FORM R405-2023

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Fleming Residence	Builder Name:	
Street:	2009 SW Wilson Springs ROAD	Permit Office:	Marion County
City, State, Zip:	Fort White, FL 32038	Permit Number:	
Owner:	Fleming Residence	Jurisdiction:	521000
Design Location:	FL, Ocala	County:	Columbia (Florida Climate Zone 2)

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: / SHGC:	Dbl, 0.470 / 0.41	96.00
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		

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
    a. Electric conventional (40 gal) — Cap: 40 gal, UEF: 0.93
    b. Conservation features (None)
15. Credits: Ceiling Fan;Cross Vent,Pstat

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.

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

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	Address type:	Street address
Building Type:	FLAsBuilt	Bathrooms:	2	Lot#:	
Owner:	Fleming Residence	Conditioned Area:	1650	Block/Subdivision:	
# of Units:	1	Total Stories:	1	Platbook:	
Builder Name:		Worst Case:	No	Street:	2009 SW Wilson Sprin
Permit Office:	Marion County	Rotate Angle:	0	County:	Columbia
Jurisdiction:	521000	Cross Ventilation:	No	City, State, Zip:	Fort White, FL 32038
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 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp 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 ft²	10598.62 ft³
2	b	471.99 ft²	4274.88 ft³

SPACES

#		Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	W.I.C.	104.14 ft²	937.25 ft³	No	0	0	1	Yes	Yes	Yes
2	Wtr CL	14.00 ft²	126.00 ft³	No	0	0	1	Yes	Yes	Yes
3	Master Bath	130.89 ft²	1178.00 ft³	No	0	0	1	Yes	Yes	Yes
4	Master Bedroom	225.96 ft²	2033.62 ft³	No	2	1	1	Yes	Yes	Yes
5	Mud Room	60.67 ft²	546.00 ft³	No	0	0	1	Yes	Yes	Yes
6	Bedroom 2	200.81 ft²	1807.25 ft³	No	1	1	1	Yes	Yes	Yes
7	CL	24.44 ft²	220.00 ft³	No	0	0	1	Yes	Yes	Yes
8	Living Space	735.56 ft²	6620.06 ft³	Yes	0	0	1	Yes	Yes	Yes
9	Bath	96.33 ft²	867.00 ft³	No	0	0	1	Yes	Yes	Yes
10	Pantry	59.81 ft²	538.31 ft³	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 ft²	1.180	0	1.0	0
	2	Bg floor, heavy dry or light damp soil, on grade	Wtr CL	0 ft	0	14.00 ft²	1.180	0	1.0	0
	3	Bg floor, heavy dry or light damp soil, on grade	Master Bath	11 ft	0	130.89 ft²	1.180	0	1.0	0
	4	Bg floor, heavy dry or light damp soil, on grade	Master Bedroom	30 ft	0	225.96 ft²	1.180	0	1.0	0
	5	Bg floor, heavy dry or light damp soil, on grade	Mud Room	7 ft	0	60.67 ft²	1.180	0	1.0	0
	6	Bg floor, heavy dry or light damp soil, on grade	Bedroom 2	27 ft	0	200.81 ft²	1.180	0	1.0	0
	7	Bg floor, heavy dry or light damp soil, on grade	CL	4 ft	0	24.44 ft²	1.180	0	1.0	0
	8	Bg floor, heavy dry or light damp soil, on grade	Living Space	39 ft	0	735.56 ft²	1.180	0	1.0	0
	9	Bg floor, heavy dry or light damp soil, on grade	Bath	11 ft	0	96.33 ft²	1.180	0	1.0	0
	10	Bg floor, heavy dry or light damp soil, on grade	Pantry	17 ft	0	59.81 ft²	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 ft²	939 ft²	Dark	N	0.75	No	0.90	No	0	0
	2	Flat	RoofMetal	1213 ft²	2024 ft²	Dark	N	0.75	No	0.90	No	0	0
	3	Flat	RoofMetal	475 ft²	558 ft²	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 ft²	0	Wood
	2	Rf/clg ceiling, mtl roof mat, mtl co	Wtr CL	30	0.024	14.00 ft²	0	Wood
	3	Rf/clg ceiling, mtl roof mat, mtl co	Master Bath	30	0.024	130.89 ft²	0	Wood
	4	Rf/clg ceiling, mtl roof mat, mtl co	Master Bedroom	30	0.024	225.96 ft²	0	Wood
	5	Rf/clg ceiling, mtl roof mat, mtl co	Mud Room	30	0.024	60.67 ft²	0	Wood
	6	Rf/clg ceiling, mtl roof mat, mtl co	Bedroom 2	30	0.024	200.81 ft²	0	Wood
	7	Rf/clg ceiling, mtl roof mat, mtl co	CL	30	0.024	24.44 ft²	0	Wood
	8	Rf/clg ceiling, mtl roof mat, mtl co	Living Space	30	0.024	735.56 ft²	0	Wood
	9	Rf/clg ceiling, mtl roof mat, mtl co	Bath	30	0.024	96.33 ft²	0	Wood
	10	Rf/clg ceiling, mtl roof mat, mtl co	Pantry	30	0.024	59.81 ft²	0	Wood

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WALLS (Total Exposed Area = 1497 sq.ft.)

