

Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0610-26 Date Received 10/9/06 By G Permit # 1241-25123
Application Approved by - Zoning Official BLK Date 12.10.06 Plans Examiner AK JH Date 12-10-06
Flood Zone X Flood Development Permit N/A Zoning RSF/MH-2 Land Use Plan Map Category RES Low Dev.
Comments SH needed

Applicants Name SUSAN FAIR Fax: 487-0396
Address 180 NW AMENITY CT. LAKE CITY, FL 32055 Phone 752-1711
Owners Name CORNERSTONE DEVELOPERS Phone 752-1711
911 Address 298 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.
Mortgage Lenders Name & Address NA
Circle the correct power company FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy
Property ID Number 28-35-16-02377-133 Estimated Cost of Construction 100,000.00
Subdivision Name MAGNOLIA HILLS Lot 33 Block Unit Phase
Driving Directions TAKE BROWN RD TO NW ETHAN PLACE, TRIGHT, GO TO NW KATELYN WAY, GO LEFT. 5TH LOT ON LEFT
Type of Construction FRAME + HARDI-FO Number of Existing Dwellings on Property 0
Total Acreage 1/2 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 35' L.Side 33' R.Side 33' Rear 58'
Total Building Height 18'2" Number of Stories 1 Heated Floor Area 1608 Roof Pitch 6/12
TOTAL 2095

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

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

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

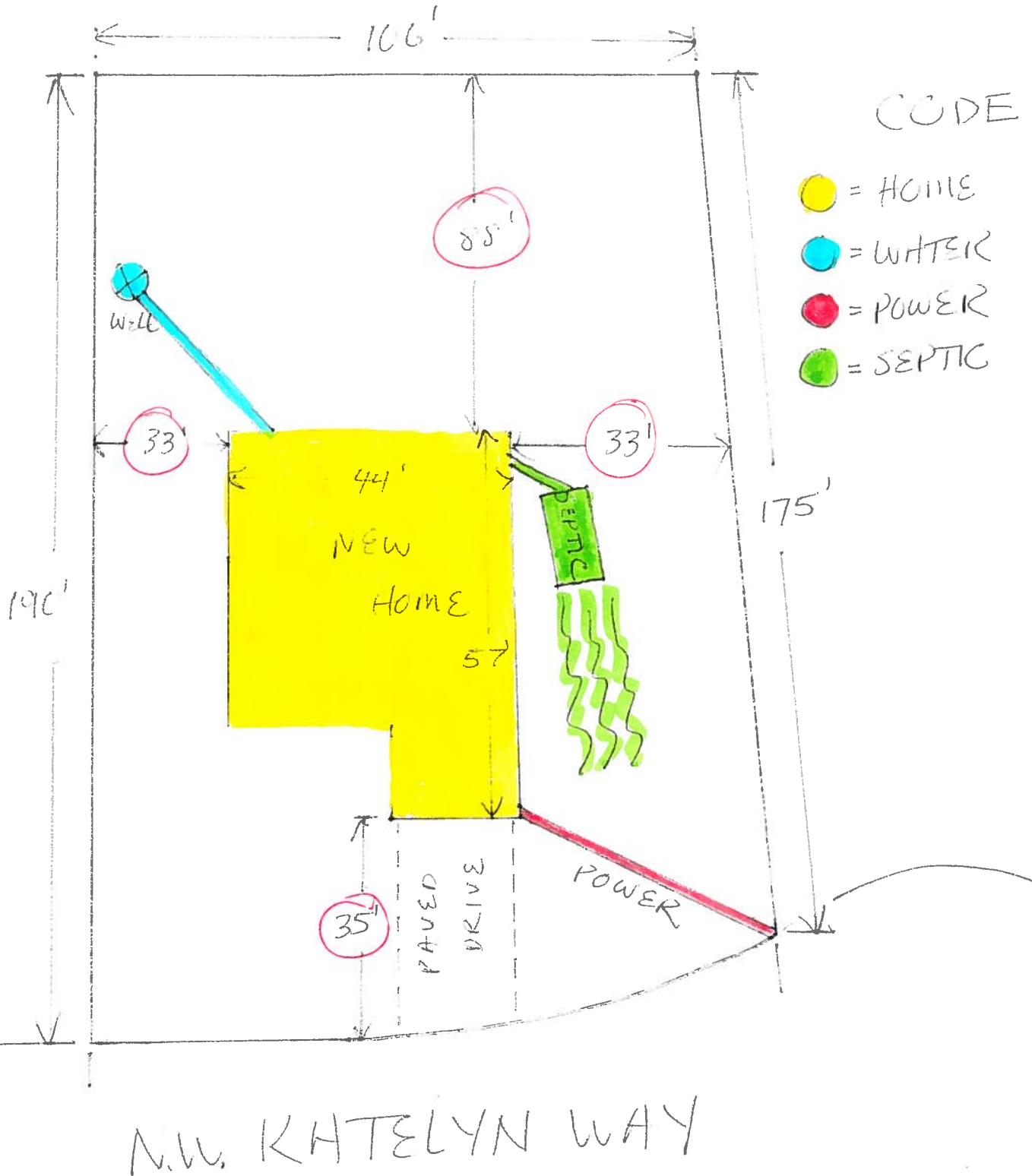
Owner Builder or Agent (Including Contractor) Susan Fair
STATE OF FLORIDA
COUNTY OF COLUMBIA
Commission #DD303891
Expires: Apr 17, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

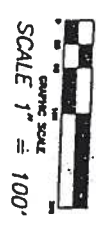
Contractor Signature [Signature]
Contractors License Number CBC054575
Competency Card Number
NOTARY STAMP/SEAL

Sworn to (or affirmed) and subscribed before me
this 9TH day of OCTOBER 20 06.
Personally known ✓ or Produced Identification

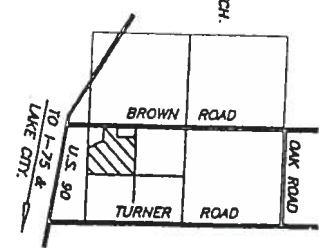
Notary Signature [Signature]

DIABLO HILLS
"COLUMBIA COUNTY"
LOT 33 SITE PLAN





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



RT. 18 BOX 555
SISTERS WELCOME ROAD
LAKE CTRY. FLA 32025
(904) 758-9831 OFFICE
(904) 758-8010 FAX
WO# 140-04-96F

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 28-35-16-02377-133

1. Description of property: (legal description of the property and street address or 911 address)

Lot 33, Magnolia Hills
298 NW Katelyn Way
Lake City, FL 32055

2. General description of improvement: New Home

3. Owner Name & Address Cornerstone Developers, LLC 180 NW
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 Zecher 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 Inst: 2006014781 Date: 06/20/2006 Time: 13:04

7. Lender Name N/A S.F. DC, P. DeWitt Cason, Columbia County B: 1087 P: 718
Address

8. Persons within the State of Florida designated by the Owner upon whom notices or other documents may be served as provided by section 718.13 (1)(a) 7; Florida Statutes:

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



NOTARY STAMP/SEAL

Susan Ann Fair

Signature of Notary

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:

Barbara A. Eraddosio
Witness Name: BARBARA A. ERADDOSIO

Dawna W. Lang
Witness Name: DAWNA W. LANG

James Lambert Hair, II (Seal)
James Lambert Hair, II

State of Florida
County of Columbia

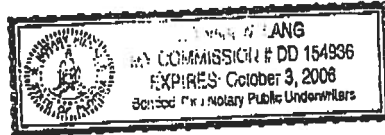
The foregoing instrument was acknowledged before me this 9th day of February, 2006 by James Lambert Hair, II, who ☐ is personally known or ☒ has produced a driver's license as identification.

