

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 92

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

„FL,

1. New construction or existing	New (From Plans)	10. Wall Types(1280.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=19.0	1280.00 ft ²
3. Number of units, if multiple family	1	b. N/A		
4. Number of Bedrooms	1	c. N/A		
5. Is this a worst case?	No	d. N/A		
6. Conditioned floor area above grade (ft ²)	1500	11. Ceiling Types(1500.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft ²)	0	a. Single assembly, no ai (Unvented)	R=30.0	1500.00 ft ²
7. Windows**	Description	b. N/A		
a. U-Factor:	Dbl, U=0.60	c. N/A		
SHGC:	SHGC=0.27			
b. U-Factor:	N/A	12. Roof(Metal, Unvent)	Deck R=0.0	1546 ft ²
SHGC:		13. Ducts, location & insulation level	R	ft ²
c. U-Factor:	N/A	a.		
SHGC:		b.		
Area Weighted Average Overhang Depth:	1.500 ft	c.		
Area Weighted Average SHGC:	0.270	14. Cooling Systems	kBtu/hr	Efficiency
8. Skylights	Description	a. Central Unit	30.0	SEER2:14.80
U-Factor:(AVG)	N/A			
SHGC(AVG):	N/A	15. Heating Systems	kBtu/hr	Efficiency
9. Floor Types	Insulation	a. Electric Heat Pump	30.0	HSPF2:7.50
a. Slab-On-Grade Edge Insulation	R= 0.0			
b. N/A	R=	16. Hot Water Systems		
c. N/A	R=	a. ElectricTankless	Cap: 1 gallons	
			EF: 0.920	
		b. Conservation features		
		17. 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: _____ 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.

Project Name: Cruce 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)	10. Wall Types(1280.0 sqft.)	Insulation	Area
2. Single family or multiple family	Detached	a. Frame - Wood, Exterior	R=19.0	1280.00 ft ²
3. Number of units, if multiple family	1	b. N/A		
4. Number of Bedrooms	1	c. N/A		
5. Is this a worst case?	No	d. N/A		
6. Conditioned floor area above grade (ft ²)	1500	11. Ceiling Types(1500.0 sqft.)	Insulation	Area
Conditioned floor area below grade (ft ²)	0	a. Single assembly, no ai (Unvented)	R=30.0	1500.00 ft ²
7. Windows(105.0 sqft.)	Description	b. N/A		
a. U-Factor:	Dbl, U=0.60	c. N/A		
SHGC:	SHGC=0.27	12. Roof(Metal, Unvent)	Deck R=0.0	1546 ft ²
b. U-Factor:	N/A	13. Ducts, location & insulation level	R	ft ²
SHGC:		a.		
b. U-Factor:	N/A	b.		
SHGC:		c.		
c. U-Factor:	N/A	14. Cooling Systems	kBtu/hr	Efficiency
SHGC:		a. Central Unit	30.0	SEER2:14.80
Area Weighted Average Overhang Depth:	1.500 ft	15. Heating Systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.270	a. Electric Heat Pump	30.0	HSPF2:7.50
8. Skylights	Description	16. Hot Water Systems		
U-Factor:(AVG)	N/A	a. ElectricTankless	Cap: 1 gallons	
SHGC(AVG):	N/A		EF: 0.920	
9. Floor Types	Insulation	b. Conservation features		
a. Slab-On-Grade Edge Insulation	R= 0.0			None
b. N/A	R=	17. Credits		CF, Pstat
c. N/A	R=			

PASS

The Seal of the State of Florida is a circular emblem. It features a central figure of a woman in a long dress, representing Justice, holding a scale of justice. She stands on a small island with a palm tree. In the background, a ship is sailing on the water. The sun is rising over the horizon, with rays emanating from it. The words "GREAT SEAL OF THE STATE OF FLORIDA" are inscribed around the top inner border, and "IN GOD WE TRUST" is inscribed around the bottom inner border. Two small stars separate the top and bottom text.

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INPUT SUMMARY CHECKLIST REPORT

WALLS															(Total Exposed Area = 1280 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	N	Exterior	Frame - Wood	Main	19.0	30.0	0	8.0	0	240.0	0.061		0.23	0.75	0 %				
___ 2	E	Exterior	Frame - Wood	Main	19.0	50.0	0	8.0	0	400.0	0.061		0.23	0.75	0 %				
___ 3	S	Exterior	Frame - Wood	Main	19.0	30.0	0	8.0	0	240.0	0.061		0.23	0.75	0 %				
___ 4	W	Exterior	Frame - Wood	Main	19.0	50.0	0	8.0	0	400.0	0.061		0.23	0.75	0 %				

