

Florida Department of Business and Professional Regulation - Residential Performance Method

BUILDING OFFICIAL: _____
DATE: _____

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FILE COPY
Code Compliance
PLANS EXAMINER

PROJECT

Title: 1303063b	Bedrooms: 3	Address Type: Street Address
Building Type: User	Conditioned Area: 2525	Lot #
Owner: Wilson, Gary & Patti	Total Stories: 1	Block/SubDivision:
# of Units: 1	Worst Case: Yes	PlatBook:
Builder Name:	Rotate Angle: 270	Street:
Permit Office:	Cross Ventilation:	County: Columbia
Jurisdiction:	Whole House Fan:	City, State, Zip: , FL ,
Family Type: Single-family		
New/Existing: New (From Plans)		
Comment:		

CLIMATE

✓	Design Location	TMY Site	IECC Zone	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_REGI	2	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	2525	25250

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	2525	25250	Yes	6	3	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	Main	292 ft	0	2525 ft²	----	0.3	0.3	0.4

ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Gable or shed	Composition shingles	2824 ft²	632 ft²	Dark	0.96	No	0.9	No	0	26.6

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2525 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	Main	30	2775 ft²	0.11	Wood

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	N=>W	Exterior	Face Brick - Wood	Main	13	86		10		860 ft²	0	0.23	0.75	0
2	E=>N	Exterior	Face Brick - Wood	Main	13	60		10		600 ft²	0	0	0.75	0
3	S=>E	Exterior	Face Brick - Wood	Main	13	58	4	10		583.3333	0	0.23	0.75	0
4	W=>S	Exterior	Face Brick - Wood	Main	13	30	6	10		305 ft²	0	0.23	0.75	0
5	S=>E	Garage	Frame - Wood	Main	13	57		10		570 ft²		0.23	0.75	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	E=>N	Insulated	Main	None	0.400000	1		6	8	6.666666
2	N=>W	Insulated	Main	None	0.400000	1		6	8	26.66666
3	S=>E	Insulated	Main	None	0.400000	1		6	8	13.33333
4	S=>E	Insulated	Main	None	0.400000	1		6	8	20 ft²
5	S=>E	Insulated	Main	None	0.400000	1		6	8	40 ft²

WINDOWS

Orientation shown is the entered orientation (=>) changed to Worst Case.

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Separation	Int Shade	Screening
1	N=>W	1	Metal	Low-E Double	Yes	0.35	0.35	4 ft²	1 ft 6 in	1 ft 0 in	None	None
2	N=>W	1	Metal	Low-E Double	Yes	0.35	0.35	36 ft²	1 ft 6 in	1 ft 0 in	None	None
3	E=>N	2	Metal	Low-E Double	Yes	0.35	0.35	18 ft²	1 ft 6 in	1 ft 0 in	None	None
4	E=>N	2	Metal	Low-E Double	Yes	0.35	0.35	13.33333	1 ft 6 in	1 ft 0 in	None	None
5	N=>W	1	Metal	Low-E Double	Yes	0.35	0.35	16 ft²	1 ft 6 in	1 ft 0 in	None	None
6	N=>W	1	Metal	Low-E Double	Yes	0.35	0.35	53.33333	1 ft 6 in	1 ft 0 in	None	None
7	N=>W	1	Metal	Low-E Double	Yes	0.35	0.35	20 ft²	1 ft 6 in	1 ft 0 in	None	None
8	N=>W	1	Metal	Low-E Double	Yes	0.35	0.35	18 ft²	1 ft 6 in	1 ft 0 in	None	None
9	E=>N	2	Metal	Low-E Double	Yes	0.35	0.35	36 ft²	1 ft 6 in	1 ft 0 in	None	None
10	E=>N	2	Metal	Low-E Double	Yes	0.35	0.35	6 ft²	1 ft 6 in	1 ft 0 in	None	None
11	S=>E	3	Metal	Low-E Double	Yes	0.35	0.35	36 ft²	1 ft 6 in	1 ft 0 in	None	None
12	S=>E	3	Metal	Low-E Double	Yes	0.35	0.35	60 ft²	1 ft 6 in	1 ft 0 in	None	None
13	S=>E	3	Metal	Low-E Double	Yes	0.35	0.35	26.66666	1 ft 6 in	1 ft 0 in	None	None
14	S=>E	3	Metal	Low-E Double	Yes	0.35	0.35	9 ft²	1 ft 6 in	1 ft 0 in	None	None
15	S=>E	3	Metal	Low-E Double	Yes	0.35	0.35	12 ft²	1 ft 6 in	1 ft 0 in	None	None
16	W=>S	4	Metal	Low-E Double	Yes	0.35	0.35	8 ft²	1 ft 6 in	1 ft 0 in	None	None
17	W=>S	4	Metal	Low-E Double	Yes	0.35	0.35	6 ft²	1 ft 6 in	1 ft 0 in	None	None

