

DATE 07/21/2008

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000027192

APPLICANT LINDA RODER PHONE 386.752.2281
ADDRESS 387 SW KEMP COURT LAKE CITY FL 32024
OWNER SETH HEITZMAN CONSTRUCTION,INC. PHONE 386.752.2281
ADDRESS 664 SW LEGION DRIVE LAKE CITY FL 32056
CONTRACTOR SETH HEITZMAN CONSTR.,INC. PHONE 386.867.1295
LOCATION OF PROPERTY 90-W TO SR.247-S TO UPCHURCH,TL TO TAAMARACK LOOP,TL TO
LEGION,TL AND IT'S ON THE L BEFORE HILLTOP RD.
TYPE DEVELOPMENT SFD/UTILITY ESTIMATED COST OF CONSTRUCTION 94400.00
HEATED FLOOR AREA 1408.00 TOTAL AREA 1888.00 HEIGHT 17.40 STORIES 1
FOUNDATION CONC WALLS FRAMED ROOF PITCH 6'12 FLOOR CONC
LAND USE & ZONING RR MAX. HEIGHT 35
Minimum Set Back Requirments: STREET-FRONT 25.00 REAR 15.00 SIDE 10.00
NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 16-4S-16-03041-033 SUBDIVISION
LOT BLOCK PHASE UNIT TOTAL ACRES 1.00
000001640 CBC1251065
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor
18"X32'MITERED 08-0131 BLK JTH N
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident
COMMENTS: 1 FOOT ABOVE ROAD.
Check # or Cash 3563

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power date/app. by Foundation date/app. by Monolithic date/app. by
Under slab rough-in plumbing date/app. by Slab date/app. by Sheathing/Nailing date/app. by
Framing date/app. by Rough-in plumbing above slab and below wood floor date/app. by
Electrical rough-in date/app. by Heat & Air Duct date/app. by Peri. beam (Lintel) date/app. by
Permanent power date/app. by C.O. Final date/app. by Culvert date/app. by
M/H tie downs, blocking, electricity and plumbing date/app. by Pool date/app. by
Reconnection date/app. by Pump pole date/app. by Utility Pole date/app. by
M/H Pole date/app. by Travel Trailer date/app. by Re-roof date/app. by

BUILDING PERMIT FEE \$ 475.00 CERTIFICATION FEE \$ 9.44 SURCHARGE FEE \$ 9.44
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$
FLOOD DEVELOPMENT FEE \$ FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ 25.00 TOTAL FEE 593.88
INSPECTORS OFFICE CLERKS OFFICE

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

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

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED TO BE IN ACTIVE PROGRESS WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

District No. 1 - Ronald Williams
District No. 2 - Dewey Weaver
District No. 3 - Jody DuPree
District No. 4 - Stephen E. Bailey
District No. 5 - Scarlet P. Frisina



BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

March 31, 2010

Seth Heitzman Construction, Inc.
CBC1251065
P.O. Box 3642
Lake City, FL 32056
(386) 719-3887



Dear Seth Heitzman Construction, Inc.,

With regards to your fax dated 3/30/10 for a refund of permit fees paid on 27192. I am sorry, Mr. Heitzman we are unable to forward your request for a refund on permit 27192 issued on July 21, 2008, as the permit is expired. There have been no inspections approved for this permit. Permit 27192 became invalid (expired) 6 months after its issuance.

Florida Building Code: 105.4.1 Permit intent. A permit issued shall be construed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance of a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 6 months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 6 months after the time the work is commenced.

Please contact me if I can be of further assistance.

Sincerely,

Laurie Hodson, Office Manager
Columbia County Building & Zoning Department

XC: 27192 Permit file.


BOARD MEETS FIRST THURSDAY AT 7:00 P.M.
AND THIRD THURSDAY AT 7:00 P.M.

3/30/10

Seth Heitzman Construction, Inc.
CBC1251065
P.O. Box 3642
Lake City, FL. 32056
(386)-719-3887

To: The Columbia County Building Dept./ County
Commissioners

This is a request for refund of my original permit for Lot on
Legion Drive Per#000027192. I did not build it, because I
could not get financing.

Sincerely,

Seth Heitzman
Owner/President

RECEIVED

614 3-31-10

DATE 07/21/2008

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FOUNDATION CONC WALLS FRAMED ROOF PITCH 6'12 FLOOR CONC

LAND USE & ZONING RR MAX. HEIGHT 35

Minimum Set Back Requirments: STREET-FRONT 25.00 REAR 15.00 SIDE 10.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO. _____

PARCEL ID 16-4S-16-03041-033 SUBDIVISION _____

LOT _____ BLOCK _____ PHASE _____ UNIT _____ TOTAL ACRES 1.00

000001640 _____ CBC1251065 _____

Culvert Permit No. _____ Culvert Waiver _____ Contractor's License Number _____ Applicant/Owner/Contractor _____

18"X32"MITERED 08-0131 BLK JTH N

Driveway Connection _____ Septic Tank Number _____ LU & Zoning checked by _____ Approved for Issuance _____ New Resident Jan

COMMENTS: 1 FOOT ABOVE ROAD.Check # or Cash 3563

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ Foundation _____ Monolithic _____
 date/app. by _____ date/app. by _____ date/app. by _____

Under slab rough-in plumbing _____ Slab _____ Sheathing/Nailing _____
 date/app. by _____ date/app. by _____ date/app. by _____

Framing _____ Rough-in plumbing above slab and below wood floor _____
 date/app. by _____ date/app. by _____ date/app. by _____

Electrical rough-in _____ Heat & Air Duct _____ Peri. beam (Lintel) _____
 date/app. by _____ date/app. by _____ date/app. by _____

Permanent power _____ C.O. Final _____ Culvert _____
 date/app. by _____ date/app. by _____ date/app. by _____

M/H tie downs, blocking, electricity and plumbing _____ Pool _____
 date/app. by _____ date/app. by _____ date/app. by _____

Reconnection _____ Pump pole _____ Utility Pole _____
 date/app. by _____ date/app. by _____ date/app. by _____

M/H Pole _____ Travel Trailer _____ Re-roof _____
 date/app. by _____ date/app. by _____ date/app. by _____

 BUILDING PERMIT FEE \$ 475.00 CERTIFICATION FEE \$ 9.44 SURCHARGE FEE \$ 9.44

 MISC FEES \$ 0.00 ZONING CERT FEE \$ 50.00 EIDE FEE \$ 0.00 WASTE FEE \$ _____

JW called ~~BLK~~ ^{MELANIE} 1.30.08

Columbia County Building Permit Application

3563

For Office Use Only Application # 0801-116 Date Received 1/23/08 By G Permit # 1640-27192
Zoning Official BLK Date 30.01.08 Flood Zone X FEMA Map # N/A Zoning RR
Land Use RULO Elevation N/A MFE 1st River N/A Plans Examiner OK JH Date 1-29-08
Comments
☐ NOC ☐ EH ☐ Deed or PA ☒ Site Plan ☐ State Road Info ☐ Parent Parcel #
☐ Dev Permit # ☐ In Floodway ☒ Letter of Authorization from Contractor
☐ Unincorporated area ☐ Incorporated area ☐ Town of Fort White ☐ Town of Fort White Compliance letter

Fax 752-2282

Name Authorized Person Signing Permit Linda or Melanie Roder Phone 752-2281

Address 387 SW Kemp Ct Lake City FL 32024

Owners Name Seth Heitzman Construction Inc. Phone 867-1295

911 Address 664 SW Legion Dr Lake City FL 32024

Contractors Name Seth Heitzman Construction Inc. Phone 867-1295

Address POB 1046 Lake City FL 32025

Fee Simple Owner Name & Address NA

Bonding Co. Name & Address NA

Architect/Engineer Name & Address William Myers

Mortgage Lenders Name & Address CCB

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

Property ID Number 16-45-16-03041-033 Estimated Cost of Construction 100K

Subdivision Name _____ Lot _____ Block _____ Unit _____ Phase _____

Driving Directions 247 S, Ron SW Upchurch Ave, Lon SW Tamarack Loop,
Lon SW Legion Dr, Lot on L before Hilltop Road

Number of Existing Dwellings on Property 0

Construction of Single family dwelling Total Acreage 1 acre Lot Size 1 acre

Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 17'4"

Actual Distance of Structure from Property Lines - Front 80' Side 73.5 Side 73.5 Rear 185'

Number of Stories 1 Heated Floor Area 1408 Total Heated Floor Area 1408 Roof Pitch 6-12
1888

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.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment

According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE:

YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

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. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

[Signature]
Owners Signature

1-22-08

Affirmed under penalty of perjury to by the Owner and subscribed before me this 22 day of Jan 2008.

Personally known [initials] or Produced Identification _____

[Signature]
State of Florida Notary Signature (For the Owner)

SEAL:



Linda R. Roder
Commission #DD303275
Expires: Mar 24, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit.

[Signature]
Contractor's Signature (Permitee)

Contractor's License Number CBC#1251065
Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 22 day of Jan 2008.

Personally known [initials] or Produced Identification _____

[Signature]
State of Florida Notary Signature (For the Contractor)

SEAL:



Linda R. Roder
Commission #DD303275
Expires: Mar 24, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

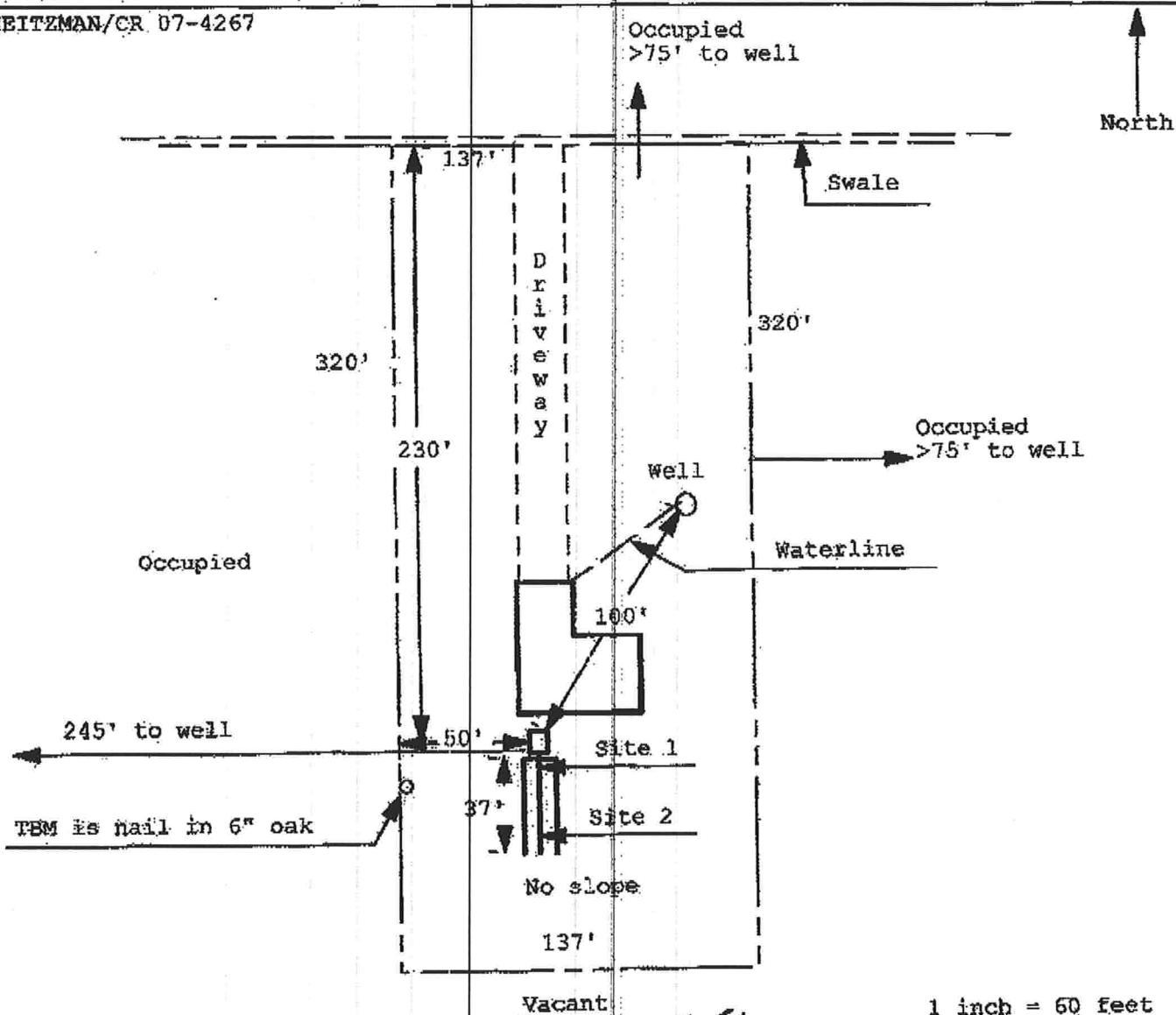
Revised 11-13-07

0801-116

**Application for Onsite Sewage Disposal System
Construction Permit. Part II Site Plan**
Permit Application Number: 08-0131

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

HEITZMAN/CR 07-4267



1 inch = 60 feet

Site Plan Submitted By Paul D. [Signature]

Date 1/28/08

Plan Approved ☒ Not Approved

Date 1/30/08

By MA D [Signature]

Columbia CPHU

Notes:

Notice of Authorization

I, Seth Heitzman, hereby authorize Linda Roder or Melanie Roder to be my Representative and act on my behalf in all aspects for applying for a Building Permit to be located in Columbia County.

16-45-16-03041-033

X 
Contractor's Signature

1-22-08
Date

Sworn to and Subscribed before me this 22 day of Jan, 2008
by _____, who

☒ is Personally Known or

_____ has produced _____ as identification.


Notary Public

Notary Stamp



Linda R. Roder
Commission #DD303275
Expires: Mar 24, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

Prepared by & Return to
Matt Rocco
Sierra Title, LLC
619 SW Baya Drive, Suite 102
Lake City, Florida 32025

File Number: 06-0295

Inst:2006021886 Date:09/13/2006 Time:12:51
Doc Stamp-Deed : 217.00
B DC, P. DeWitt Cason, Columbia County B:1095 P:2573

General Warranty Deed

Made this September 13th, 2006 A.D. By **James Starkloff and his wife, Becky Starkloff**, whose address is: 17735 NW 236th Way, High Springs, Florida 32643, hereinafter called the grantor, to **Seth Heitzman Construction, Inc.**, whose post office address is: PO Box 3642, Lake City, FL 32056, hereinafter called the grantee:
a Florida corporation

(Whenever used herein the term "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)

Witnesseth, that the grantor, for and in consideration of the sum of Ten Dollars, (\$10.00) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Columbia County, Florida, viz:

A Part of the SE 1/4 of the NW 1/4 of the Sw 1/4 of Section 16, Township 4 South, Range 16 East, Columbia County, Florida, more Particularly described as follows:

Commence at the SE corner of the E 1/2 of said SE 1/4 of NW 1/4 of SW 1/4 and run thence N 01°05'42" West, along the East line thereof, 313.93 feet; thence N 89°33'33" W, 197.79 feet to the Point of Beginning; thence N 01°04'18" W, 320.46 feet to the South Right-of-way line of SW Legion Drive; thence run N 89°33'34" W, along the said right-of-way 137.66 feet; thence run S 01°02'56" E, 320.46 feet; thence run S 89°33'33" East, 137.66 feet to the Point of Beginning.

Parcel ID Number: R03041-033

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, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:
AS TO JAMES STARKLOFF:

Mary B. Whitehurst
Witness Printed Name MARY B. WHITEHURST

James Starkloff (Seal)
James Starkloff
Address: 17735 NW 236th Way, High Springs, Florida 32643

Matthew P. Rocco
Witness Printed Name MATTHEW P. ROCCO

(Seal)

State of Florida
County of Columbia

The foregoing instrument was acknowledged before me this 11th day of September, 2006, by James Starkloff who is/are personally known to me or who has produced Driver's License as identification.



Matthew Rocco
My Commission DD150704
Expires September 17, 2008

Matthew Rocco
Notary Public
Print Name:

My Commission Expires: _____

SEE PAGE 2 FOR ADDITIONAL SIGNATURE/NOTARY

DEED Individual Warranty Deed - Legal on Face
Closers' Choice

Prepared by & Return to
Matt Rocco
Sierra Title, LLC
619 SW Baya Drive, Suite 102
Lake City, Florida 32025

File Number: 06-0295

WARRANTY DEED
PAGE 2

Inst:2006021886 Date:09/13/2006 Time:12:51
Doc Stamp-Deed : 217.00
DC,P.DeWitt Cason,Columbia County B:1095 P:2574

AS TO BECKY STARKLOFF:

Signed, sealed and delivered in our presence:

Mary B. Whitehurst
Witness Printed Name MARY B. Whitehurst

MATTHEW ROCCO
Witness Printed Name MATTHEW ROCCO

State of Florida
County of Columbia

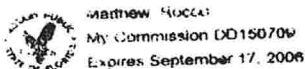
The foregoing instrument was acknowledged before me this 11th day of September, 2006, by Becky Starkloff, who is/are personally known to me or who has produced Driver's License as identification.

Becky Starkloff (Seal)
Becky Starkloff
Address: 17735 NW 236th Way, High Springs, Florida 32643

(Seal)

Matthew Rocco
Notary Public
Print Name: _____

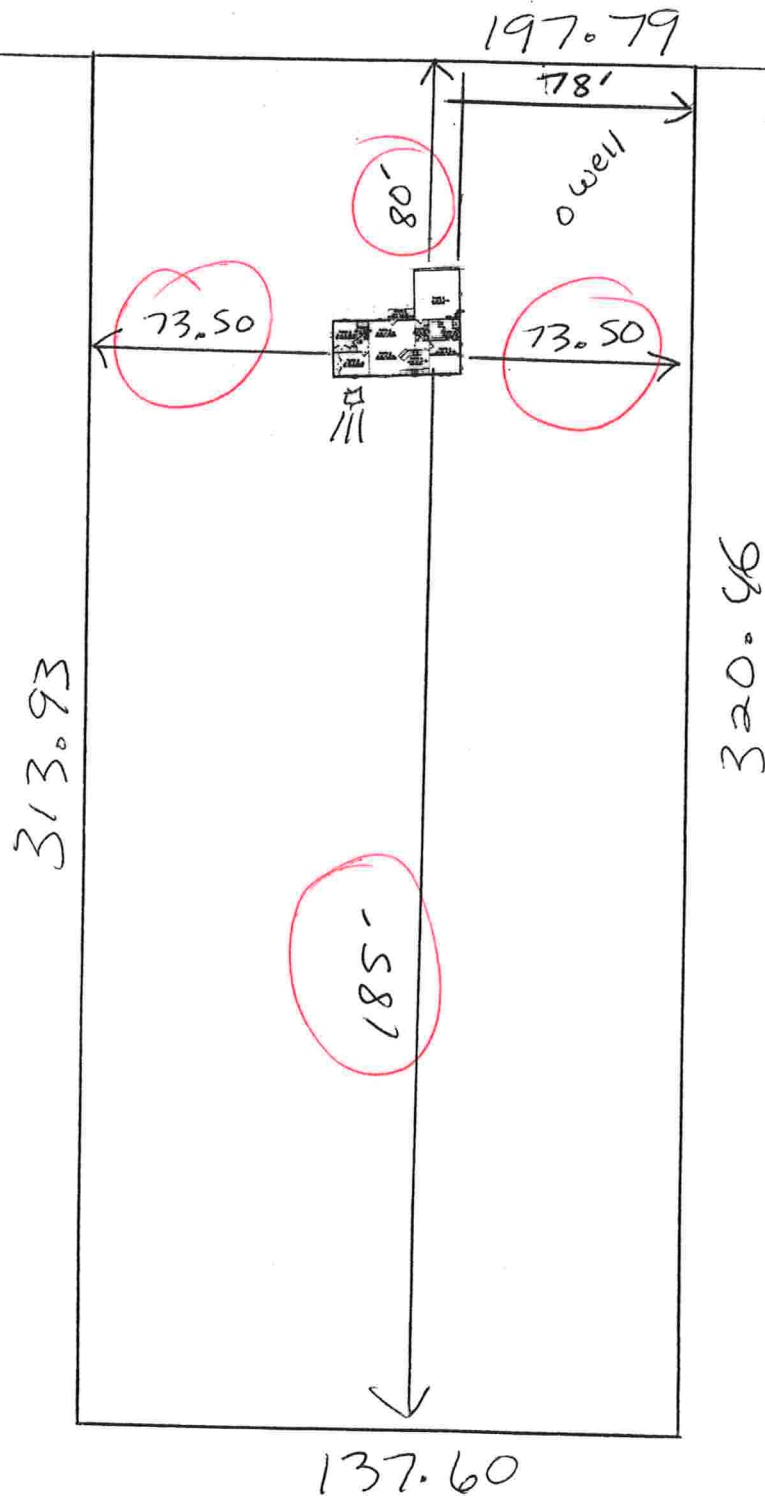
My Commission Expires: _____



16-45-16-03041-033
Seth Heitzman Construction Inc.



SW Legion Dr



**Water Wells
Pumps & Service**

**Phone: (386) 752-6677
Fax: (386) 752-1477**

Lynch Well Drilling, Inc.

**173 SW Young Place
Lake City, FL 32025
www.lynchwelldrilling.com**

January 21, 2008

To Whom It May Concern:

As required by building code regulations for Columbia County in order that a building permit can be issued, the following well information is provided with regard to the Seth Heitzman construction well on Legion, Parcel # 16-4S-16-03041-033.

Size of Pump Motor:	1 Horse Power 20 gallon GPM
Size of Pressure Tank:	81 -Gallon Bladder Tank - 25.1 Draw down
Cycle Stop Valve Used:	No
Constant Pressure System:	No

Should you require any additional information, please contact us.

Sincerely,



Linda Newcomb
Lynch Well Drilling, Inc.

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Whole Building Performance Method A

Project Name:	Seth Heitzman Construction - Legion RD	Builder:	Seth Heitzman
Address:	Legion Road	Permitting Office:	
City, State:	Lake City, FL 32025-	Permit Number:	
Owner:	Spec House	Jurisdiction Number:	
Climate Zone:	North		

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: 13.00
4. Number of Bedrooms	3	b. N/A	
5. Is this a worst case?	No	c. N/A	
6. Conditioned floor area (ft²)	1408 ft²	13. Heating systems	
7. Glass type ¹ and area: (Label reqd. by 13-104.4.5 if not default)		a. Electric Heat Pump	Cap: 30.0 kBtu/hr
a. U-factor:	Description Area		HSPF: 7.70
(or Single or Double DEFAULT) 7a. (Dble Default) 202.0 ft²		b. N/A	
b. SHGC:	7b. (Clear) 202.0 ft²	c. N/A	
(or Clear or Tint DEFAULT)		14. Hot water systems	
8. Floor types		a. Electric Resistance	Cap: 50.0 gallons
a. Slab-On-Grade Edge Insulation	R=5.0, 175.0(p) ft		EF: 0.90
b. N/A		b. N/A	
c. N/A		c. Conservation credits	
9. Wall types		(HR-Heat recovery, Solar	
a. Frame, Wood, Exterior	R=13.0, 1002.0 ft²	DHP-Dedicated heat pump)	
b. Frame, Wood, Adjacent	R=13.0, 196.0 ft²	15. HVAC credits	PT,
c. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
d. N/A		HF-Whole house fan,	
e. N/A		PT-Programmable Thermostat,	
10. Ceiling types		MZ-C-Multizone cooling,	
a. Under Attic	R=30.0, 1550.0 ft²	MZ-H-Multizone heating)	
b. N/A			
c. N/A			
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 35.0 ft		
b. N/A			

Glass/Floor Area: 0.14

Total as-built points: 20567

Total base points: 20991

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: 11-17-08

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

OWNER/AGENT: [Signature]

DATE: 1-21-08

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: Legion Road, Lake City, FL, 32025-

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	1408.0	18.59	4711.0	1.Double, Clear	W	1.5	8.0	75.0	38.52	0.96	2768.0
				2.Double, Clear	W	1.5	8.0	30.0	38.52	0.96	1107.0
				3.Double, Clear	W	1.5	8.0	20.0	38.52	0.96	738.0
				4.Double, Clear	N	1.5	8.0	20.0	19.20	0.97	371.0
				5.Double, Clear	N	1.5	8.0	6.0	19.20	0.97	111.0
				6.Double, Clear	E	1.5	8.0	45.0	42.06	0.96	1812.0
				7.Double, Clear	S	1.5	8.0	6.0	35.87	0.92	198.0
				As-Built Total:			202.0			7105.0	
WALL TYPES Area X BSPM = Points				Type	R-Value			Area X SPM = Points			
Adjacent	196.0	0.70	137.2	1. Frame, Wood, Exterior		13.0	1002.0	1.50	1503.0		
Exterior	1002.0	1.70	1703.4	2. Frame, Wood, Adjacent		13.0	196.0	0.60	117.6		
Base Total:				1198.0			1840.6				
				As-Built Total:			1198.0		1620.6		
DOOR TYPES Area X BSPM = Points				Type	R-Value			Area X SPM = Points			
Adjacent	20.0	2.40	48.0	1.Exterior Insulated			20.0	4.10	82.0		
Exterior	20.0	6.10	122.0	2.Adjacent Insulated			20.0	1.60	32.0		
Base Total:				40.0			170.0				
				As-Built Total:			40.0		114.0		
CEILING TYPES Area X BSPM = Points				Type	R-Value			Area X SPM X SCM = Points			
Under Attic	1408.0	1.73	2435.8	1. Under Attic		30.0	1550.0	1.73 X 1.00	2681.5		
Base Total:				1408.0			2435.8				
				As-Built Total:			1550.0		2681.5		
FLOOR TYPES Area X BSPM = Points				Type	R-Value			Area X SPM = Points			
Slab	175.0(p)	-37.0	-6475.0	1. Slab-On-Grade Edge Insulation		5.0	175.0(p)	-36.20	-6335.0		
Raised	0.0	0.00	0.0								
Base Total:				-6475.0			175.0		-6335.0		
				As-Built Total:			175.0		-6335.0		
INFILTRATION Area X BSPM = Points				Area X SPM = Points							
1408.0 10.21 14375.7				1408.0 10.21 14375.7							

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Legion Road, Lake City, FL, 32025-

PERMIT #:

BASE				AS-BUILT						
Summer Base Points: 17058.1				Summer As-Built Points: 19561.8						
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
17058.1	0.3250		5543.9	<small>(sys 1: Central Unit 30000btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Gar(AH),R6.0(INS)</small> 19562 1.00 (1.09 x 1.147 x 1.00) 0.260 0.950 6040.8 19561.8 1.00 1.250 0.260 0.950 6040.8						

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Legion Road, Lake City, FL, 32025-

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	1408.0	20.17	5112.0	1.Double, Clear	W	1.5	8.0	75.0	20.73	1.01	1571.0
				2.Double, Clear	W	1.5	8.0	30.0	20.73	1.01	628.0
				3.Double, Clear	W	1.5	8.0	20.0	20.73	1.01	419.0
				4.Double, Clear	N	1.5	8.0	20.0	24.58	1.00	491.0
				5.Double, Clear	N	1.5	8.0	6.0	24.58	1.00	147.0
				6.Double, Clear	E	1.5	8.0	45.0	18.79	1.02	862.0
				7.Double, Clear	S	1.5	8.0	6.0	13.30	1.04	83.0
				As-Built Total:			202.0			4201.0	
WALL TYPES Area X BWPM = Points				Type	R-Value			Area X WPM = Points			
Adjacent	196.0	3.60	705.6	1. Frame, Wood, Exterior		13.0	1002.0	3.40			3406.8
Exterior	1002.0	3.70	3707.4	2. Frame, Wood, Adjacent		13.0	196.0	3.30			646.8
Base Total: 1198.0 4413.0				As-Built Total:			1198.0			4053.6	
DOOR TYPES Area X BWPM = Points				Type				Area X WPM = Points			
Adjacent	20.0	11.50	230.0	1.Exterior Insulated			20.0	8.40			168.0
Exterior	20.0	12.30	246.0	2.Adjacent Insulated			20.0	8.00			160.0
Base Total: 40.0 476.0				As-Built Total:			40.0			328.0	
CEILING TYPES Area X BWPM = Points				Type	R-Value			Area X WPM X WCM = Points			
Under Attic	1408.0	2.05	2886.4	1. Under Attic		30.0	1550.0	2.05 X 1.00			3177.5
Base Total: 1408.0 2886.4				As-Built Total:			1550.0			3177.5	
FLOOR TYPES Area X BWPM = Points				Type	R-Value			Area X WPM = Points			
Slab	175.0(p)	8.9	1557.5	1. Slab-On-Grade Edge Insulation		5.0	175.0(p)	7.60			1330.0
Raised	0.0	0.00	0.0								
Base Total: 1557.5				As-Built Total:			175.0			1330.0	
INFILTRATION Area X BWPM = Points							Area X WPM = Points				
	1408.0	-0.59	-830.7				1408.0	-0.59	-830.7		

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: Legion Road, Lake City, FL, 32025-

PERMIT #:

BASE			AS-BUILT						
Winter Base Points: 13614.2			Winter As-Built Points: 12259.4						
Total Winter Points	X System Multiplier	= Heating Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
13614.2	0.5540	7542.3	(sys 1: Electric Heat Pump 30000 btuh ,EFF(7.7) Ducts:Unc(S),Unc(R),Gar(AH),R6.0 12259.4 1.000 (1.069 x 1.169 x 1.00) 0.443 0.950 6445.4 12259.4 1.00 1.250 0.443 0.950 6445.4						

WATER HEATING & CODE COMPLIANCE STATUS**Residential Whole Building Performance Method A - Details**

ADDRESS: Legion Road, Lake City, FL, 32025-

PERMIT #:

BASE					AS-BUILT					
WATER HEATING					Tank	EF	Number of	X	Tank	X
Number of	X	Multiplier	=	Total	Volume		Bedrooms		Ratio	Multiplier
Bedrooms										
3		2635.00		7905.0	50.0	0.90	3		1.00	2693.56
										1.00
										8080.7
					As-Built Total:					8080.7

CODE COMPLIANCE STATUS

BASE						AS-BUILT					
Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points
5544		7542		7905	20991	6041		6445		8081	20567

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: Legion Road, Lake City, FL, 32025-

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* = 84.6

The higher the score, the more efficient the home.

