FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Boyko Residence Street: 110 Joel Glen City, State, Zip: White Springs, FL, 32055 Owner: Mike & Jodi Boyko Design Location: FL, Gainesville	Builder Name: Permit Office: Columbia County Permit Number: Jurisdiction: County: Columbia (Florida Climate Zone 2)
1. New construction or existing 2. Single family or multiple family 3. Number of units, if multiple family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area above grade (ft²) Conditioned floor area below grade (ft²) 7. Windows (214.0 sqft.) a. U-Factor: Dbl, U=0.36 SHGC: SHGC=0.25 b. U-Factor: N/A New (From Plans) Single-family 1 A rea 2413 Conditioned floor area above grade (ft²) Area 214.00 ft² SHGC: SHGC=0.25	9. Wall Types (2408.0 sqft.) a. Frame - Wood, Exterior b. N/A c. N/A d. N/A 10. Ceiling Types (2576.0 sqft.) a. Under Attic (Vented) b. N/A c. N/A R= ft² lnsulation R=19.0 2408.00 ft² R= ft² R= ft² R= ft² Insulation Area R=38.0 2576.00 ft² B. N/A R= ft² R=38.0 2576.00 ft² R= ft²
SHGC: c. U-Factor: N/A ft² SHGC: d. U-Factor: N/A ft² SHGC: d. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 7.224 ft. Area Weighted Average SHGC: 0.250 8. Floor Types (2413.0 sqft.) Insulation Area a. Slab-On-Grade Edge Insulation R=0.0 2413.00 ft² b. N/A R= ft² c. N/A R= ft²	a. Central Unit 26.9 SEER:14.00 13. Heating systems a. Electric Heat Pump 35.2 HSPF:8.20 14. Hot water systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None 15. Credits Conservation
Glass/Floor Area: 0.089 Total Proposed Modification Total Baseline	PASS
I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: DATE: 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 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).

				PROJE	СТ							
Title: Building Type: Owner Name: # of Units: Builder Name: Permit Office: Jurisdiction: Family Type: New/Existing: Comment:	Boyko Residence User Mike & Jodi Boyko 1 Columbia County Single-family New (From Plans)		Bedrooms: Conditioned Total Storie Worst Case Rotate Angl Cross Venti Whole House	s: e: e: lation:	3 2413 1 No 0 Yes No		Lot# Block PlatB Stree Coun	k/Subdivis Book: et:	sion: 11 Ce	reet Addre 10 Joel Gle blumbia hite Spring , 3209	n gs,	
				CLIMA	TE							
	sign Location , Gainesville FL	TMY Site	PEGI	97.	esign Temp .5 % 2.5 %	Int D Wint		ner Deg	eating ree Days 305.5	Desigr Moistur 51	e Ra	Temp inge edium
FL	, Gairlesville FL	_GAINESVILLE	_REGI	BLOC		70	75	-	303.3	51	IVIE	ealum
Number	Name	Area	Volume	<u> </u>								
1	Block1	2413	28956									
				SPAC	ES							
Number	Name	Area	Volume K	itchen	Occupants	Bedro	oms li	nfil ID	Finished	I Coo	led	Heate
1	Main	2413	28956	Yes	6	3	1		Yes	Yes		Yes
				FLOO	RS							
/ # 1 Sla	Floor Type ab-On-Grade Edge Insul	Space ation Ma	Perin		R-Value 0	Area 2413 ft ²	2			Tile Wo		rpet 1
				ROO	F							
√ #	Туре	Materials	Roof Area	Gable Area		Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitcl (deg
1	Gable or shed	Metal	2487 ft²	300 ft ²	² Medium	Υ	0.96	No	0.9	No	0	14
				ATTI	С							
√ #	Туре	Ventil	ation	Vent Rati	o (1 in)	Area	RBS	IR	СС			
1	Full cathedral ceiling	Vent	ted	300) 2	2413 ft²	Υ	1	N			
				CEILIN	NG							
V #	Ceiling Type		Space	R-Value	e Ins Ty	pe	Area	Fran	ning Frac	Truss	Туре	
	Under Attic (Vented											

