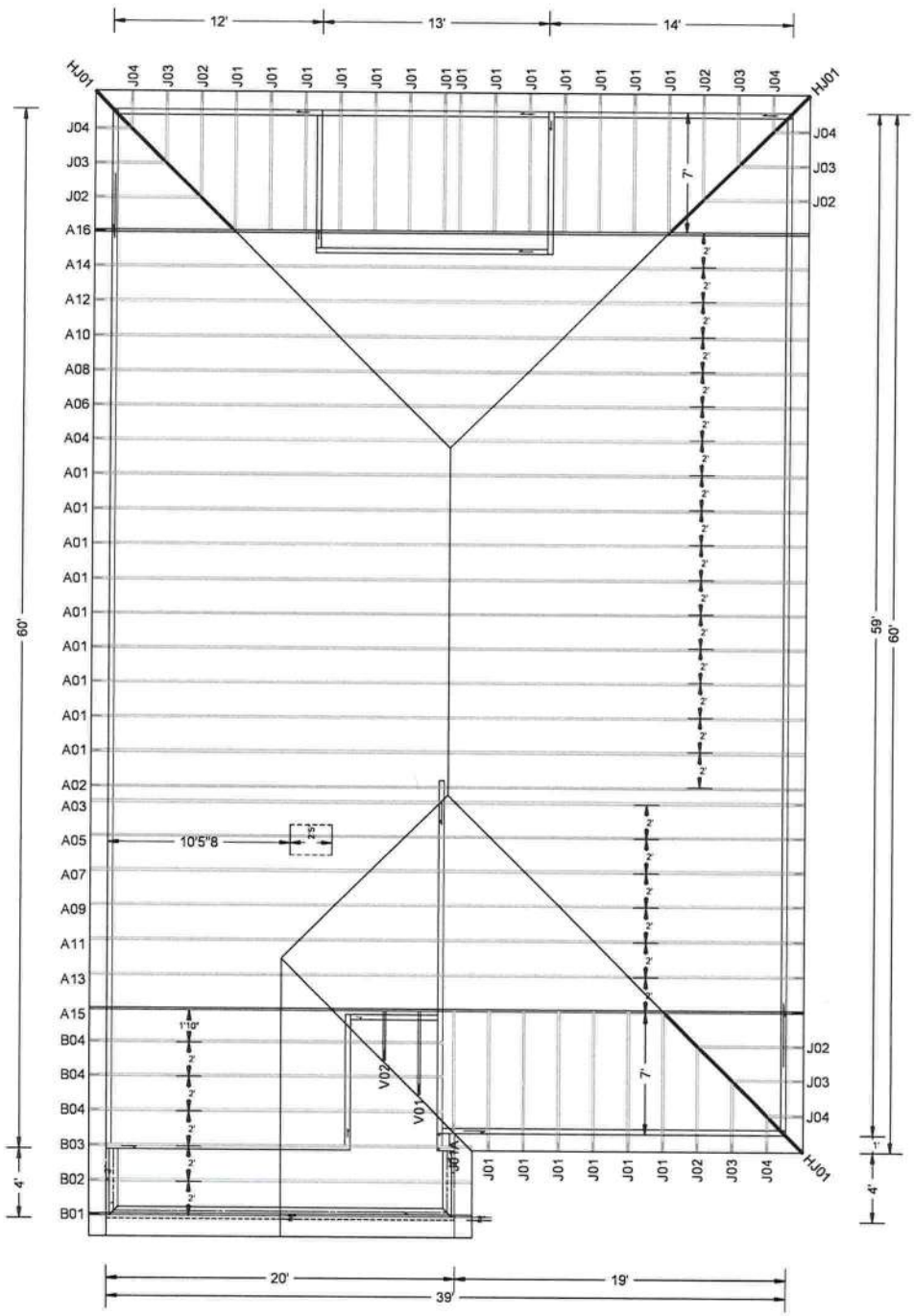
(73)



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

ROOF PITCH: 6/12
OVERHANG: 12"

CEILING: FLAT

EXT. WALLS: FRAME

LOADING: 40 TL
WIND LOAD: 130
CATEGORY: II
EXPOSURE: C
DEFLECTION: 360/240

DATE: 8/6/21

Reviewed for Code Compliance
Universal Engineering Sciences

R42707
EXAMINER - LICENSE NO.

JOB #: 21-5888

Job Name: Reserve at Jewel Lake 42
Customer: Century Complete
Designer: Chris McCall
ADDRESS:
SALESMAN: Fill in later
: <Not Found>

JOB NO:
21-5888

PAGE NO:
1 OF 1

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

ALPINE AN ITW COMPANY

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

Reviewed for Code Compliance
Universal Engineering Sciences

EXAMINER - LICENSE NO.

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	*Job Number:* 21-5888
Job Description: Reserve at Jewel Lake 42 - Radford B - GR	
Address: FL	

Job Engineering Criteria:	
Design Code: FBC 7th Ed. 2020 Res	*IntelliVIEW Version:* 21.01.01A *JRef #:* 1X7V2150005
Wind Standard: ASCE 7-16 *Wind Speed (mph):* 130 *Building Type:* Closed	*Design Loading (psf):* 40.00

This package contains general notes pages, 28 truss drawing(s) and 6 detail(s).

Item	Drawing Number	Truss	Item	Drawing Number	Truss
1	223.21.1145.08801	A01	2	223.21.1145.08614	A02
3	223.21.1145.08910	A03	4	223.21.1145.09426	A04
5	223.21.1145.08769	A05	6	223.21.1145.08615	A06
7	223.21.1145.08613	A07	8	223.21.1145.08941	A08
9	223.21.1145.09067	A09	10	223.21.1145.09302	A10
11	223.21.1145.09316	A11	12	223.21.1145.09129	A12
13	223.21.1145.09114	A13	14	223.21.1145.09347	A14
15	223.21.1145.09066	A15	16	223.21.1145.08786	A16
17	223.21.1145.08176	B01	18	223.21.1145.09177	B02
19	223.21.1145.09505	B03	20	223.21.1145.08192	B04
21	223.21.1145.09473	HJ01	22	223.21.1145.09191	J01
23	223.21.1145.08238	J01A	24	223.21.1145.08895	J02
25	223.21.1145.09239	J03	26	223.21.1145.09270	J04
27	223.21.1145.08911	V01	28	223.21.1145.09380	V02
29	A14015ENC160118		30	BRCLBSUB0119	
31	CNNAILSP1014		32	GBLLETIN0118	
33	VAL180160118		34	VALTN160118	

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.

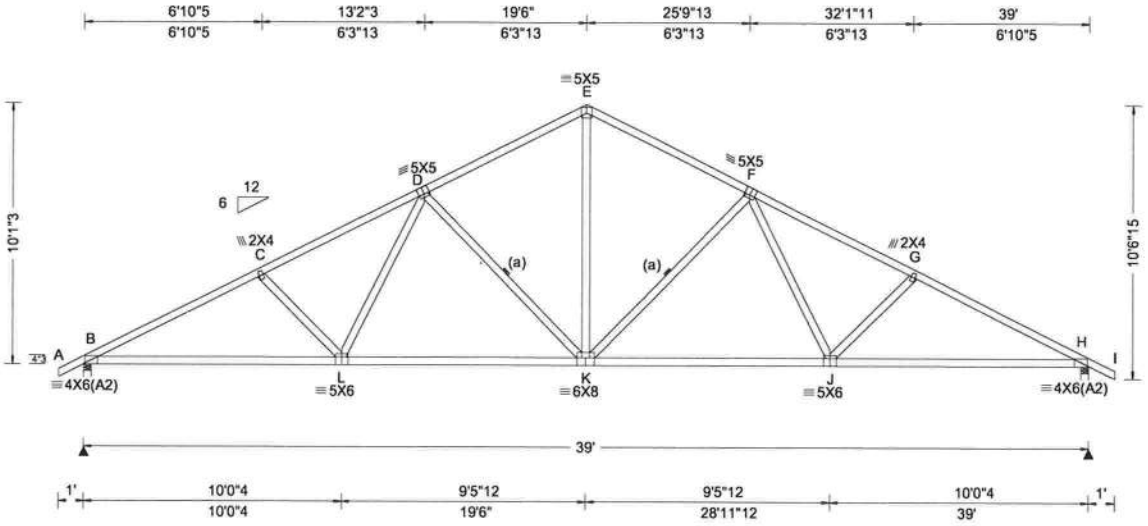
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
CL = Certified lumber.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
FRT = Fire Retardant Treated lumber.
FRT-DB = D-Blaze 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.sbcindustry.com.

SEQN: 387889 / COMN FROM: CDM	Ply: 1 Qty: 9	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A01	Cust: R 215 JRef: 1X7V2150005 T9 DrwNo: 223.21.1145.08801 / YK 08/11/2021



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: h/2 to h C&C Dist a: 3.90 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): 0.190 K 999 360 VERT(CL): 0.357 K 999 240 HORZ(LL): 0.064 J - - HORZ(TL): 0.120 J - - Creep Factor: 2.0 Max TC CSI: 0.569 Max BC CSI: 0.484 Max Web CSI: 0.549 VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1825	/-	/-	/1003	/292	/288
H	1825	/-	/-	/1003	/292	/-

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

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	665	-3311	E - F	558	-2144
C - D	638	-3029	F - G	638	-3029
D - E	558	-2144	G - H	665	-3311

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - L	2883	-497	K - J	2373	-325
L - K	2373	-339	J - H	2883	-484

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
L - D	609	-58	K - F	266	-770
D - K	266	-770	F - J	609	-58
E - K	1441	-270			

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP M-31;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Loading

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

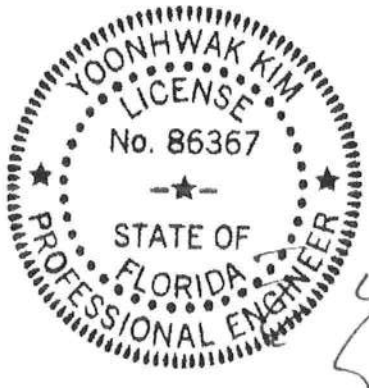
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 10-1-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

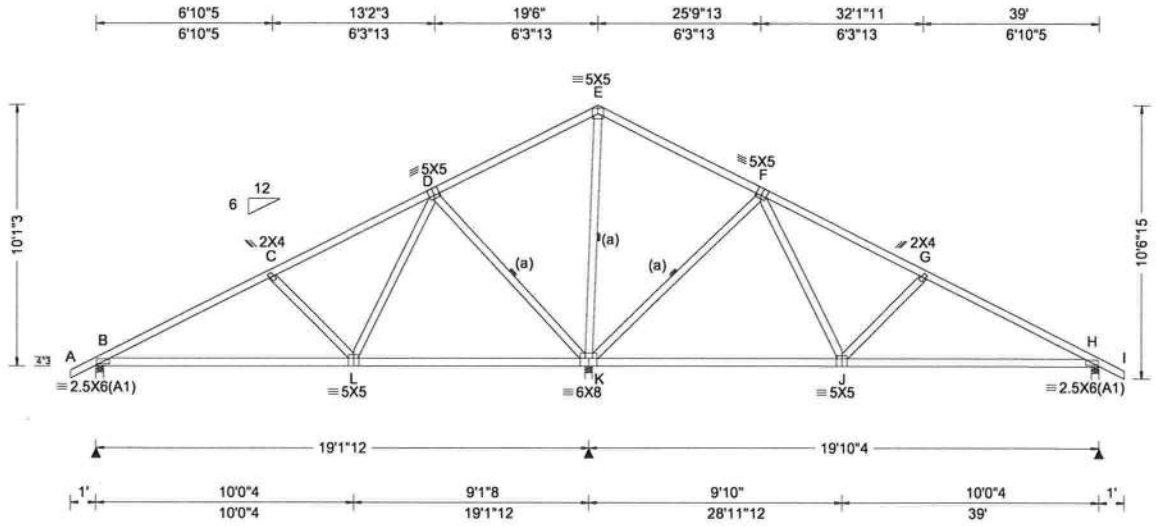
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387891 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A02	Cust: R 215 JRef: 1X7V2150005 T1 / DrwNo: 223.21.1145.08614 / YK 08/11/2021



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: 3.90 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):	0.020 J	999	360
VERT(CL):	0.045 L	999	240
HORZ(LL):	0.011 L	-	-
HORZ(TL):	0.026 L	-	-

Creep Factor: 2.0
Max TC CSI: 0.636
Max BC CSI: 0.881
Max Web CSI: 0.433

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	677	/-	/-	/424	/99	/288
K	2381	/-	/-	/1136	/380	/-
H	717	/-	/-	/499	/106	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
K Brg Width = 3.5 Min Req = 2.8
H Brg Width = 3.5 Min Req = 1.5
Bearings B, K, & 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.
B - C	156	-825	E - F	655	-6
C - D	130	-536	F - G	149	-631
D - E	690	-17	G - H	177	-919

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - L	671	-240	J - H	754	-53

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - L	209	-397	K - F	298	-851
L - D	643	-66	F - J	668	-60
D - K	297	-820	J - G	209	-393
K - E	153	-859			

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

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.