Spec House, Legion Road, Lake City, FL, 32025-

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: 13.00 ___
4. Number of Bedrooms	3	___	b. N/A	___
5. Is this a worst case?	No	___	c. N/A	___
6. Conditioned floor area (ft ²)	1408 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: 30.0 kBtu/hr ___
(or Single or Double DEFAULT)	7a. (Dble Default) 202.0 ft ²	___		HSPF: 7.70 ___
b. SHGC:			b. N/A	___
(or Clear or Tint DEFAULT)	7b. (Clear) 202.0 ft ²	___	c. N/A	___
8. Floor types				___
a. Slab-On-Grade Edge Insulation	R=5.0, 175.0(p) ft	___	14. Hot water systems	
b. N/A		___	a. Electric Resistance	Cap: 50.0 gallons ___
c. N/A		___		EF: 0.90 ___
9. Wall types			b. N/A	___
a. Frame, Wood, Exterior	R=13.0, 1002.0 ft ²	___	c. Conservation credits	___
b. Frame, Wood, Adjacent	R=13.0, 196.0 ft ²	___	(HR-Heat recovery, Solar	
c. N/A		___	DHP-Dedicated heat pump)	
d. N/A		___	15. HVAC credits	PT, ___
e. N/A		___	(CF-Ceiling fan, CV-Cross ventilation,	
10. Ceiling types			HF-Whole house fan,	
a. Under Attic	R=30.0, 1550.0 ft ²	___	PT-Programmable Thermostat,	
b. N/A		___	MZ-C-Multizone cooling,	
c. N/A		___	MZ-H-Multizone heating)	
11. Ducts				
a. Sup: Unc. Ret: Unc. AH: Garage	Sup. R=6.0, 35.0 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: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____



**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: FLRCPB v4.5.2)

Columbia County Building Department Culvert Permit

Culvert Permit No.
000001640

DATE 07/21/2008 PARCEL ID # 16-4S-16-03041-033

APPLICANT LINDA RODER PHONE 386.752.2281

ADDRESS 387 SW KEMP COURT LAKE CITY FL 32024

OWNER SETH HEITZMAN CONSTRUCTION, INC. PHONE 386.867.1295

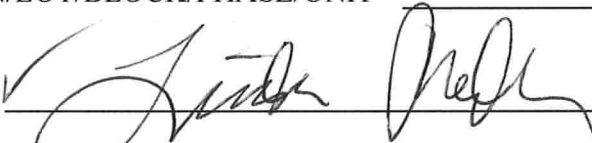
ADDRESS 664 SW LEGION DRIVE LAKE CITY FL 32024

CONTRACTOR SETH HEITZMAN PHONE 386.867.1295

LOCATION OF PROPERTY 90-W TO SR. 247-S TO UPCHURCH, TR TO TAMARACK LOOP, TL TO
LEGION, TL AND IT'S ON THE L BEFORE HILLTOP ROAD.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT _____

SIGNATURE



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



ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number: 0 278
Florida Certificate of Product Approval # FL1999
Page 1 of 1 Document ID: 1TE68228Z0216094609

Truss Fabricator: Anderson Truss Company
Job Identification: 8-015--Seth Heitzman SETH HEITZMAN --, **
Truss Count: 27
Model Code: Florida Building Code 2004 and 2006 Supplement
Truss Criteria: ANSI/TPI-2002(STD)/FBC
Engineering Software: Alpine Software, Version 7.36.
Structural Engineer of Record: The identity of the structural EOR did not exist as of
Address: the seal date per section 61G15-31.003(5a) of the FAC
Minimum Design Loads: Roof - 40.0 PSF @ 1.25 Duration
Floor - N/A
Wind - 110 MPH ASCE 7-02 -Closed

Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR8228

Details: BRCLBSUB-A11015EE-GBLLETIN-

Seal Date: 01/16/2008

-Truss Design Engineer-

Doug Fleming

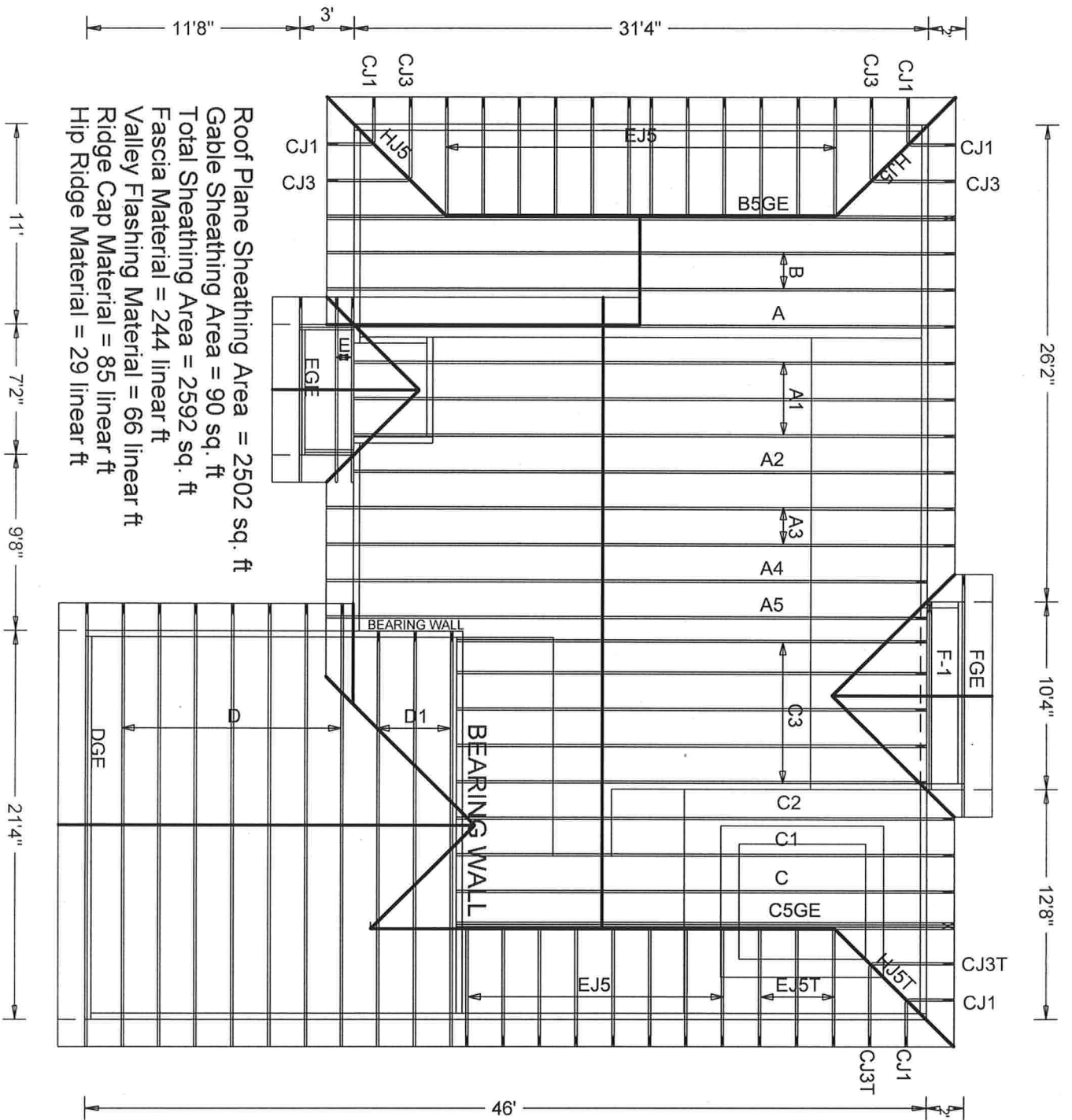
Florida License Number: 66648

1950 Marley Drive

Haines City, FL 33844

#	Ref	Description	Drawing#	Date
1	04075--A1		08016010	01/16/08
2	04076--A2		08016011	01/16/08
3	04077--A3		08016012	01/16/08
4	04078--A4		08016013	01/16/08
5	04079--A5		08016014	01/16/08
6	04080--A		08016015	01/16/08
7	04081--B		08016001	01/16/08
8	04082--B5GE		08016016	01/16/08
9	04083--C3		08016017	01/16/08
10	04084--C2		08016002	01/16/08
11	04085--C5GE		08016018	01/16/08
12	04086--C		08016019	01/16/08
13	04087--C1		08016020	01/16/08
14	04088--DGE		08016021	01/16/08
15	04089--D		08016003	01/16/08
16	04090--D1		08016004	01/16/08
17	04091--EGE		08016022	01/16/08
18	04092--E		08016005	01/16/08
19	04093--F-1		08016023	01/16/08
20	04094--FGE		08016024	01/16/08
21	04095--EJ5		08016006	01/16/08
22	04096--CJ1		08016025	01/16/08
23	04097--HJ5		08016026	01/16/08
24	04098--HJ5T		08016027	01/16/08
25	04099--CJ3		08016007	01/16/08
26	04100--CJ3T		08016008	01/16/08
27	04101--EJ5T		08016009	01/16/08





Roof Plane Sheathing Area = 2502 sq. ft
Gable Sheathing Area = 90 sq. ft
Total Sheathing Area = 2592 sq. ft
Fascia Material = 244 linear ft
Valley Flashing Material = 66 linear ft
Ridge Cap Material = 85 linear ft
Hip Ridge Material = 29 linear ft

8-015 SETH HEITZMAN / LEGION 1-16-08

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCPI(+/-)=0.18

Wind reactions based on MWFRS pressures.

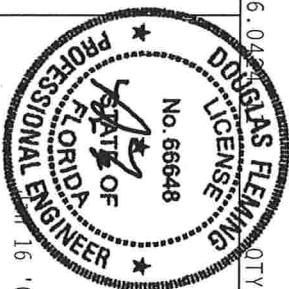
(A) Continuous lateral bracing equally spaced on member.



Scale = .25"/Ft.

REF	R8228 - 4075
DATE	01/16/08

FL Certificate of Authorization # 00278



TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCSUR8228 0801601D
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEON-	27456
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC D=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpi(+/-)=0.18

Wind reactions based on MWFRS pressures.

(A) Continuous lateral bracing equally spaced on member.



R=1288 U=115 W=4"

Design Crit: TPI-2002(STD)/FBC

$$Cq/RT=1.00(1.25)/10(0) \quad 7.36.042$$

QTY:1 FL/-/4/-/-/R/-/

Scale = .25"/Ft.

DOUGLAS FLEMING
LICENSE
N0166648

FL/-/4/-/-/R/-		Scale = .25"/Ft.
TC LL	20.0 PSF	REF R8228- 4076
TC DL	10.0 PSF	DATE 01/16/08

****IMPORTANT** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT**

BC LL	0.0 PSF	HC-ENG RA/DF

TOT.LD.	40.0 PSF	SEQN-	27491
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DUR.FAC.	1.25
----------	------

SPACING	24.0"	JREF- 1TF68228702
---------	-------	-------------------

BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



SPACING 24.0" JREF- 1TE68228Z02

Top chord 2x4 SP #2 Dense
Bot chord 2x6 SP #1 Dense :B3 2x4 SP #2 Dense:
Webs 2x4 SP #3

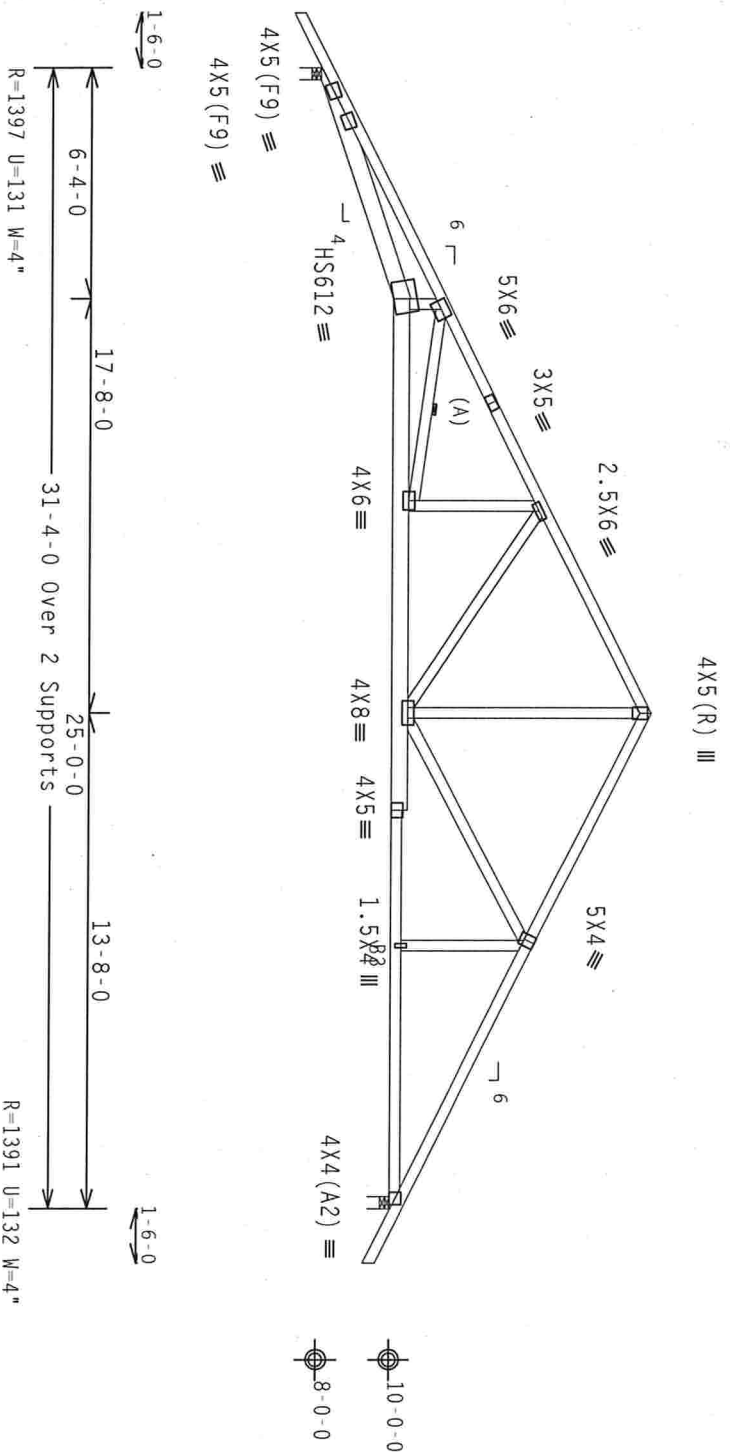
Calculated horizontal deflection is 0.15" due to live load and 0.24" due to dead load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI(+/-)=0.18

Wind reactions based on MWFRS pressures.

(A) Continuous lateral bracing equally spaced on member.



PLT TYP. 20 Gauge HS.Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

QTY:1 FL/-/4/-/-/R/-

Scale = .1875"/ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION) PUBLISHED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, 1001 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA 22314 AND WICA (WOOD TRUSS COUNCIL OF AMERICA), 2100 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCS, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONDITIONS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AIA/RA) AND TPI. ITW BCS CONNECTOR PLATES ARE MADE OF 20/18/16GA (20/H/18/16GA) ASTM A653 GRADE 40/50 (24, 24/H/25) GALV. STEEL. APPLY A MINIMUM OF 1/4" MIN. OF WELD TO ALL TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-2. ANY INSPECTION OF TRUSSES SHALL BE BY A QUALIFIED PERSONNEL. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY. SOLICIT FOR THE TRUSS COMPONENT BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



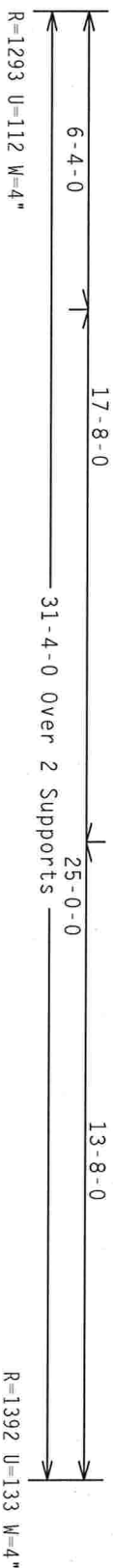
ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0378

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TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCSUR8228 08016012
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEON-	27477
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCpf(+/-)=0.18

Wind reactions based on MWFRS pressures.

(A) Continuous lateral bracing equally spaced on member.



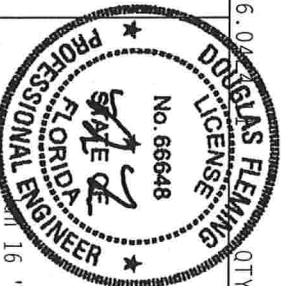
Scale = .25" / Ft.

DOUGLAS
LICENSE
No. 66648

****IMPORTANT** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT**

ITW Building Components Group, Inc.

Haines City, FL 33844
FL Certificate of Authorization # 0277



TC LL	20.0 PSF	REF	R8228- 4078
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCSUR8228 08016013
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEQN-	27499
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

Top chord 2x4 SP #2 Dense
Bot chord 2x6 SP #1 Dense :B3 2x4 SP #2 Dense:
Webs 2x4 SP #3

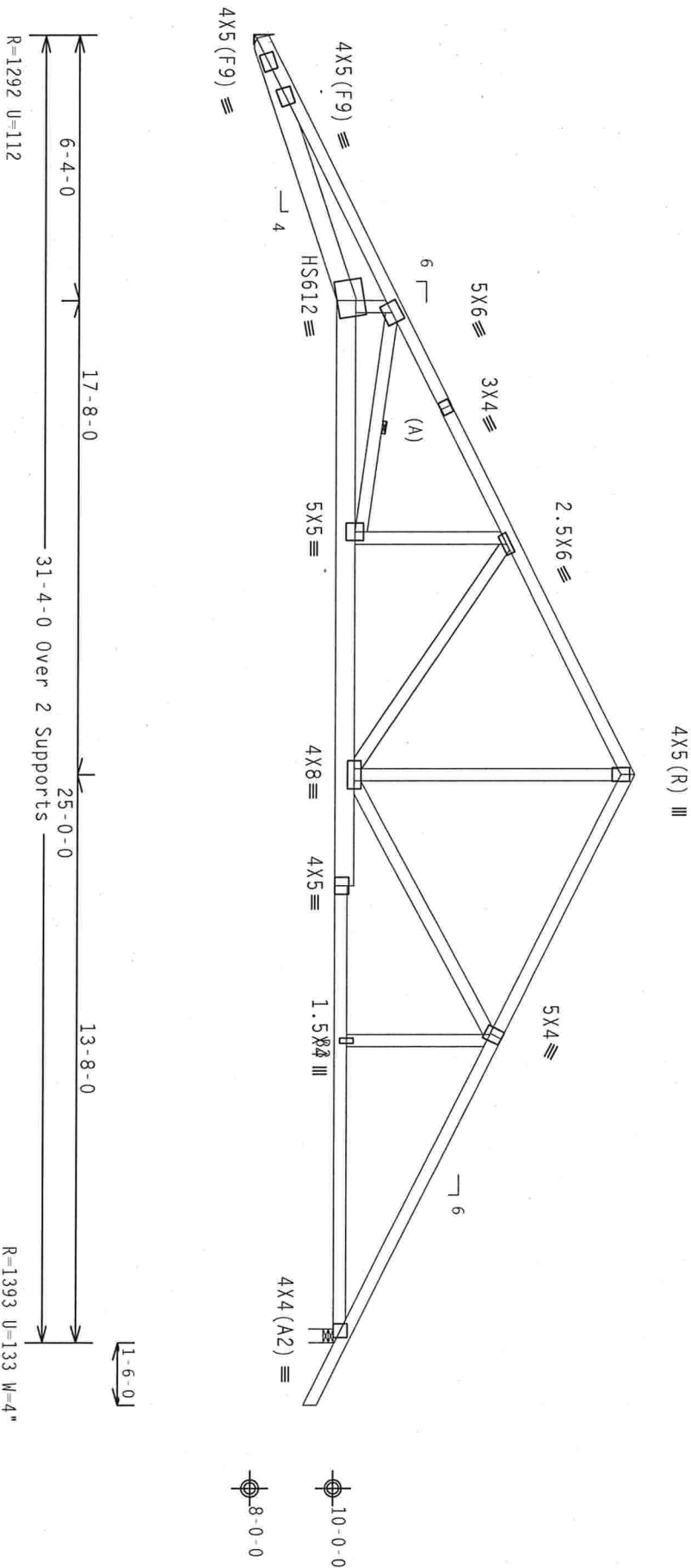
Calculated horizontal deflection is 0.16" due to live load and 0.24" due to dead load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18

Wind reactions based on MMFRS pressures.

(A) Continuous lateral bracing equally spaced on member.



PLT TYP. 20 Gauge HS.Wave

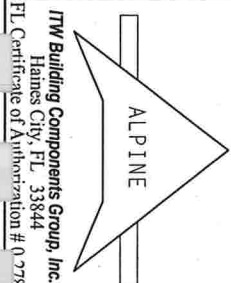
Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

QTY:1 FL/-/4/-/-/R/-

Scale = .25"/ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BC31 (BUILDING COMPONENT SAFETY INFORMATION) PUBLISHED BY THE NATIONAL ASSOCIATION OF BUILDING OFFICIALS, 6300 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314 AND AISC (GOOD TRUSS) COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CORRECTIONS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY ACPA) AND TPI. CONNECTOR PLATES ARE MADE OF 20/18/16GA (W/H/S/R) ASTM A653 GRADE 40/40 (Q. K/R, SS) GALV. STEEL. ITW BCG HAS CONDUCTED VISUAL INSPECTIONS OF THIS DESIGN. POSITION PER DRAWINGS 160A-2. ANY INSPECTION OF PLATES FROM ONO BY OTHERS SHALL BE LIMITED TO VISUAL INSPECTION. NO OTHERS SHALL BE RESPONSIBLE FOR THE DESIGN. DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



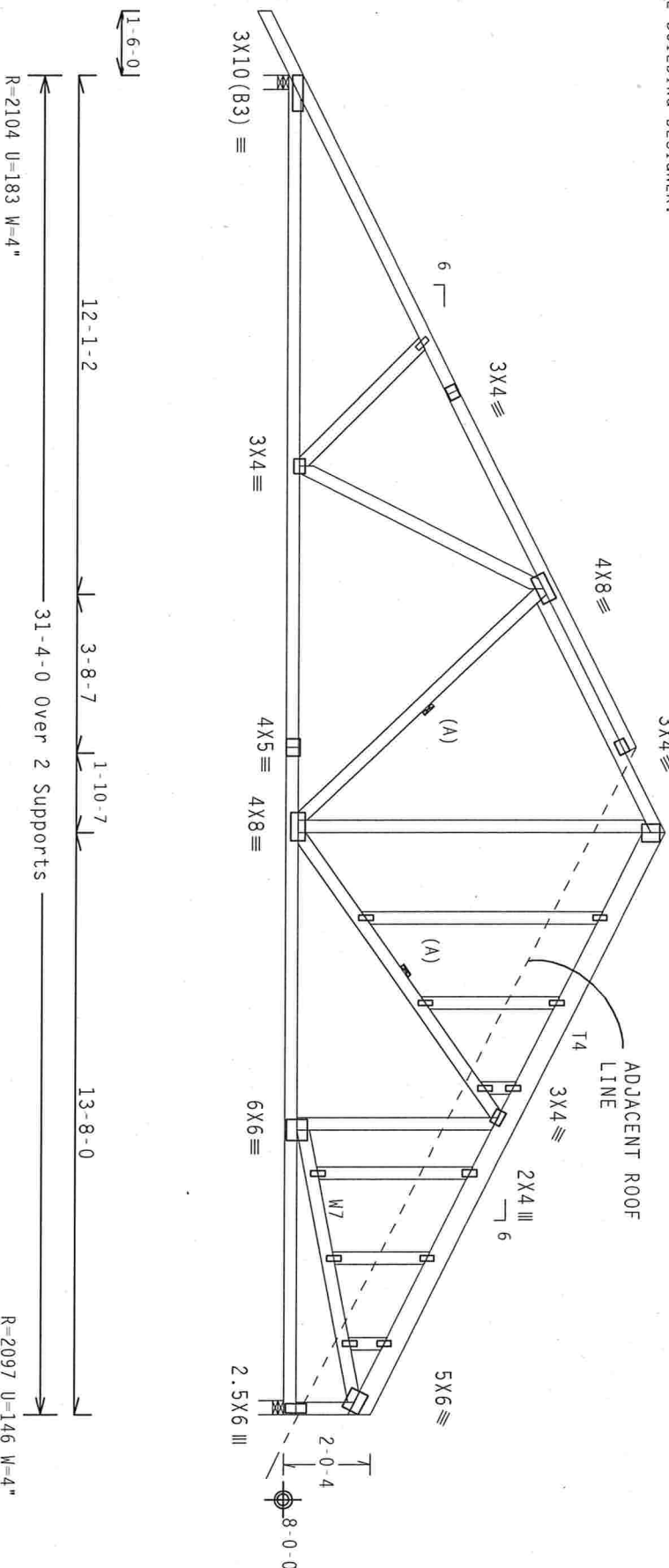
ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0-078

TC LL	20.0 PSF	REF	R8228- 4079
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016014
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT. LD.	40.0 PSF	SEQN-	27510
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

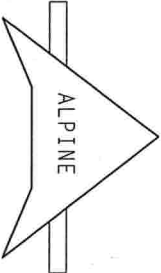
110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT 11, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18

Wind reactions based on MMFRS pressures.
Right end vertical not exposed to wind pressure.

