Columbia County Building Permit Application

444.14 Revised 9-23-04

For Office Use Only Application # 0606-60 Date Received 6-19-06 By CH Permit # 1158/24779

Application Approved by - Zoning Official BAK Date 23.06.06 Plans Examiner OKJTH Date 6-21-06

Flood Zone Xpwt Plat Development Permit N/A Zoning RSF/MH-2 Land Use Plan Map Category Res. Low Dev.

Comments ~~[illegible]~~ / NOC

Applicants Name SUSAN FAIR Phone 752-1711

Address 180 NW AMENITY CT. LAKE CITY, FL. 32055

Owners Name CORNERSTONE DEVELOPERS Phone 752-1711

911 Address 174 NW KATELYN WAY LAKE CITY, FL 32055

Contractors Name BRYAN ZECHER Phone 752-8653

Address PO BOX 815 LAKE CITY, FL. 32056

Fee Simple Owner Name & Address NA

Bonding Co. Name & Address NA

Architect/Engineer Name & Address MARK DISOSWAY PO BOX 868 LAKE CITY FL 32056

Mortgage Lenders Name & Address NA

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy

Property ID Number 28-3S-16-02377-101 Estimated Cost of Construction $ 90,000.00

Subdivision Name MAGNOLIA HILLS Lot 1 Block ____ Unit ____ Phase ____

Driving Directions TAKE 90 TO BROWN RD. TURN RIGHT. GO 1/4 MILE AND TURN RIGHT ON NW ETHAN PLACE. 1ST LOT ON RIGHT.
"SEE ATTACHED"

Type of Construction FRAME + HARDI-SID Number of Existing Dwellings on Property 0

Total Acreage 30 acre Lot Size 1/2 acre Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 31' L. Side 12' R. Side 31' Rear 123'

Total Building Height 18' 9" Number of Stories 1 Heated Floor Area 1500 SQ FT Roof Pitch 6/12

Porch 44 GARAGE 430 TOTAL 1974

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction. CE# 2580

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)

Contractor Signature

Contractors License Number CBC054575

Competency Card Number

NOTARY STAMP/SEAL

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me this 19TH day of JUNE 2006.

Personally known ✓ or Produced Identification ____

Notary Signature

LEIGH ANN CANNON
Notary Public - State of Florida
My Commission Expires Dec 16, 2006
Commission # DD172314
Bonded By National Notary Assn.

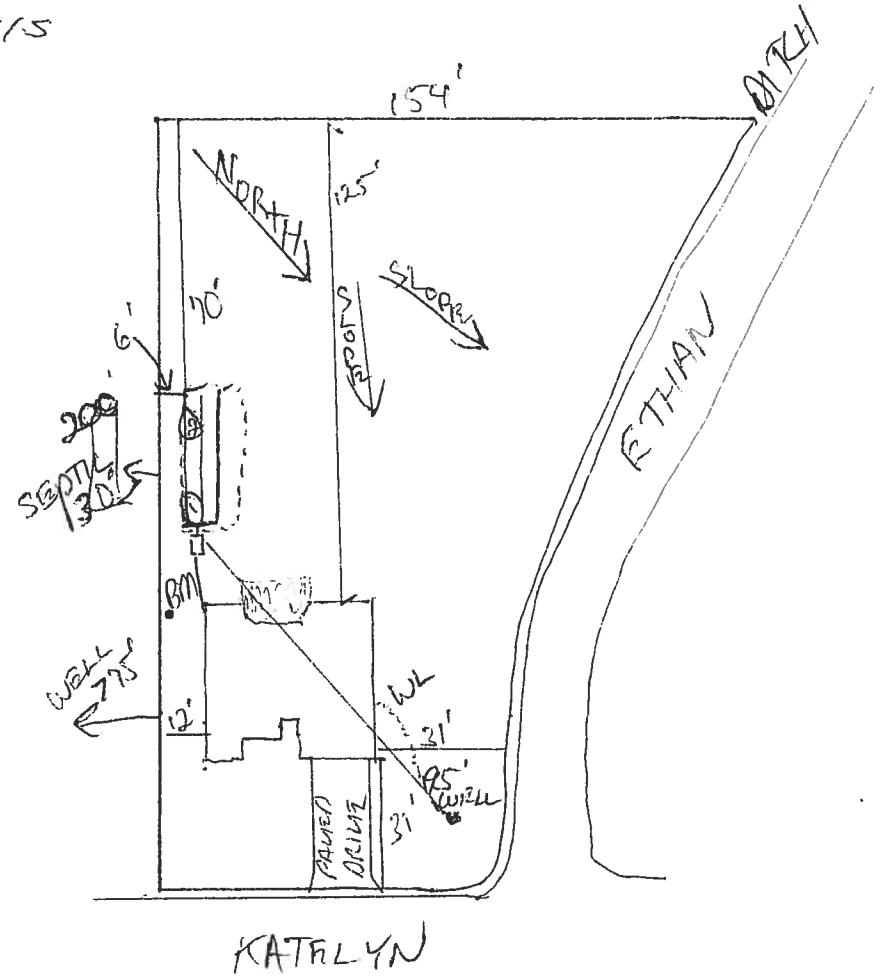
STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 06-0632N

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

Scale: 1 inch = 50 feet.

Cornerstone Dev LLC
Chris
Lot 1, Magnolia Hills



Notes: _____

Site Plan submitted by: Rock D 7-0

MASTER CONTRACTOR

Plan Approved ✓ Not Approved _____ Date 7/17/06

By _____ Columbia County Health Department

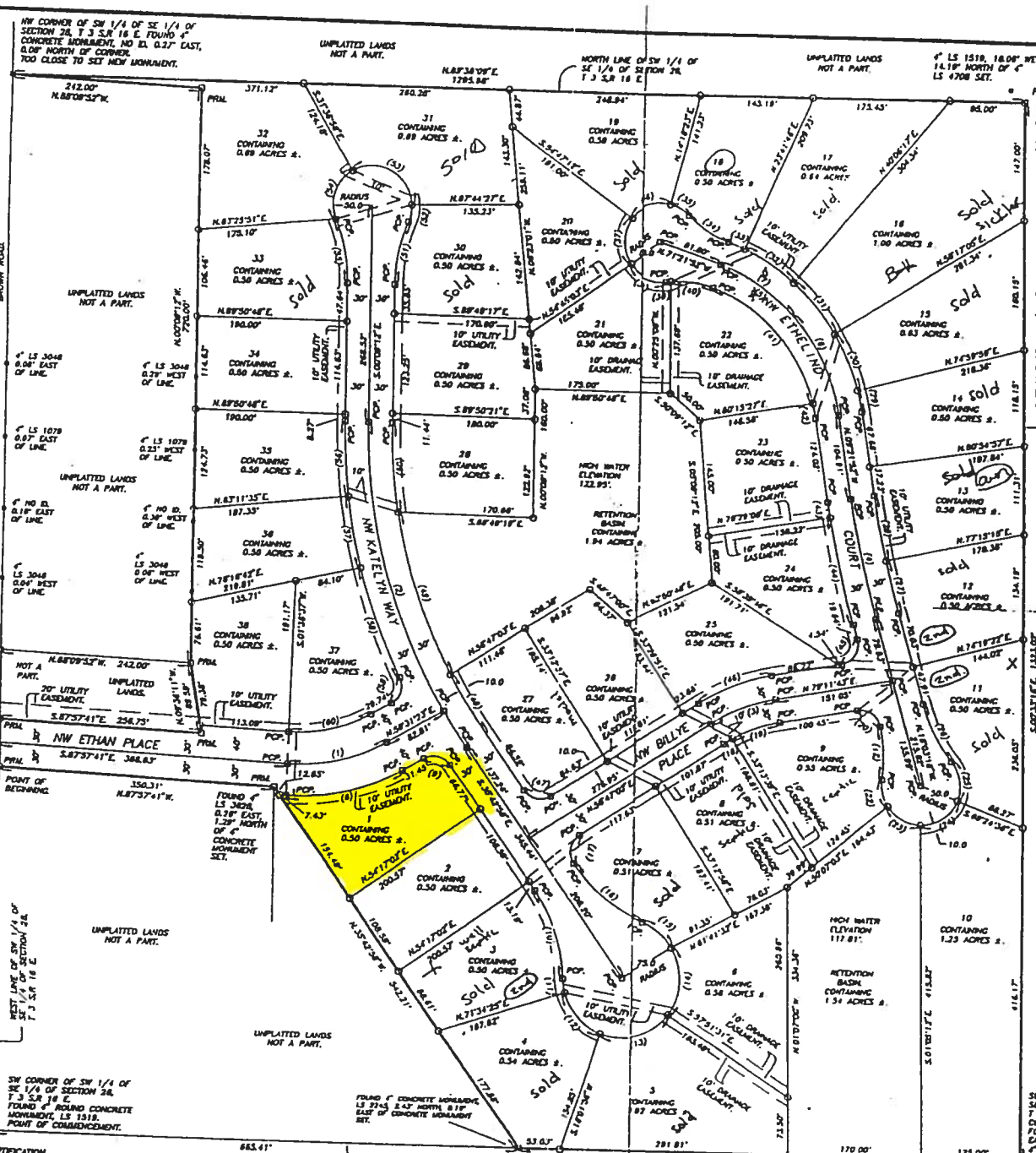
ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

PLAT BOOK 6 PAGE 190

SHEET 2 OF 2.

"MAGNOLIA HILLS"

IN THE SW 1/4 OF THE SE 1/4 OF SECTION 28, TOWNSHIP 3 SOUTH, RANGE 16 EAST. COLUMBIA COUNTY, FLORIDA.



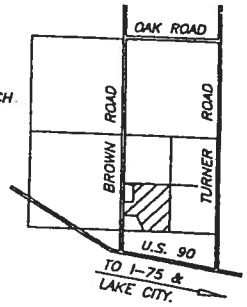
GRAPHIC SCALE

SCALE 1" = 100'

N

DESCRIPTION:
A PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 28, TOWNSHIP 3 SOUTH, RANGE 16 EAST, MORE PARTICULARLY DESCRIBED AS FOLLOWS; COMMENCE AT THE SOUTHWEST CORNER OF THE SW 1/4 OF SAID SE 1/4 AND RUN N.0°09'12"W., ALONG THE WEST LINE THEREOF, SAID LINE ALSO BEING THE EAST RIGHT-OF-WAY LINE OF BROWN ROAD, A DISTANCE OF 457.86 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N.0°09'12"W., STILL ALONG SAID WEST LINE, 50.04 FEET; THENCE S.87°57'41"E., 256.75 FEET; THENCE N.9°38'11"W., 89.59 FEET; THENCE N.0°09'12"W., PARALLEL TO SAID WEST LINE, 720.00 FEET; THENCE N.88°09'52"W., 242.00 FEET TO THE NORTHWEST CORNER OF THE SW 1/4 OF SAID SE 1/4; THENCE N.89°38'09"E., ALONG THE NORTH LINE THEREOF, 1295.98 FEET TO THE NORTHEAST CORNER OF THE SW 1/4 OF SAID SE 1/4; THENCE S.0°33'16"E., ALONG THE EAST LINE THEREOF, 1323.02 FEET TO THE SOUTHEAST CORNER OF THE SW 1/4 OF SAID SE 1/4; THENCE S.89°33'18"W., ALONG THE SOUTH LINE THEREOF, 639.84 FEET TO A POINT LYING 665.41 FEET EAST OF THE SOUTHWEST CORNER OF SAID SE 1/4; THENCE N.35°42'58"W., 542.21 FEET; THENCE N.87°57'41"W., 350.31 FEET TO THE POINT OF BEGINNING. COLUMBIA COUNTY, FLORIDA. CONTAINING 28.81 ACRES, MORE OR LESS.

