

73

From: Howland Truss Howlandtruss@gmail.com
 Subject: Cox Carport Seals
 Date: Jun 15, 2020 at 9:04:30 AM
 To: Glenwood King gkconstru@gmail.com

They came back really quick. Here you go!

Truss Operations

W.B. Howland Co., LLC

610 11th St.

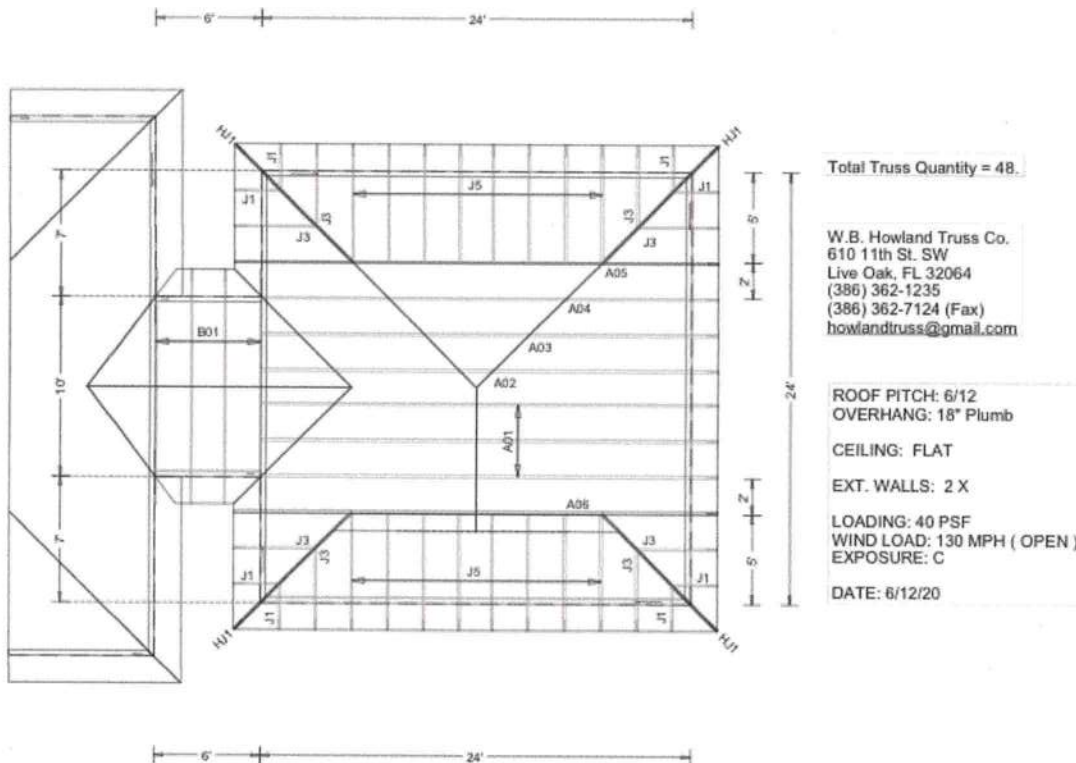
Live Oak, Fl. 32064

(386)362-1235

Fax: (386)362-7124

truss@wbhowland.com

Tap to
 Download
 20-43...53.pdf
 983 KB



Total Truss Quantity = 48.

W.B. Howland Truss Co.
 610 11th St. SW
 Live Oak, FL 32064
 (386) 362-1235
 (386) 362-7124 (Fax)
 howlandtruss@gmail.com

ROOF PITCH: 6/12
 OVERHANG: 18" Plumb

CEILING: FLAT

EXT. WALLS: 2 X

LOADING: 40 PSF
 WIND LOAD: 130 MPH (OPEN)
 EXPOSURE: C

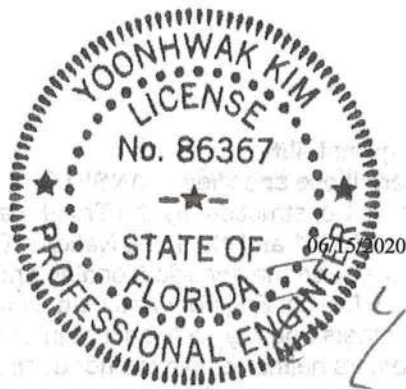
DATE: 6/12/20

JOB #: 20-4315

Job Name: Cox Carport
 Customer: GLENWOOD KING
 Designer: Bob Glover
 ADDRESS: 669 NW Woodlands Terrace
 SALESMAN: DB
 : <Not Found>

JOB NO:
 20-4315

PAGE NO:
 1 OF 1



FL REG# 278, Yoonhwak Kim, FL PE #86367

Alpine, an ITW Company
 6750 Forum Drive, Suite 305
 Orlando, FL 32821
 Phone: (800)755-6001
 www.alpineitw.com



This document has been electronically signed and sealed using a Digital Signature. Printed copies without an original signature must be verified using the original electronic version.

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	Job Number: 20-4315
Job Description: Cox Carport	
Address: 869 NW Woodlands Terrace, LAKE CITY, FL	

Job Engineering Criteria:	
Design Code: FBC 2017 RES	IntelliVIEW Version: 19.02.02B JRef #: 1WW52150001
Wind Standard: ASCE 7-10 Wind Speed (mph): 130	Roof Load (psf): 20.00-10.00- 0.00-10.00
Building Type: Partial	Floor Load (psf): None

This package contains general notes pages, 11 truss drawing(s) and 2 detail(s).

Item	Drawing Number	Truss
1	167.20.0850.30940	A01
3	167.20.0850.34213	A03
5	167.20.0850.40927	A05
7	167.20.0850.46997	B01
9	167.20.0850.50087	J1
11	167.20.0850.53827	J5
13	GBLLETIN0118	

Item	Drawing Number	Truss
2	167.20.0850.32670	A02
4	167.20.0850.35877	A04
6	167.20.0850.45450	A06
8	167.20.0850.48813	HJ1
10	167.20.0850.51270	J3
12	A16015ENC101014	

General Notes

Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:

The design responsibilities assumed in the preparation of these design drawings are those specified in ANSI/TPI 1, Chapter 2; and the National Design Standard for Metal Plate Connected Wood Truss Construction, by the Truss Plate Institute. The truss component designs conform to the applicable provisions of ANSI/TPI 1 and NDS, the National Design Specification for Wood Construction by AWC. The truss component designs are based on the specified loading and dimension information furnished by others to the Truss Design Engineer. The Truss Design Engineer has no duty to independently verify the accuracy or completeness of the information provided by others and may rely on that information without liability. The responsibility for verification of that information remains with others neither employed nor controlled by the Truss Design Engineer. The Truss Design Engineer's seal and signature on the attached drawings, or cover page listing these drawings, indicates acceptance of professional engineering responsibility solely for the truss component designs and not for the technical information furnished by others which technical information and consequences thereof remain their sole responsibility.

The suitability and use of these drawings for any particular structure is the responsibility of the Building Designer in accordance with ANSI/TPI 1 Chapter 2. The Building Designer is responsible for determining that the dimensions and loads for each truss component match those required by the plans and by the actual use of the individual component, and for ascertaining that the loads shown on the drawings meet or exceed applicable building code requirements and any additional factors required in the particular application. Truss components using metal connector plates with integral teeth shall not be placed in environments that will cause the moisture content of the wood in which plates are embedded to exceed 19% and/or cause corrosion of connector plates and other metal fasteners.

The Truss Design Engineer shall not be responsible for items beyond the specific scope of the agreed contracted work set forth herein, including but not limited to: verifying the dimensions of the truss component, calculation of any of the truss component design loads, inspection of the truss components before or after installation, the design of temporary or permanent bracing and their attachment required in the roof and/or floor systems, the design of diaphragms or shear walls, the design of load transfer connections to and from diaphragms and shear walls, the design of load transfer to the foundation, the design of connections for truss components to their bearing supports, the design of the bearing supports, installation of the truss components, observation of the truss component installation process, review of truss assembly procedures, sequencing of the truss component installation, construction means and methods, site and/or worker safety in the installation of the truss components and/or its connections.

This document may be a high quality facsimile of the original engineering document which is a digitally signed electronic file with third party authentication. A wet or embossed seal copy of this engineering document is available upon request.

