

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: HILL V E
 Street: 1160 NW LOWER SPRINGS RD
 City, State, Zip: LAKE CITY, FL, 32055-
 Owner: FREDDIE PETERSON
 Design Location: FL, Jacksonville

Builder Name: AMERICA'S HOME PLACE
 Permit Office: COLUMBIA COUNTY
 Permit Number:
 Jurisdiction:

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	5
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft ²)	2609
Conditioned floor area below grade (ft ²)	0
7. Windows (320.0 sqft.)	Description Area
a. U-Factor:	Dbl, U=0.35 320.00 ft ²
SHGC:	SHGC=0.27
b. U-Factor:	N/A ft ²
SHGC:	
c. U-Factor:	N/A ft ²
SHGC:	
d. U-Factor:	N/A ft ²
SHGC:	
Area Weighted Average Overhang Depth:	2.376 ft.
Area Weighted Average SHGC:	0.270
8. Floor Types (1569.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 1569.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²

9. Wall Types (2761.3 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=13.0 2761.30 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²
d. N/A	R= ft ²
10. Ceiling Types (1569.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=30.0 1569.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²
11. Ducts	R ft ²
a. Sup: Attic, Ret: Attic, AH: Attic	6 306
b. Sup: Attic, Ret: Attic, AH: Attic	6 219
12. Cooling systems	kBtu/hr Efficiency
a. Central Unit	24.0 SEER:14.00
b. Central Unit	17.4 SEER:14.00
13. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	24.0 HSPF:8.20
b. Electric Heat Pump	17.5 HSPF:8.20
14. Hot water systems	
a. Electric	Cap: 50 gallons
b. Conservation features	EF: 0.920
None	
15. Credits	Pstat

Glass/Floor Area: 0.123

Total Proposed Modified Loads: 43.76
 Total Standard Reference Loads: 61.89

PASS

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

PREPARED BY: *Speedy Calc's LLC*
 DATE: *9-15-12*

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 403.2.2.1.1.
- Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist
- Heat sys #1 may be undersized. Size of 24.0 was increased to 25.8 for simulation. Please review the Manual J8 report.

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 71

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

1160 NW LOWER SPRINGS RD, LAKE CITY, FL, 32055-

1. New construction or existing	New (From Plans)		9. Wall Types	Insulation	Area
2. Single family or multiple family	Single-family		a. Frame - Wood, Exterior	R=13.0	2761.30 ft ²
3. Number of units, if multiple family	1		b. N/A	R=	ft ²
4. Number of Bedrooms	5		c. N/A	R=	ft ²
5. Is this a worst case?	No		d. N/A	R=	ft ²
6. Conditioned floor area (ft ²)	2609		10. Ceiling Types	Insulation	Area
7. Windows**	Description	Area	a. Under Attic (Vented)	R=30.0	1569.00 ft ²
a. U-Factor:	Dbl, U=0.35	320.00 ft ²	b. N/A	R=	ft ²
SHGC:	SHGC=0.27		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: Attic	6	306
c. U-Factor:	N/A	ft ²	b. Sup: Attic, Ret: Attic, AH: Attic	6	219
SHGC:			12. Cooling systems	kBtu/hr	Efficiency
d. U-Factor:	N/A	ft ²	a. Central Unit	24.0	SEER:14.00
SHGC:			b. Central Unit	17.4	SEER:14.00
Area Weighted Average Overhang Depth:	2.376 ft.		13. Heating systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.270		a. Electric Heat Pump	24.0	HSPF:8.20
8. Floor Types	Insulation	Area	b. Electric Heat Pump	17.5	HSPF:8.20
a. Slab-On-Grade Edge Insulation	R=0.0	1569.00 ft ²	14. Hot water systems		Cap: 50 gallons
b. N/A	R=	ft ²	a. Electric		EF: 0.92
c. N/A	R=	ft ²	b. Conservation features		
			None		
			15. Credits		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: _____



*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.

PROJECT

Title: HILL V E	Bedrooms: 5	Address Type: Street Address
Building Type: User	Conditioned Area: 2609	Lot #:
Owner: FREDDIE PETERSON	Total Stories: 2	Block/SubDivision:
# of Units: 1	Worst Case: No	PlatBook:
Builder Name: AMERICA'S HOME PLACE	Rotate Angle: 0	Street: 1160 NW LOWER SPRI
Permit Office: COLUMBIA COUNTY	Cross Ventilation:	County: COLUMBIA
Jurisdiction:	Whole House Fan:	City, State, Zip: LAKE CITY ,
Family Type: Single-family		FL , 32055-
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, Jacksonville	FL_JACKSONVILLE_INT	2	32	93	70	75	1281	49	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1569	14277.9003
2	Block2	1040	8320

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1569	14277.9	Yes	2	1	1	Yes	Yes	Yes
2	NewSpace2	1040	8320	No	4	4	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulation	Main	172 ft	0	1569 ft²	----	0	0	1

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	1817 ft²	458 ft²	Medium	0.85	No	0.9	No	0	30.3

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1569 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
	1	Under Attic (Vented)	Main	30	1569 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	E	Exterior	Frame - Wood	Main	13	20		9	1	181.6666		0	0.4	0
	2	N	Exterior	Frame - Wood	Main	13	5		9	1	45.41666		0	0.4	0
	3	E	Exterior	Frame - Wood	Main	13	33		9	1	299.75 ft²		0	0.4	0
	4	S	Exterior	Frame - Wood	Main	13	33		9	1	299.75 ft²		0	0.4	0
	5	W	Exterior	Frame - Wood	Main	13	35	4	9	1	320.9444		0	0.4	0
	6	N	Exterior	Frame - Wood	Main	13	4		9	1	36.33333		0	0.4	0
	7	W	Exterior	Frame - Wood	Main	13	17	8	9	1	160.4722		0	0.4	0
	8	N	Exterior	Frame - Wood	Main	13	24		9	1	218 ft²		0	0.4	0
	9	E	Exterior	Frame - Wood	NewSpace2	13	33		9	1	299.75 ft²		0	0.4	0
	10	S	Exterior	Frame - Wood	NewSpace2	13	33		9	1	299.75 ft²		0	0.4	0
	11	W	Exterior	Frame - Wood	NewSpace2	13	33		9	1	299.75 ft²		0	0.4	0
	12	N	Exterior	Frame - Wood	NewSpace2	13	33		9	1	299.75 ft²		0	0.4	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
	1	E	Insulated	Main	None	0.460000	3		8		24 ft²
	2	S	Insulated	Main	None	0.460000	3		8		24 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Separation	Int Shade	Screening
	1	E	1	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 4 in	2 ft 6 in	Drapes/blinds	Exterior 5
	2	E	1	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 4 in	2 ft 6 in	Drapes/blinds	Exterior 5
	3	E	3	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	6 ft 0 in	2 ft 6 in	Drapes/blinds	Exterior 5
	4	E	3	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	6 ft 0 in	2 ft 6 in	Drapes/blinds	Exterior 5
	5	E	3	Vinyl	Low-E Double	Yes	0.35	0.27	8 ft²	6 ft 0 in	2 ft 6 in	Drapes/blinds	Exterior 5
	6	E	3	Vinyl	Low-E Double	Yes	0.35	0.27	3 ft²	6 ft 0 in	0 ft 6 in	Drapes/blinds	Exterior 5
	7	E	3	Vinyl	Low-E Double	Yes	0.35	0.27	8 ft²	6 ft 0 in	2 ft 6 in	Drapes/blinds	Exterior 5
	8	E	3	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	6 ft 0 in	2 ft 6 in	Drapes/blinds	Exterior 5
	9	E	3	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	6 ft 0 in	2 ft 6 in	Drapes/blinds	Exterior 5
	10	W	5	Vinyl	Low-E Double	Yes	0.35	0.27	40 ft²	1 ft 4 in	10 ft 6 in	Drapes/blinds	Exterior 5
	11	W	5	Vinyl	Low-E Double	Yes	0.35	0.27	12 ft²	1 ft 4 in	9 ft 6 in	Drapes/blinds	Exterior 5
	12	W	5	Vinyl	Low-E Double	Yes	0.35	0.27	30 ft²	1 ft 4 in	10 ft 6 in	Drapes/blinds	Exterior 5
	13	W	7	Vinyl	Low-E Double	Yes	0.35	0.27	16 ft²	1 ft 4 in	2 ft 6 in	Drapes/blinds	Exterior 5
	14	N	8	Vinyl	Low-E Double	Yes	0.35	0.27	8 ft²	1 ft 4 in	2 ft 6 in	Drapes/blinds	Exterior 5
	15	E	9	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 0 in	1 ft 4 in	Drapes/blinds	Exterior 5
	16	E	9	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 0 in	1 ft 4 in	Drapes/blinds	Exterior 5
	17	E	9	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 0 in	1 ft 4 in	Drapes/blinds	Exterior 5

