DATE 06/23/2004 Columbia Count	y Building Permit PERMIT	
	Year From the Date of Issue 000021995	
APPLICANT BRYAN ZECHER ADDRESS P.O. BOX 815	PHONE 752-8653 LAKE CITY FL 32056	
OWNER WILLIAM & BETTY DENSON	PHONE PHONE	
ADDRESS 834 NW ZACK DR.	LAKE CITY FL 32055	
CONTRACTOR BRYAN ZECHER	PHONE	
	, TL ON WINDING PLACE, TL ON EMERALD	
	MERALD LAKES DR., AND ZACK DRIVE	i .
TYPE DEVELOPMENT SFD,UTILITY	ESTIMATED COST OF CONSTRUCTION 79650.00	
HEATED FLOOR AREA TOTAL A	AREA 2111.00 HEIGHT .00 STORIES 1	
FOUNDATION CONC WALLS FRAMED	ROOF PITCH 6/12 FLOOR SLAB	-0
LAND USE & ZONING RSF-2	MAX. HEIGHT 22	_
Minimum Set Back Requirments: STREET-FRONT 25.	00 REAR 15.00 SIDE 10.00	
NO. EX.D.U. 0 FLOOD ZONE X PP	DEVELOPMENT PERMIT NO.	
PARCEL ID 28-3S-16-02372-629 SUBDIVIS	SION ARBOR GREEN @ EMERALD LAKES	
LOT 29 BLOCK PHASE 2 UNIT	TOTAL ACRES50	
000000337 N CBC054575		
Culvert Permit No. Culvert Waiver Contractor's License N	Number Applicant/Owner/Contractor	
EXISTING 04-0624-N BK		
A CONTRACTOR OF THE PROPERTY O	oning checked by Approved for Issuance New Resident	
COMMENTS: ONE FOOT ABOVE THE ROAD, NOC ON FILE		7
	Check # or Cash 2793	-
FOR BUILDING & ZON	IING DEPARTMENT ONLY (footer/Slab)	
Temporary Power Foundation	Monolithic	
date/app. by	date/app. by	
Under slab rough-in plumbing Slab	Sheathing Training	
Framing Rough-in plumbing	date/app. by date/app. by	
date/app. by	above slab and below wood floor 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	date/app. by Culvert date/app. by	
M/H tie downs, blocking, electricity and plumbing	Pool	
Reconnection Pump pole	135/4 133/2	
I amp pole	date/app. by	
ANAPARA (ARA) (ARA	Utility Pole date/app. by Utility Pole date/app. by	
M/H Pole Travel Trailer	Utility Pole	
M/H Pole Travel Trailer	Utility Pole date/app. by date/app. by Re-roof date/app. by date/app. by	
M/H Pole Travel Trailer	Utility Pole date/app. by Re-roof date/app. by Re-roof SURCHARGE FEE \$ 10.56	
M/H Pole Travel Trailer date/app. by BUILDING PERMIT FEE \$ 400.00 CERTIFICATION F	Utility Pole date/app. by date/app. by	_

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."

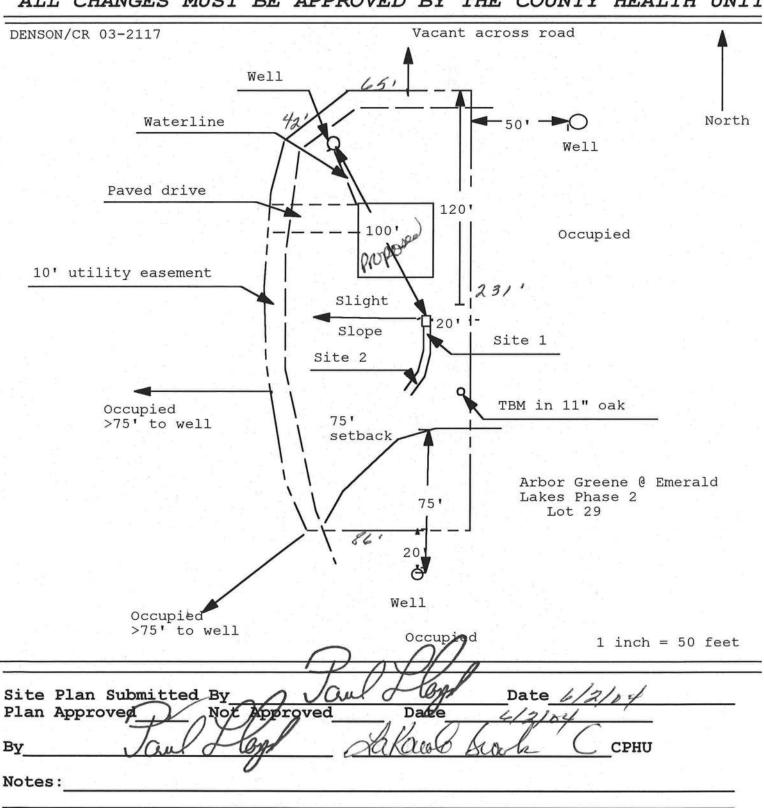
This Permit Must Be Prominently Posted on Premises During Construction

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.

