

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Lot 18 Wingate	Bedrooms:	4	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1910	Lot #	
Owner Name:	N/A	Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Gibraltar Contracting, LLC.	Rotate Angle:	270	Street:	218 SW Granite Court
Permit Office:	Columbia County	Cross Ventilation:	Yes	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32024
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	1910	17190

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1910	17190	Yes	5	4	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulation	Main	195.4 ft	0	1910 ft²	----	0	0	1

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Composition shingles	2212 ft²	558 ft²	Medium	Y	0.96	No	0.9	No	0	30.3

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Partial cathedral ceili	Vented	300	1910 ft²	Y	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	38	Double Batt	2006 ft²	0.11	Wood

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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	S=>E	Exterior	Frame - Wood	Main	13	10		9		90.0 ft²		0.23	0.75	0
2	W=>S	Exterior	Frame - Wood	Main	13	6		9		54.0 ft²		0.23	0.75	0
3	S=>E	Exterior	Frame - Wood	Main	13	8	4	9		75.0 ft²		0.23	0.75	0
4	W=>S	Exterior	Frame - Wood	Main	13	7		9		63.0 ft²		0.23	0.75	0
5	S=>E	Exterior	Frame - Wood	Main	13	11		9		99.0 ft²		0.23	0.75	0
6	S=>E	Garage	Frame - Wood	Main	13	23		9		207.0 ft²		0.23	0.75	0
7	E=>N	Exterior	Frame - Wood	Main	13	40	8	9		366.0 ft²		0.23	0.75	0
8	N=>W	Exterior	Frame - Wood	Main	13	34	4	9		309.0 ft²		0.23	0.75	0
9	W=>S	Exterior	Frame - Wood	Main	13	10	8	9		96.0 ft²		0.23	0.75	0
10	N=>W	Exterior	Frame - Wood	Main	13	18	4	9		165.0 ft²		0.23	0.75	0
11	W=>S	Exterior	Frame - Wood	Main	13	20		9		180.0 ft²		0.23	0.75	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	S=>E	Insulated	Main	None	.46	3		6	8	20 ft²
2	S=>E	Insulated	Main	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered orientation(=>) changed to As Built (rotated 270 degrees).

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
1	S=>E	1	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	5 ft 0 in	0 ft 6 in	None	None
2	S=>E	3	Vinyl	Low-E Double	Yes	0.36	0.25	N	13.3 ft²	9 ft 0 in	1 ft 0 in	None	None
3	S=>E	5	Vinyl	Low-E Double	Yes	0.36	0.25	N	36.0 ft²	1 ft 6 in	0 ft 6 in	None	None
4	E=>N	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	1 ft 6 in	1 ft 0 in	None	None
5	E=>N	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	20.0 ft²	1 ft 6 in	1 ft 0 in	None	None
6	N=>W	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	1 ft 6 in	1 ft 0 in	None	None
7	N=>W	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	16.0 ft²	1 ft 6 in	1 ft 0 in	None	None
8	N=>W	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	6.0 ft²	1 ft 6 in	1 ft 0 in	None	None
9	N=>W	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	36.0 ft²	1 ft 6 in	0 ft 6 in	None	None
10	W=>S	9	Vinyl	Low-E Double	Yes	0.36	0.25	N	36.0 ft²	5 ft 0 in	0 ft 6 in	None	None
11	N=>W	10	Vinyl	Low-E Double	Yes	0.36	0.25	N	54.0 ft²	12 ft 0 in	0 ft 6 in	None	None
12	N=>W	10	Vinyl	Low-E Double	Yes	0.36	0.25	N	20.0 ft²	12 ft 0 in	1 ft 0 in	None	None
13	W=>S	11	Vinyl	Low-E Double	Yes	0.36	0.25	N	60.0 ft²	1 ft 6 in	0 ft 6 in	None	None

GARAGE

✓ #	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
1	513.59 ft²	513.59 ft²	64.6667 ft	9 ft	1

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INFILTRATION										
#	Scope	Method	SLA	CFM 50	ELA	EqlA	ACH	ACH 50		
1	Wholehouse	Proposed ACH(50)	.000286	1432.5	78.64	147.9	.1128	5		