[Notary Seal]

Dawna W. Lang
Notary Public

Printed Name: DAWNA W. LANG

My Commission Expires: _____



Inst:2006003506 Date:02/13/2006 Time:16:16

Doc Stamp-Deed : 3276.00

DC,P.DeWitt Cason,Columbia County B:1073 P:2552

HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-6" WELLS



DONALD AND MARY HALL
OWNERS

PHONE (904) 752-1854
FAX (904) 755-7022
X724 NORTH WILKINSON STREET
LAKE CITY, FLORIDA 32055
904 NW Main Blvd.

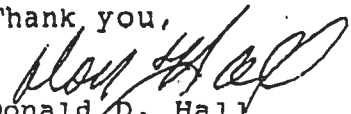
June 12, 2002

NOTICE TO ALL CONTRACTORS

Please be advised that due to the new building codes we will use a large capacity diaphragm tank on all new wells. This will insure a minimum of one (1) minute draw down or one (1) minute refill. If a smaller diaphragm 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

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs
Residential Whole Building Performance Method A

Project Name:	609124CornerstoneDevelopment	Builder:	Bryan Zecher
Address:	Lot: 33, Sub: Magnolia Hills, Plat:	Permitting Office:	Column 27
City, State:	Lake City, FL	Permit Number:	25123
Owner:	Spec House	Jurisdiction Number:	221000
Climate Zone:	North		

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 31.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 12.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft²)	1608 ft²		
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		13. Heating systems	
a. U-factor:	Description Area	a. Electric Heat Pump	Cap: 31.0 kBtu/hr
(or Single or Double DEFAULT) 7a. (Dble Default)	112.7 ft²		HSPF: 7.00
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT) 7b. (Clear)	112.7 ft²	c. N/A	
8. Floor types		14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=0.0, 188.0(p) ft	a. Electric Resistance	Cap: 40.0 gallons
b. N/A			EF: 0.92
c. N/A		b. N/A	
9. Wall types		c. Conservation credits	
a. Frame, Wood, Exterior	R=13.0, 1175.3 ft²	(HR-Heat recovery, Solar	
b. Frame, Wood, Adjacent	R=13.0, 156.0 ft²	DHP-Dedicated heat pump)	
c. N/A		15. HVAC credits	
d. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
e. N/A		HF-Whole house fan,	
10. Ceiling types		PT-Programmable Thermostat,	
a. Under Attic	R=30.0, 1648.0 ft²	MZ-C-Multizone cooling,	
b. N/A		MZ-H-Multizone heating)	
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 150.0 ft		
b. N/A			

Glass/Floor Area: 0.07

Total as-built points: 21047

Total base points: 24813

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: 10/2/06

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

OWNER/AGENT: [Signature]
DATE: 10-6-06

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.

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: 33, Sub: Magnolia Hills, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BSPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt		Area X SPM X SOF = Points				
.18	1608.0	20.04	5800.4	Double, Clear	W	1.5	5.5	45.0	38.52	0.90	1554.9
				Double, Clear	W	1.5	2.0	20.0	38.52	0.60	464.2
				Double, Clear	N	1.5	5.5	15.0	19.20	0.93	267.3
				Double, Clear	E	1.5	5.5	30.0	42.06	0.90	1131.0
				Double, Clear	S	1.5	1.0	2.7	35.87	0.47	45.8
As-Built Total:				112.7 3463.1							
WALL TYPES				Area X BSPM = Points		Type		R-Value		Area X SPM = Points	
Adjacent	156.0	0.70	109.2	Frame, Wood, Exterior		13.0		1175.3		1.50 1763.0	
Exterior	1175.3	1.70	1998.0	Frame, Wood, Adjacent		13.0		156.0		0.60 93.6	
Base Total:				1331.3 2107.2		As-Built Total:		1331.3 1856.6			
DOOR TYPES				Area X BSPM = Points		Type		Area X SPM = Points			
Adjacent	20.0	1.60	32.0	Exterior Insulated		20.0		4.10		82.0	
Exterior	40.0	4.10	164.0	Adjacent Insulated		20.0		1.60		32.0	
				Exterior Insulated		20.0		4.10		82.0	
Base Total:				60.0 196.0		As-Built Total:		60.0 196.0			
CEILING TYPES				Area X BSPM = Points		Type		R-Value		Area X SPM X SCM = Points	
Under Attic	1608.0	1.73	2781.8	Under Attic		30.0		1648.0		1.73 X 1.00 2851.0	
Base Total:				1608.0 2781.8		As-Built Total:		1648.0 2851.0			
FLOOR TYPES				Area X BSPM = Points		Type		R-Value		Area X SPM = Points	
Slab	188.0(p)	-37.0	-6956.0	Slab-On-Grade Edge Insulation		0.0		188.0(p)		-41.20 -7745.6	
Raised	0.0	0.00	0.0								
Base Total:				-6956.0		As-Built Total:		188.0 -7745.6			
INFILTRATION				Area X BSPM = Points				Area X SPM = Points			
	1608.0	10.21	16417.7					1608.0		10.21 16417.7	

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 33, Sub: Magnolia Hills, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT						
Summer Base Points: 20347.1				Summer As-Built Points: 17038.8						
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	=	Cooling Points
20347.1	0.4266		8680.1	(sys 1: Central Unit 31000 btuh ,SEER/EFF(12.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0(INS) 17039	1.00	(1.09 x 1.147 x 0.91)	0.284	1.000		5513.5
				17038.8	1.00	1.138	0.284	1.000		5513.5

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 33, Sub: Magnolia Hills, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT							
GLASS TYPES											
.18 X Conditioned X BWPM = Points Floor Area				Type/SC	Overhang Ornt Len Hgt		Area X WPM X WOF = Points				
.18	1608.0	12.74	3687.5	Double, Clear	W	1.5	5.5	45.0	20.73	1.03	959.0
				Double, Clear	W	1.5	2.0	20.0	20.73	1.13	470.4
				Double, Clear	N	1.5	5.5	15.0	24.58	1.00	369.8
				Double, Clear	E	1.5	5.5	30.0	18.79	1.04	587.1
				Double, Clear	S	1.5	1.0	2.7	13.30	3.28	117.6
As-Built Total:				112.7 2503.8							
WALL TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	156.0	3.60	561.6	Frame, Wood, Exterior	13.0		1175.3	3.40		3996.0	
Exterior	1175.3	3.70	4348.6	Frame, Wood, Adjacent	13.0		156.0	3.30		514.8	
Base Total:				1331.3		4910.2		As-Built Total: 1331.3 4510.8			
DOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Adjacent	20.0	8.00	160.0	Exterior Insulated			20.0	8.40		168.0	
Exterior	40.0	8.40	336.0	Adjacent Insulated			20.0	8.00		160.0	
				Exterior Insulated			20.0	8.40		168.0	
Base Total:				60.0		496.0		As-Built Total: 60.0 496.0			
CEILING TYPES Area X BWPM = Points				Type	R-Value		Area X WPM X WCM = Points				
Under Attic	1608.0	2.05	3296.4	Under Attic	30.0		1648.0	2.05 X 1.00		3378.4	
Base Total:				1608.0		3296.4		As-Built Total: 1648.0 3378.4			
FLOOR TYPES Area X BWPM = Points				Type	R-Value		Area X WPM = Points				
Slab	188.0(p)	8.9	1673.2	Slab-On-Grade Edge Insulation	0.0		188.0(p)	18.80		3534.4	
Raised	0.0	0.00	0.0								
Base Total:				1673.2		188.0		As-Built Total: 3534.4			
INFILTRATION Area X BWPM = Points						Area X WPM = Points					
1608.0 -0.59 -948.7						1608.0 -0.59 -948.7					

