
7	Bg floor, heavy dry or light damp soil, on grade	CL	4 ft	0	24.44 ft ²	1.180	0	1.0	0	
8	Bg floor, heavy dry or light damp soil, on grade	Living Space	39 ft	0	735.56 ft ²	1.180	0	1.0	0	
9	Bg floor, heavy dry or light damp soil, on grade	Bath	11 ft	0	96.33 ft ²	1.180	0	1.0	0	
10	Bg floor, heavy dry or light damp soil, on grade	Pantry	17 ft	0	59.81 ft ²	1.180	0	1.0	0	

ROOF												
✓ #	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
1	Flat	RoofMetal	1178 ft ²	939 ft ²	Dark	N	0.75	No	0.90	No	0	0
2	Flat	RoofMetal	1213 ft ²	2024 ft ²	Dark	N	0.75	No	0.90	No	0	0
3	Flat	RoofMetal	475 ft ²	558 ft ²	Dark	N	0.75	No	0.90	No	0	0

CEILING (Total Exposed Area = 1650 sq.ft.)							
✓ #	Ceiling Type	Space	R-Value	U-Factor	Area	Framing Fraction	Truss Type
1	Rf/clg ceiling, mtl roof mat, mtl co	W.I.C.	30	0.024	104.14 ft ²	0	Wood
2	Rf/clg ceiling, mtl roof mat, mtl co	Wtr CL	30	0.024	14.00 ft ²	0	Wood
3	Rf/clg ceiling, mtl roof mat, mtl co	Master Bath	30	0.024	130.89 ft ²	0	Wood
4	Rf/clg ceiling, mtl roof mat, mtl co	Master Bedroom	30	0.024	225.96 ft ²	0	Wood
5	Rf/clg ceiling, mtl roof mat, mtl co	Mud Room	30	0.024	60.67 ft ²	0	Wood
6	Rf/clg ceiling, mtl roof mat, mtl co	Bedroom 2	30	0.024	200.81 ft ²	0	Wood
7	Rf/clg ceiling, mtl roof mat, mtl co	CL	30	0.024	24.44 ft ²	0	Wood
8	Rf/clg ceiling, mtl roof mat, mtl co	Living Space	30	0.024	735.56 ft ²	0	Wood
9	Rf/clg ceiling, mtl roof mat, mtl co	Bath	30	0.024	96.33 ft ²	0	Wood
10	Rf/clg ceiling, mtl roof mat, mtl co	Pantry	30	0.024	59.81 ft ²	0	Wood

WALLS (Total Exposed Area = 1497 sq.ft.)																
✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft In	Height Ft In	Area	Sheathing R-Value	U-Factor	Frm. Frac.	Solar Absor.	Below Grade%			
1	S	Exterior	Frm wall, mtl ext	W.I.C.	13	13 7	9 0	122.2 ft²	0	0.097	0.22	0.75	0			
2	W	Exterior	Frm wall, mtl ext	W.I.C.	13	7 8	9 0	69.0 ft²	0	0.097	0.22	0.75	0			
3	W	Exterior	Frm wall, mtl ext	Master Bath	13	10 8	9 0	96.0 ft²	0	0.097	0.22	0.75	0			
4	N	Exterior	Frm wall, mtl ext	Master Bedroom	13	15 7	9 0	140.2 ft²	0	0.097	0.22	0.75	0			
5	W	Exterior	Frm wall, mtl ext	Master Bedroom	13	14 6	9 0	130.5 ft²	0	0.097	0.22	0.75	0			
6	N	Exterior	Frm wall, mtl ext	Mud Room	13	7 0	9 0	63.0 ft²	0	0.097	0.22	0.75	0			
7	S	Exterior	Frm wall, mtl ext	Bedroom 2	13	13 3	9 0	119.2 ft²	0	0.097	0.22	0.75	0			
8	-	Partition	Frm wall, 1/2" gy	Bedroom 2	13	13 4	9 0	120.0 ft²	0	0.094	0.25	0.75	0			
9	-	Partition	Frm wall, 1/2" gy	CL	13	3 8	9 0	33.0 ft²	0	0.094	0.25	0.75	0			
10	N	Exterior	Frm wall, mtl ext	Living Space	13	15 6	9 0	139.5 ft²	0	0.097	0.22	0.75	0			
11	S	Exterior	Frm wall, mtl ext	Living Space	13	23 6	9 0	211.5 ft²	0	0.097	0.22	0.75	0			
12	-	Partition	Frm wall, 1/2" gy	Bath	13	11 4	9 0	102.0 ft²	0	0.094	0.25	0.75	0			
13	N	Exterior	Frm wall, mtl ext	Pantry	13	12 3	9 0	110.2 ft²	0	0.097	0.22	0.75	0			
14	-	Partition	Frm wall, 1/2" gy	Pantry	13	4 6	9 0	40.5 ft²	0	0.094	0.25	0.75	0			

DOORS (Total Exposed Area = 144 sq.ft.)									
✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft In	Height Ft In	Area	
1	N	Door, mtl fbrgl type	Master Bedroom	None	0.127	6 0	8 0	48.0 ft²	
2	N	Door, mtl fbrgl type	Mud Room	None	0.127	3 0	8 0	24.0 ft²	
3	N	Door, mtl fbrgl type	Living Space	None	0.127	3 0	8 0	24.0 ft²	
4	S	Door, mtl fbrgl type	Living Space	None	0.127	6 0	8 0	48.0 ft²	