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Area	Overhang Depth	Separation	Int Shade	Screening
✓	18	E	9	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 0 in	1 ft 4 in	Drapes/blinds	Exterior 5
✓	19	E	9	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 0 in	1 ft 4 in	Drapes/blinds	Exterior 5
✓	20	W	11	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 0 in	1 ft 4 in	Drapes/blinds	Exterior 5
✓	21	W	11	Vinyl	Low-E Double	Yes	0.35	0.27	15 ft²	1 ft 0 in	1 ft 4 in	Drapes/blinds	Exterior 5

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Best Guess	0.000500	3421.72	187.848	353.275	0.47399	9.08506

HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
✓	1	Electric Heat Pump	None	HSPF: 8.2	24 kBtu/hr	1	sys#1
✓	2	Electric Heat Pump	None	HSPF: 8.2	17.5 kBtu/hr	2	sys#2

COOLING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
✓	1	Central Unit	None	SEER: 14	24 kBtu/hr	720 cfm	0.8	1	sys#1
✓	2	Central Unit	None	SEER: 14	17.4 kBtu/hr	522 cfm	0.7	2	sys#2

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	None	Main	0.92	50 gal	80 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 Location	R-Value	Area	Return Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF	HVAC # Heat	Cool
✓	1	Attic	6	306 ft²	Attic	65.225 f	Default Leakage	Attic	(Default)	c(Default) %			1	1
✓	2	Attic	6	219 ft²	Attic	65.225 f	Default Leakage	Attic	(Default)	c(Default) %			2	2

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

Schedule Type		Hours											
		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	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: 1160 NW LOWER SPRINGS RD
LAKE CITY, FL, 32055-

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.	

Manual S Compliance Report

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: FREDDIE PETERSON
1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Cooling Equipment

Design Conditions

Outdoor design DB: 92.7°F	Sensible gain: 17809 Btuh	Entering coil DB: 76.1°F
Outdoor design WB: 77.1°F	Latent gain: 3530 Btuh	Entering coil WB: 63.0°F
Indoor design DB: 75.0°F	Total gain: 21338 Btuh	
Indoor RH: 50%	Estimated airflow: 744 cfm	

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP	Model: GSZ140241A*+AR*F193116C*
Manufacturer: Goodman Mfg.	
Actual airflow: 744 cfm	
Sensible capacity: 17760 Btuh	100% of load
Latent capacity: 4440 Btuh	126% of load
Total capacity: 22200 Btuh	104% of load SHR: 80%

Heating Equipment

Design Conditions

Outdoor design DB: 32.5°F	Heat loss: 21959 Btuh	Entering coil DB: 69.5°F
Indoor design DB: 70.0°F		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP	Model: GSZ140241A*+AR*F193116C*	
Manufacturer: Goodman Mfg.		
Actual airflow: 850 cfm		
Output capacity: 23300 Btuh	106% of load	Capacity balance: 38 °F
Supplemental heat required: 0 Btuh		Economic balance: -99 °F

Backup equipment type: Elec strip	Model:
Manufacturer:	
Actual airflow: 850 cfm	
Output capacity: 6.3 kW	98% of load Temp. rise: 0 °F

The above equipment was selected in accordance with ACCA Manual S.



Manual S Compliance Report

SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
 Date: Sep 13, 2012
 By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: FREDDIE PETERSON
 1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Cooling Equipment

Design Conditions

Outdoor design DB: 92.7°F	Sensible gain: 10940 Btuh	Entering coil DB: 76.0°F
Outdoor design WB: 77.1°F	Latent gain: 3616 Btuh	Entering coil WB: 63.0°F
Indoor design DB: 75.0°F	Total gain: 14556 Btuh	
Indoor RH: 50%	Estimated airflow: 580 cfm	

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP	Model: GSZ130181A*+AWUF31XX16A*
Manufacturer: Goodman Mfg.	
Actual airflow: 580 cfm	
Sensible capacity: 13026 Btuh	119% of load
Latent capacity: 3674 Btuh	102% of load
Total capacity: 16700 Btuh	115% of load SHR: 78%

Heating Equipment

Design Conditions

Outdoor design DB: 32.5°F	Heat loss: 9111 Btuh	Entering coil DB: 69.5°F
Indoor design DB: 70.0°F		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type: Split ASHP	Model: GSZ130181A*+AWUF31XX16A*	
Manufacturer: Goodman Mfg.		
Actual airflow: 580 cfm		
Output capacity: 16200 Btuh	178% of load	Capacity balance: 25 °F
Supplemental heat required: 0 Btuh		Economic balance: -99 °F

Backup equipment type: Elec strip	Model:
Manufacturer:	
Actual airflow: 580 cfm	
Output capacity: 2.5 kW	94% of load Temp. rise: 0 °F

The above equipment was selected in accordance with ACCA Manual S.



Project Summary

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: FREDDIE PETERSON
1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Notes: FREDDY PETERSON
1160 NW LOWER SPRINGS ROAD
LAKE CITY, FL. 32055

Design Information

Weather: Jacksonville Intl AP, FL, US

Winter Design Conditions

Outside db	33 °F
Inside db	70 °F
Design TD	38 °F

Summer Design Conditions

Outside db	93 °F
Inside db	75 °F
Design TD	18 °F
Daily range	M
Relative humidity	50 %
Moisture difference	51 gr/lb

Heating Summary

Structure	19516 Btuh
Ducts	2443 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	21959 Btuh

Sensible Cooling Equipment Load Sizing

Structure	14886 Btuh
Ducts	2923 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	17809 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1569	1569
Volume (ft³)	14675	14675
Air changes/hour	0.31	0.16
Equiv. AVF (cfm)	76	38

Latent Cooling Equipment Load Sizing

Structure	2919 Btuh
Ducts	611 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	3530 Btuh
Equipment total load	21338 Btuh
Req. total capacity at 0.80 SHR	1.9 ton

