

1412-37

# Alpine, an ITW Company

2400 Lake Orange Drive suite 150 Orlando FL 32837  
Florida Engineering Certificate of Authorization Number: 0 278  
Florida Certificate of Product Approval # FL1999  
Page 1 of 1 Document ID: IVD5487-Z0113160052



01/13/2015

William H. Krick  
-Truss Design Engineer-

2400 Lake Orange Dr, Suite 150  
Orlando FL, 32837

Truss Fabricator: **Anderson Truss Company**  
Job Identification: **14-215E--OWNER BUILDER /Res for Rimrock Developme -- Lake City, FL**  
Truss Count: **9**  
Model Code: **Florida Building Code 2014 or 2010**  
Truss Criteria: **FBC2010Res/TPI-2007(STD)**  
Engineering Software: **Alpine Software, Version 14.03.**  
Structural Engineer of Record: **The identity of the structural EOR did not exist as of the seal date per section 61615-31.003(5a) of the FAC**  
Address: **Roof - 37.0 PSF @ 1.25 Duration**  
Minimum Design Loads: **Floor - N/A**  
**Wind - 130 MPH ASCE 7-10 -Closed**

## Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR9114

Details: BRCLBSUB-14030EC1-GBLLETIN-PB16010-

#	Ref	Description	Drawing#	Date
1	20296--A	29' Common	15013004	01/13/15
2	20297--A1	29' Attic	15013003	01/13/15
3	20298-A4	28'10"8 Attic	15013005	01/13/15
4	20299--C	39' Attic	15013006	01/13/15
5	20306-DGEC	39' Gable G	15013007	01/13/15
6	20307-PBA	7'6"2 Common	15013002	01/13/15
7	20308-PBC	17'6"2 Speci	15013001	01/13/15
8	20309-A2	29' Attic Gir	15013002	01/13/15
9	20310-A3	28'10"8 Attic	15013001	01/13/15



130 mph wind, 15.64 ft mean hgt, ASCE 7-10, CLOSED bldg, located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=0 psf. GCoI(+/-)=0.18

DL=5.0 psf.  $G_{up1} (+/-)=0.10$   
Wind loads and reactions based on MMFRS with additional C&C member design.

Calculated horizontal deflection is 0.11" due to live load and 0.16" due to dead load.

Bottom chord checked for 10.00 psf non-concurrent live load.

3 || 5X6 ||



10:07	77
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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FL COA #0278

For more information see this job's general notes page and these web sites:  
ALPINE: [www.alpine.ca.com](http://www.alpine.ca.com) TPI: [www.tpinco.org](http://www.tpinco.org) BTCA: [www.sbcindustry.com](http://www.sbcindustry.com) ICC: [www.icc.org](http://www.icc.org)

01/13/2015

TC LL	20.0 PSF	REF	R9114- 20296
TC DL	7.0 PSF	DATE	01/13/15
BC DL	10.0 PSF	DRW	HCSR9114 15013004
BC LL	0.0 PSF	HC-ENG	JB/WHK
TOT. LD.	37.0 PSF	SEQN-	386321
DUR. FAC.	1.25	FROM	JMW
SPACING	24.0"	JREF-	1VDS487_Z01



Top chord 2x4 SP M-30 :T2, T4 2x6 SP SS: :T3 2x4 SP #1:  
Bot chord 2x6 SP M-26 :B2, B4 2x8 SP 2400f-2.0E:

:B3 2x4 SP #1:  
Webs 2x4 SP #3 :W1 2x4 SP M-30:  
:W16 2x4 SP 2850f-2.3E:

Lumber value set "13B" uses design values approved 1/30/2013 by ALSC

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

BC attic room floor loading: LL = 40.00 psf; DL = 10.00 psf; from 7-8-1 to 21-3-15.

MMFRS loads based on trusses located at least 15.64 ft. from roof edge.

130 mph wind, 15.64 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind BC DL=3.5 psf, wind BC DL=5.0 psf. GCpl (+/-)=0.18

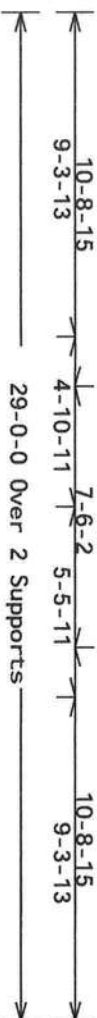
Wind loads and reactions based on MMFRS with additional C&C member design.

Calculated horizontal deflection is 0.13" due to live load and 0.23" due to dead load.

Bottom chord checked for 10.00 psf non-concurrent live load.

Collar-tie braced with continuous lateral bracing at 24" OC, or rigid ceiling.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



R=2217 U=0 W=3.5  
RL=247/-247

R=2217 U=0 W=4"

Note: All Plates Are 3X4 Except As Shown.  
PLT TYP. 20 Gauge HS, 18 Gauge HS, Design

Wave FT/RT=10%(0%)/0(0)

FT/RT=10%(0%)/0(0)	14.03.01.1120.16
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QTY:6 FL/-/5/-/-/R/-

Scale = .1875"/Ft.

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

**K. I. TAMM**

TC LL	20.0
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REF R9114- 20297

Trussing, rod-bracing, cable bracing, handing, shipling, installing and bracing. Refer to and the latest edition of BCST (Building Component Safety Information, by TPI and WTC) for safety practices to performing these functions. Installers shall provide temporary bracing per BCST. Unless noted otherwise, all

Patented by the U.S. Patent Office

TC DL	7.0
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DATE 01/13/15

Top ceiling (wall) has no opening, electrical conduits and cables are in place. If a rigid ceiling, locations shown for permanent lateral restraint of webs shall have bracing installed per BC sections 83, 87 or B10, as applicable. Apply plates to each face of truss and position as shown above and the joint details, unless noted otherwise. Refer to drawings 180A-2 for standard plate positions.