Çolumbia County Bui	Iding Permit Application July 6-4-04-
	0406-20 Permit # 337/21995
Application Approved by - Zoning Official	Date /5.06.04 Plans Examiner Date
Flood Zone X Per flat Development Permit NA Z	oning RSF-2 Land Use Plan Map Category Kes Low day
Comments Jours Racher EN , Plet	requires I foot obox controline of adjust Road
Applicants Name Bryan Zeile	Phone 752 8653
Address Po Box 815 LC FL	32056
Owners Name Derson, William & Beth	1 Phone
911 Address B34 N'w Zack Dr, L	ake Cim Pl 32055
Contractors Name Byan Zuher Caret	Inc Phone 752 -9653
Address 60 Bif 815, LC, PC	32056
Fee Simple Owner Name & Address	
Bonding Co. Name & Address	
Architect/Engineer Name & Address Teere Ruff	Mark Disomay
Mortgage Lenders Name & Address	,
Property ID Number 28 - 35 - 16 - 62372 - 6	79 Fellmoted Cost of Construction \$104 000
Subdivision Name Alas (alexa @ Final of	Lot 29 Block Unit 2 Phase 2
Driving Directions 1/5 So / B-	Lot ZI Block Unit 2 Phase Z
Driving Directions US 90 to Brown Cd	11 to Winding Place - 1/L
College 1/2 on cher	ld lets drive, The on comer
of En Les Dr + Zack Rd -	
Type of Construction France - New	Number of Existing Dwellings on Property
Total Acreage Lot Size / 2 are Do you need a	Culvert Permit of Culvert Waiver or Have an Existing Dri
Actual Distance of Structure from Property Lines - Front	30 Side 30 Side 15 Rear 100'
Total Building Height Number of Stories/	Heated Floor Area 1593 Roof Pitch 6/12
Application is hereby made to obtain a permit to do work a installation has commenced prior to the issuance of a permall laws regulating construction in this jurisdiction.	and installations as indicated. I certify that no work or mit and that all work be performed to meet the standards o
OWNERS AFFIDAVIT: I hereby certify that all the foregoing compliance with all applicable laws and	information is accurate and all work will be done in
WARNING TO OWNER: YOUR FAILURE TO RECORD A NO TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YO LENDER OR ATTORNEY BEFORE RECORDING YOUR NOT	U INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR
Owner Builder or Agent (Including Contractor)	Contractor Signature
STATE OF FLORIDA	Contractors License NumberCOS4575 Competency Card Number
COUNTY OF COLUMBIA Sworn to (or affirmed) and subscribed before me	NOTARY STAMP/SEAL
this day of 20	NOTANT OTANIFICEAL
Personally known or Produced Identification	
	Notary Signature

Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan Permit Application Number: 04-0624N

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT



P.2 PAGE 01

NOTICE OF COMMENCEMENT FORM COLUMBIA COUNTY, FLORIDA

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.

Tex Parcel ID Number 28-35-16-62372-629

Description of property: (legal description of the property Lot 29 / Arbor Greene	y and street address or \$11 address)
Inst:2	004013281 Date:06/08/2004 Time:13:59 DC,P.DeWitt Cason,Columbia County B:1017 P:2243
General description of improvement:New Hon	ne
Owner Name & Address William + Bety De	2 Non
Name & Address of Fee Simple Owner (if other than own	nterest in Property fee simple
Gontractor Name Bryan Vector Construction Address PO Box 815 Lake City, Fr	37056 Phone Number 386-752-8653
Surety Holders Name	Phone Number
Amount of Bond Lender Name	
Address	
NameAddress	
In addition to himself/herself the owner designates	the Lienor's Notice as provided in Section 712 42 (4)
(a) 7. Phone Number of the designee O. Expiration date of the Notice of Commencement (the exp (Unless a different date is specified)	hiration date is 1 (one) year from the date of recording
OTICE AS PER CHAPTER 713. Florids Statutes: le owner must sign the notice of commencement and no on	ne else may be permitted to sign in his/her stead.
Milliam A. Clenson + Bety C. Denson Signature of Owner	Sworn to (or affirmed) and subscribed before 2 day of
Signature of Owner	NOTANT STAMPISEAL



PAGE NI

NOTICE OF COMMENCEMENT FORM COLUMBIA COUNTY, FLORIDA

THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 712. Flurida Statutes, the following information is provided in this Notice of Commencement.