Additional Notes

The overall height of this truss excluding overhang is 10-1-3.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

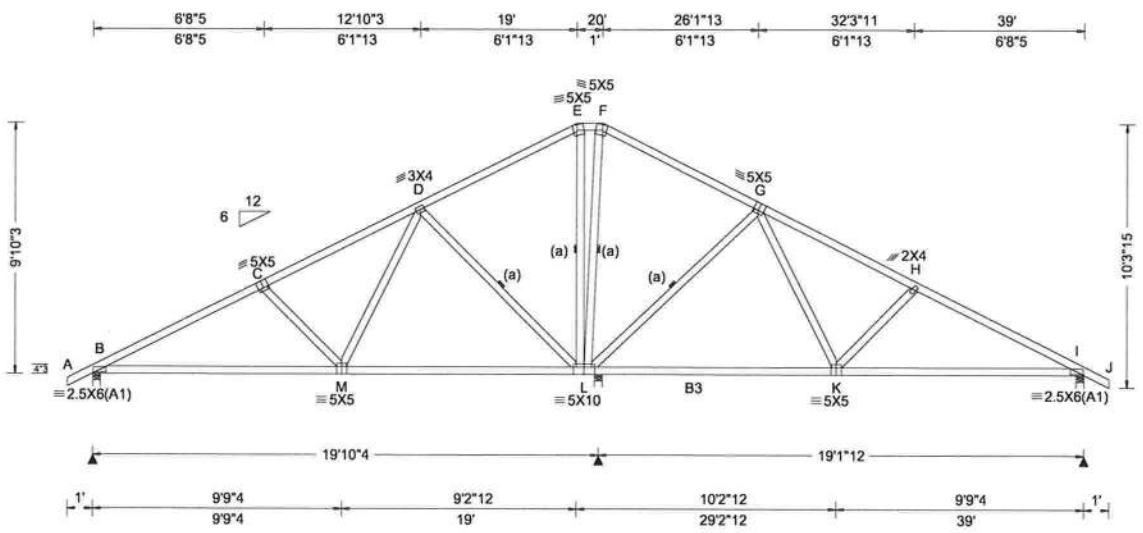
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387931 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A03	Cust: R 215 JRef: 1X7V2150005 T22 / DrwNo: 223.21.1145.08910 / YK 08/11/2021



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): 0.065 D 999 360
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.133 D 999 240
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.029 K - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.060 K - -
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: 0.481
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.957
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.330
	C&C Dist a: 3.90 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
B	1009	/-	/-	/634	/35	/281
L	1352	/-	/-	/752	/17	/-
I	984	/-	/-	/655	/49	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
L Brg Width = 3.5 Min Req = 1.5
I Brg Width = 3.5 Min Req = 1.5
Bearings B, L, & 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	385	-1555	F - G	255	-409
C - D	360	-1276	G - H	334	-1187
D - E	260	-406	H - I	361	-1471

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - M	1321	-249	L - K	1570	-148
M - L	819	-119	K - I	1252	-225

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - M	201	-377	L - G	258	-698
M - D	608	-68	G - K	530	-42
D - L	277	-757	K - H	206	-392

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2; B3 2x4 SP M-31;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

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

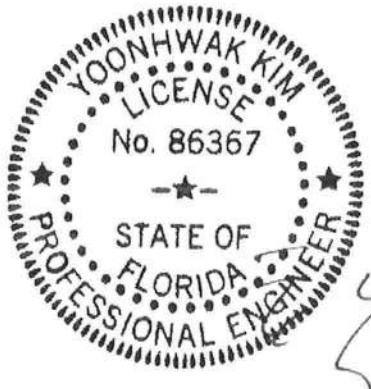
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 9-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

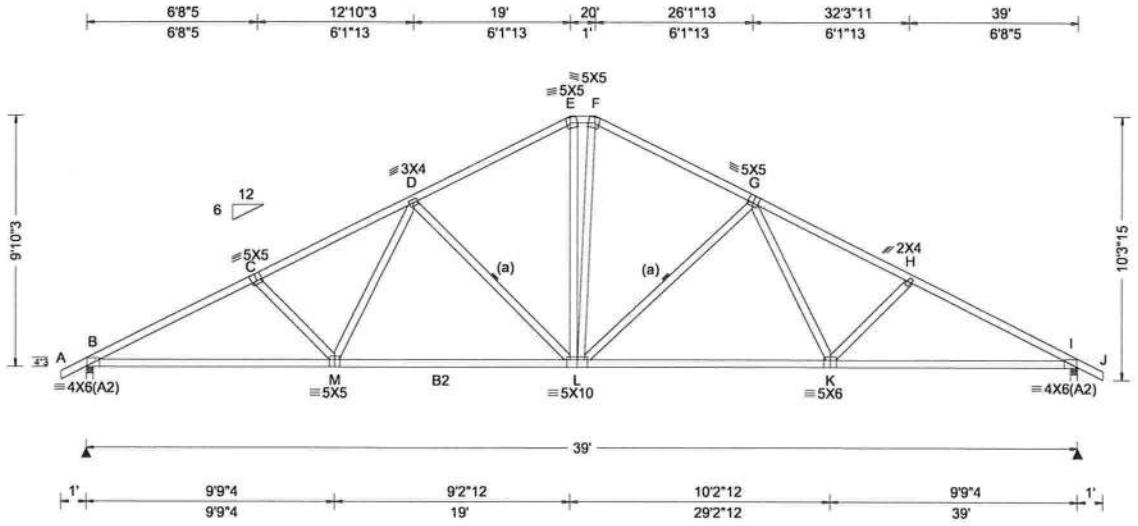
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387887 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A04	Cust: R 215 JRef: 1X7V2150005 T8 / DrwNo: 223.21.1145.09426 / YK 08/11/2021	



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: 3.90 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): 0.152	L	999	360
VERT(CL): 0.310	L	999	240
HORZ(LL): 0.057	K	-	-
HORZ(TL): 0.116	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.531
Max BC CSI: 0.955
Max Web CSI: 0.333

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1673	/-	/-	/1003	/33	/281
I	1673	/-	/-	/1003	/33	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
I Brg Width = 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	687	-2972	F - G	574	-1879
C - D	663	-2699	G - H	662	-2702
D - E	580	-1907	H - I	687	-2976
E - F	567	-1641			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - M	2584	-523	L - K	2125	-359
M - L	2128	-373	K - I	2588	-510

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
M - D	545	-52	L - F	587	-183
D - L	267	-710	L - G	266	-720
E - L	603	-189	G - K	560	-50

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP M-31; B2 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

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

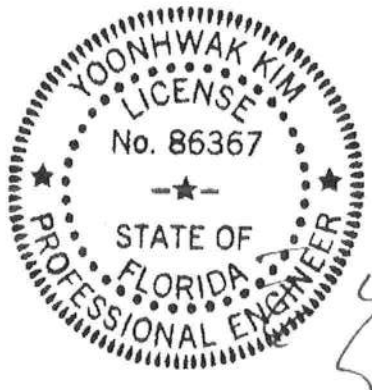
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 9-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

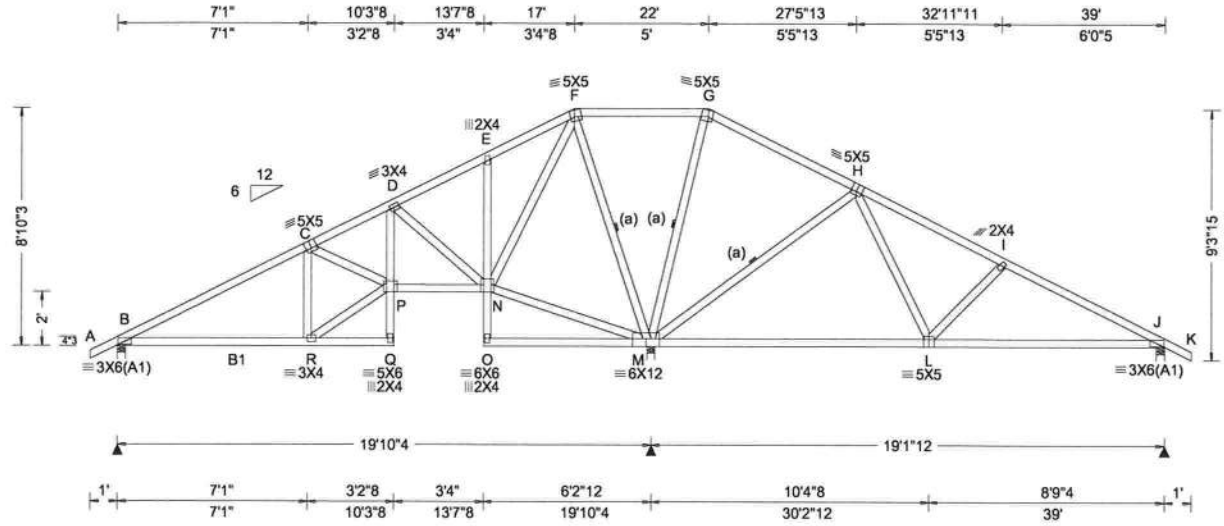
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387940 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A05	Cust: R 215 JRef: 1X7V2150005 T21 / DrwNo: 223.21.1145.08769 / YK 08/11/2021



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: 3.90 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): 0.018	P	999	360
VERT(CL): 0.047	P	999	240
HORZ(LL): 0.011	L	-	-
HORZ(TL): 0.025	M	-	-

Creep Factor: 2.0
Max TC CSI: 0.626
Max BC CSI: 0.437
Max Web CSI: 0.392

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	618	/-	/-	/376	/30	/254
M	2229	/-	/-	/1270	/35	/-
J	653	/-	/-	/468	/117	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
M Brg Width = 3.5 Min Req = 1.8
J Brg Width = 3.5 Min Req = 1.5
Bearings B, M, & J 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	167	-711	G - H	709	-24
C - D	122	-545	H - I	243	-571
F - G	730	-3	I - J	245	-819

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - R	560	-175	L - J	673	-157
P - N	434	-233			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
R - P	689	-211	F - M	273	-900
P - D	509	-78	M - G	211	-605
D - N	131	-609	M - H	272	-736
N - F	658	-163	H - L	573	-39
N - M	287	-481			

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP M-31; B1 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

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

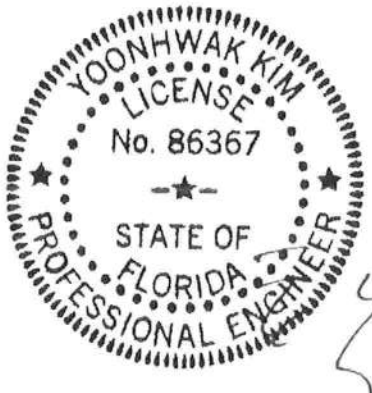
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 8-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

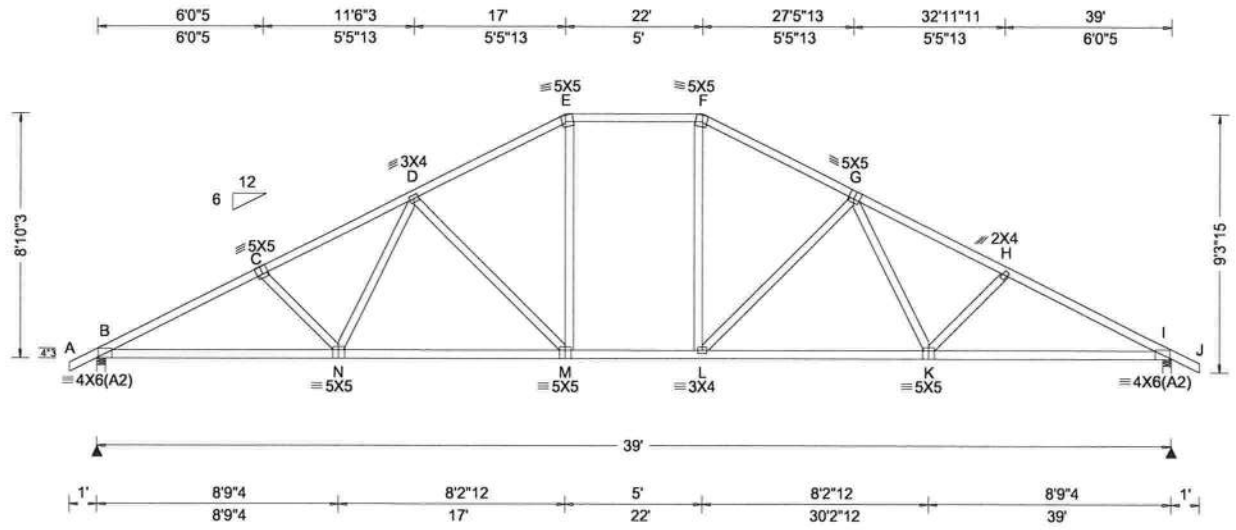
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387885 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A06	Cust: R 215 JRef: 1X7V2150005 T7 / DrwNo: 223.21.1145.08615 / YK 08/11/2021



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: 3.90 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): 0.223	L	999	360
VERT(CL): 0.623	L	745	240
HORZ(LL): 0.083	E	-	-
HORZ(TL): 0.233	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.786
Max BC CSI: 0.905
Max Web CSI: 0.876

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1673	/-	/-	/1002	/39	/254
I	1673	/-	/-	/1002	/39	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 2.0
I Brg Width = 3.5 Min Req = 2.0
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	789	-3005	F - G	708	-2086
C - D	771	-2765	G - H	772	-2766
D - E	708	-2087	H - I	790	-3007
E - F	675	-1793			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	2618	-628	L - K	2224	-488
N - M	2225	-502	K - I	2619	-616
M - L	1793	-330			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
N - D	486	-38	F - L	576	-99
D - M	248	-697	L - G	247	-696
E - M	577	-101	G - K	486	-40

Lumber

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

Purlins

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

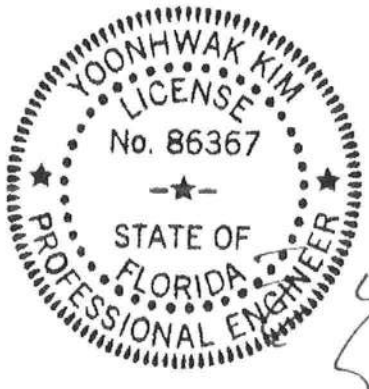
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 8-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

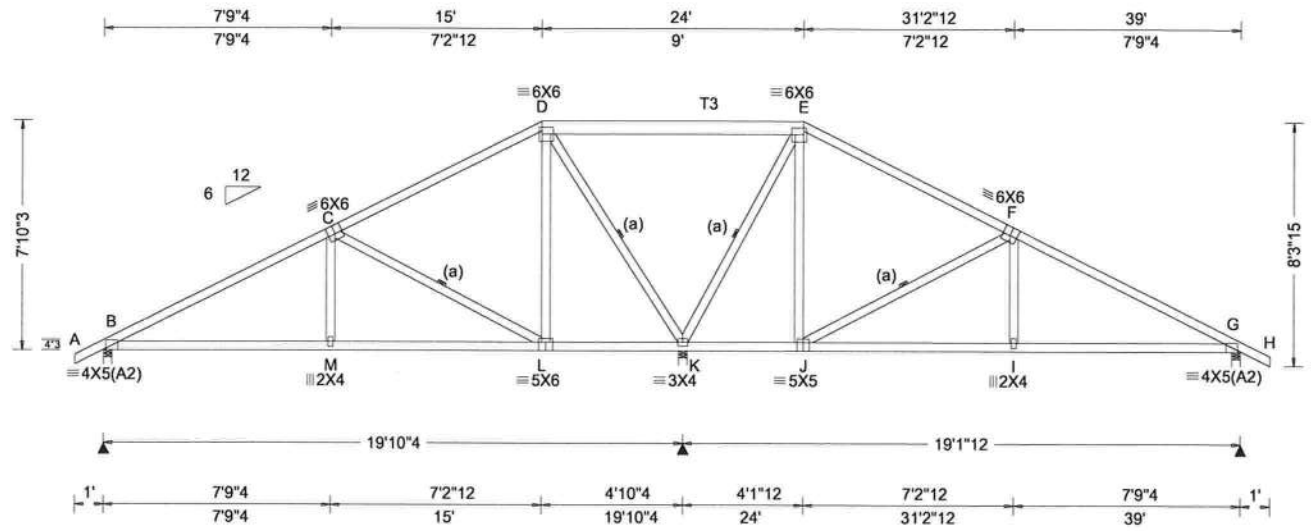
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387945 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A07	Cust: R 215 JRef: 1X7V2150005 T20 / DrwNo: 223.21.1145.08613 / YK 08/11/2021



