

Project Name:

Address:

604284KeenRichard

Lot: 11, Sub: Century Oaks, Plat:

### FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Whole Building Performance Method A

Builder:

Permitting Office: Council

City, State: , FL 32024 Owner: Keen Rich Climate Zone: North		Permit Number: 24  Jurisdiction Number: 27	56 E
1. New construction or existing 2. Single family or multi-family 3. Number of units, if multi-family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area (ft²) 7. Glass type ¹ and area: (Label reqd. a. U-factor:	Description Area	12. Cooling systems a. Central Unit b. N/A c. N/A  13. Heating systems a. Electric Heat Pump b. N/A c. N/A  14. Hot water systems a. Electric Resistance b. N/A  c. Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)  15. HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)	Cap: 30.0 kBtu/hr SEER: 10.00
Glass/Floor Area	a: 0.09 Total as-built p	oints: 22652 oints: 24137	

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy PREPARED BY: DATE: 5-2-1) I hereby certify that this building as designed, is in compliance with the Florida Energy OWNER/AGENT: DATE:

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.



**BUILDING OFFICIAL:** 

DATE:

### **SUMMER CALCULATIONS**

### Residential Whole Building Performance Method A - Details

BASE		AS-	BU	LT				
GLASS TYPES .18 X Conditioned X BSPM = Points Floor Area	Type/SC C	Overhang Ornt Len	Hgt	Area X	SP	мх	SOF	= Points
.18 1508.0 20.04 5439.7	Double, Clear	E 1.5	5.5	75.0	42.0	06	0.90	2827.4
	Double, Clear	E 1.5	8.0	20.0	42.0		0.96	805.5
	Double, Clear	S 1.5	1.5	5.0	35.8		0.52	93.4
	Double, Clear	W 1.5	5.5	40.0	38.	52	0.90	1382.1
	As-Built Total:			140.0				5108.4
WALL TYPES Area X BSPM = Points	Туре	R-\	/alue	Area	Х	SPN	=	Points
Adjacent 168.0 0.70 117.6	Frame, Wood, Exterior		13.0	1168.0		1.50		1752.0
Exterior 1168.0 1.70 1985.6	Frame, Wood, Adjacent		13.0	168.0		0.60		100.8
Base Total: 1336.0 2103.2	As-Built Total:			1336.0				1852.8
DOOR TYPES Area X BSPM = Points	Туре			Area	Х	SPM	l =	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	Туре	R-Value	e A	Area X S	PM	X SC	M =	Points
Under Attic 1508.0 1.73 2608.8	Under Attic	;	30.0	1706.0	1.73 )	X 1.00		2951.4
Base Total: 1508.0 2608.8	As-Built Total:			1706.0				2951.4
FLOOR TYPES Area X BSPM = Points	Туре	R-V	/alue	Area	Х	SPM	=	Points
Slab 167.0(p) -37.0 -6179.0	Slab-On-Grade Edge Insulation		0.0	167.0(p		41.20		-6880.4
Raised 0.0 0.00 0.0								
Base Total: -6179.0	As-Built Total:			167.0				-6880.4
INFILTRATION Area X BSPM = Points				Area	Х	SPM	=	Points
1508.0 10.21 15396.7				1508.0	)	10.21		15396.7

### **SUMMER CALCULATIONS**

### Residential Whole Building Performance Method A - Details

BASE			AS-BUILT						
Summer Ba	se Points:	19565.4	Summer As-Built Points:	8624.8					
Total Summer Points	X System Multiplier	= Cooling Points	Total X Cap X Duct X System X Credit = Component Ratio Multiplier Multiplier Multiplier (System - Points) (DM x DSM x AHU)	Cooling Points					
19565.4	0.4266	8346.6	(1100)	) 7232.0 <b>7232.0</b>					

### WINTER CALCULATIONS

### Residential Whole Building Performance Method A - Details

BASE		AS-	BUI	LT				
GLASS TYPES .18 X Conditioned X BWPM = Points Floor Area		Overhang Irnt Len	Hgt	Area X	WPN	ΛX	WO	= Point
.18 1508.0 12.74 3458.1	Double, Clear	E 1.5	5.5	75.0	18.79	)	1.04	1467.7
	Double, Clear	E 1.5	8.0	20.0	18.79		1.02	383.3
	Double, Clear	S 1.5	1.5	5.0	13.30		2.73	181.6
	Double, Clear	W 1.5	5.5	40.0	20.73	i	1.03	852.4
	As-Built Total:			140.0				2885.1
WALL TYPES Area X BWPM = Points	Туре	R-\	/alue	Area	ΧV	VPM	=	Points
Adjacent 168.0 3.60 604.8	Frame, Wood, Exterior		13.0	1168.0		3.40		3971.2
Exterior 1168.0 3.70 4321.6	Frame, Wood, Adjacent		13.0	168.0		3.30		554.4
Base Total: 1336.0 4926.4	As-Built Total:			1336.0				4525.6
DOOR TYPES Area X BWPM = Points	Туре			Area	x v	VPM	=	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	Туре	R-Value	Ar	ea X W	РМ Х	wc	M =	Points
Under Attic 1508.0 2.05 3091.4	Under Attic	:	30.0	1706.0	2.05 X	1.00		3497.3
Base Total: 1508.0 3091.4	As-Built Total:			1706.0				3497.3
FLOOR TYPES Area X BWPM = Points	Туре	R-V	/alue	Area	x v	/PM	=	Points
Siab 167.0(p) 8.9 1486.3	Slab-On-Grade Edge Insulation		0.0	167.0(p	1	8.80		3139.6
Raised 0.0 0.00 0.0								
Base Total: 1486.3	As-Built Total:			167.0				3139.6
INFILTRATION Area X BWPM = Points				Area	X V	/PM	=	Points
1508.0 -0.59 -889.7				1508.0	)	-0.59		-88 <u>9.7</u>

### WINTER CALCULATIONS

### Residential Whole Building Performance Method A - Details

BASE			AS-BUILT						
Winter Base	Points:	12568.5	Winter As-Built Points:	13653.9					
Total Winter X Points	System = Multiplier	Heating Points	Total X Cap X Duct X System X Credit = Component Ratio Multiplier Multiplier Multiplier (System - Points) (DM x DSM x AHU)	Heating Points					
12568.5	0.6274	7885.5	(sys 1: Electric Heat Pump 30000 btuh ,EFF(7.2) Ducts:Unc(S),Unc(R),Int(AH 13653.9 1.000 (1.069 x 1.169 x 0.93) 0.474 1.000 13653.9 1.00 1.162 0.474 1.000	7515.4 <b>7515.4</b>					

FORM 600A-2004 EnergyGauge® 4.1

### **WATER HEATING & CODE COMPLIANCE STATUS**

Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 11, Sub: Century Oaks, Plat: , , FL, 32024- PERMIT #:

	ASE				A	S-BUIL	.Т				
WATER HEA Number of Bedrooms	TING X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X	Tank X Ratio	Multiplier X	Credit Multipli	
3		2635.00	7905.0	40.0	0.92	3		1.00	2635.00	1.00	7905.0
				As-Built To	tal:						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
8347		7885		7905		24137	7232		7515		7905		22652

**PASS** 



### **Code Compliance Checklist**

### Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 11, Sub: Century Oaks, Plat: , , FL, 32024- PERMIT #:

#### **6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST**

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

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

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 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\* = 83.9

The higher the score, the more efficient the home.

Keen Richard, Lot: 11, Sub: Century Oaks, Plat: , , FL, 32024-

1.	New construction or existing	New	-	12.	Cooling systems	
2.	Single family or multi-family	Single family		a.	Central Unit	Cap: 30.0 kBtu/hr
3.	Number of units, if multi-family	1				SEER: 10.00
4.	Number of Bedrooms	3		b.	N/A	_
5.	Is this a worst case?	Yes	_			_
6.	Conditioned floor area (ft²)	1508 ft²	_	C.	N/A	
7.	Glass type 1 and area: (Label reqd.	by 13-104.4.5 if not default)				-
a.	U-factor:	Description Area		13.	Heating systems	
	(or Single or Double DEFAULT)	7a. (Dble Default) 140.0 ft <sup>2</sup>	_	a.	Electric Heat Pump	Cap: 30.0 kBtu/hr
b.	SHGC:					HSPF: 7.20
	(or Clear or Tint DEFAULT)	7b. (Clear) 140.0 ft <sup>2</sup>	_	b.	N/A	74
8.	Floor types					10=
a.	Slab-On-Grade Edge Insulation	R=0.0, 167.0(p) ft	-	C.	N/A	10=
b.	N/A		-			
c.	N/A			14.	Hot water systems	
9.	Wall types			a.	Electric Resistance	Cap: 40.0 gallons
a.	Frame, Wood, Exterior	R=13.0, 1168.0 ft <sup>2</sup>				EF: 0.92
	Frame, Wood, Adjacent	R=13.0, 168.0 ft <sup>2</sup>	-	b.	N/A	8=
	N/A		_			8=
	N/A			C.	Conservation credits	12
	N/A		-		(HR-Heat recovery, Solar	
	Ceiling types				DHP-Dedicated heat pump)	
	Under Attic	R=30.0, 1706.0 ft <sup>2</sup>	_	15.	HVAC credits	
	N/A		_		(CF-Ceiling fan, CV-Cross ventilation,	
	N/A		_		HF-Whole house fan,	
	Ducts				PT-Programmable Thermostat,	
	Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 128.0 ft	_		MZ-C-Multizone cooling,	
b.	N/A		_		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 completed teatures.

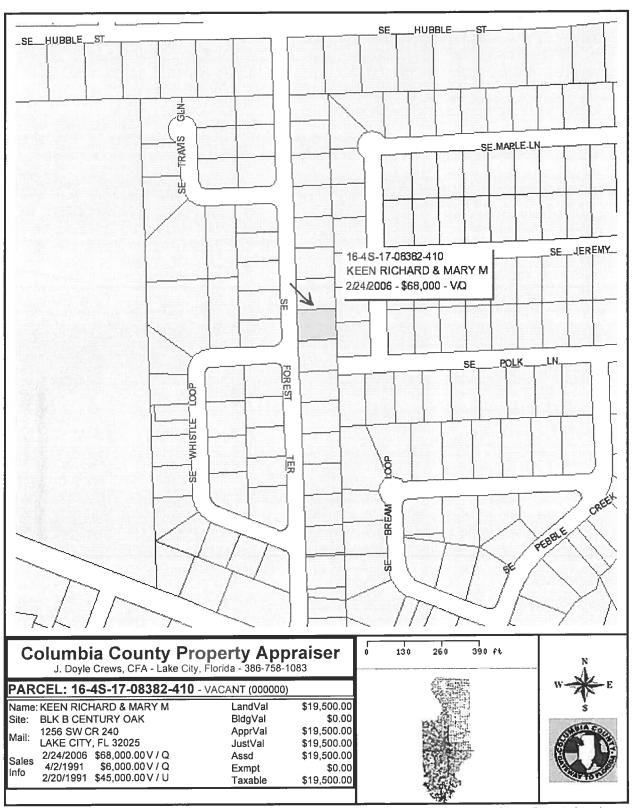
Builder Signature: (

Date: 5 11 06

Address of New Home: 299 SE Forest Kor

City/FL Zip: LabeCaty, FI

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



This information, GIS Map Updated: 5/5/2006, was derived from data which was compiled by the Columbia County Property Appraiser Office solely for the governmental purpose of property assessment. This information should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, it's use, or it's interpretation. Although it is periodically updated, this information may not reflect the data currently on file in the Property Appraiser's office. The assessed values are NOT certified values and therefore are subject to change before being finalized for advalorem assessment purposes.

Lot 11 Block B Century DAK 299 SE Forest Terrace 16-45-17-08382-410

108 Lenvil Dicks Water System \* Septic TANK 58 30 48 22 GArage

Forest Terrace

#### NOTICE OF COMMENCEMENT FORM **COLUMBIA COUNTY, FLORIDA**

Tax Parcel ID Number

#### THIS DOCUMENT MUST BE RECORDED AT THE COUNTY CLERKS OFFICE BEFORE YOUR FIRST INSPECTION.\*\*\*

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. 16-45-17-08382-410

1. Description of property: (legal description of the property and street address or 911 address) parturu General description of improvement: **Owner Name & Address** 1256 SW CR 240 320d Interest in Property Name & Address of Fee Simple Owner (if other than owner): Tohnston James 5. Contractor Name Blvd. AKE Ci SW Main Address 650 **Phone Number** 6. Surety Holders Name Address **Amount of Bond** 7. Lender Name **Phone Number** Address 8. Persons within the State of Florida designated by the served as provided by section 718.13 (1)(a) 7; Florida S Inst:2006011276 Date:05/09/2006 Time:10:09 <u>メラー</u>DC,P.DeWitt Cason,Columbia County B:1083 P:302 Name Address In addition to himself/herself the owner designates to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) -(a) 7. Phone Number of the designee 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) **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 04 MC 22, 20 DC MCen, 20 D(0 **NOTARY STAMP/SEAL CAREY F. CHANDLER** MY COMMISSION #DD432023 **EXPIRES: MAY 22, 2009** Bonded through 1st State Insurance

Signature of

Notice of Treatment					
Applicator Florida Pest Control & Chemical Co.					
Address BANA AUC					
City /	Phone	452-1703			
Site Location Subdivision	ENTURY	Osks			
Lot# // Block# Pern					
Address 219 SE Fore					
	5.17.08	382,010			
AREAS IREATED / / /		Print Technician's			
Area Treated Date	Time Gal.	<u>Name</u>			
Main Body 6-20-06	0845 4	F754			
Patio/s #					
Stoop/s #					
Porch/s #					
Brick Veneer					
Extension Walls					
A/C Pad		7.5			
Walk/s #					
Exterior of Foundation					
Driveway Apron					
Out Building					
Tub Trap/s					
(Other)	1				
Name of Product Applied	ate	<u> </u>			
Remarks					

### **Columbia County Property** Appraiser DB Last Updated: 5/5/2006

Parcel: 16-4S-17-08382-410

### 2006 Proposed Values

Tax Record Property Card Interactive GIS Map | Print

#### **Owner & Property Info**

Owner's Name  KEEN RICHARD & MARY M			
Site Address	BLK B CENTURY OAK		
Mailing Address	1256 SW CR 240 LAKE CITY, FL 32025		
Description	LOT 11 BLOCK B CENTURY OAK S/D ORB 377-431, 732-964, 742-115, 742-115, 744-153, DC 770-294, DC 830-1963, WD 1075-999		

<< Prev Search	Result: 2 of 6 Next >>				
Use Desc. (code)	VACANT (000000)				
Neighborhood	16417.09				
Tax District	2				
UD Codes	мкта06				
Market Area	06				
Total Land Area	0.000 ACRES				

#### **Property & Assessment Values**

Mkt Land Value	cnt: (1)	\$19,500.00
Ag Land Value	cnt: (0)	\$0.00
Building Value	cnt: (0)	\$0.00
XFOB Value	cnt: (0)	\$0.00
Total Appraised Value		\$19,500.00

Just Value	\$19,500.00
Class Value	\$0.00
Assessed Value	\$19,500.00
Exempt Value	\$0.00
Total Taxable Value	\$19,500.00

#### **Sales History**

Sale Date	Book/Page	Inst. Type	Sale VImp	Sale Qual	Sale RCode	Sale Price
2/24/2006	1075/999	WD	٧	Q		\$68,000.00
4/2/1991	744/153	WD	V	Q		\$6,000.00
2/20/1991	742/115	WD	٧	U	35	\$45,000.00

### **Building Characteristics**

Bidg Item	Bldg Desc	Year Bit	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
			NONE			

#### **Extra Features & Out Buildings**

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
				NONE		

#### Land Breakdown

Lnd	
-----	--

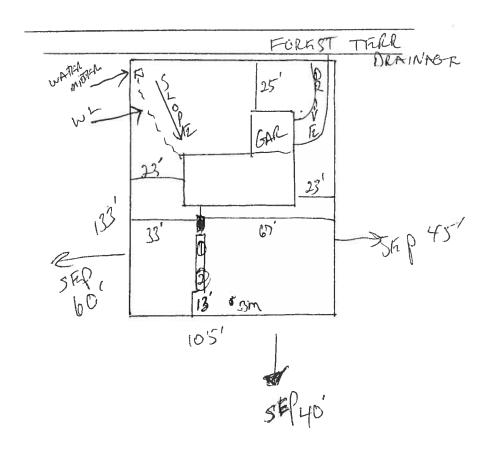
## **Columbia County Building Department** Waiver No. **Culvert Waiver Permit / Application** Kichard + OWNER Same PHONE ADDRESS James Johnston PHONE 365 LOCATION OF PROPERTY 4/ 5. to Terrace turn Left Block B Century SUBDIVISION (Lot/Block/Phase/Unit) I HEREBY CERTIFY THAT I UNBERSTAND AND WILL FULLY COMPLY WITH THE DECISION OF THE COLUMBIA COUNTY PUBLIC WORKS DEPARTMENT IN CONNECTION WITH THE HEREIN PROPOSED APPLICATION. DATE: 5-5-06 FEE: \$ 50.00 A SEPARATE CHECK IS REQUIRED. MAKE CHECKS PAYABLE TO BCC. **Public Works Department Use Only** I HEREBY CERTIFY THAT I HAVE EXAMINED THIS APPLICATION AND DETERMINE THAT THE CULVERT WAIVER IS: NOT APPROVED – NEEDS A CULVERT PERMIT APPROVED COMMENTS

ANY QUESTIONS PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 386-752-5955.

