

73

# ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844  
Florida Engineering Certificate of Authorization Number: 0 278  
Florida Certificate of Product Approval # FL1999  
Page 1 of 1 Document ID: IUZ0487-Z0223074548



Truss Fabricator: **Anderson Truss Company**  
Job Identification: **13-173C--Jerry Castagna Constructi Custom Res. For Jerry Cas**  
Truss Count: **1**  
Model Code: **Florida Building Code 2010**  
Truss Criteria: **FBC2010Res/TPI-2007(STD)**  
Engineering Software: **Alpine Software, Version 12.03.**  
Structural Engineer of Record: **The identity of the structural EOR did not exist as of**  
Address: **the seal date per section 61G15-31.003(5a) of the FAC**  
Minimum Design Loads: **Roof - 40.0 PSF @ 1.25 Duration**  
**Floor - N/A**  
**Wind - 120 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: HCUSR487

Walter P. Finn  
-Truss Design Engineer-

1950 Marley Drive  
Haines City, FL 33844

## Details: -

#	Ref	Description	Drawing#	Date
1	21797-repair	B1 24'6"	13235001	08/23/13

\$31216

Repair Charge: \$0.00 per Customer Agreement.  
Amount to be invoiced separately.

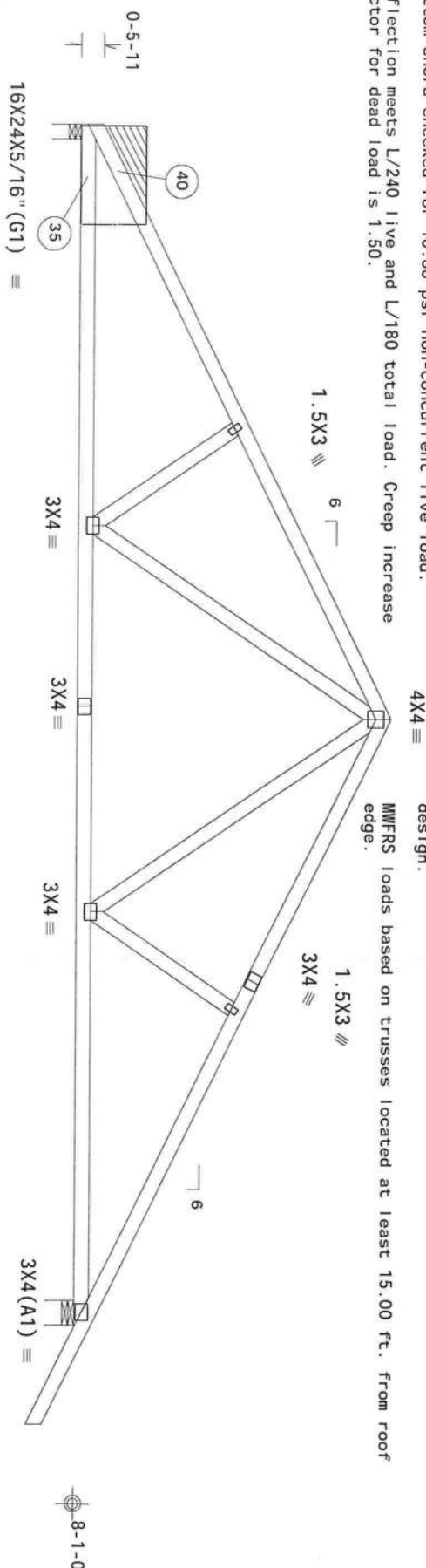
Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

This design is based on lumber values in effect prior to June 1, 2013 and shall only be used on projects designed and permitted prior to this date unless specifically approved in writing by the building authority having jurisdiction, the building designer and the project owner.

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

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.



12  
R=1048 U=0 W=3.5" (3.5" min.)  
RL=107/-100

24-3-0 Over 2 Supports	n.)
------------------------	-----

R=1193 U=0 W=6" (6" min.)

PLT TYP. Wave

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

12.03.2012 03:26

FL/-/4/-/-/R/-

Scale = .3125"/Ft.

ALPINE

ITW Building Components Group Inc

Orlando FL, 32837  
FL COA #0278

**\*\*IMPORTANT\*\***  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

Tenants require attention care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (*Building Component Safety Information*, by TPI and WTC). Practices used to performing these functions. Insulators shall provide temporary bracing per BCSI. Braces shall be installed at all locations shown for permanent bracing and noted shall have a properly attached rigid collar. Locations shown for permanent lateral restraint shall have driving installed per BCSI sections BS-9 or BTG, as applicable.

STATE OF

	DATE
TC DL	10.0 PSF
BC DL	10.0 PSF
BC LL	0.0 PSF
	HC-ENG SSB/W/PF

any failure to build the truss in conformance with ANSI/PPI 1, or for handling, shipping, installing, or bracing of trusses. Apply plates to each face of truss and position as shown above and on the details, unless noted otherwise. Refer to drawings T60A-2 for standard gable positions. A seal drawing or cover plate indicating this drawing indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this design for any structure is the responsibility of the building designer per ANSI/PPI 1 Sec. 2. For more information see: This JGCI general notice page: [TLBG: \[www.tlbg.com\]\(http://www.tlbg.com\)](http://www.tlbg.com); [www.sprink.org](http://www.sprink.org); [www.sbcindustry.com](http://www.sbcindustry.com); [www.tlbg.com](http://www.tlbg.com); [www.sprink.org](http://www.sprink.org); [www.sbcindustry.com](http://www.sbcindustry.com); [www.tlbg.com](http://www.tlbg.com); [www.sprink.org](http://www.sprink.org); [www.sbcindustry.com](http://www.sbcindustry.com)



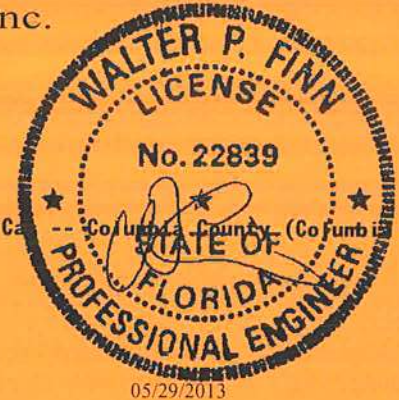
Professional Engineer Seal of the State of Florida

TOT. LD.	40.0 PSF	SEQN-	18172
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UZO487 Z02



# ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844  
Florida Engineering Certificate of Authorization Number: 0 278  
Florida Certificate of Product Approval # FL1999  
Page 1 of 1 Document ID: IUWM487-Z0429103946



Truss Fabricator: **Anderson Truss Company**  
Job Identification: **13-173--Jerry Castagna Constructi Custom Res. For Jerry Ca**  
Truss Count: **41**  
Model Code: **Florida Building Code 2010**  
Truss Criteria: **FBC2010Res/TPI-2007(STD)**  
Engineering Software: **Alpine Software, Version 12.03.**  
Structural Engineer of Record: **The identity of the structural EOR did not exist as of**  
Address: **the seal date per section 61G15-31.003(5a) of the FAC**  
Minimum Design Loads: **Roof - 40.0 PSF @ 1.25 Duration**  
**Floor - N/A**  
**Wind - 120 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: HCUSR487

Walter P. Finn  
-Truss Design Engineer-

1950 Marley Drive  
Haines City, FL 33844

Details: BRCLBSUB-12015EC1-GBLLETIN-GABRST10-PB16010-

#	Ref	Description	Drawing#	Date
1	70745--CJ1	1' Jack	13149002	05/29/13
2	70746--C1	23'9" Common	13149003	05/29/13
3	70747--EJ7	7' End Jack	13149004	05/29/13
4	70748-H11B	24'6" Stepd	13149041	05/29/13
5	70749--CJ5	5' Jack	13149005	05/29/13
6	70750-H9C	23'9" Stepdo	13149006	05/29/13
7	70751--CJ3	3' Jack	13149007	05/29/13
8	70752-H15	39'4" Specia	13149008	05/29/13
9	70753-H9	41'4" Stepdow	13149009	05/29/13
10	70754-H9B	24'6" Stepdo	13149010	05/29/13
11	70755-H13	41'4" Specia	13149011	05/29/13
12	70756-H11C	23'9" Stepd	13149012	05/29/13
13	70757--CJ5A	5' Jack	13149013	05/29/13
14	70758-H17	39'4" Specia	13149014	05/29/13
15	70759-H11	41'4" Stepdo	13149015	05/29/13
16	70760-HJ7	9'10"13 Hip	13149037	05/29/13
17	70761-HJ7A	9'10"13 Hip	13149020	05/29/13
18	70762-HG7C	23'9" Stepd	13149021	05/29/13
19	70763-FG7	7'1" Flat Gi	13149022	05/29/13
20	70764-HG7	41'4" Stepdo	13149042	05/29/13
21	70765-EJ4	4'4" End Jac	13149016	05/29/13
22	70766-EJG7	7' End Jack	13149038	05/29/13
23	70767-HG7B	24'6" Stepd	13149039	05/29/13
24	70768-B1	24'6" Special	13149017	05/29/13
25	70769-D1	10'2"8 Common	13149018	05/29/13
26	70770--D2	8'6"8 Common	13149023	05/29/13
27	70771-DG1	10'2"8 Gable	13149019	05/29/13
28	70772-H15A	31'5"8 Spec	13149024	05/29/13
29	70773-H9A	31'5"8 Stepd	13149025	05/29/13
30	70774-H13A	31'5"8 Spec	13149026	05/29/13
31	70775-HG7A	31'5"8 Step	13149040	05/29/13
32	70776-H17A	31'5"8 Spec	13149027	05/29/13
33	70777-H11A	31'5"8 Step	13149028	05/29/13
34	70778-A4	41'4" Stepdow	13149029	05/29/13
35	70779-PB1	7'3"14 Commo	13149030	05/29/13
36	70780-A1	39'4" Stepdow	13149031	05/29/13

#	Ref	Description	Drawing#	Date
37	70781-A3	41'4" Stepdow	13149032	05/29/13
38	70782-PB2	7'3"14 Stepd	13149033	05/29/13
39	70783-H19	39'4" Stepdo	13149034	05/29/13
40	70784-A2	41'4" Stepdow	13149035	05/29/13
41	70785-A5	31'5"8 Stepdo	13149036	05/29/13



Top chord	2x4	SP_#1_12A
Bot chord	2x4	SP_#1_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

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

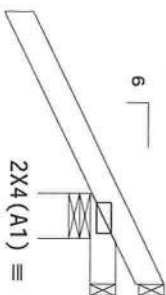
Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Top chord.  
Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Bot chord.

120 mph wind, 15.00 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, GCPI (+/-)=0.18

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

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

R=-110 R<sub>W</sub>=31 U=77 (1.5" min.)



R=-35 R<sub>w</sub>=15 U=23 (1.5" min.)



R=361 U=57 W=6" (6" min.)  
RL=24/-20

RL=24/-20

PLT TYP. Wave

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

NO. 42632

0.75

4 FL/-/4/-/-/R/-

Scale = .5"/Ft.

ALPINE

**ITW Building Components Group Inc.**

Haines City, FL 33844  
FL COA #0278

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

Trusses, requiring attention care in fabricating, hoisting, shipping, unloading and bracing, shall be designed and fabricated in accordance with the provisions of the AISC Specification to follow the latest edition of DCS1 (Building Component Safety Information, by TPI and WTA). For practices prior to performing these functions, installers shall provide temporary bracing per the design drawings. Top chord shall have properly attached structural sheathing and bottom chord shall have properly attached rigid ceiling. Locations shown for permanent lateral restraint of trusses shall have bracing installed per DCS1 sections D3, D7 or D10, as applicable.

[illegible]

WALTER P. FINN  
 LICENSE  
 No. 22839  
 12/03/04  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

TC LL	20.0 PSF	REF R487-- 70745
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13149002
BC LL	0.0 PSF	HC-ENG JB/W/PF
TOT. LD.	40.0 PSF	SEQN- 298347
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWM487_Z04



THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.  
(mon)

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

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

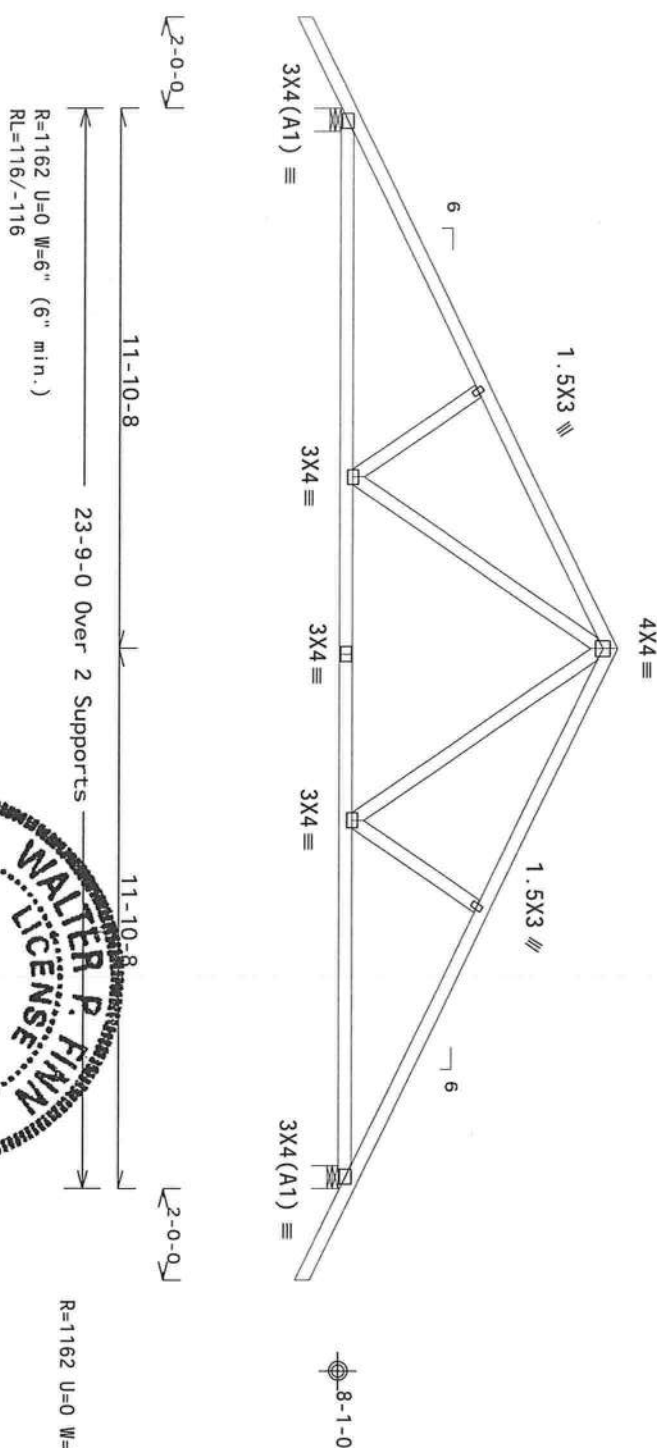
MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bidg, 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 MNFRS with additional C&C member design.

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.



PLT TYP: Wave

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

12.03.04 0326; 14

City of

FL/-/4/-/-/R/-/

Scale = .25"/Ft.

ALPINE

**ITW Building Components Group Inc.**

Haines City, FL 33844  
FL COA #0 278

**\*\*IMPORTANT\*\*** **READ AND FOLLOW ALL NOTES ON THIS SHEET!**

Trussors require extensive care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TPI and WITCA) for best practices prior to performing these functions. Installers shall provide temporary bracing post bracing for all trussors. Trussors shall have properly attached structural sheathing and bottom shall have bracing installed per BCSI sections B3, D7 or D10, as applicable.

The Building Components Group, Inc. (BTBCG) shall not be responsible for any design from this drawing to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation or bracing of the truss. The truss shall be installed in accordance with the design shown above and on the Joint Details, unless noted otherwise. Refer to document 100A-2, Positioning of professional engineering drawings for cover page listing this drawing. The suitability and use of this design for any structure is the responsibility solely for the design shop. The availability and use of this design 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. TPI-BCSI: [www.tlbbag.com](http://www.tlbbag.com); TPI: [www.tlbbag.com](http://www.tlbbag.com); WITCA: [www.sbcindustry.com](http://www.sbcindustry.com); [info@tcbn.com](mailto:info@tcbn.com)

TC LL	20.0 PSF	REF	R487-- 70746
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCSUR487 13149003
BC LL	0.0 PSF	HC-ENG	JB/W/PF
TOT. LD.	40.0 PSF	SEQN-	298349
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UIMM487_Z04

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A

Lumber grades designated with "12A" use design values approved  
1/5/2012 by ALSC.

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

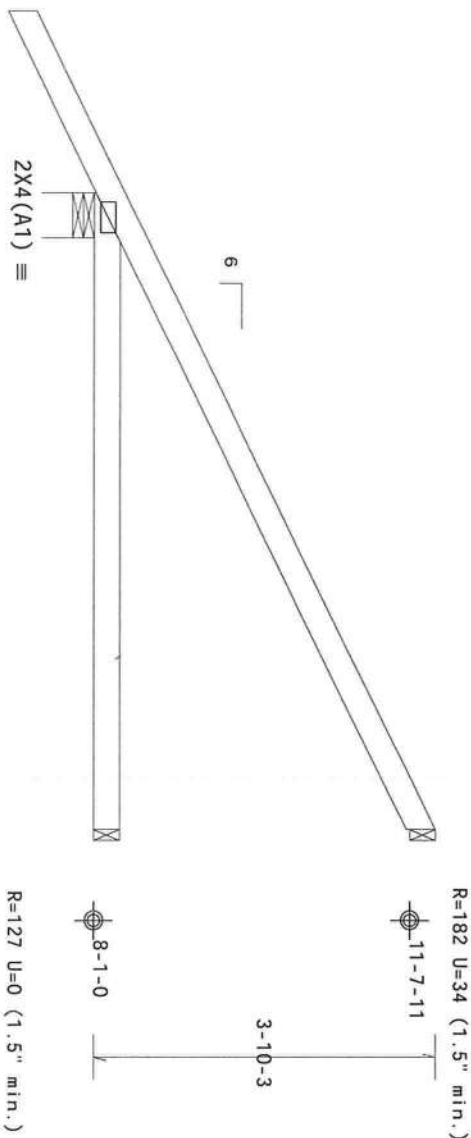
MMFRS loads based on trusses located at least 7.50 ft. from roof edge.

120 mph wind, 15.00 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. GCpl(+/-)=0.18

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

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

Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Top chord.  
Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Bot chord.



PLT TYP. Wave

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

03/04/2013

FL/-/4/-/4/-/R/-

Scale = .5"/Ft.

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

\*\*IMPORTANT\*\* FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Before construction, the fabricator must read and understand the design and specifications. The fabricator must follow the latest edition of BCS (Building Component Safety Information, by TP1 and WTC) for all practices prior to performing these functions. Installers shall provide temporary bracing per BCS. The fabricator shall have bracing installed per BCS sections B3, B7 or B10, as applicable.