LOCATION SKETCH
NOT TO SCALE
SECTION 28,
T 3 S,R 16 E.



SURVEYOR CERTIFICATION
I HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION AND IS A CORRECT REPRESENTATION OF THE LAND SURVEYED AND THAT THE PERMANENT REFERENCE POINTS HAVE BEEN SET AND THAT SURVEY DATA AND MONUMENTATION COMPLIES WITH COLUMBIA COUNTY SUBDIVISION ORDINANCE AND CHAPTER 177 THE FLORIDA STATUTES.

DATED OCTOBER 20 1997, A.D.

MARK D. DUREN, P.S.M.
FLORIDA CERT. NO. 4708

ENGINEERS CERTIFICATION
I HEREBY CERTIFY THAT ANY PROPOSED DRAINAGE SYSTEM WILL BE DESIGNED ACCORDING TO THE REQUIREMENTS OF THE COLUMBIA COUNTY SUBDIVISION ORDINANCE NO. 78-7.

DATED OCTOBER 1997, A.D.

JAMES H. PITMAN JR.
FLORIDA CERT. NO. 43033

NOTE:
HIGH WATER ELEVATIONS SET BY JAMES H. PITMAN JR. PE. NO. 43033.
ELEVATIONS BASED ON NGVD 29 DATUM.

MARK D. DUREN, P.S.M.
LS 4708
RT. 18 BOX 555
SISTERS WELCOME ROAD
LAKE CITY, FLA. 32025
(904) 758-9831 OFFICE
(904) 758-8010 FAX

WO# 140-04-96F

Prepared by and return to:

Home Town Title of North Florida
2744 US Highway 90 West
Lake City, FL 32055
386-754-7175
File Number: **2005-2188**

Inst:2006003506 Date:02/13/2006 Time:16:16
Doc Stamp-Deed : 3276.00
DC,P.DeWitt Cason,Columbia County B:1073 P:2551

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **9th** day of **February, 2006** between **James Lambert Hair, II, a married person not residing on subject property** whose post office address is **314 North Marion Avenue, Lake City, FL 32055**, grantor, and **Cornerstone Developers, LLC, a Florida Limited Liability Company** whose post office address is **180 NW Amenity Court, Lake City, FL 32055**, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Columbia County, Florida** to-wit:

Lots 1, 2, 6, 9, 10, 20, 22, 23, 24, 25, 26, 28, 29, 33, 35, 36, 37 and 38 of MAGNOLIA HILLS, according to the plat thereof as recorded in Plat Book 6, Page 189, public records of Columbia County, Florida.

Parcel Identification Number: R023777-101,102,106,109,120,110,122

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2005.**

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: BARBARA A. FRADDOSIO

Witness Name: DAWNA W. LANG

(Seal)
James Lambert Hair, II

State of Florida
County of Columbia

The foregoing instrument was acknowledged before me this 9th day of February, 2006 by James Lambert Hair, II, who [_] is personally known or [X] has produced a driver's license as identification.

[Notary Seal]

Notary Public

Printed Name: DAWNA W. LANG

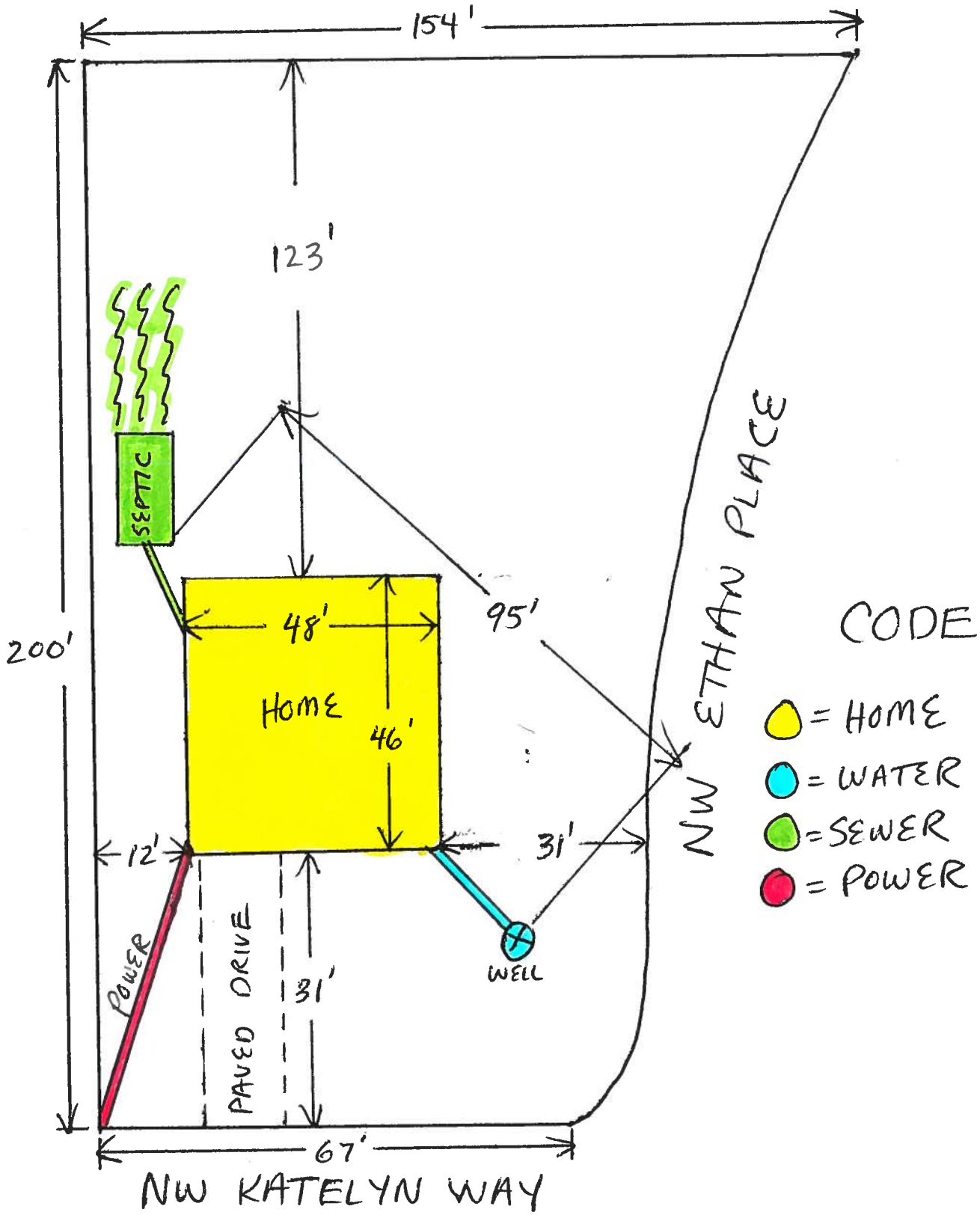
My Commission Expires:

DAWNA W. LANG
MY COMMISSION # DD 154936
EXPIRES: October 3, 2006
Bonded Thru Notary Public Underwriters

DAWNA W. LANG
MY COMMISSION # DD 154936
EXPIRES: October 3, 2006
Bonded Thru Notary Public Underwriters

Inst:2006003506 Date:02/13/2006 Time:16:16
Doc Stamp-Deed : 3276.00
DC,P.DeWitt Cason,Columbia County B:1073 P:2552

MAGNOLIA HILLS
COLUMBIA COUNTY, FL.
LOT 1 SITE PLAN



HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-6" WELLS

DONALD AND MARY HALL
OWNERS

PHONE (904) 752-1854
FAX (904) 755-7022
~~XXXNORTH FIRST STREETXXX~~
LAKE CITY, FLORIDA 32055
904 NW Main Blvd.

June 12, 2002

NOTICE TO ALL CONTRACTORS

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

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

Thank you,

Donald D. Hall
DDH/jk

FORM 600A-2004 EnergyGauge® 4.1

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	606024TheSamuelModel	Builder:	Bryan Zecher Construction
Address:	Lot: 1, Sub: Magnolia Hills, Plat:	Permitting Office:	Columbia
City, State	LAKE CITY/~~Starke,~~ FL	Permit Number:	24779
Owner:	Model Home	Jurisdiction Number:	221000
Climate Zone:	North		

1. New construction or existing	New	
2. Single family or multi-family	Single family	
3. Number of units, if multi-family	1	
4. Number of Bedrooms	3	
5. Is this a worst case?	Yes	
6. Conditioned floor area (ft²)	1500 ft²	
7. Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)		
a. U-factor: (or Single or Double DEFAULT)	7a. Description Area (Dble Default) 186.0 ft²	
b. SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 186.0 ft²	
8. Floor types		
a. Slab-On-Grade Edge Insulation	R=0.0, 192.0(p) ft	
b. N/A		
c. N/A		
9. Wall types		
a. Frame, Wood, Adjacent	R=13.0, 183.0 ft²	
b. Frame, Wood, Exterior	R=13.0, 1108.0 ft²	
c. N/A		
d. N/A		
e. N/A		
10. Ceiling types		
a. Under Attic	R=30.0, 1558.0 ft²	
b. N/A		
c. N/A		
11. Ducts		
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 150.0 ft	
b. N/A		

12. Cooling systems		
a. Central Unit	Cap: 33.0 kBtu/hr	
	SEER: 11.00	
b. N/A		
c. N/A		
13. Heating systems		
a. Electric Heat Pump	Cap: 33.0 kBtu/hr	
	HSPF: 7.30	
b. N/A		
c. N/A		
14. Hot water systems		
a. Electric Resistance	Cap: 40.0 gallons	
	EF: 0.93	
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)		

Glass/Floor Area: 0.12

Total as-built points: 23429
Total base points: 23666

PASS

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

PREPARED BY: [signature]

DATE: 6-5-06

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: [signature]

DATE: 6-19-06

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.

