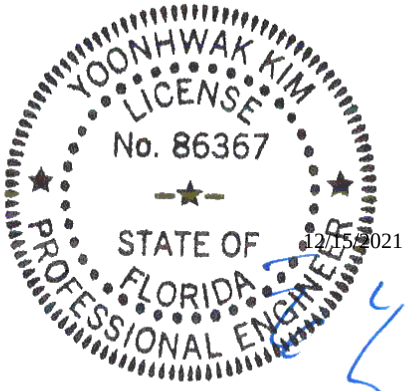


12/15/2021

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.

ALPINE AN ITW COMPANY

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

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	*Job Number:* 21-6560
Job Description: ARLENA 7/12 // Sunset	
Address: FL	

Job Engineering Criteria:	
Design Code: FBC 7th Ed. 2020 Res.	*IntelliVIEW Version:* 21.01.01A *JRef #:* 1Xbc2150008
Wind Standard: ASCE 7-16 *Wind Speed (mph):* 130 *Building Type:* Closed	*Design Loading (psf):* 40.00

This package contains general notes pages, 41 truss drawing(s) and 6 detail(s).

Item	Drawing Number	Truss	Item	Drawing Number	Truss
1	349.21.0813.22087	A01	2	349.21.0813.25463	A02
3	349.21.0813.27377	A03	4	349.21.0813.31033	B01
5	349.21.0813.32767	B02	6	349.21.0813.34633	B03
7	349.21.0813.37323	C01	8	349.21.0813.39703	C02
9	349.21.0813.53627	C03	10	349.21.0814.00097	D01
11	349.21.0814.02467	D02	12	349.21.0814.04617	D03
13	349.21.0814.08847	D04	14	349.21.0814.13370	D05
15	349.21.0814.15653	D06	16	349.21.0814.18270	D07
17	349.21.0814.20703	D08	18	349.21.0814.23263	D09
19	349.21.0814.25727	D10	20	349.21.0814.27980	D11
21	349.21.0814.30417	D12	22	349.21.0814.32917	D13
23	349.21.0814.39077	D14	24	349.21.0814.41253	D15
25	349.21.0814.44130	D16	26	349.21.0814.48770	D17
27	349.21.0814.59030	D18	28	349.21.0815.01573	D19
29	349.21.0815.04197	G01	30	349.21.0815.12163	G02
31	349.21.0815.14483	J01	32	349.21.0815.17980	J02
33	349.21.0815.19483	J03	34	349.21.0815.21020	J04
35	349.21.0815.22410	J05	36	349.21.0815.24617	J06
37	349.21.0815.26777	J07	38	349.21.0815.28820	J08
39	349.21.0815.30633	J09	40	349.21.0815.32393	J10
41	349.21.0815.36497	J11	42	A14015ENC160118	
43	GBLLETIN0118		44	S14015ENC160118	
45	BRCLBSUB0119		46	DEFLCAMB1014	
47	CNNAILSP1014				

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.

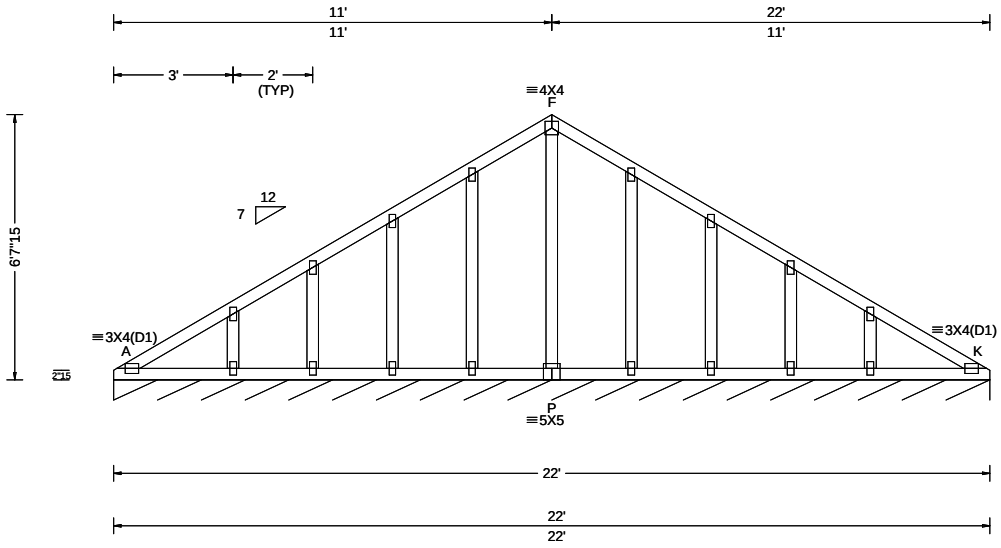
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
CL = Certified lumber.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
FRT = Fire Retardant Treated lumber.
FRT-DB = D-Blaze 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 Catoctin 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.: 514 Earth City Expressway, Suite 242, Earth City, MO 63045; 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. sbcacomponents.com.

SEQN: 409465 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** A01	Cust: R 215 JRef:1Xbc2150008 T16 DrwNo: 349.21.0813.22087 / YK 12/15/2021



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 K 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.003 K 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.001 K - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.002 E - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.031
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.026
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.040
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: Any	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
K*	83	/-	/-	/44	/13	/7

Wind reactions based on MWFRS
K Brg Wid = 264 Min Req = -
Bearing A is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Plating Notes

All plates are 2X4 except as noted.

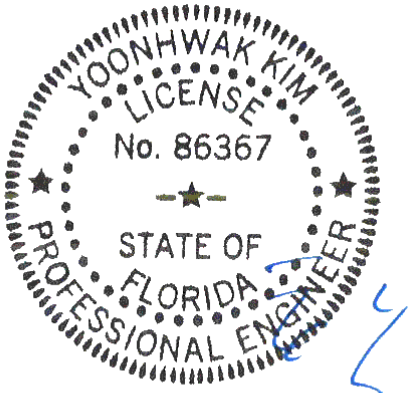
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

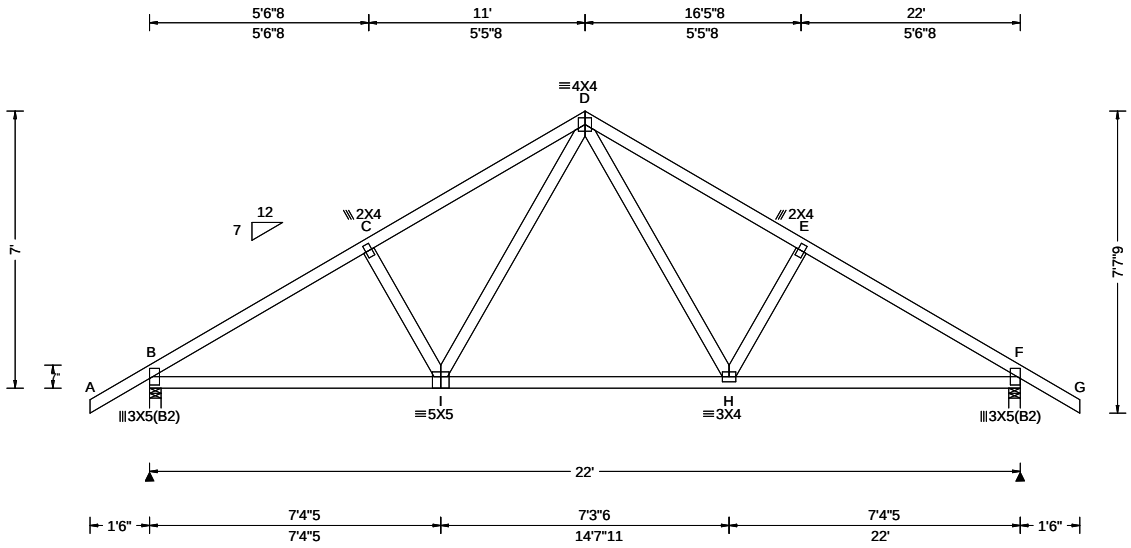
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409466 COMN FROM: CDM	Ply: 1 Qty: 9	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** A02	Cust: R 215 JRef:1Xbc2150008 T29 DrwNo: 349.21.0813.25463 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.047	H	999	240
VERT(CL): 0.090	H	999	180
HORZ(LL): 0.024	F	-	-
HORZ(TL): 0.047	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.207
Max BC CSI: 0.251
Max Web CSI: 0.094

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1075	/-	/-	/610	/175	/210
F	1075	/-	/-	/610	/175	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
F Brg Wid = 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	450	-1473	D - E	488	-1309
C - D	489	-1308	E - F	449	-1475

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - I	1185	-247	H - F	1186	-259
I - H	822	-62			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - D	492	-160	D - H	494	-159

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

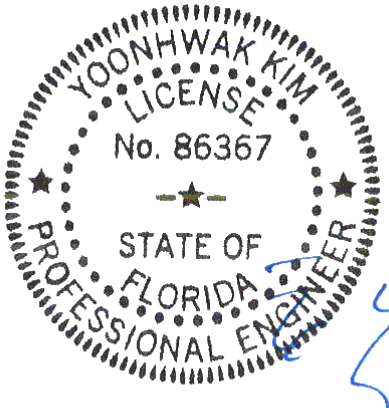
Loading

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.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

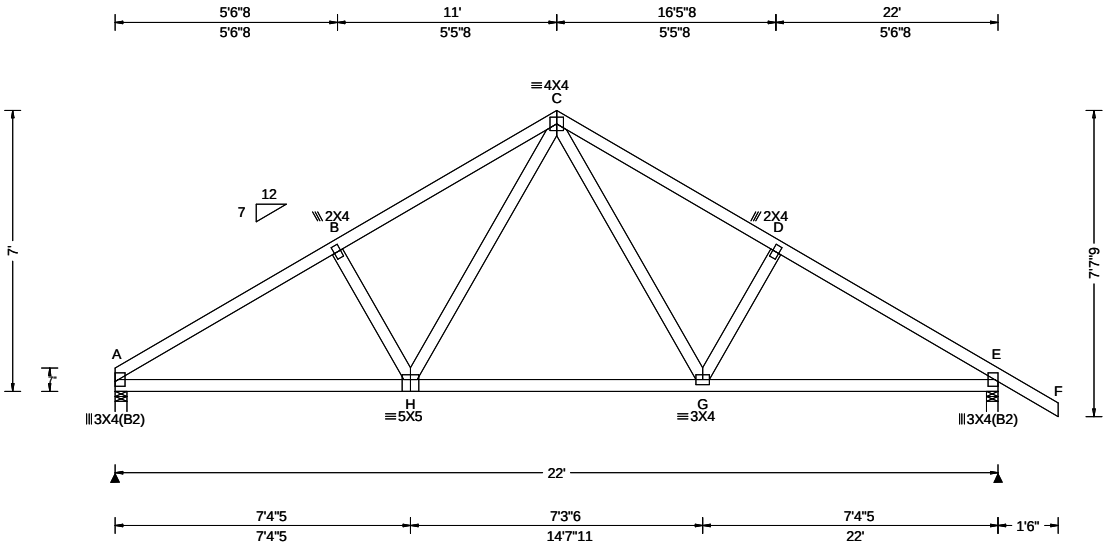
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409467 COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** A03	Cust: R 215 JRef:1Xbc2150008 T31 DrwNo: 349.21.0813.27377 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
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 7th Ed. 2020 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): 0.038	G	999	240
VERT(CL): 0.077	G	999	180
HORZ(LL): 0.019	E	-	-
HORZ(TL): 0.039	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.187
Max BC CSI: 0.210
Max Web CSI: 0.059

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	911	/-	/-	/524	/10	/193
E	1020	/-	/-	/610	/17	/-

Wind reactions based on MWFRS
A Brg Wid = 3.5 Min Req = 1.5
E Brg Wid = 3.5 Min Req = 1.5
Bearings A & E 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.
A - B	281	- 1371	C - D	312	- 1194
B - C	318	- 1206	D - E	275	- 1359

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - H	1105	- 142	G - E	1090	- 135
H - G	754	- 4			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
H - C	444	- 100	C - G	428	- 90

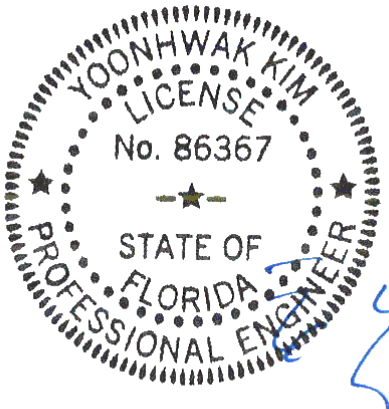
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

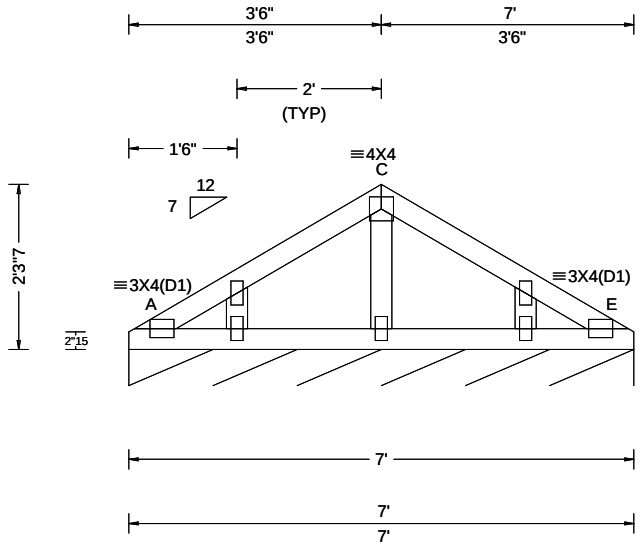
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409468 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** B01	Cust: R 215 JRef:1Xbc2150008 T20 DrwNo: 349.21.0813.31033 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.000	C	999	240
VERT(CL): 0.000	E	999	180
HORZ(LL): -0.000	B	-	-
HORZ(TL): 0.000	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.027
Max BC CSI: 0.011
Max Web CSI: 0.014

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
E*	82	/-	/-	/44	/12	/7

Wind reactions based on MWFRS
E Brg Wid = 84.0 Min Req = -
Bearing A is a rigid surface.
Members not listed have forces less than 375#

Lumber
Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Plating Notes
All plates are 2X4 except as noted.

Wind
Wind loads based on MWFRS with additional C&C member design.
Wind loading based on both gable and hip roof types.

Additional Notes
See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

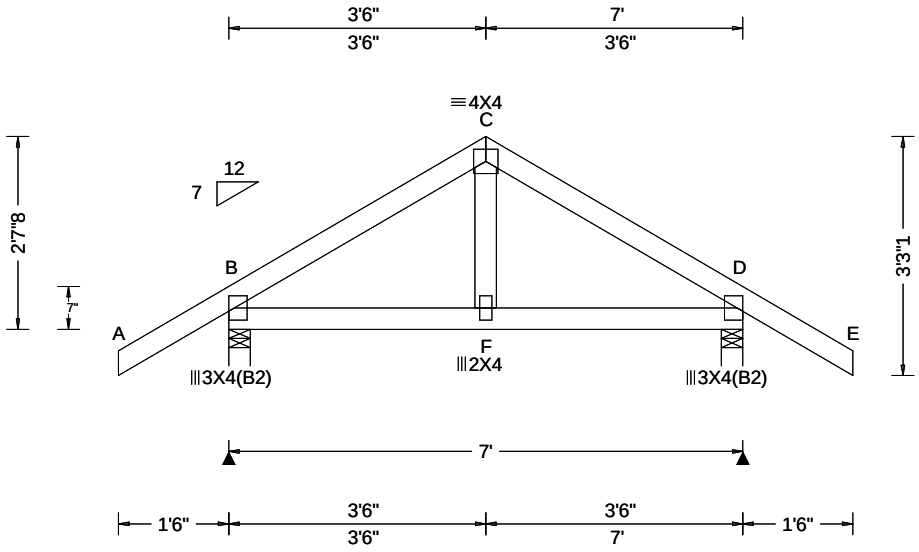
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409469 COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** B02	Cust: R 215 JRef:1Xbc2150008 T54 DrwNo: 349.21.0813.32767 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.004	F	999	240
VERT(CL): 0.007	F	999	180
HORZ(LL): 0.002	D	-	-
HORZ(TL): 0.004	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.087
Max BC CSI: 0.043
Max Web CSI: 0.013

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	393	/-	/-	/258	/72	/97
D	393	/-	/-	/258	/72	/-

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

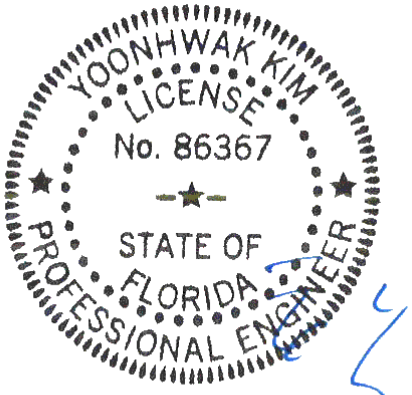
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

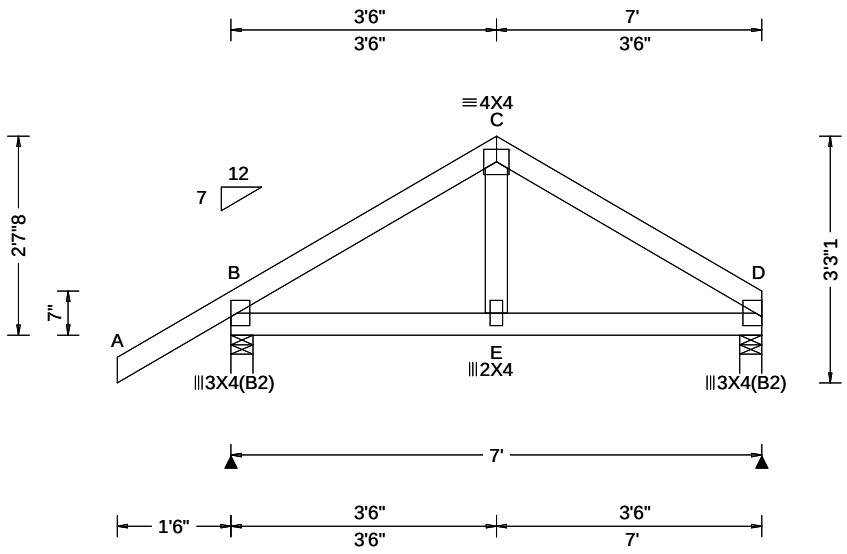
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409470 COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** B03	Cust: R 215 JRef:1Xbc2150008 T1 DrwNo: 349.21.0813.34633 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.003	E	999	240
VERT(CL): 0.006	E	999	180
HORZ(LL): 0.001	D	-	-
HORZ(TL): 0.003	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.077
Max BC CSI: 0.048
Max Web CSI: 0.013

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	404	/-	/-	/258	/75	/80
D	279	/-	/-	/165	/42	/-

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

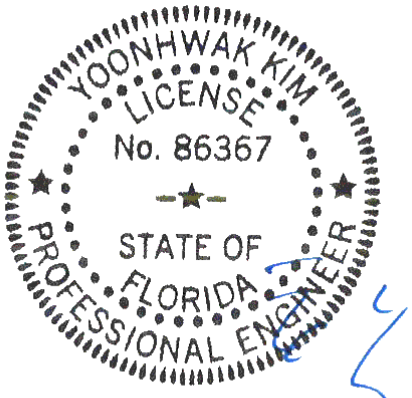
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

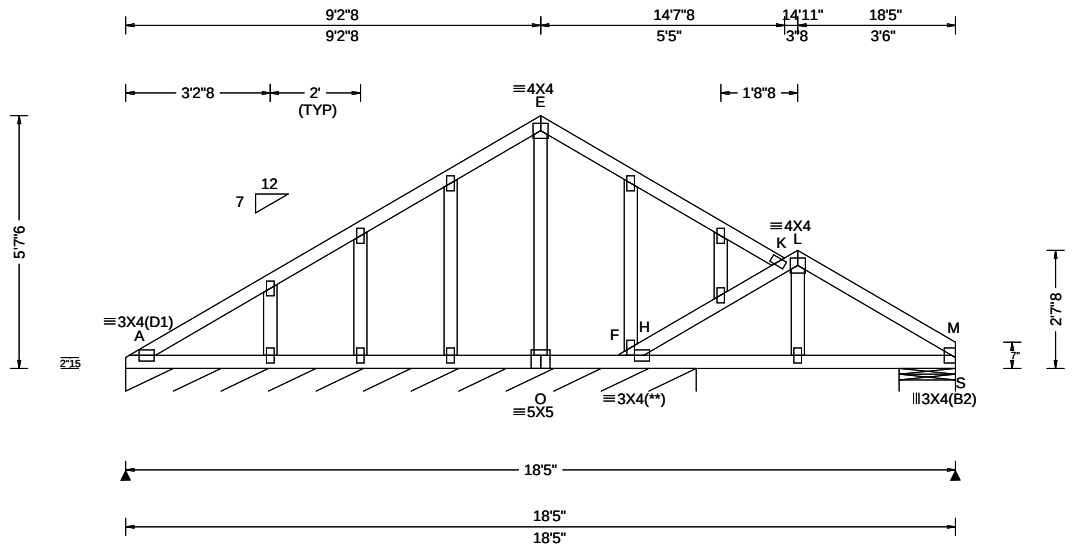
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409471 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** C01	Cust: R 215 JRef:1Xbc2150008 T3 DrwNo: 349.21.0813.37323 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.003	I	999	240
VERT(CL): 0.007	I	999	180
HORZ(LL): 0.002	J	-	-
HORZ(TL): 0.003	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.047
Max BC CSI: 0.029
Max Web CSI: 0.042

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs), or *=PLF

Loc	Gravity R+	Gravity / R-	Gravity / Rh	Non-Gravity / Rw	Non-Gravity / U	Non-Gravity / RL
A*	99	/-	/-	/54	/16	/11
S	267	/-	/-	/162	/37	/-

Wind reactions based on MWFRS
A Brg Wid = 151 Min Req = -
S Brg Wid = 15.0 Min Req = 1.5
Bearings A & S are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
F - K	337	-383

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Plating Notes

All plates are 2X4 except as noted.