(A) Continuous lateral bracing equally spaced on member.



Scale = .25"/Ft.



WARNING—TRIES TO REINFORCE EXISTING CAME IN FABRICATION, MOUNTING, SHIPPIING, INSTALLING AND BRACING REFER TO RCSC (BUILDING COMPONENTS INFORMATION), PUBLISHED BY PCI (TRUSS PLATE INSTITUTE), 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314, AND NCA (WOOD TRUSS COUNCIL OF AMERICA, 65000 ENTERPRISE LAKE, MADISON, WI, 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUT/CORRAL PANELS AND BOTTOM CHORD SHALL HAVE PROPERLY ATTACHED RIGID CELLING.

IMPORTANT CURTIS A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI-1 OR FABRICATING, HANDLING, SHIPPING, INSTALLING BRACING OR TRUSSES.

DESIGN CONDITIONS FOR APPLICABLE PROVISIONS OF MODULAR BUILDING CODES AND STANDARDS SHALL BE AS FOLLOWS:

(A) CONDUCTOR PLATES ARE MADE OF 2017-T6 ALUMINUM (AL-99.5%) ASTM A655, GRADE 40/60 (F_y/T_s) 55, STEEL, APPLY TO EACH FACE OF THISSAM, UNLESS OTHERWISE LOCATED ON THIS DESIGN POSITION.

(B) AN INSPECTION OF PLATES FOLLOWED BY (C) SHALL BE PER AMEX AS OF THIS DATE. SEE A SEAL ON THIS

DRAWING INDICATES ACCEPTANCE AND PROFESSIONAL ENGINEERING RESPONSIBILITY. SOLICIT FOR THE TOWNS COMPONENTS OF THE SUBMITTALS AND USE OF THIS COMPONENT FOR ANY OUTLINES IS THE RESPONSIBILITY OF THE USER.

BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2



TC LL	20.0 PSF	REF	R8228- 4080
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016015
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEQN-	27641
DUR.FAC.	1.25		
SPACING	24.0"	JREF -	1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCPI(+/-)=0.18

Wind reactions based on MWFRS pressures.



Scale = .1875"/Ft.

DOUGLAS
LICENSE
No. 66648

3

FER

OFFICE OF THE
CLERK OF THE
COURT

16

DUR.FAC.	1.25	
SPACING	24.0"	JREF - 1TE68228Z02

Nailing Schedule: (10d_Box_or_Gun_(0.128"x3",_min.)_nails)

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCp1 (+/-)=0.18

Truss spaced at 24.0" OC designed to support 1-4-0 top chord outlookers. Cladding load shall not exceed 10.00 PSF. Top chord must not be cut or notched.

#1 hip supports 5-0-0 jacks with no webs.

THE BUILDING DESIGNER IS RESPONSIBLE FOR THE DESIGN OF THE ROOF AND CEILING DIAPHRAGMS, GABLE END SHEAR WALLS, AND SUPPORTING SHEAR WALLS. SHEAR WALLS MUST PROVIDE CONTINUOUS LATERAL RESTRAINT TO THE GABLE END. ALL CONNECTIONS TO BE DESIGNED BY THE BUILDING DESIGNER.

R=2810 U=399 W=4"

R=2810 U=399 W=4"

Design Crit: $TPI-2002(STD)/FBC$
$$Cq/RT=1.00(1.25)/10(0)$$

QTY:1 FL/-/4/-/-/R/-/

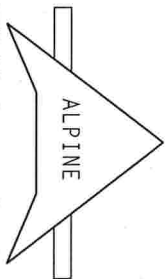
Scale = .1875" / Ft.

*****WARNING***** TRUCKS REQUIRE ERECTION GATE IN FABRICATION, SHIPPING, INSTALLING AND BRACING REFER TO #651 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PRACTICE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WCA (WOOD TRUSS COUNCIL OF AMERICA, 6500 ENTERPRISE LANE, MANSION, MI, 48151) FOR SAFETY PRACTICES AND WITNESS TO PERFORMING THESE FUNCTIONS. UNDESIRABLE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH THE OR FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING OF TRUSSES.

CONNECTION PLATES ARE MADE OF 20/20/1604 (4 H/55/3) WITH A653 GRADE 40/60 (4 H/55) GALV. STEEL. APPLY PLATES TO EACH FACE OF BRASS ANGLE. DRILL HOLES LOCATED ON THIS DESIGN. POSITION PER DRAWINGS 1604-2. IF INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER AMNH AS OF 11-1-2002 SEC. 3. SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY. SIGNED FOR THE TRUSS COMPONENT DESIGN SHOW. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0079



1 FL / 4 / - / - / R / -		Scale = .1875" / Ft.
TC LL	20.0 PSF	REF R8228 - 4082
TC DL	10.0 PSF	DATE 01/16/08
BC DL	10.0 PSF	DRW HCUR8228 08016016
BC LL	0.0 PSF	HC-ENG RA/DF
TOT. LD.	40.0 PSF	SEQN - 27729
DUR. FAC.	1.25	
SPACING	24.0"	JREF - 1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. Iw=1.00 GCPI(+/-)=0.18

Wind reactions based on MMFRS pressures.

Right end vertical not exposed to wind pressure.

Deflection meets $L/240$ live and $L/180$ total load. Creep increase factor for dead load is 1.50.



R=1053 U=104 W=4"

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)

 $Cq/RT=1.00(1.25)/10(0)$

7.36.043

QTY:1

FL/-/4/-/1/-/R/-/

Scale = .3125" / Ft.

WARNING: TRUCKS (INCLUDING EXISTING CASES IN FABRICATION), HANDLING, SHIPPING, INSTALLING AND BROCHING REFER TO RCSC (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY IP1 (STEEL PLATE INSTITUTE), 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314 AND AISC (AMERICAN INSTITUTE OF STEEL CONSTRUCTION), 5300 ENTERPRISE LANE, SUITE 510, WEST CHICAGO, IL 60631 FOR SAFETY PRACTICES AND MICH TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT****FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC., SHALL NOT

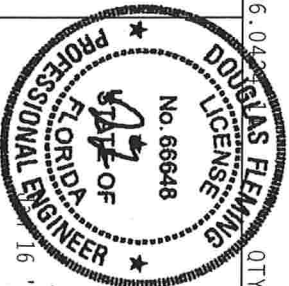
TP1: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES.

CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/SS/K) ASTM A653 GRADE 40/60 (W, K/H,SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND THREE OTHERS LOCATED ON TUBE SECTION. POSITION AND NUMBERING OF PLATES TO BE SHOWN ON DRAWING.

ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TP11-2002 SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT

ON EXISTING STRUCTURES. THE CONTRACTOR AND USER OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 00795



16.08

TC LL	20.0 PSF	REF	R8228 - 4083
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016017
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEQN-	27526
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

JREF - 1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18

Wind reactions based on MMFRS pressures.
Right end vertical not exposed to wind pressure.



Scale = .25"/Ft.

****IMPORTANT** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL**

DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TP1 1 SEC. 2.



TC LL	20.0 PSF	REF	R8228 - 4084
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016002
BC LL	0.0 PSF	HC-ENG	RA/DF *
TOT.LD.	40.0 PSF	SEQN-	27541
DUR.FAC.	1.25		
SPACING	24.0"	JREF -	1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, closed bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC D=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18

Wind reactions based on MWFRS pressures.

Right end vertical not exposed to wind pressure.

(A)(1) 2x6x9-1-10 SP #1 Dense scab at left end. Attach scab to face of chord with: 10d Box or Gun (0.128"x3", min.) nails @ 8" OC, plus additional nail clusters at : BRG.: (4), heel: (6), 1st panel point: (2).



R=1043 U=103 W=4"

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)

 $Cq/RT=1.00(1.25)/10(0)$

7.36.042

QTY:1

FL/-/4/-/1/-/R/-/

Scale = .3125" / Ft.

* **WARNING** *
THESE DESIGNS REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO RES1 (BUILDING COMPONENT SAFETY INFORMATION) PUBLISHED BY THE BRASS & STEEL INSTITUTE, 6500 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314, AND NFCA 6000 TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. INTERSECTIONS INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT****FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT

TP1: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES.

CONNECTOR PLATES ARE MADE OF 20/18/166A (W.H/SS/K) ASTM A653 GRADE 40/60 (W. K/H.SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND UNLESS OTHERWISE LOCATED ON THIS DESIGN POSITION AND OTHERWISE NOTED.

DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT

BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 278



TC LL	20.0 PSF	REF	R8228 - 4086
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016019
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEQN-	27699
DUR.FAC.	1.25		
SPACING	24.0"	JREF -	1TE68228202

Top chord 2x4 SP #2 Dense :11 2x6 SP #1 Dense:
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

Right end vertical not exposed to wind pressure.

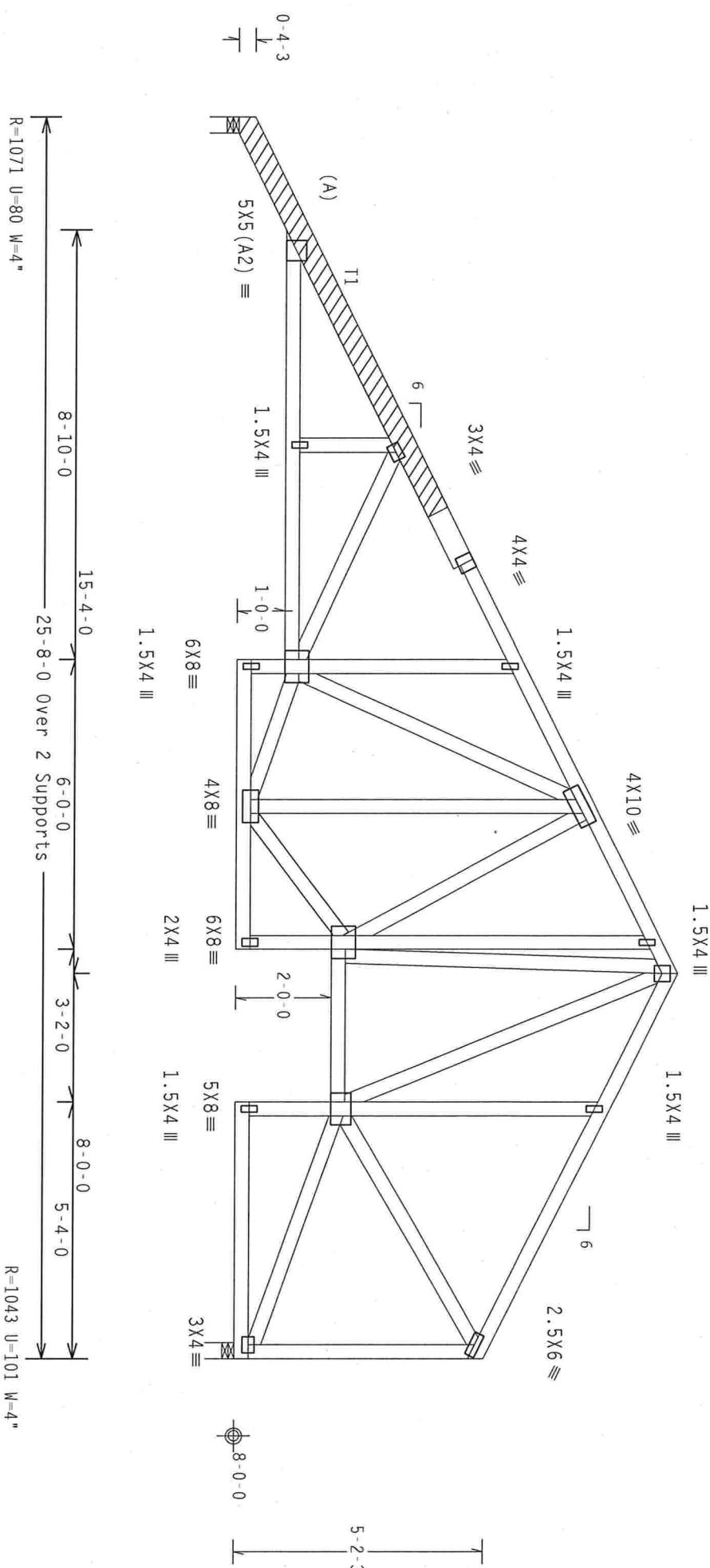
Calculated horizontal deflection is 0.12" due to live load and 0.19" due to dead load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI(+/-)=0.18

Wind reactions based on MWFRS pressures.

(A)(1) 2x6x9-1-10 SP #1 Dense scab at left end. Attach scab to face of chord with: 10d Box or Gun (0.128"x3" min.) nails @ 8" OC, plus additional nail clusters at: BRG.: (4), heel: (6), 1st panel point: (2).



PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

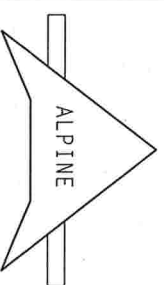
QTY: 1 FL/-/4/-/-/R/-

Scale = .3125"/ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSE (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY THE TRUSS SOCIETY OF AMERICA, 6300 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314 AND NCA (NATIONAL COUNCIL OF AMERICAN TRUSS ROOFERS), 6300 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN: ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES.

CONNECTION PLATES ARE MADE OF 20/18/16GA (W/H/S/S/R) ASH 6053 GRADE 40/60 (W, K/L, S/S) GALV. STEEL. APPLY TO ALL CONNECTIONS. CONNECTIONS LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-2, 160B-2, 160C-2, 160D-2, 160E-2, 160F-2, 160G-2, 160H-2, 160I-2, 160J-2, 160K-2, 160L-2, 160M-2, 160N-2, 160O-2, 160P-2, 160Q-2, 160R-2, 160S-2, 160T-2, 160U-2, 160V-2, 160W-2, 160X-2, 160Y-2, 160Z-2. THIS DRAWING INDICATES THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0278



TC LL	20.0 PSF	REF	R8228- 4087
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCU8R8228 080160Z0
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT. LD.	40.0 PSF	SEON-	27720
DUR. FAC.	1.25		
SPACING	24.0"		

JREF - 1TE68228Z02

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

: Stack Chord SC1 2x4 SP #2 Dense:
: Stack Chord SC2 2x4 SP #2 Dense:

Truss, spaced at 24.0" OC designed to support 1-4-0 top chord outlookers.
Cladding load shall not exceed 10.00 PSF. Top chord must not be cut or
notched.

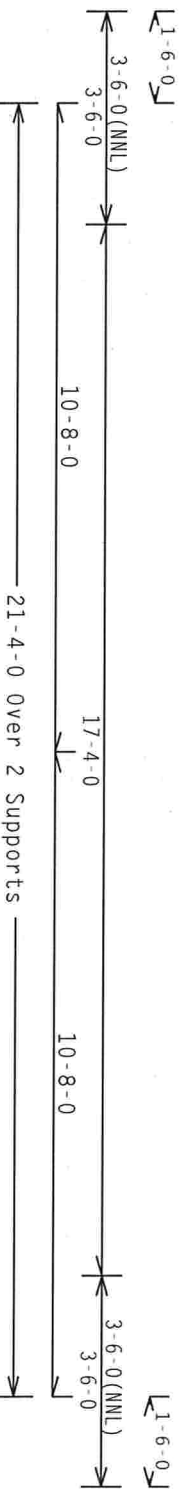
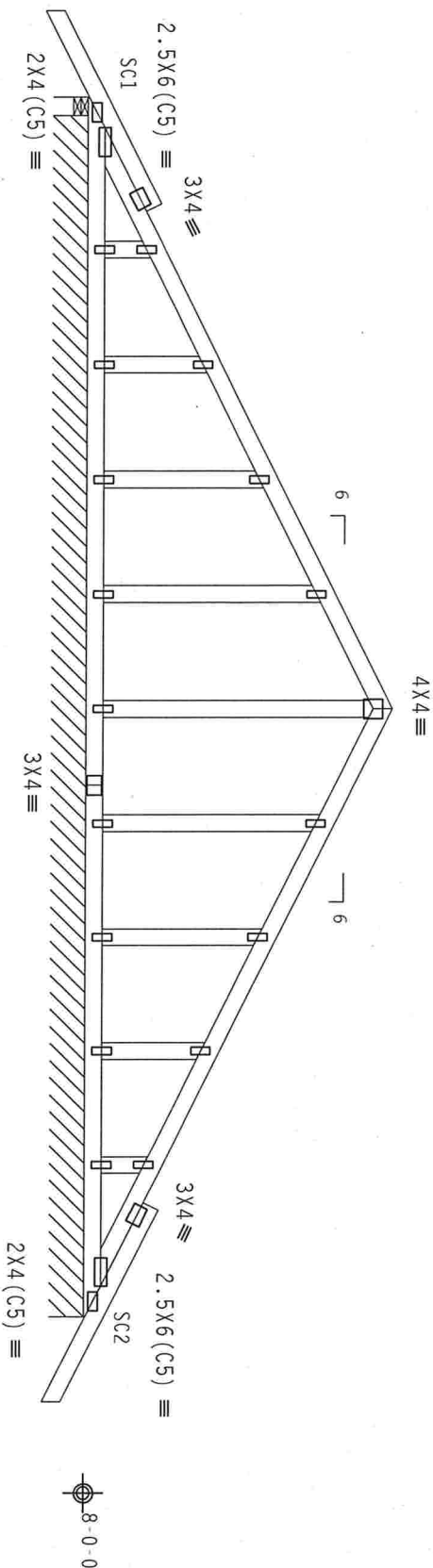
Deflection meets L/240 live and L/180 total load. Creep increase factor
for dead load is 1.50.

THE BUILDING DESIGNER IS RESPONSIBLE FOR THE DESIGN OF THE
ROOF AND CEILING DIAPHRAGMS, GABLE END SHEAR WALLS, AND
SUPPORTING SHEAR WALLS. SHEAR WALLS MUST PROVIDE CONTINUOUS
LATERAL RESTRAINT TO THE GABLE END. ALL CONNECTIONS TO BE
DESIGNED BY THE BUILDING DESIGNER.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located
anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0
psf. $I_w=1.00$ $G_{CPI}(+/-)=0.18$
Wind reactions based on MWFRS pressures.

See DWGS A11015EE0207 & GBLETTINO207 for more requirements.

Stacked top chord must NOT be notched or cut in area (NML). Dropped
top chord braced at 24" o.c. intervals. Attach stacked top chord (SC)
to dropped top chord in notchable area using 3x4 tie-plates 24" o.c.
Center plate on stacked/dropped chord interface, plate length
perpendicular to chord length. Splice top chord in notchable area
using 3x6.



R=343 W=4"
R=124 PLF U=7 PLF W=21-0-0

Note: All Plates Are 1.5X4 Except As Shown.

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

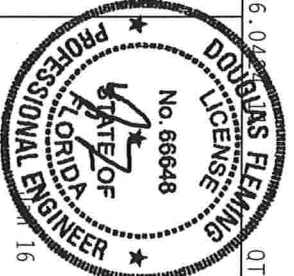
7.36.04

QTY: 1 FL/-/4/-/-/R/-

Scale = .3125"/ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSE (BUILDING COMPONENT SAFETY INFORMATION) PUBLISHED BY TPI (TRUSSING INSTITUTE OF AMERICA), 6300 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN: ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF 903 (NATIONAL DESIGN SPEC. BY AIA/PA) AND TPI. TRUSSES SHALL BE FABRICATED AND SHIPPED TO THE PROJECT SITE WITHIN 20/10/1600 (H/D/S/R) ASH 6053 GRADE 40/50 (Q, K/H, S) GALV. STEEL. APPLY PLATES TO EACH END OF THE TRUSS. THE TRUSS SHALL BE SHIPPED AND INSTALLED PER DRAWINGS 160A-2. ANY INSPECTION OF PLATES FOLLOWED BY (C) SHALL BE PERFORMED BY THE TRUSS COMPONENT DESIGNER. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization #0278

TC LL	20.0 PSF	REF	R8228- 4088
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCU8R8228 08016021
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT. LD.	40.0 PSF	SEON-	27607
DUR. FAC.	1.25		
SPACING	24.0"		
UREF	1TE68228Z02		

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18

Wind reactions based on MMFRS pressures.


$$Cq/RT=1.00(1.25)/10(0)$$

QTY:1 FL/-/4/-/-/R/-/

Scale = .3125"/Ft.

****IMPORTANT*** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITM BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH IT11 OR FABRICATING, HANDLING, SHIPPING, INSTALLING BRACING OF TRUSSES.

[illegible]

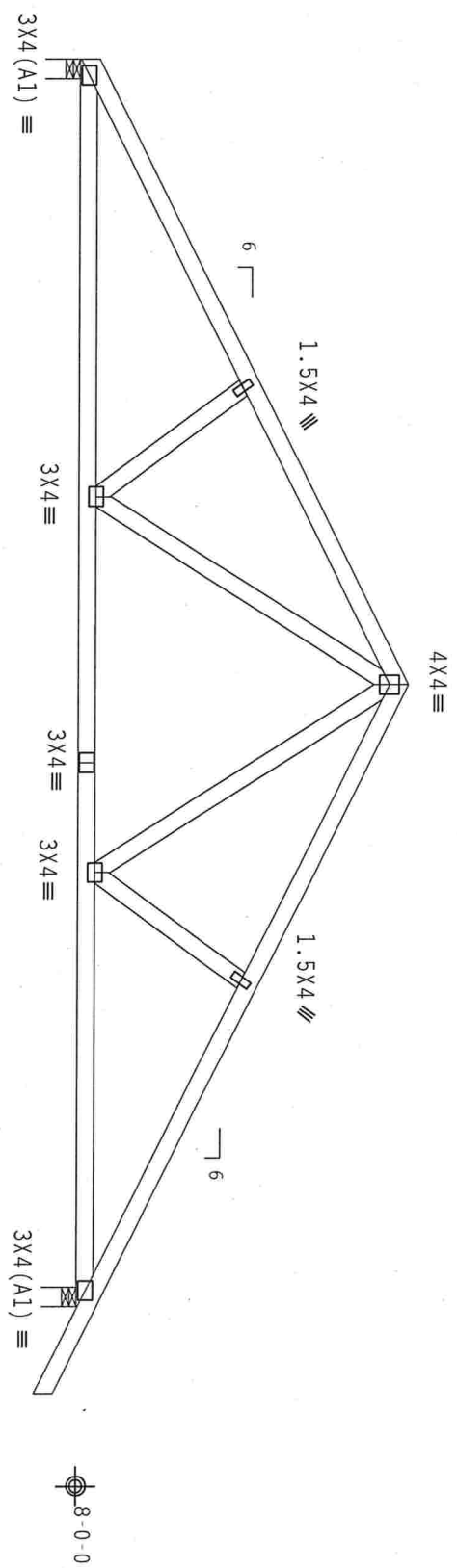
TC LL	20.0 PSF	REF	R8228 - 4089
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016003
BC LL	0.0 PSF	HC-ENG RA/DF	*
TOT.LD.	40.0 PSF	SEQN -	27595
DUR.FAC.	1.25		
SPACING	24.0"	JREF -	1TE68228Z02

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf, $I_w=1.00$ GCPI (+/-)=0.18

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

Wind reactions based on MWFRS pressures.



10-8-0

21-4-0 Over 2 Supports

10-8-0

R=87/4 U=76 W=4"

R=983 U=96 W=4"

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC

Cq/RT=1.00(1.25)/10(0)

7.36.04

QTY: 1

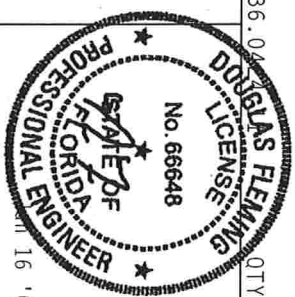
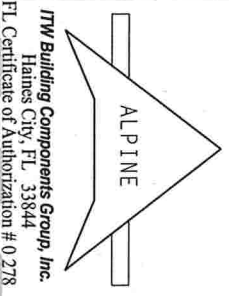
FL/-/4/-/R/-

Scale = .3125"/Ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSE (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE), 6300 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND WICA (WOOD TRUSS COUNCIL OF AMERICA, 6000 ENTERPRISE LANE, MADISON, WI, 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES.