ITW Building Components Group Inc. (ITWBC) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TPI 1 or for handling, shipping, installing and bracing of trusses. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 180A-2 for standard plate positions. A seal on this drawing or cover page listing this design, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this design for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec. 2. For more information see: This Job's specifications, ITWBC's website, www.itwbc.com, TPI's website, www.tpiinc.org, WTC's website, www.wtcindustry.com, ICC's website, www.icc-interactive.org



TC LL	20.0 PSF	REF R487-- 70747
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUR487 13149004
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298485
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWMA487_Z04



Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

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

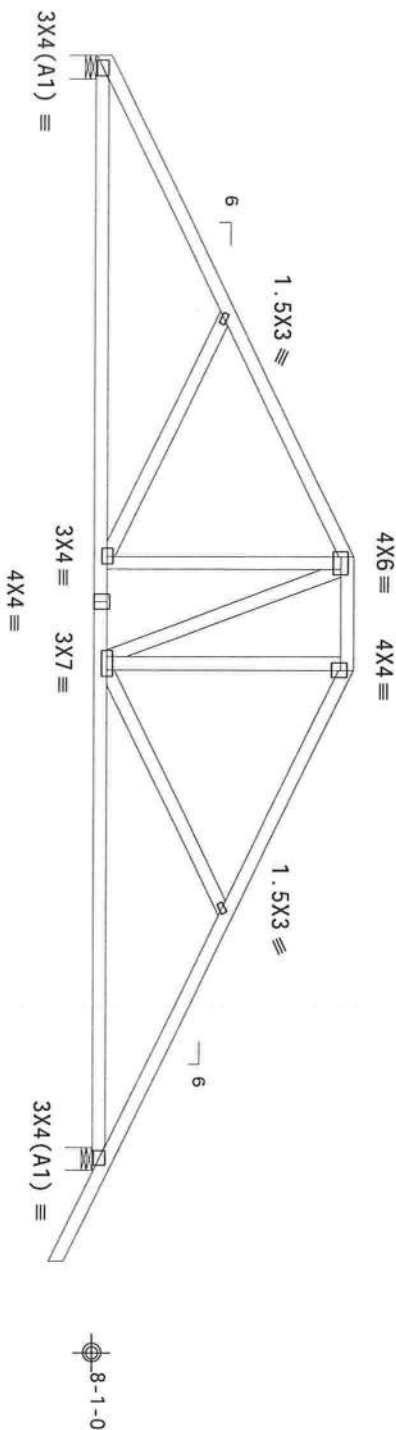
MWFRS loads based on trusses located at least 7.50 ft. from roof edge.

120 mph wind, 15.00 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 MWFRS with additional C&C member design.

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.



11'-0'-0"  
2'-0'-0"  
24'-6'-0" Over 2 Supports  
R=1003 U=30 W=6" (6" min.)  
RL=99/-91

Design Crit: FBC2010Res/TP1-2007(S1B)

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

12.03.04.0226.14

05/29/2013

FL/-/4/-/-/R/-

Scale = .25"/Ft.

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

\*\*IMPORTANT\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCS1 (Building Component Safety Information, by TPI and WTC) practices prior to performing these functions. Installers shall provide temporary bracing per BCS1 sections 83, 87 or 810, as applicable. Top chord shall have properly attached structural sheathing and bottom chord shall have bracing installed per BCS1 sections 83, 87 or 810, as applicable.

ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure of the truss system. The user of this design shall be responsible for the design, fabrication, installation, and bracing of the truss. Apply plates to each face of truss and position as shown above. The joint details, unless noted otherwise, shall be as shown above. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility of the Building Designer, per ASCE/TP1 1 Sec 2. For more information see: This Job's drawing. ITW BCG: www.itwbcg.com; TPI: www.tpi-inc.org; WTC: www.structure.com; ICC: www.iccsafe.org



TC LL	20.0 PSF	REF R487-- 70748
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUR487 13149041
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298355
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UMM487_Z04

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A

Lumber grades designated with "12A" use design values approved  
1/5/2012 by ALSC.

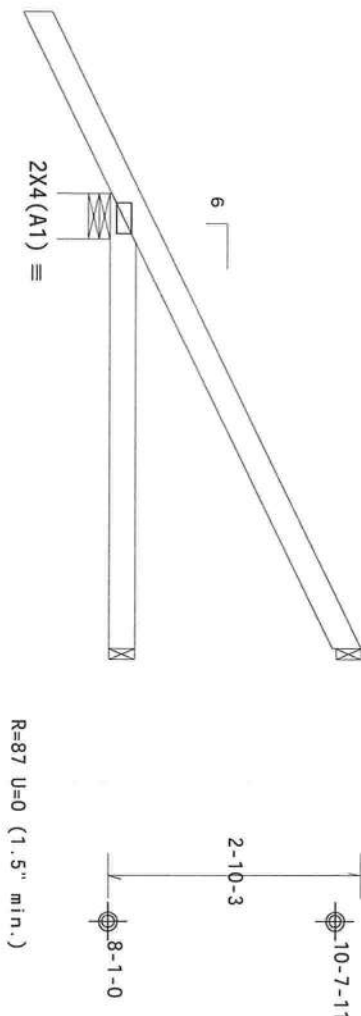
Bottom chord checked for 10.00 psf non-concurrent live load.

Provide { 2 } 16d common nails(0.162"x3.5"), toe nailed at Top chord.  
Provide { 2 } 16d common nails(0.162"x3.5"), toe nailed at Bot chord.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located  
within 4.50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf,  
wind BC DL=5.0 psf. GCPI(+/-)=0.18

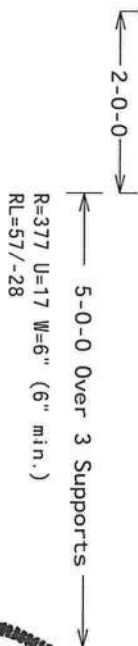
Wind loads and reactions based on MMFRS with additional C&C member  
design.

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



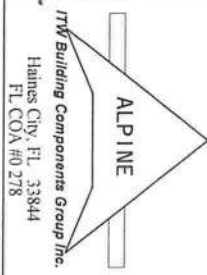
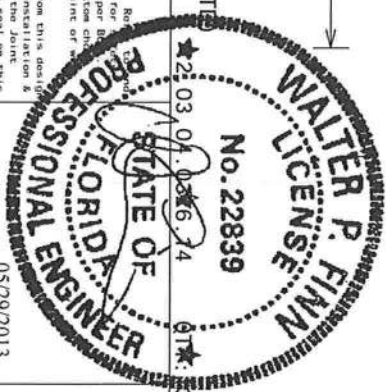
R=120 U=23 (1.5" min.)

R=87 U=0 (1.5" min.)



PLT TYP. Wave

Design Crit: FBC2010Res/TPI-2007(STB)  
FT/RT=10%(0%)/0(0)



**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING 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 WTC) for practices prior to performing these functions. Installers shall provide temporary bracing per BCSI notes noted otherwise. Top chord shall have properly attached structural sheathing and bottom chord shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in accordance with ANSI/TPI 1 detailing, unless noted otherwise. Refer to drawings 100A-2 for standard plate positions. 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 design 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 or ITW BCSI: www.bcsinfo.com; TPI: www.tpinet.org; WTC: www.structure.com; ITC: www.itc-safe.org

TC LL	20.0 PSF	REF R487-- 70749
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HOURS487 13149005
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298357
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UNMM487_204

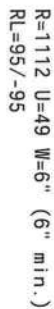


120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf, GCPI (+/-)=0.18

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

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.

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

১৭

Scale = .25"/Ft.

**ITW Building Components Group Inc.**

[illegible]

TC LL	20.0 PSF	REF R487-- 70750
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUR487 13149006
BC LL	0.0 PSF	HC-ENG JB/W/PF
TOT. LD.	40.0 PSF	SEQN- 298361
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UJMM487_Z04

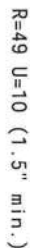
THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, located anywhere in roof, RISK CAT 11, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. Gcpi (+/-)=0.18

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

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

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



Design Crit: FBC2010Res/TP1-2007(STB

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

2:03 0A.0826:14

Q174

FL/-/-/4/-/-/-/R/-/-

Scale = .5"/Ft.

ITW Building Components Group Inc

Haines City, FL 33844  
FL COA #0278

**\*\* IMPORTANT \*\***  
 WORKING READ AND FOLLOW ALL NOTES ON THIS SHEET!  
 FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

These require attention care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI's Building Component Safety Information, by IPI and WTC's practices prior to performing these functions. Installers shall provide temporary bracing per the manufacturer's instructions. Top chord shall have properly attached structural bracing and bottom chord shall have a properly attached cold rolling. Locations shown for permanent lateral restraint of shall have bracing installed per BCSI sections B3, B9 or B10, as applicable.

ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this document, or any failure to build the truss in conformance with ASIS/ITP 1, or for handling, shipping, installation & bracing of trusses. Apply plates to each face of truss and position as shown above and on the Joint drawings. Trusses needed approximately 10 days before to drawings TBCD-2 for standard plate positions. A seal on this drawing is required for the design shop to use for obtaining engineering approval. The availability and use of the design shop's responsibility for the design shop. For more information see: TBCD-2, TBCD-3, TBCD-4, TBCD-5, TBCD-6, TBCD-7, TBCD-8, TBCD-9, TBCD-10, TBCD-11, TBCD-12, TBCD-13, TBCD-14, TBCD-15, TBCD-16, TBCD-17, TBCD-18, TBCD-19, TBCD-20, TBCD-21, TBCD-22, TBCD-23, TBCD-24, TBCD-25, TBCD-26, TBCD-27, TBCD-28, TBCD-29, TBCD-30, TBCD-31, TBCD-32, TBCD-33, TBCD-34, TBCD-35, TBCD-36, TBCD-37, TBCD-38, TBCD-39, TBCD-40, TBCD-41, TBCD-42, TBCD-43, TBCD-44, TBCD-45, TBCD-46, TBCD-47, TBCD-48, TBCD-49, TBCD-50, TBCD-51, TBCD-52, TBCD-53, TBCD-54, TBCD-55, TBCD-56, TBCD-57, TBCD-58, TBCD-59, TBCD-60, TBCD-61, TBCD-62, TBCD-63, TBCD-64, TBCD-65, TBCD-66, TBCD-67, TBCD-68, TBCD-69, TBCD-70, TBCD-71, TBCD-72, TBCD-73, TBCD-74, TBCD-75, TBCD-76, TBCD-77, TBCD-78, TBCD-79, TBCD-80, TBCD-81, TBCD-82, TBCD-83, TBCD-84, TBCD-85, TBCD-86, TBCD-87, TBCD-88, TBCD-89, TBCD-90, TBCD-91, TBCD-92, TBCD-93, TBCD-94, TBCD-95, TBCD-96, TBCD-97, TBCD-98, TBCD-99, TBCD-100, TBCD-101, TBCD-102, TBCD-103, TBCD-104, TBCD-105, TBCD-106, TBCD-107, TBCD-108, TBCD-109, TBCD-110, TBCD-111, TBCD-112, TBCD-113, TBCD-114, TBCD-115, TBCD-116, TBCD-117, TBCD-118, TBCD-119, TBCD-120, TBCD-121, TBCD-122, TBCD-123, TBCD-124, TBCD-125, TBCD-126, TBCD-127, TBCD-128, TBCD-129, TBCD-130, TBCD-131, TBCD-132, TBCD-133, TBCD-134, TBCD-135, TBCD-136, TBCD-137, TBCD-138, TBCD-139, TBCD-140, TBCD-141, TBCD-142, TBCD-143, TBCD-144, TBCD-145, TBCD-146, TBCD-147, TBCD-148, TBCD-149, TBCD-150, TBCD-151, TBCD-152, TBCD-153, TBCD-154, TBCD-155, TBCD-156, TBCD-157, TBCD-158, TBCD-159, TBCD-160, TBCD-161, TBCD-162, TBCD-163, TBCD-164, TBCD-165, TBCD-166, TBCD-167, TBCD-168, TBCD-169, TBCD-170, TBCD-171, TBCD-172, TBCD-173, TBCD-174, TBCD-175, TBCD-176, TBCD-177, TBCD-178, TBCD-179, TBCD-180, TBCD-181, TBCD-182, TBCD-183, TBCD-184, TBCD-185, TBCD-186, TBCD-187, TBCD-188, TBCD-189, TBCD-190, TBCD-191, TBCD-192, TBCD-193, TBCD-194, TBCD-195, TBCD-196, TBCD-197, TBCD-198, TBCD-199, TBCD-200, TBCD-201, TBCD-202, TBCD-203, TBCD-204, TBCD-205, TBCD-206, TBCD-207, TBCD-208, TBCD-209, TBCD-210, TBCD-211, TBCD-212, TBCD-213, TBCD-214, TBCD-215, TBCD-216, TBCD-217, TBCD-218, TBCD-219, TBCD-220, TBCD-221, TBCD-222, TBCD-223, TBCD-224, TBCD-225, TBCD-226, TBCD-227, TBCD-228, TBCD-229, TBCD-230, TBCD-231, TBCD-232, TBCD-233, TBCD-234, TBCD-235, TBCD-236, TBCD-237, TBCD-238, TBCD-239, TBCD-240, TBCD-241, TBCD-242, TBCD-243, TBCD-244, TBCD-245, TBCD-246, TBCD-247, TBCD-248, TBCD-249, TBCD-250, TBCD-251, TBCD-252, TBCD-253, TBCD-254, TBCD-255, TBCD-256, TBCD-257, TBCD-258, TBCD-259, TBCD-260, TBCD-261, TBCD-262, TBCD-263, TBCD-264, TBCD-265, TBCD-266, TBCD-267, TBCD-268, TBCD-269, TBCD-270, TBCD-271, TBCD-272, TBCD-273, TBCD-274, TBCD-275, TBCD-276, TBCD-277, TBCD-278, TBCD-279, TBCD-280, TBCD-281, TBCD-282, TBCD-283, TBCD-284, TBCD-285, TBCD-286, TBCD-287, TBCD-288, TBCD-289, TBCD-290, TBCD-291, TBCD-292, TBCD-293, TBCD-294, TBCD-295, TBCD-296, TBCD-297, TBCD-298, TBCD-299, TBCD-300, TBCD-301, TBCD-302, TBCD-303, TBCD-304, TBCD-305, TBCD-306, TBCD-307, TBCD-308, TBCD-309, TBCD-310, TBCD-311, TBCD-312, TBCD-313, TBCD-314, TBCD-315, TBCD-316, TBCD-317, TBCD-318, TBCD-319, TBCD-320, TBCD-321, TBCD-322, TBCD-323, TBCD-324, TBCD-325, TBCD-326, TBCD-327, TBCD-328, TBCD-329, TBCD-330, TBCD-331, TBCD-332, TBCD-333, TBCD-334, TBCD-335, TBCD-336, TBCD-337, TBCD-338, TBCD-339, TBCD-340, TBCD-341, TBCD-342, TBCD-343, TBCD-344, TBCD-345, TBCD-346, TBCD-347, TBCD-348, TBCD-349, TBCD-350, TBCD-351, TBCD-352, TBCD-353, TBCD-354, TBCD-355, TBCD-356, TBCD-357, TBCD-358, TBCD-359, TBCD-360, TBCD-361, TBCD-362, TBCD-363, TBCD-364, TBCD-365, TBCD-366, TBCD-367, TBCD-368, TBCD-369, TBCD-370, TBCD-371, TBCD-372, TBCD-373, TBCD-374, TBCD-375, TBCD-376, TBCD-377, TBCD-378, TBCD-379, TBCD-380, TBCD-381, TBCD-382, TBCD-383, TBCD-384, TBCD-385, TBCD-386, TBCD-387, TBCD-388, TBCD-389, TBCD-390, TBCD-391, TBCD-392, TBCD-393, TBCD-394, TBCD-395, TBCD-396, TBCD-397, TBCD-398, TBCD-399, TBCD-400, TBCD-401, TBCD-402, TBCD-403, TBCD-404, TBCD-405, TBCD-406, TBCD-407, TBCD-408, TBCD-409, TBCD-410, TBCD-411, TBCD-412, TBCD-413, TBCD-414, TBCD-415, TBCD-416, TBCD-417, TBCD-418, TBCD-419, TBCD-420, TBCD-421, TBCD-422, TBCD-423, TBCD-424, TBCD-425, TBCD-426, TBCD-427, TBCD-428, TBCD-429, TBCD-430, TBCD-431, TBCD-432, TBCD-433, TBCD-434, TBCD-435, TBCD-436, TBCD-437, TBCD-438, TBCD-439, TBCD-440, TBCD-441, TBCD-442, TBCD-443, TBCD-444, TBCD-445, TBCD-446, TBCD-447, TBCD-448, TBCD-449, TBCD-450, TBCD-451, TBCD-452, TBCD-453, TBCD-454, TBCD-455, TBCD-456, TBCD-457, TBCD-458, TBCD-459, TBCD-460, TBCD-461, TBCD-462, TBCD-463, TBCD-464, TBCD-465, TBCD-466, TBCD-467, TBCD-468, TBCD-469, TBCD-470, TBCD-471, TBCD-472, TBCD-473, TBCD-474, TBCD-475, TBCD-476, TBCD-477, TBCD-478, TBCD-479, TBCD-480, TBCD-481, TBCD-482, TBCD-483, TBCD-484, TBCD-485, TBCD-486, TBCD-487, TBCD-488, TBCD-489, TBCD-490, TBCD-491, TBCD-492, TBCD-493, TBCD-494, TBCD-495, TBCD-496, TBCD-497, TBCD-498, TBCD-499, TBCD-500, TBCD-501, TBCD-502, TBCD-503, TBCD-504, TBCD-505, TBCD-506, TBCD-507, TBCD-508, TBCD-50

WALTER P. FINN  
LICENSE  
No. 22839  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
12/03/01 08:56:14  
GT

05/29/2013

TC LL	20.0 PSF	REF R487-- 70751
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUR487 13148007
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298369
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWM487 Z04



Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

(a) Continuous lateral bracing equally spaced on member.

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

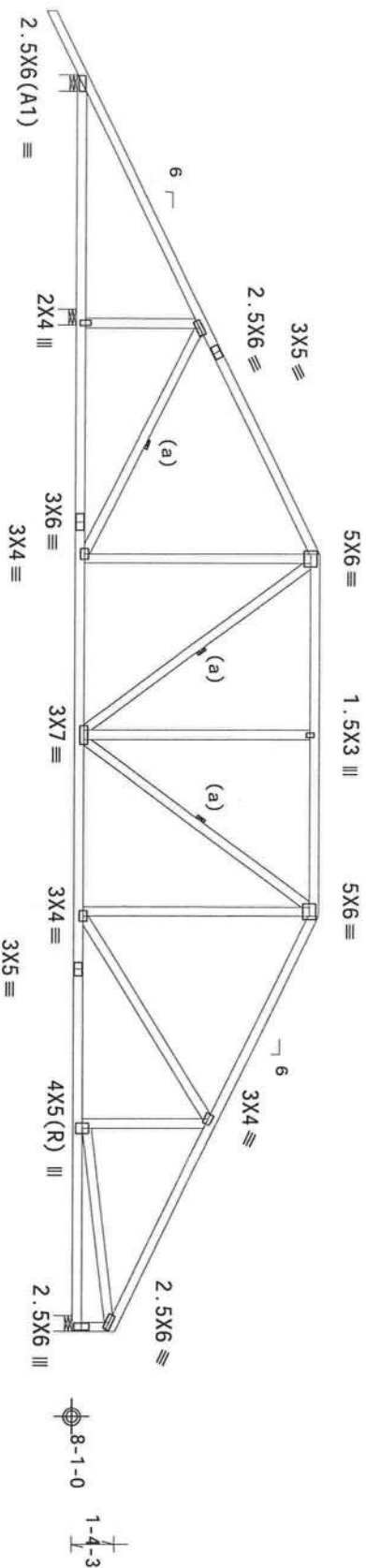
MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind 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.