Ho. 70861

BC DL	10.0
BC IL	0.0

DRW HCUSR9114 1501300

Alpine, a division of ITW Building Components Group Inc., shall not be responsible for any damage from disassembly, any failure to conform with ABS/TTI, or for handling, shipping, installation & broeing of cranes.

STATE OF

DC EL	0.0
TOT.LD.	37.0

SEQN- 385724

A seal on this drawing or cover page listing this drawing, indicates acceptance or professional 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.

el and wearing  
subject is the

DUR. FAC.	1.25
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FROM JMW

For more information, see this job's general notes page and check with sites:  
ALPINE: [www.alpinetw.com](http://www.alpinetw.com); TPI: [www.tpinetw.com](http://www.tpinetw.com); BTCA: [www.abctindustry.com](http://www.abctindustry.com); ICC: [www.iccinfo.org](http://www.iccinfo.org)

SSIGNAL ENGINE

SPACING	24.0"
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JREF- 1VD5487\_Z01

2400 Lake Orange Dr., Suite 150  
Orlando, FL 32837  
FL COA #0278

For more information see this job's general notes page and these web sites:  
ALPINE: [www.alpinetw.com](http://www.alpinetw.com) | PFI: [www.pfinc.com](http://www.pfinc.com) | WCCA: [www.sbcindustry.com](http://www.sbcindustry.com) | ICC: [www.iccstate.org](http://www.iccstate.org)

01/11/2015

SPACING	24.0"
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JREF- 1VD5487\_Z01

Lumber value set "13B" uses design values approved 1/30/2013 by ALSC

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

Collar-tie braced with continuous lateral bracing at 24" OC. or rigid celling.

BC attic room floor loading: LL = 40.00 psf; DL = 10.00 psf; from 7-6-9 to 21-2-7.

130 mph wind @ 15.64 ft mean hgt., ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf.  $G C p f (+/-) = 0.18$

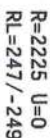
Wind loads and reactions based on MMFRS with additional C&C member design.

Calculated horizontal deflection is 0.13" due to live load and 0.22" due to dead load.

Bottom chord checked for 10.00 psf non-concurrent live load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

MMFRS loads based on trusses located at least 31.29 ft. from roof edge.



Note: All Plates A-H<sup>3</sup>B<sup>4</sup> Except As Shown.  
PLT TYP. 20 Gauge HS, 18 Gauge HS, Design Crit: FBC2010Res/TP1-2007(STD)

Wave

$$FT/RT=10\%(0\%)/0(0)$$

14.03.01 1120.16

QTY:5 FL/-/5/-/-/R/-

Scale = .1875"/Ft.

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

AMERICAN

TC LL	20.0
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REF R9114- 20298



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FL COA #0278

For more information see this job's general notes page and check web sites  
ALPINE: [www.alpineinc.com](http://www.alpineinc.com); TPI: [www.tpiinst.org](http://www.tpiinst.org); WICA: [www.sbcindustry.com](http://www.sbcindustry.com); ICC:

ES  
NGIR

SPACING 24.0"

JREF- 1VD5487\_Z01



Top chord 2x4 SP #1  
Bot chord 2x6 SP SS : B2, B5 2x4 SP #1:  
:B3, B4 2x8 SP 2400F-2.0E:  
Webs 2x4 SP #3

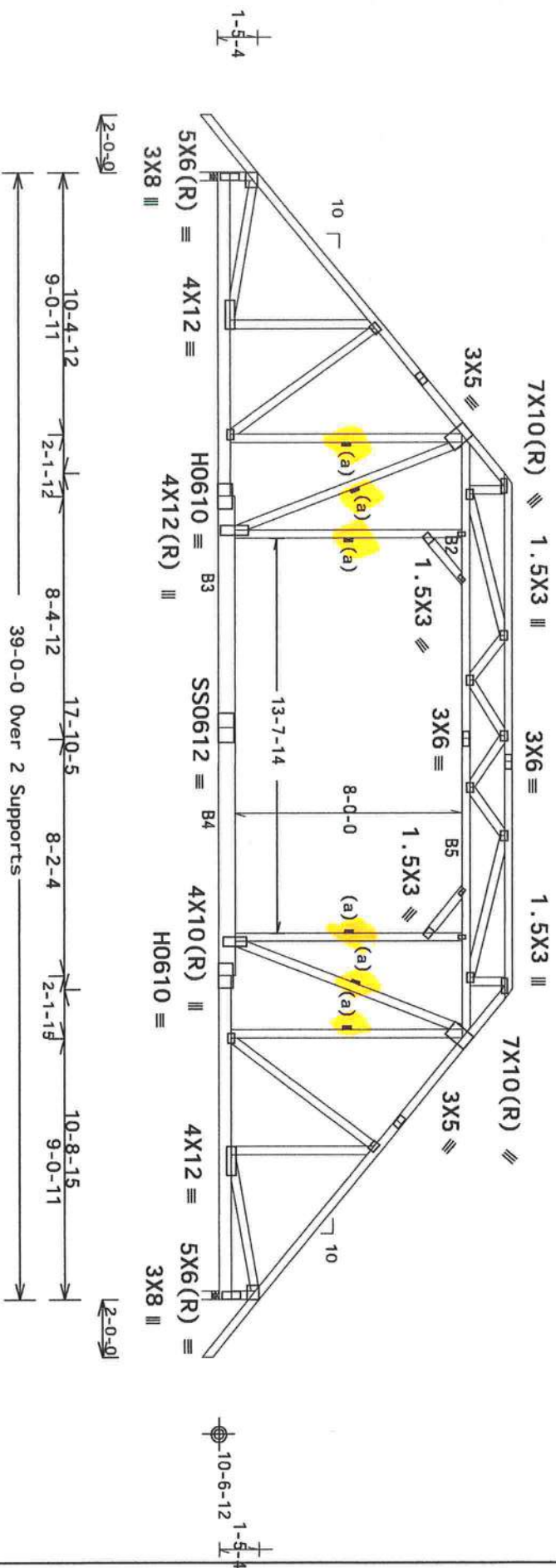
Lumber value set "13B" uses design values approved 1/30/2013 by ALSC

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

BC attic room floor loading: LL = 40.00 psf; DL = 10.00 psf; from 12-7-15 to 26-3-13.