Temporary Lateral Restraint and Bracing:

Temporary lateral restraint and diagonal bracing shall be installed according to the provisions of BCSI chapters B1, B2, B7 and/or B10 (Building Component Safety Information, by TPI and SBCA), or as specified by the Building Designer or other Registered Design Professional. The required locations for lateral restraint and/or bracing depicted on these drawings are only for the permanent lateral support of the truss members to reduce buckling lengths, and do not apply to and may not be relied upon for the temporary stability of the truss components during their installation.

Permanent Lateral Restraint and Bracing:

The required locations for lateral restraint or bracing depicted on these drawings are for the permanent lateral support of the truss members to reduce buckling lengths. Permanent lateral support shall be installed according to the provisions of BCSI chapters B3, B7 and/or B10, or as specified by the Building Designer or other Registered Design Professional. These drawings do not depict or specify installation/erection bracing, wind bracing, portal bracing or similar building stability bracing which are parts of the overall building design to be specified, designed and detailed by the Building Designer.

Connector Plate Information:

Alpine connector plates are made of ASTM A653 or ASTM A1063 galvanized steel with the following designations, gauges and grades: W=Wave, 20ga, grade 40; H=High Strength, 20ga, grade 60; S=Super Strength, 18ga, grade 60. Information on model code compliance is contained in the ICC Evaluation Service report ESR-1118, available on-line at www.icc-es.org.

Fire Retardant Treated Lumber:

Fire retardant treated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Fire retardant treated lumber may be more brittle than untreated lumber. Special handling care must be taken to prevent breakage during all handling activities.

General Notes (continued)

Key to Terms:

Information provided on drawings reflects a summary of the pertinent information required for the truss design. Detailed information on load cases, reactions, member lengths, forces and members requiring permanent lateral support may be found in calculation sheets available upon written request.

BCDL = Bottom Chord standard design Dead Load in pounds per square foot.

BCLL = Bottom Chord standard design Live Load in pounds per square foot.

CL = Certified lumber.

Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.

FRT = Fire Retardant Treated lumber.

FRT-DB = D-Blaze Fire Retardant Treated lumber.

FRT-DC = Dricon Fire Retardant Treated lumber.

FRT-FP = FirePRO Fire Retardant Treated lumber.

FRT-FL = FlamePRO Fire Retardant Treated lumber.

FRT-FT = FlameTech Fire Retardant Treated lumber.

FRT-PG = PYRO-GUARD Fire Retardant Treated lumber.

g = green lumber.

HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.

HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.

HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.

Ic = Incised lumber.

FJ = Finger Jointed lumber.

L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.

L/defl = ratio of Length between bearings, in inches, divided by the vertical Deflection due to creep, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.

Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.

Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for of all load cases.

Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for of all load cases.

Max Web CSI = Maximum bending and axial Combined Stress Index for Webs for of all load cases.

NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.

PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.

PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds

PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.

PP = Panel Point.

R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).

Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).

TCDL = Top Chord standard design Dead Load in pounds per square foot.

TCLL = Top Chord standard design Live Load in pounds per square foot.

U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.

VERT(CTL) = maximum Vertical panel point deflection ratios due to Live Load and Creep Component of Dead Load, and maximum long term Vertical panel point deflection in inches due to Total load, including creep adjustment.

VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.

VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.

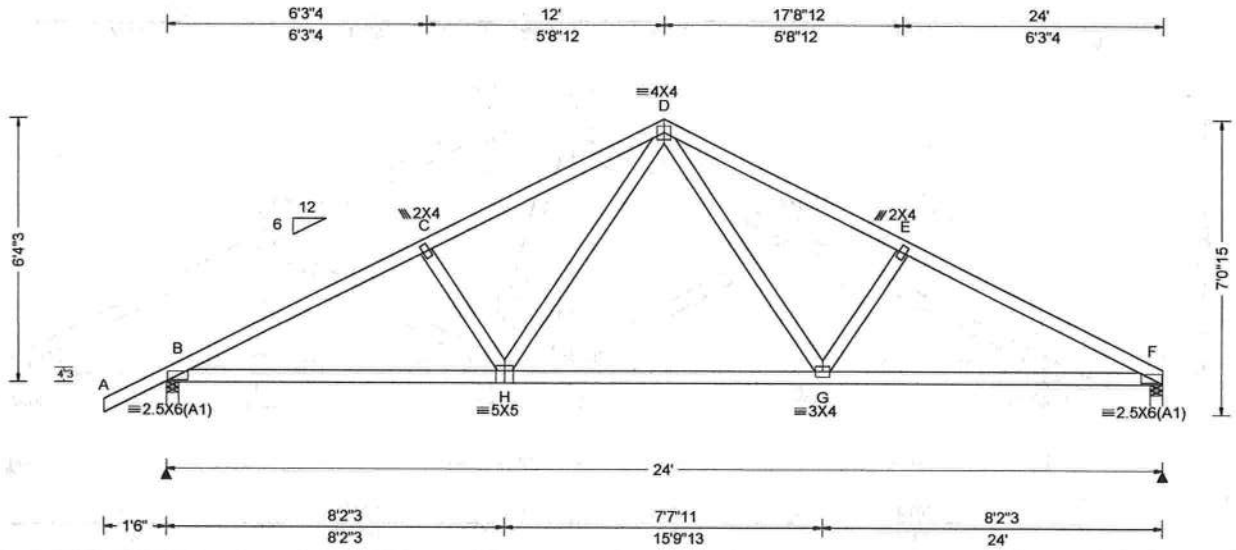
W = Width of non-hanger bearing, in inches.

Refer to ASCE-7 for Wind and Seismic abbreviations.

Uppercase Acronyms not explained above are as defined in TPI 1.

References:

1. AWC: American Wood Council; 222 Catocin Circle SE, Suite 201; Leesburg, VA 20175; www.awc.org.
2. ICC: International Code Council; www.iccsafe.org.
3. Alpine, a division of ITW Building Components Group Inc.: 13723 Riverport Drive, Suite 200, Maryland Heights, MO 63043; www.alpineitw.com.
4. TPI: Truss Plate Institute, 2670 Crain Highway, Suite 203, Waldorf, MD 20601; www.tpinst.org.
5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; www.sbcindustry.com.



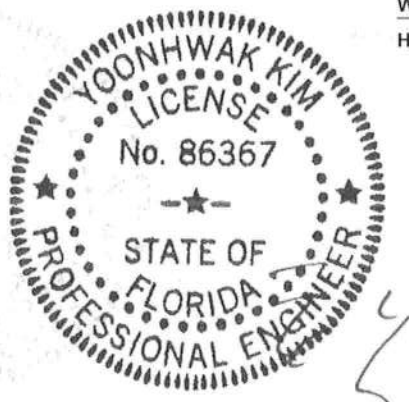
Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)																																																																																							
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.55 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.067 H 999 360 VERT(CL): 0.131 H 999 240 HORZ(LL): 0.027 G - - HORZ(TL): 0.052 G - - Creep Factor: 2.0 Max TC CSI: 0.379 Max BC CSI: 0.770 Max Web CSI: 0.268 VIEW Ver: 19.02.02B.0122.15	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/ R-</th> <th>/ Rh</th> <th>/ Rw</th> <th>/ U</th> <th>/ RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>1145</td> <td>-</td> <td>-</td> <td>1818</td> <td>1359</td> <td>1176</td> </tr> <tr> <td>F</td> <td>1037</td> <td>-</td> <td>-</td> <td>1734</td> <td>1331</td> <td>-</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 F Brg Width = 3.5 Min Req = 1.5 Bearings B & F are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Chords</th> <th colspan="2">Tens.Comp.</th> <th rowspan="2">Chords</th> <th colspan="2">Tens. Comp.</th> </tr> <tr> <th>B - C</th> <th>D - E</th> <th>E - F</th> <th>C - D</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>643</td> <td>-1797</td> <td>D - E</td> <td>681</td> <td>-1621</td> </tr> <tr> <td>C - D</td> <td>656</td> <td>-1605</td> <td>E - F</td> <td>667</td> <td>-1814</td> </tr> </tbody> </table> <p>Maximum Bot Chord Forces Per Ply (lbs)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Chords</th> <th colspan="2">Tens.Comp.</th> <th rowspan="2">Chords</th> <th colspan="2">Tens. Comp.</th> </tr> <tr> <th>B - H</th> <th>G - F</th> <th>H - G</th> <th>D - G</th> </tr> </thead> <tbody> <tr> <td>B - H</td> <td>1539</td> <td>-518</td> <td>G - F</td> <td>1558</td> <td>-522</td> </tr> <tr> <td>H - G</td> <td>1047</td> <td>-292</td> <td>D - G</td> <td>614</td> <td>-271</td> </tr> </tbody> </table> <p>Maximum Web Forces Per Ply (lbs)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Webs</th> <th colspan="2">Tens.Comp.</th> <th rowspan="2">Webs</th> <th colspan="2">Tens. Comp.</th> </tr> <tr> <th>H - D</th> <th>D - G</th> <th>D - G</th> <th>H - D</th> </tr> </thead> <tbody> <tr> <td>H - D</td> <td>589</td> <td>-261</td> <td>D - G</td> <td>614</td> <td>-271</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/ R-	/ Rh	/ Rw	/ U	/ RL	B	1145	-	-	1818	1359	1176	F	1037	-	-	1734	1331	-	Chords	Tens.Comp.		Chords	Tens. Comp.		B - C	D - E	E - F	C - D	B - C	643	-1797	D - E	681	-1621	C - D	656	-1605	E - F	667	-1814	Chords	Tens.Comp.		Chords	Tens. Comp.		B - H	G - F	H - G	D - G	B - H	1539	-518	G - F	1558	-522	H - G	1047	-292	D - G	614	-271	Webs	Tens.Comp.		Webs	Tens. Comp.		H - D	D - G	D - G	H - D	H - D	589	-261	D - G	614	-271
Loc	Gravity			Non-Gravity																																																																																							
	R+	/ R-	/ Rh	/ Rw	/ U	/ RL																																																																																					
B	1145	-	-	1818	1359	1176																																																																																					
F	1037	-	-	1734	1331	-																																																																																					
Chords	Tens.Comp.		Chords	Tens. Comp.																																																																																							
	B - C	D - E		E - F	C - D																																																																																						
B - C	643	-1797	D - E	681	-1621																																																																																						
C - D	656	-1605	E - F	667	-1814																																																																																						
Chords	Tens.Comp.		Chords	Tens. Comp.																																																																																							
	B - H	G - F		H - G	D - G																																																																																						
B - H	1539	-518	G - F	1558	-522																																																																																						
H - G	1047	-292	D - G	614	-271																																																																																						
Webs	Tens.Comp.		Webs	Tens. Comp.																																																																																							
	H - D	D - G		D - G	H - D																																																																																						
H - D	589	-261	D - G	614	-271																																																																																						

