DATE 08/18/2004 Columbia County	Building Permit	PERMIT
This Permit Expires One You APPLICANT GARY THOMPSON		000022210
ADDRESS 3554 256TH STREET	PHONE 935-2118 O'BRIEN	EI 22071
OWNER LAMAR & LEANN HIRES	PHONE 755-5913	FL 32071
ADDRESS 1000 SW LEGION DRIVE	-	FL 32024
CONTRACTOR THOMPSON CONSTRUCTION	PHONE	
	CK, TL ON LEGION, GO INTO SUBDIVISI	ON
1ST LOT ON LEFT		
TYPE DEVELOPMENT SFD,UTILITY ES	TIMATED COST OF CONSTRUCTION	149000.00
HEATED FLOOR AREA 2980.00 TOTAL ARE	EA <u>3892.00</u> HEIGHT <u>.00</u>	STORIES 1
FOUNDATION CONC WALLS FRAMED I	ROOF PITCH 8/12 FLOO	OR SLAB
LAND USE & ZONING A-3	MAX. HEIGHT 25	
Minimum Set Back Requirments: STREET-FRONT 30.00	REAR 25.00 S	IDE <u>25.00</u>
NO. EX.D.U. 0 FLOOD ZONE X	DEVELOPMENT PERMIT NO.	
PARCEL ID 17-4S-16-03051-125 SUBDIVISIO	N SOUTH POINTE	
LOT 25 BLOCK PHASE UNIT	TOTAL ACRES 5.01	
		1
000000386 N CRC046869	Nay N V bryse	<i>U</i>
Culvert Permit No. Culvert Waiver Contractor's License Nun	V //	ntractor
PERMIT 04-0822-N BK Driveway Connection Septic Tank Number LU & Zonir	ng checked by Approved for Issuance	Y New Resident
COMMENTS: ONE FOOT ABOVE THE ROAD, NOC ON FILE	Approved for issuance	New Resident
COMMINIENTS. ONE TOOT ABOVE THE ROAD, NOC ON TIEL		
	Check # or Cash	8688
FOR BUILDING & ZONIN	IG DEPARTMENT ONLY	
Temporary Power Foundation	Monolithic	(footer/Slab)
date/app. by	date/app. by	date/app. by
Under slab rough-in plumbing Slab	Sheathing/Nai	ling
date/app. by	date/app. by	date/app. by
Framing Rough-in plumbing ab date/app. by	ove slab and below wood floor	1
Electrical rough-in Heat & Air Duct		date/app. by
date/app. by	Peri. beam (Lintel)	date/app. by
Permanent power C.O. Final	Culvert	
date/app. by d M/H tie downs, blocking, electricity and plumbing	ate/app. by Pool	date/app. by
Reconnection Pump pole	. by	date/app. by
date/app. by date/a	Utility Pole date/app. by	
M/H Pole Travel Trailer	Re-roof date/app. by	ate/app. by
data app. oy	петарр. бу	ate/app. by
BUILDING PERMIT FEE \$ 745.00 CERTIFICATION FEE	SURCHARGE FE	E\$ 19.46
MISC. FEES \$.00 ZONING CERT. FEE \$ 50.00	FIRE FEE \$ WASTE F	EE\$
FLOOD ZONE DEVELOPMENT FEE \$ GULVERT FE	EE\$ 25.00 TOTAL FEE	858.92
INSPECTORS OFFICE TO LET THE STATE OF THE ST	/1 //	
NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE	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.

Columbia County Building Permit Application

8688

Columbia County Building Permit Application
For Office Use Only Application # 0408-10 Date Received 8/4/09 By Permit # 386/22210
Application Approved by - Zoning Official BK Date 9/18/09 Plans Examiner RJ Date
Flood Zone Development Permit Zoning A-3 Land Use Plan Map Category
Comments NEED VISURE EN HENCH VITE HAN
2. Juss Frehry C ascerl
GARY W. THOMPSON _ 935-2118
Applicants Name Phone Phone Phone
Address 3554 256 ST. O'BRIEN PC. 32071
Owners Name LAMAR & LEANN HIRES Phone 755 - 5913
911 Address 1000 SW LEGION DR. LAKE CITT, P. 32024
Contractors Name THOMPSON CONTROLOGICAN Phone 396) 935-2118
Address 3554 256 ST OBEIEN PL. 32071
Fee Simple Owner Name & Address
Bonding Co. Name & Address
Architect/Engineer Name & Address Nicholas GEISUR Rt 17 Box 1038 LC 32055
Mortgage Lenders Name & Address CNB NATIONAL BANK 187 SW BARA DR LC 37005
Property ID Number 17-45-16-03051-125 Estimated Cost of Construction 3/1,000
Subdivision Name SOUTH DOWTE
Driving Directions FROM LAKE CITY GO VELTST ON 247 # TIP.) PICHT ON THE BACK
GO 3/10 HILES TURN LEFT ONTO LEGION GO 8/10 MILES. LOT 25 ON LEFT
Type of Construction 5/F NEW CONSTRUCTION Number of Existing Dwellings on Property
Total Acreage 5.01 Lot Size Do you need a - <u>Culvert Permit</u> or <u>Culvert Walver</u> or <u>Have an Existing Dri</u>
Actual Distance of Structure from Property Lines - Front 150 Side 435 Side 400 Pear 130
Total Building Height 25-10" Number of Stories Heated Floor Area 2980 Roof Pitch 8/12
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 indicated.
an 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) Owner Builder or Agent (Including Contractor)
STATE OF FLORIDA STATE OF FLORIDA Competency Card Number Competency Card Number
게 금 정 로 부
Sworn to (or affirmed) and subscribed before me NOTARY STAMP/SEAL
this day of aug 20.09
Personally known or Produced Identification legality a Sey
Notary Signature