Heating Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN, JANITROL, AMANA DISTI...
Model	GSZ140241A*
AHRI ref	4690323

Efficiency	8.2 HSPF
Heating input	
Heating output	24000 Btuh @ 47°F
Temperature rise	26 °F
Actual air flow	850 cfm
Air flow factor	0.039 cfm/Btuh
Static pressure	1.00 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN, JANITROL, AMANA DISTI...
Cond	GSZ140241A*
Coil	AR*F193116C*
AHRI ref	4690323
Efficiency	12.0 EER, 14 SEER
Sensible cooling	19200 Btuh
Latent cooling	4800 Btuh
Total cooling	24000 Btuh
Actual air flow	744 cfm
Air flow factor	0.042 cfm/Btuh
Static pressure	1.00 in H2O
Load sensible heat ratio	0.83

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Project Summary

SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: FREDDIE PETERSON
1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Notes: FREDDY PETERSON
1160 NW LOWER SPRINGS ROAD
LAKE CITY, FL. 32055

Design Information

Weather: Jacksonville Intl AP, FL, US

Winter Design Conditions

Outside db	33 °F
Inside db	70 °F
Design TD	38 °F

Summer Design Conditions

Outside db	93 °F
Inside db	75 °F
Design TD	18 °F
Daily range	M
Relative humidity	50 %
Moisture difference	51 gr/lb

Heating Summary

Structure	7588 Btuh
Ducts	1523 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	9111 Btuh

Sensible Cooling Equipment Load Sizing

Structure	9055 Btuh
Ducts	1885 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	10940 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1040	1040
Volume (ft³)	8447	8447
Air changes/hour	0.34	0.17
Equiv. AVF (cfm)	47	24

Latent Cooling Equipment Load Sizing

Structure	3223 Btuh
Ducts	393 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	3616 Btuh
Equipment total load	14556 Btuh
Req. total capacity at 0.78 SHR	1.2 ton

Heating Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN, JANITROL, AMANA DISTI...
Model	GSZ130181A*
AHRI ref	3629336

Efficiency	8.2 HSPF
Heating input	
Heating output	17500 Btuh @ 47°F
Temperature rise	27 °F
Actual air flow	580 cfm
Air flow factor	0.064 cfm/Btuh
Static pressure	1.00 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN, JANITROL, AMANA DISTI...
Cond	GSZ130181A*
Coil	AWUF31XX16A*
AHRI ref	3629336
Efficiency	11.3 EER, 14 SEER
Sensible cooling	13572 Btuh
Latent cooling	3828 Btuh
Total cooling	17400 Btuh
Actual air flow	580 cfm
Air flow factor	0.053 cfm/Btuh
Static pressure	1.00 in H2O
Load sensible heat ratio	0.75

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Component Constructions

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: FREDDIE PETERSON
1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Design Conditions

Location:	Jacksonville Intl AP, FL, US	Indoor:	Indoor temperature (°F)	70	Heating	75
Elevation:	33 ft		Design TD (°F)	38		18
Latitude:	30°N		Relative humidity (%)	50		50
Outdoor:			Moisture difference (gr/lb)	33.1		51.2
Dry bulb (°F)	33	Heating				
Daily range (°F)	-	Cooling				
Wet bulb (°F)	-					
Wind speed (mph)	15.0					
			Infiltration:			
			Method	Simplified		
			Construction quality	Average		
			Fireplaces	0		

Construction descriptions

	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12C-0sw: Frm wall, stucco ext, r-13 cav ins, 1/2" gypsum board int	n	292	0.091	13.0	3.41	997	2.29	670
fnsh, 2"x4" wood frm	e	400	0.091	13.0	3.41	1365	2.29	917
	s	300	0.091	13.0	3.41	1025	2.29	689
	w	381	0.091	13.0	3.41	1298	2.29	873
	all	1373	0.091	13.0	3.41	4686	2.29	3149

Partitions

(none)

Windows

AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1.4 ft overhang (4 ft window ht, 6.6 ft sep.)	n	8	0.350	0	13.1	105	9.40	75
AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1 ft overhang (5 ft window ht, 1 ft sep.)	e	15	0.350	0	13.1	197	25.9	388
AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1.4 ft overhang (5 ft window ht, 2.5 ft sep.)	e	30	0.350	0	13.1	394	25.9	777
AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 5.6 ft overhang (5 ft window ht, 2.5 ft sep.)	e	60	0.350	0	13.1	788	18.8	1128
AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 5.6 ft overhang (6.8 ft window ht, 2.5 ft sep.)	e	14	0.350	0	13.1	179	20.7	281
AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1.4 ft overhang (4 ft window ht, 2.6 ft sep.)	w	16	0.350	0	13.1	210	25.9	414



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AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1.4 ft overhang (5 ft window ht, 10.6 ft sep.)	w	45	0.350	0	13.1	591	25.9	1165
AMERICA S HOME PLACE W GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1.4 ft overhang (6.8 ft window ht, 10.6 ft sep.)	w	41	0.350	0	13.1	536	25.9	1056
Doors								
11J0: Door, mtl fbrgl type	e	20	0.600	6.3	22.5	459	18.1	370
Ceilings								
16B-30ad: Attic ceiling, asphalt shingles roof mat, r-30 ceil ins, 1/2" gypsum board int fnsh		529	0.032	30.0	1.20	635	1.72	909
Floors								
22A-cpm: Bg floor, heavy dry or light damp soil, on grade depth, carpet flr fnsh		96	1.180	0	44.2	4248	0	0
22A-vpm: Bg floor, heavy dry or light damp soil, on grade depth, vinyl flr fnsh		76	1.180	0	44.2	3363	0	0



Component Constructions **SECOND FLOOR UNIT** 1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: FREDDIE PETERSON
1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Design Conditions

Location:		Indoor:		Heating	Cooling
Jacksonville Intl AP, FL, US		Indoor temperature (°F)		70	75
Elevation: 33 ft		Design TD (°F)		38	18
Latitude: 30°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		33.1	51.2
Outdoor:		Heating	Cooling		
Dry bulb (°F)	33	93			
Daily range (°F)	-	18 (M)			
Wet bulb (°F)	-	77			
Wind speed (mph)	15.0	7.5			
		Infiltration:		Simplified	
		Method		Average	
		Construction quality		0	
		Fireplaces			

Construction descriptions

	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12C-0sw: Frm wall, stucco ext, r-13 cav ins, 1/2" gypsum board int fnsh, 2"x4" wood frm	n	267	0.091	13.0	3.41	912	2.29	613
	e	151	0.091	13.0	3.41	514	2.29	345
	s	267	0.091	13.0	3.41	912	2.29	613
	w	231	0.091	13.0	3.41	789	2.29	530
	all	916	0.091	13.0	3.41	3128	2.29	2102

Partitions (none)

Windows

AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1 ft overhang (5 ft window ht, 1 ft sep.)	e	60	0.350	0	13.1	788	25.9	1554
AMERICA S HOME PLACE NO GRIDS: 2 glazing, clr low-e outr, air gas, vnl frm mat, clr innr, 1/2" gap, 1/8" thk; NFRC rated (SHGC=0.27); 50% blinds 45°, medium; 50% outdoor insect screen; 1 ft overhang (6 ft window ht, 1 ft sep.)	w	36	0.350	0	13.1	473	25.9	932

Doors (none)