WINDOWS (Total Exposed Area = 96 sq.ft.)														
✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Impact	W x H, Area	Overhang Depth	Separation	Interior Shade	Screening	
1	S	1	Vinyl	Low-E Double	Yes	0.470	0.41	No	3'0" x 5'0", 15 ft²	6 ft 0 in	2 ft 0 in	None	None	
2	W	5	Vinyl	Low-E Double	Yes	0.470	0.41	No	6'0" x 5'0", 30 ft²	8 ft 0 in	2 ft 0 in	None	None	
3	S	7	Vinyl	Low-E Double	Yes	0.470	0.41	No	3'0" x 5'0", 15 ft²	6 ft 0 in	2 ft 0 in	None	None	
4	N	10	Vinyl	Low-E Double	Yes	0.470	0.41	No	3'0" x 2'0", 6 ft²	12 ft 0 in	2 ft 0 in	None	None	
5	S	11	Vinyl	Low-E Double	Yes	0.470	0.41	No	6'0" x 5'0", 30 ft²	6 ft 0 in	2 ft 0 in	None	None	

GARAGE					
✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	1213 ft²	1213 ft²	127 ft	16 ft	13

INFILTRATION								
#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Blower Door	0.000401	1735	95.34	179.0	0.55	7.00

HEATING SYSTEM							
✓ #	System Type	Subtype	Efficiency	Capacity	Block	Ducts	
1	Split air source heat pump		9 HSPF2	23.0 kBtu/hr	1	Ductless	
2	Split air source heat pump		9 HSPF2	11.3 kBtu/hr	2	Ductless	

COOLING SYSTEM								
✓ #	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
1	Split air source heat pump		18 SEER2	22.4 kBtu/hr	747 cfm	0.70	1	Ductless
2	Split air source heat pump		18 SEER2	12.0 kBtu/hr	400 cfm	0.70	2	Ductless

HOT WATER SYSTEM								
✓ #	System Type	Subtype	Location	EF	Cap	Use	SetPnt	Conservation
1	Electric conventional			0.93 UEF	40 gal	50 gal	120 °F	None

TEMPERATURES														
Programmable Thermostat: Y							Ceiling Fans:							
Cooling	Heating	Venting	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Thermostat Schedule: Florida Building Code, 8th Edition														
Schedule Type (2023)														
		1	2	3	4	5	6	7	8	9	10	11	12	
Cooling (WD)		AM	75	75	75	75	75	75	75	75	75	75	75	
		PM	75	75	75	75	75	75	75	75	75	75	75	
Cooling (WEH)		AM	75	75	75	75	75	75	75	75	75	75	75	
		PM	75	75	75	75	75	75	75	75	75	75	75	
Heating (WD)		AM	72	72	72	72	72	72	72	72	72	72	72	
		PM	72	72	72	72	72	72	72	72	72	72	72	
Heating (WEH)		AM	72	72	72	72	72	72	72	72	72	72	72	
		PM	72	72	72	72	72	72	72	72	72	72	72	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX = 95

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

<p>1. New home or addition</p> <p>2. Single-family or multiple-family</p> <p>3. Number of units, if multiple-family</p> <p>4. Number of bedrooms</p> <p>5. Is this a worst case? (yes/no)</p> <p>6. Conditioned floor area (ft²)</p> <p>7. Windows, type and area*</p> <p style="margin-left: 20px;">a. U-Factor:</p> <p style="margin-left: 20px;">b. Solar Heat Gain Coefficient (SHGC):</p> <p style="margin-left: 20px;">c. Area (ft²)</p> <p>8. Skylights</p> <p style="margin-left: 20px;">a. U-Factor:</p> <p style="margin-left: 20px;">b. Solar Heat Gain Coefficient (SHGC):</p> <p>9. Floor type, insulation level</p> <p style="margin-left: 20px;">a. Slab-on-grade (R-value):</p> <p style="margin-left: 20px;">b. Wood, raised (R-value):</p> <p style="margin-left: 20px;">c. Concrete, raised (R-value):</p> <p>10 Wall type and insulation:</p> <p style="margin-left: 20px;">a. Exterior:</p> <p style="margin-left: 40px;">1. Wood/mtl frame (Insulation R-value):</p> <p style="margin-left: 40px;">2. Masonry (Insulation R-value):</p> <p style="margin-left: 20px;">b. Adjacent:</p> <p style="margin-left: 40px;">1. Wood/mtl frame (Insulation R-value):</p> <p style="margin-left: 40px;">2. Masonry (Insulation R-value):</p> <p>11. Ceiling type and insulation level</p> <p style="margin-left: 20px;">a. Under attic (R-value):</p> <p style="margin-left: 20px;">b. Single assembly (R-value):</p> <p style="margin-left: 20px;">c. Knee walls/skylight walls (R-value)</p> <p style="margin-left: 20px;">d. Radiant barrier installed</p>	<p>1. <u>New (From Plans)</u></p> <p>2. <u>Single-Family</u></p> <p>3. <u>1</u></p> <p>4. <u>2</u></p> <p>5. <u>No</u></p> <p>6. <u>1649.61</u></p> <p>7a. <u>DbI, 0.470</u></p> <p>7b. <u>0.41</u></p> <p>7c. <u>96</u></p> <p>8a. _____</p> <p>8b. _____</p> <p>9a. <u>0.0</u></p> <p>9b. _____</p> <p>9c. _____</p> <p>10a1. <u>13.0</u></p> <p>10a2. _____</p> <p>10b1. <u>13.0</u></p> <p>10b2. _____</p> <p>11a. _____</p> <p>11b. <u>30.0</u></p> <p>11c. _____</p> <p>11d. <u>No</u></p>	<p>12. Ducts, location & insulation level</p> <p style="margin-left: 20px;">a. Supply ducts: R _____</p> <p style="margin-left: 20px;">b. Return ducts: R _____</p> <p style="margin-left: 20px;">c. AHU location: _____</p> <p>13. Cooling systems</p> <p style="margin-left: 20px;">a. Split system: Capacity <u>34.4</u></p> <p style="margin-left: 20px;">b. Single package: SEER <u>18.00</u></p> <p style="margin-left: 20px;">c. Ground/water source: SEER/COP _____</p> <p style="margin-left: 20px;">d. Room unit/PTAC: EER _____</p> <p style="margin-left: 20px;">e. Other: _____</p> <p>14. Heating systems</p> <p style="margin-left: 20px;">a. Split system heat pump: Capacity <u>34.3</u></p> <p style="margin-left: 20px;">b. Single package heat pump: HSPF <u>9.00</u></p> <p style="margin-left: 20px;">c. Electric resistance: HSPF _____</p> <p style="margin-left: 20px;">d. Gas furnace, natural gas: COP _____</p> <p style="margin-left: 20px;">e. Gas furnace, LPG: AFUE _____</p> <p style="margin-left: 20px;">f. Other: AFUE _____</p> <p>15. Water heating systems</p> <p style="margin-left: 20px;">a. Electric resistance: _____</p> <p style="margin-left: 20px;">b. Gas fired, natrual gas: <u>0.93 UEF</u></p> <p style="margin-left: 20px;">c. Gas fired, LPG: _____</p> <p style="margin-left: 20px;">d. Solar system with tank: _____</p> <p style="margin-left: 20px;">e. Dedicated heat pump with tank: _____</p> <p style="margin-left: 20px;">f. Heat recovery unit: HeatRec% _____</p> <p style="margin-left: 20px;">g. Other: _____</p> <p>16. HVAC credits claimed (Performance Method)</p> <p style="margin-left: 20px;">a. Ceiling fans: <u>Yes</u></p> <p style="margin-left: 20px;">b. Cross ventilation: <u>Yes</u></p> <p style="margin-left: 20px;">c. Whole house fan: _____</p> <p style="margin-left: 20px;">d. Multizone cooling credit: <u>Yes</u></p> <p style="margin-left: 20px;">e. Multizone heating credit: <u>Yes</u></p> <p style="margin-left: 20px;">f. Programmable thermostat: <u>Yes</u></p>
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*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

