

DATE 01/14/2004

Columbia County Building Permit

PERMIT

This Permit Expires One Year From the Date of Issue

000021418

APPLICANT MICHELE WILLINGHAM PHONE 719-7098
ADDRESS 179 SW LEONARD TERR LAKE CITY FL 32024
OWNER MICHELE WILLINGHAM PHONE 719-7098
ADDRESS 179 SW LEONARD TERR LAKE CITY FL 32024
CONTRACTOR SAME PHONE

LOCATION OF PROPERTY HIGHWAY 90 TO PINEMOUNT ROAD, TL ON BARWICK, TR ON PARKER
, TL ON LEONARD, 3RD ON LEFT

TYPE DEVELOPMENT SFD,UTILITY ESTIMATED COST OF CONSTRUCTION 48800.00

HEATED FLOOR AREA 976.00 TOTAL AREA 976.00 HEIGHT .00 STORIES 1

FOUNDATION CONC WALLS FRAMED ROOF PITCH 4/12 FLOOR SLAB

LAND USE & ZONING A-3 MAX. HEIGHT 12

Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 08-4S-16-02815-004 SUBDIVISION BAWICK

LOT 3 BLOCK PHASE UNIT TOTAL ACRES 1.41

Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor
EXISTING 83-352 BK HD
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: ONE OOT ABOVE THE ROAD, NOC ON FILE

Check # or Cash 419

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power Foundation Monolithic
date/app. by date/app. by date/app. by
Under slab rough-in plumbing Slab Sheathing/Nailing
date/app. by date/app. by date/app. by
Framing Rough-in plumbing above slab and below wood floor
date/app. by date/app. by
Electrical rough-in Heat & Air Duct Peri. beam (Lintel)
date/app. by date/app. by date/app. by
Permanent power C.O. Final Culvert
date/app. by date/app. by date/app. by
M/H tie downs, blocking, electricity and plumbing Pool
date/app. by date/app. by
Reconnection Pump pole Utility Pole
date/app. by date/app. by date/app. by
M/H Pole Travel Trailer Re-roof
date/app. by date/app. by date/app. by

BUILDING PERMIT FEE \$ 245.00 CERTIFICATION FEE \$ 4.88 SURCHARGE FEE \$ 4.88

MISC. FEES \$.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ WASTE FEE \$

FLOOD ZONE DEVELOPMENT FEE \$ CULVERT FEE \$ TOTAL FEE 304.76

INSPECTORS OFFICE CLERKS OFFICE

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

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

This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Building Permit Application

21418

Date 12-23-03

Application No. 0312-57

Applicants Name & Address Michele L. Willingham Phone 386-719-7098
Rt 2 Box 407 Lake Butler FL 32057 Or 386-496-1722
Owners Name & Address Michele L. Willingham Phone _____
Rt 2 Box 407 Lake Butler FL 32057
Fee Simple Owners Name & Address Same as Owner Phone _____
Contractors Name & Address Michele L. Willingham (owner) Phone _____
Legal Description of Property Barwick Subdivision Lot 3 Section 4 Range 16
Location of Property Hwy 90 to Pinemount Rd - to Barwick Rd turn left go two
Driving Directions Streets to Parker Rd turn Right 1 Blk to Leonard turn left 3rd
Tax Parcel Identification No. 08-45-16-02815-004 Estimated Cost of Construction \$ 18,000 left
Type of Development Single Family Residence Number of Existing Dwellings on Property _____
Comprehensive Plan Map Category A-3 Zoning Map Category A-3
Building Height 12'4" Number of Stories 1 Floor Area 967 Total Acreage in Development 1.41 AC
Distance From Property Lines (Set Backs) Front 250' Side 58'6" Rear 125' Street 250'
Flood Zone X Certification Date _____ Development Permit N/A
Bonding Company Name & Address _____
Architect/Engineer Name & Address Freeman Design grp 305 E Duval St Suite 3 LC FL 32058
Mortgage Lenders Name & Address _____

Application is hereby made to obtain a permit to do the 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 will 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 regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT 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.