SIGNED: DATE:

### STATE OF FLORIDA **DEPARTMENT OF HEALTH**

APPLICATION FOR ONSITE SEWAGE DISPOSA	Permit Application Number 06-050
PART II - SITE	
Scale: 1 inch = 50 feet.	Lot 11



Notes:		
Site Plan submitted by:	7-0	MASTER CONTRACTOR
Plan Approved	Not Approved	Date <u>3/3/८</u>
By PRONIES	Colu	mha CHPInty Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

JIN WELSE

## Columbia County Building Department Culvert Waiver

Phone: 386-758-1008 Fax: 386-758-2160

Culvert Waiver No. 000001089

DATE: 05/25/2006 BUILDING PERMIT NO.	C456 C
APPLICANT JAMES JOHNSTON	PHONE <u>365.5999</u>
ADDRESS 650 SW MAIN BLVD	LAKE CITY FL 32055
OWNER RICHARD & MARY KEEN	PHONE 758.8999
ADDRESS 299 SE FOREST TERRACE	LAKE CITY FL 32025
CONTRACTOR JAMES H. JOHNSTON	PHONE 365.5999
ON THE R. (1ST.CLEARED LOT)  41-S TO C-252-S BY HIGH SCHO	OL,TL TO FOREST,TL IT'S 1/4 MILE DOWN
SUBDIVISION/LOT/BLOCK/PHASE/UNITCENTURY OAK	11 B
PARCEL ID # 16-4S-17-08382-410	
I HEREBY CERTIFY THAT I UNDERSTAND AND WILL FULLY COUNTY PUBLIC WORKS DEPARTMENT IN CONNECTION WIT SIGNATURE:	
A SEPARATE CHECK IS REQUIRED  MAKE CHECKS PAYABLE TO BCC	Amount Paid 50.00
_	
MAKE CHECKS PAYABLE TO BCC	IT USE ONLY
MAKE CHECKS PAYABLE TO BCC  PUBLIC WORKS DEPARTMEN  I HEREBY CERTIFY THAT I HAVE EXAMINED THIS APPLICATION  CULVERT WAIVER IS:	IT USE ONLY ON AND DETERMINED THAT THE  NOT APPROVED - NEEDS A CULVERT PERMIT
MAKE CHECKS PAYABLE TO BCC  PUBLIC WORKS DEPARTMEN  I HEREBY CERTIFY THAT I HAVE EXAMINED THIS APPLICATION  CULVERT WAIVER IS:  APPROVED  COMMENTS:  SIGNED:  DA	TON AND DETERMINED THAT THE  NOT APPROVED - NEEDS A CULVERT PERMIT  TEL  TE: 6-5-06
MAKE CHECKS PAYABLE TO BCC  PUBLIC WORKS DEPARTMEN  I HEREBY CERTIFY THAT I HAVE EXAMINED THIS APPLICATION  CULVERT WAIVER IS:  APPROVED  COMMENTS:  SIGNED:  DA	ON AND DETERMINED THAT THE  NOT APPROVED - NEEDS A CULVERT PERMIT

Project Information for: L162012

Builder:

RICHARD KEEN LOT 11 CENTURY OAKS

Date: Start Number: 5/11/2006

1003

Subdivision:

Lot:

N/A

**COLUMBIA COUNTY** 

County or City:

Truss Page Count: Truss Design Load Information (UNO)

Wind

Design Program: MiTek 5.2 / 6.2 **Building Code:** 

FBC2004

Gravity Roof (psf):

42

Wind Standard:

**ASCE 7-02** 

Floor (psf):

55

Wind Speed (mph):

110

Note: See individual truss drawings for special loading conditions

#### Building Designer, responsible for Structural Engineering: (See attached)

JOHNSTON, JAMES H III RC0067161

Address:

650 SOUTHWEST MAIN BOULEVARD LAKE CITY, FL 32024

Designer:

66

Truss Design Engineer: Thomas, E. Miller, P.E., 56877 - Byron K. Anderson, PE FL 60987

Company:

Structural Engineering and Inspections, Inc. EB 9196

Address

16105 N. Florida Ave, Ste B, Lutz, FL 33549

Notes:

- 1. Truss Design Engineer is responsible for the individual trusses as components only.
- 2. Determination as to the suitability and use of these truss components for the structure is the responsibility of the Building Designer of Record, as defined in ANSI/TPI
- 3. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.
- Trusses designed for veritcal loads only, unless noted otherwise.

				I			1
#	Truss ID	Dwg. #	Seal Date	#	Truss ID	Dwg. #	Seal Date
1	CJ1	0511061003	5/11/2006	#	I I I USS ID	Dwg. #	Sear Dat
2	CJ3	0511061003	5/11/2006	-	<del> </del>		<del></del>
3	CJ3A	0511061004	5/11/2006	<b>-</b>	ļ		<del> </del>
	CJ5 CJ5			<del>                                     </del>			<del> </del>
4		0511061006	5/11/2006				-
5	CJ5A	0511061007	5/11/2006	-			1
6	EJ7	0511061008	5/11/2006	ļ			<b></b>
7	EJ7A	0511061009	5/11/2006	ļ			ļ
8	HJ9	0511061010	5/11/2006				ļ
9	HJ9A	0511061011	5/11/2006	ļ			
10	T01	0511061012	5/11/2006	<u> </u>			
11	T02	0511061013	5/11/2006				
12	T03	0511061014	5/11/2006		1		
13	T04	0511061015	5/11/2006				1
14	T05	0511061016	5/11/2006				
15	T06	0511061017	5/11/2006	l			
16	T07	0511061018	5/11/2006				
17	T08	0511061019	5/11/2006				
18	T09	0511061020	5/11/2006				
19	T10	0511061021	5/11/2006				
20	T11G	0511061022	5/11/2006		* 1		
21	T12	0511061023	5/11/2006				
22	T13G	0511061024	5/11/2006				
23	T14	0511061025	5/11/2006				1
	1 1						1
	1			<b> </b>	† · · · · · · · · · · · · · · · · · · ·		
	† †				<del> </del>		
	1			-			
					1		<b>+</b>
	<del>                                     </del>	<del></del>		<b>-</b>	+		<del>                                     </del>
	<del> </del>			<del>                                     </del>			<del> </del>
	<del>                                     </del>				+		
	<del>                                     </del>			<u> </u>	<del> </del>		+
	+						-
	<del>                                     </del>						<del>                                     </del>
					1		<del>  -</del>
	<del>                                     </del>						-
	1				ļ		-
	<b> </b>				ļ		
	<b></b>		·				ļ



#### Log On

#### Public Services

Search for a Licensee Apply for a License View Application Status Apply to Retake Exam Find Exam Information File a Complaint AB&T Delinguent Invoice & Activity List Search

#### ■ User Services

Renew a License Change License Status Maintain Account Change My Address View Messages Change My PIN View Continuing Ed



Term Glossarv



Online Help



DBPR Home | Online Services Home | Help | Site Map

4:25:30 PA

#### Licensee Details

#### **Licensee Information**

Name:

JOHNSTON, JAMES H III (Primary Name)

INDIVIDUAL (DBA Name)

Main Address: 650 SOUTHWEST MAIN BOULEVARD

LAKE CITY Florida 32024

County: **COLUMBIA** 

License Mailing:

LicenseLocation: RT #15 BOX 3693

LAKE CITY FL 32024

County: **COLUMBIA** 

#### License Information

License Type:

**Registered Roofing Contractor** 

Rank:

Reg Roofing

License Number:

RC0067161

Status:

**Current, Inactive** 

**Qualification Effective** 

Licensure Date:

08/27/1998

Expires:

08/31/2005

Special

Qualifications

**Bldg Code Core Course Credit** 

No Qualified

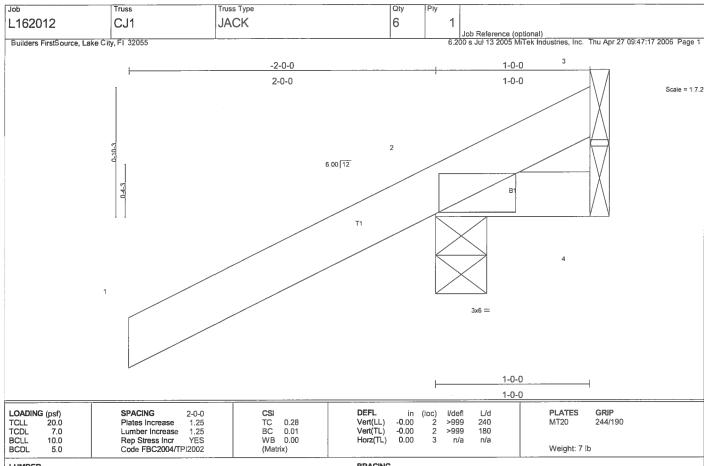
**Business License** 

02/20/2004

Required

View Related License Information View License Complaint

| Terms of Use | | Privacy Statement |



LUMBER

TOP CHORD 2 X 4 SYP No.2

BOT CHORD 2 X 4 SYP No.2

BRACING TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 1-0-0 oc purlins. Rigid celling directly applied or 10-0-0 oc bracing.

REACTIONS (|b/size) 2=267/0-4-0, 4=14/Mechanical, 3=-91/Mechanical Max Horz 2=87(load case 5)

Max Uplift2=-275(load case 5), 3=-91(load case 1)

Max Grav 2=267(load case 1), 4=14(load case 1), 3=128(load case 5)

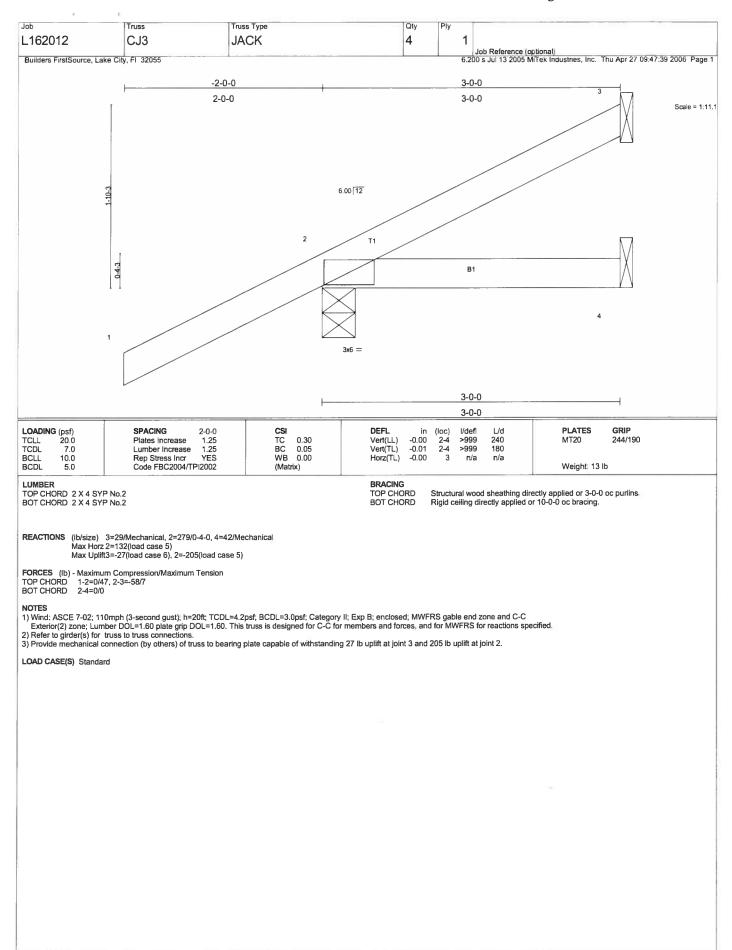
FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/47, 2-3=-69/76 BOT CHORD 2-4=0/0

