

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: Model 1302 Street: Rose Point Place City, State, Zip: Lake City, FL, 32024- Owner: N/A Design Location: FL, Gainesville	Builder Name: Innovative Home Builders Permit Office: Columbia County Permit Number: Jurisdiction:
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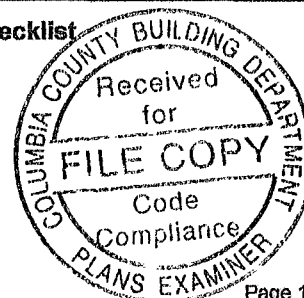
1. New construction or existing New (From Plans) 2. Single family or multiple family Single-family 3. Number of units, if multiple family 1 4. Number of Bedrooms 3 5. Is this a worst case? No 6. Conditioned floor area above grade (ft²) 1302 Conditioned floor area below grade (ft²) 0 7. Windows (172.0 sqft.) Description Area a. U-Factor: Dbj, U=0.30 172.00 ft² SHGC: SHGC=0.50 b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: d. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 2.547 ft. Area Weighted Average SHGC: 0.500 8. Floor Types (1302.0 sqft.) Insulation Area a. Slab-On-Grade Edge Insulation R=5.0 1302.00 ft² b. N/A R= ft² c. N/A R= ft²	9. Wall Types (1396.5 sqft.) Insulation Area a. Frame - Wood, Exterior R=13.0 1155.00 ft² b. Frame - Wood, Adjacent R=13.0 241.50 ft² c. N/A R= ft² d. N/A R= ft² 10. Ceiling Types (1432.0 sqft.) Insulation Area a. Under Attic (Vented) R=30.0 1432.00 ft² b. N/A R= ft² c. N/A R= ft² 11. Ducts R ft² a. Sup: Attic, Ret: Attic, AH: Garage 6 325.5 12. Cooling systems kBtu/hr Efficiency a. Central Unit 27.1 SEER:16.50 13. Heating systems kBtu/hr Efficiency a. Electric Heat Pump 27.1 HSPF:7.70 14. Hot water systems a. Electric Cap: 50 gallons EF: 0.920 b. Conservation features None 15. Credits Pstat
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Glass/Floor Area: 0.132	Total Proposed Modified Loads: 26.97 Total Standard Reference Loads: 33.82	PASS
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I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: <u>W/A</u> DATE: <u>4/30/14</u> 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: _____
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- Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist



PROJECT

Title:	Model 1302	Bedrooms:	3	Address Type:	Street Address
Building Type:	FLProp2010	Conditioned Area:	1302	Lot #	
Owner:	N/A	Total Stories:	1	Block/SubDivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	Innovative Home Builders	Rotate Angle:	0	Street:	Rose Point Place
Permit Office:	Columbia County	Cross Ventilation:	No	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32024-
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

✓	Design Location	TMY Site	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	1302	11718

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	RoomsInBlock1	1302	11718	Yes	3	3	1	Yes	Yes	Yes

FLOORS

✓	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	RoomsInBlock1	155 ft	5	1302 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	Hip	Composition shingles	1565 ft²	0 ft²	Medium	0.96	No	0.9	No	0	33.7

ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Partial cathedral cei	Vented	303	1302 ft²	N	N

CEILING

✓	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	RoomsInBlock1	30	1432 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	RoomsInBloc	13	14	8	9		132 ft²		0.23	0.75	0
✓	2	N	Exterior	Frame - Wood	RoomsInBloc	13	41	8	9		375 ft²		0.23	0.75	0
✓	3	W	Exterior	Frame - Wood	RoomsInBloc	13	36		9		324 ft²		0.23	0.75	0
✓	4	S	Exterior	Frame - Wood	RoomsInBloc	13	36		9		324 ft²		0.23	0.75	0
✓	5	E	Garage	Frame - Wood	RoomsInBloc	13	21	4	9		192 ft²		0.23	0.01	0
✓	6	S	Garage	Frame - Wood	RoomsInBloc	13	5	6	9		49.5 ft²		0.23	0.01	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
✓	1	E	Insulated	RoomsInBloc	None	0.460000	3		6	8	20 ft²
✓	2	E	Insulated	RoomsInBloc	None	0.460000	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Separation	Int Shade	Screening
✓	1	E	1	Vinyl	Low-E Double	Yes	0.3	0.5	N	30 ft²	7 ft 6 in	1 ft 6 in	HERS 2006	None
✓	2	N	2	Vinyl	Low-E Double	Yes	0.3	0.5	N	60 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
✓	3	W	3	Vinyl	Low-E Double	Yes	0.3	0.5	N	30 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
✓	4	W	3	Vinyl	Low-E Double	Yes	0.3	0.5	N	16 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
✓	5	S	4	Vinyl	Low-E Double	Yes	0.3	0.5	N	6 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None
✓	6	S	4	Vinyl	Low-E Double	Yes	0.3	0.5	N	30 ft²	1 ft 6 in	1 ft 6 in	HERS 2006	None