Michele L. Willingham
Owner or Agent (including contractor)

Contractor

Contractor License Number

STATE OF FLORIDA
COUNTY OF COLUMBIA
Sworn to (or affirmed) and subscribed before me
this _____ day of _____ by _____

STATE OF FLORIDA
COUNTY OF COLUMBIA
Sworn to (or affirmed) and subscribed before me
this _____ day of _____ by _____

Personally Known _____ OR Produced Identification

Personally Known _____ OR Produced Identification

911 A. BATES
179 SW LEONARD
LAKE CITY, FL 32024
JAMES

DISCLOSURE STATEMENT

FOR OWNER/BUILDER WHEN ACTING AS THEIR OWN CONTRACTOR AND CLAIMING EXEMPTION OF CONTRACTOR LICENSING REQUIREMENTS IN ACCORDANCE WITH FLORIDA STATUTES, ss. 489.103(7).

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed \$25,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building you have built or substantially improved yourself within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

TYPE OF CONSTRUCTION

☒ Single Family Dwelling
☐ Farm Outbuilding

☐ Two-Family Residence
☐ Other _____

NEW CONSTRUCTION OR IMPROVEMENT

☒ New Construction ☐ Addition, Alteration, Modification or other Improvement

I Michelle L. Willingham, have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit Number _____

Michelle L. Willingham
Signature

12-23-03
Date

FOR BUILDING USE ONLY

I hereby certify that the above listed owner/builder has been notified of the disclosure statement in Florida Statutes ss 489.103(7).

Date 12-23-03 Building Official/Representative [Signature]

Permit No. _____

Tax Parcel No. 08-48-16-02815-004

COLUMBIA COUNTY NOTICE OF COMMENCEMENT

STATE OF FLORIDA

COUNTY OF COLUMBIA

THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Description of property: (legal description of the property, and street address if available.)

Barwick Subdivision
Lot 3 Sect 4 Range 16

2. General description of improvement: Single Family Residence

3. Owner Information:

A. Name and address:

Michele L. Willingham - Rt 2 Box 407
Lake Butler FL 32054

B. Interest in property:

C. Name and address of fee simple titleholder (if other than owner):

4. Contractor: (name and address)

Owner

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 Section 718.13 (1) (a) 7., Florida Statutes: (name and address)

Inst: 2003027616 Date: 12/23/2003 Time: 11:43
DC, P. Dewitt Cason, Columbia County B: 1002 P: 2841

8. In addition to himself, owner designates n/a of _____ to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) (a) 7., Florida Statutes.

9. Expiration date of notice of commencement (the expiration date is 1 year from the date of recording unless a different date is specified) _____.

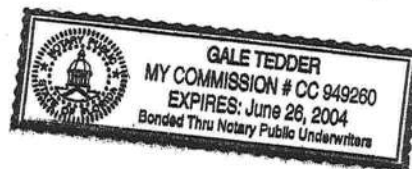
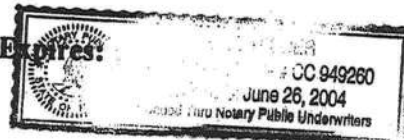
Michelle L. Wellingham
(Signature of Owner)

SWORN TO and subscribed before me this 23rd day of December 2003.

Gale Tedder
Notary Public

(NOTARIAL
SEAL)

My Commission Expires:



Inst:2003027616 Date:12/23/2003 Time:11:43
DC,P.Dewitt Cason,Columbia County B:1002 P:2842

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name: **Forest Williams Residence**
Address: **Lot: 3, Sub: Barwick, Plat: 4 page 47**
City, State: **Lake City, FL 32055-**
Owner: **Michele Willingham**
Climate Zone: **North**

Builder: **Forest Williams**
Permitting Office: **Columbia County**
Permit Number: **21418**
Jurisdiction Number: **221000**