Inst:2004016347	Date: 07	/15/2004	Time: 08	8:56		
DC,F	.DeWitt	Cason, Co	olumbia	County	B: 1020	P:251

_	OWNER DESIGNATES THE FOLLOWING PERSON IN ADDITION TO HIMSELF TO RECEIVE A COPY
8.	OWNER DESIGNATES THE FOLLOWING TERRORISMS 12 (1) (1) PLOPIDA STATUTES:
	OF THE LIENORS NOTICE AS PROVIDED IN SECTION 713.13 (1) (b), FLORIDA STATUTES:

Name: CNB NATIONAL BANK

Address: 187 SW BAYA DR., P.O. BOX 3239

LAKE CITY, FLORIDA 32025

Attn:

 EXPIRATION DATE OF NOTICE OF COMMENCEMENT (THE EXPIRATION DATE IS 1 YEAR FROM THE DATE OF RECORDING UNLESS A DIFFERENT DATE IS SPECIFIED.)

WITNESS JOUN W. NOPRIS	OWNER Hershell Lamar Hires, 5r.
WITNESS DIANE A. Cheus	OWNER Lee Ann Hires
	OWNER
	OWNER

State of Florida

The following instrument was acknowledged before me this JULY 14, 2004 Hershell Lamar Hires, Jr. AND Lee Ann Hires, HUSBAND AND WIFE

by

who is personally known to me or who has produced Fin. Drivers' Licenses who did not take an oath.

as identification and

NOTARY PUBLIC

MY COMMISSION EXP

OFFICIAL NOTARY SEAL
DIANE A CREWS
ARY PUBLIC STATE OF FLORIDA

NOTARY PUBLIC STATE OF FLORIDA RES: COMMISSION NO. DD08668

MY COMMISSION EXP. FEB. 9,2006

Exhibit A

Lot 25, SOUTH POINTE, a subdivision according to the plat thereof as recorded in Plat Book 7, Pages 52, 53 and 54 of the public records of Columbia County, Florida.

Parcel Identification Number: 17-4S-16-03051-125

Inst:2004016347 Date:07/15/2004 Time:08:56 _____DC,P.DeWitt Cason,Columbia County B:1020 P:2519

STATE OF FLORIDA, COUNTY OF COLUMBIA I HEREBY CERTIFY, that the above and foregoing is a true copy of the original filed in this office. P. DeWITT CASON, CLERK OF COURTS

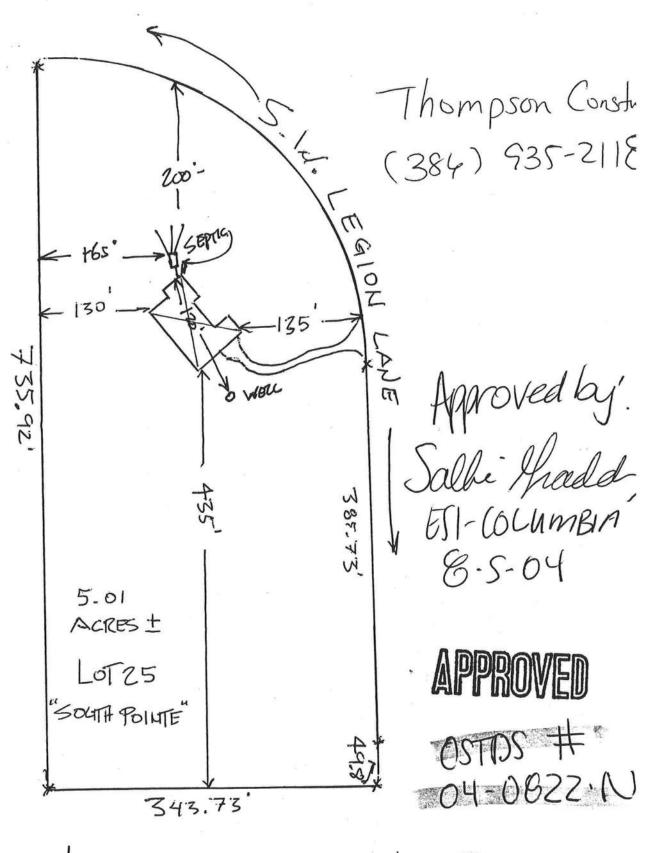
Deputy Clark

O Deputy

File Number: C1074

ELIMBIA COUNT

Lemar & Lecnn Hires



Naz N. Lhope aly 4/04

AHN ROM



STATE OF FLORIDA DEPARTMENT OF HEALTH

APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number

				DADTII	OUTE DI A		Application	, radino	-		
					SITE PLA						
Scale: Each block	ck represents	5 feet and	1 inch = 50	feet.							
							9				
ШШШ											
Notes:	129	729Wa					1 h		Mary .		
		125014							100	Titali	
	The Property of	1								03.0	
		1					1849		0	,	
Site Plan subm	nitted by:	X Jary.	NIA	Signature	S. Lord		188		1500	Title	
Plan Approved		1		Not Appr	oved				Date_S	3-04	.04
Ву		re	attacl	ned	12)		Co			partment
	# # #										

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

Project Name:

Climate Zone:

Address:

Owner:

1.