MMFRS loads based on trusses located at least 31.29 ft. from roof edge.  
2.5X6 =

130 mph wind, 15.64 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf, GCPI (+/-)=0.18  
Wind loads and reactions based on MMFRS with additional C&C member design.  
(a) Continuous lateral restraint equally spaced on member.  
Bottom chord checked for 10.00 psf non-concurrent live load.  
Collar-tie braced with continuous lateral bracing at 24" OC. or rigid ceiling.  
Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.  
2.5X6 =



Note: All Plates Are 3X4 Except As Shown.  
PLT TYP. 20 Gauge HS, 18 Gauge HS, Design Crit: FBC2010Res/TP1-2007 (STD)  
FT/RT=10%(0%)/0(0)

14.03.01.1120.16 QTY: 8 FL/-/5/-/-/R/- Scale = .1875"/Ft.



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FL COA #0 278

**\*\*IMPORTANT\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING.  
FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCSI (Building Component Safety Information, by TPI and WCA) for safety practices when performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural bracing and bottom chord shall have properly attached structural bracing. All bracing shall be installed in accordance with the BCSI. Apply plates to each face of truss and position as shown above and in the joint details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positions. Alpine, a division of ITW Building Components Group Inc., shall not be responsible for any design or 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 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.alpinetec.com; TPI: www.tpiinc.org; WCA: www.abciindustry.com; ICC: www.iccdirect.org



TC LL	20.0 PSF	REF	R9114- 20299
TC DL	7.0 PSF	DATE	01/13/15
BC DL	10.0 PSF	DRW	HGUSR9114 15013006
BC LL	0.0 PSF	HC-ENG	JB/WHK
TOT. LD.	37.0 PSF	SEQN-	386332
DUR. FAC.	1.25	FROM	JMW
SPACING	24.0"	JREF-	1VD5487_Z01



## 5 COMPLETE TRUSSES REQUIRED

R=5677 U=173 W=3.5"

## 5 COMPLETE TRUSSES REQUIRED

Nail Schedule: 0.131"x3", min. nails

Top Chord:	1 Row	8.50"	0.c
Bot Chord:	1 Row	6.00"	0.c

Repeats nailing as each layer  
Webs : 1 Row @ 4" o.c.

between rows and stagger nail  
In addition, apply (1) 0.22"

length wood screw (from each

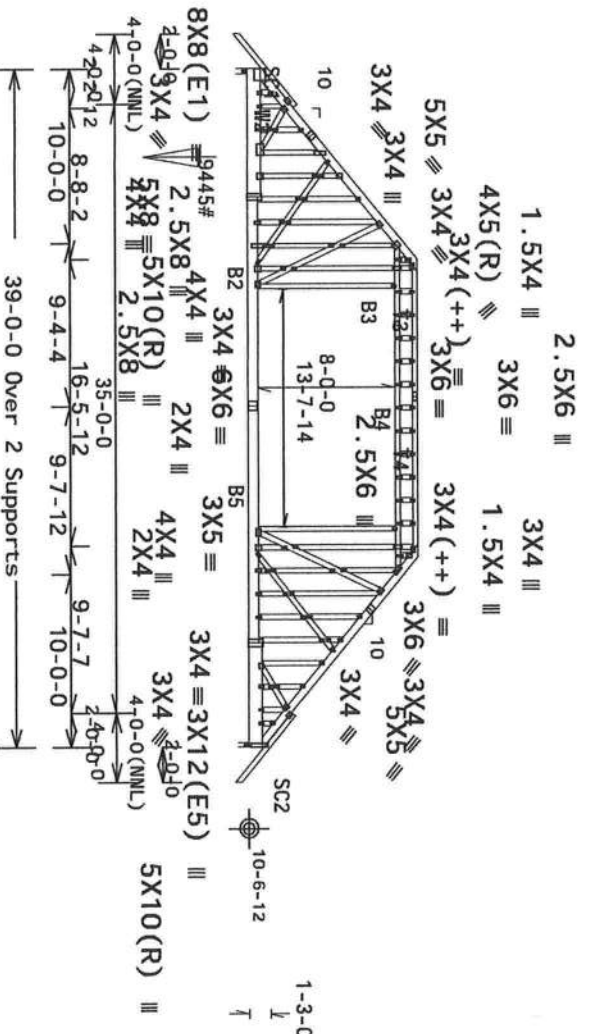
Wind loads and reactions based on MWFRS.

Calculated horizontal deflection is 0.20" due to live load and 0.35

due to dead load.

See DMGS A14030ENC101014 & GBLLEI1N1014 for gable wind bracing requirements.

The maximum concentrated load is 9446#



R=12668 U=172 W=3.5"

R=5677 U=173 W=3.5"

Note: All Plates Are 1.5X3 Except As Shown.

