	8 2005 07+55AM P2
Columbia County Building Permit Application	458/1204 Revised 9-23-04
For Office Use Only Application # 0608-86 Date Received \$125/06 By T Application Approved by - Zoning Official BLK Date 08-09-06 Plans Examiner Flood Zone X Polt Development Permit 1/A Zoning & SF - 2 Land Use Plan	OK JTH Date 9-6-06
Comments	
Applicants Name Bryan Techer Phone Phone	
Address <u>P.U. Box SIS Lake City FL 32256</u> Owners Name <u>Pase-Marie Wilson</u> Phone	752-5875
911 Address <u>304</u> 5W Short Leas Dr. Lake City, FL 32024 Contractors Name <u>Bryan Techer Construction Inc.</u> Phone Address P.U. Bux 815 Lake City, FL 32056	
Fee Simple Owner Name & Address 1/4	
Bonding Co. Name & Address <u>NIA</u> Architect/Engineer Name & Address <u>Teena Ruffs   Mark Disasway</u> Mortgage Lenders Name & Address <u>NIA</u>	
Circle the correct power company - <u>FL Power &amp; Light</u> - <u>Clay Elec.</u> - <u>Suwannee Valle</u> Property ID Number <u>21-45-16-03080-007</u> Estimated Cost of Constr	y Elec Progressive Energy
Subdivision Name Forest Country Lot 6 Bloc Driving Directions Take CR 247 South to Forest Country Suc	:k 📙 Unit Phase 🧟
Left into subdivision. At step sign, turn light and onto short Leas Orive. Lot is let on Right.	d take 2nd Left
Type of Construction       Frame       Number of Existing Dweiling         Total Acreage       532       Lot Size       532       Do you need a Culvert Permit or Culvert Walk         Actual Distance of Structure from Property Lines - Front       28'       Side       98'       Side	ver or <u>Have an Existing Drive</u>
Total Building Height <u>26' 11'/2"</u> Number of Stories Heated Floor Area <u>286</u> TOTAL	7 3.F. Roof Pitch

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

this \_\_\_\_\_ day of \_\_\_\_\_\_ 20\_06.

Personally known\_\_\_\_\_ or Produced Identification\_\_\_\_\_

Contractor Signature Contractors License Number BC054575 Competency Card Number\_\_\_\_\_ NOTARY STAMP/SEAL

Maan

Notary Signature



### STATE OF FLORIDA DEPARTMENT OF HEALTH APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 06-0730/

----- PART II - SITEPLAN ------

Scale: 1 inch = 50 feet.

Wilson, Rosky MARIE



Notes: Site Plan submitted by MASTER CONTRACTOR Date\_8//6 06 Plan Approved Not Approved By\_ 5.4 **County Health Department** 

#### ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

# HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-6" WELLS



DONALD AND MARY HALL OWNERS

June 12, 2002

NOTICE TO ALL CONTRACTORS

Please be advised that due to the new building codes we will use a large capacity diaphram tank on all new wells. This will insure a minimum of one (1) minute draw down or one (1) minute refill. If a smaller diaphram tank is used then we will install a cycle stop valve which will produce the same results.

If you have any questions please feel free to call our office anytime.

Thank, you, Donald Hall

Donald D. H DDH/jk

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LOT 6 BLOCK A FOREST COUNTRY WILSO SECOND ADDITION. ORB 848-1710, 743 S 934-2261, 934-2268, 990-2332. LAKE	WILSON ROSE-MARIE G 743 SW LAKE MONTGOMERY AVE LAKE CITY, FL 32025-5190	21-4S-16-03080-007 PRI APP	NTED R	Columb 5/05/2006 8:43	Columbia County 20 CARD ( 8:43 BY	Y 2006 R CARD 001 of 001
				U/2003 HC		JEFF
BUSE AE? MOD BATH EXW FIXT	HTD AREA EFF AREA 5 RCN	.000 INDEX 21416.01 59.399 E-RATE .000	FOREST INDX AYB	2 PUSE STR 21- 4S- 16 MKT AREA 06	5E 0000000 VACANT 6	ANT 0 BLDG
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A-AREA % E-AREA			<sup>3</sup> NUMBER <sup>3</sup>	DESC	AMT	ISSUED
			3 GOOK 9 GRANTOR 3 GRANTEE 9 GRANTEE 9 34 9 34	1 9	AGE DATE AGE DATE 2332 8/06/2003 Q V BLONDINA M STEVENS ROSE-MARIE G WILSON 2268 9/07/2001 U V RANDELL VAN VLECK	PRICE 21000 18000
			GRANTEE		BLONDINA STEVENS (BACK TO ORIGINAL	TO ORIGINAL
AE BN CODE DESC LEN WID H	HGHT QTY QL YR ADJ	CK: UNITS UT	PRICE ADJ UT	UT PR SPCD		XFOB VALUE
AE CODE DESC ZONE ROAD (UD1 (U AE CODE TOPO UTIL (UD2 (U Y 000000 VAC RES RSF-1 0002 0002 0003	(UD3 FRONT DEPTH FIELD CK: (UD4 BACK DT ADJUSTM 190 122 1.00 1.00	CK:				
		ADJUSTMENTS 1.00 1.00 1.00 1.00	UNITS UT 1.000 LT	PRICE AD 34000.000	ADJ UT PR LAI 34000.00	LAND VALUE 34,000

FORM 600A-2004

## FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Whole Building Performance Method A

Project Name:	608152BryanZecher	Builder:	
Address:	Lot: 6, Sub: Forest Country, Plat:	Permitting Office:	
City, State:	9	Permit Number:	
Owner:	Rose Wilson	Jurisdiction Number:	
Climate Zone:	North		
1 Nous construction	Now	12 Cooling sustants	

1.	New construction of existing	INCOV		12. Coomig systems		
2.	Single family or multi-family	Single family		a. Central Unit	Cap: 50.0 kBtu/hr	_
3.	Number of units, if multi-family	1			SEER: 10.00	-
4.	Number of Bedrooms	4		b. N/A		-
5.	Is this a worst case?	Yes				_
6.	Conditioned floor area (fl <sup>2</sup> )	2867 ft <sup>2</sup>	-	c. N/A		-
7.	Glass type 1 and area: (Label reqd.	by 13-104.4.5 if not default)				-
a.	U-factor:	Description Area		13. Heating systems		
	(or Single or Double DEFAULT)	7a. (Dble Default) 345.0 ft <sup>2</sup>	_	a. Electric Heat Pump	Cap: 50.0 kBtu/hr	
b	SHGC:				HSPF: 7.00	-
	(or Clear or Tint DEFAULT)	7b. (Clear) 345.0 ft <sup>2</sup>		b. N/A		
8.	Floor types					_
a.	Slab-On-Grade Edge Insulation	R=0.0, 252.0(p) ft		c. N/A		-
Ь	N/A		s <u>-</u> 2			
c.	N/A		2 <b></b> -3	14. Hot water systems		
9.	Wall types			a. Electric Resistance	Cap: 40.0 gallons	_
a.	Frame, Wood, Exterior	R=13.0, 1481.0 ft <sup>2</sup>	_		EF: 0.93	_
b.	Frame, Wood, Adjacent	R=13.0, 180.0 ft <sup>2</sup>	_	b. N/A		-
c.	N/A					
d.	N/A			c. Conservation credits		
e.	N/A		-	(HR-Heat recovery, Solar		
10.	Ceiling types		-	DHP-Dedicated heat pump)		
a.	Under Attic	R=30.0, 2971.0 ft <sup>2</sup>		15. HVAC credits		
b.	N/A			(CF-Ceiling fan, CV-Cross ventilation,		
c.	N/A		-	HF-Whole house fan,		
	Ducts			PT-Programmable Thermostat,		
	Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 200.0 ft		MZ-C-Multizone cooling,		
b.	N/A			MZ-H-Multizone heating)		
			1000			