I certify that this home has complied with the Florida Building Code, Energy Conservation, 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: 5/4/20

Address of New Home: 2009 SW Wilson Springs ROAD

City/FL Zip: Fort White, FL 32038

Florida Building Code, Energy Conservation, 8th Edition (2023) Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS: 2009 SW Wilson Springs ROAD
Fort White, FL 32038

PERMIT #:

MANDATORY REQUIREMENTS - See individual code sections for full details.

SECTION R401 GENERAL

- R401.3 Energy Performance Level (EPL) display card (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law (Section 553.9085, Florida Statutes) requires the EPL display card to be included as an addendum to each sales contract for both presold and nonpresold residential buildings. The EPL display card contains information indicating the energy performance level and efficiencies of components installed in a dwelling unit, completed and signed by the builder. The building official shall verify that the EPL display card accurately reflects the plans and specifications submitted to demonstrate compliance for the building. A copy of the EPL display card can be found in Appendix RD.

SECTION R402 BUILDING THERMAL ENVELOPE

- R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.

Exception: Dwelling units of R-2 Occupancies and multiple attached single family dwellings shall be permitted to comply with Section C402.5.

- R402.4.1 Building thermal envelope.** The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.

- R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

- R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and M1507.3 of the Florida Building Code, Residential. 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 individual as defined in Section 553.993(5) or (7), Florida Statutes, 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 code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Exception: Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building 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, backdraft 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.
7. If an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting an infiltration volume and calculating the air leakage of the home.

- R402.4.2 Fireplaces.** New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air. Where using tight-fitting doors on factory-built fireplaces listed and labeled in accordance with UL 127, the doors shall be tested and listed for the fireplace. Where using tight-fitting doors on masonry fireplaces, the doors shall be listed and labeled in accordance with UL 907.

- R402.4.3 Fenestration air leakage.** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m²), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m²), when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

Exception: Site-built windows, skylights and doors.

- R402.4.4 Rooms containing fuel-burning appliances.** In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table R402.1.2, where the walls, floors and ceilings shall meet not less than the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section R403. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.

Exceptions:

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with Section R402.4.2 and Section R1006 of the Florida Building Code, Residential.

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance
2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction: 521000	Permit Number:
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Job Information

Builder:	Community:	Lot:
Address: 2009 SW Wilson Sprin		Unit:
City: Fort White	State: FL	Zip: 32038

Air Leakage Test Results Passing results must meet either the Performance, Prescriptive, or ERI Method.

PRESCRIPTIVE METHOD The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 pascals) in Climate Zones 1 and 2.

PERFORMANCE or ERI METHOD The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on FORM R405-2023 (Performance) or R406-2023 (ERI), section labeled as Infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2023-Energy Calc (Performance) or R406-2023 (ERI): 7.000

$\frac{\text{CFM}(50)}{\text{Building Volume}} \times 60 \div \frac{14874}{\text{ACH}(50)} =$ <p style="text-align: center; font-size: 2em; font-weight: bold; margin: 10px 0;"><input type="checkbox"/> PASS</p> <p><input checked="" type="checkbox"/> When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.</p>	<p>Method for calculating building volume:</p> <p><input type="checkbox"/> Retrieved from architectural plans</p> <p><input checked="" type="checkbox"/> Code software calculated</p> <p><input type="checkbox"/> Field measured and calculated</p>
---	--

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and M1507.3 of the Florida Building Code, Residential. 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 individual as defined in Section 553.993(5) or (7), Florida Statutes, 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 code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Exception: Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building 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.
7. If an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting an infiltration volume and calculating the air leakage of the home.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2023 8th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

Duct Leakage Test Report

Residential Prescriptive, Performance or ERI Method Compliance
2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction: 521000	Permit Number:
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Job Information

Builder:	Community:	Lot:
Address: 2009 SW Wilson Sprin		Unit:
City: Fort White	State: FL	Zip: 32038

Duct Leakage Test Results

System 1	_____	cfm25
System 2	_____	cfm25
System 3	_____	cfm25
Sum of any additional systems	_____	cfm25
Total of all systems	_____	cfm25

Prescriptive Method cfm25 (Total)
 To qualify as "substantially leak free" Qn Total must be less than or equal to 0.04 if air handler unit is installed. If air handler unit is not installed, Qn Total must be less than or equal to 0.03. This testing method meets the requirements in accordance with Section R403.3.3.
Is the air handler unit installed during testing?