2.

3.

4.

5.

6.

City, State:

Hires Residence

North

New construction or existing

Single family or multi-family

Conditioned floor area (ft2)

Number of Bedrooms

Is this a worst case?

Glass area & type

a. Clear - single pane

b. Clear - double pane

Number of units, if multi-family

Lake City, FL 32024-

Lamar & LeeAnn Hires

Lot: 25, Sub: Southpoint, Plat:

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Whole Building Performance Method A

New

Yes

2980 ft²

0.0 ft²

469.5 ft²

Single family

Builder:

12. Cooling systems

13. Heating systems

a. Electric Heat Pump

a. Central Unit

b. N/A

c. N/A

Permitting Office:

Permit Number: 22210

Jurisdiction Number: 221000

Gary Thompson

Cap: 54.0 kBtu/hr

Cap: 54.0 kBtu/hr

HSPF: 6.80

SEER: 10.00

c. Tint/oth	ner SHGC - single pane	0.0 ft ²		HSPF: 6.80
	ner SHGC - double pane	0.0 ft ²	b. N/A	_
8. Floor ty				
	n-Grade Edge Insulation	R=0.0, 323.0(p) ft	c. N/A	
b. N/A			National Control of the Control of t	
c. N/A		-	14. Hot water systems	
9. Wall ty	nes		a. LP Gas	Cap: 40.0 gallons
	Wood, Exterior	R=13.0, 2852.0 ft ²		EF: 0.66
	Wood, Adjacent	R=13.0, 216.0 ft ²	b. LP Gas	Cap: 40.0 gallons
c. N/A	Wood, Adjacent	10.0,210.01	0.2.	EF: 0.66
d. N/A		_	c. Conservation credits	_
e. N/A		_	(HR-Heat recovery, Solar	
			DHP-Dedicated heat pump)	- 5
10. Ceiling		P-30 0 2080 0 83	15. HVAC credits	100
a. Under	Attic	R=30.0, 2980.0 ft ²		_
b. N/A			(CF-Ceiling fan, CV-Cross ventilation,	
c. N/A			HF-Whole house fan,	
11. Ducts	1972		PT-Programmable Thermostat,	4
100	nc. Ret: Unc. AH: Interior	Sup. R=6.0, 168.0 ft	MZ-C-Multizone cooling,	
b. N/A			MZ-H-Multizone heating)	10.0
		42		9
		Total as-built	points: 38105	
	Glass/Floor Area:	0.76	points: 42400 PASS	
		Total base	points. 42400	
		d specifications covered	Review of the plans and	THE STAN
	lculation are in complia	nce with the Florida	specifications covered by this	
Energy C	ode.		calculation indicates compliance	18/11/2
			with the Florida Energy Code.	A number of the state of the st
PREPA	RED BY:		Before construction is completed	B 5
DATE:	7-21-04		this building will be inspected for	
	certify that this building,	as designed it in	compliance with Section 553.908	12 75
			Florida Statutes.	COD WE TREE
Access Sections	ce with the Florida finer	gy Youe.		
OWNER	RIAGENT: X Peru	11 . 1/1/11/	BUILDING OFFICIAL:	
	0110 mile			
	297	2/2010	DATE	
	A D	2/04/04	DATE:	
	297	B/04/04/ EnergyGauge® (V	DATE:	

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 25, Sub: Southpoint, Plat: , Lake City, FL, 32024- 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.	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 25, Sub: Southpoint, Plat: , Lake City, FL, 32024- PERMIT #:

BASE							A	S-BUII	LT			
WATER HEA Number of Bedrooms	TING X	Multiplier	=	Total	Tank Volume	EF	Number of Bedrooms	х	Tank X Ratio	Multiplier X	Credit Multiplie	
3	AS III AAAA	2746.00		8238.0	40.0 40.0 As-Built To	0.66 0.66 otal:	3		0.50 0.50	1973.45 1973.45	1.00 1.00	2960.2 2960.2 5920.4

				CODE	CC	MPLI	ANCE	ST	ATUS	;			
	BASE									AS-	BUILT		
Cooling Points	+	Heating Points	+	Hot Water Points	=	Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	#	Total Points
17140		17023		8238		42400	16232		15952		5920		38105

PASS



Residential System Sizing Calculation

Summary Project Title:

Lamar & LeeAnn Hires

Lake City, FL 32024-

Hires Residence

Code Only **Professional Version** Climate: North

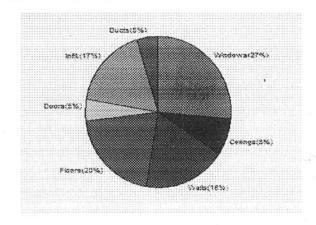
7/21/2004

Location for weather data: Gainesvi	lle - Defau	ts: Lati	tude(29) Temp Range(M)		
Humidity data: Interior RH (50%)	Outdoor we	et bulb (77F) Humidity difference(51gr.)		1
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	49859	Btuh	Total cooling load calculation	48965	Btuh
Submitted heating capacity	54000	Btuh	Submitted cooling capacity	54000	Btuh
Submitted as % of calculated	108.3	%	Submitted as % of calculated	110.3	%

WINTER CALCULATIONS

Winter Heating Load (for 2980 soft)

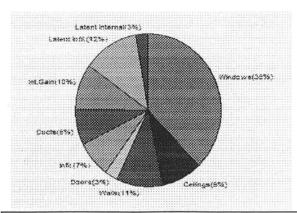
Load component			Load	
Window total	470	sqft	13287	Btuh
Wall total	3068	sqft	9187	Btuh
Door total	143	sqft	2391	Btuh
Ceiling total	2980	sqft	3874	Btuh
Floor total	323	ft	10207	Btuh
Infiltration	199	cfm	8540	Btuh
Subtotal			47485	Btuh
Duct loss		-	2374	Btuh
TOTAL HEAT LOSS			49859	Btuh

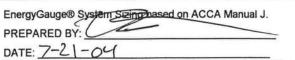


SUMMER CALCULATIONS

Summer Cooling Load (for 2980 sqft)

Load component			Load	
Window total	470	sqft	18673	Btuh
Wall total	3068	sqft	5187	Btuh
Door total	143	sqft	1427	Btuh
Ceiling total	2980	sqft	4232	Btuh
Floor total			0	Btuh
Infiltration	174	cfm	3449	Btuh
Internal gain			4800	Btuh
Subtotal(sensible)			37768	Btuh
Duct gain			3777	Btuh
Total sensible gain			41544	Btuh
Latent gain(infiltration)			6041	Btuh
Latent gain(internal)		-	1380	Btuh
Total latent gain			7421	Btuh
TOTAL HEAT GAIN			48965	Btuh





System Sizing Calculations - Summer

Residential Load - Component Details Project Title:

Lamar & LeeAnn Hires

Reference City: Gainesville (Defaults)

Hires Residence

Lake City, FL 32024-

Summer Temperature Difference: 18.0 F

Code Only

Professional Version Climate: North

7/21/2004

	Туре	Over	rhang	Win	dow Are	a(sqft)	Н	TM	Load	
Window	Panes/SHGC/U/InSh/ExSh Ornt	Len	Hgt	Gross		Unshaded	Shaded	Unshaded		
1	2, Clear, DEF, N, N N	1.5	7	24.0	0.0	24.0	22	22	528	Btuh
2	2, Clear, DEF, N, N N	2.5	6	60.0	0.0	60.0	22	22	1320	Btuh
3	2, Clear, DEF, N, N N	1.5	7	36.0	0.0	36.0	22	22	792	Btuh
4	2, Clear, DEF, N, N N	1.5	4	36.0	0.0	36.0	22	22	792	Btuh
5	2, Clear, DEF, N, N W	1.5	7	54.0	0.7	53.3	22	72	3851	Btuh
6	2, Clear, DEF, N, N SW	1.5	6	15.0	4.6	10.4	22	62	747	Btuh
7	2, Clear, DEF, N, N S	1.5	6	30.0	30.0	0.0	22	37	660	Btuh
8	2, Clear, DEF, N, N SE	100	6	15.0	4.6	10.4	22	62	747	Btuh
9	2, Clear, DEF, N, N S	9.5	8	40.0	20.0	20.0	22	37	1180	Btuh
	2, Clear, DEF, N, N SW	1.5	8	17.5	3.8	13.7	22	62	933	Btuh
10	AND THE RESERVE AND THE PROPERTY OF THE PROPER	0	0	52.5	0.0	52.5	22	37	1942	Btuh
11		Nic.	8	17.5	3.8	13.7	22	62	933	Btuh
12	CHANGE AND STREET	3 th 2 1	7	18.0	18.0	0.0	22	37	396	Btuh
13		300	7	54.0	0.7	53.3	22	72	3851	Btuh
14	2, Clear, DEF, N, N E	1.5		34.0	0.1	00.0				
	Window Total	100		470			1		18673	Btu
Walls	Type	R	-Value			Area		HTM	Load	
	Frame - Exterior		13.0	•		2852.0		1.7	4962	Btul
1	Market Market Company (1985)		13.0			216.0		1.0	225	Btul
2	Frame - Adjacent		13.0			210.0				
	Wall Total				3	0.8908			5187	Btu
Doors	Туре					Area		HTM	Load	
. 1	Wood - Exter					40.0		10.0	399	
2	Wood - Exter					18.0		10.0	180	Btul
3	Wood - Exter					45.0		10.0	449	Btul
4	Wood - Exter					20.0		10.0	200	Btu
5	Wood - Adjac					20.0		10.0	200	Btu
						143.0			1427	Btı
	Door Total		Value			Area		НТМ	Load	
Ceilings	Type/Color	R	-Value	Š		2980.0		1.4	4232	
1	Under Attic/Dark		30.0			2980.0		1.4	4202	Dia
	Ceiling Total				:	2980.0			4232	Btı
Floors	Туре	R	-Value	;		Size		HTM	Load	
1	Slab-On-Grade Edge Insulation		0.0			323.0 ft(p)		0.0	0	Btu
									1	-
9 7	Floor Total					323.0				Bt
Infiltration	Type		ACH		V	/olume		CFM=	Load	
	Natural		0.35	-		29800		174.2		Btu
	Mechanical							0		Btu
	Infiltration Total							174	3449	Bt