DESIGN CONDITIONS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AIA/NA) AND TPI. ITW BCG CONNECTOR PLATES ARE MADE OF 20/18/16GA (W/H/55/RS) ASTM A653 GRADE 40/50 (W, F/H, 55) GALV. STEEL. APPLY FINISHES TO ALL EXPOSED SURFACES. UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-2. ALL DIMENSIONS ARE IN FEET AND INCHES. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. A SEAL ON THIS DRAWING INDICATES THE ACCEPTANCE OF PROFESSIONAL ENGINEER. CONSULT WITH THE TRUSS COMPONENT MANUFACTURER FOR THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



TC LL	20.0 PSF	REF R8228- 4090
TC DL	10.0 PSF	DATE 01/16/08
BC DL	10.0 PSF	DRW HCUR8228 08016004
BC LL	0.0 PSF	HC-ENG RA/DF
TOT. LD.	40.0 PSF	SEON- 27602
DUR. FAC.	1.25	
SPACING	24.0"	

JREF - 1TE68228Z02

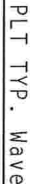
Webs 2x4 SP #3

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT 11, EXP 8, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18

See DWGS A1015EE0207 & GBULLETIN0207 for more requirements.

Stacked top chord must NOT be notched or cut in area (NML). Dropped top chord braced at 24" o.c. intervals. Attach stacked top chord (SC) to dropped top chord in notifiable area using 3x4 tie-plates 24" o.c.

perpendicular to chord length. Splice top chord in notchable area using 3x6.



QTY: 1

FL/-/4/-/-/R/-/

Scale = .5" / Ft.

DOUGLAS FLEMING
LICENSE
No. 66648

****IMPORTANT** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT**

DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC., BY AIAA) AND TPI.

PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-2

DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE



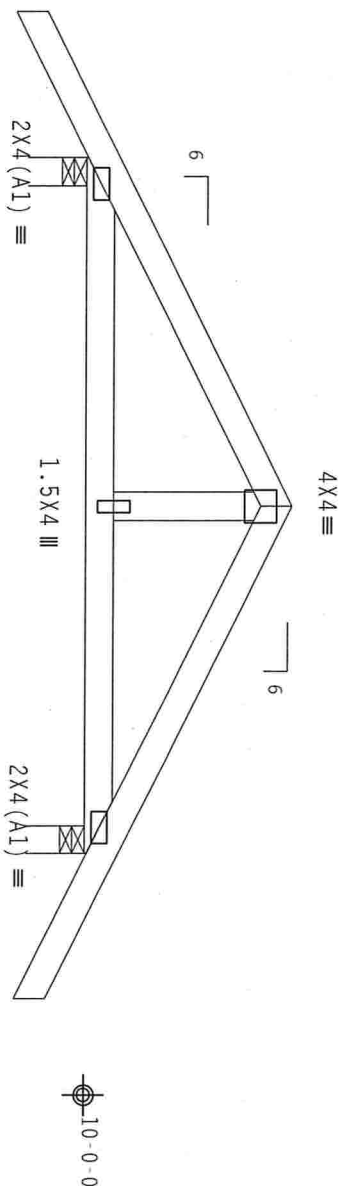
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TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCSUR8228 08016022
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEQN-	27611
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ Gcpi (+/-)=0.18

Wind reactions based on MMFRS pressures.



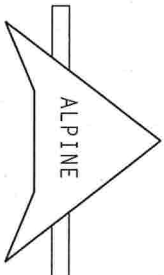
← 1-6-0 →
3-7-0 3-7-0
← 7-2-0 Over 2 Supports →
R=395 U=43 W=3.5"
R=395 U=43 W=3.5"

PLT TYP. Wave

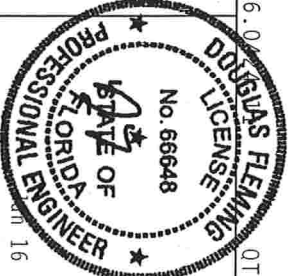
Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSE CONSULTING COMPONENT SAFETY INFORMATION, PUBLISHED BY THE AMERICAN TRUSS COUNCIL, 6000 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. BY A/RNA AND TPI. ITW BCG DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. FOR ARCHITECTURAL TRUSSES), UNLESS OTHERWISE INDICATED. UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DIAGRAMS 160A-2. ANY DEVIATION FROM THIS DESIGN SHALL BE THE RESPONSIBILITY OF THE TRUSS COMPONENT FABRICATOR. ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0-770



TC LL	20.0 PSF	REF	R8228- 4092
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCSR8228 08016005
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEON-	27615
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228202

Top chord 2x4 SP #2 Dense
Bot chord 2x6 SP #2
Webs 2x4 SP #3

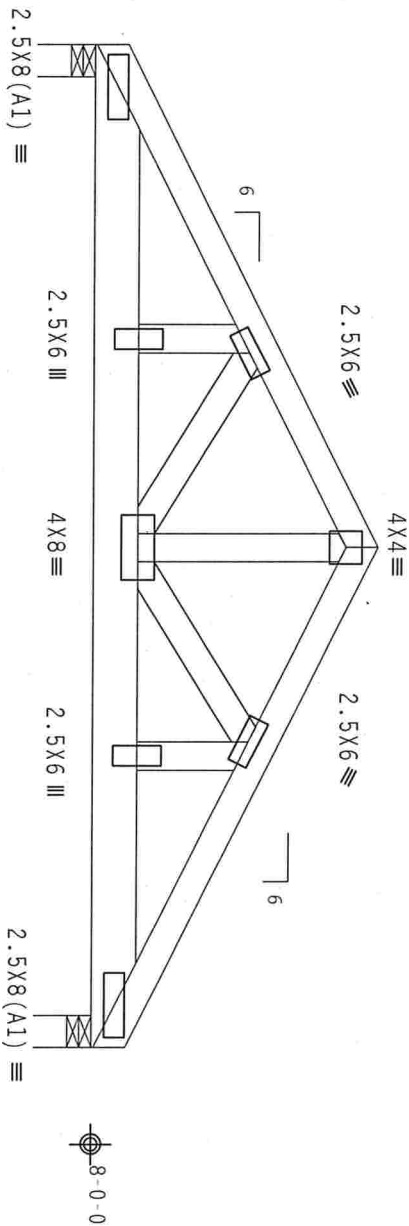
SPECIAL LOADS

----- (LUMBER DUR.FAC.=1.25 / PLATE DUR.FAC.=1.25)
TC - From 62 PLF at 0.00 to 62 PLF at 5.17
TC - From 62 PLF at 5.17 to 62 PLF at 10.33
BC - From 20 PLF at 0.00 to 20 PLF at 10.33
BC - 1292 LB Conc. Load at 0.90
BC - 1068 LB Conc. Load at 2.19, 3.94, 5.94, 7.94, 9.94

Wind reactions based on MMFRS pressures.

2 COMPLETE TRUSSES REQUIRED

Nailing Schedule: (10d Box or Gun (0.128"x3", min.) nails)
Top Chord: 1 Row @ 12.00" o.c.
Bot Chord: 2 Rows @ 4.50" o.c. (Each Row)
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails
in each row to avoid splitting.
110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located
anywhere in roof, CAT II, Exp B, wind TC DL=5.0 psf, wind BC DL=5.0
psf. Iw=1.00 Gcpi (+/-)=0.18
Deflection meets L/240 live and L/180 total load. Creep increase
factor for dead load is 1.50.



5-2-0 10-4-0 over 2 Supports 5-2-0
R=3855 U=318 W=4"
R=3629 U=290 W=4"

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE), 210 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA. 22314) AND WICA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

ALPINE

ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0-778



TC LL	20.0 PSF	REF	R8228- 4093
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCSUR8228 08016023
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEON-	27627
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228202

Scale = 5"/Ft.

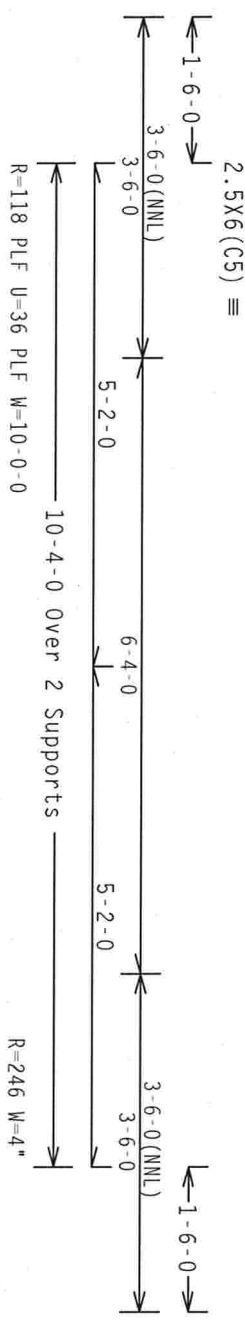
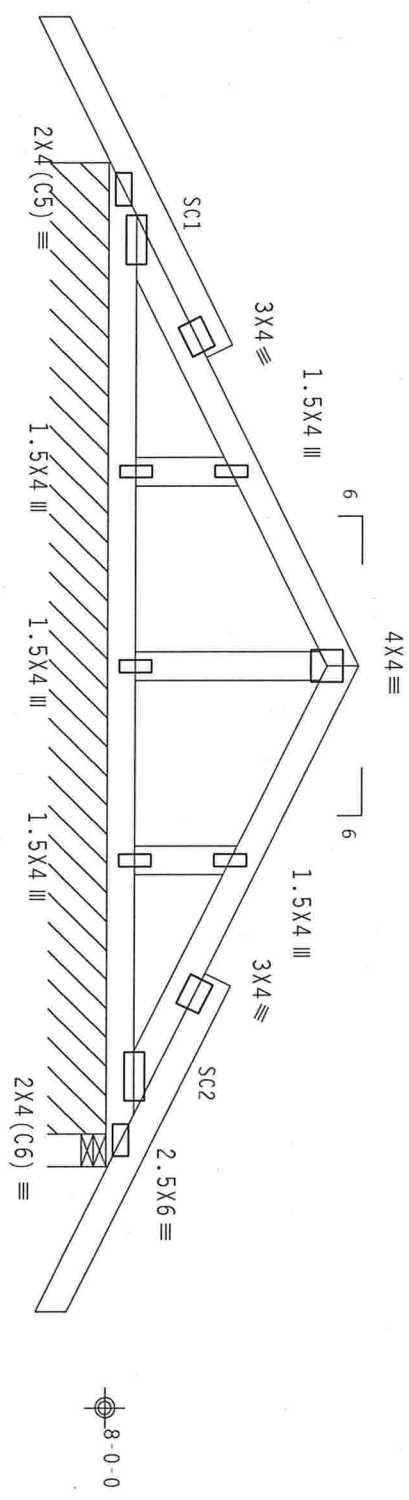
Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3
:Stack Chord SC1 2x4 SP #2 Dense:
:Stack Chord SC2 2x4 SP #2 Dense:

Truss, spaced at 24.0" OC designed to support 1-4-0 top chord outlookers.
Cladding load shall not exceed 10.00 PSF. Top chord must not be cut or notched.

Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" o.c. intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" o.c. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

THE BUILDING DESIGNER IS RESPONSIBLE FOR THE DESIGN OF THE ROOF AND CEILING DIAPHRAGMS, GABLE END SHEAR WALLS, AND SUPPORTING SHEAR WALLS. SHEAR WALLS MUST PROVIDE CONTINUOUS LATERAL RESTRAINT TO THE GABLE END. ALL CONNECTIONS TO BE DESIGNED BY THE BUILDING DESIGNER.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18
Wind reactions based on MWFRS pressures.
See DWGS A11015EE0207 & GBLETTIND0207 for more requirements.
In lieu of structural panels use purlins to brace TC @ 24" OC.
Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



PLT TYP. Wave

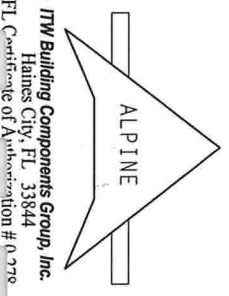
Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

QTY: 1 FL/-/4/-/R/-

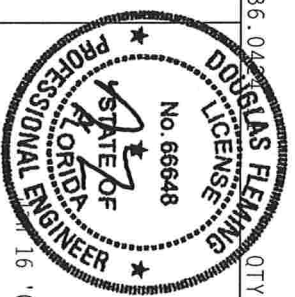
Scale = .5"/ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI (BUILDING COMPONENT SAFETY INFORMATION) PUBLISHED BY THE NATIONAL TRUSS CONGRESS OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE OF THE TRUSS IN COMPLIANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AIA/AIA) AND TPI. ITW BCG TRUSSES ARE MADE OF 20/18/16GA (24/18/SS/AS) 40/60 (4. K/LH/SS) GALV. STEEL. APPLY ALL APPLICABLE CODES AND STANDARDS. UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWING 160A-2. ALL TRUSSES ARE TO BE INSTALLED IN ACCORDANCE WITH THE TPI. THE TRUSS COMPONENT DRAWING INDICATES THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0792

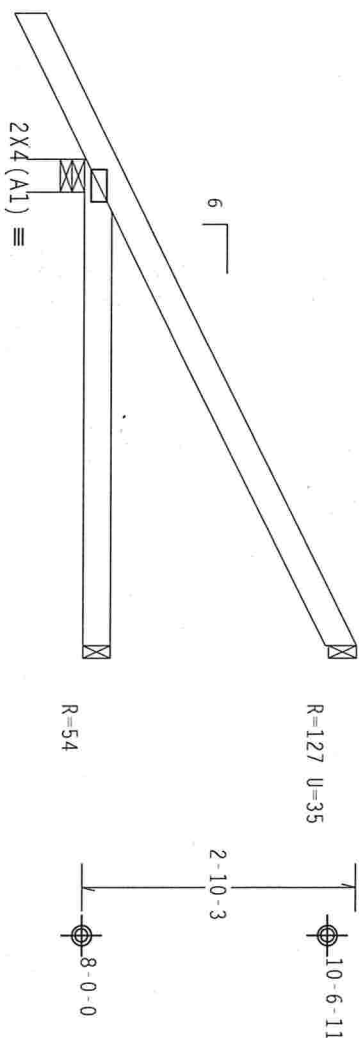


TC LL	20.0 PSF	REF R8228- 4094
TC DL	10.0 PSF	DATE 01/16/08
BC DL	10.0 PSF	DRW HCUSR8228 08016024
BC LL	0.0 PSF	HC-ENG RA/DF
TOT.LD.	40.0 PSF	SEON- 27619 REV
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1TE68228202

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI(+/-)=0.18
Wind reactions based on MWFRS pressures.



← 1-6-0 →

4-5-8
5-0-0 Over 3 Supports
R=331 U=24 W=4"

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC

Cq/RT=1.00(1.25)/10(0)

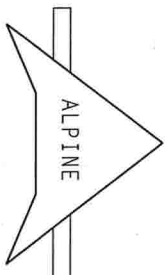
7.36.042

QTY:1 FL/-/4/-/-/R/-

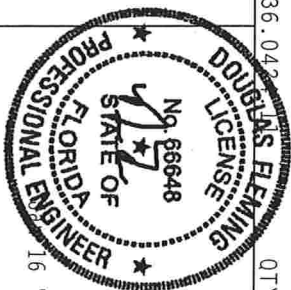
Scale = .5"/Ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO HCST (BUILDING COMPONENT SAFETY INFORMATION) PUBLISHED BY THE NATIONAL ASSOCIATION OF TRUSS MANUFACTURERS, 6200 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314, AND NCTA (WOOD TRUSS COUNCIL OF AMERICA, 100 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC., BY AIA/PDA) AND TPI. ITW BCG CONNECTOR PLATES ARE MADE OF 20/18/16GA (W/H/S/S) ASTM A653 GRADE 40/60 (K, K/H, SSI) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-2, 160B-2, 160C-2, 160D-2, 160E-2, 160F-2, 160G-2, 160H-2, 160I-2, 160J-2, 160K-2, 160L-2, 160M-2, 160N-2, 160O-2, 160P-2, 160Q-2, 160R-2, 160S-2, 160T-2, 160U-2, 160V-2, 160W-2, 160X-2, 160Y-2, 160Z-2. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROJECT. ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



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FL Certificate of Authorization # 0-278



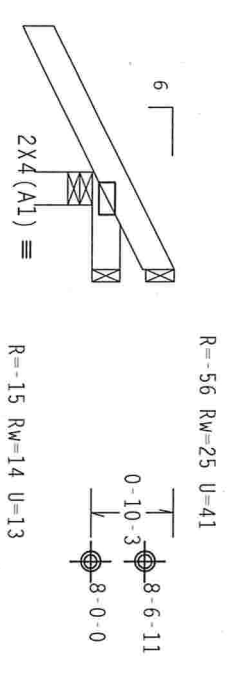
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TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016006
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT. LD.	40.0 PSF	SEQN-	27547
DUR. FAC.	1.25		
SPACING	24.0"		

JREF - 1TE68228Z02

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ Gcpl (+/-)=0.18
Wind reactions based on MWFRS pressures.



R=254 U=49 W=4"

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC

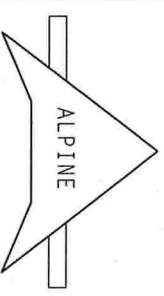
Cq/RT=1.00(1.25)/10(0)

7.36.00

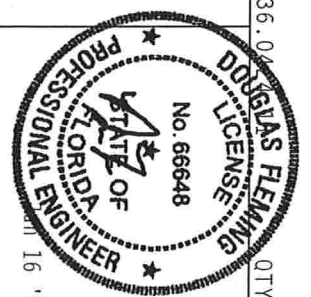
****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCST (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE), 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314, AND WICA (WOOD TRUSS COUNCIL OF AMERICA), 6300 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI, OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES.

DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AIA/PA AND TPI. ITW BCG TRUSSES MODE 20/18/160K (W/H/S/V) ASH A663 GRADE 40/60 (Q, K/1, S3) GALV. STEEL. ITW BCG PLATES TO EACH JOINT AND CHORD ENDS. THIS DESIGN, POSITION PER DRAWINGS 160A-Z, ANY INSPECTION OF PLATES FOLLOWED BY (3) SHALL BEER ENDED AS OF THE DATE OF THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0 078



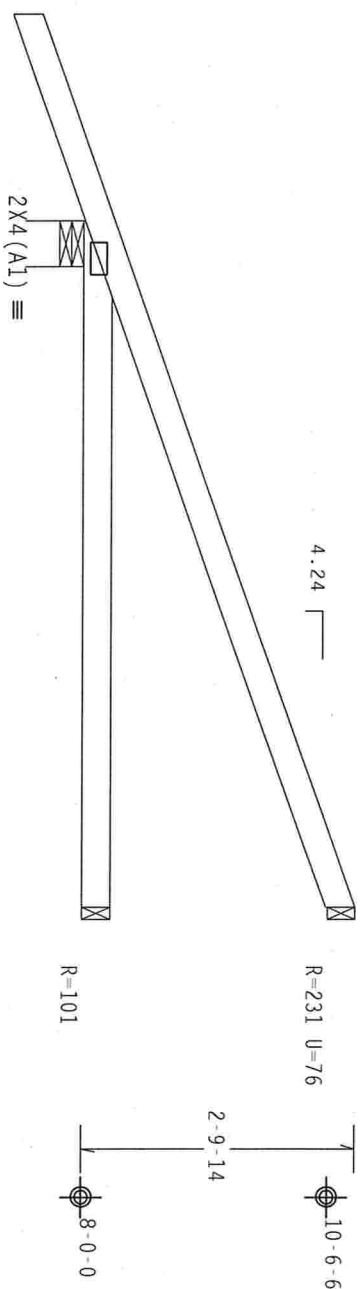
QTY: 1 FL/-/4/-/-/R/- Scale = .5"/Ft.

TC LL	20.0 PSF	REF R8228- 4096
TC DL	10.0 PSF	DATE 01/16/08
BC DL	10.0 PSF	DRW HCUSR8228 08016025
BC LL	0.0 PSF	HC-ENG RA/DF
TOT. LD.	40.0 PSF	SEQN- 27553
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1TE68228202

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense

Wind reactions based on MFRS pressures.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ $G_{CPI}(+/-)=0.18$
Hi-jack supports 5-0-0 setback jacks with no webs.
Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



PLT TYP. Wave

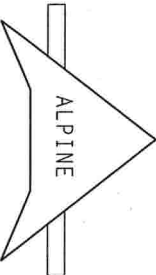
Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

QTY: 1 FL/-/4/-/-/R/-

Scale = .5"/ft.

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSE (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY THE NATIONAL ASSOCIATION OF BUILDING OFFICIALS, 6300 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314 AND WCA (WOOD TRUSS COUNCIL OF AMERICA), 6000 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN: ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY ACPA) AND TPI. CONNECTOR PLATES ARE MADE OF 20/18/160A (W/H/SS/R) ASH A653 GRAD 40/50 (CL, K/L, SS) GALV. STEEL. ITW BCG TRUSSES ARE DESIGNED TO BE USED IN CONFORMANCE WITH THE DESIGN SPECIFICATIONS AND DRAWINGS. ANY INSPECTION OF PLATES FOLLOWED BY VISUAL INSPECTION OF THE TRUSS SHALL BE SUFFICIENT TO VERIFY THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY. SOLELY FOR THE TRUSS COMPONENT BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0-376



TC LL	20.0 PSF	REF	R8228- 4097
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016026
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEON:	27565
DUR.FAC.	1.25		
SPACING	24.0"		
JREF	1TE68228Z02		

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT 1I, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI (+/-)=0.18

Deflection meets $L/240$ live and $L/180$ total load. Creep increase factor for dead load is 1.50.

factor for dead load is 1.50.



Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)

$$Cq/RT=1.00(1.25)/10(0)$$

7.36.043

QTY:1

FL/-/4/-/-/R/-

Scale = .5"/Ft.

WARNING: TRUSSES' TRUSSES (INCLUDING EXISTING) CAME IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING REFER TO NC31 (BUILDING COMPONENT SPECIFICATION), PUBLISHED BY THE TRUSS PRACTICE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314 AND NPIA (WOOD TRUSS CONSTRUCTION OF AMERICA, 6500 ENTERPRISE LANE, MOUNTAIN, NJ 53139) FOR TRUSS PRACTICES, PRACTICES FOR PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, FOR CORDS SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CORD SHALL HAVE PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT**

TP1: OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES.

PLATES TO EACH FACE OF TRUSS AND SUBJECT ATTENUATION LOCATED ON TRUSS DESIGN POSITION AND PROVIDED FOR CONNECTION PLATES ARE MADE OF 20/10/16GA (W. H/55/K) ASIM A653 GRADE 40/50 (W. K/H.55) GALV. STEEL. APPLY

DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT

BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.

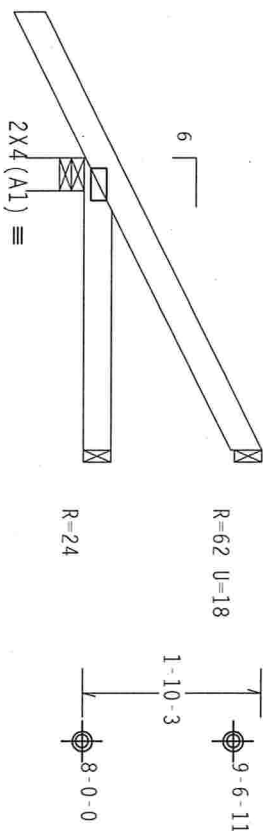
ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0278



TC LL	20.0 PSF	REF	R8228 - 4098
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016027
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEQN-	27579 REV
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf, $1w=1.00$ gcpi (+/-)=0.18

Wind reactions based on MFRS pressures.



1-6-0

0-5-8 0 over 2-5-8
3-5-8 supports
R=262 U=26 W=4"

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)

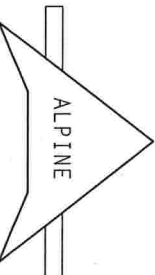
 $Cq/RT=1.00(1.25)/10(0)$

7.36.04

QTY:1

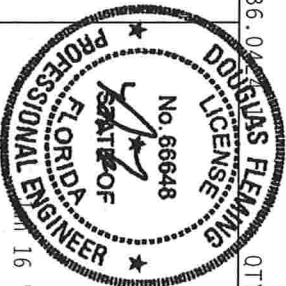
FL/-/4/-/-/R/-/

Scale = .5" / Ft.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 00790

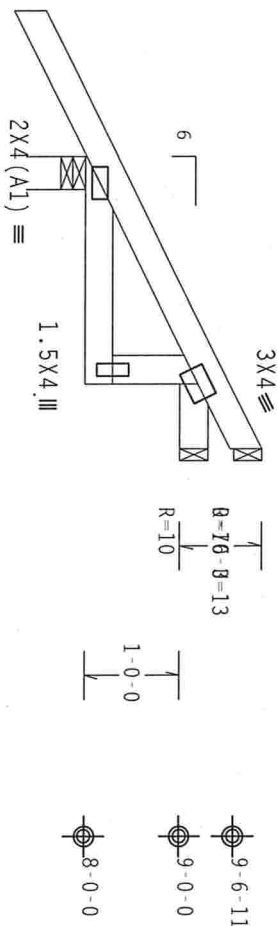
WARNING—TRUCKS, REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY THE CRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314, AND WICK MOON TRUSS COUNCIL OF AMERICA, 65000 ENTERPRISE LANE, MADISON, WI 53719, FOR SAFETY PRACTICES PERTAINING TO PERFORMING THESE OPERATIONS. UNDESIRABLE OUTCOME INDICATED FOR GOOD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

[illegible]

TC LL	20.0 PSF	REF	R8228 - 4099
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016007
BC LL	0.0 PSF	HC-ENG RA/DF	*
TOT.LD.	40.0 PSF	SEQN-	27559
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228Z02

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, located anywhere in roof, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf, $I_w=1.00$ Gcpl (+/-)=0.18

Wind reactions based on MWFRS pressures.



1-6-0

$R=262 \quad U=25 \quad W=4$

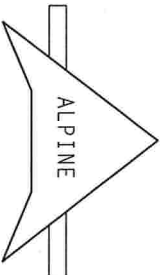
Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)
$$Cq/RT=1.00(1.25)/10(0)$$

7.36.04

QTY:1

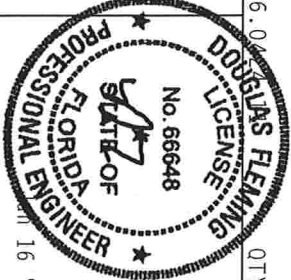
FL/-/4/-/-/R/-

Scale = .5" / Ft.



ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 00770

WARNING: TRUCKS REQUIRING EXTERIOR CABLE IN FABRICATION, SHIPPING, INSTALLING AND BRACING REFER TO GC#1 (BUILDING COMPONENT CABLE INFORMATION). PUBLISHED BY TPI (TRUSS PAPER INSTITUTE), 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314 AND WPCA (WOOD TRUSS COUNCIL OF AMERICA), 65000 ENTERPRISE LANE, MIDDLETOWN, MI 48159 FOR SAFETY PRACTICES PRIOR TO TRUSS CONSTRUCTION. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE PROPERLY ATTACHED RIGID CEILING.