YES (<= 0.04 Qn)
 NO (<= 0.03 Qn)

_____ ÷ _____ = _____ Qn
 Total of all systems Total Conditioned Square Footage

PASS **FAIL**

Performance / ERI Method cfm25 (Out or Total)
 To qualify using this method, Qn must be not greater than the proposed duct leakage Qn specified on Form R405-2023 or R406-2023.

Leakage Type selected on Form R405-2023 (Energy Calc) or R406-2023	Qn specified on Form R405-2023 (Energy Calc) or R406-2023
_____	_____

Duct tightness shall be verified by testing in accordance with ANSI/RESNET/ICC380 by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i), Florida Statutes.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above duct leakage test results are in accordance with the 2023 8th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

Reference Home Characteristics

Fleming Residence
2009 SW Wilson Springs ROAD
Fort White, FL 32038

Title: Fleming Residence
FLBase2023

TMY City: FL_Gainesville_Rgn

Above-grade Walls (Uo)	0.084
Above-grade Wall Solar Absorptance	0.75
Above-grade Wall Infrared Emittance	0.90
Basement Walls (Uo)	n/a
Above-grade Floors (Uo)	n/a
Slab Insulation R-Value	0.0
Ceilings (Uo)	0.030
Roof Solar Absorptance	0.75
Roof Infrared Emittance	0.90
Attic Vent Area (ft ²)	0.00
Crawlspace Vent Area (ft ²)	n/a
Exposed Masonry Floor Area (ft ²)	573.11
Carpet & Pad R-Value	2.0
Door Area (ft ²)	0.00
Door U-Factor	n/a
North Window Area (ft ²)	11.25
South Window Area (ft ²)	24.00
East Window Area (ft ²)	0.00
West Window Area (ft ²)	11.25
Window U-Factor	0.400
Window SHGC (Heating)	0.2169
Window SHGC (Cooling)	0.2169
ACH50	7.00
Internal Gains * (Btu/day)	83340
Water heater gallons per day	100.00
Water Heater set point temperature	120.00
Water heater efficiency rating	0.77
Labeled Heating System Rating and Efficiency	HSPF = 8.0
Labeled Cooling System Rating and Efficiency	SEER = 14.0
Air Distribution System Efficiency	0.88
Thermostat Type	Manual
Heating Thermostat Settings	72.0 (All hours)



Load Short Form

Entire House

Iron Shield Heating & Air LLC

Job: Fleming-RH
 Date: Apr 09, 2026
 By: Iron Shield Heating and ...
 Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

Design Information

	Htg	Clg		Infiltration
Outside db (°F)	34	91	Method	Blower door
Inside db (°F)	70	75	Shielding / stories	3 (partial) / 1
Design TD (°F)	36	16	Pressure /ACH /AVF	50 Pa / 7.0 / 1735 cfm
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	32	44		

HEATING EQUIPMENT

Make	n/a
Trade	n/a
Model	n/a
AHRI ref.	n/a
Efficiency	n/a
Heating input	
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	n/a

COOLING EQUIPMENT

Make	n/a
Trade	n/a
Cond	n/a
Coil	n/a
AHRI ref.	n/a
Efficiency	n/a
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
(Unconditioned)	1213	0	0	0	0
a	1178	41949	19464	0	0
b	472	19964	9926	0	0
Entire House	2863	61914	29190	0	0
Other equip loads		0	0		
Equip. @ 1.00 RSM			29190		
Latent cooling			38968		
TOTALS	2863	61914	68157	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Load Short Form

a

Iron Shield Heating & Air LLC

Job: Fleming-RH
 Date: Apr 09, 2026
 By: Iron Shield Heating and ...
 Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

Design Information

	Htg	Clg	Method	Infiltration
Outside db (°F)	34	91	Shielding / stories	Blower door
Inside db (°F)	70	75	Pressure /ACH /AVF	3 (partial) / 1
Design TD (°F)	36	16		50 Pa / 7.0 / 1928 cfm
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	32	44		

HEATING EQUIPMENT

Make Daikin
 Trade DAIKIN
 Model RXC24AXVJU
 AHRI ref 213895725

Efficiency 9 HSPF2
 Heating input
 Heating output 23000 Btuh @ 47°F
 Temperature rise 28 °F
 Actual air flow 747 cfm
 Air flow factor 0.018 cfm/Btuh
 Static pressure 0 in H2O
 Space thermostat
 Capacity balance point = 45 °F

Backup: Daikin
 Input = 5 kW, Output = 54594 Btuh, 100 AFUE

COOLING EQUIPMENT

Make Daikin
 Trade DAIKIN
 Cond RXC24AXVJU
 Coil FTXC24AXVJU
 AHRI ref 213895725

Efficiency 10.5 EER2, 18 SEER2
 Sensible cooling 15680 Btuh
 Latent cooling 6720 Btuh
 Total cooling 22400 Btuh
 Actual air flow 747 cfm
 Air flow factor 0.038 cfm/Btuh
 Static pressure 0 in H2O
 Load sensible heat ratio 0.93

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
MSI1	1178	41949	19773	0	0
a	1178	41949	19464	0	0
Other equip loads		0	0		
Equip. @ 1.00 RSM			19464		
Latent cooling			1402		
TOTALS	1178	41949	20866	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Load Short Form

b

Iron Shield Heating & Air LLC

Job: Fleming-RH
Date: Apr 09, 2026
By: Iron Shield Heating and ...
Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

Design Information

	Htg	Clg		Infiltration
Outside db (°F)	34	91	Method	Blower door
Inside db (°F)	70	75	Shielding / stories	3 (partial) / 1
Design TD (°F)	36	16	Pressure /ACH /AVF	50 Pa / 7.0 / 1928 cfm
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	32	44		