✓	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height 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	Width In	Height Ft	Height 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	Overhang 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	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Heating	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[X] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[X] Oct	[X] Nov	[X] Dec

Thermostat Schedule: Schedule Type	Florida Building Code, 8th Edition (2023)	Hours 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	75
	PM	75	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	75
	PM	75	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	72
	PM	72	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	72
	PM	72	72	72	72	72	72	72	72	72	72	72	72

FORM R405-2023

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX = 95

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

1. New home or addition	1.	New (From Plans)
2. Single-family or multiple-family	2.	Single-Family
3. Number of units, if multiple-family	3.	1
4. Number of bedrooms	4.	2
5. Is this a worst case? (yes/no)	5.	No
6. Conditioned floor area (ft²)	6.	1649.61
7. Windows, type and area*		
a. U-Factor:	7a.	Dbl, 0.470
b. Solar Heat Gain Coefficient (SHGC):	7b.	0.41
c. Area (ft²)	7c.	96
8. Skylights		
a. U-Factor:	8a.	
b. Solar Heat Gain Coefficient (SHGC):	8b.	
9. Floor type, insulation level		
a. Slab-on-grade (R-value):	9a.	0.0
b. Wood, raised (R-value):	9b.	
c. Concrete, raised (R-value)	9c.	
10 Wall type and insulation:		
a. Exterior:		
1. Wood/mtl frame (Insulation R-value):	10a1.	13.0
2. Masonry (Insulation R-value):	10a2.	
b. Adjacent:		
1. Wood/mtl frame (Insulation R-value):	10b1.	13.0
2. Masonry (Insulation R-value):	10b2.	
11. Ceiling type and insulation level		
a. Under attic (R-value):	11a.	
b. Single assembly (R-value):	11b.	30.0
c. Knee walls/skylight walls (R-value)	11c.	
d. Radiant barrier installed	11d.	No

12. Ducts, location & insulation level		
a. Supply ducts:		R
b. Return ducts:		R
c. AHU location:		
13. Cooling systems	Capacity	34.4
a. Split system:	SEER	18.00
b. Single package:	SEER	
c. Ground/water source:	SEER/COP	
d. Room unit/PTAC:	EER	
e. Other:		
14. Heating systems	Capacity	34.3
a. Split system heat pump:	HSPF	9.00
b. Single package heat pump:	HSPF	
c. Electric resistance:	COP	
d. Gas furnace, natural gas:	AFUE	
e. Gas furnace, LPG:	AFUE	
f. Other:		
15. Water heating systems		
a. Electric resistance:		0.93 UEF
b. Gas fired, natrual gas:		
c. Gas fired, LPG:		
d. Solar system with tank:		
e. Dedicated heat pump with tank:		
f. Heat recovery unit:		HeatRec%
g. Other:		
16. HVAC credits claimed (Performance Method)		
a. Ceiling fans:		Yes
b. Cross ventilation:		Yes
c. Whole house fan:		
d. Multizone cooling credit:		Yes
e. Multizone heating credit:		Yes
f. Programmable thermostat:		Yes

*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: 5/4/26

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 Statues) 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 ENVELOP

☐ **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 labeledin accordance with UL 127, the doors shall be tested and listed for the fireplace. Where using tight-figging 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:

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

$$\frac{\text{\_\_\_\_\_}}{\text{CFM(50)}} \times 60 \div \frac{14874}{\text{Building Volume}} = \frac{\text{\_\_\_\_\_}}{\text{ACH(50)}}$$

☐ **PASS**

☑ When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.

Method for calculating building volume:

- ☐ Retrieved from architectural plans
- ☑ Code software calculated
- ☐ Field measured and calculated

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 percentof 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 Perscriptive, Performance or ERI Method Compliance
2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction: 521000	Permit Number:

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**

_____ ÷ 1650 = _____ Qn
Total of all systems | Total Conditioned Square Footage

☐ **PASS** ☐ **FAIL**

☐ **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)*

☑ **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 Statues.