[illegible]

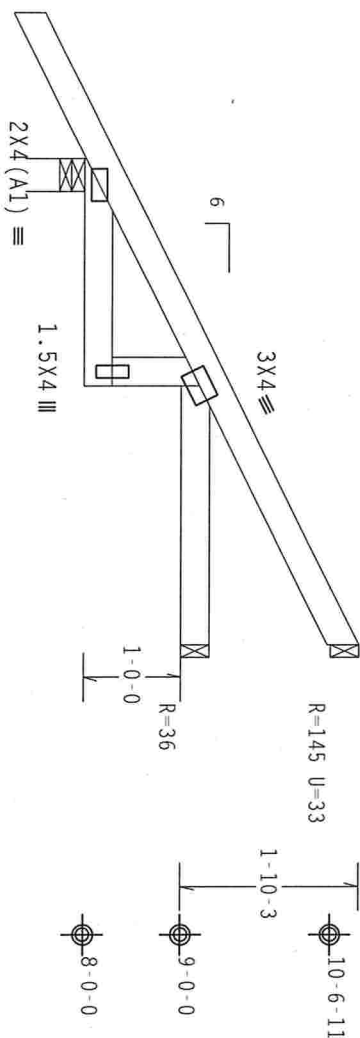
TC LL	20.0 PSF	REF	R8228- 4100
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016008
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEQN-	27569
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1TE68228202

Top chord 2x4 SP #2 Dense
Bot chord 2x4 SP #2 Dense
Webs 2x4 SP #3

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

110 mph wind, 15.00 ft mean hgt, ASCE 7-02, CLOSED bldg, not located within 4.50 ft from roof edge, CAT II, EXP B, wind TC DL=5.0 psf, wind BC DL=5.0 psf. $I_w=1.00$ GCPI(+/-)=0.18

Wind reactions based on MWFRS pressures.



← 1-6-0 →

2-4-0 2-8-0
5-0-0 Over 3 Supports
R=331 U=24 W=4"

PLT TYP. Wave

Design Crit: TPI-2002(STD)/FBC
Cq/RT=1.00(1.25)/10(0)

7.36.04

QTY:1

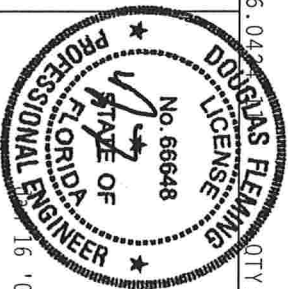
FL/-/4/-/-/R/-

Scale = .5"/ft.

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCST (BUILDING COMPONENT SAFETY INFORMATION) PUBLISHED BY TPI (TRUSS PLATE INSTITUTE), 6300 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314 AND WCA (WOOD TRUSS COUNCIL OF AMERICA), 6300 ENTERPRISE LANE, MADISON, WI 53719 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

ALPINE

ITW Building Components Group, Inc.
Haines City, FL 33844
FL Certificate of Authorization # 0-078



TC LL	20.0 PSF	REF	R8228- 4101
TC DL	10.0 PSF	DATE	01/16/08
BC DL	10.0 PSF	DRW	HCUSR8228 08016009
BC LL	0.0 PSF	HC-ENG	RA/DF
TOT.LD.	40.0 PSF	SEON-	27573
DUR.FAC.	1.25		
SPACING	24.0"	UREF-	1TE68228Z02

CLB WEB BRACE SUBSTITUTION

THIS DETAIL IS TO BE USED WHEN CONTINUOUS LATERAL BRACING (CLB) IS SPECIFIED ON AN ALPINE TRUSS DESIGN BUT AN ALTERNATIVE WEB BRACING METHOD IS DESIRED.

NOTES:

THIS DETAIL IS ONLY APPLICABLE FOR CHANGING THE SPECIFIED CLB SHOWN ON SINGLE PLY SEALED DESIGNS TO T-BRACING OR SCAB BRACING.

ALTERNATIVE BRACING SPECIFIED IN CHART BELOW MAY BE CONSERVATIVE. FOR MINIMUM ALTERNATIVE BRACING, RE-RUN DESIGN WITH APPROPRIATE BRACING.

WEB MEMBER SIZE	SPECIFIED CLB BRACING	T OR L-BRACE	ALTERNATIVE BRACING SCAB BRACE
2X3 OR 2X4	1 ROW	2X4	1-2X4
2X3 OR 2X4	2 ROWS	2X6	2-2X4
2X6	1 ROW	2X4	1-2X6
2X6	2 ROWS	2X6	2-2X4(*)
2X8	1 ROW	2X6	1-2X8
2X8	2 ROWS	2X6	2-2X6(*)

T-BRACE, L-BRACE AND SCAB BRACE TO BE SAME SPECIES AND GRADE OR BETTER THAN WEB MEMBER UNLESS SPECIFIED OTHERWISE ON ENGINEER'S SEALED DESIGN.

(*) CENTER SCAB ON WIDE FACE OF WEB. APPLY (1) SCAB TO EACH FACE OF WEB.



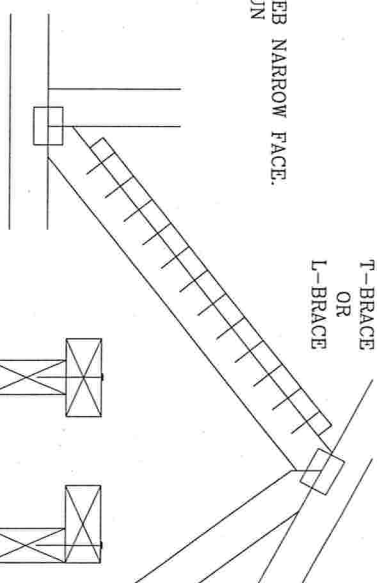
ITW BUILDING COMPONENTS GROUP, INC.
POMPANO BEACH, FLORIDA

****WARNING**** TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY TPI TRUSS PLATE INSTITUTE, 218 NORTH LEE STR., SUITE 312, ALEXANDRIA, VA 22319, AND VITCA GUIDO TRUSS COUNCIL OF AMERICA, 5300 WILSON AVENUE, SUITE 100, CHICAGO, IL 60631, FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS, UNLESS OTHERWISE INDICATED BY THE DESIGNER. ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

****IMPORTANT**** FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR. ITW BCG, INC., SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN, ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES IN THE FIELD. ITW BCG, INC., SHALL BE RESPONSIBLE FOR THE QUALITY OF THE DESIGN SPEC. BY AERAPY AND THE ITW BCG CONNECTOR PLATES. LABEL EACH END OF THE TRUSS WITH THE ITW BCG CONNECTOR PLATES TO EACH FACE OF THE TRUSS AND, UNLESS OTHERWISE INDICATED ON THE DESIGN, POSITION PER DRAWINGS 1604-Z. ANY INSPECTION OF PLATES FOLLOWED BY CD SHALL BE PER ANNEK A3 OF TPI 1-2002 SEC. 3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER. PER ANSI/TPI 1 SEC. 2.

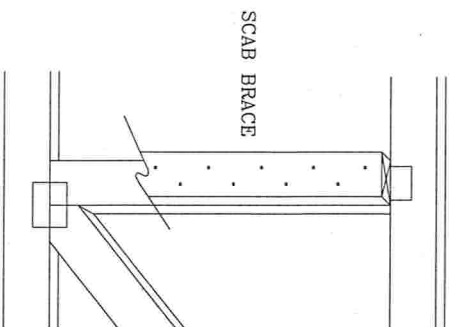
T-BRACING OR L-BRACING:

APPLY TO EITHER SIDE OF WEB NARROW FACE. ATTACH WITH 10d BOX OR GUN (0.128" x 3" MIN) NAILS. AT 6" O.C. BRACE IS A MINIMUM 80% OF WEB MEMBER LENGTH



SCAB BRACING:

APPLY SCAB(S) TO WIDE FACE OF WEB. NO MORE THAN (1) SCAB PER FACE. ATTACH WITH 10d BOX OR GUN (0.128" x 3" MIN) NAILS. AT 6" O.C. BRACE IS A MINIMUM 80% OF WEB MEMBER LENGTH

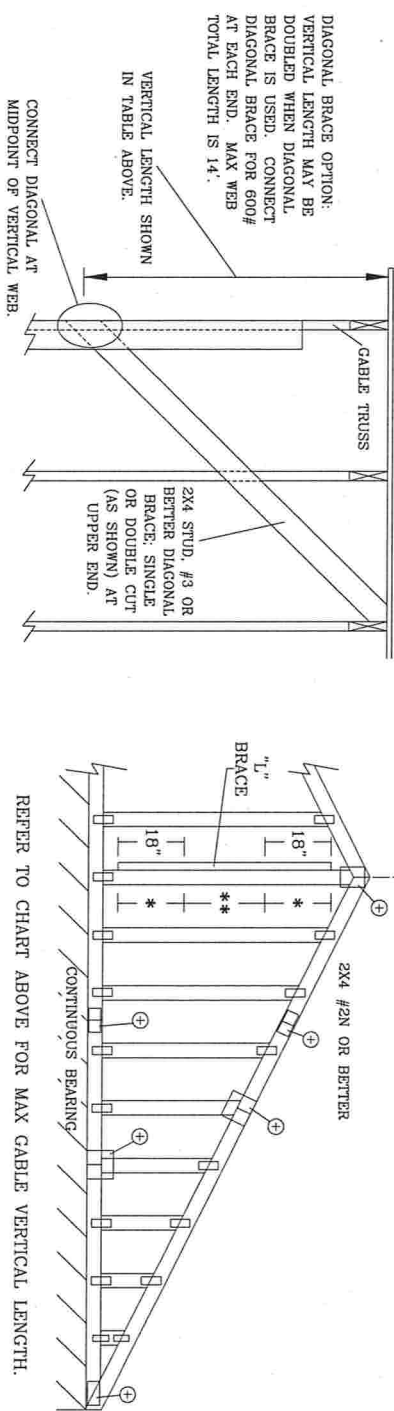


THIS DRAWING REPLACES DRAWING 579.640



TC LL	PSF	REF	CLB SUBST.
TC DL	PSF	DATE	2/23/07
BC DL	PSF	DRWG	BRCLBSUB0207
BC LL	PSF	-ENG	MLH/KAR
TOT. LD.	PSF		
DUR. FAC.			
SPACING			

MAX GABLE VERTICAL LENGTH																		
CABLE VERTICAL SPACING	2x4 SPECIES	BRACE GRADE	NO BRACES		(1) 1x4 "L" BRACE *		(1) 2x4 "L" BRACE *		(2) 2x4 "L" BRACE **		(1) 2x6 "L" BRACE *		(2) 2x6 "L" BRACE *		(2) 2x6 "L" BRACE **			
			GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B				
24" O.C.	SPF	#1 / #2	3' 10"	6' 8"	6' 10"	7' 11"	8' 1"	9' 5"	9' 8"	12' 5"	12' 9"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 4"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"			
			STUD	3' 9"	6' 0"	6' 0"	7' 11"	7' 11"	9' 5"	9' 5"	12' 3"	12' 3"	14' 0"	14' 0"	14' 0"	14' 0"		
	HF	STANDARD	3' 9"	5' 2"	5' 2"	6' 9"	6' 9"	9' 1"	9' 1"	10' 7"	10' 7"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"		
			#1	4' 3"	6' 8"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	4' 2"	6' 8"	7' 2"	7' 11"	8' 6"	9' 5"	10' 2"	12' 5"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"		
	SP	#3	4' 0"	6' 2"	6' 2"	7' 11"	8' 1"	9' 5"	9' 11"	12' 5"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			STUD	4' 0"	6' 1"	6' 1"	7' 11"	8' 0"	9' 5"	9' 11"	12' 6"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"		
			STANDARD	3' 10"	5' 3"	5' 3"	6' 11"	6' 11"	9' 4"	9' 4"	10' 10"	10' 10"	14' 0"	14' 0"	14' 0"	14' 0"		
	DFL	#1 / #2	4' 5"	7' 8"	7' 10"	9' 1"	9' 4"	10' 10"	11' 1"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	4' 4"	7' 4"	7' 4"	9' 1"	9' 1"	10' 10"	10' 10"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			STANDARD	4' 4"	6' 4"	6' 4"	8' 4"	8' 4"	10' 10"	10' 10"	12' 11"	12' 11"	14' 0"	14' 0"	14' 0"	14' 0"		
16" O.C.	SPF	#1 / #2	4' 10"	7' 8"	8' 3"	9' 1"	9' 9"	10' 10"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			STUD	4' 4"	7' 4"	7' 4"	9' 1"	9' 1"	10' 10"	10' 10"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			STANDARD	4' 4"	6' 4"	6' 4"	8' 4"	8' 4"	10' 10"	10' 10"	12' 11"	12' 11"	14' 0"	14' 0"	14' 0"	14' 0"		
	SP	#1	4' 10"	7' 8"	8' 3"	9' 1"	9' 9"	10' 10"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#2	4' 9"	7' 8"	8' 3"	9' 1"	9' 9"	10' 10"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			#3	4' 6"	7' 7"	7' 7"	9' 1"	9' 6"	10' 10"	11' 4"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
	DFL	STUD	4' 6"	7' 6"	7' 6"	9' 1"	9' 6"	10' 10"	11' 4"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			STANDARD	4' 5"	6' 5"	6' 5"	8' 6"	8' 6"	10' 10"	11' 1"	13' 3"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"		
			#1 / #2	4' 11"	8' 5"	8' 8"	10' 0"	10' 3"	11' 11"	12' 3"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
	SPF	#3	4' 9"	8' 5"	8' 5"	10' 0"	10' 0"	11' 11"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			STUD	4' 9"	8' 5"	8' 5"	10' 0"	10' 0"	11' 11"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
			STANDARD	4' 9"	7' 3"	7' 3"	9' 7"	9' 7"	11' 11"	11' 11"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"		
12" O.C.	SP	#1	5' 4"	8' 5"	9' 1"	10' 0"	10' 9"	11' 11"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"			
			#2	5' 3"	8' 5"	9' 1"	10' 0"	10' 9"	11' 11"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"			
			#3	5' 0"	8' 5"	8' 5"	10' 0"	10' 6"	11' 11"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"			
			STUD	5' 0"	8' 5"	8' 5"	10' 0"	10' 6"	11' 11"	12' 6"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"			
DFL	STANDARD	4' 11"	7' 5"	7' 5"	9' 10"	9' 10"	11' 11"	12' 3"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"				



REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE VERTICAL PLATE SIZES	
VERTICAL LENGTH	NO SPICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4
GREATER THAN 11' 6"	2.5X4

+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPICE, AND HEEL PLATES.

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

ATTACH EACH "L" BRACE WITH 10d NAILS.
* FOR (1) "L" BRACE: SPACE NAILS AT 2' O.C. IN 18" END ZONES AND 4' O.C. BETWEEN ZONES.
** FOR (2) "L" BRACES: SPACE NAILS AT 3' O.C. IN 18" END ZONES AND 6' O.C. BETWEEN ZONES.

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

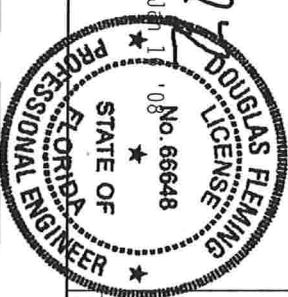
LIVE LOAD DEFLECTION CRITERIA IS $L/240$.
PROVIDE UPLIFT CONNECTIONS FOR 60 PSF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD).

GABLE TRUSS DETAIL NOTES:

BRACING GROUP SPECIES AND GRADES:	
GROUP A:	
SPRUC-PINE-FIR	HEM-FIR
#1 / #2 STANDARD	#2 STUD
#3 STUD	#3 STANDARD
DOUGLAS FIR-LARCH	SOUTHERN PINE
#3 STUD	#3 STUD
STANDARD	STANDARD
GROUP B:	
HEM-FIR	DOUGLAS FIR-LARCH
#1 & BTR	#1
SOUTHERN PINE	#2



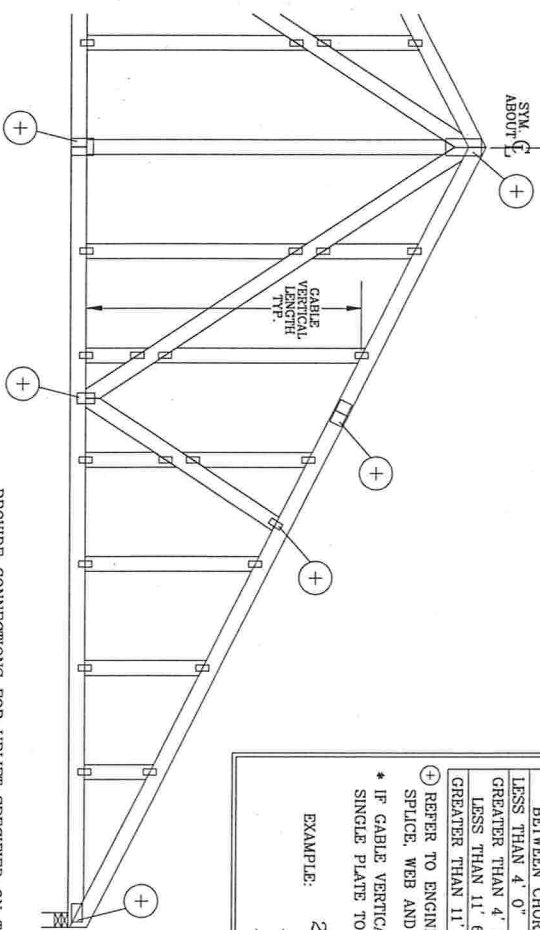
TRUSS BUILDING COMPONENTS GROUP, INC.
POMPAHO BEACH, FLORIDA



MAX. TOT. LD. 60 PSF
MAX. SPACING 24' 0"

REF ASC7-02-CAB11015
DATE 2/23/07
DRWG A11015ED0207
-ENG

CABLE DETAIL FOR LET-IN VERTICALS

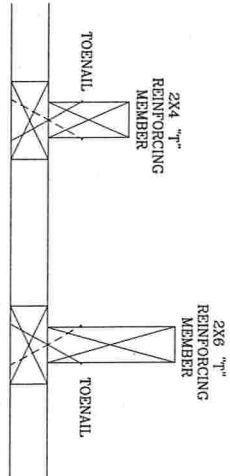


CABLE VERTICAL PLATE SIZES

VERTICAL LENGTH BETWEEN CHORDS	PLATE SIZE	IF PLATES OVERLAP*
LESS THAN 4' 0"	1X4 OR 2X3	2X8
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4	2X8
GREATER THAN 11' 6"	2.5X4	2.5X8

* IF GABLE VERTICAL PLATES OVERLAP, USE A SINGLE PLATE TO SPAN THE WEB.

EXAMPLE: 2X4 2X4 2X8



TO CONVERT FROM "T" TO "T" REINFORCING MEMBERS, MULTIPLY "T" FACTOR BY LENGTH (BASED ON GABLE VERTICAL SPECIES, GRADE AND SPACING) FOR (1) 2X4 "T" BRACE GROUP A, OBTAINED FROM THE APPROPRIATE ALPINE CABLE DETAIL FOR ASCE OR SBCCI WIND LOAD.

MAXIMUM ALLOWABLE "T" REINFORCED GABLE VERTICAL LENGTH IS 14' FROM TOP TO BOTTOM CHORD.

WEB LENGTH INCREASE W/ "T" BRACE

WIND SPEED AND MRH	"T" REINF. MBR. SIZE	SBCCI	ASCE
110 MPH	2x4	10 %	10 %
15 FT	2x6	40 %	50 %
110 MPH	2x4	10 %	10 %
30 FT	2x6	50 %	60 %
100 MPH	2x4	10 %	10 %
15 FT	2x6	30 %	50 %
100 MPH	2x4	10 %	10 %
30 FT	2x6	40 %	40 %
90 MPH	2x4	20 %	40 %
15 FT	2x6	10 %	10 %
90 MPH	2x4	10 %	10 %
30 FT	2x6	30 %	50 %
80 MPH	2x4	10 %	20 %
15 FT	2x6	10 %	30 %
80 MPH	2x4	20 %	10 %
30 FT	2x6	20 %	40 %
70 MPH	2x4	0 %	20 %
15 FT	2x6	0 %	20 %
70 MPH	2x4	10 %	20 %
30 FT	2x6	10 %	30 %

EXAMPLE:
ASCE WIND SPEED = 100 MPH
MEAN ROOF HEIGHT = 30 FT
GABLE VERTICAL = 24' O.C. SP #3
"T" REINFORCING MEMBER SIZE = 2X4
(1) 2X4 "T" BRACE LENGTH = 6' 7"
MAXIMUM "T" REINFORCED GABLE VERTICAL LENGTH 1.10 x 6' 7" = 7' 3"

PROVIDE CONNECTIONS FOR UPLIFT SPECIFIED ON THE ENGINEERED TRUSS DESIGN.

ATTACH EACH "T" REINFORCING MEMBER WITH

HAND DRIVEN NAILS:

10d COMMON (0.148" X 3" MIN) TOENAILS AT 4" O.C. PLUS

(4) 16d COMMON (0.162" X 3.5" MIN) TOENAILS IN TOP AND BOTTOM CHORD.

CUN DRIVEN NAILS:

8d COMMON (0.131" X 2.5" MIN) TOENAILS AT 4" O.C. PLUS

(4) TOENAILS IN TOP AND BOTTOM CHORD.

THIS DETAIL TO BE USED WITH THE APPROPRIATE ALPINE CABLE DETAIL FOR ASCE OR SBCCI WIND LOAD.

ASCE 7-93 GABLE DETAIL DRAWINGS

A11015EN0207, A10015EN0207, A09015EN0207, A07015EN0207, A1030EN0207, A10030EN0207, A09030EN0207, A08030EN0207, A07030EN0207

ASCE 7-98 GABLE DETAIL DRAWINGS

A13015EC0207, A12015EC0207, A1015EC0207, A08515EC0207, A13030EC0207, A12030EC0207, A1030EC0207, A08530EC0207

ASCE 7-02 GABLE DETAIL DRAWINGS

A13015EB0207, A12015EB0207, A1015EB0207, A08515EB0207, A13030EB0207, A12030EB0207, A1030EB0207, A08530EB0207

ASCE 7-05 GABLE DETAIL DRAWINGS

A13015B0207, A12015B0207, A1015B0207, A08515B0207, A13030B0207, A12030B0207, A1030B0207, A08530B0207

SEE APPROPRIATE ALPINE CABLE DETAIL (ASCE OR SBCCI WIND LOAD) FOR MAXIMUM UNREINFORCED GABLE VERTICAL LENGTH.

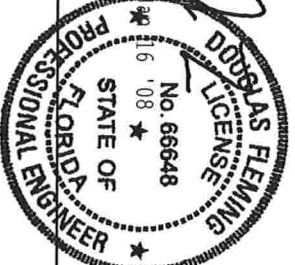
THIS DRAWING REPLACES DRAWINGS GAB98117 876.719 & HC26294035




ITW BUILDING COMPONENTS GROUP, INC.
POMPAHO BEACH, FLORIDA

WARNING TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY TPI TRUSS PLATE INSTITUTE, 218 NORTH LEE STR., SUITE 312, ALEXANDRIA, VA 22314 AND WTA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TPI CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

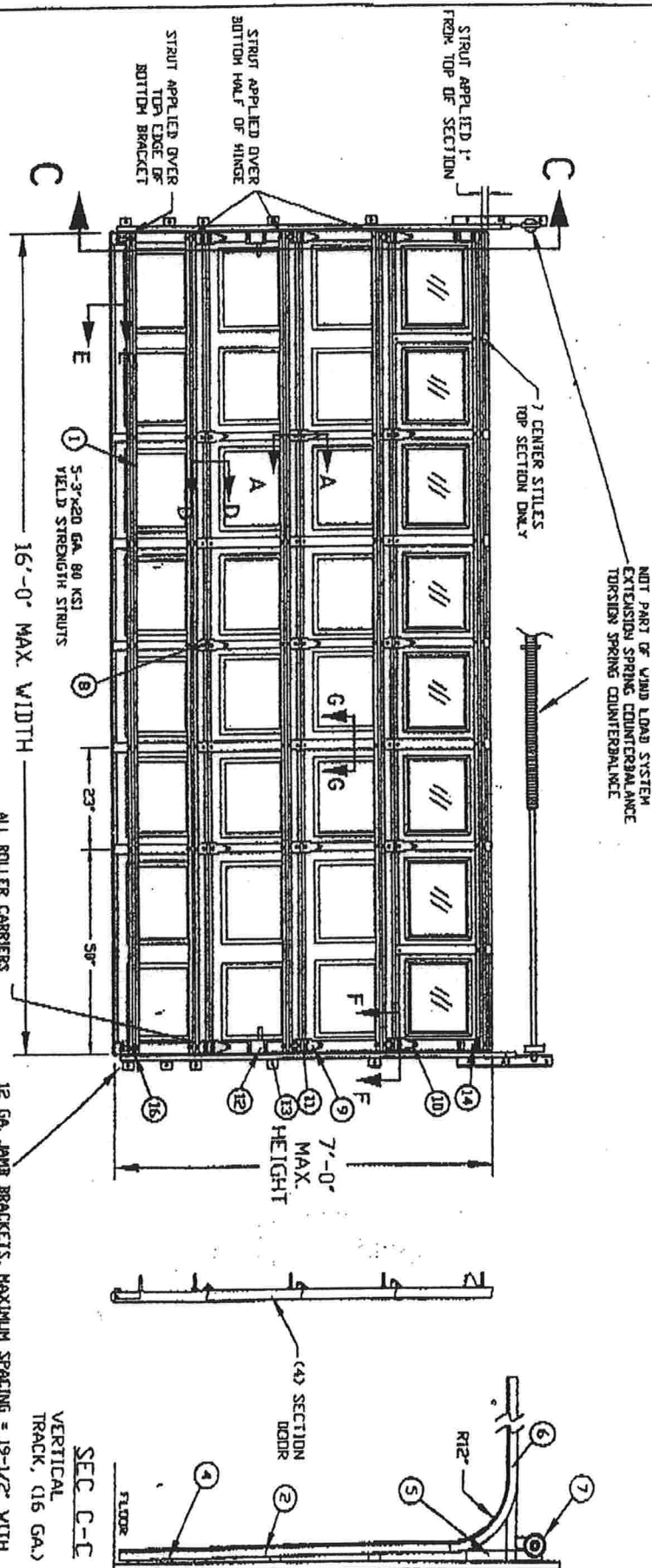
IMPORTANT FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN, ANY FAILURE TO BUILD THE TRUSSES IN CONFORMANCE WITH TPI OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NCS NATIONAL DESIGN SPEC. BY AF&PA AND TPI. TPI, BCG CONNECTION PLATES ARE MADE OF 2018/16GA C/S450 ASTM A653 GRADE 40/60 (A/K/A/433) GALVALUME STEEL. IF PLATE IS NOT GALVALUME, UNLESS OTHERWISE INDICATED IN THIS PER DESIGN POSITION PER DRAWING 1602Z, INSPECTOR SHALL VERIFY THAT THE PLATE IS GALVALUME. DESIGN ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWS THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER, PER ANSI/TPI 1 SEC. 2.



