



Site Information:	Page 1:						
Customer: W. B. Howland Company, Inc.	Job Number: 21-6254						
Job Description: Reserve at Jewel Lake 24 - Radford A - GL							
Address: FL							

Job Engineering Criteria:							
Design Code: FBC 7th Ed. 2020 Res.	IntelliVIEW Version: 21.01.01A						
	JRef #: 1X9f2150037						
Wind Standard: ASCE 7-16 Wind Speed (mph): 130	Design Loading (psf): 40.00						
Building Type: Closed							

This package contains general notes pages, 18 truss drawing(s) and 6 detail(s).

Item	Drawing Number	Truss	Item	Drawing Number	Truss
1	279.21.1238.22303	A01	2	279.21.1238.22631	A02
3	279.21.1238.25648	A03	4	279.21.1238.22381	A04
5	279.21.1238.22913	A05	6	279.21.1238.27834	A06
7	279.21.1238.22538	A07	8	279.21.1238.25069	A08
9	279.21.1238.26662	A09	10	279.21.1238.25366	A10
11	279.21.1238.27772	A11	12	279.21.1238.23241	A12
13	279.21.1238.24131	B01	14	279.21.1238.28209	HJ01
15	279.21.1238.25835	J01	16	279.21.1238.24256	J02
17	279.21.1238.26382	J03	18	279.21.1238.26506	J04
19	A14015ENC160118		20	BRCLBSUB0119	
21	CNNAILSP1014		22	GBLLETIN0118	
23	VAL180160118		24	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. The Truss Design Engineer. The Truss Design Engineer 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 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.

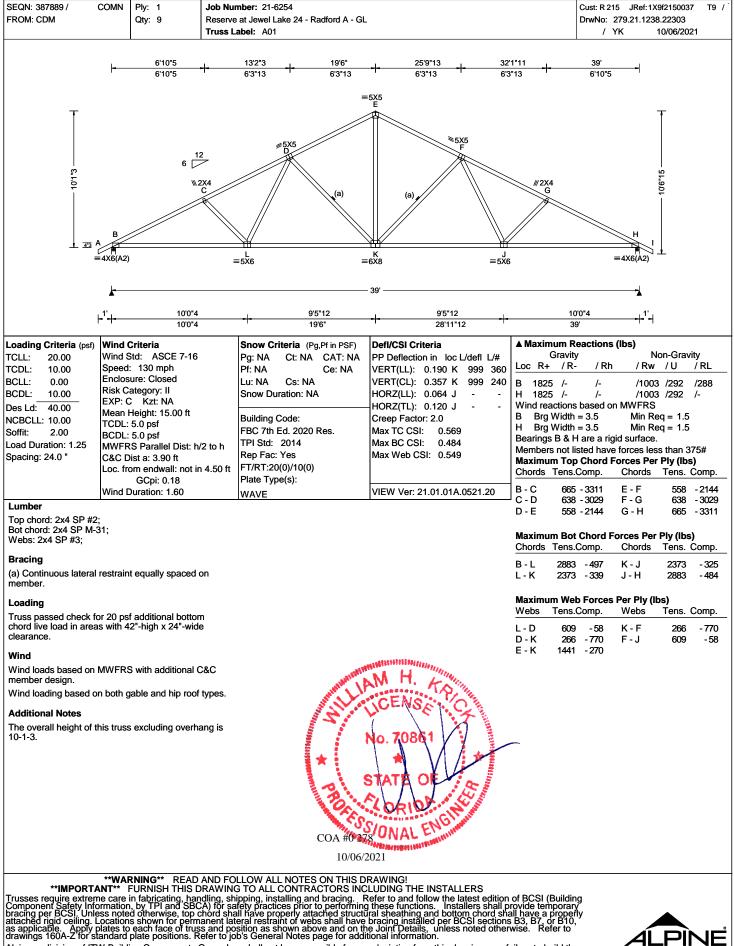
VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment. W = Width of non-hanger bearing, in inches.

Refer to ASCE-7 for Wind and Seismic abbreviations.

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

# **References:**

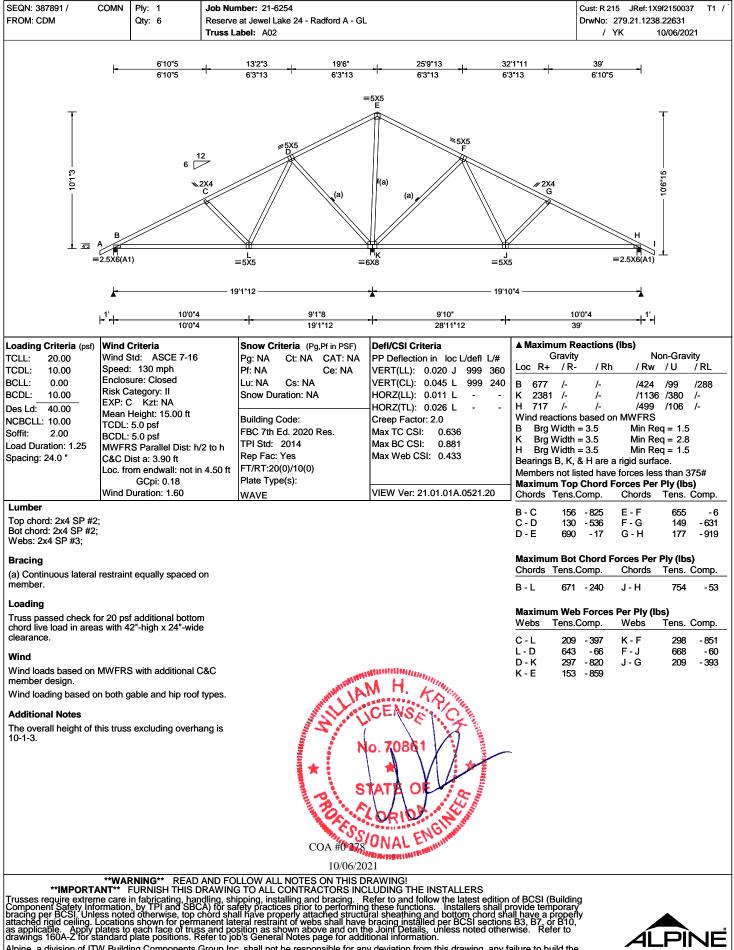
- 1. AWC: American Wood Council; 222 Catoctin Circle SE, Suite 201; Leesburg, VA 20175; www.awc.org.
- 2. ICC: International Code Council; www.iccsafe.org.
- 3. Alpine, a division of ITW Building Components Group Inc.: 514 Earth City Expressway, Suite 242, Earth City, MO 63045; <u>www.alpineitw.com</u>.
- 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.



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.