1. New construction or existing	New	___	12. Cooling systems		
2. Single family or multi-family	Single family	___	a. Central Unit	Cap: 36.0 kBtu/hr	___
3. Number of units, if multi-family	1	___		SEER: 10.00	___
4. Number of Bedrooms	1	___	b. N/A		___
5. Is this a worst case?	Yes	___	c. N/A		___
6. Conditioned floor area (ft ²)	976 ft ²	___	13. Heating systems		
7. Glass area & type	Single Pane	Double Pane	a. Electric Heat Pump	Cap: 36.0 kBtu/hr	___
a. Clear glass, default U-factor	0.0 ft ²	71.0 ft ²		HSPF: 6.80	___
b. Default tint	0.0 ft ²	0.0 ft ²	b. N/A		___
c. Labeled U or SHGC	0.0 ft ²	0.0 ft ²	c. N/A		___
8. Floor types			14. Hot water systems		
a. Slab-On-Grade Edge Insulation	R=0.0, 128.0(p) ft	___	a. Electric Resistance	Cap: 50.0 gallons	___
b. N/A		___		EF: 0.92	___
c. N/A		___	b. N/A		___
9. Wall types			c. Conservation credits		___
a. Frame, Wood, Exterior	R=13.0, 1024.0 ft ²	___	(HR-Heat recovery, Solar		___
b. N/A		___	DHP-Dedicated heat pump)		___
c. N/A		___	15. HVAC credits		___
d. N/A		___	(CF-Ceiling fan, CV-Cross ventilation,		___
e. N/A		___	HF-Whole house fan,		___
10. Ceiling types			PT-Programmable Thermostat,		___
a. Under Attic	R=30.0, 976.0 ft ²	___	MZ-C-Multizone cooling,		___
b. N/A		___	MZ-H-Multizone heating)		___
c. N/A		___			___
11. Ducts					___
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 50.0 ft	___			___
b. N/A		___			___

Glass/Floor Area: 0.07

Total as-built points: 11973

Total base points: 13744

PASS

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

PREPARED BY: William H. Freeman

DATE: 12/19/03

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: _____

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Barwick, Plat: 4 page 47, Lake City, FL, 32055-

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt		Area X SPM X SOF = Points				
.18	976.0	20.04	3520.6	Double, Clear	E	1.5	4.5	24.0	42.06	0.85	856.1
				Double, Clear	E	1.5	4.5	6.0	42.06	0.85	214.0
				Double, Clear	N	1.0	6.5	16.0	19.20	0.98	301.2
				Double, Clear	W	1.5	5.5	16.0	38.52	0.90	552.8
				Double, Clear	W	1.5	4.5	9.0	38.52	0.85	294.5
				As-Built Total:				71.0	2218.7		
WALL TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	13.0		1024.0	1.50		1536.0	
Exterior	1024.0	1.70	1740.8								
Base Total:				1024.0		1740.8					
				As-Built Total:		1024.0		1536.0			
DOOR TYPES Area X BSPM = Points				Type	Area X SPM = Points						
Adjacent	0.0	0.00	0.0	Exterior Insulated			20.0	4.10		82.0	
Exterior	40.0	6.10	244.0	Exterior Insulated			20.0	4.10		82.0	
Base Total:				40.0		244.0					
				As-Built Total:		40.0		164.0			
CEILING TYPES Area X BSPM = Points				Type	R-Value		Area X SPM X SCM = Points				
Under Attic	976.0	1.73	1688.5	Under Attic	30.0		976.0	1.73 X 1.00		1688.5	
Base Total:				976.0		1688.5					
				As-Built Total:		976.0		1688.5			
FLOOR TYPES Area X BSPM = Points				Type	R-Value		Area X SPM = Points				
Slab	128.0(p)	-37.0	-4736.0	Slab-On-Grade Edge Insulation	0.0		128.0(p)	-41.20		-5273.6	
Raised	0.0	0.00	0.0								
Base Total:				128.0		-5273.6					
				As-Built Total:		128.0		-5273.6			
INFILTRATION Area X BSPM = Points				Area X SPM = Points							
976.0 10.21 9965.0				976.0 10.21 9965.0							

SUMMER CALCULATIONS
Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Barwick, Plat: 4 page 47, Lake City, FL, 32055-

PERMIT #:

BASE				AS-BUILT						
Summer Base Points: 12422.9				Summer As-Built Points: 10298.5						
Total Summer Points	X	System Multiplier	= Cooling Points	Total Component	X	Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Cooling Points
12422.9		0.4266	5299.6	10298.5		1.000	(1.090 x 1.147 x 0.91)	0.341	1.000	3998.9
				10298.5		1.00	1.138	0.341	1.000	3998.9

WINTER CALCULATIONS
Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Barwick, Plat: 4 page 47, Lake City, FL, 32055-