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

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



12'-0-0" 7'-4-0" 15'-0-0" 11'-4-0" 32'-0-0" 13'-0-0"

R=461 U=0 W=6" (6" min.) R=1696 U=0 W=6" (6" min.)

RL=123/-125

R=1280 U=0 W=6" (6" min.)

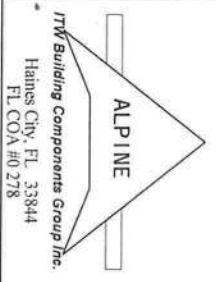
PLT TYP. Wave

Design Crit: FBC2010Res/TPI-2007(SD)  
FT/RT=10%(0%)/0(0)

\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety) Information, by TPI and WTCA. Trusses must be properly braced prior to performing these functions. Installers shall provide temporary bracing prior to erection. Trusses must be properly braced after erection. Trusses shall have a properly attached ridge purlin. Locations shown for permanent lateral restraint shall have bracing installed per BCSI sections 81, 87 or 810, as applicable.

ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design. ITWBCG shall be responsible for any deviation from this design. ITWBCG shall be responsible for any deviation from this design.



FL/-/4/-/-/R/-	Scale = .1875"/Ft.
TC LL 20.0 PSF	REF R487-- 70752
TC DL 10.0 PSF	DATE 05/29/13
BC DL 10.0 PSF	DRW HCUSR487 13149008
BC LL 0.0 PSF	HC-ENG JB/WPF
TOT. LD. 40.0 PSF	SEON- 298371
DUR. FAC. 1.25	
SPACING 24.0"	JREF- 1UWMA487_Z04

Top chord 2x4 SP #1 12A  
Bot chord 2x4 SP #1 12A  
Webs 2x4 SP #3 12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

(a) 1x4 #3SRB SPF-S or better "T" brace. 80% length of web member. Attach with 8d Box or Gun (0.113"x2.5", min.) nails @ 6" OC.

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

WMFRS loads based on trusses located at least 7.50 ft. from roof edge.

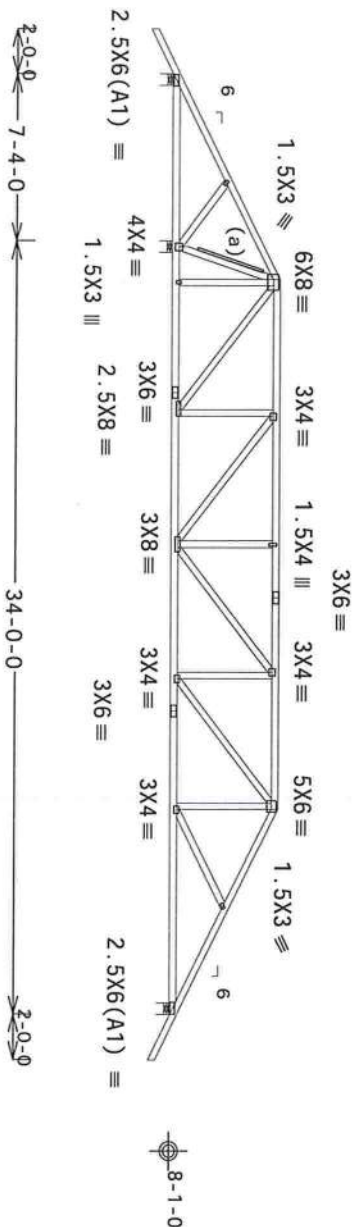
Negative reaction(s) of -352# MAX. (See below) from a non-wind load case requires uplift connection.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 6.50 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 WMFRS with additional C&C member design.

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.



R=150/-352 U=105 W=6" (6" min.)  
RL=101/-101

R=2400 U=94 W=6" (6" min.)

R=1406 U=62 W=6" (6" min.)

PLT TYP. Wave

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

2003 04 08 16:34  
No. 22839  
WALTER P. FINN  
FLORIDA  
PROFESSIONAL ENGINEER

FL/-/4/-/-/R/-

Scale = .125"/Ft.

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278

\*\*\*IMPORTANT\*\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TP1 and WPCA) for details. Trusses shall be installed in accordance with the BCSI instructions. Trusses shall have bracing installed per BCSI section B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in accordance with this design. The user of this design shall be responsible for the safety of the building design. Refer to drawings 1604-Z for standard brace positions. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility of the building designer per ASCE/TP1 Sec. 2. For more information see: This Job's general specifications or ITWBCG web: www.itwbcg.com; TP1: www.tp1net.org; WPCA: www.structure.com; ICC: www.iccsafe.org

TC LL	20.0 PSF	REF R487-- 70753
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUR487 13149009
BC LL	0.0 PSF	HC-ENG JB/WMP
TOT. LD.	40.0 PSF	SEQN- 298379
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UNMM487_Z04



Top chord	2x4	SP_#1_12A
Bot chord	2x4	SP_#1_12A
Webbs	2x4	SP_#3_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

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

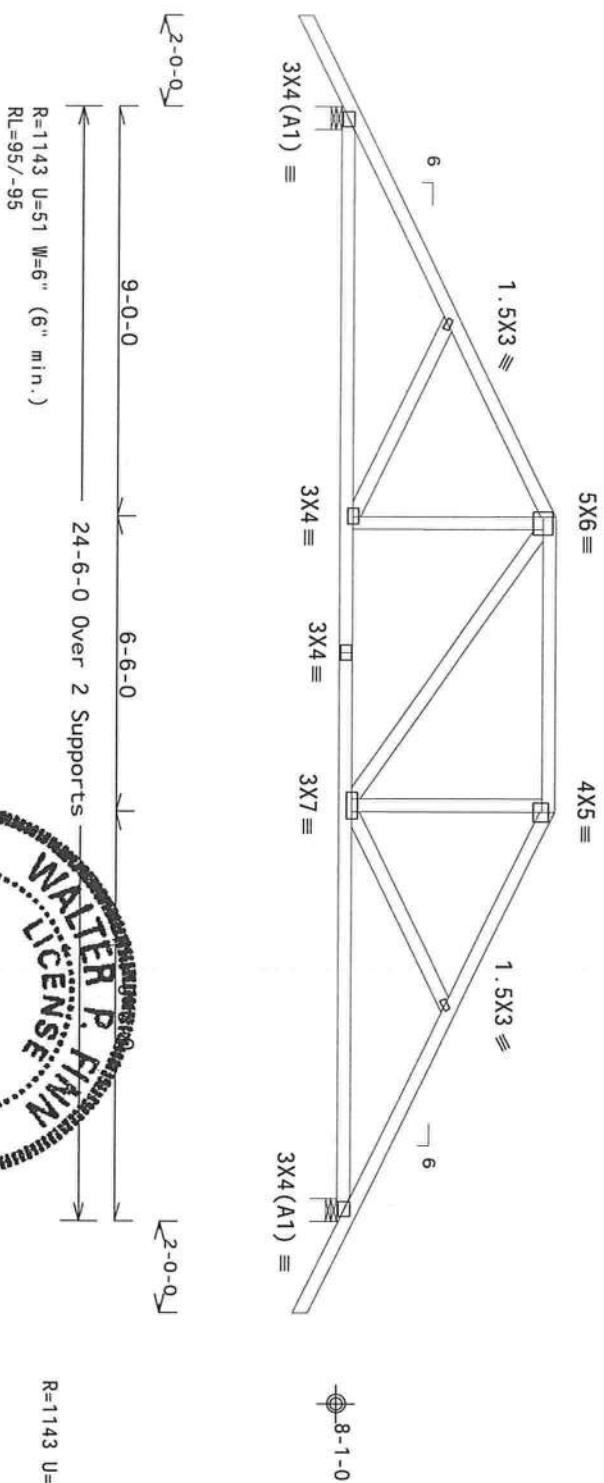
MMFRS loads based on trusses located at least 7.50 ft. from roof edge

THIS DING PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRU  
- H9B 24'6" Steepdown H/P)

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

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.



PLT TYP. Wave

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

2:03 04.026.74

FL/-/4/-/-/R/-

Scale = .25"/Ft

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

**\*\*IMPORTANT\*\***

**WARNINGS:** READ AND FOLLOW ALL NOTES ON THIS SHEET!

FURNISH THIS DECISION TO ALL CONTRACTORS INCLUDING INSTALLERS.

Trossen requires outcome care in fabricating, handling, shipping, installing and bracing. Before beginning work, please review the following information carefully. Failure to follow the practices noted or performing those functions. Installers shall provide temporary bracing per Decisions attached hereto. 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 shall have bracing installed per DCS sections B7 or B10, as applicable.

1TB Building Components Group Inc. (1TBDC) shall not be responsible for any deviation from this design by failure to build the truss in conformance with AISI/TPI 1, or for handling, shipping, installation or bracing of trusses. Apply plates to each face of truss and position as shown above and on the joint details, unless noted otherwise. Refer to drawings TBDA-2 for standard plate positions. A seal on truss ends is required to prevent moisture intrusion. Truss installation acceptance of professional engineering responsibility solely for the design system.

The responsibility of the Building Designer per AISI/TPI 1, Sec. 2, shall include providing all necessary general notes page: 1TB-DC; www.tdbc.com; TPI: www.tpi.net.org; WCA: www.alcindustry.com; www.alcarchive.org.

WALTER P. FINN  
No. 22839  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
12/03/04

05/29/2013

TC LL	20.0 PSF	REF	R487-- 70754
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCUSR487 13149010
BC LL	0.0 PSF	HC-ENG	JB/WMP
TOT.LD.	40.0 PSF	SEQN-	298383
DUR.FAC.	1.25		
SPACING	24.0"	JREF-	1UWMM487 Z04

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

(a) Continuous lateral bracing equally spaced on member.

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

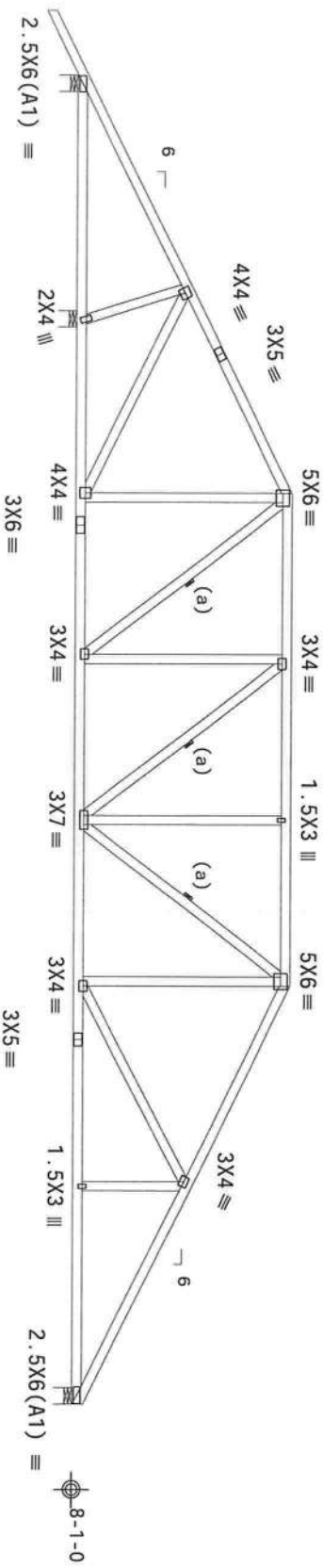
MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13.00 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.

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

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



12'-0-0  
7'-4-0  
13'-0-0  
15'-4-0  
34'-0-0  
13'-0-0  
8'-1-0  
6  
2.5X6(A1) ≡  
4X4 ≡  
3X5 ≡  
5X6 ≡  
3X4 ≡  
1.5X3 ≡  
5X6 ≡  
3X4 ≡  
3X7 ≡  
3X4 ≡  
1.5X3 ≡  
2.5X6(A1) ≡  
R=395 U=0 W=6" (6" min.)  
RL=113/-121  
R=1865 U=0 W=6" (6" min.)  
R=1360 U=0 W=6" (6" min.)

PLT TYP. Wave  
Design Crit: FBC2010Res/TPI-2007(SD)  
FT/RT=10%(0%)/0(0)  
FL/-/4/-/R/-  
Scale = .1875"/Ft.



ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278

\*\*\*IMPORTANT\*\*\*  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Components Safety Information, by TPI and WTC) practices prior to performing these functions. Installers shall provide temporary bracing and bracing as required. Top chord shall have properly attached structural sheathing and bottom shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint shall have bracing installed per BCSI sections 83, 87 or 810, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design and/or for the safety of the structure. The user of this design shall be responsible for the safety of the structure. Refer to drawings 1004.2 for standard shown above and on the joint details, unless noted otherwise. Refer to drawings 1004.2 for standard shown above and on the joint details, unless noted otherwise. The suitability and use of this design 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: ITW BCSI: www.bcsi.com; TPI: www.tpiinc.org; WTC: www.sbcindustry.com; IBC: www.icbc.org



TC LL	20.0 PSF	REF	R487-- 70755
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCUSR487 13149011
BC LL	0.0 PSF	HC-ENG	JB/WPF
TOT. LD.	40.0 PSF	SEQN-	298391
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UWMM487_Z04

THIS DMC PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.  
(stepdown Hip)

MMFRS loads based on trusses located at least 7.50 ft. from roof edge

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



★2.03.04.036.14

Scale = .25"/Ft.

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0 278

**\*\*\*IMPORTANT\*\*\*** **READ AND FOLLOW ALL NOTES ON THIS SHEET!**  
**WARNING: FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.**

These require extensive care in fabricating, handling, shipping, installing and bracing. To follow the latest edition of BCSI (Building Component Safety Information), by TPI and WCTA for practices prior to performing these functions. Installers shall provide temporary bracing per Uniform code otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid steel section. Locations shown for permanent lateral restraint or shall have bracing installed per BCSI sections 6D, 6F or 6I10, as applicable.

The Building Components Group, Inc. (IBCBG) shall not be responsible for any deviation from this design. Any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation or details, unless noted otherwise. Refer to T00A-2 detailing or cover page listing this drawing. The suitability and use of this design for any structure is the responsibility solely for the design shop. The suitability and use of this design 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 only. [www.tpiinc.org](http://www.tpiinc.org), [www.sprink.org](http://www.sprink.org), [www.abctindustry.com](http://www.abctindustry.com), [www.tceinc.org](http://www.tceinc.org)

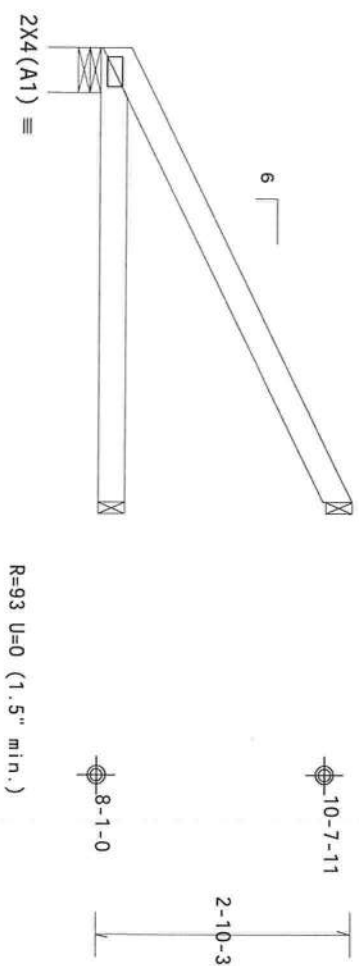


05/29/2013

TC LL	20.0 PSF	REF R487-- 70756
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUR487 13149012
BC LL	0.0 PSF	HC-ENG JB/W/PF
TOT. LD.	40.0 PSF	SEQN- 298399
DUR. FAC.	1.25	
SPACING	24.0"	JREF - 1UWMA487_Z04

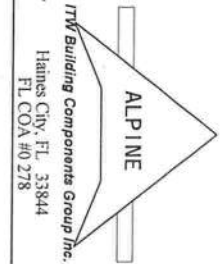
Top chord 2x4 SP #1\_12A  
Bot chord 2x4 SP #1\_12A  
Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.  
Bottom chord checked for 10.00 psf non-concurrent live load.  
Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Top chord.  
Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Bot chord.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 4.50 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.  
Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.



PLT TYP. Wave

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



**\*\*IMPORTANT\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET.  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING 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 WTKA for details on proper bracing and installation. Truss members shall be installed in accordance with the manufacturer's instructions. Truss members shall have a properly installed and secured bracing system. Truss members shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with the design. Truss members shall be installed in accordance with the manufacturer's instructions. Truss members shall have a properly installed and secured bracing system. Truss members shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
Apply plates to each face of truss and position as shown. A seal on this drawing or cover page listing this design, indicates acceptance of professional engineering responsibility for the design shown. The suitability and use of this design for any structure is the responsibility of the user. For more information see: This Job's general notes page, ITW BCSI, www.bcsi.com, TPI, www.tpiinc.org, WTKA, www.wtkaindustrial.com, ITCC, www.itccsafe.org

FL/-/4/-/-/R/-		Scale = .5"/Ft.	
TC LL	20.0 PSF	REF	R487-- 70757
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCUSR487 13149013
BC LL	0.0 PSF	HC-ENG	JB/WPF
TOT. LD.	40.0 PSF	SECON	298405
DUR. FAC.	1.25		
SPACING	24.0"	JREF	1UWMA487_Z04





Top chord 2x4 SP #1\_12A  
Bot chord 2x4 SP #1\_12A  
Webs 2x4 SP #3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

(a) 1x4 #3SRB SPF-S or better "T" brace. 80% length of web member. Attach with 8d Box or Gun (0.113"x2.5",min.)nails @ 6" OC.

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

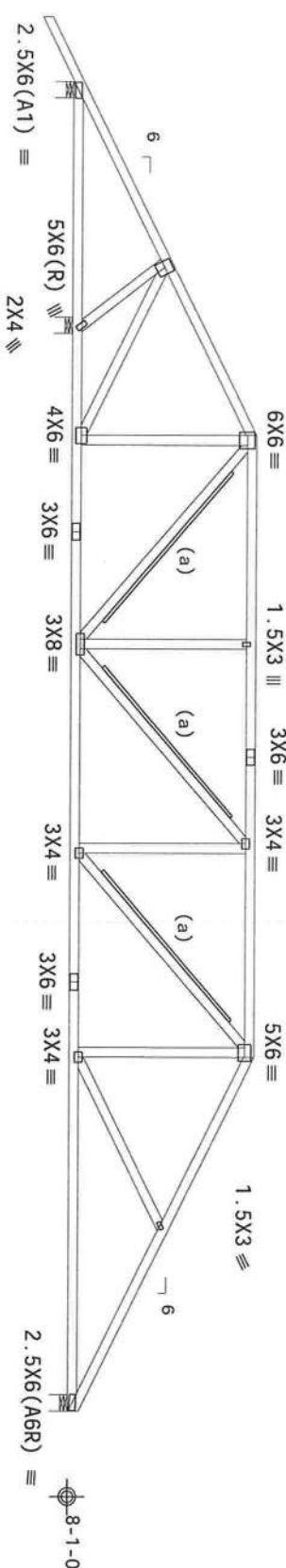
MMFRS loads based on trusses located at least 7.50 ft. from roof edge.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13.00 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.

