

This document has been electronically signed and sealed using a Digital Signature. Printed copies without an original signature must be verified using the original electronic version.



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

COA #0 278 04/13/2021

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	Job Number: 20-4515
Job Description: Steedley Residence	
Address: FL	

Job Engineering Criteria:			
Design Code: FBC 7th Ed. 2020 Res	IntelliVIEW Version: 20.01.01A		
	JRef #: 1X4J2150007		
Wind Standard: ASCE 7-16 Wind Speed (mph): 130	Design Loading (psf): 40.00		
Building Type: Closed			

This package contains general notes pages, 13 truss drawing(s) and 3 detail(s).

Item	Drawing Number	Truss
1	103.21.1405.09100	A01
3	103.21.1405.15973	A03
5	103.21.1406.45990	A05
7	103.21.1406.52340	B02
9	103.21.1407.01720	B04
11	103.21.1407.08767	C02
13	103.21.1407.17157	J01
15	A14015ENC160118	

Item	Drawing Number	Truss
2	103.21.1405.11583	A02
4	103.21.1406.11567	A04
6	103.21.1406.48407	B01
8	103.21.1406.55237	B03
10	103.21.1407.04897	C01
12	103.21.1407.10777	HJ01
14	BRCLBSUB0119	
16	GBLLETIN0118	



# **General Notes**

# Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:

The design responsibilities assumed in the preparation of these design drawings are those specified in ANSI/TPI 1, Chapter 2; and the National Design Standard for Metal Plate Connected Wood Truss Construction, by the Truss Plate Institute. The truss component designs conform to the applicable provisions of ANSI/TPI 1 and NDS, the National Design Specification for Wood Construction by AWC. The truss component designs are based on the specified loading and dimension information furnished by others to the Truss Design Engineer. The Truss Design Engineer has no duty to independently verify the accuracy or completeness of the information provided by others and may rely on that information without liability. The responsibility for verification of that information remains with others neither employed nor controlled by the Truss Design Engineer. The Truss Design Engineer's seal and signature on the attached drawings, or cover page listing these drawings, indicates acceptance of professional engineering responsibility solely for the truss component designs and not for the technical information furnished by others which technical information and consequences thereof remain their sole responsibility.

The suitability and use of these drawings for any particular structure is the responsibility of the Building Designer in accordance with ANSI/TPI 1 Chapter 2. The Building Designer is responsible for determining that the dimensions and loads for each truss component match those required by the plans and by the actual use of the individual component, and for ascertaining that the loads shown on the drawings meet or exceed applicable building code requirements and any additional factors required in the particular application. Truss components using metal connector plates with integral teeth shall not be placed in environments that will cause the moisture content of the wood in which plates are embedded to exceed 19% and/or cause corrosion of connector plates and other metal fasteners.

The Truss Design Engineer shall not be responsible for items beyond the specific scope of the agreed contracted work set forth herein, including but not limited to: verifying the dimensions of the truss component, calculation of any of the truss component design loads, inspection of the truss components before or after installation, the design of temporary or permanent bracing and their attachment required in the roof and/or floor systems, the design of diaphragms or shear walls, the design of load transfer connections to and from diaphragms and shear walls, the design of load transfer to the foundation, the design of connections for truss components to their bearing supports, the design of the bearing supports, installation of the truss components, observation of the truss component installation process, review of truss assembly procedures, sequencing of the truss component installation, construction means and methods, site and/or worker safety in the installation of the truss components and/or its connections.

This document may be a high quality facsimile of the original engineering document which is a digitally signed electronic file with third party authentication. A wet or embossed seal copy of this engineering document is available upon request.

# **Temporary Lateral Restraint and Bracing:**

Temporary lateral restraint and diagonal bracing shall be installed according to the provisions of BCSI chapters B1, B2, B7 and/or B10 (Building Component Safety Information, by TPI and SBCA), or as specified by the Building Designer or other Registered Design Professional. The required locations for lateral restraint and/or bracing depicted on these drawings are only for the permanent lateral support of the truss members to reduce buckling lengths, and do not apply to and may not be relied upon for the temporary stability of the truss components during their installation.

# Permanent Lateral Restraint and Bracing:

The required locations for lateral restraint or bracing depicted on these drawings are for the permanent lateral support of the truss members to reduce buckling lengths. Permanent lateral support shall be installed according to the provisions of BCSI chapters B3, B7 and/or B10, or as specified by the Building Designer or other Registered Design Professional. These drawings do not depict or specify installation/erection bracing, wind bracing, portal bracing or similar building stability bracing which are parts of the overall building design to be specified, designed and detailed by the Building Designer.

# **Connector Plate Information:**

Alpine connector plates are made of ASTM A653 or ASTM A1063 galvanized steel with the following designations, gauges and grades: W=Wave, 20ga, grade 40; H=High Strength, 20ga, grade 60; S=Super Strength, 18ga, grade 60. Information on model code compliance is contained in the ICC Evaluation Service report ESR-1118, available on-line at www.icc-es.org.