WINTER CALCULATIONS**Residential Whole Building Performance Method A - Details**

ADDRESS: Lot: 33, Sub: Magnolia Hills, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT						
Winter Base Points: 13114.6				Winter As-Built Points: 13474.7						
Total Winter Points	X System Multiplier	= Heating Points		Total Component (System - Points)	X Cap Ratio (DM x DSM x AHU)	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
13114.6	0.6274	8228.1		(sys 1: Electric Heat Pump 31000 btuh ,EFF(7.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0 13474.7 1.000 (1.069 x 1.169 x 0.93) 0.487 1.000 7628.7						
13114.6	0.6274	8228.1		13474.7	1.00	1.162	0.487	1.000	7628.7	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 33, Sub: Magnolia Hills, Plat: , Lake City, FL,

PERMIT #:

BASE				AS-BUILT					
WATER HEATING									
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank X Ratio	Multiplier X	Credit = Total Multiplier
3		2635.00	7905.0	40.0	0.92	3	1.00	2635.00	1.00 7905.0
				As-Built Total:					7905.0

CODE COMPLIANCE STATUS									
BASE					AS-BUILT				
Cooling Points	+	Heating Points	+	Hot Water Points = Total Points	Cooling Points	+	Heating Points	+	Hot Water Points = Total Points
8680		8228		7905 24813	5513		7629		7905 21047

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 33, Sub: Magnolia Hills, Plat: , Lake City, FL,

PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

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

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

COMPONENTS	SECTION	REQUIREMENTS	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* = 86.1

The higher the score, the more efficient the home.

Spec House, Lot: 33, Sub: Magnolia Hills, Plat: , Lake City, FL,

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 31.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 12.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft ²)	1608 ft ²		
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		13. Heating systems	
a. U-factor:	Description Area	a. Electric Heat Pump	Cap: 31.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 112.7 ft ²		HSPF: 7.00
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT)	7b. (Clear) 112.7 ft ²	c. N/A	
8. Floor types		14. Hot water systems	
a. Slab-On-Grade Edge Insulation	R=0.0, 188.0(p) ft	a. Electric Resistance	Cap: 40.0 gallons
b. N/A			EF: 0.92
c. N/A		b. N/A	
9. Wall types		c. Conservation credits	
a. Frame, Wood, Exterior	R=13.0, 1175.3 ft ²	(HR-Heat recovery, Solar	
b. Frame, Wood, Adjacent	R=13.0, 156.0 ft ²	DHP-Dedicated heat pump)	
c. N/A		15. HVAC credits	
d. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
e. N/A		HF-Whole house fan,	
10. Ceiling types		PT-Programmable Thermostat,	
a. Under Attic	R=30.0, 1648.0 ft ²	MZ-C-Multizone cooling,	
b. N/A		MZ-H-Multizone heating)	
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 150.0 ft		
b. N/A			

I certify that this home has complied with the Florida Energy Efficiency Code For Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: C. H. W. Co.

Date: 10-6-06

Address of New Home: 298 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 EnergyStarTM designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.

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



Columbia County Building Department Culvert Permit

Culvert Permit No.
000001241

DATE 10/16/2006 PARCEL ID # 28-3S-16-02377-133

APPLICANT SUSAN FAIR PHONE 386.752.1711

ADDRESS 180 NW AMENITY COURT LAKE CITY FL 32055

OWNER CORNERSTONE DEVELOPERS PHONE 386.752.1711

ADDRESS 298 NW KATELYN WAY LAKE CITY FL 32055

CONTRACTOR BRYAN ZECHER PHONE 386.752.1711

LOCATION OF PROPERTY 90-W TO BROWN RD, TO ETHAN PL, TR TO KATELYN WAY, TL AND IT'S THE
5TH LOT ON L.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT MAGNOLIA HILLS 33

SIGNATURE ✓ Susan Fair

INSTALLATION REQUIREMENTS



Culvert size will be 18 inches in diameter with a total length 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 _____

ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED
DURING THE INSTALLATION 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





UNIVERSAL

ENGINEERING SCIENCES

Consultant In: Geotechnical Engineering,
Environmental Sciences, Construction Materials Testing
4475 SW 35th Terrace, Gainesville, Florida 32608 (352) 372-3392

Order No.: 27915-008-01
Report No.: 6882
Date: October 11, 2006

REPORT ON IN-PLACE DENSITY TESTS

Permit 25123

Client: Cornerstone Development
P.O. Box 1867
Lake City, FL 32056

Project: Magnolia Hills, Lot No. 33, Permit Not Posted, Lake City, Columbia County, FL

Area Tested: Fill Beneath Proposed Building Pad

Course: Final Grade

Depth of Test: 0-1'

Type of Test: ASTM D-2922

Date Tested: 09-29-06

Remarks: The tests below meet the minimum 95 percent relative soil compaction requirement of Laboratory Modified Proctor maximum dry density (ASTM D-1557).

TEST LOCATION		LABORATORY RESULTS		FIELD TEST RESULTS		
Description of Test Location		Maximum Density (pcf)	Optimum Moisture (%)	Dry Density (pcf)	Field Moisture (%)	Soil Compaction (%)
1.	Approximately 10' Northwest of Southeast Corner of Proposed Building Pad	112.0	12.0	110.1	4.8	98.3
2.	Approximately 10' Southeast of Northwest Corner of Proposed Building Pad	112.0	12.0	111.4	6.1	99.5
3.	Approximate Center of Proposed Building Pad	112.0	12.0	112.1	6.3	100.1

Handwritten signature: Hance

Technician: CS/sc

Handwritten signature: Keith L. Butts, P.E.
FL Professional Engineer No. 53986

Notice of Treatment

Applicator: Florida Pest Control & Chemical Co. (www.flapest.com)

Address: BAVA AVE

City: LAKE CITY Phone: 752 1703

Site Location: Subdivision MAGNOLIA HILLS

Lot # 33 Block# Permit # 25123

Address 298 NW KATELVA

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
<u>Dwelling</u>	<u>2005</u>	<u>620</u>	<u>4</u>
<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>

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 _____.

11/30/06 1100 F254 GUNNY
Date Time Print Technician's Name

Remarks: _____

Applicator - White

Permit File - Canary

Permit Holder - Pink

10/05



CORNERSTONE DEVELOPMENT

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-16-02377-133

Building permit No. 00025123

Use Classification SFD/UTILITY

Fire: 50.22

Permit Holder BRYAN ZECHER

Waste: 150.75

Owner of Building CORNERSTONE DEVELOPERS

Total: 200.97

Location: 298 NW KATELYN WAY(MAGNOLIA HILLS, LOT 33)

Date: 01/31/2007

John Kerce

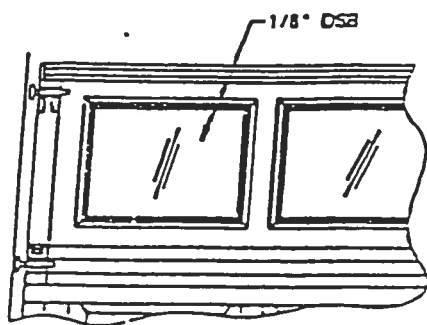
Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)