Tax Parcel ID Number 28-35-16-02372-629

Lot 29 , Arbor breeze	erty and street address or \$11 address)
The state of the s	
General description of improvement New H	one
Owner Name & Address Villiam + Bathy	
2468 Captan Kid Sid Small MIC 2011	2 Interest in Property fee Simple
Name & Address of Fee Simple Owner (if other than ov	where in Property 442 5mg/c
Contractor Name Bryan Zecher Construct	ion, Tre Phone Number 386-752-8653
Address to lone ois late City, Fr	32056
Surety Molders Name	Phone Number
Address	
Amount of Bond	A CONTRACTOR OF THE CONTRACTOR
Lander Name	Phone Number
Address	The results of the second of t
Name	Phone Number
The second secon	
(a) 7. Phone Number of the designee	f the Lienor's Notice as provided in Section 749 49 44
Expiration data of the Notice of Commencement (the ex	united in the state of the stat
(Unless a different date is specified)	optration date is 1 (one) year from the date of recording
ICE AS PER CHAPTER 713. Florida Statutes:	
owner must sign the netice of commencement and no o	and else may be permitted to slore in his her stead
1	Swam on far address at a section of the section of
1	day of
1	2004
& Betty C. Denson	NOTARY STAMP/SEAL
1	,

FORM 600A-2001

Project Name:

405311DensonRes.

EnergyGauge® 3.4

Bryan Zecher

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Whole Building Performance Method A

Builder:

Address: City, State: Owner: Climate Zone:	Lot: 29, Sub: Eme Lake City, FL William & Betty Do North	erald lakes, Plat:	Permitting Office: Permit Number: 2/99 Jurisdiction Number: 2		
 New construction of 2. Single family or mu Number of units, if Number of Bedroom Is this a worst case? Conditioned floor at Glass area & type Clear glass, default Default tint, default Labeled U-factor or Floor types Slab-On-Grade Edg N/A N/A Wall types Frame, Wood, Exter Frame, Wood, Adjac Face Brick, Wood, I N/A N/A Under Attic N/A N/A N/A N/A N/A N/A N/A Sup: Unc. Ret: Unc N/A 	Iti-family multi-family ms rea (ft²) U-factor U-factor SHGC Elnsulation Single P 0.0 ft² 0.0 ft² 0.0 ft² 0.0 ft²	232.0 ft ² 0.0 ft ²	12. Cooling systems a. Central Unit b. N/A c. N/A 13. Heating systems a. Electric Heat Pump b. N/A c. N/A 14. Hot water systems a. Electric Resistance b. N/A c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump) 15. HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)	Cap: 32.0 kBtu/hr SEER: 10.00 Cap: 32.0 kBtu/hr HSPF: 6.80 Cap: 40.0 gallons EF: 0.89	
Glass/	Floor Area: 0.15	Total as-built p	oints: 24484 oints: 24594 PASS		

by this calculation are in compliance with the Florida Energy Code. PREPARED BY: **Evan Beamsley** I hereby certify that this building as designed, is in compliance with the Florida Energy Code. OWNER/AGENT: DATE:

I hereby certify that the plans and specifications covered

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: 29, Sub: Emerald lakes, Plat: , Lake City, FL, PERMIT #:

BASE		AS-BU	JILT			
GLASS TYPES .18 X Conditioned X BSPM = Points Floor Area	(Type/SC Or	Overhang nt Len Hg	t Area X S	SPM X	SOF	= Points
.18 1593.0 20.04 5746.3	Double, Clear	E 1.5 5.5	20.0	42.06	0.90	754.0
.10 1393.0 20.04 3746.3		E 1.5 5.5		42.06	0.90	2261.9
		S 1.5 5.5		35.87	0.83	1790.9
4-		S 1.5 3.5		35.87	0.70	
						151.4
	The state of the s	The Company of the Company		38.52	0.67	723.8
	Double, Clear N	ties are meno attended		25.97	0.72	391.4
		W 10.5 2.0		38.52	0.37	43.3
		W 1.5 5.5		38.52	0.90	1036.6
	Double, Clear	N 1.5 1.5	4.0	19.20	0.71	54.6
	As-Built Total:		232.0			7207.8
WALL TYPES Area X BSPM = Points	Туре	R-Valu	ue Area	X SPN	1 =	Points
Adjacent 208.0 0.70 145.6	Frame, Wood, Exterior	13.0	220.0	1.50		330.0
Exterior 904.0 1.70 1536.8	Frame, Wood, Adjacent	13.0	208.0	0.60		124.8
	Face Brick, Wood, Exterior	13.0	684.0	0.35		239.4
Base Total: 1112.0 1682.4	As-Built Total:	70.0	1112.0	0.00		694.2
DOOR TYPES Area X BSPM = Points	Туре		THE SHOWING THE	X SPN	1 =	Points
Adjacent 19.0 2.40 45.6	Exterior Insulated		40.0	4.10		164.0
Exterior 40.0 6.10 244.0	Adjacent Insulated		19.0	1.60		30.4
244.0	Adjacent insulated		19.0	1.00		30.4
Base Total: 59.0 289.6	As-Built Total:		59.0			194.4
CEILING TYPES Area X BSPM = Points	Туре	R-Value	Area X SF	PM X SC	CM =	Points
Under Attic 1593.0 1.73 2755.9	Under Attic	30.0	1753.0 1.7	73 X 1.00		3032.7
Base Total: 1593.0 2755.9	As-Built Total:	-1	1753.0			3032.7
FLOOR TYPES Area X BSPM = Points	Туре	R-Valu	ie Area	X SPM	1 =	Points
Slab 178.0(p) -37.0 -6586.0 Raised 0.0 0.00 0.00	Slab-On-Grade Edge Insulation	0.0	178.0(p	-41.20		-7333.6
Base Total: -6586.0	As-Built Total:		178.0			-7333.6
INFILTRATION Area X BSPM = Points			Area 2	X SPM	1 =	Points
1593.0 10.21 16264.5			1593.0	10.21		16264.5

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 29, Sub: Emerald lakes, Plat: , Lake City, FL, PERMIT #:

3-11	BASE		AS-BUILT								
Summer Bas	e Points:	20152.7	Summer As-Built Points:	20060.0							
Total Summer Points	X System Multiplier	= Cooling Points	Total X Cap X Duct X System X Credit Component Ratio Multiplier Multiplier Multiplier Multiplier (DM x DSM x AHU)	= Cooling Points							
20152.7	0.4266	8597.1	20060.0 1.000 (1.090 x 1.147 x 0.91) 0.341 1.000 20060.0 1.00 1.138 0.341 1.000	7789.3 7789.3							

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 29, Sub: Emerald lakes, Plat: , Lake City, FL, PERMIT #:

BASE		AS-BUILT						
GLASS TYPES .18 X Conditioned X BWPM = Points		Overha	na				10-415	
Floor Area	N. W. W. W. C.		-	Area X	WF	м х	WO	F = Points
.18 1593.0 12.74 3653.1	Double, Clear	E 1.	5 5.5	20.0	18.	79	1.04	391.4
Y	Double, Clear	E 1.	5 5.5	60.0	18.	79	1.04	1174.2
	Double, Clear	S 1.	5 5.5	60.0	13.	30	1.15	915.2
	Double, Clear	S 1.	5 3.5	6.0	13.	30	1.47	117.0
	Double, Clear	W 4.	5 7.5	28.0	20.	73	1.11	642.1
	Double, Clear N	IW 5.	0 7.5	21.0	24.	30	1.02	519.5
	Double, Clear	W 10.	5 2.0	3.0	20.	73	1.24	77.0
	Double, Clear	W 1.	5 5.5	30.0	20.	73	1.03	639.3
	Double, Clear	N 1.	5 1.5	4.0	24.		1.02	100.1
	As-Built Total:			232.0				4575.8
WALL TYPES Area X BWPM = Points	Туре		R-Value	Area	Х	WPM	=	Points
Adjacent 208.0 3.60 748.8	Frame, Wood, Exterior		13.0	220.0		3.40		748.0
Exterior 904.0 3.70 3344.8	Frame, Wood, Adjacent		13.0	208.0		3.30		686.4
Existion 554.5 5.75 5544.5	Face Brick, Wood, Exterior		13.0	684.0		3.17		2171.7
Base Total: 1112.0 4093.6	As-Built Total:		13.0	1112.0		3.17		3606.1
DOOR TYPES Area X BWPM = Points	Туре			Area	Х	WPM	=	Points
Adjacent 19.0 11.50 218.5	Exterior Insulated			40.0		8.40		336.0
Exterior 40.0 12.30 492.0	Adjacent Insulated			19.0		8.00		152.0
Base Total: 59.0 710.5	As-Built Total:	-1		59.0				488.0
CEILING TYPES Area X BWPM = Points	Туре	R-Va	lue Ar	ea X W	PM.	x wc	M =	Points
Under Attic 1593.0 2.05 3265.6	Under Attic		30.0	1753.0 2	2.05 >	(1.00		3593.6
Base Total: 1593.0 3265.6	As-Built Total:			1753.0				3593.6
FLOOR TYPES Area X BWPM = Points	Туре		R-Value	Area	Х	WPM	=	Points
Slab 178.0(p) 8.9 1584.2 Raised 0.0 0.00 0.0	Slab-On-Grade Edge Insulation		0.0	178.0(p		18.80		3346.4
Base Total: 1584.2	As-Built Total:			178.0				3346.4
INFILTRATION Area X BWPM = Points				Area	Х	WPM	=	Points
1593.0 -0.59 -939.9				1593.0)	-0.59		-939.9