Design Crit: FBC2010Res/TP1-2007 (STD)  
FT/RT=10%(0)/0(0)

5.01.7120.16

QTY:1 FL/-/5/-/-/R/-

Scale = .09375"/Ft.



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Orlando, FL 32837  
ET COA #0 278

**\*\*WARNING INSTRUCTIONS\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!**

**\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.**

Tension rod/wire systems care in fabricating, handling, shipping, installing and bracing. Refer to section 805.1 for details. The latest edition of BCSI's Building Component Survey Information, by ITI and WICCA for safety precautions on 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 temporary bracing. Section 805.1 or BCS as applicable. Apply plates to each face of truss and cross members shall have bracing installed at the joint Details, unless noted otherwise. Refer to drawings 160d-7 for standard plate positions. Allowing, a division of ITM 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 or bracing of trusses.

A seal on the 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 visit this job's general notes page and those with it@iti:  
ALPINE: www.alpineusa.com TPI: www.tpi-inc.org BTCL: www.bctclindustry.com ICD: www.icdwca.org

01/13/2015

TC LL	20.0 PSF	REF	R9114- 2036
TC DL	7.0 PSF	DATE	01/13/15
BC DL	10.0 PSF	DRW	HCUSR9114_15013007
BC LL	0.0 PSF	HC-ENG	JB/MHK
TOT. LD.	37.0 PSF	SEON-	386370
DUR. FAC.	1.25	FROM	JMW
SPACING	24.0"	JREF-	1YD5487_Z01

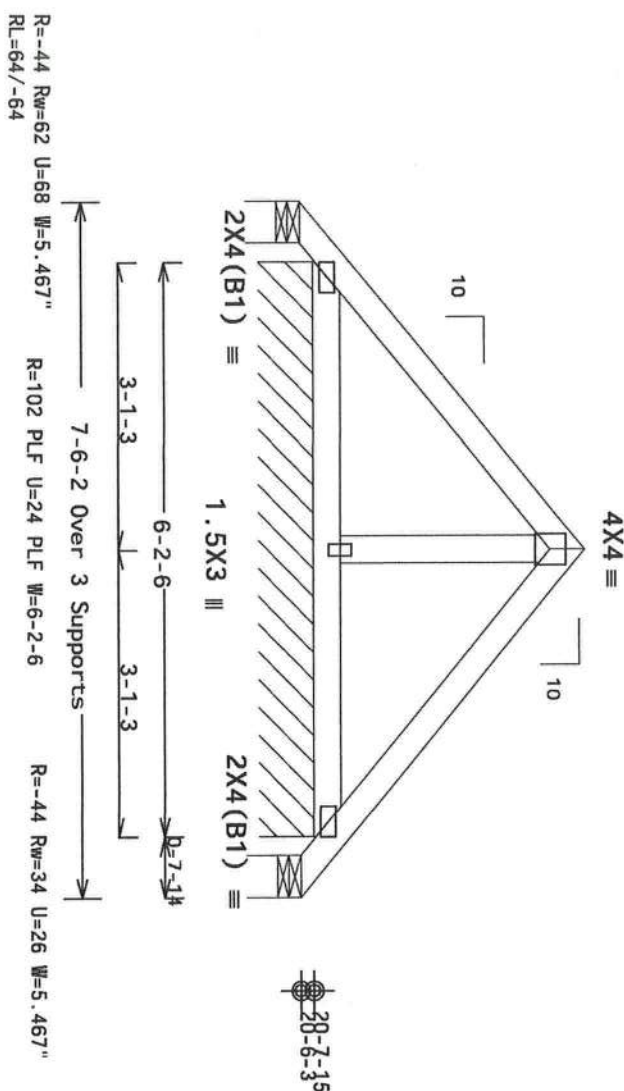
Value Set: 13B (Effective 6/1/2013)

Top chord	2x4	SP	#1
Bot chord	2x4	SP	#1

Lumber value set "13B" uses design values approved 1/30/2013 by ALSC

Wind loads and reactions based on MMFRS with additional C&C member design.

Refer to DWG PB160101014 for piggyback details.



R=-44 Rw=62 U=68 W=5.467"  
RL=64/-64

R=102 PLF U=24 PLF W=6-2-6

R=-44 R<sub>w</sub>=34 U=26 W=5.467"

Design Crit: FBC2010Res/TP1-2007(STD)

PLT TYP. Wave

$$FT/RT=10\%(0\%)/0(0)$$

14.05.01.1120.16

QTY: 26 FL/-/5/-/-/R/-

Scale = .5"/Ft.

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



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FL COA #0 278

For more information see this job's general notes page and these web sites:  
ALPINE: [www.alpinehvac.com](http://www.alpinehvac.com) TPI: [www.tpinet.org](http://www.tpinet.org) WGA: [www.abcindustry.com](http://www.abcindustry.com) ICC: [www.iccbate.org](http://www.iccbate.org)

01/13/2015

SPACING 24.0"

JREF- 1VD5487\_Z01



( 14-215E--OWNER BUILDER /Res for Rimrock Developme -- Lake City, FL - PBC 17'6"2 Special )

THIS DRAWING IS THE PROPERTY OF THE ENGINEER. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON.

Value Set: 13B (Effective 6/1/2013)

Top chord 2x4 SP #1  
Bot chord 2x4 SP #1  
Webs 2x4 SP #3

Lumber value set "13B" uses design values approved 1/30/2013 by ALSC

Bottom chord checked for 10.00 psf non-concurrent live load.

Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

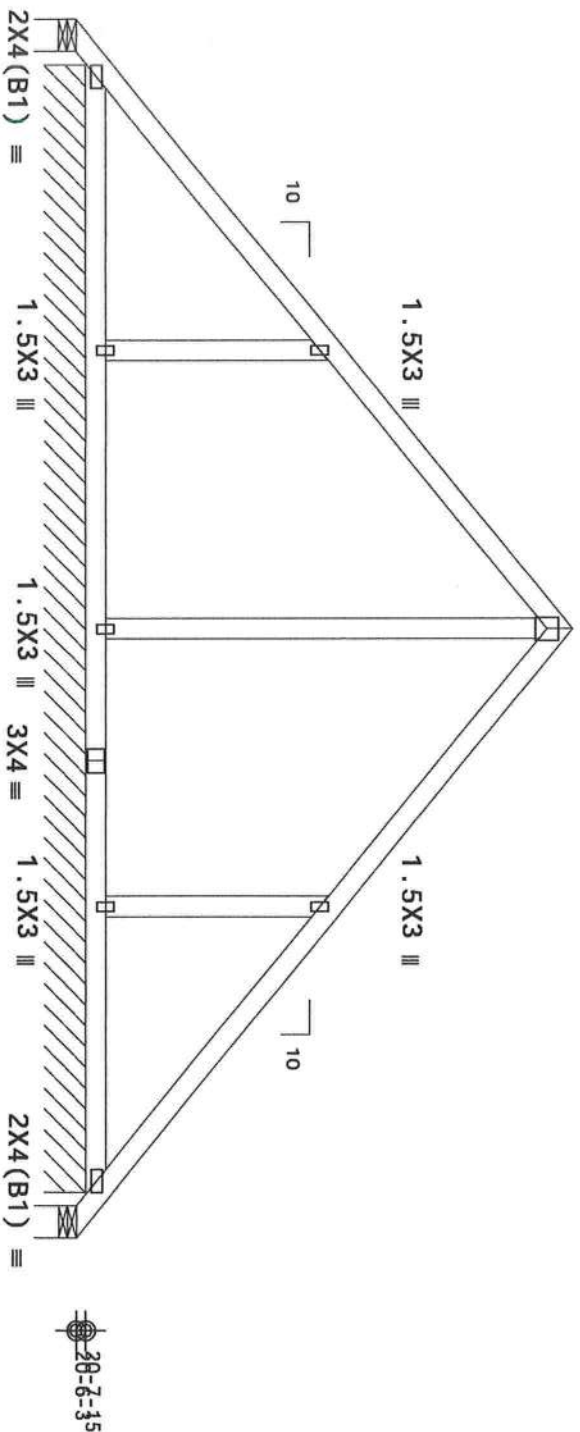
Refer to DWG PB160101014 for piggyback details.

130 mph wind, 24.16 ft mean hgt, ASCE 7-10, CLOSED bldg, located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf, GCP(+/)=0.18

Wind loads and reactions based on MMFRS with additional C&C member design.

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

4X4 ≡



R=16 Rw=127 U=140 W=5.467" R=105 PLF U=21 PLF W=16-2-6  
RL=156/-156 R=8 Rw=46 U=42 W=5.467"

PLT TYP. Wave Design Crit: FBC2010Res/TP1-2007(STD)  
FT/RT=10%(0%)/0(0)

14.08.01.1120.16 QTY: 8 FL/-/5/-/-/R/-

Scale = .375"/Ft.



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FL COA #0278

**\*\*IMPORTANT\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING.**  
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Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCSI (Building Component Safety) Information, by TPI and WCA for safety precautions and 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 structural sheathing. Apply plates to each face of truss and position on shown above and below the joint details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positioning and details. 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 indicating this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structural application is the responsibility of the building designer per ANSI/TPI 1 Sec.2.  
For more information visit this job's general notes page and check web sites:  
ALPINE: www.alpineinc.com; TPI: www.tpiinc.org; WCA: www.wcaindustry.com; ICC: www.iccsafe.org



TC LL	20.0 PSF	REF	R9114- 20308
TC DL	7.0 PSF	DATE	01/13/15
BC DL	10.0 PSF	DRW	HOURS9114 15013001
BC LL	0.0 PSF	HC-ENG	JB/WHK
TOT. LD.	37.0 PSF	SEQN-	382685
DUR. FAC.	1.25	FROM	JMW
SPACING	24.0"	JREF-	1VD5487_Z01











# 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 a single ply sealed designs to T-reinforcement or L-reinforcement or scab reinforcement.

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

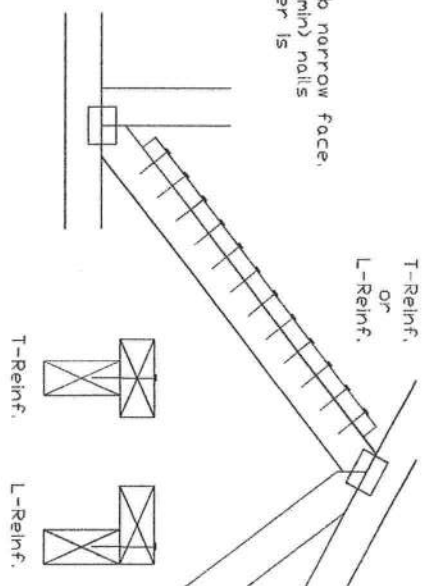
Web Member Size	Specified CLR Restraint	Alternative Reinforcement T- or L- Reinf. Scab Reinf.
2x3 or 2x4	1 row 2 rows	2x4 2x5 1-2x4 2-2x4
2x6	1 row 2 rows	2x4 2x5 1-2x6 2-2x4(*)
2x8	1 row 2 rows	2x5 2x6 1-2x8 2-2x6(*)

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:

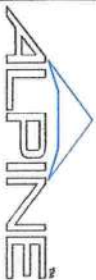
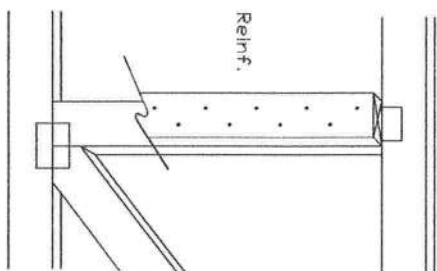
Apply to either side of web narrow face. Attach with 10d (0.128"x3.0", min) nails at 6' o.c. Reinforcing member is a minimum 80% of web member length.