Glass/Floor Area: 0.12

Total as-built points: 37849 Total base points: 39103

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. <b>PREPARED BY:</b> <b>DATE:</b> <b>DATE:</b> <b>D</b> -	Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed	THE STATION
I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.	this building will be inspected for compliance with Section 553.908 Florida Statutes.	COD WE TRUST
OWNER/AGENT:	BUILDING OFFICIAL:	

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4. EnergyGauge® (Version: FLR2PB v4.1)

## **SUMMER CALCULATIONS**

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 6, Sub: Forest Country, Plat: , , ,

	BASE					AS	-BU	LT				
GLASS TYPES .18 X Conditi Floor A	oned X E	BSPM =	Points	Type/SC	Ove Ornt	erhang Len		Area X	SPN	1 X S	SOF	= Points
.18 286	7.0	20.04	10341.8	Double, Clear	S	9.0	3.5	31.7	35.8	7	0.44	496.1
				Double, Clear	S	8.0	10.0	10.0	35.8	7	0.55	198.4
				Double, Clear	S	8.0	7.5	54.0	35.8	7	0.51	989.8
				Double, Clear	E	34.0	10.0	10.0	42.0		0.36	150.1
				Double, Clear	S	2.0	5.5	45.0	35.8		0.75	1208.6
				Double, Clear	S	1.5	5.5	15.0	35.8		0.83	447.7
				Double, Clear	W	1.5	2.5	6.0	38.5		0.67	155.1
				Double, Clear	W	1.5	5.5	30.0	38.5		0.90	1036.6
				Double, Clear	W	1.5	5.5	10.0	38.5		0.90	345.5
				Double, Clear	N	1.5	7.0	45.0	19.20		0.96	825.1
				Double, Clear	N	1.5 1.5	0.0	15.0	19.20		0.59 0.85	170.8 570.7
				Double, Clear Double, Clear	E	1.5 1.5	4.5 3.5	16.0 6.0	42.00 42.00		0.65	570.7 195.7
				Double, Clear	E	1.5	5.5	15.0	42.00		0.90	565.5
				Double, Clear	S	8.0	1.5	9.0	35.8		0.43	139.4
				Double, Clear	s	2.0	1.5	3.0	35.8		0.48	52.1
				Double, Clear	N	1.5	2.0	3.0	19.20		0.76	43.6
				Double, Clear	N	8.0	2.0	5.0	19.20		0.59	56.9
				Double, Clear	N	1.5	0.0	3.0	19.20		0.59	34.2
				Double, Clear	Ν	8.0	8.0	13.3	19.20		0.71	181.5
				As-Built Total:				345.0				7863.5
WALL TYPES	Area >	K BSPM	= Points	Туре		R-	Value	Area	Х	SPM	=	Points
Adjacent	180.0	0.70	126.0	Frame, Wood, Exterior			13.0	1481.0		1.50		2221.5
Exterior	1481.0	1.70	2517.7	Frame, Wood, Adjacent			13.0	180.0		0.60		108.0
Base Total:	1661.0		2643.7	As-Built Total:				1661.0				2329.5
DOOR TYPES	Area >	K BSPM	= Points	Туре				Area	Х	SPM	=	Points
Adjacent	20.0	1.60	32.0	Exterior Insulated				20.0		4.10		82.0
Exterior	40.0	4.10	164.0	Exterior Insulated				20.0		4.10		82.0
				Adjacent Insulated				20.0		1.60		32.0
Base Total:	60.0		196.0	As-Built Total:				60.0				196.0
CEILING TYPE	<b>S</b> Area >	( BSPM	= Points	Туре	F	R-Valu	ie A	rea X S	PM )	( SCI	vi =	Points
Under Attic	2867.0	1.73	4959.9	Under Attic			30.0	2971.0 <sup>4</sup>	1.73 X	1.00		5139.8
Base Total:	2867.0		4959.9	As-Built Total:				2971.0				5139.8

## **SUMMER CALCULATIONS**

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 6, Sub: Forest Country, Plat: , , ,

	BASE		AS-BUILT	
FLOOR TYPE	S Area X BSI	PM = Points	Type R-Value Area X SPM = P	oints
Slab Raised	252.0(p) -37 0.0 0.	7.0 -9324.0 00 0.0	Slab-On-Grade Edge Insulation 0.0 252.0(p -41.20 -1	0382.4
Base Total:		-9324.0	As-Built Total: 252.0 -1	0382.4
INFILTRATION	I Area X BSI	PM = Points	Area X SPM = P	oints
	2867.0 10	0.21 29272.1	2867.0 10.21 29	9272.1
Summer Ba	se Points: 3	8089.5	Summer As-Built Points: 344	18.5
Total Summer Points	X System = Multiplier	= Cooling Points		poling Points
38089.5	0.4266	16249.0	(sys 1: Central Unit 50000 btuh ,SEER/EFF(10.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0(INS)           34418         1.00         (1.09 x 1.147 x 0.91)         0.341         1.000         1336           34418.5         1.00         1.138         0.341         1.000         1336	

## WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 6, Sub: Forest Country, Plat: , , ,

	BASE			AS-BUILT							
GLASS TYPES .18 X Condition Floor A	oned X B	SWPM =	Points	Type/SC	Ove Ornt	erhang Len	-	Area X	WPM	x wo	F = Point
		40.74									
.18 2867	.0	12.74	6574.6	Double, Clear Double, Clear	S S	9.0 8.0	3.5 10.0	31.7 10.0	13.30 13.30	3.63 2.38	1528.0 316.4
				Double, Clear	S	8.0	7.5	54.0	13.30	2.84	2039.4
				Double, Clear	E	34.0	10.0	10.0	18.79	1.51	283.2
				Double, Clear	S	2.0	5.5	45.0	13.30	1.32	787.4
				Double, Clear	S	1.5	5.5	15.0	13.30	1.15	228.8
				Double, Clear	w	1.5	2.5	6.0	20.73	1.11	137.6
				Double, Clear	w	1.5	5.5	30.0	20.73	1.03	639.3
				Double, Clear	W	1.5	5.5	10.0	20.73	1.03	213.1
				Double, Clear	Ν	1.5	7.0	45.0	24.58	1.00	1107.7
				Double, Clear	Ν	1.5	0.0	15.0	24.58	1.03	378.7
				Double, Clear	E	1.5	4.5	16.0	18.79	1.06	318.9
				Double, Clear	E	1.5	3.5	6.0	18.79	1.09	123.3
				Double, Ciear	E	1.5	5.5	15.0	18.79	1.04	293.5
				Double, Clear	S	8.0	1.5	9.0	13.30	3.66	438.0
				Double, Clear	S	2.0	1.5	3.0	13.30	3.15	125.6
				Double, Clear	N	1.5	2.0	3.0	24.58	1.01	74.8
				Double, Clear	N	8.0	2.0	5.0	24.58	1.03	126.2
				Double, Clear	N	1.5	0.0	3.0	24.58	1.03	75.7
				Double, Clear	N	8.0	8.0	13.3	24.58	1.02	332.9
		-		As-Built Total:				345.0			9568.7
WALL TYPES	Area X	BWPM	= Points	Туре		R-	Value	Area	x w	PM =	Points
Adjacent	180.0	3.60	648.0	Frame, Wood, Exterior	· · ·		13.0	1481.0	3.	.40	5035.4
Exterior	1481.0	3.70	5479.7	Frame, Wood, Adjacent			13.0	180.0	3.	.30	594.0
Base Total:	1661.0		6127.7	As-Built Total:				1661.0			5629.4
DOOR TYPES	Area X	BWPM	= Points	Туре				Area	X W	PM =	Points
Adjacent	20.0	8.00	160.0	Exterior Insulated				20.0	8.	40	168.0
Exterior	40.0	8.40	336.0	Exterior Insulated				20.0	8.	40	168.0
				Adjacent Insulated				20.0	8.	00	160.0
Base Total:	60.0		496.0	As-Built Total:				60.0			496.0
CEILING TYPE	<b>S</b> Area X	BWPM	= Points	Туре	R-	Value	e Ar	ea X W	PM X V	VCM =	Points
Under Attic	2867.0	2.05	5877.4	Under Attic			30.0	2971.0	2.05 X 1.	00	6090.5
Base Total:	2867.0		5877.4	As-Built Total:				2971.0			6090.5

## WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 6, Sub: Forest Country, Plat: , , ,

	BASE		AS-BUILT						
FLOOR TYPE	6 Area X BV	VPM = Points	Type R-Value Area X WPM = Po	oints					
Slab Raised	252.0(p) 0.0	8.92242.80.000.0	5	4737.6					
Base Total:		2242.8	As-Built Total: 252.0	737.6					
INFILTRATION	I Area X BV	VPM = Points	Area X WPM = Po	oints					
	2867.0	-0.59 -1691.5	2867.0 -0.59 -1	691.5					
Winter Base	Points:	19626.9	Winter As-Built Points:2483	0.7					
Total Winter X Points	System = Multiplier	· Heating Points		ating pints					
19626.9	0.6274	12313.9	(sys 1: Electric Heat Pump 50000 btuh ,EFF(7.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0         24830.7       1.000       (1.069 x 1.169 x 0.93)       0.487       1.000       1405         24830.7       1.000       1162       0.487       1.000       1405						

# WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 6, Sub: Forest Country, Plat: , , ,

BASE					AS-BUILT						
WATER HEA Number of Bedrooms	TING X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	х	Tank X Ratio	Multiplier X	Credit Multipli	
4		2635.00	10540.0	40.0	0.93	4		1.00	2606.67	1.00	10426.7
				As-Built Total:				10426.7			

CODE COMPLIANCE STATUS													
BASE				AS-BUILT									
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points
16249		12314		10540		39103	13365		14058		10427		37849





## Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 6, Sub: Forest Country, Plat: , , ,

PERMIT #:

#### 6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum:.3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall;	
		foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility	
		penetrations; between wall panels & top/bottom plates; between walls and floor.	
		EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends	
		from, and is sealed to, the foundation to the top plate.	
Floors	606.1.ABC.1.2.2	Penetrations/openings >1/8" sealed unless backed by truss or joint members.	
		EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed	
		to the perimeter, penetrations and seams.	
Ceilings	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of top floor; around shafts, chases,	
		soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate;	
		attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is	
		installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	606.1.ABC.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a	
		sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with < 2.0 cfm from	
		conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA,	
		have combustion air.	

#### 6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit	
		breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools	
		must have a pump timer. Gas spa & pool heaters must have a minimum thermal	
		efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically	
		attached, sealed, insulated, and installed in accordance with the criteria of Section 610.	
		Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides.	
(		Common ceiling & floors R-11.	

# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

**ESTIMATED ENERGY PERFORMANCE SCORE\* = 83.7** 

The higher the score, the more efficient the home.

Rose Wilson, Lot: 6, Sub: Forest Country, Plat: , , ,

1	New construction or existing	New	1	2. Cooling systems		
2.	Single family or multi-family	Single family		a. Central Unit	Cap: 50.0 kBtu/hr	
3.	Number of units, if multi-family	1			SEER: 10.00	
4.	Number of Bedrooms	4		b. N/A		
5.	Is this a worst case?	Yes		0. 1911		
5. 6.	Conditioned floor area (ft <sup>2</sup> )	2867 ft <sup>2</sup>		c. N/A		
0. 7.	Glass type <sup>1</sup> and area: (Label reqd. b		_	0. 19/1		
	a. U-factor:	-	1	3. Heating systems		
i		Description Area		a. Electric Heat Pump	Cap: 50.0 kBtu/hr	
1	(or Single or Double DEFAULT) 7 b. SHGC:	a. (Dble Default) 345.0 ft-		a. Electric meat i unip	HSPF: 7.00	
		7b. (Clear) 345 0 ft <sup>2</sup>		b. N/A	1011.7.00	
0	(	7b. (Clear) $345.0 \text{ ft}^2$	-	D. NA		-
8.	Floor types	R=0.0.252.0(-) A		c. N/A		-
	a. Slab-On-Grade Edge Insulation	R=0.0, 252.0(p) ft		c. N/A		_
	5. N/A		_			_
	. N/A			4. Hot water systems	Care 40.0 callege	
9.	Wall types	D 12 0 1 (01 0 02		a. Electric Resistance	Cap: 40.0 gallons	
	a. Frame, Wood, Exterior	R=13.0, 1481.0 ft <sup>2</sup>			EF: 0.93	_
	o. Frame, Wood, Adjacent	R=13.0, 180.0 ft <sup>2</sup>		b. N/A		
	2. N/A		—			
	1. N/A		—	c. Conservation credits		
	e. N/A			(HR-Heat recovery, Solar		
10	Ceiling types			DHP-Dedicated heat pump)		
;	a. Under Attic	R=30.0, 2971.0 ft <sup>2</sup>	1	5. HVAC credits		
i	o. N/A			(CF-Ceiling fan, CV-Cross ventilation,		
	2. N/A		-	HF-Whole house fan,		
11	Ducts			PT-Programmable Thermostat,		
	a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 200.0 ft		MZ-C-Multizone cooling,		
i	5. N/A			MZ-H-Multizone heating)		

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.

Date: 8/24/06 Sw Short ber City/FL Zip: LC, FC 32024 Builder Signature: Address of New Home:



\*NOTE: The home's estimated energy performance score is only available through the FL4/RES computer program. This is <u>not</u> a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergySta<sup>TM</sup> designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4. EnergyGauge® (Version: FLR2PB v4.1)

## NOTICE OF COMMENCEMENT

### STATE OF FLORIDA COUNTY OF Columbia

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The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, <u>Florida Statutes</u>, the following information is provided in this Notice of Commencement.