HEATING EQUIPMENT

Make	Daikin
Trade	DAIKIN
Model	RXC12AXVJU
AHRI ref	213895723
Efficiency	9 HSPF2
Heating input	
Heating output	11300 Btuh @ 47°F
Temperature rise	26 °F
Actual air flow	400 cfm
Air flow factor	0.020 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	
Capacity balance point = 45 °F	

COOLING EQUIPMENT

Make	Daikin
Trade	DAIKIN
Cond	RXC12AXVJU
Coil	FTXC12AXVJU
AHRI ref	213895723
Efficiency	8.5 EER2, 18 SEER2
Sensible cooling	8400 Btuh
Latent cooling	3600 Btuh
Total cooling	12000 Btuh
Actual air flow	400 cfm
Air flow factor	0.040 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.87

Backup: Daikin
Input = 5 kW, Output = 34121 Btuh, 100 AFUE

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
MSI2	472	19964	10695	0	0
b	472	19964	9926	0	0
Other equip loads		0	0		
Equip. @ 1.00 RSM			9926		
Latent cooling			1442		
TOTALS	472	19964	11368	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Project Summary

Entire House

Iron Shield Heating & Air LLC

Job: Fleming-RH
 Date: Apr 09, 2026
 By: Iron Shield Heating and ...
 Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

Notes:

Design Information

Weather: Ocala, FL, US

Winter Design Conditions

Outside db 34 °F
 Inside db 70 °F
 Design TD 36 °F

Ventilation Method

Summer Design Conditions

Outside db 91 °F
 Inside db 75 °F
 Design TD 16 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 44 gr/lb

Heating Summary

Structure 61914 Btuh
 Ducts (R-6.0) 0 Btuh
 Central vent (0 cfm) 0 Btuh
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 61914 Btuh

Infiltration

Method Blower door
 Shielding / stories 3 (partial) / 1
 Pressure /ACH /AVF 50 Pa / 7.0 / 1735 cfm

	Heating	Cooling
Area (ft ²)	1650	1650
Volume (ft ³)	14874	14874
Air changes/hour	0.54	0.30
Equiv. AVF (cfm)	135	75

Heating Equipment Summary

Make n/a
 Trade n/a
 Model n/a
 AHRI ref n/a
 Efficiency n/a
 Heating input
 Heating output 0 Btuh
 Temperature rise 0 °F
 Actual air flow 0 cfm
 Air flow factor 0 cfm/Btuh
 Static pressure 0 in H2O
 Space thermostat n/a

Sensible Cooling Equipment Load Sizing

Structure 29190 Btuh
 Ducts (R-6.0) 0 Btuh
 Central vent (0 cfm) 0 Btuh
 Blower 0 Btuh
 Use manufacturer's data y
 Rate/swing multiplier 1.00
 Equipment sensible load 29190 Btuh

Latent Cooling Equipment Load Sizing

Structure 38968 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm) 0 Btuh
 Equipment latent load 38968 Btuh
Equipment Total Load (Sen+Lat) 68157 Btuh
 Req. total capacity at 0.70 SHR 3.5 ton

Cooling Equipment Summary

Make n/a
 Trade n/a
 Cond n/a
 Coil n/a
 AHRI ref n/a
 Efficiency n/a
 Sensible cooling 0 Btuh
 Latent cooling 0 Btuh
 Total cooling 0 Btuh
 Actual air flow 0 cfm
 Air flow factor 0 cfm/Btuh
 Static pressure 0 in H2O
 Load sensible heat ratio 0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.





Project Summary

a
Iron Shield Heating & Air LLC

Job: Fleming-RH
Date: Apr 09, 2026
By: Iron Shield Heating and ...
Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

Notes:

Design Information

Weather: Ocala, FL, US

Winter Design Conditions

Outside db 34 °F
Inside db 70 °F
Design TD 36 °F

Ventilation Method MJ8

Heating Summary

Structure 41949 Btuh
Ducts (R-6.0) 0 Btuh
Central vent (0 cfm) 0 Btuh

Humidification 0 Btuh
Piping 0 Btuh
Equipment load 41949 Btuh

Infiltration

Method Blower door
Shielding / stories 3 (partial) / 1
Pressure /ACH /AVF 50 Pa / 7.0 / 1928 cfm

	Heating	Cooling
Area (ft ²)	1178	1178
Volume (ft ³)	10599	10599
Air changes/hour	0.41	0.23
Equip. AVF (cfm)	72	40

Heating Equipment Summary

Make Daikin
Trade DAIKIN
Model RXC24AXVJU
AHRI ref 213895725

Efficiency 9 HSPF2
Heating input
Heating output 23000 Btuh @ 47°F
Temperature rise 28 °F
Actual air flow 747 cfm
Air flow factor 0.018 cfm/Btuh
Static pressure 0 in H2O
Space thermostat
Capacity balance point = 45 °F

Backup: Daikin
Input = 5 kW, Output = 54594 Btuh, 100 AFUE

Summer Design Conditions

Outside db 91 °F
Inside db 75 °F
Design TD 16 °F
Daily range M
Relative humidity 50 %
Moisture difference 44 gr/lb

Sensible Cooling Equipment Load Sizing

Structure 19464 Btuh
Ducts (R-6.0) 0 Btuh
Central vent (0 cfm) 0 Btuh

Blower 0 Btuh

Use manufacturer's data y
Rate/swing multiplier 1.00
Equipment sensible load 19464 Btuh

Latent Cooling Equipment Load Sizing

Structure 1402 Btuh
Ducts 0 Btuh
Central vent (0 cfm) 0 Btuh

Equipment latent load 1402 Btuh

Equipment Total Load (Sen+Lat) 20866 Btuh
Req. total capacity at 0.70 SHR 2.3 ton

Cooling Equipment Summary

Make Daikin
Trade DAIKIN
Cond RXC24AXVJU
Coil FTXC24AXVJU
AHRI ref 213895725
Efficiency 10.5 EER2, 18 SEER2
Sensible cooling 15680 Btuh
Latent cooling 6720 Btuh
Total cooling 22400 Btuh
Actual air flow 747 cfm
Air flow factor 0.038 cfm/Btuh
Static pressure 0 in H2O
Load sensible heat ratio 0.93

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.