PERMIT #:

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 29, Sub: Emerald lakes, Plat: , Lake City, FL,

	I	BASE			AS-BUILT										
Winter Base	Winter As-Built Points:								14670.1						
Total Winter 2 Points	X	System Multiplie	= er	Heating Points	Total Componer	X	Cap Ratio		Duct Multiplier		Multiplier	X	Credit Multiplier	=	Heating Points
12367.1		0.6274		7759.1	14670.1 14670. 1		1.000 1.00	(1.0	069 x 1.169 1.162		0.501 0.501		1.000 1.000		8549.8 8549.8

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 29, Sub: Emerald lakes, Plat: , Lake City, FL, PERMIT #:

	E	BASE			AS-BUILT									
WATER HEA Number of Bedrooms	X	Multiplier	=	Total	Tank Volume	EF	Number of Bedrooms	X	Tank X Ratio	Multiplier	X Credit Multiplie		Total	
3		2746.00		8238.0	40.0	0.89	3		1.00	2715.15	1.00		8145.4	
					As-Built To	otal:							8145.4	

	CODE COMPLIANCE STATUS														
	BASE							AS-BUILT							
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points		
8597		7759		8238		24594	7789		8550		8145		24484		

PASS



Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 29, Sub: Emerald lakes, Plat: , Lake City, FL, 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					
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* = 82.7

The higher the score, the more efficient the home.

William & Betty Denson, Lot: 29, Sub: Emerald lakes, Plat: , Lake City, FL,

1.	New construction or existing		New	_	12.	Cooling systems	
2.	Single family or multi-family		Single family	_	a.	Central Unit	Cap: 32.0 kBtu/hr
3.	Number of units, if multi-family		1				SEER: 10.00
4.	Number of Bedrooms		3		b.	N/A	F 102
5.	Is this a worst case?		No				
6.	Conditioned floor area (ft²)		1593 ft ²		c.	N/A	_
7.	Glass area & type	Single Pane	Double Pane				
a.	Clear glass, default U-factor	0.0 ft ²	232.0 ft ²	-	13.	Heating systems	_
b	Default tint, default U-factor	0.0 ft ²	0.0 ft ²	-	a.	Electric Heat Pump	Cap: 32.0 kBtu/hr
c.	Labeled U-factor or SHGC	0.0 ft ²	0.0 ft ²				HSPF: 6.80
8.	Floor types				b.	N/A	
a.	Slab-On-Grade Edge Insulation	R=0	0.0, 178.0(p) ft				
b.	N/A				c.	N/A	
c.	N/A						
9.	Wall types				14.	Hot water systems	
a.	Frame, Wood, Exterior	R=	13.0, 220.0 ft ²		a.	Electric Resistance	Cap: 40.0 gallons
b.	Frame, Wood, Adjacent	R=	13.0, 208.0 ft ²				EF: 0.89
c.	Face Brick, Wood, Exterior	R=	13.0, 684.0 ft ²		b.	N/A	in was according to the
d.	N/A			-			_
e.	N/A				c.	Conservation credits	
10.	Ceiling types			001.00		(HR-Heat recovery, Solar	_
a.	Under Attic	R=3	0.0, 1753.0 ft ²	2012		DHP-Dedicated heat pump)	
b.	N/A				15.	HVAC credits	
c.	N/A					(CF-Ceiling fan, CV-Cross ventilation,	
11.	Ducts			0000		HF-Whole house fan,	
a.	Sup: Unc. Ret: Unc. AH: Interior	Sup. F	e=6.0, 170.0 ft			PT-Programmable Thermostat,	
b.	N/A					MZ-C-Multizone cooling,	
						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.