# Fire Retardant Treated Lumber:

Fire retardant treated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Fire retardant treated lumber may be more brittle than untreated lumber. Special handling care must be taken to prevent breakage during all handling activities.

# **General Notes** (continued)

# **Key to Terms:**

Information provided on drawings reflects a summary of the pertinent information required for the truss design. Detailed information on load cases, reactions, member lengths, forces and members requiring permanent lateral support may be found in calculation sheets available upon written request.

BCDL = Bottom Chord standard design Dead Load in pounds per square foot.

BCLL = Bottom Chord standard design Live Load in pounds per square foot.

CL = Certified lumber.

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

FRT = Fire Retardant Treated lumber.

FRT-DB = D-Blaze Fire Retardant Treated lumber.

FRT-DC = Dricon Fire Retardant Treated lumber.

FRT-FP = FirePRO Fire Retardant Treated lumber.

FRT-FL = FlamePRO Fire Retardant Treated lumber.

FRT-FT = FlameTech Fire Retardant Treated lumber.

FRT-PG = PYRO-GUARD Fire Retardant Treated lumber.

g = green lumber.

HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.

HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.

HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.

Ic = Incised lumber.

FJ = Finger Jointed lumber.

L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.

L/defl = ratio of Length between bearings, in inches, divided by the vertical Deflection due to creep, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.

Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.

Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for of all load cases.

Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for of all load cases.

Max Web CSI= Maximum bending and axial Combined Stress Index for Webs for of all load cases.

NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.

PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.

PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds

PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.

PP = Panel Point.

R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).

Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).

TCDL = Top Chord standard design Dead Load in pounds per square foot.

TCLL = Top Chord standard design Live Load in pounds per square foot.

U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.

VERT(CTL) = maximum Vertical panel point deflection ratios due to Live Load and Creep Component of Dead Load, and maximum long term Vertical panel point deflection in inches due to Total load, including creep adjustment.

VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.

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

Refer to ASCE-7 for Wind and Seismic abbreviations.

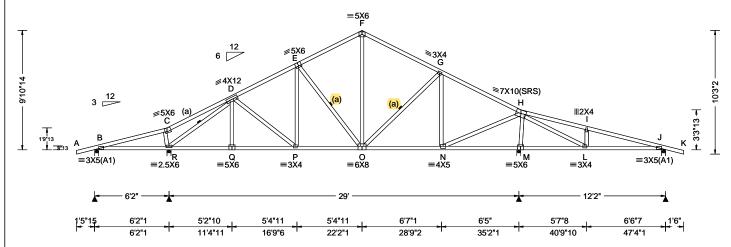
Uppercase Acronyms not explained above are as defined in TPI 1.

# References:

- 1. AWC: American Wood Council; 222 Catoctin Circle SE, Suite 201; Leesburg, VA 20175; www.awc.org.
- 2. ICC: International Code Council; www.iccsafe.org.
- 3. Alpine, a division of ITW Building Components Group Inc.: 514 Earth City Expressway, Suite 242, Earth City, MO 63045; <a href="https://www.alpineitw.com">www.alpineitw.com</a>.
- 4. TPI: Truss Plate Institute, 2670 Crain Highway, Suite 203, Waldorf, MD 20601; www.tpinst.org.
- 5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; www.sbcindustry.com.

SEQN: 619861 SPEC Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 T11 FROM: CDM DrwNo: 103.21.1405.09100 Qty: 7 Steedley Residence Truss Label: A01 / DF 04/13/2021





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	4
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	١.
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.055 P 999 240	L
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.107 P 999 180	E
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.022 N	F
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.043 N	١
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0	J
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.504	Į v
Load Duration: 1.25	MWFRS Parallel Dist: > 2h	TPI Std: 2014	Max BC CSI: 0.552	E
Spacing: 24.0 "	C&C Dist a: 4.73 ft	Rep Fac: Yes	Max Web CSI: 0.616	
'	Loc. from endwall: not in 13.00 ft	FT/RT:20(0)/10(0)		Ľ
	GCpi: 0.18	Plate Type(s):		Ē
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.01.01A.0724.11	١

۸N	▲ Maximum Reactions (lbs)							
	Gravity Non-Gravity							
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL		
В	318	/-	/-	/141	/73	/233		
R	1530	/-	/-	/870	/14	/-		
М	2010	/-	/-	/1038	/-	/-		
J	450	/-	/-	/233	/76	/-		
Wii	nd read	tions b	ased on	MWFRS				
В	Brg V	Vidth =	4.0	Min Re	q = 1.5	5		
R	Brg V	Vidth =	4.0	Min Re	q = 1.5	5		
М	Brg V	Vidth =	4.0	Min Re	q = 2.4	4		
J	Brg V	Vidth =	4.0	Min Re	q = 1.5	5		
Bea	arings l	B, R, M	, & J are	a rigid su	rface.			
Members not listed have forces less than 375#								
Ma	Maximum Top Chord Forces Per Ply (lbs)							
Ch	ords T	ens.Co	omp.	Chords	Tens.	Comp.		

G-H

H - I

1 - .1

Chords

N - M

M - L

281

202

157

236

232

423

Tens. Comp.