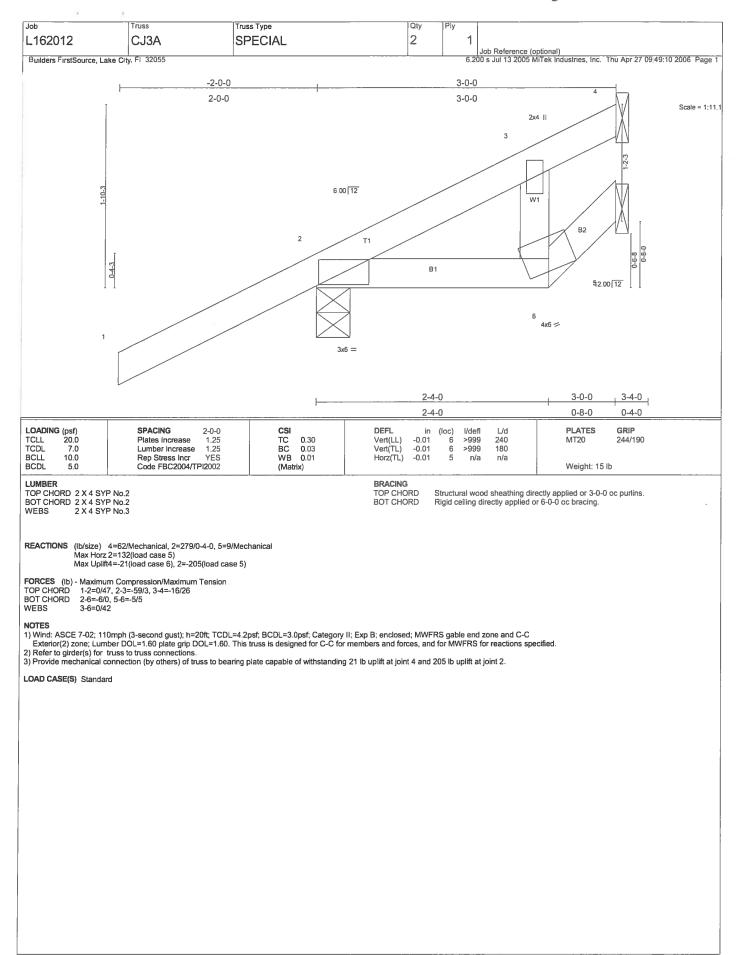
#### NOTES

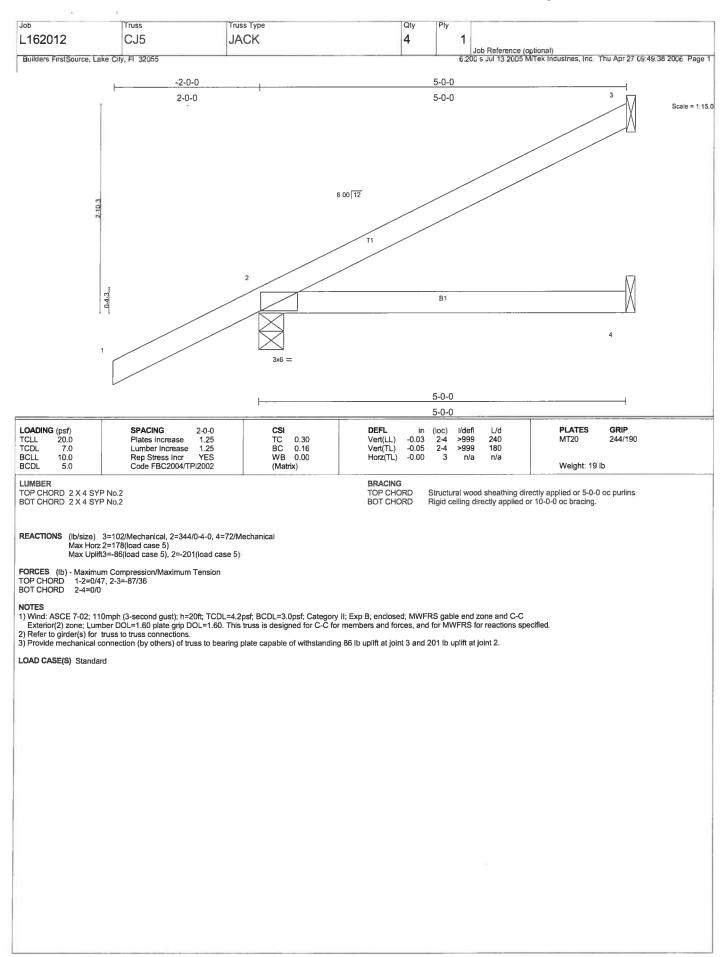
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.

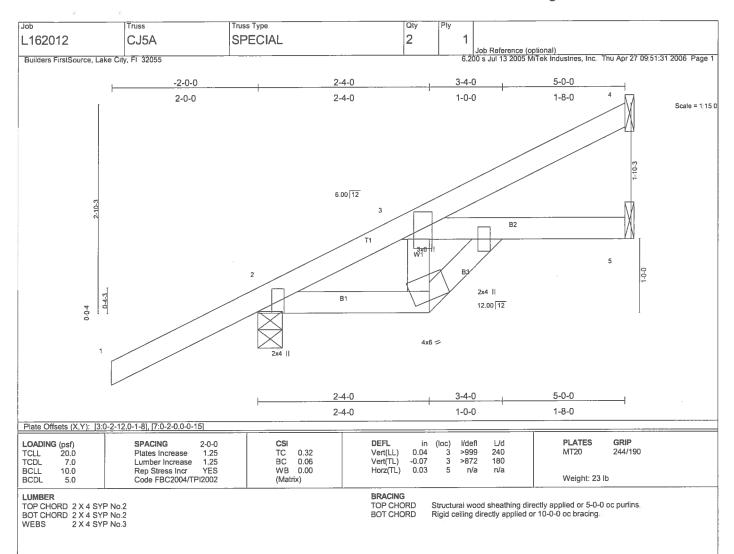
2) Refer to girder(s) for truss to truss connections.

3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 275 lb uplift at joint 2 and 91 lb uplift at joint 3.









(lb/size) 4=120/Mechanical, 2=319/0-4-0, 5=45/Mechanical REACTIONS

Max Horz 2=180(load case 5) Max Upift4=-74(load case 5), 2=-208(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/53, 2-3=-88/0, 3-4=-70/47 BOT CHORD 3-5=0/0

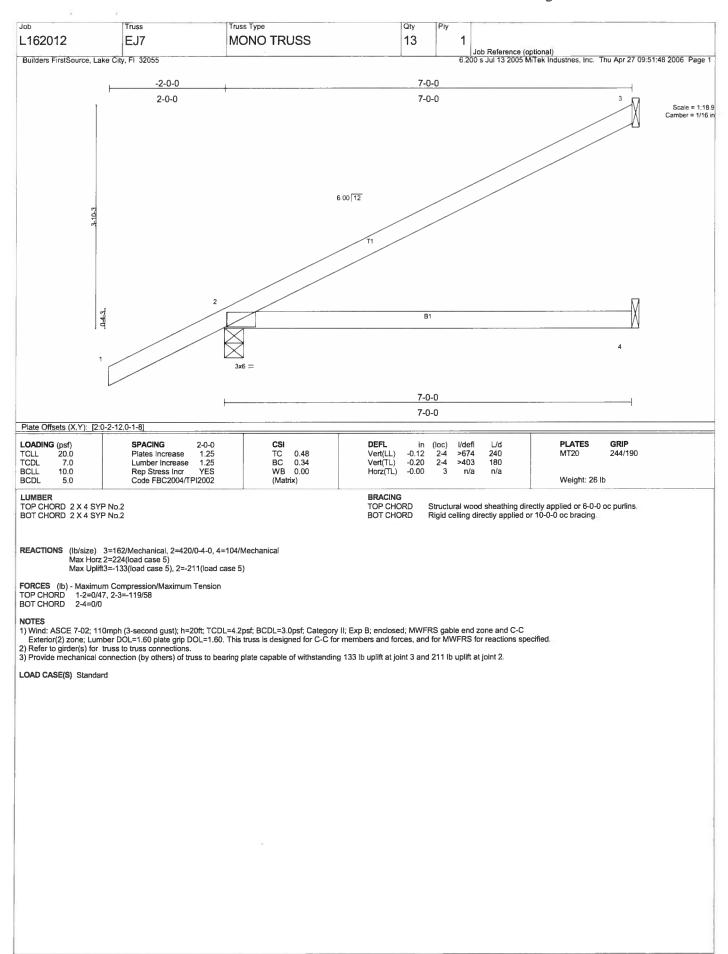
#### NOTES

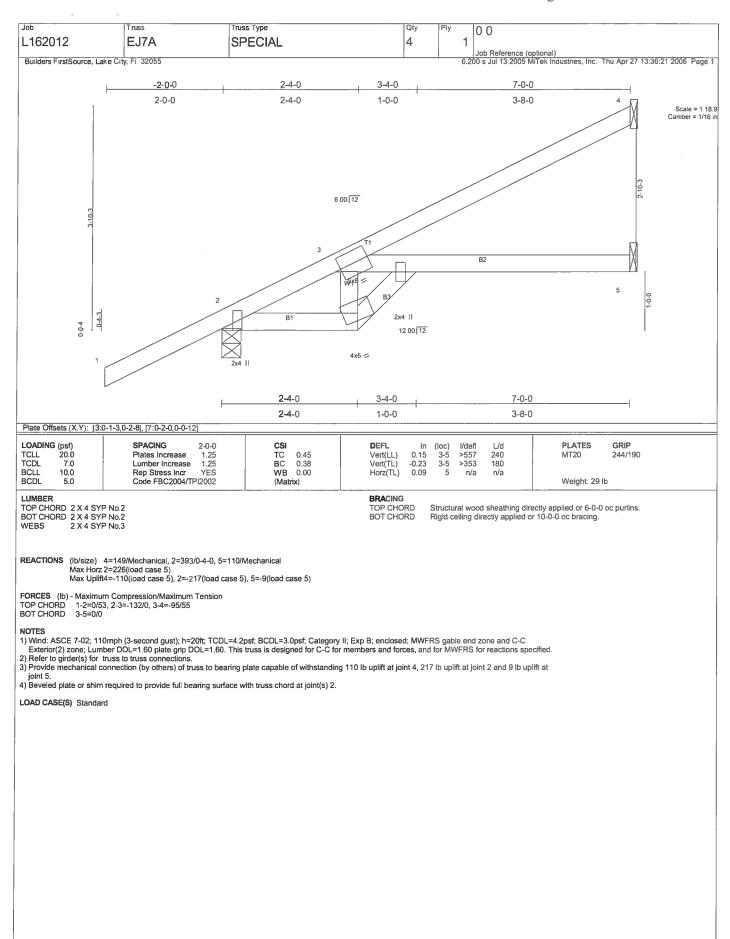
NOTES

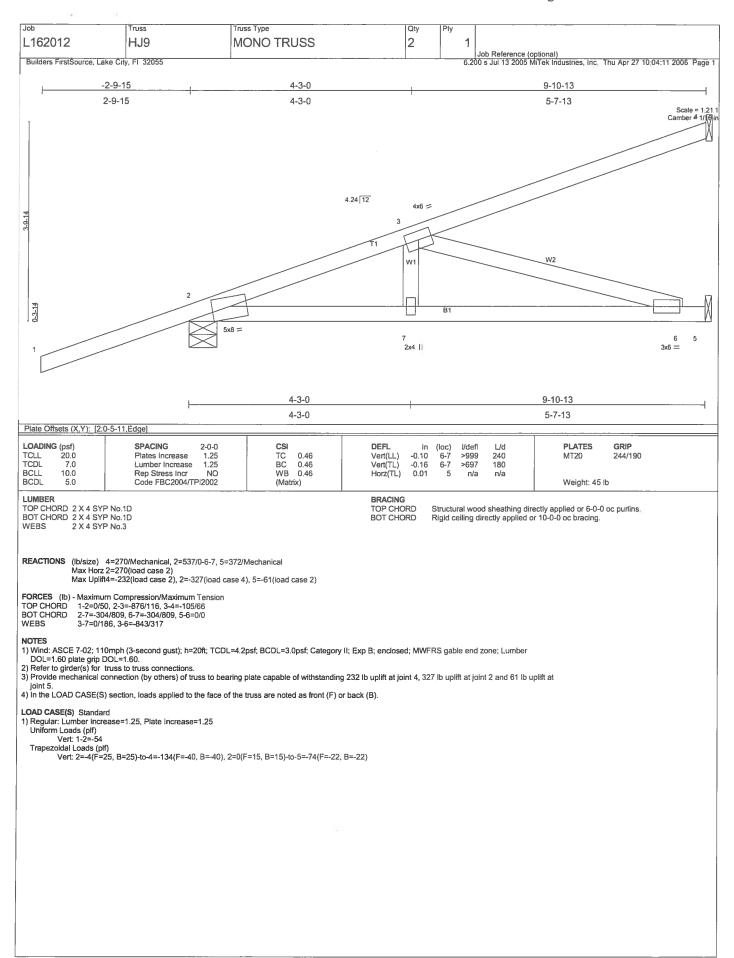
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified. 2) Refer to girder(s) for truss to truss connections.

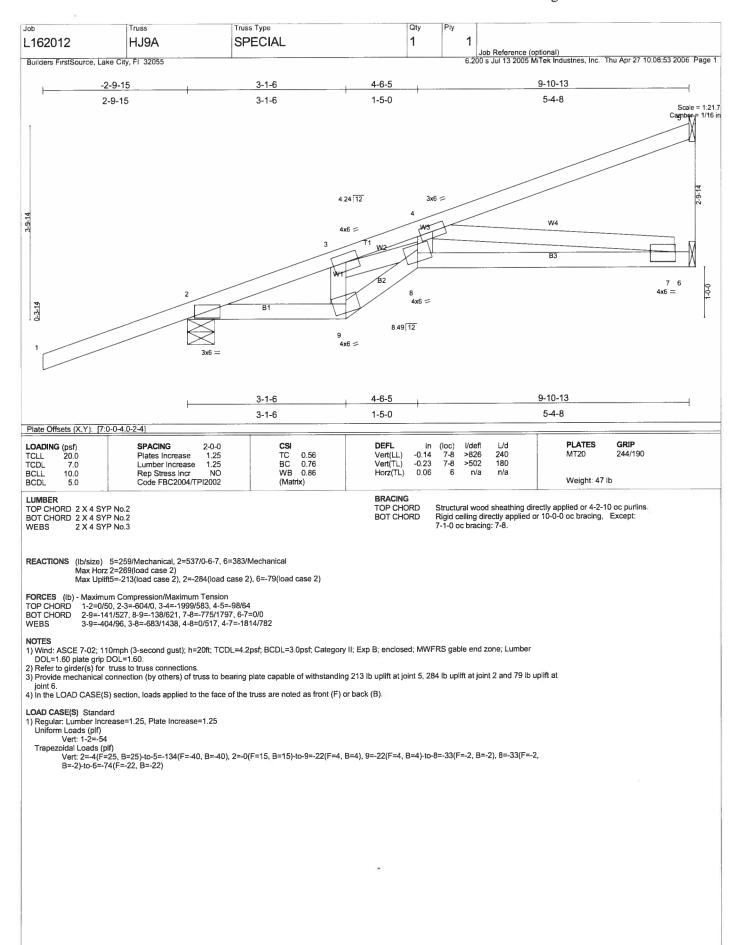
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 4 and 208 lb uplift at joint 2.