Address of New Home: 834 Nw Pack De City/FL Zip: Lake City/FL Zip:

*NOTE: The home's estimated energy performance score is only available through the FLA/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 EnergyStar 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: FLR2PB v3.4)

Residential System Sizing Calculation

William & Betty Denson

Summary Project Title: 405311DensonRes.

Class 3 Rating Registration No. 0

Lake City, FL

Climate: North

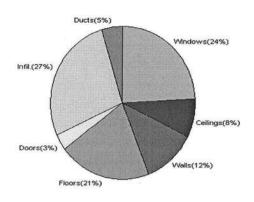
01410004

				6/1/2004	
Location for weather data: Gainesv	ville - Default	s: Latitu	ude(29) Temp Range(M)		
Humidity data: Interior RH (50%)	Outdoor we	t bulb (7	7F) Humidity difference(51gr.)		
Winter design temperature	31	F	Summer design temperature	93	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	39	F Summer temperature difference		18	F
Total heating load calculation	27111	Btuh	Total cooling load calculation	26964	Btuh
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	118.0	32000	Sensible (SHR = 0.75)	117.5	24000
Heat Pump + Auxiliary(0.0kW)	118.0	32000	Latent	122.2	8000
			Total (Electric Heat Pump)	118.7	32000

WINTER CALCULATIONS

Winter Heating Load (for 1593 soft)

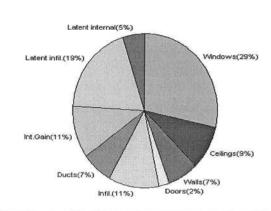
Load component			Load	
Window total	232	sqft	6566	Btuh
Wall total	1112	sqft	3135	Btuh
Door total	59	sqft	912	Btuh
Ceiling total	1753	sqft	2279	Btuh
Floor total	178	ft	5625	Btuh
Infiltration	170	cfm	7304	Btuh
Subtotal			25820	Btuh
Duct loss			1291	Btuh
TOTAL HEAT LOSS			27111	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1593 sqft)

Load component			Load	
Window total	232	sqft	7735	Btuh
Wall total	1112	sqft	1789	Btuh
Door total	59	sqft	598	Btuh
Ceiling total	1753	sqft	2489	Btuh
Floor total			0	Btuh
Infiltration	149	cfm	2950	Btuh
Internal gain			3000	Btuh
Subtotal(sensible)			18562	Btuh
Duct gain			1856	Btuh
Total sensible gain			20418	Btuh
Latent gain(infiltration)			5167	Btuh
Latent gain(internal)			1380	Btuh
Total latent gain			6547	Btuh
TOTAL HEAT GAIN			26964	Btuh



EnergyGauge® System Sizing based on ACCA Manual J. PREPARED BY:

EnergyGauge® FLR2PB v3.4

System Sizing Calculations - Winter

Residential Load - Component Details

William & Betty Denson

Project Title:

Class 3 Rating Registration No. 0

Lake City, FL

405311DensonRes.

Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 39.0 F

6/1/2004

Window	Panes/SHGC/Frame/U	Orientation	n Area X	HTM=	Load
1	2, Clear, Metal, DEF	N	20.0	28.3	566 Btuh
2	2, Clear, Metal, DEF	N	60.0	28.3	1698 Btuh
3	2, Clear, Metal, DEF	E	60.0	28.3	1698 Btuh
4	2, Clear, Metal, DEF	Ε	6.0	28.3	170 Btuh
5 6 7	2, Clear, Metal, DEF	S	28.0	28.3	792 Btuh
6	2, Clear, Metal, DEF	SW	21.0	28.3	594 Btuh
7	2, Clear, Metal, DEF	S	3.0	28.3	85 Btuh
8	2, Clear, Metal, DEF	S	30.0	28.3	849 Btuh
9	2, Clear, Metal, DEF	W	4.0	28.3	113 Btuh
	Window Total		232		6566 Btuh
Walls	Туре	R-Value	Area X	HTM=	Load
1	Frame - Exterior	13.0	220	3.1	682 Btuh
2 3	Frame - Adjacent	13.0	208	1.6	333 Btuh
3	Frame - Exterior	13.0	684	3.1	2120 Btuh
	Wall Total		1112		3135 Btuh
Doors	Туре		Area X	HTM=	Load
1	Insulated - Exter		40	18.3	733 Btuh
2	Insulated - Adjac		19	9.4	179 Btuh
	Door Total		59		912Btuh
Ceilings	Туре	R-Value	Area X	HTM=	Load
1	Under Attic	30.0	1753	1.3	2279 Btuh
	Ceiling Total		1753		2279Btuh
Floors	Туре	R-Value	Size X	HTM=	Load
1	Slab-On-Grade Edge Insul	0	178.0 ft(p)	31.6	5625 Btuh
	Floor Total		178		5625 Btuh
Infiltration	Туре	ACH X	Building Volume	CFM=	Load
	Natural	0.80	12744(sqft)	170	7304 Btuh
	Mechanical		30000 SE 50	0	0 Btuh
	Infiltration Total			170	7304 Btuh