1	⊲ 1	Description of Property: Lot #6 Block A 2 Addition 304 SW Short Lews Dr., Lake City, FC 32024							
2	)	General Description of Improvement:ノさい けっかび							
3		Owner Information: B. Name and Address: <u>Rise - Marie Wilson</u> 743 Siv Lake Montging Av LC, FL 32025 b. Interest in Property: <u>Fee simple</u>							
		c. Name and Address of Fee Simple Titleholder (if other than owner):							
2	4_	Contractor (name and address): Brynn Zecher Construction Fire.							
Ę	5.	Surety: a. Name and Address:							
		b. Amount of Bond:							
(	6.	Lender (name and address):							
	7	Persons within the State of Florida designated by owner upon whom notices or other documents may be served as provided by <u>Florida Statutes</u> 713.13(1)(a)(7):							
1	8.	In addition to himself, owner designates:							
	9.	to receive a copy of the Leinor's Notice as provided in <u>Florida Statutes</u> 713.13(1)(b). Expiration date of Notice of Commencement (the expiration date is 1 year from the date of recording unless a different date is specified):							
		te:08/24/2006 Time:11:50 ewitt Cason,Columbia County B:1093 P:2232 Type Owner Name: Lose -Marie Wilson							
		Type Owner Name:							
	Swom	to and subscribed before me this $\frac{23}{2}$ day of $\underline{August}$ , 20 $\underline{as}$ .							
		nally Known							
	Produ Did/Di	ced ID       Type Notary's Name       Rebecca Dugan         d Not Take an Oath       Notary Public, State of Florida         Commission Expiry & Number							
		REBECCA DUGAN MY COMMISSION #DD452939							

EXPIRES: JUL 20, 2009 Bonded through 1st State Insurance

## **Columbia County Building Department Culvert Permit**

Culvert Permit No. 000001206

DATE <u>09/</u>	/19/2006 PARCEL ID #	21-4S-16-03080-007	
APPLICANT	BRYAN ZECHER	PHONE	752-8653
ADDRESS	PO BOX 815	LAKE CITY	FL 32056
OWNER <u>R</u>	OSE-MARIA WILSON	PHONE	752-5875
ADDRESS	304 SW SHORT LEAF DR	LAKE CITY	FL 32024
CONTRACTO	DR BRYAN ZECHER	PHONE	
LOCATION O	DF PROPERTY 247 S, L INTO FOREST CO	DUNTRY S/D, R AT STOP SI	GN, 2ND LEFT ONTO
SHORT LEAF DE	R, 6TH ON RIGHT		
SUBDIVISION	J/LOT/BLOCK/PHASE/UNIT FORREST	COUNTRY	<u>6 A 2</u>
SIGNATURE	INSTALLATION REQUIREMENT		
X	Culvert size will be 18 inches in diame driving surface. Both ends will be mite thick reinforced concrete slab.	eter with a total lenght of red 4 foot with a 4 : 1 slo	32 feet, leaving 24 feet of ope and poured with a 4 inch
	INSTALLATION NOTE: Turnouts wi a) a majority of the current and existing b) the driveway to be served will be p Turnouts shall be concrete or paved concrete or paved driveway, which current and existing paved or concrete	ng driveway turnouts are baved or formed with cor a minimum of 12 feet w ever is greater. The width	paved, or; crete. vide or the width of the
	Culvert installation shall conform to the	e approved site plan stand	lards.
	Department of Transportation Permit in	stallation approved stand	lards.
	Other		

### ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED DURING THE INSTALATION OF THE CULVERT.

135 NE Hernando Ave., Suite B-21 Lake City, FL 32055 Phone: 386-758-1008 Fax: 386-758-2160

Amount Paid 25.00





From: The Columbia County Building & Zoning Department Plan Review 135 NE Hernando Av. P.O. Box 1529 Lake City Florida 32056-1529

Reference to a building permit application Number: 0608-86 Contractor Bryan Zecher Owner Rose-Marie Wilson Property ID# 21-4s-16-03080-007

On the date of August 30, 2006 application 0608-86 and plans for construction of a single family dwelling were reviewed and the following information or alteration to the plans will be required to continue processing this application. If you should have any question please contact the above address, or contact phone number (386) 758-1163 or fax any information to (386) 754-7088.

## <u>Please include application number 0608-86 and when making</u> reference to this application.

This is a plan review for compliance with the Florida Residential Code 2004 only and doesn't make any consideration toward the land use and zoning requirements.

1. Please submit a recorded (with the Columbia County Clerk Office) notice of

commencement before any inspections can be preformed by the Columbia

County Building Department.

- 2. The location of the HVAC unit is not shown on the floor plans it is assumed that this unit would be located in the mechanical room, therefore there are two options to comply with the residential code as the relate to HVAC units.
  - A. If the mechanical room access door is so installed to meet sections R309.1. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

Look Co feast

- B. The HVAC ducts could be so constructed to meet section R309.1.1 Duct penetration: Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other approved material and shall have no openings into the garage.
- 3. A floor drain is shown in the laundry room, to drain overflow from a mechanical malfunction by the washing machine. This floor drain will be required to comply with plumbing code 2004 section 1002.4 Trap seals. Each fixture trap shall have a liquid seal of not less than 2 inches (51 mm) and not more than 4 inches (102 mm), or deeper for special designs relating to accessible fixtures. Where a trap seal is subject to loss by evaporation, a trap seal primer valve shall be installed. A trap seal primer valve shall conform to ASSE 1018 or ASSE 1044.

Joe Haltiwanger Columbia County

Plan Examiner

## COLUMBIA COUNTY BUILDING DEPARTMENT

### RESIDENTIAL MINIMUM PLAN REQUIREMENTS AND CHECKLIST FOR FLORIDA BUILDING CODE 2001 ONE (1) AND TWO (2) FAMILY DWELLINGS ALL REQUIREMENTS ARE SUBJECT TO CHANGE EFFECTIVE MARCH 1, 2002

ALL BUILDING PLANS MUST INDICATE THE FOLLOWING ITEMS AND INDICATE COMPLIANCE WITH CHAPTER 1606 OF THE FLORIDA BUILDING CODE 2001 BY PROVIDING CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE-AND-TWO FAMILY DWELLINGS. FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEED AS PER FIGURE 1606 SHALL BE USED.

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75.

- 1. ALL BUILDINGS CONSTRUCTED EAST OF SAID LINE SHALL BE ------ 100 MPH
- 2. ALL BUILDINGS CONSTRUCTED WEST OF SAID LINE SHALL BE ------- 110 MPH
- 3. NO AREA IN COLUMBIA COUNTY IS IN A WIND BORNE DEBRIS REGION

APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL

GENERAL	REOUIREMI	ENTS: Two (2) complete sets of plans containing the following:
Applicant	Plans Examine	er
6		All drawings must be clear, concise and drawn to scale ("Optional " details that are not used shall be marked void or crossed off). Square footage of different areas shall be shown on plans. Designers name and signature on document (FBC 104.2.1). If licensed
		<ul> <li>a) Dimensions of lot</li> <li>b) Dimensions of building set backs</li> <li>c) Location of all other buildings on lot, well and septic tank if applicable, and all utility easements</li> </ul>
E		<ul> <li>d) Provide a full legal description of property.</li> <li><u>Wind-load Engineering Summary, calculations and any details required</u></li> <li>a) Plans or specifications must state compliance with FBC Section 1606</li> <li>b) The following information must be shown as per section 1606.1.7 FBC</li> <li>a. Basic wind speed (MPH)</li> <li>b. Wind importance factor (1) and building category</li> <li>c. Wind exposure - if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated</li> <li>d. The applicable internal pressure coefficient</li> </ul>
		<ul> <li>e. Components and Cladding. The design wind pressure in terms of psf (kN/m<sup>2</sup>), to be used for the design of exterior component and cladding materials not specifally designed by the registered design professional</li> <li><u>Elevations including:</u> <ul> <li>a) All sides</li> <li>b) Roof pitch</li> <li>c) Overhang dimensions and detail with attic ventilation</li> <li>d) Location, size and height above roof of chimneys</li> <li>e) Location and size of skylights</li> <li>f) Building height</li> <li>e) Number of stories</li> </ul> </li> </ul>