REF	LET-IN VERT
DATE	2/23/07
DRWG	GBLETTINO207
-ENG	DLJ/KAR
MAX TOT. LD.	60 PSF
DUR. FAC.	ANY
MAX SPACING	24.0"

1. TESTED TO POSITIVE AND NEGATIVE 20 PSF DESIGN AND POSITIVE AND NEGATIVE 30 PSF TEST PRESSURES PER ASTM E-330
2. MINIMUM SECTION HEIGHT = 21"
3. SECTION HEIGHTS OF 21"00 AND 19"50" ARE AVAILABLE AND MAY BE USED IN ANY COMBINATION TO ACHIEVE VARIOUS DECK HEIGHTS.
4. JOINTS MAY BE INSTALLED IN THE TOP SECTION, OR TESTED WITH LAYER BEB GLASS OR EQUIVALENT, OR IN THE SECTION IMMEDIATELY BELOW THE TOP SECTION.
5.  9. DROP IN TYPE OF INSULATION IS OPTIONAL.
6. THE STRUT PLACEMENT IN DECK MUST BE CONSISTENT WITH THE DECK SPOON.
7. STRUTS SECURED AT ALL LOCATIONS WITH TIE STREPS.
8. QUANTITY OF SIDE JOISTS CAN BE 0.1 OR 0.2 AS TESTED.
9. DROP IN TYPE OF INSULATION IS OPTIONAL.

NOT PART OF CURB & GABION SYSTEM



12 GA. JAMB BRACKETS, MAXIMUM SPACING = 19-1/2" WITH LOWEST BRACKET APPROX. 3" FROM FLOOR, 2ND BRACKET NEAR THE HORIZONTAL $\frac{1}{2}$ OF THE BOTTOM SECTION, AND 3RD BRACKET NEAR THE TOP OF THE BOTTOM SECTION.

TEST REPORTS IN FILE
VIDE0 10/19/00 (00293)

DESIGN LOAD	+20.0 PSF &	-20.0 PSF
TEST LOAD	+30.0 PSF &	-30.0 PSF

GADCO DOORS
S 7400, EXTERIOR STEEL = 0.17 MIN GAS TESTED

7825, EXTERIOR STEEL = 0.19" MIN
7524, EXTERIOR STEEL = 0.24" MIN
WITH WINDOWS

	GENERAL AMERICAN DOOR COMPANY 5050 BASELINE ROAD MONTGOMERY, IL 60538
	PHONE NO. 312-439-1000 TELEX NO. 250000
CIRCLE 105	DESIGN BY: H. VITZTHUM

REPORT No. 2202

MAXIMUM DOSE	TYPICAL CTR. STYLE	BO PSI	VERTICAL

MAXIMUM DOOR WIDTH	MAXIMUM DOOR HEIGHT	TYPICAL CTR. STYLE SPACING	STORES		VERTICAL TRACK
			BO. KLT SIZE	QTY.	
16'	7'	23"	3'	5	2 IN.

DATE 10-20-80	REVISED (A) 11-10-80
DESCRIPTION 15' X 7' MAX. RAISED PANEL STEEL DOOR - WINDLOAD 20 PSF	
DRAWN BY BOB SCHMIDT	CHECKED BY JONAS PEG. SANCHEZ
PAGE 1 OF 2	W3220-1

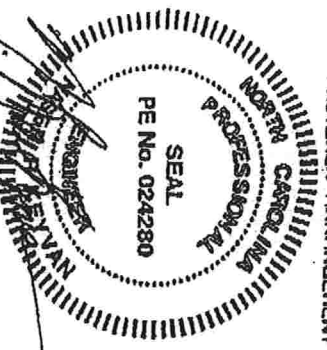
PAGE 1 OF 2

W13220-1

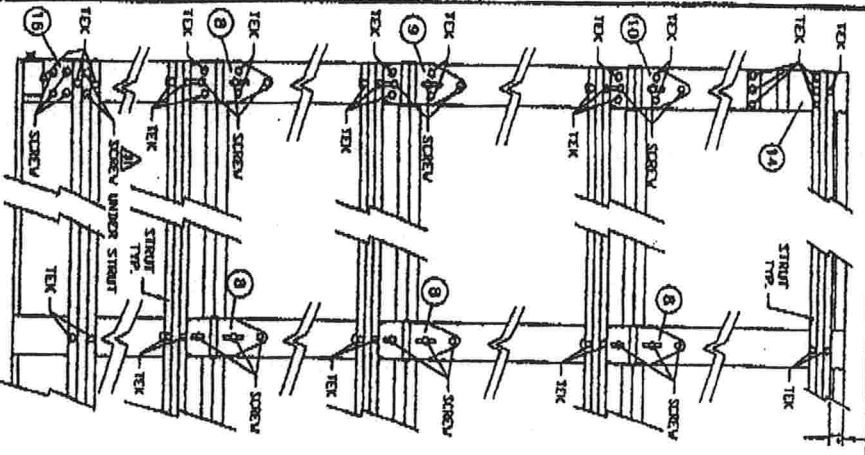
020-1

020-1

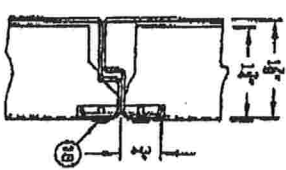
The seal on this drawing only certifies that the product(s) illustrated and described herein represent the configuration(s) of the door as tested.



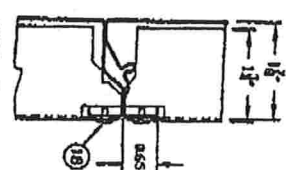
FASTENER ARRANGEMENT A



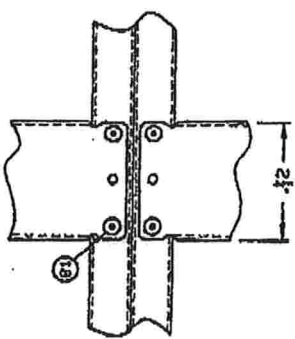
SEC D-D
PAN ATTACHMENT TO STILE
GAS TESTED



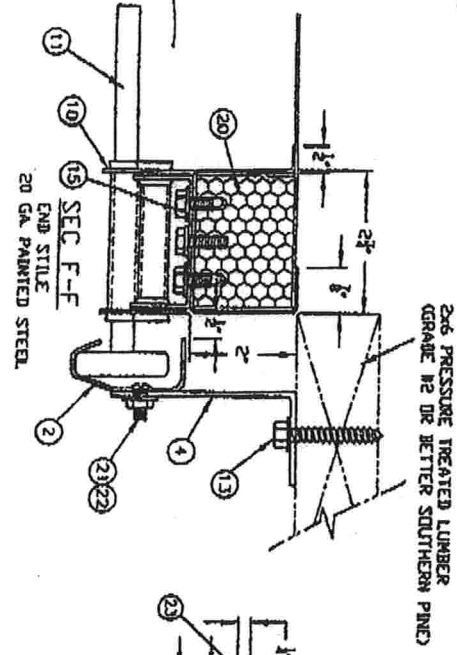
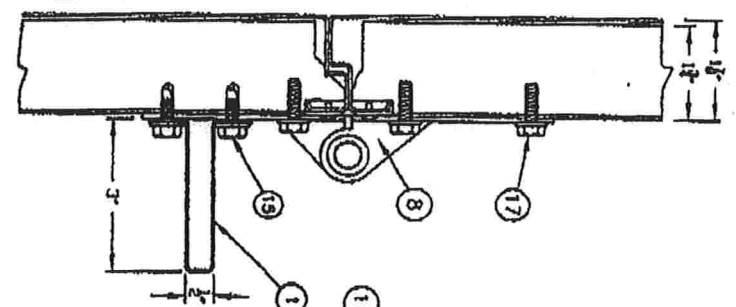
SEC D-D
PAN ATTACHMENT TO STILE (OPTIMUM)



SEC G-G
CENTER STILE
20 GA. GALVANIZED
PAN ATTACHMENT TO STILE



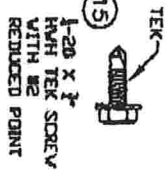
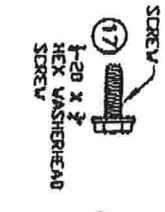
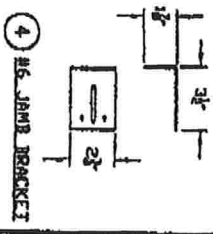
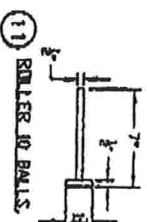
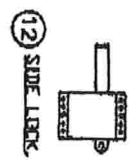
SEC A-A



2x6 PRESSURE TREATED LUMBER GRADE #2 OR BETTER SOUTHERN PINE

LISTED
SBC1
PST & ESI
REPORT No. 2202

TRACK
16 GA. CROSS MEMBER



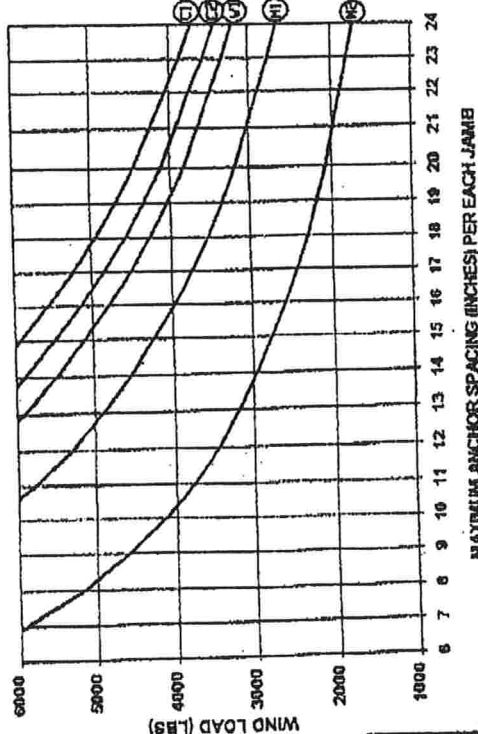
ITEM	QUANTITY	DESCRIPTION
23	3465	ROLLER BALL 6663 16 ALUM. EXT.
24	1381	1/4"-20 X 1/2" RIBBED HEAVY SCREW
25	4444	1/4"-20 UNFINISHED FLANGE NUT
26	1	1/4" RIBBED FLAT ROLLER EYE
27	4385	POP RIVET 3/32" STEEL
28	4320	1/4" UNFINISHED SCREW 1/4"-20 X 3/4"
29	1390	1/4" UNFINISHED SCREW 1/4"-20 X 3/4" V/ REDUCED PT.
30	1138	1/4" UNFINISHED SCREW 1/4"-20 X 3/4" V/ REDUCED PT.
31	4075	1/4" UNFINISHED SCREW 1/4"-20 X 3/4" V/ REDUCED PT.
32	4075	1/4" UNFINISHED SCREW 1/4"-20 X 3/4" V/ REDUCED PT.
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98	4075	1/4" UNFINISHED SCREW 1/4"-20 X 3/4" V/ REDUCED PT.
99	4075	1/4" UNFINISHED SCREW 1/4"-20 X 3/4" V/ REDUCED PT.
100	4075	1/4" UNFINISHED SCREW 1/4"-20 X 3/4" V/ REDUCED PT.



GENERAL AMERICAN DOOR COMPANY
5050 BASSEL LINE ROAD
MONTICELLO, IL 60538

SCALE: NONE
DATE: 11-7-00
REVISIONS:
15" X 7" MAX RAISED PANEL STEEL, DOOR-VINYL/ALUM 520 PSS
PAGE 2 OF 2
V13280-2

WIND LOAD vs ANCHOR SPACING



EXAMPLE

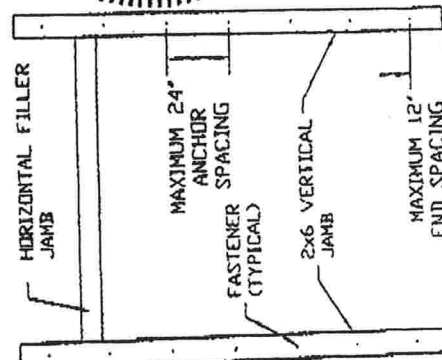
30 LBS X 16 FT WIDE X 8 FT HIGH = 3840 LBS

④ USE 22" SPACING

⑤ USE 21" SPACING

⑥ USE 19" SPACING

SEE NOTE 11 FOR ADDITIONAL REQUIRED 2X6 WOOD JAMB ANCHORS



2X6 JAMB TO SUPPORTING STRUCTURE ATTACHMENT

2X6 PRESSURE TREATED (GRADE #2 OR BETTER SOUTHERN PINE) WOOD JAMB SHALL BE ANCHORED TO BUILDING WOOD FRAME, GROUTED AND REINFORCED CONCRETE MASONRY UNIT (CMU) WALLS OR COLUMNS, OR REINFORCED CONCRETE COLUMNS.

NOTES:

- 1) ALL DOOR OPENING SURROUNDING STRUCTURE TO BE DESIGNED BY REGISTERED ENGINEER OR ARCHITECT WITH DUE CONSIDERATION GIVEN TO INSTALLATIONS USING CENTER "HURRICANE" POSTS.
- 2) ALL DOOR OPENING STRUCTURE AND FASTENERS TO COMPLY WITH ALL APPLICABLE CODES INCLUDING SBCCI "STANDARD FOR HURRICANE RESISTANT RESIDENTIAL CONSTRUCTION" SSTB 10, CURRENT EDITION.
- 3) ALL FASTENERS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, INSTRUCTIONS AND RECOMMENDATIONS.
- 4) WOOD FRAME BUILDINGS: STUDS AT EACH SIDE OF DOOR OPENING SHALL BE PROPERLY DESIGNED, CONNECTED, ANCHORED AND SHALL CONSIST OF A MINIMUM OF THREE (3) LAMINATIONS OF 2X6 PRESSURE TREATED SOUTHERN PINE (#2 GRADE OR BETTER) WALL STUDS CONTINUOUS FROM FOOTING TO DOUBLE TOP PLATE.
- 5) REINFORCED CMU OR CONCRETE: 2X6 WOOD JAMB SHALL BE ANCHORED TO SOLIDLY GROUTED AND REINFORCED CONCRETE MASONRY UNIT (CMU) WALLS OR COLUMNS, OR REINFORCED CONCRETE COLUMNS. ANCHOR SPACING AND EMBEDMENT IS BASED ON CONCRETE MASONRY UNITS COMPLYING WITH ASTM C90 WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2500 PSI GROUT WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI REINFORCED CONCRETE COLUMNS WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
- 6) EMBEDMENTS LISTED ARE THE MINIMUM ALLOWABLE EMBEDMENTS.
- 7) ANCHORS FOR CONCRETE AND CONCRETE MASONRY UNITS (CMU) SHALL HAVE A MINIMUM 3" EDGE DISTANCE FROM ALL EDGES OF CONCRETE OR CONCRETE MASONRY UNITS. ANCHORS FOR CONCRETE AND CMU SHALL HAVE A MINIMUM SPACING OF 3-3/4"
- 8) LAG SCREWS SHALL BE CENTERED IN ONE OF THE 1-1/2" DIMENSION FACES OF THE TRIPLE 2X6 WALL STUDS.
- 9) WASHERS ARE REQUIRED ON ALL FASTENERS.
- 10) THE WIND LOAD VS. ANCHOR SPACING CHART IS FOR A MAXIMUM DOOR SIZE OF 18' X 8' AT A MAXIMUM 42 PSF DESIGN WIND LOAD.
- 11) FOR THE UPPER THREE INDIVIDUAL STEEL JAMB BRACKETS, BRACKETS SHALL BE CENTERED BETWEEN THE TWO CLOSEST 2X6 WOOD JAMB ANCHORS. IF THE STEEL JAMB BRACKET IS NOT CENTERED BETWEEN THE TWO CLOSEST 2X6 WOOD JAMB ANCHORS, ADD AN ADDITIONAL 2X6 WOOD JAMB ANCHOR NEAR THAT STEEL BRACKET TO INSURE THAT THE LOAD FROM THE STEEL BRACKET IS EQUALLY TRANSFERRED TO TWO WOOD JAMB ANCHORS.



GENERAL AMERICAN DOOR COMPANY
5050 BASELINE ROAD
MONTGOMERY, IL 60538

WIND NINE	APPROVED BY	REVIEW BY	DV
SUB. 8-30-99			
REVISION	JAMB TO STRUCTURE ATTACHMENT FOR WIND LOADED GARAGE DOORS		
WIND SPEED NUMBER		BRACKETS NUMBER	
A10580			

FLORIDA DEPARTMENT OF Community Affairs

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Product Approval
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- ▶ COMMUNITY PLANNING
- ▶ HOUSING & COMMUNITY DEVELOPMENT
- ▶ EMERGENCY MANAGEMENT
- ▶ OFFICE OF THE SECRETARY

FL # **FL5108**
Application Type **New**
Code Version **2004**
Application Status **Approved**
Comments
Archived ☐

Product Manufacturer
Address/Phone/Email

MI Windows and Doors
650 W Market St
Gratz, PA 17030
(717) 365-3300 ext 2101
surich@miwd.com

Authorized Signature

Steven Urich
surich@miwd.com

Technical Representative
Address/Phone/Email

Quality Assurance Representative
Address/Phone/Email

Window



(Validator / Operations Administrator)

AAMA CERTIFICATION PROGRAM



AUTHORIZATION FOR PRODUCT CERTIFICATION

MI Windows & Doors, Inc.
P.O. Box 370
Gratz, PA 17030-0370

Attn: Bill Emley

The product described below is hereby approved for listing in the next issue of the AAMA Certified Products Directory. The approval is based on successful completion of tests, and the reporting to the Administrator of the results of tests, accompanied by related drawings, by an AAMA Accredited Laboratory.

- The listing below will be added to the next published AAMA Certified Products Directory.

SPECIFICATION		RECORD OF PRODUCT TESTED				LABEL ORDER NO.
AAMA/NWWDA 101/I.S. 2-97 H-R55"-36x62						
COMPANY AND PLANT LOCATION	CODE NO.	SERIES MODEL & PRODUCT DESCRIPTION	MAXIMUM SIZE TESTED			
MI Windows & Doors, Inc. (Oldsmar, FL) MI Windows & Doors, Inc. (Smyrna, TN)	MTL-8 MTL-9	185/3185 SH (Fin) (AL)(O/P)(OG) (ASTM)	FRAME 3'0" x 5'2"	SASH 2'10" x 2'7"	By Request	

- This Certification will expire May 14, 2008 and requires validation until then by continued listing in the current AAMA Certified Products Directory.
- Product Tested and Reported by: Architectural Testing, Inc.

Report No.: 01-50360.02


Date of Report: June 14, 2004

NOTE: PLEASE REVIEW,
AND ADVISE ALI IMMEDIATELY
IF DATA, AS SHOWN, NEEDS
CORRECTION.


Date: August 1, 2005

cc: AAMA
JGS/df
ACP-04 (Rev. 5/03)

Validated for Certification:

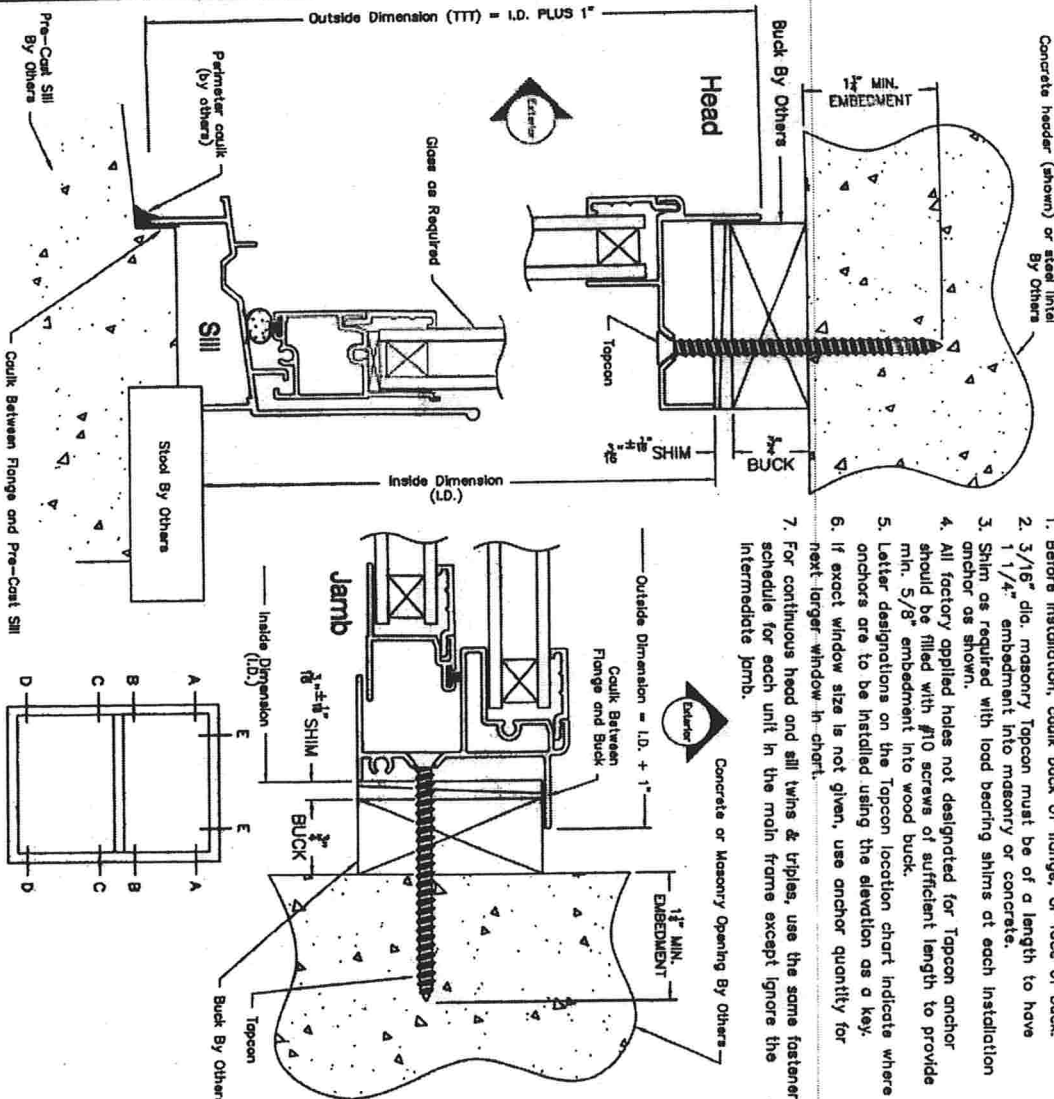

Associated Laboratories, Inc.

Authorized for Certification:


American Architectural Manufacturers Association

ONE BY (3/4) BUCKS (SHOWN)

1. Before installation, caulk back of flange, or face of buck.
2. 3/16" dia. masonry Topcon must be of a length to have 1 1/4" embedment into masonry or concrete.
3. Shim as required with load bearing shims at each installation anchor as shown.
4. All factory applied holes not designated for Tapcon anchor should be filled with #10 screws of sufficient length to provide min. 5/8" embedment into wood buck.
5. Letter designations on the Topcon location chart indicate where anchors are to be installed using the elevation as a key.
6. If exact window size is not given, use anchor quantity for next larger window in chart.
7. For continuous head and sill twins & triples, use the same fastener schedule for each unit in the main frame except ignore the intermediate jamb.



TWO BY (1 1/2) BUCKS

"TWO BY" bucks are engineered and fastened to the masonry opening BY OTHERS.

Follow the same instructions and fastener requirements for "one by" bucks except use #10 screws of sufficient length for 1 1/4" minimum embedment into buck.

* TAPCON LOCATION CHART

CODE SIZE	WINDOW ID SIZE	FASTENER LOCATIONS			
		UP TO DP35	DP35.1 TO DP55	DP55.1 TO DP69.3	
12	18 1/8 x 25	A D & E	A D & E	A D & E	A D & E
13	18 1/8 x 37 3/8	A D & E	A D & E	A D & E	A D & E
14	18 1/8 x 49 5/8	A D & E	A D & E	A D & E	A D & E
15	18 1/8 x 62	A D & E	A D & E	A D & E	A D & E
16	18 1/8 x 71	A D & E	A D & E	A D & E	A D & E
17	18 1/8 x 83	A D & E	A D & E	A D & E	A D & E
1/2 32	25 1/2 x 25	A D & E	A D & E	A D & E	A D & E
1/2 33	25 1/2 x 37 3/8	A D & E	A D & E	A D & E	A D & E
1/2 34	25 1/2 x 49 5/8	A D & E	A D & E	A D & E	A D & E
1/2 35	25 1/2 x 62	A D & E	A D & E	A D & E	A D & E
1/2 36	25 1/2 x 71	A D & E	A D & E	A D & E	A D & E
1/2 37	25 1/2 x 83	A D & E	A D & E	A D & E	A D & E
22	36 x 25	A D & E	A D & E	A D & E	A D & E
23	36 x 37 3/8	A D & E	A D & E	A D & E	A D & E
24	36 x 49 5/8	A D & E	A D & E	A D & E	A D & E
25	36 x 62	A D & E	A D & E	A D & E	A D & E
26	36 x 71	A D & E	A D & E	A D & E	A D & E
27	36 x 83	A D & E	A D & E	A D & E	A D & E
32	52 1/8 x 25	A D & E	A D & E	A D & E	A D & E
33	52 1/8 x 37 3/8	A D & E	A D & E	A D & E	A D & E
34	52 1/8 x 49 5/8	A D & E	A D & E	A D & E	A D & E
35	52 1/8 x 62	A D & E	A D & E	A D & E	A D & E
36	52 1/8 x 71	A D & E	A D & E	A D & E	A D & E
37	52 1/8 x 83	A D & E	A D & E	A D & E	A D & E
2040	23 3/8 x 47 5/8	A D & E	A D & E	A D & E	A D & E
2050	23 3/8 x 59 5/8	A D & E	A D & E	A D & E	A D & E
2060	23 3/8 x 71 5/8	A D & E	A D & E	A D & E	A D & E
2070	23 3/8 x 83 5/8	A D & E	A D & E	A D & E	A D & E
3040	35 3/8 x 47 5/8	A D & E	A D & E	A D & E	A D & E
3050	35 3/8 x 59 5/8	A D & E	A D & E	A D & E	A D & E
3060	35 3/8 x 71 5/8	A D & E	A D & E	A D & E	A D & E
3070	35 3/8 x 83 5/8	A D & E	A D & E	A D & E	A D & E
4040	47 3/8 x 47 5/8	A D & E	A D & E	A D & E	A D & E
4050	47 3/8 x 59 5/8	A D & E	A D & E	A D & E	A D & E
4060	47 3/8 x 71 5/8	A D & E	A D & E	A D & E	A D & E
4070	47 3/8 x 83 5/8	A D & E	A D & E	A D & E	A D & E
4450	51 3/8 x 59 5/8	A D & E	A D & E	A D & E	A D & E
4460	51 3/8 x 71 5/8	A D & E	A D & E	A D & E	A D & E
4470	51 3/8 x 83 5/8	A D & E	A D & E	A D & E	A D & E

*"TAPCON" TYPE HARDENED MASONRY SCREENS INCLUDE TAPCON, RAM, & SIMPSON

REV	DESCRIPTION	DATE	BY
1	ISSUED FOR INSTALLATION AND/OR SCREENS	7/24/94	AS
2	REVISION		



MI HOME PRODUCTS
GRATZ, PA

185/3185 SINGLE HUNG FLANGE FRAME
INSTALLATION DETAILS & FASTENER SCHEDULE

DATE: 06/15/04
SCALE: N.T.S.
REV: 1 OF 1

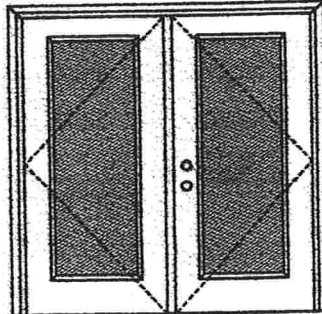
Phone: 412/223-2334 Fax: 412/223-2335

XX**Glazed Outswing Unit**

COP-WL-JH4162-02

WOOD-EDGE STEEL DOORS

APPROVED ARRANGEMENT:

**Note:**

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

Double Door

Maximum unit size = 6'0" x 6'8"

Design Pressure

+40.5/-40.5

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-MA0012-02 and MAD-WL-MA0041-02.