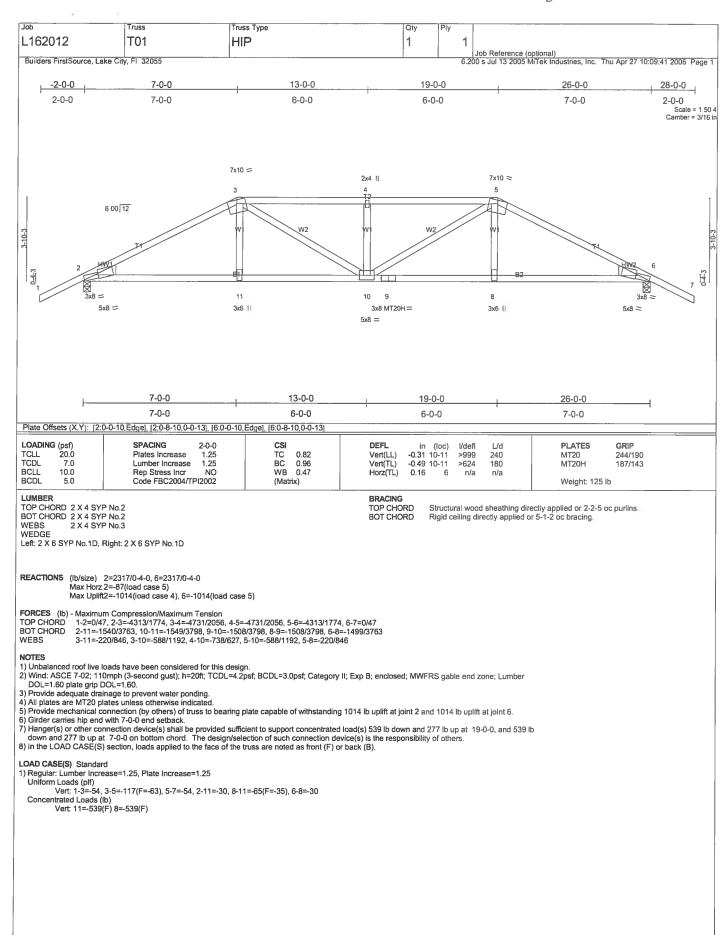
4) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

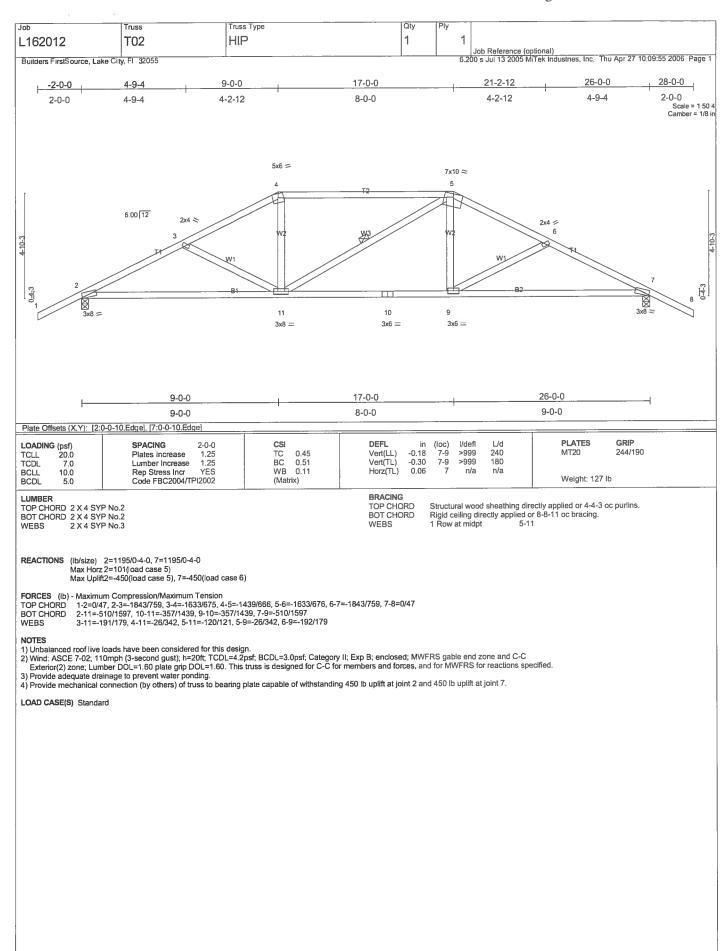


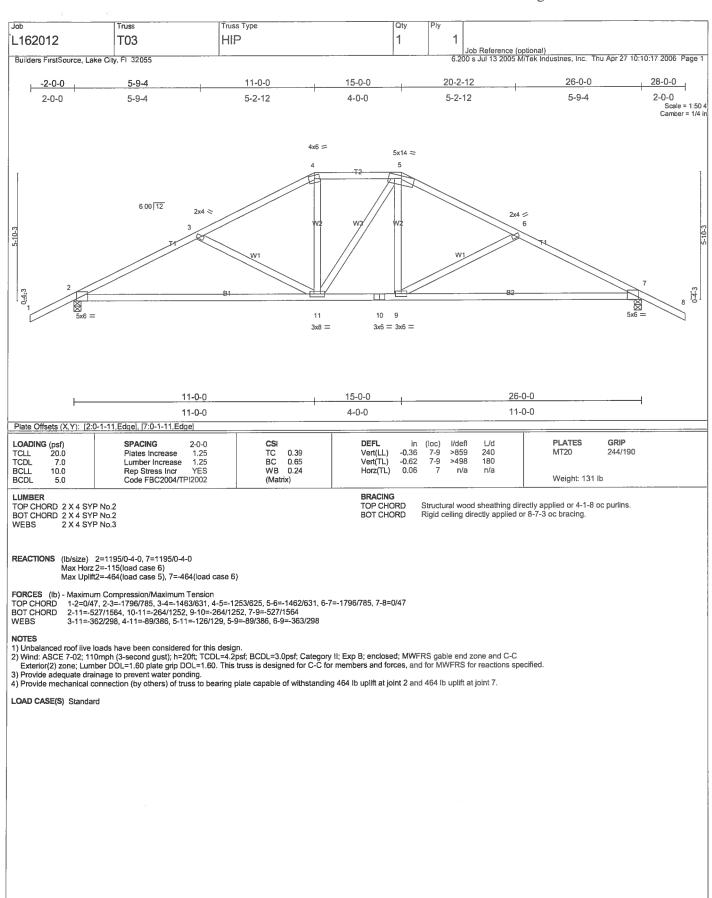


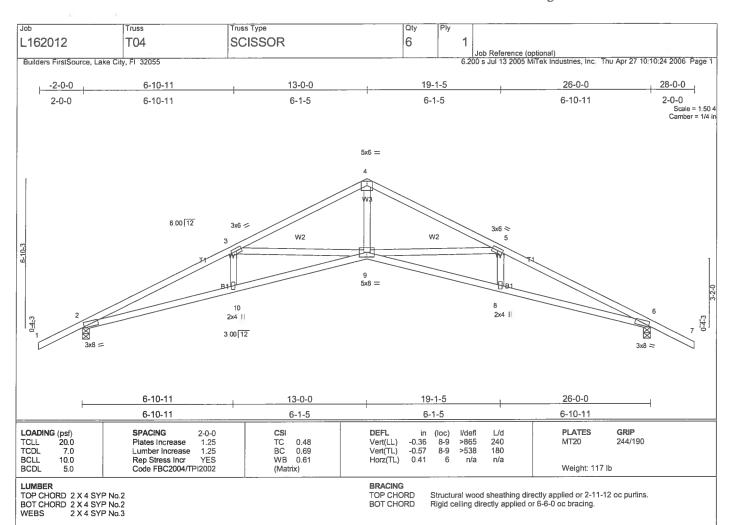










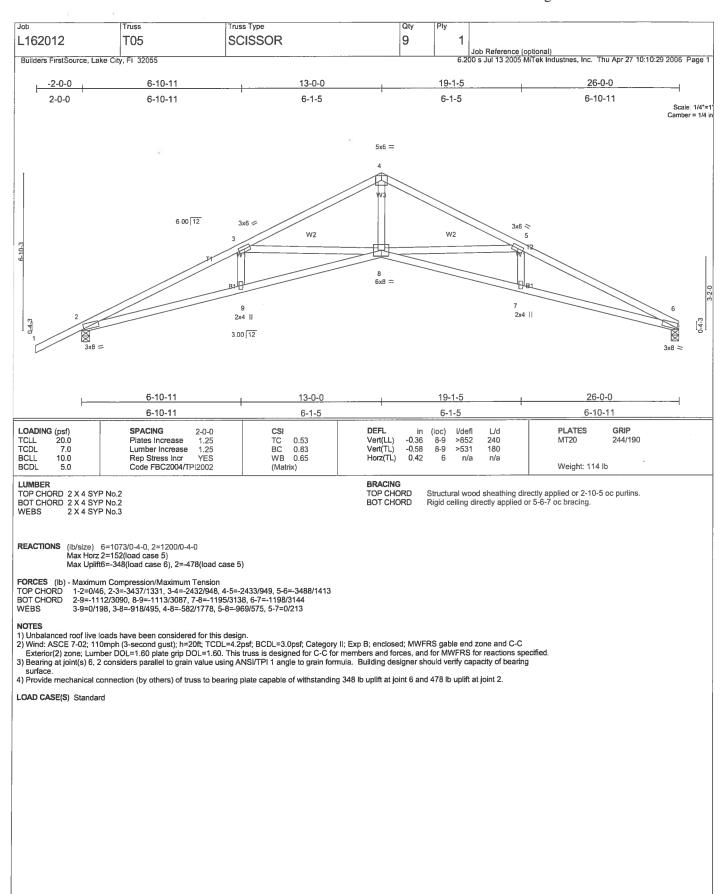


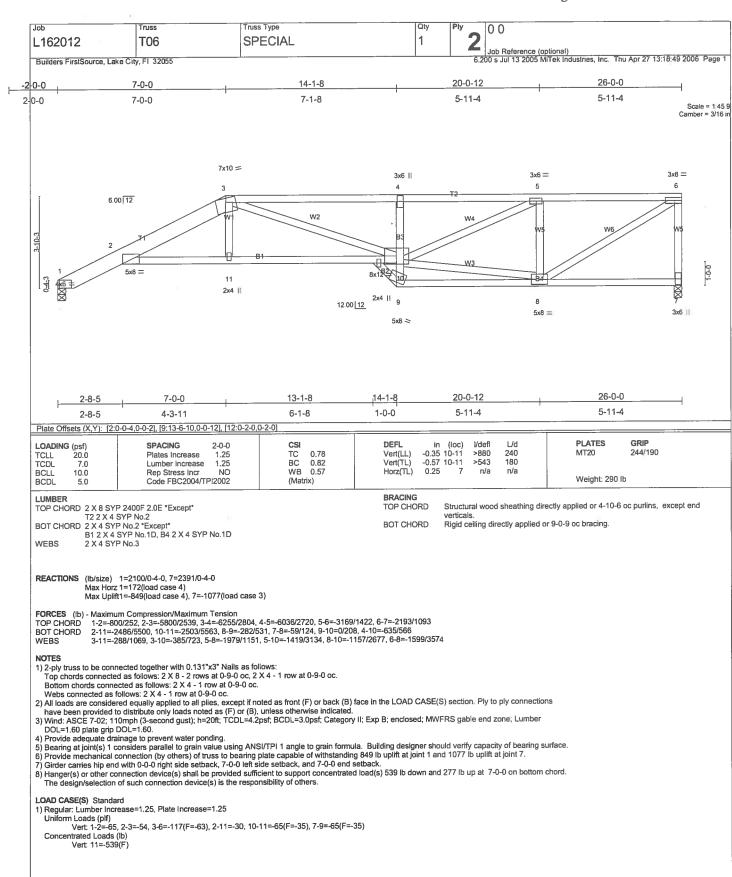
**REACTIONS** (lb/size) 2=1195/0-4-0, 6=1195/0-4-0 Max Horz 2=128(load case 5)

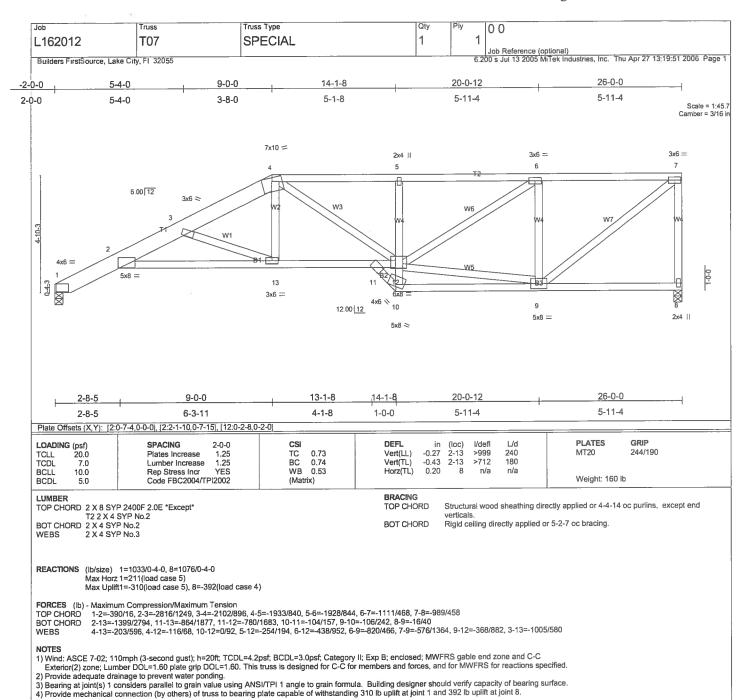
Max Uplift2=-476(load case 5), 6=-476(load case 6)

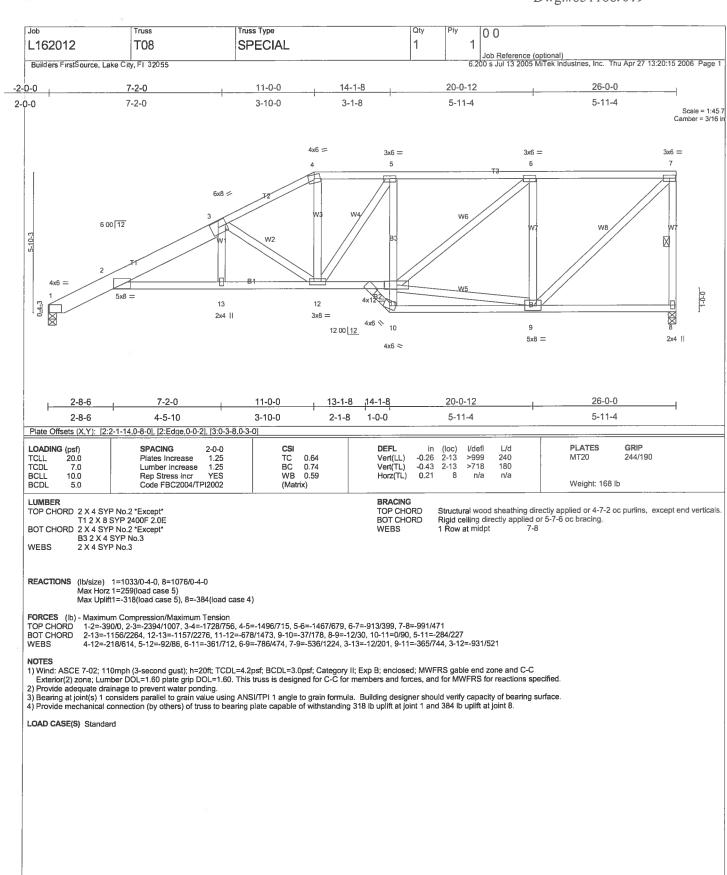
FORCES (Ib) - Maximum Compression/Maximum Tension
TOP CHORD 1.2=0/46, 2.3=-3416/1222, 3-4=-2414/837, 4-5=-2414/837, 5-6=-3416/1222, 6-7=0/46
BOT CHORD 2-10=-935/3071, 9-10=-937/3068, 8-9=-937/3068, 6-8=-935/3071
WEBS 3-10=0/197, 3-9=-917/497, 4-9=-478/1757, 5-9=-917/497, 5-8=0/197

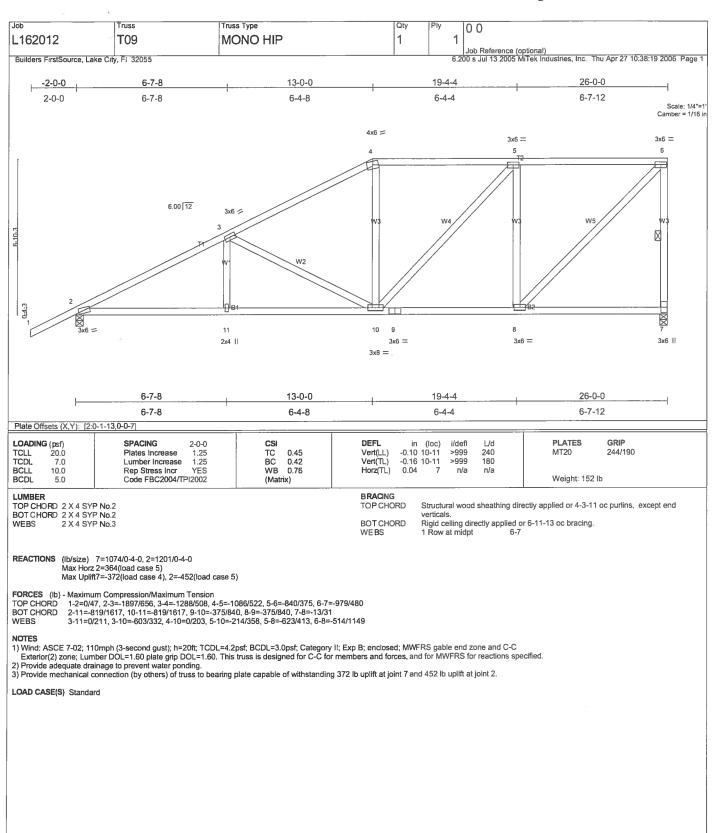
- 1) Unbalanced roof live loads have been considered for this design.
  2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
  3) Bearing at joint(s) 2, 6 considers parallel to grain value using ANS/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 476 lb uplift at joint 2 and 476 lb uplift at joint 6.