*W.							
Internal	Occupants	Btu	uh/occup	ant	Appliance	Load	
gain	6	X	300	+	3000	4800	Btuh

System Sizing Calculations - Winter

Residential Load - Component Details

Lamar & LeeAnn Hires

Project Title: Hires Residence

Lake City, FL 32024-

Code Only **Professional Version** Climate: North

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

7/21/2004

Window	Panes/SHGC/Frame/U	Orientation	n Area X	HTM=	Load
1	2, Clear, Metal, DEF	N	24.0	28.3	679 Btuh
2	2, Clear, Metal, DEF	N	60.0	28.3	1698 Btuh
3	2, Clear, Metal, DEF	· N	36.0	28.3	1019 Btuh
	2, Clear, Metal, DEF	N	36.0	28.3	1019 Btuh
4 5 6	2, Clear, Metal, DEF	W	54.0	28.3	1528 Btuh
6	2, Clear, Metal, DEF	SW	15.0	28.3	424 Btuh
7	2, Clear, Metal, DEF	S	30.0	28.3	849 Btuh
8	2, Clear, Metal, DEF	SE	15.0	28.3	424 Btuh
9	2, Clear, Metal, DEF	S	40.0	28.3	1132 Btuh
10	2, Clear, Metal, DEF	SW	17.5	28.3	495 Btuh
11	2, Clear, Metal, DEF	S	52.5	28.3	1486 Btuh
12	2, Clear, Metal, DEF	SE	17.5	28.3	495 Btuh
13	2, Clear, Metal, DEF	S	18.0	28.3	509 Btuh
14	2, Clear, Metal, DEF	E	54.0	28.3	1528 Btuh
	Window Total		470		13287 Btuh
Walls	Туре	R-Value	Area X	HTM=	Load
1	Frame - Exterior	13.0	2852	3.1	8841 Btuh
2	Frame - Adjacent	13.0	216	1.6	346 Btuh
- 1	Wall Total		3068		9187 Btuh
Doors	Туре		Area X	HTM=	Load
1	Wood - Exter		40	17.9	718 Btuh
2	Wood - Exter		18	17.9	323 Btuh
3	Wood - Exter		45	17.9	807 Btuh
4	Wood - Exter		20	17.9	359 Btuh
5	Wood - Adjac		20	9.2	184 Btuh
1	-				
	Door Total		143		2391Btuh
Ceilings	Туре	R-Value	Area X	HTM=	Load
1	Under Attic	30.0	2980	1.3	3874 Btuh
1	-				
2	Ceiling Total		2980		3874Btuh
Floors	Туре	R-Value	Size X	HTM=	Load
1	Slab-On-Grade Edge Insul	0	323.0 ft(p)	31.6	10207 Btuh
	Land and the second		200		40007 51-1
	Floor Total		323	0511	10207 Btuh
Infiltration	Туре	ACH X	Building Volume	CFM=	Load
	Natural	0.40	29800(sqft)	199	8540 Btuh
	Mechanical			0	0 Btuh
	Infiltration Total			199	8540 Btuh

	Subtotal	47485 Btuh
Totals for Heating	Duct Loss(using duct multiplier of 0.05)	2374 Btuh
	Total Ctyle Liuss PB v3.2	49859 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Hires Project Title: Cod

Lamar & LeeAnn Hires

Hires Residence

Code Only Professional Version Climate: North

Lake City, FL 32024-

7/21/2004

	Subtotal	37768	Btuh
	Duct gain(using duct multiplier of 0.10)	3777	Btuh
	Total sensible gain	41544	Btuh
Totals for Cooling	Latent infiltration gain (for 51 gr. humidity difference)	6041	Btuh
	Latent occupant gain (6 people @ 230 Btuh per person)	1380	Btuh
	Latent other gain	0	Btuh
	TOTAL GAIN	48965	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)

Manual J Winter Calculations

Residential Load - Component Details (continued)

Project Title: Cod

Lamar & LeeAnn Hires

Hires Residence

Code Only **Professional Version**

Lake City, FL 32024-

Climate: North

7/21/2004

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)

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 25, Sub: Southpoint, Plat: , Lake City, FL, 32024-

PERMIT #:

	BASE					AS-	BU	ILT				
GLASS TYPE .18 X Condi Floor	itioned X B	SPM =	Points	Type/SC	Ove Ornt	erhang Len	Hgt	Area X	SPI	их	SOF	= Points
.18 29	0.080	20.04	10749.5	Double, Clear	W	1.5	7.0	24.0	36.9	20	0.94	000.0
		20.04	107 40.0	Double, Clear	W	2.5	6.0	60.0	36.9		0.79	833.5 1747.0
				Double, Clear	W	1.5	7.0	36.0	36.9		0.79	
				Double, Clear	W	1.5	4.0	36.0	36.9		0.82	1250.2
				Double, Clear	S	1.5	7.0	54.0	34.5		0.89	1088.6 1666.4
				Double, Clear	SE	1.5	6.0	15.0	40.8		0.88	
				Double, Clear	E	1.5	6.0	30.0	40.2		0.88	541.4
				Double, Clear	NE	1.5	6.0	15.0	28.7		0.92	1101.4
				Double, Clear	E	9.5	8.0	40.0	40.2		0.92	396.6 757.8
				Double, Clear	SE	1.5	8.0	17.5	40.8		0.95	675.8
				Double, Clear	E	0.0	0.0	52.5	40.2		1.00	2111.7
				Double, Clear	NE	1.5	8.0	17.5	28.7		0.96	483.4
				Double, Clear	E	1.5	7.0	18.0	40.2		0.94	679.4
				Double, Clear	N	1.5	7.0	54.0	19.2		0.96	
				Double, Olcui	1.8	1.5	7.0	54.0	19.2	.2	0.90	991.1
			35 11	As-Built Total:			2.1	469.5				14324.2
WALL TYPES	Area X	BSPM	= Points	Туре		R-V	/alue	Area	Х	SPN	1 =	Points
Adjacent	216.0	0.70	151.2	Frame, Wood, Exterior			13.0	2852.0	:	1.50		4278.0
Exterior	2852.0	1.70	4848.4	Frame, Wood, Adjacent			13.0	216.0		0.60		129.6
			10.10.1	, ramo, vvoca, rajacent			10.0	210.0		0.00		129.0
Base Total:	3068.0		4999.6	As-Built Total:				3068.0				4407.6
DOOR TYPES	S Area X	BSPM	= Points	Туре				Area	Х	SPN	1 =	Points
Adjacent	20.0	2.40	48.0	Exterior Wood				40.0		6.10		244.0
Exterior	123.0	6.10	750.3	Exterior Wood				18.0		6.10		109.8
				Exterior Wood				45.0		6.10		274.5
				Exterior Wood				20.0		6.10		122.0
			-21	Adjacent Wood				20.0		2.40		48.0
Base Total:	143.0		798.3	As-Built Total:				143.0				798.3
CEILING TYP	ES Area X	BSPM	= Points	Туре	R	R-Value	Α (rea X S	SPM	x sc	:M =	Points
Under Attic	2980.0	1.73	5155.4	Under Attic			30.0	2980.0	1.73 X	1.00		5155.4
Base Total:	2980.0		5155.4	As-Built Total:				2980.0				5155.4

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 25, Sub: Southpoint, Plat: , Lake City, FL, 32024- PERMIT #:

	BASE				AS-BL	JILT					
FLOOR TYPES	Area X BWP	M = Points	Туре			R-Valu	e Area	X	WPM	=	Points
Slab Raised	323.0(p) 8.9 0.0 0.00	0	Slab-On-Grade Ed	dge Insulati	on	0.0	323.0(p		18.80		6072.4
Base Total:		2874.7	As-Built Total:				323.0				6072.4
INFILTRATION	Area X BWPI	M = Points					Area	Х	WPM	=	Points
71-11	2980.0 -0.5	9 -1758.2					2980	0.0	-0.59		-1758.2
Winter Base	Points:	27132.1	Winter As-	Built P	oints:					2	7371.0
Total Winter Points	X System = Multiplier	Heating Points	Total Component	X Cap Ratio	Mul	Ouct X Itiplier SM x AHU)	Multiplier		Credit Multiplie	= r	Heating Points
27132.1	0.6274	17022.7	27371.0 27371.0	1.000 1.00		1.169 x 0.9 162	3) 0.501 0.501		1.000 1.000		15951.9 5951.9

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 83.4

The higher the score, the more efficient the home.