- 1136

- 438

- 468

- 601

- 585

- 93

### Lumber

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

(a) Continuous lateral restraint equally spaced on

# Loading

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

# Wind

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

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

# **Additional Notes**

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 9-10-14.



Marrima	Wah Faraa	Des Div	lb-s\
	um Web Forces Tens.Comp.		•

Maximum Bot Chord Forces Per Ply (lbs)

365 - 1449

371 - 1115

367 - 1140

1236 - 190

1221 - 154

Chords Tens.Comp.

1237 - 189

959

D-E

E-F

F-G

R - Q

Q - P

P - O

O - N

Comp. R-D 298 - 1631 1616 - 236 181 - 484 M - H 508 - 1902 E - O H-L - 346 F - O - 131 1030 577 G - N 171 - 472 225 - 375

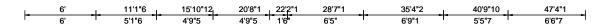
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

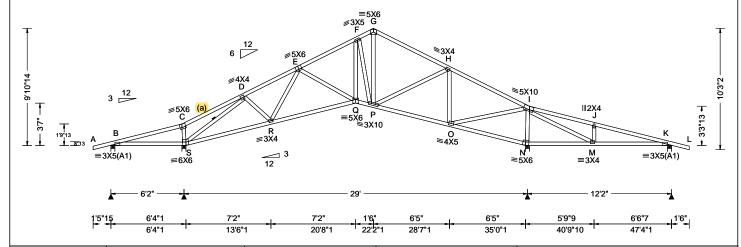
\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.



SEQN: 619862 SPEC Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 T16 FROM: CDM DrwNo: 103.21.1405.11583 Qty: 12 Steedley Residence Truss Label: A02 / DF 04/13/2021





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria	•
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res.	PP Deflection in loc L/defl L/# VERT(LL): 0.093 Q 999 240 VERT(CL): 0.193 Q 999 180 HORZ(LL): 0.061 N HORZ(TL): 0.130 N Creep Factor: 2.0 Max TC CSI: 0.549	LBSNKVB
Load Duration: 1.25 Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h C&C Dist a: 4.73 ft Loc. from endwall: not in 13.00 ft GCpi: 0.18 Wind Duration: 1.60	TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Max BC CSI: 0.699 Max Web CSI: 0.710  VIEW Ver: 20.01.01A.0724.11	S N K B N
Lumber				M

### ▲ Maximum Reactions (lbs) Gravity Non-Gravity R+ /Rh /Rw /U /RL 268 /72 /89 /233 1544 /-/-/939 /-/1100 /10 2027 /-/80 /-412 /-/194 Wind reactions based on MWFRS Brg Width = 4.0 Min Req = 1.5 Brg Width = 4.0Min Req = 1.8 Min Req = 2.4 Brg Width = 4.0 Brg Width = 4.0Min Req = 1.5Bearings B, S, N, & K are a rigid surface. Members not listed have forces less than 375#

### Maximum Top Chord Forces Per Ply (lbs) Tens. Comp. Chords Tens.Comp. Chords

B-C	484 - 116	F-G	372	- 1180
C - D	595 - 85	G-H	344	- 1275
D - E	365 - 1667	H - I	251	- 994
E-F	360 - 1516			

Chords

O - N

N - M

Tens. Comp.

- 935

883

320 - 1169

252

Maximum Bot Chord Forces Per Ply (lbs)

Chords Tens.Comp.

132

1260 - 220

1561 - 226

1313

B - S

S - R

R - Q

Q - P

### **Bracing**

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

(a) Continuous lateral restraint equally spaced on

### Wind

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

### Additional Notes

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 9-10-14



Maximum Web Forces Per Ply (lbs)

- 81

Webs	Tens.Comp.	Webs	Tens. Comp.	
S-D	426 - 2215	0-1	1863 - 264	1
Q-F	875 - 106	N - I	443 - 1640	)
F-P	241 - 920	I - M	1044 - 341	1
P-G	785 - 220	M - J	224 - 376	3
H - O	105 - 725			

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

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.



FROM: CDM DrwNo: 103.21.1405.15973 Qty: 2 Steedley Residence Truss Label: A03 / DF 04/13/2021 11'0"11 16'1"6 21'2"1 28'8"1 35'4"2 40'9"10 47'4"1 5'0"11 5'0"11 5'0"11 5'5"7 6'6"7 **∥2X4** ≡5X6 G **6** X8 9'10"14 ₹7X10(SRS) ≢5X6 (a) C **∥2X4** ≥4X10 =5X6 M ≡3X4 12 =3X5(A1) =5X6 =2.5X6 5'0"11 6'2"1 7'4"15 2'6"6 7'6" 6'6" 5'7"9 6'6"7 6'2"1 13'7"1 16'1"6 21'2"1 28'8"1 35'2"1 40'9"10 47'4"1

