

Florida Department of Business and Professional Regulation - Residential Performance Method

Checklist

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Code
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PLANS EXAMINER

7/27/2012 10:27 AM

PROJECT											
Title:	Steve Beck Residence	Bedrooms:	3	AddressType:	StreetAddress						
Building Type:	FLProp2010	Conditioned Area:	3200	Lot #							
Owner:	Steve & Celeste Beck	Total Stories:	2	Block/SubDivision:							
# of Units:	1	Worst Case:	No	PlatBook:							
Builder Name:	Owner	Rotate Angle:	0	Street:	824 SW CR 138						
Permit Office:	Columbia County	Cross Ventilation:		County:	Columbia						
Jurisdiction:	221000	Whole House Fan:		City, State, Zip:	Ft White , FL , 32038-						
Family Type:	Single-family										
New/Existing:	Addition										
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	3200	34758

SPACES										
Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	RoomsInBlock1	3200	34758	No	3	3	1	Yes	Yes	Yes

FLOORS										
✓	#	Floor Type	Space	Perimeter	Perimeter R-Value	Area	Joist R-Value	Tile	Wood	Carpet
_____	1	Raised Floor	RoomsInBlock1	---	---	868 ft²	19	0.2	0	0.8
_____	2	Floor Over Other Space	RoomsInBlock1	---	---	953 ft²	1	0.2	0.5	0.3

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	2037 ft²	456 ft²	Medium	0.96	No	0.9	No	0	26.6

ATTIC							
✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	1821 ft²	N	N

CEILING							
✓	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	RoomsInBlock1	30	1821 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	19	40	9	12	0	489ft²		0.23	0.75	0
	2	E	Exterior	Frame - Wood	RoomsInBloc	19	31	0	12	0	372ft²		0.23	0.75	0
	3	S	Exterior	Frame - Wood	RoomsInBloc	19	31	6	12	0	378ft²		0.23	0.75	0
	4	S	Exterior	Frame - Wood	RoomsInBloc	19	17	0	18	0	306ft²		0.23	0.75	0
	5	W	Exterior	Frame - Wood	RoomsInBloc	19	36	5	12	0	437ft²		0.23	0.75	0
	6	N	Exterior	Frame - Wood	RoomsInBloc	13	40	9	10	0	407.5ft²		0.23	0.75	0
	7	E	Exterior	Frame - Wood	RoomsInBloc	13	48	11	10	0	489.1666		0.23	0.75	0
	8	S	Exterior	Frame - Wood	RoomsInBloc	13	32	3	10	0	322.5ft²		0.23	0.75	0
	9	W	Exterior	Frame - Wood	RoomsInBloc	13	52	11	10	0	529.1666		0.23	0.75	0

DOORS

✓	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
	1	N=>S	Insulated	RoomsInBloc	None	0.460000	3	6	7	0	24.5ft²
	2	S=>N	Insulated	RoomsInBloc	None	0.460000	3	6	7	0	20ft²
	3	S=>N	Insulated	RoomsInBloc	None	0.460000	3	6	7	0	20ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓	#	Ornt	Wall ID	Frame	Panels	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Separation	Int Shade	Screening
	1	N=>S	1	Vinyl	Low-EDouble	Yes	0.55	0.5	N	83.11111	2 ft 0 in	1 ft 0 in	HERS 2006	None
	2	E=>W	2	Vinyl	Low-EDouble	Yes	0.55	0.5	N	23.11111	2 ft 0 in	1 ft 0 in	HERS 2006	None
	3	E=>W	2	Vinyl	Low-EDouble	Yes	0.55	0.5	N	8.888889	2 ft 0 in	1 ft 0 in	HERS 2006	None
	4	E=>W	2	Vinyl	Low-EDouble	Yes	0.55	0.5	N	8.888889	2 ft 0 in	0 ft 4 in	HERS 2006	None
	5	S=>N	4	Vinyl	Low-EDouble	Yes	0.55	0.5	N	49.77777	2 ft 0 in	8 ft 0 in	HERS 2006	None
	6	N=>S	6	Vinyl	Low-EDouble	Yes	0.55	0.5	N	83.11111	2 ft 0 in	1 ft 0 in	HERS 2006	None
	7	N=>S	6	Vinyl	Low-EDouble	Yes	0.55	0.5	N	24.88888	2 ft 0 in	1 ft 0 in	HERS 2006	None
	8	E=>W	7	Vinyl	Low-EDouble	Yes	0.55	0.5	N	24.88888	2 ft 0 in	1 ft 0 in	HERS 2006	None
	9	S=>N	8	Vinyl	Low-EDouble	Yes	0.55	0.5	N	49.77777	2 ft 0 in	1 ft 0 in	HERS 2006	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	BySpaces	BestGuess	0.000699	2531.9	139.00	261.41	0.6635	9.1805

HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
	1	Electric Heat Pump	None	HSPF: 7.7	56.6 kBtu/hr	1	sys#1

COOLING SYSTEM											
✓	#	System Type	Subtype	Efficiency	Capacity	AirFlow	SHR	Block	Ducts		
✓	1	Central Unit	Split	SEER: 14	57.2 kBtu/hr	1800 cfm	0.75	1	sys#1		

HOT WATER SYSTEM									
✓	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
✓	1	Propane	Tankless	Exterior	0.5428	1 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM							
✓	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
✓	None	None				ft²	

DUCTS														
✓	#	---Supply---			---Return---		Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF	HVAC# Heat Cool	
		Location	R-Value	Area	Location	Area								
✓	1	Attic	6	800ft²	Attic	160 ft²	DSE=0.88	RoomsInBl	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

Thermostat Schedule: HERS 2006 Reference													
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: 824 SW CR 138
Ft White, FL, 32038-

PERMIT #:

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

COMPONENT	SECTION	SUMMARY OF REQUIREMENT(S)	CHECK
Airleakage	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	403.2.2 403.3.3	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. 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/kneewalls	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.

824 SW CR 138, Ft White, FL, 32038-

1. New construction or existing	Addition	9. Wall Types	Insulation	Area
2. Single family or multiple family	Single-family	a. Frame - Wood, Exterior	R=19.0	1982.00 ft ²
3. Number of units, if multiple family	1	b. Frame - Wood, Exterior	R=13.0	1748.30 ft ²
4. Number of Bedrooms	3(0)	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)	3200	10. Ceiling Types	Insulation	Area
7. Windows**	Description	a. Under Attic (Vented)	R=30.0	1821.00 ft ²
a. U-Factor:	Dbl, U=0.55	b. N/A	R=	ft ²
SHGC:	SHGC=0.50	c. N/A	R=	ft ²
b. U-Factor:	N/A	11. Ducts		R
SHGC:		a. Sup: Attic, Ret: Attic, AH: RoomsInBlock1		6 800
c. U-Factor:	N/A			
SHGC:		12. Cooling systems	kBtu/hr	Efficiency
d. U-Factor:	N/A	a. Central Unit	57.2	SEER:14.00
SHGC:				
Area Weighted Average Overhang Depth:	2.000 ft.	13. Heating systems	kBtu/hr	Efficiency
Area Weighted Average SHGC:	0.500	a. Electric Heat Pump	56.6	HSPF:7.70
8. Floor Types	Insulation			
a. Floor Over Other Space	R=1.0	14. Hot water systems-		
b. Raised Floor	R=19.0	a. Propane		Cap: 1 gallons
c. N/A	R=			EF: 0.54
	Area	b. Conservation features		
	953.00 ft ²	None		
	868.00 ft ²	15. Credits		CF, Pstat
	ft ²			

I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____



*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida EnergyGauge Rating. Contact the EnergyGauge Hotline at (321) 638-1492 or see the EnergyGauge web site at energygauge.com for information and a list of certified Raters. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

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

Residential System Sizing Calculation

Summary

Steve & Celeste Beck
824 SW CR 138
Ft White, FL 32038-

Project Title:
Steve Beck Residence

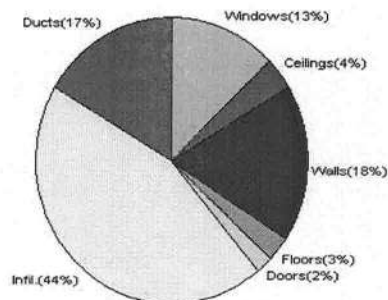
7/27/2012

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	56561 Btuh	Total cooling load calculation	54458 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	116.7 66000	Sensible (SHR = 0.75)	144.4 49500
Heat Pump + Auxiliary(0.0kW)	116.7 66000	Latent	81.8 16500
		Total (Electric Heat Pump)	121.2 66000

WINTER CALCULATIONS

Winter Heating Load (for 3200 sqft)

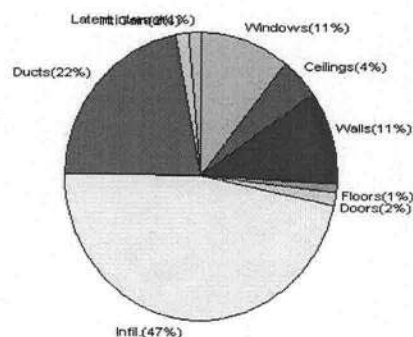
Load component	Load
Window total 356 sqft	7254 Btuh
Wall total 3309 sqft	10127 Btuh
Door total 65 sqft	1098 Btuh
Ceiling total 1821 sqft	2146 Btuh
Floor total See detail report	1611 Btuh
Infiltration 615 cfm	24914 Btuh
Duct loss	9412 Btuh
Subtotal	56561 Btuh
Ventilation 0 cfm	0 Btuh
TOTAL HEAT LOSS	56561 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 3200 sqft)