_	Floor Plan including:
	a) Rooms labeled and dimensioned
	b) Shear walls
	c) Windows and doors (including garage doors) showing size, mfg., approval listing and attachment space (EDC) 1707)
	noting and anachitent specs. (FBC 1/0/) and safety glazing where needed
_	("Gress madows in Demoolins (o be shown)
	d) Fireplaces (gas appliance) (vented or non-vented) or wood huming with
_	
	e) Stairs with dimensions (width, tread and riser) and details of guardrails and
L	f) Must show and identify accessibility requirements (accessible bathroom)
9	a) Location of all load-bearing wall with required footings indicated as standard Or monolithic and dimensions and price for
	or menorities and unitensions and reinforcing
	b) All posts and/or column footing including size and reinforcing
	<ul><li>c) Any special support required by soil analysis such as piling</li><li>d) Location of any vertical steel</li></ul>
	Roof System:
	a) Truss package including:
	<ol> <li>Truss layout and truss details signed and sealed by FI. Pro. Eng.</li> <li>Roof assembly (ERC 104.2 + D)</li> </ol>
	2. Root assentory (FDC 104.2.) Rooting system materials
	manufacturer, fastening requirements and product overlapsing with
-	while resistance rating)
	b) Conventional Framing Layout including:
	1. Rafter size, species and spacing
	<ol> <li>Attachment to wall and uplift</li> <li>Ridge beam sized and valley from incomed.</li> </ol>
	7. Root assentibly (FBC 104.2.) Rooting systems motorials
	manufacturer, fastening requirements and product evaluation with wind resistance rating)
	Wall Sections including:
	a) Masonry wall
	1. All materials making up wall
	2. Block size and mortar type with size and spacing of reinforcement
	4. Gable ends with rake beams showing reinforcement or gable truss
	and required connectors with until rating and required numbers
	size of fasteners for continuous tie from roof to foundation 6. Roof assembly shown here or on roof system detail (FBC 104.2.1 Roofing system materials and foundation
	Roofing system, materials, manufacturer, fastening requirements
	and product evaluation with resistance rating)
	7. Fire resistant construction (if required)
	8. Fireproofing requirements
	<ol> <li>Shoe type of termite treatment (termiticide or alternative method)</li> <li>Slab on grade</li> </ol>
	in the on grade
	a. Vapor retarder (6mil. Polyethylene with joints lapped 6
	b. Must show control joints, synthetic fiber reinforcement or Welded fire fabric reinforcement and supports
	The indicate where pressure treated wood will be alread
	12. Provide insulation R value for the following:
	a. Affic space
	b. Exterior wall cavity
	c. Crawl space (if applicable)

NA

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10 - 180

ADD O A P & BAD

- b) Wood frame wall
  - 1. All materials making up wall
  - 2. Size and species of studs
  - 3. Sheathing size, type and nailing schedule
  - 4. Headers sized
  - 5. Gable end showing balloon framing detail or gable truss and wall hinge bracing detail
  - 6. All required fasteners for continuous tie from roof to foundation (truss anchors, straps, anchor bolts and washers)
  - 7. Roof assembly shown here or on roof system detail (FBC104.2.1 Roofing system, materials, manufacturer, fastening requirements and product evaluation with wind resistance rating)
  - 8. Fire resistant construction (if applicable)
  - 9. Fireproofing requirements
  - 10. Show type of termite treatment (termiticide or alternative method)
  - 11. Slab on grade
    - a. Vapor retarder (6Mil. Polyethylene with joints lapped 6 inches and sealed
    - b. Must show control joints, synthetic fiber reinforcement or welded wire fabric reinforcement and supports
  - 12. Indicate where pressure treated wood will be placed
  - 13. Provide insulation R value for the following:
    - a. Attic space
    - b. Exterior wall cavity
    - c. Crawl space (if applicable)
- c) Metal frame wall and roof (designed, signed and sealed by Florida Prof. Engineer or Architect)

#### Floor Framing System:

- a) Floor truss package including layout and details, signed and sealed by Florida Registered Professional Engineer
- b) Floor joist size and spacing
- c) Girder size and spacing
- d) Attachment of joist to girder
- e) Wind load requirements where applicable

#### **Plumbing Fixture layout**

#### **Electrical layout including:**

- a) Switches, outlets/receptacles, lighting and all required GFCI outlets identified
- b) Ceiling fans
- c) Smoke detectors

d) Service panel and sub-panel size and location(s)

- e) Meter location with type of service entrance (overhead or underground)
- f) Appliances and HVAC equipment
- g) Arc Fault Circuits (AFCI) in bedrooms

#### **HVAC** information

- a) Manual J sizing equipment or equivalent computation
  - b) Exhaust fans in bathroom
- Energy Calculations (dimensions shall match plans)

Gas System Type (LP or Natural) Location and BTU demand of equipment Disclosure Statement for Owner Builders

### Notice Of Commencement

#### Private Potable Water

a) Size of pump motor

7lhrs b) Size of pressure tank

c) Cycle stop valve if used

NA 

# **Residential System Sizing Calculation**

Rose Wilson

 $\mathbf{r}^{2}$ 

Summary Project Title: 608152BryanZecher

Class 3 Rating Registration No. 0 Climate: North

				8/16/2006				
Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)								
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)								
Winter design temperature	33	F	Summer design temperature	92	F			
Winter setpoint	70	F	Summer setpoint	75	F			
Winter temperature difference	37	F	Summer temperature difference	17	F			
Total heating load calculation	42060	Btuh	Total cooling load calculation	38094	Btuh			
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh			
Total (Electric Heat Pump)	118.9	50000	Sensible (SHR = 0.75)	118.1	37500			
Heat Pump + Auxiliary(0.0kW) 118.9 50000		50000	Latent	196.9	12500			
			Total (Electric Heat Pump)	131.3	50000			

Winter Heating Load	(for 2867 sqft)	
Lood common on t		

winter rieating Load (10)	2001 3910	1		
Load component			Load	
Window total	345	sqft	11106	Btuh
Wall total	1661	sqft	5455	Btuh
Door total	60	sqft	777	Btuh
Ceiling total	2971	sqft	3501	Btuh
Floor total	252	sqft	11002	Btuh
Infiltration	252	cfm	10220	Btuh
Duct loss			0	Btuh
Subtotal			42060	Btuh
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			42060	Btuh

### WINTER CALCULATIONS



Summer Cooling Load (f	or 2867 so	ft)		
Load component			Load	
Window total	345	sqft	18616	Btuh
Wall total	1661	sqft	3361	Btuh
Door total	60	sqft	588	Btuh
Ceiling total	2971	sqft	4920	Btuh
Floor total			0	Btuh
Infiltration	130	cfm	2419	Btuh
Internal gain			1840	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			31744	Btuh
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)	4750	Btuh		
Latent gain(ventilation)	0	Btuh		
Latent gain(internal/occupants/other)			1600	Btuh
Total latent gain			6350	Btuh
TOTAL HEAT GAIN			38094	Btuh



## SUMMER CALCULATIONS



EnergyGauge® System Sizing PREPARED BY: 99 M	Conce	
DATE: 4-16-06		

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# **System Sizing Calculations - Winter**

Residential Load - Whole House Component Details

Rose Wilson

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Project Title: 608152BryanZecher Class 3 Rating Registration No. 0 Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F This calculation is for Worst Case. The house has been rotated 315 degrees. 8/16/2006