Loading Criteria (psf) Wind Criteria	Snow Crit	teria (Pg,Pf in PSF)	Defl/CSI Criteria				actions (I	bs)
TCLL: 20.00 Wind Std: ASCE 7	-16 Pg: NA	Ct: NA CAT: NA	PP Deflection in loc	L/defl L/#		Gravity		
TCDL: 10.00 Speed: 130 mph	Pf: NA	Ce: NA	VERT(LL): 0.075 F	999 240	Loc R+	/ R-	/ Rh	/
BCLL: 0.00 Enclosure: Closed	Lu: NA	Cs: NA	VERT(CL): 0.156 F	999 180	B 292	/-	/-	/
BCDL: 10.00 Risk Category: II	Snow Dura	ation: NA	HORZ(LL): 0.047 N		T 147	3 /-	/-	/8
Des Ld: 40.00 EXP: C Kzt: NA			HORZ(TL): 0.100 N		N 200	I /-	/-	1
NCBCLL: 10.00 Mean Height: 15.00	π Building C	ode:	Creep Factor: 2.0		K 423	/-	/-	1
Soffit: 2.00 FCDL: 5.0 psf	FBC 7th E	d. 2020 Res.	Max TC CSI: 0.50	5	Wind rea	actions b	oased on I	MWF
BCDL. 5.0 psi	TDI Cade		Max BC CSI: 0.72	-	B Brg	Width =	4.0	Mi
Load Duration: 1.25 MWFRS Parallel Dis	St. II tO ZII	-		-	T Brg	Width =	4.0	Mi
Spacing: 24.0 " C&C Dist a: 4.73 ft	Rep Fac: \		Max Web CSI: 0.69	5	N Bra	Width =	4.0	Mi
Loc. from endwall: r	ot in 13.00 ft FT/RT:20(	(0)/10(0)			K Bra	Width =	4.0	Mi
GCpi: 0.18	Plate Type						l, & K are	
Wind Duration: 1.60	WAVE		VIEW Ver: 20.01.01A	.0724.11			ted have f	_

Job Number: 20-4515

### Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL В 292 /104 /233 1478 /-/-/896 /-/1092 /20 2001 /-423 /196 /-/-/78 Wind reactions based on MWFRS Brg Width = 4.0 Min Req = 1.5 Brg Width = 4.0Min Req = 1.5 Min Req = 2.3 Brg Width = 4.0 Brg Width = 4.0Min Rea = 1.5Bearings B, T, N, & K are a rigid surface.

Cust: R 215 JRef: 1X4J2150007

T10

### Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

D-E	355 - 1234	G-H	402	- 1164
E-F	381 - 1595	H - I	268	- 1156
F-G	449 - 1505			

# **Bracing**

Lumber

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

SEQN: 619863

SPEC

Ply: 1

(a) Continuous lateral restraint equally spaced on

# Wind

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

### Additional Notes

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 9-10-14



Chords Tens.Comp.

Maximum Bot Chord Forces Per Ply (lbs)

T-S	992	- 183	O - N	319	- 980
S - R	1040	- 146	N - M	275	- 843
P - O	1204	- 58			

Chords Tens. Comp.

# Maximum Web Forces Per Ply (lbs)

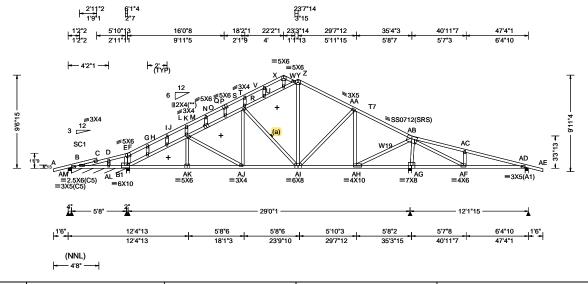
Webs	Tens.Comp.	Webs	Tens. Comp.		
T - D	313 - 1572	O - H	262	- 443	
E-R	137 - 699	0-1	1833	- 272	
E-P	395 0	N - I	448	- 1659	
R - P	1280 - 177	I - M	1038	- 343	
P - G	1116 - 240	M - J	226	- 376	
G - O	124 - 392				

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

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.166 Q 999 240
DCLL. 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.322 Q 999 180
DCDL. 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.067 P
Dec I d: 40 00	EXP: C Kzt: NA		HORZ(TL): 0.131 P
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.874
	MWFRS Parallel Dist: h to 2h	TPI Std: 2014	Max BC CSI: 0.920
Spacing: 24.0 "	C&C Dist a: 4.73 ft	Rep Fac: Varies by Ld Case	Max Web CSI: 0.972
	Loc. from endwall: not in 17.00 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE, 18SS	VIEW Ver: 20.01.01A.0724.11

### Lumber

Top chord: 2x4 SP #2; T7 2x4 SP M-31; Bot chord: 2x4 SP #2; B1 2x4 SP M-31; Webs: 2x4 SP #3; W19 2x4 SP #2; Stack Chord: SC1 2x4 SP #2;

# **Bracing**

(a) Continuous lateral restraint equally spaced on member

### **Plating Notes**

All plates are 2X4 except as noted.