INPUT SUMMARY CHECKLIST REPORT

							WA	LLS							
V #	Ornt		Adjace To	ent Wall	Туре	Spac	Cavity e R-Value	Wic Ft		Height t In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade ⁹
1	Ν	E	xterior	Fran	me - Wood	Main	19	60	4 1	2	724.0 ft ²		0.23	0.75	0
2	W	E	xterior	Fran	me - Wood	Main	19	40	1	2	480.0 ft ²		0.23	0.75	0
3	S	E	xterior	Fran	me - Wood	Main	19	60	4 1	2	724.0 ft ²		0.23	0.75	0
4	E	E	xterior	Fran	me - Wood	Main	19	40	1	2	480.0 ft ²		0.23	0.75	0
							DO	ORS							
\vee	#		Ornt		Door Type	Space			Storms	U-Valı	ue Fi	Width t In	Height Ft Ir		Area
	1		W		Insulated	Main			None	.46	3	3	8	:	24 ft²
						Orientations	WINI hown is the e	DOWS		orientation					
/			Wall			CHCHIGHOTTO	nowino the c	ntorou, i	Торозса	SHOTILULION		rhang			
V	#	Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Depth	Separation	Int Shac	de :	Screenin
	1	Ν	1	Vinyl	Low-E Double	Yes	0.36	0.25	Ν	36.0 ft ²	1 ft 6 in	3 ft 0 in	None		None
	2	W	2	Vinyl	Low-E Double	Yes	0.36	0.25	N	18.0 ft ²	1 ft 0 in	6 ft 0 in	None		None
	3	W	2	Vinyl	Low-E Double	Yes	0.36	0.25	N	16.0 ft ²	1 ft 0 in	6 ft 0 in	None		None
	4	S	3	Vinyl	Low-E Double	Yes	0.36	0.25	N	36.0 ft ²	1 ft 6 in	3 ft 0 in	None		None
	5	Е	4	Vinyl	Low-E Double	Yes	0.36	0.25	N	36.0 ft ²	13 ft 0 in	4 ft 0 in	None		None
	6	Е	4	TIM	Low-E Double	Yes	0.36	0.25	N	48.0 ft ²	13 ft 0 in	6 ft 0 in	None		None
	7	E	4	Vinyl	Low-E Double	Yes	0.36	0.25	N	24.0 ft ²	13 ft 0 in	4 ft 0 in	None		None
							INFILT	RATIO	ON						
ŧ :	Scope		M	1ethod		SLA	CFM 50	ELA	E	qLA	ACH	ACH	1 50		
Wh	olehou	se	Propo	osed AC	H(50)	000381	2413	132.47	24	9.13	.1687	Ę	5		
							HEATING	SYS	TEM						
$\sqrt{}$	#	Sys	stem T	уре		Subtype	Speed		Efficienc	y	Capacity		В	lock	Ducts
	1	Ele	ctric H	eat Pum	np/	None	Single		HSPF:8.2	2 35.	.19 kBtu/hr		,	1	sys#1
							COOLING	3 SYS	TEM						
$\sqrt{}$	#	Sys	stem T	уре		Subtype	Subtype		Efficiency	Capac	ity A	ir Flow S	HR B	lock	Ducts
	1	Cei	ntral Uı	nit/		None	Single		SEER: 14	26.91 kB	tu/hr 81	10 cfm ().7	1	sys#1
						ŀ	TAW TOP	ER SY	STEM						
$\sqrt{}$	#	S	System	Туре	SubType	Location	EF	Ca	р	Use	SetPr	nt	Conser	vation	
•	1		lectric		None	Main	0.92	50 g	-	40 gal	120 de	g	Nor	ne	