GARAGE

✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	753.99996 ft²	753.99996 ft²	56 ft	10 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Best Guess	0.000699	4636.1	254.51	478.66	0.5389	11.016

HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump	None	HSPF: 7.7	57 kBtu/hr	1	sys#1

COOLING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit	None	SEER: 13	57 kBtu/hr	1710 cfm	0.75	1	sys#1

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	Tankless	Exterior	0.92	1 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

✓	#	--- Supply ---			--- Return ---		Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF	Heat	HVAC # Cool
_____	1	Attic	6	453.8 ft	Attic	113.45	Default Leakage	Main	(Default)	(Default) %			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

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

Florida Code Compliance Checklist

Florida Department of Business and Professional Regulations
Residential Whole Building Performance Method

ADDRESS:

, FL,

PERMIT #:

MANDATORY REQUIREMENTS SUMMARY - See individual code sections for full details.

COMPONENT	SECTION	SUMMARY OF REQUIREMENT(S)	CHECK
Air leakage	402.4	To be caulked, gasketed, weatherstripped or otherwise sealed. Recessed lighting IC-rated as meeting ASTM E 283. Windows and doors = 0.30 cfm/sq.ft. Testing or visual inspection required. Fireplaces: gasketed doors & outdoor combustion air. Must complete envelope leakage report or visually verify Table 402.4.2.	
Thermostat & controls	403.1	At least one thermostat shall be provided for each separate heating and cooling system. Where forced-air furnace is primary system, programmable thermostat is required. Heat pumps with supplemental electric heat must prevent supplemental heat when compressor can meet the load.	
Ducts	403.2.2	All ducts, air handlers, filter boxes and building cavities which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section 503.2.7.2 of this code.	
	403.3.3	Building framing cavities shall not be used as supply ducts.	
Water heaters	403.4	Heat trap required for vertical pipe risers. Comply with efficiencies in Table 403.4.3.2. Provide switch or clearly marked circuit breaker (electric) or shutoff (gas). Circulating system pipes insulated to = R-2 + accessible manual OFF switch.	
Mechanical ventilation	403.5	Homes designed to operate at positive pressure or with mechanical ventilation systems shall not exceed the minimum ASHRAE 62 level. No make-up air from attics, crawlspaces, garages or outdoors adjacent to pools or spas.	
Swimming Pools & Spas	403.9	Pool pumps and pool pump motors with a total horsepower (HP) of = 1 HP shall have the capability of operating at two or more speeds. Spas and heated pools must have vapor-retardant covers or a liquid cover or other means proven to reduce heat loss except if 70% of heat from site-recovered energy. Off/timer switch required. Gas heaters minimum thermal efficiency=78% (82% after 4/16/13). Heat pump pool heaters minimum COP= 4.0.	
Cooling/heating equipment	403.6	Sizing calculation performed & attached. Minimum efficiencies per Tables 503.2.3. Equipment efficiency verification required. Special occasion cooling or heating capacity requires separate system or variable capacity system. Electric heat >10kW must be divided into two or more stages.	
Ceilings/knee walls	405.2.1	R-19 space permitting.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 74

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

, , FL,

1. New construction or existing	New (From Plans)		9. Wall Types	Insulation	Area
2. Single family or multiple family	Single-family		a. Face Brick - Wood, Exterior	R=13.0	2348.30 ft ²
3. Number of units, if multiple family	1		b. Frame - Wood, Adjacent	R=13.0	570.00 ft ²
4. Number of Bedrooms	3		c. N/A	R=	ft ²
5. Is this a worst case?	Yes		d. N/A	R=	ft ²
6. Conditioned floor area (ft ²)	2525		10. Ceiling Types	Insulation	Area
7. Windows**	Description	Area	a. Under Attic (Vented)	R=30.0	2775.00 ft ²
a. U-Factor:	Dbl, U=0.35	378.33 ft ²	b. N/A	R=	ft ²
SHGC:	SHGC=0.35		c. N/A	R=	ft ²
b. U-Factor:	N/A	ft ²	11. Ducts	R	ft ²
SHGC:			a. Sup: Attic, Ret: Attic, AH: Main	6	453.8
c. U-Factor:	N/A	ft ²	12. Cooling systems	kBtu/hr	Efficiency
SHGC:			a. Central Unit	57.0	SEER:13.00
d. U-Factor:	N/A	ft ²	13. Heating systems	kBtu/hr	Efficiency
SHGC:			a. Electric Heat Pump	57.0	HSPF:7.70
Area Weighted Average Overhang Depth:		1.500 ft.	14. Hot water systems		
Area Weighted Average SHGC:		0.350	a. Electric	Cap: 1 gallons	EF: 0.92
8. Floor Types	Insulation	Area	b. Conservation features		
a. Slab-On-Grade Edge Insulation	R=0.0	2525.00 ft ²	None		
b. N/A	R=	ft ²	15. Credits		Pstat
c. N/A	R=	ft ²			