GREAT SEAL OF THE STATE OF FLORIDA — IN GOD WE TRUST

BUILDING OFFICIAL: _____

DATE: _____

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 1, Sub: Magnolia Hills, Plat: , Starke, FL,** PERMIT #:

BASE

GLASS TYPES

.18 X	Conditioned Floor Area	X BSPM	= Points
.18	1500.0	20.04	5410.8

AS-BUILT

Type/SC	Overhang Ornt	Len	Hgt	Area	X SPM	X SOF	= Points
Double, Clear	SE	2.0	5.5	45.0	42.75	0.77	1488.9
Double, Clear	S	6.5	5.5	15.0	35.87	0.49	266.1
Double, Clear	SE	12.0	5.3	45.0	42.75	0.39	759.0
Double, Clear	E	8.5	7.0	10.0	42.06	0.47	196.6
Double, Clear	SW	2.0	1.5	3.0	40.16	0.44	53.0
Double, Clear	NW	9.5	7.5	6.0	25.97	0.60	93.2
Double, Clear	NW	2.0	5.5	30.0	25.97	0.86	666.7
Double, Clear	NW	2.0	8.0	30.0	25.97	0.93	721.1
Double, Clear	NE	1.5	1.5	2.0	29.56	0.59	34.6
As-Built Total:				**186.0**			**4279.2**

WALL TYPES	Area	X BSPM	= Points
Adjacent	183.0	0.70	128.1
Exterior	1108.0	1.70	1883.6
Base Total:	**1291.0**		**2011.7**

Type	R-Value	Area	X SPM	= Points
Frame, Wood, Adjacent	13.0	183.0	0.60	109.8
Frame, Wood, Exterior	13.0	1108.0	1.50	1662.0
As-Built Total:		**1291.0**		**1771.8**

DOOR TYPES	Area	X BSPM	= Points
Adjacent	20.0	1.60	32.0
Exterior	40.0	4.10	164.0
Base Total:	**60.0**		**196.0**

Type	Area	X SPM	= Points
Exterior Insulated	20.0	4.10	82.0
Exterior Insulated	20.0	4.10	82.0
Adjacent Insulated	20.0	1.60	32.0
As-Built Total:	**60.0**		**196.0**

CEILING TYPES	Area	X BSPM	= Points
Under Attic	1500.0	1.73	2595.0
Base Total:	**1500.0**		**2595.0**

Type	R-Value	Area	X SPM X SCM	= Points
Under Attic	30.0	1558.0	1.73 X 1.00	2695.3
As-Built Total:		**1558.0**		**2695.3**

FLOOR TYPES	Area	X BSPM	= Points
Slab	192.0(p)	-37.0	-7104.0
Raised	0.0	0.00	0.0
Base Total:			**-7104.0**

Type	R-Value	Area	X SPM	= Points
Slab-On-Grade Edge Insulation	0.0	192.0(p	-41.20	-7910.4
As-Built Total:		**192.0**		**-7910.4**

INFILTRATION	Area	X BSPM	= Points
	1500.0	10.21	15315.0

	Area	X SPM	= Points
	1500.0	10.21	15315.0

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 1, Sub: Magnolia Hills, Plat: , Starke, FL,** PERMIT #:

BASE				AS-BUILT						
Summer Base Points: 18424.5				**Summer As-Built Points:**						**16346.9**
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	=	Cooling Points
				(sys 1: Central Unit 33000 btuh ,SEER/EFF(11.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)						
				16347	1.00	(1.09 x 1.147 x 1.00)	0.310	1.000		6341.2
18424.5	**0.4266**		**7859.9**	**16346.9**	**1.00**	**1.250**	**0.310**	**1.000**		**6341.2**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 1, Sub: Magnolia Hills, Plat: , Starke, FL,** PERMIT #:

BASE

GLASS TYPES .18 X Conditioned Floor Area	X BWPM	= Points
.18 1500.0	12.74	3439.8

WALL TYPES	Area X	BWPM =	Points
Adjacent	183.0	3.60	658.8
Exterior	1108.0	3.70	4099.6
Base Total:	**1291.0**		**4758.4**

DOOR TYPES	Area X	BWPM =	Points
Adjacent	20.0	8.00	160.0
Exterior	40.0	8.40	336.0
Base Total:	**60.0**		**496.0**

CEILING TYPES	Area X	BWPM =	Points
Under Attic	1500.0	2.05	3075.0
Base Total:	**1500.0**		**3075.0**

FLOOR TYPES	Area X	BWPM =	Points
Slab	192.0(p)	8.9	1708.8
Raised	0.0	0.00	0.0
Base Total:			**1708.8**

INFILTRATION	Area X	BWPM =	Points
	1500.0	-0.59	-885.0

AS-BUILT

Type/SC	Overhang Ornt	Len	Hgt	Area X	WPM X	WOF =	Points
Double, Clear	SE	2.0	5.5	45.0	14.71	1.21	798.3
Double, Clear	S	6.5	5.5	15.0	13.30	3.03	603.9
Double, Clear	SE	12.0	5.3	45.0	14.71	2.54	1682.8
Double, Clear	E	8.5	7.0	10.0	18.79	1.34	252.1
Double, Clear	SW	2.0	1.5	3.0	16.74	1.76	88.2
Double, Clear	NW	9.5	7.5	6.0	24.30	1.03	149.9
Double, Clear	NW	2.0	5.5	30.0	24.30	1.01	734.7
Double, Clear	NW	2.0	8.0	30.0	24.30	1.00	731.2
Double, Clear	NE	1.5	1.5	2.0	23.57	1.04	49.2
As-Built Total:				**186.0**			**5090.4**

Type	R-Value	Area X	WPM =	Points
Frame, Wood, Adjacent	13.0	183.0	3.30	603.9
Frame, Wood, Exterior	13.0	1108.0	3.40	3767.2
As-Built Total:		**1291.0**		**4371.1**

Type	Area X	WPM =	Points
Exterior Insulated	20.0	8.40	168.0
Exterior Insulated	20.0	8.40	168.0
Adjacent Insulated	20.0	8.00	160.0
As-Built Total:	**60.0**		**496.0**

Type	R-Value	Area X	WPM X WCM =	Points
Under Attic	30.0	1558.0	2.05 X 1.00	3193.9
As-Built Total:		**1558.0**		**3193.9**

Type	R-Value	Area X	WPM =	Points
Slab-On-Grade Edge Insulation	0.0	192.0(p	18.80	3609.6
As-Built Total:		**192.0**		**3609.6**

Area X	WPM =	Points
1500.0	-0.59	-885.0

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 1, Sub: Magnolia Hills, Plat: , Starke, FL,** PERMIT #:

BASE			AS-BUILT						
Winter Base Points:		**12593.0**	**Winter As-Built Points:**						**15876.0**
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
			(sys 1: Electric Heat Pump 33000 btuh ,EFF(7.3) Ducts:Unc(S),Unc(R),Gar(AH),R6.0						
			15876.0	1.000	(1.069 x 1.169 x 1.00)	0.467	1.000	9267.5	
12593.0	**0.6274**	**7900.8**	**15876.0**	**1.00**	**1.250**	**0.467**	**1.000**	**9267.5**	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 1, Sub: Magnolia Hills, Plat: , Starke, FL,** PERMIT #:

BASE				AS-BUILT							
WATER HEATING											
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	X Multiplier	X Credit Multiplier	= Total	
3		2635.00	7905.0	40.0	0.93	3	1.00	2606.67	1.00	7820.0	
				As-Built Total:						**7820.0**	

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points +	Heating Points +	Hot Water Points =	Total Points	Cooling Points +	Heating Points +	Hot Water Points =	Total Points
7860	**7901**	**7905**	**23666**	**6341**	**9268**	**7820**	**23429**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 1, Sub: Magnolia Hills, Plat: , Starke, 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	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 83.2

The higher the score, the more efficient the home.

Model Home, Lot: 1, Sub: Magnolia Hills, Plat: , Starke, FL,

1. New construction or existing	New	
2. Single family or multi-family	Single family	
3. Number of units, if multi-family	1	
4. Number of Bedrooms	3	
5. Is this a worst case?	Yes	
6. Conditioned floor area (ft²)	1500 ft²	
7. Glass type [1] and area: (Label reqd. by 13-104.4.5 if not default)		
a. U-factor: (or Single or Double DEFAULT)	7a. Description Area (Dble Default) 186.0 ft²	
b. SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 186.0 ft²	
8. Floor types		
a. Slab-On-Grade Edge Insulation	R=0.0, 192.0(p) ft	
b. N/A		
c. N/A		
9. Wall types		
a. Frame, Wood, Adjacent	R=13.0, 183.0 ft²	
b. Frame, Wood, Exterior	R=13.0, 1108.0 ft²	
c. N/A		
d. N/A		
e. N/A		
10. Ceiling types		
a. Under Attic	R=30.0, 1558.0 ft²	
b. N/A		
c. N/A		
11. Ducts		
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 150.0 ft	
b. N/A		
12. Cooling systems		
a. Central Unit	Cap: 33.0 kBtu/hr	
	SEER: 11.00	
b. N/A		
c. N/A		
13. Heating systems		
a. Electric Heat Pump	Cap: 33.0 kBtu/hr	
	HSPF: 7.30	
b. N/A		
c. N/A		
14. Hot water systems		
a. Electric Resistance	Cap: 40.0 gallons	
	EF: 0.93	
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)		

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: Chuck. Cx Date: 6-19-06

Address of New Home: 174 NW KATELYN WAY City/FL Zip: LAKE CITY, FL. 32055

**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 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.*

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

Columbia County Building Department
Culvert Permit

Culvert Permit No.
000001159

DATE 07/24/2006 PARCEL ID # 28-3S-16-02377-101

APPLICANT SUSAN FAIR PHONE 386.752.1711

ADDRESS 180 NW AMENITY COURT LAKE CITY FL 32055

OWNER CORNERSTONE DEVELOPERS PHONE 386.752.1711

ADDRESS 174 NW KATELYN WAY LAKE CITY FL 32055

CONTRACTOR BRYAN ZECHER PHONE 386.752.8653

LOCATION OF PROPERTY 90-W TO BROWN RD,TR TO 1/4 MILE AND TURN R ON ETHAN PLACE, 1ST. LOT ON R.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT MAGNOLIA HILLS 1

SIGNATURE Susan Fair

INSTALLATION REQUIREMENTS

☐ Culvert size will be 18 inches in diameter with a total lenght of 32 feet, leaving 24 feet of driving surface. Both ends will be mitered 4 foot with a 4 : 1 slope and poured with a 4 inch thick reinforced concrete slab.

INSTALLATION NOTE: Turnouts will be required as follows:
a) a majority of the current and existing driveway turnouts are paved, or;
b) the driveway to be served will be paved or formed with concrete.
Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.

☐ Culvert installation shall conform to the approved site plan standards.

☐ Department of Transportation Permit installation approved standards.

☒ Other WAIVER REQUEST FOR 18"X24' MITERED CULVERTS IN S.D.

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

24779

NOTICE OF COMMENCEMENT FOR
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.

Tax Parcel ID Number 28-3S-16-02377-101

1. Description of property: (legal description of the property and street address or 911 address)
Lot 1, Magnolia Hills
174 NW Katelyn way
Lake City, Fl 32055

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
By: Sharon Teagle
Deputy Clerk
Date 06-20-06

2. General description of improvement: New Home

3. Owner Name & Address Cornerstone Developers, LLC, 180 N.W. Amenity Ct, Lake City, Fl 32055 Interest in Property Fee Simple

4. Name & Address of Fee Simple Owner (if other than owner):

5. Contractor Name Bryan Zechel Construction Phone Number 386-752-8653
Address P.O. Box 815 Lake City, Fl. 32056

6. Surety Holders Name N/A Phone Number
Address
Amount of Bond N/A

7. Lender Name N/A
Address

nst:2006014778 Date:06/20/2006 Time:13:04
DC,P.DeWitt Cason,Columbia County B:1087 P:715

8. Persons within the State of Florida designated by the
served as provided by section 718.13 (1)(a) 7; Florida St
Name N/A Phone Number
Address

9. In addition to himself/herself the owner designates N/A of
to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) – (a) 7. Phone Number of the designee N/A

10. Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording. (Unless a different date is specified) N/A

NOTICE AS PER CHAPTER 713, Florida Statutes:
The owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.

Sworn to (or affirmed) and subscribed before day of June 19, 2006

Signature of Owner

SUSAN ANN FAIR
MY COMMISSION # DD 342945
EXPIRES: August 14, 2008
Bonded Thru Notary Public Underwriters

NOTARY STAMP/SEAL

Susan Ann Fair
Signature of Notary

24779

UNIVERSAL
ENGINEERING SCIENCES
Consultants In: Geotechnical Engineering • Environmental Sciences • Construction Materials Testing
4475 S.W. 35th Terrace • Gainesville, Florida 32608 • (352) 372-3392

REPORT ON IN-PLACE DENSITY TESTS

CLIENT: Cornerstone Development

PROJECT: Magnolia Hills Lot 1
174 NW Katlyn Way Columbia Co.