Lamar & LeeAnn Hires, Lot: 25, Sub: Southpoint, Plat: , Lake City, FL, 32024-

	New construction or existing	New	12.	Cooling systems		
1.	New construction or existing Single family or multi-family	Single family	_	Central Unit	Cap: 54.0 kBtu/hr	_
2.	Number of units, if multi-family	1	= 570		SEER: 10.00	
3.	Number of Bedrooms	3	b.	N/A		_
4.	Is this a worst case?	Yes	-			
5. 6.	Conditioned floor area (ft²)	2980 ft²	С.	N/A		_
7.	Glass area & type	(=				-
	. Clear - single pane	0.0 ft²	13.	Heating systems		
	c. Clear - single pane	469.5 ft ²		Electric Heat Pump	Cap: 54.0 kBtu/hr	_
	:. Tint/other SHGC - single pane	0.0 ft ²	- 000	•	HSPF: 6.80	-
	1. Tint/other SHGC - double pane	0.0 ft ²	_ _	. N/A		_
		0.0 A	-	1,5000		
	Floor types a. Slab-On-Grade Edge Insulation	R=0.0, 323.0(p) ft _	- с	. N/A		
		K 0.0, 323,0(p) K _		200		_
	o. N/A	-	- 14	Hot water systems		
	o. N/A			. LP Gas	Cap: 40.0 gallons	
9.		R=13.0, 2852.0 ft ²	_		EF: 0.66	
	a. Frame, Wood, Exterior b. Frame, Wood, Adjacent	R=13.0, 216.0 ft ²	_ 	. LP Gas	Cap: 40.0 gallons	_
		K 15.0, 210.0 II	_	17	EF: 0.66	1
	c. N/A	-	_ c	. Conservation credits		_
	d. N/A	=	_	(HR-Heat recovery, Solar		
	e. N/A			DHP-Dedicated heat pump)		
	Ceiling types	R=30.0, 2980.0 ft ²	15	HVAC credits		10.7
	a. Under Attic	K-30.0, 2360.0 It	_ 15.	(CF-Ceiling fan, CV-Cross ventilation,		
	b. N/A	-	_	HF-Whole house fan,		
	c. N/A			PT-Programmable Thermostat,		
	. Ducts	Sup. R=6.0, 168.0 ft	-	RB-Attic radiant barrier,		
	a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R-0.0, 108.0 II	_	MZ-C-Multizone cooling,		
	b. N/A			MZ-H-Multizone heating)		
				MZ-11-Multizone heating)		
I	certify that this home has complied wonstruction through the above energy	with the Florida Energy	Efficier	ncy Code For Building	THE STAD	
	this home before final inspection. O	thornica a new EDI T	Dienlay (ard will be completed		By
ın	inis nome before mai hispection. O	tures	rispiay (and this be completed	18/m2 1/1	121
ba	sed on installed Code compliant feat	tures.			3	
В	uilder Signature:	1	Date:		85	DA
٨	ddress of New Home		City/FL	Zip:	GOD WE TRUS	A STATE OF THE STA

*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 EnergyStd^M 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 v3.2)

STRUCTURAL TEST REPORT SUMMARY

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650

TYPE: Twin Aluminum Single Hung Window

Title of Test	Results
Overall Design Pressure	35.0 psf
Operating Force	18 lb max.
Air Infiltration	0.29 cfm/ft ²
Water Resistance	5.25 psf
Structural Test Pressure	70.5 psf

Reference should be made to Report No. 01-36060.02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Scott D. Kramer, Technician

SDK:nlb/baw

28 MARCH 2002

Architectural Testing

STRUCTURAL TEST REPORT

Rendered to:

MI HOME PRODUCTS, INC. 650 West Market Street P.O. Box 370 Gratz, Pennsylvania 17030-0370

Report No: 01-36060.02

Test Date:

11/04/99 03/26/02

Report Date: Expiration Date:

11/04/03

Project Summary: Architectural Testing, Inc. (ATI) was contracted to perform tests on a Series/Model 650, twin aluminum single hung window at MI Home Products' test facility in Elizabethville, Pennsylvania. Test specimen description and results are reported herein.

Test Specification The test specimen was evaluated in accordance with the following:

ASTM E 283-91, Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

ASTM E 330-97, Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference

ASTM E 547-96, Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential

Test Specimen Description:

Series/Model: 650

Type: Twin Aluminum Single Hung Window

Overall Size: 5' 10-1/4" wide by 5' 0" high

Active Size (2): 2' 8-3/4" wide by 2' 6-1/4" high

Fixed Daylight Opening Size (2): 2' 6- 1/4" wide by 2' 3" high

Screen Size (2): 2' 7-3/4" wide by 2' 4-1/4" high

130 Derry Court York, PA 17402-9405 phone: 717.764.7700 fax: 717.764.4129 www.archtest.com

allen M. Runs. 28 MARCH 2002

Test Specimen Description: (Continued)

Finish: All aluminum was painted white.

Glazing Details: Both the active sash and fixed lites utilized 5/8" thick insulating glass fabricated from two sheets of 3/32" thick clear annealed glass and a desiccant filled metal spacer system. The active sash were channel glazed with a flexible wedge gasket. The fixed lites were interior glazed, back bedded with single sided adhesive foam tape and held-in-place with PVC snap-in glazing beads.

Weatherstripping:

<u>Description</u>	Quantity	Location
0.270" backed by 0.190" high polypile with center fin	1 Row	Fixed meeting stile
3/8" high vinyl wrapped foam bulb	1 Row	Bottom rail
0.187" backed by 0.250" high polypile with center fin	2 Rows	Stiles
1/4" high polypile dust plug	2 Rows	Ends of bottom rail, top of each stile

Frame Construction: Frame was constructed of extruded aluminum members and all corners were coped, butted, sealed, and fastened with two screws per corner. The fixed meeting rail was attached to the jambs with a plastic clip and two screws per end.

Mullion Construction: The mullion was constructed of an extruded aluminum member. It was fastened to the head and sill with four screws per end. All screw heads were sealed as well as the butt joint at the sill.