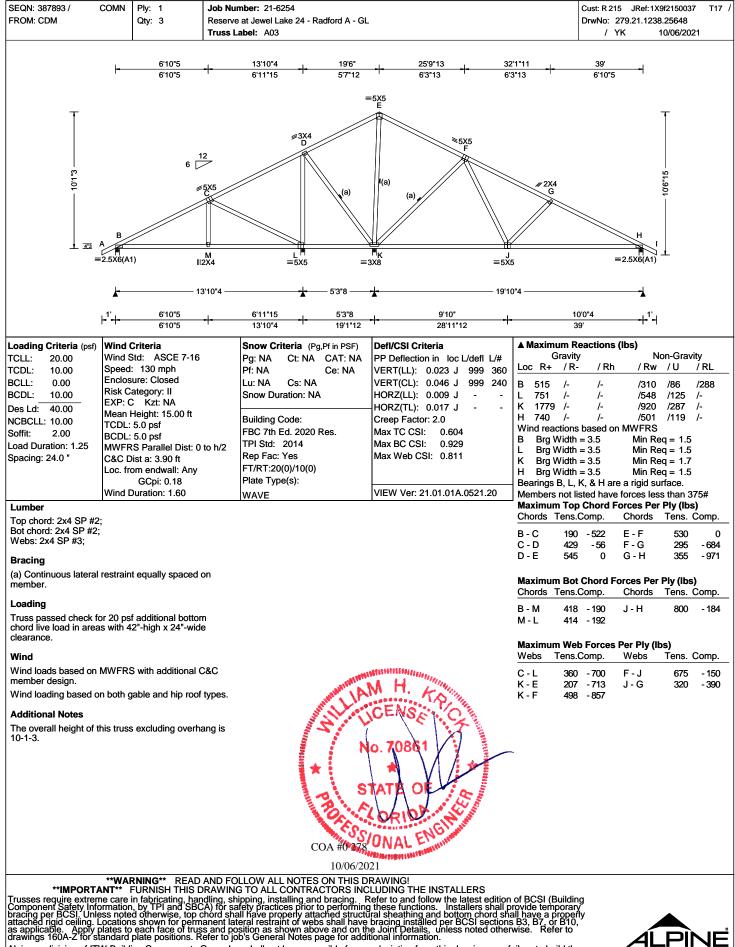
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org



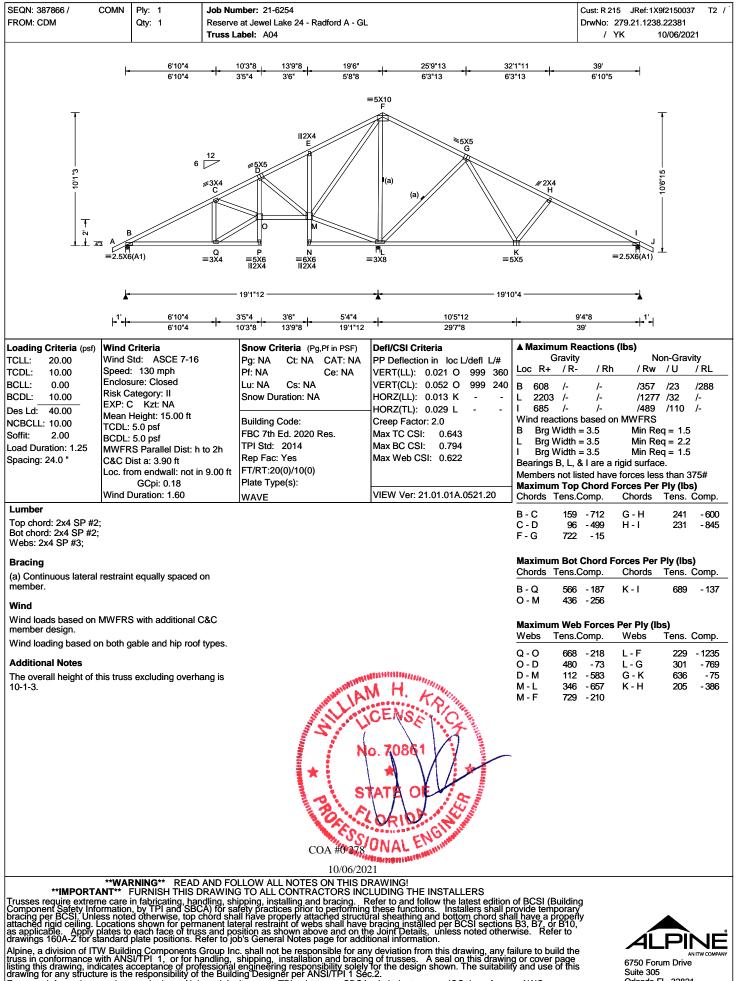
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, 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

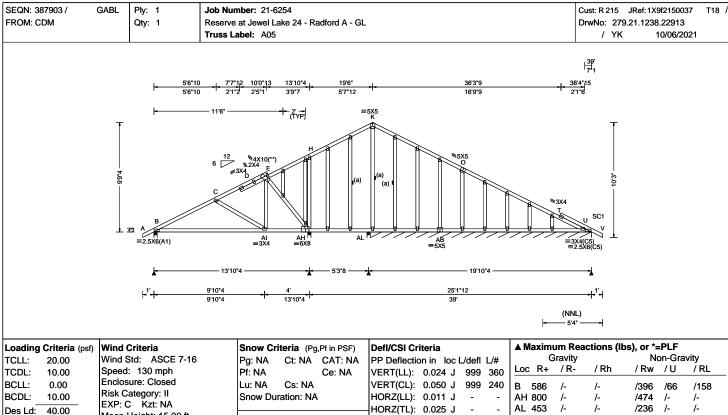






For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org

Suite 305 Orlando FL, 32821



BCLL: 0.00	Linciosule. Closed
BCDL: 10.00	Risk Category: II
	EXP: C Kzt: NA
Des Ld: 40.00	Mean Height: 15.00 ft
NCBCLL: 10.00	TCDL: 5.0 psf
Soffit: 2.00	BCDL: 5.0 psf
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2
Spacing: 24.0 "	C&C Dist a: 3.90 ft
	Loc. from endwall: Any
	GCpi: 0.18
	Wind Duration: 1.60

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

### Bracing

(a) Continuous lateral restraint equally spaced on member

#### **Plating Notes**

All plates are 2X4 except as noted.

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

#### Loading

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

#### Wind

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

Wind loading based on both gable and hip roof types.

Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	A Maximum Read
Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	Gravity
Pf: NA Ce: NA	VERT(LL): 0.024 J 999 360	Loc R+ /R-
Lu: NA Cs: NA	VERT(CL): 0.050 J 999 240	B 586 /-
Snow Duration: NA	HORZ(LL): 0.011 J	AH 800 /-
	HORZ(TL): 0.025 J	AL 453 /-
Building Code:	Creep Factor: 2.0	U* 80 /-
FBC 7th Ed. 2020 Res.	Max TC CSI: 0.442	Wind reactions ba
TPI Std: 2014	Max BC CSI: 0.722	B Brg Width = 3
Rep Fac: Yes	Max Web CSI: 0.370	AH Brg Width = 3
	Max Web CSI. 0.370	AL Brg Width = 3
FT/RT:20(0)/10(0)		U Brg Width = 2
Plate Type(s):		Bearings B, AH, A
WAVE	VIEW Ver: 21.01.01A.0521.20	Members not liste
Additional Notes		Maximum Top C

#### 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

9-9-4.

		axiiiii	umree	actions (i	105), OI =	FLF		
		G	Gravity		No	on-Gra	vity	
D	Loc	R+	/ R-	/ Rh	/ Rw	/U	/ RL	
0	в	586	/-	/-	/396	/66	/158	
	AH	800	/-	/-	/474	/-	/-	
	AL	453	/-	/-	/236	/-	/-	
	U*	80	/-	/-	/41	/-	/-	
	Win	d read	ctions b	ased on	MWFRS			
	в	Brg V	Vidth =	3.5	Min Re	q = 1.	5	
	AH	Brg V	Vidth =	3.5	Min Re	q = 1.5	5	
	AL	Brg V	Vidth =	3.5	Min Re	q = 1.5	5	
	υ	Brg V	Vidth =	236	Min Re	q = -		
	Bea	rings	B, AH,	AL, & AE	are a rigi	d surfa	ace.	
	Mer	nbers	not list	ed have f	orces less	s than	375#	
	Max	cimun	n Top (	Chord Fo	rces Per	Ply (lb	os)	
	Cho	ords <sup>-</sup>	Tens.C	omp.				
	В-	С	454	- 669				