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

### Loading

Truss designed to support 2-0-0 top chord outlookers and cladding load not to exceed 2.30 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

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

LATERALLY BRACE TOP CHORD BELOW FILLER AT 24" O.C, OR RIGID SHEATING, INCLUDING A LATERAL BRACE AT CHORD ENDS.

# **Additional Notes**

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

WARNING: Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

The overall height of this truss excluding overhang is 9-6-15



COA #0 278

▲ Ma	▲ Maximum Reactions (lbs), or *=PLF									
	Gı	ravity		Non-Gravity						
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL				
AM (	671	/-	/-	/306	/44	/485				
AM*	376	/-	/-	/160	/62	/-				
E	502	/-	/-	/364	/-	/-				
AG:	3857	/-	/-	/1635	/769	/-				
AD .	741	/-	/-	/370	/231	/-				
Wind	d reac	tions bas	sed on M	WFRS						
AM	Brg W	/idth = 4	.0	Min Red	q = 1.5					
AM	Brg W	/idth = 6	8.0	Min Red	i = -					
E	Brg W	/idth = 4	.0	Min Red	1.5					
AG	Brg W	/idth = 4	.0	Min Red	q = 3.9					
AD	Brg W	/idth = 4	.0	Min Red	i = 1.5					
	rings <i>A</i> gid sur		E, AG, &	AD are	•					

Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - C	101 -833	P - S	312 -863
C - D	0 - 759	Q-R	773 - 1920
D - F	0 - 775	R-T	593 - 1308
E - H	1124 - 2841	S - U	420 - 882
F-G	44 - 1144	T - V	532 - 1154
G - I	70 - 1027	U - W	479 - 802
H - J	1118 - 2835	V - X	506 - 1097
I - K	114 - 953	W - Y	510 - 785
J-L	1094 - 2781	X - Y	567 - 1220
K - N	222 - 1016	Y - Z	792 - 1681
L - M	1004 - 2590	Z -AA	845 - 2145
M - O	822 - 2031	AA-AB	622 - 1833
N - P	265 - 937	AB-AC	388 - 422
O - Q	799 - 1980	AC-AD	298 - 493

# Maximum Bot Chord Forces Per Ply (lbs)

Choras	rens.Comp.	Choras	rens. Comp.
B -AM	1039 - 218	AJ-AI	2516 - 553
B -AL	757 - 197	Al-AH	1506 - 262
AL- E	745 - 201	AH-AG	613 - 1253
E -AK	6820 - 1772	AG-AF	604 - 1225
AK-AJ	3410 -888	AF-AD	407 - 172

# Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
E-F	250 - 857	Z -AI	720 - 337
K-L	286 - 568	AA-AH	393 - 1387

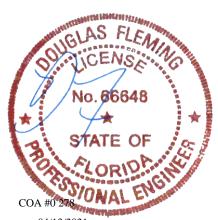
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.



SEQN: 619864 G	SABL	Ply:	1	Job Number: 20-4515		Cust: R 2	15 JRef: 1X	(4J2150007	7 T14
FROM: CDM		Qty:	1	Steedley Residence		DrwNo:	103.21.140	6.11567	
Page 2 of 2				Truss Label: A04		JB /	DF	04/13/202	:1
					M -AJ 44	0 - 1010	AH-AB	3063	- 702
					AJ- R 58	0 - 170	AG-AB	1218	- 3793
					R -AI 48	6 - 1186	AB-AF	1778	- 834
					S - T 25	9 - 456	AF-AC	461	- 788



04/13/2021

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

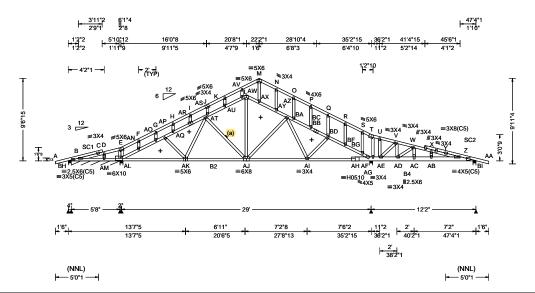
\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall flave properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.





SEQN: 619873 GABL Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 FROM: CDM DrwNo: 103.21.1406.45990 Qty: 1 Steedley Residence Page 1 of 2 Truss Label: A05 / DF 04/13/2021



Loading Criteria (psf)		Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria		
	TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#		
		Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.202 K 999 240		
	DCLL. 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.384 K 906 180		
	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.105 S		
	Doc I d: 10 00	EXP: C Kzt: NA		HORZ(TL): 0.199 S		
	NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0		
	Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.968		
		MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.893		
		C&C Dist a: 4.73 ft	Rep Fac: Varies by Ld Case	Max Web CSI: 0.728		
		Loc. from endwall: not in 8.50 ft	FT/RT:20(0)/10(0)			
		GCpi: 0.18	Plate Type(s):			
		Wind Duration: 1.60	WAVE, HS	VIEW Ver: 20.01.01A.0724.11		

### Lumber

Top chord: 2x4 SP #2; Bot chord: 2x4 SP M-31; B2 2x4 SP #2; B4 2x6 SP 2400f-2.0E; Webs: 2x4 SP #3; Stack Chord: SC1 2x4 SP #2; Stack Chord: SC2 2x4 SP #2;