INPUT SUMMARY CHECKLIST REPORT

				(SOLA	R HO	WATER	SYST	EM						
V	FSEC Cert #	Company	Name		:	System I	Model#	С	ollector Model		ollector Area	Stor Volu	•	FEF	
	None	None									ft²				
							DUCTS								
\checkmark	#		pply R-Value Area	Loca	- Retur ition	n Area	Leakaç	деТуре	Air Handler	CFM 25 TOT	CFM2 OUT		RLF	HV. Heat	AC # Cool
	1	Attic	6 603.25	f Att	tic	120.65 f	Default	Leakage	Main	(Default)	c(Defau	ult) c		1	1
						TEME	PERATUR	RES							
Program	ableThern	nostat: Y			Ceili	ng Fans	:								
Cooling Heating Venting	[] Jan [X] Jan [] Jan	[] Feb [X] Feb [] Feb	Mar X Mar X Mar	Apr Apr X Apr	[]	May May May	[X] Jun [] Jun [] Jun	[X] Jul [] Jul [] Jul	[X] Aug [] Aug [] Aug	[X] Ser [] Ser [] Ser		Oct Oct Oct	[] Nov [X] Nov [X] Nov	$[\times]$	Dec Dec Dec
Thermosta		: HERS 2	006 Reference	0	0	4			ours	0	•	40	44		10
Schedule T	ype		1	2	3	4	5	6	7	8	9	10	11		12
Cooling (W	D)	AM PM	78 80	78 80	78 78	78 78	78 78	78 78	78 78	78 78	80 78	80 78	80 78	5	30 78
Cooling (W	EH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	7	78 78
Heating (W	D)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	6	88 86
Heating (W	EH)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	6	68 66
							MASS								
Ma	iss Type			Area			Thickness		Furniture Fra	ction		Space			
De	fault(8 lbs	/sq.ft.		O ft²			0 ft		0.3			Main			

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 87

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)	12. Ducts, location & insulation level
2. Single-family or multiple-family	2. Single-family	a) Supply ducts R 6.0 b) Return ducts R 6.0 c) AHU location Main
3. No. of units (if multiple-family)	31	c) Alto location in initial
4. Number of bedrooms	43	13. Cooling system: Capacity 26.9 a) Split system SEER
5. Is this a worst case? (yes/no)	5. <u>No</u>	b) Single package SEER c) Ground/water source SEER/COP
6. Conditioned floor area (sq. ft.)	62413	d) Room unit/PTAC EER
7. Windows, type and areaa) U-factor:(weighted average)b) Solar Heat Gain Coefficient (SHGC)c) Area	7a. 0.360 7b. 0.250 7c. 214.0	14. Heating system: Capacity 35.2 a) Split system heat pump HSPF b) Single package heat pump HSPF
8. Skylights	0- NA	c) Electric resistance COP
a) U-factor:(weighted average)b) Solar Heat Gain Coefficient (SHGC)	8a. <u>NA</u> 8b. <u>NA</u>	d) Gas furnace, natural gas AFUE e) Gas furnace, LPG AFUE f) Other 8.20
9. Floor type, insulation level:		,
a) Slab-on-grade (R-value)	9a0.0	45.344
b) Wood, raised (R-value)	9b	15. Water heating system
c) Concrete, raised (R-value)	9c	a) Electric resistance EF 0.92 b) Gas fired, natural gas EF E
10. Wall type and insulation:		c) Gas fired, LPG EF
A. Exterior:		d) Solar system with tank EF
 Wood frame (Insulation R-value) 	10A1. <u>19.0</u>	e) Dedicated heat pump with tank EF
Masonry (Insulation R-value)	10A2	f) Heat recovery unit HeatRec%
B. Adjacent:		g) Other
 Wood frame (Insulation R-value) 	10B1	
Masonry (Insulation R-value)	10B2	
		16. HVAC credits claimed (Performance Method)
11. Ceiling type and insulation level		a) Ceiling fans
a) Under attic	11a. <u>38.0</u>	b) Cross ventilation Yes
b) Single assembly	11b	c) Whole house fan No
c) Knee walls/skylight walls	11c	d) Multizone cooling credit
d) Radiant barrier installed	11d. <u>Yes</u>	e) Multizone heating credit
		f) Programmable thermostat Yes
*Label required by Section R303.1.3 of the FI	orida Building Code, Ene	rgy Conservation, if not DEFAULT.
I certify that this home has complied with the saving features which will be installed (or exc display card will be completed based on insta	eeded) in this home befo	
Builder Signature:		Date:
Address of New Home: 110 Joel Glen		City/FL Zin: White Springs FL 32055