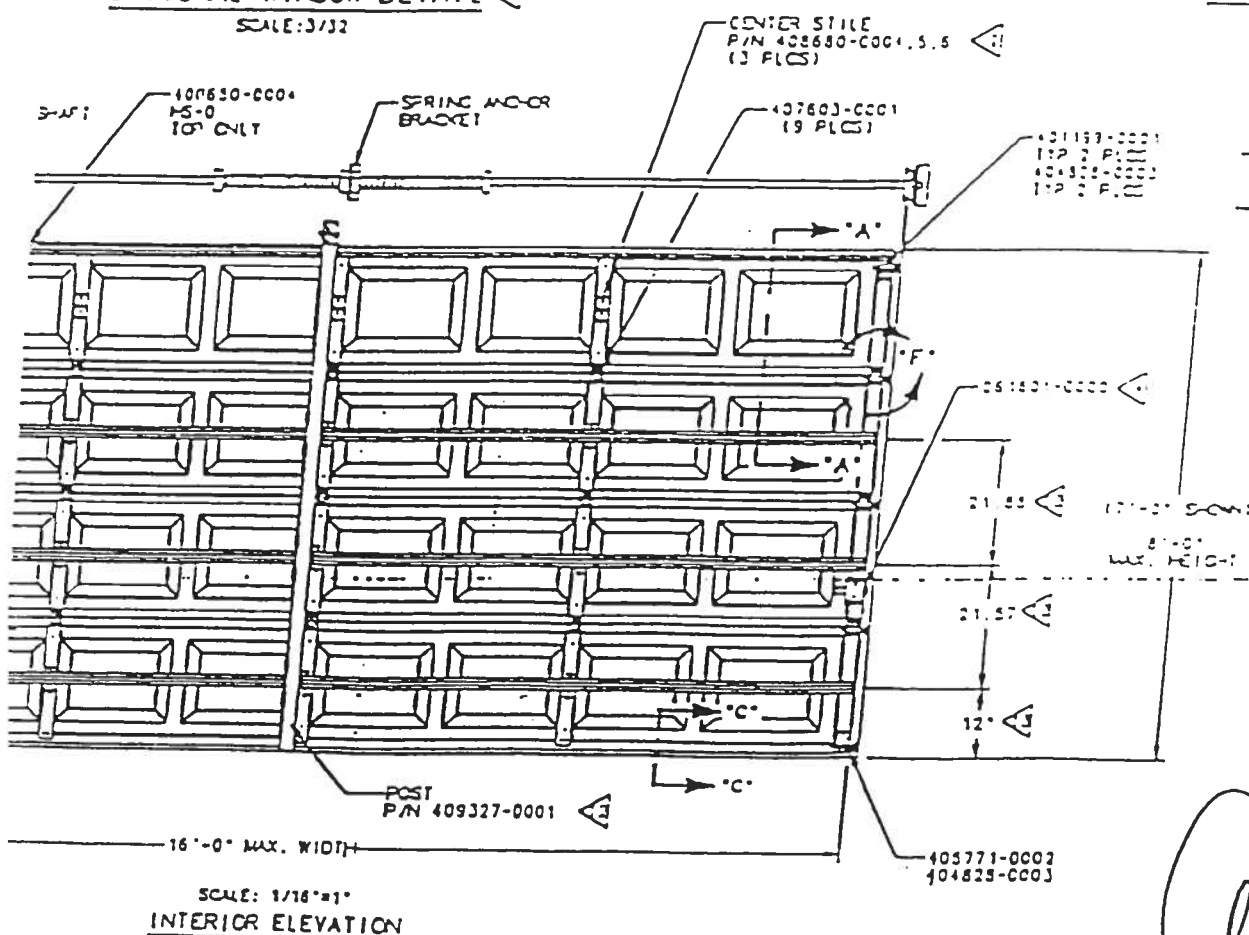
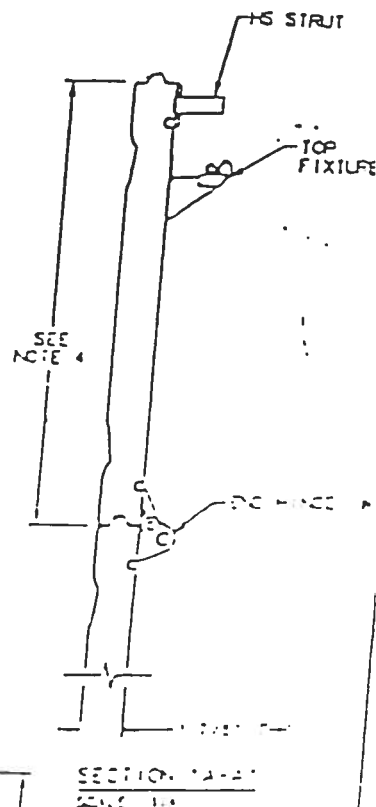
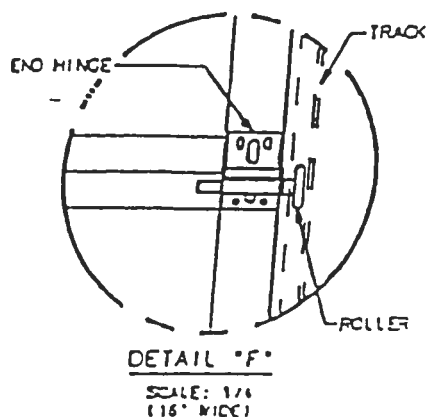
REVISIONS		
LOT#	DESCRIPTION	DATE
A	REV PER CN 10130	3/06/98
B	REV PER CN 10141	3/13/98
C	REV PER CN 10132	3/18/98

2.



OPTIONAL WINDOW DETAIL 

SCALE: 3/12



DESIGN LOAD
25 PSF =
TEST LOAD
37.5 PSF =

10/10/01

[illegible]

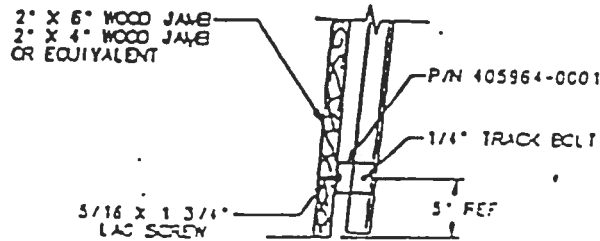
NAME	M. TOLINIS	DATE	01/13/98
NAME	DAVID FAX	DATE	02/19/98
NAME	DAVID FAX	DATE	02/19/98

SERIES 280 & 180
RESI STL DR-16"-q. MAX
WIDTH/WINGLOAD
D-409335

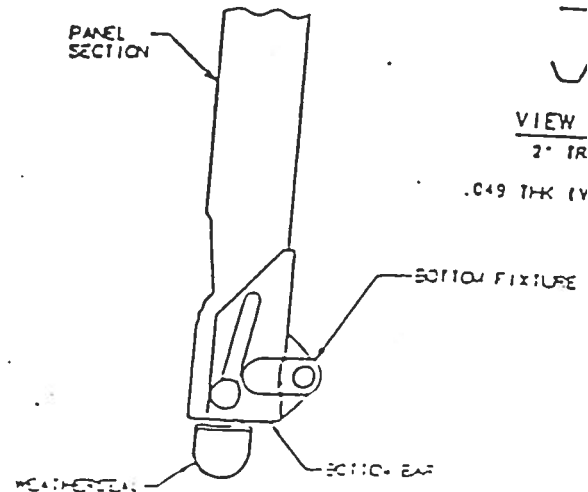
NOTES

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 20.312, 19.00 & 16.75 ARE AVAILABLE AND MAY BE USED IN COMBINATION TO ACHIEVE VARIOUS HEIGHT DOORS.
5. DOSSMENT PATTERN OF 11.50 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.