Load component	Load
Window total 356 sqft	5833 Btuh
Wall total 3309 sqft	5880 Btuh
Door total 65 sqft	831 Btuh
Ceiling total 1821 sqft	2436 Btuh
Floor total	522 Btuh
Infiltration 461 cfm	8585 Btuh
Internal gain	920 Btuh
Duct gain	9282 Btuh
Sens. Ventilation 0 cfm	0 Btuh
Blower Load	0 Btuh
Total sensible gain	34288 Btuh
Latent gain(ducts)	2512 Btuh
Latent gain(infiltration)	16858 Btuh
Latent gain(ventilation)	0 Btuh
Latent gain(internal/occupants/other)	800 Btuh
Total latent gain	20170 Btuh
TOTAL HEAT GAIN	54458 Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: ERIN BENNETT

DATE: 7/27/12

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Steve & Celeste Beck
824 SW CR 138
Ft White, FL 32038-

Project Title:
Steve Beck Residence
Building Type: User

7/27/2012

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	0.55	N	83.1		20.4	1691 Btuh
2	2, NFRC 0.50	Vinyl	0.55	E	23.1		20.4	470 Btuh
3	2, NFRC 0.50	Vinyl	0.55	E	8.9		20.4	181 Btuh
4	2, NFRC 0.50	Vinyl	0.55	E	8.9		20.4	181 Btuh
5	2, NFRC 0.50	Vinyl	0.55	S	49.8		20.4	1013 Btuh
6	2, NFRC 0.50	Vinyl	0.55	N	83.1		20.4	1691 Btuh
7	2, NFRC 0.50	Vinyl	0.55	N	24.9		20.4	506 Btuh
8	2, NFRC 0.50	Vinyl	0.55	E	24.9		20.4	506 Btuh
9	2, NFRC 0.50	Vinyl	0.55	S	49.8		20.4	1013 Btuh
Window Total					356.4(sqft)			7254 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Frame - Wood	- Ext	(0.077)	19.0/0.0	381		2.86	1090 Btuh
2	Frame - Wood	- Ext	(0.077)	19.0/0.0	331		2.86	947 Btuh
3	Frame - Wood	- Ext	(0.077)	19.0/0.0	338		2.86	966 Btuh
4	Frame - Wood	- Ext	(0.077)	19.0/0.0	256		2.86	733 Btuh
5	Frame - Wood	- Ext	(0.077)	19.0/0.0	437		2.86	1249 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	300		3.28	984 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	464		3.28	1525 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	273		3.28	896 Btuh
9	Frame - Wood	- Ext	(0.089)	13.0/0.0	529		3.28	1738 Btuh
Wall Total					3309(sqft)			10127 Btuh
Doors	Type	Storm	Ueff.		Area	X	HTM=	Load
1	Insulated - Exterior,	n	(0.460)		25		17.0	417 Btuh
2	Insulated - Exterior,	n	(0.460)		20		17.0	340 Btuh
3	Insulated - Exterior,	n	(0.460)		20		17.0	340 Btuh
Door Total					65(sqft)			1098Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Vented Attic/L/Shing		(0.032)	30.0/0.0	1821		1.2	2146 Btuh
Ceiling Total					1821(sqft)			2146Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
1	Raised - Open		(0.050)	19.0	868.0 sqft		1.9	1611 Btuh
2	Interior		(0.050)	1.0	953.0 sqft		0.0	0 Btuh
Floor Total					1821 sqft			1611 Btuh
Envelope Subtotal:								22235 Btuh
Infiltration	Type	Wholehouse	ACH	Volume(cuft)	Wall Ratio	CFM=		Load
	Natural		1.06	34758	1.00	615.1		24914 Btuh
Duct load	Average sealed, R6.0, Supply(Att), Return(Att) (DLM of 0.200)							9412 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Steve & Celeste Beck
824 SW CR 138
Ft White, FL 32038-

Project Title:
Steve Beck Residence
Building Type: User

7/27/2012

All Zones	Sensible Subtotal All Zones	56561 Btuh
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WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	56561 Btuh 0 Btuh 56561 Btuh
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EQUIPMENT