DOORS												(Total Exposed Area = 73 sq.ft.)		
✓ #	Ornt	Adjacent To	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	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	5.00	0	6.00	8	33.3ft²			
___ 3	W	Exterior	Insulated	Main	None	0.46	3.00	0	6.00	8	20.0ft²			

WINDOWS															(Total Exposed Area = 105 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	0.60	0.27	N	N	6.0	1	2.00	3.00	1.5	2.3	None	None	
___ 2	N	1	Vinyl	Low-E Double	Y	0.60	0.27	N	N	9.0	1	3.00	3.00	1.5	2.3	None	None	
___ 3	E	2	Vinyl	Low-E Double	Y	0.60	0.27	N	N	6.0	1	2.00	3.00	1.5	2.3	None	None	
___ 4	E	2	Vinyl	Low-E Double	Y	0.60	0.27	N	N	30.0	2	3.00	5.00	1.5	2.3	None	None	
___ 5	S	3	Vinyl	Low-E Double	Y	0.60	0.27	N	N	30.0	2	3.00	5.00	1.5	2.3	None	None	
___ 6	S	3	Vinyl	Low-E Double	Y	0.60	0.27	N	N	9.0	1	3.00	3.00	1.5	2.3	None	None	
___ 7	W	4	Vinyl	Low-E Double	Y	0.60	0.27	N	N	15.0	1	3.00	5.00	1.5	2.3	None	None	

INFILTRATION										
✓ #	Scope	Method	SLA	CFM50	ELA	EqLA	ACH	ACH50	Space(s)	Infiltration Test Volume
___ 1	Wholehouse	Proposed ACH(50)	0.00025	978	53.66	100.73	0.0958	4.9	All	12000 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 Entry---	Heat Pump Power	Volt	Current	Ducts	Block
___ 1	Electric Heat Pump	None/Single		HSPF2: 7.50	30.0		0.00	0.00	0.00	sys#0	1

COOLING SYSTEM									
✓ #	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
___ 1	Central Unit	None/Single		SEER2:14.8	30.0	900	0.85	Ductless	1

INPUT SUMMARY CHECKLIST REPORT

HOT WATER SYSTEM

✓ #	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixture Flow	Pipe Ins.	Pipe length
___ 1	Electric	Tankless	Exterior	0.92 (0.92)	1.00 gal	40 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	Leakage Type	Air Handler	CFM 25 TOT	CFM 25 OUT	QN	RLF	HVAC # Heat Cool
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TEMPERATURES

Programable Thermostat: Y				Ceiling Fans: N								
Cooling	☐ Jan	☐ Feb	☐ Mar	☐ Apr	☐ May	☒ Jun	☒ Jul	☒ Aug	☒ Sep	☐ Oct	☐ Nov	☐ Dec
Heating	☒ Jan	☒ Feb	☒ Mar	☐ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☐ Oct	☒ Nov	☒ Dec
Venting	☐ Jan	☐ Feb	☒ Mar	☒ Apr	☐ May	☐ Jun	☐ Jul	☐ Aug	☐ Sep	☒ Oct	☒ Nov	☐ Dec

✓	Thermostat Schedule: HERS 2006 Reference												
	Schedule Type	1	2	3	4	5	6	Hours 7	8	9	10	11	12
___	Cooling (WD)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	80 78	80 78	80 78	80 78
___	Cooling (WEH)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	80 78	80 78	80 78	80 78
___	Heating (WD)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68
___	Heating (WEH)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68

Residential System Sizing Calculation

Summary

Project Title:
Cruce Residence

, FL

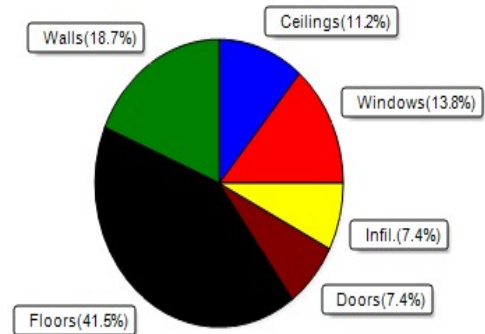
9/30/2023

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(100 ft.) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)			
Winter design temperature(TMY3 99%)	30 F	Summer design temperature(TMY3 99%)	94 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	40 F	Summer temperature difference	19 F
Total heating load calculation	18212 Btuh	Total cooling load calculation	11384 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	164.7 30000	Sensible (SHR = 0.85)	250.3 25500
Heat Pump + Auxiliary(0.0kW)	164.7 30000	Latent	376.6 4500
		Total (Electric Heat Pump)	263.5 30000

WINTER CALCULATIONS

Winter Heating Load (for 1500 sqft)