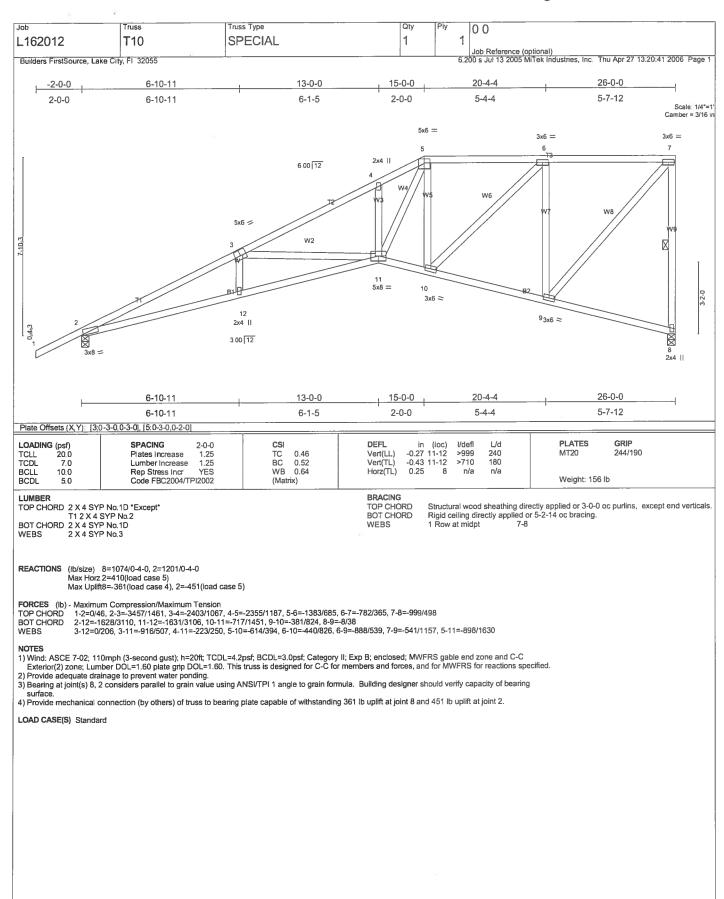


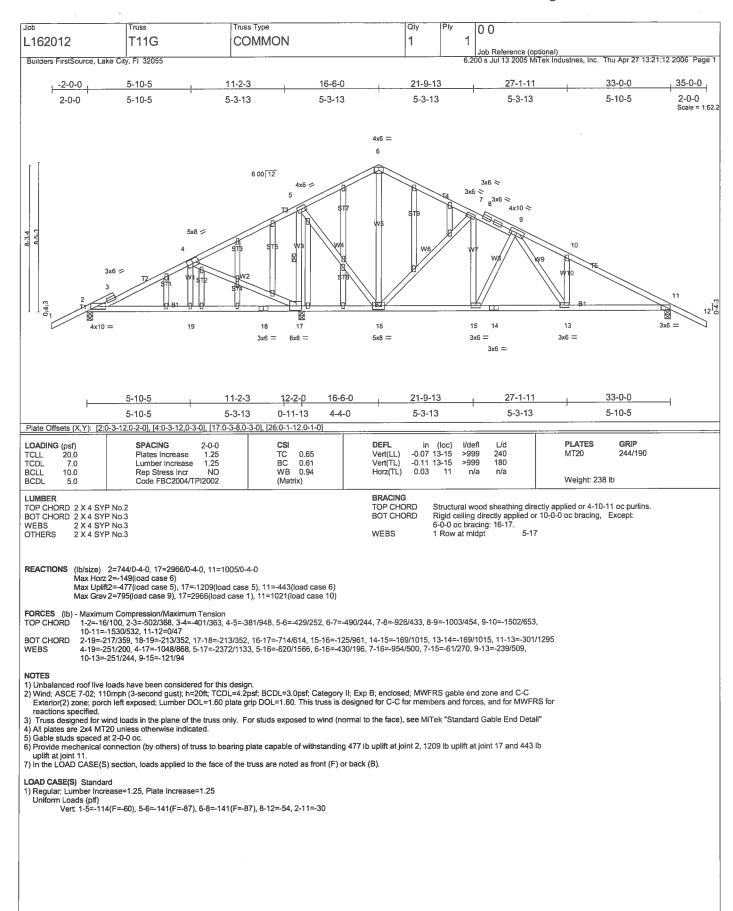


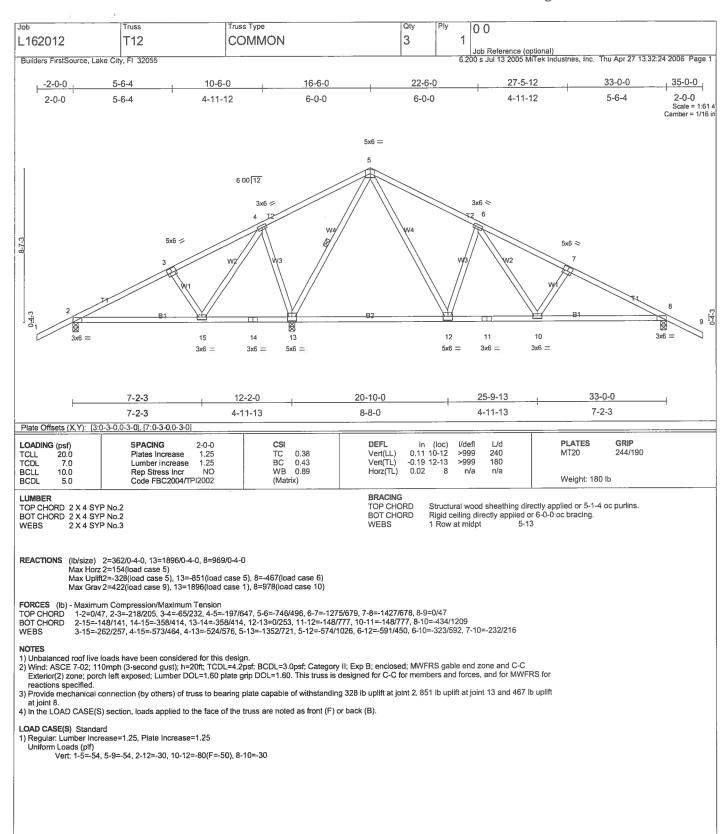


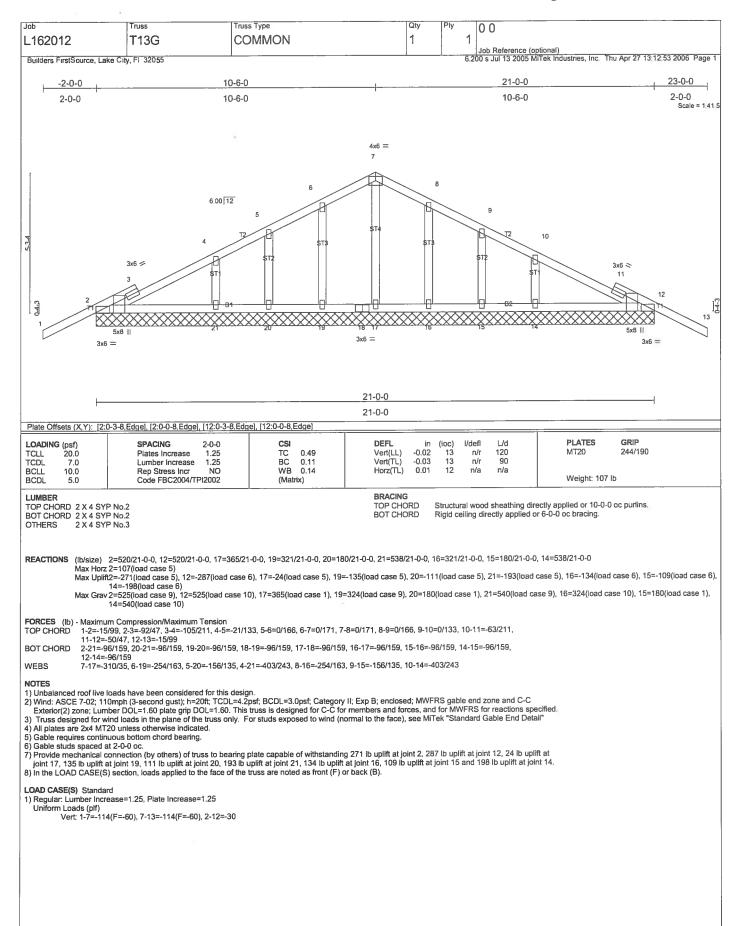


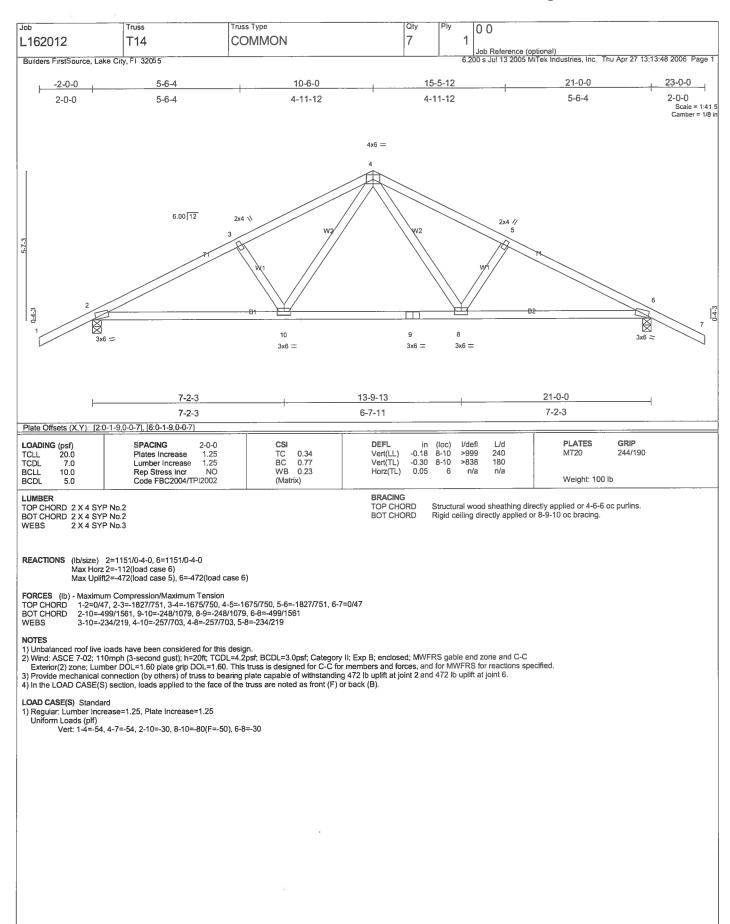










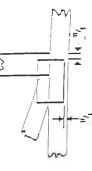


## Symbols

# PLATE LOCATION AND ORIENTATION



\*Center plate on Joint unless dimensions indicate officines Apply Plates to both sides of fires and securely secu



\*for 4 x 2 altentation, locate plates 1/8 from outside edge of hoss and vertical web.

• It is symbol indicates the required direction of stats in connector places

### PLATE SIZE

7 × 7

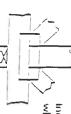
The first climension is the width perpendicular to stots. Second dimension is the length parallel to stots.

## LATERAL BRACING



Indicates tocation of required confimuous lateral bracing

### BEARING



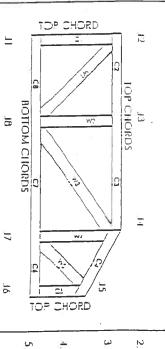
which bearings (supports) accur



Mifel Engineering Reference Sheet: MII-7473

# Numbering System

\_



JOHAIS AND CHORDS ARE NIJMBERED CLOCKWISE AROUND THE TRUSS STARTING AT THE LOWEST JOH IT FARTHEST TO THE LEFT.

WEBS ARE PHIMBERED FROM LEFT TO RIGHT

## CONHECTOR PLATE CODE APPROVALS

BOCA

ICBO

3907, 4922

9667, 9432A

SBCCI

WISC/DILLIR 960022 W. 970036-11

561

IER

# m | Deneral Safety Notes

fallure to follow Could Cause Properly Damage or Personal Injury

- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties
- Cut menubers to bear lightly against each officer
- Place plates on each face of truss at each joint and embed fully. Avoid knots and wane at joint locations
- d. Thiless otherwise noted, locate chord splices of 1% panel length (1.6% from adjacent joint)
- Italess altherwise noted, malsture content of lumiber shall not exceed 19% at time of fabrication.
   Unless expressly noted, this design is not
- unless expressly noted. This design is not applicable for use with the retordant or preservative treated lumber.
- Comber is a non-structural consideration and is the responsibility of truss tabricator General practice is to camber for dead load deflection
- B. Plate type, size and tocation alimensions shown indicate minimum plating requirements
- Lumber shall be of the species and size, and in all respects, equal to or better than the grade specified
- Iop chords must be streathed or purlins provided at spacing shown on design.
- 11. Boffom chords require lateral bracing at 10 ft. spacing, or less, If no ceiling is installed, unless officivities noted.
- 12. Anchorage and / or load transferring connections to trusses are the responsibility of others unless shown.
- Do not averload roat or thou husses with stacks of construction materials.
- 14. Do not cut or after truss member or plate without prior approval of a professional engineer.
- Care should be exercised in handling erection and installation of husses.
- © 1993 MiTek® Holdings, Inc.