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 Infared 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 Infared Emittance	0.90
Attic Vent Area (ft²)	0.00
Crawlspace Vent Area (ft²)	n/a
Exposed Masonry Floor Area (ft²)	573.11
Carpet & Pad R-Value	2.0
Door Area (ft²)	0.00
Door U-Factor	n/a
North Window Area (ft²)	11.25
South Window Area (ft²)	24.00
East Window Area (ft²)	0.00
West Window Area (ft²)	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
Outside db (°F)	34	91
Inside db (°F)	70	75
Design TD (°F)	36	16
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	32	44

Infiltration

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

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.

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
Outside db (°F)	34	91
Inside db (°F)	70	75
Design TD (°F)	36	16
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	32	44

Infiltration

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

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.

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
Outside db (°F)	34	91
Inside db (°F)	70	75
Design TD (°F)	36	16
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	32	44

Infiltration

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

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

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

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	

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.

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

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

Infiltration

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

	Heating	Cooling
Area (ft²)	1650	1650
Volume (ft³)	14874	14874
Air changes/hour	0.54	0.30
Equiv. AVF (cfm)	135	75

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

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	

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	

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	41949	Btuh
Ducts (R-6.0)	0	Btuh
Central vent (0 cfm)	0	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	41949	Btuh

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

Infiltration

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

	Heating	Cooling
Area (ft²)	1178	1178
Volume (ft³)	10599	10599
Air changes/hour	0.41	0.23
Equiv. AVF (cfm)	72	40

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

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

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	

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	19964	Btuh
Ducts (R-6.0)	0	Btuh
Central vent (0 cfm)	0	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	19964	Btuh

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

Infiltration

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

	Heating	Cooling
Area (ft²)	472	472
Volume (ft³)	4275	4275
Air changes/hour	0.88	0.49
Equiv. AVF (cfm)	63	35

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

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

Cooling Equipment Summary

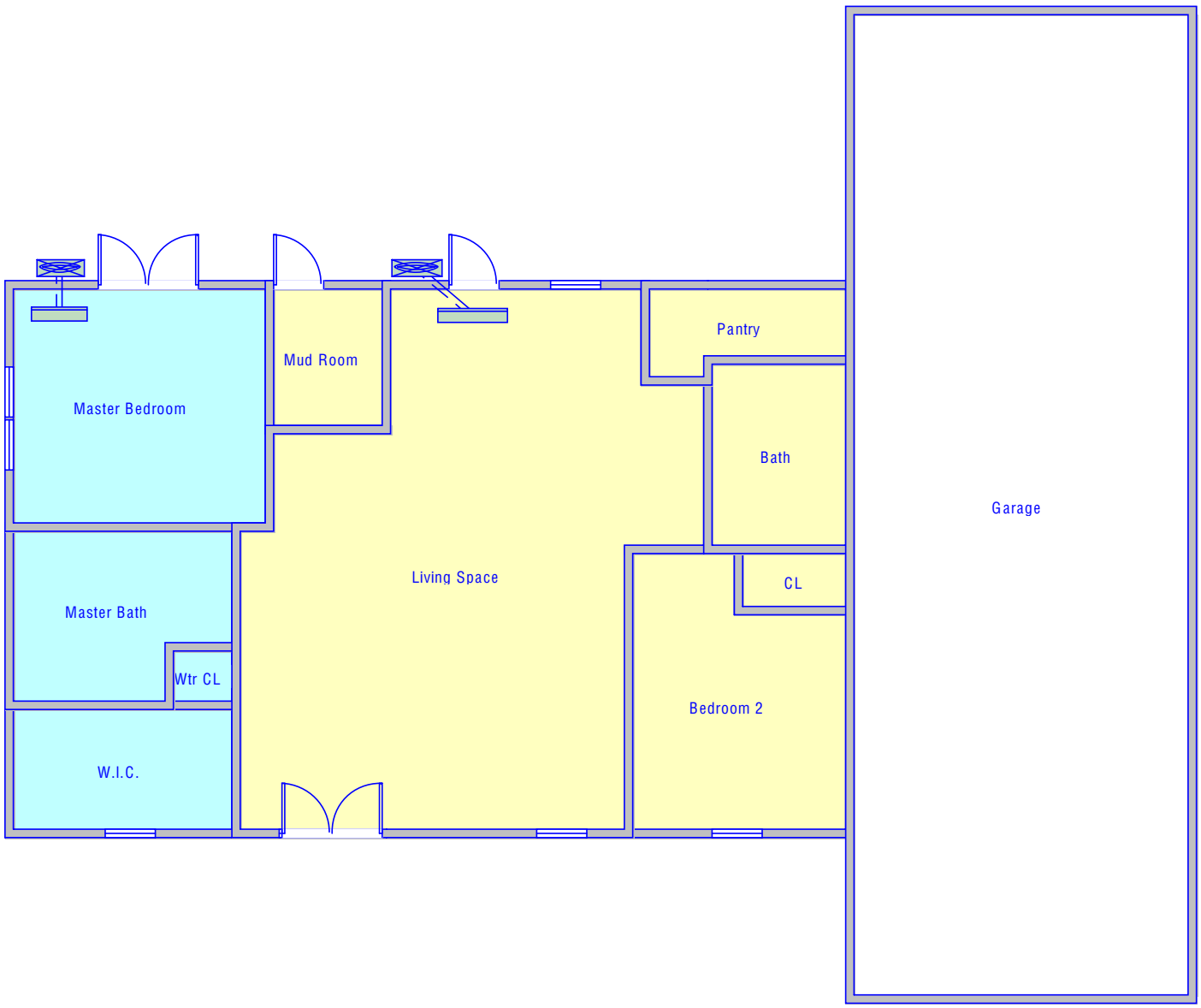
Make	Daikin
Trade	DAIKIN
Cond	RXC12AXVJU
Coil	FTXC12AXVJU
AHRI ref	213895723

