

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

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Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	Job Number: 19-3406
Job Description: /SUNSET MEADOWS /BRADLEY FRANKS	
Address: LAKE CITY, FL	

Job Engineering Criteria:	
Design Code: FBC 2017 RES	IntelliVIEW Version: 18.02.01 through 18.02.01B
	JRef #: 1WS22150004
Wind Standard: ASCE 7-10 Wind Speed (mph): 130	Roof Load (psf): 20.00-10.00- 0.00-10.00
Building Type: Closed	Floor Load (psf): None

This package contains general notes pages, 38 truss drawing(s) and 4 detail(s).

Item	Drawing Number	Truss	Item	Drawing Number	Truss
1	020.20.1458.13380	A01	2	020.20.1614.07393	A02
3	020.20.1614.16970	A03	4	020.20.1614.24910	A04
5	020.20.1614.30413	A05	6	020.20.1614.41510	A06
7	020.20.1614.46163	A07	8	020.20.1614.49080	A08
9	020.20.1614.51747	A09	10	020.20.1614.55390	A10
11	020.20.1614.57310	A11	12	020.20.1614.59010	A12
13	020.20.1615.01097	A13	14	020.20.1615.04587	A14
15	020.20.1458.13459	B01	16	020.20.1458.13351	B02
17	020.20.1458.13475	B03	18	020.20.1615.06503	B04
19	020.20.1615.08143	B05	20	020.20.1615.09907	C01
21	020.20.1615.16003	C02	22	020.20.1615.18090	D01
23	020.20.1615.19420	D02	24	020.20.1615.20643	D03
25	020.20.1615.22420	G01	26	020.20.1615.29730	G02
27	020.20.1615.32240	J01	28	020.20.1615.34087	J03
29	020.20.1615.35827	J05	30	020.20.1615.37383	J07
31	020.20.1615.39247	J08	32	020.20.1615.41380	J09
33	020.20.1615.45427	J10	34	020.20.1615.47360	J11
35	020.20.1615.48497	J12	36	020.20.1615.51343	J13
37	020.20.1615.57237	J14	38	020.20.1616.08553	V01
39	A14015ENC101014		40	BRCLBSUB0119	
41	GBLLETIN0118		42	VAL160101014	

## **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 AF&PA. 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 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.

# 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.

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

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.

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 immediate vertical Deflection, 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(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. AF&PA: American Forest & Paper Association, 1111 19<sup>th</sup> Street, NW, Suite 800, Washington, DC 20036; <u>www.afandpa.org</u>.

2. ICC: International Code Council; www.iccsafe.org.

3. Alpine, a division of ITW Building Components Group Inc.: 13723 Riverport Drive, Suite 200, Maryland Heights, MO 63043; <u>www.alpineitw.com</u>.