Maximu	Im Bot Chord I	Forces Per	Ply (lbs)	
Chords	Tens.Comp.	Chords	Tens. Comp.	
B -AI	551 - 225	AH-AB	557 - 203	

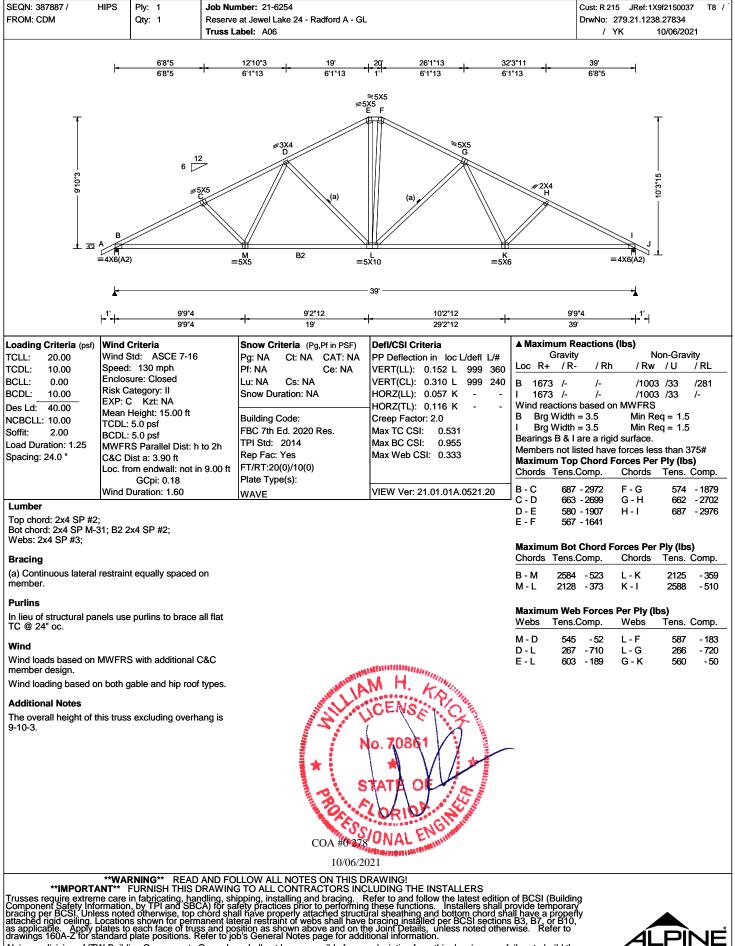
#### Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp	. Webs	Tens.	Comp.
C -AI Al- E	405 - 380 446 - 138		275	- 558

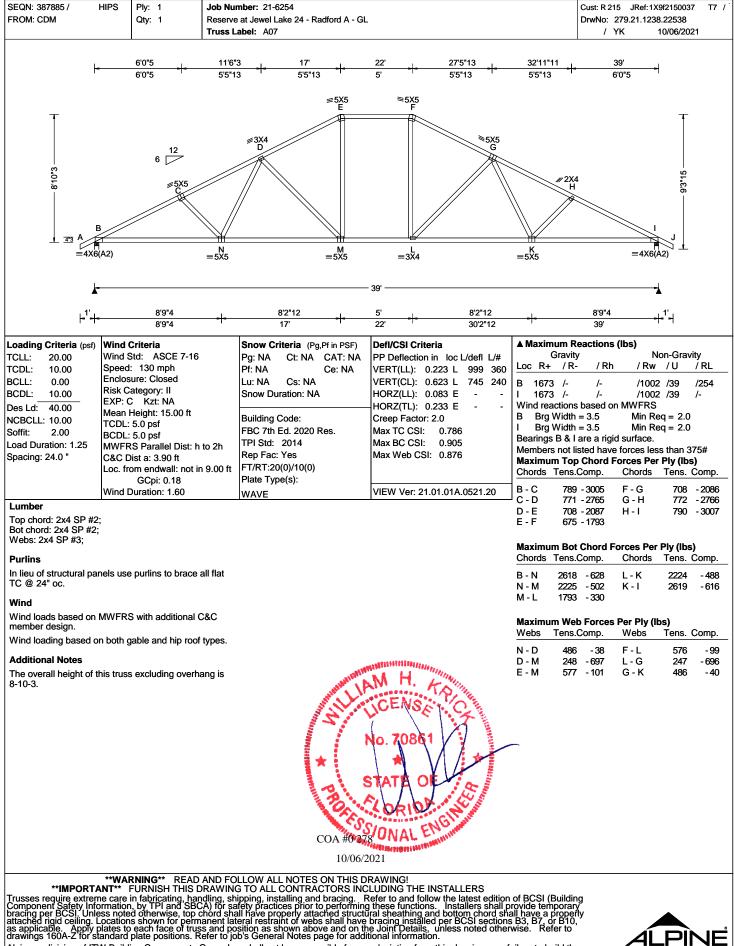


\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING! \*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building component Safety 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.