Lumber
 Top chord: 2x4 SP #2;
 Bot chord: 2x4 SP #2;
 Webs: 2x4 SP #3;

Loading
 Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

Wind
 Wind loads based on MWFRS with additional C&C member design.

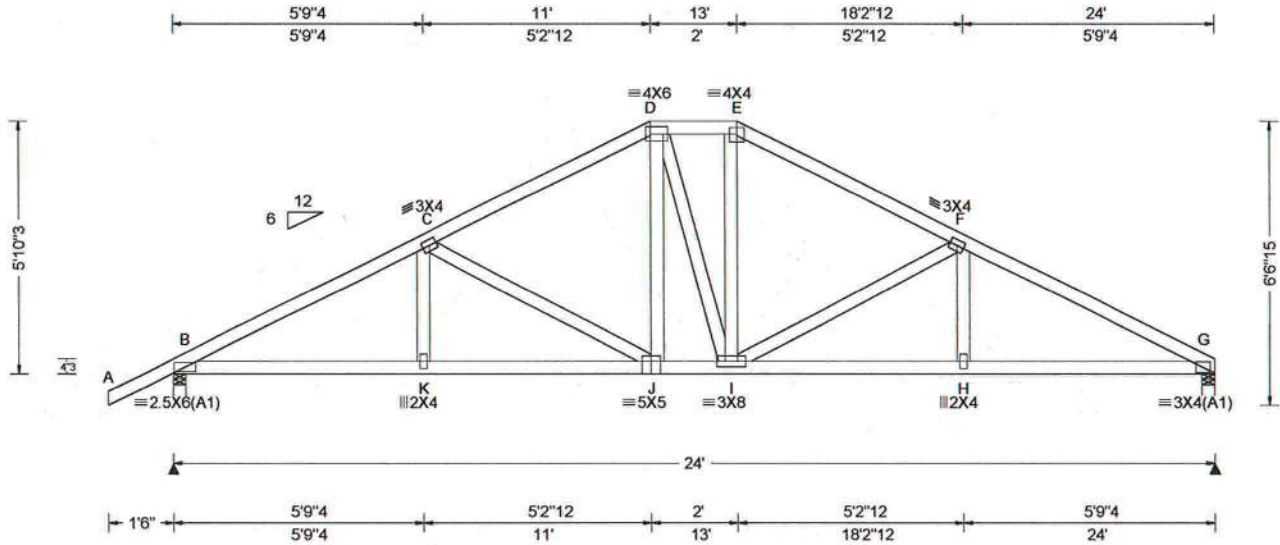
Additional Notes
 The overall height of this truss excluding overhang is 6-4-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
 06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
 Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org





Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00
Load Duration:	1.25
Spacing:	24.0 "

Wind Criteria

Wind Std: ASCE 7-10
 Speed: 130 mph
 Enclosure: Part. Enc.
 Risk Category: II
 EXP: C Kzt: NA
 Mean Height: 15.00 ft
 TCDL: 5.0 psf
 BCDL: 5.0 psf
 MWFRS Parallel Dist: h/2 to h
 C&C Dist a: 3.00 ft
 Loc. from endwall: not in 9.00 ft
 GCpi: 0.55
 Wind Duration: 1.60

Snow Criteria (Pg, Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 2017 RES
 TPI Std: 2014
 Rep Fac: Yes
 FT/RT: 20(0)/10(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/defl L/#
 VERT(LL): 0.060 J 999 360
 VERT(CL): 0.122 J 999 240
 HORZ(LL): 0.027 H - -
 HORZ(TL): 0.054 H - -
 Creep Factor: 2.0
 Max TC CSI: 0.322
 Max BC CSI: 0.447
 Max Web CSI: 0.363

VIEW Ver: 19.02.02B.0122.15

Maximum Reactions (lbs)

Loc	Gravity			Non-Gravity		
	R+	/R-	/Rh	/Rw	/U	/RL
B	1092	-	-	/819	/361	/163
G	985	-	-	/734	/332	-

Wind reactions based on MWFRS
 B Brg Width = 3.5 Min Req = 1.5
 G Brg Width = 3.5 Min Req = 1.5
 Bearings B & G are a rigid surface.
 Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - C	696 -1711	E - F	567 -1243
C - D	562 -1248	F - G	717 -1732
D - E	534 -1049		

Lumber
 Top chord: 2x4 SP #2;
 Bot chord: 2x4 SP #2;
 Webs: 2x4 SP #3;

Wind
 Wind loads based on MWFRS with additional C&C member design.

Additional Notes
 The overall height of this truss excluding overhang is 5-10-3.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - K	1464 -566	I - H	1485 -567
K - J	1461 -564	H - G	1488 -568
J - I	1046 -357		

Maximum Web Forces Per Ply (lbs)

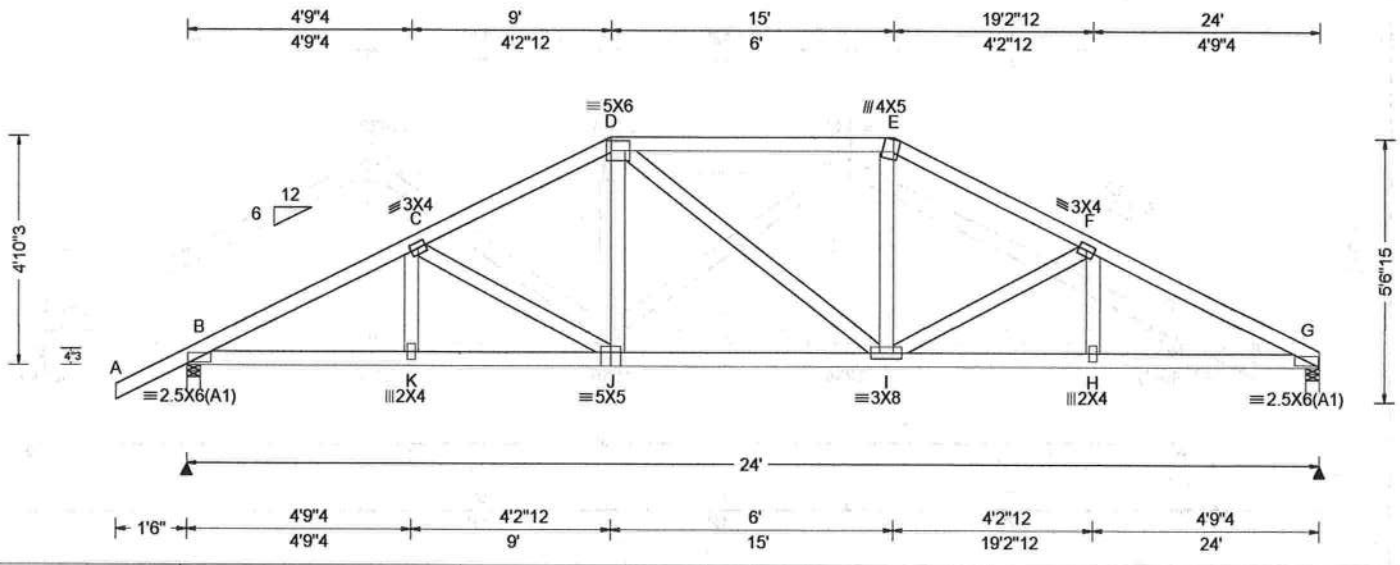
Webs	Tens.Comp.	Webs	Tens. Comp.
C - J	239 -480	I - F	256 -509