HEATING SYSTEM										
✓	#	System Type	Subtype	Speed	Efficiency	Capacity	Block		Ducts	
✓	1	Electric Heat Pump/	None	Single	HSPF:8.2	29.53 kBtu/hr	1		sys#1	

COOLING SYSTEM										
✓	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
✓	1	Central Unit/	None	Single	SEER: 15.5	23.72 kBtu/hr	720 cfm	0.7	1	sys#1

HOT WATER SYSTEM										
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation	
✓	1	Electric	None	Garage	0.92	50 gal	40 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														
✓	#	--- Supply ---			--- Return ---		Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC #	
		Location	R-Value	Area	Location	Area							Heat	Cool
✓	1	Attic	6	462 ft²	Attic	92.4 ft²	Default Leakage	Garage	(Default) c	(Default) c			1	1

TEMPERATURES																								
Programable Thermostat: Y						Ceiling Fans:																		
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

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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	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
MASS													
Mass Type		Area		Thickness		Furniture Fraction		Space					
Default(8 lbs/sq.ft.		0 ft ²		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>4</u>	c) AHU location <u>Garage</u>
5. Is this a worst case? (yes/no)	5. <u>No</u>	13. Cooling system: Capacity <u>23.7</u>
6. Conditioned floor area (sq. ft.)	6. <u>1910</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>0.360</u>	c) Ground/water source SEER/COP <u> </u>
b) Solar Heat Gain Coefficient (SHGC)	7b. <u>0.250</u>	d) Room unit/PTAC EER <u> </u>
c) Area	7c. <u>387.3</u>	e) Other <u>15.5</u>
8. Skylights		14. Heating system: Capacity <u>29.5</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>13.0</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>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> </u>
c) Knee walls/skylight walls	11c. <u> </u>	b) Cross ventilation <u>Yes</u>
d) Radiant barrier installed	11d. <u>Yes</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: 218 SW Granite Court City/FL Zip: Lake City, FL 32024

Residential System Sizing Calculation

Summary

N/A
218 SW Granite Court
Lake City, FL 32024

Project Title:
Lot 18 Wingate

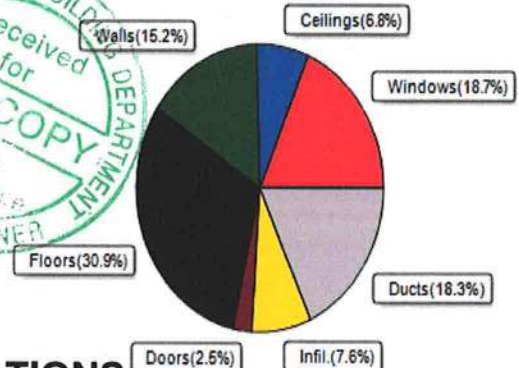
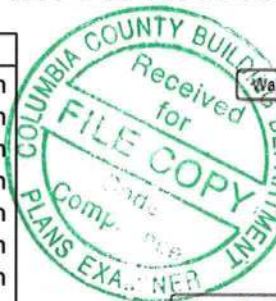
5/12/2020

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 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	29815 Btuh	Total cooling load calculation	24993 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	99.1 29535	Sensible (SHR = 0.70)	77.9 16605
Heat Pump + Auxiliary(0.0kW)	99.1 29535	Latent	194.2 7116
		Total (Electric Heat Pump)	94.9 23722

WINTER CALCULATIONS

Winter Heating Load (for 1910 sqft)