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

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



R=391 U=18 W=6" (6" min.)  
R=1863 U=74 W=6" (6" min.)  
R=1362 U=46 W=6" (6" min.)

PLT TYP. Wave  
Design Crit: FBC2010Res/TP1-2007(S10)  
FT/RT=10%(0%)/0(0)



<p>ITW Building Components Group Inc. Haines City, FL 33844 FL COA #0278</p>		<p>ALPINE</p>	
<p>ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or construction of the truss system. The truss system shall be constructed in accordance with the design and specifications shown on this drawing. The truss system shall be constructed in accordance with the design and specifications shown on this drawing. The truss system shall be constructed in accordance with the design and specifications shown on this drawing.</p>		<p>FL / - / 4 / - / - / R / -</p>	
TC LL	20.0 PSF	REF	R487-- 70759
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HGUSR487 13149015
BC LL	0.0 PSF	HC-ENG	JB/WMP
TOT. LD.	40.0 PSF	SEQN	298411
DUR. FAC.	1.25		
SPACING	24.0"	JREF	1UWMM487_Z04

chord	2x4	SP_#1_12A
chord	2x4	SP_2850f-2.3E
Webs	2x4	SP_#3_12A

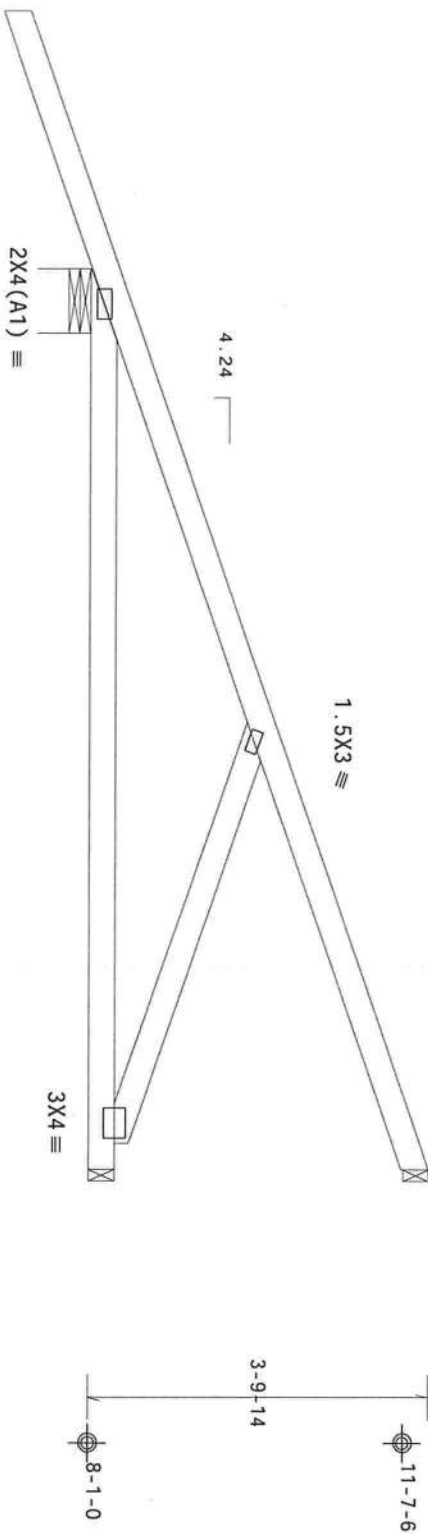
er grades designated with "12A" use design values approved  
2012 by ALSC.

ph wind, 13.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located  
n 4.50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf  
BC DL=5.0 psf. GCPI (+/-)=0.18

loads and reactions based on MMFRS.

10.00 psf non-concurrent live load

de ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Top chord  
de ( 3 ) 16d common nails(0.162"x3.5"), toe nailed at Bot chord.



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

R=74 U=4 (1.5" min.)

R=301 U=27 (1.5" min.)

9-10-13 Over 3 Support  
R=391 U=190 W=8.485" (8.485" min.)

PLT TYP. Wave

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

NO. 42633  
12.03.04 1026.14

FL/-/4/-/-/R/-

Scale = .5"/Ft.

ALPINE

**ITW Building Components Group Inc.**

Haines City, FL 33844  
FL COA #0278

**..IMPORTANT..**  
**..WARNING..** READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

Those requiring care in fabrication, handling, shipping, installing and bracing, follow the latest edition of BCSI (Building Component Safety Information by TPI and MITI) for practices prior to performing these functions. Installers shall provide temporary bracing per the above 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 shall have bracing installed per BCSI sections B3, B8 or B10, as applicable.



Professional Engineer Seal of the State of Florida

05/29/2013

TC LL	20.0 PSF	REF R487-- 70760
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13145037
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298415
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UJMM487 Z04

(13-173--Jerry Castagna Constructi Custom Res. For Jerry Cas -- Columbia County - HJ7A 9'10"13 Hip Jack Girder)

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 4.50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf wind BC DL=5.0 psf. Gcpi (+/-)=0.18

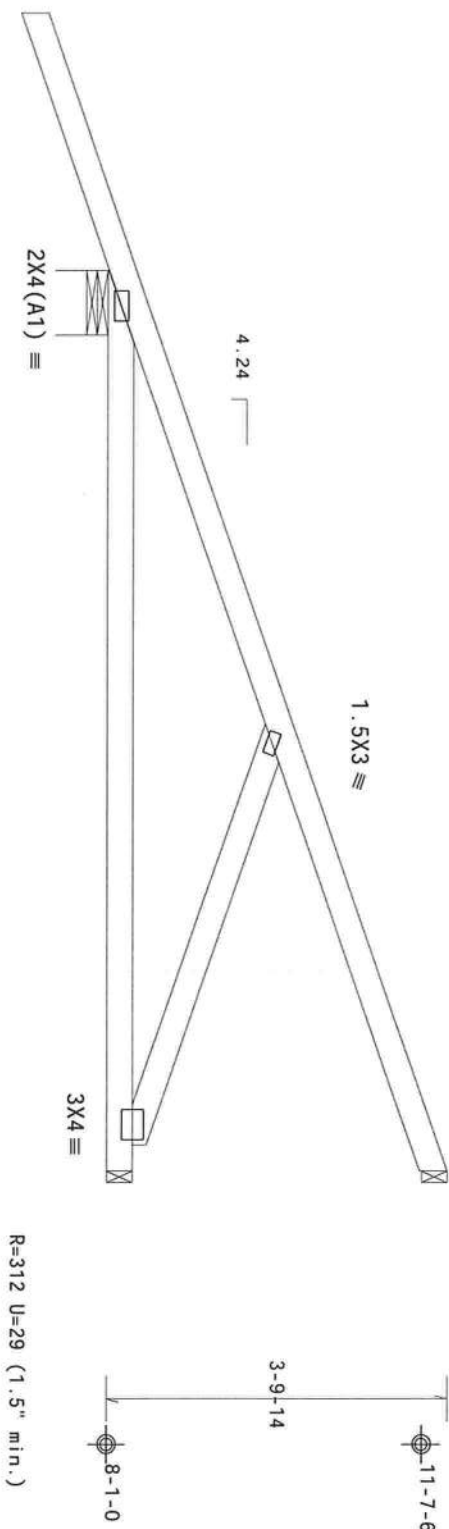
Wind loads and reactions based on MWFRS.

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

Provide ( 2 )	16d common nails(0.162"x3.5")	toe nailed at Top chord.
Provide ( 3 )	16d common nails(0.162"x3.5")	toe nailed at Bot chord.

Special loads	-----	(Lumber Dur. Fac.=1.25 / Plate Dur. Fac.=1.25)
TC-From	0 pif at -2.83 to	61 pif at 0.00
TC-From	2 pif at 0.00 to	2 pif at 9.90
BC-From	0 pif at -2.83 to	4 pif at 0.00
BC-From	2 pif at 0.00 to	2 pif at 9.90
TC-86.25 lb Conc.	Load at	1.48
TC-97.82 lb Conc.	Load at	4.31
TC-257.79 lb Conc.	Load at	7.13
BC-5.98 lb Conc.	Load at	1.48
BC-91.24 lb Conc.	Load at	4.31
BC-179.94 lb Conc.	Load at	7.13

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



9-10-13 Over 3 Support  
R=391 U=191 W=8.485" (8.485" min.)

PLT TYP. Wave

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

12.03.04.0326, 14

QTY=1

FL/-/4/-/-/R/-

Scale = .5"/Ft.

ALPINE

ITW Building Components Group Inc

Haines City, FL 33844  
FL COA #0278

[illegible]

05/29/2013

TC LL	20.0 PSF	REF	R487-- 70761
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCSR487 13149020
BC LL	0.0 PSF	HC-ENG	JB/M/PF
TOT. LD.	40.0 PSF	SEQN-	298417
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UW487_Z04



(13-173--Jerry Castagna Construct Custom Res. For Jerry Cas -- Columbia County - HG7C 23'9" Steepdown Hip Girder)

Top chord 2x4 SP #1\_12A  
Bot chord 2x4 SP #1\_12A  
Webs 2x4 SP #3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 4.50 ft from roof edge, RISK CAT 11, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. GCPI (+/-)=0.18

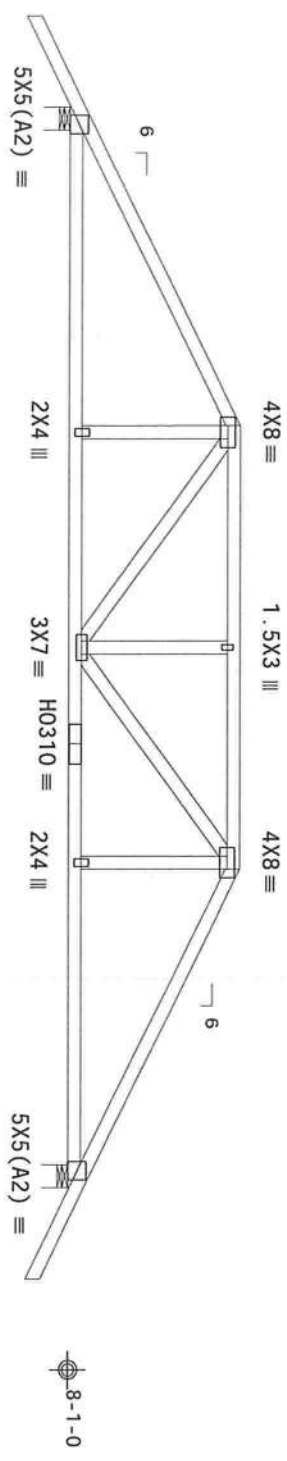
Wind loads and reactions based on MMFRS.

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

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

Special loads

TC-From	Dur.Fac.=1.25 / Plate Dur.Fac.=1.25	62 pif at -2.00 to 7.00
TC-From	31 pif at 7.00 to 16.75	62 pif at 16.75 to 25.75
TC-From	62 pif at 25.75 to 34.75	4 pif at 34.75 to 43.75
BC-From	20 pif at 43.75 to 52.75	10 pif at 52.75 to 61.75
BC-From	10 pif at 61.75 to 70.75	20 pif at 70.75 to 79.75
BC-From	4 pif at 79.75 to 88.75	4 pif at 88.75 to 97.75
TC-256.00	1b Conc. Load at 7.03,16.72	
TC-182.44	1b Conc. Load at 9.06,11.06,12.69,14.69	
BC-427.67	1b Conc. Load at 7.03,16.72	
BC-126.90	1b Conc. Load at 9.06,11.06,12.69,14.69	



7-0-0 9-9-0 7-0-0

23-9-0 Over 2 Supports

R=2214 U=149 W=6" (6" min.)

R=2214 U=149 W=6" (6" min.)

PLT TYP. 20 Gauge HS,Wave

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

05/29/2013

FL/-/4/-/R/- Scale = .25"/Ft.

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278



TC LL	20.0 PSF	REF R487-- 70762
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13149021
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298423
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWMM487_Z04

(13-173--Jerry Castagna Constructi Custom Res. For Jerry Cas -- Columbia County - FG7 7'1" Flat Girder)  
Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

Wind loads and reactions based on MMFRS.

(H1) = (J) Hanger not calculated (1)2x4 SP 2850f-2.3E supporting member.  
(H2) = (J) Hanger not calculated (1)2x4 SP 2850f-2.3E supporting member.

Truss must be installed as shown with top chord up.

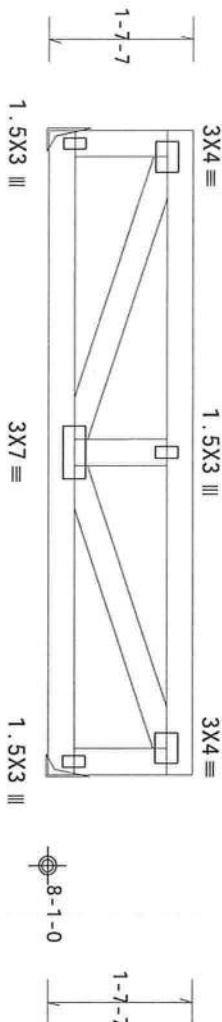
Special loads  
-----Lumber  
TC-From 60 pif at 0.00 to 60 pif at 7.08  
BC-From 10 pif at 0.00 to 10 pif at 7.08  
BC- 178.45 lb Conc. Load at 1.94, 3.54, 5.15

120 mph wind, 15.00 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. GCpl(+/-)=0.18

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.

The TC of this truss shall be braced with attached spans at 24" OC in lieu of structural sheathing.



R=516 U=28  
H=H1  
7'-1-0 Over 2 Supports  
Design Crit: FBC2010Res/TP1-2007 (STB)  
FT/RT=10%(0%/0(0))

PLT TYP. Wave

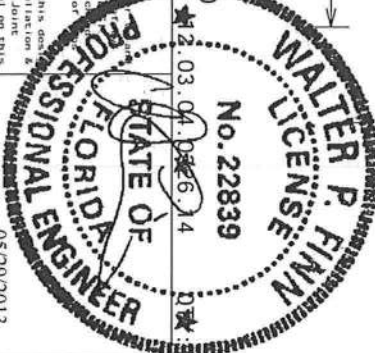
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET

FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TPI and WTC) for practices prior to performing these functions. Installations shall provide temporary bracing for trusses noted otherwise. Top chord shall have properly attached structural sheathing and bottom chord shall have properly attached structural sheathing. Trusses shall be braced in accordance with BCSI sections B3, B7 or B10, as applicable.

ITW Building Components Group, Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TP1-1 or the hand-installed instructions & details, unless noted otherwise. Refer to drawings 180A-2 for standard plate positions. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility for the design shown. The suitability and use of this design for any structure is the responsibility of the user. ITWBCG: www.itwbcg.com, TP1: www.tp1inc.org, WTC: www.wtcindustry.com, ICC: www.iccactive.org

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278



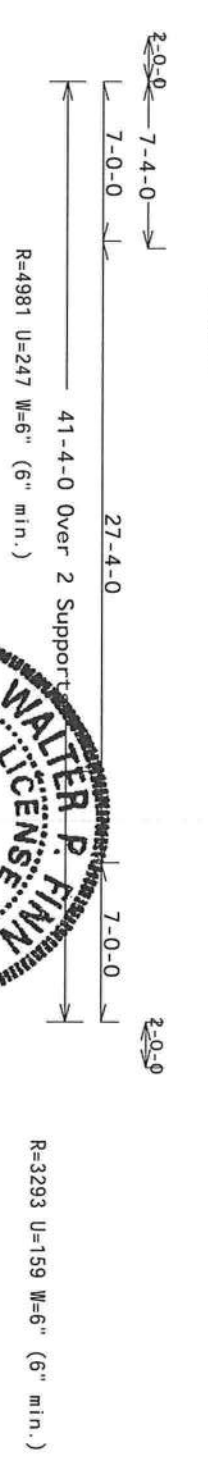
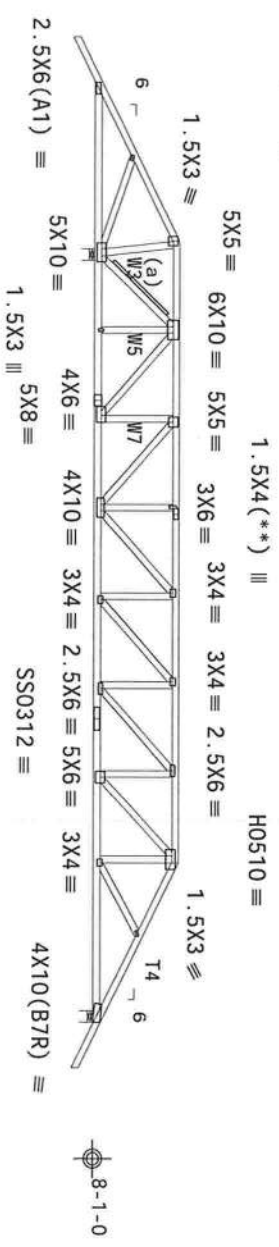
FL/-/4/-/1/R/-	Scale = .5"/Ft.
TC LL 20.0 PSF	REF R487-- 70763
TC DL 10.0 PSF	DATE 05/29/13
BC DL 10.0 PSF	DRW HCUR487 13149022
BC LL 0.0 PSF	HC-ENG JB/WPF
TOT.LD. 40.0 PSF	SEQN- 298524
DUR.FAC. 1.25	
SPACING 24.0"	JREF- 1UWM487_Z04

Top chord 2x4 SP 2850F-2.3E :T4 2x4 SP #1\_12A:  
Bot chord 2x4 SP 2850F-2.3E  
Webs 2x4 SP #3\_12A :W3, W5, W7 2x4 SP #1\_12A:

Lumber grades designated with "12A" use design values approved  
1/5/2012 by ALSC.