		Subtotal	25820 Btuh
	Totals for Heating	Duct Loss(using duct multiplier of 0.05)	1291 Btuh
1		Total Btuh Loss	27111 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

William & Betty Denson

Project Title:

Lake City, FL

405311DensonRes.

Class 3 Rating Registration No. 0 Climate: North

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 18.0 F

6/1/2004

	Туре	Ove	rhang	Win	dow Are	a(sqft)	Н	ITM	Load	
Window	Panes/SHGC/U/InSh/ExSh Ornt I		Hgt	Gross		Unshaded	Shaded	Unshaded		
1	2, Clear, DEF, N, N N	1.5	5.5	20.0	0.0	20.0	22	22	440	Btuh
2	2, Clear, DEF, N, N N	1.5	5.5	60.0	0.0	60.0	22	22	1320	Btuh
3	2, Clear, DEF, N, N E	1.5	5.5	60.0	13.6	46.4	22	72	3641	Btuh
4	2, Clear, DEF, N, N E	1.5	3.5	6.0	0.5	5.5	22	72	408	Btuh
5	2, Clear, DEF, N, N S	4.5	7.5	28.0	28.0	0.0	22	37	616	Btuh
6	2, Clear, DEF, N, N SW	5	7.5	21.0	21.0	0.0	22	62	462	Btuh
7	2, Clear, DEF, N, N S	10.5	2	3.0	3.0	0.0	22	37	66	Btuh
8	2, Clear, DEF, N, N S	1.5	5.5	30.0	30.0	0.0	22	37	660	Btuh
9	2, Clear, DEF, N, N W	1.5	1.5	4.0	3.3	0.7	22	72	122	Btuh
	Window Total			232					7735	Btuh
Walls	Туре	R-	Value			Area		НТМ	Load	
1	Frame - Exterior		13.0		2	220.0		1.7	383	Btuh
2	Frame - Adjacent		13.0		2	208.0		1.0	216	Btuh
3	Frame - Exterior		13.0 684.0					1.7	1190	Btuh
	Wall Total	1112.0						1789	Btuh	
Doors	Type			Area		HTM		Load		
1	Insulated - Exter				40.0		10.1		406	Btuh
2	Insulated - Adjac		19.0					10.1	193	Btuh
	Door Total				59.0				598	Btuh
Ceilings	Type/Color	R-Value			Area		НТМ		Load	Diani
1	Under Attic/Dark	30.0				1753.0 1.4		WOOLENS AND ON	2489	Btuh
	Ceiling Total				1753.0				2489	Btuh
Floors	Type	R-\	√alue			Size		НТМ	Load	
1	Slab-On-Grade Edge Insulation	0.0			178.0 ft(p)			0.0	0	Btuh
	Floor Total				1	78.0			0	Btuh
Infiltration	Туре	Α	CH		Vo	lume		CFM=	Load	
	Natural		0.70	12744		2744		149.0	2950	Btuh
	Mechanical							0	0	Btuh
	Infiltration Total							149	2950	Btuh

Internal	Occupants	Btu	uh/occup	ant	Appliance	Load	
gain	6	X	300	+	1200	3000	Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)
Project Title: Class

William & Betty Denson

405311DensonRes.