(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Loading

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

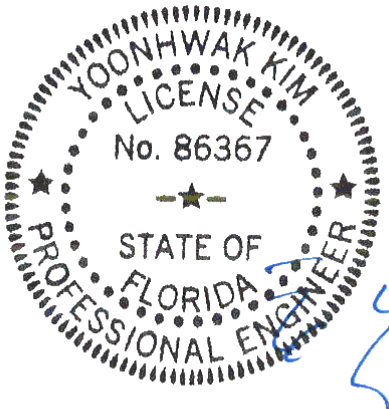
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS S14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

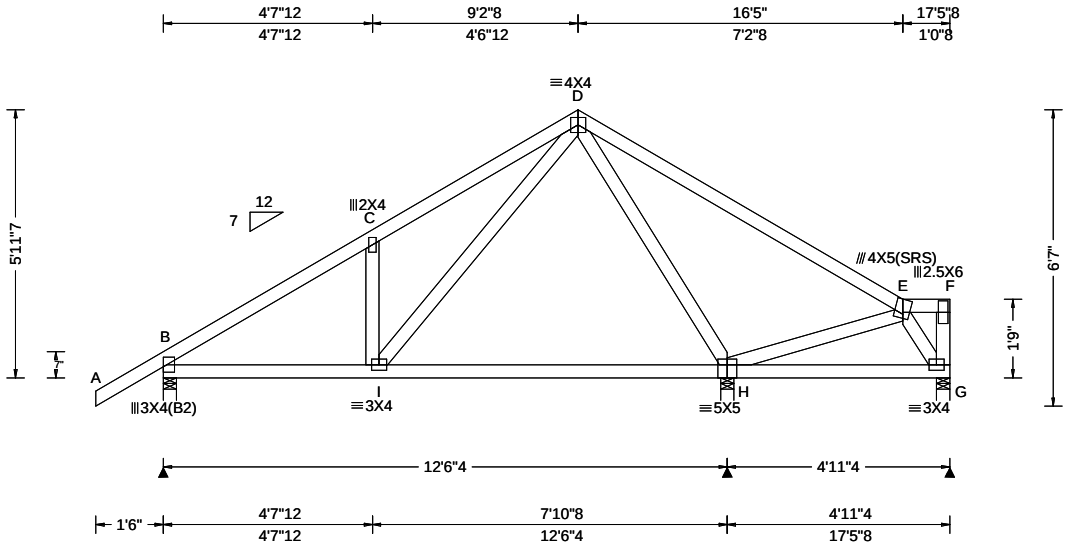
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409472 COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** C02	Cust: R 215 JRef:1Xbc2150008 T2 DrwNo: 349.21.0813.39703 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.012	C	999	240
VERT(CL): 0.025	C	999	180
HORZ(LL): 0.004	C	-	-
HORZ(TL): 0.007	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.290
Max BC CSI: 0.148
Max Web CSI: 0.303

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	575	/-	/-	/360	/104	/155
H	912	/-	/-	/521	/140	/-
G	123	/-35	/-	/51	/40	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
H Brg Wid = 3.5 Min Req = 1.5
G Brg Wid = 3.5 Min Req = 1.5
Bearings B, H, & 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	110	-613	C - D	221	-598

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - I	464	-82

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - D	523	-147	H - E	273	-462
D - H	173	-696			

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Purlins

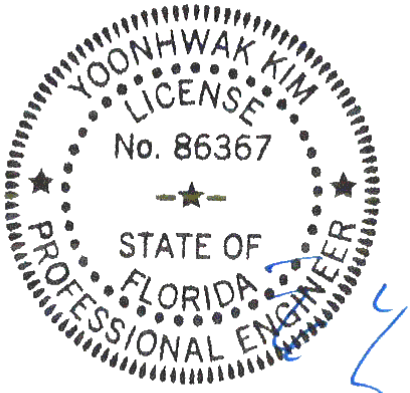
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

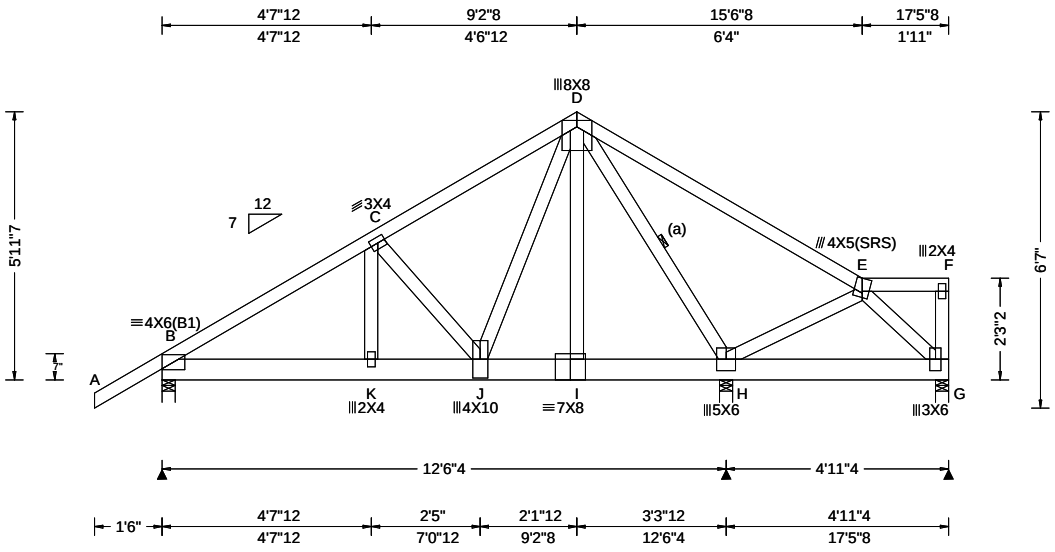
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409505 COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** C03	Cust: R 215 JRef:1Xbc2150008 T4 DrwNo: 349.21.0813.53627 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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/defl	L/#
VERT(LL): 0.042	J	999	240
VERT(CL): 0.085	J	999	180
HORZ(LL): 0.010	C	-	-
HORZ(TL): 0.021	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.260
Max BC CSI: 0.330
Max Web CSI: 0.431

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1934	/-	/-	/-	/350	/-
H	4092	/-	/-	/-	/712	/-
G	98	/-203	/-	/13	/-	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.6
H Brg Wid = 3.5 Min Req = 3.0
G Brg Wid = 3.5 Min Req = 1.5
Bearings B, H, & 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	510	- 2913	D - E	473	- 102
C - D	498	- 2837			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - K	2434	- 414	J - I	1455	- 260
K - J	2438	- 416	I - H	1455	- 260

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
J - D	2602	- 407	D - H	642	- 3534
D - I	1596	- 297	H - E	125	- 387

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Special Loads

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

TC: From	63 plf at	-1.50 to	63 plf at	7.06
TC: From	32 plf at	7.06 to	32 plf at	11.06
TC: From	63 plf at	11.06 to	63 plf at	17.46
BC: From	5 plf at	-1.50 to	5 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	7.06
BC: From	10 plf at	7.06 to	10 plf at	11.06
BC: From	20 plf at	11.06 to	20 plf at	17.46

BC: 2346 lb Conc. Load at 7.06
BC: 1090 lb Conc. Load at 9.06
BC: 1093 lb Conc. Load at 11.06

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

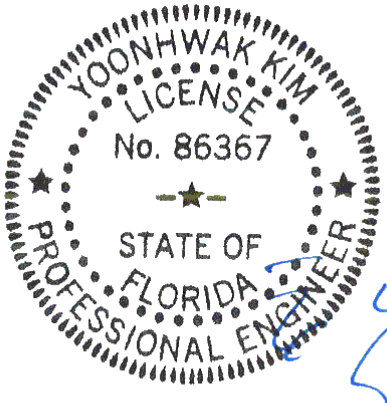
Wind loads and reactions based on MWFRS.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

Negative reaction(s) of -203# MAX. from a non-wind load case requires uplift connection. See Maximum Reactions.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

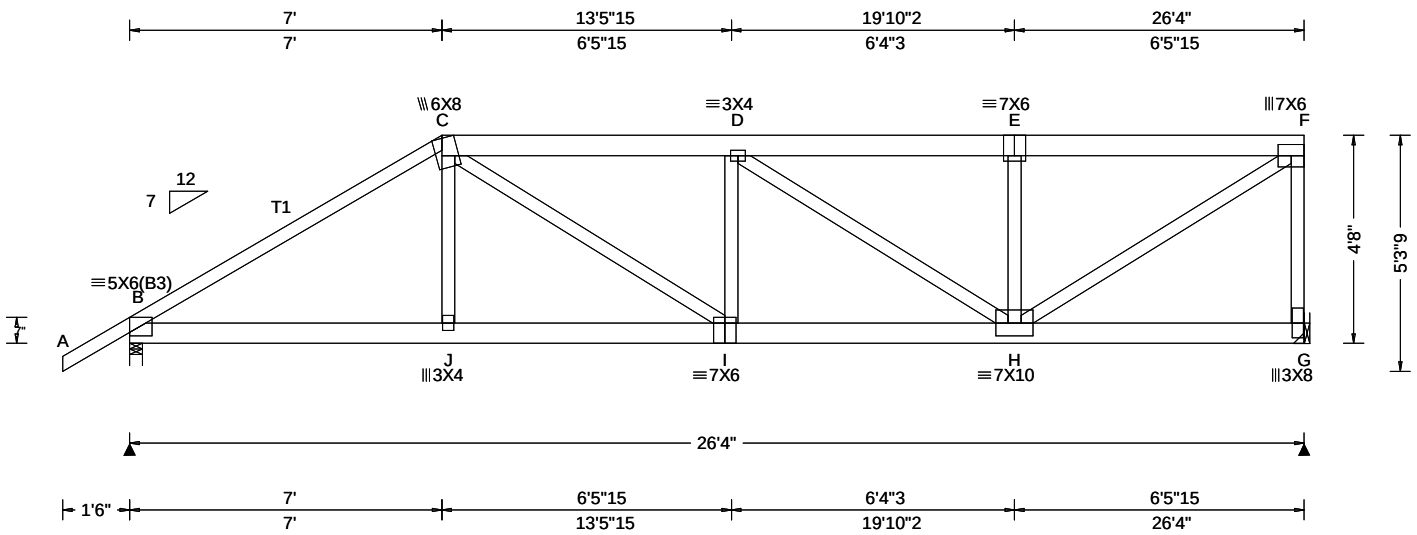
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409502 HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D01		Cust: R 215 JRef:1Xbc2150008 T25 DrwNo: 349.21.0814.00097 / YK 12/15/2021	



Loading Criteria (psf)

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

Wind Criteria

Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 11.28 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: NA
GCpi: 0.18
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 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.094	D	999	240
VERT(CL): 0.197	D	999	180
HORZ(LL): 0.024	H	-	-
HORZ(TL): 0.050	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.357
Max BC CSI: 0.399
Max Web CSI: 0.646

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	2236	/-	/-	/-	/381	/-
G	2346	/-	/-	/-	/375	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.9
G Brg Wid = -
Bearing B is 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	585	- 3543	D - E	456	- 2875
C - D	608	- 3821	E - F	456	- 2875

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	2964	- 471	I - H	3836	- 623
J - I	2984	- 470			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - J	589	0	E - H	347	- 912
C - I	1004	- 165	H - F	3426	- 544
D - H	201	- 1161	F - G	429	- 2222

Lumber

Top chord: 2x6 SP 2400f-2.0E; T1 2x4 SP M-31;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP M-31;

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=26'1" uses the following support conditions: 26'1"
Bearing G (26'1", 9'1"2) HUS26
Supporting Member: (1)2x6 SP 2400f-2.0E
(14) 0.148"x3" nails into supporting member,
(6) 0.148"x3" nails into supported member.

Loading

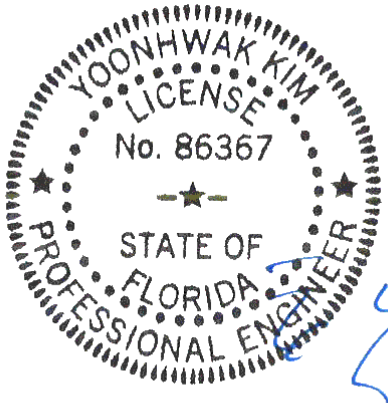
#1 hip supports 7-0-0 jacks with no webs.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads and reactions based on MWFRS.
Right end vertical not exposed to wind pressure.
Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

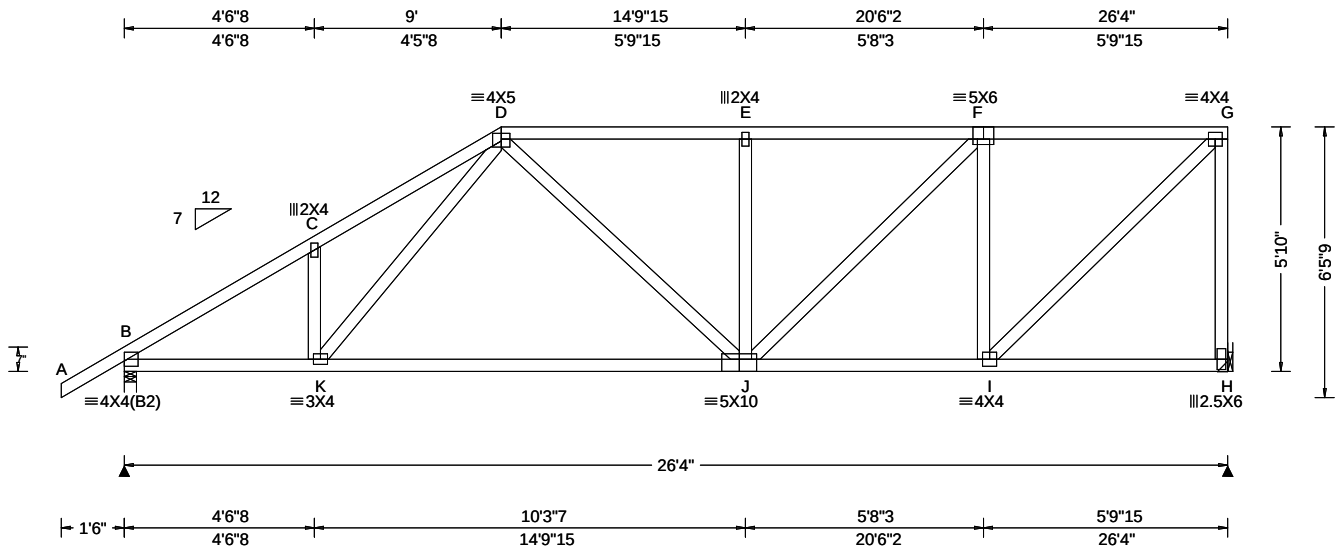
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409473 HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D02		Cust: R 215 JRef:1Xbc2150008 T30 DrwNo: 349.21.0814.02467 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.049	E	999	240
VERT(CL): 0.100	E	999	180
HORZ(LL): 0.017	I	-	-
HORZ(TL): 0.035	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.234
Max BC CSI: 0.341
Max Web CSI: 0.437

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

		Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh		/ Rw	/ U	/ RL
B	1201	/-	/-		/733	/196	/210
H	1090	/-	/-		/568	/219	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
H Brg Wid = -
Bearing B is 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	601	-1738	E - F	720	-1326
C - D	679	-1678	F - G	508	-909
D - E	721	-1326			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - K	1412	-641	J - I	950	-537
K - J	1160	-629			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
K - D	433	-67	I - G	1270	-710
J - F	531	-264	G - H	648	-1040
F - I	553	-784			

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=26'1" uses the following support conditions: 26'1"
Bearing H (26'1", 9'1"2) HUS26
Supporting Member: (1)2x6 SP 2400f-2.0E
(14) 0.148"x3" nails into supporting member,
(4) 0.148"x3" nails into supported member.

Purlins

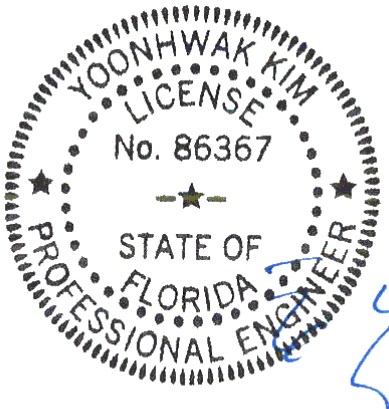
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

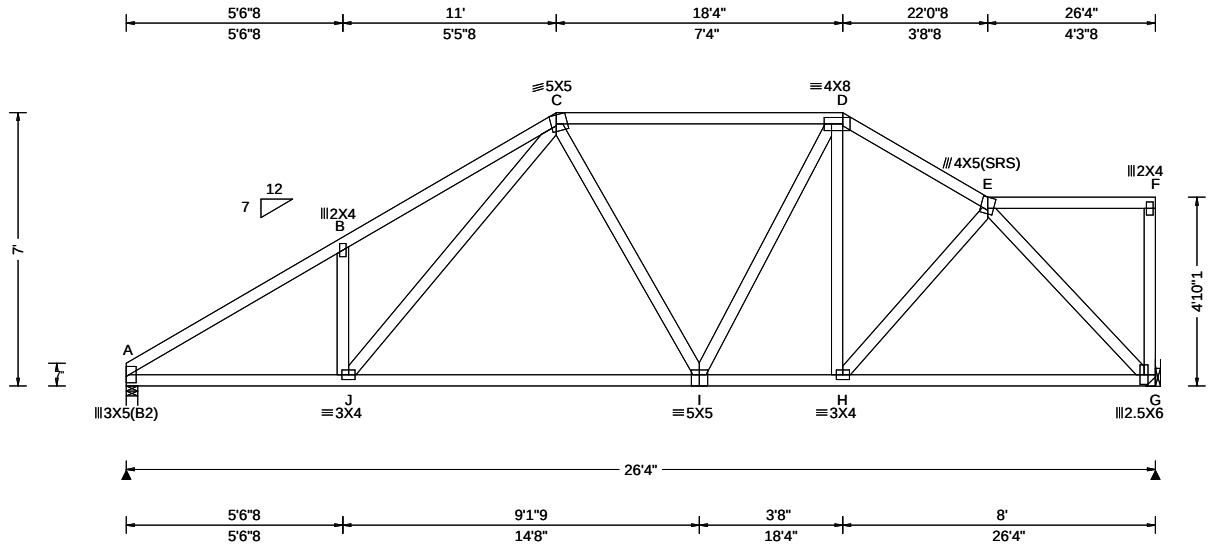
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409474 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D03	Cust: R 215 JRef:1Xbc2150008 T34 DrwNo: 349.21.0814.04617 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.044	B	999	240
VERT(CL): 0.092	B	999	180
HORZ(LL): 0.019	G	-	-
HORZ(TL): 0.039	G	-	-

Creep Factor: 2.0
Max TC CSI: 0.231
Max BC CSI: 0.275
Max Web CSI: 0.473

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	1097	/-	/-	/649	/172	/165
G	1093	/-	/-	/563	/206	/-

Wind reactions based on MWFRS
A Brg Wid = 3.5 Min Req = 1.5
G Brg Wid = -
Bearing A is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	522	- 1729	C - D	498	- 1044
B - C	632	- 1684	D - E	505	- 1142

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - J	1406	- 534	I - H	951	- 405
J - I	1063	- 464	H - G	855	- 397

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
J - C	524	- 135	E - G	578	- 1244

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=26'1" uses the following support conditions: 26'1"
Bearing G (26'1", 9'1"2) HUS26
Supporting Member: (1)2x6 SP 2400f-2.0E
(14) 0.148"x3" nails into supporting member,
(4) 0.148"x3" nails into supported member.