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: _____



*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 EnergyGauge Rating. Contact the EnergyGauge Hotline at (321) 638-1492 or see the EnergyGauge web site at energygauge.com for information and a list of certified Raters. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section 303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

Residential System Sizing Calculation

Summary

Wilson, Gary & Patti
FL

Project Title:
1303063b

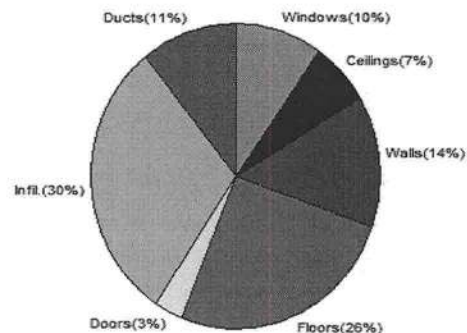
2013-05-31

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(54gr.)			
Winter design temperature(MJ8 99%)	33 F	Summer design temperature(MJ8 99%)	92 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	37 F	Summer temperature difference	17 F
Total heating load calculation	49517 Btuh	Total cooling load calculation	50619 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	115.1 57000	Sensible (SHR = 0.75)	112.5 42750
Heat Pump + Auxiliary(0.0kW)	115.1 57000	Latent	112.9 14250
		Total (Electric Heat Pump)	112.6 57000

WINTER CALCULATIONS

Winter Heating Load (for 2525 sqft)

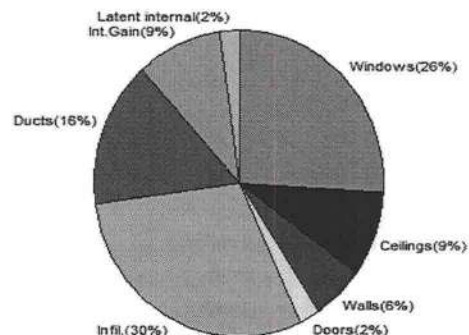
Load component		Load	
Window total	378 sqft	4899	Btuh
Wall total	2433 sqft	7023	Btuh
Door total	107 sqft	1579	Btuh
Ceiling total	2775 sqft	3270	Btuh
Floor total	2525 sqft	12749	Btuh
Infiltration	363 cfm	14701	Btuh
Duct loss		5296	Btuh
Subtotal		49517	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		49517	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 2525 sqft)

Load component		Load	
Window total	378 sqft	13175	Btuh
Wall total	2433 sqft	2793	Btuh
Door total	107 sqft	1195	Btuh
Ceiling total	2775 sqft	4596	Btuh
Floor total		0	Btuh
Infiltration	272 cfm	5066	Btuh
Internal gain		4780	Btuh
Duct gain		6390	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Blower Load		0	Btuh
Total sensible gain		37993	Btuh
Latent gain(ducts)		1478	Btuh
Latent gain(infiltration)		9947	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		1200	Btuh
Total latent gain		12626	Btuh
TOTAL HEAT GAIN		50619	Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: EIAN BEAMSLEY

DATE: 2013-05-31

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Wilson, Gary & Patti

Project Title:

1303063b

, FL

Building Type: User

2013-05-31

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 37.0 F (MJ8 99%)

This calculation is for Worst Case. The house has been rotated 270 degrees.