## Scab Reinforcement:

Apply (scabs) 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.

Scab Reinf.



13389 Lakerton Drive  
Earth City, MO 63043

WARNING: READ AND FOLLOW ALL NOTES ON THIS DRAWING. THIS DRAWING IS TO BE USED IN CONJUNCTION WITH THE INSTALLATION OF THE TRUSS. FOLLOW THE LATEST EDITION OF BCSI BUILDING COMPONENT SELECTION AND DESIGN GUIDE. UNLESS NOTED OTHERWISE, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL STEERING AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING. LOCATIONS SHOWN FOR PERMANENT LATERAL RESTRAINT OR WEB MEMBER BRACING SHALL BE SHOWN ABOVE AND ON THE JOINT DETAILS, UNLESS NOTED OTHERWISE. REFER TO DRAWINGS 1504-7 FOR STANDARD PLATE POSITIONS.

Alpha, a division of ITW Building Components Group, Inc. shall not be responsible for any deviation from this drawing, or for any failure of the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses.

Alpha is not responsible for the design, or for the suitability and use of this drawing for any structure. The responsibility of the Building Designer per ANSI/TPI 1 Sec.2. For more information see the job's general notes page and these web sites: ALPINE: www.alpineinc.com; TPI: www.tpiinc.org; BCSI: www.bcsigroup.com; ICC: www.iccsafe.org.



01/13/2015

TC LL	PSF	REF	CLR Subst.
TC DL	PSF	DATE	10/01/14
BC DL	PSF	DRWG	BRCLBSUB1014
BC LL	PSF		
TDI, L.D.	PSF		
DUR, FAC.			
SPACING			

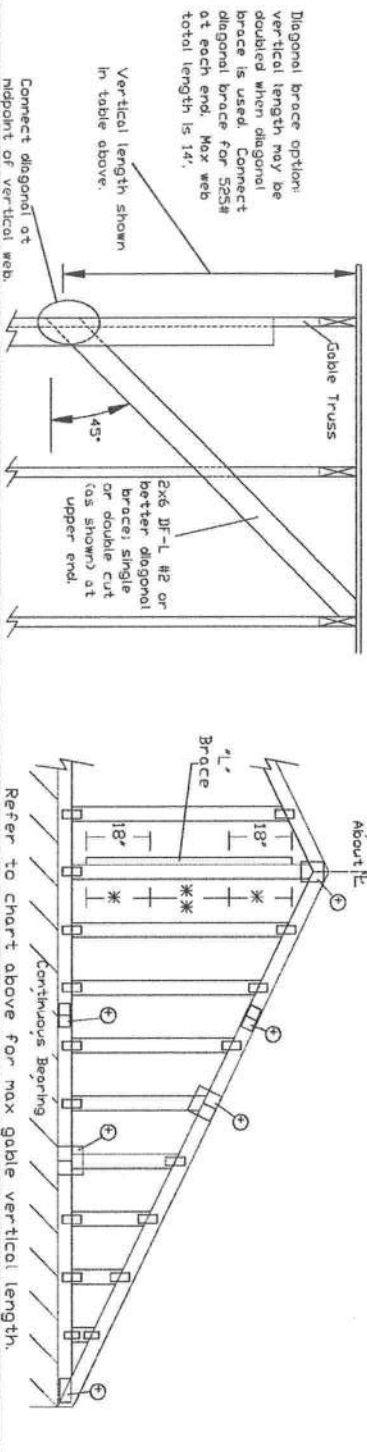


# ASCE 7-10: 140 mph Wind Speed, 30' Mean Height, Enclosed, Exposure C, Kzt = 1.00

ASCE 7-10: 140 mph Wind Speed, 30' Mean Height, Enclosed, Exposure C, Kzt = 1.00  
 Dn: 120 mph Wind Speed, 30' Mean Height, Enclosed, Exposure C, Kzt = 1.00  
 Dn: 120 mph Wind Speed, 30' Mean Height, Enclosed, Exposure D, Kzt = 1.00  
 Dn: 100 mph Wind Speed, 30' Mean Height, Enclosed, Exposure D, Kzt = 1.00