4. TPI: Truss Plate Institute, 218 North Lee Street, Suite 312, Alexandria, VA 22314; www.tpinst.org.

5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; www.sbcindustry.co















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.com; ICC: www.iccsafe.org









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SEQN: 568696 C FROM: CDM	GABL	Ply: 1 Qty: 1		er: 19-3406 MEADOWS /BRADLEY FRANKS el: D01	;		Cust: R 215         JRef: 1WS22150004         Tr           DrwNo:         020.20.1615.18090         /           /         FV         01/20/2020
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				7 2 3X4 SC1 =3X4(C4) =3X4(C4)	₹3X4 F = 3X4(C4) = 3X4(C4)	∕210 <sup>-</sup>	
			⊦ ⊧	- 1'6"	- 7'	'6" — <del>- </del>	
coading Criteria (psf)           TCLL:         20.00           TCDL:         10.00           3CLL:         0.00           3CDL:         10.00           Des Ld:         40.00           VCBCLL:         10.00           Soffit:         2.00           coad Duration:         1.25           Spacing:         24.0 "	Win Spe Encl Risk EXP Mea TCD BCD MW C&C Loc.	d Criteria d Std: ASCE 7-1 ed: 130 mph losure: Closed : Category: II : C Kzt: NA in Height: 15.00 ft DL: 5.0 psf DL: 5.0 psf FRS Parallel Dist: Dist a: 3.00 ft from endwall: An GCpi: 0.18 d Duration: 1.60	0 to h/2	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria           PP Deflection in loc L/defl L/4           VERT(LL): 0.001 D 999 24           VERT(CL): 0.003 D 999 18           HORZ(LL): 0.001 F -           HORZ(TL): 0.001 F -           Creep Factor: 2.0           Max TC CSI: 0.177           Max BC CSI: 0.053           Max Web CSI: 0.028	# Gravi 40 Loc R+ / R 30 B 187 /- - H* 84 /- - Wind reaction B Brg Widtl H Brg Widtl Bearings B & Members not	X-         / Rh         / Rw         / U         / RL           /-         /140         /47         /94           /-         /41         /14         /-           ns based on MWFRS         h = 4.0         Min Req = 1.5
umber op chord: 2x4 SP #2; ot chord: 2x4 SP #2; Vebs: 2x4 SP #3; tack Chord: SC1 2x4 S tack Chord: SC2 2x4 S							
Plating Notes All plates are 2X4 excep Vind Wind loads based on M nember design.			C&C	A PROPERTY OF	ONHWAK KING		
Additional Notes Refer to General Notes See DWGS A14015ENG gable wind bracing and Stacked top chord must area (NNL). Dropped toj netrvals. Attach stacker op chord in notchable a oc. Center plate on stac nterface, plate length pd Splice top chord in notcl The overall height of this 2-3-1.	C1010 other NOT o chor top o rea us ked/d erpeno nable	14 & GBLLETIN( requirements. be notched or cut rd braced at 24" o chord (SC) to drop sing 3x4 tie-plates ropped chord dicular to chord le area using 3x6.	0118 for c pped 224" ngth.	A DROKK	No. 86367 STATE OF CORIDA		
					G# 278, Yoonhwak Kim, FL 0/2020	PE #86367	
**!!!! 000741	T++ 1			OW ALL NOTES ON THIS DR O ALL CONTRACTORS INCL ing, installing and bracing. Re y practices prior to performing ave properly attached structure al restraint of webs shall have on as shown above and on th	AWING! UDING THE INSTALLERS fer to and follow the latest edition these functions. Installers shall al sheathing and bottom chord s bracing installed per BCSI section e Joint Details, unless noted of	on of BCSI (Buildin provide temporar shall have a prope ons B3, B7, or B1 herwise. Refer t	
lpine, a division of ITW uss in conformance with sting this drawing, inc nd use of this drawi	Build h ANS licate	ing Components ( SI/TPL 1, or for ha	Group Inc. s ndling, ship f professions the response	shall not be responsible for any ping, installation and bracing o pnal engineering responsib posibility of the Building Desi	deviation from this drawing,any f trusses <b>A seal on this drawin</b> lity solely for the design shov gner per ANSI/TPI 1 Sec.2.	/ failure to build the g or cover page wn. The suitabi	e 6750 Forum Drive Suite 305

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 ANSU/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.com; ICC: www.iccsafe.org



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Image: state of the state of the state second of the st	SEQN: 568588 FROM: CDM	JACK	Ply: 1 Qty: 8		er: 19-3406 MEADOWS /BRADLEY FRANKS el: J03	3			Cust: R 215         JRef: 1WS22150004           DrwNo:         020.20.1615.34087           /         FV         01/20/2020
Image: space of the space			6"10 •	A	7 B				
TCLL:       20.00       Wind Std: ASCE 7-10       Pg: NA       Ct: NA       CAT: NA       PP Deflection in loc L/defl L/#         TCDL:       10.00       Speed: 130 mph       Pg: NA       Ct: NA       CAT: NA       PP Deflection in loc L/defl L/#         BCLL:       10.00       ExP: C K2: NA       Risk Category: II       Pg: NA       Ct: NA       CAT: NA       PC NA       CAT: NA         Des Ld:       40.00       Mean Height: 15.00 ft       TCDL: 5.0 psf       Soffit:       2.00       Code / Misc Criteria       Did Code: FBC 2017 RES       Max TC CSI:       0.01 C       -       -       //75       //37       //4         Dost d:       40.00       Mean Height: 15.00 ft       TCDL: 5.0 psf       Did Code: FBC 2017 RES       Max TC CSI:       0.01 C       -       -       //26       //22       /-       Wind Reg = 1.5       Min Reg = 1.5       Min Reg = -       C&C Dis 1::       0.01       Pi Std:::       0.00       Pi Std:::       0.00       Pi Std:::       0.00       Pi Std:::       0.01       Pi Std:::       0.01       Non-Gravity       Min Reg = 1.5       Dis gi did ufface.       Non Reg = -       C Std::       Non Std::       Non Per Std::       Non Per Std::       Non Per Std::       Non Per Std::       Non Notest::       No No Notest::				⊶ 1	'6" ──		•		
Lumber         Top chord: 2x4 SP #2;         Bot chord: 2x4 SP #2;         Wind         Wind loads based on MWFRS with additional C&C member design.         Additional Notes         Refer to General Notes for additional information         The overall beight of this truss excluding overhang is	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	Wind Spee Encl Risk EXP Mea TCD BCD MWI C&C Loc.	d Std: ASCE 7-1 ad: 130 mph osure: Closed Category: II c Kzt: NA n Height: 15.00 ft L: 5.0 psf L: 5.0 psf FRS Parallel Dist Dist a: 3.00 ft from endwall: An GCpi: 0.18	: 0 to h/2	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s):	PP Deflection in loc L/de VERT(LL): NA VERT(CL): NA HORZ(LL): 0.001 C - HORZ(TL): 0.001 C - Creep Factor: 2.0 Max TC CSI: 0.175 Max BC CSI: 0.092 Max Web CSI: 0.000	-	Gravit; Loc R+ / R- B 239 /- D 55 /- C 66 /- Wind reactions B Brg Width D Brg Width D Brg Width Bearing B is a	y Non-Gravity - /Rh /Rw /U /R /- /175 /37 /74 /- /40 /- /- /- /26 /32 /- s based on MWFRS = 4.0 Min Req = 1.5 = 1.5 Min Req = - = 1.5 Min Req = - rigid surface.
Refer to General Notes for additional information	Top chord: 2x4 SP #2; Bot chord: 2x4 SP #2; Wind Wind loads based on M			C&C			21.00		
	Refer to General Notes The overall height of th				DROCTO	NHWAK CENSA No. 86367 STATE OF VORIDA	Conter +	/	
FL REG# 278, Yoonhwak Kim, FL PE #86367 01/20/2020 **WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING!					01/20	/2020	FL PE #	#86367	