AREA TESTED: Fill & prop. Bldg. Foundation

COURSE: Fill DEPTH OF TEST: 0-1'

TYPE OF TEST: D-2922 DATE TESTED: 1-19-07

NOTE: The below tests DO ~~DO NOT~~ meet the minimum 95 % compaction requirements of maximum density.

REMARKS:

LOCATION OF TESTS	DRY DEN.	MAX. DEN.	% MAX. DEN.	% MOIST.	OPT. MOIST.
		112.0			12.0
App. cntr of NE. corner of ext.					
Foundation	107.0		95.5	11.0	
App cntr of West Int. Foundation	107.2		95.7	10.6	
App cntr of North ext. Foundation	106.5		95.1	9.7	

TECH. SC

4404

PROJECT: Magnolia Hills lot 1
Columbia County

DATE: 1-18-07

W.O. NUMBER:

WEATHER:

CLIENT: Cornerstone Development

ON SITE TIME: 1.0 hr.

FIELD CONTACT:

TRAVEL TIME:

SCOPE OF FIELD WORK:

RECORD OF FIELD OBSERVATIONS AND TESTS: On 1-15-07 a Rep. of U.E.S. visited the above ref. project to inspect the undercut of the SIC material + prop. Bldg. Pad on lot 1 of Magnolia Hills. The undercut area was probed and found to be stable and in a non-yielding condition. A total of 3' of unsuitable clayey material was removed and hauled off site. The undercut was B/F with a clean fill material hauled in from off site.

TECHNICIAN: SC

COPIES TO:

FIELD REPORT RECORD

UNIVERSAL ENGINEERING SCIENCES
Consulting Geotechnical Engineers

UNIVERSAL
ENGINEERING SCIENCES
Consultants In: Geotechnical Engineering • Environmental Sciences • Construction Materials Testing
4475 S.W. 35th Terrace • Gainesville, Florida 32608 • (352) 372-3392

REPORT ON IN-PLACE DENSITY TESTS

Permit # 0000 24779

CLIENT: Cornerstone Dev.

PROJECT: Magnolia Hills Lot #1
174 NW Katelyn Way Lake City Fl. 32055. (Columbia Cty)

AREA TESTED: Fill & Prop Bldg Pad.

COURSE: F/G

DEPTH OF TEST: 0-1'

TYPE OF TEST: ASTM D-2922.

DATE TESTED: 1-15-07

NOTE: The below tests DO/~~DO NOT~~ meet the minimum 95 % compaction requirements of maximum density.

REMARKS:

LOCATION OF TESTS	DRY DEN.	MAX. DEN.	% MAX. DEN.	% MOIST.	OPT. MOIST.
		112.0			12.0
Approx center of N ~~side~~ 1/2 of prop			98.6	6.1	
Pad.	110.4				
Approx C of Pad.	108.4		96.8	7.0	
Approx C of west ~~side~~ 1/2 of Prop					
Bldg Pad	109.0		97.3	6.7	

TECH. JF/TG.

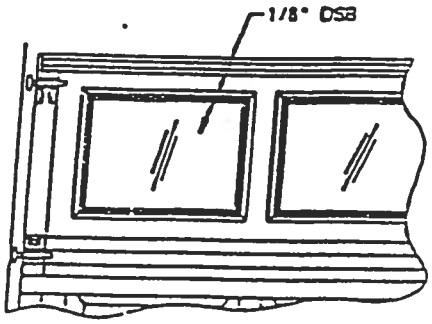
4404

GARAGE DOORS

REVISIONS			
LETTER	DESCRIPTION	DATE	
A	REV PER CN 10130	3/06/98	
B	REV PER CN 10141	3/13/98	
C	REV PER CN 10152	3/18/98	

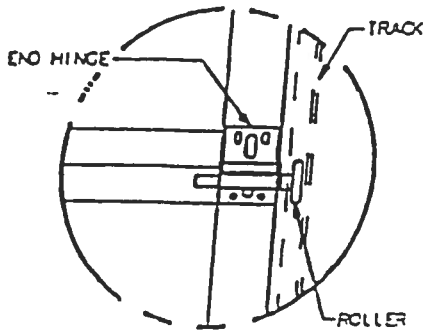
RUCTED WITH 5 OR MORE SECTIONS MUST BE
E STRUTS FOR THE ADDITIONAL INTERMEDIATE
ON THE THIRD SECTION.
.. SECTIONS LESS THAN 20.812" MUST BE
THE ACTUAL SECTION HEIGHT & 20.812".
1 X 5/8" LONG TYPE AB HEX HEAD METAL SCREW
4 WIND WARNINGS ISSUED.

2.



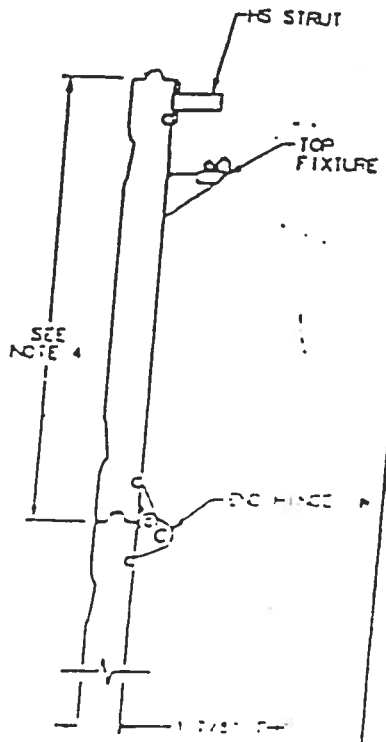
OPTIONAL WINDOW DETAIL

SCALE: 3/32



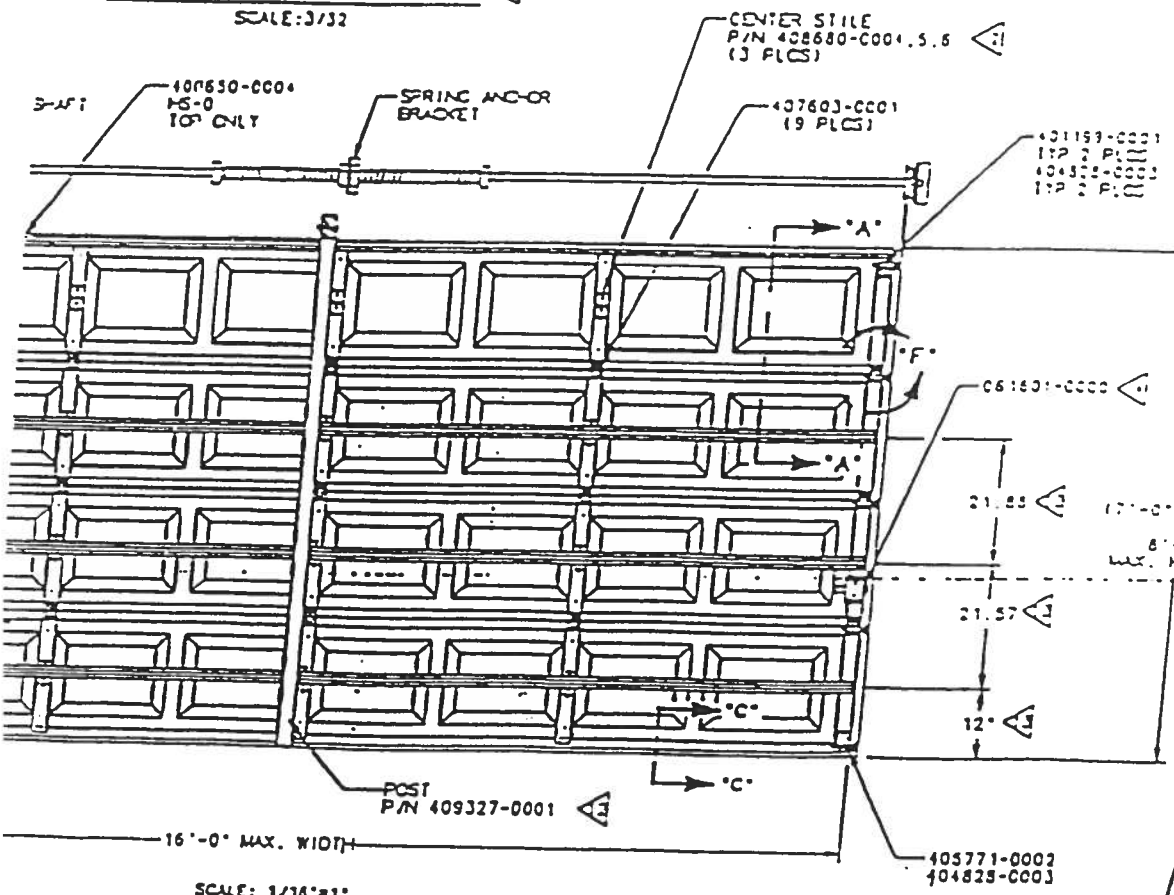
DETAIL "F"

SCALE: 1/4
(16" WIDE)



SECTION "A-A"

SCALE 1:4



DESIGN LOAD
25 PSF =
TEST LOAD
37.5 PSF =

17'-0" SCAN
8'-0"
MAX. HEIGHT

SCALE: 1/16"=1'

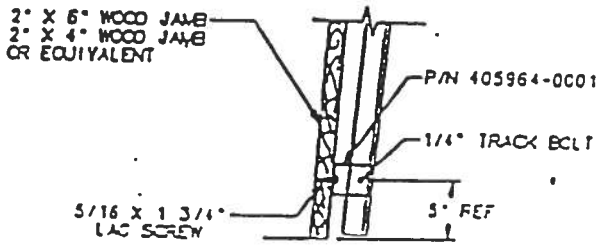
INTERIOR ELEVATION

10/01/01

M. TOLNIS	01/13/98	SERIES 280 & 180 RESI STL DR. 16'-0" MAX WIDTH, WINDLOAD	
N/A	DAVID FAX	02/19/98	D- 409335
NONE / EACH	DAVID FAX	02/19/98	

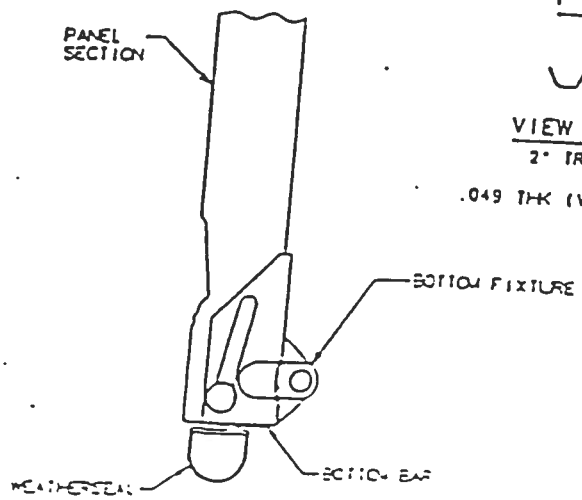
NOTES:

1. TESTED IN ACCORDANCE WITH STANDARD BUILDING CODE, CHAPTER 17, TO A POSITIVE AND NEGATIVE 37.5 PSF.
2. DASH NUMBERS REPRESENT VARIOUS SECTION HEIGHTS.
3. FOUR SECTION 7' HIGH DOOR SHOWN. 8' HIGH DOORS HAVE FIVE SECTIONS.
4. SECTION HEIGHT OF 20.812, 19.00 & 16.75 ARE AVAILABLE AND MAY BE USED IN COMBINATION TO ACHIEVE VARIOUS HEIGHT DOORS.
5. EMBOSSMENT PATTERN OF 14.50 X 20.375 SHOWN. ALTERNATE PATTERNS OF 12.50 X 43.375 AND 12.50 X 20.375 MAY BE USED.
6. TORSION SPRINGS SHOWN. EXTENSION SPRINGS AVAILABLE.
7. USE THIS BRACKET, REF. P/N 405964-0002, ON 8' HIGH DOORS ONLY.
8. WINDOW MAY BE INSTALLED IN THE TOP SECTION OR THE SECTION IMMEDIATELY BELOW THE TOP SECTION.
9. THE STRUT PLACEMENT ON [illegible] CONSISTENT WITH THE DOOR SECTIONS ARE TO BE PLACE[illegible]
10. THE STRUT PLACEMENT DIME[illegible] REDUCED BY THE DIFFERENC[illegible]
11. SCREW P/N 605911-0001 IS [illegible]
12. POST TO BE INSTALLED ONLY [illegible]
13. STRUT PLACEMENTS CAN VARY [illegible]
14. QUANTITY FOR LOOKS CAN BE [illegible]



DETAIL "E"

SCALE: 1/3



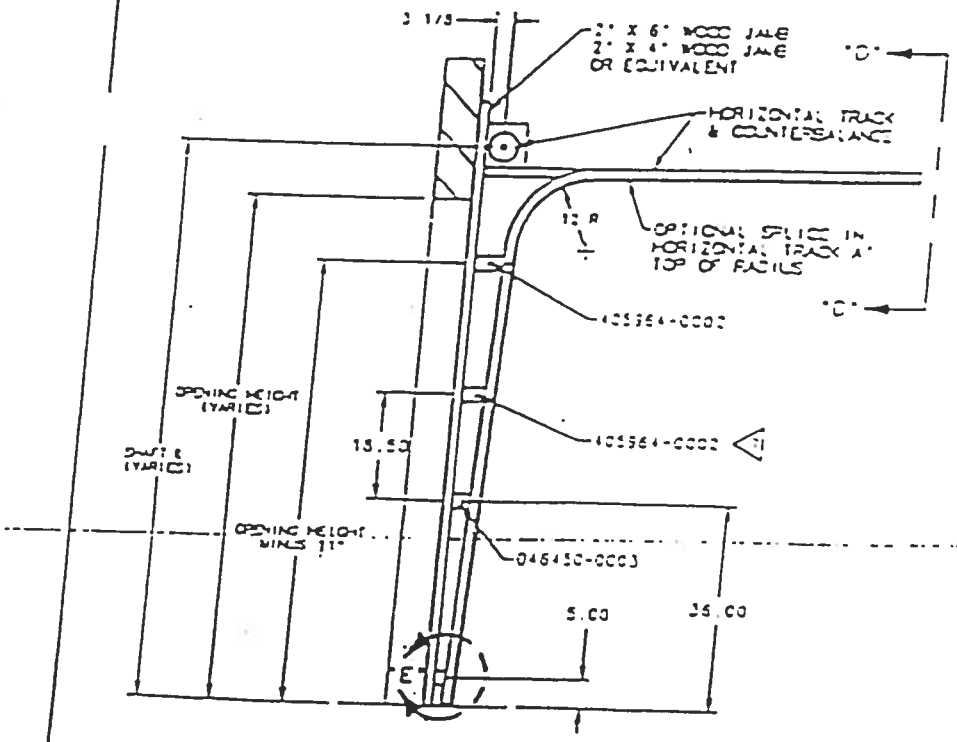
SECTION "C-C"

SCALE 1/2

VIEW "D-

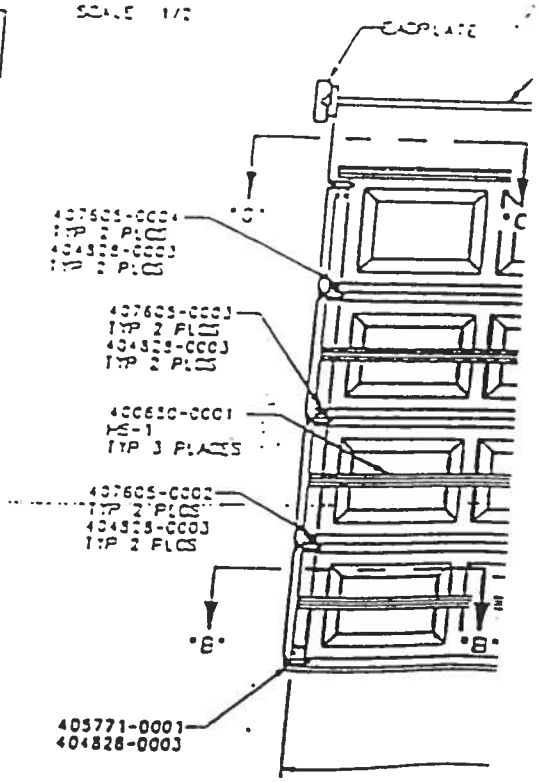
2" TRACK

.049 THK (VERT



STANDARD TRACK DETAIL FOR 16'

SCALE: 1/16" = 1"



SERIES 280 THRU 289 ARE EQUIVALENT CONSTRUCTION 25GA STEEL
SERIES 180 ARE SAME CONSTRUCTION AS SERIES 280 ONLY 24GA STEEL AND END CAPS

DOOR TESTED WAS 281 SERIES.

DOOR WIDTH	CENTER STILE	END STILE	ROLLER SHAFT BRACKET	STRUTS/SECT.	ROLLER	VERTICAL TRACK GAGE	JAMB LOAD (# PER FT-HT)	HARDWARE
16'	3	SINGLE		HS1 HS0	2" X 7/16"	.049"	100	STD.

GARAGE HEADER (84)

Anthony POWER HEADER®

26F$_b$ - 1.9E

ENGINEERED WOOD SECTION PROPERTIES AND LOAD CAPACITIES

ALLOWABLE DESIGN STRESSES (PSI):

FLEXURAL STRESS (F_b) =	2600
COMPRESSION PERP. TO GRAIN ($F_{c\perp}$) =	740
HORIZONTAL SHEAR (F_v) =	225
MODULUS OF ELASTICITY (MOE) =	1.9×10^6

[illegible]	7.7	9.0	10.4	11.7	12.9	14.2	15.5
[illegible]	326	514	789	1115	1521	2014	2604
[illegible]	8865	12015	15996	20145	24772	29877	35460
[illegible]	3908	4550	5250	5892	6533	7175	7817

NOTES:

1. Beam weights are based on 38 pcf.
2. Moment capacities are based on a span of 21 feet and must be modified for other spans.
3. Flexural Stress, F_b, shall be modified by the Volume Factor, C_v, as outlined in AITC 117 - Design 1993 and the NDS for Wood Construction 1997.
4. Allowable design properties and load capacities are based on a load duration of 100 percent and dry use conditions.
5. The AITC NER 466 was used in calculating the above allowable design stresses for POWER HEADER®.

GARAGE HEADER COMPARISONS

[illegible]	810 / 540	3-1/2" x 8-3/8"	3-1/2" x 9-5/8"	3-1/2" x 9"	3-1/2" x 9-1/4"	3-1/2" x 11-1/4"
[illegible]	990 / 720	3-1/2" x 9-3/4"	3-1/2" x 9-5/8"	3-1/2" x 10-1/2"	3-1/2" x 9-1/4"	3-1/2" x 11-1/4"
[illegible]	640 / 400	3-1/2" x 12-5/8"	3-1/2" x 13-3/4"	3-1/2" x 13-1/2"	3-1/2" x 14"	3-1/2" x 14"
[illegible]	765 / 510	3-1/2" x 14"	3-1/2" x 15-1/8"	3-1/2" x 15"	3-1/2" x 14"	3-1/2" x 16"
[illegible]	750 / 490	3-1/2" x 15-3/8"	3-1/2" x 16-1/2"	3-1/2" x 16-1/2"	3-1/2" x 16"	3-1/2" x 18"
[illegible]	900 / 600	3-1/2" x 16-3/4"	3-1/2" x 17-7/8"	3-1/2" x 18"	3-1/2" x 16"	—

For more information on POWER HEADER®, or other laminated structural products from Anthony Forest Products Company please call 1-800-221-2326 or FAX at 870-862-6502.

Anthony Forest Products Company
Post Office Box 1877 • El Dorado, Arkansas 71731
Internet address: http:// www.anthonyforest.com
e-mail: info@anthonyforest.com

Distributed by:

WOODFORD PLYWOOD, INC.
"Structural Wood Products"

11960 West Beaver Street
Jacksonville, Florida 32220

(904) 695-9080
(800) 447-6568
FAX (904) 695-9160

Anthony POWER HEADER®

26F$_b$ - 1.9E

3-1/2" WIDTH GARAGE HEADER PLF CAPACITY

	844	896		1216		1573						
	161	207	254	330	390	510	552	669	752	824		
	114	145	180	231	277	359	391	510	534	653	707	789

	844	975		1322								
	161	207	254	330	390	510	552	724	752	897		
	114	145	180	231	277	359	391	510	534	699	693	

	562	778	888	1056	1363	1367		1582					
	107	153	169	245	260	380	368	540	501	715	664	864	840
	76	107	120	171	185	267	261	380	356	521	471	684	609	813

NOTES:

1. Values shown are the maximum uniform loads in pounds per lineal foot (PLF) that can be applied to the header. Header weight has been subtracted from the allowable total load.
2. Tables are based on simple span uniform load conditions using a design span equal to the center-to-center of bearing. Non-shaded areas are based on 3" of bearing at each support, shaded areas on 4.5" of bearing, and shaded & outlined areas on 6" of bearing at supports.
3. Headers are assumed to be loaded on the top edge with continuous lateral support along compression edge.
4. When no live load is listed, total load controls.
5. Deflection limits are listed within the PLF table heading.

GARAGE HEADER SIZING USING PLF TABLES:

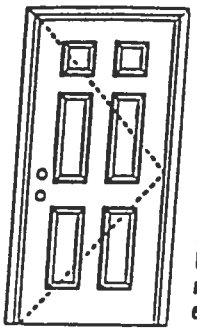
To size a garage header supporting roof only, determine the total load & live load in pounds per lineal foot (PLF). Check the appropriate PLF table for a header supporting roof loads only (125% Non-Snow vs. 115% Snow) and select a member with a total load and live load capacity which meets or exceeds the design load for the rough opening size. For a garage header supporting roof, wall, and floor framing, determine the total load and live load in pounds per lineal foot (PLF). Select a header size from the roof, wall, and floor table (100% load duration) which has a total load and live load capacity equal to or greater than the design load for the appropriate rough opening.

X
Opaque Inswing Unit

COP-WL-JH4101-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



Warnock Hersey

Test Data Review Certificate #3026447A and COP/Test Report Validation Matrix #3026447A-001 provides additional information - available from the ITS/WH website (www.itsweb.com), the Masonite website (www.masonite.com) or the Masonite technical center

Note:
Units of other sizes are covered by this report as long as the panel used does not exceed 3'0" x 6'8".