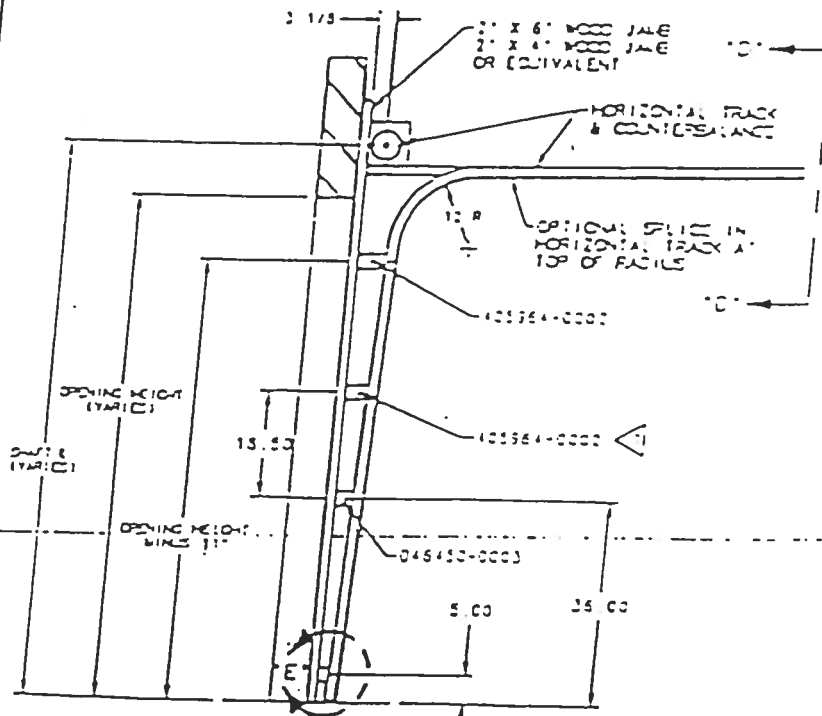
9. THE STRUT PLACEMENT CONSISTENT WITH THE 1
- SECTIONS ARE TO BE P
10. THE STRUT PLACEMENT C
- REDUCED BY THE DIFFER
11. SCREW P/N 805911-0001
12. POST TO BE INSTALLED
13. STRUT PLACEMENTS CAN
14. QUANTITY FOR LOOS CAN



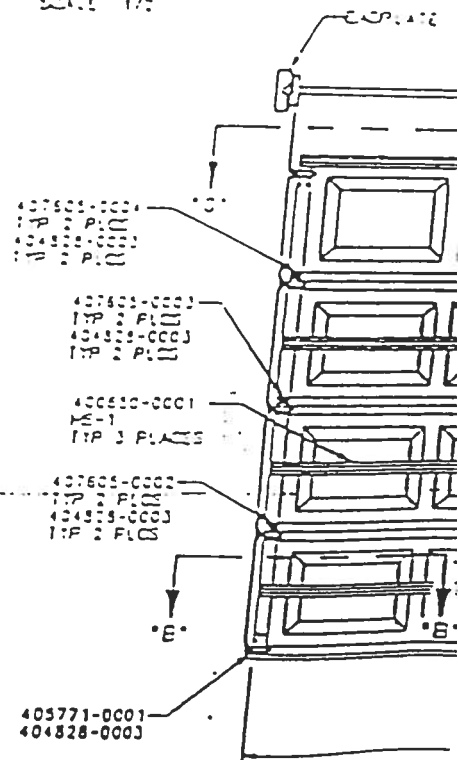
DETAIL "E"
SCALE: 1/8



SECTION "C-C"
SCALE: 1/8



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 251 SERIES.

DOOR WIDTH	CENTER STILE	END STILE	ROLLER SHUNT BRACKET	STRUTS/SECT.	ROLLER	VERTICAL TRACK GAGE	JAMB LOAD (11 PER FT-H1)	HARDWARE
16"	3	SINGLE		HS1 HS2	2" X 7/16"	.049"	100	STD.

26F_b - 1.91

[illegible]

NOTES:

- 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:

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.

Anthony POWER HEADER®**GARAGE HEADER** (84) **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

SPAN (ft)	7.7	9.0	10.4	11.7	12.9	14.2	15.5
WGT (lb/ft)	326	514	789	1115	1521	2014	2604
MOM (ft-lb)	8865	12015	15996	20145	24772	29877	35460
REACTION (lb)	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 ATC 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 ATC NER 466 was used in calculating the above allowable design stresses for Power Header®.

GARAGE HEADER COMPARISONS

SPAN (ft)	8.0	9.0	10.0	11.0	12.0	13.0
WGT (lb/ft)	810/540	950/720	1100/510	1250/660	1400/770	1550/880
MOM (ft-lb)	810/540	950/720	1100/510	1250/660	1400/770	1550/880
REACTION (lb)	810/540	950/720	1100/510	1250/660	1400/770	1550/880

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.

POWER HEADER® is a trademark of
Anthony Forest Products Company
 Post Office Box 1877 • El Dorado, Arkansas 71731
 Internet address: <http://www.anthonyforest.com>
 e-mail: info@anthonyforest.com
 © 2001 Anthony Forest Products Company

Distributed by:

WOODFORD PLYWOOD, INC.
"Structural Wood Products"

11980 West Beaver Street
 Jacksonville, Florida 32220
 (904) 695-0080
 (800) 447-6568
 FAX (904) 695-0160

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 Balthaz

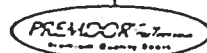
State of Florida, Professional Engineer
Kurt Balthaz, P.E. - License Number 56533



Test Data Review Certificate #2025447A
and CCP/First Report Validation Matrix
#2025447A-001 provides additional
information - available from the ITS.WM
website (www.itswm.com), the
Masonite website (www.masonite.com)
or the Masonite technical center.

Johnson
EntrySystems

June 17, 2002
Our continuing program of product development makes Johnson's doors and windows
the most advanced in the industry today.



Exclusively from

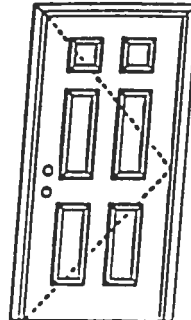
Masonite
Masonite International Corporation

X
Opaque Inswing Unit

COP-WL-JH4101-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:



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



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

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

Design Pressure
+66.0/-66.0

limited water uplift special designed design is used

Large Missile Impact Resistance

Hurricane protective system (shutters) is NOT REQUIRED.

Actual design pressure and impact resistance requirements for a specific building design and geographic location are determined by ASCE 7-10, the IBC or local building code, whichever is more restrictive.

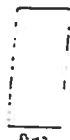
MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed - see VAD-WL-VAD001-02

MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed - see VAD-WL-VAD001-02

APPROVED DOOR STYLES:



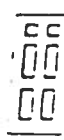
Plain



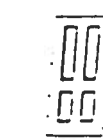
Arch Top 1 panel



3-panel



4-panel



New England 4-panel



European 4-panel



6-panel



6-panel



15-panel



3-panel



3-panel with screen



Eyebow 3-panel



Eyebow 3-panel with screen

Johnson
EntrySystems

June 17, 2002
Our continuing program of product development covers construction, design and product. Please contact us for more information.