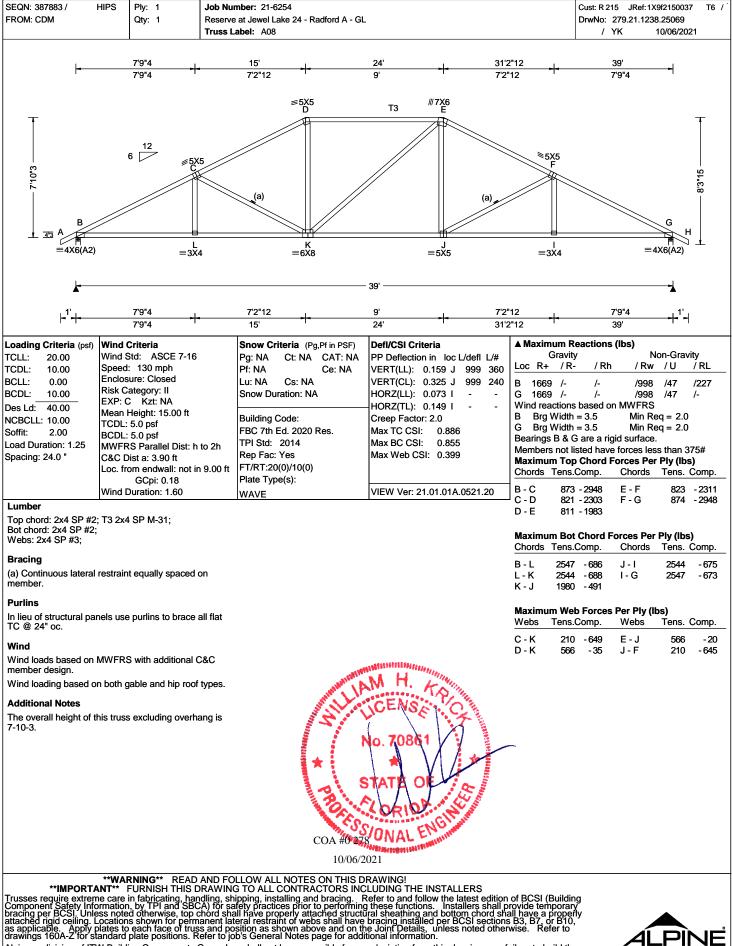




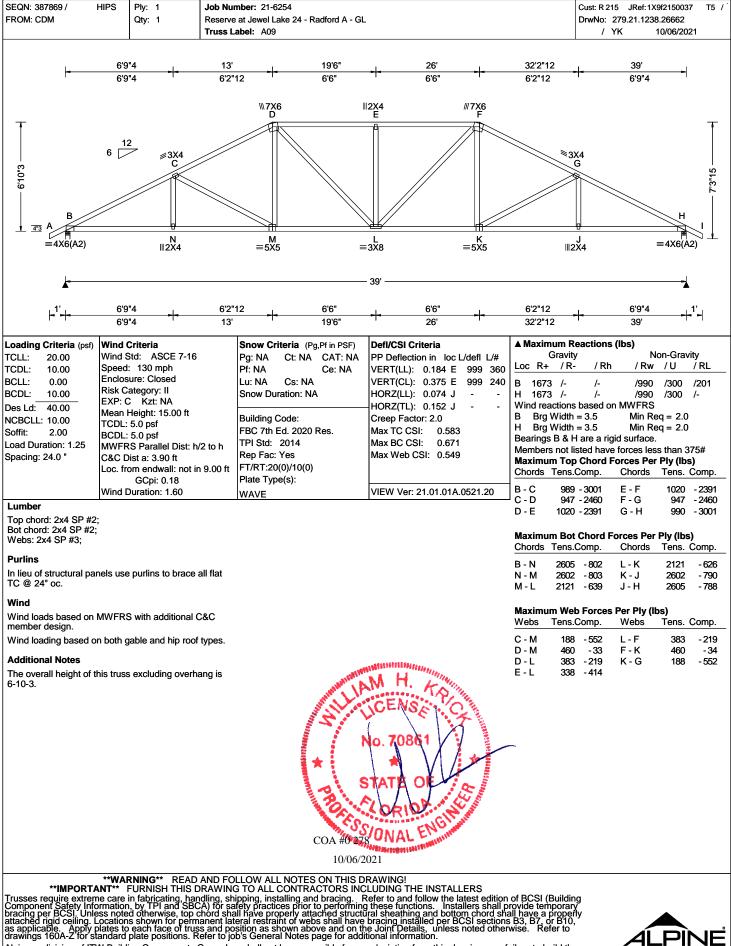




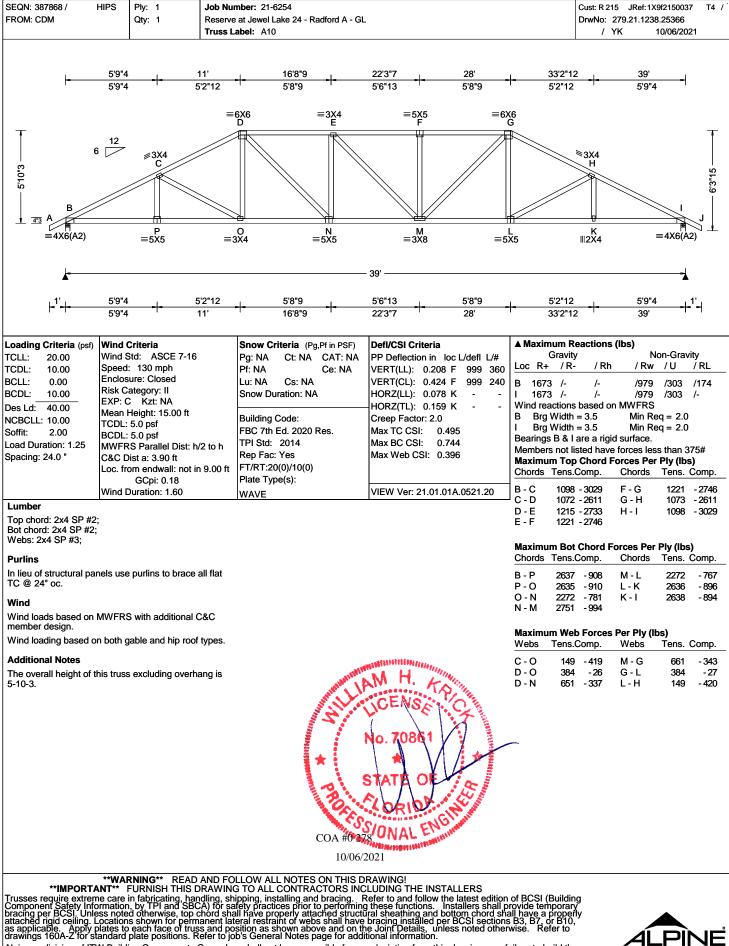












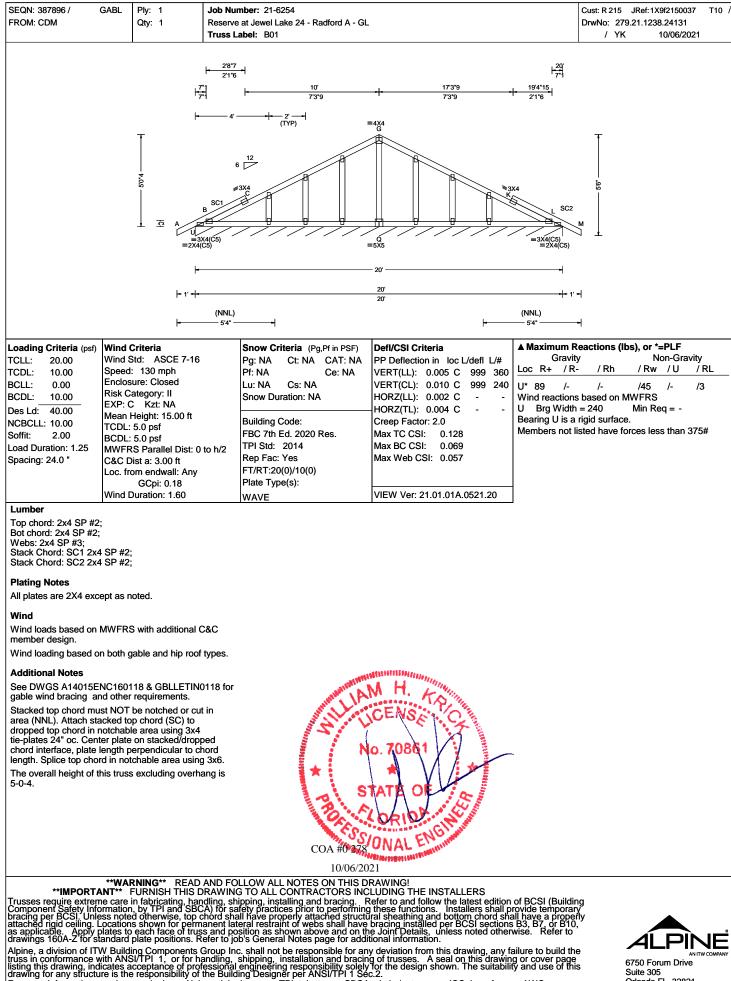


SEQN: 387867 / FROM: CDM	HIPS	Ply: 1 Qty: 1	Job Number: 21-6254 Reserve at Jewel Lake 24 - R Truss Label: A11	adford A - GL					5 JRef:1X9 279.21.1238 YK 1	
<del> -</del>	4'9"4 4'9"4	<u>9'</u> 4'2"12	<del>- - 16'0"9 - - 7'0"9</del>	-	22'11"7 6'10"13	<u>30'</u> 7'0"9		34'2"12 4'2"12	<u>39'</u> 4'9'	
6 [ 6 [ 6 [ 4 43 A B =4X6(A2)		P	$ \begin{array}{c} 6X8 \\ D \\ \hline 0 \\ 3X4 \\ \end{array} = 5 $	3X4 E N X5	=5X5 F (a) =3X10		<sup>≅</sup> 6X8 G = L =5X5	<sup>₩3X</sup> H K II2X		- 51:8:5 - J = 4X6(A2)
, <b>k</b>	4'9"4 4'9"4	4'2"12 - - 9'	<del>- -</del> 7'0"9 - -16'0"9	<del>- -</del>	39'	7'0"9 30'		4'2"12 34'2"12	<u>4'9'</u> 39'	<b>-</b> ↓ <sup>'4</sup>  - <sup>1'</sup> -
Loading Criteria (psf)           TCLL:         20.00           TCDL:         10.00           BCLL:         0.00           BCLL:         10.00           Des Ld:         40.00           NCBCLL:         10.00           Des Ld:         40.00           NCBCLL:         10.00           Soffit:         2.00           Load Duration:         1.25           Spacing:         24.0 "	Wind S Speed Enclos Risk C EXP: ( Mean I TCDL: BCDL: BCDL: MWFR C&C D Loc. fm Wind D	Criteria Std: ASCE 7-16 : 130 mph sure: Closed ategory: II C Kzt: NA Height: 15.00 ft 5.0 psf 5.0 psf S.0 psf S.0 psf S.0 psf tom endwall: not in GCpi: 0.18 Duration: 1.60	Pf: NA Lu: NA Cs: NA Snow Duration: N/ Building Code: FBC 7th Ed. 2020 TPI Std: 2014 Rep Fac: Yes	CAT: NA Ce: NA		loc L/defi L/# 1 F 999 360 2 F 872 240 3 K 8 K 0.924 0.847 0.686	Loc R+ B 1673 I 1673 Wind rea B Brg V I Brg V Bearings Members Maximur	/- /-	/ Rw /964 /964 n MWFRS Min Re Min Re d surface. e forces less Forces Per	
Bot chord: 2x4 SP #2; Webs: 2x4 SP #3; Bracing (a) Continuous lateral member. Purlins		t equally spaced c	n				Maximur	n Bot Chord F Tens.Comp. 2648 - 1003 2647 - 1004 2439 - 927 3345 - 1342	orces Per Chords M - L L - K K - I	Ply (lbs) Tens. Comp. 2438 - 913 2648 - 992 2649 - 990
In lieu of structural par TC @ 24" oc. Wind Wind loads based on member design. Wind loading based of Additional Notes The overall height of th 4-10-3.	MWFRS n both g	S with additional C gable and hip roof	C&C types.	NILLA NILLA NILLA N	M H. Fr	CA A	Maximur	n Web Forces Tens.Comp. 1051 - 525 362 - 440	Per Ply (lb Webs M - G F - M	rs) Tens. Comp. 1069 - 536 345 - 432
**IMPORTA Trusses require extrem Component Safety Infr	NT**	FURNISH THIS D		CTORS INC	RAWING!	TALLERS the latest edition	of BCSI (E	Building		
bracing per BCSI. Unle attached rigid ceiling. L as applicable. Apply p drawings 160A-Z for st Alpine, a division of IT	SS note ocation plates to andard N Build	d otherwise, top c s shown for perma each face of truss plate positions. Re ing Components C	dling, shipping, installing an A) for safety practices prior shord shall have properly attra anent lateral restraint of web s and position as shown abc efer to job's General Notes p Group Inc. shall not be respo andling, shipping, installatic	ached structu s shall have ove and on th bage for addi nsible for an	iral sheathing and bracing installed p le Joint Details, ur tional information. y deviation from the	bottom chord sha er BCSI sections iless noted other is drawing, any fa	allure to bu	ild the	AL 6750 Eon	



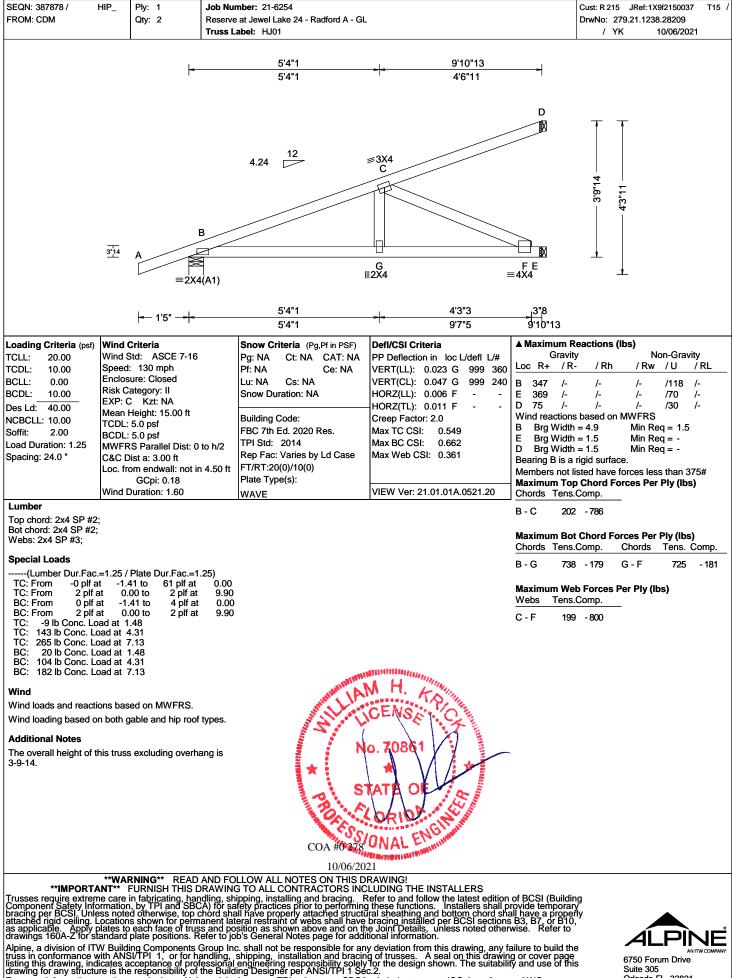
SEQN: 387881 / FROM: CDM	HIPS Ply: 1 Qty: 1	Job Number: 21-6254 Reserve at Jewel Lake 2 Truss Label: A12	4 - Radford A - GL			Cust: R 215 JRef: 1X DrwNo: 279.21.1238 / YK	