Window	Panes/SHGC/Frame/U	Orientation		HTM=	Load
1	2, Clear, Metal, 0.87	NW	31.7	32.2	1020 Btu
2	2, Clear, Metal, 0.87	NW	10.0	32.2	322 Btu
3	2, Clear, Metal, 0.87	NW	54.0	32.2	1738 Btu
4	2, Clear, Metal, 0.87	SW	10.0	32.2	322 Btu
5 6	2, Clear, Metal, 0.87	NW	45.0	32.2	1449 Btu
6	2, Clear, Metal, 0.87	NW	15.0	32.2	483 Btu
7	2, Clear, Metal, 0.87	NE	6.0	32.2	193 Btu
8	2, Clear, Metal, 0.87	NE	30.0	32.2	966 Btu
9	2, Clear, Metal, 0.87	NE	10.0	32.2	322 Btu
10	2, Clear, Metal, 0.87	SE	45.0	32.2	1449 Btu
11	2, Clear, Metal, 0.87	SE	15.0	32.2	483 Btu
12	2, Clear, Metal, 0.87	sW	16.0	32.2	515 Btu
13	2, Clear, Metal, 0.87	sW	6.0	32.2	193 Btu
14	2, Clear, Metal, 0.87	SW	15.0	32.2	483 Btu
15	2, Clear, Metal, 0.87	NW	9.0	32.2	290 Btu
16	2, Clear, Metal, 0.87	NW	3.0	32.2	97 Btu
17	2, Clear, Metal, 0.87	SE	3.0	32.2	97 Btu
18	2, Clear, Metal, 0.87	SE	5.0	32.2	161 Btu
19	2, Clear, Metal, 0.87	SE	3.0	32.2	97 Btu
20	2, Clear, Metal, 0.87	SE	13.3	32.2	428 Btu
	Window Total		345(sqft)		11106 Btu
Walls	Туре	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1481	3.3	4864 Btu
2	Frame - Wood - Adj(0.09)	13.0	180	3.3	591 Btu
	Wall Total		1661		5455 Btu
Doors	Туре		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btu
2	Insulated - Exterior		20	12.9	259 Btu
3	Insulated - Exterior		20	12.9	259 Btu
	Door Total		60		<u>777Btu</u>
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2971	1.2	3501 Btu
	Ceiling Total		2971		3501Btu
Floors	Туре	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	252.0 ft(p)	43.7	11002 Btu
	Floor Total		252		11002 Btu
·		Z	Zone Envelope Su	btotal:	31841 Btu
	l				
nfiltration	Type Natural	ACH X 0.66	Zone Volume 22936	CFM= 252.3	10220 Btu
Ductload	Unsealed, R6.0, Supply(Atti	ic) Poturn/At	tic) ([	DLM of 0.00)	 0 Btu

# **Manual J Winter Calculations**

Residential Load - Component Details (continued)

Rose Wilson

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Project Title: 608152BryanZecher Class 3 Rating Registration No. 0 Climate: North

8/16/2006

Zone	#1
------	----

Sensible Zone Subtotal

### 42060 Btuh

#### WHOLE HOUSE TOTALS

	Subtotal Sensible Ventilation Sensible Total Btuh Loss	42060 Btuh 0 Btuh 42060 Btuh
Key: Window types (SHGC - Shading coefficient of (Frame types - metal, wood or	f glass as SHGC numerical value or as clear or tint) insulated metal)	
(U - Window U-Factor or 'DEF (HTM - ManualJ Heat Transfe	er Multiplier)	Yester

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types )

For Florida residences only

# **System Sizing Calculations - Winter**

Residential Load - Room by Room Component Details

**Rose Wilson** 

,

Project Title: 608152BryanZecher Class 3 Rating Registration No. 0 Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F This calculation is for Worst Case. The house has been rotated 315 degrees. 8/16/2006

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	31.7	32.2	1020 Btu
2	2, Clear, Metal, 0.87	NW	10.0	32.2	322 Btu
3	2, Clear, Metal, 0.87	NW	54.0	32.2	1738 Btu
4	2, Clear, Metal, 0.87	SW	10.0	32.2	322 Btu
5	2, Clear, Metal, 0.87	NW	45.0	32.2	1449 Btu
6	2, Clear, Metal, 0.87	NW	15.0	32.2	483 Btu
7	2, Clear, Metal, 0.87	NE	6.0	32.2	193 Btu
8	2, Clear, Metal, 0.87	NE	30.0	32.2	966 Btu
9	2, Clear, Metal, 0.87	NE	10.0	32.2	322 Btu
10	2, Clear, Metal, 0.87	SE	45.0	32.2	1449 Btu
11	2, Clear, Metal, 0.87	SE	15.0	32.2	483 Btu
12	2, Clear, Metal, 0.87	sw	16.0	32.2	515 Btu
13	2, Clear, Metal, 0.87	SW	6.0	32.2	193 Btu
13	2, Clear, Metal, 0.87	SW	15.0	32.2	483 Btu
14	2, Clear, Metal, 0.87	NW	9.0	32.2	290 Btu
			3.0	32.2	97 Btu
16	2, Clear, Metal, 0.87	NW			
17	2, Clear, Metal, 0.87	SE	3.0	32.2	97 Btu
18	2, Clear, Metal, 0.87	SE	5.0	32.2	161 Btu
19	2, Clear, Metal, 0.87	SE	3.0	32.2	97 Btu
20	2, Clear, Metal, 0.87	SE	13.3	32.2	428 Btu
	Window Total		345(sqft)		<u>11106 Btu</u>
Walls	Туре	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1481	3.3	4864 Btu
2	Frame - Wood - Adj(0.09)	13.0	180	3.3	591 Btu
	Wall Total		1661		<u>5455 Btu</u>
Doors	Туре		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btu
2	Insulated - Exterior		20	12.9	259 Btu
3	Insulated - Exterior		20	12.9	259 Btu
	Door Total		60		<u>777Btu</u>
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2971	1.2	3501 Btu
	Ceiling Total		2971		3501Btu
Floors	Туре	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	252.0 ft(p)	43.7	11002 Btu
·	Floor Total		252		11002 Btu
		2	Zone Envelope Su	ubtotal:	31841 Btu
nfiltration	Туре	ACH X	Zone Volume	CFM=	
	Natural	0.66	22936	252.3	10220 Btu
Ductload	Unsealed, R6.0, Supply(Att			DLM of 0.00)	0 Btu

# **Manual J Winter Calculations**

Residential Load - Component Details (continued)

Rose Wilson

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Project Title: 608152BryanZecher Class 3 Rating Registration No. 0 Climate: North

8/16/2006

Zone #	¥1
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Sensible Zone Subtotal

### 42060 Btuh

#### WHOLE HOUSE TOTALS

	Subtotal Sensible Ventilation Sensible Total Btuh Loss	42060 Btuh 0 Btuh 42060 Btuh
Key: Window types (SHGC - Shading coefficient of	glass as SHGC numerical value or as clear or tint)	
(Frame types - metal, wood or i	nsulated metal)	
(U - Window U-Factor or 'DEF'		
(HTM - ManualJ Heat Transfer	Multiplier)	N. C.

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types )

For Florida residences only

# **System Sizing Calculations - Summer**

**Residential Load - Whole House Component Details** 

Rose Wilson

**Component Loads for Whole House** 

Project Title: 608152BryanZecher Class 3 Rating Registration No. 0 Climate: North

8/16/2006

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F This calculation is for Worst Case. The house has been rotated 315 degrees.