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): 0.022 M 999 360
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.051 M 999 240
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.012 I - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.024 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: 0.740
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.546
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.478
	C&C Dist a: 3.90 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
B	713	/-	/-	/451	/46	/227
K	2059	/-	/-	/1114	/27	/-
G	680	/-	/-	/476	/81	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
K Brg Width = 3.5 Min Req = 2.1
G Brg Width = 3.5 Min Req = 1.5
Bearings B, 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.
B - C	241	-904	F - G	220	-834
D - E	687	-25			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - M	732	-199	J - I	665	-96
M - L	728	-201	I - G	669	-95

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - L	276	-781	K - E	398	-1141
L - D	518	-66	J - E	503	-69
D - K	401	-1154	J - F	276	-784

Lumber

Top chord: 2x4 SP #2; T3 2x6 SP 2400f-2.0E;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

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

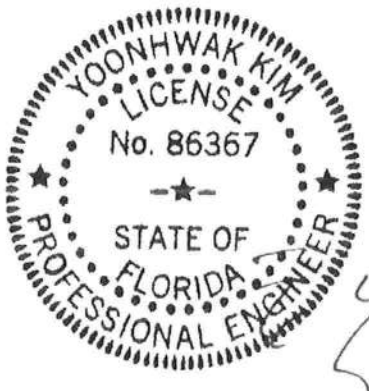
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 7-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

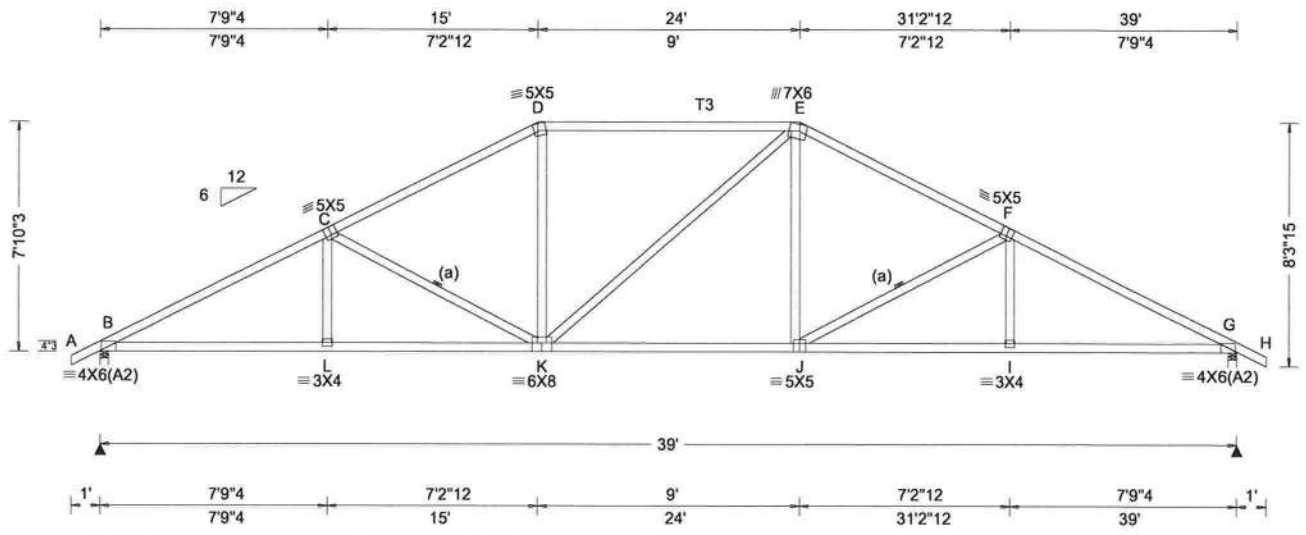
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387883 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A08	Cust: R 215 JRef: 1X7V2150005 T6 / DrwNo: 223.21.1145.08941 / YK 08/11/2021



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: 3.90 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): 0.159	J	999	360
VERT(CL): 0.325	J	999	240
HORZ(LL): 0.073	I	-	-
HORZ(TL): 0.149	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.886
Max BC CSI: 0.855
Max Web CSI: 0.399

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1669	/-	/-	/998	/47	/227
G	1669	/-	/-	/998	/47	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 2.0
G Brg Width = 3.5 Min Req = 2.0
Bearings B & G are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	873	-2948	E - F	823	-2311
C - D	821	-2303	F - G	874	-2948
D - E	811	-1983			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - L	2547	-686	J - I	2544	-675
L - K	2544	-688	I - G	2547	-673
K - J	1980	-491			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - K	210	-649	E - J	566	-20
D - K	566	-35	J - F	210	-645

Lumber

Top chord: 2x4 SP #2; T3 2x4 SP M-31;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

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.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 7-10-3.

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

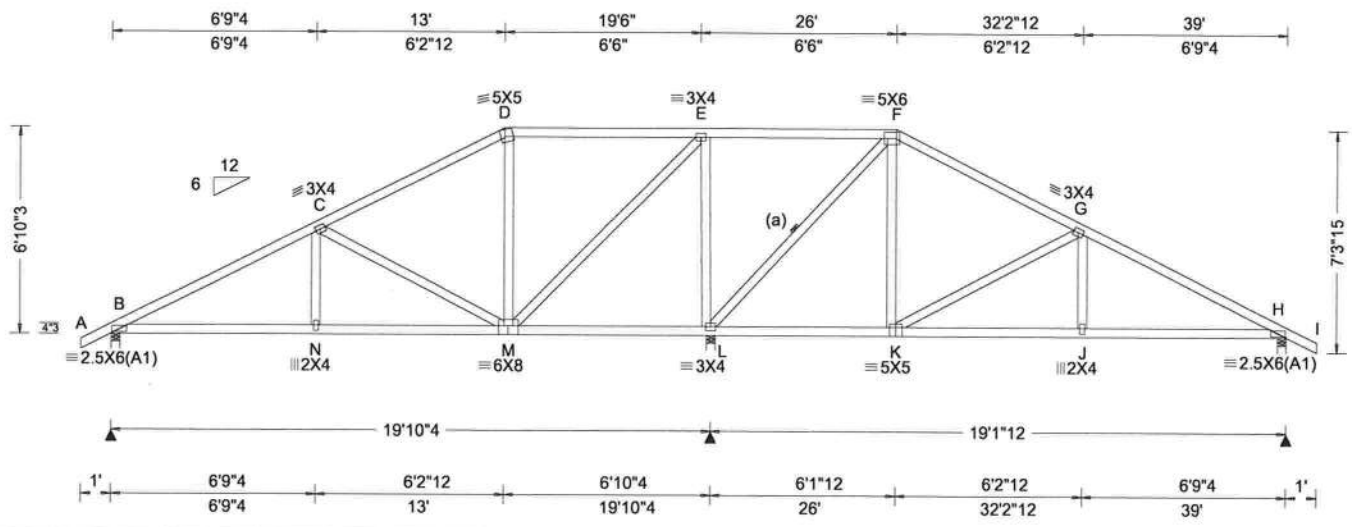
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387948 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A09	Cust: R 215 JRef: 1X7V2150005 T18 / DrwNo: 223.21.1145.09067 / YK 08/11/2021



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: 3.90 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): 0.024	N	999	360
VERT(CL): 0.054	N	999	240
HORZ(LL): 0.011	J	-	-
HORZ(TL): 0.023	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.699
Max BC CSI: 0.430
Max Web CSI: 0.976

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	741	/-	/-	/470	/42	/201
L	2002	/-	/-	/1060	/93	/-
H	701	/-	/-	/482	/66	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
L Brg Width = 3.5 Min Req = 2.0
H Brg Width = 3.5 Min Req = 1.5
Bearings B, L, & 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.
B - C	271	-1005	E - F	564	0
C - D	206	-405	G - H	252	-930

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	828	-176	K - J	761	-135
N - M	825	-177	J - H	764	-134
M - L	245	-501			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - M	215	-629	L - F	285	-954
M - E	966	-294	F - K	471	-59
E - L	581	-1169	K - G	246	-665

Lumber

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

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.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 6-10-3.

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

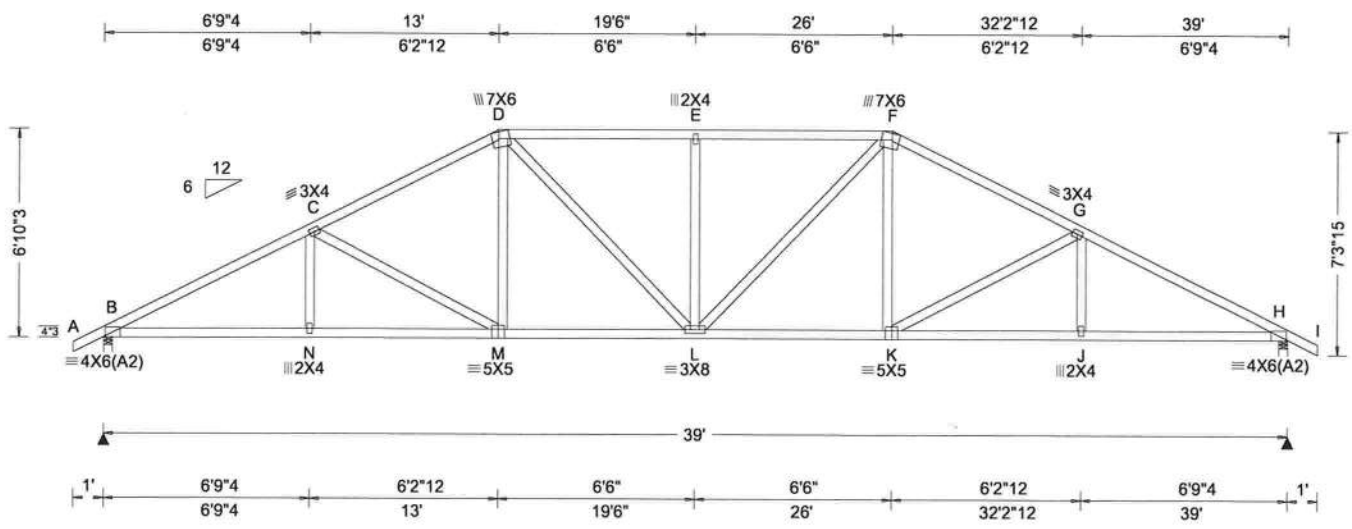
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387869 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A10	Cust: R 215 JRef: 1X7V2150005 T5 / DrwNo: 223.21.1145.09302 / YK 08/11/2021



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: 3.90 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): 0.184	E	999	360
VERT(CL): 0.375	E	999	240
HORZ(LL): 0.074	J	-	-
HORZ(TL): 0.152	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.583
Max BC CSI: 0.671
Max Web CSI: 0.549

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1673	/-	/-	/990	/300	/201
H	1673	/-	/-	/990	/300	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 2.0
H Brg Width = 3.5 Min Req = 2.0
Bearings B & 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.
B - C	989	-3001	E - F	1020	-2391
C - D	947	-2460	F - G	947	-2460
D - E	1020	-2391	G - H	990	-3001

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	2605	-802	L - K	2121	-626
N - M	2602	-803	K - J	2602	-790
M - L	2121	-639	J - H	2605	-788

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - M	188	-552	L - F	383	-219
D - M	460	-33	F - K	460	-34
D - L	383	-219	K - G	188	-552
E - L	338	-414			

Lumber

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

Purlins

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

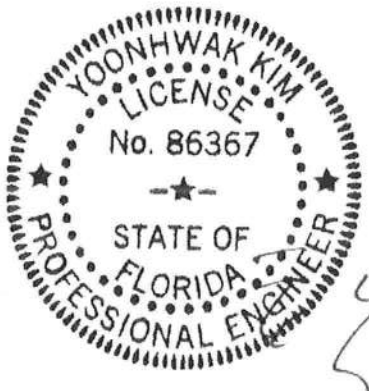
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 6-10-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

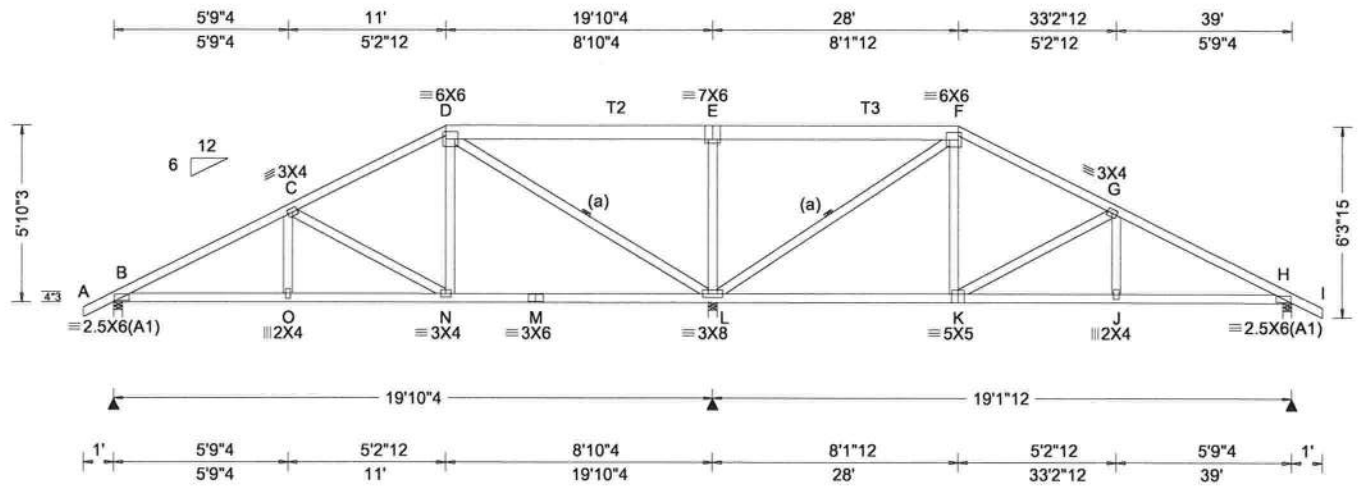
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387951 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A11	Cust: R 215 JRef: 1X7V2150005 T17 / DrwNo: 223.21.1145.09316 / YK 08/11/2021



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: 3.90 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): 0.025	O	999	360
VERT(CL): 0.057	O	999	240
HORZ(LL): 0.015	J	-	-
HORZ(TL): 0.031	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.365
Max BC CSI: 0.619
Max Web CSI: 0.607

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	726	/-	/-	/458	/36	/173
L	2039	/-	/-	/1061	/131	/-
H	692	/-	/-	/466	/57	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
L Brg Width = 3.5 Min Req = 2.0
H Brg Width = 3.5 Min Req = 1.5
Bearings B, L, & 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.
B - C	295	- 1021	E - F	662	- 66
C - D	222	- 536	F - G	197	- 458
D - E	662	- 66	G - H	267	- 952

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - O	854	- 195	M - L	403	- 72
O - N	852	- 197	K - J	790	- 159
N - M	403	- 72	J - H	793	- 158

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - N	217	- 523	L - F	336	- 1062
D - N	473	- 33	F - K	449	- 40
D - L	363	- 1128	K - G	215	- 533
E - L	520	- 661			

Lumber

Top chord: 2x4 SP #2; T2,T3 2x6 SP 2400f-2.0E;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

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.