## Gable Stud Reinforcement Detail

Gable Vertical Spacing	2x4 Vertical Species	Brace Grade	No. Braces	Max Gable Vertical Length											
				(1) 1x4 "L" Brace	Group A	Group B	(1) 2x4 "L" Brace	Group A	Group B	(2) 2x4 "L" Brace	Group A	Group B	(1) 2x6 "L" Brace	Group A	Group B
12" o.c.	SPF	#1 / #2	4' 1"	6' 11"	7' 2"	8' 2"	8' 2"	8' 6"	9' 9"	10' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"
		#3	3' 10"	6' 2"	6' 7"	8' 1"	8' 5"	9' 8"	9' 8"	10' 0"	12' 8"	13' 2"	14' 0"	14' 0"	14' 0"
		Stud	3' 10"	6' 2"	6' 7"	8' 1"	8' 5"	9' 8"	9' 8"	10' 0"	12' 8"	13' 2"	14' 0"	14' 0"	14' 0"
		Standard	3' 10"	5' 3"	5' 7"	7' 0"	7' 6"	9' 6"	9' 6"	10' 0"	11' 0"	11' 10"	14' 0"	14' 0"	14' 0"
16" o.c.	SPF	#1	4' 2"	7' 0"	7' 3"	8' 3"	8' 3"	9' 10"	9' 10"	10' 3"	13' 0"	13' 6"	14' 0"	14' 0"	14' 0"
		#2	4' 1"	6' 11"	7' 2"	8' 2"	8' 6"	9' 9"	9' 9"	10' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"
		#3	4' 0"	5' 7"	5' 11"	7' 5"	7' 11"	9' 8"	9' 8"	10' 1"	11' 7"	12' 5"	14' 0"	14' 0"	14' 0"
		Stud	4' 0"	5' 7"	5' 11"	7' 5"	7' 11"	9' 8"	9' 8"	10' 1"	11' 7"	12' 5"	14' 0"	14' 0"	14' 0"
24" o.c.	SPF	Standard	3' 9"	4' 11"	5' 13"	6' 6"	6' 6"	7' 0"	7' 0"	8' 10"	9' 6"	10' 3"	11' 0"	13' 11"	14' 0"
		#1 / #2	4' 8"	7' 11"	8' 3"	9' 4"	9' 4"	9' 9"	9' 9"	11' 2"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 5"	7' 6"	8' 3"	9' 3"	9' 3"	9' 7"	9' 7"	11' 0"	11' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 5"	7' 6"	8' 3"	9' 3"	9' 3"	9' 7"	9' 7"	11' 0"	11' 6"	14' 0"	14' 0"	14' 0"	14' 0"
12" o.c.	SPF	Standard	4' 5"	6' 5"	6' 10"	8' 7"	8' 7"	9' 10"	9' 10"	11' 6"	13' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		#1	4' 10"	8' 0"	8' 4"	9' 6"	9' 6"	9' 10"	9' 10"	11' 3"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	4' 7"	7' 11"	8' 3"	9' 4"	9' 4"	9' 9"	9' 9"	11' 2"	11' 7"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 7"	6' 10"	7' 3"	9' 1"	9' 1"	9' 8"	9' 8"	11' 1"	11' 6"	14' 0"	14' 0"	14' 0"	14' 0"
16" o.c.	SPF	Standard	4' 5"	6' 0"	6' 5"	8' 0"	8' 0"	9' 10"	9' 10"	11' 6"	12' 7"	13' 15"	14' 0"	14' 0"	14' 0"
		#1 / #2	5' 2"	8' 9"	9' 1"	10' 4"	10' 4"	11' 2"	11' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 10"	8' 7"	8' 11"	10' 2"	10' 2"	10' 7"	10' 7"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 10"	8' 7"	8' 11"	10' 2"	10' 2"	10' 7"	10' 7"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"
24" o.c.	SPF	Standard	5' 4"	7' 5"	7' 11"	9' 11"	9' 11"	10' 7"	10' 7"	12' 7"	12' 11"	14' 0"	14' 0"	14' 0"	14' 0"
		#1	5' 2"	8' 9"	9' 1"	10' 4"	10' 4"	10' 9"	10' 9"	12' 3"	12' 9"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	5' 0"	7' 10"	8' 4"	10' 3"	10' 3"	10' 8"	10' 8"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 0"	7' 10"	8' 4"	10' 3"	10' 3"	10' 8"	10' 8"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"
12" o.c.	SPF	Standard	4' 10"	6' 11"	7' 4"	9' 3"	9' 3"	9' 10"	9' 10"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		#1 / #2	4' 10"	6' 11"	7' 4"	9' 3"	9' 3"	9' 10"	9' 10"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 10"	6' 11"	7' 4"	9' 3"	9' 3"	9' 10"	9' 10"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		Stud	4' 10"	6' 11"	7' 4"	9' 3"	9' 3"	9' 10"	9' 10"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"	14' 0"



Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	2x4
Greater than 4' 0", but less than 11' 6"	3x4
Greater than 11' 6"	4x4

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

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

Bracing Group Species and Grades:	
Group A:	Group B:
Species-Frame	Species-Frame
#1 / #2 Stud	#1 / #2 Stud
#3 Stud	#3 Stud
Standard	Standard
Species-Frame	Species-Frame
#1 / #2 Stud	#1 / #2 Stud
#3 Stud	#3 Stud
Standard	Standard

1x4 Braces shall be SRA (Stress-Rated Boards), or 1x4 SRA Ply use only Industrial S5 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 100 psf over continuous bearing (5 psf TC Dead Load).

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



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 Earth City, MO 63045

Trusses require extreme care in fabrication, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety) Information, by TPI and SCSA 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 or bracing shall be in accordance with the BCSI information. Refer to drawings 100-7 for standard plate positions. Refer to drawings 100-7 for standard plate positions.

Alpine, a division of ITV 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 or trusses. Page listing this drawing indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of the 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.alpineinc.com TPI: www.tpi.org BCSI: www.bcsinfo.org