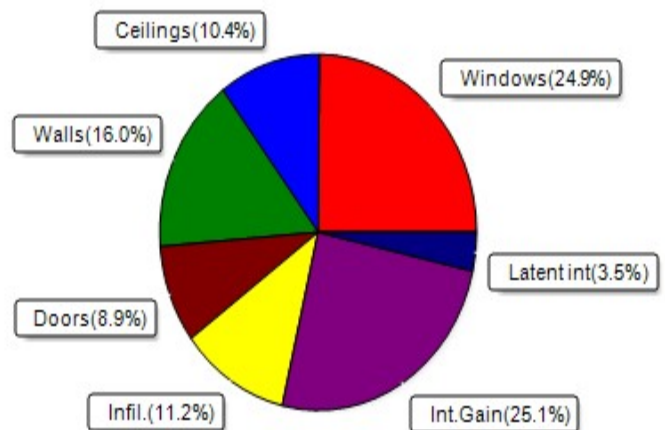
Load component	Load
Window total 105 sqft	2520 Btuh
Wall total 1102 sqft	3405 Btuh
Door total 73 sqft	1349 Btuh
Ceiling total 1500 sqft	2040 Btuh
Floor total 1500 sqft	7552 Btuh
Infiltration 31 cfm	1345 Btuh
Duct loss	0 Btuh
Subtotal	18212 Btuh
Ventilation Ex:0 cfm; Sup:0 cfm	0 Btuh
TOTAL HEAT LOSS	18212 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1500 sqft)

Load component	Load
Window total 105 sqft	2831 Btuh
Wall total 1102 sqft	1822 Btuh
Door total 73 sqft	1012 Btuh
Ceiling total 1500 sqft	1185 Btuh
Floor total	0 Btuh
Infiltration 23 cfm	479 Btuh
Internal gain	2860 Btuh
Duct gain	0 Btuh
Sens.Ventilation Ex:0 cfm; Sup:0 cfm	0 Btuh
Blower Load	0 Btuh
Total sensible gain	10189 Btuh
Latent gain(ducts)	0 Btuh
Latent gain(infiltration)	795 Btuh
Latent gain(ventilation)	0 Btuh
Latent gain(internal/occupants/other)	400 Btuh
Total latent gain	1195 Btuh
TOTAL HEAT GAIN	11384 Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____

9-30-23

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title:
Cruce Residence

, FL

9/30/2023

Reference City: Gainesville, FL (Defaults)
Humidity difference: 51gr.

Temperature Difference: 19.0F(TMY3 99%)
Summer Setpoint: 75 °F (Required Manual J default)

Component Loads for Whole House

Window	Type*					Overhang		Window Area(sqft)			HTM		Load		
	Panes	SHGC	U	InSh	IS Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded			
1	2 NFRC	0.27, 0.60	No	No	N	1.5ft	2.3ft	6.0	0.0	6.0	17	17	102	Btuh	
2	2 NFRC	0.27, 0.60	No	No	N	1.5ft	2.3ft	9.0	0.0	9.0	17	17	154	Btuh	
3	2 NFRC	0.27, 0.60	No	No	E	1.5ft	2.3ft	6.0	0.0	6.0	17	37	225	Btuh	
4	2 NFRC	0.27, 0.60	No	No	E	1.5ft	2.3ft	30.0	0.0	30.0	17	37	1123	Btuh	
5	2 NFRC	0.27, 0.60	No	No	S	1.5ft	2.3ft	30.0	30.0	0.0	17	19	512	Btuh	
6	2 NFRC	0.27, 0.60	No	No	S	1.5ft	2.3ft	9.0	9.0	0.0	17	19	154	Btuh	
7	2 NFRC	0.27, 0.60	No	No	W	1.5ft	2.3ft	15.0	0.0	15.0	17	37	561	Btuh	
Window Total								105 (sqft)					2831 Btuh		
Walls	Type					U-Value		R-Value		Area(sqft)		HTM		Load	
								Cav/Sheath							
1	Frame - Wood - Ext					0.08		19.0/0.0		205.0		1.7		339 Btuh	
2	Frame - Wood - Ext					0.08		19.0/0.0		364.0		1.7		602 Btuh	
3	Frame - Wood - Ext					0.08		19.0/0.0		167.7		1.7		277 Btuh	
4	Frame - Wood - Ext					0.08		19.0/0.0		365.0		1.7		604 Btuh	
Wall Total										1102 (sqft)				1822 Btuh	
Doors	Type									Area (sqft)		HTM		Load	
1	Insulated - Exterior									20.0		13.8		276 Btuh	
2	Insulated - Exterior									33.3		13.8		460 Btuh	
3	Insulated - Exterior									20.0		13.8		276 Btuh	
Door Total										73 (sqft)				1012 Btuh	
Ceilings	Type/Color/Surface					U-Value		R-Value		Area(sqft)		HTM		Load	
1	SnglAsmb no airsp/Light/Metal					0.034		30.0/0.0		1500.0		0.79		1185 Btuh	
Ceiling Total										1500 (sqft)				1185 Btuh	
Floors	Type							R-Value		Size		HTM		Load	
1	Slab On Grade							0.0		1500 (ft-perimeter)		0.0		0 Btuh	
Floor Total										1500.0 (sqft)				0 Btuh	
	Envelope Subtotal:												6850 Btuh		
Infiltration	Type					Average ACH		Volume(cuft)		Wall Ratio		CFM=		Load	
	Natural					0.11		12000		1		23.0		479 Btuh	
Internal gain						Occupants		Btuh/occupant		Appliance		Load			
						2		X 230	+	2400		2860 Btuh			
	Sensible Envelope Load:												10189 Btuh		
Duct load	NA, Supply(R0.0-None), Return(R0.0-None)										(DGM of 0.000)		0 Btuh		
	Sensible Load All Zones												10189 Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title: Climate:FL_GAINESVILLE_REGIONAL_A
Cruce Residence