Wind loading based on both gable and hip roof types.

Additional Notes

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

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

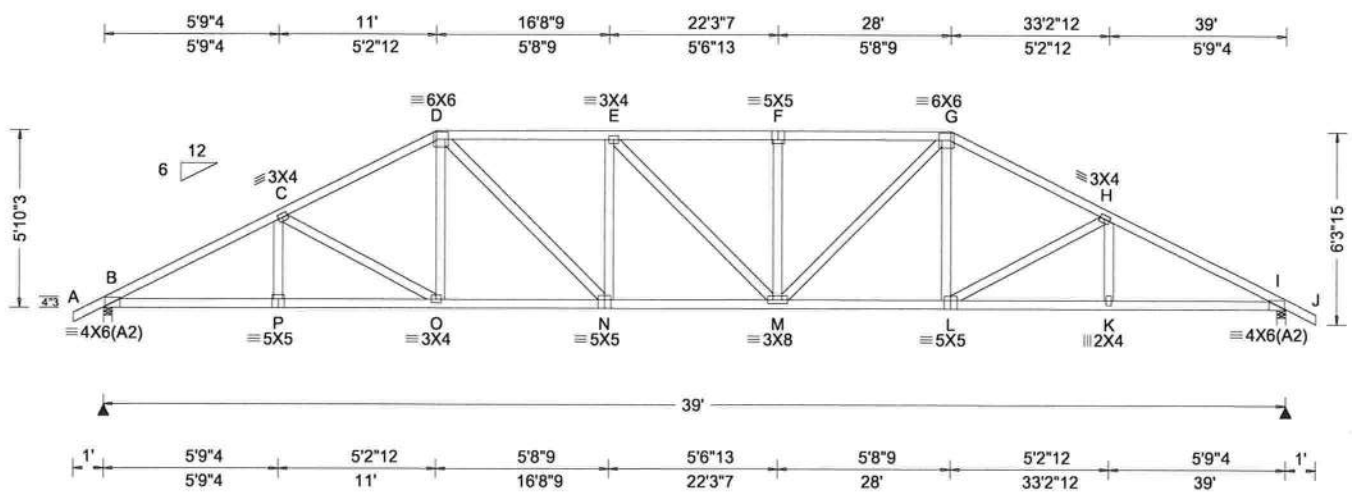
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387868 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A12	Cust: R 215 JRef: 1X7V2150005 T4 / DrwNo: 223.21.1145.09129 / YK 08/11/2021



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: 3.90 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): 0.208	F	999	360
VERT(CL): 0.424	F	999	240
HORZ(LL): 0.078	K	-	-
HORZ(TL): 0.159	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.495
Max BC CSI: 0.744
Max Web CSI: 0.396

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1673	/-	/-	/979	/303	/174
I	1673	/-	/-	/979	/303	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 2.0
I Brg Width = 3.5 Min Req = 2.0
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	1098	-3029	F - G	1221	-2746
C - D	1072	-2611	G - H	1073	-2611
D - E	1215	-2733	H - I	1098	-3029
E - F	1221	-2746			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - P	2637	-908	M - L	2272	-767
P - O	2635	-910	L - K	2636	-896
O - N	2272	-781	K - I	2638	-894
N - M	2751	-994			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - O	149	-419	M - G	661	-343
D - O	384	-26	G - L	384	-27
D - N	651	-337	L - H	149	-420

Lumber

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

Purlins

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

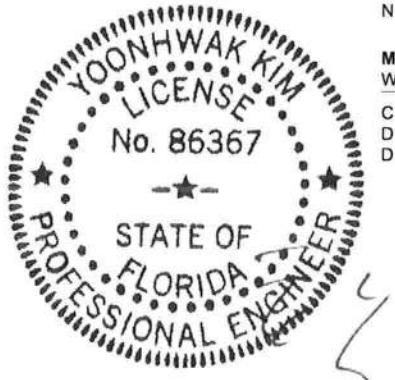
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

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



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

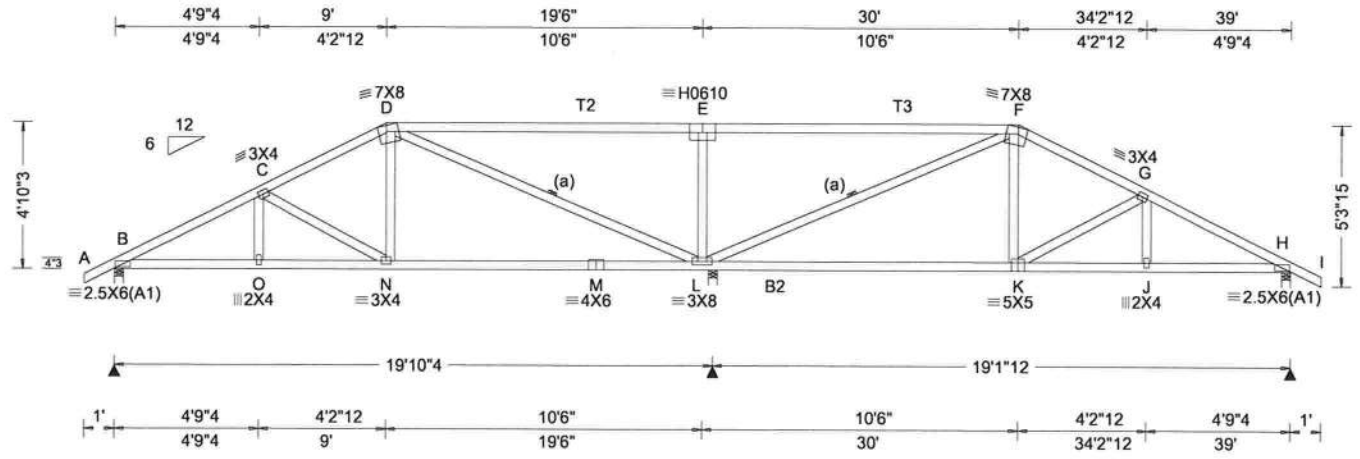
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387928 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A13	Cust: R 215 JRef: 1X7V2150005 T29 / DrwNo: 223.21.1145.09114 / YK 08/11/2021	



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: 3.90 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, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.052	N	999	360
VERT(CL): 0.099	N	999	240
HORZ(LL): 0.028	J	-	-
HORZ(TL): 0.057	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.718
Max BC CSI: 0.978
Max Web CSI: 0.598

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	879	/-	/-	/556	/160	/147
L	1616	/-	/-	/832	/295	/-
H	855	/-	/-	/554	/155	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
L Brg Width = 3.5 Min Req = 1.5
H Brg Width = 3.5 Min Req = 1.5
Bearings B, L, & 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.
B - C	490	-1346	F - G	442	-1004
C - D	484	-1095	G - H	474	-1310

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - O	1145	-373	L - K	1760	-502
O - N	1145	-374	K - J	1107	-346
N - M	961	-302	J - H	1110	-345
M - L	961	-302			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - N	459	0	L - F	283	-841
D - L	329	-922	F - K	382	0
E - L	573	-727			

Lumber

Top chord: 2x4 SP #2; T2,T3 2x4 SP M-31;
Bot chord: 2x4 SP #2; B2 2x4 SP M-31;
Webs: 2x4 SP #3;

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.

Wind loading based on both gable and hip roof types.

Additional Notes

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

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

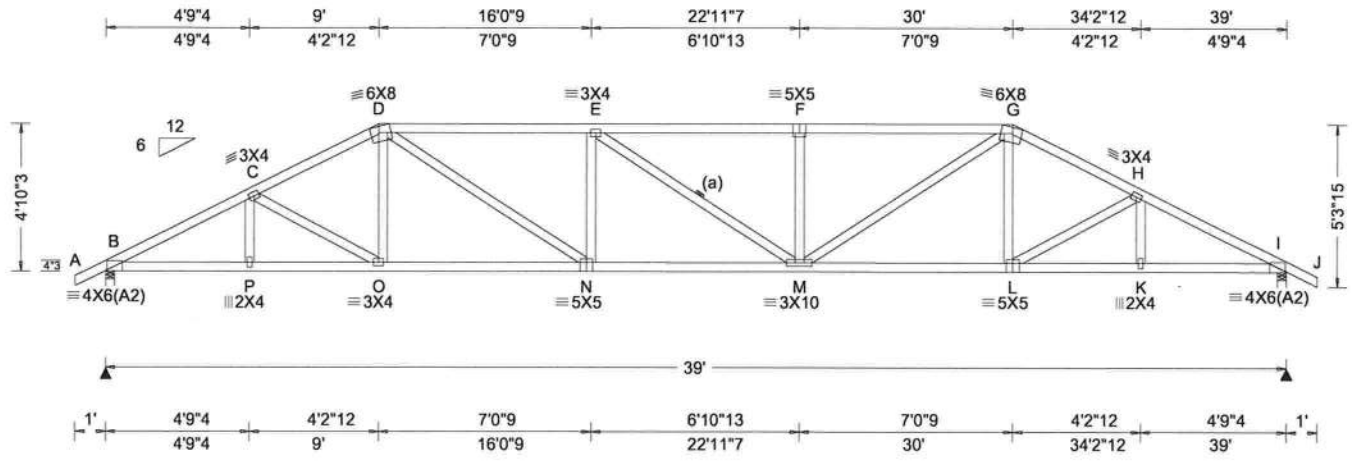
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387867 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A14	Cust: R 215 JRef: 1X7V2150005 T3 / DrwNo: 223.21.1145.09347 / YK 08/11/2021



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: 3.90 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): 0.261	F	999	360
VERT(CL): 0.532	F	872	240
HORZ(LL): 0.083	K	-	-
HORZ(TL): 0.168	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.924
Max BC CSI: 0.847
Max Web CSI: 0.686

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1673	/-	/-	/964	/305	/147
I	1673	/-	/-	/964	/305	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 2.0
I Brg Width = 3.5 Min Req = 2.0
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	1196	-3035	F - G	1529	-3337
C - D	1196	-2770	G - H	1196	-2769
D - E	1519	-3317	H - I	1196	-3036
E - F	1529	-3336			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - P	2648	-1003	M - L	2438	-913
P - O	2647	-1004	L - K	2648	-992
O - N	2439	-927	K - I	2649	-990
N - M	3345	-1342			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - N	1051	-525	M - G	1069	-536
N - E	362	-440	F - M	345	-432

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

Purlins

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

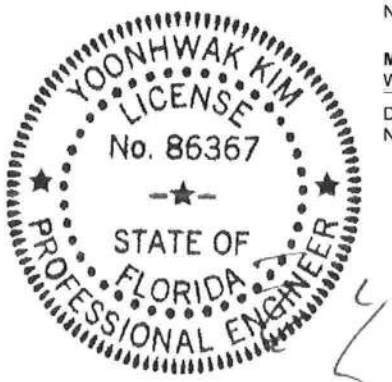
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

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



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

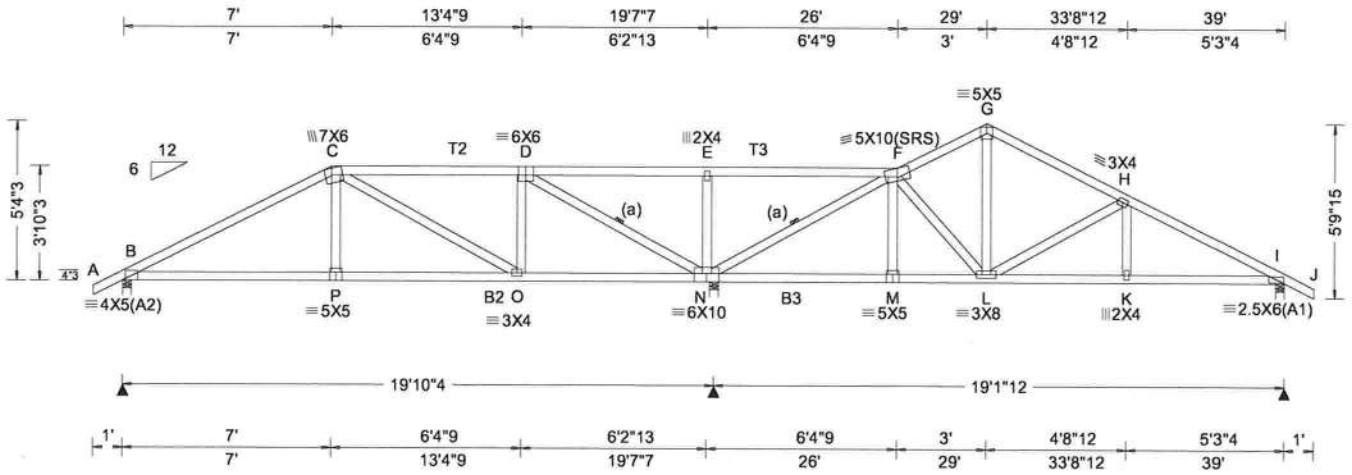
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387923 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A15	Cust: R 215 JRef: 1X7V2150005 T2 / DrwNo: 223.21.1145.09066 / YK 08/11/2021