Ceilings

16B-30ad: Attic ceiling, asphalt shingles roof mat, r-30 ceil ins, 1/2" gypsum board int fnsh		1040	0.032	30.0	1.20	1248	1.72	1787
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Floors (none)



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**AED Assessment
FIRST FLOOR UNIT
1756 WELLS ROAD**

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

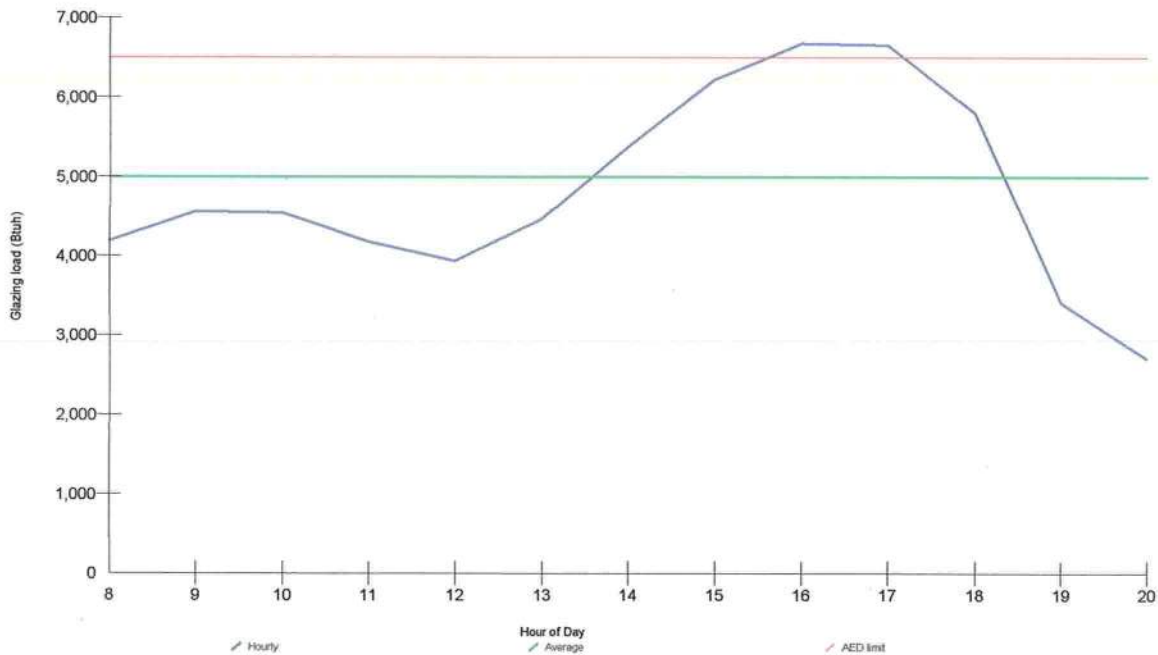
For: FREDDIE PETERSON
1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Design Conditions

Location:		Indoor:		Heating	Cooling
Jacksonville Intl AP, FL, US		Indoor temperature (°F)		70	75
Elevation: 33 ft		Design TD (°F)		38	18
Latitude: 30°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		33.1	51.2
Outdoor:	Heating	Cooling	Infiltration:		
Dry bulb (°F)	33	93			
Daily range (°F)	-	18 (M)			
Wet bulb (°F)	-	77			
Wind speed (mph)	15.0	7.5			

Test for Adequate Exposure Diversity

Hourly Glazing Load



Maximum hourly glazing load exceeds average by 33.5%.

Zone does not have adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 174 Btuh (PFG - 1.3* AFG)

AED Assessment
SECOND FLOOR UNIT
1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: **FREDDIE PETERSON**
1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

Design Conditions

Location:

Jacksonville Intl AP, FL, US
Elevation: 33 ft
Latitude: 30°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

33

Cooling

93
18 (M)
77
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
38
50
33.1

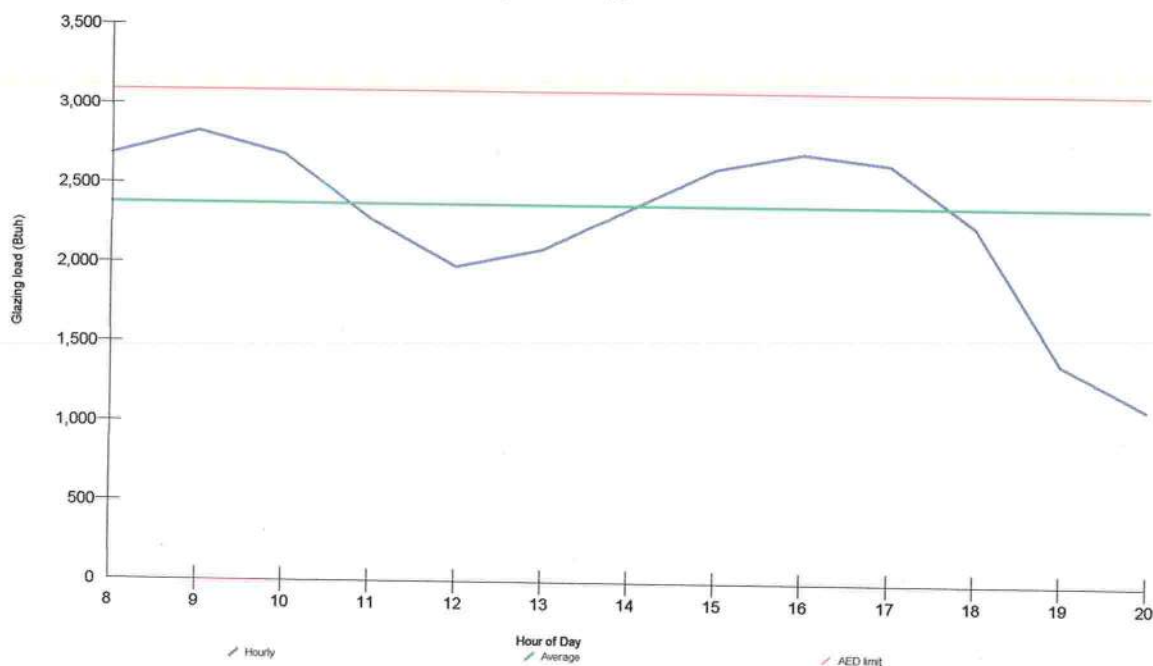
Cooling

75
18
50
51.2

Infiltration:

Test for Adequate Exposure Diversity

Hourly Glazing Load



Maximum hourly glazing load exceeds average by 18.9%.