### Bracing

(a) Continuous lateral restraint equally spaced on

# **Special Loads**

(Lumber	Dur.Fac.=1	.25 / Plate D	Dur.Fac.=1.2	25)
TC: From	61 plf at	-1.50 to	61 plf at	6.10
TC: From	62 plf at	6.10 to	62 plf at	35.24
TC: From	61 plf at	35.24 to	61 plf at	37.61
TC: From	30 plf at	37.61 to	30 plf at	45.51
TC: From	61 plf at	45.51 to	61 plf at	48.84
BC: From	4 plf at	-1.50 to	4 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	37.61
BC: From	10 plf at	37.61 to	10 plf at	47.34
BC: From	4 plf at	47.34 to	4 plf at	48.84
BC: 24 lb	Conc. Load	at 37.61,39	9.61,41.61,4	13.61
BC: 62 lb	Conc. Load	at 45.64		

### **Plating Notes**

All plates are 2X4 except as noted.

### Loading

Truss designed to support 2-0-0 top chord outlookers and cladding load not to exceed 2.30 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

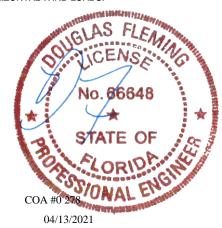
# Wind

Wind loads and reactions based on MWFRS. Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

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

LATERALLY BRACE TOP CHORD BELOW FILLER AT 24" O.C., OR RIGID SHEATING, INCLUDING A LATERAL BRACE AT CHORD ENDS.

+ MEMBER TO BE LATERALLY BRACED FOR HORIZONTAL WIND LOADS.



▲ Maximum Reactions (lbs), or *=PLF							
	Gı	ravity		No	on-Grav	∕ity	
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL	
вн	667	/-	/-	/-	/93	/-	
BH*	402	/-	/-	/-	/61	/-	
AL	629	/-	/-	/105	/-	/-	
AG	3171	/-	/0	/-	/302	/0	
ы	1272	/-	/-	/-	/167	/-	
Win	d reac	tions b	ased on N	<b>MWFRS</b>			
BH	Brg W	idth =	4.0	Min Re	q = 1.5	;	
BH	Brg W	idth =	68.0	Min Re	q = -		
AL	Brg W	idth =	4.0	Min Re	q = 1.5	;	
AG	Brg W	idth =	4.0	Min Re	q = 2.3	3	
DI	Bra M	lidth -	4.0	Min Do	a – 15		

BI Brg Width = 4.0 Min Req = 1.5Bearings BH, BH, AL, AG, & BI are a rigid surface.

Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens.	Comp.
B-C	89 - 758	N - O	78	- 741
C - D	72 - 668	O - P	75	- 731
D - E	78 - 703	P - Q	88	- 805
E-F	126 - 1045	Q - R	79	- 779
F-G	106 - 920	R-S	91	- 827
G-H	106 - 917	S - T	78	- 728
H - I	101 - 888	T - U	65	- 667
I - J	89 - 817	U - V	74	- 706
J - K	95 - 852	V - W	183	- 1438
K-L	75 - 739	W - X	294	- 2491
L - M	77 - 722	X - Y	291	- 2466
M - N	74 - 715	Y - Z	303	- 2554

# Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.		Chords	Tens. Comp.	
в -вн	837	- 17	AH-AG	3425	- 335
B -AM	687	- 76	AG-AF	1340	- 138
AM-AL	674	-73	AF-AE	654	-66
AL-AK	7519	- 738	AE-AD	1272	- 161
AK-AJ	3102	- 293	AD-AC	2340	- 277
AJ-AI	2890	- 272	AC-AB	2394	- 283
Al-AH	3425	- 336	AB- Z	2408	- 284

# Maximum Web Forces Per Ply (lbs)

vvebs	rens.Comp.	webs	rens. Comp.
AL- E	119 - 799	AX-AY	167 - 1906
AL-AN	312 - 3310	AY-AZ	184 - 2017

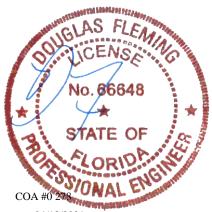
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.