, FL

9/30/2023

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	10189 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	10189 Btuh
	Sensible ventilation (Ex:0 cfm; Sup:0 cfm)	0 Btuh
	Blower	0 Btuh
	Total sensible gain	10189 Btuh
	Latent infiltration gain (for 51 gr. humidity difference)	795 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (2.0 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	Latent total gain	1195 Btuh
	TOTAL GAIN	11384 Btuh

EQUIPMENT

1. Central Unit	#	30000 Btuh
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*Key: Window types (Panels - Number and type of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value)
(U - Window U-Factor)
(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed
For Draperies: Assume medium weave, half closed
For Roller shades: Assume translucent, half closed
(IS - Insect screen: none(N), Full(F) or Half(½))
(Ornt - compass orientation)



Version 8

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

, FL

Project Title:
Cruce Residence
Building Type: User

9/30/2023

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 °F (TMY3 99%)
Winter Setpoint: 70 °F (Required Manual J default)

Component Loads for Whole House								
Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
1	2, NFRC 0.27	Vinyl	0.60	N	6.0		24.0	144 Btuh
2	2, NFRC 0.27	Vinyl	0.60	N	9.0		24.0	216 Btuh
3	2, NFRC 0.27	Vinyl	0.60	E	6.0		24.0	144 Btuh
4	2, NFRC 0.27	Vinyl	0.60	E	30.0		24.0	720 Btuh
5	2, NFRC 0.27	Vinyl	0.60	S	30.0		24.0	720 Btuh
6	2, NFRC 0.27	Vinyl	0.60	S	9.0		24.0	216 Btuh
7	2, NFRC 0.27	Vinyl	0.60	W	15.0		24.0	360 Btuh
	Window Total				105.0(sqft)			2520 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Frame - Wood	- Ext	(0.077)	19.0/0.0	205		3.09	634 Btuh
2	Frame - Wood	- Ext	(0.077)	19.0/0.0	364		3.09	1125 Btuh
3	Frame - Wood	- Ext	(0.077)	19.0/0.0	168		3.09	518 Btuh
4	Frame - Wood	- Ext	(0.077)	19.0/0.0	365		3.09	1128 Btuh
	Wall Total				1102(sqft)			3405 Btuh
Doors	Type	Storm	Ueff.		Area	X	HTM=	Load
1	Insulated - Exterior, n		(0.460)		20		18.4	368 Btuh
2	Insulated - Exterior, n		(0.460)		33		18.4	613 Btuh
3	Insulated - Exterior, n		(0.460)		20		18.4	368 Btuh
	Door Total				73(sqft)			1349Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Single as/L/Metal		(0.034)	30.0/0.0	1500		1.4	2040 Btuh
	Ceiling Total				1500(sqft)			2040Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
1	Slab On Grade		(1.180)	0.0	160.0 ft(perim.)		47.2	7552 Btuh
	Floor Total				1500 sqft			7552 Btuh
	Envelope Subtotal:							16867 Btuh
Infiltration	Type	Wholehouse	ACH	Volume(cuft)	Wall Ratio	CFM=		
	Natural		0.15	12000	1.00	30.7		1345 Btuh
Duct load	NA, R0.0, Supply(), Return()						(DLM of 0.000)	0 Btuh
All Zones	Sensible Subtotal All Zones							18212 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

, FL

Project Title:
Cruce Residence
Building Type: User

9/30/2023

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	18212 Btuh
	Ventilation Sens. Heat Loss (Ex:0 cfm; Sup:0 cfm)	0 Btuh
	Total Heat Loss	18212 Btuh

EQUIPMENT

1. Electric Heat Pump	#	30000 Btuh
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Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)



Version 8