FORM R405-2023

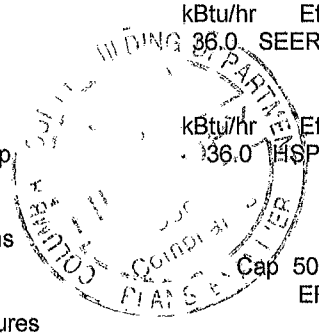
FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

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

1 New construction or existing		New (From Plans)
2 Single family or multiple family		Detached
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)		1553
Conditioned floor area below grade (ft²)		0
7 Windows(255 5 sqft.)	Description	Area
a U-Factor	Dbl, U=0 26	255 50 ft²
SHGC	SHGC=0 20	
b U-Factor	N/A	ft²
SHGC		
c. U-Factor	N/A	ft²
SHGC		
Area Weighted Average Overhang Depth		1 500 ft
Area Weighted Average SHGC		0 200
8 Skylights	Description	Area
U-Factor (AVG)	N/A	N/A ft²
SHGC(AVG).	N/A	
9 Floor Types	Insulation	Area
a Slab-On-Grade Edge Insulation	R= 0 0	1553 00 ft²
b N/A	R=	ft²
c. N/A	R=	ft²

10 Wall Types(1548 0 sqft.)	Insulation	Area
a Frame - Wood, Exterior	R=13 0	1548 00 ft²
b N/A		
c. N/A		
d N/A		
11 Ceiling Types(1553 0 sqft)	Insulation	Area
a Flat ceiling under att (Unvented)	R=30 0	1553 00 ft²
b N/A		
c. N/A		
12 Roof(Comp Shingles, Vented)	Deck R=0 0	1798 ft²
13 Ducts, location & insulation level		R ft²
a Sup Attic, Ret: Attic, AH Main		6 311
b		
c.		
14 Cooling Systems	kBtu/hr	Efficiency
a Central Unit	36.0	SEER2.15 00
15 Heating Systems	kBtu/hr	Efficiency
a Electric Heat Pump	36.0	HSPF2·7 50
16 Hot Water Systems		
a Electric		Cap 50 gallons
		EF 0.920
b Conservation features		None
17 Credits		CF, Pstat



Glass/Floor Area 0 165	Total Proposed Modified Loads	40 83
	Total Baseline Loads	45 85

PASS

NOTE. Proposed residence must have annual total normalized Modified Loads that are less than or equal to 95 percent of the annual total loads of the standard reference design in order to comply

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

PREPARED BY _____

DATE 11-3-25

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 _____

- 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 0.030 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 6.00 ACH50 (R402.4.1.2).

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INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title	Mathis Residence			Address type.	Street Address
Building Type	User	Bedrooms	2	Lot #	---
Owner		Conditioned Area	1553	Block/SubDivision	---
Builder Home ID		Total Stories	1	PlatBook.	---
Builder Name		Worst Case	No	Street	
Permit Office		Rotate Angle	0	County	columbia
Jurisdiction		Cross Ventilation		City, State, Zip	,
Family Type	Detached	Whole House Fan			FL,
New/Existing	New (From Plans)	Terrain	Rural		
Year Construct	2025	Shielding	Moderate/Rural		
Comment.					

CLIMATE

√	Design Location	Tmy Site	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, Gainesville	FL_GAINESVILLE_REGIONA	32	92	70	75	1305 5	51	Medium

BLOCKS

√	Number	Name	Area	Volume
___	1	Block1	1553	13977 cu ft

SPACES

√	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated
___	1	Main	1553	13977	Yes	4	2	Yes	Yes	Yes

FLOORS (Total Exposed Area = 1553 sq.ft.)