PREVOC
Premium Entry Doors



Exclusively from

Masonite
Masonite International Corporation

WINDOWS



AAMA/NWDA 101/1.S.2-97
TEST REPORT SUMMARY

Rendered to:

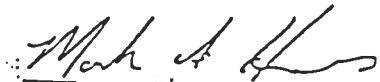
MI HOME PRODUCTS, INC.

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/ft ²
Water Resistance	6.00 psf
Structural Test Pressure	+67.5 psf -70.8 psf
Deglazing	Passed
Forced Entry Resistance	Grade 10

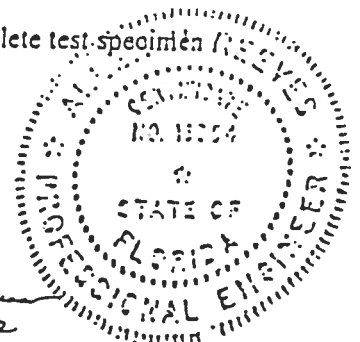
Reference should be made to Report No. 01-41134.01 dated 03/26/02 for complete test specimen description and data.

For ARCHITECTURAL TESTING, INC.


Mark A. Hess, Technician

MAH:nb


1 APRIL 2002





Architectural Testing

AAMA/NWDA 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/NWDA 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

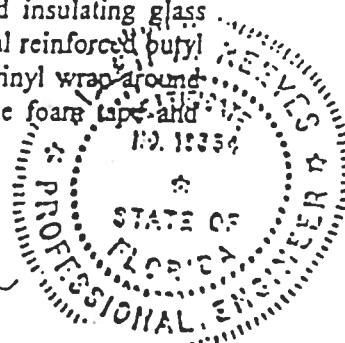
Screen Size: 4' 0-1/4" wide by 2' 11-1/8" high

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: 717.764.4125
www.archtest.com

Allen G. Reum
1 APRIL 2002





Test Specimen Description: (Continued)

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
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.

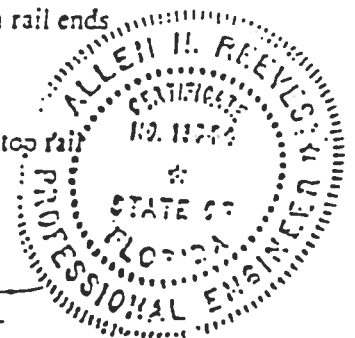
Sash Construction: The sash was constructed of extruded aluminum with coped, butted, and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

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

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
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
1 APRIL 2002





Test Specimen Description: (Continued)

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
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 capped, beveled, 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.

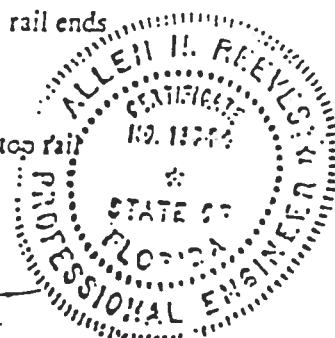
Sash Construction: The sash was constructed of extruded aluminum with capped, beveled and sealed corners fastened with two #8 x 1-1/2" screws through the rails into each jamb screw boss.

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

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
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
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

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
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/ft ²	0.3 cfm/ft ² max

Note #1: The tested specimen meets the performance levels specified in ASTM E 283-91 1011.5. 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) @ 34.7 psf (negative)	0.43" 0.43"	0.26" max. 0.26" max.
<i>*Exceeds L/175 for deflection, but passes all other test requirements</i>			
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) @ 52.1 psf (negative)	0.02" 0.02"	0.18" max. 0.18" max.

Allen H. Reeves
1 APRIL 2002



Test Specimen Description: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
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 555-97)		
	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

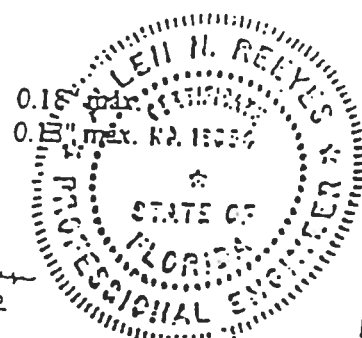
Optional Performance

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"
@ 70.8 psf (negative)	0.05"

Allen H. Reeves
1 APRIL 2002





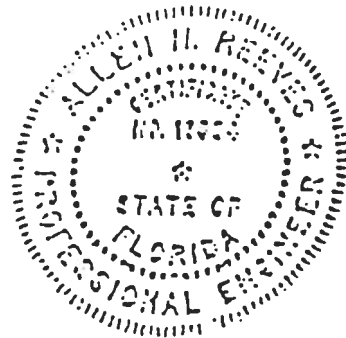
Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. 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

NAH:nb
01-41134.01

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



SHINGLES

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).

Baked Profile, Prestique High Definition, Prestique DS or Prestique DS -

PA 100 = 4 nails

PA 107 = 5 nails

MD NOA# = 01-1226 04

Prestique LS or Prestique LS -

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.

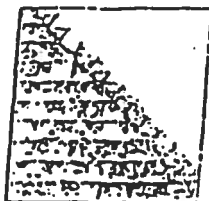
If there are any questions please contact:

Mike Reed - Technical Manager
(205) 342-0287

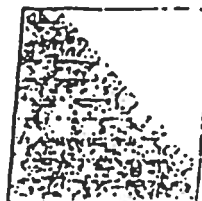
or

Daniel DeJarnette - QA Engineer
(205) 342-0293

ROOFING PRODUCTS SPECIFICATIONS - TUSCALOOSA, AL



**PRESTIGE®
HIGH DEFINITION®**



RAISED PROFILE

•, 84, 4, 2000.

[illegible][illegible]

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IMP AND RICE SPINDLES

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87. 2026	2026	87. 2026
88. 2027	2027	88. 2027
89. 2028	2028	89. 2028
90. 2029	2029	90. 2029
91. 2030	2030	91. 2030
92. 2031	2031	92. 2031

[illegible][illegible]

1. What are the components of the system?
 a. Hardware - the physical components of the system
 b. Software - the programs and data that run on the hardware
 c. Network - the communication links between the components
 d. Users - the people who interact with the system

[illegible]

1. What is the purpose of the study?
 The purpose of the study is to determine the effect of the use of a computer program on the learning of the English language.

2. What are the research questions?
 The research questions are: (1) What is the effect of the use of a computer program on the learning of the English language? (2) What is the effect of the use of a computer program on the learning of the English language?

3. What are the hypotheses?
 The hypotheses are: (1) The use of a computer program will have a positive effect on the learning of the English language. (2) The use of a computer program will have a positive effect on the learning of the English language.

4. What are the variables?
 The variables are: (1) The use of a computer program. (2) The learning of the English language.

5. What are the methods?
 The methods are: (1) The use of a computer program. (2) The learning of the English language.

6. What are the results?
 The results are: (1) The use of a computer program has a positive effect on the learning of the English language. (2) The use of a computer program has a positive effect on the learning of the English language.

7. What are the conclusions?
 The conclusions are: (1) The use of a computer program has a positive effect on the learning of the English language. (2) The use of a computer program has a positive effect on the learning of the English language.

8. What are the implications?
 The implications are: (1) The use of a computer program has a positive effect on the learning of the English language. (2) The use of a computer program has a positive effect on the learning of the English language.

9. What are the limitations?
 The limitations are: (1) The use of a computer program has a positive effect on the learning of the English language. (2) The use of a computer program has a positive effect on the learning of the English language.

10. What are the future research directions?
 The future research directions are: (1) The use of a computer program has a positive effect on the learning of the English language. (2) The use of a computer program has a positive effect on the learning of the English language.