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: 3.90 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: 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): 0.090	P	999	360
VERT(CL): 0.184	P	999	240
HORZ(LL): 0.035	K	-	-
HORZ(TL): 0.071	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.640
Max BC CSI: 0.808
Max Web CSI: 0.999

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1604	/-	/-	/-	/344	/-
N	3329	/-	/-	/-	/671	/-
I	656	/-	/-	/-	/114	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.9
N Brg Width = 3.5 Min Req = 2.8
I Brg Width = 3.5 Min Req = 1.5
Bearings B, N, & 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	629	-2854	F - G	55	-440
C - D	439	-2101	G - H	66	-462
D - E	966	-217	H - I	137	-893
E - F	966	-218			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - P	2475	-533	N - M	701	-476
P - O	2504	-533	L - K	741	-102
O - N	2034	-440	K - I	744	-101

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - P	700	0	E - N	258	-679
C - O	108	-537	N - F	219	-1212
O - D	846	0	F - L	407	-87
D - N	761	-3322	L - H	79	-454

Lumber

Top chord: 2x4 SP #2; T2,T3 2x4 SP M-31;
Bot chord: 2x4 SP #2; B2,B3 2x4 SP M-31;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Special Loads

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

TC: From	62 plf at	-1.00 to	62 plf at	7.00
TC: From	31 plf at	7.00 to	31 plf at	19.06
TC: From	62 plf at	19.06 to	62 plf at	40.00
BC: From	4 plf at	-1.00 to	4 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	7.03
BC: From	10 plf at	7.03 to	10 plf at	19.06
BC: From	20 plf at	19.06 to	20 plf at	39.00
BC: From	4 plf at	39.00 to	4 plf at	40.00

TC: 266 lb Conc. Load at 7.03
TC: 191 lb Conc. Load at 9.06,11.06,13.06,15.06 17.06
TC: 194 lb Conc. Load at 19.06
BC: 499 lb Conc. Load at 7.03
BC: 130 lb Conc. Load at 9.06,11.06,13.06,15.06 17.06
BC: 131 lb Conc. Load at 19.06

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.

Additional Notes

The overall height of this truss excluding overhang is 5-4-3.

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

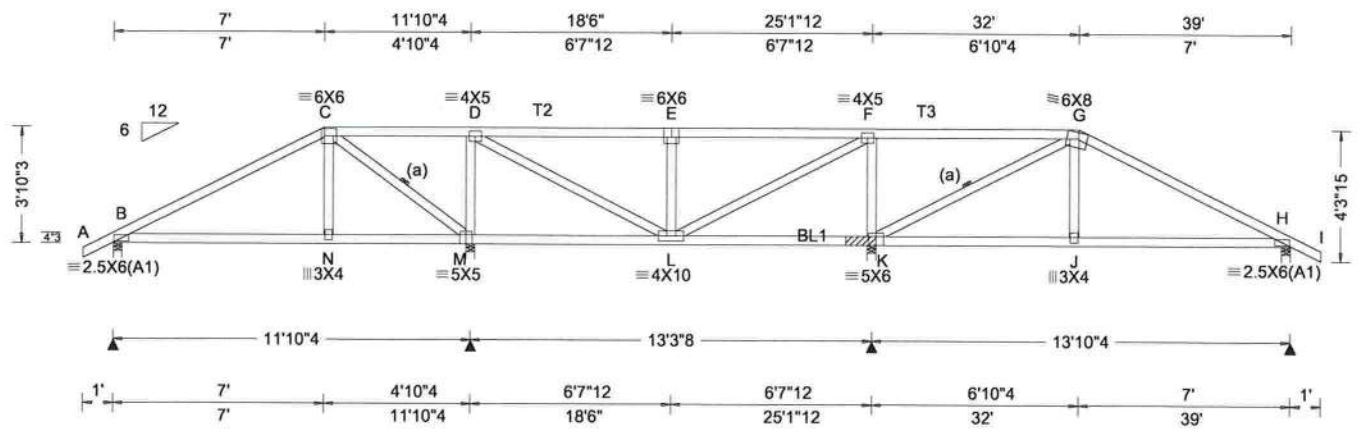
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387881 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** A16	Cust: R 215 JRef: 1X7V2150005 T16 / DrwNo: 223.21.1145.08786 / YK 08/11/2021	



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: 3.90 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): 0.035	E	999	360
VERT(CL): 0.070	E	999	240
HORZ(LL): 0.012	J	-	-
HORZ(TL): 0.025	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.901
Max BC CSI: 0.958
Max Web CSI: 0.635

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	719	/-	/-	/-	/149	/-
M	2892	/-	/-	/-	/659	/-
K	3171	/-	/-	/-	/721	/-
H	932	/-	/-	/-	/198	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
M Brg Width = 3.5 Min Req = 3.4
K Brg Width = 3.5 Min Req = -
H Brg Width = 3.5 Min Req = 1.5
Bearings B, M, K, & 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.
B - C	189	- 885	E - F	205	- 907
C - D	557	- 125	F - G	595	- 128
D - E	205	- 907	G - H	291	- 1366

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	701	- 133	L - K	77	- 459
N - M	730	- 133	K - J	1161	- 223
M - L	81	- 435	J - H	1129	- 224

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - N	693	- 8	L - F	1556	- 322
C - M	322	- 1552	F - K	623	- 1741
M - D	537	- 1540	K - G	397	- 1949
D - L	1515	- 326	J - G	772	0
E - L	414	- 882			

Lumber

Top chord: 2x4 SP #2; T2,T3 2x4 SP M-31;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Special Loads

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

TC: From	62 plf at	-1.00 to	62 plf at	7.00
TC: From	31 plf at	7.00 to	31 plf at	32.00
TC: From	62 plf at	32.00 to	62 plf at	40.00
BC: From	4 plf at	-1.00 to	4 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	7.03
BC: From	10 plf at	7.03 to	10 plf at	31.97
BC: From	20 plf at	31.97 to	20 plf at	39.00
BC: From	4 plf at	39.00 to	4 plf at	40.00

TC: 266 lb Conc. Load at 7.03,31.97
TC: 191 lb Conc. Load at 9.06,11.06,13.06,15.06 17.06,19.06,19.94,21.94,23.94,25.94,27.94,29.94
BC: 499 lb Conc. Load at 7.03,31.97
BC: 130 lb Conc. Load at 9.06,11.06,13.06,15.06 17.06,19.06,19.94,21.94,23.94,25.94,27.94,29.94

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.

Bearing Block(s)

Brg blocks:0.131"x3", min. nails

brg	x-loc	#blocks	length/blk	#nails/blk	wall plate
3	25.000'	1	12"	4	Rigid Surface

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

Additional Notes

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

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

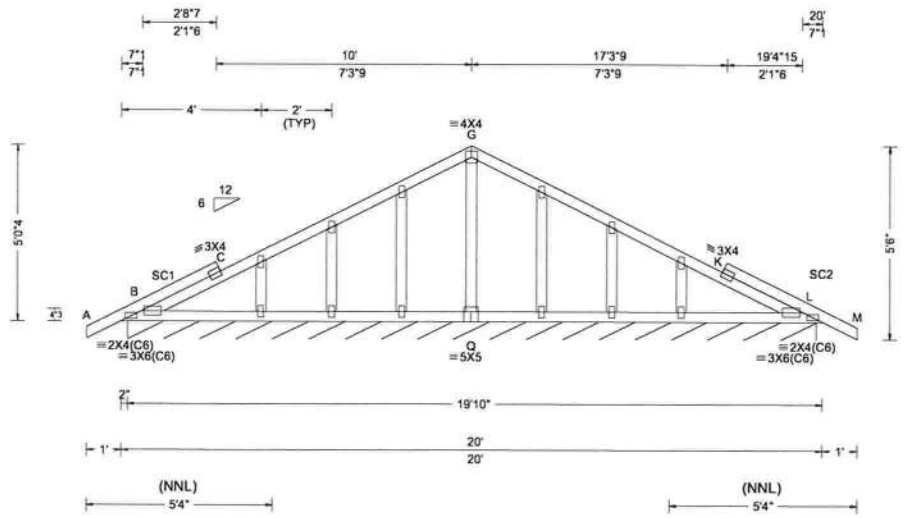
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387905 / GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** B01	Cust: R 215 JRef: 1X7V2150005 T19 / DrwNo: 223.21.1145.08176 / YK 08/11/2021



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): 0.005 C 999 360
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.010 C 999 240
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.002 C - -
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL): 0.004 C - -
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: 0.136
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.071
Spacing:	24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.060
		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
B*	91	/-	/-	/46	/-	/3

Wind reactions based on MWFRS
B Brg Width = 236 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4 except as noted.

Wind

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

Left and right cantilevers are exposed to wind

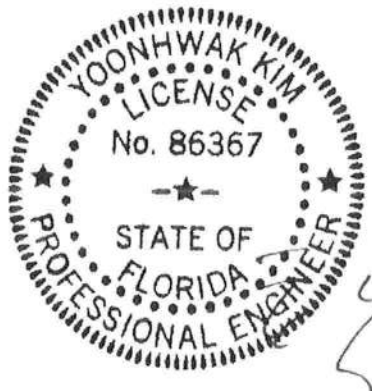
Wind loading based on both gable and hip roof types.

Additional Notes

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

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

The overall height of this truss excluding overhang is 5-0-4.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

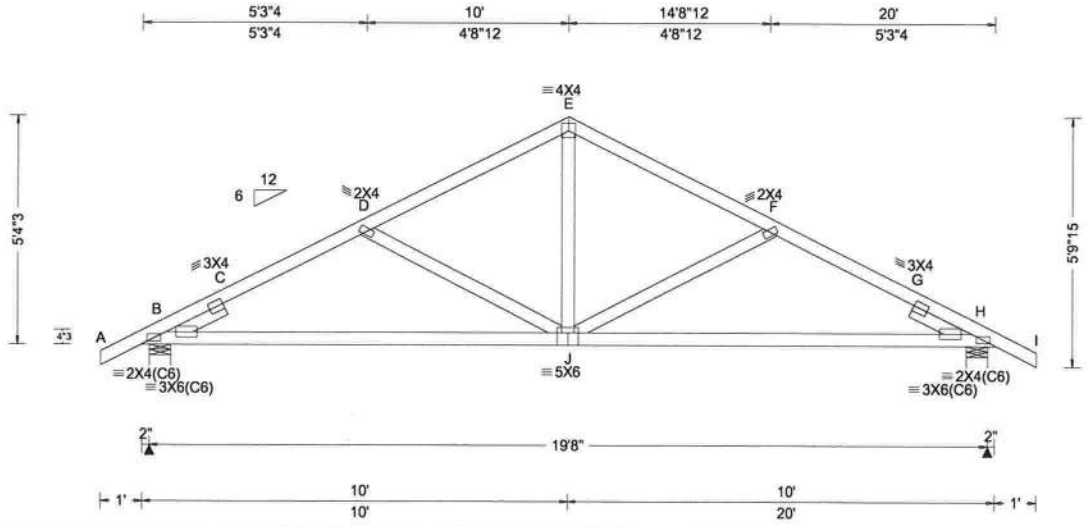
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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-2 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: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org

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

SEQN: 387908 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** B02	Cust: R 215 JRef: 1X7V2150005 T24 / DrwNo: 223.21.1145.09177 / YK 08/11/2021



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): 0.036	J	999	360
VERT(CL): 0.072	J	999	240
HORZ(LL): 0.016	J	-	-
HORZ(TL): 0.033	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.232
Max BC CSI: 0.824
Max Web CSI: 0.244

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	890	/-	/-	/535	/157	/154
H	890	/-	/-	/535	/157	/-

Wind reactions based on MWFRS
B Brg Width = 6.0 Min Req = 1.5
H Brg Width = 6.0 Min Req = 1.5
Bearings B & H are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	0	-834	E - F	483	-947
C - D	603	-1212	F - G	603	-1212
D - E	483	-947	G - H	0	-834

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	1052	-443	J - H	1052	-420

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - C	728	-726	G - H	728	-726
E - J	534	-154			

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Lt Slider: 2x4 SP #3; block length = 1.500'
Rt Slider: 2x4 SP #3; block length = 1.500'

Wind

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

Left and right cantilevers are exposed to wind

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 5-4-3.