Purlins

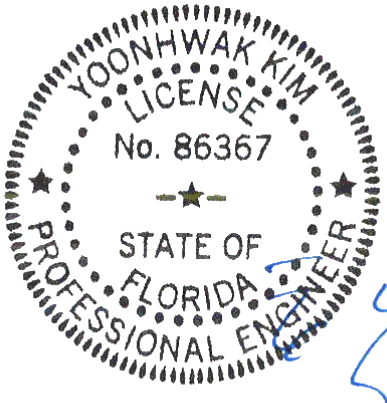
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

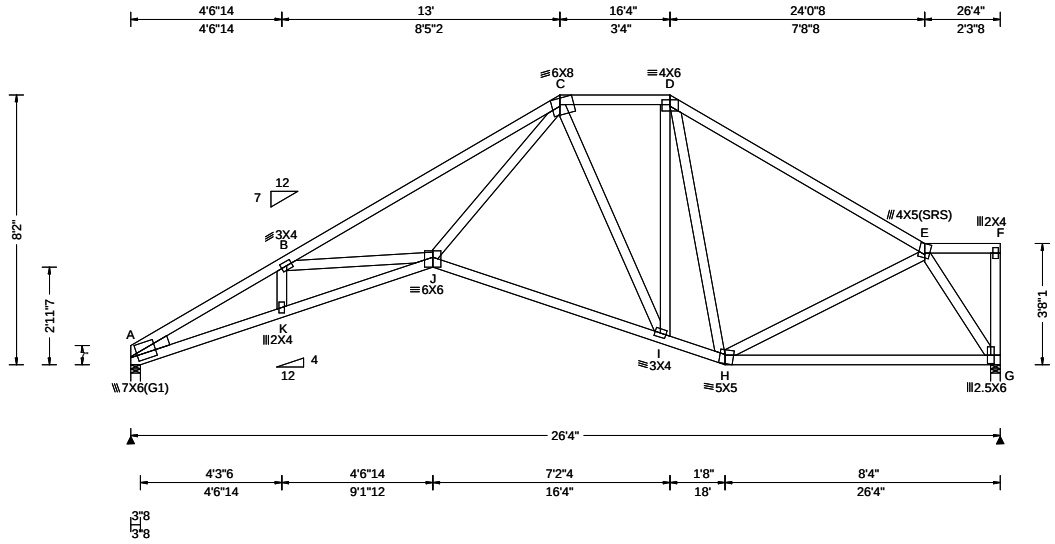
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409475 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D04		Cust: R 215 JRef:1Xbc2150008 T38 DrwNo: 349.21.0814.08847 / YK 12/15/2021	



Loading Criteria (psf)		**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL:	20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL:	10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.135 J 999 240
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.283 J 999 180
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.092 G - -
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL): 0.192 G - -
NCBCLL:	10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit:	2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.540
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.430
Spacing:	24.0 "	MWFRS Parallel Dist: h/2 to h	Rep Fac: Yes	Max Web CSI: 0.338
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
		Loc. from endwall: not in 9.00 ft	Plate Type(s):	VIEW Ver: 21.01.01A.0521.20
		GCpi: 0.18	WAVE	
		Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	1108	/-	/-	/651	/171	/195
G	1102	/-	/-	/577	/191	/-

Wind reactions based on MWFRS
A Brg Wid = 3.5 Min Req = 1.5
G Brg Wid = 3.5 Min Req = 1.5
Bearings A & 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.
A - B	917	- 3438	C - D	411	- 1000
B - C	785	- 2911	D - E	367	- 1183

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - K	3009	- 890	I - H	1030	- 261
K - J	3063	- 907	H - G	730	- 256
J - I	1296	- 346			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - J	288	- 482	I - D	500	- 106
J - C	1928	- 428	E - G	463	- 1283
C - I	183	- 542			

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;
Lt Stub Wedge: 2x4 SP M-31;

Purlins

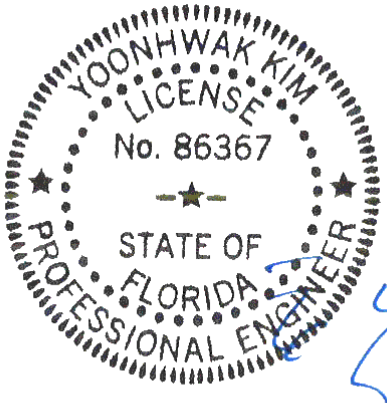
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

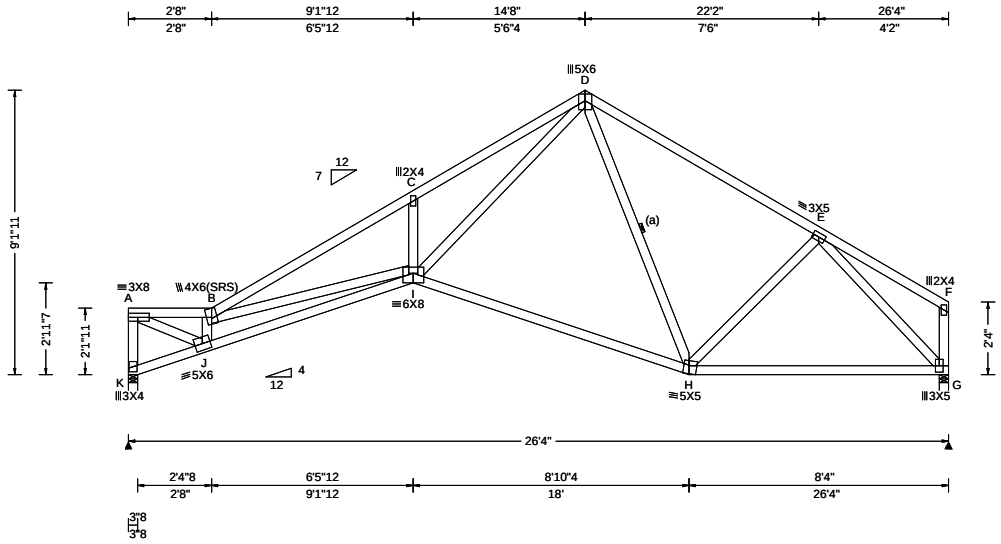
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409476 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D05		Cust: R 215 JRef:1Xbc2150008 T42 DrwNo: 349.21.0814.13370 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
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 7th Ed. 2020 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): 0.133	C	999	240
VERT(CL): 0.279	C	999	180
HORZ(LL): 0.087	G	-	-
HORZ(TL): 0.183	G	-	-

Creep Factor: 2.0
Max TC CSI: 0.307
Max BC CSI: 0.330
Max Web CSI: 0.468

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
K	1108	/-	/-	/607	/13	/180
G	1102	/-	/-	/609	/10	/-

Wind reactions based on MWFRS
K Brg Wid = 3.5 Min Req = 1.5
G Brg Wid = 3.5 Min Req = 1.5
Bearings K & 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.
A - B	494	- 2233	C - D	698	- 3077
B - C	558	- 3101	D - E	307	- 1171

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
J - I	2806	- 653	H - G	903	- 181
I - H	1032	- 104			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - K	282	- 1079	C - I	224	- 376
A - J	2459	- 542	I - D	2384	- 464
J - B	506	- 1883	E - G	274	- 1304

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

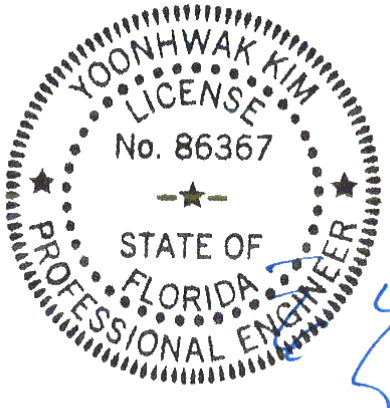
Wind loads based on MWFRS with additional C&C member design.

End verticals not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Deflection

Max JT VERT DEFL: LL: 0.13" DL: 0.15". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

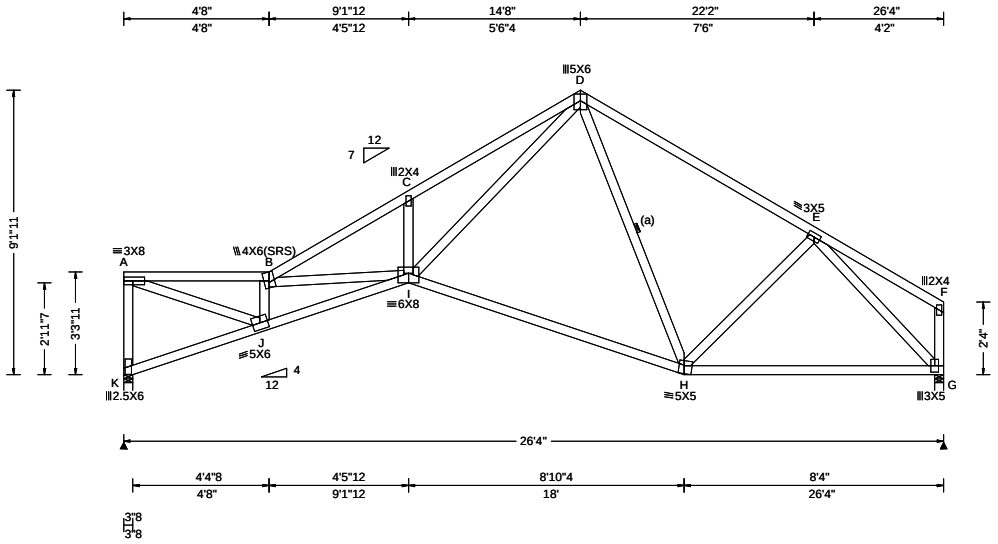
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409477 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D06		Cust: R 215 JRef:1Xbc2150008 T43 DrwNo: 349.21.0814.15653 / YK 12/15/2021	



Loading Criteria (psf)		Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00		Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00		Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.135 C 999 240
BCLL: 0.00		Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.282 C 999 180
BCDL: 10.00		Risk Category: II	Snow Duration: NA	HORZ(LL): 0.085 G - -
Des Ld: 40.00		EXP: C Kzt: NA		HORZ(TL): 0.179 G - -
NCBCLL: 10.00		Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00		TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.218
Load Duration: 1.25		BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.318
Spacing: 24.0 "		MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.468
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
		Loc. from endwall: not in 9.00 ft	Plate Type(s):	
		GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
		Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
K	1108	/-	/-	/582	/38	/175
G	1102	/-	/-	/613	/7	/-

Wind reactions based on MWFRS
K Brg Wid = 3.5 Min Req = 1.5
G Brg Wid = 3.5 Min Req = 1.5
Bearings K & 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.
A - B	625	- 2521	C - D	717	- 3023
B - C	604	- 3023	D - E	315	- 1172

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
J - I	2963	- 709	H - G	902	- 186
I - H	1033	- 115			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - K	360	- 1058	I - D	2324	- 479
A - J	2674	- 659	E - G	281	- 1302
J - B	516	- 1799			

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

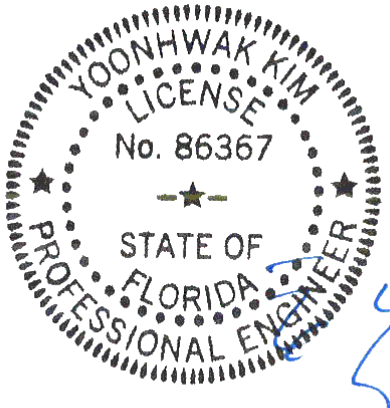
Wind loads based on MWFRS with additional C&C member design.

End verticals not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Deflection

Max JT VERT DEFL: LL: 0.13" DL: 0.15". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

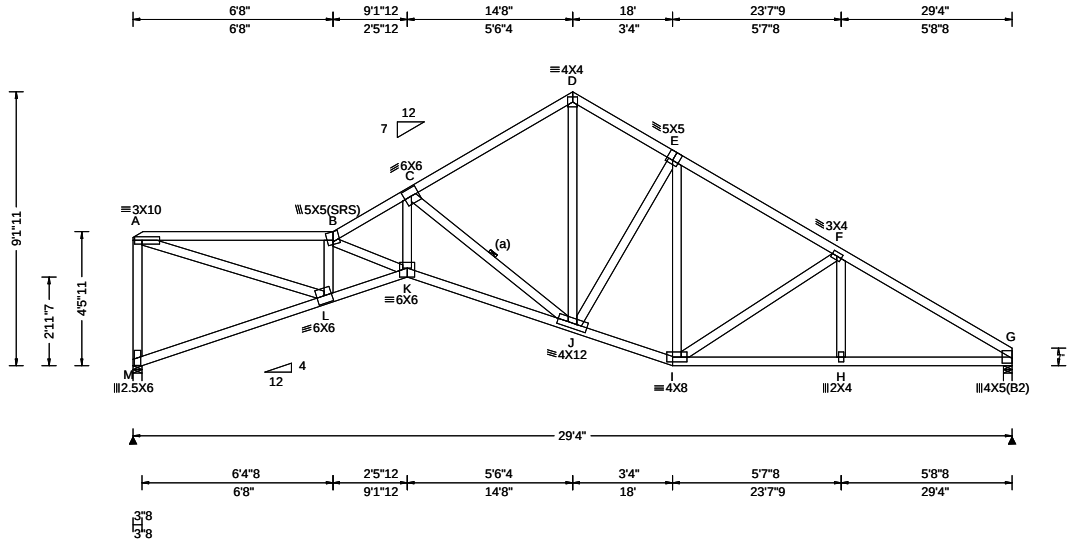
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409478 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D07		Cust: R 215 JRef:1Xbc2150008 T12 DrwNo: 349.21.0814.18270 / YK 12/15/2021	



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.164 K 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.344 K 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.105 G - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.220 G - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.455
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.333
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.323
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	VIEW Ver: 21.01.01A.0521.20
	GCpi: 0.18	WAVE	
	Wind Duration: 1.60		

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Left end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Deflection

Max JT VERT DEFL: LL: 0.16" DL: 0.18". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
M	1230	/-	/-	/637	/72	/220
G	1227	/-	/-	/717	/8	/-

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

Maximum Top Chord Forces Per Ply (lbs)

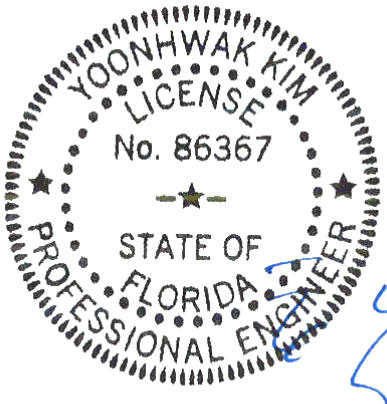
Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	699	-2970	D - E	401	-1430
B - C	723	-3455	E - F	385	-1551
C - D	384	-1468	F - G	385	-1943

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
L - K	3368	-661	I - H	1588	-262
K - J	3054	-451	H - G	1590	-260
J - I	1342	-145			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
M - A	385	-1176	C - J	461	-2198
A - L	3109	-729	J - D	1098	-266
L - B	553	-1938	I - F	154	-390
K - C	2199	-405			



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

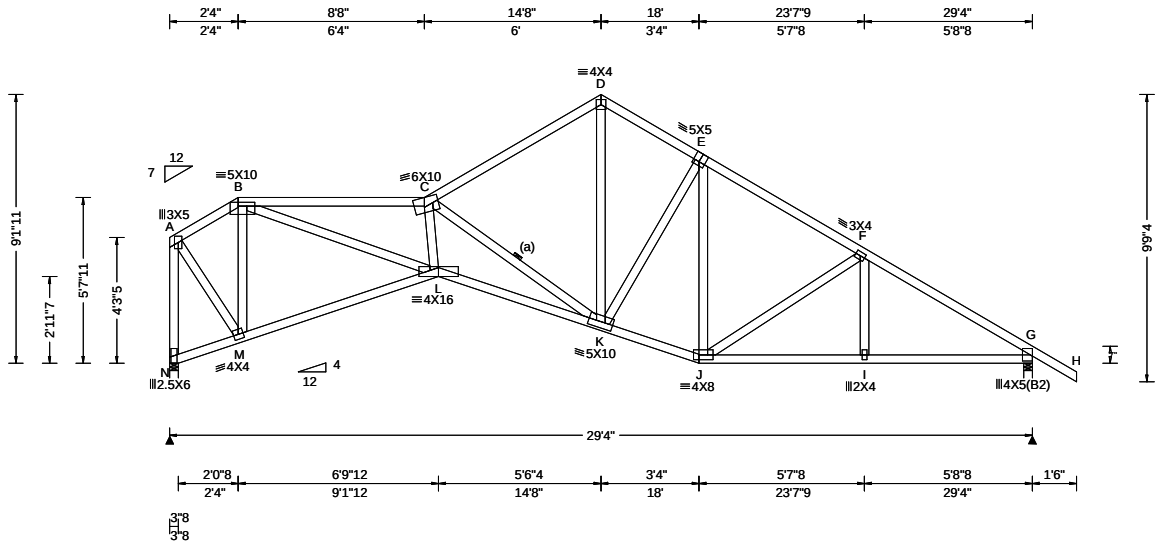
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409479 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D08		Cust: R 215 JRef:1Xbc2150008 T35 DrwNo: 349.21.0814.20703 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
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 7th Ed. 2020 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): 0.168	L	999	240
VERT(CL): 0.349	L	999	180
HORZ(LL): 0.108	G	-	-
HORZ(TL): 0.225	G	-	-

Creep Factor: 2.0
Max TC CSI: 0.309
Max BC CSI: 0.372
Max Web CSI: 0.410

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
N	1229	/-	/-	/638	/61	/237
G	1332	/-	/-	/806	/30	/-

Wind reactions based on MWFRS
N Brg Wid = 3.5 Min Req = 1.5
G Brg Wid = 3.5 Min Req = 1.5
Bearings N & 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.
A - B	215	- 736	D - E	428	- 1424
B - C	836	- 3345	E - F	410	- 1541
C - D	413	- 1476	F - G	404	- 1922

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
M - L	673	- 115	J - I	1565	- 243
L - K	3649	- 640	I - G	1566	- 242
K - J	1335	- 135			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - N	338	- 1244	C - L	575	- 3
A - M	1070	- 306	C - K	667	- 2759
B - M	363	- 920	K - D	1081	- 301
B - L	2885	- 646			

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

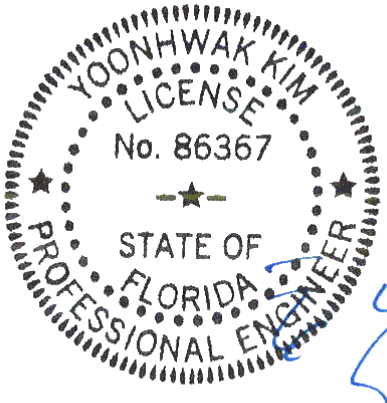
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Left end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

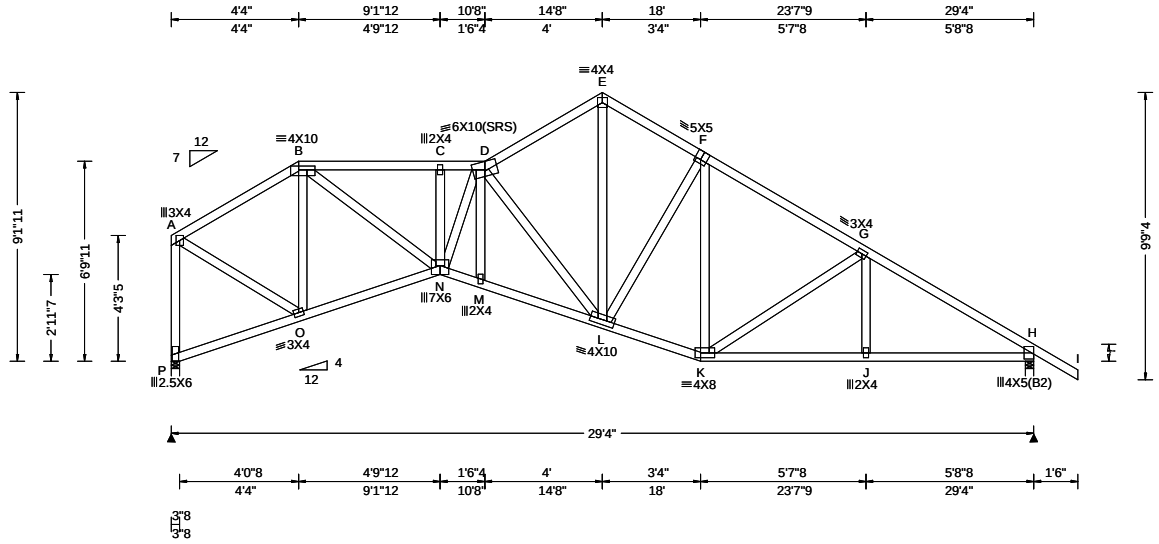
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409480 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D09		Cust: R 215 JRef:1Xbc2150008 T14 DrwNo: 349.21.0814.23263 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
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 7th Ed. 2020 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): 0.083	D	999	240
VERT(CL): 0.173	D	999	180
HORZ(LL): 0.058	H	-	-
HORZ(TL): 0.121	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.249
Max BC CSI: 0.351
Max Web CSI: 0.653

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1229	/-	/-	/639	/51	/237
H	1332	/-	/-	/810	/40	/-

Wind reactions based on MWFRS
P Brg Wid = 3.5 Min Req = 1.5
H Brg Wid = 3.5 Min Req = 1.5
Bearings P & H 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.
A - B	332	- 1123	E - F	460	- 1421
B - C	633	- 2189	F - G	437	- 1543
C - D	633	- 2188	G - H	430	- 1921
D - E	451	- 1424			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
O - N	976	- 145	L - K	1334	- 160
N - M	2176	- 376	K - J	1564	- 265
M - L	2182	- 382	J - H	1565	- 263

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - P	340	- 1195	B - N	1581	- 378
A - O	1071	- 279	D - L	432	- 1479
B - O	276	- 730	L - E	1138	- 357

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Purlins

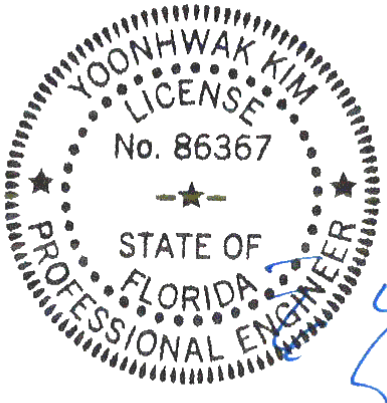
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Left end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