MINIMUM INSTALLATION DETAIL:

Compliance requires that minimum installation details have been followed – see MID-WL-MA0002-02.

APPROVED DOOR STYLES:

1/4 GLASS:

100 Series



133, 135 Series



136 Series



680 Series



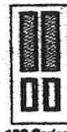
822 Series

1/2 GLASS:

105 Series*



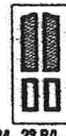
106, 160 Series*



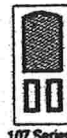
129 Series*



200 Series*



12 R/L, 23 R/L, 24 R/L Series*



107 Series*



108 Series



304 Series

*This glass kit may also be used in the following door styles: 5-panel; 5-panel with scroll; Eyebrow 5-panel; Eyebrow 5-panel with scroll.

Johnson
EntrySystems

March 29, 2002
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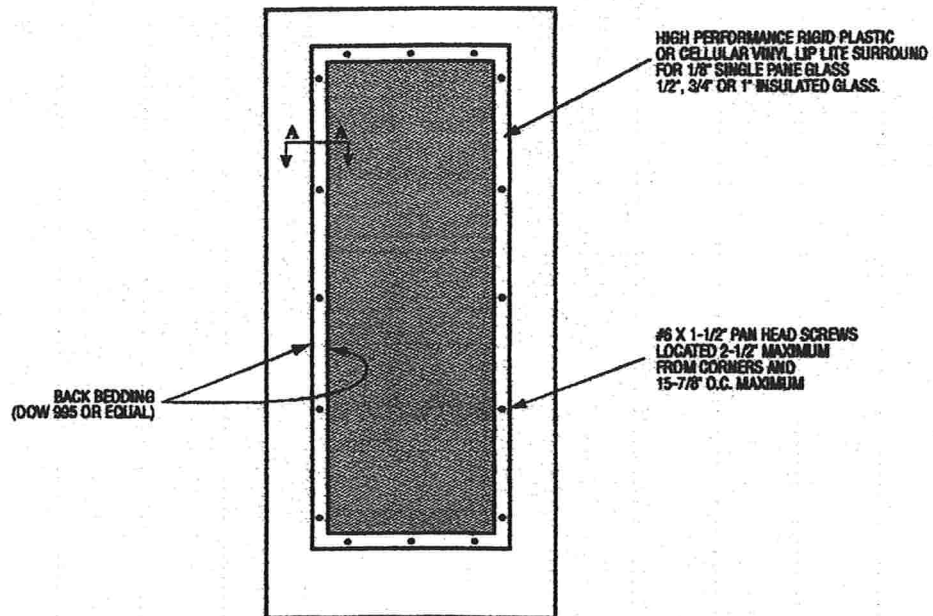
PREMIER Collection
Premium Quality Doors



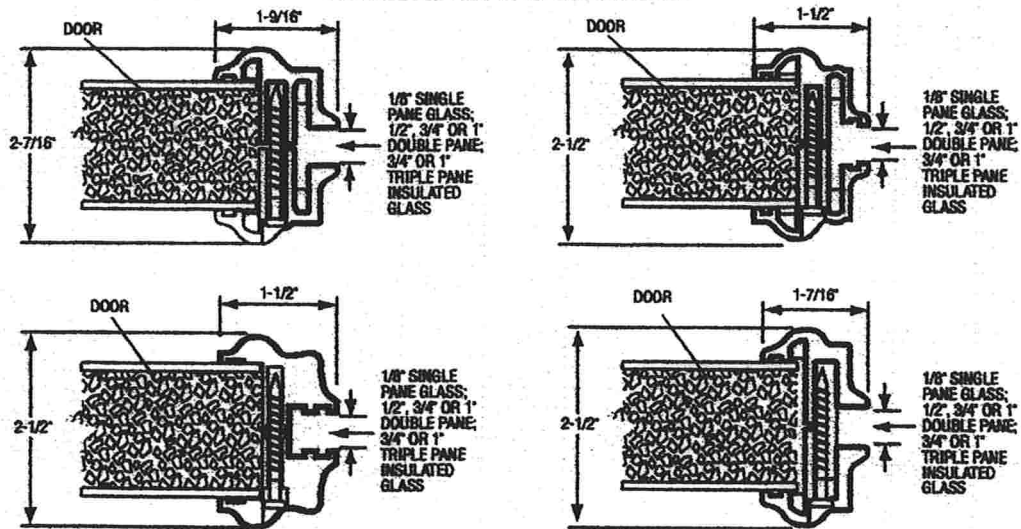
Exclusively from

Masonite
Masonite International Corporation

GLASS INSERT IN DOOR OR SIDELITE PANEL



SECTION A-A TYPICAL RIGID PLASTIC LIP LITE SURROUND



XX

Glazed Outswing Unit

COP-WL-JH4162-02

WOOD-EDGE STEEL DOORS**APPROVED DOOR STYLES:****3/4 GLASS:**

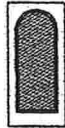
404 Series



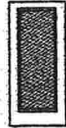
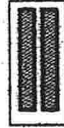
410 Series



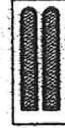
450 Series

FULL GLASS:

100 Series

114, 120, 122
Series

152 Series



149 Series



300 Series

CERTIFIED TEST REPORTS:

NCTL 210-1897-7, 8, 9, 10, 11, 12; NCTL 210-1864-5, 6, 7, 8; NCTL 210-2178-1, 2, 3

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

Unit Tested in Accordance with Miami-Dade BCCO PA202.

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

Frame constructed of wood with an extruded aluminum bumper 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

Johnson
EntrySystems

March 28, 2002
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Premium Quality Doors



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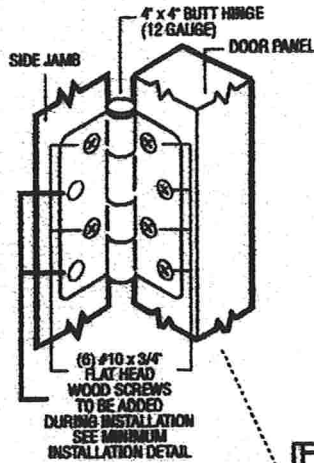
Masonite
Masonite International Corporation

XX
Unit

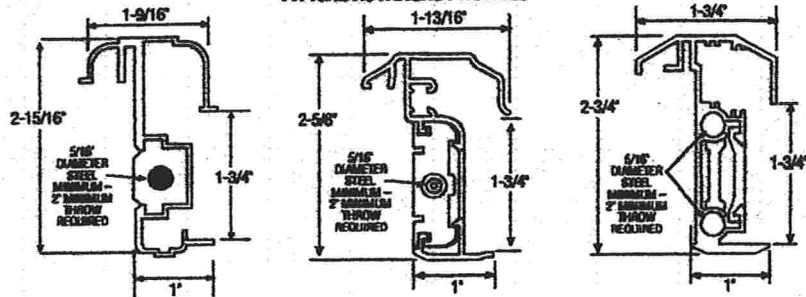
MAD-WL-MA0012-02

OUTSWING UNITS WITH DOUBLE DOOR

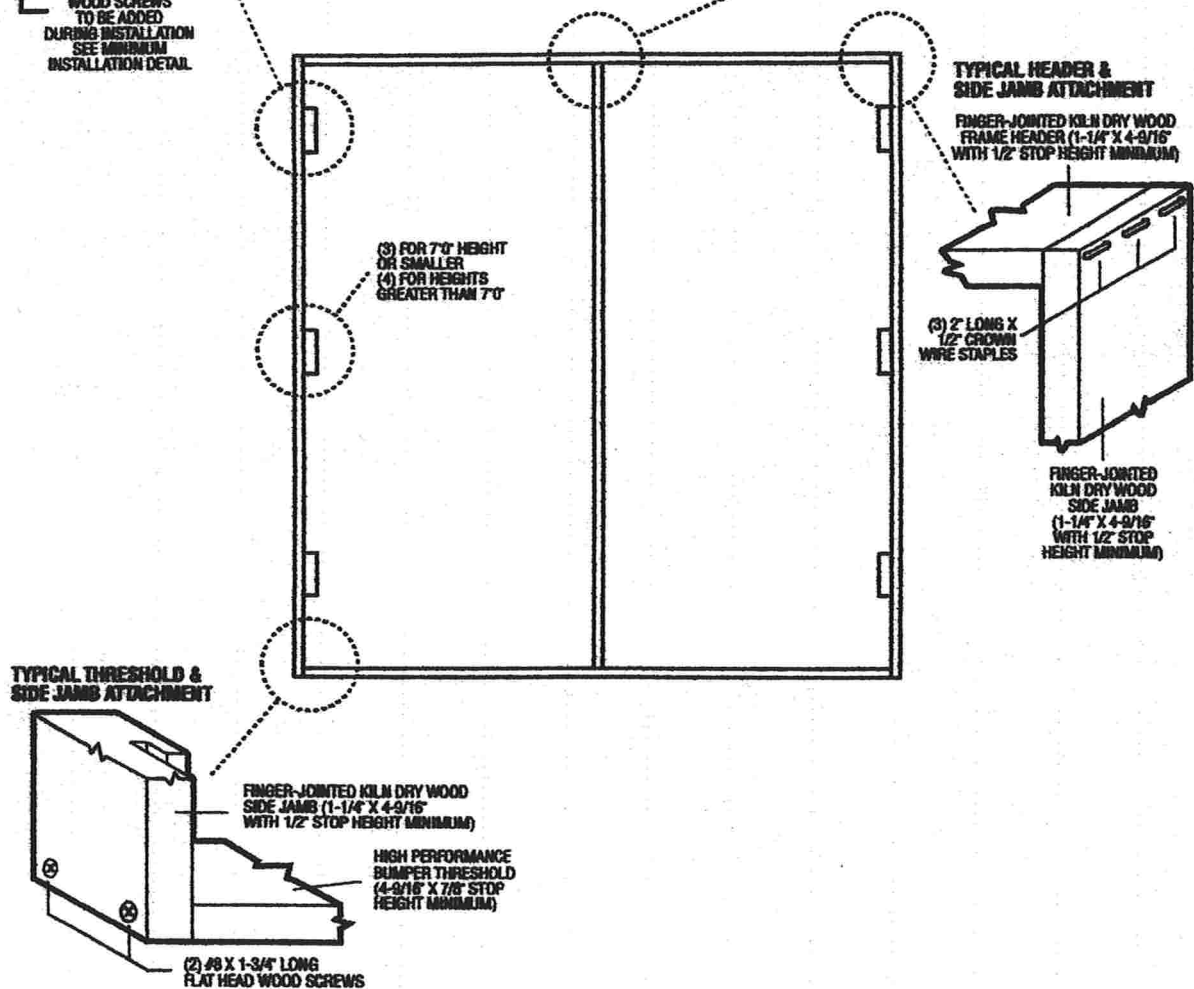
TYPICAL HINGE ATTACHMENT



TYPICAL ASTRAGAL PROFILES



ALUMINUM EXTRUDED ASTRAGAL (0.06" MINIMUM WALL THICKNESS) WITH ADDED REINFORCEMENT INSERTS AT TOP EXTENSION BOLT, BOTTOM EXTENSION BOLT AND CYLINDRICAL DEADBOLT LATCHING LOCATIONS. ATTACH WITH #8 X 1" PAN HEAD SCREWS - LOCATE 1" FROM EACH END MINIMUM AND 22" O.C. MAXIMUM.



March 29, 2002
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PREMDOR Collection
Premium Quality Doors



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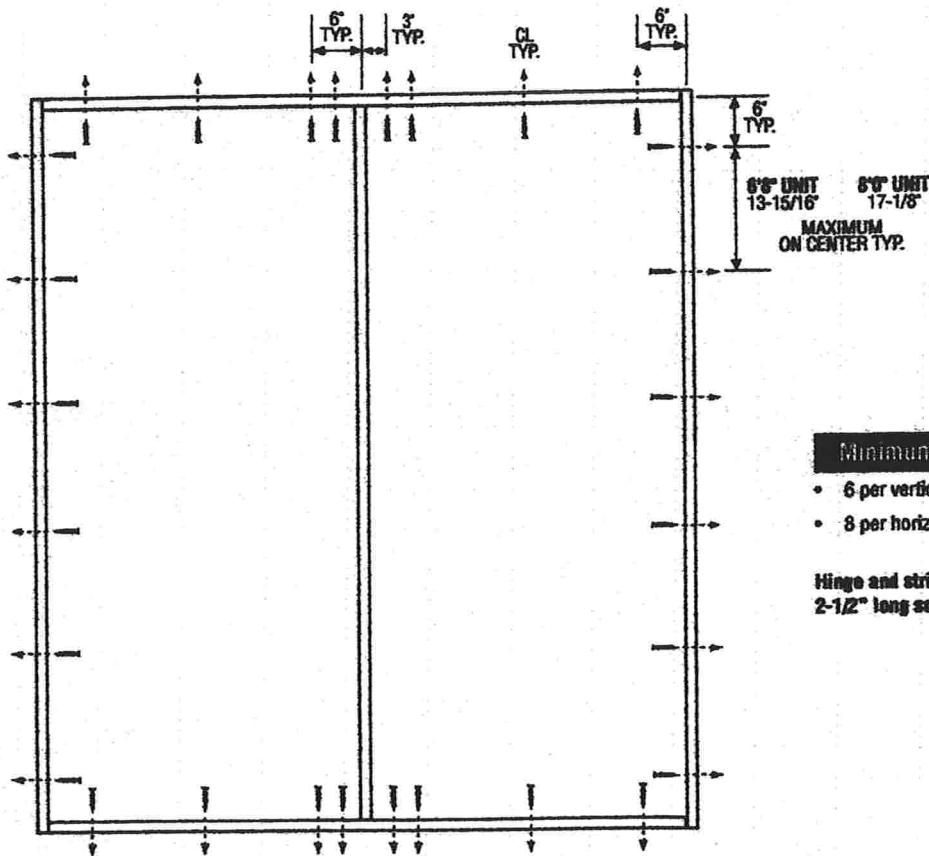
Masonite

Masonite International Corporation

XX
Unit

MID-WL-MA0002-02

DOUBLE DOOR



Minimum Fastener Count

- 6 per vertical framing member
- 8 per horizontal framing member

Hinge and strike plates require two 2-1/2" long screws per location.

Latching Hardware:

- Compliance requires that GRADE 2 or better (ANSI/BHMA A156.2) cylindrical and deadlock hardware be installed.

Notes:

1. Anchor calculations have been carried out with the lowest (least) fastener rating from the different fasteners being considered for use. Fasteners analyzed for this unit include #8 and #10 wood screws or 3/16" Tapcons.
2. The wood screw single shear design values come from Table 11.3A of ANSI/AF & PA NDS for southern pine lumber with a side member thickness of 1-1/4" and achievement of minimum embedment. The 3/16" Tapcon single shear design values come from the ITW and ELCO Dade County approvals respectively, each with minimum 1-1/4" embedment.
3. Wood bucks by others, must be anchored properly to transfer loads to the structure.

March 29, 2002
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PREMIER Collection
Premium Quality Doors



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Masonite

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Shingle

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FL # FL1956-R1
Application Type Revision
Code Version 2004
Application Status Approved
Comments
Archived

Product Manufacturer TAMKO Building Products, Inc.
Address/Phone/Email PO Box 1404
 Joplin, MO 64802
 (800) 641-4691 ext 2394
 fred_oconnor@tamko.com

Authorized Signature Frederick O'Connor
 fred_oconnor@tamko.com

Technical Representative Frederick J. O'Connor
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 fred_oconnor@tamko.com



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Quality Assurance Representative
Address/Phone/Email

Category
Subcategory

Roofing
Asphalt Shingles

Compliance Method

Certification Mark or Listing

Certification Agency

Underwriters Laboratories Inc.

Referenced Standard and Year (of
Standard)

Standard
ASTM D 3462

Year
2001

Equivalence of Product Standards
Certified By

Product Approval Method

Method 1 Option A

Date Submitted
Date Validated
Date Pending FBC Approval
Date Approved

06/09/2005
06/20/2005
06/25/2005
06/29/2005

Summary of Products

FL #	Model, Number or Name	Description

slopes of 2:12 or greater. Not approved for use in HVHZ.

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DCA Administration
Department of Community Affairs
Florida Building Code Online
Codes and Standards

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 Tallahassee, Florida 32399-2100
 (850) 487-1824, Suncom 277-1824, Fax (850) 414-8436
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Product Approval Accepts:





**Underwriters
Laboratories Inc.®**

Northbrook Division

333 Pfingsten Road
Northbrook, IL 60062-2006 USA
www.ul.com
tel: 1 847 272 8600

June 17, 2005

Tamko Roofing Products
Ms. Kerri Eden
P.O. Box 1404
220 W. 4th Street
Joplin, MO 64802-1404

Our Reference: R2919

This is to confirm that "Elite Glass-Seal AR", "Heritage 30 AR", "Heritage 50 AR", "Glass-Seal AR" manufactured at Tuscaloosa, AL and "Elite Glass-Seal AR", "Heritage 30 AR", "Heritage XL AR", "Heritage 50 AR" manufactured at Frederick, MD and "Heritage 30 AR", "Heritage XL AR", and "Heritage 50 AR" manufactured in Dallas, TX are UL Listed asphalt glass mat shingles and have been evaluated in accordance with ANSI/UL 790, Class A (ASTM E108), ASTM D3462, ASTM D3161 or UL 997 modified to 110 mph when secured with four nails.

Let me know if you have any further questions.

Very truly yours,

Alpesh Patel (Ext. 42522)
Engineer Project
Fire Protection Division

Reviewed by,

Randall K. Laymon (Ext. 42687)
Engineer Sr Staff
Fire Protection Division



Application Instructions for

• HERITAGE® VINTAGE™ AR – Phillipsburg, KS LAMINATED ASPHALT SHINGLES

THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR THE ROOFING CONDITIONS DESCRIBED. TAMKO BUILDING PRODUCTS, INC. ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER ROOFING DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

THIS PRODUCT IS COVERED BY A LIMITED WARRANTY, THE TERMS OF WHICH ARE PRINTED ON THE WRAPPER.

IN COLD WEATHER (BELOW 40°F), CARE MUST BE TAKEN TO AVOID DAMAGE TO THE EDGES AND CORNERS OF THE SHINGLES.

IMPORTANT: It is not necessary to remove the plastic strip from the back of the shingles.

1. ROOF DECK

These shingles are for application to roof decks capable of receiving and retaining fasteners, and to inclines of not less than 2 in. per foot. For roofs having pitches 2 in. per foot to less than 4 in. per foot, refer to special instructions titled "Low Slope Application". Shingles must be applied properly. TAMKO assumes no responsibility for leaks or defects resulting from improper application, or failure to properly prepare the surface to be roofed over.

NEW ROOF DECK CONSTRUCTION: Roof deck must be smooth, dry and free from warped surfaces. It is recommended that metal drip edges be installed at eaves and rakes.

PLYWOOD: All plywood shall be exterior grade as defined by the American Plywood Association. Plywood shall be a minimum of 3/8 in. thickness and applied in accordance with the recommendations of the American Plywood Association.

SHEATHING BOARDS: Boards shall be well-seasoned tongue-and-groove boards and not over 6 in. nominal width. Boards shall be a 1 in. nominal minimum thickness. Boards shall be properly spaced and nailed.

TAMKO does not recommend re-roofing over existing roof.

2. VENTILATION

Inadequate ventilation of attic spaces can cause accumulation of moisture in winter months and a build up of heat in the summer. These conditions can lead to:

1. Vapor Condensation
2. Buckling of shingles due to deck movement.
3. Rotting of wood members.
4. Premature failure of roof.

To insure adequate ventilation and circulation of air, place louvers of sufficient size high in the gable ends and/or install continuous ridge and soffit vents. FHA minimum property standards require one square foot of net free ventilation area to each 150 square feet of space to be vented, or one square foot per 300 square feet if a vapor barrier is installed on the warm side of the ceiling or if at least one half of the ventilation is provided near the ridge. If the ventilation openings are screened, the total area should be doubled.

IT IS PARTICULARLY IMPORTANT TO PROVIDE ADEQUATE VENTILATION.

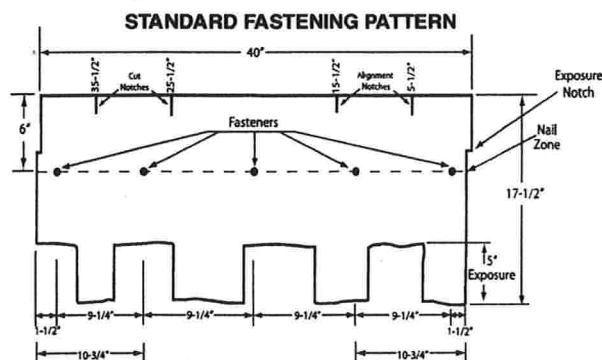
3. FASTENERS

WIND CAUTION: Extreme wind velocities can damage these shingles after application when proper sealing of the shingles does not occur. This can especially be a problem if the shingles are applied in cooler months or in areas on the roof that do not receive direct sunlight. These conditions may impede the sealing of the adhesive strips on the shingles. The inability to seal down may be compounded by prolonged cold weather conditions and/or blowing dust. In these situations, hand sealing of the shingles is recommended. Shingles must also be fastened according to the fastening instructions described below.

Correct placement of the fasteners is critical to the performance of the shingle. If the fasteners are not placed as shown in the diagram and described below, this will result in the termination of TAMKO's liabilities under the limited warranty. TAMKO will not be responsible for damage to shingles caused by winds in excess of the applicable miles per hour as stated in the limited warranty. See limited warranty for details.

FASTENING PATTERNS: Fasteners must be placed 6 in. from the top edge of the shingle located horizontally as follows:

1) Standard Fastening Pattern. (For use on decks with slopes 2 in. per foot to 21 in. per foot.) One fastener 1-1/2 in. back from each end, one 10-3/4 in. back from each end and one 20 in. from one end of the shingle for a total of 5 fasteners. (See standard fastening pattern illustrated below).



2) Mansard or Steep Slope Fastening Pattern. (For use on decks with slopes greater than 21 in. per foot.) Use standard nailing instructions with four additional nails placed 6 in. from the butt edge of the shingle making certain nails are covered by the next (successive) course of shingles.

(Continued)

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www.tamko.com

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Southeast District
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220 West 4th St., Joplin, MO 64801
4500 Tamko Dr., Frederick, MD 21701
2300 35th St., Tuscaloosa, AL 35401
7910 S. Central Exp., Dallas, TX 75216
5300 East 43rd Ave., Denver, CO 80216

800-641-4691
800-368-2055
800-228-2656
800-443-1834
800-530-8868

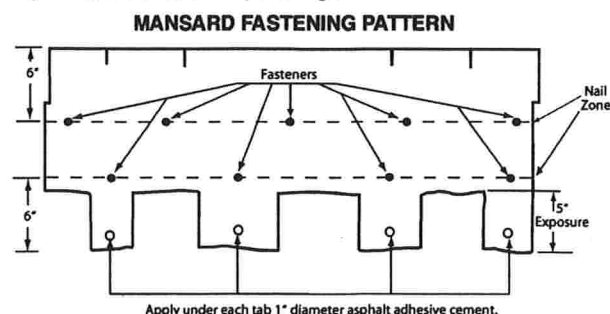
05/06



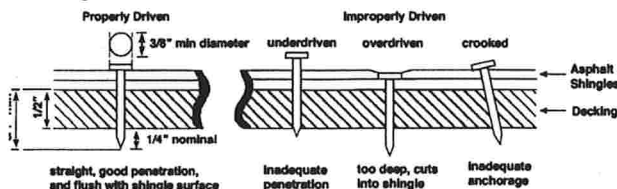
(CONTINUED from Pg. 1)

• HERITAGE® VINTAGE™ AR – Phillipsburg, KS LAMINATED ASPHALT SHINGLES

Each shingle tab must be sealed underneath with quick setting asphalt adhesive cement immediately upon installation. Spots of cement must be equivalent in size to a \$.25 piece and applied to shingles with a 5 in. exposure, use 9 fasteners per shingle.



NAILS: TAMKO recommends the use of nails as the preferred method of application. Standard type roofing nails should be used. Nail shanks should be made of minimum 12 gauge wire, and a minimum head diameter of 3/8 in. Nails should be long enough to penetrate 3/4 in. into the roof deck. Where the deck is less than 3/4 in. thick, the nails should be long enough to penetrate completely through plywood decking and extend at least 1/8 in. through the roof deck. Drive nail head flush with the shingle surface.