SEQN: 619873 GABL	Ply: 1	Job Number: 20-4515		Cust: R	215 JRef: 1.	X4J2150007 T8	
FROM: CDM	Qty: 1	Steedley Residence		DrwNo:	103.21.140	6.45990	
Page 2 of 2		Truss Label: A05		JB /	DF	04/13/2021	
Additional Notes			AN-AO	310 - 3310	AZ-BA	203 - 2565	
Stacked top chord must NOT	be notched or cut	in	AO-AP	289 - 3187	AZ-AI	399 0	
area (NNL). Dropped top chor			AP-AQ	259 - 3013	BA-BB	228 - 2710	
intervals. Áttach stacked top o			AP-AK	110 -631	AI-BD	99 - 534	
top chord in notchable area us			AQ-AR	242 - 2913	BB-BC	236 - 2769	
oc. Center plate on stacked/de			AK-AS	552 - 5	BC-BD	237 - 2771	
plate length perpendicular to c		е тор	AR-AS	232 - 2853	BD-BF	296 - 3081	
			AS-AT	193 - 2095	BF-BG	306 - 3162	
WARNING: Furnish a copy of			AS-AJ	121 - 1107	BG- S	58 - 406	
installation contractor. Specia			J -AT	80 - 499	BG-AG	334 - 3348	
during handling, shipping and See "WARNING" note below.	installation of trus	ses.	AT-AU	165 - 1927	AE- V	144 - 935	
			AU-AV	164 - 1905	V -AD	636 - 100	
The overall height of this truss	excluding overha	ng is	AV-AW	140 - 1786	AD- W	134 - 1285	
9-6-15.			AJ-AZ	91 -800	W -AC	722 -80	
			AW-AJ	1477 -86	AB- X	35 - 378	
			AW-AX	171 - 1990			

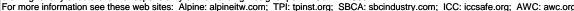


04/13/2021

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

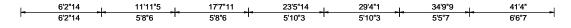
\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

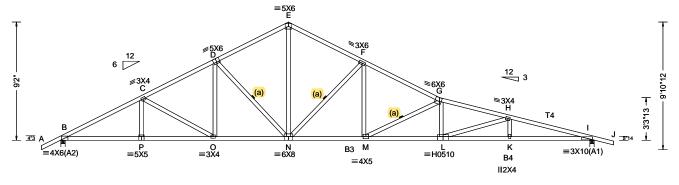
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

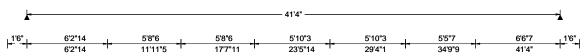




SEQN: 619865 MONO Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 T13 FROM: CDM Steedley Residence DrwNo: 103.21.1406.48407 Qty: 10 Truss Label: B01 JB / DF 04/13/2021







Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	DefI/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.388 G 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.784 G 628 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.110 E
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.223 E
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.503
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.832
Spacing: 24.0 "	C&C Dist a: 4.13 ft	Rep Fac: Yes	Max Web CSI: 0.966
' "	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE, HS	VIEW Ver: 20.01.01A.0724.11

### Lumber

Top chord: 2x4 SP #2; T4 2x4 SP M-31; Bot chord: 2x4 SP #2; B3,B4 2x4 SP M-31; Webs: 2x4 SP #3;

### **Bracing**

(a) Continuous lateral restraint equally spaced on

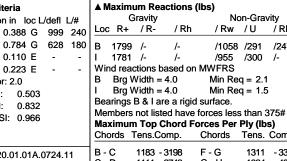
# Wind

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

# Additional Notes

The overall height of this truss excluding overhang is



Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords 1183 - 3198

1311 - 3320 C-D 1111 - 2742 G-H 1924 - 4923 D-E 1001 - 2228 2121 - 5585 H - I 1030 - 2232

Non-Gravity

/300 /-

Tens. Comp.

/RL

/247

/Rw /U

/1058 /291

Min Rea = 2.1

Min Reg = 1.5

/955

# Maximum Bot Chord Forces Per Ply (lbs)

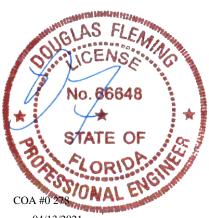
/Rh

/-

Chords	Tens.Comp.	Chords	Tens. Comp.
B - P	2783 - 1005	M - L	4710 - 1732
P - O	2781 - 1007	L-K	5371 - 1999
O - N	2370 - 798	K-I	5376 - 1994
N - M	2860 - 932		

# Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
C-0	245 - 460	F-M	1078 - 370
O - D	409 - 70	M - G	925 - 2046
D - N	375 - 658	G-L	391 -43
E-N	1574 - 641	L-H	277 - 663
N - F	631 - 1350		



04/13/2021

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

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

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

6750 Forum Drive Suite 305 Orlando FL, 32821

SEQN: 619866 MONO Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 FROM: CDM DrwNo: 103.21.1406.52340 Qty: 1 Steedley Residence Truss Label: B02 / DF 04/13/2021 6'2"14 11'11"5 17'7"11 23'5"14 29'4"1 34'9"9 41'4" 6'2"14 5'8"6 5'8"6 5'10"3 5'10"3 5'5"7 6'6"7 ≡5X6 12 3 9'2" 3'3"13 -QL ≡5X6 P ≡5X5 б N ≡6X8 K ∥2X4 ≡2.5X6(A1) =2.5X6(A1)

5'10"3

23'5"14

5'10"3

29'4"1

Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.032 K 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.060 K 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.005 F
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.011 F
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.682
Load Duration: 1.25	MWFRS Parallel Dist: h to 2h	TPI Std: 2014	Max BC CSI: 0.456
Spacing: 24.0 "	C&C Dist a: 4.13 ft	Rep Fac: Yes	Max Web CSI: 0.580
'	Loc. from endwall: not in 13.00 ft	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.01.01A.0724.11