Single Door
Maximum unit size = 3'0" x 6'8"

Design Pressure
+66.0/-66.0
Limited water unless special threshold design is used

Large Missile Impact Resistance
Hurricane protective system (shutters) is NOT REQUIRED.

Actual design pressure and impact resistant requirements for a specific building design are dependent upon a minimum of ASCE 7-98 and state or local building codes specify the version required

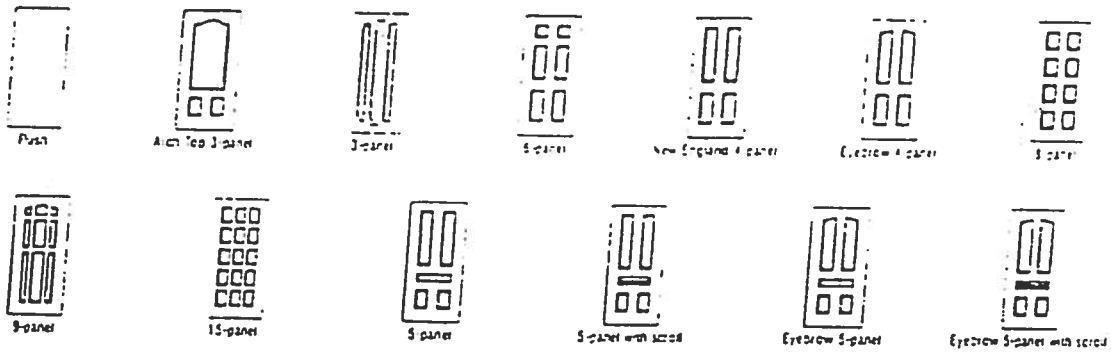
MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed – see MD-WL-MA0001-00

MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed – see MD-WL-MA0001-00

APPROVED DOOR STYLES:



Johnson EntrySystems

June 17, 2002
Our continuing program of product improvement makes specifications, design and prices subject to change without notice

PREMDOOR Premium Quality Doors

Exclusively from Masonite
Masonite International Corporation

X
Opaque Inswing Unit

COP-WL-JH4101-02

WOOD-EDGE STEEL DOORS

CERTIFIED TEST REPORTS:

NCTL 210-2185-1, 2, 3

Certifying Engineer and License Number: Barry D. Portney, P.E. / 16258.

Unit Tested in Accordance with Miami-Dade BCCO PA201, PA202 and PA203.

Door panels constructed from 26-gauge 0.017" thick steel skins. Both stiles constructed from wood. Top end rails constructed of 0.041" steel. Bottom end rails constructed of 0.021" steel. Interior cavity of slab filled with rigid polyurethane foam core.

Frame constructed of wood with an extruded aluminum threshold.

PRODUCT COMPLIANCE LABELING:

TESTED IN ACCORDANCE WITH
MIAMI-DADE BCCO
PA201, PA202 & PA203

COMPANY NAME
CITY STATE

To the best of my knowledge and ability the above side-hinged exterior door unit conforms to the requirements of the 2001 Florida Building Code, Chapter 17 (Structural Tests and Inspections).

Kurt L Balthazor

State of Florida, Professional Engineer
Kurt Balthazor, P.E. – License Number 56533

Warnock Hersey

Test Data Review Certificate #30264447A and COP/Test Report Validation Matrix #30264447A-001 provides additional information - available from the ITS WH website (www.itswhsa.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson EntrySystems

June 17, 2002

PREMDOOR Premium Quality Doors

Exclusively from Masonite
Masonite International Corporation

WINDOWS

AAMA/NWWDA 101/I.S.2-97
TEST REPORT SUMMARY

Rendered to:

MI HOME PRODUCTS, INC.

SERIES/MODEL: 650 Fin
TYPE: Aluminum Single Hung Window

Title of Test	Results
Rating	H-R40 52 x 72
Overall Design Pressure	+45.0 psf -47.2 psf
Operating Force	11 lb max.
Air Infiltration	0.13 cfm/ft²
Water Resistance	6.00 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.

Mark A. Hess, Technician

MAH:nlb

1 APRIL 2002

STATE OF FLORIDA PROFESSIONAL ENGINEER

Architectural Testing

AAMA/NWWDA 101/I.S.2-97 TEST REPORT

Rendered to

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

Report No: 01-41134.01
Test Date: 03/07/02
Report Date: 03/26/02
Expiration Date: 03/07/06

Project Summary: Architectural Testing, Inc. (ATI) was contracted by MI Home Products, Inc. to perform tests on Series/Model 650 Fin, aluminum single hung window at their facility located in Elizabethville, Pennsylvania. The samples tested successfully met the performance requirements for a H-R40 52 x 72 rating.

Test Specification: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S.2-97, *Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.*

Test Specimen Description

Series/Model: 650 Fin

Type: Aluminum Single Hung Window

Overall Size: 4' 4-1/4" wide by 6' 0-3/8" high

Active Sash Size: 4' 1-3/4" wide by 3' 0-5/8" high

Daylight Opening Size: 3' 11-3/8" wide by 2' 9-1/2" high

Screen Size: 4' 0-1/4" wide by 2' 11-1/8" high

Finish: All aluminum was white.

Glazing Details: The active and fixed lites utilized 5/8" thick, sealed insulating glass constructed from two sheets of 1/8" thick, clear annealed glass and a metal reinforced butyl spacer system. The active sash was channel glazed utilizing a flexible vinyl wrap around gasket. The fixed lite was interior glazed against double-sided adhesive foam tape and secured with PVC snap-in glazing beads.

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

Allen G. Reeves
1 APRIL 2002

REEVES ☆ STATE OF FLORIDA ☆ PROFESSIONAL ENGINEER
No. 19354

Test Specimen Description: (Continued)

Weatherstripping:

Description	Quantity	Location
0.230" high by 0.270" backed polypile with center fin	1 Row	Fixed meeting rail
0.250" high by 0.187" backed polypile with center fin	2 Rows	Active sash stiles
1/2" x 1/2" dust plug	4 Pieces	Active sash, top and bottom of stiles
1/4" foam-filled vinyl bulb seal	1 Row	Active sash, bottom rail

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting rail was secured to the frame utilizing two 1-1/4" screws.

Sash Construction: The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

Screen Construction: The screen was constructed from roll-formed aluminum with keyed corners. The fiberglass mesh was secured with a flexible spline.

Hardware:

Description	Quantity	Location
Metal cam lock with keeper		Midspan, active meeting rail with keeper adjacent on fixed meeting rail
Plastic tilt latch	2	Active sash, meeting rail ends
Metal tilt pin	2	Active sash, bottom rail ends
Balance assembly	2	One in each jamb
Screen plunger	2	4" from rail ends on top rail

ALLEN H. REEVES, III
CERTIFICATE NO. 18[illegible]
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Allen H. Reeves
1 APRIL 2002

Test Specimen Description: (Continued)

Weatherstripping:

Description	Quantity	Location
0.230" high by 0.270" backed polypile with center fin	1 Row	Fixed meeting rail
0.250" high by 0.187" backed polypile with center fin	2 Rows	Active sash stiles
1/2" x 1/2" dust plug	4 Pieces	Active sash, top and bottom of stiles
1/4" foam-filled vinyl bulb seal	1 Row	Active sash, bottom rail

Frame Construction: The frame was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1" screws through the head and sill into each jamb screw boss. End caps were utilized on the ends of the fixed meeting rail and secured with two 1-1/4" screws per cap. Meeting rail was secured to the frame utilizing two 1-1/4" screws.

Sash Construction: The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

Screen Construction: The screen was constructed from roll-formed aluminum with keyed corners. The fiberglass mesh was secured with a flexible spline.

Hardware:

Description	Quantity	Location
Metal cam lock with keeper		Midspan, active meeting rail with keeper adjacent on fixed meeting rail
Plastic tilt latch	2	Active sash, meeting rail ends
Metal tilt pin	2	Active sash, bottom rail ends
Balance assembly	2	One in each jamb
Screen plunger	2	4" from rail ends on top rail

ALLEN H. REEVES CERTIFICATE NO. 13994 STATE OF FLORIDA PROFESSIONAL ENGINEER

1 APRIL 2002

Test Specimen Description: (Continued)

Drainage: Sloped sill

Reinforcement: No reinforcement was utilized.

Installation: The test specimen was installed into a 2 x 8 #2 Spruce-Pine-Fir wood test buck with #8 x 1-5/8" drywall screws every 8" on center around the nail fin. Polyurethane was used as a sealant under the nail fin and around the exterior perimeter.

Test Results:

The results are tabulated as follows

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.1	Operating Force	11 lbs	30 lbs max
	Air Infiltration (ASTM E 283-91) @ 1.57 psf (25 mph)	0.13 cfm/ft²	0.3 cfm/ft² max

Note #1: The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.

	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 2.86 psf	No leakage	No leakage
2.1.4.1	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 25.9 psf (positive)	0.42"*	0.26" max.
	@ 34.7 psf (negative)	0.43"*	0.26" max.

**Exceeds L/175 for deflection, but passes all other test requirements.*

2.1.4.2	Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
	@ 38.9 psf (positive)	0.02"	0.18" max.
	@ 52.1 psf (negative)	0.02"	0.18" max.

Allen M. Reeves
1 APRIL 2002

ALLEN M. REEVES
CERTIFICATE
NO. 1337
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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:

Mark A. Hess
Technician

Allen N. Reeves, P.E.
Director - Engineering Services
1 APRIL 2002

MAH:rlb
01-41134.01

ALLEN N. REEVES
CERTIFICATE NO. 17353
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Test Specimen Description: (Continued)

Paragraph	Title of Test - Test Method	Results	Allowed
2.2.1.6.2	Deglazing Test (ASTM E 987)		
	In operating direction at 70 lbs		
	Meeting rail	0.12"/25%	0.50"/100%
	Bottom rail	0.12"/25%	0.50"/100%
	In remaining direction at 50 lbs		
	Left stile	0.06"/12%	0.50"/100%
	Right stile	0.06"/12%	0.50"/100%
	Forced Entry Resistance (ASTM F 588-97)		
	Type: A		
	Grade: 10		
	Lock Manipulation Test	No entry	No entry
	Tests A1 through A5	No entry	No entry
	Test A7	No entry	No entry
	Lock Manipulation Test	No entry	No entry

Optional Performance

4.3	Water Resistance (ASTM E 547-00) (with and without screen) WTP = 6.00 psf	No leakage	No leakage
	Uniform Load Deflection (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 33 seconds)		
	@ 45.0 psf (positive)	0.47"*	0.26" max.
	@ 47.2 psf (negative)	0.46"*	0.26" max.

*Exceeds L/175 for deflection, but passes all other test requirements.

Uniform Load Structural (ASTM E 330-97) (Measurements reported were taken on the meeting rail) (Loads were held for 10 seconds)		
@ 67.5 psf (positive)	0.05"	0.16" max.
@ 70.8 psf (negative)	0.05"	0.16" max.