Special loads

-----Lumber Dur. Fac.=1.25 / Plate Dur. Fac.=1.25)  
TC-From 62 pif at -2.00 to 62 pif at 7.00  
TC-From 31 pif at 7.00 to 31 pif at 34.33  
TC-From 62 pif at 34.33 to 62 pif at 43.33  
BC-From 4 pif at -2.00 to 4 pif at 0.00  
BC-From 20 pif at 0.00 to 20 pif at 7.03  
BC-From 10 pif at 7.03 to 10 pif at 34.30  
BC-From 20 pif at 34.30 to 20 pif at 41.33  
BC-From 4 pif at 41.33 to 4 pif at 43.33  
TC-256.00 lb Conc. Load at 7.03, 34.30  
TC-182.44 lb Conc. Load at 9.06, 11.06, 13.06, 15.06  
26.27, 28.27, 30.27, 32.27  
TC-86.12 lb Conc. Load at 17.06, 24.27  
TC-135.11 lb Conc. Load at 19.06, 20.67, 22.27  
PLT-254.00 lb Conc. Load at (24.27, 11.89)  
BC-427.67 lb Conc. Load at 7.03, 34.30  
BC-126.90 lb Conc. Load at 9.06, 11.06, 13.06, 15.06  
26.27, 28.27, 30.27, 32.27  
BC-370.49 lb Conc. Load at 17.06, 24.27  
BC-86.67 lb Conc. Load at 19.06, 20.67, 22.27



PLT TYP. 20 Gauge HS, 18 Gauge HS, Design Crit: FBC2010Res/TP1-2007(STB)  
Wave FT/RT=10%(0%/0(0))

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278

\*\*\*IMPORTANT\*\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing, bracing, and erection. Follow the latest edition of BCSI (Building Component Safety Information, by TPI and WTC) for all practices prior to performing these functions. Installers shall provide temporary bracing per the instructions provided on the drawings. The truss manufacturer shall be responsible for the design and construction of the truss. The truss manufacturer shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or for any failure to build the truss in accordance with the design. The truss manufacturer shall be responsible for the design and construction of the truss. The truss manufacturer shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
any failure to build the truss in accordance with the design. The truss manufacturer shall be responsible for the design and construction of the truss. The truss manufacturer shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or for any failure to build the truss in accordance with the design. The truss manufacturer shall be responsible for the design and construction of the truss. The truss manufacturer shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
drawing or cover page listing the design shown. The manufacturer's use of this design for any structure is the responsibility of the user. For more information see: This Job's general notes page.  
ITW BCSI: www.bcsi.org; TPI: www.tpi-inc.org; WTC: www.wtcindustry.com; ITC: www.itccafe.org



FL/-/4/-/-/R/-	Scale = .125"/Ft.
TC LL 20.0 PSF	REF R487-- 70764
TC DL 10.0 PSF	DATE 05/29/13
BC DL 10.0 PSF	DRW HCUR487 13149042
BC LL 0.0 PSF	HC-ENG JB/WPF
TOT.LD. 40.0 PSF	SEQN- 298538
DUR.FAC. 1.25	
SPACING 24.0"	JREF- 1UWMA87_Z04

Top chord 2x4 SP #1 12A  
Bot chord 2x4 SP #1 12A  
Webs 2x4 SP #3 12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

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

MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

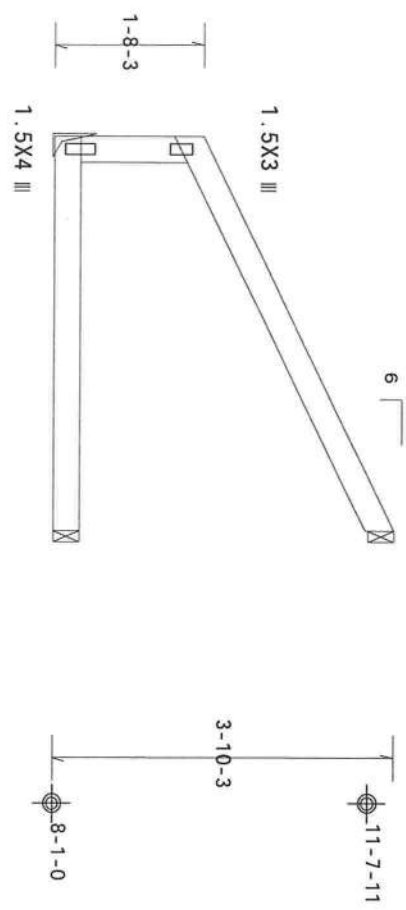
120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. GCPI(+/-)=0.18

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

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

Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Top chord. Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Bot chord.

R=135 U=1 (1.5" min.)  
RL=24



4-4-0 Over 3 Supports  
R=178 U=0

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



ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278

IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS SHEET.  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING 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 WTC) for instructions on bracing. Truss installers shall provide temporary bracing per BCSI instructions for exterior trusses. Truss installers shall provide permanent bracing per BCSI instructions for interior trusses. Truss installers shall have a properly attached rigid ceiling. Locations shown for permanent bracing shall have bracing installed per BCSI section B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping and bracing of trusses. 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. A seal on this drawing or cover page listing this drawing, the acceptance of professional engineering the responsibility of the engineer, shall be provided. For more information see: This job's general notes page: ITW BCSI: www.bcsi.org WTC: www.wtcindustry.com; TPI: www.tpinet.org; ITC: www.itc-safe.org

FL/-/4/-/-/R/-			Scale = .5"/Ft.	
TC LL	20.0 PSF	REF	R487--	70765
TC DL	10.0 PSF	DATE	05/29/13	
BC DL	10.0 PSF	DRW	HCSUR487	13149016
BC LL	0.0 PSF	HC-ENG	JB/WPF	
TOT. LD.	40.0 PSF	SEQN-	298523	
DUR. FAC.	1.25			
SPACING	24.0"	JREF-	1UWMM487_Z04	



Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT 11, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. GCPI (+/-)=0.18

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

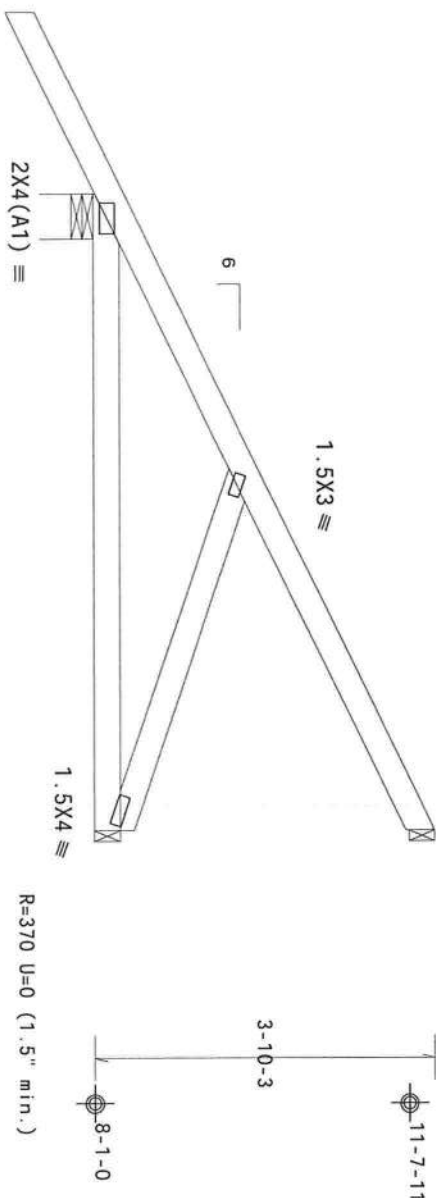
		Dur.	Fac.=1.25 /	Plate	Dur.	Fac.=1.25)
TC-	From	62 pif at	-2.00 to	62 pif at	7.00	
BC-	From	4 pif at	-2.00 to	4 pif at	0.00	
BC-	From	20 pif at	0.00 to	20 pif at	7.00	
BC-	515.59 lb Conc.	Load at	2.60			

Wind loads and reactions based on MWFRS.

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

Provide ( 2 ) 16d common nails(0.162"x3.5"), toe nailed at Top chord.  
Provide ( 3 ) 16d common nails(0.162"x3.5"), toe nailed at Bot chord.

R=86 U=21 (1.5" min.)



7-0-0 Over 3 Supports  
R=769 U=62 W=6" (6" min.)

PLT TYP. Wave

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

★2:03 04.056.74 011

FL/-/4/-/-/R/-

Scale = .5"/Ft.

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

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

Tucson require someone care in fabricating, handling, shipping, installing and bracing. Not only do they have to be trained in the use of the equipment, they also have to be trained in following the latest edition of BCSI (Building Component Safety Information, by TPI and WTA) for the practices prior to performing these functions. Inspectors shall provide temporary bracing per BCSI unless noted otherwise. Top chord shall have properly attached structural sheathing and bottom chord shall have properly attached rigid soiling. Locations shown for permanent lateral restraint of wall shall have bracing installed per BCSI sections B3, B or B10, as applicable.

ITW Building Components Group, Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 300-2-2 for section and connection details on this truss. The manufacturer of the truss shall be responsible for providing the proper engineering for the responsibility solely for the design theme. The suitability and use of this design for any structure is the responsibility of the building engineer. per ANSI/TPI 1 Sec.2. For more information see: This job's general notes page: ITW-BCG: [www.itwbcg.com](http://www.itwbcg.com); TPI: [www.tpi.net](http://www.tpi.net); WCCA: [www.sbcindustry.com](http://www.sbcindustry.com); CDE: [www.cde.com](http://www.cde.com)

WALTER P. FINN  
 No. 22839  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 12/31/06

TC LL	20.0 PSF	REF R487-- 70766
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13149038
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298535
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWMM487_Z04

(13-173--Jerry Castagna Construct Custom Res. For Jerry Cas -- Columbia County - HG7B 24'6" Steepdown Hip Gilder)

Top chord 2x4 SP\_#1\_12A :T3 2x4 SP M-30:  
Bot chord 2x4 SP\_#1\_12A :B2 2x4 SP 2850F-2.3E:  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

120 mph wind, 15.00 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.

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

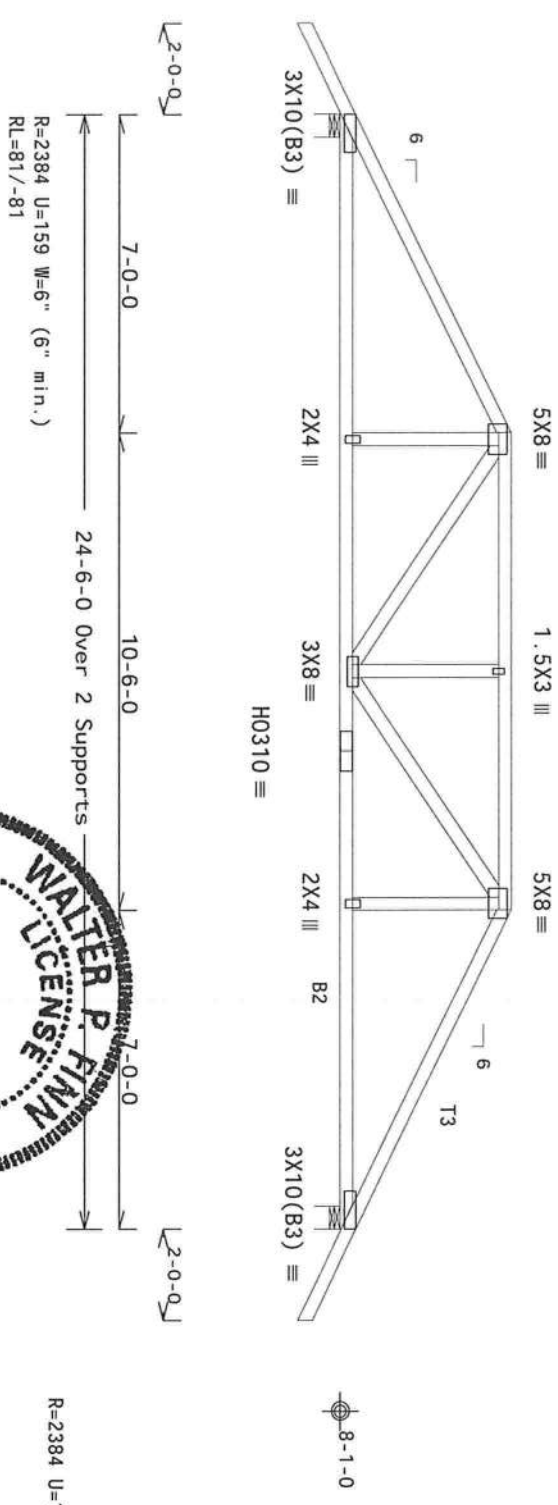
Bottom chord checked for 10.00 psf non-concurrent live load.

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

Special loads

TC-From	Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)	62 pif at -2.00 to 7.00
TC-From	62 pif at 7.00 to 17.50	31 pif at 17.50 to 26.50
TC-From	62 pif at 26.50 to 31 pif at 31.00 to 42.67	42.67 pif at 42.67 to 126.90
BC-From	4 pif at -2.00 to 0.00	20 pif at 0.00 to 7.03
BC-From	20 pif at 7.03 to 10 pif at 10.00 to 14.00	10 pif at 14.00 to 17.47
BC-From	10 pif at 17.47 to 20 pif at 20.00 to 24.50	4 pif at 24.50 to 26.50
BC-From	4 pif at 26.50 to 7.03, 17.47	7.03, 17.47
TC-256.00	1b Conc. Load at 9.06, 11.06, 12.25, 13.44	15.44
TC-182.44	1b Conc. Load at 7.03, 17.47	15.44
BC-427.67	1b Conc. Load at 9.06, 11.06, 12.25, 13.44	15.44
BC-126.90	1b Conc. Load at 9.06, 11.06, 12.25, 13.44	15.44

MMFRS loads based on trusses located at least 7.50 ft. from roof edge.



PLT TYP. 20 Gauge HS, Wave

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

2.03.04.06.14

FL/-/4/-/R/-

Scale = .25"/Ft.

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET.**  
FURNISH THIS DESIGN TO ALL CONTRACTORS, INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Be sure to follow the latest edition of BCSI (Building Component Safety Information, by TPI and WFA) for practices prior to performing these functions. Installers shall provide temporary bracing per details noted otherwise. Top chord shall have properly attached structural sheathing and bottom chord shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design, or any failure of the truss system. The user of this design shall be responsible for any deviation from this design, or any failure of the truss system. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positions. A seal on this drawing or cover page listing this design. The suitability and use of this design for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information see: This Job's TCI: www.tci-usa.org



TC LL	20.0 PSF	REF R487-- 70767
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUR487 13149039
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298541
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWM487_Z04

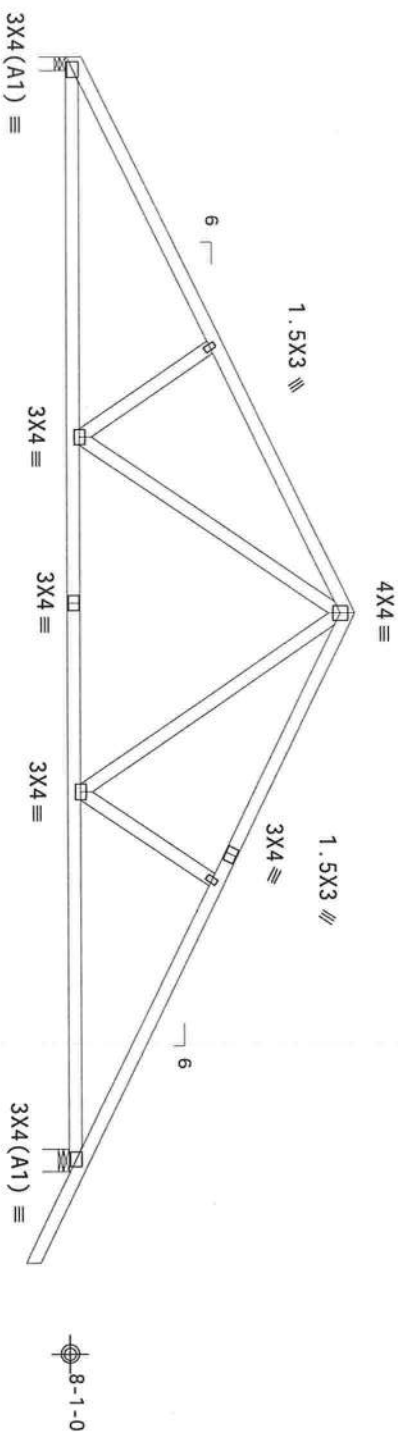
THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.

120 mph wind, 15.00 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, GCFI (+/-)=0.18

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

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.



R=1204 U=0 W=6" (6" min.)

Design Crit: FBC2010Res/TP1-2007(ST

BC2010Res/TP1-2007(STP)  
FT/RT=10%(0%)/0(0)

2.03.04.086.14

১৩৩

FL/-/4/-/-/R/-

Scale = .25"/Ft.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSP (Building Component Safety Information, by TPI and WCA) for practices prior to performing those functions. Installers shall provide temporary bracing per the notes shown above. Top chord shall have properly attached structural sheathing and blocking. Trusses shall have a properly attached BCSP section. Locations shown for permanent lateral restraint shall have bracing installed per BCSP section 33, 37 or 410, as applicable.

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

ITW Building Components Group, Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation or bracing of trusses. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings B00A-2 for standard plate positions. A seal on this responsibility solely for the design intent. The suitability and use of this design 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; ITW-B0G: [www.itwinc.com](http://www.itwinc.com); ITWCA: [www.industry.com](http://www.industry.com); [www.itwbcg.org](http://www.itwbcg.org)

05/29/2013

TC LL	20.0 PSF	REF R487-- 70768
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13149017
BC LL	0.0 PSF	HC-ENG JB/M/PF
TOT. LD.	40.0 PSF	SEON- 298540
DUR. FAC.	1.25	
SPACING	24.0"	JREF - 1UUMM487_Z04



Top	chord	2x4	SP_#1_12A
Bot	chord	2x4	SP_#1_12A
	Wabs	2x4	SP_#3_12A

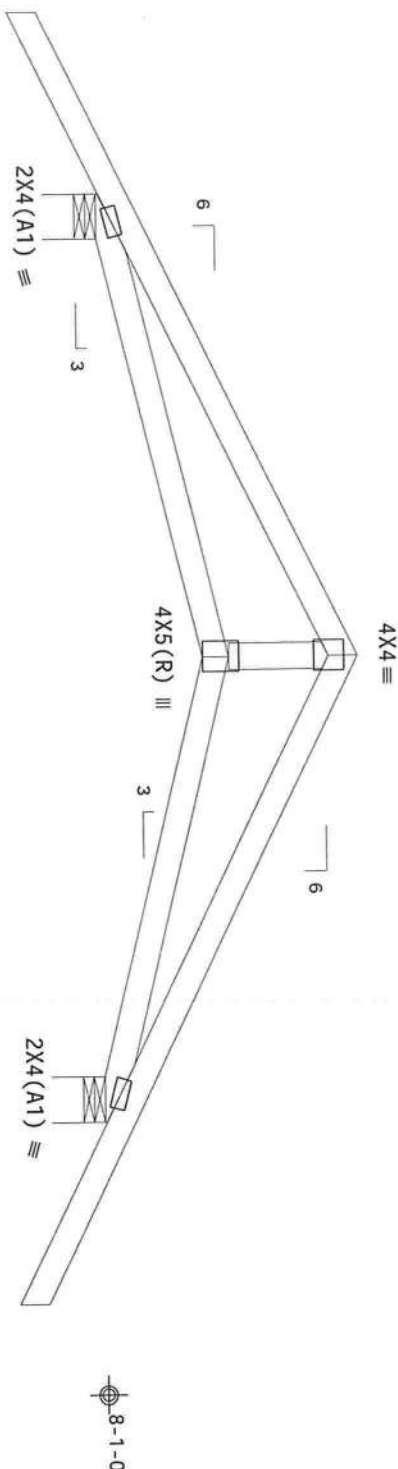
Bottom chord checked for 10.00 psf non-concurrent live load.