HTM Overhang Window Area(sqft) Type\* Load Window Pn/SHGC/U/InSh/ExSh/IS Ornt Len Hat Gross Shaded Unshaded Shaded Unshaded 2, Clear, 0.87, None, N, N NW 9ft. 3.5ft. 31.7 0.0 31.7 29 60 1903 Btuh 2 2, Clear, 0.87, None, N, N NW 8ft. 10ft. 10.0 0.0 10.0 29 60 600 Btuh 3 2, Clear, 0.87, None, N, N NW 8ft. 7.5ft. 54.0 0.0 54.0 29 60 3242 Btuh 2, Clear, 0.87, None, N, N SW 34ft. 10ft. 10.0 10.0 0.0 29 63 290 Btuh 4 5 2. Clear. 0.87. None.N.N NW 2ft. 5.5ft. 45.0 0.0 45.0 29 60 2702 Btuh 6 2, Clear, 0.87, None, N, N NW 1.5ft. 5.5ft. 15.0 0.0 15.0 29 60 901 Btuh 2, Clear, 0.87, None,N,N 2.5ft. 0.0 29 60 360 7 NF 1.5ft 60 60 Btuh 8 2, Clear, 0.87, None, N, N NF 1.5ft 5.5ft. 30.0 0.0 30.0 29 60 1801 Btuh 2, Clear, 0.87, None, N, N 9 NE 1.5ft. 5.5ft. 10.0 0.0 10.0 29 60 600 Btuh 10 2, Clear, 0.87, None, N, N SE 1.5ft. 7ft. 45.0 4.7 40.3 29 63 2656 Btuh 11 2, Clear, 0.87, None, N, N SE 1.5ft. Oft. 15.0 15.0 0.0 29 63 434 Btuh 2, Clear, 0.87, None, N, N SW 4.5ft. 29 63 1.5ft 16.0 7.9 729 Btuh 12 8.1 2. Clear, 0.87, None, N, N 13 SW 1.5ft. 3.5ft. 6.0 4.0 2.0 29 63 239 Btuh 2, Clear, 0.87, None, N, N SW 5.5ft. 15.0 63 14 1.5ft 61 89 29 734 Btuh 15 2, Clear, 0.87, None, N, N NW 8ft. 1.5ft. 9.0 0.0 9.0 29 60 540 Btuh 2, Clear, 0.87, None, N, N NW 2ft. 1.5ft. 3.0 0.0 3.0 29 60 180 Btuh 16 2, Clear, 0.87, None, N, N 3.0 0.0 29 63 17 SE 1.5ft. 2ft. 3.0 Btuh 87 18 2, Clear, 0.87, None, N, N SE 8ft. 2ft. 5.0 5.0 0.0 29 63 145 Btuh 19 2, Clear, 0.87, None, N, N SE 1.5ft Oft. 3.0 3.0 0.0 29 63 87 Btuh 2, Clear, 0.87, None, N, N 0.0 20 SF 8ft. 8ft 13.3 13.3 29 63 385 Btuh Window Total 345 (sqft) 18616 Btuh Walls Туре R-Value/U-Value Area(sqft) HTM Load Frame - Wood - Ext 13.0/0.09 1481.0 2.1 3089 Btuh 1 2 Frame - Wood - Adj 13.0/0.09 180.0 1.5 272 Btuh Wall Total 1661 (sqft) 3361 Btuh Doors Area (sqft) HTM Load Туре Insulated - Adjacent 20.0 9.8 196 Btuh 1 2 Insulated - Exterior 20.0 9.8 196 Btuh 3 Insulated - Exterior 20.0 9.8 196 Btuh Door Total 588 Btuh 60 (sqft) Type/Color/Surface Ceilings **R-Value** HTM Area(sqft) Load Vented Attic/DarkShingle 30.0 2971.0 1.7 4920 Btuh 1 **Ceiling Total** 2971 (sqft) 4920 Btuh HTM Floors **R-Value** Load Type Size Slab On Grade 0.0 0.0 0 Btuh 1 252 (ft(p)) Floor Total 0 Btuh 252.0 (sqft) Zone Envelope Subtotal: 27485 Btuh Infiltration Type ACH Volume(cuft) CFM= Load SensibleNatural 22936 130.0 2419 Btuh 0.34 Btuh/occupant Internal Occupants Appliance Load gain 8 Х 230 + 0 1840 Btuh Unsealed, R6.0, Supply(Attic), Return(Attic) DGM = 0.000.0 Btuh Duct load Sensible Zone Load 31744 Btuh

# **Manual J Summer Calculations**

Residential Load - Component Details (continued)

Rose Wilson

1

Project Title: 608152BryanZecher

Class 3 Rating Registration No. 0 Climate: North

8/16/2006

#### WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	31744	Btuh
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	31744	Btuh
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
Whole House	Total sensible gain	31744	Btuh
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	4750	Btuh
	Latent ventilation gain	0	Btuh
	Latent duct gain	0	Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600	Btuh
	Latent other gain	0	Btuh
	Latent total gain	6350	Btuh
	TOTAL GAIN	38094	Btuh

\*Key: Window types (Pn - Number of panes of glass)

(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(U - Window U-Factor or 'DEF' for default)
(InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))
(ExSh - Exterior shading device: none(N) or numerical value)
(BS - Insect screen: none(N), Full(F) or Half(H))
(Ornt - compass orientation)



For Florida residences only

# **System Sizing Calculations - Summer**

Residential Load - Room by Room Component Details

Rose Wilson

1

Project Title: 608152BryanZecher Class 3 Rating Registration No. 0 Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F This calculation is for Worst Case. The house has been rotated 315 degrees.