Zone has adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 0 Btuh

Right-J® Worksheet

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					FIRST FLOOR UNIT					BREAKFAST				
2	Exposed wall					9.4 ft 172.0 ft					21.0 ft				
3	Room height										9.1 ft 9.0 x 12.0 ft				
4	Room dimensions										heat/cool				
5	Room area					1569.0 ft²					108.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	300	292	997	670	0	0	0	0	
11	G	AMERICAS HOME	0.350	n	13.13	9.40	8	0	105	75	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	539	400	1365	917	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	15	0	197	388	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	30	0	394	777	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	18.81	60	52	788	1128	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	20.68	14	9	179	281	0	0	0	0	
	D	PLUCE	0.600	e	22.50	18.12	20	20	459	370	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	300	300	1025	689	109	109	373	250	
	W	12C-0sw	0.091	w	3.41	2.29	482	381	1298	873	82	41	140	94	
	G	AMERICAS HOME	0.350	w	13.13	25.89	16	0	210	414	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	45	0	591	1165	0	0	0	0	
C	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	41	0	536	1056	41	0	536	1056	
	F	16B-30ad	0.032	-	1.20	1.72	529	529	635	909	0	0	0	0	
	F	22A-cpm	1.180	-	44.25	0.00	890	96	4248	0	0	0	0	0	
	F	22A-vpm	1.180	-	44.25	0.00	679	76	3363	0	108	21	929	0	
6	c) AED excursion									174				383	
	Envelope loss/gain								16388	9888			1978	1784	
12	a) Infiltration								3128	738			369	87	
	b) Room ventilation								0	0			0	0	
13	Internal gains: Occupants @ 230 Appliances/other						2			460	0			0	0
	Subtotal (lines 6 to 13)								19516	14886			2346	1871	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
	Subtotal								0	0			0	0	
15	Duct loads								19516	14886			2346	1871	
							13%	20%	2443	2923		13%	20%	294	367
	Total room load								21959	17809			2640	2238	
	Air required (cfm)								850	744			102	94	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Right-J® Worksheet

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
 Date: Sep 13, 2012
 By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					UTILITY					PWDR				
2	Exposed wall					7.0 ft					0 ft				
3	Room height					heat/cool					heat/cool				
4	Room dimensions					9.1 ft 6.0 x 7.0 ft					9.1 ft 3.0 x 7.0 ft				
5	Room area					42.0 ft²					21.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6 . . . 11	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	n	13.13	9.40	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	18.81	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	20.68	0	0	0	0	0	0	0	0	
	D	PLUCE	0.600	e	22.50	18.12	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	64	64	217	146	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	C	16B-30ad	0.032	-	1.20	1.72	0	0	0	0	0	0	0	0	
F	22A-cpm	1.180	-	44.25	0.00	0	0	0	0	0	0	0	0		
F	22A-vpm	1.180	-	44.25	0.00	42	7	310	0	21	0	0	0		

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Right-J® Worksheet

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

	Room name Exposed wall Room height Room dimensions Room area					DINING 26.0 ft 9.1 ft 12.0 x 14.0 ft 168.0 ft²					KITCHEN 10.0 ft 9.1 ft 10.0 x 12.0 ft 120.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	n	13.13	9.40	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	109	79	270	182	0	0	0	0	
	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	13.13	18.81	30	13	394	564	0	0	0	0	
	G	AMERICA S HOME	0.350	e	13.13	20.68	0	0	0	0	0	0	0	0	
	D	PLUCE	0.600	e	22.50	18.12	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	127	127	435	292	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0	91	76	259	174	
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	15	0	197	388	
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	C	16B-30ad	0.032	-	1.20	1.72	0	0	0	0	0	0	0	0	
	F	22A-cpm	1.180	-	44.25	0.00	168	26	1150	0	0	0	0	0	
	F	22A-vpm	1.180	-	44.25	0.00	0	0	0	0	120	10	442	0	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Right-J® Worksheet

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					FAMILY				LIVING				
2	Exposed wall					18.0 ft				19.0 ft				
3	Room height					9.1 ft				14.0 ft				
4	Room dimensions					14.0 x 21.0 ft				14.0 x 12.0 ft				
5	Room area					294.0 ft²				168.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6 . . . 11	W	12C-0sw	0.091	n	3.41	2.29	36	36	124	83	46	46	155	104
	G	AMERICA S HOME	0.350	n	13.13	9.40	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0	127	97	332	223
	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	e	13.13	18.81	0	0	0	0	30	13	394	564
	G	AMERICA S HOME	0.350	e	13.13	20.68	0	0	0	0	0	0	0	0
	D	PLUCE	0.600	e	22.50	18.12	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	w	3.41	2.29	127	97	332	223	0	0	0	0
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	w	13.13	25.89	30	0	394	777	0	0	0	0
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0
	C	16B-30ad	0.032	-	1.20	1.72	0	0	0	0	0	0	0	0
	F	22A-cpm	1.180	-	44.25	0.00	294	18	796	0	168	19	841	0
	F	22A-vpm	1.180	-	44.25	0.00	0	0	0	0	0	0	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Right-J® Worksheet

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
 Date: Sep 13, 2012
 By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Room name Exposed wall Room height Room dimensions Room area					ENTRY 7.0 ft 11.8 ft 7.0 x 21.0 ft 147.0 ft²					HALL 0 ft 9.1 ft 3.0 x 7.0 ft 21.0 ft²				
Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
				Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0	0	0	0	0
11	G	AMERICA S HOME	0.350	n	13.13	9.40	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	e	3.41	2.29	120	71	244	164	0	0	0	0
	G	AMERICA S HOME	0.350	e	13.13	25.89	15	0	197	388	0	0	0	0
	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	e	13.13	18.81	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	e	13.13	20.68	14	4	179	281	0	0	0	0
	D	PLACE	0.600	e	22.50	18.12	20	20	459	370	0	0	0	0
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0
12	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0
	C	16B-30ad	0.032	-	1.20	1.72	49	49	59	84	0	0	0	0
	F	22A-cpm	1.180	-	44.25	0.00	0	0	0	0	0	0	0	0
	F	22A-vpm	1.180	-	44.25	0.00	147	7	310	0	21	0	0	0
6	c) AED excursion								9				0	
	Envelope loss/gain							1447	1296			0	0	
12	a) Infiltration							232	55			0	0	
	b) Room ventilation							0	0			0	0	
13	Internal gains: Occupants @ 230					0			0	0			0	
	Appliances/other								0				0	
	Subtotal (lines 6 to 13)							1679	1351			0	0	
14	Less external load							0	0			0	0	
	Less transfer							0	0			0	0	
	Redistribution							0	0			0	0	
	Subtotal							1679	1351			0	0	
15	Duct loads					13%	20%	210	265	13%	20%	0	0	
	Total room load							1889	1616			0	0	
	Air required (cfm)							73	68			0	0	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Right-J® Worksheet