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BWPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt			Area X WPM X WOF = Points			
.18	976.0	12.74	2238.2	Double, Clear	E	1.5	4.5	24.0	18.79	1.06	478.3
				Double, Clear	E	1.5	4.5	6.0	18.79	1.06	119.6
				Double, Clear	N	1.0	6.5	16.0	24.58	1.00	393.3
				Double, Clear	W	1.5	5.5	16.0	20.73	1.03	341.0
				Double, Clear	W	1.5	4.5	9.0	20.73	1.04	194.5
				As-Built Total:							71.0
WALL TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	0.0	0.00	0.0	Frame, Wood, Exterior	13.0		1024.0		3.40		3481.6
Exterior	1024.0	3.70	3788.8								
Base Total: 1024.0 3788.8				As-Built Total:		1024.0		3481.6			
DOOR TYPES Area X BWPM = Points				Type	Area X WPM = Points						
Adjacent	0.0	0.00	0.0	Exterior Insulated			20.0	8.40		168.0	
Exterior	40.0	12.30	492.0	Exterior Insulated			20.0	8.40		168.0	
Base Total: 40.0 492.0				As-Built Total:		40.0		336.0			
CEILING TYPES Area X BWPM = Points				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	976.0	2.05	2000.8	Under Attic	30.0		976.0	2.05 X 1.00		2000.8	
Base Total: 976.0 2000.8				As-Built Total:		976.0		2000.8			
FLOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Slab	128.0(p)	8.9	1139.2	Slab-On-Grade Edge Insulation	0.0		128.0(p)	18.80			2406.4
Raised	0.0	0.00	0.0								
Base Total: 1139.2				As-Built Total:		128.0		2406.4			
INFILTRATION Area X BWPM = Points				Area X WPM = Points							
976.0 -0.59 -575.8				976.0 -0.59 -575.8							

WINTER CALCULATIONS
Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Barwick, Plat: 4 page 47, Lake City, FL, 32055-

PERMIT #:

BASE				AS-BUILT						
Winter Base Points:		9083.1		Winter As-Built Points:			9175.7			
Total Winter Points	X	System Multiplier	= Heating Points	Total Component	X	Cap Ratio	X Duct Multiplier	X System Multiplier	X Credit Multiplier	= Heating Points
				(DM x DSM x AHU)						
9083.1		0.6274	5698.8	9175.7	1.000	1.00	(1.069 x 1.169 x 0.93)	0.501	1.000	5347.6
				9175.7		1.00	1.162	0.501	1.000	5347.6

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 3, Sub: Barwick, Plat: 4 page 47, Lake City, FL, 32055-

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 6-12. 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* = 85.3

The higher the score, the more efficient the home.

Forest Williams, Lot: 3, Sub: Barwick, Plat: 4 page 47, Lake City, FL, 32055-

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 36.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 10.00
4. Number of Bedrooms	1	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft ²)	976 ft ²		
7. Glass area & type	Single Pane Double Pane	13. Heating systems	
a. Clear - single pane	0.0 ft ² 71.0 ft ²	a. Electric Heat Pump	Cap: 36.0 kBtu/hr
b. Clear - double pane	0.0 ft ² 0.0 ft ²		HSPF: 6.80
c. Tint/other SHGC - single pane	0.0 ft ² 0.0 ft ²	b. N/A	
d. Tint/other SHGC - double pane		c. N/A	
8. Floor types		14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=0.0, 128.0(p) ft	a. Electric Resistance	Cap: 50.0 gallons
b. N/A			EF: 0.92
c. N/A		b. N/A	
9. Wall types		c. Conservation credits	
a. Frame, Wood, Exterior	R=13.0, 1024.0 ft ²	(HR-Heat recovery, Solar	
b. N/A		DHP-Dedicated heat pump)	
c. N/A		15. HVAC credits	
d. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
e. N/A		HF-Whole house fan,	
10. Ceiling types		PT-Programmable Thermostat,	
a. Under Attic	R=30.0, 976.0 ft ²	MZ-C-Multizone cooling,	
b. N/A		MZ-H-Multizone heating)	
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 50.0 ft		
b. N/A			

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: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStarTM 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.*

EnergyGauge® (Version: FLRCPB v3.30)

Residential System Sizing Calculation

Summary

Forest Williams
Lake City, FL 32055-

Project Title:
Forest Williams Residence

Code Only
Professional Version
Climate: North

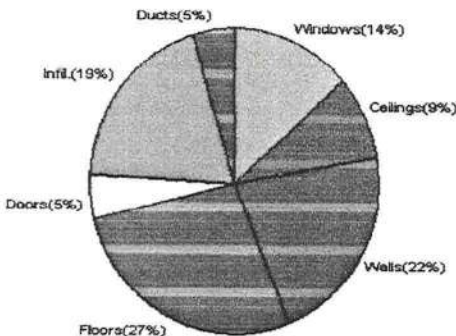
12/19/2003

Location for weather data: St. Augustine - Defaults: Latitude(29) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (78F) Humidity difference(64gr.)			
Winter design temperature	35 F	Summer design temperature	89 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	35 F	Summer temperature difference	14 F
Total heating load calculation	13277 Btuh	Total cooling load calculation	13150 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	271.1 36000	Sensible (SHR = 0.5)	176.3 18000
Heat Pump + Auxiliary(0.0kW)	271.1 36000	Latent	611.7 18000
		Total (Electric Heat Pump)	273.8 36000