Allen N. Reeves
1 APRIL 2002

ALLEN N. REEVES
LICENSED
STATE OF FLORIDA
PROFESSIONAL ENGINEER
No. 18036

SHINGLES

ELK Premium Roofing

March 6, 2002

Subject: Elk Product Approval Information

All Prestique® and Capstone® products manufactured in Tuscaloosa, AL are certified under the Miami – Dade County Building Code Office (BCCO). These products also meet the requirements for the Florida Building Code since they are MD approved. The following test protocols must be passed by each of the products in order for MD product certification:

ASTM D3462
PA 100 (110 mph uplift and wind driven rain resistance)
PA 107 (Modified ASTM D3161 - 110 mph wind uplift resistance)

The nailing patterns that were used during the PA 100 and PA 107 wind test protocols for the Prestique and Capstone products are listed below. Also listed below are the Miami – Dade Notice of Acceptance Numbers (NOA)

Raised Profile, Prestique High Definition, Prestique 35, or Prestique 30 –
PA 100 = 4 nails
PA 107 = 5 nails
MD NOA# = 01-1226.04

Prestique I 35 or Prestique I* –
PA 100 = 4 nails
PA 107 = 5 nails
MD NOA# = 01-1226.05

Prestique Plus or Prestique Gallery Collection* –
PA 100 = 4 nails
PA 107 = 4 nails
MD NOA# = 01-1226.03

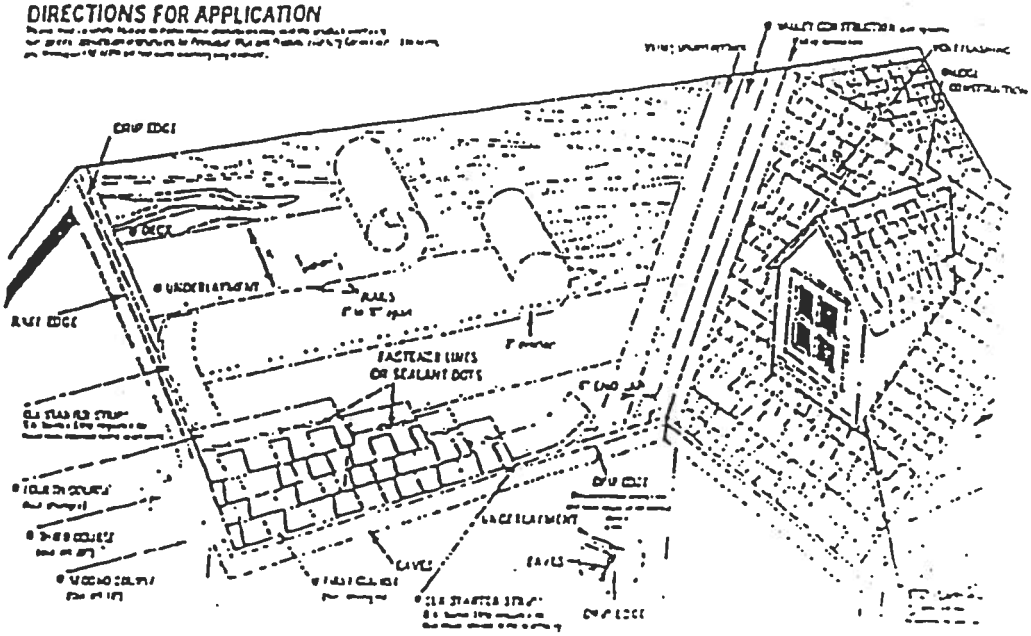
Capstone*
PA 100 = 4 Nails
PA 107 = 4 Nails
MD NOA# = 01-0523.01

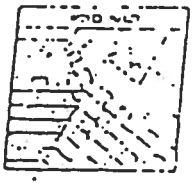
* As per the Elk Limited Warranty, six nails are required for the Elk high wind warranty

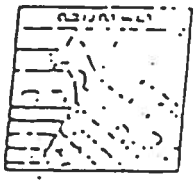
If there are any questions please contact:

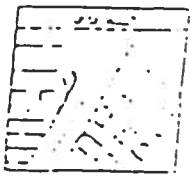
Mike Reed – Technical Manager or Daniel DeLamette – QA Engineer
(205) 342-0287 (205) 342-0298

DIRECTIONS FOR APPLICATION









DIRECTIONS FOR APPLICATION

STARTER SHINGLE COURSE

FIRST COURSE

SECOND COURSE

THIRD COURSE

FOURTH COURSE

FIFTH COURSE

VALLEY CONSTRUCTION

RIDGE CONSTRUCTION

FLASHING

SUNSARU APPLICATIONS

LIMITED WARRANTY

CAUTION TO WHOLESALER

ELK

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CORPORATE HEAD QUARTERS:
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PLANT LOCATION:
800.945.5545

ELK
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Residential System Sizing Calculation

Summary

Model Home

Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

6/5/2006

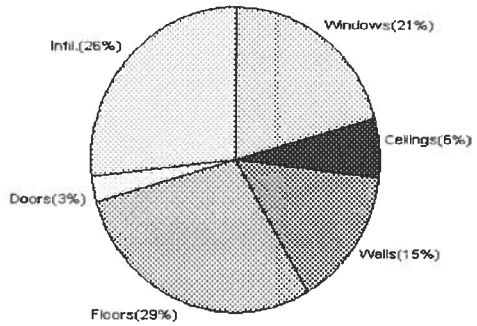
Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)

Winter design temperature	33	F	Summer design temperature	92	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	37	F	Summer temperature difference	17	F
Total heating load calculation	**28838**	**Btuh**	**Total cooling load calculation**	**23382**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	114.4	33000	Sensible (SHR = 0.75)	133.1	24750
Heat Pump + Auxiliary(0.0kW)	114.4	33000	Latent	172.5	8250
			Total (Electric Heat Pump)	141.1	33000

WINTER CALCULATIONS

Winter Heating Load (for 1500 sqft)

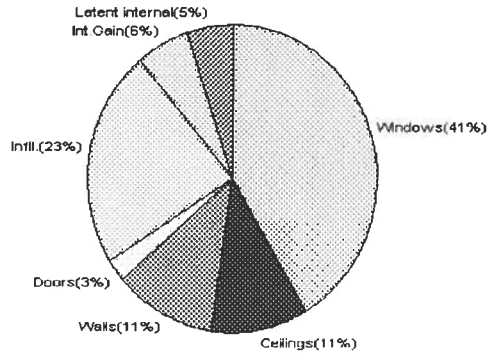
Load component			Load	
Window total	186	sqft	5987	Btuh
Wall total	1291	sqft	4240	Btuh
Door total	60	sqft	777	Btuh
Ceiling total	1558	sqft	1836	Btuh
Floor total	192	sqft	8383	Btuh
Infiltration	188	cfm	7615	Btuh
Duct loss			0	Btuh
Subtotal			**28838**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**28838**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 1500 sqft)

Load component			Load	
Window total	186	sqft	9641	Btuh
Wall total	1291	sqft	2587	Btuh
Door total	60	sqft	588	Btuh
Ceiling total	1558	sqft	2580	Btuh
Floor total			0	Btuh
Infiltration	98	cfm	1824	Btuh
Internal gain			1380	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			**18600**	**Btuh**
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)			3581	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1200	Btuh
Total latent gain			**4781**	**Btuh**
TOTAL HEAT GAIN			**23382**	**Btuh**



For Florida residences only

EnergyGauge® System Sizing
PREPARED BY: Vizen
DATE: 6-5-06

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

6/5/2006

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	45.0	32.2	1449 Btuh
2	2, Clear, Metal, 0.87	N	15.0	32.2	483 Btuh
3	2, Clear, Metal, 0.87	NW	45.0	32.2	1449 Btuh
4	2, Clear, Metal, 0.87	W	10.0	32.2	322 Btuh
5	2, Clear, Metal, 0.87	NE	3.0	32.2	97 Btuh
6	2, Clear, Metal, 0.87	SE	6.0	32.2	193 Btuh
7	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
8	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
9	2, Clear, Metal, 0.87	SW	2.0	32.2	64 Btuh
	Window Total		186(sqft)		5987 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Adj(0.09)	13.0	183	3.3	601 Btuh
2	Frame - Wood - Ext(0.09)	13.0	1108	3.3	3639 Btuh
	Wall Total		1291		4240 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
3	Insulated - Exterior		20	12.9	259 Btuh
	Door Total		60		777Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	1558	1.2	1836 Btuh
	Ceiling Total		1558		1836Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	192.0 ft(p)	43.7	8383 Btuh
	Floor Total		192		8383 Btuh
			Zone Envelope Subtotal:		21223 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.94	12000	188.0	7615 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**28838 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

6/5/2006

WHOLE HOUSE TOTALS

	Subtotal Sensible	28838 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	28838 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)

For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

6/5/2006

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	45.0	32.2	1449 Btuh
2	2, Clear, Metal, 0.87	N	15.0	32.2	483 Btuh
3	2, Clear, Metal, 0.87	NW	45.0	32.2	1449 Btuh
4	2, Clear, Metal, 0.87	W	10.0	32.2	322 Btuh
5	2, Clear, Metal, 0.87	NE	3.0	32.2	97 Btuh
6	2, Clear, Metal, 0.87	SE	6.0	32.2	193 Btuh
7	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
8	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
9	2, Clear, Metal, 0.87	SW	2.0	32.2	64 Btuh
	Window Total		186(sqft)		5987 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Adj(0.09)	13.0	183	3.3	601 Btuh
2	Frame - Wood - Ext(0.09)	13.0	1108	3.3	3639 Btuh
	Wall Total		1291		4240 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		20	12.9	259 Btuh
3	Insulated - Exterior		20	12.9	259 Btuh
	Door Total		60		777Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	1558	1.2	1836 Btuh
	Ceiling Total		1558		1836Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	192.0 ft(p)	43.7	8383 Btuh
	Floor Total		192		8383 Btuh
			Zone Envelope Subtotal:		21223 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.94	12000	188.0	7615 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**28838 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

6/5/2006

WHOLE HOUSE TOTALS

	Subtotal Sensible	28838 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	28838 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)

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 6/5/2006

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Overhang Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	HTM Unshaded	Load
1	2, Clear, 0.87, None,N,N	NW	2ft.	5.5ft.	45.0	0.0	45.0	29	60	2702 Btuh
2	2, Clear, 0.87, None,N,N	N	6.5ft.	5.5ft.	15.0	0.0	15.0	29	29	434 Btuh
3	2, Clear, 0.87, None,N,N	NW	12ft.	5.25f	45.0	0.0	45.0	29	60	2702 Btuh
4	2, Clear, 0.87, None,N,N	W	8.5ft.	7ft.	10.0	10.0	0.0	29	80	290 Btuh
5	2, Clear, 0.87, None,N,N	NE	2ft.	1.5ft.	3.0	0.0	3.0	29	60	180 Btuh
6	2, Clear, 0.87, None,N,N	SE	9.5ft.	7.5ft.	6.0	6.0	0.0	29	63	174 Btuh
7	2, Clear, 0.87, None,N,N	SE	2ft.	5.5ft.	30.0	17.2	12.8	29	63	1299 Btuh
8	2, Clear, 0.87, None,N,N	SE	2ft.	8ft.	30.0	2.2	27.8	29	63	1803 Btuh
9	2, Clear, 0.87, None,N,N	SW	1.5ft.	1.5ft.	2.0	2.0	0.0	29	63	58 Btuh
	Window Total				186 (sqft)					9641 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Adj	13.0/0.09	183.0	1.5	276 Btuh
2	Frame - Wood - Ext	13.0/0.09	1108.0	2.1	2311 Btuh
	Wall Total		1291 (sqft)		2587 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
2	Insulated - Exterior	20.0	9.8	196 Btuh
3	Insulated - Exterior	20.0	9.8	196 Btuh
	Door Total	60 (sqft)		588 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	1558.0	1.7	2580 Btuh
	Ceiling Total		1558 (sqft)		2580 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	192 (ft(p))	0.0	0 Btuh
	Floor Total		192.0 (sqft)		0 Btuh