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY

- D1	10'2"x8	Common)
120	mph wind,	15.00 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.	GCPI(+/-)=0.18

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

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



2-0-0-0

2-0-0

5-1-4

10-2-8 Over 2 Supports

5-1-4

R=557 U=32 W=6" (6" min.)

R=557 U=32 W=6" (6" min.)  
RL=67/-67

PLT TYP.: Wave

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

No. 22839

QTY 1	FL/-/4/-/-/R/-
-------	----------------

Scale = .5"/Ft.

••IMPORTANT••

•-WARNING-• READ AND FOLLOW ALL NOTES ON THIS SHEET!

FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

Trusses require extensive care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TPI and WTC) practices prior to performing those functions. Installers shall provide temporary bracing procedures 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 shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.

ALPINE

**ITW Building Components Group Inc.**

Haines City, FL 33844  
FL COA #0278

**ITW Building Components Group** (**IBCGC**) shall not be responsible for any deviation from this document or its drawings, specifications, schedules, or other documents, or for any failure to build the truss in conformance with ANSI/TPI-1, or for handling, shipping, installing, erecting or erector's use of the truss. The manufacturer shall not be responsible for detailing or bracing of trusses. After placement to each face of trusses and position as shown above and on the Joiner Details, various noted approvals. Refer to drawings for details and dimensions. The manufacturer's acceptance of professional engineering responsibility solely for the design shown per ANSI/TPI-1 Sec. 2. For more information see: This Job's responsibility of the Building Designer.

**per AIA/TPI-1 Sec. 2**

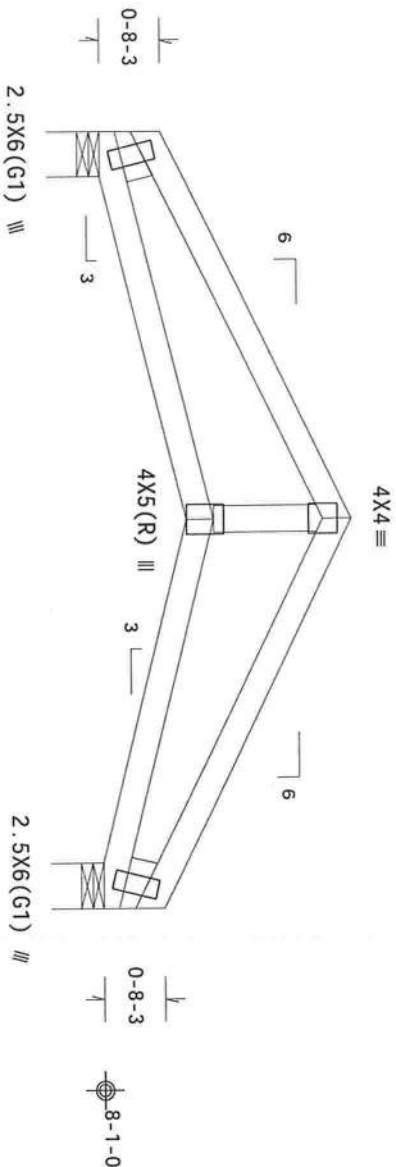
**For more information see:** This Job's general notes page; ITW-BGC: [www.itwinc.com](http://www.itwinc.com); WFLA: [www.industry.com](http://www.industry.com); [www.tlccare.org](http://www.tlccare.org).

Professional Engineer Seal for Walter P. Finn, State of Florida, License No. 22839, dated 12.03.04 to 12.03.14. The seal is circular with a dotted border. The outer ring contains the text "WALTER P. FINN" at the top and "PROFESSIONAL ENGINEER" at the bottom. The inner ring contains "FLORIDA" on the left and "STATE OF" on the right. The center contains "No. 22839" and the dates "12.03.04" and "12.03.14". There are two stars on the seal, one at the top and one at the bottom. A signature is written across the seal.

TC LL	20.0 PSF	REF	R487-- 70769
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCSR487 13149018
BC LL	0.0 PSF	HC-ENG	JB/W/PF
TOT. LD.	40.0 PSF	SEQN-	298575
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UWMA87_Z04

(13-173--Jerry Castagna Constructi Custom Res. For Jerry Cas -- Columbia County - D2 8'6"8 Common)  
 Top chord 2x4 SP\_#1\_12A  
 Bot chord 2x4 SP\_#1\_12A  
 Webs 2x4 SP\_#3\_12A  
 Lt Stub Wedge 2x4 SP\_#3\_12A: Rt Stub Wedge 2x4 SP\_#3\_12A:  
 Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.  
 Deflection meets L/240 live and L/180 total load. Creep increase factor for dead load is 1.50.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 4.50 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 MWFRS with additional C&C member design.  
 Bottom chord checked for 10.00 psf non-concurrent live load.



R=354 U=12 W=6" (6" min.)

4-3-4 8-6-8 Over 2 Supports 4-3-4  
 R=354 U=12 W=6" (6" min.)  
 RL=31/-31

PLT TYP. Wave

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

ALPINE

ITW Building Components Group Inc.  
 Haines City, FL 33844  
 FL COA #0 278

IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS SHEET.

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 WTA) for details on proper practices prior to performing these functions. Installers shall provide temporary bracing per the instructions 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 trusses shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.

ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TPI 1, or for any damage to property or injury to persons resulting from the use of this design. Refer to drawings 100A.2 for standard plate positions. A seal on this drawing or cover page listing this design, indicates acceptance of professional engineering responsibility solely for the Building Designer per ANSI/TPI 1 Sec. 2. For more information see: This job's general notes page. ITW BCSI: www.bcsi.org; WTA: www.wtaindustry.com; ICC: www.iccsafe.org



TC LL	20.0 PSF	REF	R487-- 70770
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCSR487 13149023
BC LL	0.0 PSF	HC-ENG	JB/WPF
TOT. LD.	40.0 PSF	SEQN-	298578
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UWMA87_Z04

(13-173--Jerry Castagna Constructi

Webs 2x4 SP\_#3\_12A

2012 by ALSC

improvements.

3x6.

all supports to solid bearing.

Design Crit: FBC2010Res/TP1-2007(ST) 11/11/2007  
FT/RT=10%(0%)/0(0)

12. 03. 04. 03. 06. 14

○

FL/-/4/-/-/R/-

Scale = .5"/Ft.

ALPINE

**ITW Building Components Group Inc**


Haines City, FL 33844  
FL COA #0 278

**\*\*IMPORTANT\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET**

FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.

Tenusers require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI Building Component Safety Information, by TPI and WTA. Practices refered to performing these functions. Insulators shall provide temporary bracing per Unit one attached otherwise, stop third shall have properly attached structural sheathing and become shall have a properly attached fire rating. The following are minimum lateral preventer of shall show bracing installed per BCSI sections B3, D7 or E10, as applicable.

The Building Components Group, Inc. (TBGDC) shall not be responsible for any deviation from this design. Any failure to build the Truss in conformance with ASCE/TPI 1-16, or for handling, shipping, Details, unless noted otherwise. Refer to drawings TBGDC-2 for standard plate positions. A note 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 design for any structure is the responsibility of the Building Designer per AISI/TPI 1 Sec 2. For more information see: This job # general notes page; TBGDC; www.tbdcg.com; TPI: www.tpinet.org; WTA: www.aberindustry.com; IBC: www.icbcare.org;



TC LL	20.0 PSF	REF R487-- 7077
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13149014
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT.LD.	40.0 PSF	SEQN- 298688
DUR.FAC.	1.25	
SPACING	24.0"	JREF- 1UWMM487_Z04





(a) Continuous lateral bracing equally spaced on member.

Bottom chord checked for 10.00 psf non-concurrent live load.  
 MNFRS loads based on trusses located at least 7.50 ft. from roof edge.

Right end vertical not exposed to wind pressure.  
In lieu of structural panels use purlins to brace all flat TC @ 24" OC.

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



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

BC2010Res/TP1-2007(STB)  
FT/RT=10%(0%)/0(0)

12.03.04.026.14

0.75

Scale = .25"/Ft.

**ITW Building Components Group Inc.**

Haines City, FL 33844  
FL COA #0278

[illegible]

05/29/2013

FL/-/4/-/-/R/-		Scale = .25"/Ft.
TC LL	20.0 PSF	REF R487-- 70773
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13149025
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298632
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWM487_Z04



Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

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

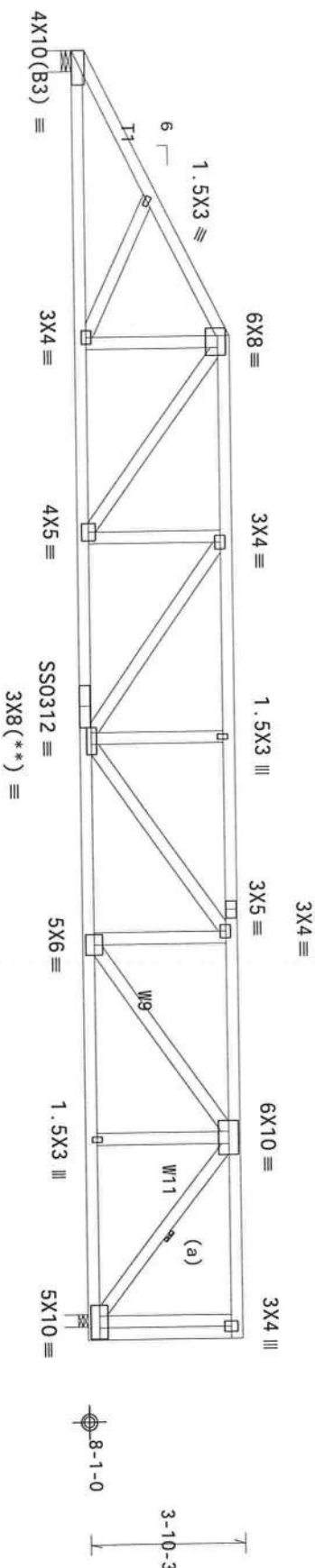
120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf, GCPI (+/-)=0.18

Wind loads and reactions based on MWFRS.

Right canti lever is exposed to wind

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

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



7'-0" 0  
R=2805 U=167 W=6" (6" min.)

PIT TYP 18 Gauge HS. Wave

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

★1 $\frac{1}{2}$ .03.04.0326.14

10

FL/-/4/-/-/R/-

Scale = .25 / Ft.

R=2980 U=176 W=3.5" (3.5" min.)

ALPINE

ITW Building Components Group Inc

Haines City, FL 33844  
FL COA #0278

[illegible]

Professional Engineer Seal for Walter P. Finn, State of Florida, License No. 22839, expires 12-03-04.

05/29/2013

FL/-4/-/-R/-	Scale= .25 /ft.
TC LL 20.0 PSF	REF R487-- 70775
TC DL 10.0 PSF	DATE 05/29/13
BC DL 10.0 PSF	DRW HCUSR487 13149040
BC LL 0.0 PSF	HC-ENG JB/WPF
TOT.LD. 40.0 PSF	SEQN- 298678
DUR.FAC. 1.25	
SPACING 24.0"	JREF- 1UWMM487_Z04

(13-173--Jerry Castagna Construct Custom Res. For Jerry Cas -- Columbia County - H17A 31'5"8 Special)  
Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

Right cantilever is exposed to wind

(a) Continuous lateral bracing equally spaced on member.

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

MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

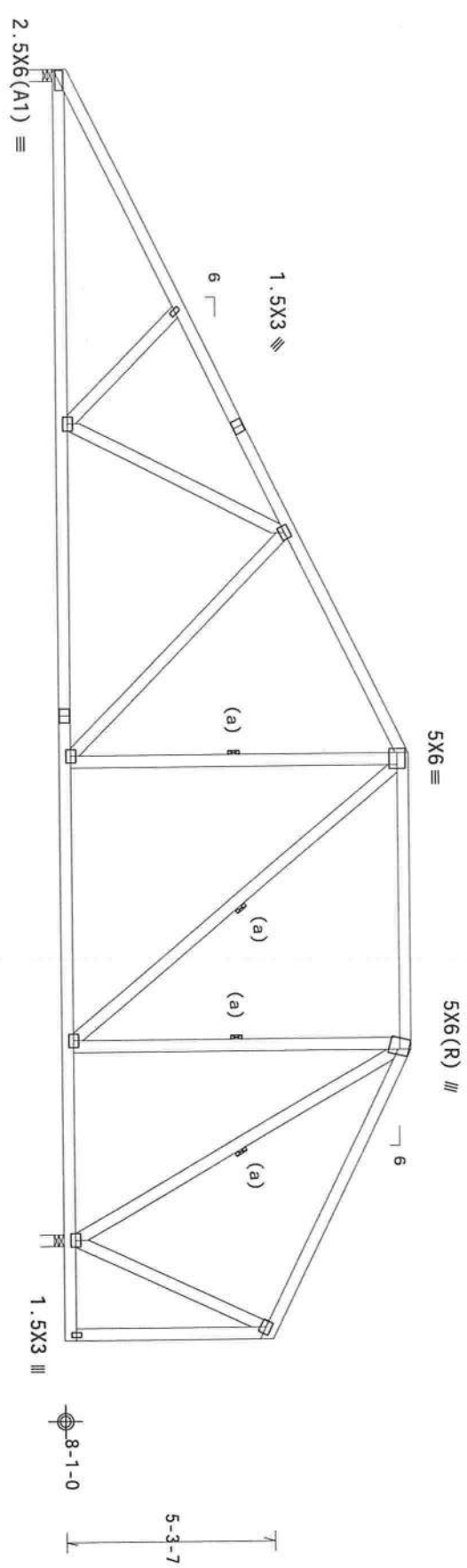
120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf. GCPI(+/-)=0.18

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

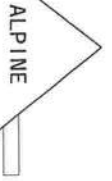
Right end vertical not exposed to wind pressure.

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

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



17'-0-0  
31'-5-8 Over 2 Supports  
7'-1-8  
R=1195 U=0 W=3.499" (3.499" min.)  
RL=107/-71  
R=1400 U=0 W=3.5" (3.5" min.)  
Note: All Plates Are 3X4 Except As Shown.  
Design Crit: FBC2010Res/TP1-2007 (STB)  
FT/RT=10%(0%)/0(0)  
PLT TYP. Wave  
Scale = .25"/Ft.



ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TPI and WTA) for practices prior to performing these functions. Installers shall provide temporary bracing per unions noted otherwise. Top chord shall have properly attached structural sheathing and bottom chord shall have properly attached rigid ceiling. Locations shown for permanent lateral restraint of shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TPI 1, or for any damage to property or injury to persons resulting from the use of this design. The user of this design shall assume responsibility for the design shown. A seal on this drawing or cover page listing this design. The suitability and use of this design 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; ITW-BCG: www.itwbcg.com; TPI: www.tpiinc.org; WTA: www.wtaindustry.com; IBC: www.icbcare.org



FL/-/4/-/-/R/-		Scale = .25"/Ft.	
TC LL	20.0 PSF	REF	R487-- 70776
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCUSR487 13149027
BC LL	0.0 PSF	HC-ENG	JB/WPF
TOT. LD.	40.0 PSF	SEQN-	298618
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UWMM487_Z04



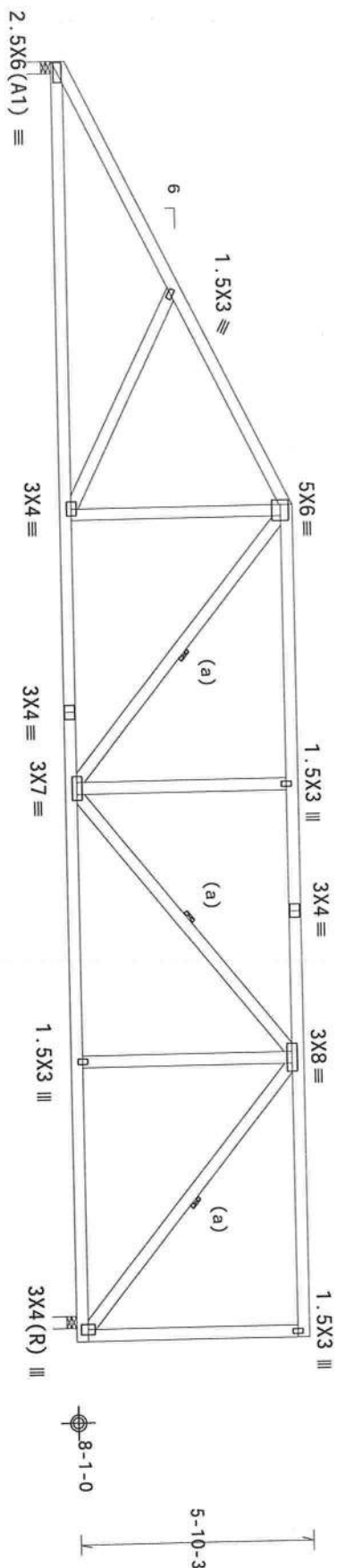
(a) Continuous lateral bracing equally spaced on member. Right cantilever is exposed to wind

Bottom chord checked for 10.00 psf non-concurrent live load.  
 MNMFRS loads based on trusses located at least 7.50 ft. from roof edge.

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

Right end vertical not exposed to wind pressure.  
In lieu of structural panels use purlins to brace all flat TC @ 24" OC.

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



11-0-0  
R=1281 U=36 W=3.499" (3.499" min.)  
RL=90/-21

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

2.03.04. ~~2026~~ 14

FL/-/4/-/-/R/-	Scale = .25"/Ft.
----------------	------------------

PLT TYP. Wave



ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

••WARNING•• READ AND FOLLOW ALL NOTES ON THIS SHEET!  
 ADVISE YOUR DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.

[illegible]

ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design and failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation &

[illegible]

05/29/2013

FL/-/4/-/-/R/-		Scale = .25"/Ft.
TC LL	20.0 PSF	REF R487-- 70777
TC DL	10.0 PSF	DATE 05/29/13
BC DL	10.0 PSF	DRW HCUSR487 13149028
BC LL	0.0 PSF	HC-ENG JB/WPF
TOT. LD.	40.0 PSF	SEQN- 298637
DUR. FAC.	1.25	
SPACING	24.0"	JREF- 1UWM487_Z04

(13-173--Jerry Castagna Constructi Custom Res. For Jerry Gas -- Columbia County - A4 41'4" Seepdown Hip)  
Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

(a) Continuous lateral bracing equally spaced on member.

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

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

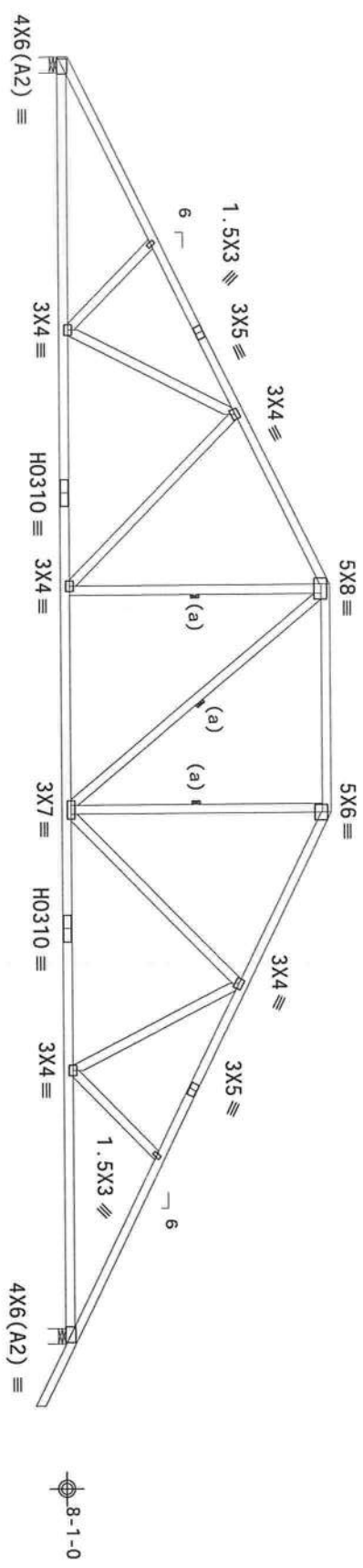
120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf, GCpl(+/-)=0.18

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

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

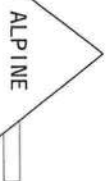
Bottom chord checked for 10.00 psf non-concurrent live load.