√	#	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim	R-Value Joist	U-Factor	Slab Insul. Vert/Horiz	Tile	Wood	Carpet
___	1	Slab-On-Grade Edge Ins	Main	173	1553 sqft	0 0	---	0 631	0 (ft)/0 (ft)	0.40	0 60	0 00

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Framing Fract.	Roof Color	Rad Barr	Solar Absor	SA Tested	Emitt	Emitt Tested	Deck Insul	Pitch (deg)
___	1	Gable or shed	Composition shingles	1798 ft²	454 ft²	0 11	Medium	N	0 85	No	0 9	No	0	30 26

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
___	1	Full attic	Vented	300	1553 ft²	N	N

CEILING (Total Exposed Area = 1553 sq.ft.)

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	U-Factor	Framing Frac	Truss Type
___	1	Flat ceiling under attic(Vented)	Main	30 0	Blown	1553 0ft²	0.030	0 11	Wood

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INPUT SUMMARY CHECKLIST REPORT

WALLS (Total Exposed Area = 1548 sq.ft.)

√ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area sq ft	U-Factor	Sheath R-Value	Frm Frac	Solar Absor	Below Grade
___ 1	N	Exterior	Frame - Wood	Main	13 0	42.0	0	9 0	0	378.0	0 084		0 23	0.75	0 %
___ 2	E	Exterior	Frame - Wood	Main	13 0	32 0	0	9 0	0	288 0	0 084		0 23	0 75	0 %
___ 3	S	Exterior	Frame - Wood	Main	13 0	42.0	0	9 0	0	378 0	0 084		0.23	0 75	0 %
___ 4	W	Exterior	Frame - Wood	Main	13 0	10 0	0	9 0	0	90 0	0.084		0 23	0 75	0 %
___ 5	S	Exterior	Frame - Wood	Main	13 0	12 0	0	9 0	0	108 0	0 084		0 23	0 75	0 %
___ 6	W	Exterior	Frame - Wood	Main	13 0	16 0	0	9 0	0	144 0	0 084		0 23	0 75	0 %
___ 7	N	Exterior	Frame - Wood	Main	13 0	12 0	0	9 0	0	108 0	0 084		0 23	0.75	0 %
___ 8	W	Exterior	Frame - Wood	Main	13 0	6 0	0	9.0	0	54 0	0 084		0 23	0 75	0 %

DOORS (Total Exposed Area = 40 sq.ft.)

√ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
___ 1	N	Exterior	Insulated	Main	None	0.46	3 00	0	6 00	8	20 0ft²
___ 2	S	Exterior	Insulated	Main	None	0 46	3 00	0	6 00	8	20 0ft²

WINDOWS (Total Exposed Area = 256 sq.ft.)

√ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Storm	Total Area (ft²)	Same Units	Width (ft)	Height (ft)	--Overhang-- Depth (ft)	Sep (ft)	Interior Shade	Screen
___ 1	N	1	Vinyl	Low-E Double	Y	0 26	0 20	N	N	6 0	1	2 00	3 00	1 5	1 3	None	None
___ 2	N	1	Vinyl	Low-E Double	Y	0 26	0 20	N	N	60 0	4	2 50	6 00	1 5	1 3	None	None
___ 3	N	1	Vinyl	Low-E Double	Y	0 26	0 20	N	N	8 0	2	3 00	1 33	1 5	1 3	None	None
___ 4	N	1	Vinyl	Low-E Double	Y	0 26	0 20	N	N	14 0	1	3 50	4 00	1 5	1 3	None	None
___ 5	E	2	Vinyl	Low-E Double	Y	0 26	0 20	N	N	17 5	1	5 00	3 50	1.5	1 3	None	None
___ 6	E	2	Vinyl	Low-E Double	Y	0 26	0 20	N	N	6 0	1	2 00	3 00	1 5	1 3	None	None
___ 7	E	2	Vinyl	Low-E Double	Y	0 26	0 20	N	N	10 0	1	6 00	1 67	1 5	1 3	None	None
___ 8	S	3	Vinyl	Low-E Double	Y	0 26	0 20	N	N	75 0	6	2 50	5 00	1 5	1 3	None	None
___ 9	S	3	Vinyl	Low-E Double	Y	0 26	0 20	N	N	4 0	1	3 00	1 33	1 5	1 3	None	None
___ 10W		4	Vinyl	Low-E Double	Y	0 26	0 20	N	N	15 0	1	3 00	5 00	1 5	1 3	None	None
___ 11S		5	Vinyl	Low-E Double	Y	0 26	0 20	N	N	15 0	1	3 00	5 00	1 5	1 3	None	None
___ 12W		6	Vinyl	Low-E Double	Y	0 26	0 20	N	N	10 0	1	6 00	1 67	1 5	1 3	None	None
___ 13N		7	Vinyl	Low-E Double	Y	0 26	0 20	N	N	15 0	1	3 00	5 00	1 5	1 3	None	None

