

FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Paul Wiser- Frowick
 Street: Paul Wiser- Frowick
 City, State, Zip: Odessa, FL
 Owner: Paul Wiser- Frowick
 Design Location: FL, Gainesville

Builder Name: Spann's Heating and Air INC.
 Permit Office:
 Permit Number:
 Jurisdiction: *Columbia*
 County: Pasco (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 (ft ²)	1352
Conditioned floor area below grade (ft ²)	0
7. Windows(168.0 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.40 168.00 ft ²
SHGC:	SHGC=0.20
b. U-Factor:	N/A ft ²
SHGC:	
c. U-Factor:	N/A ft ²
SHGC:	
d. U-Factor:	N/A ft ²
SHGC:	
Area Weighted Average Overhang Depth:	2.000 ft.
Area Weighted Average SHGC:	0.200
8. Floor Types (1350.1 sqft.)	Insulation Area
a. Raised Floor	R=24.0 1350.10 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²

9. Wall Types (1716.0 sqft.)	Insulation Area
a. Log - 8 inch, Exterior	R=0.0 1716.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²
d. N/A	R= ft ²
10. Ceiling Types (1352.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=38.0 1352.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²
11. Ducts	R ft ²
a. Sup: Attic, Ret: Attic, AH: Attic	6 120
12. Cooling systems	kBtu/hr Efficiency
a. Central Unit	30.0 SEER:14.00
13. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	30.0 HSPF:8.20
14. Hot water systems	
a. Electric	Cap: 40 gallons
	EF: 0.960
b. Conservation features	
None	
15. Credits	None

Glass/Floor Area: 0.124

Total Proposed Modified Loads: 47.92

Total Baseline Loads: 55.40

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: *Paul Wiser*DATE: *1-22-2021*

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code

OWNER/AGENT: *Paul Wiser*DATE: *2/22/21*

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.



BUILDING OFFICIAL: _____

DATE: _____

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 7.00 ACH50 (R402.4.1.2).
- Compliance with a proposed duct leakage Qn requires a Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.020 Qn for whole house.

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Paul Wiser- Frowick	Bedrooms:	2	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1352	Lot #	
Owner Name:	Paul Wiser- Frowick	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Spann's Heating and Air INC.	Rotate Angle:	0	Street:	Paul Wiser- Frowick
Permit Office:		Cross Ventilation:	No	County:	pasco
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Odessa , FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

✓	Design Location	TMY Site	Design Temp 97.5 %	2.5 %	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Entire House	1352	15860

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Bedroom 2	150	1350	No	2	1	1	No	Yes	Yes
2	Bath	50	450	No	0		1	No	Yes	Yes
3	Master Bedroom	156	1404	No	2	1	1	No	Yes	Yes
4	Kitchen	442	5746	No	0		1	No	Yes	Yes
5	Living Room	481	6253	No	0		1	No	Yes	Yes
6	Closet	43	387	No	0		1	No	Yes	Yes
7	1/2 Bath	30	270	No	0		1	No	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet
_____	1	Raised Floor	Bedroom 2	----	----	150 ft²	24	0	1	0
_____	2	Raised Floor	Bath	----	----	49.5 ft²	24	0	1	0
_____	3	Raised Floor	Master Bedroom	----	----	156.3 ft²	24	0	1	0
_____	4	Raised Floor	Kitchen	----	----	441.5 ft²	24	0	1	0
_____	5	Raised Floor	Living Room	----	----	480.5 ft²	24	0	1	0
_____	6	Raised Floor	Closet	----	----	42.5 ft²	24	0	1	0
_____	7	Raised Floor	1/2 Bath	----	----	29.8 ft²	24	0	1	0

INPUT SUMMARY CHECKLIST REPORT

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
✓	1	Gable or Shed	Metal	1423 ft²	224 ft²	Unfinishe	0.6	No	0.4	No	0	18.4