Project Summary

b
Iron Shield Heating & Air LLC

Job: Fleming-RH
Date: Apr 09, 2026
By: Iron Shield Heating and ...
Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

Notes:

Design Information

Weather: Ocala, FL, US

Winter Design Conditions

Outside db 34 °F
Inside db 70 °F
Design TD 36 °F

Ventilation Method MJ8

Heating Summary

Structure 19964 Btuh
Ducts (R-6.0) 0 Btuh
Central vent (0 cfm) 0 Btuh

Humidification 0 Btuh
Piping 0 Btuh
Equipment load 19964 Btuh

Infiltration

Method Blower door
Shielding / stories 3 (partial) / 1
Pressure /ACH /AVF 50 Pa / 7.0 / 1928 cfm

	Heating	Cooling
Area (ft ²)	472	472
Volume (ft ³)	4275	4275
Air changes/hour	0.88	0.49
Equiv. AVF (cfm)	63	35

Heating Equipment Summary

Make Daikin
Trade DAIKIN
Model RXC12AXVJU
AHRI ref 213895723

Efficiency 9 HSPF2
Heating input
Heating output 11300 Btuh @ 47°F
Temperature rise 26 °F
Actual air flow 400 cfm
Air flow factor 0.020 cfm/Btuh
Static pressure 0 in H2O
Space thermostat
Capacity balance point = 45 °F

Backup: Daikin
Input = 5 kW, Output = 34121 Btuh, 100 AFUE

Summer Design Conditions

Outside db 91 °F
Inside db 75 °F
Design TD 16 °F
Daily range M
Relative humidity 50 %
Moisture difference 44 gr/lb

Sensible Cooling Equipment Load Sizing

Structure 9926 Btuh
Ducts (R-6.0) 0 Btuh
Central vent (0 cfm) 0 Btuh

Blower 0 Btuh

Use manufacturer's data y
Rate/swing multiplier 1.00
Equipment sensible load 9926 Btuh

Latent Cooling Equipment Load Sizing

Structure 1442 Btuh
Ducts 0 Btuh
Central vent (0 cfm) 0 Btuh

Equipment latent load 1442 Btuh

Equipment Total Load (Sen+Lat) 11368 Btuh
Req. total capacity at 0.70 SHR 1.2 ton

Cooling Equipment Summary

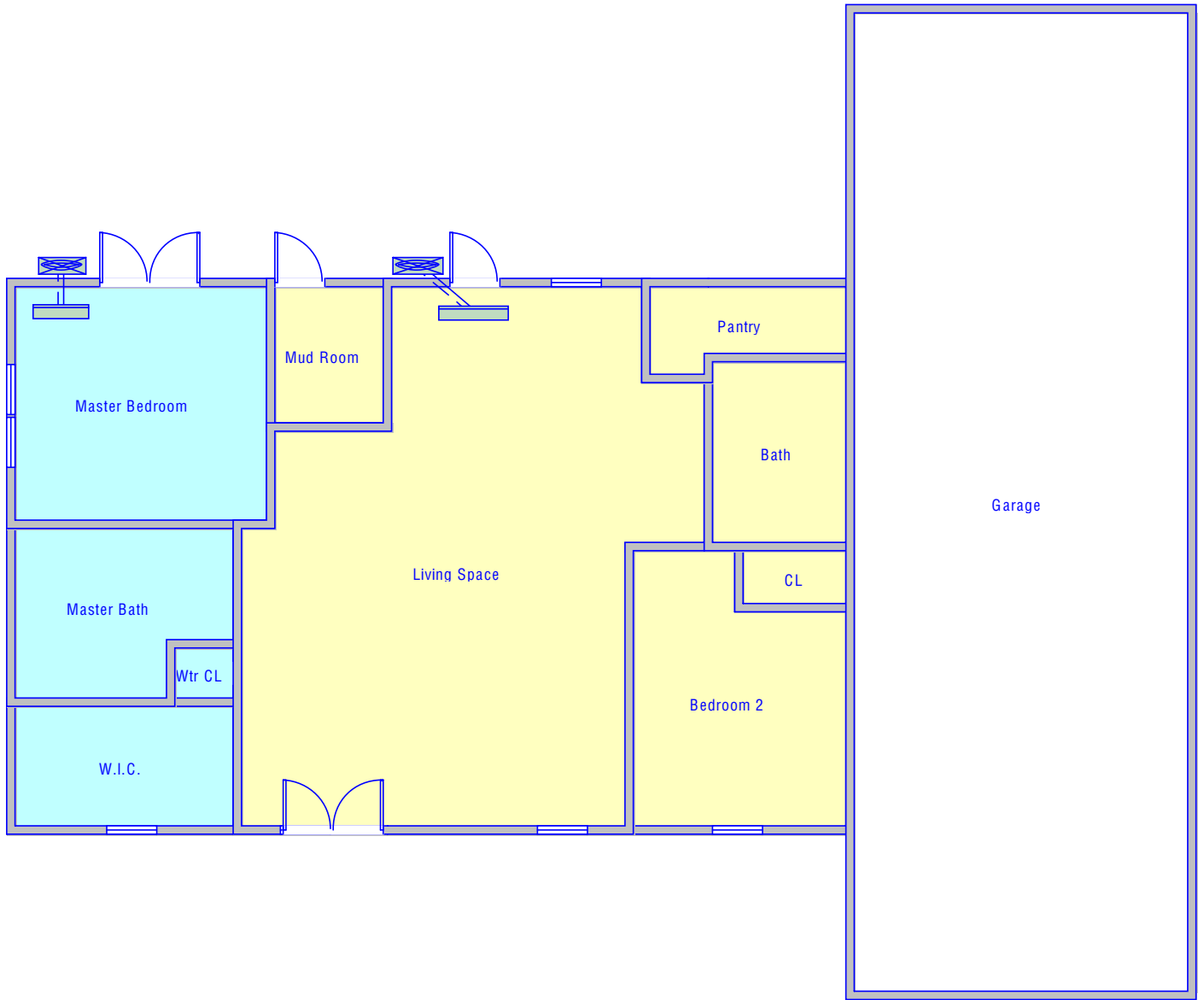
Make Daikin
Trade DAIKIN
Cond RXC12AXVJU
Coil FTXC12AXVJU
AHRI ref 213895723
Efficiency 8.5 EER2, 18 SEER2
Sensible cooling 8400 Btuh
Latent cooling 3600 Btuh
Total cooling 12000 Btuh
Actual air flow 400 cfm
Air flow factor 0.040 cfm/Btuh
Static pressure 0 in H2O
Load sensible heat ratio 0.87