GARAGE

✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
✓	1	511.92 ft²	511.92 ft²	64 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	BySpaces	Proposed SLA	0.000360	1229.4	67.495	126.93	0.2771	6.2952

HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
✓	1	Electric Heat Pump	None	HSPF 7.7	27.1 kBtu/hr	1	sys#1

COOLING SYSTEM													
✓	#	System Type	SubType	Efficiency	Capacity	Air Flow	SHR	Block	Ducts				
✓	1	Central Unit	None	SEER: 16.5	27.1 kBtu/hr	813 cfm	0.75	1	sys#1				

HOT WATER SYSTEM									
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	None	RoomsInBlock	0.92	50 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM							
✓	FSEC	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	HVAC #		
		Location	R-Value	Area	Location	Area					Heat	Cool	
✓	1	Attic	6	325.5 ft	Attic	65 1 ft²	DSE=0.88	Garage	0.0 cfm	0.00 %	0.00	0.60	1 1

TEMPERATURES															
Programable Thermostat: Y				Ceiling Fans.											
Cooling	Heating	Venting		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
☒	☒	☒		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
☒	☒	☒		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
☒	☒	☒		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 PM	78 80	78 80	78 78	78 78	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
Cooling (WEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78
Heating (WD)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	68 66
Heating (WEH)	AM PM	66 68	66 68	66 68	66 68	66 68	68 68	68 68	68 68	68 68	68 68	68 66	68 66

Florida Code Compliance Checklist

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

ADDRESS: Rose Point Place Lake City, FL, 32024-	PERMIT #:
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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* = 80

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

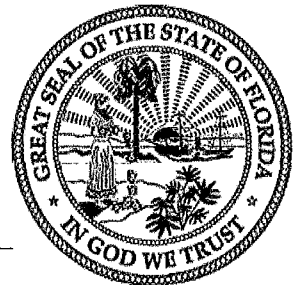
Rose Point Place, Lake City, FL, 32024-

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	1155.00 ft ²
3 Number of units, if multiple family	1	b. Frame - Wood, Adjacent	R=13.0	241.50 ft ²
4 Number of Bedrooms	3	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)	1302	10 Ceiling Types	Insulation	Area
7 Windows**	Description	a. Under Attic (Vented)	R=30.0	1432.00 ft ²
a U-Factor:	DbI, U=0.30	b. N/A	R=	ft ²
SHGC:	SHGC=0.50	c. N/A	R=	ft ²
b U-Factor:	N/A	11 Ducts	R	ft ²
SHGC:		a Sup: Attic, Ret. Attic, AH. Garage	6	325.5
c U-Factor:	N/A			
SHGC:		12. Cooling systems	kBtu/hr	Efficiency
d U-Factor:	N/A	a Central Unit	27.1	SEER 16.50
SHGC:				
Area Weighted Average Overhang Depth	2.547 ft.	13 Heating systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.500	a Electric Heat Pump	27.1	HSPF: 7.70
8. Floor Types	Insulation	Area		
a. Slab-On-Grade Edge Insulation	R=5.0	1302.00 ft ²	Cap	50 gallons
b. N/A	R=	ft ²	EF:	0.92
c. N/A	R=	ft ²		
		14 Hot water systems		
		a Electric		
		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.