FL REG# 278, Yoonhwak Kim, FL PE #86367
 06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
 Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org



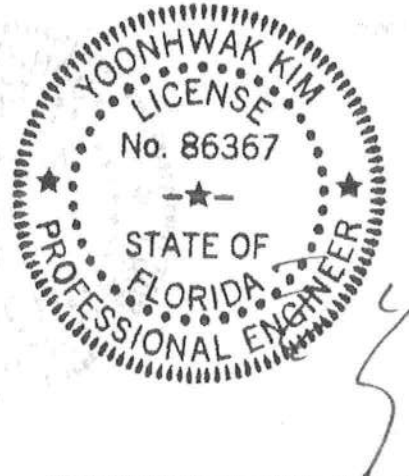


Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft GCpi: 0.55 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.060 J 999 360 VERT(CL): 0.123 J 999 240 HORZ(LL): 0.027 H - - HORZ(TL): 0.054 H - - Creep Factor: 2.0 Max TC CSI: 0.420 Max BC CSI: 0.495 Max Web CSI: 0.166 VIEW Ver: 19.02.02B.0122.15	▲ Maximum Reactions (lbs)																												
				<table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>1092</td> <td>-</td> <td>-</td> <td>/817</td> <td>/363</td> <td>/138</td> </tr> <tr> <td>G</td> <td>985</td> <td>-</td> <td>-</td> <td>/732</td> <td>/335</td> <td>-</td> </tr> </tbody> </table>		Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	1092	-	-	/817	/363	/138	G	985	-	-	/732	/335	-
Loc	Gravity			Non-Gravity																												
	R+	/R-	/Rh	/Rw	/U	/RL																										
B	1092	-	-	/817	/363	/138																										
G	985	-	-	/732	/335	-																										
		<table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>737 -1729</td> <td>E - F</td> <td>649 -1412</td> </tr> <tr> <td>C - D</td> <td>651 -1413</td> <td>F - G</td> <td>753 -1758</td> </tr> <tr> <td>D - E</td> <td>611 -1226</td> <td></td> <td></td> </tr> </tbody> </table>		Chords	Tens.Comp.	Chords	Tens. Comp.	B - C	737 -1729	E - F	649 -1412	C - D	651 -1413	F - G	753 -1758	D - E	611 -1226					Maximum Bot Chord Forces Per Ply (lbs)										
Chords	Tens.Comp.	Chords	Tens. Comp.																													
B - C	737 -1729	E - F	649 -1412																													
C - D	651 -1413	F - G	753 -1758																													
D - E	611 -1226																															
		<table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - K</td> <td>1485 -609</td> <td>I - H</td> <td>1515 -608</td> </tr> <tr> <td>K - J</td> <td>1484 -608</td> <td>H - G</td> <td>1517 -610</td> </tr> <tr> <td>J - I</td> <td>1219 -464</td> <td></td> <td></td> </tr> </tbody> </table>		Chords	Tens.Comp.	Chords	Tens. Comp.	B - K	1485 -609	I - H	1515 -608	K - J	1484 -608	H - G	1517 -610	J - I	1219 -464															
Chords	Tens.Comp.	Chords	Tens. Comp.																													
B - K	1485 -609	I - H	1515 -608																													
K - J	1484 -608	H - G	1517 -610																													
J - I	1219 -464																															

Lumber
 Top chord: 2x4 SP #2;
 Bot chord: 2x4 SP #2;
 Webs: 2x4 SP #3;

Wind
 Wind loads based on MWFRS with additional C&C member design.

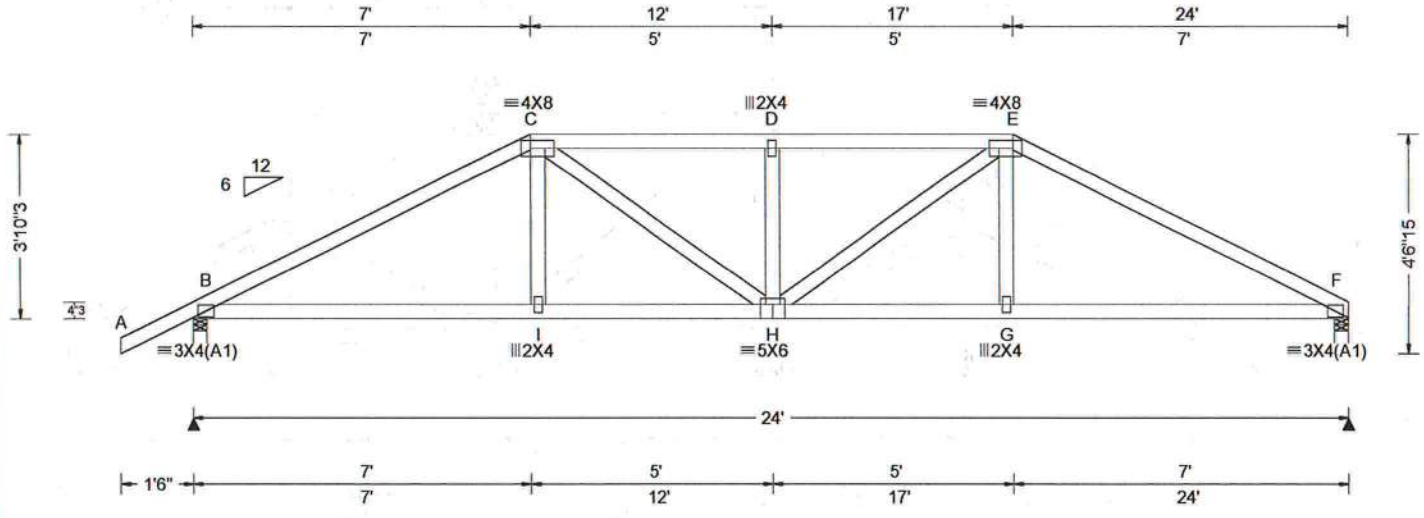
Additional Notes
 The overall height of this truss excluding overhang is 4-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
 06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
 Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org





Loading Criteria (psf) TCCL: 20.00 TCDL: 10.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.55 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.068 D 999 360 VERT(CL): 0.138 D 999 240 HORZ(LL): 0.025 G - - HORZ(TL): 0.052 G - - Creep Factor: 2.0 Max TC CSI: 0.608 Max BC CSI: 0.590 Max Web CSI: 0.115 VIEW Ver: 19.02.02B.0122.15	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL					
				B 1092 /- /- /809 /365 /112 F 985 /- /- /724 /337 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 F Brg Width = 3.5 Min Req = 1.5 Bearings B & F are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 717 -1645 D - E 783 -1643 C - D 783 -1643 E - F 722 -1660					

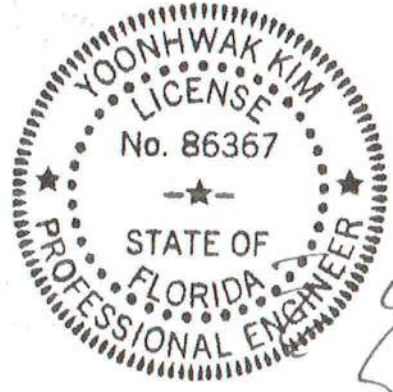
Lumber
 Top chord: 2x4 SP #2;
 Bot chord: 2x4 SP #2;
 Webs: 2x4 SP #3;

Wind
 Wind loads based on MWFRS with additional C&C member design.