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance 2017 Florida Building Code, Energy Conservation, 6th Edition

	Jurisdiction:	Permit #:							
Jok	Information								
Bui	lder: Community:	Lot: NA							
Add	dress: 110 Joel Glen								
City	: White Springs State	e: FL Zip: 32055							
Air	Leakage Test Results Passing results must meet	either the Performance, Prescriptive, or ERI Method							
	PRESCRIPTIVE METHOD-The building or dwelling unit shall be test changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Clin	sted and verified as having an air leakage rate of not exceeding 7 air nate Zones 1 and 2.							
the		all be tested and verified as having an air leakage rate of not exceeding or R406-2017 (ERI), section labeled as infiltration, sub-section ACH50. It (Performance) or R406-2017 (ERI): 5.000							
	x 60 ÷ 28956 = ACH(50) PASS When ACH(50) is less than 3, Mechanical Ventilation must be verified by building department.	Method for calculating building volume: ○ Retrieved from architectural plans ○ Code software calculated ○ Field measured and calculated							
Tes 489 pro Dui 1. E cor 2. E me 3. I 4. E 5. H	R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7F/orida Statuesor individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to theode official. Testing shall be performed at any time after creation of all penetrations of the intended weatherstripping or other infiltration control measures. 1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures. 2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures. 3. Interior doors, if installed at the time of the test, shall be open. 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed. 5. Heating and cooling systems, if installed at the time of the test, shall be turned off. 6. Supply and return registers, if installed at the time of the test, shall be fully open.								
Te	esting Company								
۱ŀ	ompany Name:								
Si	gnature of Tester:	Date of Test:							
Р	rinted Name of Tester:								
Li	cense/Certification #:	Issuing Authority:							

Residential System Sizing Calculation

Summary

Mike & Jodi Boyko 110 Joel Glen White Springs, FL 32055 Project Title: Boyko Residence

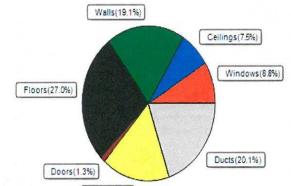
4/24/2020

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	35060	Btuh	Total cooling load calculation	26969	Btuh				
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh				
Total (Electric Heat Pump)	100.4	35195	Sensible (SHR = 0.70)	90.9	18839				
Heat Pump + Auxiliary(0.0kW)	100.4	35195	Latent	129.2	8074				
			Total (Electric Heat Pump)	99.8	26912				

WINTER CALCULATIONS

Winter Heating Load (for 2413 sqft)

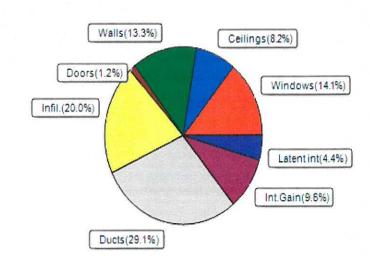
Load component			Load	
Window total	214	sqft	3082	Btuh
Wall total	2170	sqft	6707	Btuh
Door total	24	sqft	442	Btuh
Ceiling total	2576	sqft	2615	Btuh
Floor total	2413	sqft	9472	Btuh
Infiltration	130	cfm	5704	Btuh
Duct loss			7038	Btuh
Subtotal			35060	Btuh
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			35060	Btuh



SUMMER CALCULATIONS Infil.(16.3%)

Summer Cooling Load (for 2413 sqft)