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

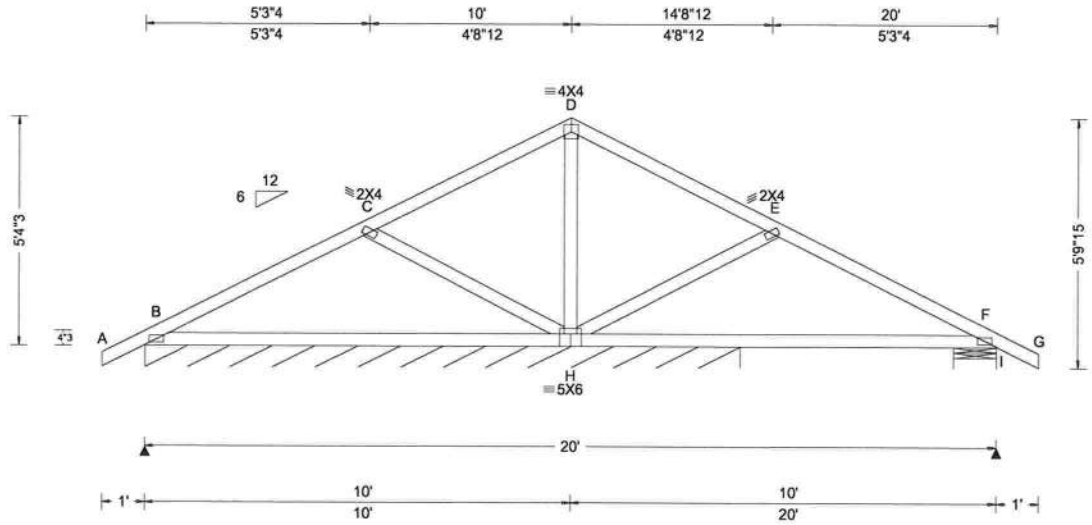
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387911 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** B03	Cust: R 215 JRef: 1X7V2150005 T26 / DrwNo: 223.21.1145.09505 / YK 08/11/2021



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	H	999	360
VERT(CL): 0.039	H	999	240
HORZ(LL): 0.006	H	-	-
HORZ(TL): 0.021	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.479
Max BC CSI: 0.711
Max Web CSI: 0.246

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B*	99	/-	/-	/56	/18	/11
I	393	/-	/-	/278	/67	/-

Wind reactions based on MWFRS
B Brg Width = 168 Min Req = -
I Brg Width = 12.0 Min Req = 1.5
Bearings B & F are a rigid surface.
Members not listed have forces less than 375#

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
H - F	494	-16

Maximum Web Forces Per Ply (lbs)

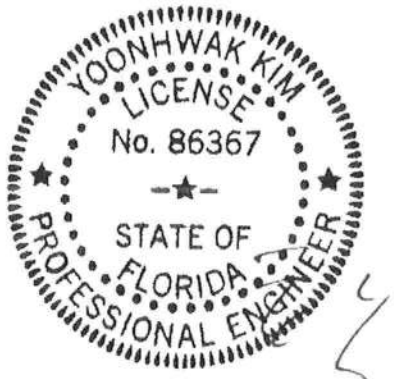
Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - H	278	-422	H - E	288	-394

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

Plating Notes
All plates are 2X4(A1) 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
The overall height of this truss excluding overhang is 5-4-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

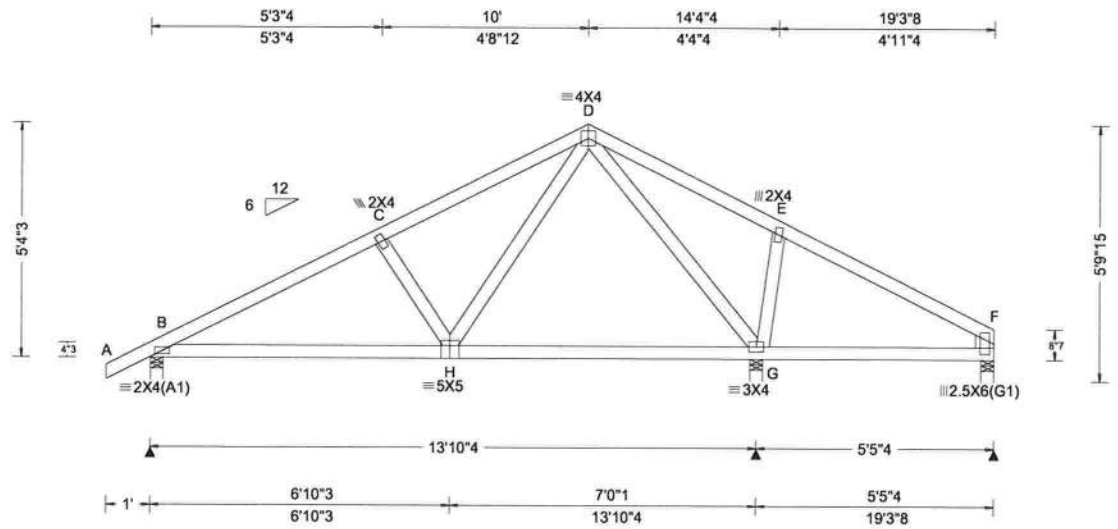
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387914 / COMN FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** B04	Cust: R 215 JRef: 1X7V2150005 T27 / DrwNo: 223.21.1145.08192 / YK 08/11/2021



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):	0.015 C	999	360	
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL):	0.030 C	999	240	
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL):	0.005 G	-	-	
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL):	0.010 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:	0.308			
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI:	0.424			
Spacing:	24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI:	0.421			
		C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)					
		Loc. from endwall: not in 4.50 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
B	633	/-	/-	/397	/113	/138
G	832	/-	/-	/437	/143	/-
F	234	/-	/-	/143	/31	/-

Wind reactions based on MWFRS
B Brg Width = 3.5 Min Req = 1.5
G Brg Width = 3.5 Min Req = 1.5
F Brg Width = 3.5 Min Req = 1.5
Bearings B, G, & 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	283	-836	C - D	285	-675

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - H	699	-216

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
H - D	487	-156	D - G	120	-529

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Rt Stub Wedge: 2x4 SP #3;

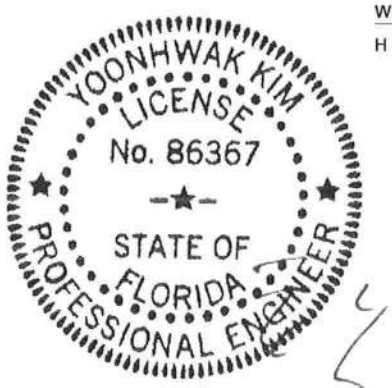
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 5-4-3.



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

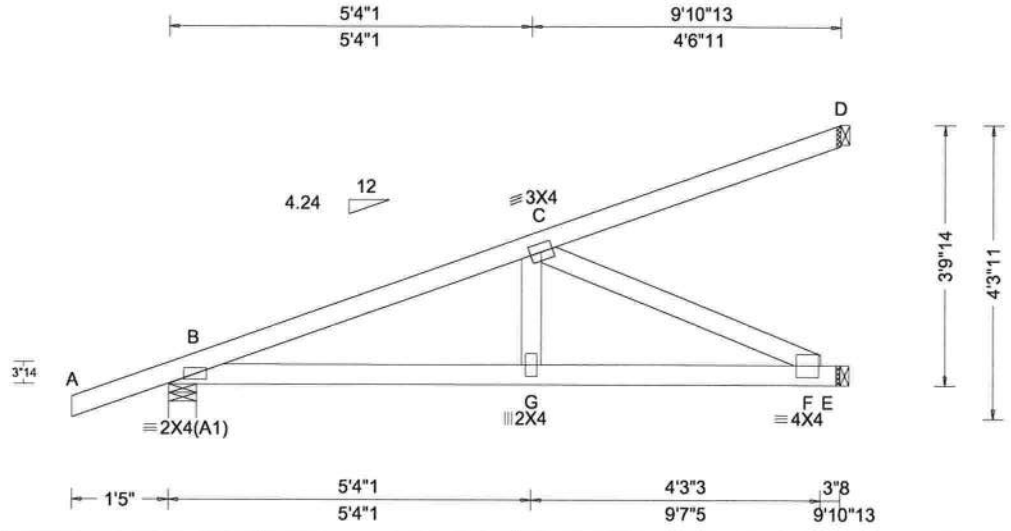
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387878 / HIP_ FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** HJ01	Cust: R 215 JRef: 1X7V2150005 T15 / DrwNo: 223.21.1145.09473 / YK 08/11/2021



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): 0.023	G	999	360
VERT(CL): 0.047	G	999	240
HORZ(LL): 0.006	F	-	-
HORZ(TL): 0.011	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.549
Max BC CSI: 0.662
Max Web CSI: 0.361

VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	347	/-	/-	/-	/118	/-
E	369	/-	/-	/-	/70	/-
D	75	/-	/-	/-	/30	/-

Wind reactions based on MWFRS
B Brg Width = 4.9 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
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	202	-786

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - G	738	-179	G - F	725	-181

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
C - F	199	-800

Lumber

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

Special Loads

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

TC: From	-0 plf at	-1.41 to	61 plf at	0.00
TC: From	2 plf at	0.00 to	2 plf at	9.90
BC: From	0 plf at	-1.41 to	4 plf at	0.00
BC: From	2 plf at	0.00 to	2 plf at	9.90

TC: -9 lb Conc. Load at 1.48
TC: 143 lb Conc. Load at 4.31
TC: 265 lb Conc. Load at 7.13
BC: 20 lb Conc. Load at 1.48
BC: 104 lb Conc. Load at 4.31
BC: 182 lb Conc. Load at 7.13

Wind

Wind loads and reactions based on MWFRS.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 3-9-14.

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

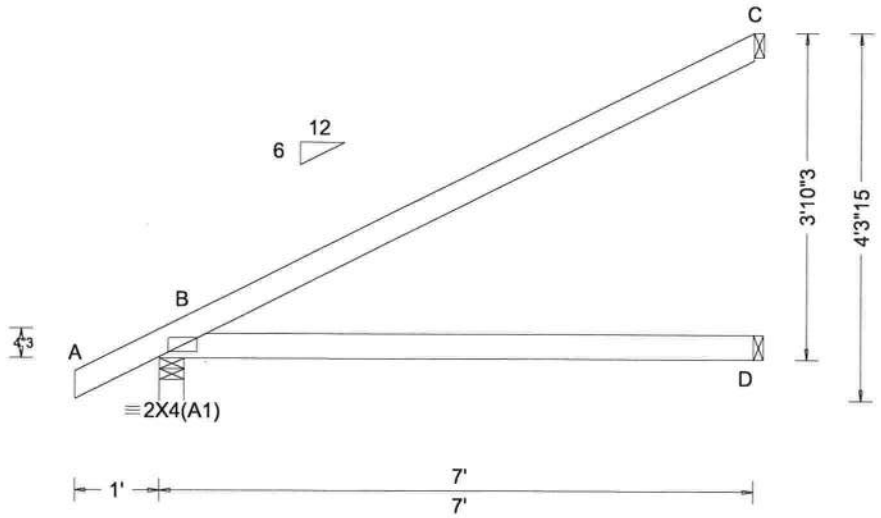
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387865 / EJAC FROM: CDM	Ply: 1 Qty: 20	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** J01	Cust: R 215 JRef: 1X7V2150005 T14 / DrwNo: 223.21.1145.09191 / YK 08/11/2021



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): 0.015 D - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.031 D - -
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: 0.740
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.522
Spacing: 24.0 "	MWFRS Parallel Dist: h/2 to h	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	368	/-	/-	/245	/36	/137
D	130	/-	/-	/75	/-	/-
C	191	/-	/-	/121	/95	/-

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

Lumber

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

Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

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

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

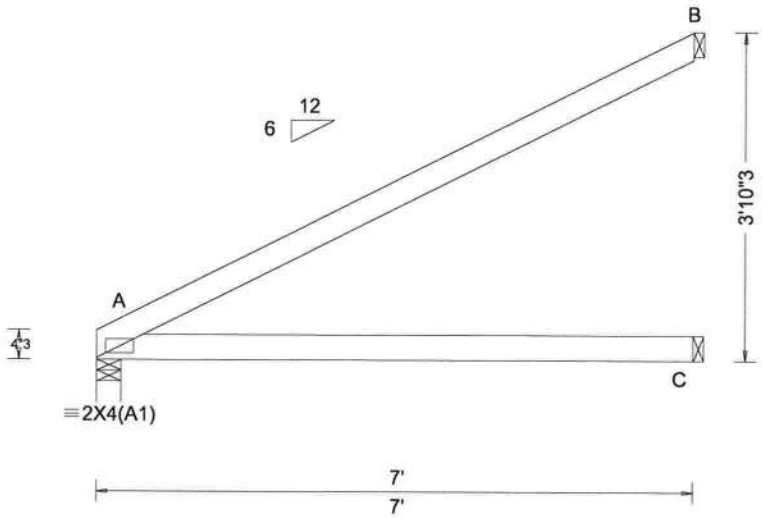
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387916 / EJAC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** J01A	Cust: R 215 JRef: 1X7V2150005 T23 / DrwNo: 223.21.1145.08238 / YK 08/11/2021



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): NA
VERT(CL): NA
HORZ(LL): 0.016 C - -
HORZ(TL): 0.034 C - -
Creep Factor: 2.0
Max TC CSI: 0.766
Max BC CSI: 0.532
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
A	294	/-	/-	/186	/-	/90
C	131	/-	/-	/78	/-	/-
B	194	/-	/-	/124	/60	/-

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

Lumber

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

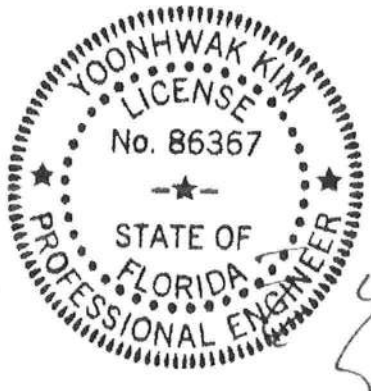
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

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



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

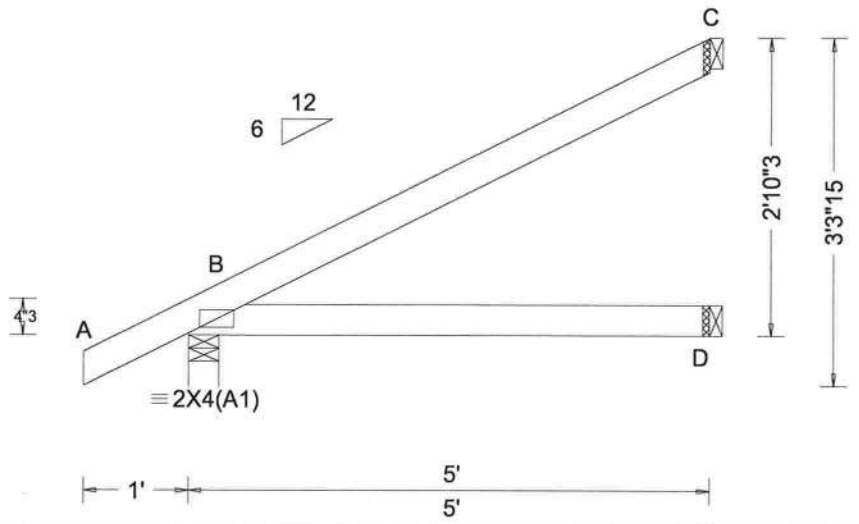
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387862 / JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** J02	Cust: R 215 JRef: 1X7V2150005 T11 / DrwNo: 223.21.1145.08895 / YK 08/11/2021



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): 0.005 D - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.010 D - -
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: 0.336
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.243
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	288	/-	/-	/195	/31	/102
D	91	/-	/-	/52	/-	/-
C	133	/-	/-	/84	/66	/-

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

Lumber

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

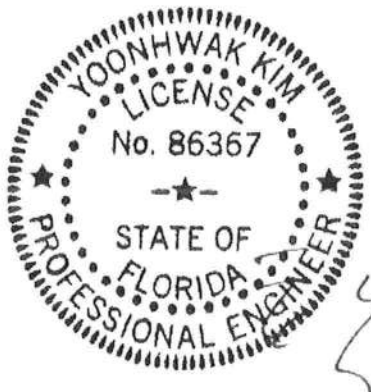
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

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



FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

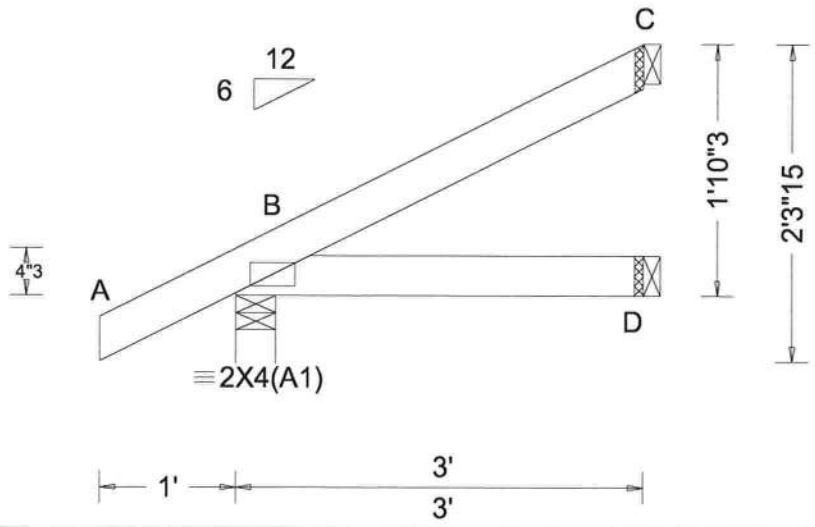
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387863 / JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** J03	Cust: R 215 JRef: 1X7V2150005 T12 / DrwNo: 223.21.1145.09239 / YK 08/11/2021



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 D - -
HORZ(TL): 0.001 D - -
Creep Factor: 2.0
Max TC CSI: 0.123
Max BC CSI: 0.071
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	212	/-	/-	/148	/28	/66
D	52	/-	/-	/28	/-	/-
C	72	/-	/-	/44	/37	/-

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

Lumber

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

Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 1-10-3.