#### **Residential System Sizing Calculation**

Summary

Keen Richard

, FL 32024-

Project Title: 604284KeenRichard Class 3 Rating Registration No. 0 Climate: North

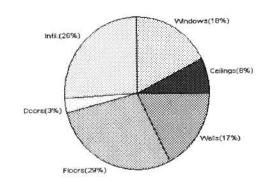
5/2/2006

Location for weather data: Gaines	ville - De	faults: Latit	ude(29) Altitude(152 ft.) Temp Range(	M)	
Humidity data: Interior RH (50%)	) Outdooi	wet bulb (	77F) Humidity difference(54gr.)		_
Winter design temperature	33	F	Summer design temperature	92	•
Winter setpoint	70	F	Summer setpoint	75	F
Winter setpoint Winter temperature difference	37	F	Summer temperature difference	17	
Total heating load calculation	25488	Btuh	Total cooling load calculation	21302	
Submitted heating capacity	% of calc		Submitted cooling capacity	% of calc	
Total (Electric Heat Pump)		30000	Sensible (SHR = 0.75)	132.2	22500
		30000	Latent	175.0	7500
Heat Pump + Auxiliary(0.0kW)	117.7	30000	Total (Electric Heat Pump)	140.8	30000

#### WINTER CALCULATIONS

Winter Heating Load (for 1508 sqft)

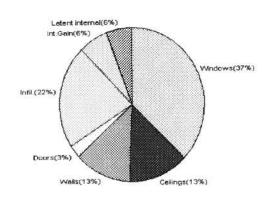
Winter Heating Load (10)	1000 3910			
Load component			Load	
Window total	140	sqft	4507	Btuh
Wall total	1336	sqft	4387	Btuh
Door total	60	sqft	777	Btuh
Ceiling total	1706	sqft	2010	Btuh
Floor total	167	sqft	7291	Btuh
Infiltration	161	cfm	6516	Btuh
Duct loss			0	Btuh
Subtotal			25488	Btuh
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			25488	Btuh



#### **SUMMER CALCULATIONS**

Summer Cooling Load (for 1508 sqft)

Load component			Load	
Window total	140	sqft	7962	Btuh
Wall total	1336	sqft	2690	Btuh
Door total	60	sqft	588	Btuh
Ceiling total	1706	sqft	2825	Btuh
Floor total			0	Btuh
Infiltration	84	cfm	1572	Btuh
Internal gain			1380	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			17016	Btuh
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)			3086	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occup	ants/othe	er)	1200	Btuh
Total latent gain		•	4286	Btuh
TOTAL HEAT GAIN			21302	Btuh



For Florida residences only

EnergyGauge® System Sizing PREPARED BY:

DATE:

EnergyGauge® FLR2PB v4.1

#### **System Sizing Calculations - Winter**

#### Residential Load - Whole House Component Details

Keen Richard

Project Title: 604284KeenRichard

Class 3 Rating Registration No. 0 Climate: North

, FL 32024-

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

5/2/2006

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

Component Loads for vinore flous	Componen	t Loads for	Whole House
----------------------------------	----------	-------------	-------------

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load			
1	2, Clear, Metal, 0.87	NW	75.0	32.2	2414 Btuh			
2	2, Clear, Metal, 0.87	NW	20.0	32.2	644 Btuh			
3	2, Clear, Metal, 0.87	NE	5.0	32.2	161 Btuh			
4	2, Clear, Metal, 0.87	SE	40.0	32.2	1288 Btuh			
	Window Total		4507 Btuh					
Walls	Туре	R-Value	Area X	HTM=	Load			
1	Frame - Wood - Ext(0.09)	13.0	1168	3.3	3836 Btuh			
2	Frame - Wood - Adj(0.09)	13.0	168	3.3	552 Btuh			
	Wall Total		1336		4387 Btuh			
Doors	Туре		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	1706	1.2	2010 Btuh			
	Ceiling Total		1706		2010Btuh			
Floors	Туре	R-Value	Size X	HTM=	Load			
1	Slab On Grade	0	167.0 ft(p)	43.7	7291 Btuh			
	Floor Total		167		7291 Btuh			
		Zone Envelope Subtotal:						
Infiltration	Туре	ACH X	Zone Volume	CFM=				
	Natural	0.80	12064	160.9	6516 Btuh			
Ductload	Average sealed, R6.0, Sup	e sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)						
Zone #1		Sen	sible Zone Sul	ototal	25488 Btuh			

#### WHOLE HOUSE TOTALS

Subtotal Sensible	25488 Btuh
Ventilation Sensible	0 Btuh
Total Btuh Loss	25488 Btuh

#### **Manual J Winter Calculations**

Residential Load - Component Details (continued)

Keen Richard

Project Title: 604284KeenRichard Class 3 Rating Registration No. 0 Climate: North

, FL 32024-

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

Keen Richard

Project Title: 604284KeenRichard

Class 3 Rating Registration No. 0 Climate: North

, FL 32024-

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

5/2/2006

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

nponent Loads for Zone #1: Main	

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load		
1	2, Clear, Metal, 0.87	NW	75.0	32.2	2414 Btuh		
2	2, Clear, Metal, 0.87	NW	20.0	32.2	644 Btuh		
3	2, Clear, Metal, 0.87	NE	5.0	32.2	161 Btuh		
4	2, Clear, Metal, 0.87	SE	40.0	32.2	1288 Btuh		
	Window Total		140(sqft)		4507 Btuh		
Walls	Туре	R-Value	Area X	HTM=	Load		
1	Frame - Wood - Ext(0.09)	13.0	1168	3.3	3836 Btuh		
2	Frame - Wood - Adj(0.09)	13.0	168	3.3	552 Btuh		
	Wall Total		1336		4387 Btuh		
Doors	Туре		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	1706	1.2	2010 Btuh		
	Ceiling Total		1706		2010Btuh		
Floors	Туре	R-Value	Size X	HTM=	Load		
1	Slab On Grade	0	167.0 ft(p)	43.7	7291 Btuh		
	Floor Total		167		7291 Btuh		
		Z	18973 Btuh				
Infiltration	Туре	ACH X	Zone Volume	CFM=			
	Natural	0.80	12064	160.9	6516 Btuh		
Ductioad	Average sealed, R6.0, Sup	Average sealed, R6.0, Supply(Attic), Return(Attic) (DLM of 0.00)					
Zone #1		Sen	sible Zone Sub	ototal	25488 Btuh		

WHOLE HOUSE TOTA	LS	
	Subtotal Sensible Ventilation Sensible Total Btuh Loss	25488 Btuh 0 Btuh 25488 Btuh

#### **Manual J Winter Calculations**

Residential Load - Component Details (continued)

Keen Richard

Project Title: 604284KeenRichard

Class 3 Rating Registration No. 0 Climate: North

, FL 32024-

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

Keen Richard

Project Title: 604284KeenRichard

Class 3 Rating Registration No. 0 Climate: North

, FL 32024-

Reference City: Gainesville (Defaults)

Summer Temperature Difference: 17.0 F

5/2/2006

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

#### **Component Loads for Whole House**

	Type*		Overhang Window Area(sqft) HTM					ITM	Load		
Window	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hat	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None, N, N	NW	1.5ft.	5.5ft.	75.0	0.0	75.0	29	60	4503	Btuh
2	2, Clear, 0.87, None, N, N	NW	1.5ft.	8ft.	20.0	0.0	20.0	29	60	1201	Btuh
3	2, Clear, 0.87, None, N, N	NE	1.5ft.	1.5ft.	5.0	0.0	5.0	29	60	300	Btuh
4	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	40.0	16.2	23.8	29	63	1958	
	Window Total		l		140 (	sqft)				7962	Btuh
Walls	Туре		R-Va	alue/U	-Value	Area	ı(sqft)		HTM	Load	
1	Frame - Wood - Ext			13.0/	0.09	11	68.0		2.1	2436	Btuh
2	Frame - Wood - Adj			13.0/	0.09	16	8.0		1.5	253	Btuh
	Wall Total					13	36 (sqft)			2690	Btuh_
Doors	Туре					Area	(sqft)		HTM	Load	
1	Insulated - Exterior					2	0.0		9.8	196	Btuh
2	Insulated - Adjacent					2	0.0		9.8	196	Btuh
3	Insulated - Exterior					2	0.0		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			1706.0			1.7	2825	Btuh
	Ceiling Total					1706 (sqft)				2825	Btuh
Floors	Туре		R-Value			S	ize		HTM	Load	
1	Slab On Grade			0.0		167 (ft(p))			0.0	0	Btuh
	Floor Total					167.0 (sqft)			0	Btuh	
V 2 V 2 V 2 V 2 V 2 V 2 V 2 V 2 V 2 V 2						Zone Envelope Subtotal:					Btuh
Infiltration	Туре		A	CH			ne(cuft)		CFM=	Load	
	SensibleNatural			0.42			064		84.4	1572	Btuh
Internal		•	Occup	oants		Btuh/o	ccupant	P	Appliance	Load	
gain				6		X 23	30 +		0	1380	Btuh
Duct load	Average sealed, R6.0,	Supply	(Attic)	, Reti	ırn(Atti	C)		DGM	= 0.00	0.0	Btuh
	Sensible Zone Load							17016	Btuh		

#### **Manual J Summer Calculations**

Residential Load - Component Details (continued)

Keen Richard

, FL 32024-

Project Title: 604284KeenRichard Class 3 Rating Registration No. 0 Climate: North

5/2/2006

#### WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	17016	Btuh
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	17016	Btuh
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
Whole House	Total sensible gain	17016	Btuh
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	3086	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	4286	Btuh
ľ	TOTAL GAIN	21302	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 Project Title: Class 3

Keen Richard

604284KeenRichard

Class 3 Rating Registration No. 0 Climate: North

, FL 32024-

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

5/2/2006

	Type*	Overhang Window Area(sqft) HTM						TM	Load		
Window	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross		Unshaded	Shaded	Unshaded		
Williaow	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	75.0	0.0	75.0	29	60	4503	Btuh
2	2, Clear, 0.87, None,N,N	NW	1.5ft.	8ft.	20.0	0.0	20.0	29	60	1201	Btuh
3	2, Clear, 0.87, None,N,N	NE	1.5ft.	1.5ft.	5.0	0.0	5.0	29	60	300 1958	Btuh Btuh
4	2, Clear, 0.87, None, N, N	SE	1.5ft.	5.5ft.	40.0	16.2	23.8	29	63	7962	
	Window Total				140 (						Dluii
Walls	Туре		R-Va	alue/L	J-Value	Area	(sqft)		HTM	Load	
1	Frame - Wood - Ext			13.0/	0.09	116			2.1	2436	Btuh
2	Frame - Wood - Adj			13.0/	0.09	168			1.5		Btuh
-	Wall Total					133	6 (sqft)			2690	Btun
Doors	Туре			-		Area	(sqft)		HTM	Load	
00013	Insulated - Exterior					20	0.0		9.8	196	Btuh
2	Insulated - Adjacent					20	0.0		9.8	196	Btuh
3	Insulated - Exterior						0.0		9.8		Btuh
Ü	Door Total					6	0 (sqft)				Btuh
Ceilings	Type/Color/Surface		R-V	R-Value		Area	(sqft)		HTM	Load	
1	Vented Attic/DarkShingle			30.0		1706.0			1.7		Btuh
1	Ceiling Total					1706 (sqft)				2825	Btuh
Flagra			R-V	alue		Size			HTM	Load	
Floors	Туре		1 ( 0	0.0	167 (ft(p))			0.0	0	Btuh	
1	Siab On Grade			0.0				167.0 (sqft)		0	Btuh
	Floor Total					107	.0 (3411)				
Zone Envelope		elope S	ubtotal:	14065	Btuh						
nfiltration	Type	34.5		ACH			ne(cuft)		CFM= 84.4	Load 1572	Btuh
	SensibleNatural			0.42			064				Diuli
Internal			Occu	ıpants			ccupant		Appliance	Load	D4
gain				6		X 23	30 +		0	1380	
Duct load	Average sealed, R6.0,	Supply	y(Attio	c), Re	turn(Att	ic)		DGM	= 0.00	0.0	Btu
							Sanci	ble Zon	e Load	17016	Btul

#### **Manual J Summer Calculations**

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

Keen Richard

, FL 32024-

604284KeenRichard

Class 3 Rating Registration No. 0 Climate: North

5/2/2006

#### WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	17016	Btuh
	Sensible Duct Load	0	Btuh
	Total Sensible Zone Loads	17016	Btuh
	Sensible ventilation	0	Btuh
	Blower	0	Btuh
Whole House	Total sensible gain	17016	Btuh
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	3086	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	4286	Btuh
	TOTAL GAIN	21302	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

#### **Residential Window Diversity**

#### MidSummer

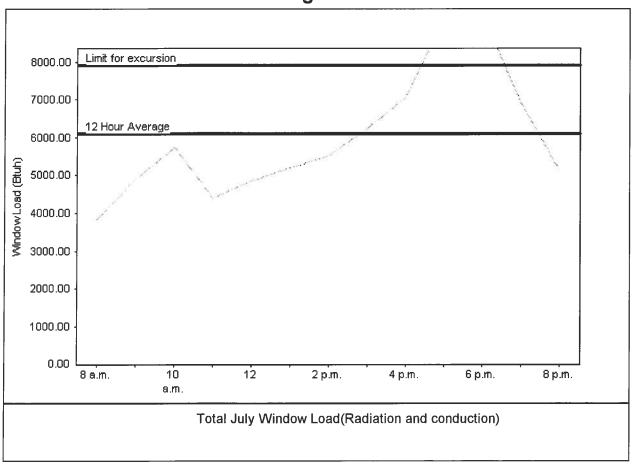
Keen Richard , FL 32024Project Title: 604284KeenRichard

Class 3 Rating Registration No. 0 Climate: North

5/2/2006

Weather data for: Gainesville - Defaults			
Summer design temperature	92 F	Average window load for July	6095 Btuh
Summer setpoint	75 F	Peak window load for July	9269 Btuh
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	7924 Btuh
Latitude	29 North	Window excursion (July)	1345 Btuh

#### **WINDOW Average and Peak Loads**



This application has glass areas that produce large heat gains for part of the day. Variable air volume devices are required to overcome spikes in solar gain for one or more rooms. Install a zoned system or provide zone control for problem rooms. Single speed equipment may not be suitable for the application.