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Qty: 8 /SUNS		S		Cust: R 215 JRef: 1WS22150004 T38 DrwNo: 020.20.1615.35827 / FV 01/20/2020
	7 <sup>12</sup> B ≡ 3X4(B2)		3'5"10         1           4'0"8         1	
L 1	6" — <del></del>	5'	J	
		5'	1	
Vind Std: ASCE 7-10 speed: 130 mph inclosure: Closed tisk Category: II XP: C Kzt: NA Mean Height: 15.00 ft CDL: 5.0 psf ICDL: 5.0 psf IWFRS Parallel Dist: 0 to h. &C Dist a: 3.00 ft oc. from endwall: not in 4.50 GCpi: 0.18	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Code / Misc Criteria Bldg Code: FBC 2017 RES TPI Std: 2014 Rep Fac: Yes 0 ft FT/RT:20(0)/10(0) Plate Type(s):	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.003 D HORZ(LL): 0.006 D Creep Factor: 2.0 Max TC CSI: 0.344 Max BC CSI: 0.274 Max Web CSI: 0.000	Gravity Loc R+ /R- B 309 /- D 94 /- C 130 /- Wind reactions B Brg Width = D Brg Width = C Brg Width = Bearing B is a r	Non-Gravity           / Rh         / Rw         / U         / RL           /-         /218         /37         /107           /-         /65         /-         /-           /-         /61         /59         /-           based on MWFRS         = 4.0         Min Req = 1.5         =           = 1.5         Min Req = -         =         =           = 1.5         Min Req = -         =         =
		VIEW Ver. 10.02.010.0321.00		
FRS with additional C&C				
		NO. 86367 STATE OF CORIDA	4	
	Qty: 8 /SUNS Truss 6'10 4 6'10 4 1' Vind Criteria Vind Std: ASCE 7-10 peed: 130 mph inclosure: Closed tisk Category: II XXP: C Kzt: NA Mean Height: 15.00 ft CDL: 5.0 psf ICDL: 5.0 psf WFRS Parallel Dist: 0 to h/ &C Dist a: 3.00 ft oc. from endwall: not in 4.50	Qiy: 8       /SUNSET MEADOWS /BRADLEY FRANKS         Truss Label: J05         7       7         7       7         6 <sup>+10</sup> 8         6 <sup>+10</sup> 9         6 <sup>+10</sup> 9         16 <sup>+10</sup> 9         16 <sup>+10</sup> 9         16 <sup>+10</sup> 9         16 <sup>+10</sup> 16 <sup>+10</sup> 176 <sup>+10</sup> 9         16 <sup>+10</sup> 9         176 <sup>+10</sup> 9         16 <sup>+10</sup> 9         10 <sup>+10</sup>	Ory: 8       /SUNSET MEADOWS /BRADLEY FRANKS Truss Label: J05         7       12         7       12         7       12         8       334(B2)         10       16"         9       16"         9       16"         9       16"         10	Op: 8       SUNSET NEADOWS / BRADLEY FRANKS         Truss Labe: J05         Image: Structure in the image: Structure in the image in t

FL REG# 278, Yoonhwak Kim, FL PE #86367 01/20/2020

\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING! \*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, drawings 160A-Z for standard plate positions.