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

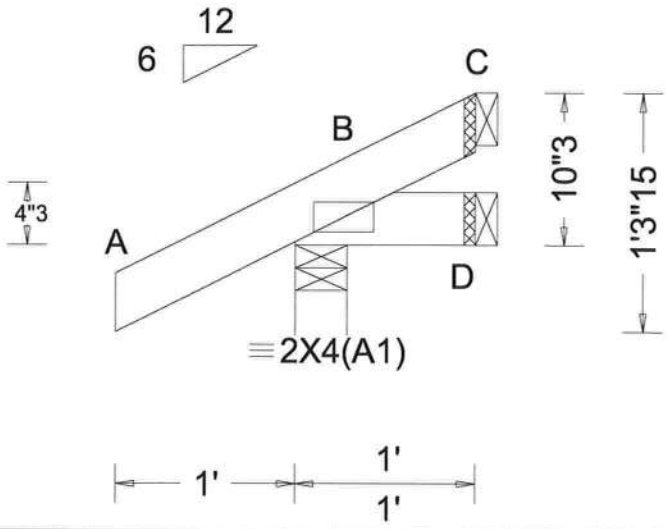
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387864 / JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** J04	Cust: R 215 JRef: 1X7V2150005 T13 / DrwNo: 223.21.1145.09270 / YK 08/11/2021



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): -0.000 D - -
Des Ld:	40.00	EXP: C Kzt: NA		HORZ(TL): 0.000 D - -
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: 0.112
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.013
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: Any	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	166	/-	/-	/126	/35	/31
D	10	/-2	/-	/9	/5	/-
C	-	/-14	/-	/17	/20	/-

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

Lumber

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

Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 0-10-3.

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

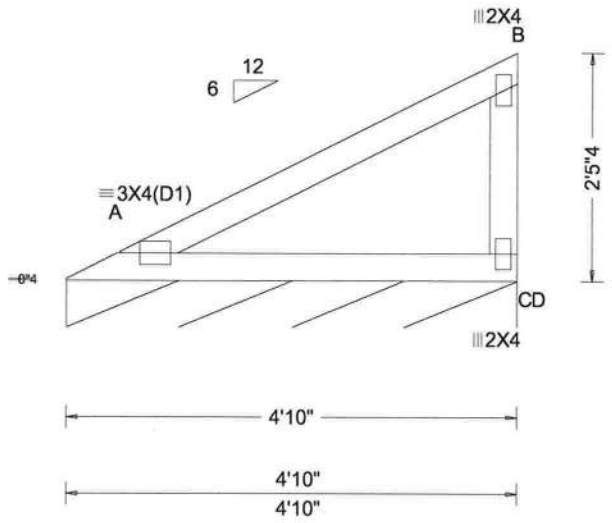
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387918 / VAL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** V01	Cust: R 215 JRef: 1X7V2150005 T25 / DrwNo: 223.21.1145.08911 / YK 08/11/2021



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: 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	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): 0.005 C - - HORZ(TL): 0.011 C - - Creep Factor: 2.0 Max TC CSI: 0.278 Max BC CSI: 0.264 Max Web CSI: 0.107 VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
D*	82	/-	/-	/51	/2	/11

Wind reactions based on MWFRS
D Brg Width = 58.0 Min Req = -
Bearing A is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS VALTN160118 and VAL180160118 for valley details.

The overall height of this truss excluding overhang is 2-5-4.

YOONHWAK KIM
LICENSE
No. 86367
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

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

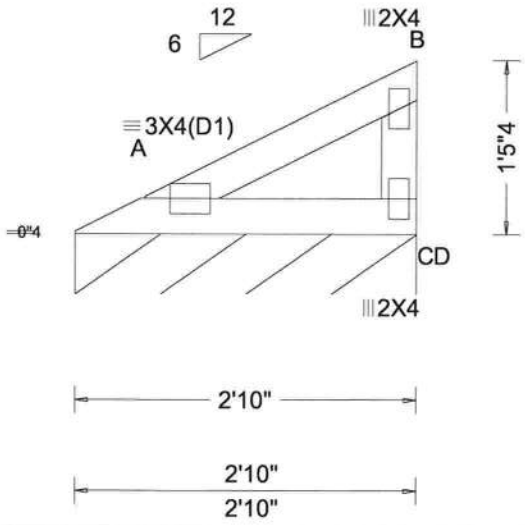
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 387920 / VAL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5888 Reserve at Jewel Lake 42 - Radford B - GR **Truss Label:** V02	Cust: R 215 JRef: 1X7V2150005 T28 / DrwNo: 223.21.1145.09380 / YK 08/11/2021



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: 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	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): 0.001 C - - HORZ(TL): 0.002 C - - Creep Factor: 2.0 Max TC CSI: 0.085 Max BC CSI: 0.077 Max Web CSI: 0.044 VIEW Ver: 21.01.01A.0521.20

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
D*	82	/-	/-	/48	/1	/10

Wind reactions based on MWFRS
D Brg Width = 34.0 Min Req = -
Bearing A is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS VALTN160118 and VAL180160118 for valley details.

The overall height of this truss excluding overhang is 1-5-4.

YOONHWAK KIM
LICENSE
No. 86367
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
08/11/2021

****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: sbcindustry.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 * 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	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		Hem-Fir	
#1 / #2	Standard	#2	Stud
#3	Stud	#3	Standard

Douglas Fir-Larch	Southern Pine***
#3	#3
Stud	Stud
Standard	Standard

Group B:

Hem-Fir
#1 & Btr
#1

Douglas Fir-Larch	Southern Pine***
#1	#1
#2	#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.

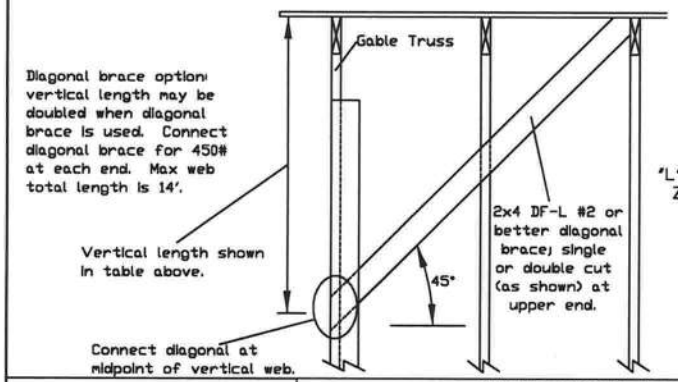
'L' bracing must be a minimum of 80% of web member length.

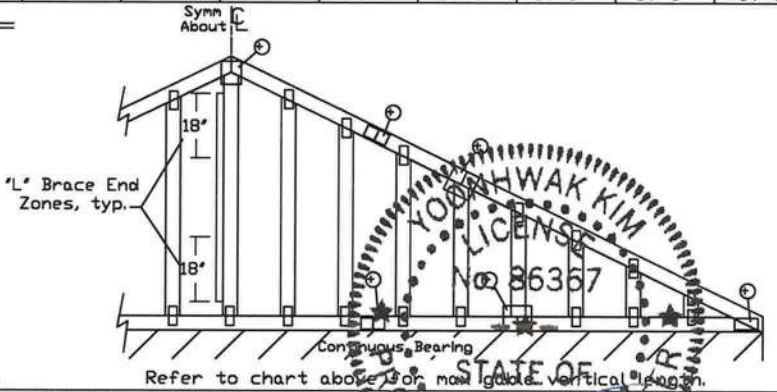
Gable Vertical Plate Sizes

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.





Refer to chart above for max gable vertical length.

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 Sec2.

For more information see this job's general notes page and these web sites:
ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.org; 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

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

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

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.

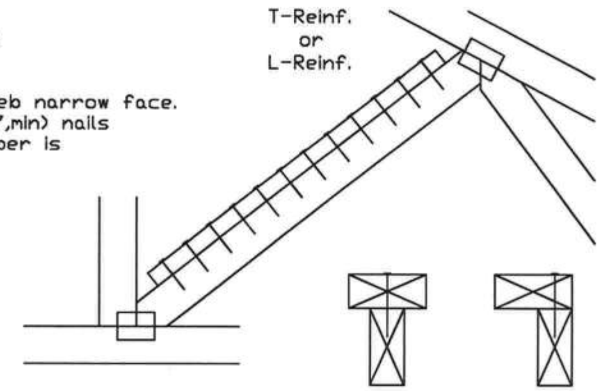
Web Member Size	Specified CLR Restraint	Alternative Reinforecement T- or L- Reinf.	Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(*)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(*)

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.

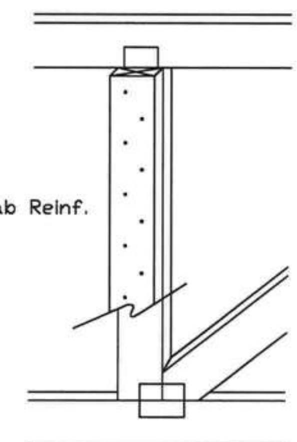
T-Reinforcement or L-Reinforcement:

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.sbcindustry.org; ICC: www.iccsafe.org

11/2021 TE REG# 278, Yoonhwak Kim, FL PE #86367

TC LL	PSF	REF	CLR Subst.
TC DL	PSF	DATE	01/02/19
BC DL	PSF	DRWG	BRCLBSUB0119
BC LL	PSF		
TOT. LD.	PSF		
DUR. FAC.			
SPACING			

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)

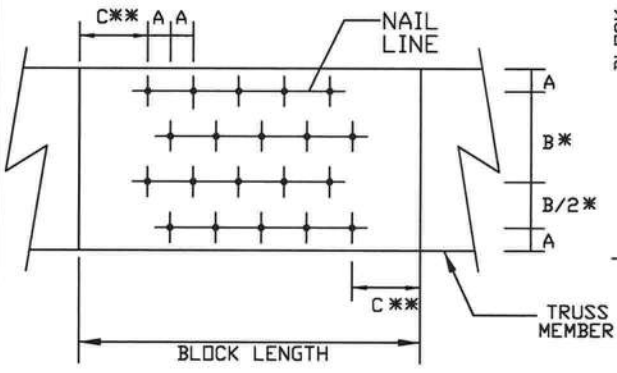
LOAD PARALLEL TO GRAIN
A - EDGE DISTANCE (6 NAIL DIAMETERS)
C - SPACING OF NAILS IN A ROW AND END DISTANCE (15 NAIL DIAMETERS)
D - SPACING BETWEEN STAGGERED ROWS OF NAILS (7 1/2 NAIL DIAMETERS)

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%

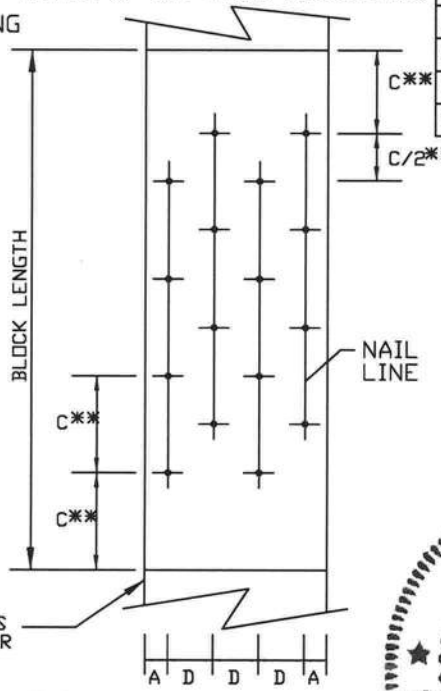
MINIMUM NAIL SPACING DISTANCES

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

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.