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
1	2, NFRC 0.35	Metal	0.35	W	4.0		12.9	52 Btuh
2	2, NFRC 0.35	Metal	0.35	W	36.0		12.9	466 Btuh
3	2, NFRC 0.35	Metal	0.35	N	18.0		12.9	233 Btuh
4	2, NFRC 0.35	Metal	0.35	N	13.3		12.9	173 Btuh
5	2, NFRC 0.35	Metal	0.35	W	16.0		12.9	207 Btuh
6	2, NFRC 0.35	Metal	0.35	W	53.3		12.9	691 Btuh
7	2, NFRC 0.35	Metal	0.35	W	20.0		12.9	259 Btuh
8	2, NFRC 0.35	Metal	0.35	W	18.0		12.9	233 Btuh
9	2, NFRC 0.35	Metal	0.35	N	36.0		12.9	466 Btuh
10	2, NFRC 0.35	Metal	0.35	N	6.0		12.9	78 Btuh
11	2, NFRC 0.35	Metal	0.35	E	36.0		12.9	466 Btuh
12	2, NFRC 0.35	Metal	0.35	E	60.0		12.9	777 Btuh
13	2, NFRC 0.35	Metal	0.35	E	26.7		12.9	345 Btuh
14	2, NFRC 0.35	Metal	0.35	E	9.0		12.9	117 Btuh
15	2, NFRC 0.35	Metal	0.35	E	12.0		12.9	155 Btuh
16	2, NFRC 0.35	Metal	0.35	S	8.0		12.9	104 Btuh
17	2, NFRC 0.35	Metal	0.35	S	6.0		12.9	78 Btuh
Window Total					378.3(sqft)			4899 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Face Br - Wood	- Ext	(0.080)	13.0/0.0	686		2.95	2024 Btuh
2	Face Br - Wood	- Ext	(0.063)	13.0/0.0	520		2.32	1207 Btuh
3	Face Br - Wood	- Ext	(0.080)	13.0/0.0	426		2.95	1258 Btuh
4	Face Br - Wood	- Ext	(0.080)	13.0/0.0	291		2.95	859 Btuh
5	Frame - Wood	- Adj	(0.089)	13.0/0.0	510		3.28	1675 Btuh
Wall Total					2433(sqft)			7023 Btuh
Doors	Type	Storm	Ueff.		Area	X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)		7		14.8	99 Btuh
2	Insulated - Exterior,	n	(0.400)		27		14.8	395 Btuh
3	Insulated - Exterior,	n	(0.400)		13		14.8	197 Btuh
4	Insulated - Garage,	n	(0.400)		20		14.8	296 Btuh
5	Insulated - Garage,	n	(0.400)		40		14.8	592 Btuh
Door Total					107(sqft)			1579 Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shing		(0.032)	30.0/0.0	2775		1.2	3270 Btuh
Ceiling Total					2775(sqft)			3270 Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
1	Slab On Grade		(1.180)	0.0	292.0 ft(perim.)		43.7	12749 Btuh
Floor Total					2525 sqft			12749 Btuh
Envelope Subtotal:								29519 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Wilson, Gary & Patti

Project Title:

1303063b

, FL

Building Type: User

2013-05-31

Infiltration	Type Natural	Wholehouse ACH 0.86	Volume(cuft) 25250	Wall Ratio 1.00	CFM= 362.9	14701 Btuh
Duct load	Average sealed, R6.0, Supply(Att), Return(Att) (DLM of 0.120)					5296 Btuh
All Zones	Sensible Subtotal All Zones					49517 Btuh

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	49517 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	49517 Btuh

EQUIPMENT

1. Electric Heat Pump	#	57000 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

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Wilson, Gary & Patti

Project Title:
1303063b

, FL

2013-05-31

Reference City: Gainesville, FL Temperature Difference: 17.0F(MJ8 99%) Humidity difference: 54gr.
This calculation is for Worst Case. The house has been rotated 270 degrees.