Additional Notes
 The overall height of this truss excluding overhang is 3-10-3.

Maximum Bot Chord Forces Per Ply (lbs)

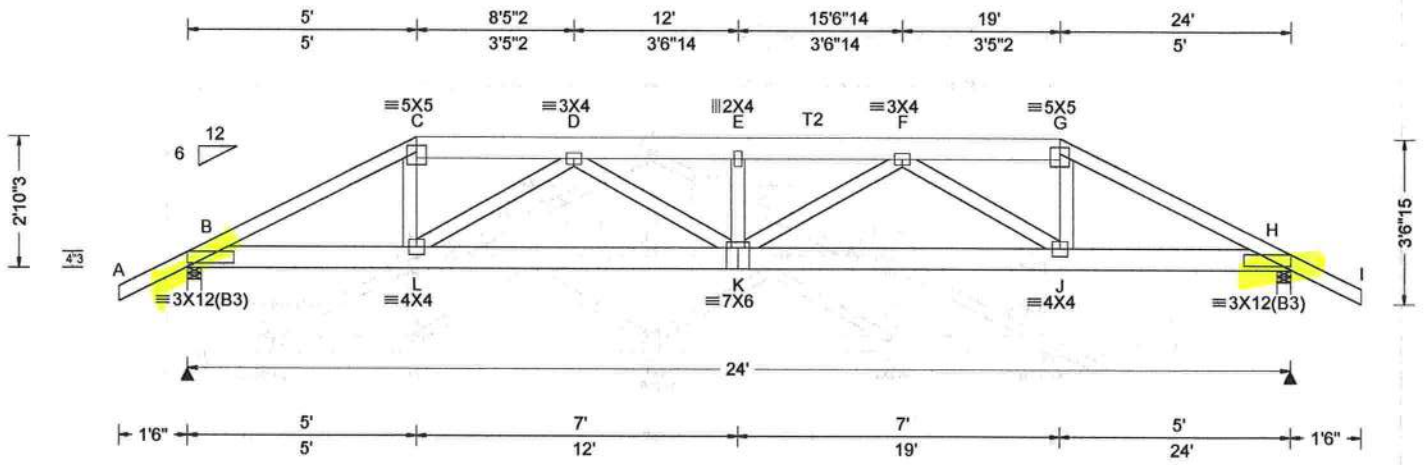
Chords	Tens.Comp.	Chords	Tens. Comp.
B - I	1390 -568	H - G	1413 -566
I - H	1396 -571	G - F	1407 -562



FL REG# 278, Yoonhwak Kim, FL PE #86367
 06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
 Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org





Loading Criteria (psf) TCCL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.55 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.138 E 999 360 VERT(CL): 0.276 E 999 240 HORZ(LL): 0.032 J - - HORZ(TL): 0.065 J - - Creep Factor: 2.0 Max TC CSI: 0.436 Max BC CSI: 0.331 Max Web CSI: 0.474 VIEW Ver: 19.02.02B.0122.15	▲ Maximum Reactions (lbs) <table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>1867</td> <td>-</td> <td>-</td> <td>-</td> <td>/691</td> <td>-</td> </tr> <tr> <td>H</td> <td>1867</td> <td>-</td> <td>-</td> <td>-</td> <td>/691</td> <td>-</td> </tr> </tbody> </table>						Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	1867	-	-	-	/691	-	H	1867	-	-	-	/691	-
				Loc	Gravity			Non-Gravity																												
R+	/R-	/Rh	/Rw		/U	/RL																														
B	1867	-	-	-	/691	-																														
H	1867	-	-	-	/691	-																														
Lumber Top chord: 2x4 SP #2; T2 2x6 SP 2400f-2.0E; Bot chord: 2x6 SP 2400f-2.0E; Webs: 2x4 SP #3;				Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 H Brg Width = 3.5 Min Req = 1.5 Bearings B & H are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>1270 -3526</td> <td>E - F</td> <td>1695 -4732</td> </tr> <tr> <td>C - D</td> <td>1108 -3111</td> <td>F - G</td> <td>1108 -3111</td> </tr> <tr> <td>D - E</td> <td>1695 -4732</td> <td>G - H</td> <td>1270 -3526</td> </tr> </tbody> </table>						Chords	Tens.Comp.	Chords	Tens. Comp.	B - C	1270 -3526	E - F	1695 -4732	C - D	1108 -3111	F - G	1108 -3111	D - E	1695 -4732	G - H	1270 -3526											
Chords	Tens.Comp.	Chords	Tens. Comp.																																	
B - C	1270 -3526	E - F	1695 -4732																																	
C - D	1108 -3111	F - G	1108 -3111																																	
D - E	1695 -4732	G - H	1270 -3526																																	

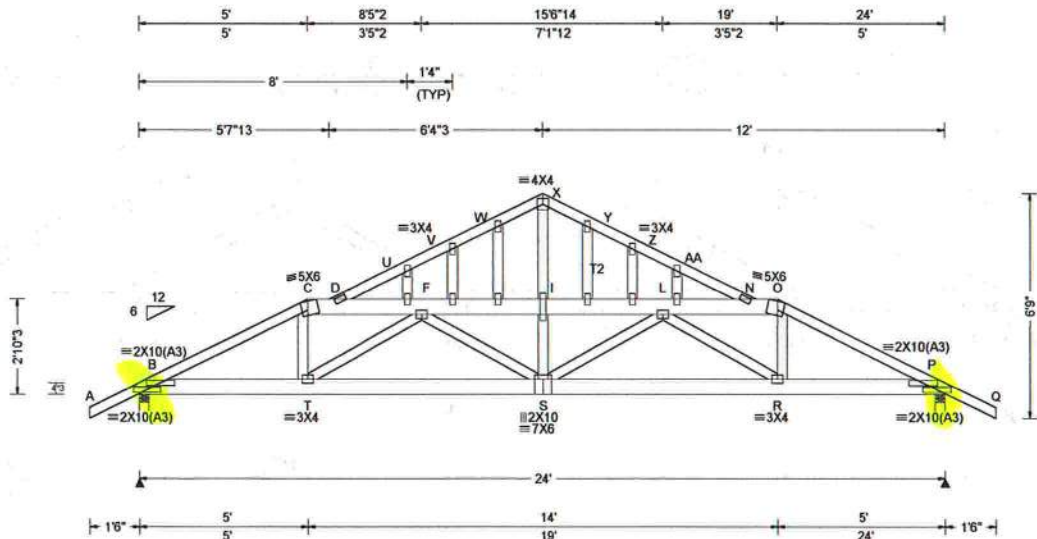
Special Loads -----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25) TC: From 62 plf at -1.50 to 62 plf at 5.00 TC: From 31 plf at 5.00 to 31 plf at 19.00 TC: From 62 plf at 19.00 to 62 plf at 25.50 BC: From 4 plf at -1.50 to 4 plf at 0.00 BC: From 20 plf at 0.00 to 20 plf at 5.03 BC: From 10 plf at 5.03 to 10 plf at 18.97 BC: From 20 plf at 18.97 to 20 plf at 24.00 BC: From 4 plf at 24.00 to 4 plf at 25.50 TC: 203 lb Conc. Load at 5.03,18.97 TC: 127 lb Conc. Load at 7.06, 9.06,11.06,12.94 14.94,16.94 BC: 214 lb Conc. Load at 5.03,18.97 BC: 89 lb Conc. Load at 7.06, 9.06,11.06,12.94 14.94,16.94				Maximum Bot Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - L</td> <td>3110 -1107</td> <td>K - J</td> <td>4159 -1512</td> </tr> <tr> <td>L - K</td> <td>4159 -1512</td> <td>J - H</td> <td>3110 -1107</td> </tr> </tbody> </table>						Chords	Tens.Comp.	Chords	Tens. Comp.	B - L	3110 -1107	K - J	4159 -1512	L - K	4159 -1512	J - H	3110 -1107				
Chords	Tens.Comp.	Chords	Tens. Comp.																						
B - L	3110 -1107	K - J	4159 -1512																						
L - K	4159 -1512	J - H	3110 -1107																						
Wind Wind loads and reactions based on MWFRS.				Maximum Web Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Webs</th> <th>Tens.Comp.</th> <th>Webs</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>C - L</td> <td>1116 -326</td> <td>K - F</td> <td>689 -220</td> </tr> <tr> <td>L - D</td> <td>493 -1278</td> <td>F - J</td> <td>493 -1278</td> </tr> <tr> <td>D - K</td> <td>689 -220</td> <td>G - J</td> <td>1116 -326</td> </tr> </tbody> </table>						Webs	Tens.Comp.	Webs	Tens. Comp.	C - L	1116 -326	K - F	689 -220	L - D	493 -1278	F - J	493 -1278	D - K	689 -220	G - J	1116 -326
Webs	Tens.Comp.	Webs	Tens. Comp.																						
C - L	1116 -326	K - F	689 -220																						
L - D	493 -1278	F - J	493 -1278																						
D - K	689 -220	G - J	1116 -326																						