	7' 7' =6X6 C	11'10"4 4'10"4 = = =4X5 D T2 (a)	$     \frac{18'6"}{6'7"12} + -     = 6X6     =     $	25'1"12 6'7"12 =4X5 F T3	32' 6'10"4 ≋6X	39' 7'	15    
₩ <u>43</u> A =2.5X6(A1)	₩ N N N X4	M <sup>#1</sup> ≡5X5	≡4X10	BL1 K ≡5X6	J III3X	l_4 ≡	91.524 H ■ ■ =2.5X6(A1)
  - <sup>1</sup> • <del> -</del>	11'10"4 7' 7'	4'10"4 11'10"4 + -	6'7"12 18'6" 18'6"	6'7"12 25'1"12	6'10"4 32'	10"4 <u></u>	<b>-</b> ≱ 
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: C C&C Dist a: 3.90 ft Loc. from endwall: not i GCpi: 0.18 Wind Duration: 1.60	Pf: NA Pf: NA Lu: NA Cs Snow Duration Building Code FBC 7th Ed. 2 TPI Std: 201- Rep Fac: Vari	NA CAT: NA Ce: NA NA VERT(L NA N: NA HORZ(L HORZ(L HORZ(C Creep F 020 Res. 4 Se by Ld Case 0(0)		B 719 /- M 2892 /- K 3171 /- H 932 /- Wind reactions B Brg Width M Brg Width H Brg Width H Brg Width H Brg Width	y <u>/ Rh / Rw</u> /- /- /- /- based on MVFRS = 3.5 Min Re = 3.5 Min Re = 3.5 Min Re	/149 /- /659 /- /721 /- /198 /- eq = 1.5 eq = 3.4 eq = - eq = 1.5 urface.
Lumber Top chord: 2x4 SP #2 Bot chord: 2x4 SP #2; Webs: 2x4 SP #3; Bracing	; T2,T3 2x4 SP M-31;	Bearing E Brg blocks brg x-loc 3 25.00 Brg block		ails/blk wall plate 4 Rigid Surface es as chord.	Maximum Top Chords Tens. B - C 189 C - D 557	Chord Forces Per	
(a) Continuous lateral member. Special Loads	at 7.00 to 31 plf at at 32.00 to 62 plf at	on Additiona The overa 3-10-3. 25) 7.00 32.00 40.00	0		Chords Tens. B - N 701 N - M 730 M - L 81	Chord Forces Per           Comp.         Chords           -133         L - K           -133         K - J           -435         J - H           b Forces Per Ply (Ik	Tens.         Comp.           77         - 459           1161         - 223           1129         - 224
BC: From 20 plf a BC: From 10 plf a BC: From 20 plf a BC: From 20 plf a TC: 266 lb Conc. Lc TC: 191 lb Conc. Lc T7.06,19.06,19.94,21. BC: 499 lb Conc. Lc BC: 130 lb Conc. Lc T7.06,19.06,19.94,21.	at 0.00 to 20 plf at at 7.03 to 10 plf at at 31.97 to 20 plf at at 39.00 to 4 plf at bad at 7.03,31.97 bad at 9.06,11.06,13.06, 94,23.94,25.94,27.94,29	7.03 31.97 39.00 40.00 15.06 .94 15.06 .94	No. 700	561 01	Webs         Tens.0           C - N         693           C - M         322           M - D         537           D - L         1515	Comp. Webs	Tens. Comp.           1556         - 322           623         - 1741           397         - 1949           772         0
Wind Wind loads and reacti Wind loading based o	ons based on MWFRS. n both gable and hip roo **WARNING** READ NT** FURNISH THIS I	AND FOLLOW ALL NO	COA #0 278 0/06/2021 TES ON THIS DRAWING TRACTORS INCLUDING	HIGHERS			
Trusses require extrem Component Safety Info bracing per BCSI. Unle attached rigid ceiling. L as applicable. Apply r drawings 160A-Z for st Alpine, a division of ITV	le care in fabricating, hai irmation, by TPI and SB( iss noted otherwise, top locations shown for perm lates to each face of trus andard plate positions. F	ndling, shipping, installing CA) for safety practices p chord shall have properh nanent lateral restraint of ss and position as showr Refer to job's General No	g and bracing. Refer to a rior to performing these fu / attached structural sheat webs shall have bracing i above and on the Joint D tes page for additional info	nd tollow the latest edition nctions. Installers shall hing and bottom chord sinstalled per BCSI section etails, unless noted other mation.	n of BCSI (Buildin provide temporary hall have a proper is B3, B7, or B10, prwise. Refer to		PINË