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					MASTER BEDROOM					WIC 1				
2	Exposed wall					33.0 ft					7.0 ft				
3	Room height					9.1 ft					1.0 ft				
4	Room dimensions					20.0 x 13.0 ft					40.0 ft				
5	Room area					260.0 ft²					40.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	118	118	404	271	0	0	0	0	
11	G	AMERICAS HOME	0.350	n	13.13	9.40	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	182	152	519	349	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	30	0	394	777	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	18.81	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	20.68	0	0	0	0	0	0	0	0	
	D	PLACE	0.600	e	22.50	18.12	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0	64	64	217	146	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	C	16B-30ad	0.032	-	1.20	1.72	260	260	312	447	40	40	48	69	
	F	22A-cpm	1.180	-	44.25	0.00	260	33	1460	0	0	0	0	0	
	F	22A-vpm	1.180	-	44.25	0.00	0	0	0	0	40	7	310	0	
6	c) AED excursion									-34				-26	
	Envelope loss/gain								3088	1810			575	189	
12	a) Infiltration								579	137			123	29	
	b) Room ventilation								0	0			0	0	
13	Internal gains:			Occupants @	230		2			460	0			0	
				Appliances/other						200				0	
	Subtotal (lines 6 to 13)								3668	2606			698	218	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
	Subtotal								3668	2606			698	218	
15	Duct loads						13%	20%	459	512	13%	20%	87	43	
	Total room load								4127	3118			785	260	
	Air required (cfm)								160	130			30	11	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					WIC 2					WC				
2	Exposed wall					12.0 ft					6.0 ft				
3	Room height					heat/cool					heat/cool				
4	Room dimensions					9.1 ft 1.0 x 33.0 ft					9.1 ft 3.0 x 6.0 ft				
5	Room area					33.0 ft²					18.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	46	46	155	104	55	47	159	107	
.	G	AMERICA S HOME	0.350	n	13.13	9.40	0	0	0	0	8	0	105	75	
.	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0	0	0	0	0	
.	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
11	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	13.13	18.81	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	13.13	20.68	0	0	0	0	0	0	0	0	
	D	PLACE	0.600	e	22.50	18.12	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	64	64	217	146	0	0	0	0	
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	C	16B-30ad	0.032	-	1.20	1.72	33	33	40	57	18	18	22	31	
	F	22A-cpm	1.180	-	44.25	0.00	0	0	0	0	0	0	0	0	
	F	22A-vpm	1.180	-	44.25	0.00	33	12	531	0	18	6	265	0	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					M BATH								
2	Exposed wall					9.1 ft					6.0 ft			
3	Room height					1.0					heat/cool			
4	Room dimensions					129.0 ft					x 129.0 ft			
5	Room area					129.0 ft²								
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area or perimeter		Load	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6 . . . 11	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0				
	G	AMERICAS HOME	0.350	n	13.13	9.40	0	0	0	0				
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0				
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0				
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0				
	G	AMERICAS HOME	0.350	e	13.13	18.81	0	0	0	0				
	G	AMERICAS HOME	0.350	e	13.13	20.68	0	0	0	0				
	D	PLACE	0.600	e	22.50	18.12	0	0	0	0				
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0				
	W	12C-0sw	0.091	w	3.41	2.29	55	39	132	89				
	G	AMERICAS HOME	0.350	w	13.13	25.89	16	0	210	414				
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0				
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0				
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0				
	C	16B-30ad	0.032	-	1.20	1.72	129	129	155	222				
F	22A-cpm	1.180	-	44.25	0.00	0	0	0	0					
F	22A-vpm	1.180	-	44.25	0.00	129	6	265	0					
6	c) AED excursion									132				
	Envelope loss/gain								762	857				
12	a) Infiltration								105	25				
	b) Room ventilation								0	0				
13	Internal gains:		Occupants @	230			0			0				
			Appliances/other							0				
	Subtotal (lines 6 to 13)								867	882				
	Less external load								0	0				
	Less transfer								0	0				
	Redistribution								0	0				
14	Subtotal								867	882				
15	Duct loads						13%	20%	109	173				
	Total room load								976	1055				
	Air required (cfm)								38	44				

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					SECOND FLOOR UNIT					BEDROOM 3				
2	Exposed wall					125.0 ft					24.0 ft				
3	Room height					8.1 ft					8.1 ft				
4	Room dimensions					1040.0 ft²					12.0 x 12.0 ft				
5	Room area					1040.0 ft²					144.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	267	267	912	613	0	0	0	0	
11	G	AMERICAS HOME	0.350	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	211	151	514	345	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	60	0	788	1554	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	D	PLICE	0.600	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	267	267	912	613	97	97	332	223	
	W	12C-0sw	0.091	w	3.41	2.29	267	231	789	530	97	79	270	182	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0		
G	AMERICAS HOME	0.350	w	13.13	25.89	36	0	473	932	18	0	236	466		
G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0		
C		16B-30ad	0.032	-	1.20	1.72	1040	1040	1248	1787	144	144	173	247	
F		22A-cpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
F		22A-vpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					BATH 6.0 ft				VANITY 0 ft					
2	Exposed wall					8.1 ft 6.0 x 6.0 ft				8.1 ft 6.0 x 6.0 ft					
3	Room height					heat/cool				heat/cool					
4	Room dimensions					36.0 ft²				36.0 ft²					
5	Room area														
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6 . . . 11	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	D	PLUCE	0.600	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	49	49	166	111	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	C		16B-30ad	0.032	-	1.20	1.72	36	36	43	62	36	36	43	62
F		22A-cpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
F		22A-vpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
6	c) AED excursion									-21				-7	
	Envelope loss/gain								209	152			43	55	
12	a) Infiltration								94	22			0	0	
	b) Room ventilation								0	0			0	0	
13	Internal gains: Occupants @ 230						0			0	0			0	0
	Appliances/other									0				0	0
	Subtotal (lines 6 to 13)								303	174			43	55	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			14	70	
	Subtotal								303	174			57	125	
15	Duct loads						20%	21%	61	36		20%	21%	11	26
	Total room load								364	211			69	151	
	Air required (cfm)								23	11			4	8	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					BEDROOM 2					BATH 2				
2	Exposed wall					27.0 ft					5.0 ft				
3	Room height					8.1 ft 15.0 x 12.0 ft					8.1 ft 10.0 x 5.0 ft				
4	Room dimensions					180.0 ft²					50.0 ft²				
5	Room area														
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	97	97	332	223	41	41	138	93	
	G	AMERICAS HOME	0.350	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
11	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	D	PLACE	0.600	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	122	104	353	237	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	18	0	236	466	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	C	16B-30ad	0.032	-	1.20	1.72	180	180	216	309	50	50	60	86	
	F	22A-cpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
	F	22A-vpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					HSL 0 ft					WIC 4 4.0 ft				
2	Exposed wall					8.1 ft					8.1 ft				
3	Room height					1.0					10.0				
4	Room dimensions					x					x				
5	Room area					80.0 ft²					40.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0	32	32	111	74	
11	G	AMERICA S HOME	0.350	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	D	PLICE	0.600	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
C	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	F	16B-30ad	0.032	-	1.20	1.72	80	80	96	137	40	40	48	69	
	F	22A-cpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
	F	22A-vpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
6	c) AED excursion									-58				-17	
	Envelope loss/gain								96	79			159	126	
12	a) Infiltration								0	0			62	15	
	b) Room ventilation								0	0			0	0	
13	Internal gains:		Occupants @	230			0			0	0			0	
			Appliances/other							400				0	
	Subtotal (lines 6 to 13)								96	479			221	141	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								-96	-479			5	23	
15	Subtotal								0	0			226	164	
	Duct loads						20%	21%	0	0	20%	21%	45	34	
	Total room load								0	0			271	198	
	Air required (cfm)								0	0			17	11	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name						WIC 5				WIC 3				
2	Exposed wall						0 ft				4.0 ft				
3	Room height						heat/cool				heat/cool				
4	Room dimensions						9.4 ft 3.0 x 6.0 ft				8.1 ft 6.0 x 4.0 ft				
5	Room area						18.0 ft²				24.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0	0	0	0	0	
11	G	AMERICAS HOME	0.350	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	D	PLICE	0.600	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0	32	32	111	74	
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
C	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	F	16B-30ad	0.032	-	1.20	1.72	18	18	22	31	24	24	29	41	
	F	22A-cpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
F	F	22A-vpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0	
6	c) AED excursion									-3				-14	
	Envelope loss/gain								22	28			139	101	
12	a) Infiltration								0	0			62	15	
	b) Room ventilation								0	0			0	0	
13	Internal gains:		Occupants @	230			0			0	0			0	0
										0				0	0
	Subtotal (lines 6 to 13)								22	28			202	116	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								30	65			9	47	
	Subtotal								52	93			211	163	
15	Duct loads						20%	21%	10	19	20%	21%	42	34	
	Total room load								62	112			254	197	
	Air required (cfm)								4	6			16	10	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
Date: Sep 13, 2012
By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					BEDROOM 5					BEDROOM 4				
2	Exposed wall					29.0 ft					26.0 ft				
3	Room height					8.1 ft					8.1 ft				
4	Room dimensions					12.0 x 17.0 ft					1.0 x 176.0 ft				
5	Room area					204.0 ft²					176.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0	97	97	332	223	
.	G	AMERICAS HOME	0.350	n	0.00	0.00	0	0	0	0	0	0	0	0	
.	W	12C-0sw	0.091	e	3.41	2.29	97	67	229	154	113	83	285	191	
.	G	AMERICAS HOME	0.350	e	13.13	25.89	30	0	394	777	30	0	394	777	
11	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	e	0.00	0.00	0	0	0	0	0	0	0	0	
	D	PLACE	0.600	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.41	2.29	138	138	470	316	0	0	0	0	
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	0.00	0.00	0	0	0	0	0	0	0	0	
	G	AMERICAS HOME	0.350	w	13.13	25.89	0	0	0	0	0	0	0	0	
C	16B-30ad	0.032	-	1.20	1.72	204	204	245	351	176	176	211	302		
F	22A-cpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0		
F	22A-vpm	1.180	-	0.00	0.00	0	0	0	0	0	0	0	0		
6 c) AED excursion										19			32		
Envelope loss/gain									1338	1617			1221	1525	
12 a) Infiltration									453	107			406	96	
b) Room ventilation									0	0			0	0	
13 Internal gains: Occupants @ 230 Appliances/other							1			230 200	1			230 200	
Subtotal (lines 6 to 13)									1791	2154			1627	2051	
Less external load									0	0			0	0	
Less transfer									0	0			0	0	
Redistribution									14	70			48	97	
14 Subtotal									1805	2224			1676	2148	
15 Duct loads							20%	21%	362	463	20%	21%	336	447	
Total room load									2167	2687			2012	2595	
Air required (cfm)									138	142			128	138	