Residential System Sizing Calculation

Summary

N/A
Rose Point Place
Lake City, FL 32024-

Project Title:
Model 1302

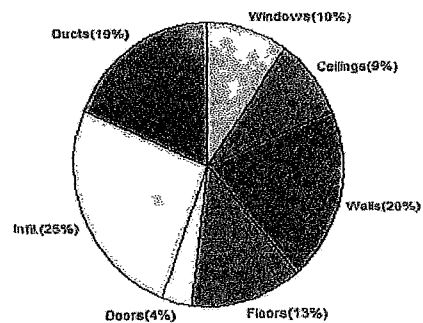
5/1/2014

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	19144 Btuh	Total cooling load calculation	24646 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	141.6 27100	Sensible (SHR = 0.75)	105.6 20325
Heat Pump + Auxiliary(0.0kW)	141.6 27100	Latent	125.3 6775
		Total (Electric Heat Pump)	110.0 27100

WINTER CALCULATIONS

Winter Heating Load (for 1302 sqft)

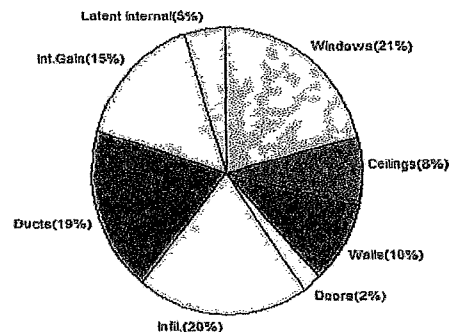
Load component		Load	
Window total	172 sqft	1909	Btuh
Wall total	1185 sqft	3890	Btuh
Door total	40 sqft	681	Btuh
Ceiling total	1432 sqft	1687	Btuh
Floor total	1302 sqft	2535	Btuh
Infiltration	120 cfm	4873	Btuh
Duct loss		3569	Btuh
Subtotal		19144	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		19144	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1302 sqft)

Load component		Load	
Window total	172 sqft	5174	Btuh
Wall total	1185 sqft	2343	Btuh
Door total	40 sqft	515	Btuh
Ceiling total	1432 sqft	1915	Btuh
Floor total		0	Btuh
Infiltration	90 cfm	1679	Btuh
Internal gain		3780	Btuh
Duct gain		3834	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Blower Load		0	Btuh
Total sensible gain		19241	Btuh
Latent gain(ducts)		908	Btuh
Latent gain(infiltration)		3297	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		1200	Btuh
Total latent gain		5405	Btuh
TOTAL HEAT GAIN		24646	Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: W/A

DATE: 4/30/14

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

N/A
Rose Point Place
Lake City, FL 32024-

Project Title:
Model 1302
Building Type: User

5/1/2014

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

Component Loads for Whole House								
Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
1	2, NFRC 0.50	Vinyl	0.30	E	30.0		11.1	333 Btuh
2	2, NFRC 0.50	Vinyl	0.30	N	60.0		11.1	666 Btuh
3	2, NFRC 0.50	Vinyl	0.30	W	30.0		11.1	333 Btuh
4	2, NFRC 0.50	Vinyl	0.30	W	16.0		11.1	178 Btuh
5	2, NFRC 0.50	Vinyl	0.30	S	6.0		11.1	67 Btuh
6	2, NFRC 0.50	Vinyl	0.30	S	30.0		11.1	333 Btuh
	Window Total					172.0(sqft)		1909 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	82		3.28	269 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	315		3.28	1034 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	278		3.28	913 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	288		3.28	946 Btuh
5	Frame - Wood	- Adj	(0.089)	13.0/0.0	172		3.28	565 Btuh
6	Frame - Wood	- Adj	(0.089)	13.0/0.0	50		3.28	163 Btuh
	Wall Total					1185(sqft)		3890 Btuh
Doors	Type	Storm	Ueff.		Area	X	HTM=	Load
1	Insulated - Exterior, n		(0.460)		20		17.0	340 Btuh
2	Insulated - Garage, n		(0.460)		20		17.0	340 Btuh
	Door Total					40(sqft)		681Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shing		(0.032)	30.0/0.0	1432		1.2	1687 Btuh
	Ceiling Total					1432(sqft)		1687Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
1	Slab On Grade		(0.442)	5.0	155.0 ft(perim.)		16.4	2535 Btuh
	Floor Total					1302 sqft		2535 Btuh
	Envelope Subtotal:							10702 Btuh
Infiltration	Type	Wholehouse	ACH	Volume(cuft)	Wall Ratio	CFM=		
	Natural		0.62	11718	1.00	120.3		4873 Btuh
Duct load	Average sealed, R6.0, Supply(Att), Return(Att)					(DLM of 0.229)		3569 Btuh
All Zones	Sensible Subtotal All Zones							19144 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

N/A
Rose Point Place
Lake City, FL 32024-

Project Title:
Model 1302
Building Type: User

5/1/2014

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	19144 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	19144 Btuh

EQUIPMENT

1 Electric Heat Pump	#	27100 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

N/A
Rose Point Place
Lake City, FL 32024-

Project Title:
Model 1302

5/1/2014

Reference City: Gainesville, FL

Temperature Difference: 17.0F(MJ8 99%) Humidity difference: 54gr.

