

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Hartley - Mahn Residence		Builder Name: Hartley	
Street:		Permit Office:	
City, State, Zip: , FL,		Permit Number:	
Owner:		Jurisdiction:	
Design Location: FL, Gainesville		County: Columbia(Florida Climate Zone 2)	

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Glass/Floor Area:0.153	Total Proposed Modified Loads: 57.42	PASS
	Total Baseline Loads: 71.56	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: <u>Nichole Lewis</u> DATE: <u>9/30/2022</u> I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: <u>Andrew L. Thompson</u> DATE: <u>10/03/2022</u>	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. Reviewed for BUILDING OFFICIAL _____ DATE: _____  File Copy
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- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.
- Compliance with a proposed duct leakage Qn requires a PERFORMANCE Duct Leakage Test Report confirming duct leakage to outdoors, tested in accordance with ANSI/RESNET/ICC 380, is not greater than 0.000 Qn for whole house.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires a PERFORMANCE envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Hartley - Mahn Residence	Bedrooms:	4	Address type:	Street Address
Building Type:	User	Conditioned Area:	2510	Lot #:	---
Owner:		Total Stories:	1	Block/SubDivision:	---
		Worst Case:	No	PlatBook:	---
Builder Name:	Hartley	Rotate Angle:	0	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	, FL,
Family Type:	Detached	Terrain:	Suburban		
New/Existing:	New (From Plans)	Shielding:	Suburban		
Year Construct:	2022				
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_REGIONA	32	92	70	75	1305.5	51	Medium

BLOCKS

✓ Number	Name	Area	Volume
___ 1	Block1	2510	25100

SPACES

✓ Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___ 1	Main	2510	25100	Yes	4	4	Yes	Yes	Yes

FLOORS

(Total Exposed Area = 2510 sq.ft.)

✓ #	Floor Type	Space	Exposed Perim	Perimeter R-Value	Area	U-Factor	Joist R-Value	Tile	Wood	Carpet
___ 1	Slab-On-Grade Edge Ins	Main	273	0	2510 ft	0.547	---	0.22	0.22	0.56

ROOF

✓ #	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
___ 1	Hip	Composition shingles	3267 ft²	0 ft²	Medium	N	0.96	No	0.9	No	0	39.81

ATTIC

✓ #	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___ 1	Full attic	Vented	300	2510 ft²	N	N

CEILING

(Total Exposed Area = 2510 sq.ft.)

✓ #	Ceiling Type	Space	R-Value	Ins. Type	Area	U-Factor	Framing Frac.	Truss Type
___ 1	Under Attic (Vented)	Main	38.0	Blown	2510.0 ft²	0.024	0.11	Wood

INPUT SUMMARY CHECKLIST REPORT

WALLS

(Total Exposed Area = 2732 sq.ft.)

✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area sq.ft.	U-Factor	Sheath R-Value	Frm. Frac.	Solar Absor.	Below Grade
1	SW	Exterior	Frame - Wood	Main	15.0	55.0	4	10.0	0	553.3	0.079		0.23	0.20	0 %
2	NW	Exterior	Frame - Wood	Main	15.0	57.0	6	10.0	0	575.0	0.079		0.23	0.20	0 %
3	NE	Exterior	Frame - Wood	Main	15.0	77.0	4	10.0	0	773.3	0.079		0.23	0.20	0 %
4	SE	Exterior	Frame - Wood	Main	15.0	49.0	0	10.0	0	490.0	0.079		0.23	0.20	0 %
5	SE	Garage	Frame - Wood	Main	15.0	12.0	0	10.0	0	120.0	0.079		0.23	0.20	0 %
6	SW	Garage	Frame - Wood	Main	15.0	22.0	0	10.0	0	220.0	0.079		0.23	0.20	0 %

DOORS

(Total Exposed Area = 114 sq.ft.)

✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	SW	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²
2	SW	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²
3	NE	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²
4	NE	Exterior	Insulated	Main	None	0.46	3.00	0	8.00	0	24.0ft²
5	SW	Garage	Insulated	Main	None	0.46	2.00	8	6.00	8	17.8ft²

WINDOWS

(Total Exposed Area = 384 sq.ft.)

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Area	Depth	Overhang Separation	Interior Shade	Screening
1	SW	1	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	32.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
2	SW	1	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	90.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
3	SW	1	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	18.8ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
4	NW	2	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	18.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
5	NW	2	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	10.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
6	NE	3	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	48.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
7	NE	3	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	72.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
8	NE	3	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	22.5ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
9	NE	3	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	20.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
10	NE	3	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	25.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
11	SE	4	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	10.0ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
12	SE	4	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	6.8ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None
13	SE	4	Vinyl	Low-EDouble	Yes	0.34	0.23	N	N	11.3ft²	1.0 ft 6 in	1.0 ft 6 in	Drapes/blinds	None

INFILTRATION

✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)
1	Wholehouse	Proposed ACH(50)	0.00032	2092	114.76	215.44	0.1071	5.0	All

GARAGE

✓ #	Floor Area	Roof Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	556 ft²	556 ft²	64 ft	9 ft	1

MASS

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

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	---GeothermalHeatPump--- Entry Power Volt Current				Ducts	Block
1	Electric Heat Pump	None/Single		HSPF: 8.50	46.5		0.00	0.00	0.00	sys#1	1

COOLING SYSTEM

✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
1	Central Unit	None/Single		SEER:15.0	48.0	1440	0.85	sys#1	1

HOT WATER SYSTEM

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

DUCTS

✓ Duct #	Location	Supply R-Value	Area	Return R-Value	Area	LeakageType	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
1	Attic	6.0	502 ft²	Attic	6.0	126 ft²	DefaultLeakage	Main	(Default)	(Default)		1 1

TEMPERATURES

Programable Thermostat: Y				Ceiling Fans: N									
Cooling	[] Jan	[] Feb	[] Mar	[] Apr	[] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[] Oct	[] Nov	[] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[] Apr	[] May	[] Jun	[] Jul	[] Aug	[] Sep	[] Oct	[X] Nov	[X] Dec	
Venting	[] Jan	[] Feb	[X] Mar	[X] Apr	[] May	[] Jun	[] Jul	[] Aug	[] Sep	[X] Oct	[X] Nov	[] Dec	
✓ Thermostat Schedule: HERS 2006 Reference	ScheduleType	1	2	3	4	5	6	Hours 7	8	9	10	11	12
Cooling (WD)	AM PM	78 80	78 80	78 78	78 78	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Heating (WD)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	68 66
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ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 80

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

„FL,

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9. Floor Types	Insulation		EF: 0.590	
a. Slab-On-Grade Edge Insulation	R= 0.0	b. Conservation features		
b. N/A	R=			
c. N/A	R=	16. Credits		None
				CF, Pstat

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction 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: Andrew L. Thompson

Date: 10/03/2022

Address of New Home: TBD SW US Hwy. 441
Fort White, FL 32038

City/FL Zip: ,FL,



*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.