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	0.35, 0.35	No	No	W		1.5ft	1.0ft	4.0	1.0	3.0	13	40	133 Btuh	
2	2 NFRC	0.35, 0.35	No	No	W		1.5ft	1.0ft	36.0	1.5	34.5	13	40	1390 Btuh	
3	2 NFRC	0.35, 0.35	No	No	N		1.5ft	1.0ft	18.0	0.0	18.0	13	13	240 Btuh	
4	2 NFRC	0.35, 0.35	No	No	N		1.5ft	1.0ft	13.3	0.0	13.3	13	13	177 Btuh	
5	2 NFRC	0.35, 0.35	No	No	W		1.5ft	1.0ft	16.0	1.0	15.0	13	40	609 Btuh	
6	2 NFRC	0.35, 0.35	No	No	W		1.5ft	1.0ft	53.3	2.0	51.4	13	40	2065 Btuh	
7	2 NFRC	0.35, 0.35	No	No	W		1.5ft	1.0ft	20.0	0.7	19.3	13	40	774 Btuh	
8	2 NFRC	0.35, 0.35	No	No	W		1.5ft	1.0ft	18.0	0.7	17.3	13	40	695 Btuh	
9	2 NFRC	0.35, 0.35	No	No	N		1.5ft	1.0ft	36.0	0.0	36.0	13	13	479 Btuh	
10	2 NFRC	0.35, 0.35	No	No	N		1.5ft	1.0ft	6.0	0.0	6.0	13	13	80 Btuh	
11	2 NFRC	0.35, 0.35	No	No	E		1.5ft	1.0ft	36.0	1.5	34.5	13	40	1390 Btuh	
12	2 NFRC	0.35, 0.35	No	No	E		1.5ft	1.0ft	60.0	2.9	57.1	13	40	2304 Btuh	
13	2 NFRC	0.35, 0.35	No	No	E		1.5ft	1.0ft	26.7	1.0	25.7	13	40	1033 Btuh	
14	2 NFRC	0.35, 0.35	No	No	E		1.5ft	1.0ft	9.0	1.5	7.5	13	40	318 Btuh	
15	2 NFRC	0.35, 0.35	No	No	E		1.5ft	1.0ft	12.0	1.0	11.0	13	40	450 Btuh	
16	2 NFRC	0.35, 0.35	No	No	S		1.5ft	1.0ft	8.0	8.0	0.0	13	16	106 Btuh	
17	2 NFRC	0.35, 0.35	No	No	S		1.5ft	1.0ft	6.0	6.0	0.0	13	16	80 Btuh	
	Excursion														849 Btuh
	Window Total								378 (sqft)						13175 Btuh
Walls	Type						U-Value	R-Value	Area(sqft)			HTM		Load	
								Cav/Sheath							
1	Face Brick - Wood - Ext						0.08	13.0/0.0	686.0			1.1		766 Btuh	
2	Face Brick - Wood - Ext						0.06	13.0/0.0	520.0			0.9		457 Btuh	
3	Face Brick - Wood - Ext						0.08	13.0/0.0	426.3			1.1		476 Btuh	
4	Face Brick - Wood - Ext						0.08	13.0/0.0	291.0			1.1		325 Btuh	
5	Frame - Wood - Adj						0.09	13.0/0.0	510.0			1.5		770 Btuh	
	Wall Total								2433 (sqft)					2793 Btuh	
Doors	Type								Area (sqft)			HTM		Load	
1	Insulated - Exterior								6.7			11.2		75 Btuh	
2	Insulated - Exterior								26.7			11.2		299 Btuh	
3	Insulated - Exterior								13.3			11.2		149 Btuh	
4	Insulated - Garage								20.0			11.2		224 Btuh	
5	Insulated - Garage								40.0			11.2		448 Btuh	
	Door Total								107 (sqft)					1195 Btuh	
Ceilings	Type/Color/Surface						U-Value	R-Value	Area(sqft)			HTM		Load	
1	Vented Attic/DarkShingle						0.032	30.0/0.0	2775.0			1.66		4596 Btuh	
	Ceiling Total								2775 (sqft)					4596 Btuh	
Floors	Type							R-Value	Size			HTM		Load	
1	Slab On Grade							0.0	2525 (ft-perimeter)			0.0		0 Btuh	
	Floor Total								2525.0 (sqft)					0 Btuh	
	Envelope Subtotal:													21758 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Wilson, Gary & Patti

Project Title:
1303063b

Climate:FL_GAINESVILLE_REGIONAL_A

, FL

2013-05-31

Infiltration	Type Natural	Average ACH 0.65	Volume(cuft) 25250	Wall Ratio 1	CFM= 272.2	Load 5066 Btuh
Internal gain		Occupants 6	Btuh/occupant X 230	Appliance +	3400	Load 4780 Btuh
					Sensible Envelope Load:	31604 Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)				(DGM of 0.202)	6390 Btuh
					Sensible Load All Zones	37993 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Wilson, Gary & Patti
, FL

Project Title:
1303063b

Climate:FL_GAINESVILLE_REGIONAL_A

2013-05-31

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	31604 Btuh
	Sensible Duct Load	6390 Btuh
	Total Sensible Zone Loads	37993 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	37993 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	9947 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1478 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	12626 Btuh
	TOTAL GAIN	50619 Btuh

EQUIPMENT

1. Central Unit	#	57000 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