INFILTRATION

√ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0 00034	1398	76 68	143 96	0 1232	6 0	All	13977 cu ft

MASS

√ #	Mass Type	Area	Thickness	Furniture Fraction	Space
___ 1	Default(8 lbs/sq ft)	0 ft²	0 ft	0 30	Main

HEATING SYSTEM

√ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	----Geothermal HeatPump---- Entry	Power	Volt	Current	Ducts	Block
___ 1	Electric Heat Pump	None/Single		HSPF2. 7 50	36.0		0 00	0 00	0.00	sys#1	1

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INPUT SUMMARY CHECKLIST REPORT

COOLING SYSTEM

✓	#	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___	1	Central Unit	None/Single		SEER2 15 0	36 0	1080	0 75	sys#1	1

HOT WATER SYSTEM

✓	#	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixt Flow	Trap	Pipe Ins	Pipe length
___	1	Electric	None	Main	0.92 (0 92)	50 0 gal	50 gal	120 deg	Standard	Yes	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 #	Supply Location	Supply R-Value	Supply Area	Return Location	Return R-Value	Return Area	Leakage Type	AHU Location	CFM 25 TOT|OUT	QN OUT	AHU SEALED	RLF	HVAC # Heat	HVAC # Cool
___	1	Attic	6 0	311 ft²	Attic	6 0	78 ft²	Prop Leak Free	Main	---|---	0 030	Yes	0 50	1	1

TEMPERATURES

Programable Thermostat Y Ceiling Fans N

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

✓	Thermostat Schedule Schedule Type	HERS 2006 Reference	Hours 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

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ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 89

The lower the EnergyPerformance Index, the more efficient the home

,,FL,

1	New construction or existing		New (From Plans)
2	Single family or multiple family		Detached
3	Number of units, if multiple family		1
4	Number of Bedrooms		2
5	Is this a worst case?		No
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7	Windows**	Description	Area
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	SHGC	SHGC=0 20	
b.	U-Factor:	N/A	ft²
	SHGC		
c.	U-Factor:	N/A	ft²
	SHGC		
	Area Weighted Average Overhang Depth		1 500 ft
	Area Weighted Average SHGC		0 200
8	Skylights	Description	Area
	U-Factor (AVG)	N/A	N/A ft²
	SHGC(AVG)	N/A	

9	Floor Types	Insulation	Area
a	Slab-On-Grade Edge Insulation	R= 0 0	1553 00 ft²
b	N/A	R=	ft²
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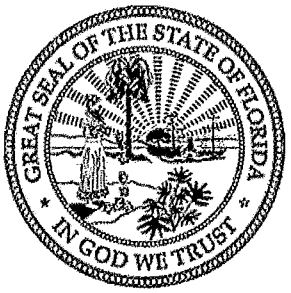
12	Roof(Comp Shingles, Vented)	Deck R=0 0	1798 ft²
13	Ducts, location & insulation level		R ft²
a	Sup Attic, Ret Attic, AH Main		6 311
b			
c.			

14	Cooling Systems	kBtu/hr	Efficiency
a	Central Unit	36 0	SEER2 15 00
15	Heating Systems	kBtu/hr	Efficiency
a	Electric Heat Pump	36 0	HSPF2 7 50
16	Hot Water Systems		
a	Electric		Cap 50 gallons
			EF: 0 920
b	Conservation features		
			None
17	Credits		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 _____ Date _____

Address of New Home 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