

20

FORM 405-10

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: 1209031
 Street:
 City, State, Zip: , FL,
 Owner:
 Design Location: FL, Gainesville

Builder Name: Hometown Homes
 Permit Office:
 Permit Number: 30511
 Jurisdiction: 221000

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	2
5. Is this a worst case?	Yes
6. Conditioned floor area above grade (ft ²)	899
Conditioned floor area below grade (ft ²)	0
7. Windows(99.0 sqft.)	Description Area
a. U-Factor:	DbI, U=0.35 99.00 ft ²
SHGC:	SHGC=0.35
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:	1.500 ft.
Area Weighted Average SHGC:	0.350
8. Floor Types (899.0 sqft.)	Insulation Area
a. Slab-On-Grade Edge Insulation	R=0.0 899.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²

9. Wall Types(960.0 sqft.)	Insulation Area
a. Frame - Wood, Exterior	R=13.0 960.00 ft ²
b. N/A	R= ft ²
c. N/A	R= ft ²
d. N/A	R= ft ²
10. Ceiling Types (899.0 sqft.)	Insulation Area
a. Under Attic (Vented)	R=30.0 899.00 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: RoomsInBlock1	6 177.8
12. Cooling systems	kBtu/hr Efficiency
a. Central Unit	22.0 SEER:14.00
13. Heating systems	kBtu/hr Efficiency
a. Electric Heat Pump	22.0 HSPF:8.00
14. Hot water systems	
a. Electric	Cap: 40 gallons
b. Conservation features	EF: 0.920
None	
15. Credits	Pstat

Glass/Floor Area: 0.110

Total Proposed Modified Loads: 19.84

Total Standard Reference Loads: 25.89

PASS

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

PREPARED BY: ERAN BEANSLEY
 DATE: 9/11/12

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 completion of a Florida Air Barrier and Insulation Inspection Checklist



PROJECT

Title: 1209031	Bedrooms: 2	Address Type: Street Address
Building Type: FLProp2010	Conditioned Area: 899	Lot #
Owner:	Total Stories: 1	Block/SubDivision:
# of Units: 1	Worst Case: Yes	PlatBook:
Builder Name: Hometown Homes	Rotate Angle: 45	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	899	7192

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	RoomsInBlock1	899	7192	Yes	2	2	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
	1	Slab-On-Grade Edge Insulatio	RoomsInBlock1	120 ft	0	899 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	Hip	Composition shingles	1005 ft²	0 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	899 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	RoomsInBlock1	30	899 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	Exterior	Frame - Wood	RoomsInBloc	13	29		8		232 ft²		0.23	0.75	0
	2	E	Exterior	Frame - Wood	RoomsInBloc	13	31		8		248 ft²		0.23	0.75	0
	3	S	Exterior	Frame - Wood	RoomsInBloc	13	29		8		232 ft²		0.23	0.75	0
	4	W	Exterior	Frame - Wood	RoomsInBloc	13	31		8		248 ft²		0.23	0.75	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
	1	S	Insulated	RoomsInBloc	None	0.4	3		6	8	20 ft²
	2	W	Insulated	RoomsInBloc	None	0.4	3		6	8	20 ft²

WINDOWS

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

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Separation	Int Shade	Screening
	1	N	1	Metal	Low-E Double	Yes	0.35	0.35	N	30 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	2	E	2	Metal	Low-E Double	Yes	0.35	0.35	N	30 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	3	S	3	Metal	Low-E Double	Yes	0.35	0.35	N	15 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	4	S	3	Metal	Low-E Double	Yes	0.35	0.35	N	9 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	5	W	4	Metal	Low-E Double	Yes	0.35	0.35	N	15 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	BySpaces	Proposed SLA	0.000360	848.91	46.604	87.646	0.2771	7.0821

HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
	1	Electric Heat Pump	None	HSPF: 8	22 kBtu/hr	1	sys#1

COOLING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
	1	Central Unit	None	SEER: 14	22 kBtu/hr	660 cfm	0.75	1	sys#1

HOT WATER SYSTEM

✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
	1	Electric	None	RoomsInBlock10.92		40 gal	50 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

✓	#	Location	Supply R-Value	Area	Location	Return Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF	Heat	Cool	HVAC #
	1	Attic	6	177.8 ft	Attic	44.45 ft	DSE=0.88	RoomsInBI	0.0 cfm	0.00 %	0.00	0.60	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* = 77