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SEQN: 568657 J/ FROM: CDM	ACK Ply: 1 Qty: 2		er: 19-3406 /IEADOWS /BRADLEY FRANKS	3	Cust: R 215 JRef: 1WS22150004 T3 DrwNo: 020.20.1615.47360
		Truss Labe		-	/ FV 01/20/2020
		A	7 <mark>12</mark> 7 B ≡ 3X4(B2)	$ \begin{array}{c} \parallel 2X4(**) & D \\ \equiv 3X4 \\ C \\ \hline  \\  \\  \\  \\  \\  \\  \\  \\  \\  \\  \\  \\  \\ $	
		1'(	5"⊳⊲	4" 8" 4" 3'	
Loading Criteria (psf)           TCLL:         20.00           TCDL:         10.00           BCLL:         0.00           BCLL:         10.00           BCLL:         10.00           BCLL:         10.00           BCLL:         10.00           SCELL:         10.00           Scentral:         10.00           Soffit:         2.00           Load Duration:         1.25           Spacing:         24.0 "	Wind Criteria Wind Std: ASCE 7- Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dis C&C Dist a: 3.00 ft Loc. from endwall: A GCpi: 0.18	ft t: 0 to h/2	Snow Criteria (Pg,Pf in PSF)           Pg: NA         Ct: NA         CAT: NA           Pf: NA         Ce: NA         Ce: NA           Lu: NA         Cs: NA         Snow Duration: NA           Code / Misc Criteria           Bldg Code:         FBC 2017 RES           TPI Std:         2014           Rep Fac: Yes         FT/RT:20(0)/10(0)           Plate Type(s):         Here State S	VERT(LL): 0.005 F 999 240 VERT(CL): 0.009 F 999 180 HORZ(LL): 0.002 C HORZ(TL): 0.005 C - Creep Factor: 2.0 Max TC CSI: 0.175 Max BC CSI: 0.043 Max Web CSI: 0.038	$\begin{tabular}{ c c c c c c c } \hline & Maximum Reactions (lbs) & Gravity & Non-Gravity & Loc R+ / R- / Rh / Rw / U / RL & B 239 /- /- /175 /37 /74 & E 23 /- /- /18 /2 /- D 77 /- /- /45 /27 /- Wind reactions based on MWFRS & B Brg Width = 4.0 & Min Req = 1.5 & E Brg Width = 1.5 & Min Req = - D Brg Width = 1.5 & Min Req = - Bearing B is a rigid surface. & Members not listed have forces less than 375# & The set of the$
Lumber Fop chord: 2x4 SP #2; Bot chord: 2x4 SP #2; Vebs: 2x4 SP #3;	Wind Duration: 1.60		WAVE	VIEW Ver: 18.02.01B.0321.08	
Plating Notes (**) 1 plate(s) require spe scaled plate plot details f requirements.					
<b>Wind</b> Wind loads based on MV member design.	VFRS with additional	C&C		ONHWAK KING	
Additional Notes Refer to General Notes for The overall height of this 2-3-10.		-	AND	STATE OF	
				G# 278, Yoonhwak Kim, FL PE //2020	#86367
			DW ALL NOTES ON THIS DF O ALL CONTRACTORS INCI ing, installing and bracing. Re / practices prior to performing ave properly attached structur al restraint of webs shall have on as shown above and on th	RAWING! LUDING THE INSTALLERS offer to and follow the latest edition these functions. Installers shall pi al sheathing and bottom chord she bracing installed per BCSI section e Joint Details, unless noted othe	of BCSI (Building rovide temporary III have a property s B3, B7, or B10, rwise. Refer to
rawings 160A-Z for stan Ipine, a division of ITW I uss in conformance with sting this drawing ind	dard plate positions. Building Components ANSI/TPL 1, or for h cates acceptance	Group Inc. s andling, ship	hall not be responsible for any ping, installation and bracing ( nal engineering responsib	v deviation from this drawing,any fa of trusses A seal on this drawing lity solely for the design shown igner per ANSI/TPI 1 Sec.2.	ailure to build the or cover page . The suitability Suite 305

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.com; ICC: www.iccsafe.org















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

# 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	Specified CLR	Alternative Reinforeceme			
Size	Restraint	T- or L- Reinf, Scab Re			
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>ж</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.lccsafe.org

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

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SPACING



#### Valley Detail - ASCE 7-10: 160 mph, 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 7-10 160 mph. 30' Mean Height, Enclosed Building, Exp. C, Wind TC DL=5 psf, Kzt = 1.00 Dr ASCE 7-10 140 mph. 30' Mean Height, Enclosed 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 ITW BCG 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. Dr

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''.



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