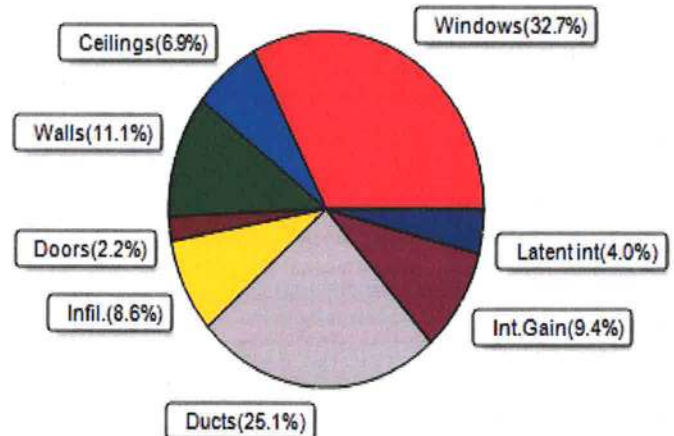
Load component		Load	
Window total	387 sqft	5578	Btuh
Wall total	1277 sqft	4533	Btuh
Door total	40 sqft	736	Btuh
Ceiling total	2006 sqft	2037	Btuh
Floor total	1910 sqft	9223	Btuh
Infiltration	52 cfm	2264	Btuh
Duct loss		5445	Btuh
Subtotal		29815	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		29815	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1910 sqft)

Load component		Load	
Window total	387 sqft	8165	Btuh
Wall total	1277 sqft	2782	Btuh
Door total	40 sqft	552	Btuh
Ceiling total	2006 sqft	1731	Btuh
Floor total		0	Btuh
Infiltration	39 cfm	806	Btuh
Internal gain		2350	Btuh
Duct gain		4943	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Blower Load		0	Btuh
Total sensible gain		21329	Btuh
Latent gain(ducts)		1327	Btuh
Latent gain(infiltration)		1338	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		1000	Btuh
Total latent gain		3665	Btuh
TOTAL HEAT GAIN		24993	Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____

5/18/2020

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

N/A
218 SW Granite Court
Lake City, FL 32024

Project Title:
Lot 18 Wingate
Building Type: User

5/12/2020

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
1	2, NFRC 0.25	Vinyl	0.36	E	30.0		14.4	432 Btuh
2	2, NFRC 0.25	Vinyl	0.36	E	13.3		14.4	192 Btuh
3	2, NFRC 0.25	Vinyl	0.36	E	36.0		14.4	518 Btuh
4	2, NFRC 0.25	Vinyl	0.36	N	30.0		14.4	432 Btuh
5	2, NFRC 0.25	Vinyl	0.36	N	20.0		14.4	288 Btuh
6	2, NFRC 0.25	Vinyl	0.36	W	30.0		14.4	432 Btuh
7	2, NFRC 0.25	Vinyl	0.36	W	16.0		14.4	230 Btuh
8	2, NFRC 0.25	Vinyl	0.36	W	6.0		14.4	86 Btuh
9	2, NFRC 0.25	Vinyl	0.36	W	36.0		14.4	518 Btuh
10	2, NFRC 0.25	Vinyl	0.36	S	36.0		14.4	518 Btuh
11	2, NFRC 0.25	Vinyl	0.36	W	54.0		14.4	778 Btuh
12	2, NFRC 0.25	Vinyl	0.36	W	20.0		14.4	288 Btuh
13	2, NFRC 0.25	Vinyl	0.36	S	60.0		14.4	864 Btuh
Window Total					387.3(sqft)			5578 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	60		3.55	213 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	54		3.55	192 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	42		3.55	148 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	63		3.55	224 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	63		3.55	224 Btuh
6	Frame - Wood	- Adj	(0.089)	13.0/0.0	187		3.55	664 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	316		3.55	1122 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	221		3.55	785 Btuh
9	Frame - Wood	- Ext	(0.089)	13.0/0.0	60		3.55	213 Btuh
10	Frame - Wood	- Ext	(0.089)	13.0/0.0	91		3.55	323 Btuh
11	Frame - Wood	- Ext	(0.089)	13.0/0.0	120		3.55	426 Btuh
Wall Total					1277(sqft)			4533 Btuh
Doors	Type	Storm	Ueff.		Area	X	HTM=	Load
1	Insulated - Exterior, n		(0.460)		20		18.4	368 Btuh
2	Insulated - Garage, n		(0.460)		20		18.4	368 Btuh
Door Total					40(sqft)			736Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shing		(0.025)	38.0/0.0	2006		1.0	2037 Btuh
Ceiling Total					2006(sqft)			2037Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
1	Slab On Grade		(1.180)	0.0	195.4 ft(perim.)		47.2	9223 Btuh
Floor Total					1910 sqft			9223 Btuh
Envelope Subtotal:								22106 Btuh