Sash Construction: The sash were constructed of extruded aluminum members and all corners were coped, butted, and fastened with one screw per corner.

Screen Construction: The screen was constructed of rolled aluminum members, and corners were keyed. The screen mesh was held-in-place with a flexible spline.

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Test Specimen Description: (Continued)

Hardware:

<u>Description</u>	Quantity	Location
Plastic tilt latches	4	Ends of interior meeting rail
Metal pivot bars	4	Ends of the bottom rails
Metal sweep lock	2	Midspan of interior meeting rail
Metal keeper	2	Midspan of fixed meeting rail
Sash stops	4	One per jamb
Block and tackle balance system	4	One per jamb
Spring loaded latch pins	2	6" from ends of screen top rail

Drainage:

Description	Quantity	Location
Sloped sill		Sill
1/4" wide by 3/16" high weepslot	4	Ends of exterior vertical sill leg

Installation: The test unit was installed into the 2" x 8" nominal Spruce-Pine-Fir #2 wood test buck utilizing the integral nailing fin and 1" roofing nails. Five per top, bottom, and sides of the nail fin were evenly spaced. The nail fin was bedded in a silicone sealant.



Test Results

The results are tabulated as follows:

Results	Allowed
3-91	
$0.15 \mathrm{cfm/ft^2}$	0.30cfm/ft^2
0.29cfm/ft^2	0.30cfm/ft^2
47-96	
No leakage	No leakage
TM E 330-97	
ken on the meeting ra	nil)
	/
0.010"	0.24" max.
0.015"	0.24" max.
	3-91 0.15 cfm/ft ² 0.29 cfm/ft ² 647-96 No leakage TM E 330-97 ken on the meeting ra

Note: No end measurements were taken on the member measured. The measurements stated above include displacement as well as bending. Only permanent sets were recorded, not deflection measurements. This statement applies to all uniform load tests performed.

Uniform Load Structural per A	ASTM E 330-97	
(Measurements reported were	taken on the meeting	rail)
(load held for 10 seconds))
@ 70.5 psf (exterior)	0.060"	0.24" max
@ 70.5 psf (interior)	0.040"	0.24" max

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product which may only be granted by the certification program administrator.

For ARCHITECTURAL TESTING, INC:

Scott D. Kramer Technician

SDK:nlb/baw 01-36060.02 Allen N. Reeves, P.E.

Director - Engineering Services

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28 MARCH 2002



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COLUMBIA COUNTY, FLORIDA

epartment 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 17-4S-16-03051-125 Building permit No. 000022210

Use Classification SFD, UTILITY Fire: 28.35

Permit Holder THOMPSON CONSTRUCTION

Owner of Building LAMAR & LEANN HIRES

Waste: 61.25

Total: 89.60

Location: 1000 SW LEGION DRIVE(SOUTH POINTE, LOT 25)

Date: 04/13/2005

Building Inspector

POST IN A CONSPICUOUS PLACE (Business Places Only)

22210

KEEN ENGINEERING & SURVEYING, INC. 9263 COUNTY ROAD 417 LIVE OAK, FLORIDA 32060 386/362-4787

September 14, 2004

Columbia County Building Department 135 NE Hernando Avenue Lake City, FL 32055

RE: LAMAR & LEE ANN HIRES RESIDENCE

I have inspected the Lamar & Lee Ann Hires foundation on Lot 25 of South Pointe Subdivision in Columbia County on September 13, 2004. The finish floor elevation of the living area of the home is approximately 16 inches above the highest adjacent grade in the front (paved road side) and approximately 32 inches above the highest adjacent grade in the back. The garage floor elevation will be 10-12 inches above adjacent grade.

THE FLOOR LEVEL OF THE RESIDENCE WILL NOT FLOOD.

If additional information is required, please advise.

Curtis E. Keen, PE #23836

EB #3761

Notice of Treatment				
Applicator Florida Pest Control & Chemical Co.				
Address 536 SE BASIA AUC				
City 4. C. Phone 752-1723				
Site Location Subdivision Douthparate				
Lot#_25 Block# Permit#_22210				
Address 1000 Cegion DRIVE				
AREAS TREATED				
Print Technician's				
Area Treated Date Time Gal. Name				
Main Body				
Patio/s #				
Stoop/s #				
Porch/s # 1 9-16-04 920 20 Gunny F254				
Brick Veneer				
Extension Walls				
A/C Pad				
Walk/s #				
Exterior of Foundation				
Driveway Apron				
Out Building				
Tub Trap/s				
CARAGE 9-16-04 8920 60 Gunny #254				
Name of Product Applied Durs Bur To				
Remarks				
EXPERIM NOT FOR SHALL				

Notice of Treatment				
Applicator Florida Pest Control & Chemical Co. ////				
Address				
City Lake City Phone 752-1703				
Site Location Subdivision South pointe				
Lot#_ 3.5_ Block#Permit#_ 22210				
Address 1000 Legion Drive Lel.				
AREAS TREATED				
Print Technician's				
Area Treated Date Time Gal. Name				
Main Body 09/13/04 1300 443 Gunny 5254				
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 Duckhan TC				
Tiending Exterior no. Tienshed				