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





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

Orlando FL, 32821

SEQN: 387865 / FROM: CDM	EJAC	Ply: 1 Qty: 14	Job Number: 21-6254 Reserve at Jewel Lake 24 - Radford A - Gl Truss Label: J01	-			JRef:1X9f2150037 21.1238.25835 10/06/2021	T14 /
		<u>4</u> 3 A	6 12 B = 2X4(A1)		D 310"3	<del>-</del> 4'3"15		
		1'		7' 7'				
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 S Speed Enclos Risk C EXP: C Mean I TCDL: BCDL: BCDL: MWFR C&C D Loc. fre	Criteria Std: ASCE 7-16 130 mph sure: Closed ategory: II C Kzt: NA Height: 15.00 ft 5.0 psf 5.0 psf S Parallel Dist: h/ Dist a: 3.00 ft om endwall: not in GCpi: 0.18 Duration: 1.60	Rep Fac: Yes	Defi/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.015 D HORZ(TL): 0.031 D Creep Factor: 2.0 Max TC CSI: 0.740 Max BC CSI: 0.522 Max Web CSI: 0.000 VIEW Ver: 21.01.01A.0521.20	▲ Maximum R Gravit Loc R+ / R B 368 /- D 130 /- C 191 /- Wind reactions B Brg Width D Brg Width D Brg Width Bearing B is a Members not I	y - / Rh /- /- s based on M = 3.5 = 1.5 = 1.5 rigid surface.	Non-Gravity / Rw / U / R /245 /36 /13 /75 /- /- /121 /95 /-	37

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.



10/06/2021

\*\*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.



SEQN: 387862 / FROM: CDM	Qty: 4 Reser	<b>umber:</b> 21-6254 ve at Jewel Lake 24 - Radford A - GL <b>Label:</b> J02		Cust: R 215 JRef: 1X9f2150037 T11 / DrwNo: 279.21.1238.24256 / YK 10/06/2021
		6 12 B 2X4(A1)	5'	
	1. 1	.   .	5'	-
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         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):	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.005 D HORZ(TL): 0.010 D Creep Factor: 2.0 Max TC CSI: 0.336 Max BC CSI: 0.243 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 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#

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.



10/06/2021

\*\*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.



SEQN: 387863 / FROM: CDM	Qty: 4 Rese	Number: 21-6254 rrve at Jewel Lake 24 - Radford A - GL s Label: J03		Cust: R 215 JRef: 1X9/2150037 T12 / DrwNo: 279.21.1238.26382 / YK 10/06/2021
	<sup>4</sup> / <sub>4</sub> <sup>3</sup> A	6 12 6 B = 2X4(A1)	C D	1'10"3 2'3"15
		- 1'	3' 3'	
Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (Ibs)
TCLL: 20.00	Wind Std: ASCE 7-16 Speed: 130 mph	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL
TCDL: 10.00 BCLL: 0.00	Enclosure: Closed	Pf: NA Ce: NA Lu: NA Cs: NA	VERT(LL): NA VERT(CL): NA	B 212 /- /- /148 /28 /66
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.001 D	D 52 /- /- /28 /- /-
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.001 D	C 72 /- /- /44 /37 /-
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0	Wind reactions based on MWFRS B Brg Width = 3.5 Min Reg = 1.5
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.123	D Brg Width = $1.5$ Min Req = $-$
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014 Rep Fac: Yes	Max BC CSI: 0.071 Max Web CSI: 0.000	C Brg Width = 1.5 Min Req = -
Spacing: 24.0 "	C&C Dist a: 3.00 ft Loc. from endwall: Any	FT/RT:20(0)/10(0)	Wax Web CSI. 0.000	Bearing B is a rigid surface.
	GCpi: 0.18	Plate Type(s):		Members not listed have forces less than 375#
	Wind Duration: 1.60	WAVE	VIEW Ver: 21.01.01A.0521.20	

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.



10/06/2021

\*\*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.



SEQN: 387864 / J FROM: CDM	ACK Ply: Qty:	4 Reser	umber: 21-6254 /e at Jewel Lake 24 - Radford A - GL Label: J04		Cust: R 215 JRef: 1X9f2150037 T13 DrwNo: 279.21.1238.26506 KD / YK 10/06/2021
			$\begin{array}{c} 12 \\ 6 \\ \end{array}$	$ \begin{array}{c} C \\ B \\ \hline B \\ \hline C \\ \hline P \\ \hline D \\ \hline T \\ \hline 1' \\ \hline 1' \\ \hline 1' \\ \hline \end{array} $	
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: <u>10.00</u> Des Ld: 40.00 NCBCLL: 10.00	Speed: 130 Enclosure: ( Risk Catego EXP: C K Mean Heigh TCDL: 5.0 p BCDL: 5.0 p MWFRS Pa C&C Dist a: Loc. from er	ASCE 7-16 0 mph Closed ory: II zt: NA tx: 15.00 ft osf vallel Dist: 0 to h/2 : 3.00 ft ndwall: Any pi: 0.18	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): -0.000 D           HORZ(TL): 0.000 D           Creep Factor: 2.0           Max TC CSI: 0.112           Max BC CSI: 0.013           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 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#