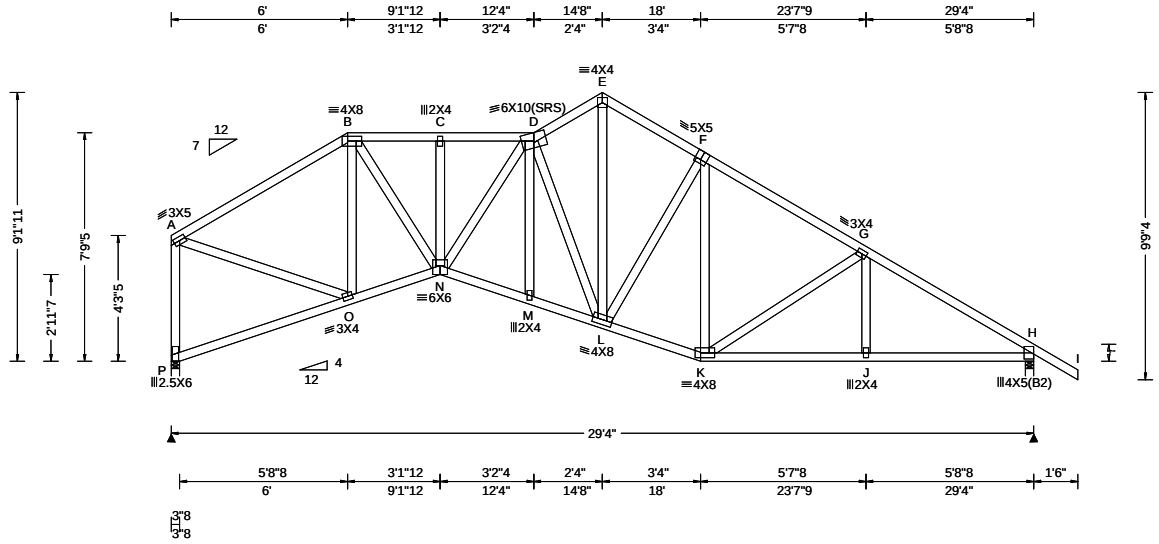
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409481 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D10	Cust: R 215 JRef:1Xbc2150008 T10 DrwNo: 349.21.0814.25727 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
GCpi: 0.18
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 7th Ed. 2020 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): 0.070	D	999	240
VERT(CL): 0.146	D	999	180
HORZ(LL): 0.048	H	-	-
HORZ(TL): 0.100	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.249
Max BC CSI: 0.350
Max Web CSI: 0.518

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1229	/-	/-	/641	/42	/237
H	1332	/-	/-	/814	/49	/-

Wind reactions based on MWFRS
P Brg Wid = 3.5 Min Req = 1.5
H Brg Wid = 3.5 Min Req = 1.5
Bearings P & H 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.
A - B	389	- 1358	E - F	488	- 1419
B - C	546	- 1707	F - G	460	- 1543
C - D	546	- 1706	G - H	451	- 1920
D - E	493	- 1388			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
O - N	1158	- 163	L - K	1334	- 182
N - M	1665	- 269	K - J	1563	- 283
M - L	1662	- 268	J - H	1565	- 282

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - P	337	- 1177	B - N	1065	- 278
A - O	1163	- 281	D - L	395	- 1158
B - O	241	- 603	L - E	1187	- 421

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Purlins

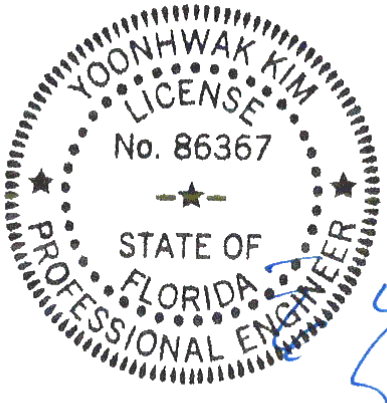
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Left end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

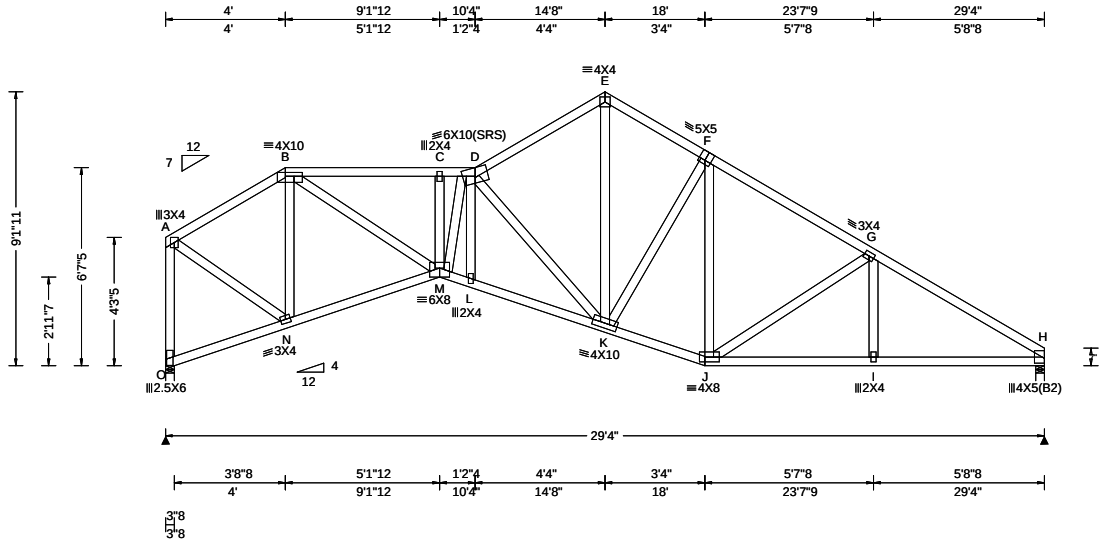
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409482 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D11	Cust: R 215 JRef:1Xbc2150008 T24 DrwNo: 349.21.0814.27980 / YK 12/15/2021		



Loading Criteria (psf)		Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00		Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00		Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.087 D 999 240
BCLL: 0.00		Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.183 D 999 180
BCDL: 10.00		Risk Category: II	Snow Duration: NA	HORZ(LL): 0.060 H - -
Des Ld: 40.00		EXP: C Kzt: NA		HORZ(TL): 0.126 H - -
NCBCLL: 10.00		Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00		TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.210
Load Duration: 1.25		BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.334
Spacing: 24.0 "		MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.718
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
		Loc. from endwall: not in 9.00 ft	Plate Type(s):	
		GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
		Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
O	1232	/-	/-	/639	/53	/220
H	1227	/-	/-	/725	/27	/-

Wind reactions based on MWFRS
O Brg Wid = 3.5 Min Req = 1.5
H Brg Wid = 3.5 Min Req = 1.5
Bearings O & H 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.
A - B	328	- 1070	E - F	463	- 1426
B - C	689	- 2329	F - G	436	- 1552
C - D	688	- 2329	G - H	433	- 1942
D - E	452	- 1438			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
N - M	935	- 196	K - J	1341	- 193
M - L	2332	- 451	J - I	1588	- 303
L - K	2340	- 459	I - H	1589	- 302

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - O	352	- 1202	D - K	486	- 1597
A - N	1060	- 291	K - E	1133	- 353
B - N	295	- 760	J - G	149	- 388
B - M	1735	- 436			

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Purlins

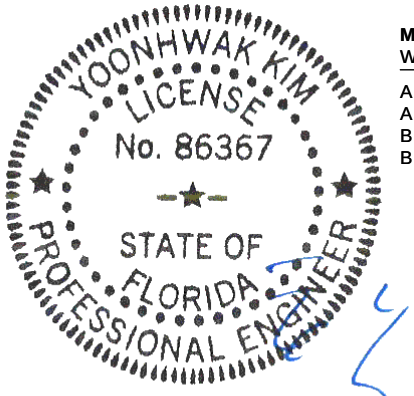
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Left end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

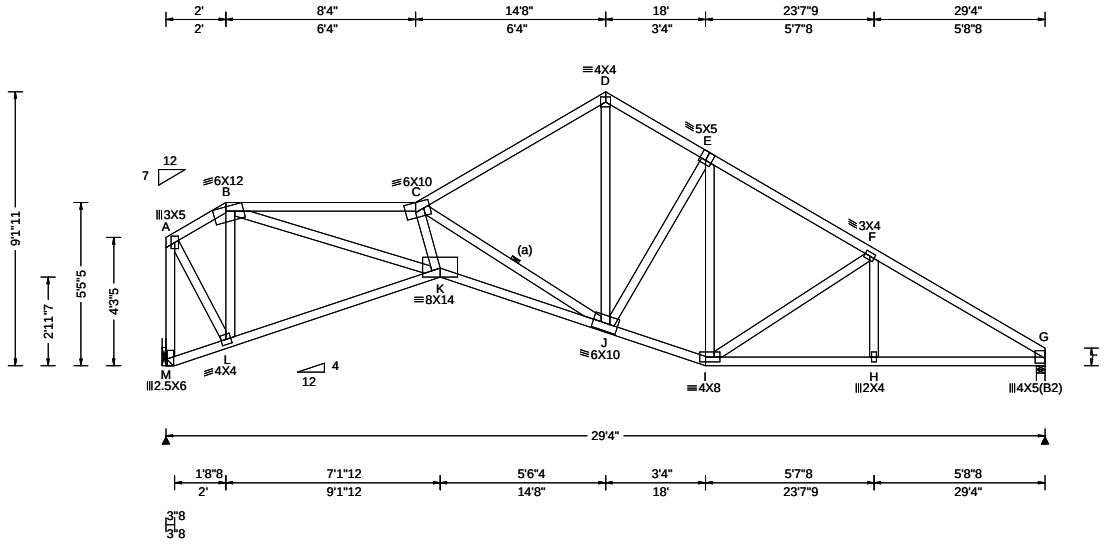
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409483 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D12	Cust: R 215 JRef:1Xbc2150008 T37 DrwNo: 349.21.0814.30417 / YK 12/15/2021		



Loading Criteria (psf)		**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**				
TCLL:	20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in	loc	L/defl	L/#	
TCDL:	10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL):	0.208 K	999	240	
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL):	0.435 K	807	180	
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL):	0.129 G	-	-	
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL):	0.270 G	-	-	
NCBCLL:	10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0				
Soffit:	2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI:	0.333			
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI:	0.428			
Spacing:	24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI:	0.497			
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)					
		Loc. from endwall: not in 9.00 ft	Plate Type(s):	VIEW Ver: 21.01.01A.0521.20				
		GCpi: 0.18	WAVE					
		Wind Duration: 1.60						

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
M	1232	/-	/-	/638	/63	/220
G	1227	/-	/-	/720	/16	/-

Wind reactions based on MWFRS
M Brg Wid = - Min Req = -
G Brg Wid = 3.5
Bearing G is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	192	- 657	D - E	431	- 1431
B - C	958	- 3679	E - F	408	- 1550
C - D	414	- 1491	F - G	408	- 1943

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
L - K	611	- 104	I - H	1589	- 281
K - J	4141	- 810	H - G	1590	- 280
J - I	1342	- 168			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - M	347	- 1266	C - K	724	0
A - L	1105	- 328	C - J	795	- 3217
B - L	394	- 960	J - D	1068	- 293
B - K	3258	- 784	I - F	153	- 393

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=0' uses the following support conditions: 0'
Bearing M (0', 9'1"2) HUS28
Supporting Member: (1)2x8 SP #2
(22) 0.148"x3" nails into supporting member,
(4) 0.148"x3" nails into supported member.

Purlins

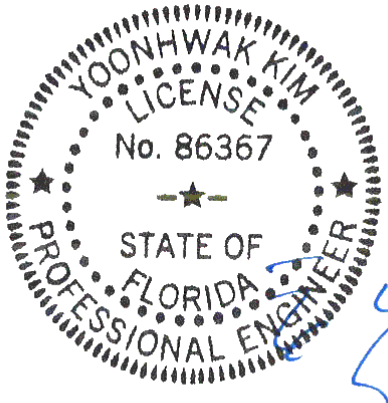
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Left end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

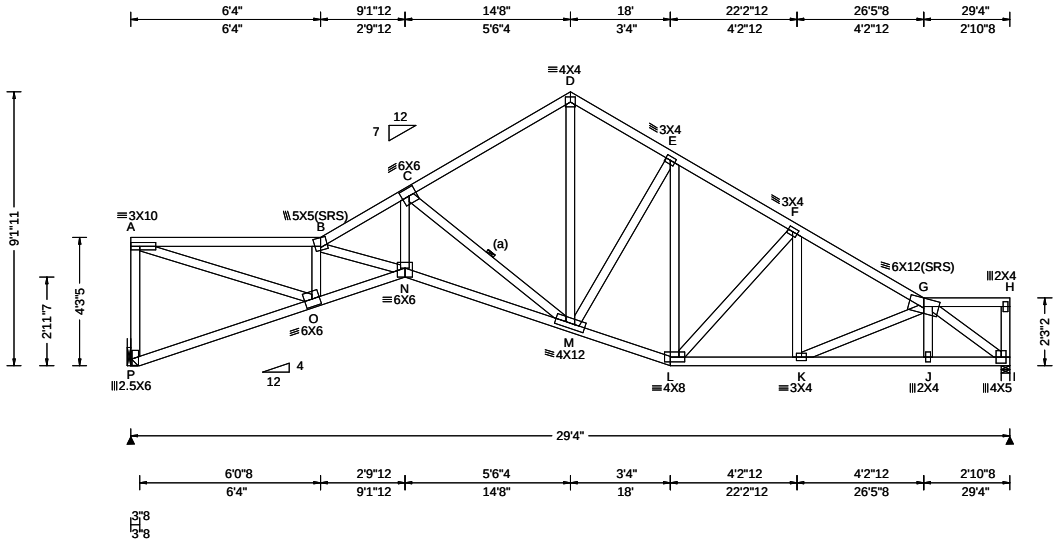
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409484 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D13		Cust: R 215 JRef:1Xbc2150008 T5 DrwNo: 349.21.0814.32917 / YK 12/15/2021	



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.161 N 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.337 N 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.101 I - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.212 I - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.419
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.326
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.317
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	VIEW Ver: 21.01.01A.0521.20
	GCpi: 0.18	WAVE	
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1233	/-	/-	/639	/72	/177
I	1226	/-	/-	/674	/12	/-

Wind reactions based on MWFRS
P Brg Wid = - Min Req = -
I Brg Wid = 3.5
Bearing I is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	755	- 2968	D - E	411	- 1426
B - C	791	- 3463	E - F	398	- 1523
C - D	397	- 1473	F - G	405	- 1830

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
O - N	3382	- 801	L - K	1523	- 297
N - M	3060	- 585	K - J	1638	- 383
M - L	1337	- 211	J - I	1642	- 380

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - P	415	- 1173	C - M	531	- 2199
A - O	3130	- 796	M - D	1083	- 271
O - B	597	- 1965	L - F	148	- 396
N - C	2184	- 465	G - I	456	- 1979

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=0' uses the following support conditions: 0'
Bearing P (0', 9'1"2) HUS28
Supporting Member: (1)2x8 SP #2
(22) 0.148"x3" nails into supporting member,
(4) 0.148"x3" nails into supported member.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

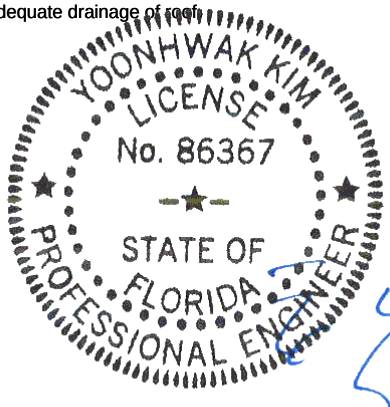
Wind loads based on MWFRS with additional C&C member design.

End verticals not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Deflection

Max JT VERT DEFL: LL: 0.16" DL: 0.18". See detail DEFLCAMB1014 for camber recommendations.
Provide for adequate drainage of roof.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

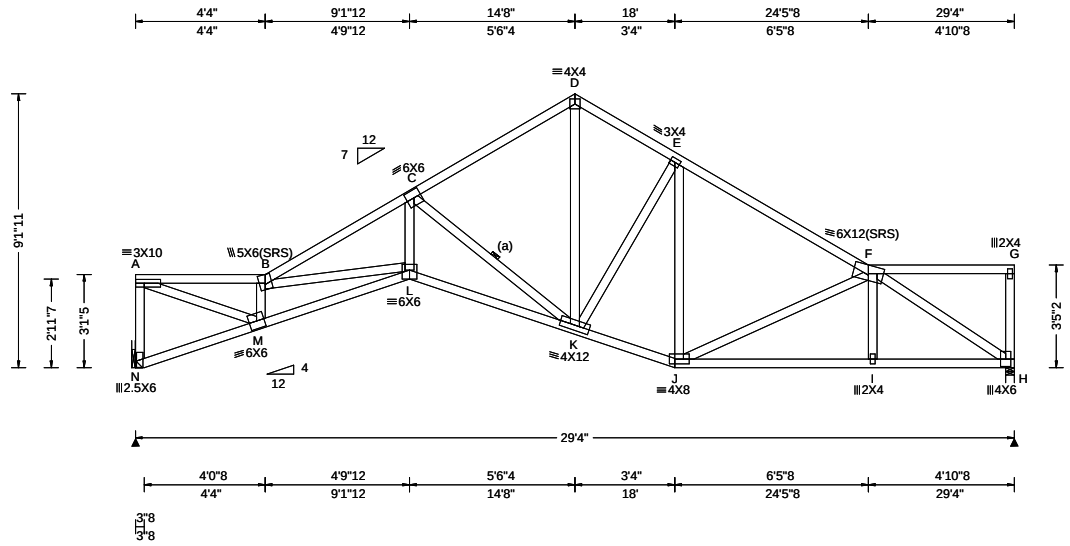
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409485 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D14		Cust: R 215 JRef:1Xbc2150008 T39 DrwNo: 349.21.0814.39077 / YK 12/15/2021	



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.161 L 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.338 L 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.106 H - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.222 H - -
NCBCLL: 10.00	Mean Height: 15.22 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.189
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.356
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.592
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
N	1233	/-	/-	/652	/29	/155
H	1226	/-	/-	/643	/43	/-

Wind reactions based on MWFRS
N Brg Wid = - Min Req = -
H Brg Wid = 3.5
Bearing H is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	706	- 2826	D - E	426	- 1441
B - C	785	- 3515	E - F	388	- 1577
C - D	406	- 1475			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
M - L	3337	- 865	J - I	1663	- 436
L - K	3097	- 660	I - H	1668	- 433
K - J	1355	- 268			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - N	380	- 1188	C - K	566	- 2249
A - M	3009	- 749	K - D	1136	- 306
M - B	596	- 2050	J - F	208	- 430
L - C	2126	- 415	F - H	508	- 1971

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=0' uses the following support conditions: 0'
Bearing N (0', 9'1"2) HUS28
Supporting Member: (1)2x8 SP #2
(22) 0.148"x3" nails into supporting member,
(4) 0.148"x3" nails into supported member.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

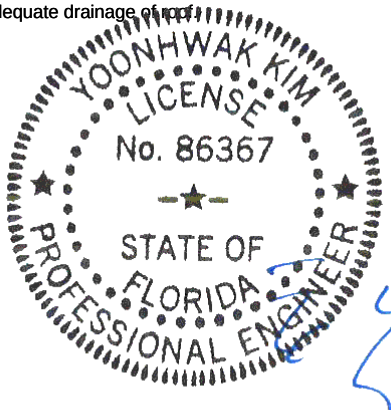
Wind loads based on MWFRS with additional C&C member design.