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.

N

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.

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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
Victor Oquendo
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

Elevation	87	ft
Altitude Correction Factor	1.00	
Latitude	29	°N

Winter Design Conditions

Outdoor Winter Temp	34	°F
Indoor Winter Temp	70	°F
Heating Temp Diff	36	°F

Summer Design Conditions

Outdoor Cooling Temp	91	°F
Indoor Cooling Temp	75	°F
Cooling Temp Diff	16	°F
Indoor Summer Design RH	50	%
Coincident Wet Bulb Temp	76	°F

Manual J Loads

Total Heat Loss	41949	Btuh
Sensible Heat Gain	19464	Btuh
Latent Head Gain	1402	Btuh
Total Heat Gain	20866	Btuh

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	23000 Btuh	Sizing Value	41949	Btuh	
Supplemental Heat	18949 Btuh	Sizing Limit	175.0	%	
		Load: Capacity	130.1	%	

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: RXC24AXVJU+FTXC24AXVJU

Sensible	15680 Btuh	Sizing Value	20866	Btuh	
Latent	6720 Btuh	Sizing Limit	115.0	%	
Total	22400 Btuh	Load: Capacity	107.3	%	

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
External Static Pressure (ESP)	0	in H2O	Longest Return Duct	0	ft
Component Pressure Loss (CPL)	0	in H2O	Total Effective Length (TEL)	0	ft
Available static pressure (ASP)	0	in H2O	Friction Rate	0	in/100ft
ESP – CPL = ASP			(ASP x 100) / TEL = Friction Rate		

Duct Materials Used
Trunk Duct: ☐ Duct Board ☐ Sheet Metal ☐ Flex ☐ Lined Sheet Metal ☐ Other
Branch Duct: ☐ Duct Board ☐ Sheet Metal ☐ Flex ☐ Lined Sheet Metal ☐ 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:

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
Victor Oquendo
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

Elevation	87	ft
Altitude Correction Factor	1.00	
Latitude	29	°N

Winter Design Conditions

Outdoor Winter Temp	34	°F
Indoor Winter Temp	70	°F
Heating Temp Diff	36	°F

Summer Design Conditions

Outdoor Cooling Temp	91	°F
Indoor Cooling Temp	75	°F
Cooling Temp Diff	16	°F
Indoor Summer Design RH	50	%
Coincident Wet Bulb Temp	76	°F

Manual J Loads

Total Heat Loss	19964	Btuh
Sensible Heat Gain	9926	Btuh
Latent Head Gain	1442	Btuh
Total Heat Gain	11368	Btuh

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
External Static Pressure (ESP)	0	in H2O	Longest Return Duct	0	ft
Component Pressure Loss (CPL)	0	in H2O	Total Effective Length (TEL)	0	ft
Available static pressure (ASP)	0	in H2O	Friction Rate	0	in/100ft
ESP – CPL = ASP			(ASP x 100) / TEL = Friction Rate		

Duct Materials Used
Trunk Duct: ☐ Duct Board ☐ Sheet Metal ☐ Flex ☐ Lined Sheet Metal ☐ Other
Branch Duct: ☐ Duct Board ☐ Sheet Metal ☐ Flex ☐ Lined Sheet Metal ☐ 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: □□□□□□□□

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	