MMFRS loads based on trusses located at least 15.00 ft. from roof edge.



17-0-1 7-3-14 17-0-1  
41-4-0 Over 2 Support  
R=1878 U=0 W=6" (6" min.)  
RL=153/-144  
R=2010 U=0 W=6" (6" min.)

PLT TYP. 20 Gauge HS.Wave  
Design Crit: FBC2010Res/TP1-2007(Std)  
FT/RT=10%(0%)/0(0)  
12.03.04 032014  
FL/-/4/-/-/R/- Scale = .1875"/Ft.



ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278

**\*\*IMPORTANT\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET.  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TP1 and WTCA) practices prior to performing these functions. Installers shall provide temporary bracing 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 shall have bracing installed per BCSI sections 63, 67 or 810, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or for any failure to build the truss in conformance with ANSI/TP1 1, or for handling, shipping, directing or erecting the truss. The user of this design shall be responsible for the design, the drawing or cover page listing the design shown. The suitability and use of this design for any structure is the responsibility of the Building Designer per ANSI/TP1 1 Sec 2. For more information see: This Job's general notes page, ITW BCSI: www.bcsi.com; TP1: www.tpinc.org; WTCA: www.structure.com; IBC: www.international.org



TC LL	20.0 PSF	REF	R487-- 70778
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCUSR487 13149029
BC LL	0.0 PSF	HC-ENG	JB/WPF
TOT. LD.	40.0 PSF	SEQN-	298691
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UWM487_Z04

(13-173--Jerry Castagna Constructi Custom Res. For Jerry Cas -- Columbia County - PB1 7'3"14 Common)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

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

In lieu of rigid ceiling use purlins to brace BC @ 24" OC.

MMFRS loads based on trusses located at least 17.85 ft. from roof edge.

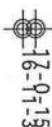
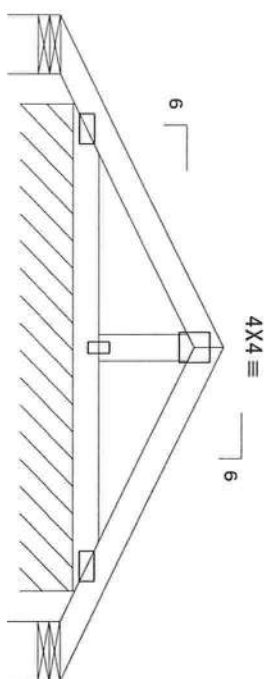
Refer to DWG PB160100212 for piggyback details.

Special loads

-----Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC- From 62 pif at 0.00 to 62 pif at 3.66  
TC- From 62 pif at 3.66 to 62 pif at 7.32  
BC- From 4 pif at 0.00 to 4 pif at 7.32

120 mph wind, 17.85 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=2.0 psf, GCPI(+/-)=0.18

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



R=5 Rw=12 U=14 W=7.826" (7.826" min.)  
RL=25/-25

R=81 PLF U=4 PLF W=5-4-4

PLT TYP. Wave

Design Crit: FBC2010Res/TPI-2007(STE)  
FT/RT=10%(%) / 0(0)

\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TPI and WPCA) for 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. All bracing shall be installed in accordance with BCSI, BSI or BSI, as applicable.

The Building Components Group Inc. (TMBG) shall not be responsible for any deviation from this design and/or construction. The Building Components Group Inc. is not responsible for the design, fabrication, bracing or trusses. Apply place to own trusses and structures. 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 design 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, TMBG, www.tmbg.com, TPI: www.tpiinc.org, WPCA, www.wpcaindust.com, TPI: www.tpiinc.org



ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278

FL/-/4/-/-/R/-	Scale = .5"/Ft.
TC LL 20.0 PSF	REF R487-- 70779
TC DL 10.0 PSF	DATE 05/29/13
BC DL 10.0 PSF	DRW HCUSR487 13149030
BC LL 0.0 PSF	HC-ENG JB/WPF
TOT. LD. 40.0 PSF	SEON- 298692
DUR. FAC. 1.25	
SPACING 24.0"	JREF- 1UWM487_Z04

(13-173--Jerry Castagna Constructi Custom Res. For Jerry Cas -- Columbia County - A1 39'-4" Steepdown Hip)  
Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

(a) Continuous lateral bracing equally spaced on member.

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

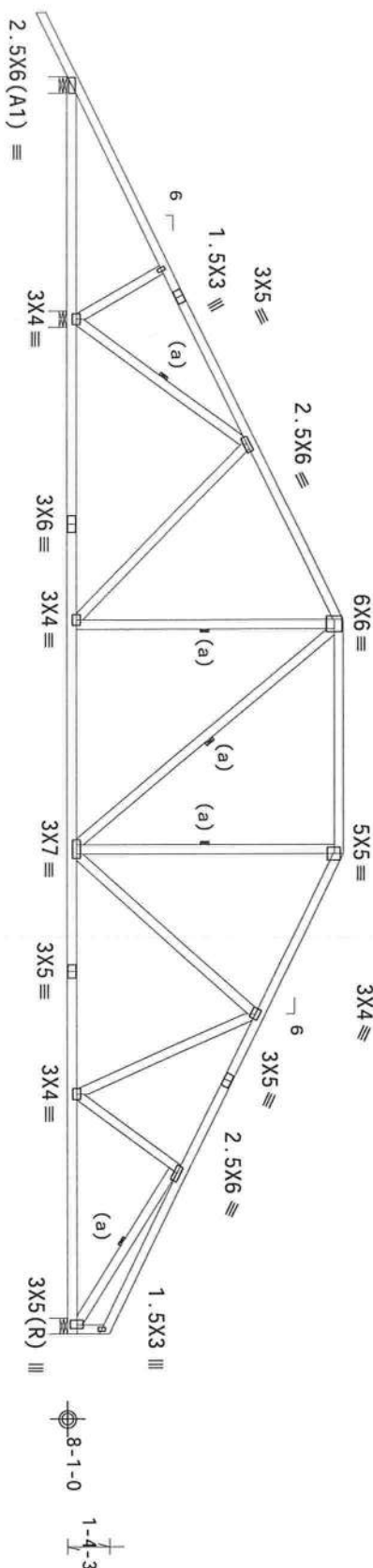
MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

120 mph wind, 15.00 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.

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

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



Design Crit: FBC2010Res/TP1-2007(STB)  
FT/RT=10%(0%)/0(0)  
R=377 U=3 W=6" (6" min.)  
R=1789 U=0 W=6" (6" min.)  
R=1273 U=0 W=6" (6" min.)  
R=138/-140

PLT TYP. Wave

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

No. 22839  
WALTER P. FINN  
FLORIDA  
PROFESSIONAL ENGINEER  
05/29/2013

ALPINE

NTW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

\*\*IMPORTANT\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET.  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information, by TPI and WTC) for practices prior to performing these functions. Installers shall provide temporary bracing per truss notes otherwise, top chord shall have properly attached structural sheathing and bottom shall have a properly attached 7/8" x 6" x 6" blocking. Trusses shall be installed per BCSI Section 83, B7 or B10, as applicable.

NTW Building Components Group Inc. (NTWBCCI) shall not be responsible for any deviation from this design or for any damage to property or persons resulting from the use of this design. 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 design for any structure is the responsibility of the Building Designer, per ANSI/TP1 3 Sec. 2. For more information see: This Job's Truss notes page, the BCSI, www.bcsi.org, WTC, www.wtcindustry.com, TPI, www.tpiinc.com, IBC, www.international.org

FL/-/4/-/-/R/-	Scale = .1875"/Ft.
TC LL	20.0 PSF
TC DL	10.0 PSF
BC DL	10.0 PSF
BC LL	0.0 PSF
TOT. LD.	40.0 PSF
DUR. FAC.	1.25
SPACING	24.0"
REF	R487-- 70780
DATE	05/29/13
DRW	HCUSR487 13149031
HC-ENG	JB/WPF
SEQN	298694
JREF	1UWM487_204



THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR.  
(down Hip)

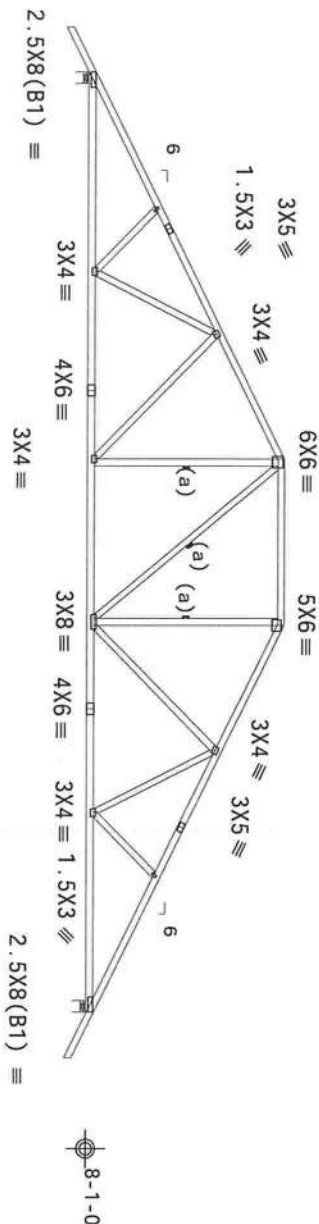
120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf, GCoI (+/-)=0.18

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

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

[illegible]

factor for dead load is 1.50.



Technical drawing of a bridge section. The drawing shows a cross-section of a bridge with a total width of 17'-0" and a height of 41'-4" over 2 supports. The drawing includes a license stamp for "WALTER P. FIANN" and "LICENSE". Dimensions are given in feet and inches, with a note "R=1836 U=0 W=6" (6" min.)". The drawing also shows a "2'-0" dimension on the right side.

17'-0"

41'-4" Over 2 Supports

2'-0"

WALTER P. FIANN  
LICENSE

R=1836 U=0 W=6" (6" min.)

Scale = .125"/Ft.

REF R487-- 7078

DATE	05/29/13
DRW	HCUSR487 1314903

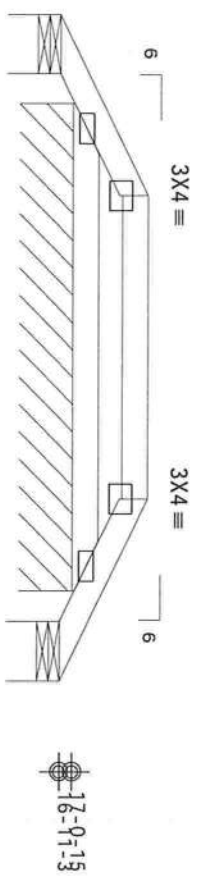
HC-ENG JB/WPF

---

JREF- 1UWM487\_Z04

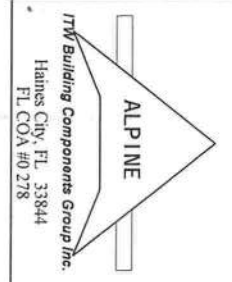
Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Lumber grades designated with "12A" use design values approved  
1/5/2012 by ALSC.  
120 mph wind, 17.43 ft mean hgt, ASCE 7-10, CLOSED bldg, Located  
anywhere in roof, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC  
DL=2.0 psf, GCPi (+/-)=0.18  
Wind loads and reactions based on MMFRS with additional C&C member  
design.  
MMFRS loads based on trusses located at least 17.43 ft. from roof  
edge.  
Refer to DWG PB160100212 for piggyback details.

Special loads  
-----  
Lumber Dur. Fac.=1.25 / Plate Dur. Fac.=1.25)  
TC- From 62 pif at 0.00 to 62 pif at 2.00  
TC- From 62 pif at 2.00 to 62 pif at 5.33  
TC- From 62 pif at 5.33 to 62 pif at 7.33  
BC- From 4 pif at 0.00 to 4 pif at 7.33  
In lieu of structural panels or rigid ceiling use purlins to brace all  
flat TC @ 24" OC, all BC @ 24" OC.  
Deflection meets L/240 live and L/180 total load. Creep increase  
factor for dead load is 1.50.



R=7 U=11 W=7.826" (7.826" min.)  
R=80 PLF U=9 PLF W=5-4-4

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



\*\*\*IMPORTANT\*\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Re-  
follow the latest edition of BCSI (Building Component Safety) Information, by TPI and WIGA) for  
practices prior to performing truss functions. Installers shall provide temporary bracing per BCSI  
and shall have properly attached structural sheathing and bottom chord bracing. Trusses shall  
shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design  
any failure to build the truss in accordance with ANSI/TPI 1 Spec. 2. For more information see: This Job's  
drawing or cover page listing this drawing, indicates acceptance of professional engineering  
responsibility for the design shown. The suitability and use of this design for any structure is  
general notes page 1 of 1. ITW BCS: www.bcs.com; TPI: www.tpiinc.org; WIGA: www.wiga.com

FL/-4/-/-/R/-		Scale = .5"/Ft.	
TC LL	20.0 PSF	REF	R487-- 70782
TC DL	10.0 PSF	DATE	05/29/13
BC DL	10.0 PSF	DRW	HCUSR487 13149033
BC LL	0.0 PSF	HC-ENG	JB/WPF
TOT. LD.	40.0 PSF	SEON-	298697
DUR. FAC.	1.25		
SPACING	24.0"	JREF-	1UWMM487_Z04



Top chord 2x4 SP #1 12A  
Bot chord 2x4 SP #1 12A  
Webs 2x4 SP #3 12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

(a) Continuous lateral bracing equally spaced on member.

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

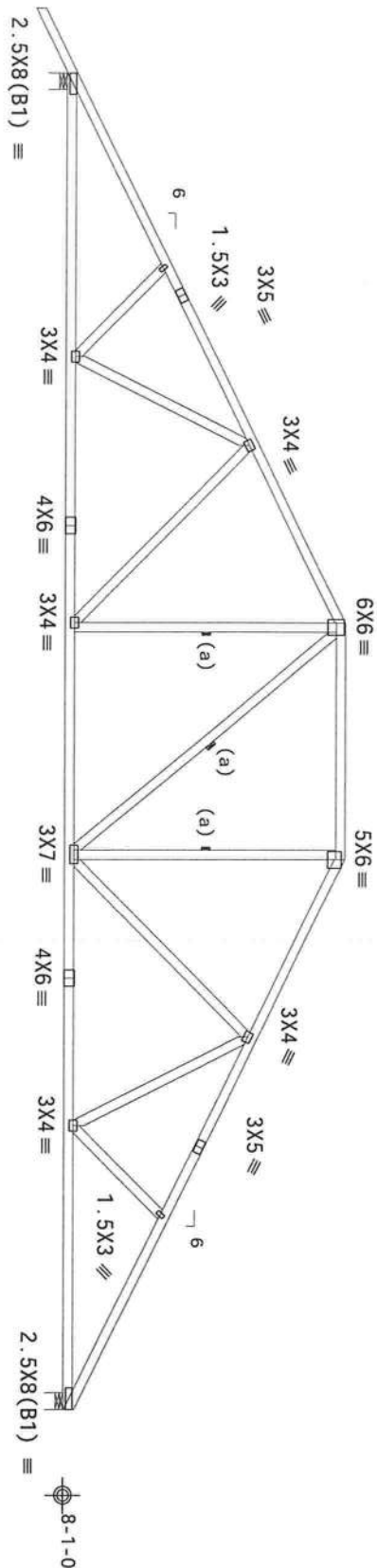
MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

120 mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13.00 ft from roof edge, 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.

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

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



17-0-1 7-3-14 17-0-1  
41-4-0 Over 2 Spans  
R=1840 U=0 W=6" (6" min.)  
RL=144/-153  
R=1698 U=0 W=6" (6" min.)

PLT TYP. Wave

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

No. 22839  
WALTER P. FINN  
FLORIDA  
STATE OF  
PROFESSIONAL ENGINEER  
05/29/2013

FL/-/4/-/R/-

Scale = .1875"/Ft.

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278

**\*\*IMPORTANT\*\*** FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Read and follow the latest edition of BCSI (Building Component Safety Information, by TPI and WTC) for proper practices prior to performing these functions. Installers shall provide temporary bracing per the drawings and specifications. Trusses shall be properly braced and secured to the structure. Trusses shall have bracing installed per BCSI sections B3, B7 or B10, as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or for any failure to build the truss in accordance with ASCE/TP1 1, or for handling, shipping, installation or bracing of trusses. 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. A seal on this drawing or cover page listing this design, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this design for any structure is the responsibility of the user. This design is not to be used for any other purpose. This job is general notes page: ITW BCSI: www.bcsi.org; WTC: www.wtc.com; TPI: www.tpi-inc.com; This job is IBC: www.icsafe.org

TC LL	20.0 PSF	REF	R487--	70784
TC DL	10.0 PSF	DATE	05/29/13	
BC DL	10.0 PSF	DRW	HCSR487	13149035
BC LL	0.0 PSF	HC-ENG	JB/WPF	
TOT. LD.	40.0 PSF	SEQN-	298701	
DUR. FAC.	1.25			
SPACING	24.0"	JREF-	1UWM487_Z04	



Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

Right canti lever is exposed to wind

(a) Continuous lateral bracing equally spaced on member.

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

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

120. mph wind, 15.00 ft mean hgt, ASCE 7-10, CLOSED bldg, TC 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.  $G C p i (+/-) = 0.18$

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

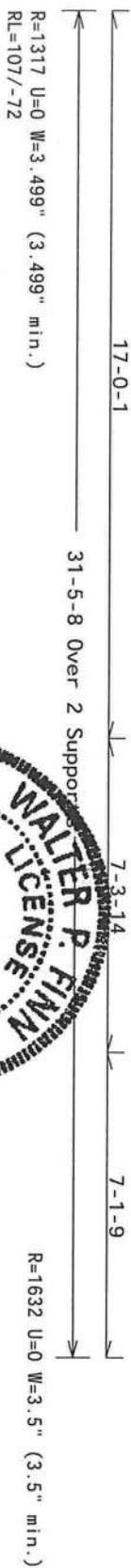
Right end vertical not exposed to wind pressure.

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

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

MMFRS loads based on trusses located at least 15.00 ft. from roof edge.

5X6  $\equiv$  5X6(R)  $\equiv$



R=1317 U=0 W=3.499" (3.499" min.)  
RL=107/-72

Note: All Plates Are 3X4 Except As Shown.