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

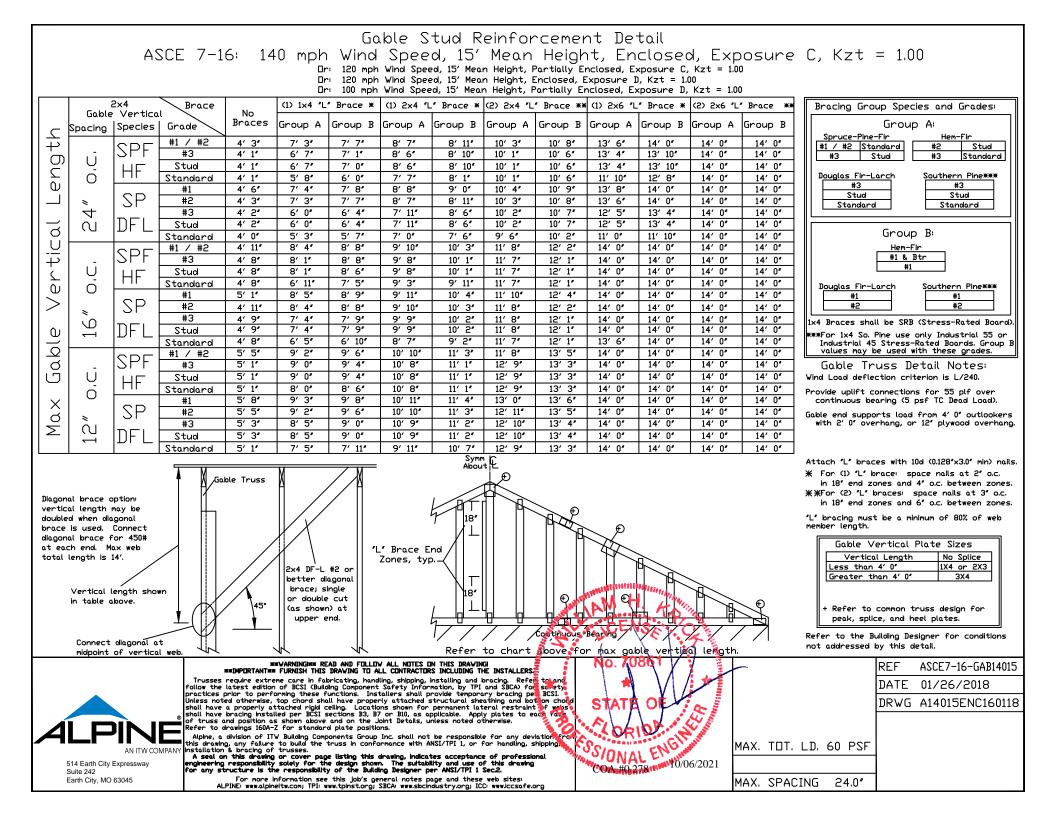
The overall height of this truss excluding overhang is 0-10-3.



10/06/2021

\*\*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 Satety 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.





# 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

514 Earth City Expressway

Earth City, MO 63045

Suite 242

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.

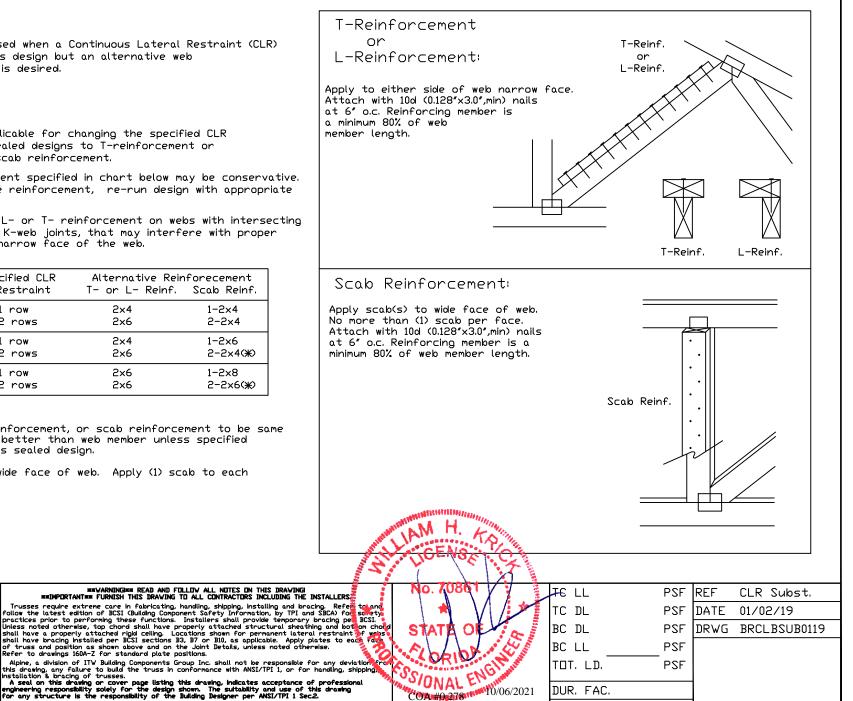
Use scabs instead of L- or T- reinforcement on webs with intersecting truss joints, such as K-web joints, that may interfere with proper application along the narrow face of the web.

Web Member	Specified CLR	Alternative Reir	
Size	Restraint	T- or L- Reinf.	
2x3 or 2x4	1 row	2×4	1-2×4
2x3 or 2x4	2 rows	2×6	2-2×4
2×6	1 row	2×4	1-2×6
2×6	2 rows	2×6	2-2×4( <del>X</del> )
2×8	1 row	2×6	1-2×8
2×8	2 rows	2×6	2-2×6( <del>%</del> )

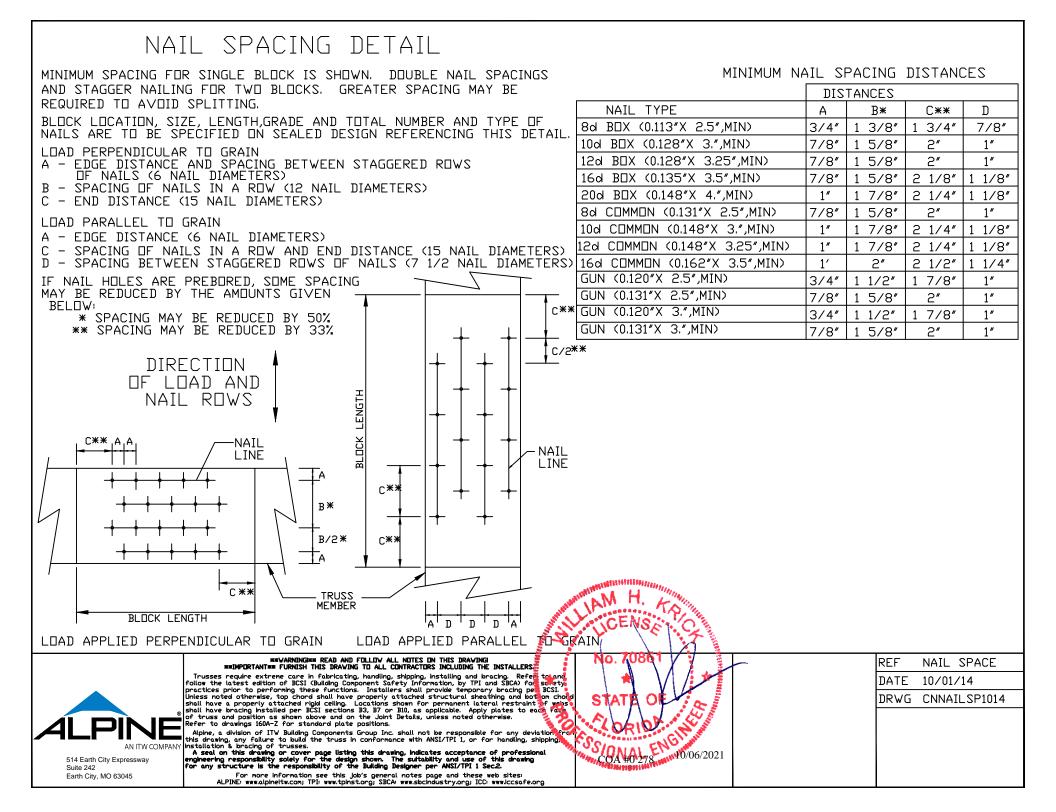
T-reinforcement, L-reinforcement, or scab reinforcement to be same species and grade or better than web member unless specified otherwise on Engineer's sealed design.