WINTER CALCULATIONS

Winter Heating Load (for 976 sqft)

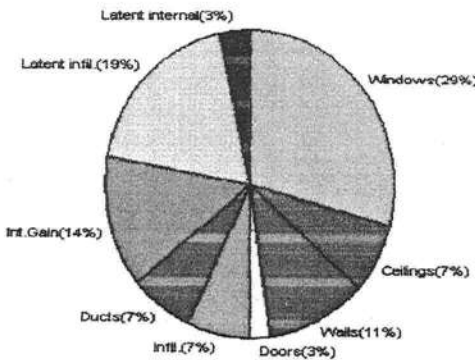
Load component		Load	
Window total	71 sqft	1803	Btuh
Wall total	1024 sqft	2867	Btuh
Door total	40 sqft	658	Btuh
Ceiling total	976 sqft	1171	Btuh
Floor total	128 ft	3635	Btuh
Infiltration	65 cfm	2510	Btuh
Subtotal		12645	Btuh
Duct loss		632	Btuh
TOTAL HEAT LOSS		13277	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 976 sqft)

Load component		Load	
Window total	71 sqft	3861	Btuh
Wall total	1024 sqft	1454	Btuh
Door total	40 sqft	330	Btuh
Ceiling total	976 sqft	956	Btuh
Floor total		0	Btuh
Infiltration	57 cfm	879	Btuh
Internal gain		1800	Btuh
Subtotal(sensible)		9279	Btuh
Duct gain		928	Btuh
Total sensible gain		10207	Btuh
Latent gain(infiltration)		2483	Btuh
Latent gain(internal)		460	Btuh
Total latent gain		2943	Btuh
TOTAL HEAT GAIN		13150	Btuh



EnergyGauge® System Sizing based on ACCA Manual J.

PREPARED BY: William H. Lee

DATE: 12/19/03

System Sizing Calculations - Winter

Residential Load - Component Details

Forest Williams

Project Title:

Code Only

Lake City, FL 32055-

Forest Williams Residence

Professional Version

Climate: North

Reference City: St. Augustine (Defaults) Winter Temperature Difference: 35.0 F

12/19/2003

Window	Panes/SHGC/Frame/U	Orientation	Area X	HTM=	Load
1	2, Clear, Metal, DEF	E	24.0	25.4	610 Btuh
2	2, Clear, Metal, DEF	E	6.0	25.4	152 Btuh
3	2, Clear, Metal, DEF	N	16.0	25.4	406 Btuh
4	2, Clear, Metal, DEF	W	16.0	25.4	406 Btuh
5	2, Clear, Metal, DEF	W	9.0	25.4	229 Btuh
Window Total			71		1803 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Exterior	13.0	1024	2.8	2867 Btuh
Wall Total			1024		2867 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exter		20	16.5	329 Btuh
2	Insulated - Exter		20	16.5	329 Btuh
Door Total			40		658Btuh
Ceilings	Type	R-Value	Area X	HTM=	Load
1	Under Attic	30.0	976	1.2	1171 Btuh
Ceiling Total			976		1171Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab-On-Grade Edge Insul	0	128.0 ft(p)	28.4	3635 Btuh
Floor Total			128		3635 Btuh
Infiltration	Type	ACH X	Building Volume	CFM=	Load
	Natural	0.40	9760(sqft)	65	2510 Btuh
	Mechanical			0	0 Btuh
Infiltration Total				65	2510 Btuh

Totals for Heating	Subtotal	12645 Btuh
	Duct Loss(using duct multiplier of 0.05)	632 Btuh
	Total Btuh Loss	13277 Btuh

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)

(Frame types - metal, wood or insulated metal)

(U - Window U-Factor or 'DEF' for default)

(HTM - ManualJ Heat Transfer Multiplier)

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

System Sizing Calculations - Summer

Residential Load - Component Details

Forest Williams

Project Title:

Code Only

Lake City, FL 32055-

Forest Williams Residence

Professional Version

Climate: North

Reference City: St. Augustine (Defaults)

Summer Temperature Difference: 14.0 F

12/19/2003

Window	Type	Overhang	Window Area(sqft)			HTM		Load		
	Panes/SHGC/U/InSh/ExSh Ornt		Len	Hgt	Gross	Shaded	Unshaded		Shaded	Unshaded
1	2, Clear, DEF, N, N	E	1.5	4.5	24.0	6.6	17.4	21	70	1355 Btuh
2	2, Clear, DEF, N, N	E	1.5	4.5	6.0	0.0	6.0	21	70	420 Btuh
3	2, Clear, DEF, N, N	N	1	6.5	16.0	0.0	16.0	21	21	336 Btuh
4	2, Clear, DEF, N, N	W	1.5	5.5	16.0	0.0	16.0	21	70	1120 Btuh
5	2, Clear, DEF, N, N	W	1.5	4.5	9.0	0.0	9.0	21	70	630 Btuh
Window Total			71							3861 Btuh
Walls	Type	R-Value		Area		HTM		Load		
	1	Frame - Exterior	13.0		1024.0		1.4		1454 Btuh	
Wall Total			1024.0					1454 Btuh		
Doors	Type	R-Value		Area		HTM		Load		
	1	Insulated - Exter			20.0		8.2		165 Btuh	
2	Insulated - Exter			20.0		8.2		165 Btuh		
Door Total			40.0					330 Btuh		
Ceilings	Type/Color	R-Value		Area		HTM		Load		
	1	Under Attic/Light	30.0		976.0		1.0		956 Btuh	
Ceiling Total			976.0					956 Btuh		
Floors	Type	R-Value		Size		HTM		Load		
	1	Slab-On-Grade Edge Insulation	0.0		128.0 ft(p)		0.0		0 Btuh	
Floor Total			128.0					0 Btuh		
Infiltration	Type	ACH		Volume		CFM=		Load		
	Natural	0.35		9760		57.0		879 Btuh		
	Mechanical					0		0 Btuh		
Infiltration Total						57		879 Btuh		

Internal gain	Occupants	Btuh/occupant			Appliance	Load	
	2	X	300	+	1200	1800	Btuh

Totals for Cooling	Subtotal	9279 Btuh
	Duct gain(using duct multiplier of 0.10)	928 Btuh
	Total sensible gain	10207 Btuh
	Latent infiltration gain (for 64 gr. humidity difference)	2483 Btuh
	Latent occupant gain (2 people @ 230 Btuh per person)	460 Btuh
	Latent other gain	0 Btuh
TOTAL GAIN		13150 Btuh

Key: Window types (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/Daperies(B) or Roller Shades(R))
 (ExSh - Exterior shading device: none(N) or numerical value)
 (Ornt - compass orientation)

EnergyGauge® FLRCPB v3.30



Engineers

Contractors

Designers

January 14, 2004

Harry Dicks
Columbia County Building and Zoning
Lake City, FL. 32055

Dear Mr. Dicks:

I have inspected the residential structure on Lot #3 Barwick Subdivision for Michele Willingham and Forrest Williams. I certify that the structure meets the requirements of Section 1606 of the Florida Building Code, 2001 edition. Please find a copy of the construction documents indicating As-built construction of the structure. If you have any questions, Please call me at (386) 758-4209.

Sincerely,

A handwritten signature in cursive script, reading "William H. Freeman".

William H. Freeman, P.E.
President

409 East Duval St., Suite 3 ~ Lake City, Florida 32055 ~ (386) 758-4209



Engineers

Contractors

Designers

January 14, 2004

Harry Dicks
Columbia County Building and Zoning
Lake City, FL. 32055

Dear Mr. Dicks:

I have inspected the residential structure on Lot #3 Barwick Subdivision for Michele Willingham and Forrest Williams. I certify that the structure meets the requirements of Section 1606 of the Florida Building Code, 2001 edition. Please find a copy of the construction documents indicating As-built construction of the structure. If you have any questions, Please call me at (386) 758-4209.

Sincerely,

A handwritten signature in cursive script, appearing to read 'William H. Freeman'.

William H. Freeman, P.E.
President

409 East Duval St., Suite 3 ~ Lake City, Florida 32055 ~ (386) 758-4209