Design Crit: FBC2010Res/TP1-2007 (Std)

PLT TYP. Wave

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

Trucks requiring extreme care in fabricating, handling, shipping, installing, and bracing. Inspectors shall follow the latest edition of BCSI (Building Component Safety Information, by TPI and WTA) practices prior to performing these functions. Inspectors shall provide temporary bracing and shoring as needed otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have properly attached rigid collar. Bracing shall have properly attached lateral restraint. Lateral restraint shall have bracing installed per BCSI sections D3, D7 or D10, as applicable.

[illegible]

WALTER P. FINN  
LICENSE  
No. 22839  
12-03-04  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

FL/-/4/-/-/R/-	Scale = .25"/Ft.
TC LL 20.0 PSF	REF R487-- 70785
TC DL 10.0 PSF	DATE 05/29/13
BC DL 10.0 PSF	DRW HCURS487 13149036
BC LL 0.0 PSF	HC-ENG JB/W/PF
TOT.LD. 40.0 PSF	SEQN- 298711
DUR.FAC. 1.25	
SPACING 24.0"	JREF- 1UWM487_Z04

THIS DETAIL IS TO BE USED WHEN CONTINUOUS LATERAL BRACING (CLB) IS SPECIFIED ON A TRUSS DESIGN BUT AN ALTERNATIVE WEB BRACING METHOD IS DESIRED.

THIS DETAIL IS ONLY APPLICABLE FOR CHANGING THE SPECIFIED CLIB SHOWN ON SINGLE PLY SEALED DESIGNS TO T-BRACING OR SCAB BRACING.

ALTERNATIVE BRACING SPECIFIED IN CHART BELOW MAY BE CONSERVATIVE FOR MINIMUM ALTERNATIVE BRACING. RE-RUN DESIGN WITH APPROPRIATE BRACING.

WEB MEMBER SIZE	SPECIFIED CLR BRACING	ALTERNATIVE BRACING T OR L-BRACE	SCAB BRACE
2X3 OR 2X4 2X3 OR 2X4	1 ROW 2 ROWS	2X4 2X6	1-2X4 2-2X4
2X6 2X6	1 ROW 2 ROWS	2X4 2X6	1-2X6 2-2X4(※)
2X8 2X8	1 ROW 2 ROWS	2X6 2X6	1-2X8 2-2X6(※)

I-BRACE, L-BRACE AND SCAB BRACE 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.



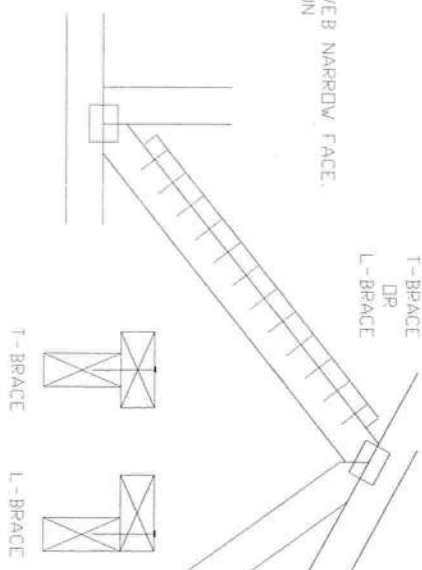
Building Components Group Inc.

Building Components Group Inc.

Earth City, MO 63045

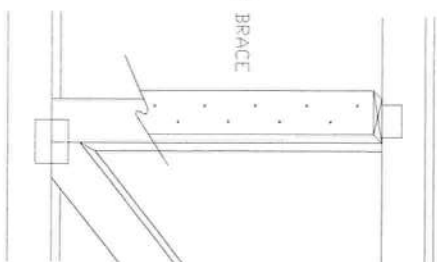
T-BRACING  
DR  
L-BRACING

APPLY TO EITHER SIDE OF WEB NARROW FACE  
ATTACH WITH 10d BOX OR GUN  
C0128 x 3" (MIN) NAILS  
AT 6" O.C.  
BRACE IS A  
MINIMUM 80% OF WEB  
MEMBER LENGTH



## SCAB BRACING:

APPLY SCABS TO WIDE FACE OF WEB  
NO MORE THAN (1) SCAB PER FACE.  
ATTACH WITH 10d BOX DR GUN  
CO.128"x 3" MIN) NAILS.  
AT 6" O.C.  
BRACE IS A MINIMUM  
80% OF WEB MEMBER LENGTH



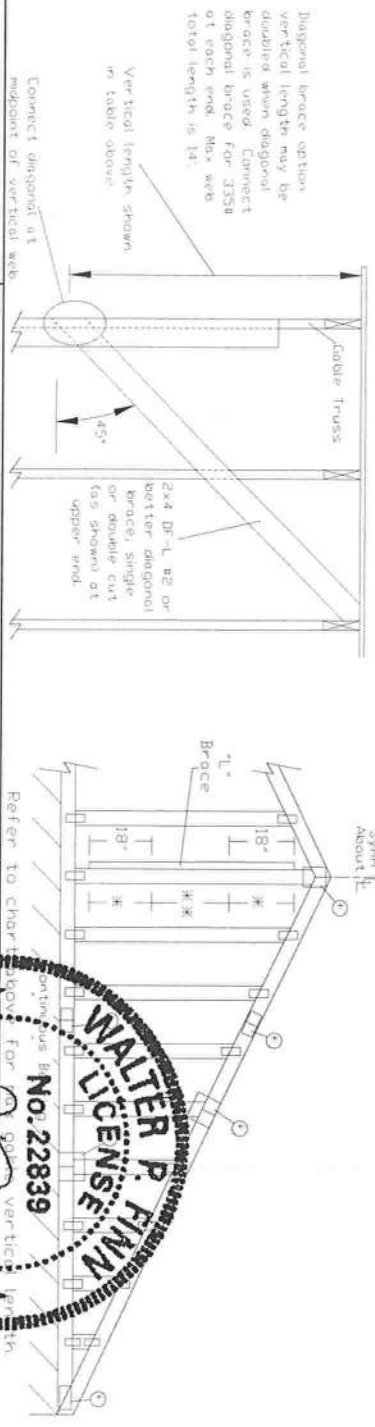
05/29/2013  
May 29 '13

TC LL	PSF	REF	CLB	SUBST.
TC DL	PSF	DATE	1/1/09	
BC DL	PSF	DRWG	BRCLBSUB0109	
BC LL	PSF			
TDI. LD.	PSF			
DUR. FAC.				
SPACING				

# ASCE 7-10: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00 Dr. 100 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00 Dr. 100 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00

## Gable Stud Reinforcement Detail

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



Building Components Group Inc.

11W Building Components Group Inc. shall not be responsible for any deviation from this drawing, any building code, or any other applicable code. The user of this drawing is responsible for obtaining all necessary permits and for ensuring that the design complies with all applicable codes and standards. The user of this drawing is also responsible for ensuring that the design is suitable for the intended use and for the intended location. The user of this drawing is also responsible for ensuring that the design is suitable for the intended use and for the intended location.



Earth City, MO 63045

May 29 '13

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF ASCE7-10-GAB1015

DATE 2/14/12

DRWG A12015ENC100212

Bracing Group Species and Grades:			
Group A	Spruce-Pine-Fir	Heir-Fir	Stud
	#1 / #2	Standard	#3
Group B	Douglas Fir-Larch	Southern Pine***	Standard
	#3	Stud	Standard
Group B			
Heir-Fir			
#1 & Bir			
Douglas Fir-Larch			
Southern Pine***			
#1			
#2			

1x4 Braces shall be SRR (Stress-Rated Boards) or Industrial 43 Stress-Rated Boards. Group B values may be used with these grades.

Gable Truss Detail Notes:

Wind Load direction criterion is L/240.

Provide uplift connections for 35 psf over continuous bearing (5 psf TC Dead Load).

Gable end supports load from 4' o.c. outleaves with 2' o.c. overhang, or 12" plywood overhang.

So. Pine lumber design values based on the ALSC January, 2012 rule.

Attach "L" braces with 10d (128x30" min) nails.

# For (1) "L" brace: space nails at 2' o.c. in 18" end zones and 4' o.c. between zones.

# For (2) "L" braces: space nails at 3' o.c. in 18" end zones and 6' o.c. between zones.

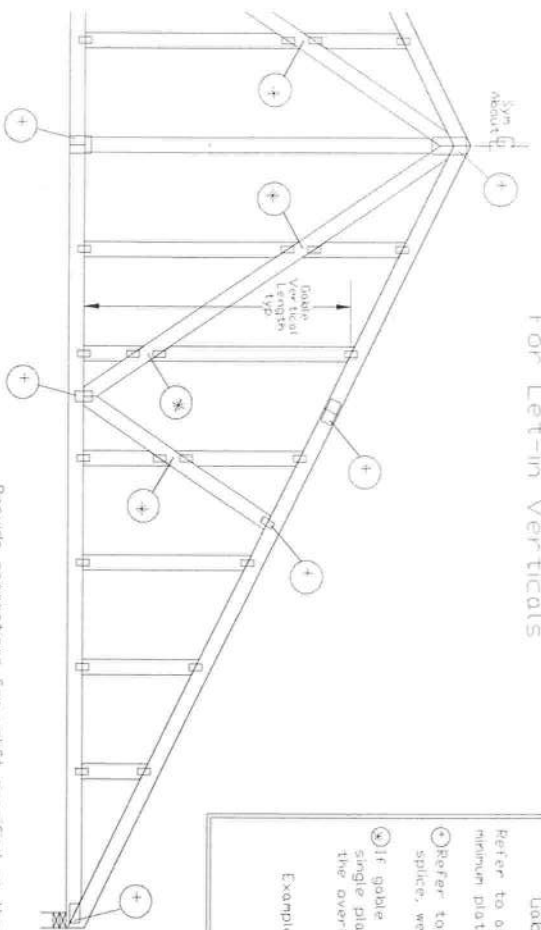
"L" bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes		
Vertical Length	No Splice	
Less than 4' 0"	1x4 or 2x3	
Greater than 4' 0", but less than 11' 6"	2x4	
Greater than 11' 6"	2x4	

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

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

# Gable Detail For Let-In Verticals

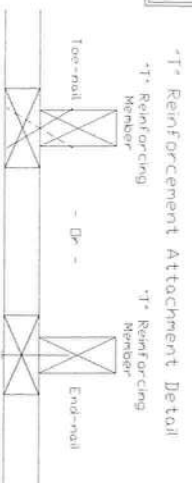


Gable Truss Plate Sizes  
Refer to appropriate ITW gable detail for minimum plate sizes for vertical studs.

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:



To convert from 'L' to 'T' reinforcing members, multiply 'T' increase by length (based on appropriate ITW 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

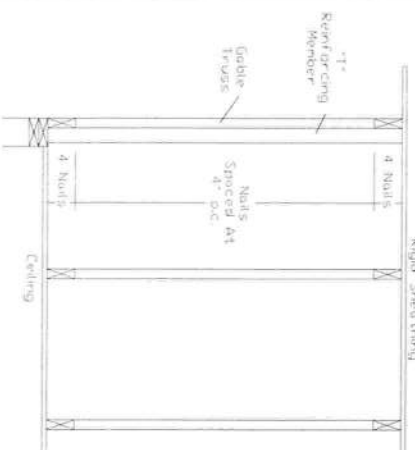
'T' Reinf. Size	Increase
2x4	30 %
2x6	20 %

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"

Provide connections for uplift specified on the engineered truss design.  
Attach each 'T' reinforcing member with:  
End Driven Nails:  
10d Common (0.148 x 3" min) Nails at 4' o.c. plus  
(4) nails in the top and bottom chords.  
Toenailed Nails:  
10d Common (0.148 x 3" min) Toenails at 4' o.c. plus  
(4) toenails in the top and bottom chords.  
This detail to be used with the appropriate ITW gable detail for ASCE wind load.

ASCE 7-98 Gable Detail Drawings  
A13015980109, A12015980109, A1015980109, A10015980109,  
A13030980109, A12030980109, A1030980109, A10030980109  
ASCE 7-02 Gable Detail Drawings  
A13015020109, A12015020109, A1015020109, A10015020109,  
A13030020109, A12030020109, A1030020109, A10030020109  
ASCE 7-05 Gable Detail Drawings  
A13015050109, A12015050109, A1015050109, A10015050109,  
A13030050109, A12030050109, A1030050109, A10030050109  
ASCE 7-10 Gable Detail Drawings  
A13151515100212, A120151515100212, A140151515100212,  
A180151515100212, A200151515100212, A20151515100212,  
A13130130100212, A12030130100212, A14030130100212,  
A18030130100212, A20030130100212, A20130130100212

See appropriate ITW gable detail for maximum allowable gable vertical length.



Building Components Group Inc.

Earth City, MO 63045



05/29/2013

May 29 '13

REF	LET-IN VERT
DATE	2/16/12
DRWG	GBLETTIN0212
MAX. TOT. LD.	60 PSF
DUR. FAC.	ANY
MAX. SPACING	24.0"

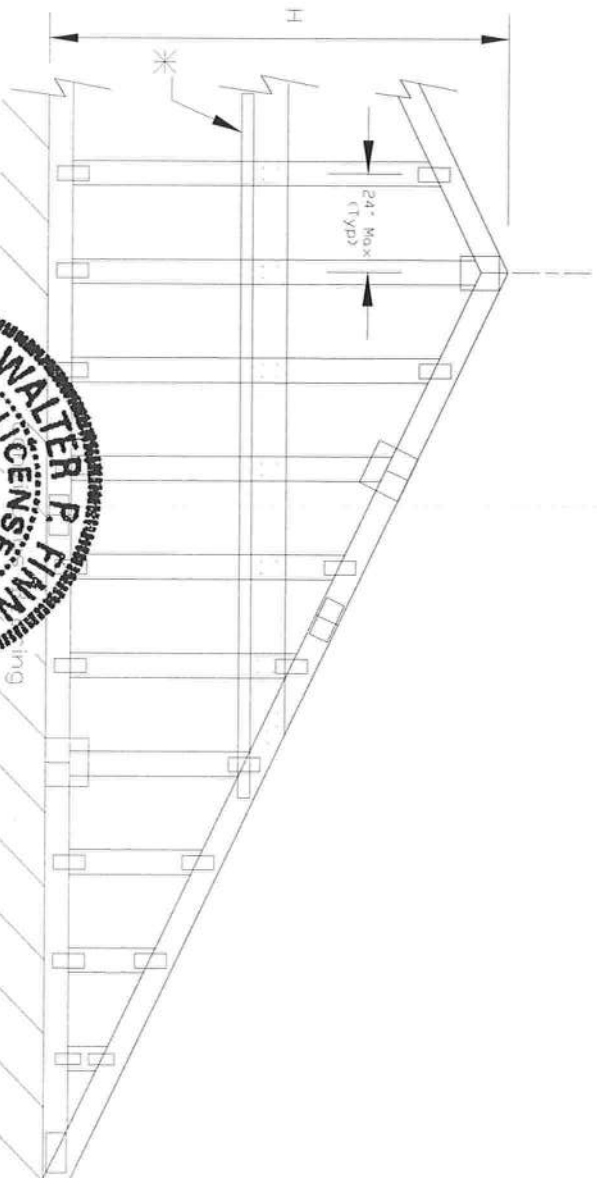
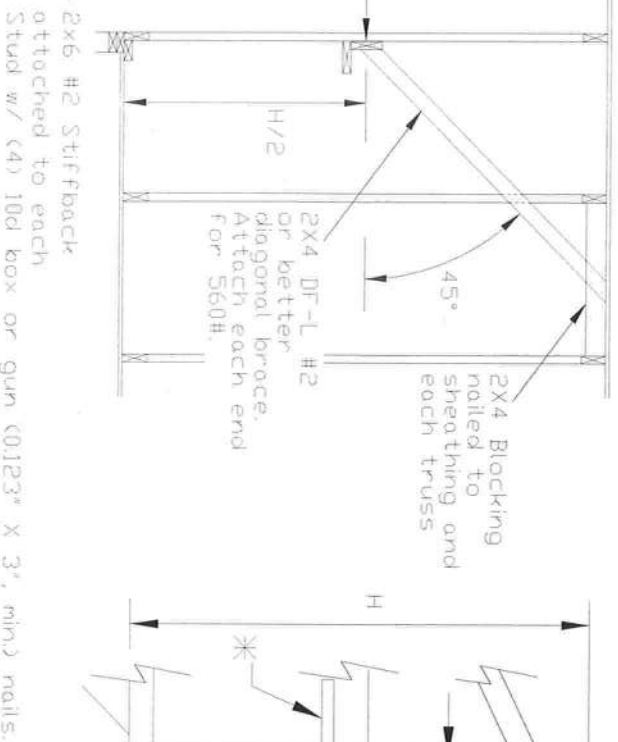
# ASCE 7-10: 120 mph, 30' Mean Height, Closed, Exposure C Common Residential Gable End Wind Bracing Requirements - Stiffeners

120 mph, 30ft. Mean Hgt, ASCE 7-10, Enclosed, Exp C, or 100 mph, 30ft. Mean Hgt, ASCE 7-10, Enclosed, Exp D, or 100 mph, 30ft. Mean Hgt, ASCE 7-10, Part, Enclosed, Exp C, Kzt = 1.00, Wind TC DL=5.0 psf, Wind BC DL=5.0 psf.

Lateral chord bracing requirements  
Top: Continuous roof sheathing  
Bot: Continuous ceiling diaphragm

See Engineer's sealed design referencing this detail for lumber, plates, and other information not shown on this detail.

Nails: 10d box or gun (0.128"x3", min.) nails.



- H Less than 4'6" - no stud bracing required
- H Greater than 4'6" to 7'6" in length provide a 2x6 stiffback at mid-height and brace stiffback to roof diaphragm every 6'0" (see detail below or refer to DWG A12030ENC10).
- H Greater than 7'6" to 12'0" max: provide a 2x6 stiffback at mid-height and brace to roof diaphragm every 4'0" (see detail below or refer to DWG A12030ENC10).
- \* Optional 2x L-reinforcement attached to stiffback with 10d box or gun (0.128" x 3", min.) nails @ 6" o.c.



Building Components Group Inc.

Earth City, MO 63045

\*\*IMPORTANT\*\* READ AND FOLLOW ALL NOTES ON THIS BRACING DRAWING. FURNISH THE FOLLOWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS:

Trusses receive extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCS (Building Components Safety Information, by TPI and VITA) for details on proper handling, shipping, installation, and bracing. Trusses shall be braced in accordance with the BCS (Building Components Safety Information, by TPI and VITA) for details on proper handling, shipping, installation, and bracing. Trusses shall have a properly attached rigid ceiling. Locations shown for permanent lateral bracing of webs shall have bracing installed per BCS 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 1000-2 for standard plate positions.

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 of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of this drawing for any structure. It is the responsibility of the engineer to ensure the suitability and use of this drawing for any structure. For more information see this job's general notes page and these web sites: <http://www.bcsa.com>, <http://www.tpi.com>, <http://www.vita.com>, <http://www.ansi.org>, <http://www.icc.com>, <http://www.csa.ca>



May 29 '13

REF	GE	WHALE
DATE	2/14/12	
DRWG	GABST100212	

MAX. TOT. LD. 60 PSF  
MAX. SPACING