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.





Sheet 1



8'-0"

Job #: Fleming-RH
Performed by Iron Shield Heating and Air
Fleming Residence

Iron Shield Heating & Air LLC
7660 SE 59TH Court #105
Ocala, FL 34472
Phone: 352-704-0334 License: CAC1821882
Ironshieldheatingandair.com victor@ironshieldheatingandair.com

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Manual S Compliance Report

a

Iron Shield Heating & Air LLC

Job: Fleming-RH
Date: Apr 09, 2026
By: Iron Shield Heating and ...
Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

Cooling Equipment

Design Conditions

Outdoor design DB:	91.4°F	Sensible gain:	19464 Btuh	Entering coil DB:	75.0°F
Outdoor design WB:	75.7°F	Latent gain:	1402 Btuh	Entering coil WB:	62.5°F
Indoor design DB:	75.0°F	Total gain:	20866 Btuh		
Indoor RH:	50%	Estimated airflow:	0 cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP			
Manufacturer:	Daikin	Model:	RXC24AXVJU+FTXC24AXVJU	
Actual airflow:	747 cfm			
Sensible capacity:	15680 Btuh		81% of load	
Latent capacity:	6720 Btuh		479% of load	
Total capacity:	22400 Btuh		107% of load	SHR: 70%

Heating Equipment

Design Conditions

Outdoor design DB:	34.0°F	Heat loss:	41949 Btuh	Entering coil DB:	70.0°F
Indoor design DB:	70.0°F				

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP			
Manufacturer:	Daikin	Model:	RXC24AXVJU+FTXC24AXVJU	
Actual airflow:	747 cfm			
Output capacity:	23000 Btuh		55% of load	Capacity balance: 45 °F
Supplemental heat required:	18949 Btuh			Economic balance: -99 °F

Backup equipment type:	Elec strip			
Manufacturer:	Daikin	Model:		
Actual airflow:	747 cfm			
Output capacity:	16.0 kW	130% of load	Temp. rise:	67 °F

Meets all requirements of ACCA Manual S.





Residential Plans Examiner Review Form for HVAC System Design (Loads, Equipment, Ducts)

Form
RPER 2.0

521000 Header Information

Contractor Iron Shield Heating & Air LLC
 Mechanical license# CAC1821882
 Building plan # Alt Key 20849
 Home address (Street or Lot#, Block, Subdivision) , a

Applicable Attachments
 Manual J1 Form and Worksheet A: Yes No
 OEM performance data (heating, cooling, blower): Yes No
 Duct distribution sketch: Yes No
 IRC Table R301.2 (climate & geographic design criteria) Yes No

HVAC LOAD CALCULATION (IRC M1401.3)

Manual J Design Criteria and Loads

Location		Summer Design Conditions		Manual J Loads	
Elevation	87 ft	Outdoor Cooling Temp	91 °F	Total Heat Loss	41949 Btuh
Altitude Correction Factor	1.00	Indoor Cooling Temp	75 °F	Sensible Heat Gain	19464 Btuh
Latitude	29 °N	Cooling Temp Diff	16 °F	Latent Heat Gain	1402 Btuh
		Indoor Summer Design RH	50 %	Total Heat Gain	20866 Btuh
		Coincident Wet Bulb Temp	76 °F		
Winter Design Conditions					
Outdoor Winter Temp	34 °F				
Indoor Winter Temp	70 °F				
Heating Temp Diff	36 °F				

The heat loss/gain was calculated in accordance with ACCA Manual J? **Y** **N**

HVAC EQUIPMENT SELECTION (IRC M1401.3)

Heating Equipment
 Furnace Boiler Electric Heat
 Single Speed Multi Stage Modulating

Cooling Equipment
 Air Conditioner Heat Pump
 Air-to-Air Geothermal Open Loop Geothermal Closed Loop
 Single Speed Multi Stage Variable Speed

Model _____

Output	23000 Btuh	Sizing Value	41949 Btuh	Sensible	15680 Btuh	Sizing Value	20866 Btuh
Supplemental Heat	18949 Btuh	Sizing Limit	175.0 %	Latent	6720 Btuh	Sizing Limit	115.0 %
		Load: Capacity	130.1 %	Total	22400 Btuh	Load: Capacity	107.3 %

Size Factor is within Manual S Size Limit? **Y** **N** Size Factor is within Manual S Size Limit? **Y** **N**

HVAC DUCT DISTRIBUTION DESIGN (IRC M1601.1)