8/16/2006

**Component Loads for Zone #1: Main** 

	Type*		Overhang Window Area(sqft) HTM			dow Area	a(sqft)	F	ITM	Load					
Window	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded						
1	2, Clear, 0.87, None,N,N	NW	9ft.	3.5ft.	31.7	0.0	31.7	29	60	1903	Btuh				
2	2, Clear, 0.87, None,N,N	NW	8ft.	10ft.	10.0	0.0	10.0	29	60	600					
3	2, Clear, 0.87, None,N,N	NW	8ft.	7.5ft.	54.0	0.0	54.0	29	60	3242					
4	2, Clear, 0.87, None,N,N	SW	34ft.	10ft.	10.0	10.0	0.0	29	63	290					
5	2, Clear, 0.87, None,N,N	NW	2ft.	5.5ft.	45.0	0.0	45.0	29	60	2702					
6	2, Clear, 0.87, None, N, N	NW	1.5ft.	5.5ft.	15.0	0.0	15.0	29	60	901	Btuh				
7 8	2, Clear, 0.87, None,N,N	NE	1.5ft.	2.5ft.	6.0	0.0	6.0	29	60 60	360	Btuh				
9	2, Clear, 0.87, None,N,N 2, Clear, 0.87, None,N,N	NE NE	1.5ft. 1.5ft.	5.5ft. 5.5ft.	30.0 10.0	0.0	30.0	29 29	60 60	1801 600	Btuh				
10	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5n. 7ft.	45.0	0.0 4.7	10.0 40.3	29 29	63	2656	Btuh Btuh				
11	2, Clear, 0.87, None,N,N	SE	1.5ft.	Oft.	15.0	15.0	0.0	29 29	63	434	Btuh				
12	2, Clear, 0.87, None, N, N	SW	1.5ft.	4.5ft.	16.0	8.1	7.9	29	63	729	Btuh				
13	2, Clear, 0.87, None, N,N	sw	1.5ft.	3.5ft.	6.0	4.0	2.0	29	63	239	Btuh				
14	2, Clear, 0.87, None, N,N	SW	1.5ft.	5.5ft.	15.0	6.1	8.9	29	63	734	Btuh				
15	2, Clear, 0.87, None,N,N	NW	8ft.	1.5ft.	9.0	0.0	9.0	29	60	540	Btuh				
16	2, Clear, 0.87, None,N,N	NW	2ft.	1.5ft.	3.0	0.0	3.0	29	60	180	Btuh				
17	2, Clear, 0.87, None,N,N	SE	1.5ft.	2ft.	3.0	3.0	0.0	29	63	87	Btuh				
18	2, Clear, 0.87, None,N,N	SE	8ft.	2ft.	5.0	5.0	0.0	29	63	145	Btuh				
19	2, Clear, 0.87, None,N,N	SE	1.5ft.	Oft.	3.0	3.0	0.0	29	63	87	Btuh				
20	2, Clear, 0.87, None,N,N	SE	8ft.	8ft.	13.3	13.3	0.0	29	63	385	Btuh				
	Window Total				345 (	sqft)				18616	Btuh				
Walls	Туре		R-Va	alue/U	-Value	Area	(sqft)		HTM	Load					
1	Frame - Wood - Ext			13.0/0	0.09	148	1.0		2.1	3089	Btuh				
2	Frame - Wood - Adj			13.0/0	).0 <del>9</del>	18			1.5	272	Btuh				
	Wall Total					166	1 (sqft)			3361	Btuh				
Doors	Туре					Area			HTM	Load					
1	Insulated - Adjacent					20			9.8	196	Btuh				
2	Insulated - Exterior					20			9.8	196	Btuh				
3	Insulated - Exterior					20			9.8	196	Btuh				
	Door Total					6	0 (sqft)			588	Btuh				
Ceilings	Type/Color/Surface		R-Va	alue		Area			нтм	Load					
1	Vented Attic/DarkShingle			30.0		297			1.7	4920	Btuh				
	Ceiling Total			50.0			1 (sqft)		1.7	4920					
Floors	Туре		R-Va	مىلە		Si			нтм	Load	Dian				
			11-00								<b>D</b> 1 1				
1	Slab On Grade			0.0			52 (ft(p))		0.0		Btuh				
	Floor Total				0.047	252.	0 (sqft)			0	Btuh				
						Zo	one Enve	elope Su	ibtotal:	27485	Btuh				
nfiltration	<b>Type</b> SensibleNatural		A	CH 0.34		Volum 229			CFM= 130.0	Load 2419	Btuh				
Internal		(	Dccup	ants		Btuh/oc	cupant	A	ppliance	Load					
gain				8		< 23			0	1840	Btuh				
Duct load	Unsealed, R6.0, Supply	(Attic).	Retu					DGM :	-		Btuh				
							Sensib			Sensible Zone Load 31744 Btuh					

# **Manual J Summer Calculations**

Residential Load - Component Details (continued)

**Rose Wilson** 

Project Title: 608152BryanZecher

Class 3 Rating Registration No. 0 Climate: North

8/16/2006

#### WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones Sensible Duct Load	<b>31744</b> 0	Btuh Btuh
	Total Sensible Zone Loads	31744	
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
Whole House	Total sensible gain	31744	Btuh
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	4750	Btuh
	Latent ventilation gain	0	Btuh
	Latent duct gain	0	Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600	Btuh
	Latent other gain	0	Btuh
	Latent total gain	6350	Btuh
	TOTAL GAIN	38094	Btuh

\*Key: Window types (Pn - Number of panes of glass)

(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint) (U - Window U-Factor or 'DEF' for default) (InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R)) (ExSh - Exterior shading device: none(N) or numerical value) (BS - Insect screen: none(N), Full(F) or Half(H)) (Ornt - compass orientation)



For Florida residences only

# **Residential Window Diversity**

Rose Wilson

MidSummer Project Title: 608152BryanZecher

Class 3 Rating Registration No. 0 Climate: North

8/16/2006

Weather data for: Gainesville - Def	aults		
Summer design temperature	92 F	Average window load for July	14577 Btu
Summer setpoint	75 F	Peak window load for July	22344 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	18950 Btu
Latitude	29 North	Window excursion (July)	3394 Btuh

### **WINDOW Average and Peak Loads**



This application has glass areas that produce large heat gains for part of the day. Variable air volume devices are required to overcome spikes in solar gain for one or more rooms. Install a zoned system or provide zone control for problem rooms. Single speed equipment may not be suitable for the application.





EnergyGauge® FLR2PB v4.1

### PRODUCT APPROVAL SPECIFICATION SHEET

#### Location:

### **Project Name:**

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit on or after April 1, 2004. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
A. EXTERIOR DOORS			
1. Swinging			
2. Sliding			
3. Sectional		5. St. St. St. St. St. St. St. St. St. St	
4. Roll up	NIA		
5. Automatic	NIA		
6. Other			
B. WINDOWS	i i		
1. Single hung	Capital/Jo	ordan	F2 675 / F2 1318-
2. Horizontal Slider	1. L.		F2 485 1 F2 1384
3. Casement			
4. Double Hung			
5. Fixed	CIT		FL 681 / FL 1383
6. Awning			
7. Pass -through			
8. Projected			
9. Mullion	-		
10. Wind Breaker		**************************************	
11 Dual Action			
12. Other		-	
. PANEL WALL			
1. Siding	Hardy Alan	L	PH 000 71
2. Soffits		<u>/</u>	F2 889-R1
3. EIFS	Ashley Ali	minum	· FL 4168
4. Storefronts			
5. Curtain walls			
6. Wall louver	-		
7. Glass block			
8. Membrane			
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles		rinteed	FZ 728 R1 1 12 250 A
2. Underlayments	Felt		F2 18 14
3. Roofing Fasteners	Nails		ROM 2.178
4. Non-structural Metal F	Xf		
5. Built-Up Roofing	-		
6. Modified Bitumen			
7. Single Ply Roofing Sys	3		
8. Roofing Tiles			
9. Roofing Insulation			
10. Waterproofing			
11. Wood shingles /shake	es —		
12. Roofing Slate	-		

	Notice of Treatme	nt 12296	
Address: 15AYA	est Control & Chemical (	Co. (www.flapest.com)	
Site Location: Subdivi Lot #Bloc Address304	k# A _ Permit #_	untury 24986	
Product used	Active Ingredient	% Concentration	
Premise	Imidacloprid	0.1%	
Termidor	Fipronil	0.12%	
Bora Care I	Disodium Octaborate Tetr	ahydrate 23.0%	
Type treatment:	Square feet Linear		
termite prevention is us to final building approv	g Code 104.2.6 – If soil che sed, final exterior treatmen val. final exterior treatment, ini	t shall be completed prior	
12/15 46	12.30	Bestering	
Date	Time Pr	int Technician's Name	
Remarks:			
Applicator - White	Permit File - Canary	Permit Holder - Pink	

POST IN A CONSPICUOUS (Business Places On United to the second se	13	Owner of Building ROSE-MARIA WILSON Location: 304 SW SHORT LEAF DRIVE	Use Classification SFD,UTILITY Permit Holder BRYAN ZECHER	COLUMBIA COUNTY, F Department of Building and This Certificate of Occupancy is issued to the below named location, and certifies accordance with the Columbia County Building Code. Parcel Number 21-4S-16-03080-007	
Places Only)	Harry Dicks	Total: 133.98	Fire: 33.48 Waste: 100.50	UNTY, FLORIDA or and Zoning Inspection he below named permit holder for the building hd certifies that the work has been completed in ing Code. Building permit No. 000024986	