End verticals not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Deflection

Max JT VERT DEFL: LL: 0.16" DL: 0.18". See detail DEFLCAMB1014 for camber recommendations.
Provide for adequate drainage of roof.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

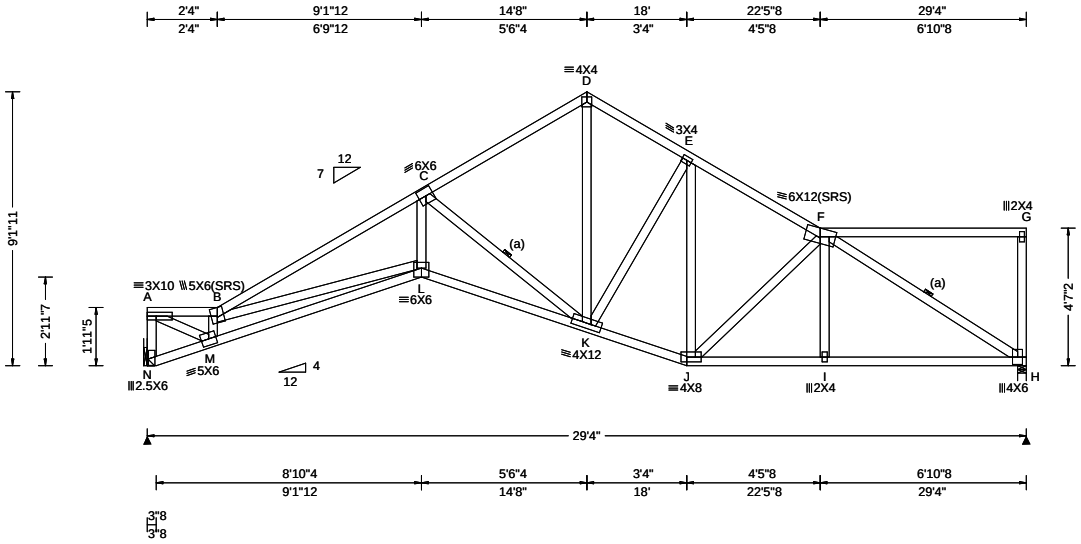
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409486 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D15	Cust: R 215 JRef:1Xbc2150008 T40 DrwNo: 349.21.0814.41253 / YK 12/15/2021		



Loading Criteria (psf)		**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL:	20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL:	10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.158 L 999 240
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.330 L 999 180
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.107 H - -
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL): 0.224 H - -
NCBCLL:	10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit:	2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.383
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.372
Spacing:	24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.330
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
		Loc. from endwall: not in 9.00 ft	Plate Type(s):	
		GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
		Wind Duration: 1.60		

▲Maximum Reactions (lbs)

Loc	Gravity R+	Gravity / R-	Gravity / Rh	Non-Gravity / Rw	Non-Gravity / U	Non-Gravity / RL
N	1233	/-	/-	/684	/9	/185
H	1226	/-	/-	/643	/84	/-

Wind reactions based on MWFRS
N Brg Wid = - Min Req = -
H Brg Wid = 3.5
Bearing H is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	580	- 2398	D - E	427	- 1422
B - C	829	- 3597	E - F	427	- 1537
C - D	425	- 1482			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
M - L	3068	- 878	J - I	1570	- 462
L - K	3143	- 763	I - H	1574	- 460
K - J	1334	- 315			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - N	319	- 1215	C - K	621	- 2304
A - M	2677	- 646	K - D	1116	- 306
M - B	627	- 2122	J - F	237	- 442
L - C	2111	- 427	F - H	542	- 1856

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=0' uses the following support conditions: 0'
Bearing N (0', 9'1"2) HUS28
Supporting Member: (1)2x8 SP #2
(22) 0.148"x3" nails into supporting member,
(4) 0.148"x3" nails into supported member.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

End verticals not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Deflection

Max JT VERT DEFL: LL: 0.16" DL: 0.17". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

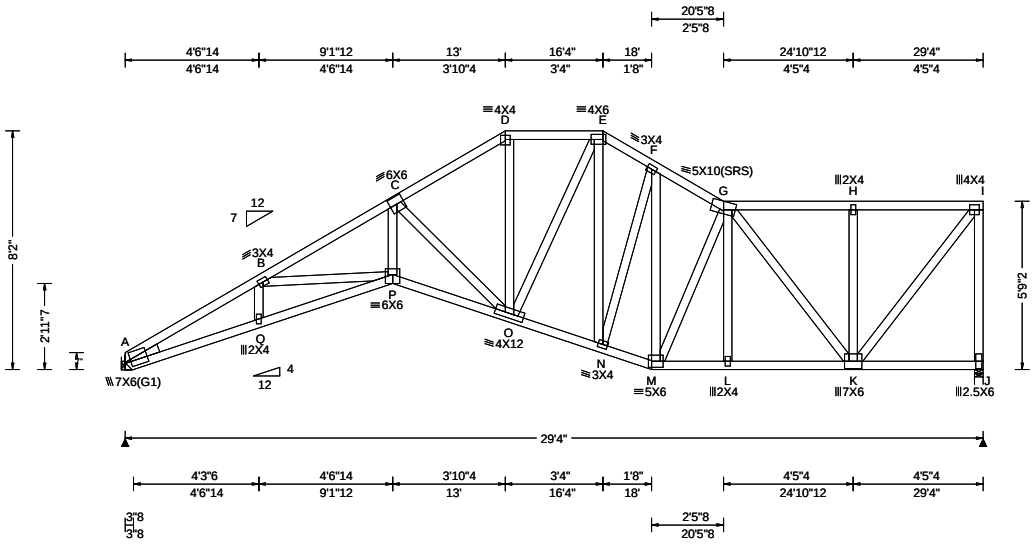
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409487 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D16		Cust: R 215 JRef:1Xbc2150008 T28 DrwNo: 349.21.0814.44130 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.163	P	999	240
VERT(CL): 0.341	P	999	180
HORZ(LL): 0.106	K	-	-
HORZ(TL): 0.222	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.228
Max BC CSI: 0.426
Max Web CSI: 0.651

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	1233	/-	/-	/728	/183	/195
J	1226	/-	/-	/647	/231	/-

Wind reactions based on MWFRS
A Brg Wid = - Min Req = -
J Brg Wid = 3.5
Bearing J is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	1112	- 3759	E - F	583	- 1444
B - C	1134	- 3492	F - G	568	- 1485
C - D	641	- 1731	G - H	374	- 876
D - E	586	- 1448	H - I	373	- 876

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - Q	3269	- 1129	N - M	1321	- 482
Q - P	3317	- 1147	M - L	1402	- 541
P - O	3071	- 1054	L - K	1404	- 540
O - N	1305	- 465			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
P - C	2110	- 652	M - G	211	- 377
C - O	715	- 2104	G - K	263	- 836
D - O	615	- 171	K - I	1390	- 593
O - E	484	- 137	I - J	562	- 1189

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;
Lt Stub Wedge: 2x4 SP M-31;

Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Bearing at location x=0' uses the following support conditions: 0'
Bearing A (0', 9'1"2) HUS28
Supporting Member: (1)2x8 SP #2
(22) 0.148"x3" nails into supporting member,
(4) 0.148"x3" nails into supported member.

Purlins

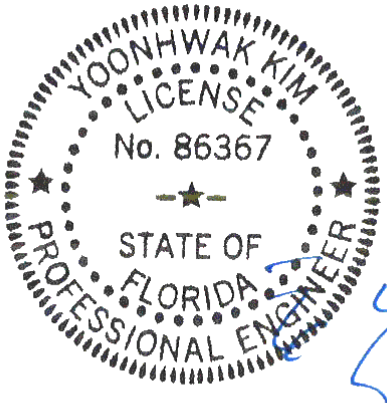
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

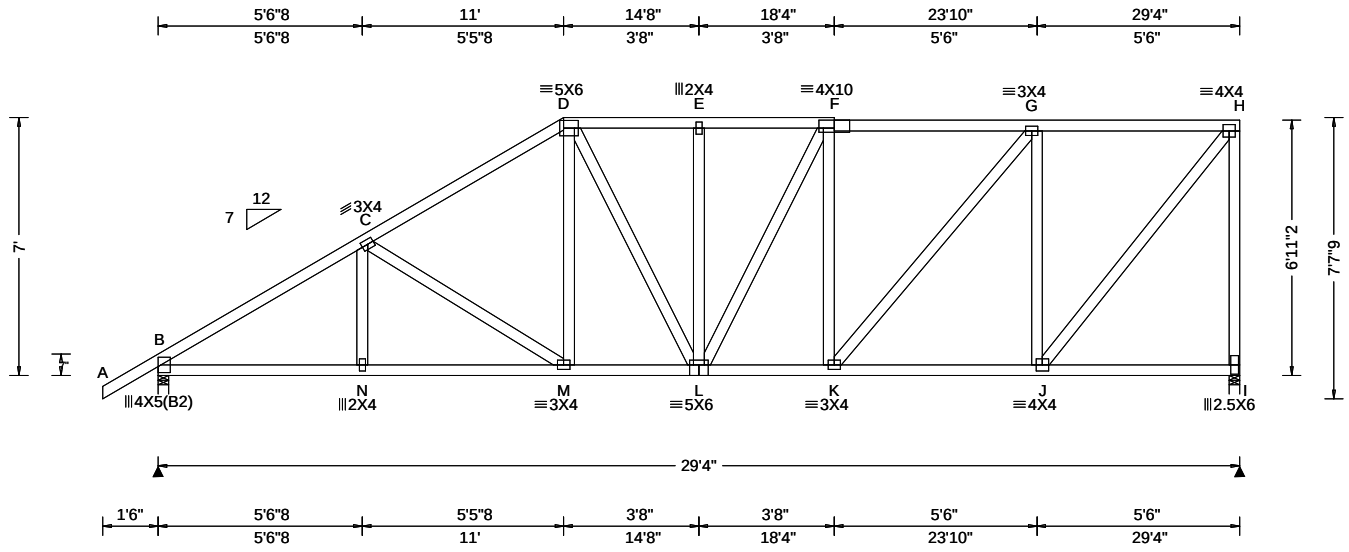
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409488 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D17		Cust: R 215 JRef:1Xbc2150008 T41 DrwNo: 349.21.0814.48770 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.058	M	999	240
VERT(CL): 0.119	M	999	180
HORZ(LL): 0.021	J	-	-
HORZ(TL): 0.044	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.246
Max BC CSI: 0.351
Max Web CSI: 0.522

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1326	/-	/-	/813	/137	/251
I	1215	/-	/-	/631	/-	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
I Brg Wid = 3.5 Min Req = 1.5
Bearings B & I 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	528	- 1910	E - F	558	- 1333
C - D	549	- 1552	F - G	510	- 1268
D - E	557	- 1333	G - H	362	- 833

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	1557	- 615	L - K	1267	- 509
N - M	1556	- 616	K - J	873	- 385
M - L	1266	- 517			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
F - K	336	- 392	J - H	1326	- 577
K - G	628	- 372	H - I	583	- 1173
G - J	514	- 907			

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Purlins

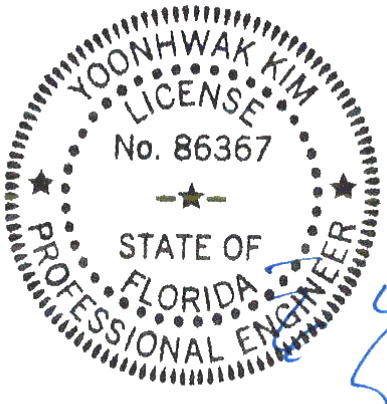
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

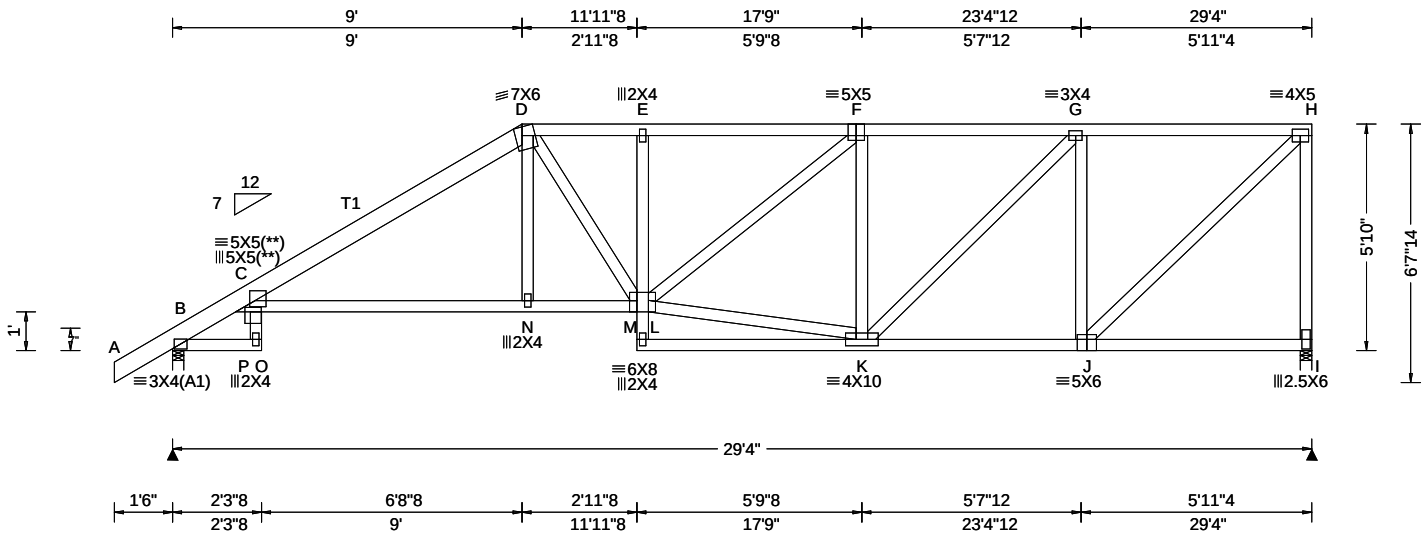
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409489 HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D18		Cust: R 215 JRef:1Xbc2150008 T7 DrwNo: 349.21.0814.59030 / YK 12/15/2021	



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.216	O	999	240
VERT(CL): 0.444	O	788	180
HORZ(LL): 0.163	J	-	-
HORZ(TL): 0.336	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.604
Max BC CSI: 0.300
Max Web CSI: 0.487

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1331	/-	/-	/800	/220	/209
I	1210	/-	/-	/623	/240	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
I Brg Wid = 3.5 Min Req = 1.5
Bearings B & I 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	218	- 847	E - F	1014	- 1939
C - D	865	- 2019	F - G	818	- 1558
D - E	1021	- 1952	G - H	560	- 1053

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - P	1440	- 654	N - L	1753	- 853
P - N	1749	- 855	K - J	1100	- 591

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
L - F	465	- 235	G - J	601	- 882
L - K	1551	- 826	J - H	1458	- 775
F - K	463	- 650	H - I	679	- 1163
K - G	651	- 331			

Lumber

Top chord: 2x4 SP M-31; T1 2x6 SP 2400f-2.0E;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Plating Notes

(**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Purlins

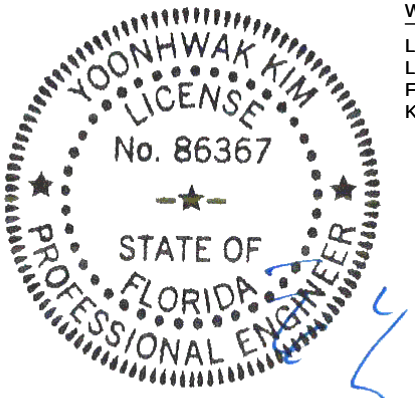
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

****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.

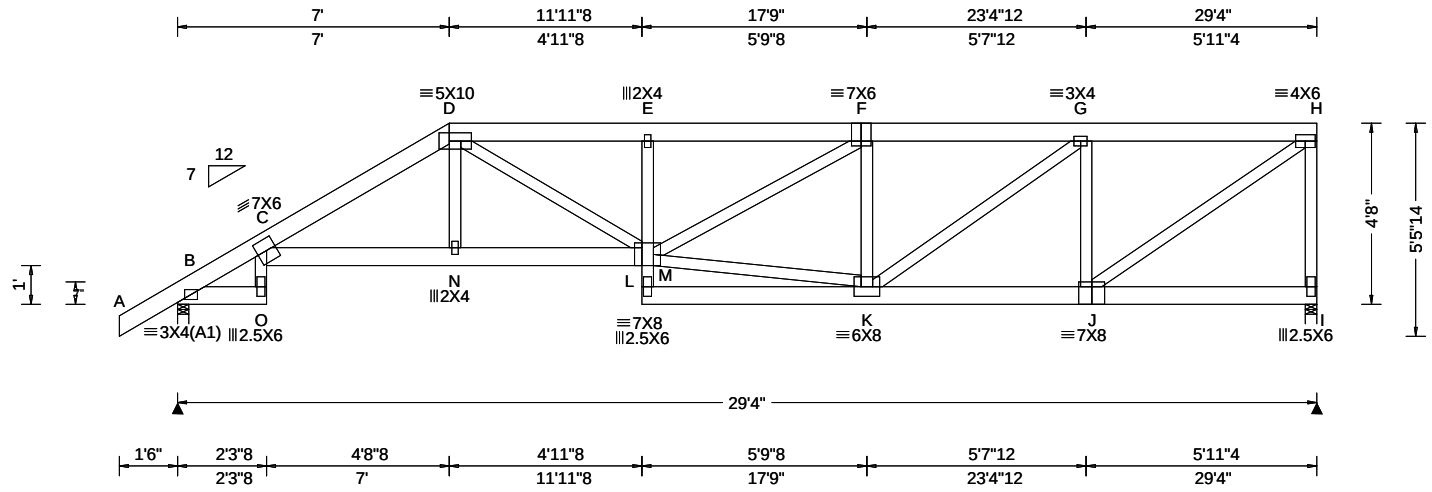
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409503 HIPM FROM: CDM	Ply: 2 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** D19		Cust: R 215 JRef:1Xbc2150008 T8 DrwNo: 349.21.0815.01573 / YK 12/15/2021	

2 Complete Trusses Required



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.226 N 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.472 N 741 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.172 J - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.359 J - -
NCBCLL: 0.00	Mean Height: 11.28 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.935
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.264
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: No	Max Web CSI: 0.209
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: NA	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
B	2504	/-	/-	/-	/424	/-
I	2605	/-	/-	/-	/416	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
I Brg Wid = 3.5 Min Req = 1.5
Bearings B & I 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	112	- 681	E - F	490	- 3019
C - D	421	- 2595	F - G	354	- 2229
D - E	493	- 3042	G - H	237	- 1490

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
C - N	2423	- 385	K - J	1546	- 250
N - L	2437	- 386			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - L	708	- 125	K - G	860	- 130
L - F	877	- 149	G - J	188	- 805
L - K	2199	- 350	J - H	1842	- 293
F - K	165	- 692	H - I	213	- 1194

Lumber

Top chord: 2x6 SP 2400f-2.0E;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP M-31;

Nailnote

Nail Schedule:0.131"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 1 Row @12.00" o.c.
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Loading

#1 hip supports 7-0-0 jacks W/2 panel TC and no end vert.

Purlins

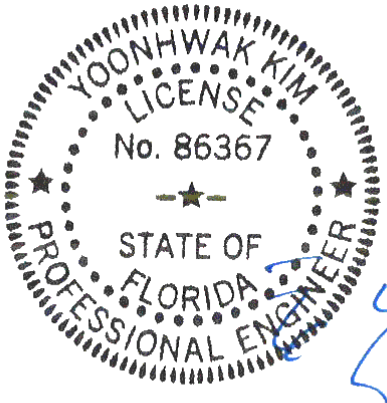
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads and reactions based on MWFRS.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

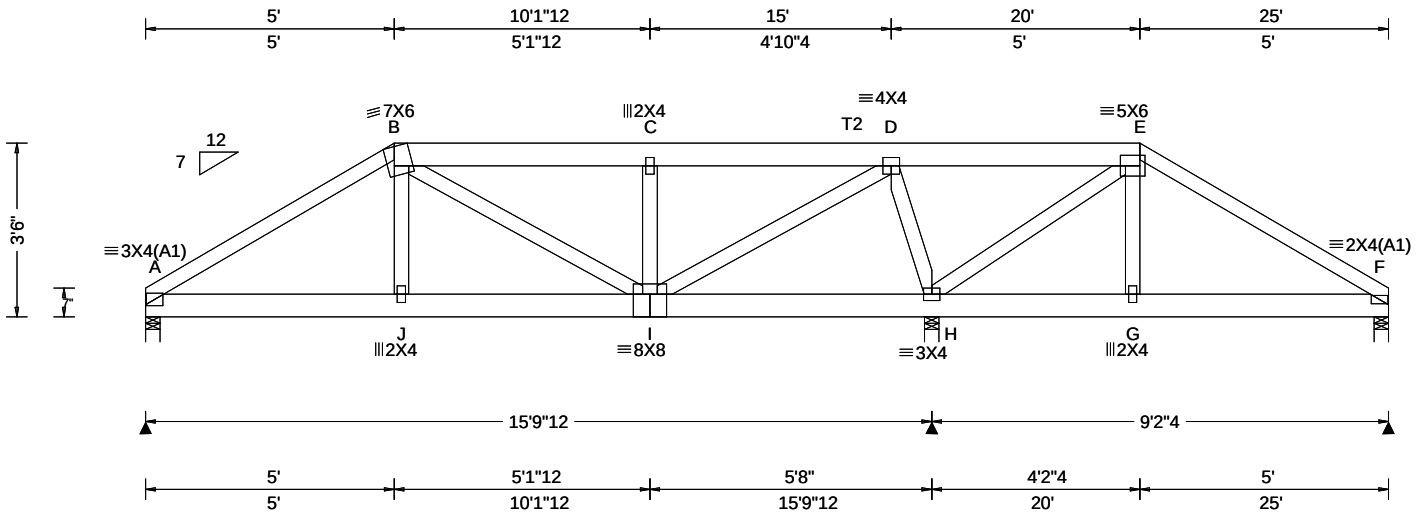
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409504 HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** G01	Cust: R 215 JRef:1Xbc2150008 T23 DrwNo: 349.21.0815.04197 / YK 12/15/2021



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

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 11.14 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: NA
GCpi: 0.18
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 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.017	C	999	240
VERT(CL): 0.036	C	999	180
HORZ(LL): 0.004	B	-	-
HORZ(TL): 0.009	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.147
Max BC CSI: 0.115
Max Web CSI: 0.228

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	879	/-	/-	/-	/143	/-
H	2022	/-	/-	/-	/304	/-
F	341	/-	/-	/-	/63	/-

Wind reactions based on MWFRS
A Brg Wid = 3.5 Min Req = 1.5
H Brg Wid = 3.5 Min Req = 1.5
F Brg Wid = 3.5 Min Req = 1.5
Bearings A, H, & 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.
A - B	227	-1315	C - D	162	-981
B - C	162	-982	D - E	513	-74

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - J	1073	-173	J - I	1087	-171

Maximum Web Forces Per Ply (lbs)

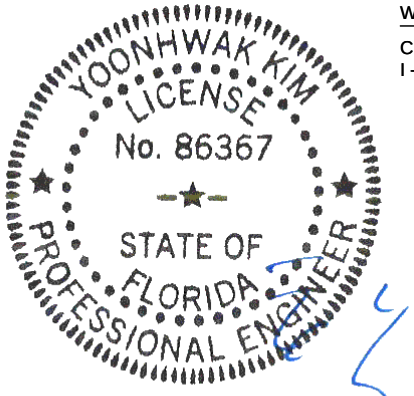
Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - I	187	-484	D - H	314	-1330
I - D	1356	-182	H - E	137	-906

Lumber
Top chord: 2x4 SP M-31; T2 2x6 SP 2400f-2.0E;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP M-31;

Loading
#1 hip supports 5-0-0 jacks with no webs.
Left side jacks have 5-0-0 setback with 0-0-0 cant and 1-6-0 overhang. End jacks have 5-0-0 setback with 0-0-0 cant and 1-6-0 overhang. Right side jacks have 5-0-0 setback with 0-0-0 cant and 0-0-0 overhang.