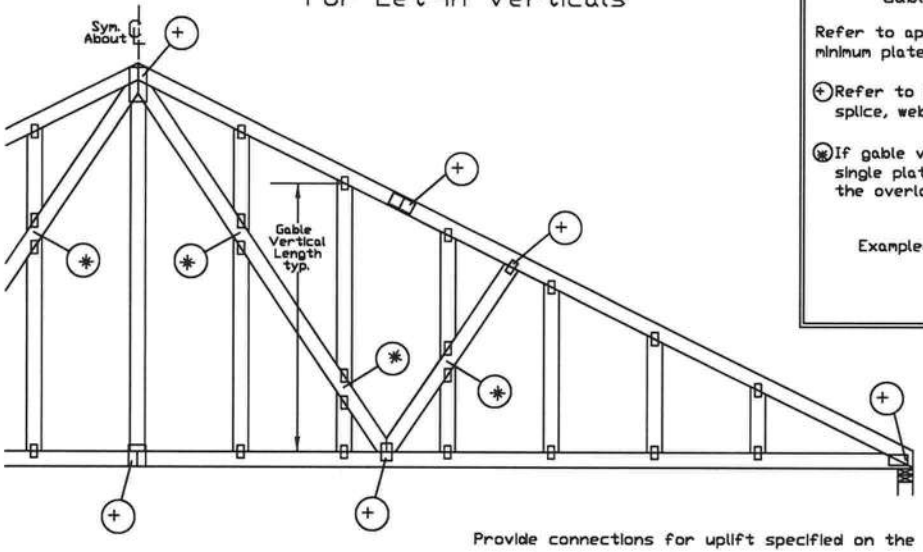
A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com/ TPI: www.tpinst.org/ SBCA: www.sbcindustry.org/ ICC: www.iccsafe.org/

REF	NAIL SPACE
DATE	10/01/14
DRWG	CNNAILSP1014

08/11/2021
Job# 278, Yoonhwak Kim, FL PE #86367

Gable Detail
For Let-in Verticals



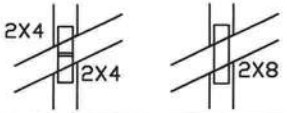
Gable Truss Plate Sizes

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

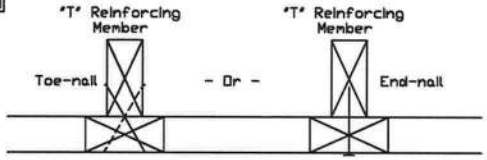
⊕ Refer to Engineered truss design for peak, splice, web, and heel plates.

⊛ 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.

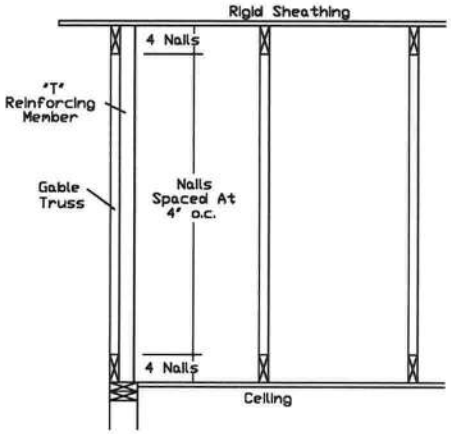
Toenailed Nails:
10d Common (0.148"x3",min) Toenails at 4" o.c. plus
(4) toenails in the top and bottom chords.

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, A16015ENC100118,
A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118,
A11530ENC100118, A12030ENC100118, A14030ENC100118, A16030ENC100118,
A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118,
S11515ENC100118, S12015ENC100118, S14015ENC100118, S16015ENC100118,
S18015ENC100118, S20015ENC100118, S20015END100118, S20015PED100118,
S11530ENC100118, S12030ENC100118, S14030ENC100118, S16030ENC100118,
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).

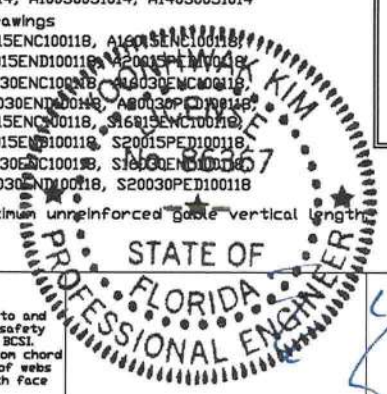
Maximum allowable "T" reinforced gable vertical length is 14' from top to bottom chord.

"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.sbcindustry.org; ICC: www.iccsafe.org

1/31/2021
FL COA # 278, Yoonhwak Kim, FL PE #86367

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

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

Valley Detail - ASCE 7-16: 180 mph, 30' Mean Height, Partially Enclosed, Exp. C, Kzt=1.00

Top Chord 2x4 SP #2N, SPF #1/#2, DF-L #2 or better.
Bot Chord 2x4 SP #2N or SPF #1/#2 or better.
Webs 2x4 SP #3, SPF #1/#2, DF-L #2 or better.

** Attach each valley to every supporting truss with:
535# connection or with (1) Simpson H2.5A or equivalent connector for
ASCE 7-16 180 mph. 30' Mean Height, Part. Enc. Building, Exp. C, Wind TC DL=5 psf, Kzt = 1.00
Or
ASCE 7-16 160 mph. 30' Mean Height, Part. Enc. Building, Exp. D, Wind TC DL=5 psf, Kzt = 1.00

Bottom chord may be square or pitched cut as shown.

Valleys short enough to be cut as solid triangular members from a single 2x6, or larger as required, shall be permitted in lieu of fabricating from separate 2x4 members.

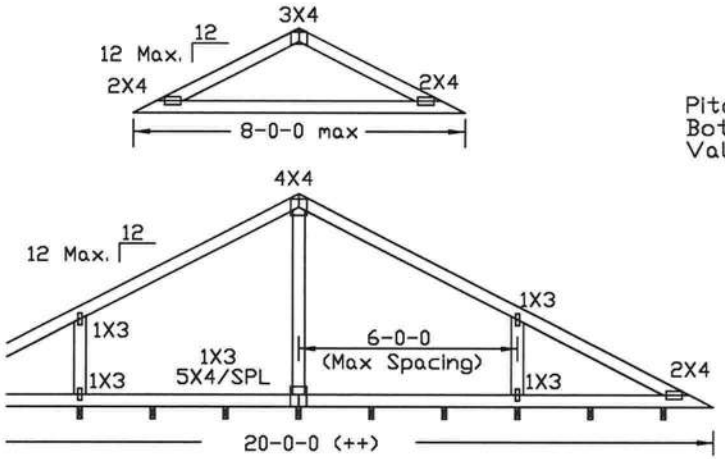
All plates shown are Alpine Wave Plates.

Unless specified otherwise on engineer's sealed design, for vertical valley webs taller than 7-9" apply 2x4 "T" reinforcement, 80% length of web, same species and grade or better, attached with 10d box (0.128" x 3.0") nails at 6" o.c. In lieu of "T" reinforcement, 2x4 Continuous Lateral Restraint applied at mid-length of web is permitted with diagonal bracing as shown in DRWG BRCLBANC1014.

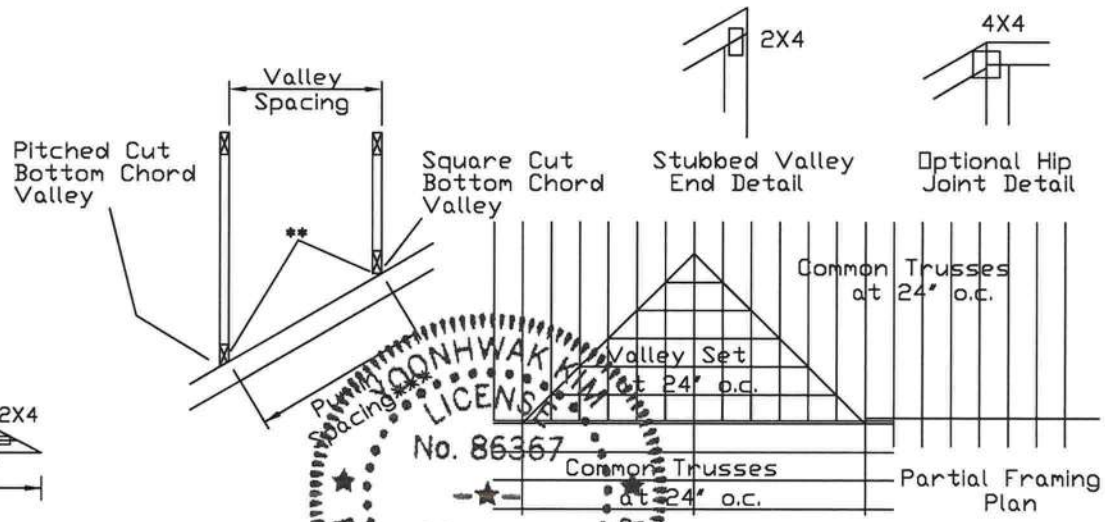
Top chord of truss beneath valley set must be braced with:
properly attached, rated sheathing applied prior to valley truss installation.
Or
Purlins at 24" o.c. or as otherwise specified on engineer's sealed design
Or
By valley trusses used in lieu of purlin spacing as specified on Engineer's sealed design.

*** Note that the purlin spacing for bracing the top chord of the truss beneath the valley is measured along the slope of the top chord.

++ Larger spans may be built as long as the vertical height does not exceed 14'-0".



Supporting trusses at 24" o.c. maximum spacing.



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.alpinebw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.org; ICC: www.iccsafe.org

8/11/2021
BCI# 278, Yoonhwak Kim, FL PE #86367

TC LL	30	30	40PSF
TC DL	20	15	7PSF
BC DL	10	10	10 PSF
BC LL	0	0	0PSF
TOT. LD.	60	55	57PSF
DUR.FAC.	1.25/1.33	1.15	1.15
SPACING		24.0"	

REF	VALLEY DETAIL
DATE	01/26/2018
DRWG	VAL180160118

Valley Detail - ASCE 7-16: 30' Mean Height, Enclosed, Exp. C, Kzt=1.00

Top Chord 2x4 SP #2N, SPF #1/#2, DF-L #2 or better.
Bot Chord 2x4 SP #2N or SPF #1/#2 or better.
Webs 2x4 SP #3, SPF #1/#2, DF-L #2 or better.

** Attach each valley to every supporting truss with:
(2) 16d box (0.135" x 3.5") nails toe-nailed for ASCE 7-16, 30' Mean Height, Enclosed Building, Exp. C, Wind TC DL=5 psf, Kzt = 1.00, Max. Wind Speed based on supporting truss material at connection location:
170 mph for SP (G = 0.55, min.),
155 mph for DF-L (G = 0.50, min.), or
120 mph for HF & SPF (G = 0.42, min.).

Maximum top chord pitch is 10/12 for supporting trusses below valley trusses.

Bottom chord of valley trusses may be square or pitched cut as shown.

Valleys short enough to be cut as solid triangular members from a single 2x6, or larger as required, shall be permitted in lieu of fabricating from separate 2x4 members.

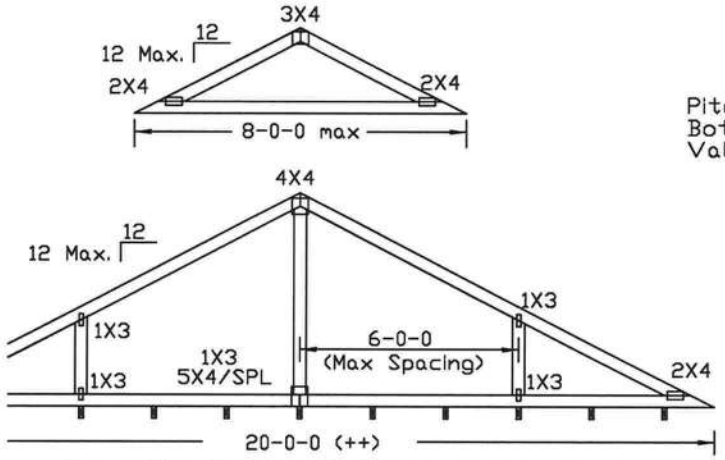
All plates shown are Alpine Wave Plates.

Unless specified otherwise on engineer's sealed design, for vertical valley webs taller than 7-9" apply 2x4 "T" reinforcement, 80% length of web, same species and grade or better, attached with 10d box (0.128" x 3.0") nails at 6" o.c. In lieu of "T" reinforcement, 2x4 Continuous Lateral Restraint applied at mid-length of web is permitted with diagonal bracing as shown in DRWG BRCLBANC1014.

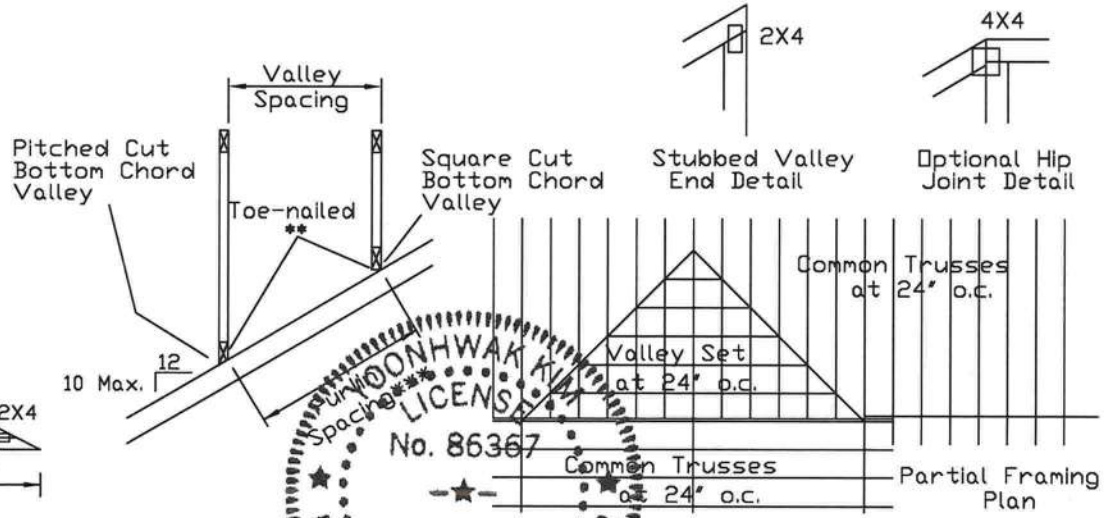
Top chord of truss beneath valley set must be braced with:
properly attached, rated sheathing applied prior to valley truss installation.
Or
Purlins at 24" o.c. or as otherwise specified on engineer's sealed design
Or
By valley trusses used in lieu of purlin spacing as specified on Engineer's sealed design.

*** Note that the purlin spacing for bracing the top chord of the truss beneath the valley is measured along the slope of the top chord.

++ Larger spans may be built as long as the vertical height does not exceed 14'-0".



Supporting trusses at 24" o.c. maximum spacing.



TC LL	30	30	40	PSF
TC DL	20	15	7	PSF
BC DL	10	10	10	PSF
BC LL	0	0	0	PSF
TOT. LD.	60	55	57	PSF
DUR.FAC.	1.25/1.33	1.15	1.15	
SPACING		24.0"		

REF	VALLEY DETAIL
DATE	01/26/2018
DRWG	VALTN160118

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.sbcindustry.org; ICC: www.iccsafe.org

Page 278, Yoonhwak Kim, FL PE #86367