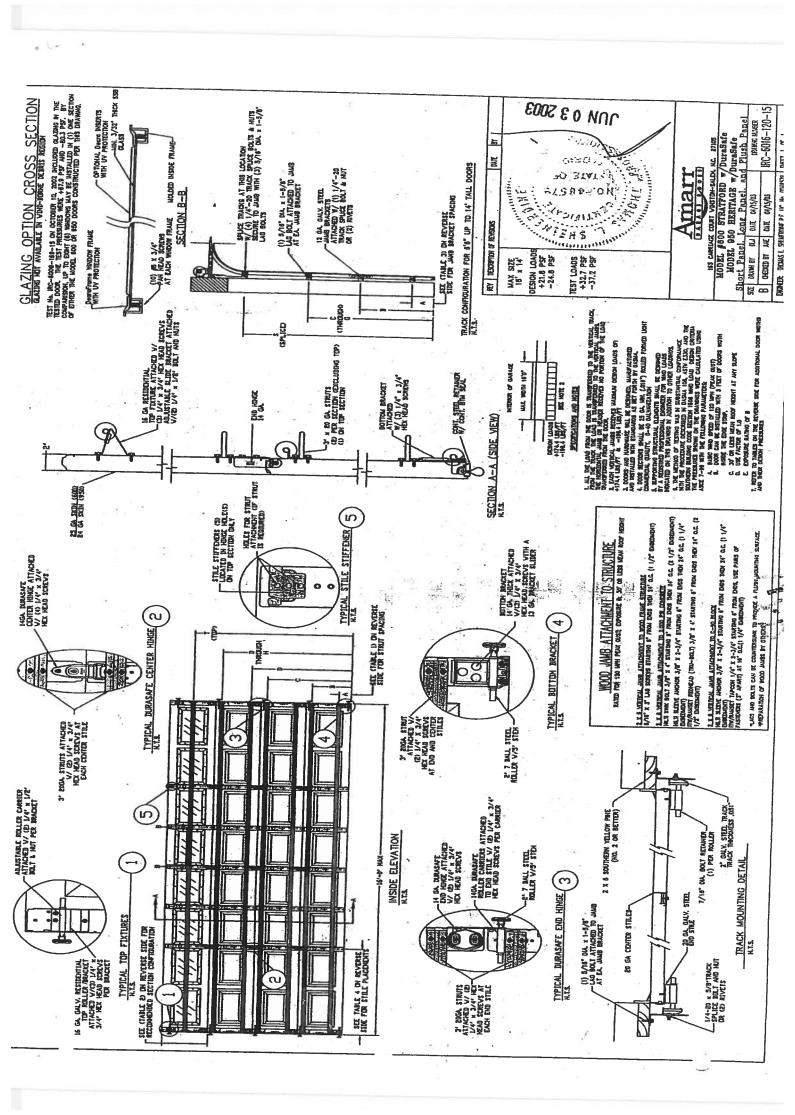
EnergyGauge® System Sizing for Florida residences only

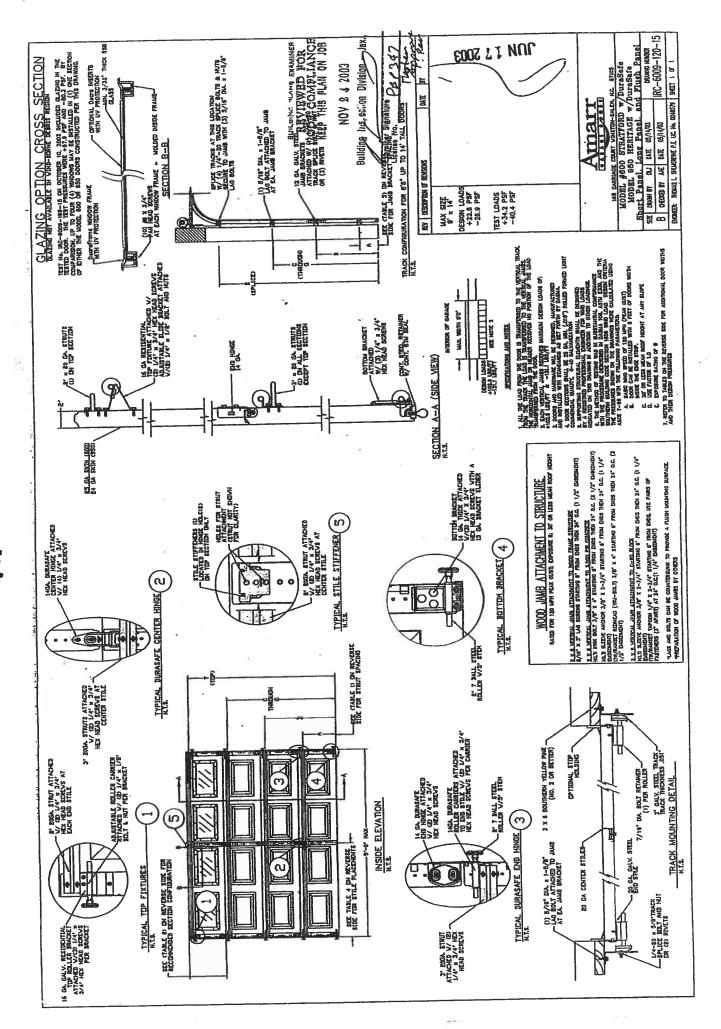
PREPARED BY:

DATE:

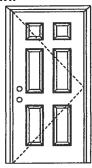
EnergyGauge® FLR2PB v4.1







#### APPROVED ARRANGEMENT:



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** 

+76.0/-76.0 limited water unless special threshold design is used.

Large Missile Impact Resistance

Hurricane protective system (shutters) is REQUIRED.

Actual design pressure and impact resistant requirements for a specific building design and geographic location is determined by ASCE 7-national, state or local building codes specify the edition required.

#### **MINIMUM ASSEMBLY DETAIL:**

Compliance requires that minimum assembly details have been followed - see MAD-WL-MA0001-02.

#### **MINIMUM INSTALLATION DETAIL:**

Compliance requires that minimum installation details have been followed - see MID-WL-MA0001-02.

#### **APPROVED DOOR STYLES:**



Flush











Eyebrow 5-panel with scroll





#### **CERTIFIED TEST REPORTS:**

NCTL 210-1973-1, 2, 3

Certifying Engineer and License Number: Ramesh Patel, P.E./20224

Unit Tested in Accordance with Miami-Dade BCCO PA202.

Door panels constructed from 0.075" minimum thick fiberglass skins. Both stiles constructed of 1-5/8" laminated lumber. Top end rails constructed of 31/32" wood. Bottom end rails constructed of 31/32" wood composite. 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 PA202

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).

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



Test Data Review Certificate #3026447A; #3026447B; #3026447C and CDP7rest Report Validation Matrix #3026447A-001, 002, 003; #30264478-001, 002, 003; #3026447C-001, 002, 003 provides additional information available from the ITS/WH website (www.etsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

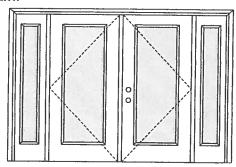








#### APPROVED ARRANGEMENT:



Units of other sizes are covered by this report as long as the panels used do not

exceed 3'0" x 6'8".

Test Data Review Certificate #3026447A, #3026447B; #3026447C and COP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447B-001, 002, 003; #3026447C-001, 002, 003 provides additional information - available from the ITS/WH website (www.etsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Double Door with 2 Sidelites Maximum unit size = 12'0" x 6'8"

Design Pressure

+52.0/-52.0 Limited water unless special threshold design is used.

Large Missile Impact Resistance

Hurricane protective system (shutters) is REQUIRED.

Actual design pressure and impact resistant requirements for a specific building design and geographic location is determined by ASCE 7-national, state or local building codes specify the edition required.

#### **MINIMUM ASSEMBLY DETAIL:**

Compliance requires that minimum assembly details have been followed - see MAD-WL-MA0005-02 or MAD-WL-MA0008-02 and MAD-WL-MA0041-02.

#### **MINIMUM INSTALLATION DETAIL:**

Compliance requires that minimum installation details have been followed - see MID-WL-MA0005-02.

#### **APPROVED DOOR STYLES:** 1/4 GLASS:









1/2 GLASS:















<sup>\*</sup>This glass kit may also be used in the following door style: Eyebrow 5-panel with scroll.







#### APPROVED DOOR STYLES:

3/4 GLASS:





**FULL GLASS:** 











**APPROVED SIDELITE STYLES:** 



















#### **CERTIFIED TEST REPORTS:**

CTLA-805W-2

Certifying Engineer and License Number: Ramesh Patel, P.E./20224

Unit Tested in Accordance with Miami-Dade BCCO PA202.

Door panels constructed from 0.075" minimum thick fiberglass skins. Both stiles constructed of 1-5/8" laminated lumber. Top end rails constructed of 31/32" wood. Bottom end rails constructed of 31/32" wood composite. Interior cavity of slab filled with rigid polyurethane foam core. Slab glazed with insulated glass mounted in a rigid plastic lip lite surround.

Frame constructed of wood with an extruded aluminum threshold.

#### PRODUCT COMPLIANCE LABELING:

TESTED IN ACCORDANCE WITH MIAMI-DADE BCCO PA202

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).

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

+ & Bal



Test Data Review Certificate #3026447A; #3026447B; #302647C and CDP/Test Report Validation Matrix #3026447A-001, 002, 003; #3026447A-001, 002, 003; #3026447C-001, 002, 003 provides additional information available from the ITS/WH website (www.etisemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

2

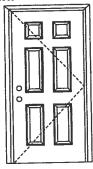








#### APPROVED ARRANGEMENT:





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

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

ecial 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 and geographic location is determined by ASCE 7-national, state or local building codes specify the edition required.

#### **MINIMUM ASSEMBLY DETAIL:**

Compliance requires that minimum assembly details have been followed - see MAD-WL-MA0001-02.

#### **MINIMUM INSTALLATION DETAIL:**

Compliance requires that minimum installation details have been followed - see MID-WL-MA0001-02.

#### APPROVED DOOR STYLES:



Arch Top 3-panel























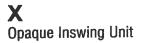
Eyebrow 5-panel



Eyebrow 5-panel with scroll

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





#### **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).

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

t & Bal

Wernock Hersey

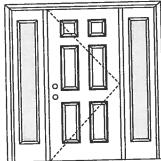
Test Data Review Certificate #3026447A and COP/Test Report Validation Matrix #3026447A-001 provides additional information - available from the ITS/WH website (www.etsemko.com), the Masonite website (www.masonite.com) or the Masonite technical center.

Johnson<sup>®</sup>
EntrySystems

June 17, 2002
Our continuing program of product Improvement makes specifications, design and product design



#### APPROVED ARRANGEMENT:





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

Units of other sizes are covered by this report as long as the panels used do not exceed 3'0" x 6'8".

Single Door with 2 Sidelites Maximum unit size = 9'0" x 6'8"

#### Design Pressure

+57.0/-57.0 with maximum sidelite panel width of 1'2" +45.0/-45.0 with maximum sidelite panel width of 3'0"

#### Large Missile Impact Resistance

Hurricane protective system (shutters) is NOT REQUIRED on opaque panels, but is required on glazed panels.

Actual design pressure and impact resistant requirements for a specific building design and geographic location is determined by ASCE 7-national, state or local building codes specify the edition required.

#### MINIMUM ASSEMBLY DETAIL:

Compliance requires that minimum assembly details have been followed - see MAD-WL-MA0004-02 or MAD-WL-MA0007-02 and MAD-WL-MA0041-02.

#### **MINIMUM INSTALLATION DETAIL:**

Compliance requires that minimum installation details have been followed - see MID-WL-MA0004-02.

#### **APPROVED DOOR STYLES:**





Arch Ton 3-panel









Evebrow 4-panel







15-panel





5-panel with scroll





Eyebrow 5-panel with scroll

ment makes specifications, design and product



#### **APPROVED SIDELITE STYLES:**





















#### **CERTIFIED TEST REPORTS:**

NCTL 210-1905-7, 8, 9, 10, 11, 12; NCTL 210-1861-4, 5, 6, 10, 11, 12; NCTL-210-1880-7, 9, 10, 12; 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.

Evaluation report NCTL-210-2794-1

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. Sidelite panels glazed with insulated glass mounted in a rigid plastic lip lite surround.

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).

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



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

2

Johnson<sup>®</sup>
EntrySystems

June 17, 2002
Our continuing program of product improvement makes specifications, design and product details utilised to change without notice.







#### 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
Operating Force	-47.2 psf
Air Infiltration	11 lb max.
Water Resistance	$0.13  \mathrm{cfm/ft^2}$
	6.00 psf
Structural Test Pressure	+67.5 psf
	-70.8 psf
Deglazing Power Po	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

alla n. Recuis



#### 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: Expiration Date:

03/26/02 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 foars tape and secured with PVC snap-in glazing beads.

130 Derry Court
130. 1302-1405"
phone: 717.764.7700
fax: 717.764.4129
www.archtest com

aller M. Reun

STATE OF

Kapios



#### 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	<b>Quantity</b>	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	Active sash, bottom rail ends
Screen plunger	2	4" from rail ends on top rail 189. 1875
		ेक हैं 🥎 🍖

allen M. Reeve



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 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/ft <sup>2</sup>	$0.3 \text{ cfm/ft}^2 \text{ max}$

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)
0.26" max.

<sup>\*</sup>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) @ 52.1 psf (negative)	0.02" 0.02"	0.18" max. 0.18" max.

aller M. Reeve 10



#### Test Specimen Description: (Continued)

Paragraph	Title of Test - Test Method	<u>Results</u>	Allowed
2.2.1.6.2	Deglazing Test (ASTM E 987) In operating direction at 70 lbs		
	Meeting rail Bottom rail	0.12"/25% 0.12"/25%	0.50"/100% 0.50"/100%
	In remaining direction at 50 lbs	E	
ž.	Left stile Right stile	0.06"/12% 0.06"/12%	0.50"/100% 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 Test A7	No entry No entry	No entry No entry
	Lock Manipulation Test	No entry	No entry
Optional Perfo	rmance		
4.3	Water Resistance (ASTM E 547-0 (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) @ 47.2 psf (negative)	0.47"* 0.46"*	0.26" max. 0.26" max.

<sup>\*</sup>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"

alle N. Reman III CONTROL OF STATE

0.EB" max. Ka. 12334



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.

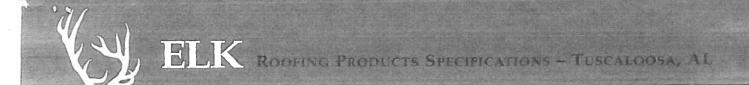
For ARCHITECTURAL TESTING, INC:

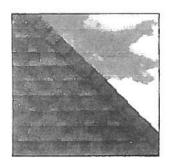
Mark A. Hess Technician

MAH:nlb 01-41134.01 Allen N. Reeves, P.E.

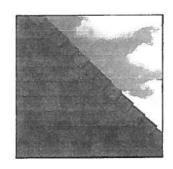
Director - Engineering Services







#### PRESTIQUE® HIGH DEFINITION®



#### RAISED PROFILE™

#### Prestique Plus High Definition and Prestique Gallery Collection™

Product size	_13%"x 39%"
Exposure	5%"
Pieces/Bundle	16
Bundles/Square_	4/98.5 sq.ft.
Squares/Pallet	a11

50-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability\*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty\*.

#### Raised Profile

Product size	13¼"x 38¾"
Exposure	_5%"
Pieces/Bundle	_22
Bundles/Square_	_3/100 sq.ft.
Squares/Pallet	16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability\*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty\*.

#### Prestique I High Definition

Product size	13%"x 39%"
Exposure	_5%"
Pieces/Bundle	_16
Bundles/Square_	_4/98.5 sq.ft
Squares/Pallet	14

40-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability\*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty\*.

#### **HIP AND RIDGE SHINGLES**

Seal-A-Ridge® w/FLX™

Size: 12"x 12" Exposure: 6%" Pieces/Bundle: 45

Coverage: 4 Bundles = 100 linear feet

#### Prestique High Definition

Product size	13%"x 38%"
Exposure	5%"
•	22
Pieces/Bundle	
Bundles/Square_	_3/100 sq.ft.
Squares/Pallet	- 16

30-year limited warranty period: non-prorated coverage for shingles and application labor for the initial 5 years, plus an option for transferability\*; prorated coverage for application labor and shingles for balance of limited warranty period; 5-year limited wind warranty\*.

#### Elk Starter Strip

52 Bundles/Pallet 18 Pallets/Truck 936 Bundles/Truck 19 Pieces/Bundle 1 Bundle = 120.33 linear feet Available Colors: Antique Slate, Weatheredwood, Shakewood, Sablewood, Hickory, Barkwood\*\*, Forest Green, Wedgewood\*\*, Birchwood\*\*, Sandalwood. Gallery Collection: Balsam Forest\*, Weathered Sage\*, Sienna Sunset\*.

All Prestique, Raised Profile and Seal-A-Ridge roofing products contain Elk WindGuard® sealant. WindGuard activates with the sun's heat, bonding shingles into a wind and weather resistant cover that resists blow-offs and leaks.

Check for availability with built-in StainGuard® treatment to inhibit the discoloration of roofing granules caused by the growth of certain types of algae. Not available in Sablewood.

All Prestique and Raised Profile shingles meet UL® Wind Resistant (UL 997) and Class "A" Fire Ratings (UL 790); and ASTM Specifications D 3018, Type-I; D 3161, Type-I; E 108 and the requirements of ASTM D 3462.

All Prestique and Raised Profile shingles meet the latest Metro Dade building code requirements.