Class 3 Rating Registration No. 0

Lake City, FL

Climate: North

6/1/2004

00,000	Subtotal	18562	Btuh
	Duct gain(using duct multiplier of 0.10)	1856	Btuh
	Total sensible gain	20418	Btuh
Totals for Cooling	Latent infiltration gain (for 51 gr. humidity difference)	5167	Btuh
	Latent occupant gain (6 people @ 230 Btuh per person)	1380	Btuh
	Latent other gain	0	Btuh
	TOTAL GAIN	26964	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)

LOT 29 ARBOR GREENE LAKES PHASE 2.		D D P CORP 5012 US 90 W		28-3S-16-02372-		Columbia Cou
		LAKE CITY		FL 32055	APPR	
USE MOD EXW % RSTR RCVR % INT % FLR % HTTP A/C QUAL FNDN SIZE CEIL ARCH FRME KTCH	AE? BATH FIXT BDRM RMS UNTS C-W% HGHT PMTR STYS ECON FUNC SPCD DEPR UD-1 UD-2 UD-3 UD-4 UD-5 UD-6	EFF RCN %GOO	AREA .000 AREA	INDEX 28316 E-RATE	.05 NBHD 000 INDX STR AYB MKT EYB (PU	PROP USE 000 28-3S-16 AREA 01 D1 .540 D R CD
NNDO CLAS OCC COND	UD-7 UD-8 UD-9 % AREA SUB VALU)))) ())				PERMI
OTAL			FIELD CK:		3 BOOK 3 GRANTO 3 GRANTE 3 GRANTO GRANTE	E R E
AE BN CODE DESC LAND DESC AE CODE 7 000000 VAC RES	ZONE ROAD (U	UD1 {UD3 FRONT DE	PTH FIELD CK:			T PR SPCD % PRICE ADJ UT F 275.000 18275.

Columbia County Building Department Culvert Permit

Culvert Permit No. 000000337

DATE $06/2$	3/2004	PARCEL ID #	28-3S-16-02372-629		
APPLICANT BRYAN ZECHER			PHONE	752-8653	
ADDRESS _	P.O. BOX	315	LAKE CITY	FL	32056
OWNER WILLIAM & BETTY DENSON			PHONE		
ADDRESS 83	34 NW ZACK I	DRIVE	LAKE CITY	FL	32055
CONTRACTO	R BRYAN ZECH	ER	PHONE	752-8653	4
LOCATION O	F PROPERTY	90W, TR ON BROWN RD,	TL ON WINDING PLACE,	TL ON EMERALD I	LAKES DR,
CORNER OF EMP	ERALD LAKES DE	R AND ZACK ROAD			
SUBDIVISION SIGNATURE	INSTALLAT Culvert size v driving surface thick reinforc INSTALLAT a) a majorit b) the drive Turnouts concrete of current an	ON REQUIREMENT vill be 18 inches in diame e. Both ends will be mite ed concrete slab. ION NOTE: Turnouts wi y of the current and exist way to be served will be shall be concrete or pave or paved driveway, which d existing paved or conc	eter with a total lenght of the ered 4 foot with a 4 : 1 still be required as following driveway turnouts a paved or formed with or d a minimum of 12 feet never is greater. The widereted turnouts.	s: re paved, or; oncrete. wide or the width	with a 4 inch
Ш	Culvert installation shall conform to the approved site plan standards.				
	Department of Transportation Permit installation approved standards.				
	Other				
	-4				

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



Notice of Treatment 10947						
Applicator Florida Pest Control & Chemical Co.						
Address 536 SE Baya						
City Lake City Phone 752-1703						
Site Location Subdivision Emeral LKS Lot#_29Block#_Permit#_2/995# Address_834 NW Zack DK						
AREAS TREATED						
Area Treated Date Time Gal. Name						
Main Body 7-19-04710 375 TRAWIS						
Patio/s #						
Stoop/s #						
Porch/s #						
Brick Veneer						
Extension Walls						
A/C Pad						
Walk/s #						
Exterior of Foundation						
Driveway Apron						
Out Building						
Tub Trap/s						
(Other)						
Name of Product Applied Dursbay TC 5% Remarks						



COLUMBIA COUNTY, FLORIDA

partment of Building and Zoning Inspection

and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code. This Certificate of Occupancy is issued to the below named permit holder for the building

Parcel Number 28-3S-16-02372-629 Building permit No. 000021995

Fire: 56.70

Waste: 122.50
Total: 179.20



Location: 834 NW ZACK DRIVE, LAKE CITY

Owner of Building WILLIAM & BETTY DENSON

Permit Holder BRYAN ZECHER

Use Classification SFD,UTILITY

Date: 12/03/2004

Building Inspector

POST IN A CONSPICUOUS PLACE (Business Places Only)