Load component	2000		Load	
Window total	214	sqft	3791	Btuh
Wall total	2170	sqft	3588	Btuh
Door total	24	sqft	331	Btuh
Ceiling total	2576	sqft	2223	Btuh
Floor total			0	Btuh
Infiltration	98	cfm	2032	Btuh
Internal gain			2580	Btuh
Duct gain			6172	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			20718	Btuh
Latent gain(ducts)			1680	Btuh
Latent gain(infiltration)			3372	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occur	1200	Btuh		
Total latent gain	ass	6251	Btuh	
TOTAL HEAT GAIN			26969	Btuh





PREPARED BY:

DATE:

4/74/7020

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Mike & Jodi Boyko 110 Joel Glen White Springs, FL 32055 Project Title: Boyko Residence Building Type: User

4/24/2020

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

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation A	Area(sqft) X	HTM=	Load
1	2, NFRC 0.25	Vinyl	0.36	N	36.0	14.4	518 Btuh
2	2, NFRC 0.25	Vinyl	0.36	W	18.0	14.4	259 Btuh
3	2, NFRC 0.25	Vinyl	0.36	W	16.0	14.4	230 Btuh
4	2, NFRC 0.25	Vinyl	0.36	S	36.0	14.4	518 Btuh
5	2, NFRC 0.25	Vinyl	0.36	E	36.0	14.4	518 Btuh
6	2, NFRC 0.25	TIM	0.36	E	48.0	14.4	691 Btuh
7	2, NFRC 0.25	Vinyl	0.36	E	24.0	14.4	346 Btuh
	Window Total				214.0(sqft)		3082 Btuh
Walls	Туре	Ornt. U	eff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext (0	0.077)	19.0/0.0	688	3.09	2127 Btuh
2	Frame - Wood	- Ext (0	0.077)	19.0/0.0	422	3.09	1304 Btuh
3	Frame - Wood	- Ext (0	0.077)	19.0/0.0	688	3.09	2127 Btuh
4	Frame - Wood	- Ext (0	0.077)	19.0/0.0	372	3.09	1150 Btuh
	Wall Total				2170(sqft)		6707 Btuh
Doors	Туре	Storm	Ueff.		Area X	HTM=	Load
1	Insulated - Exte	rior, n (0).460)		24	18.4	442 Btuh
	Door Total				24(sqft)		442Btuh
Ceilings	Type/Color/Surf		eff.	R-Value	Area X	HTM=	Load
1	Vented Attic/L/M	1etal (0.0	025)	38.0/0.0	2576	1.0	2615 Btuh
	Ceiling Total				2576(sqft)		2615Btuh
Floors	Type		Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade		(1.180)	0.0	200.7 ft(pe	rim.) 47.2	9472 Btuh
	Floor Total				2413 sqft		9472 Btuh
				E	Envelope Subt	otal:	22317 Btuh
Infiltration	Type Natural	Wholel	house A	CH Volume(d .27 28956	•	I .	5704 Btuh
Duct load	Average sealed	, R6.0, Su	pply(Att	t), Return(Att)	(DLN	/l of 0.251)	7038 Btuh
All Zones				Sensible	Subtotal All	Zones	35060 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued) Project Title:

Mike & Jodi Boyko 110 Joel Glen White Springs, FL 32055

Project Title: Boyko Residence Building Type: User

4/24/2020

WHOLE HOUSE TOTALS									
	Subtotal Sensible Heat Loss	35060 Btuh							
Totals for Heating	Ventilation Sensible Heat Loss	0 Btuh							

Total Heat Loss

EQUIPMENT

#	35195 Btuh
	#

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)



35060 Btuh

Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Mike & Jodi Boyko 110 Joel Glen White Springs, FL 32055 Project Title: Boyko Residence

4/24/2020

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.