			Zone Envelope Subtotal:		15396 Btuh
Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.49	12000	98.0	1824 Btuh
Internal gain		Occupants	Btuh/occupant	Appliance	Load
		6	X 230 +	0	1380 Btuh
Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)			DGM = 0.00	0.0 Btuh
			Sensible Zone Load		**18600 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

6/5/2006

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**18600**	**Btuh**
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	**18600**	**Btuh**
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
	Total sensible gain	**18600**	**Btuh**
	Latent infiltration gain (for 54 gr. humidity difference)	3581	Btuh
	Latent ventilation gain	0	Btuh
	Latent duct gain	0	Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200	Btuh
	Latent other gain	0	Btuh
	Latent total gain	**4781**	**Btuh**
	TOTAL GAIN	**23382**	**Btuh**

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

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 6/5/2006

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Zone #1: Main

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Overhang Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	HTM Unshaded	Load
1	2, Clear, 0.87, None,N,N	NW	2ft.	5.5ft.	45.0	0.0	45.0	29	60	2702 Btuh
2	2, Clear, 0.87, None,N,N	N	6.5ft.	5.5ft.	15.0	0.0	15.0	29	29	434 Btuh
3	2, Clear, 0.87, None,N,N	NW	12ft.	5.25f	45.0	0.0	45.0	29	60	2702 Btuh
4	2, Clear, 0.87, None,N,N	W	8.5ft.	7ft.	10.0	10.0	0.0	29	80	290 Btuh
5	2, Clear, 0.87, None,N,N	NE	2ft.	1.5ft.	3.0	0.0	3.0	29	60	180 Btuh
6	2, Clear, 0.87, None,N,N	SE	9.5ft.	7.5ft.	6.0	6.0	0.0	29	63	174 Btuh
7	2, Clear, 0.87, None,N,N	SE	2ft.	5.5ft.	30.0	17.2	12.8	29	63	1299 Btuh
8	2, Clear, 0.87, None,N,N	SE	2ft.	8ft.	30.0	2.2	27.8	29	63	1803 Btuh
9	2, Clear, 0.87, None,N,N	SW	1.5ft.	1.5ft.	2.0	2.0	0.0	29	63	58 Btuh
	Window Total				186 (sqft)					9641 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Adj	13.0/0.09	183.0	1.5	276 Btuh
2	Frame - Wood - Ext	13.0/0.09	1108.0	2.1	2311 Btuh
	Wall Total		1291 (sqft)		2587 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
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	Door Total	60 (sqft)		588 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	1558.0	1.7	2580 Btuh
	Ceiling Total		1558 (sqft)		2580 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	192 (ft(p))	0.0	0 Btuh
	Floor Total		192.0 (sqft)		0 Btuh

	Zone Envelope Subtotal:	15396 Btuh

Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.49	12000	98.0	1824 Btuh

Internal gain	Occupants		Btuh/occupant		Appliance	Load
	6	X	230	+	0	1380 Btuh

Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)	DGM = 0.00	0.0 Btuh
		Sensible Zone Load	**18600 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Model Home
Starke, FL

Project Title:
606024TheSamuelModel

Class 3 Rating
Registration No. 0
Climate: North

6/5/2006

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**18600**	**Btuh**
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	**18600**	**Btuh**
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
Whole House	**Total sensible gain**	**18600**	**Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	3581	Btuh
	Latent ventilation gain	0	Btuh
	Latent duct gain	0	Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200	Btuh
	Latent other gain	0	Btuh
	Latent total gain	**4781**	**Btuh**
	TOTAL GAIN	**23382**	**Btuh**

*Key: Window types (Pn - Number of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
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(InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))
(ExSh - Exterior shading device: none(N) or numerical value)
(BS - Insect screen: none(N), Full(F) or Half(H))
(Ornt - compass orientation)

For Florida residences only

Residential Window Diversity

MidSummer

Model Home

Starke, FL

Project Title:
606024TheSamuelModel

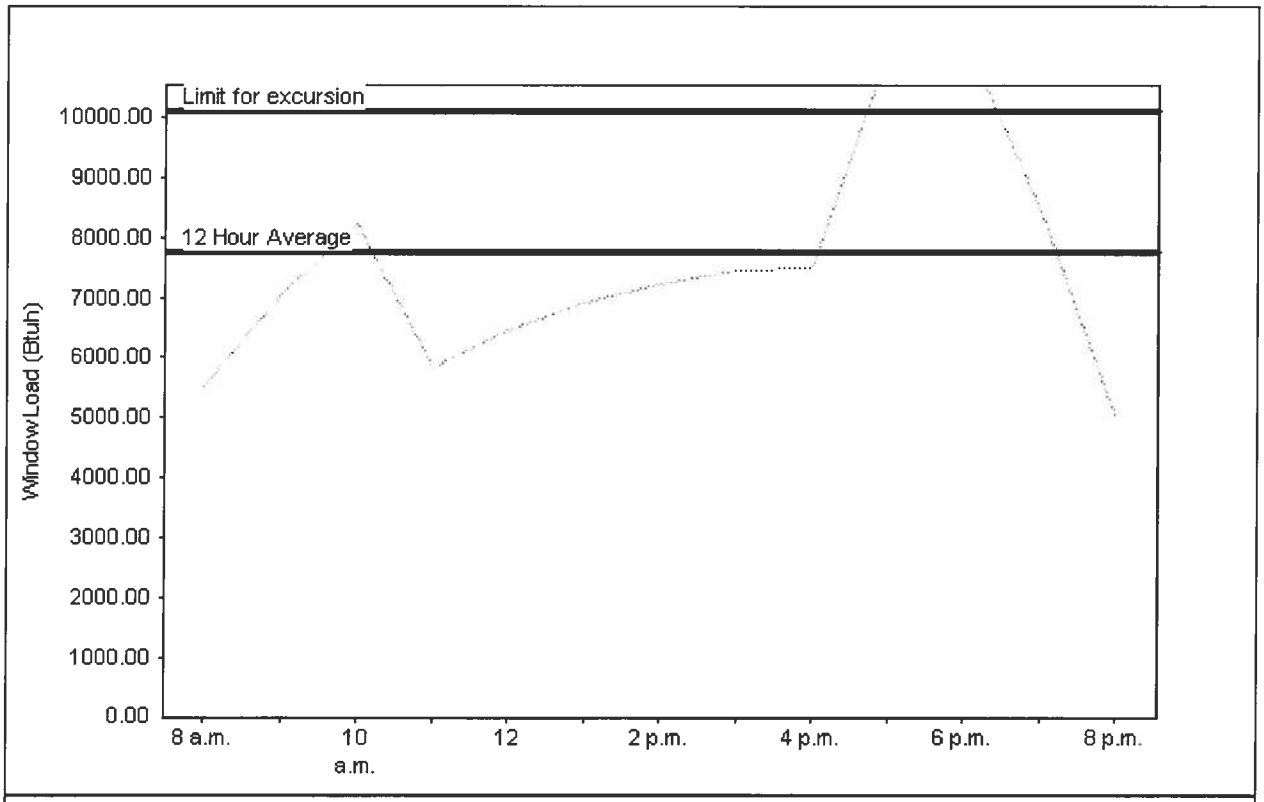
Class 3 Rating
Registration No. 0
Climate: North

6/5/2006

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	7761 Btuh
Summer setpoint	75 F	Peak window load for July	11286 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	10089 Btu
Latitude	29 North	Window excursion (July)	1197 Btuh

WINDOW Average and Peak Loads



Total July Window Load(Radiation and conduction)

Warning: This application has glass areas that produce relatively large heat gains for part of the day. Variable air volume devices may be required to overcome spikes in solar gain for one or more rooms. A zoned system may be required or some rooms may require zone control.

EnergyGauge® System Sizing for Florida residences only
PREPARED BY: [signature]
DATE: 6-5-06

EnergyGauge® FLR2PB v4.1

PRODUCT APPROVAL SPECIFICATION SHEET

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. Statewide approved products are listed online @ www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS	TLC	DOORS	FL5507
A. SWINGING			
B. SLIDING			FL-5483
C. SECTIONAL/ROLL UP			
D. OTHER		GARAGE DOOR	FL-4606
2. WINDOWS	AWT	WINDOWS	FL-1782
A. SINGLE/DOUBLE HUNG			
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING	HARDI	SIDING	FL889
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	ELK	SHINGLES	FL-250
B. NON-STRUCT METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCT COMPONENTS			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			
A.			

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector on the jobsite; 1) copy of the product approval, 2) performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements. Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

APPLICANT SIGNATURE

6-19-06
DATE

R-1305 01-04

Notice of Treatment 12343

Applicator: Florida Pest Control & Chemical Co. (www.flapest .com)
Address: 536 SE PAYA DR.
City Lake City Phone (386) 752-1703

Site Location: Subdivision Magnolia Hills
Lot # 1 Block# Permit # 24779
Address

Product used	Active Ingredient	% Concentration
☐ Premise	Imidacloprid	0.1%
☐ Termidor	Fipronil	0.12%
☑ Bora-Care	Disodium Octaborate Tetrahydrate	23.0%

Type treatment: ☐ Soil ☑ Wood

Area Treated	Square feet	Linear feet	Gallons Applied
Main Body	1974	232	4 1/2

As per Florida Building Code 104.2.6 – If soil chemical barrier method for termite prevention is used, final exterior treatment shall be completed prior to final building approval.

If this notice is for the final exterior treatment, initial this line _____.

02-12-07 — Date
330 — Time
R. D. Crawford — Print Technician's Name

Remarks:

Applicator - White Permit File - Canary Permit Holder - Pink

10/05 ©

UNIVERSAL
ENGINEERING SCIENCES

Consultants In: Geotechnical Engineering • Environmental Sciences • Construction Materials Testing

4475 S.W. 35th Terrace • Gainesville, Florida 32608 • (352) 372-3392

REPORT ON IN-PLACE DENSITY TESTS

Permit # 00002477 79

CLIENT: Cornerstone Del.

PROJECT: Magnolia Hills lot #1
174 NW Katelyn Way Lake City Fl. 32055. (Columbia Cty)

AREA TESTED: Fill & Prop. Bldg Pad.

COURSE: F/G

DEPTH OF TEST: 0-1'

TYPE OF TEST: ASTM D-2922.

DATE TESTED: 1-15-07

NOTE: The below tests DO/DO NOT meet the minimum 95 % compaction requirements of maximum density.

REMARKS:

LOCATION OF TESTS	DRY DEN.	MAX. DEN.	% MAX. DEN.	% MOIST.	OPT. MOIST.
		112.0			12.0
Approx center of N side of prop			98.6	6.1	
Pad	110.4				
Approx C of Pad.	108.4		96.8	7.0	
Approx C at west side of Prop					
Bldg Pad	109.0		97.3	6.7	

4404

TECH. F/T.G.

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

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

Parcel Number 28-3S-16-02377-101 **Building permit No.** 000024779

Use Classification SFD/UTILITY **Fire:** 27.90

Permit Holder BRYAN ZECHER **Waste:** 83.75

Owner of Building CORNERSTONE DEVELOPERS **Total:** 111.65

Location: 174 NW KATELYN WAY, (MAGNOLIA HILLS LOT 1)

Date: 05/04/2007

Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)