Purlins
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind
Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

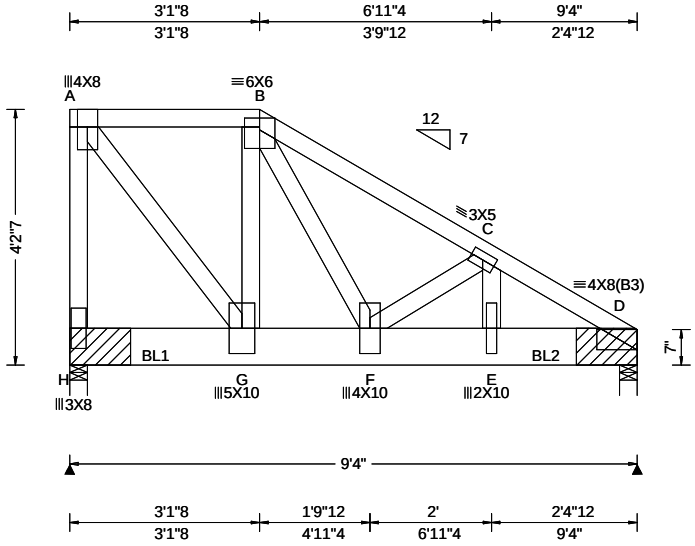
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409498 HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** G02	Cust: R 215 JRef:1Xbc2150008 T27 DrwNo: 349.21.0815.12163 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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/defl	L/#
VERT(LL):	0.033 F	999	240
VERT(CL):	0.066 F	999	180
HORZ(LL):	0.011 A	-	-
HORZ(TL):	0.021 A	-	-

Creep Factor: 2.0
Max TC CSI: 0.137
Max BC CSI: 0.726
Max Web CSI: 0.269

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
H	3132	/-	/-	/-	/192	/-
D	3594	/-	/-	/-	/294	/-

Wind reactions based on MWFRS
H Brg Wid = 3.5 Min Req = -
D Brg Wid = 3.5 Min Req = -
Bearings H & 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.
A - B	95	- 1710	C - D	190	- 3839
B - C	150	- 3017			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
G - F	1743	- 98	E - D	3264	- 156
F - E	3223	- 156			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - H	157	- 2341	B - F	1937	- 52
A - G	2828	- 155	F - C	46	- 817
G - B	42	- 426	C - E	866	- 1

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x8 SP #2;
Webs: 2x4 SP M-31;

Special Loads

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

TC: From	63 plf at	0.00 to	63 plf at	3.12
TC: From	32 plf at	3.12 to	32 plf at	6.94
TC: From	63 plf at	6.94 to	63 plf at	9.33
BC: From	10 plf at	0.00 to	10 plf at	9.33

BC: 1232 lb Conc. Load at 0.94
BC: 1233 lb Conc. Load at 2.94, 4.94, 6.94, 8.94

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads and reactions based on MWFRS.

Left end vertical not exposed to wind pressure.

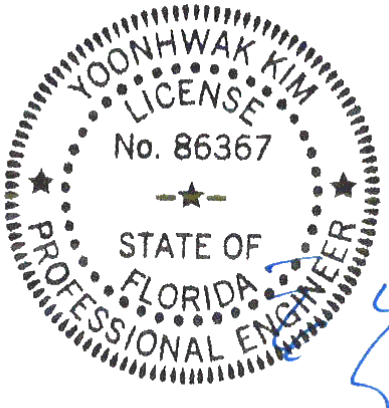
Wind loading based on both gable and hip roof types.

Bearing Block(s)

Brg blocks:0.131"x3", min. nails

brg	x-loc	#blocks	length/blk	#nails/blk	wall plate
1	0.000'	1	12"	4	Rigid Surface
2	9.041'	1	12"	5	Rigid Surface

Brg block to be same size and species as chord.
Refer to drawing CNNAILSP1014 for more information.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

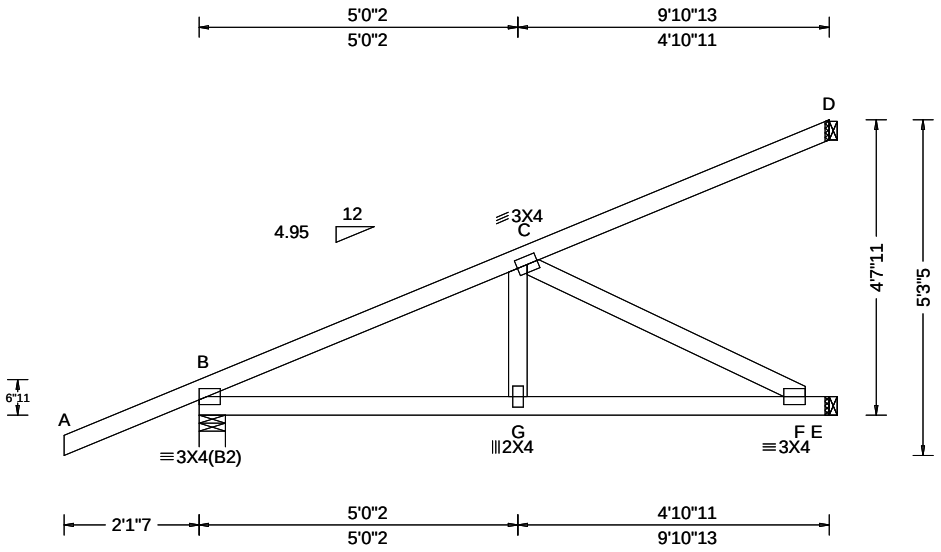
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409499 HIP_ FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J01	Cust: R 215 JRef:1Xbc2150008 T21 DrwNo: 349.21.0815.14483 / YK 12/15/2021



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

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 0.00 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: NA
GCpi: 0.18
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 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.021	G	999	240
VERT(CL): 0.043	G	999	180
HORZ(LL): -0.006	D	-	-
HORZ(TL): 0.013	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.281
Max BC CSI: 0.227
Max Web CSI: 0.166

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	462	/-	/-	/-	/93	/-
E	359	/-	/-	/-	/3	/-
D	272	/-	/-	/-	/100	/-

Wind reactions based on MWFRS
B Brg Wid = 4.9 Min Req = 1.5
E Brg Wid = 1.5
D Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - C	101	-629

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - G	553	-86	G - F	548	-89

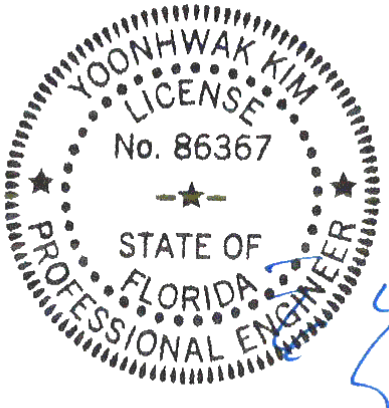
Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
C - F	100	-621

Lumber
Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Loading
Hipjack supports 7-0-0 setback jacks with no webs.

Wind
Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

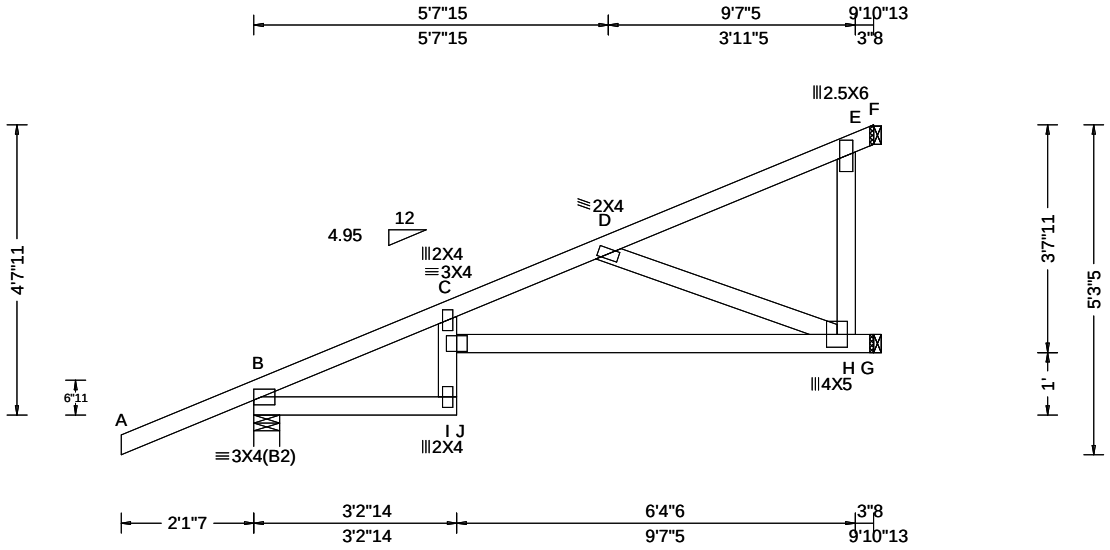
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409500 HIP_ FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J02	Cust: R 215 JRef:1Xbc2150008 T26 DrwNo: 349.21.0815.17980 / YK 12/15/2021



Loading Criteria (psf)

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

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 0.00 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: NA
GCpi: 0.18
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 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.096	I	999	240
VERT(CL): 0.195	I	606	180
HORZ(LL): 0.042	C	-	-
HORZ(TL): 0.086	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.304
Max BC CSI: 0.258
Max Web CSI: 0.238

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	462	/-	/-	/-	/93	/-
G	127	/-	/-	/-	/215	/-
F	504	/-	/-	/-	/113	/-

Wind reactions based on MWFRS
B Brg Wid = 4.9 Min Req = 1.5
G Brg Wid = 1.5
F Brg Wid = 1.5
Bearing B is 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	82	-386	C - D	187	-816

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
I - H	812	-170

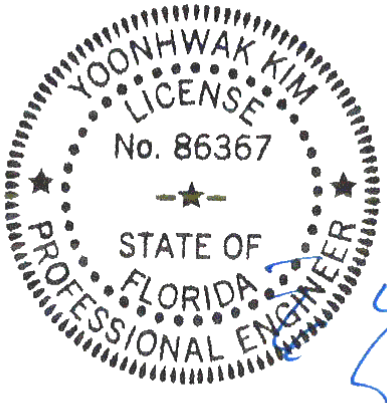
Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
D - H	183	-845

Lumber
Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Loading
Hipjack supports 7-0-0 setback jacks with no webs.

Wind
Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

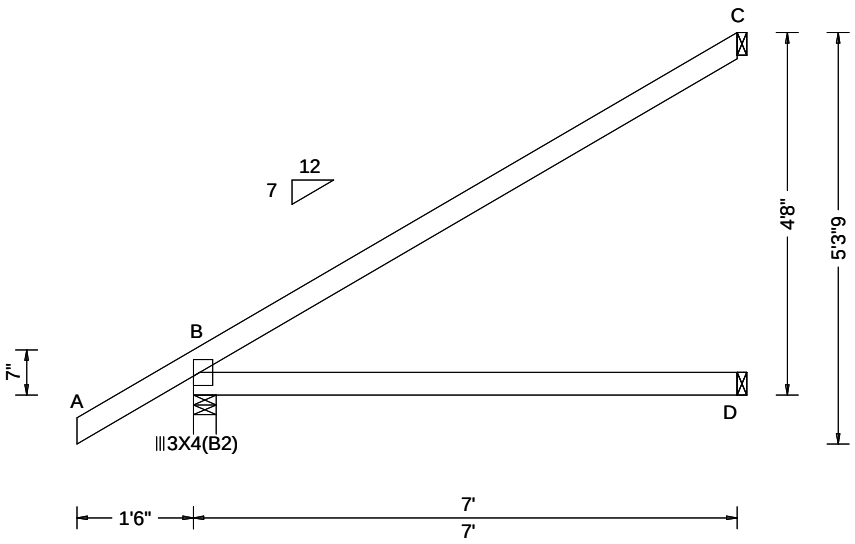
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409490 EJAC FROM: CDM	Ply: 1 Qty: 19	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J03	Cust: R 215 JRef:1Xbc2150008 T9 DrwNo: 349.21.0815.19483 / YK 12/15/2021



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
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 7-16 Speed: 130 mph Enclosure: Closed 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: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 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): 0.009 B - - HORZ(TL): 0.018 B - - Creep Factor: 2.0 Max TC CSI: 0.314 Max BC CSI: 0.216 Max Web CSI: 0.000 VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	406	/-	/-	/273	/30	/168
D	135	/-	/-	/73	/-	/-
C	200	/-	/-	/130	/113	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
D Brg Wid = 1.5
C Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

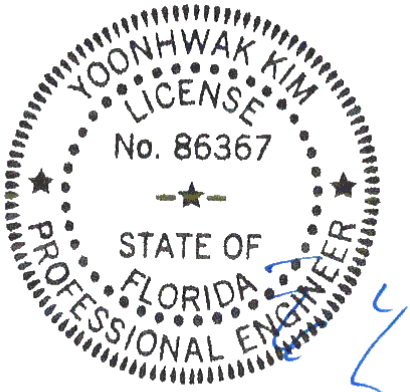
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

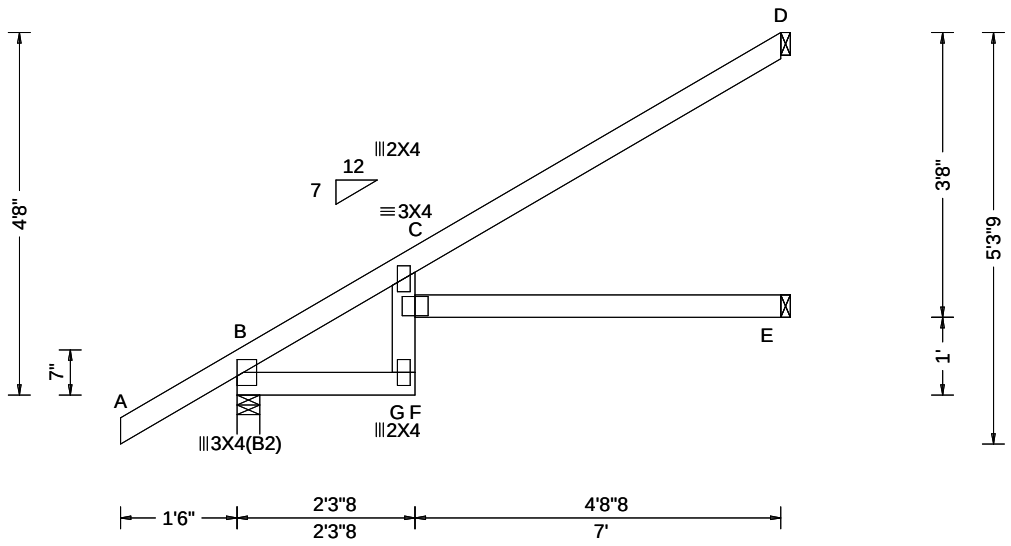
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409491 EJAC FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J04	Cust: R 215 JRef:1Xbc2150008 T48 DrwNo: 349.21.0815.21020 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.140	F	596	240
VERT(CL): 0.282	F	296	180
HORZ(LL): 0.093	C	-	-
HORZ(TL): 0.186	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.373
Max BC CSI: 0.136
Max Web CSI: 0.067

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	406	/-	/-	/274	/31	/169
E	107	/-	/-	/61	/-	/-
D	210	/-	/-	/142	/104	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
E Brg Wid = 1.5
D Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

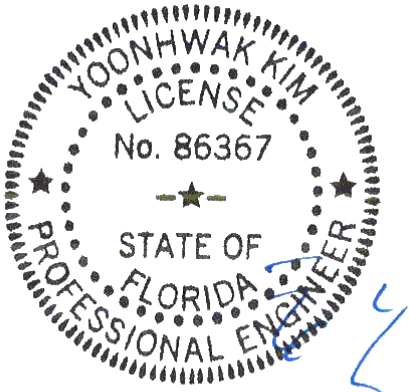
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

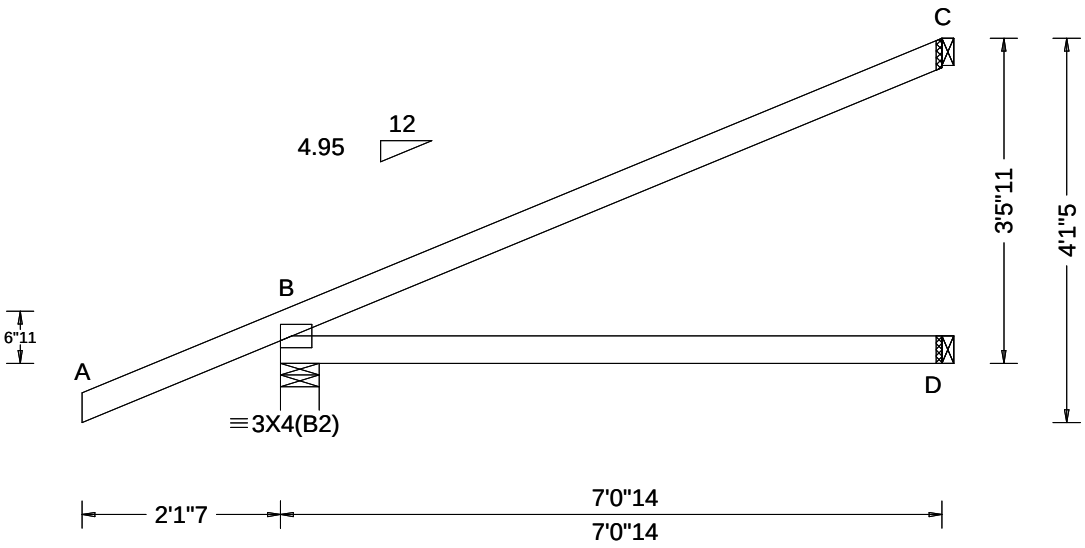
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409501 HIP_ FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J05	Cust: R 215 JRef:1Xbc2150008 T19 DrwNo: 349.21.0815.22410 / YK 12/15/2021



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

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 0.00 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: NA
GCpi: 0.18
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 7th Ed. 2020 Res.
TPI Std: 2014
Rep Fac: No
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):	0.004 B	-	-
HORZ(TL):	0.008 B	-	-

Creep Factor: 2.0
Max TC CSI: 0.296
Max BC CSI: 0.121
Max Web CSI: 0.000

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

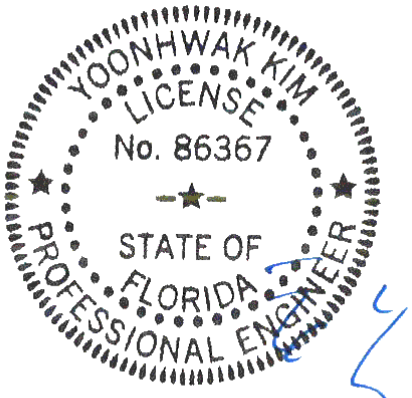
	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	307	/-	/-	/-	/68	/-
D	80	/-	/-	/34	/-	/-
C	220	/-	/-	/-	/81	/-

Wind reactions based on MWFRS
B Brg Wid = 4.9 Min Req = 1.5
D Brg Wid = 1.5
C Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber
Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;

Loading
Hipjack supports 5-0-0 setback jacks with no webs.