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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SECOND FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
 Date: Sep 13, 2012
 By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

1	Room name					SD								
2	Exposed wall					0 ft								
3	Room height					8.1 ft					heat/cool			
4	Room dimensions					4.0 x 13.0 ft								
5	Room area					52.0 ft²								
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area or perimeter		Load	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12C-0sw	0.091	n	3.41	2.29	0	0	0	0				
	G	AMERICA S HOME	0.350	n	0.00	0.00	0	0	0	0				
	W	12C-0sw	0.091	e	3.41	2.29	0	0	0	0				
	G	AMERICA S HOME	0.350	e	13.13	25.89	0	0	0	0				
11	G	AMERICA S HOME	0.350	e	0.00	0.00	0	0	0	0				
	G	AMERICA S HOME	0.350	e	0.00	0.00	0	0	0	0				
	G	AMERICA S HOME	0.350	e	0.00	0.00	0	0	0	0				
	D	PLICE	0.600	e	0.00	0.00	0	0	0	0				
	W	12C-0sw	0.091	s	3.41	2.29	0	0	0	0				
	W	12C-0sw	0.091	w	3.41	2.29	0	0	0	0				
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0				
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0				
	G	AMERICA S HOME	0.350	w	13.13	25.89	0	0	0	0				
	G	AMERICA S HOME	0.350	w	0.00	0.00	0	0	0	0				
	C	16B-30ad	0.032	-	1.20	1.72	52	52	62	89				
	F	22A-cpm	1.180	-	0.00	0.00	0	0	0	0				
	F	22A-vpm	1.180	-	0.00	0.00	0	0	0	0				
6	c) AED excursion									-10				
	Envelope loss/gain									62	80			
12	a) Infiltration									0	0			
	b) Room ventilation									0	0			
13	Internal gains:		Occupants @	230			0			0				
			Appliances/other							0				
	Subtotal (lines 6 to 13)									62	80			
	Less external load									0	0			
	Less transfer									0	0			
	Redistribution									-62	-80			
14	Subtotal									0	0			
15	Duct loads						20%	21%		0	0			
	Total room load									0	0			
	Air required (cfm)									0	0			

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

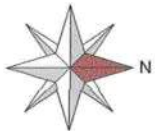


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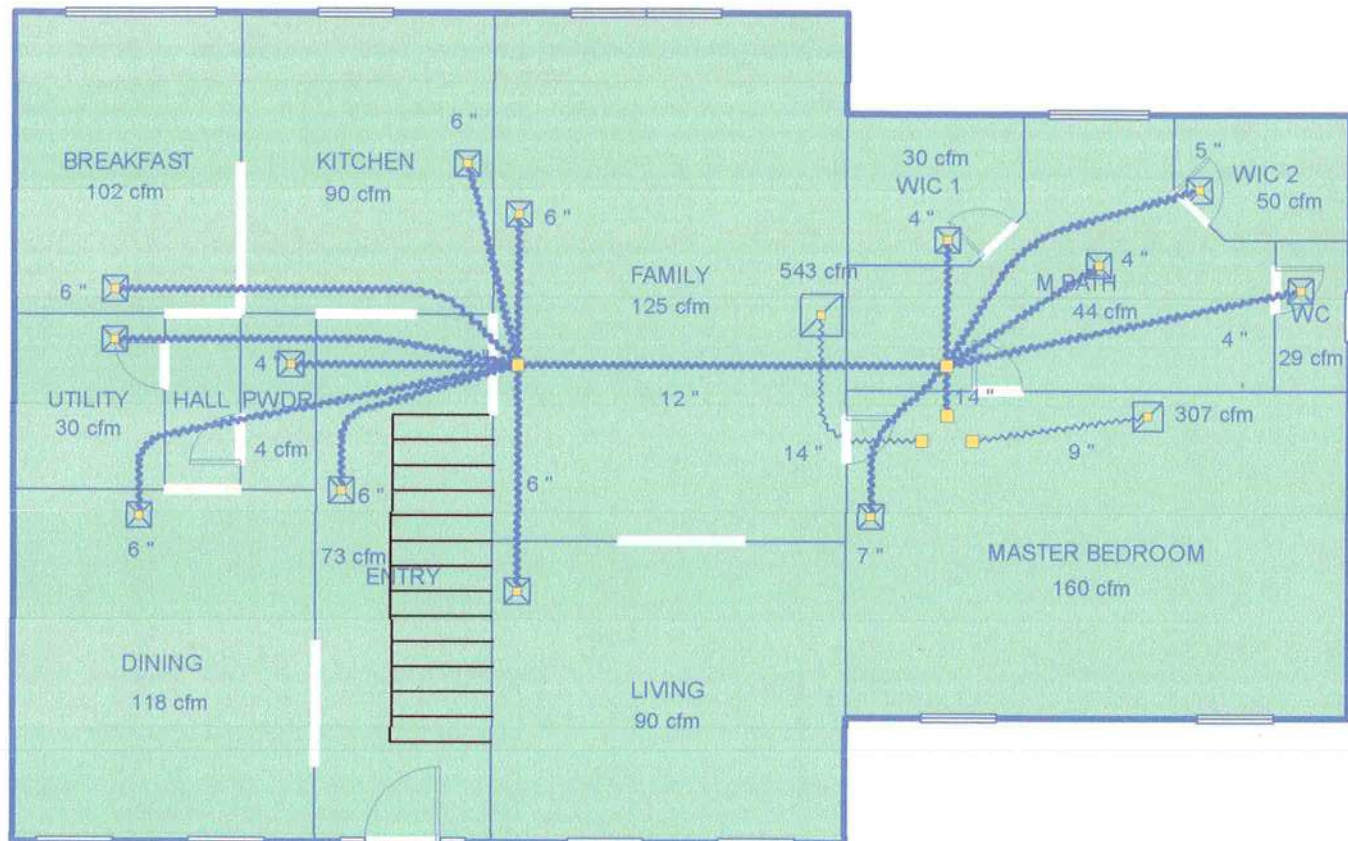
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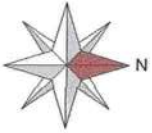
FIRST FLOOR