FL REG# 278, Yoonhwak Kim, FL PE #86367
 06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
 Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org





Loading Criteria (psf)

TCLL: 20.00
 TCDL: 10.00
 BCLL: 0.00
 BCDL: 10.00
 Des Ld: 40.00
 NCBCLL: 10.00
 Soffit: 2.00
 Load Duration: 1.25
 Spacing: 24.0"

Wind Criteria

Wind Std: ASCE 7-10
 Speed: 130 mph
 Enclosure: Part. Enc.
 Risk Category: II
 EXP: C Kzt: NA
 Mean Height: 15.00 ft
 TCDL: 5.0 psf
 BCDL: 5.0 psf
 MWFRS Parallel Dist: 0 to h/2
 C&C Dist a: 3.00 ft
 Loc. from endwall: not in 6.06 ft
 GCpi: 0.55
 Wind Duration: 1.60

Snow Criteria (Pg, Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 2017 RES
 TPI Std: 2014
 Rep Fac: Varies by Ld Case
 FT/RT: 20(0)/10(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/def L/#
 VERT(LL): 0.147 S 999 360
 VERT(CL): 0.300 S 947 240
 HORZ(LL): 0.041 R - -
 HORZ(TL): 0.085 R - -
 Creep Factor: 2.0
 Max TC CSI: 0.697
 Max BC CSI: 0.409
 Max Web CSI: 0.374

VIEW Ver: 19.02.02B.0122.15

Maximum Reactions (lbs)

Loc	Gravity			Non-Gravity		
	R+	/R-	/Rh	/Rw	/U	/RL
B	2626	-	-	-	1704	-
P	2626	-	-	-	1704	-

Wind reactions based on MWFRS
 B Brg Width = 3.5 Min Req = 2.2
 P Brg Width = 3.5 Min Req = 2.2
 Bearings B & P are a rigid surface.
 Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - C	1286 - 4985	I - L	851 - 3431
C - D	1115 - 4369	L - N	738 - 2847
D - F	738 - 2847	N - O	1115 - 4369
F - I	851 - 3431	O - P	1286 - 4985

Lumber

Top chord: 2x4 SP #2; T2 2x6 SP 2400f-2.0E;
 Bot chord: 2x6 SP 2400f-2.0E;
 Webs: 2x4 SP #3;
 Filler: 2x4 SP #2;

Wind

Wind loads and reactions based on MWFRS.

Additional Notes

See DWGS A16015ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.
 The overall height of this truss excluding overhang is 2-10-3.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - T	4396 - 1122	S - R	5224 - 1313
T - S	5224 - 1313	R - P	4396 - 1122

Special Loads

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From 62 plf at -1.50 to 62 plf at 5.00
 TC: From 31 plf at 5.00 to 31 plf at 19.00
 TC: From 62 plf at 19.00 to 62 plf at 25.50
 BC: From 4 plf at -1.50 to 4 plf at 0.00
 BC: From 22 plf at 0.00 to 22 plf at 5.03
 BC: From 11 plf at 5.03 to 11 plf at 18.97
 BC: From 22 plf at 18.97 to 22 plf at 24.00
 BC: From 4 plf at 24.00 to 4 plf at 25.50
 TC: 203 lb Conc. Load at 5.03, 18.97
 TC: 127 lb Conc. Load at 7.06, 9.06, 11.06, 12.94, 14.94, 16.94
 BC: 214 lb Conc. Load at 5.03, 18.97
 BC: 89 lb Conc. Load at 7.06, 9.06, 11.06, 12.94, 14.94, 16.94

Plating Notes

All plates are 2X4 except as noted.

Loading

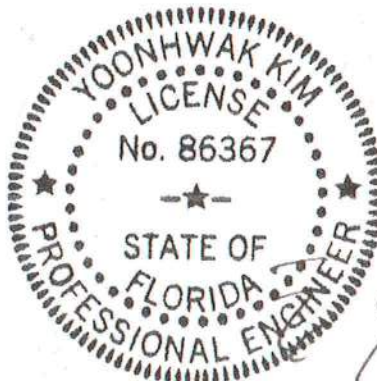
Truss designed to support 1-4-0 top chord outlookers and cladding load not to exceed 5.00 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
C - T	897 - 168	X - Y	431 - 1731
T - F	232 - 1009	Y - Z	434 - 1763
D - U	471 - 1898	Z - AA	443 - 1786
U - V	443 - 1786	L - R	232 - 1009
V - W	434 - 1763	AA - N	471 - 1898
W - X	431 - 1731	O - R	897 - 168
I - S	832 - 199		

Maximum Gable Forces Per Ply (lbs)

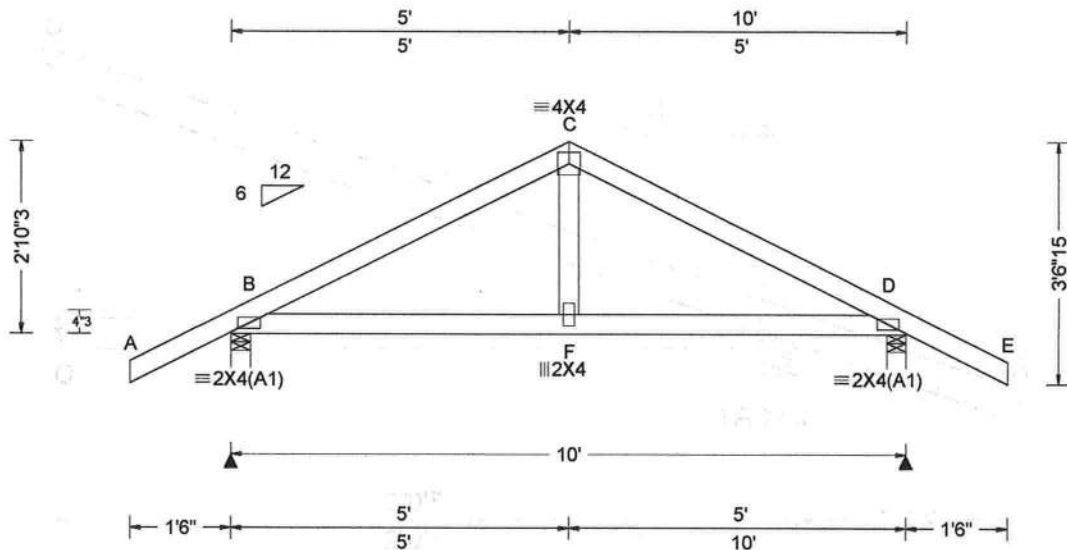
Gables	Tens.Comp.
X - I	1016 - 251



FL REG# 278, Yoonhwak Kim, FL PE #86367
 06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
 Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.55 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.007 F 999 360 VERT(CL): 0.014 F 999 240 HORZ(LL): 0.003 F - - HORZ(TL): 0.006 F - - Creep Factor: 2.0 Max TC CSI: 0.196 Max BC CSI: 0.246 Max Web CSI: 0.080 VIEW Ver: 19.02.02B.0122.15	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 512 /- /- /393 /162 /101 D 512 /- /- /393 /162 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 3.5 Min Req = 1.5 Bearings B & D are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 253 -511 C - D 254 -511

Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Wind
Wind loads based on MWFRS with additional C&C member design.