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
✓	1	Full attic	Vented	300	1350 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
✓	1	Under Attic (Vented)	Bedroom 2	38	Blown	150 ft²	0.1	Wood
✓	2	Under Attic (Vented)	Bath	38	Blown	50 ft²	0.1	Wood
✓	3	Under Attic (Vented)	Master Bedroom	38	Blown	156 ft²	0.1	Wood
✓	4	Under Attic (Vented)	Kitchen	38	Blown	442 ft²	0.1	Wood
✓	5	Under Attic (Vented)	Living Room	38	Blown	481 ft²	0.1	Wood
✓	6	Under Attic (Vented)	Closet	38	Blown	43 ft²	0.1	Wood
✓	7	Under Attic (Vented)	1/2 Bath	38	Blown	30 ft²	0.1	Wood

WALLS

✓	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
✓	1	N	Exterior	Log - 8 inch	Bedroom 2	0.01	12	6	9	0	112.5 ft²	0	0	0.8	0
✓	2	W	Exterior	Log - 8 inch	Bedroom 2	0.01	12	0	9	0	108.0 ft²	0	0	0.8	0
✓	3	W	Exterior	Log - 8 inch	Bath	0.01	5	6	9	0	49.5 ft²	0	0	0.8	0
✓	4	S	Exterior	Log - 8 inch	Master Bedro	0.01	12	6	9	0	112.5 ft²	0	0	0.8	0
✓	5	W	Exterior	Log - 8 inch	Master Bedro	0.01	12	6	9	0	112.5 ft²	0	0	0.8	0
✓	6	N	Exterior	Log - 8 inch	Kitchen	0.01	32	6	13	0	422.5 ft²	0	0	0.8	0
✓	7	E	Exterior	Log - 8 inch	Kitchen	0.01	11	0	13	0	143.0 ft²	0	0	0.8	0
✓	8	E	Exterior	Log - 8 inch	Living Room	0.01	15	6	13	0	201.5 ft²	0	0	0.8	0
✓	9	S	Exterior	Log - 8 inch	Living Room	0.01	32	6	13	0	422.5 ft²	0	0	0.8	0
✓	10	E	Exterior	Log - 8 inch	1/2 Bath	0.01	3	6	9	0	31.5 ft²	0	0	0.8	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
✓	1	E	Insulated	Kitchen	None	.4	3		7		21 ft²
✓	2	S	Insulated	Living Room	None	.4	3		7		21 ft²

INPUT SUMMARY CHECKLIST REPORT

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
✓	1	W	2	Vinyl	Double (Clear)	Yes	0.4	0.2	N	15.0 ft²	2 ft 0 in	1 ft 0 in	None	None
✓	2	W	3	Vinyl	Double (Clear)	Yes	0.4	0.2	N	9.0 ft²	2 ft 0 in	1 ft 0 in	None	None
✓	3	S	4	Vinyl	Double (Clear)	Yes	0.4	0.2	N	30.0 ft²	2 ft 0 in	1 ft 0 in	None	None
✓	4	N	6	Vinyl	Double (Clear)	Yes	0.4	0.2	N	9.0 ft²	2 ft 0 in	1 ft 0 in	None	None
✓	5	N	6	Vinyl	Double (Clear)	Yes	0.4	0.2	N	30.0 ft²	2 ft 0 in	1 ft 0 in	None	None
✓	6	E	7	Vinyl	Double (Clear)	Yes	0.4	0.2	N	15.0 ft²	2 ft 0 in	1 ft 0 in	None	None
✓	7	S	9	Vinyl	Double (Clear)	Yes	0.4	0.2	N	60.0 ft²	2 ft 0 in	1 ft 0 in	None	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000522	1850.3	101.58	191.04	.4473	7

HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
✓	1	Electric Heat Pump/	Split	HSPF:8.2	30 kBtu/hr	1	sys#1

COOLING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
✓	1	Central Unit/	Split	SEER: 14	30 kBtu/hr	900 cfm	0.7	1	sys#1

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	None	Kitchen	0.96	40 gal	50 gal	120 deg	None

SOLAR HOT WATER SYSTEM

✓	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
✓	None	None			ft²		

DUCTS

✓	#	Location	Supply R-Value	Area	Location	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Coil
✓	1	Attic	6	120 ft²	Attic	120 ft²	Proposed Qn	Attic	--- cfm	27.0 cfm	0.02	0.50	1	1