Wind
Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

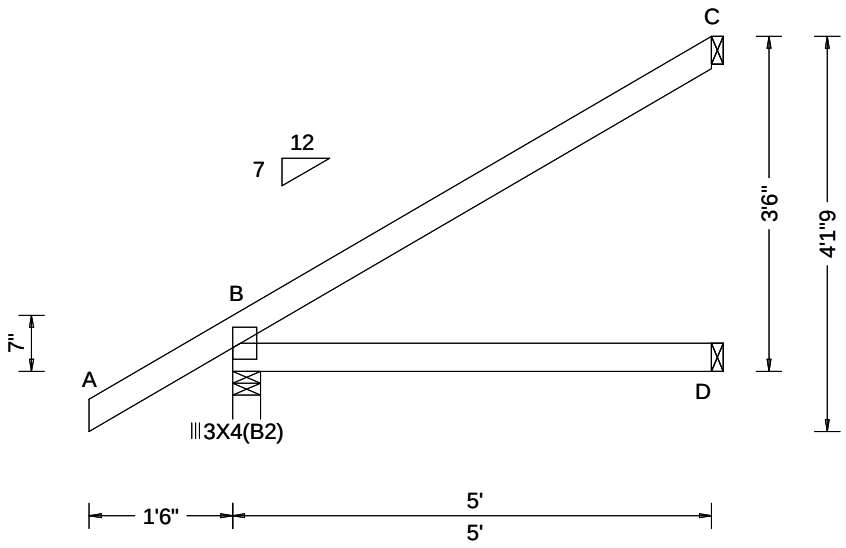
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409492 EJAC FROM: CDM	Ply: 1 Qty: 9	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J06	Cust: R 215 JRef:1Xbc2150008 T55 DrwNo: 349.21.0815.24617 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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):	-0.003 C	-	-
HORZ(TL):	0.005 B	-	-

Creep Factor: 2.0
Max TC CSI: 0.159
Max BC CSI: 0.104
Max Web CSI: 0.000

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	327	/-	/-	/225	/29	/127
D	95	/-	/-	/51	/-	/-
C	138	/-	/-	/89	/81	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
D Brg Wid = 1.5
C Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

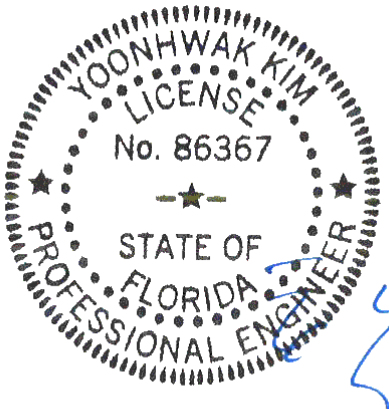
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

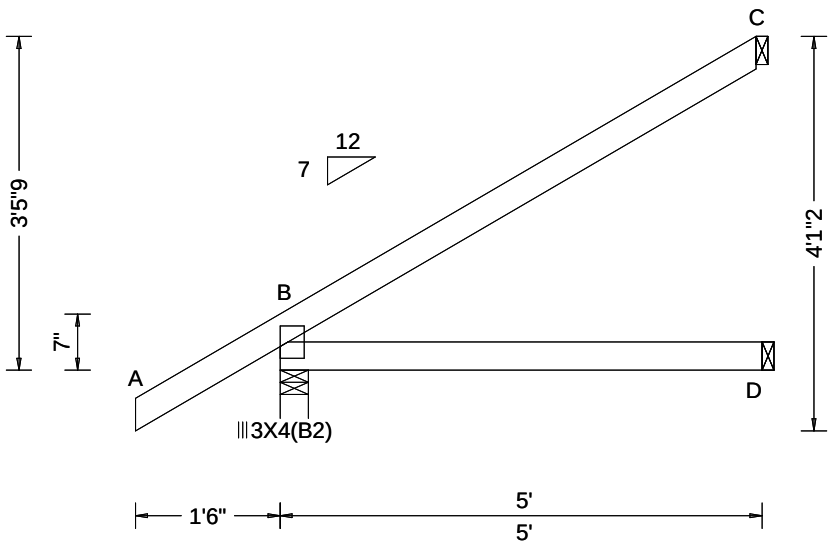
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409493 EJAC FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J07	Cust: R 215 JRef:1Xbc2150008 T45 DrwNo: 349.21.0815.26777 / YK 12/15/2021



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): NA
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.003 C - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.005 B - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.155
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.104
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.000
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 4.50 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	326	/-	/-	/225	/29	/126
C	136	/-	/-	/87	/80	/-
D	95	/-	/-	/51	/-	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
C Brg Wid = 1.5
D Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

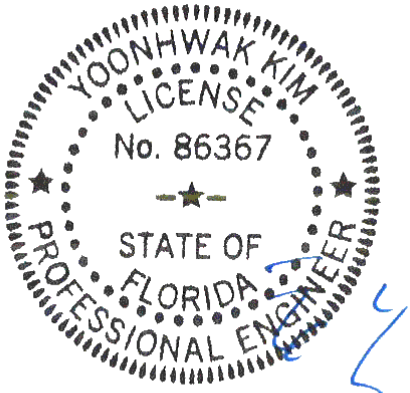
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

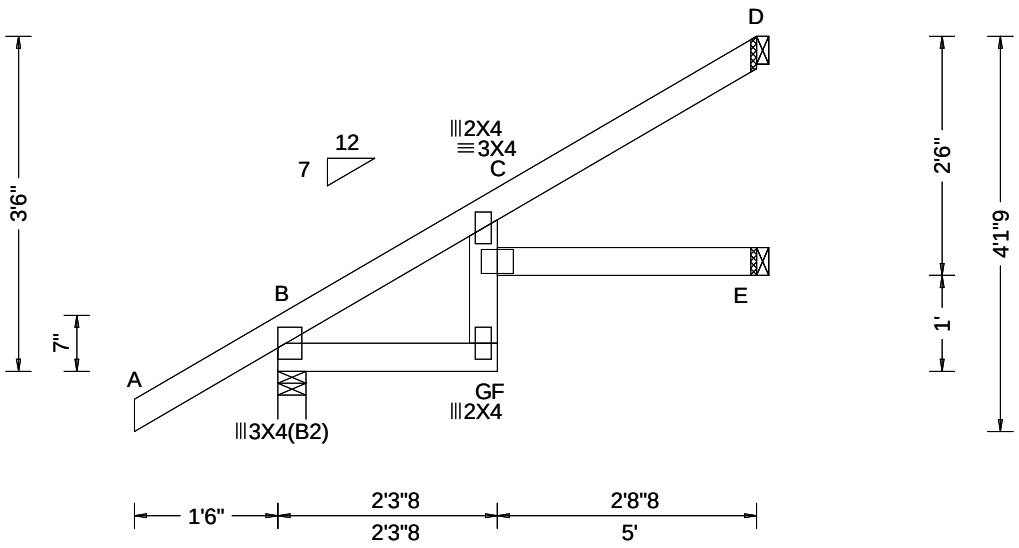
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409494 JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J08	Cust: R 215 JRef:1Xbc2150008 T18 DrwNo: 349.21.0815.28820 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.041	F	999	240
VERT(CL): 0.082	F	726	180
HORZ(LL): 0.027	C	-	-
HORZ(TL): 0.054	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.173
Max BC CSI: 0.047
Max Web CSI: 0.030

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	327	/-	/-	/226	/30	/127
E	65	/-	/-	/37	/-	/-
D	149	/-	/-	/102	/70	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
E Brg Wid = 1.5
D Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

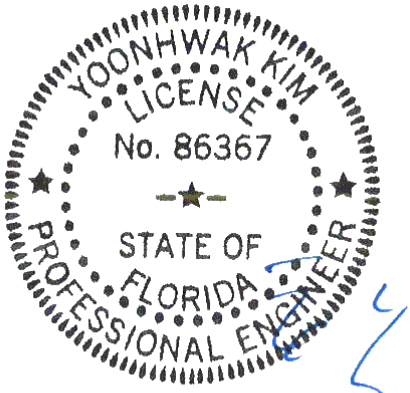
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

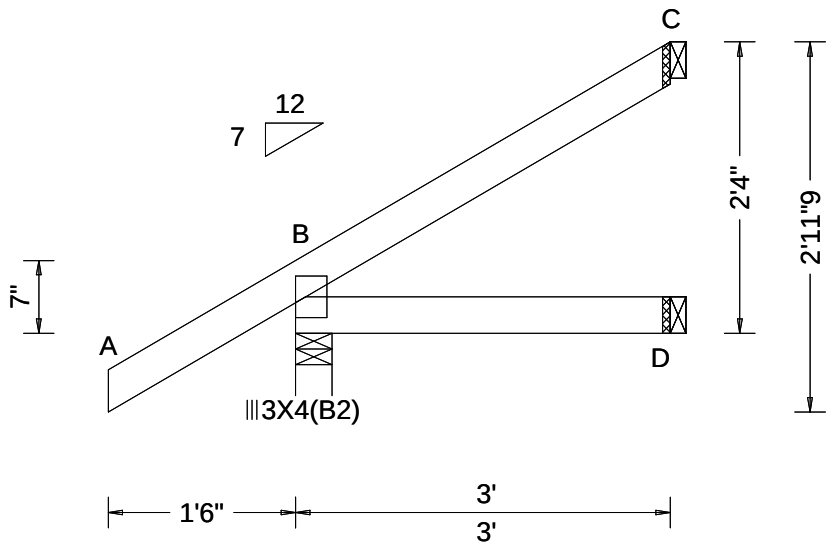
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409495 JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J09	Cust: R 215 JRef:1Xbc2150008 T17 DrwNo: 349.21.0815.30633 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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):	-0.001 C	-	-
HORZ(TL):	0.001 C	-	-

Creep Factor: 2.0
Max TC CSI: 0.072
Max BC CSI: 0.033
Max Web CSI: 0.000

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	255	/-	/-	/184	/31	/86
D	56	/-	/-	/31	/-	/-
C	69	/-	/-	/42	/46	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
D Brg Wid = 1.5
C Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

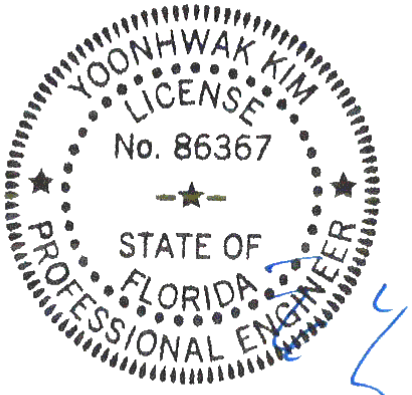
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

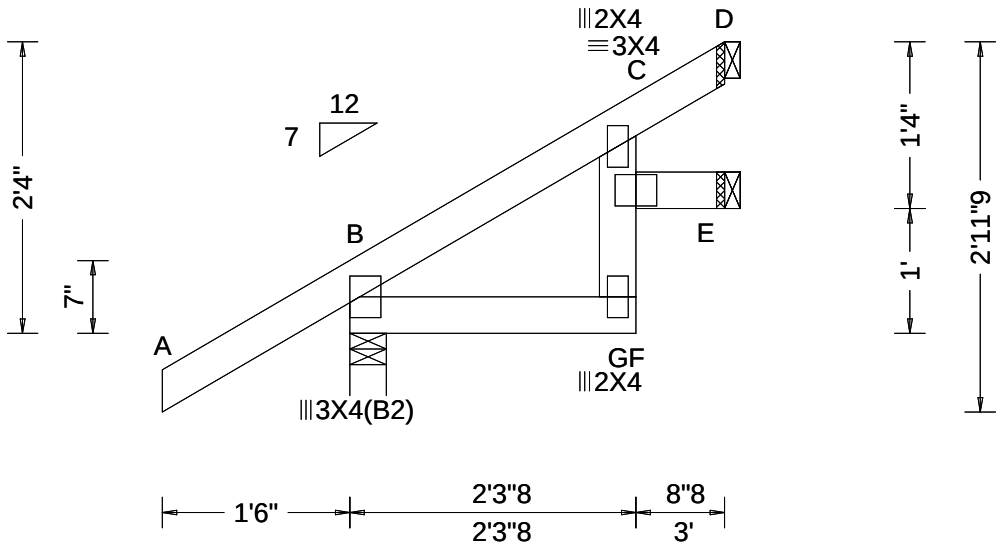
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409496 JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J10	Cust: R 215 JRef:1Xbc2150008 T13 DrwNo: 349.21.0815.32393 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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): 0.003	F	999	240
VERT(CL): 0.006	F	999	180
HORZ(LL): -0.002	C	-	-
HORZ(TL): 0.003	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.072
Max BC CSI: 0.018
Max Web CSI: 0.008

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	255	/-	/-	/184	/31	/86
E	22	/-	/-	/16	/1	/-
D	80	/-	/-	/56	/33	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
E Brg Wid = 1.5
D Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

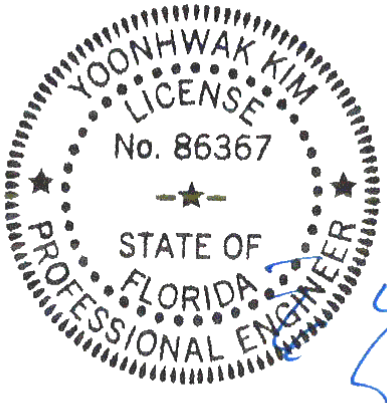
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

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

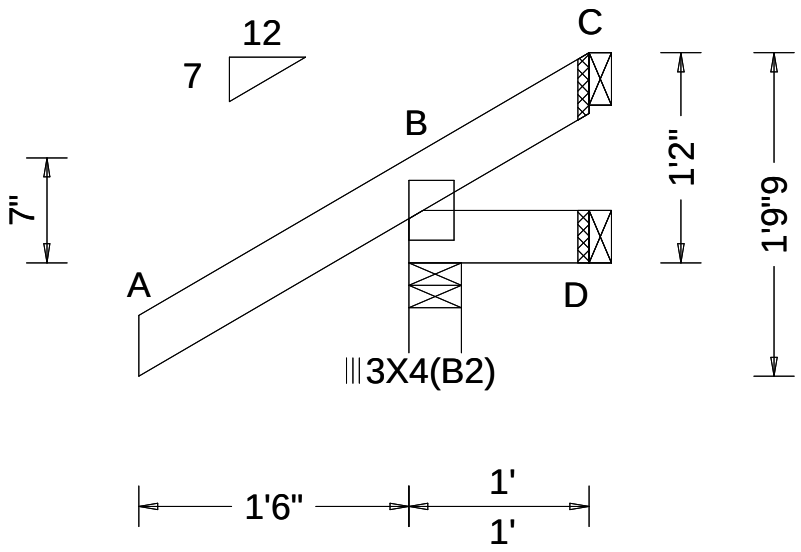
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 409497 JACK FROM: CDM	Ply: 1 Qty: 8	**Job Number:** 21-6560 ARLENA 7/12 // Sunset **Truss Label:** J11	Cust: R 215 JRef:1Xbc2150008 T36 DrwNo: 349.21.0815.36497 / YK 12/15/2021



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 7-16
Speed: 130 mph
Enclosure: Closed
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: 0.18
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 7th Ed. 2020 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):	-0.001 C	-	-
HORZ(TL):	0.001 C	-	-

Creep Factor: 2.0
Max TC CSI: 0.093
Max BC CSI: 0.010
Max Web CSI: 0.000

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	229	/-	/-	/180	/51	/45
D	14	/-1	/-	/11	/2	/-
C	-	/-43	/-	/30	/44	/-

Wind reactions based on MWFRS
B Brg Wid = 3.5 Min Req = 1.5
D Brg Wid = 1.5
C Brg Wid = 1.5
Bearing B is a rigid surface.
Members not listed have forces less than 375#

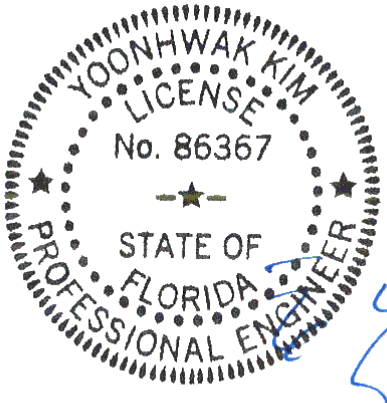
Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP M-31;

Wind

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

Wind loading based on both gable and hip roof types.



FL REG# 278, Yoonhwak Kim, FL PE #86367
12/15/2021

****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: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

Gable Stud Reinforcement Detail

ASCE 7-16: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Or: 120 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00
Or: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00
Or: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

Max Gable Vertical Length

2x4 Gable Vertical Spacing	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 **	
				Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B
24" o.c.	SPF HF	#1 / #2	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	4' 1"	6' 7"	7' 1"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		Stud	4' 1"	6' 7"	7' 0"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		Standard	4' 1"	5' 8"	6' 0"	7' 7"	8' 1"	10' 1"	10' 6"	11' 10"	12' 8"	14' 0"	14' 0"
	SP DFL	#1	4' 6"	7' 4"	7' 8"	8' 8"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"
		#2	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
		#3	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
		Stud	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
		Standard	4' 0"	5' 3"	5' 7"	7' 0"	7' 6"	9' 6"	10' 2"	11' 0"	11' 10"	14' 0"	14' 0"
16" o.c.	SPF HF	#1 / #2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 8"	8' 1"	8' 8"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 8"	8' 1"	8' 6"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	4' 8"	6' 11"	7' 5"	9' 3"	9' 11"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
	SP DFL	#1	5' 1"	8' 5"	8' 9"	9' 11"	10' 4"	11' 10"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	4' 8"	6' 5"	6' 10"	8' 7"	9' 2"	11' 7"	12' 1"	13' 6"	14' 0"	14' 0"	14' 0"
12" o.c.	SPF HF	#1 / #2	5' 5"	9' 2"	9' 6"	10' 10"	11' 3"	11' 8"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 1"	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	5' 1"	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	5' 1"	8' 0"	8' 6"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
	SP DFL	#1	5' 8"	9' 3"	9' 8"	10' 11"	11' 4"	13' 0"	13' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	5' 5"	9' 2"	9' 6"	10' 10"	11' 3"	12' 11"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	5' 1"	7' 5"	7' 11"	9' 11"	10' 7"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"

Bracing Group Species and Grades:

Group A:

Spruce-Pine-Fir	
#1 / #2	Standard
#3	Stud

Hem-Fir	
#2	Stud
#3	Standard

Douglas Fir-Larch
#3
Stud
Standard

Southern Pine***
#3
Stud
Standard

Group B:

Hem-Fir
#1 & Btr
#1

Douglas Fir-Larch
#1
#2

Southern Pine***
#1
#2

1x4 Braces shall be SRB (Stress-Rated Board).

***For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

Gable Truss Detail Notes:

Wind Load deflection criterion is L/240.

Provide uplift connections for 55 plf over continuous bearing (5 psf TC Dead Load).

Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12" plywood overhang.

Attach "L" braces with 10d (0.128"x3.0" min) 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.

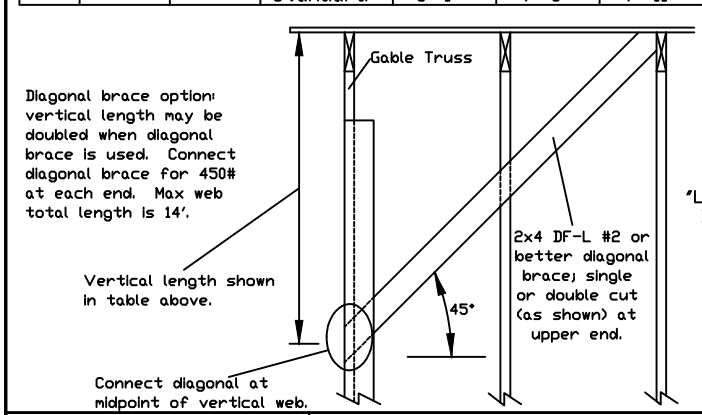
Gable Vertical Plate Sizes

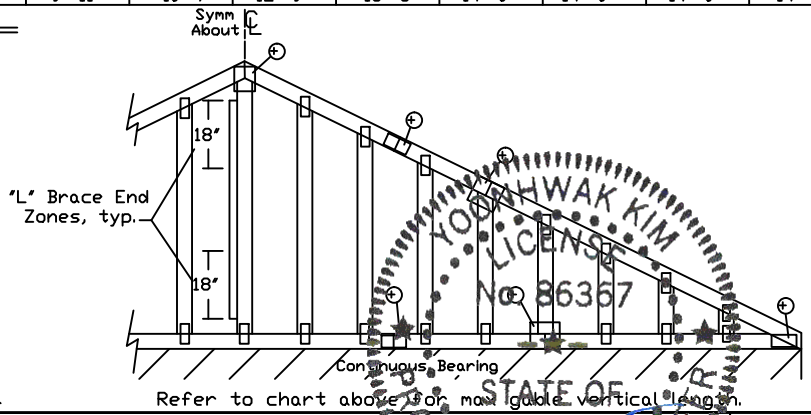
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0"	3X4

+ Refer to common truss design for peak, splice, and heel plates.

Refer to the Building Designer for conditions not addressed by this detail.

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.





Refer to chart above for max gable vertical length.

YOONHWAK KIM LICENSE No 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

ALPINE AN ITW COMPANY

514 Earth City Expressway
Suite 242
Earth City, MO 63045

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.

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 & 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 this job's general notes page and these web sites:
ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

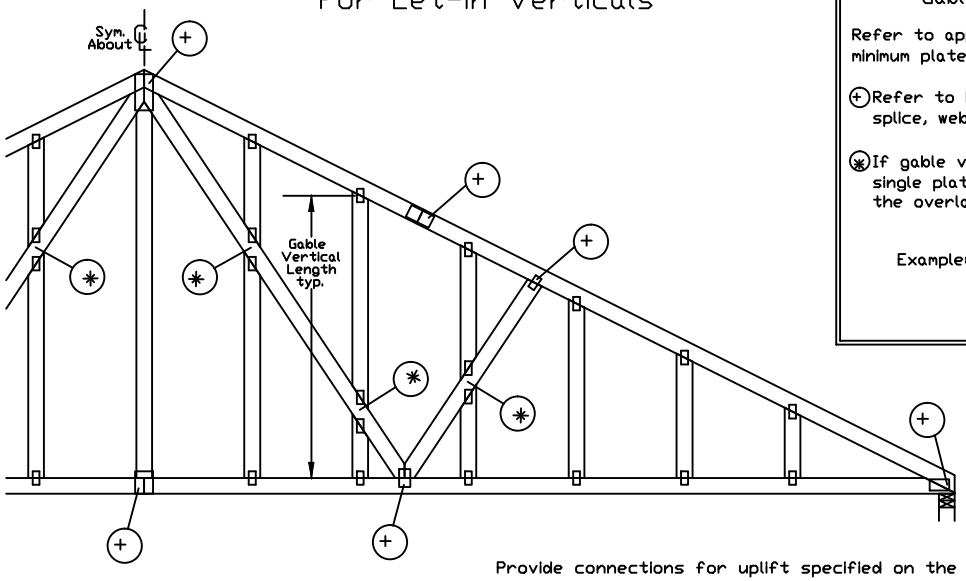
MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-16-GAB14015
DATE	01/26/2018
DRWG	A14015ENC160118

1/15/2021
FL REG. 278, Yoonhwak Kim, FL PE #86367

Gable Detail
For Let-in Verticals



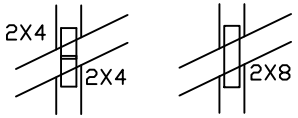
Gable Truss Plate Sizes

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

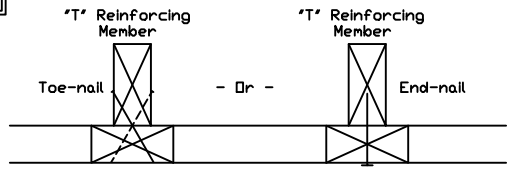
⊕ Refer to Engineered truss design for peak, splice, web, and heel plates.