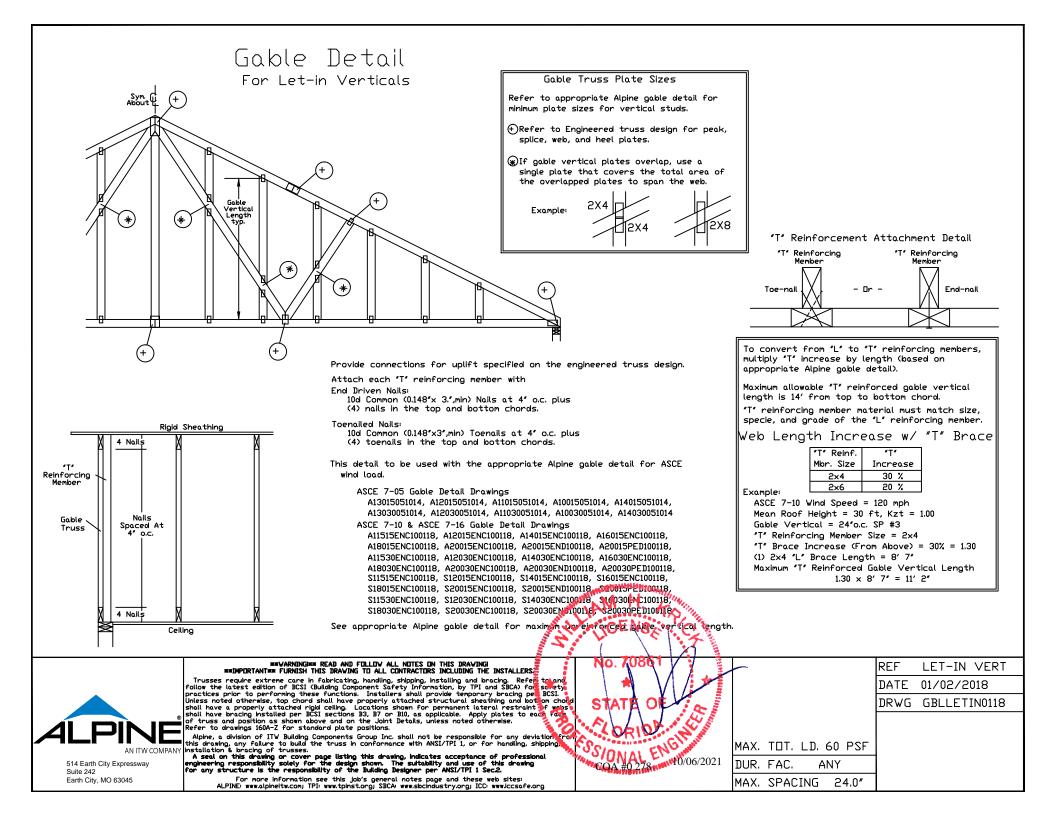
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com, TPI: www.tpinst.org; SBCA: www.sbcindustry.org; ICC: www.iccsafe.org

(₩) Center scab on wide face of web. Apply (1) scab to each face of web.



SPACING





# 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 Dr 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.

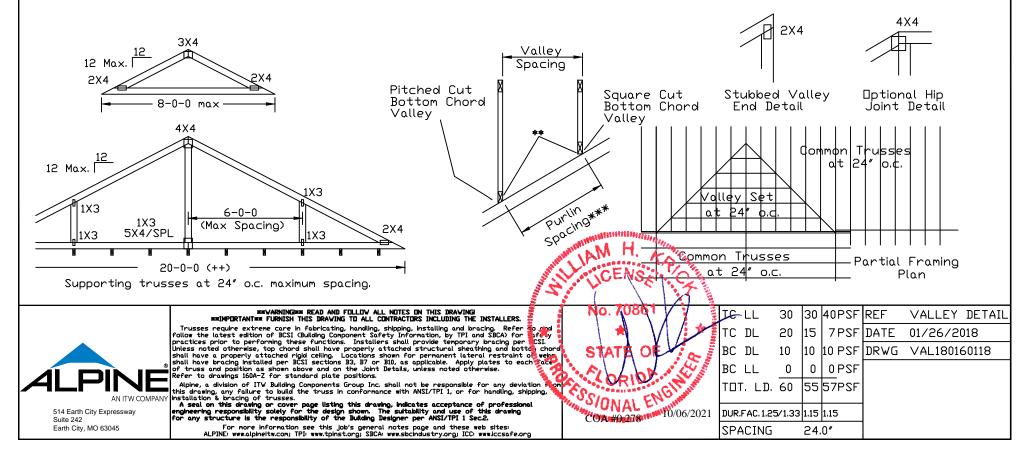
Unless specified otherwise on engineer's sealed design, for vertical valley webs taller than 7-9" apply 2x4 "T" reinforcement, 80% length of web, same species and grade or better, attached with 10d box (0.128" x 3.0") nails at 6" o.c. In lieu of "T" reinforcement, 2x4 Continuous Lateral Restraint applied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

Purlins at 24" o.c. or as otherwise specified on engineer's sealed design Dr

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''.



# 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.

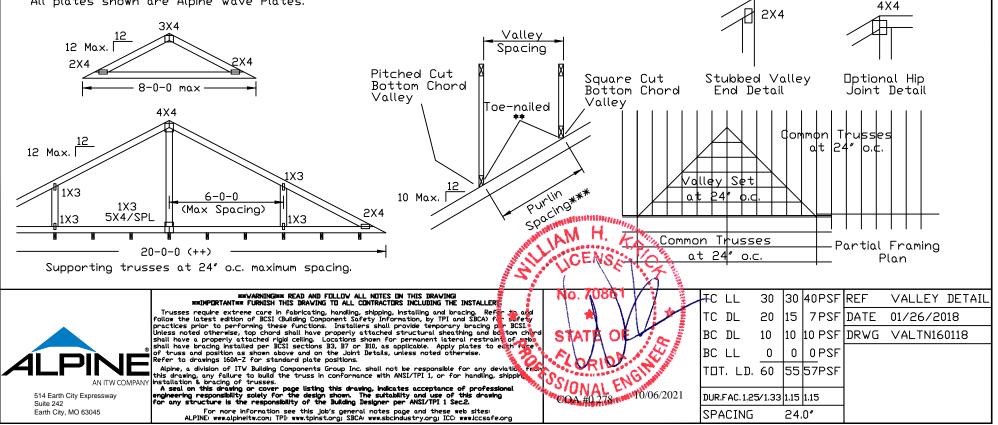
Unless specified otherwise on engineer's sealed design, for vertical valley webs taller than 7-9" apply 2x4 "T" reinforcement, 80% length of web, same species and grade or better, attached with 10d box (0.128" x 3.0") nails at 6" o.c. In lieu of "T" reinforcement, 2x4 Continuous Lateral Restraint applied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

Purlins at 24" o.c. or as otherwise specified on engineer's sealed design Πr

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''.



All plates shown are Alpine Wave Plates.