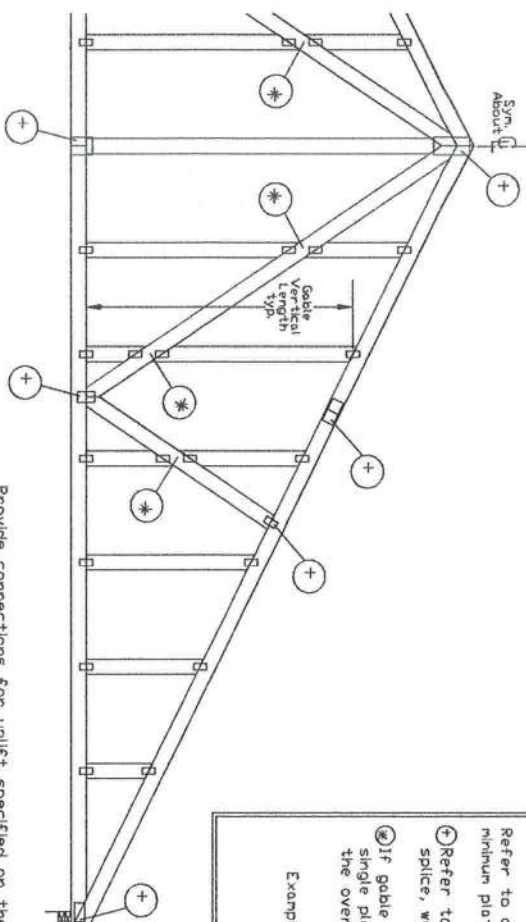
REF	ASCE 7-10-GAB14030
DATE	10/01/14
DRWG	A14030ENC101014
MAX. TOT. LD.	60 PSF
MAX. SPACING	24' 0"



01/13/2015



# Gable Detail For Let-In Verticals



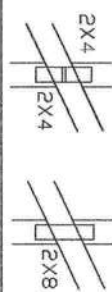
## Gable Truss Plate Sizes

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

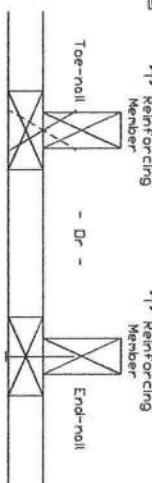
⊕ Refer to Engineered truss design for peak, splice, web, and heel plates.

⊗ 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



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,  $K_z = 1.00$   
Gable Vertical = 24' o.c. SP #3  
'T' Reinforcing Member Size = 2x4  
'T' Brace Increase (from Above) = 30% = 1.30  
(1) 2x4 'L' Brace Length = 8' 7"  
Maximum 'T' Reinforced Gable Vertical Length 130 x 8' 7" = 11' 2"

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

- ASCE 7-05 Gable Detail Drawings  
 A130150S1014, A120150S1014, A110150S1014, A140150S1014,  
 A130300S1014, A120300S1014, A110300S1014, A140300S1014  
 ASCE 7-10 Gable Detail Drawings  
 A11515ENC101014, A12015ENC101014, A14015ENC101014,  
 A18015ENC101014, A20015ENC101014, A20015PENC101014,  
 A11530ENC101014, A12030ENC101014, A14030ENC101014,  
 A18030ENC101014, A20030ENC101014, A20030PENC101014

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

## \*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the manufacturer's instructions and the manufacturer's literature for proper installation practices prior to performing these functions. Installers shall provide temporary bracing per BCSP. 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 gables shall have a properly installed per BCSP sections 20, 37 or 30, as applicable. Apply plates to each side of the gable end. Refer to drawings 100A-2 for standard plate positions. Refer to drawings 100A-2 for standard plate positions.

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A stamp on this drawing or cover page listing the drawing, indicates acceptance of professional engineering. The engineer shall be responsible for the building design per ANSI/TPI 1, Section 1.1. For any structure is the responsibility of the Building Designer per ANSI/TPI 1, Section 1.1.



13389 Lakewood Drive  
Earth City, MO 63045



REF	LET-IN VERT
DATE	10/01/14
DRWG	GBLETTIN1014

MAX. TOT. L.D.	60 PSF
DUR. FAC.	ANY
MAX. SPACING	24.0"

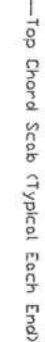
01/13/2015



160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-10, Enclosed Bldg, located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.  
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-10, Enclosed Bldg, located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

\*\*\* Refer to Engineer's sealed truss design drawing for piggyback and base truss specifications

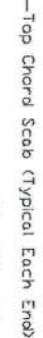
Up to 12



Attoch purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

truss TC and attached to the base truss TC with (4) 0.120"x1.375" bolts. Note! No drilling thru holes of wave plate is acceptable.

Up to 12



Flat top chord purlins required at both ends, purlin spacing  $> 24'$  o.c.

Attach pulpin bracing to the flat top chord using a minimum of (2) 16d box nails (0.135"x3.5").

W In addition, provide connection with one of the following methods

Use 3X8 trulox plates for 2x4 chord member, and 3X10 Trulox plates for 2x6 and larger chord members. Attach to each face @ 8" o.c. with (4) 0.120"x1.375" nails into cap bottom chord and (4) 1/2" base truss top chord. Trulox plates may be staggered 4" o.c. front to back faces.

APA Rated Gusset:  
8"x8"x7/16" (mils) APA rated sheathing gussets (each face). Attach @ 8" o.c. with (8) 5d common (0.113"x2") nails per gusset. (4) in cap bottom chord and (4) in base shear top chord. Gussets may be staggered 4" o.c. front to back faces.

**2x4 Vertical Scabs.**  
2x4 SPF #2, full chord depth scabs (each face), Attach @ 8' o.c. with (6) 10d box nails (0.128"x3") per scab), (3) in cap bottom chord and (3) in base truss top chord. Scabs may be staggered 1' o.c. front to back faces.

**28PB Wave Plyguyock Plate**  
The 28PB wave Plyguyock plate to each face of the o.c. Attach teehn to Plyguyock at time of fabrication. Attach to supporting truss with 4" 0.120x1.375" rolls per face per ply. Plyguyock plates may be staggered 4" o.c. front to back faces.

DATE 10/01/14

DATE 10/01/14

DRWG PB160101014



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Earth City, MO 63045

[illegible]

STATE OF  
FLORIDA  
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SUPREME COURT

SPACING

24.0'

1