\*See actual limited warranty for conditions and limitations. 
\*\*Check for product availability.

#### SPECIFICATIONS

Scope Work includes furnishing all labor, materials and equipment necessary to complete installation of (name) shingles specified herein. Color shall be (name of color). Hip and ridge type to be Elk Seal-A-Ridge with formula FLX.

All exposed metal surfaces (flashing, vents, etc.) to be painted with matching Elk roof accessory paint.

PREPARATION OF ROOF DECK: Roof deck to be dry, well-seasoned 1" x 6" (25.4mm x 152.4mm) boards; exterior-grade plywood (exposure 1 rated sheathing) at least 3/8" (9.525mm) thick conforming to the specifications of the American Plywood Association; 7/16" (11.074mm) oriented strandboard; or chipboard. Most fire retardant plywood decks are NOT approved substrates for Elk shingles. Consult Elk Field Service for application specifications over other decks and other slopes.

MATERIALS: Underlayment for standard roof slopes, 4" per foot (101.6/304.8mm) or greater: apply non-perforated No. 15 or 30 asphalt-saturated felt underlayment. For low slopes [4" per foot (101.6/304.8mm) to a minimum of 2" per foot (50.8/304.8mm)), use two plies of underlayment overlapped a minimum of 19". Fasteners shall be of sufficient length and holding power for securing material as required by the application instructions printed on shingle wrapper.

For areas where algae is a problem, shingles shall be (<u>name</u>) with StainGuard treatment, as manufactured by the Elk Tuscaloosa plant. Hip and ridge type to be Seal-A-Ridge with formula *FLX* with StainGuard treatment.

Complete application instructions are published by Elk and printed on the back of every shingle bundle. All warranties are contingent upon the correct install as shown on the instructions. These instructions ar minimum required to meet Elk application requirem In some areas, building codes may require addit application techniques or methods beyond instructions. In these cases, the local code mu followed. Under no circumstances will Elk ac application requirements less than those contained application instructions.

For specifications in CSI format, call 800.354.SPEC ( or e-mail specinfo@elkcorp.com.

SOUTHEAST & ATLANTIC OFFICE:

800.945.5551

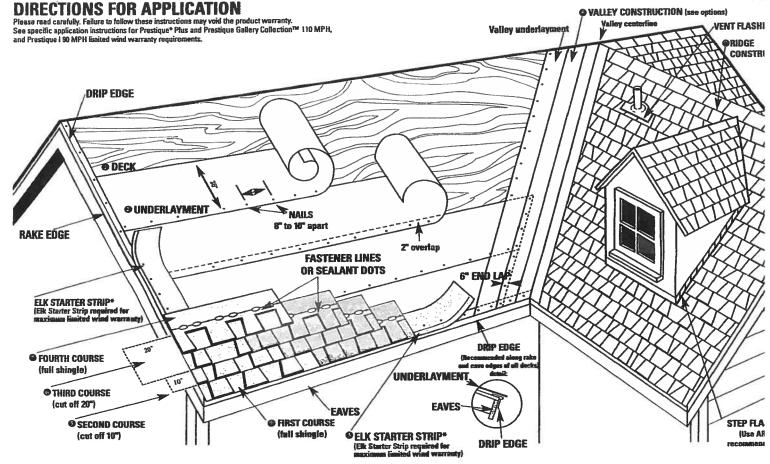
CORPORATE HEADQUARTERS:

800.354.7732

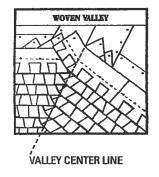
PLANT LOCATION: 800.945.5545

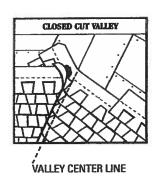


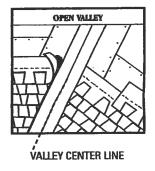
Tuscaloosa,



O VALLEY CONSTRUCTION OPTION (California Open and California Closed are also acceptable) NOTE: For complete ARMA valley installation details, see ARMA Residential Asphalt Roofing I







#### **DIRECTIONS FOR APPLICATION**

These application instructions are the minimum required to most Elk's application requirements. Your failure to follow these moet Elk's application requirements. Your taiture to follow these instructions may void the product warranty. In some areas, the building codes may require additional application techniques or methods beyond our instructions. In these cases, the local code must be followed. Under no circumstances will Elk accept application requirements that are less than those printed here. Shingles should not be jammed tightly together. All attics should be properly ventilated. Note: It is not necessary to remove tape on back of shingle.

#### **O DECK PREPARATION**

Roof decks should be dry, well-seasoned 1"x 6" boards or exterior grade plywood minimum 3/6" thick and conform to the specifications of the American Plywood Association or 7/16" oriented strandboard, or 7/16" chipboard.

#### **O UNDERLAYMENT**

Apply underlayment (Non-Perforated No. 15 or 30 asphalt saturated felt). Cover drip edge at eaves only.

For low slope (2/12 up to 4/12), completely cover the deck with two plies of underlayment overlapping a minimum of 19°. Begin by lastening a 18° wide strip of underlayment placed along the eaves. Place a full 36° wide sheet over the starter, horizontally placed along the eaves and completely overlapping the starter strip.

#### EAVE FLASHING FOR ICE DAMS (ASK A ROOFING CONTRACTOR, REFER TO ARMA MANUAL OR CHECK

For standard slope (4/12 to less than 21/12), use coated roll roofing of no less than 50 pounds over the felt underlayment extending from the eave edge to a point at least 24" beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

For low slope [2/12 up to 4/12], use a continuous layer of asphalt plastic cement between the two plies of underlayment from the eave edge up roof to a point at least 24' beyond the inside wall of the living space below or one layer of a self-adhered eave and flashing membrane.

Consult the Elk Field Service Department for application specifications over other decks and other slopes.

#### **O STARTER SHINGLE COURSE**

USE AN ELK STARTER STRIP OR A STRIP SHINGLE INVERTED WITH THE HEADLAP APPLIED AT THE EAVE EDGE. With at least 4" trimmed from the end of the first shingle, start at the rake edge overhanging the eave 1/2" to 3/4". Fasten 2" from the lower edge and 1° from each side.

#### **@ FRST COURSE**

Start at rake and continue course with full shingles laid flush with the starter course. Shingles may be applied with a course alignment of 45° on the roof.

#### 6 SECOND COURSE

Start at the rake with the shingle having 10" trimmed off and continue across roof with full shingles.

#### (6) THIRD COURSE

Start at the rake with the shingle having 20° trimmed off and continue across roof with full shingles.

#### @ FOURTH COURSE

Start at the rake and continue with full shingles across roof.

#### FIFTH AND SUCCEEDING COURSES.

Repeat application as shown for second, third, and fourth courses. Do not rack shingles straight up the roof.

#### **O VALLEY CONSTRUCTION**

Open, woven and closed cut valleys are acceptable when applied by Asphalt Roofing Manufacturing Association (ARMA) recommended procedures. For metal valleys, use 36 wide vertical underlayment prior to applying 18 metal flashing (secure edge with nails). No nails are to be within 6 of valley center.

#### **9** RIDGE CONSTRUCTION

For ridge construction use Class "A" Seal-A-Ridge" with formula FLX" (See ridge package for installation instructions.)

#### **FASTENERS**

While nailing is the preferred method for Elk shingles, Elk will accept fastening methods according to the following instructions.

Always neil or staple through the fastener line or on products without fastener lines, neil or staple between and in line with

NAILS: Corrosive resistant, 3/8" head, minimum 12-gauge roofing nails. Elk recommends 1-1/4" for new roofs and 1-1/2" for roof-overs. In cases where you are applying stingles to a roof that has an exposed overhang, for new roofs only, 3/4" ring shank nails are allowed to be used from the eave's edge to a point up the roof that is past the outside wall line. 1" ring shank nails allowed for re-roof. STAPLES: Corrosive resistant, 16-gauge minimum, crown width minimum of 15/16. Note: An improperly adjusted staple gun can result in raised staples that can cause a fish-mouthed appearance and can prevent sealing.

Fasteners should be long enough to obtain 3/4" deck penetration or penetration through deck, whichever is less.

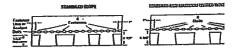
#### MANSARD APPLICATIONS

Correct fastening is critical to the performance of the roof. For slopes exceeding 60° (or 21/12) use six fasteners per shingle. Locate fasteners in the fastener area 1° from each side edge with the remaining four fasteners equally spaced along the length of the double thickness (laminated) area. Only fastening methods according to the above instructions are acceptable.

#### LIMITED WIND WARRANTY

- For a Limited Wind Warranty, all Prestique and Raised Profile<sup>to</sup> shingles must be applied with 4 properly placed fasteners, or in the case of mansard applications, 6 properly placed fasteners per shingle.
- per shingle.

  For a Limited Wind Warranty up to 110 MPH for Prestique Gallery Collection or Prestique Plus or 90 MPH for Prestique I, shingles must be applied with 6 properly placed NAILS per shingle. SHINGLES APPLIED WITH STAPLES WILL NOT OLIALITY FOR THIS ENHANCED LIMITED WIND WARRANTY. Also, Elk Starter Strip shingles must be applied at the eaves and rake edges to qualify Prestique Plus, Prestique Gallery Collection and Prestique I shingles for this enhanced Limited Wind Warranty. Under no circumstances should the Elk Shingles or the Elk Starter Strip overhang the eaves or rake edge more than 3/4 of an inch.



#### HELP STOP BLOW-OFFS AND CALL-BACKS

A minimum of four fasteners must be driven into the THICKNESS (laminated) area of the shingle. Nails of must be placed along — and through — the "fastener is products without fastener lines, nail or staple between the with sealant dots. CAUTION: Do not use fastene shingle allemment."



Refer to local codes which in some areas may require application techniques beyond those Elk has specified. All Prestique and Raised Profile shingles have a U.I. Resistance Rating when applied in accordance winstructions using nails or staples on re-roofs as we

CAUTION TO WHOLESALER: Careless and ir storage or handling can harm fiberglass si Keep these shingles completely covere reasonably cool, and protected from the w Do not store near various sources of heat, store in direct sunlight until applied. D DOUBLE STACK. Systematically rotate all 4 that the material that has been stored the will be the first to be moved out.

#### © 2002 Elk Corporation of Dallas.

All tradecarts, ©, are registered trademarks of Elk Corporation of Dalic company. Raised Profile, RidgeCrest, Gallery Collection and FLX are pending registration of Elk Corporation of Dalas. UL is a registered i Underwriters Laboratories, Inc.



**VENT-FREE GAS FIREPLACES** V32/36/42/50 Model Series

## Warm Up To A High-Efficiency Colonial

There's a growing demand for vent-free gas fireplaces because they're 99 percent energy-efficient and can be installed virtually anywhere. FMI's Colonial ventfree models deliver these benefits and more. They're part of our exciting new Renaissance Series, which offers a consistent look, sizing and construction across the entire line...plus beautiful new features homeowners will love!

#### Homeowner Highlights:

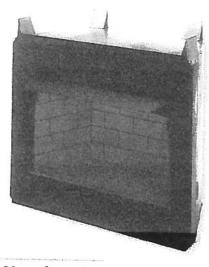
- ■Visual appeal—The industry's finest textured refractory brick liner (except 32') offers the attractive look of a true masonry fireplace.
- ■Many luxury features are standard— The Colonial comes standard with a heat deflection hood, hidden screen pockets (except 50"), stamped steel louvered panels, and other distinctive
- ■Dollar-saving efficiency—Paired with an Fmi vent free gas log heater, the systems 99% energy efficiency can provide dramatic energy savings.

#### **Builder Benefits:**

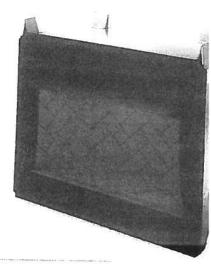
- ■Straight, secure installation—We've added full-length nailing flanges, and drywall stops.
- ■Flexibility in the field—You can quickly convert from louvered to clean face at any time (except 50").
- ■Economical and versatile—There's no chimney required. Can be installed virtually anywhere.



Fmi Hearth Industries www.fmifireplace.com For more information, call (866) 328-4537



V36 is our louver-faced 36' fireplace with textured refractory brick-lined interior.



V42 is FMI's 42" louvered-face fireplace shown with optional herringbone textures refractory brick-lined interior.

#### Colonial Vent-Free Fireplace Product Offering Summary

32", 36", 42" & 50" Vent-Free Fireplace Models Available With The Following:

- Clean or Louver (Circulating) Faced Models Available (Clean Faced only on 50")
- Traditional Stacked and Herringbone Pattern Refractory Brick-Lined Interiors
- Solid wrap or Outside Air Ready Models



The Colonial features the industry's finest textured refractory brick lining.



You get straight, solid installation, thanks to our full-length nailing flanges and drywall

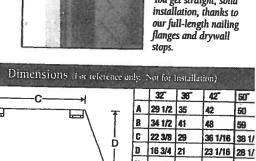
50

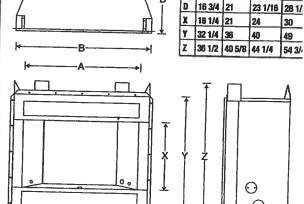
59

30

#### Accessory Offering Summary

- Rolled Black Louver Panels
- Louver Trim (Brushed Brass & Platinum)
- Decorative Filigree Panels (Black, Brushed Brass & Platinum)
- Perimeter Trim Kits (Black, Brushed Brass & Platinum)
- Heat Deflection Hoods (Brushed Brass & Platinum)
- Fan Kits
- Standard & Herringbone Refractory Brick Liners













From: The Columbia County Building & Zoning Department

Plan Review

135 NE Hernando Av.

P.O. Box 1529

Lake City Florida 32056-1529

Reference to a building permit application Number: 0605–67

Contractor: James Johnston Owner Richard Keen lot 11 Block B Century Oak Subdivision.

On the date of May 22, 2006 application 0605-67 and plans for construction of a single family dwelling were reviewed and the following information or alteration to the plans will be required to continue processing this application. If you should have any question please contact the above address, or contact phone number (386) 758-1163 or fax any information to (386) 754-7088.

Please include application number 0605-67 when making reference to this application.

To help ensure compliance with the Florida Residential Code 2004 the comments below need to be addressed on the plans.

 The attic access opening (pull down ladder type attic egress door) in the garage ceiling shall have the same protection requirements of FRC-2004 C: R309.2
 Separation required. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

- 2. Show the method of providing protection of the appliance in the garage as required by the FMC-2004 sections: 303.4 Protection from damage: Appliances shall not be installed in a location where subject to mechanical damage unless protected by approved barriers.
- 3. The electrical plan shows the location of the electrical service, Please indicate on the electrical plan that an overcurrent protection device will be installed on the exterior of structures to serve as a disconnecting means. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground.

Thank you,

Joe Haltiwanger

Plan Examiner

Columbia County Building Department



# ロののこする

# **COLUMBIA COUNTY, FLORIDA**

HEIGHTER THE TELEVISION OF THE

rtment of Building and Zoning Inspection

Parcel Number 16-4S-17-08382-410 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.

**Use Classification SFD/UTILITY** 

Permit Holder JAMES H. JOHNSTON

Fire: Waste: 12.25 5.92

Building permit No. 000024562

Owner of Building RICHARD & MARY KEEN

299 SE FOREST TERR, LAKE CITY, FL 32025

Date: 09/15/2006

Location:

18.17

**Building Inspector** 

POST IN A CONSPICUOUS PLACE (Business Places Only)