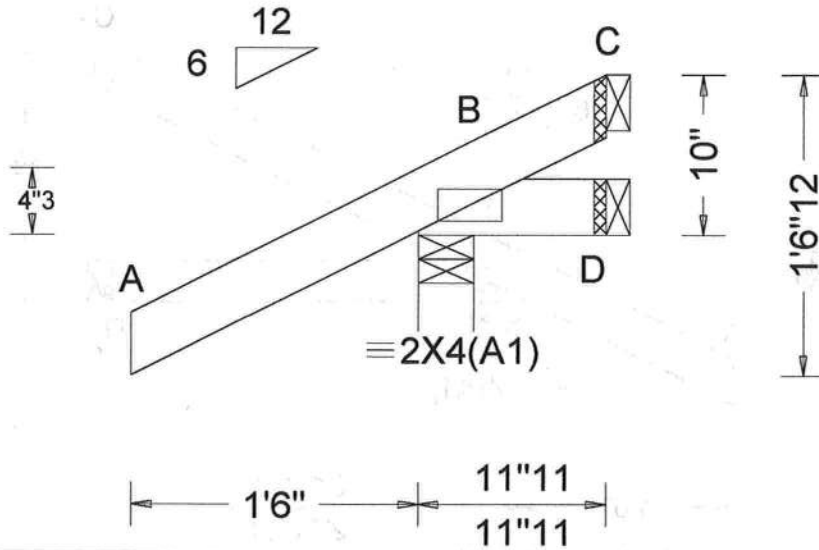
Additional Notes
The overall height of this truss excluding overhang is 2-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org





Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.55 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.000 D - - HORZ(TL): 0.001 D - - Creep Factor: 2.0 Max TC CSI: 0.289 Max BC CSI: 0.038 Max Web CSI: 0.000	▲ Maximum Reactions (lbs)																														
				<table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>256</td> <td>-</td> <td>-</td> <td>/210</td> <td>/77</td> <td>/35</td> </tr> <tr> <td>D</td> <td>3</td> <td>/-18</td> <td>-</td> <td>/22</td> <td>/23</td> <td>-</td> </tr> <tr> <td>C</td> <td>-</td> <td>/-57</td> <td>-</td> <td>/34</td> <td>/58</td> <td>-</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	256	-	-	/210	/77	/35	D	3	/-18	-	/22	/23	-	C	-	/-57
Loc	Gravity			Non-Gravity																														
	R+	/R-	/Rh	/Rw	/U	/RL																												
B	256	-	-	/210	/77	/35																												
D	3	/-18	-	/22	/23	-																												
C	-	/-57	-	/34	/58	-																												

Lumber

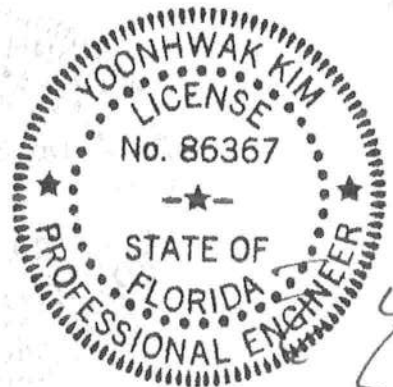
Top chord: 2x4 SP #2;
 Bot chord: 2x4 SP #2;

Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

The overall height of this truss excluding overhang is 0-10-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
 06/15/2020

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.
 Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
 For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

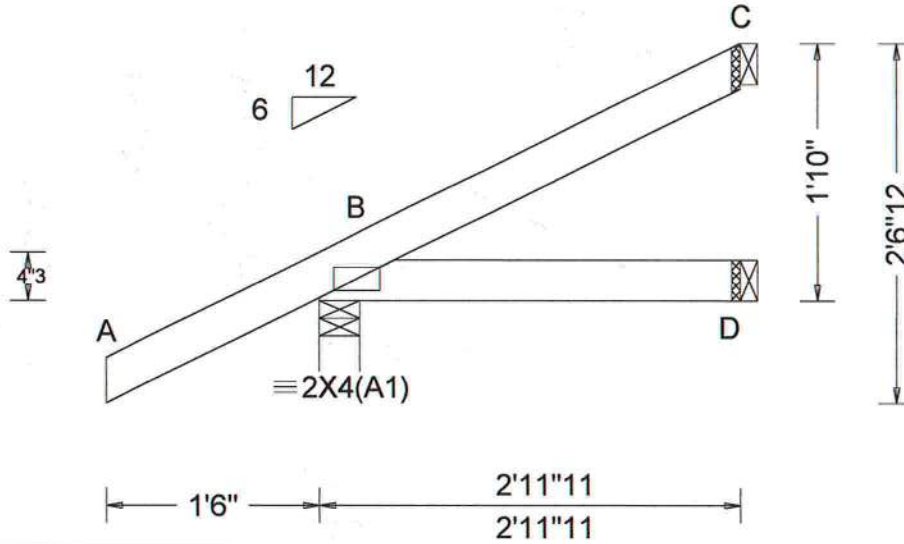


SEQN: 349061
FROM: CDM

JACK
Ply: 1
Qty: 8

Job Number: 20-4315
Cox Carport
Truss Label: J3

Cust: R 215 JRef: 1WW52150001 T8
DrwNo: 167.20.0850.51270
/ YK 06/15/2020



Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.55 Wind Duration: 1.60	Snow Criteria (Pg, Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.001 D - - HORZ(TL): 0.002 D - - Creep Factor: 2.0 Max TC CSI: 0.181 Max BC CSI: 0.073 Max Web CSI: 0.000 VIEW Ver: 19.02.02B.0122.15	▲ Maximum Reactions (lbs)					
				Gravity		Non-Gravity			
		Loc	R+	/R-	/Rh	/Rw	/U	/RL	
		B	261	-	-	/211	/64	/63	
		D	49	-	-	/56	/19	-	
		C	61	-	-	/28	/27	-	
Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#									

Lumber

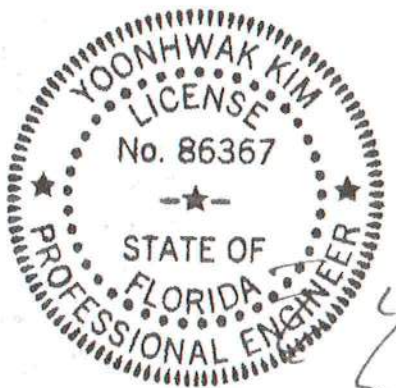
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;

Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

The overall height of this truss excluding overhang is 1'-10-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
06/15/2020

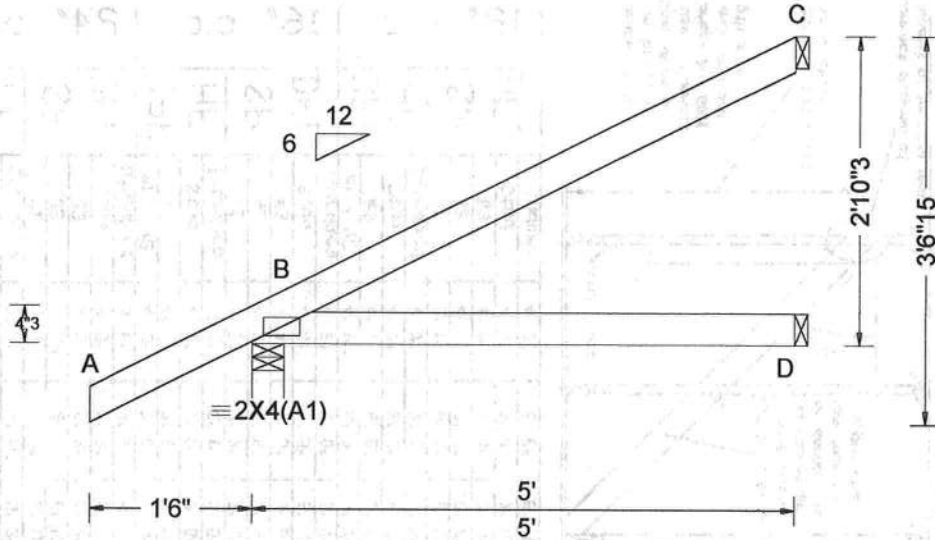
****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc, shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)																																		
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Std: ASCE 7-10 Speed: 130 mph Enclosure: Part. Enc. Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.55 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.004 D - - HORZ(TL): 0.008 D - - Creep Factor: 2.0 Max TC CSI: 0.310 Max BC CSI: 0.247 Max Web CSI: 0.000 VIEW Ver: 19.02.02B.0122.15	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>331</td> <td>/-</td> <td>/-</td> <td>/268</td> <td>/81</td> <td>/92</td> </tr> <tr> <td>D</td> <td>89</td> <td>/-</td> <td>/-</td> <td>/93</td> <td>/28</td> <td>/-</td> </tr> <tr> <td>C</td> <td>127</td> <td>/-</td> <td>/-</td> <td>/67</td> <td>/53</td> <td>/-</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#</p>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	331	/-	/-	/268	/81	/92	D	89	/-	/-	/93	/28	/-	C	127	/-	/-	/67	/53	/-
Loc	Gravity			Non-Gravity																																		
	R+	/R-	/Rh	/Rw	/U	/RL																																
B	331	/-	/-	/268	/81	/92																																
D	89	/-	/-	/93	/28	/-																																
C	127	/-	/-	/67	/53	/-																																

Lumber

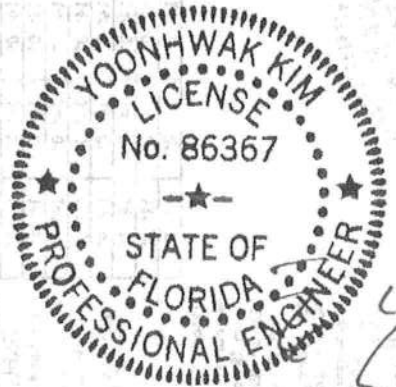
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;

Wind

Wind loads based on MWFRS with additional C&C member design.