INPUT SUMMARY CHECKLIST REPORT

TEMPERATURES

Programable Thermostat: N

Ceiling Fans:

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

Thermostat Schedule: HERS 2006 Reference

Hours

Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	80	80	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	80	80	78	78	78	78	78	78	78	78
Heating (WD)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	65	65	65	65	65	65	65	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft ²	0 ft	0.3	Bedroom 2
Default(8 lbs/sq.ft.	ft ²	ft	0.3	Bath
Default(8 lbs/sq.ft.	ft ²	ft	0.3	Master Bedroom
Default(8 lbs/sq.ft.	ft ²	ft	0.3	Kitchen
Default(8 lbs/sq.ft.	ft ²	ft	0.3	Living Room
Default(8 lbs/sq.ft.	ft ²	ft	0.3	Closet
Default(8 lbs/sq.ft.	ft ²	ft	0.3	1/2 Bath

Name:

Signature: _____

Rating Compant:

Date: _____

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 86

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. <u>New (From Plans)</u>	12. Ducts, location & insulation level
2. Single-family or multiple-family	2. <u>Single-family</u>	a) Supply ducts R <u>6.0</u>
3. No. of units (if multiple-family)	3. <u>1</u>	b) Return ducts R <u>6.0</u>
4. Number of bedrooms	4. <u>2</u>	c) AHU location Attic/Attic
5. Is this a worst case? (yes/no)	5. <u>No</u>	13. Cooling system: Capacity <u>30.0</u>
6. Conditioned floor area (sq. ft.)	6. <u>1352</u>	a) Split system SEER <u>14.0</u>
7. Windows, type and area		b) Single package SEER <u> </u>
a) U-factor:(weighted average)	7a. <u>0.400</u>	c) Ground/water source SEER/COP <u> </u>
b) Solar Heat Gain Coefficient (SHGC)	7b. <u>0.200</u>	d) Room unit/PTAC EER <u> </u>
c) Area	7c. <u>168.0</u>	e) Other <u> </u>
8. Skylights		14. Heating system: Capacity <u>30.0</u>
a) U-factor:(weighted average)	8a. <u>NA</u>	a) Split system heat pump HSPF <u>8.2</u>
b) Solar Heat Gain Coefficient (SHGC)	8b. <u>NA</u>	b) Single package heat pump HSPF <u> </u>
9. Floor type, insulation level:		c) Electric resistance COP <u> </u>
a) Slab-on-grade (R-value)	9a. <u> </u>	d) Gas furnace, natural gas AFUE <u> </u>
b) Wood, raised (R-value)	9b. <u>24.0</u>	e) Gas furnace, LPG AFUE <u> </u>
c) Concrete, raised (R-value)	9c. <u> </u>	f) Other <u> </u>
10. Wall type and insulation:		15. Water heating system
A. Exterior:		a) Electric resistance EF <u>0.96</u>
1. Wood frame (Insulation R-value)	10A1. <u> </u>	b) Gas fired, natural gas EF <u> </u>
2. Masonry (Insulation R-value)	10A2. <u> </u>	c) Gas fired, LPG EF <u> </u>
B. Adjacent:		d) Solar system with tank EF <u> </u>
1. Wood frame (Insulation R-value)	10B1. <u> </u>	e) Dedicated heat pump with tank EF <u> </u>
2. Masonry (Insulation R-value)	10B2. <u> </u>	f) Heat recovery unit HeatRec% <u> </u>
11. Ceiling type and insulation level		g) Other <u> </u>
a) Under attic	11a. <u>38.0</u>	16. HVAC credits claimed (Performance Method)
b) Single assembly	11b. <u> </u>	a) Ceiling fans <u> </u>
c) Knee walls/skylight walls	11c. <u> </u>	b) Cross ventilation <u>No</u>
d) Radiant barrier installed	11d. <u>No</u>	c) Whole house fan <u>No</u>
		d) Multizone cooling credit <u> </u>
		e) Multizone heating credit <u> </u>
		f) Programmable thermostat <u>No</u>

*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: Paul Wiser

Date: 2/22/21

Address of New Home: Paul Wiser- Frowick

City/FL Zip: Odessa, FL Fort White