Component Loads for Whole House

	Type*			Overhang Windo			ow Area(sqft)		Н	ITM	Load			
Window	Panes	SHGC U		IS	Ornt	Len	Hgt	Gross		Unshaded	Shaded	Unshaded		
1	2 NFRC	0.25, 0.36	No	No	N	1.5ft.	3.0ft.	36.0	0.0	36.0	12	12	436	Btuh
2	2 NFRC	0.25, 0.36	No	No	W	1.0ft.	6.0ft.	18.0	0.0	18.0	12	31	557	Btuh
3		0.25, 0.36	No	No	W	1.0ft.	6.0ft.	16.0	0.0	16.0	12	31	495	Btuh
4	2 NFRC	0.25, 0.36	No	No	S	1.5ft.	3.0ft.	36.0	33.1	2.9	12	14	441	Btuh
5		0.25, 0.36	No	No	Ε		4.0ft.	36.0	36.0	0.0	12	31	436	
6		0.25, 0.36	No	No	Е	13.0f	6.0ft.	48.0	28.7	19.3	12	31	944	
7		0.25, 0.36	No	No	Е	13.0f	4.0ft.	24.0	24.0	0.0	12	31	290	
	Excursion													Btuh
	Window	/ Total						214 (<u> </u>				3791	Btuh
Walls	Туре				U	-Valu	e R-\	/alue	Area	(sqft)		HTM	Load	
							Cav/S	Sheath						
1		Vood - Ext				80.0		0.0		8.0		1.7	1138	
2		Frame - Wood - Ext 0.08			19.0/0.0		422.0			1.7	698	Btuh		
3		Frame - Wood - Ext 0.08 19.0/0.0 688.0 1.7								Btuh				
4		Vood - Ext			(0.08	19.0	0.0		2.0		1.7		Btuh
	Wall To	tal								70 (sqft)			3588	Btuh
Doors	Type								Area	(sqft)		HTM	Load	
1	Insulated	- Exterior							24	4.0		13.8	331	Btuh
	Door To	otal							2	24 (sqft)			331	Btuh
Ceilings	Type/C	olor/Surf	ace		U	-Valu	е	R-Value				HTM	Load	
1	Vented A	ttic/Light/Me	etal/RB			0.025		38.0/0.0	257	76.0		0.86	2223	Btuh
	Ceiling	-							257	76 (sqft)			2223	Btuh
Floors	Type						R-\	/alue		ze		HTM	Load	
1	Slab On (Grade								0.0		Btuh		
·	Floor Total			0.			0.0	2413.0 (sqft)			0.0		Btuh	
	11001 10	Jiai							2413	.0 (Sqit)			0	Diuii
									Е	nvelope	Subtota	l:	9933	Btuh
Infiltration	Туре				Aver	age A	CH	Volu	me(cuf	t) Wall R	atio	CFM=	Load	
	Natural				, (401	age /	0.20	VOIG	28956		allo	97.7		Btuh
Internal	ivatural					O00! !!						Appliance		Dian
					,	Occu				ccupant	,		Load	ъ.
gain							6		< 23	80 +		1200	2580	Btuh
									S	ensible E	Envelop	e Load:	14545	Btuh
Duct load	Average sealed,Supply(R6.0-Attic), Return(R6.0-Attic)							c)	(DGM of 0.424)				6172	Btuh
									Ser	nsible Lo	oad All	Zones	20718	Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Mike & Jodi Boyko 110 Joel Glen White Springs, FL 32055 Project Title: Boyko Residence Climate:FL_GAINESVILLE_REGIONAL_A

4/24/2020

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	14545	Btuh	
	Sensible Duct Load	6172	Btuh	
	Total Sensible Zone Loads			
	Sensible ventilation	0	Btuh	
	Blower	0	Btuh	
Whole House	Total sensible gain	20718	Btuh	
Totals for Cooling	Latent infiltration gain (for 51 gr. humidity difference)	3372	Btuh	
	Latent ventilation gain	0	Btuh	
	Latent duct gain	1680	Btuh	
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200	Btuh	
	Latent other gain	0	Btuh	
	Latent total gain	6251	Btuh	
	TOTAL GAIN	26969	Btuh	

EQUIPMENT							
1. Central Unit	#	26912 Btuh					

*Key: Window types (Panes - 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(1/2))

(Ornt - compass orientation)