⊛ If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web.

Example:



"T" Reinforcement Attachment Detail



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.",min) Nails at 4" o.c. plus
(4) nails in the top and bottom chords.

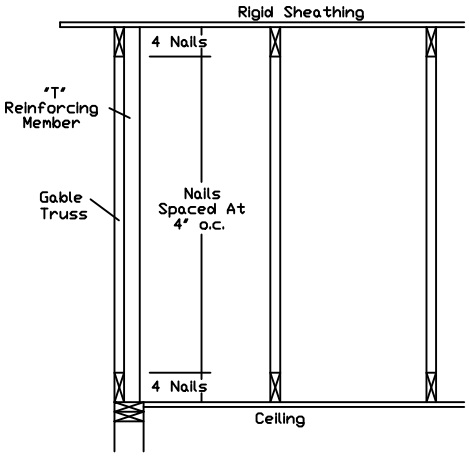
Toenailed Nails:
10d Common (0.148"x3",min) Toenails at 4" o.c. plus
(4) toenails in the top and bottom chords.

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
A11515ENC100118, A12015ENC100118, A14015ENC100118, A13015ENC100118, A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118, A11530ENC100118, A12030ENC100118, A14030ENC100118, A13030ENC100118, A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118, S11515ENC100118, S12015ENC100118, S14015ENC100118, S13015ENC100118, S18015ENC100118, S20015ENC100118, S20015END100118, S20015PED100118, S11530ENC100118, S12030ENC100118, S14030ENC100118, S13030ENC100118, S18030ENC100118, S20030ENC100118, S20030END100118, S20030PED100118

See appropriate Alpine gable detail for maximum unreinforced gable vertical length.



To convert from "L" to "T" reinforcing 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.

Web Length Increase w/ "T" Brace

"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
1.30 x 8' 7" = 11' 2"

ALPINE
AN ITW COMPANY
514 Earth City Expressway
Suite 242
Earth City, MO 63045

****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.

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 & 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 this job's general notes page and these web sites:
ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

MAX. TOT. LD.	60 PSF
DUR. FAC.	ANY
MAX. SPACING	24.0"

REF	LET-IN VERT
DATE	01/02/2018
DRWG	GBLLETIN0118

Gable Stud Reinforcement Detail for Stucco Cladding

ASCE 7-16: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Or: 120 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00
Or: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00
Or: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

Max Gable Vertical Length	2x4 Gable Vertical Spacing	Species	Brace / Grade	No Braces	(1) 1x4 "L" Brace * Group A	(1) 1x4 "L" Brace * Group B	(1) 2x4 "L" Brace * Group A	(1) 2x4 "L" Brace * Group B	(2) 2x4 "L" Brace ** Group A	(2) 2x4 "L" Brace ** Group B	(1) 2x6 "L" Brace * Group A	(1) 2x6 "L" Brace * Group B	(2) 2x6 "L" Brace ** Group A	(2) 2x6 "L" Brace ** Group B
	24" o.c.	SPF HF	#1 / #2	3' 9"	6' 4"	6' 7"	7' 6"	7' 10"	8' 11"	9' 4"	11' 9"	12' 3"	14' 0"	14' 0"
			#3	3' 7"	6' 3"	6' 6"	7' 5"	7' 8"	8' 10"	9' 2"	11' 7"	12' 1"	13' 10"	14' 0"
			Stud	3' 7"	6' 3"	6' 6"	7' 5"	7' 8"	8' 10"	9' 2"	11' 7"	12' 1"	13' 10"	14' 0"
			Standard	3' 7"	5' 8"	6' 0"	7' 5"	7' 8"	8' 10"	9' 2"	11' 7"	12' 1"	13' 10"	14' 0"
		SP DFL	#1	3' 11"	6' 5"	6' 8"	7' 7"	7' 11"	9' 0"	9' 5"	11' 11"	12' 4"	14' 0"	14' 0"
			#2	3' 9"	6' 4"	6' 7"	7' 6"	7' 10"	8' 11"	9' 4"	11' 9"	12' 3"	14' 0"	14' 0"
			#3	3' 8"	6' 0"	6' 4"	7' 5"	7' 9"	8' 11"	9' 3"	11' 8"	12' 2"	13' 11"	14' 0"
			Stud	3' 8"	6' 0"	6' 4"	7' 5"	7' 9"	8' 11"	9' 3"	11' 8"	12' 2"	13' 11"	14' 0"
			Standard	3' 7"	5' 3"	5' 7"	7' 0"	7' 6"	8' 10"	9' 2"	11' 0"	11' 10"	13' 10"	14' 0"
	16" o.c.	SPF HF	#1 / #2	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
			#3	4' 1"	7' 2"	7' 7"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
			Stud	4' 1"	7' 2"	7' 5"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
			Standard	4' 1"	6' 11"	7' 5"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		SP DFL	#1	4' 6"	7' 4"	7' 8"	8' 8"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"
			#2	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
			#3	4' 2"	7' 3"	7' 6"	8' 6"	8' 10"	10' 2"	10' 7"	13' 5"	13' 11"	14' 0"	14' 0"
			Stud	4' 2"	7' 3"	7' 6"	8' 6"	8' 10"	10' 2"	10' 7"	13' 5"	13' 11"	14' 0"	14' 0"
			Standard	4' 1"	6' 5"	6' 10"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
	12" o.c.	SPF HF	#1 / #2	4' 8"	8' 0"	8' 4"	9' 5"	9' 10"	10' 3"	11' 9"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	4' 6"	7' 11"	8' 2"	9' 4"	9' 8"	11' 1"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"
			Stud	4' 6"	7' 11"	8' 2"	9' 4"	9' 8"	11' 1"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"
			Standard	4' 6"	7' 11"	8' 2"	9' 4"	9' 8"	11' 1"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"
		SP DFL	#1	4' 11"	8' 1"	8' 5"	9' 7"	9' 11"	11' 4"	11' 10"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	4' 8"	8' 0"	8' 4"	9' 5"	9' 10"	11' 3"	11' 9"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	4' 7"	7' 11"	8' 3"	9' 5"	9' 9"	11' 2"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"
			Stud	4' 7"	7' 11"	8' 3"	9' 5"	9' 9"	11' 2"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"
			Standard	4' 6"	7' 5"	7' 11"	9' 4"	9' 8"	11' 1"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"

Bracing Group Species and Grades:

Group A:

Spruce-Pine-Fir: #1 / #2, Standard, #3, Stud
Hem-Fir: #2, Stud, #3, Standard
Douglas Fir-Larch: #3, Stud, Standard
Southern Pine***: #3, Stud, Standard

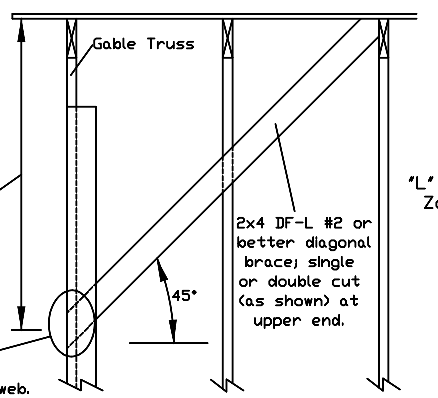
Group B:

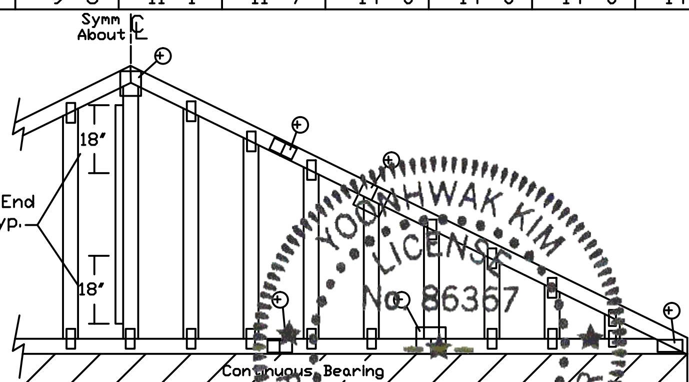
Hem-Fir: #1 & Btr, #1
Douglas Fir-Larch: #1, #2
Southern Pine***: #1, #2

1x4 Braces shall be SRB (Stress-Rated Board).

***For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.





Refer to chart above for max gable vertical length.

Gable Truss Detail Notes:

Wind Load deflection criterion is L/360.

Provide uplift connections for 55 plf over continuous bearing (5 psf TC Dead Load).

Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12" plywood overhang.

Attach "L" braces with 10d (0.128"x3.0" min) 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.

Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0"	3X4

+ Refer to common truss design for peak, splice, and heel plates.

Refer to the Building Designer for conditions not addressed by this detail.

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.

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 & 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 this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

ALPINE AN ITW COMPANY
514 Earth City Expressway
Suite 242
Earth City, MO 63045

YOONHWAK KIM LICENSE No 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

07/15/2021 COA #0 278, Yoonhwak Kim, FL PE #86367

REF	ASCE7-16-GAB14015
DATE	01/26/2018
DRWG	S14015ENC160118

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

CLR Reinforcing Member Substitution

This detail is to be used when a Continuous Lateral Restraint (CLR) is specified on a truss design but an alternative web reinforcement method is desired.

Notes:

This detail is only applicable for changing the specified CLR shown on single ply sealed designs to T-reinforcement or L-reinforecement or scab reinforcement.

Alternative reinforcement specified in chart below may be conservative. For minimum alternative reinforcement, re-run design with appropriate reinforcement type.

Use scabs instead of L- or T- reinforcement on webs with intersecting truss joints, such as K-web joints, that may interfere with proper application along the narrow face of the web.

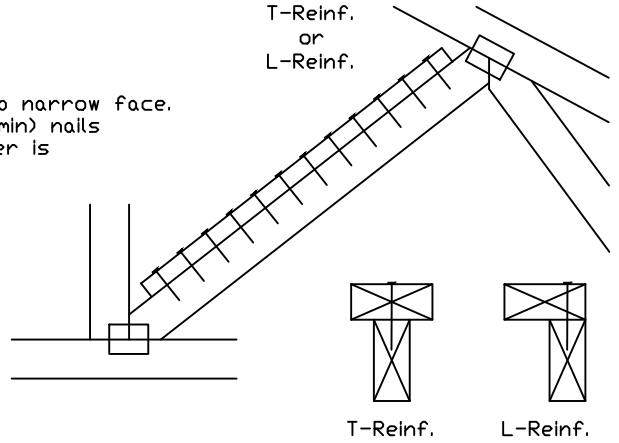
Web Member Size	Specified CLR Restraint	Alternative Reinforecement T- or L- Reinf.	Alternative Reinforecement Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(*)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(*)

T-reinforcement, L-reinforcement, or scab reinforcement 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.

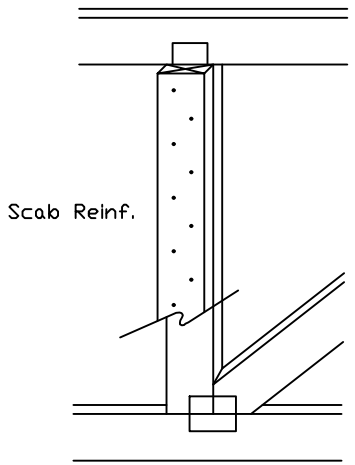
T-Reinforcement or L-Reinforcement:

Apply to either side of web narrow face. Attach with 10d (0.128"x3.0",min) nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



Scab Reinforcement:

Apply scab(s) to wide face of web. No more than (1) scab per face. Attach with 10d (0.128"x3.0",min) nails at 6" o.c. Reinforcing member is a minimum 80% of web member length.



YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

ALPINE AN ITW COMPANY
514 Earth City Expressway
Suite 242
Earth City, MO 63045

****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.

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 & 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 this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

TC LL		PSF
TC DL		PSF
BC DL		PSF
BC LL		PSF
TOT. LD.		PSF
DUR. FAC.		
SPACING		

REF	CLR Subst.
DATE	01/02/19
DRWG	BRCLBSUB0119

12/15/2021
FL Cert# 278, Yoonhwak Kim, FL PE #86367

Commentary: Deflection and Camber

Camber may be built into trusses to compensate for the vertical deflection that results from the application of loads. Providing camber has the following advantages:

- Helps to ensure level ceilings and floors after dead loads are applied.
- Facilitates drainage to avoid ponding on flat or low slope roofs.
- Compensates for different deflection characteristics between adjacent trusses.
- Improves appearance of garage door headers and other long spans that can appear to "sag."
- Avoids "dips" in roof ridgelines at the transition from the gable to adjacent clear span trusses.

In accordance with ANSI/TPI 1 the Building Designer, through the Construction Documents, shall provide the location, direction, and magnitude of all loads attributable to ponding that may occur due to the design of the roof drainage system. The Building Designer shall also specify any dead load, live load, and in-service creep deflection criteria for flat or low-slope roofs subject to ponding loads.

The amount of camber is dependent on the truss type, span, loading, application, etceteras.

More restrictive limits for allowable deflection and slenderness ratio (L/D) may be required to help control vibration.

The following tables are provided as guidelines for limiting deflection and estimating camber. Conditions or codes may exist that require exceeding these recommendations, or past experience may warrant using more stringent limitations.

L = Span of Truss (inches)
D = Depth of Truss at Deflection Point (inches)

Recommended Truss Deflection Limits

Truss Type	L/D	Deflection Limits	
		Live Load	Total Load
Pitched Roof Trusses	24	L/240 (vertical)	L/180 (vertical)
Floor of Room-In-Attic Trusses	24	L/360 (vertical)	L/240 (vertical)
Flat or Shallow Pitched Roof Trusses	24	L/360 (vertical)	L/240 (vertical)
Residential Floor Trusses	24	L/360 (vertical)	L/240 (vertical)
Commercial Floor Trusses	20	L/480 (vertical)	L/240 (vertical)
Scissors Trusses	24	0.75" (horizontal)	1.25" (horizontal)

Truss Type	Recommended Camber
Pitched Trusses	1.00 x Deflection from Actual Dead Load
Sloping Parallel Chord Trusses	1.5 x Vertical Deflection from Actual Dead Load
Floor Trusses	(0.25 x Deflection from Live Load) + Actual Dead Load
Flat Roof Trusses	(0.25 x Deflection from Live Load) + (1.5 x Design Dead Load Deflection)

Note: The actual dead load may be considerably less than the design dead load.

YOONHWAK KIM LICENSE No 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

ALPINE AN ITW COMPANY
514 Earth City Expressway
Suite 242
Earth City, MO 63045

REF	DEFLEC/CAMB
DATE	10/01/14
DRWG	DEFLCAMB1014

NAIL SPACING DETAIL

MINIMUM SPACING FOR SINGLE BLOCK IS SHOWN. DOUBLE NAIL SPACINGS AND STAGGER NAILING FOR TWO BLOCKS. GREATER SPACING MAY BE REQUIRED TO AVOID SPLITTING.

BLOCK LOCATION, SIZE, LENGTH,GRADE AND TOTAL NUMBER AND TYPE OF NAILS ARE TO BE SPECIFIED ON SEALED DESIGN REFERENCING THIS DETAIL.

LOAD PERPENDICULAR TO GRAIN
A - EDGE DISTANCE AND SPACING BETWEEN STAGGERED ROWS OF NAILS (6 NAIL DIAMETERS)
B - SPACING OF NAILS IN A ROW (12 NAIL DIAMETERS)
C - END DISTANCE (15 NAIL DIAMETERS)

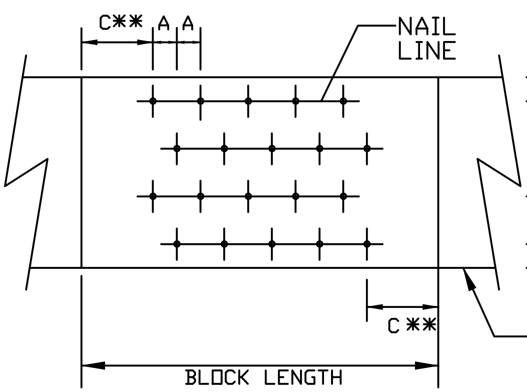
LOAD PARALLEL TO GRAIN
A - EDGE DISTANCE (6 NAIL DIAMETERS)
C - SPACING OF NAILS IN A ROW AND END DISTANCE (15 NAIL DIAMETERS)
D - SPACING BETWEEN STAGGERED ROWS OF NAILS (7 1/2 NAIL DIAMETERS)

IF NAIL HOLES ARE PREBORED, SOME SPACING MAY BE REDUCED BY THE AMOUNTS GIVEN BELOW:
* SPACING MAY BE REDUCED BY 50%
** SPACING MAY BE REDUCED BY 33%

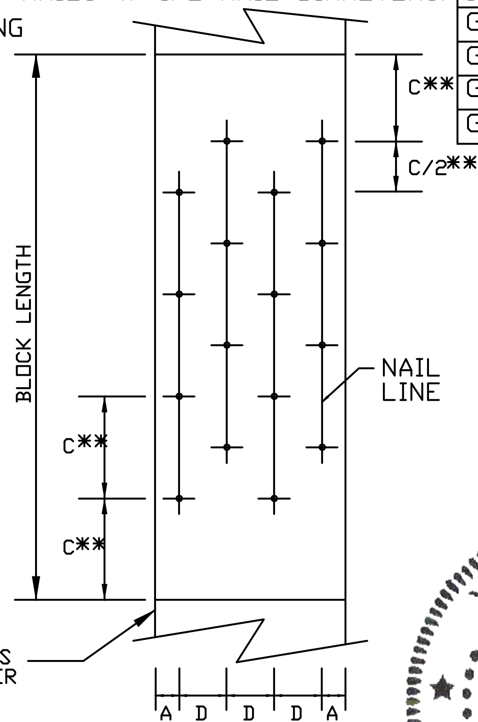
MINIMUM NAIL SPACING DISTANCES

NAIL TYPE	DISTANCES A	B*	C**	D
8d BOX (0.113"X 2.5",MIN)	3/4"	1 3/8"	1 3/4"	7/8"
10d BOX (0.128"X 3.",MIN)	7/8"	1 5/8"	2"	1"
12d BOX (0.128"X 3.25",MIN)	7/8"	1 5/8"	2"	1"
16d BOX (0.135"X 3.5",MIN)	7/8"	1 5/8"	2 1/8"	1 1/8"
20d BOX (0.148"X 4.",MIN)	1"	1 7/8"	2 1/4"	1 1/8"
8d COMMON (0.131"X 2.5",MIN)	7/8"	1 5/8"	2"	1"
10d COMMON (0.148"X 3.",MIN)	1"	1 7/8"	2 1/4"	1 1/8"
12d COMMON (0.148"X 3.25",MIN)	1"	1 7/8"	2 1/4"	1 1/8"
16d COMMON (0.162"X 3.5",MIN)	1'	2"	2 1/2"	1 1/4"
GUN (0.120"X 2.5",MIN)	3/4"	1 1/2"	1 7/8"	1"
GUN (0.131"X 2.5",MIN)	7/8"	1 5/8"	2"	1"
GUN (0.120"X 3.",MIN)	3/4"	1 1/2"	1 7/8"	1"
GUN (0.131"X 3.",MIN)	7/8"	1 5/8"	2"	1"

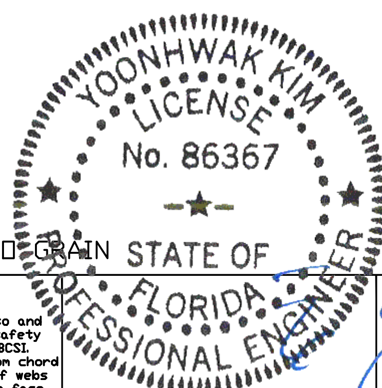
DIRECTION OF LOAD AND NAIL ROWS



LOAD APPLIED PERPENDICULAR TO GRAIN



LOAD APPLIED PARALLEL TO GRAIN



ALPINE AN ITW COMPANY

514 Earth City Expressway
Suite 242
Earth City, MO 63045

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.

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 & 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 this job's general notes page and these web sites:
ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

12/15/2021
FL REG# 278, Yoonhwak Kim, FL PE #86367

REF	NAIL SPACE
DATE	10/01/14
DRWG	CNNAILSP1014