SOUTHEAST &
ATLANTIC OFFICE:
BOX 945 5551

CORPORATE HEADQUARTERS
AM 354 7732

PLANT LOCATION
809155345

ELK 
www.elkcorp.com

Residential System Sizing Calculation

Summary

Spec House

Lake City, FL

Project Title:
609124CornerstoneDevelopment

Class 3 Rating
Registration No. 0
Climate: North

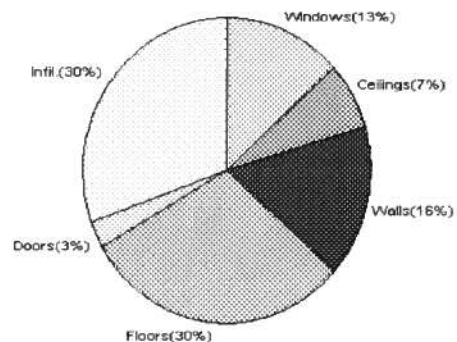
10/2/2006

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	27090 Btuh	Total cooling load calculation	20728 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	114.4 31000	Sensible (SHR = 0.50)	98.8 15500
Heat Pump + Auxiliary(0.0kW)	114.4 31000	Latent	307.6 15500
		Total (Electric Heat Pump)	149.6 31000

WINTER CALCULATIONS

Winter Heating Load (for 1608 sqft)

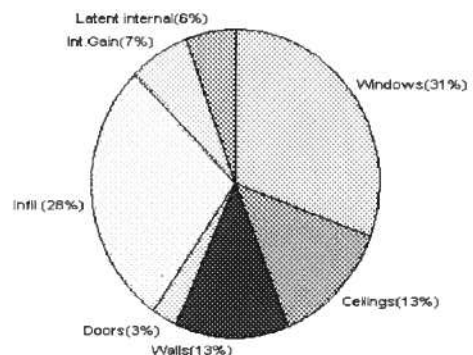
Load component		Load
Window total	113 sqft	3628 Btuh
Wall total	1331 sqft	4372 Btuh
Door total	60 sqft	777 Btuh
Ceiling total	1648 sqft	1942 Btuh
Floor total	188 sqft	8208 Btuh
Infiltration	202 cfm	8163 Btuh
Duct loss		0 Btuh
Subtotal		27090 Btuh
Ventilation	0 cfm	0 Btuh
TOTAL HEAT LOSS		27090 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1608 sqft)

Load component		Load
Window total	113 sqft	6350 Btuh
Wall total	1331 sqft	2687 Btuh
Door total	60 sqft	588 Btuh
Ceiling total	1648 sqft	2729 Btuh
Floor total		0 Btuh
Infiltration	105 cfm	1955 Btuh
Internal gain		1380 Btuh
Duct gain		0 Btuh
Sens. Ventilation	0 cfm	0 Btuh
Total sensible gain		15689 Btuh
Latent gain(ducts)		0 Btuh
Latent gain(infiltration)		3839 Btuh
Latent gain(ventilation)		0 Btuh
Latent gain(internal/occupants/other)		1200 Btuh
Total latent gain		5039 Btuh
TOTAL HEAT GAIN		20728 Btuh



For Florida residences only

EnergyGauge® System Sizing

PREPARED BY:

DATE: 10/2/06

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Spec House

Project Title:

Class 3 Rating

Lake City, FL

609124CornerstoneDevelopment

Registration No. 0

Climate: North

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

10/2/2006

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	NW	20.0		32.2	644 Btuh
3	2, Clear, Metal, 0.87	NE	15.0		32.2	483 Btuh
4	2, Clear, Metal, 0.87	SE	30.0		32.2	966 Btuh
5	2, Clear, Metal, 0.87	SW	2.7		32.2	87 Btuh
	Window Total		113(sqft)			3628 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1175		3.3	3860 Btuh
2	Frame - Wood - Adj(0.09)	13.0	156		3.3	512 Btuh
	Wall Total		1331			4372 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		20		12.9	259 Btuh
2	Insulated - Adjacent		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	1648		1.2	1942 Btuh
	Ceiling Total		1648			1942Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	0	188.0 ft(p)		43.7	8208 Btuh
	Floor Total		188			8208 Btuh
	Zone Envelope Subtotal:					18927 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=		
	Natural	0.94	12864	201.5		8163 Btuh
Ductload	Partially sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)					0 Btuh
Zone #1	Sensible Zone Subtotal					27090 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	27090 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	27090 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Spec House
Lake City, FL

Project Title:
609124CornerstoneDevelopment

Class 3 Rating
Registration No. 0
Climate: North

10/10/2020



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

Spec House

Project Title:

Class 3 Rating

Registration No. 0

Climate: North

Lake City, FL

609124CornerstoneDevelopment

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

10/2/2006

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	NW	20.0	32.2	644 Btuh
3	2, Clear, Metal, 0.87	NE	15.0	32.2	483 Btuh
4	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
5	2, Clear, Metal, 0.87	SW	2.7	32.2	87 Btuh
Window Total			113(sqft)		3628 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1175	3.3	3860 Btuh
2	Frame - Wood - Adj(0.09)	13.0	156	3.3	512 Btuh
Wall Total			1331		4372 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Exterior		20	12.9	259 Btuh
2	Insulated - Adjacent		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	1648	1.2	1942 Btuh
Ceiling Total			1648		1942Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	188.0 ft(p)	43.7	8208 Btuh
Floor Total			188		8208 Btuh
Zone Envelope Subtotal:					18927 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	Load
	Natural	0.94	12864	201.5	8163 Btuh
Ductload	Partially sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)				0 Btuh
Zone #1	Sensible Zone Subtotal				27090 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	27090 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	27090 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Spec House
Lake City, FL

Project Title:
609124CornerstoneDevelopment

Class 3 Rating
Registration No. 0
Climate: North

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

Spec House

Project Title:

Class 3 Rating

Lake City, FL

609124CornerstoneDevelopment

Registration No. 0

Climate: North

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 17.0 F

10/2/2006

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

Component Loads for Whole House

Window	Type*		Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	45.0	0.0	45.0	29	60	2702	Btuh
2	2, Clear, 0.87, None,N,N	NW	1.5ft.	2ft.	20.0	0.0	20.0	29	60	1201	Btuh
3	2, Clear, 0.87, None,N,N	NE	1.5ft.	5.5ft.	15.0	0.0	15.0	29	60	901	Btuh
4	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	30.0	12.1	17.9	29	63	1468	Btuh
5	2, Clear, 0.87, None,N,N	SW	1.5ft.	1ft.	2.7	2.7	0.0	29	63	78	Btuh
	Window Total				113 (sqft)					6350 Btuh	
Walls	Type		R-Value/U-Value		Area(sqft)			HTM		Load	
1	Frame - Wood - Ext		13.0/0.09		1175.3			2.1		2451 Btuh	
2	Frame - Wood - Adj		13.0/0.09		156.0			1.5		235 Btuh	
	Wall Total				1331 (sqft)					2687 Btuh	
Doors	Type				Area (sqft)			HTM		Load	
1	Insulated - Exterior				20.0			9.8		196 Btuh	
2	Insulated - Adjacent				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		1648.0			1.7		2729 Btuh	
	Ceiling Total				1648 (sqft)					2729 Btuh	
Floors	Type		R-Value		Size			HTM		Load	
1	Slab On Grade		0.0		188 (ft(p))			0.0		0 Btuh	
	Floor Total				188.0 (sqft)					0 Btuh	
	Zone Envelope Subtotal:									12354 Btuh	
Infiltration	Type		ACH		Volume(cuft)			CFM=		Load	
	SensibleNatural		0.49		12864			105.1		1955 Btuh	
Internal gain			Occupants		Btuh/occupant			Appliance		Load	
			6		X 230 +			0		1380 Btuh	
Duct load	Partially sealed, R6.0, Supply(Attic), Return(Attic)							DGM = 0.00		0.0 Btuh	
	Sensible Zone Load									15689 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Spec House
Lake City, FL