4. UNDERLAYMENT

UNDERLAYMENT: An underlayment consisting of asphalt saturated felt must be applied over the entire deck before the installation of TAMKO shingles. Failure to add underlayment can cause premature failure of the shingles and leaks which are not covered by TAMKO's limited warranty. Apply the felt when the deck is dry. On roof decks 4 in. per foot and greater apply the felt parallel to the eaves lapping each course of the felt over the lower course at least 2 in. Where ends join, lap the felt 4 in. If left exposed, the underlayment felt may be adversely affected by moisture and weathering. Laying of the underlayment and the shingle application must be done together.

Products which are acceptable for use as underlayment are:

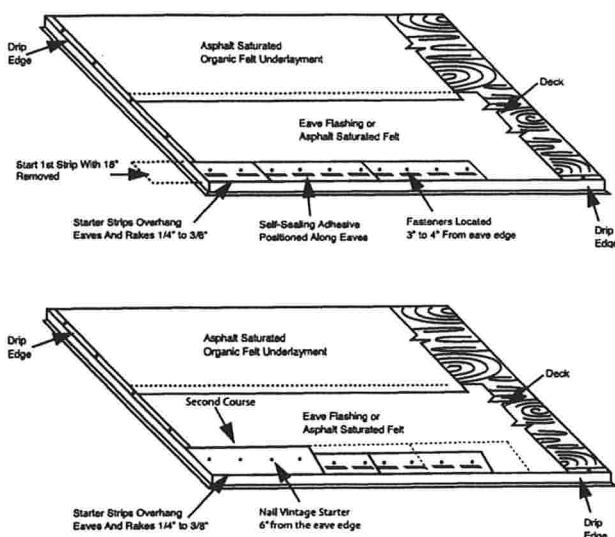
- TAMKO No. 15 Asphalt Saturated Organic Felt
- A non-perforated asphalt saturated organic felt which meets ASTM: D226, Type I or ASTM D4869, Type I
- Any TAMKO non-perforated asphalt saturated organic felt
- TAMKO TW Metal and Tile Underlayment, TW Underlayment and Moisture Guard Plus® (additional ventilation maybe required. Contact TAMKO's technical services department for more information)

In areas where ice builds up along the eaves or a back-up of water from frozen or clogged gutters is a potential problem, TAMKO's Moisture Guard Plus® waterproofing underlayment (or any specialty eaves flashing product) may be applied to eaves, rakes, ridges, valleys, around chimneys, skylights or dormers to help prevent water damage. Contact TAMKO's Technical Services Department for more information. TAMKO does not recommend the use of any substitute products as shingle underlayment.

5. APPLICATION INSTRUCTIONS

STARTER COURSE: Two starter course layers must be applied prior to application of Heritage Vintage AR Shingles.

The first starter course may consist of TAMKO Shingle Starter, three tab self-sealing type shingles or a 9 inch wide strip of mineral surface roll roofing. If three tab self-sealing shingles are used, remove the exposed tab portion and install with the factory applied adhesive adjacent to the eaves. If using three tab self-sealing shingles or shingle starter, remove 18 in. from first shingle to offset the end joints of the Vintage Starter. Attach the first starter course with approved fasteners along a line parallel to and 3 in. to 4 in. above the eave edge. The starter course should overhang both the eave and rake edge 1/4 in. to 3/8 in. Over the first starter course, install Heritage Vintage Starter AR and begin at the left rake edge with a full size shingle and continue across the roof nailing the Heritage Vintage Starter AR along a line parallel to and 6 in. from the eave edge.



Note: Do not allow Vintage Starter AR joints to be visible between shingle tabs. Cutting of the starter may be required.

HERITAGE VINTAGE STARTER AR
12 1/2" x 36" 20 PIECES PER BUNDLE
60 LINEAL FT. PER BUNDLE

(Continued)

Visit Our Web Site at
www.tamko.com

Central District 220 West 4th St., Joplin, MO 64801
Northeast District 4500 Tamko Dr., Frederick, MD 21701
Southeast District 2300 35th St., Tuscaloosa, AL 35401
Southwest District 7910 S. Central Exp., Dallas, TX 75216
Western District 5300 East 43rd Ave., Denver, CO 80216

800-641-4691
800-368-2055
800-228-2656
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800-530-8868

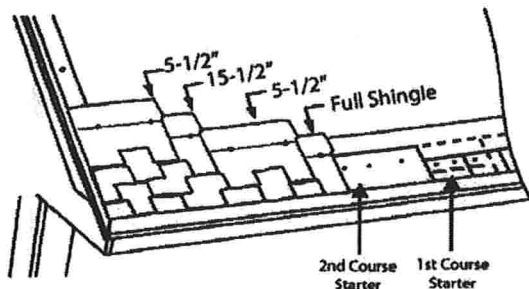
0506



(CONTINUED from Pg. 2)

• HERITAGE® VINTAGE™ AR – Phillipsburg, KS LAMINATED ASPHALT SHINGLES

SHINGLE APPLICATION: Start the first course at the left rake edge with a full size shingle and overhang the rake edge 1/4 in. to 3/8 in.. To begin the second course, align the right side of the shingle with the 5-1/2 in. alignment notch on the first course shingle making sure to align the exposure notch. (See shingle illustration on next page) Cut the appropriate amount from the rake edge so the overhang is 1/4" to 3/8". For the third course, align the shingle with the 15-1/2 in. alignment notch at the top of the second course shingle, again being sure to align the exposure notch. Cut the appropriate amount from the rake edge. To begin the fourth course, align the shingle with the 5-1/2 in. alignment notch from the third course shingle while aligning the exposure notch. Cut the appropriate amount from the rake edge. Continue up the rake in as many rows as necessary using the same formula as outlined above. Cut pieces may be used to complete courses at the right side. As you work across the roof, install full size shingles taking care to align the exposure notches. Shingle joints should be no closer than 4 in.



6. LOW SLOPE APPLICATION

On pitches 2 in. per foot to 4 in. per foot cover the deck with two layers of underlayment. Begin by applying the underlayment in a 19 in. wide strip along the eaves and overhanging the drip edge by 1/4 to 3/4 in. Place a full 36 in. wide sheet over the 19 in. wide starter piece, completely overlapping it. All succeeding courses will be positioned to overlap the preceding course by 19 in. If winter temperatures average 25°F or less, thoroughly cement the laps of the entire underlayment to each other with plastic cement from eaves and rakes to a point of at least 24 in. inside the interior wall line of the building. As an alternative, TAMKO's Moisture Guard Plus self-adhering waterproofing underlayment may be used in lieu of the cemented felts.

7. VALLEY APPLICATION

TAMKO recommends an open valley construction with Heritage Vintage AR shingles.

To begin, center a sheet of TAMKO Moisture Guard Plus, TW Underlayment or TW Metal & Tile Underlayment in the valley.

After the underlayment has been secured, install the recommended corrosion resistant metal (26 gauge galvanized metal or an equivalent) in the valley. Secure the valley metal to the roof deck. Overlaps should be 12" and cemented.

Following valley metal application; a 9" to 12" wide strip of TAMKO Moisture Guard Plus, TW Underlayment or TW Metal & Tile Underlayment should be applied along the edges of the metal valley flashing (max. 6" onto metal valley flashing) and on top of the valley underlayment. The valley will be completed with shingle application.

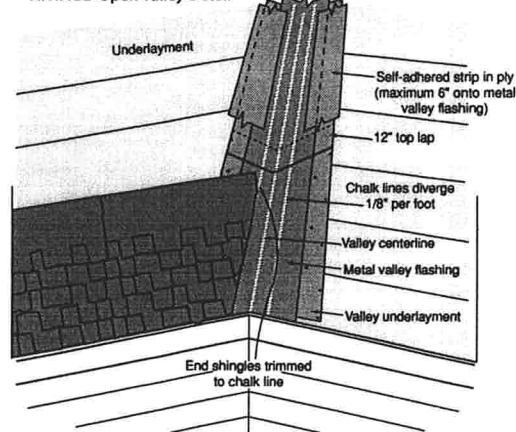
SHINGLE APPLICATION INSTRUCTIONS (OPEN VALLEY)

- Snap two chalk lines, one on each side of the valley centerline over the full length of the valley flashing. Locate the upper ends of the chalk lines 3" to either side of the valley centerline.
- The lower end should diverge from each other by 1/8" per foot. Thus, for an 8' long valley, the chalk lines should be 7" either side of the centerline at the eaves and for a 16' valley 8".

As shingles are applied toward the valley, trim the last shingle in each course to fit on the chalk line. Never use a shingle trimmed to less than 12" in length to finish a course running into a valley. If necessary, trim the adjacent shingle in the course to allow a longer portion to be used.

- Clip 1" from the upper corner of each shingle on a 45° angle to direct water into the valley and prevent it from penetrating between the courses.
- Form a tight seal by cementing the shingle to the valley lining with a 3" width of asphalt plastic cement (conforming to ASTM D 4586).

VINTAGE Open Valley Detail



• CAUTION:

Adhesive must be applied in smooth, thin, even layers.

Excessive use of adhesive will cause blistering to this product.

TAMKO assumes no responsibility for blistering.

(Continued)

Visit Our Web Site at
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05/06



(CONTINUED from Pg. 3)

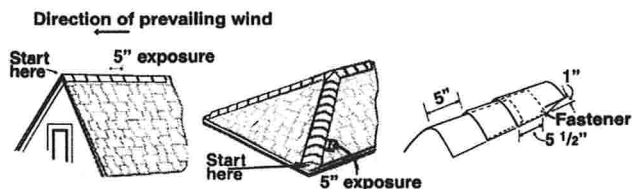
• **HERITAGE® VINTAGE™ AR** – Phillipsburg, KS
LAMINATED ASPHALT SHINGLES

8. HIP AND RIDGE FASTENING DETAIL

Apply the shingles with a 5 in. exposure beginning at the bottom of the hip or from the end of the ridge opposite the direction of the prevailing winds. Secure each shingle with one fastener on each side, 5-1/2 in. back from the exposed end and 1 in. up from the edge. TAMKO recommends the use of TAMKO Heritage Vintage Hip & Ridge shingle products.

Fasteners should be 1/4 in. longer than the ones used for shingles.

IMPORTANT: PRIOR TO INSTALLATION, CARE NEEDS TO BE TAKEN TO PREVENT DAMAGE WHICH CAN OCCUR WHILE BENDING SHINGLE IN COLD WEATHER.



THESE ARE THE MANUFACTURER'S APPLICATION INSTRUCTIONS FOR THE ROOFING CONDITIONS DESCRIBED. TAMKO BUILDING PRODUCTS, INC. ASSUMES NO RESPONSIBILITY FOR LEAKS OR OTHER ROOFING DEFECTS RESULTING FROM FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

TAMKO®, Moisture Guard Plus®, Nail Fast® and Heritage® are registered trademarks and Vintage™ is a trademark of TAMKO Building Products, Inc.

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05/06

Residential System Sizing Calculation

Summary

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

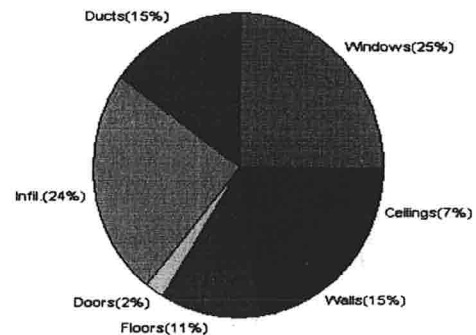
1/17/2008

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	25608 Btuh	Total cooling load calculation	40797 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	117.2 30000	Sensible (SHR = 0.75)	66.5 22500
Heat Pump + Auxiliary(0.0kW)	117.2 30000	Latent	107.5 7500
		Total (Electric Heat Pump)	73.5 30000

WINTER CALCULATIONS

Winter Heating Load (for 1408 sqft)

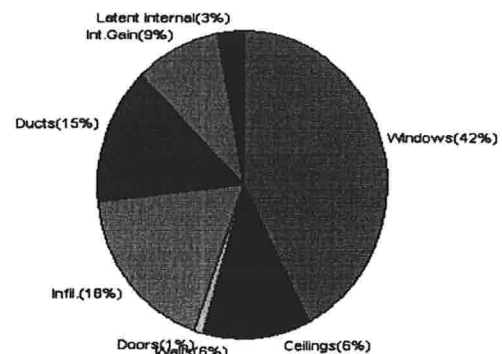
Load component		Load	
Window total	202 sqft	6502	Btuh
Wall total	1198 sqft	3934	Btuh
Door total	40 sqft	518	Btuh
Ceiling total	1550 sqft	1826	Btuh
Floor total	175 sqft	2862	Btuh
Infiltration	150 cfm	6084	Btuh
Duct loss		3881	Btuh
Subtotal		25608	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		25608	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1408 sqft)

Load component		Load	
Window total	202 sqft	17247	Btuh
Wall total	1198 sqft	2386	Btuh
Door total	40 sqft	392	Btuh
Ceiling total	1550 sqft	2567	Btuh
Floor total		0	Btuh
Infiltration	131 cfm	2446	Btuh
Internal gain		3780	Btuh
Duct gain		5005	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Total sensible gain		33822	Btuh
Latent gain(ducts)		973	Btuh
Latent gain(infiltration)		4803	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		1200	Btuh
Total latent gain		6975	Btuh
TOTAL HEAT GAIN		40797	Btuh



Version 8
For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____

[Signature]
1-17-08

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

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

1/17/2008

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	W	75.0		32.2	2414 Btuh
2	2, Clear, Metal, 0.87	W	30.0		32.2	966 Btuh
3	2, Clear, Metal, 0.87	W	20.0		32.2	644 Btuh
4	2, Clear, Metal, 0.87	N	20.0		32.2	644 Btuh
5	2, Clear, Metal, 0.87	N	6.0		32.2	193 Btuh
6	2, Clear, Metal, 0.87	E	45.0		32.2	1449 Btuh
7	2, Clear, Metal, 0.87	S	6.0		32.2	193 Btuh
Window Total			202(sqft)			6502 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1002		3.3	3291 Btuh
2	Frame - Wood - Adj(0.09)	13.0	196		3.3	644 Btuh
Wall Total			1198			3934 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		20		12.9	259 Btuh
2	Insulated - Adjacent		20		12.9	259 Btuh
Door Total			40			518 Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shin	30.0	1550		1.2	1826 Btuh
Ceiling Total			1550			1826 Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	5	175.0 ft(p)		16.4	2862 Btuh
Floor Total			175			2862 Btuh
Envelope Subtotal:						15643 Btuh
Infiltration	Type	ACH X Volume(cuft)	walls(sqft)	CFM=		Load
	Natural	0.80	11264	1198	150.2	6084 Btuh
Ductload					(DLM of 0.179)	3881 Btuh
All Zones	Sensible Subtotal All Zones					25608 Btuh

WHOLE HOUSE TOTALS

	Subtotal Sensible	25608 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	25608 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

1/17/2008

EQUIPMENT

1. Electric Heat Pump	#	30000 Btuh
-----------------------	---	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)
Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)



Version 8
For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

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

1/17/2008

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Metal, 0.87	W	75.0		32.2	2414 Btuh
2	2, Clear, Metal, 0.87	W	30.0		32.2	966 Btuh
3	2, Clear, Metal, 0.87	W	20.0		32.2	644 Btuh
4	2, Clear, Metal, 0.87	N	20.0		32.2	644 Btuh
5	2, Clear, Metal, 0.87	N	6.0		32.2	193 Btuh
6	2, Clear, Metal, 0.87	E	45.0		32.2	1449 Btuh
7	2, Clear, Metal, 0.87	S	6.0		32.2	193 Btuh
Window Total			202(sqft)			6502 Btuh
Walls	Type	R-Value	Area	X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	1002		3.3	3291 Btuh
2	Frame - Wood - Adj(0.09)	13.0	196		3.3	644 Btuh
Wall Total			1198			3934 Btuh
Doors	Type		Area	X	HTM=	Load
1	Insulated - Exterior		20		12.9	259 Btuh
2	Insulated - Adjacent		20		12.9	259 Btuh
Door Total			40			518Btuh
Ceilings	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Vented Attic/D/Shin	30.0	1550		1.2	1826 Btuh
Ceiling Total			1550			1826Btuh
Floors	Type	R-Value	Size	X	HTM=	Load
1	Slab On Grade	5	175.0 ft(p)		16.4	2862 Btuh
Floor Total			175			2862 Btuh
Zone Envelope Subtotal:						15643 Btuh
Infiltration	Type	ACH X	Volume(cuft)	walls(sqft)	CFM=	Load
	Natural	0.80	11264	1198	150.2	6084 Btuh
Ductload	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic) (DLM of 0.179)					3881 Btuh
Zone #1	Sensible Zone Subtotal					25608 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

1/17/2008

WHOLE HOUSE TOTALS

	Subtotal Sensible	25608 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	25608 Btuh

EQUIPMENT

1. Electric Heat Pump	#	30000 Btuh
-----------------------	---	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)
(Frame types - metal, wood or insulated metal)
(U - Window U-Factor or 'DEF' for default)
(HTM - ManualJ Heat Transfer Multiplier)
Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types)



Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F

1/17/2008

Component Loads for Whole House

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load		
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded			
1	2, Clear, 0.87, None,N,N	W	1.5ft	8ft.	75.0	0.0	75.0	29	80	5964	Btuh	
2	2, Clear, 0.87, None,N,N	W	1.5ft	8ft.	30.0	0.0	30.0	29	80	2385	Btuh	
3	2, Clear, 0.87, None,N,N	W	1.5ft	8ft.	20.0	0.0	20.0	29	80	1590	Btuh	
4	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	20.0	0.0	20.0	29	29	579	Btuh	
5	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	6.0	0.0	6.0	29	29	174	Btuh	
6	2, Clear, 0.87, None,N,N	E	1.5ft	8ft.	45.0	0.0	45.0	29	80	3578	Btuh	
7	2, Clear, 0.87, None,N,N	S	1.5ft	8ft.	6.0	6.0	0.0	29	34	174	Btuh	
	Excursion									2802	Btuh	
	Window Total				202 (sqft)					17247 Btuh		
Walls	Type		R-Value/U-Value		Area(sqft)			HTM		Load		
1	Frame - Wood - Ext		13.0/0.09		1002.0			2.1		2090 Btuh		
2	Frame - Wood - Adj		13.0/0.09		196.0			1.5		296 Btuh		
	Wall Total				1198 (sqft)					2386 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		
	Door Total				40 (sqft)					392 Btuh		
Ceilings	Type/Color/Surface		R-Value		Area(sqft)			HTM		Load		
1	Vented Attic/DarkShingle		30.0		1550.0			1.7		2567 Btuh		
	Ceiling Total				1550 (sqft)					2567 Btuh		
Floors	Type		R-Value		Size			HTM		Load		
1	Slab On Grade		5.0		175 (ft(p))			0.0		0 Btuh		
	Floor Total				175.0 (sqft)					0 Btuh		
			Envelope Subtotal:								22591 Btuh	
Infiltration	Type		ACH		Volume(cuft)		wall area(sqft)	CFM=		Load		
	SensibleNatural		0.70		11264		1198	150.2		2446 Btuh		
Internal gain			Occupants		Btuh/occupant		Appliance		Load			
			6		X 230		+	2400		3780 Btuh		
			Sensible Envelope Load:								28817 Btuh	
Duct load			(DGM of 0.174)								5005 Btuh	
			Sensible Load All Zones								33822 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

1/17/2008

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	28817 Btuh
	Sensible Duct Load	5005 Btuh
	Total Sensible Zone Loads	33822 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	33822 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	4803 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	973 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	6975 Btuh
	TOTAL GAIN	40797 Btuh

EQUIPMENT

1. Central Unit	#	30000 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)



Version 8
For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F

1/17/2008

Component Loads for Zone #1: Main

Window	Type*	Ornt	Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS		Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.87, None,N,N	W	1.5ft	8ft.	75.0	0.0	75.0	29	80	5964	Btuh
2	2, Clear, 0.87, None,N,N	W	1.5ft	8ft.	30.0	0.0	30.0	29	80	2385	Btuh
3	2, Clear, 0.87, None,N,N	W	1.5ft	8ft.	20.0	0.0	20.0	29	80	1590	Btuh
4	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	20.0	0.0	20.0	29	29	579	Btuh
5	2, Clear, 0.87, None,N,N	N	1.5ft	8ft.	6.0	0.0	6.0	29	29	174	Btuh
6	2, Clear, 0.87, None,N,N	E	1.5ft	8ft.	45.0	0.0	45.0	29	80	3578	Btuh
7	2, Clear, 0.87, None,N,N	S	1.5ft	8ft.	6.0	6.0	0.0	29	34	174	Btuh
Window Total					202 (sqft)					14445 Btuh	
Walls	Type	R-Value/U-Value		Area(sqft)			HTM		Load		
1	Frame - Wood - Ext	13.0/0.09		1002.0			2.1		2090 Btuh		
2	Frame - Wood - Adj	13.0/0.09		196.0			1.5		296 Btuh		
Wall Total				1198 (sqft)					2386 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		
Door Total				40 (sqft)					392 Btuh		
Ceilings	Type/Color/Surface	R-Value		Area(sqft)			HTM		Load		
1	Vented Attic/DarkShingle	30.0		1550.0			1.7		2567 Btuh		
Ceiling Total				1550 (sqft)					2567 Btuh		
Floors	Type	R-Value		Size			HTM		Load		
1	Slab On Grade	5.0		175 (ft(p))			0.0		0 Btuh		
Floor Total				175.0 (sqft)					0 Btuh		
Zone Envelope Subtotal:									19789 Btuh		
Infiltration	Type	ACH		Volume(cuft)		wall area(sqft)		CFM=		Load	
	SensibleNatural	0.70		11264		1198		131.4		2446 Btuh	
Internal gain		Occupants		Btuh/occupant			Appliance		Load		
		6		X 230 +			2400		3780 Btuh		
Sensible Envelope Load:									26015 Btuh		
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)						(DGM of 0.174)		4518 Btuh		
Sensible Zone Load									30533 Btuh		

The following window Excursion will be assigned to the system loads.

Windows	July excursion for System 1	Excursion Subtotal:	2802 Btuh 2802 Btuh
Duct load			487 Btuh
		Sensible Excursion Load	3289 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

Code Only
Professional Version
Climate: North

1/17/2008

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	28817 Btuh
	Sensible Duct Load	5005 Btuh
	Total Sensible Zone Loads	33822 Btuh
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	33822 Btuh
	Latent infiltration gain (for 54 gr. humidity difference)	4803 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	973 Btuh
	Latent occupant gain (6 people @ 200 Btuh per person)	1200 Btuh
	Latent other gain	0 Btuh
	Latent total gain	6975 Btuh
	TOTAL GAIN	40797 Btuh

EQUIPMENT

1. Central Unit	#	30000 Btuh
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*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)



Version 8
For Florida residences only

Residential Window Diversity

MidSummer

Spec House
Legion Road
Lake City, FL 32025-

Project Title:
Seth Heitzman Construction - Legion RD

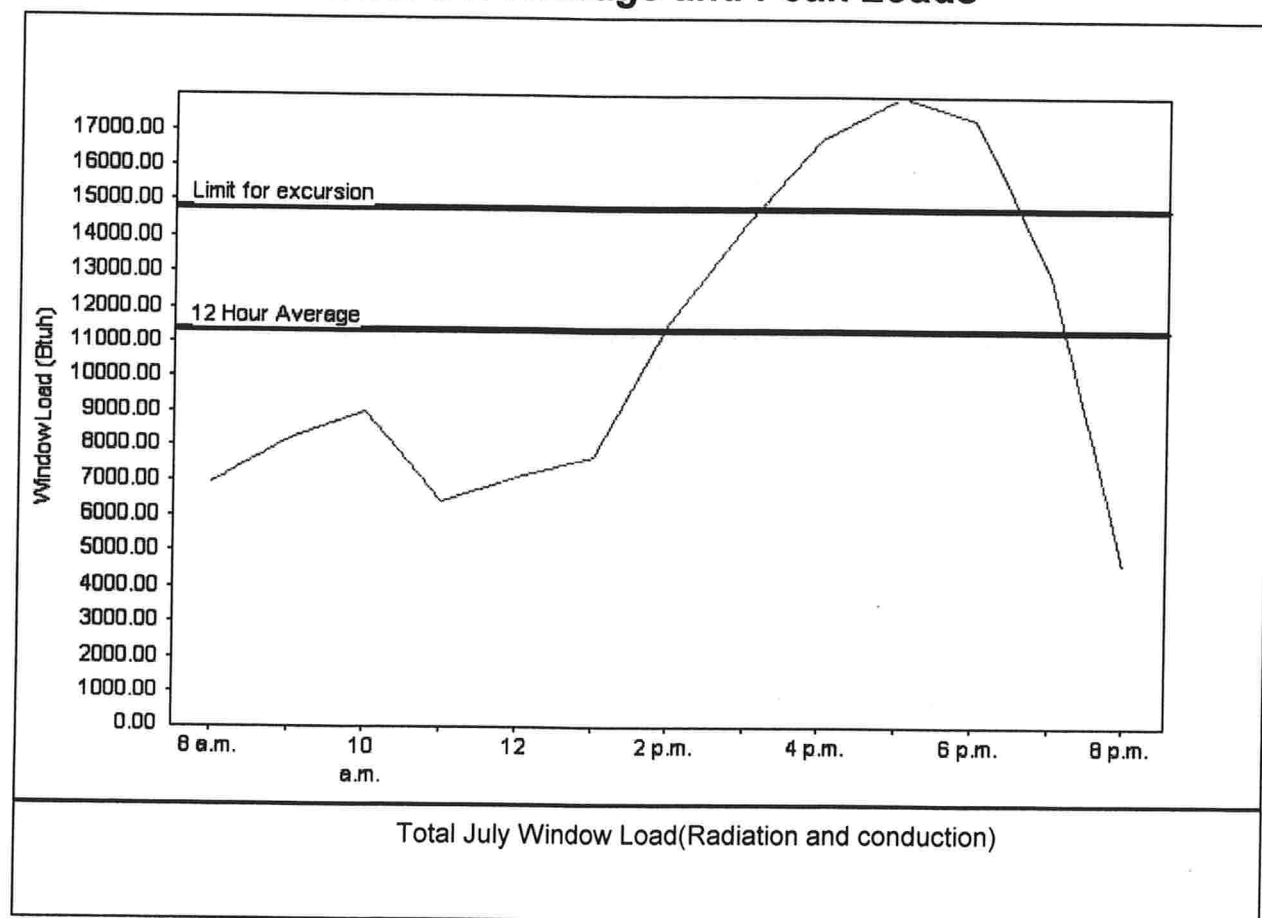
Code Only
Professional Version
Climate: North

1/17/2008

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	11364 Btu
Summer setpoint	75 F	Peak window load for July	18073 Btu
Summer temperature difference	17 F	Excursion limit(130% of Ave.)	14773 Btu
Latitude	29 North	Window excursion (July)	3301 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® FLRCPB v4.5.2