1. Electric Heat Pump	#	66000 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

Steve & Celeste Beck
824 SW CR 138
Ft White, FL 32038-

Project Title:
Steve Beck Residence

7/27/2012

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, 0.55	B-L	No	No	N	2.0ft	1.0ft	83.1	0.0	83.1	13	13	1094	Btuh	
2	2 NFRC	0.50, 0.55	B-L	No	No	E	2.0ft	1.0ft	23.1	1.8	21.4	13	34	742	Btuh	
3	2 NFRC	0.50, 0.55	B-L	No	No	E	2.0ft	1.0ft	8.9	2.2	6.7	13	34	254	Btuh	
4	2 NFRC	0.50, 0.55	B-L	No	No	E	2.0ft	0.3ft	8.9	4.4	4.5	13	34	209	Btuh	
5	2 NFRC	0.50, 0.55	B-L	No	No	S	2.0ft	8.0ft	49.8	35.9	13.9	13	16	692	Btuh	
6	2 NFRC	0.50, 0.55	B-L	No	No	N	2.0ft	1.0ft	83.1	0.0	83.1	13	13	1094	Btuh	
7	2 NFRC	0.50, 0.55	B-L	No	No	N	2.0ft	1.0ft	24.9	0.0	24.9	13	13	327	Btuh	
8	2 NFRC	0.50, 0.55	B-L	No	No	E	2.0ft	1.0ft	24.9	3.5	21.4	13	34	766	Btuh	
9	2 NFRC	0.50, 0.55	B-L	No	No	S	2.0ft	1.0ft	49.8	49.8	0.0	13	16	655	Btuh	
	Window Total								356 (sqft)					5833 Btuh		
Walls	Type						U-Value		R-Value		Area(sqft)		HTM		Load	
									Cav/Sheath							
1	Frame - Wood - Ext						0.08		19.0/0.0		381.4		1.5		572 Btuh	
2	Frame - Wood - Ext						0.08		19.0/0.0		331.1		1.5		496 Btuh	
3	Frame - Wood - Ext						0.08		19.0/0.0		338.0		1.5		507 Btuh	
4	Frame - Wood - Ext						0.08		19.0/0.0		256.2		1.5		384 Btuh	
5	Frame - Wood - Ext						0.08		19.0/0.0		437.0		1.5		655 Btuh	
6	Frame - Wood - Ext						0.09		13.0/0.0		299.5		2.1		625 Btuh	
7	Frame - Wood - Ext						0.09		13.0/0.0		464.3		2.1		968 Btuh	
8	Frame - Wood - Ext						0.09		13.0/0.0		272.7		2.1		569 Btuh	
9	Frame - Wood - Ext						0.09		13.0/0.0		529.2		2.1		1104 Btuh	
	Wall Total								3309 (sqft)					5880 Btuh		
Doors	Type										Area (sqft)		HTM		Load	
1	Insulated - Exterior										24.5		12.9		316 Btuh	
2	Insulated - Exterior										20.0		12.9		258 Btuh	
3	Insulated - Exterior										20.0		12.9		258 Btuh	
	Door Total								65 (sqft)					831 Btuh		
Ceilings	Type/Color/Surface						U-Value		R-Value		Area(sqft)		HTM		Load	
1	Vented Attic/Light/Shingle						0.032		30.0/0.0		1821.0		1.34		2436 Btuh	
	Ceiling Total								1821 (sqft)					2436 Btuh		
Floors	Type								R-Value		Size		HTM		Load	
1	Raised - Open								19.0		868 (sqft)		0.6		522 Btuh	
2	Interior								1.0		953 (sqft)		0.0		0 Btuh	
	Floor Total								1821.0 (sqft)					522 Btuh		
	Envelope Subtotal:													15501 Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued)

Steve & Celeste Beck
824 SW CR 138
Ft White, FL 32038-

Project Title:
Steve Beck Residence

Climate:FL_GAINESVILLE_REGIONAL_A

7/27/2012

Infiltration	Type Natural	Average ACH 0.80	Volume(cuft) 34758	Wall Ratio 1	CFM= 461.3	Load 8585 Btuh
Internal gain		Occupants 4	Btuh/occupant X 230	Appliance +	0	Load 920 Btuh
	Sensible Envelope Load:					25006 Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DGM of 0.371)					9282 Btuh
	Sensible Load All Zones					34288 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Steve & Celeste Beck
824 SW CR 138
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7/27/2012

WHOLE HOUSE TOTALS		
Whole House Totals for Cooling	Sensible Envelope Load All Zones	25006 Btuh
	Sensible Duct Load	9282 Btuh
	Total Sensible Zone Loads	34288 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	34288 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	16858 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	2512 Btuh
	Latent occupant gain (4.0 people @ 200 Btuh per person)	800 Btuh
	Latent other gain	0 Btuh
	Latent total gain	20170 Btuh
	TOTAL GAIN	54458 Btuh

EQUIPMENT		
1. Central Unit	#	66000 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