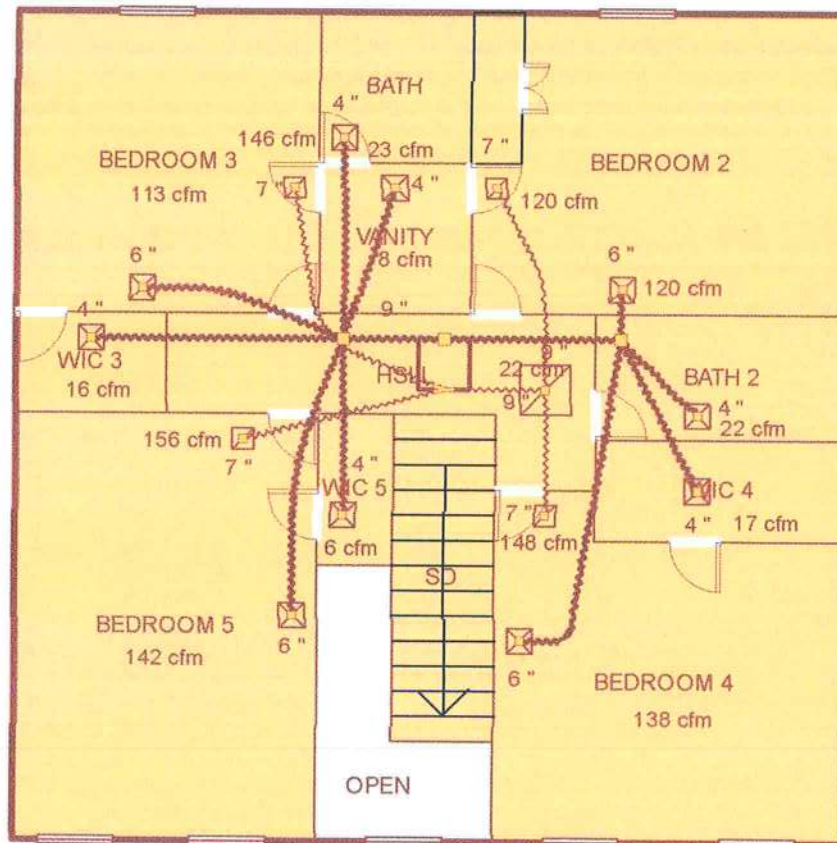
Job #: PETERSON
Performed by TRICIA HIGGINS for:
 FREDDIE PETERSON
 1160 NW LOWER SPRINGS ROAD
 LAKE CITY, FL 32055

1756 WELLS ROAD
 SUITE H
 ORANGE PARK, FL 32073
 Phone: (904) 993-7443

Scale: 1 : 92
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SECOND FLOOR



A/H'S IN ATTIC



Job #: PETERSON
Performed by TRICIA HIGGINS for:
FREDDIE PETERSON
1160 NW LOWER SPRINGS ROAD
LAKE CITY, FL 32055

1756 WELLS ROAD

SUITE H
ORANGE PARK, FL 32073
Phone: (904) 993-7443

Scale: 1 : 92

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Duct System Summary

FIRST FLOOR UNIT

1756 WELLS ROAD

Job: PETERSON
 Date: Sep 13, 2012
 By: TRICIA HIGGINS

SUITE H, ORANGE PARK, FL 32073 Phone: (904) 993-7443

Project Information

For: FREDDIE PETERSON
 1160 NW LOWER SPRINGS ROAD, LAKE CITY, FL 32055

External static pressure
 Pressure losses
 Available static pressure
 Supply / return available pressure
 Lowest friction rate
 Actual air flow
 Total effective length (TEL)

Heating
 1.00 in H2O
 0.40 in H2O
 0.60 in H2O
 0.51 / 0.09 in H2O
 0.300 in/100ft
 850 cfm

Cooling
 1.00 in H2O
 0.40 in H2O
 0.60 in H2O
 0.51 / 0.09 in H2O
 0.300 in/100ft
 744 cfm

306 ft

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
BREAKFAST	h 2640	102	94	0.300	6.0	0x0	VIFx	36.2	225.0	st4
DINING	h 3044	118	51	0.300	6.0	0x0	VIFx	37.3	225.0	st4
ENTRY	h 1889	73	68	0.300	6.0	0x0	VIFx	29.3	225.0	st4
FAMILY	c 2995	85	125	0.300	6.0	0x0	VIFx	25.0	225.0	st4
KITCHEN	c 2165	47	90	0.300	6.0	0x0	VIFx	27.2	220.0	st4
LIVING	h 2313	90	70	0.300	6.0	0x0	VIFx	28.0	220.0	st4
M BATH	c 1055	38	44	0.300	4.0	0x0	VIFx	9.2	145.0	st1
MASTER BEDROOM	h 4127	160	130	0.300	7.0	0x0	VIFx	9.2	150.0	st1
PWDR	c 107	0	4	0.300	4.0	0x0	VIFx	28.0	220.0	st4
UTILITY	c 721	28	30	0.300	4.0	0x0	VIFx	35.1	225.0	st4
WC	h 739	29	11	0.300	4.0	0x0	VIFx	16.3	145.0	st1
WIC 1	h 785	30	11	0.300	4.0	0x0	VIFx	7.0	145.0	st1
WIC 2	h 1298	50	16	0.300	5.0	0x0	VIFx	15.1	150.0	st1

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st4	Peak AVF	543	532	0.300	692	12.0	0 x 0	VinlFlx	st1
st1	Peak AVF	850	744	0.300	795	14.0	0 x 0	VinlFlx	st1

Bold/italic values have been manually overridden

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb4	0x 0	543	532	44.0	0.200	508	14.0	0x 0		VIFx	
rb5	0x 0	307	212	37.1	0.200	694	9.0	0x 0		VIFx	

Bold/italic values have been manually overridden



Right-Suite® Universal 2012 12.0.10 RSU08373

2012-Sep-15 08:36:47

...ricia Higgins\Documents\Wrightsoft HVAC\PETERSON RESIDENCE.rup Calc = MJB Front Door faces:

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Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb8	0x 0	146	156	38.2	0.200	585	7.0	0x 0		VIFx	rt1
rb6	0x 0	120	120	47.5	0.200	449	7.0	0x 0		VIFx	
rb7	0x 0	146	135	46.5	0.200	547	7.0	0x 0		VIFx	
rb9	0x 0	145	148	39.0	0.200	554	7.0	0x 0		VIFx	rt1
rb3	0x 0	22	21	14.0	0.200	252	4.0	0x 0		VIFx	rt1

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rt1	Peak AVF	287	289	0.200	653	9.0	0 x 0	VinIFlx	