Design airflow	747 cfm	Longest Supply Duct	0 ft	Duct Materials Used	
External Static Pressure (ESP)	0 in H2O	Longest Return Duct	0 ft	Trunk Duct:	<input type="checkbox"/> Duct Board <input type="checkbox"/> Sheet Metal
Component Pressure Loss (CPL)	0 in H2O	Total Effective Length (TEL)	0 ft		<input type="checkbox"/> Flex <input type="checkbox"/> Lined Sheet Metal <input type="checkbox"/> Other
Available static pressure (ASP)	0 in H2O	Friction Rate	0 in/100ft	Branch Duct:	<input type="checkbox"/> Duct Board <input type="checkbox"/> Sheet Metal
ESP - CPL = ASP		(ASP x 100) / TEL = Friction Rate			<input type="checkbox"/> Flex <input type="checkbox"/> Lined Sheet Metal <input type="checkbox"/> Other

Ducts are sized per Manual D? **Y** **N**

I declare the load calculation, equipment selection, and duct system design were rigorously performed based on the building plan listed above and understand the claims made on these forms may be subject to review and verification.

Contractor's printed name: _____

Contractor's signature: victor oquendo Date: 00000000



Residential Plans Examiner Review Form for HVAC System Design (Loads, Equipment, Ducts)

Form
RPER 2.0

521000 Header Information

Contractor Iron Shield Heating & Air LLC
 Mechanical license# CAC1821882
 Building plan # Alt Key 20849
 Home address (Street or Lot#, Block, Subdivision) , b

Applicable Attachments
 Manual J1 Form and Worksheet A: Yes No
 OEM performance data (heating, cooling, blower): Yes No
 Duct distribution sketch: Yes No
 IRC Table R301.2 (climate & geographic design criteria) Yes No

HVAC LOAD CALCULATION (IRC M1401.3)

Manual J Design Criteria and Loads

Location		Summer Design Conditions		Manual J Loads	
Elevation	87 ft	Outdoor Cooling Temp	91 °F	Total Heat Loss	19964 Btuh
Altitude Correction Factor	1.00	Indoor Cooling Temp	75 °F	Sensible Heat Gain	9926 Btuh
Latitude	29 °N	Cooling Temp Diff	16 °F	Latent Heat Gain	1442 Btuh
		Indoor Summer Design RH	50 %	Total Heat Gain	11368 Btuh
		Coincident Wet Bulb Temp	76 °F		
Winter Design Conditions					
Outdoor Winter Temp	34 °F				
Indoor Winter Temp	70 °F				
Heating Temp Diff	36 °F				

The heat loss/gain was calculated in accordance with ACCA Manual J? Y N

HVAC EQUIPMENT SELECTION (IRC M1401.3)

Heating Equipment

- Furnace Boiler Electric Heat
 Single Speed Multi Stage Modulating

Model _____

Output	11300 Btuh	Sizing Value	19964 Btuh
Supplemental Heat	8664 Btuh	Sizing Limit	175.0 %
		Load: Capacity	170.9 %

Size Factor is within Manual S Size Limit? Y N

Cooling Equipment

- Air Conditioner Heat Pump
 Air-to-Air Geothermal Open Loop Geothermal Closed Loop
 Single Speed Multi Stage Variable Speed

Model RXC12AXVJU+FTXC12AXVJU

Sensible	8400 Btuh	Sizing Value	11368 Btuh
Latent	3600 Btuh	Sizing Limit	115.0 %
Total	12000 Btuh	Load: Capacity	105.6 %

Size Factor is within Manual S Size Limit? Y N

HVAC DUCT DISTRIBUTION DESIGN (IRC M1601.1)

Design airflow	400 cfm	Longest Supply Duct	0 ft	Duct Materials Used
External Static Pressure (ESP)	0 in H2O	Longest Return Duct	0 ft	Trunk Duct: <input type="checkbox"/> Duct Board <input type="checkbox"/> Sheet Metal
Component Pressure Loss (CPL)	0 in H2O	Total Effective Length (TEL)	0 ft	<input type="checkbox"/> Flex <input type="checkbox"/> Lined Sheet Metal <input type="checkbox"/> Other
Available static pressure (ASP)	0 in H2O	Friction Rate	0 in/100ft	Branch Duct: <input type="checkbox"/> Duct Board <input type="checkbox"/> Sheet Metal
ESP - CPL = ASP		(ASP x 100) / TEL = Friction Rate		<input type="checkbox"/> Flex <input type="checkbox"/> Lined Sheet Metal <input type="checkbox"/> Other

Ducts are sized per Manual D? Y N

I declare the load calculation, equipment selection, and duct system design were rigorously performed based on the building plan listed above and understand the claims made on these forms may be subject to review and verification.

Contractor's printed name: _____

Contractor's signature: victor oquendo Date: 00000000





Duct System Summary

a

Iron Shield Heating & Air LLC

Job: Fleming-RH
Date: Apr 09, 2026
By: Iron Shield Heating and ...
Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

	Heating	Cooling
External static pressure	0 in H2O	0 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0 in H2O	0 in H2O
Supply / return available pressure	0.000 / 0.000 in H2O	0.000 / 0.000 in H2O
Lowest friction rate	0 in/100ft	0 in/100ft
Actual air flow	0 cfm	0 cfm
Total effective length (TEL)		0 ft





Duct System Summary

b

Iron Shield Heating & Air LLC

Job: Fleming-RH
Date: Apr 09, 2026
By: Iron Shield Heating and ...
Plan: Alt Key 20849

7660 SE 59TH Court #105, Ocala, FL 34472 Phone: 352-704-0334 Email: victor@ironshieldheatingandair.com Web: Ironshieldheatingandair.com License: CAC1821882

Project Information

For: Fleming Residence

	Heating	Cooling
External static pressure	0 in H2O	0 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0 in H2O	0 in H2O
Supply / return available pressure	0.000 / 0.000 in H2O	0.000 / 0.000 in H2O
Lowest friction rate	0 in/100ft	0 in/100ft
Actual air flow	0 cfm	0 cfm
Total effective length (TEL)		0 ft