Additional Notes

The overall height of this truss excluding overhang is 2-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
06/15/2020

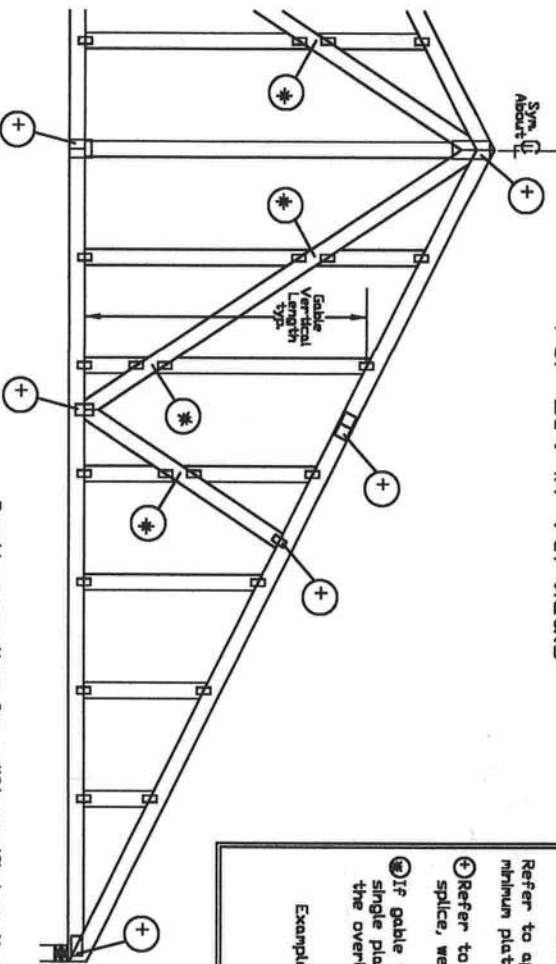
****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!**
****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS**

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Gable Detail For Let-In Verticals

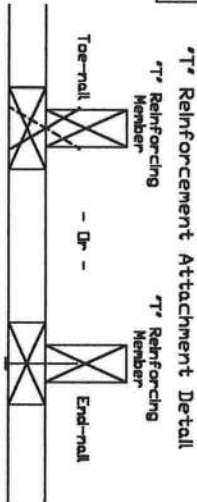


Gable Truss Plate Sizes

Refer to appropriate Alpine gable detail for minimum plate sizes for vertical studs.

- ⊕ Refer to Engineered truss design for peak, splice, web, and heel plates.
- ⊗ If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web.

Example:



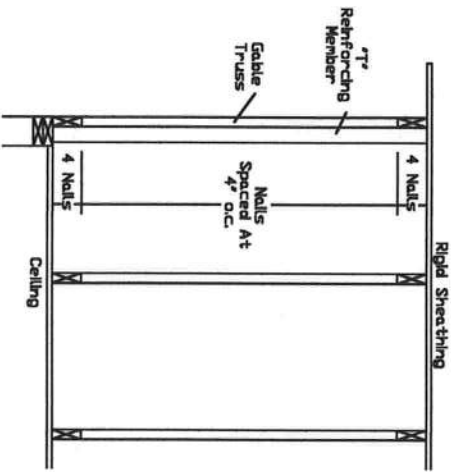
Provide connections for uplift specified on the engineered truss design.

Attach each 'T' reinforcing member with

End Driven Nails:
10d Common (0.148" x 3.1" min) Nails at 4' o.c. plus
(4) nails in the top and bottom chords.

Toenailed Nails:
10d Common (0.148" x 3.1" min) Toenails at 4' o.c. plus
(4) toenails in the top and bottom chords.

This detail to be used with the appropriate Alpine gable detail for ASCE wind load.



ASCE 7-05 Gable Detail Drawings
A13015051014, A12015051014, A11015051014, A10015051014, A14015051014,
A13030051014, A12030051014, A11030051014, A10030051014, A14030051014

ASCE 7-10 & ASCE 7-16 Gable Detail Drawings
A1151505100118, A1201505100118, A1401505100118, A1001505100118,
A1801505100118, A2001505100118, A2001505100118, A2001505100118,
A1153005100118, A1203005100118, A1403005100118, A1003005100118,
A1803005100118, A2003005100118, A2003005100118, A2003005100118,
S1151505100118, S1201505100118, S1401505100118, S1601505100118,
S1801505100118, S2001505100118, S2001505100118, S2001505100118,
S1153005100118, S1203005100118, S1403005100118, S1603005100118,
S1803005100118, S2003005100118, S2003005100118

See appropriate Alpine gable detail for maximum unreinforced gable vertical length

Web Length Increase w/ 'T' Brace

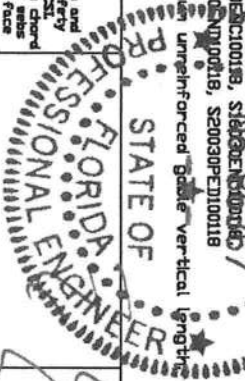
To convert from 'L' to 'T' reinforced gable members, multiply 'T' increase by length based on appropriate Alpine gable detail.

Maximum allowable 'T' reinforced gable vertical length is 14' from top to bottom chord.

'T' reinforcing member material must match size, specie, and grade of the 'L' reinforcing member.

'T' Reinf. Mbr. Size	'T' Increase
2x4	30 %
2x6	20 %

Example:
ASCE 7-10 Wind Speed = 120 mph
Mean Roof Height = 30 ft, Kzt = 1.00
Gable Vertical = 24' o.c. Sp #3
'T' Reinforcing Member Size = 2x4
'T' Brace Increase (from Above) = 30% = 1.30
(1) 2x4 'L' Brace Length = 8' 7"
Maximum 'T' Reinforced Gable Vertical Length = 130 x 8' 7" = 11' 2"



13723 Riverport Drive
Suite 200
Maryland Heights, MO 63043

WARNING: READ AND FOLLOW ALL NOTES ON THIS DRAWING

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of ICC Building Component Safety Information by TPI and SCSA for safety practices prior to performing these functions. Installers shall provide temporary bracing per ICC Building Component Safety Information. Temporary bracing shall be installed and braced prior to the installation of the truss. The contractor shall have bracing installed per ICC sections 16.01, 16.02, 16.03, 16.04, 16.05, 16.06, 16.07, 16.08, 16.09, 16.10, 16.11, 16.12, 16.13, 16.14, 16.15, 16.16, 16.17, 16.18, 16.19, 16.20, 16.21, 16.22, 16.23, 16.24, 16.25, 16.26, 16.27, 16.28, 16.29, 16.30, as applicable. Apply plates to each face of truss and position as shown above and on the Job's Details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positions.

Alpine, a division of TPI Building Components Group Inc. shall not be responsible for any deviation from this drawing, or failure to build the truss in accordance with ANSI/TPI 1, or for handling, shipping, installation, or bracing of trusses. The contractor shall be responsible for obtaining all necessary permits and approvals from the local authority. The contractor shall be responsible for obtaining all necessary permits and approvals from the local authority. The contractor shall be responsible for obtaining all necessary permits and approvals from the local authority.

For more information see the job's general notes page and there web site: www.alpine.com

Yoonhwak Kim, P.E. #86367

MAX. TOT. LD.	60 PSF
DUR. FAC.	ANY
MAX. SPACING	24.0'
REF	LET-IN VERT
DATE	01/02/2018
DRWG	GILLETIN0118