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	0.50, 0.30	No	No	E		7.5ft.	1.5ft.	30.0	28.3	1.7	16	53	531 Btuh
2	2 NFRC	0.50, 0.30	No	No	N		1.5ft.	1.5ft.	60.0	0.0	60.0	16	16	937 Btuh
3	2 NFRC	0.50, 0.30	No	No	W		1.5ft.	1.5ft.	30.0	0.0	30.0	16	53	1599 Btuh
4	2 NFRC	0.50, 0.30	No	No	W		1.5ft.	1.5ft.	16.0	0.0	16.0	16	53	853 Btuh
5	2 NFRC	0.50, 0.30	No	No	S		1.5ft.	1.5ft.	6.0	6.0	0.0	16	20	94 Btuh
6	2 NFRC	0.50, 0.30	No	No	S		1.5ft.	1.5ft.	30.0	30.0	0.0	16	20	469 Btuh
	Excursion													692 Btuh
	Window Total								172 (sqft)					5174 Btuh
Walls	Type						U-Value	R-Value	Area(sqft)		HTM		Load	
								Cav/Sheath						
	1	Frame - Wood - Ext					0.09	13.0/0.0	82.0		2.1		171 Btuh	
	2	Frame - Wood - Ext					0.09	13.0/0.0	315.0		2.1		657 Btuh	
	3	Frame - Wood - Ext					0.09	13.0/0.0	278.0		2.1		580 Btuh	
	4	Frame - Wood - Ext					0.09	13.0/0.0	288.0		2.1		601 Btuh	
	5	Frame - Wood - Adj					0.09	13.0/0.0	172.0		1.5		260 Btuh	
	6	Frame - Wood - Adj					0.09	13.0/0.0	49.5		1.5		75 Btuh	
	Wall Total								1185 (sqft)				2343 Btuh	
Doors	Type								Area (sqft)		HTM		Load	
	1	Insulated - Exterior							20.0		12.9		258 Btuh	
	2	Insulated - Garage							20.0		12.9		258 Btuh	
		Door Total								40 (sqft)				515 Btuh
Ceilings	Type/Color/Surface						U-Value	R-Value	Area(sqft)		HTM		Load	
	1	Vented Attic/Light/Shingle					0.032	30.0/0.0	1432.0		1.34		1915 Btuh	
		Ceiling Total								1432 (sqft)				1915 Btuh
Floors	Type						R-Value		Size		HTM		Load	
	1	Slab On Grade					5.0		1302 (ft-perimeter)		0.0		0 Btuh	
		Floor Total								1302.0 (sqft)				0 Btuh
	Envelope Subtotal:													9948 Btuh
Infiltration	Type						Average ACH		Volume(cuft)		Wall Ratio		CFM=	Load
	Natural						0.46		11718		1		90.2	1679 Btuh
Internal gain							Occupants		Btuh/occupant		Appliance		Load	
							6		X 230		+		2400	3780 Btuh
	Sensible Envelope Load:													15407 Btuh
Duct load	Average sealed,Supply(R6.0-Attic), Return(R6.0-Attic) (DGM of 0.249)													3834 Btuh
	Sensible Load All Zones													19241 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

N/A
Rose Point Place
Lake City, FL 32024-

Project Title:
Model 1302

Climate:FL_GAINESVILLE_REGIONAL_A

5/1/2014

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	15407 Btuh
	Sensible Duct Load	3834 Btuh
	Total Sensible Zone Loads	19241 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	19241 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	3297 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	908 Btuh
	Latent occupant gain (6.0 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	5405 Btuh
	TOTAL GAIN	24646 Btuh

EQUIPMENT

1. Central Unit	#	27100 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