

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

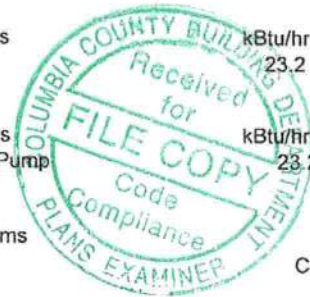
Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Housecraft homes Dawson res Street: 10523 US Highway 441 City, State, Zip: Alachua, FL, 32615 Owner: Dawson Design Location: FL, Gainesville	Builder Name: Housecraft Homes Permit Office: Permit Number: Jurisdiction: County: Alachua (Florida Climate Zone 2)
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Glass/Floor Area: 0.105	Total Proposed Modified Loads: 46.24	PASS
	Total Baseline Loads: 47.03	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: <u>John B. 25 (Tightseal Inc)</u> DATE: <u>7/27/20</u> I hereby certify that this building, as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: _____ DATE: _____	Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes. BUILDING OFFICIAL: _____ DATE: _____
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- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.
- Compliance 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 5.00 ACH50 (R402.4.1.2).

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Housecraft homes Dawson re	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1624	Lot #	
Owner Name:	Dawson	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Housecraft Homes	Rotate Angle:	0	Street:	10523 US Highway 441
Permit Office:		Cross Ventilation:		County:	Alachua
Jurisdiction:		Whole House Fan:		City, State, Zip:	Alachua , FL , 32615
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	Block1	1624	12992

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1624	12992	Yes	3	3	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	209 ft	0	1624 ft²	----	0.22	0.22	0.56

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt Tested	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Composition shingles	1816 ft²	406 ft²	Medium	N	0.96	No	0.9	No	0	26.6

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1624 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Blown	1624 ft²	0.11	Wood

INPUT SUMMARY CHECKLIST REPORT

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	NW	Garage	Frame - Wood	Main	13	22		8		176.0 ft²		0.111	0.150000	0
2	NW	Exterior	Concrete Block - Int Insul	Main	5	31		8		248.0 ft²		0	0.150000	0
3	NE	Exterior	Concrete Block - Int Insul	Main	5	52		8		416.0 ft²		0	0.150000	0
4	SE	Exterior	Concrete Block - Int Insul	Main	5	52		8		416.0 ft²		0	0.150000	0
5	SW	Exterior	Concrete Block - Int Insul	Main	5	52		8		416.0 ft²		0	0.150000	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	NW	Insulated	Main	None	.46	3		6	8	20 ft²
2	NW	Insulated	Main	None	.46	3		6	8	20 ft²
3	SE	Insulated	Main	None	.46	1		6	8	6.7 ft²

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	NW	2	Vinyl	Low-E Double	Yes	0.33	0.23	N	30.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
2	NW	2	Vinyl	Low-E Double	Yes	0.33	0.23	N	10.5 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
3	NW	2	Vinyl	Low-E Double	Yes	0.33	0.23	N	3.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
4	NE	3	Vinyl	Low-E Double	Yes	0.33	0.23	N	30.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
5	NE	3	Vinyl	Low-E Double	Yes	0.33	0.23	N	4.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
6	SE	4	Vinyl	Low-E Double	Yes	0.33	0.23	N	33.3 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
7	SE	4	Vinyl	Low-E Double	Yes	0.33	0.23	N	25.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
8	SE	4	Vinyl	Low-E Double	Yes	0.33	0.23	N	15.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
9	SW	5	Vinyl	Low-E Double	Yes	0.33	0.23	N	4.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None
10	SW	5	Vinyl	Low-E Double	Yes	0.33	0.23	N	15.0 ft²	2 ft 0 in	1 ft 6 in	Drapes/blinds	None

GARAGE

✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	382.8 ft²	382.8 ft²	64 ft	8 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000254	1082.7	59.44	111.78	.0956	5

INPUT SUMMARY CHECKLIST REPORT

HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
✓	1	Electric Heat Pump/	None	HSPF:8.2	23.2 kBtu/hr	1	sys#1

COOLING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
✓	1	Central Unit/	None	SEER: 14	23.2 kBtu/hr	696 cfm	0.75	1	sys#1

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	None	Garage	0.92	40 gal	60 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 Cool
✓	1	Attic	6	324.8 ft	Attic	81.2 ft²	Default Leakage	Garage	(Default)	(Default)			1 1

TEMPERATURES

Programable Thermostat: Y				Ceiling Fans:									
Cooling	[X] Jan	[X] Feb	[X] Mar	[] Apr	[] May	[X] Jun	[X] Jul	[X] Aug	[X] Sep	[] Oct	[] Nov	[X] Dec	
Heating	[X] Jan	[X] Feb	[X] Mar	[] Apr	[] May	[] Jun	[] Jul	[] Aug	[] Sep	[X] Oct	[X] Nov	[X] Dec	
Venting	[X] Jan	[X] Feb	[X] Mar	[X] Apr	[] May	[] Jun	[] Jul	[] Aug	[] Sep	[X] Oct	[X] Nov	[X] Dec	
Thermostat Schedule: HERS 2006 Reference													
Schedule Type		1	2	3	4	5	6	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
Heating (WEH)	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

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD**ESTIMATED ENERGY PERFORMANCE INDEX* = 98****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>3</u>	c) AHU location <u>Garage</u>
5. Is this a worst case? (yes/no)	5. <u>No</u>	13. Cooling system: Capacity <u>23.2</u>
6. Conditioned floor area (sq. ft.)	6. <u>1624</u>	a) Split system SEER <u> </u>
7. Windows, type and area		b) Single package SEER <u> </u>
a) U-factor:(weighted average)	7a. <u>0.330</u>	c) Ground/water source SEER/COP <u> </u>
b) Solar Heat Gain Coefficient (SHGC)	7b. <u>0.230</u>	d) Room unit/PTAC EER <u> </u>
c) Area	7c. <u>169.8</u>	e) Other <u>14.0</u>
8. Skylights		14. Heating system: Capacity <u>23.2</u>
a) U-factor:(weighted average)	8a. <u>NA</u>	a) Split system heat pump HSPF <u> </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>0.0</u>	d) Gas furnace, natural gas AFUE <u> </u>
b) Wood, raised (R-value)	9b. <u> </u>	e) Gas furnace, LPG AFUE <u> </u>
c) Concrete, raised (R-value)	9c. <u> </u>	f) Other <u>8.20</u>
10. Wall type and insulation:		15. Water heating system
A. Exterior:		a) Electric resistance EF <u>0.92</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>5.0</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>13.0</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>Yes</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>Yes</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: _____ Date: _____

Address of New Home: 10523 US Highway 441 City/FL Zip: Alachua, FL 32615