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. Frame - Wood, Exterior	R=13.0	960.00 ft ²
3. Number of units, if multiple family	1	b. N/A	R=	ft ²
4. Number of Bedrooms	2	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)	899	10. Ceiling Types	Insulation	Area
7. Windows**	Description	a. Under Attic (Vented)	R=30.0	899.00 ft ²
a. U-Factor:	DbI, U=0.35	b. N/A	R=	ft ²
SHGC:	SHGC=0.35	c. N/A	R=	ft ²
b. U-Factor:	N/A	11. Ducts	R	ft ²
SHGC:		a. Sup: Attic, Ret: Attic, AH: RoomsInBlock1	6	177.8
c. U-Factor:	N/A	12. Cooling systems	kBtu/hr	Efficiency
SHGC:		a. Central Unit	22.0	SEER:14.00
d. U-Factor:	N/A	13. Heating systems	kBtu/hr	Efficiency
SHGC:		a. Electric Heat Pump	22.0	HSPF:8.00
Area Weighted Average Overhang Depth:	1.500 ft.	14. Hot water systems	Cap: 40 gallons	
Area Weighted Average SHGC:	0.350	a. Electric	EF: 0.92	
8. Floor Types	Insulation	b. Conservation features		
a. Slab-On-Grade Edge Insulation	R=0.0	None		
b. N/A	R=	15. Credits		Pstat
c. N/A	R=			

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

Project Title:
1209031

, FL

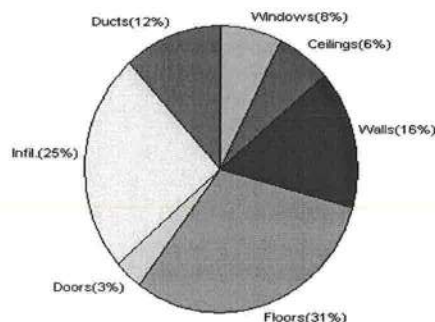
9/11/2012

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	17040 Btuh	Total cooling load calculation	19019 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	129.1 22000	Sensible (SHR = 0.75)	111.1 16500
Heat Pump + Auxiliary(0.0kW)	129.1 22000	Latent	131.9 5500
		Total (Electric Heat Pump)	115.7 22000

WINTER CALCULATIONS

Winter Heating Load (for 899 sqft)

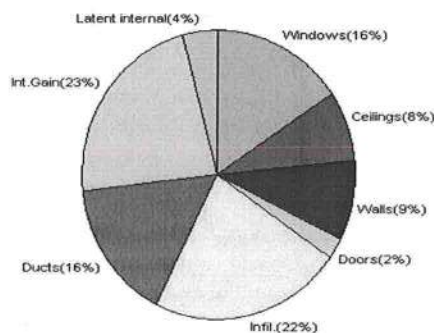
Load component		Load
Window total	99 sqft	1282 Btuh
Wall total	821 sqft	2696 Btuh
Door total	40 sqft	592 Btuh
Ceiling total	899 sqft	1059 Btuh
Floor total	899 sqft	5239 Btuh
Infiltration	103 cfm	4187 Btuh
Duct loss		1984 Btuh
Subtotal		17040 Btuh
Ventilation	0 cfm	0 Btuh
TOTAL HEAT LOSS		17040 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 899 sqft)

Load component		Load
Window total	99 sqft	2966 Btuh
Wall total	821 sqft	1712 Btuh
Door total	40 sqft	448 Btuh
Ceiling total	899 sqft	1489 Btuh
Floor total		0 Btuh
Infiltration	78 cfm	1443 Btuh
Internal gain		4320 Btuh
Duct gain		2472 Btuh
Sens. Ventilation	0 cfm	0 Btuh
Blower Load		0 Btuh
Total sensible gain		14850 Btuh
Latent gain(ducts)		536 Btuh
Latent gain(infiltration)		2833 Btuh
Latent gain(ventilation)		0 Btuh
Latent gain(internal/occupants/other)		800 Btuh
Total latent gain		4169 Btuh
TOTAL HEAT GAIN		19019 Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: ERAN BEAMLEY

DATE: 9/11/12

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Project Title:

1209031

Building Type: User

, FL

9/11/2012

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

This calculation is for Worst Case. The house has been rotated 45 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	NE	30.0		12.9	388 Btuh
2	2, NFRC 0.35	Metal	0.35	SE	30.0		12.9	388 Btuh
3	2, NFRC 0.35	Metal	0.35	SW	15.0		12.9	194 Btuh
4	2, NFRC 0.35	Metal	0.35	SW	9.0		12.9	117 Btuh
5	2, NFRC 0.35	Metal	0.35	NW	15.0		12.9	194 Btuh
Window Total					99.0(sqft)			1282 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	202		3.28	663 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	218		3.28	716 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	188		3.28	617 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	213		3.28	700 Btuh
Wall Total					821(sqft)			2696 Btuh
Doors	Type	Storm	Ueff.		Area	X	HTM=	Load
1	Insulated - Exterior, n		(0.400)		20		14.8	296 Btuh
2	Insulated - Exterior, n		(0.400)		20		14.8	296 Btuh
Door Total					40(sqft)			592Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shing		(0.032)	30.0/0.0	899		1.2	1059 Btuh
Ceiling Total					899(sqft)			1059Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
1	Slab On Grade		(1.180)	0.0	120.0 ft(perim.)		43.7	5239 Btuh
Floor Total					899 sqft			5239 Btuh
	Envelope Subtotal:							10869 Btuh
Infiltration	Type	Wholehouse	ACH	Volume(cuft)	Wall Ratio	CFM=		
	Natural		0.86	7192	1.00	103.4		4187 Btuh
Duct load	Average sealed, R6.0, Supply(Att), Return(Att)						(DLM of 0.132)	1984 Btuh
All Zones	Sensible Subtotal All Zones							17040 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Project Title:

1209031

Building Type: User

, FI

9/11/2012

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	17040 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	17040 Btuh

EQUIPMENT

1. Electric Heat Pump	#	22000 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)



Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Project Title:
1209031

, FL

9/11/2012

Reference City: Gainesville, FL Temperature Difference: 17.0F(MJ8 99%) Humidity difference: 54gr.
This calculation is for Worst Case. The house has been rotated 45 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	NE		1.5ft.	1.0ft.	30.0	0.0	30.0	13	29	884	Btuh
2	2 NFRC	0.35, 0.35	No	No	SE		1.5ft.	1.0ft.	30.0	8.8	21.2	13	31	775	Btuh
3	2 NFRC	0.35, 0.35	No	No	SW		1.5ft.	1.0ft.	15.0	4.4	10.6	13	31	387	Btuh
4	2 NFRC	0.35, 0.35	No	No	SW		1.5ft.	1.0ft.	9.0	4.4	4.6	13	31	201	Btuh
5	2 NFRC	0.35, 0.35	No	No	NW		1.5ft.	1.0ft.	15.0	0.0	15.0	13	29	442	Btuh
	Excursion													276	Btuh
	Window Total								99 (sqft)					2966	Btuh
Walls	Type					U-Value	R-Value	Area(sqft)			HTM		Load		
							Cav/Sheath								
1	Frame - Wood - Ext					0.09	13.0/0.0	202.0			2.1		421 Btuh		
2	Frame - Wood - Ext					0.09	13.0/0.0	218.0			2.1		455 Btuh		
3	Frame - Wood - Ext					0.09	13.0/0.0	188.0			2.1		392 Btuh		
4	Frame - Wood - Ext					0.09	13.0/0.0	213.0			2.1		444 Btuh		
	Wall Total								821 (sqft)					1712 Btuh	
Doors	Type							Area (sqft)			HTM		Load		
1	Insulated - Exterior							20.0			11.2		224 Btuh		
2	Insulated - Exterior							20.0			11.2		224 Btuh		
	Door Total								40 (sqft)					448 Btuh	
Ceilings	Type/Color/Surface					U-Value	R-Value	Area(sqft)			HTM		Load		
1	Vented Attic/DarkShingle					0.032	30.0/0.0	899.0			1.66		1489 Btuh		
	Ceiling Total								899 (sqft)					1489 Btuh	
Floors	Type						R-Value	Size			HTM		Load		
1	Slab On Grade						0.0	899 (ft-perimeter)			0.0		0 Btuh		
	Floor Total								899.0 (sqft)					0 Btuh	
	Envelope Subtotal:													6615 Btuh	
Infiltration	Type					Average ACH	Volume(cuft)		Wall Ratio		CFM=		Load		
	Natural					0.65	7192	1	77.5			1443 Btuh			
Internal gain						Occupants	Btuh/occupant		Appliance		Load				
						4	X 230	+	3400			4320 Btuh			
	Sensible Envelope Load:													12378 Btuh	
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DGM of 0.200)													2472 Btuh	
	Sensible Load All Zones													14850 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Project Title:
1209031

Climate: FL_GAINESVILLE_REGIONAL_A

, FL

9/11/2012

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	12378 Btuh
	Sensible Duct Load	2472 Btuh
	Total Sensible Zone Loads	14850 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	14850 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	2833 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	536 Btuh
	Latent occupant gain (4.0 people @ 200 Btuh per person)	800 Btuh
	Latent other gain	0 Btuh
	Latent total gain	4169 Btuh
	TOTAL GAIN	19019 Btuh

EQUIPMENT

1. Central Unit	#	22000 Btuh
-----------------	---	------------

*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