Project Title:
609124CornerstoneDevelopment

Class 3 Rating
Registration No. 0
Climate: North

10/2/2006

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	15689 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	15689 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	15689 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	3839 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	5039 Btuh
	TOTAL GAIN	20728 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

Spec House

Project Title:

Class 3 Rating

609124CornerstoneDevelopment

Registration No. 0

Lake City, FL

Climate: North

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

10/2/2006

Component Loads for Zone #1: Main

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/lnSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	45.0	0.0	45.0	29	60	2702	Btuh
2	2, Clear, 0.87, None,N,N	NW	1.5ft.	2ft.	20.0	0.0	20.0	29	60	1201	Btuh
3	2, Clear, 0.87, None,N,N	NE	1.5ft.	5.5ft.	15.0	0.0	15.0	29	60	901	Btuh
4	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	30.0	12.1	17.9	29	63	1468	Btuh
5	2, Clear, 0.87, None,N,N	SW	1.5ft.	1ft.	2.7	2.7	0.0	29	63	78	Btuh
Window Total					113 (sqft)					6350 Btuh	
Walls	Type	R-Value/U-Value		Area(sqft)		HTM		Load			
1	Frame - Wood - Ext	13.0/0.09		1175.3		2.1		2451 Btuh			
2	Frame - Wood - Adj	13.0/0.09		156.0		1.5		235 Btuh			
Wall Total					1331 (sqft)				2687 Btuh		
Doors	Type			Area (sqft)		HTM		Load			
1	Insulated - Exterior			20.0		9.8		196 Btuh			
2	Insulated - Adjacent			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		1648.0		1.7		2729 Btuh			
Ceiling Total					1648 (sqft)				2729 Btuh		
Floors	Type	R-Value		Size		HTM		Load			
1	Slab On Grade	0.0		188 (ft(p))		0.0		0 Btuh			
Floor Total					188.0 (sqft)				0 Btuh		
	Zone Envelope Subtotal:									12354 Btuh	
Infiltration	Type	ACH		Volume(cuft)		CFM=		Load			
	SensibleNatural	0.49		12864		105.1		1955 Btuh			
Internal gain	Occupants		Btuh/occupant		Appliance		Load				
	6		X 230 +		0		1380 Btuh				
Duct load	Partially sealed, R6.0, Supply(Attic), Return(Attic)									0.0 Btuh	
	Sensible Zone Load									15689 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Spec House
Lake City, FL

Project Title:
609124CornerstoneDevelopment

Class 3 Rating
Registration No. 0
Climate: North

10/2/2006

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	15689 Btuh
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	15689 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	15689 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	3839 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	5039 Btuh
	TOTAL GAIN	20728 Btuh

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

Spec House

Lake City, FL

Project Title:
609124CornerstoneDevelopment

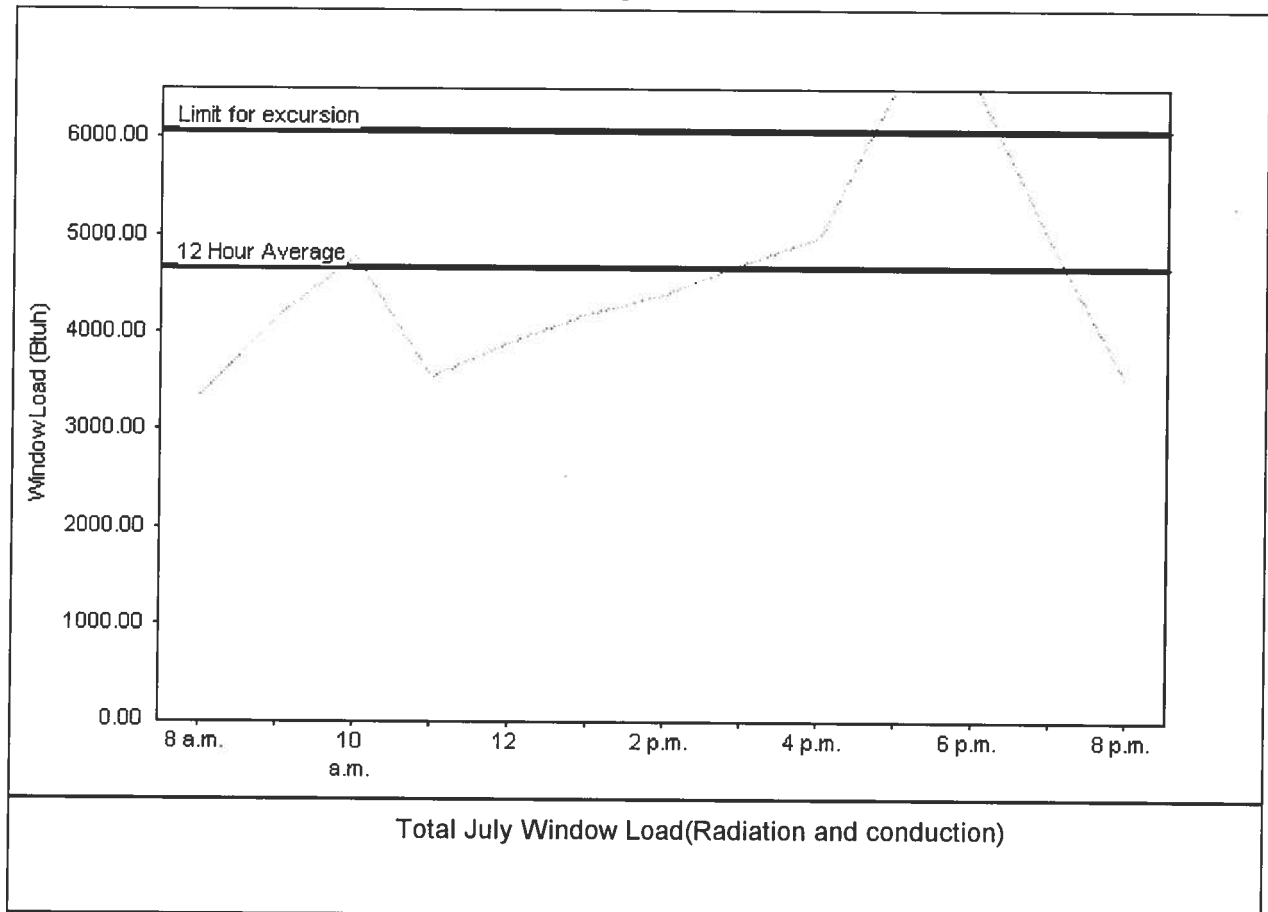
Class 3 Rating
Registration No. 0
Climate: North

10/2/2006

Weather data for: Gainesville - Defaults

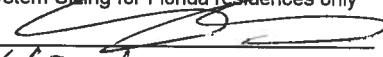
Summer design temperature	92 F	Average window load for July	4670 Btuh
Summer setpoint	75 F	Peak window load for July	6571 Btuh
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	6071 Btuh
Latitude	29 North	Window excursion (July)	500 Btuh

WINDOW Average and Peak Loads



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: 

DATE: 10/2/06

EnergyGauge® FLR2PB v4.1