5'8"6

11'11"5

29'2"1

5'8"6

17'7"11

Ŭ								
	▲ M	axim	um Rea	actions	(lbs), or *=	:PLF		
		(	Gravity		· N	on-Gra	vity	
0	Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL	
0	В*	88	/-	/-	/49	/2	/9	
			/-	/-	/289	/-	/-	
	1	533	/-	/-	/283	/85	/-	
	Win	d rea	ctions b	ased or	MWFRS			
	В	Brg \	Width =	348	Min Re	q = -		
	Q	Brg \	Width =	4.0	Min Re	q = 1.5	5	
	1	Brg \	Width =	4.0	Min Re	q = 1.5	5	
	Bea	rings	B, Q, &	l are a	rigid surfac	e.		
	Mer	nbers	not list	ed have	forces less	s than	375#	
	Max	timur	n Top (	Chord F	orces Per	Ply (lb	s)	
	Cho	rds	Tens.C	omp.	Chords	Tens.	Ćomp.	
	F - 0	3	482	- 98	H - I	252	- 794	-

6'6"7

41'4"

12'1"15

5'5"7

34'9"9

### Lumber

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

### **Bracing**

(a) Continuous lateral restraint equally spaced on

6'2"14

6'2"14

# **Plating Notes**

All plates are 3X4 except as noted.

### Wind

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

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

# **Additional Notes**

The overall height of this truss excluding overhang is 9-2-0.



Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. M - L 254 - 455 K - I 737 - 184 L-K - 187 726

# Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.	
	83 - 469 214 - 646	L-H	337 - 975	5

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

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

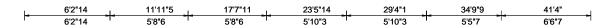
04/13/2021

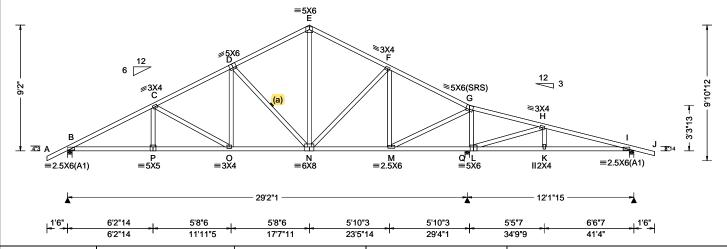


 SEQN: 619867
 MONO
 Ply: 1
 Job Number: 20-4515
 Cust: R 215
 JRef: 1X4J2150007
 T5

 FROM: CDM
 Qty: 3
 Steedley Residence
 DrwNo: 103.21.1406.55237

 Truss Label: B03
 JB / DF
 04/13/2021





Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	4
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code:	PP Deflection in loc L/defl L/# VERT(LL): 0.092 O 999 240 VERT(CL): 0.181 O 999 180 HORZ(LL): 0.031 K HORZ(TL): 0.064 K Creep Factor: 2.0	
Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	BCDL: 5.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 4.13 ft	FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Max TC CSI: 0.519 Max BC CSI: 0.896 Max Web CSI: 0.638  VIEW Ver: 20.01.01A.0724.11	E   C   E   N   C
Lumber				

	▲ N	laximu	ım Rea	actions (I	bs)			
		G	ravity		No	on-Gra	vity	
0	Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL	
0	В	1288	/-	/-	/799	/24	/247	
	Q	1798	/-	/-	/959	/15	/-	
	1	514	/-	/-	/277	/85	/-	
	Wir	nd read	tions b	ased on I	MWFRS			
	В	Brg V	/idth =	4.0	Min Re	q = 1.5	5	
	Q	Brg V	/idth =	4.0	Min Re	q = 1.7	7	
	1	Brg V	/idth =	4.0	Min Re	q = 1.5	5	
	Bea	arings I	3, Q, &	I are a ri	gid surfac	e.		
	Mei	mbers	not list	ed have f	orces less	than	375#	
	Ma	ximum	Ton (	hord Fo	rces Per	Ply (Ih	s)	
					Chords			
_				•				_

### B - C 415 - 2106 F-G 282 - 1008 C-D 392 - 1620 G-H 403 - 44 D-E 353 - 1101 -743 H - I 253 F-F 372 - 1106

Chords

M - L

L-K

K - I

Tens. Comp.

- 480

- 186

- 185

245

675

688

Maximum Bot Chord Forces Per Ply (lbs)

Chords Tens.Comp.

1811 - 341

1365 - 219

855 - 103

1808 - 342

B - P

P - O

O - N

N - M

# Bracing

Top chord: 2x4 SP #2;

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

(a) Continuous lateral restraint equally spaced on member.

# Wind

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

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

# **Additional Notes**

The overall height of this truss excluding overhang is 9-2-0.



Maximum Web Forces Per Ply (lbs)
Webs Tens.Comp. Webs Te

Webs	Tens.Comp.	Webs	Tens. Comp.
C-O	147 - 500	F-M	156 - 533
O - D	414 - 15	M - G	1129 - 158
D - N	217 - 663	G-L	352 - 1342
E - N	571 - 143	L-H	361 - 1071

04/13/2021

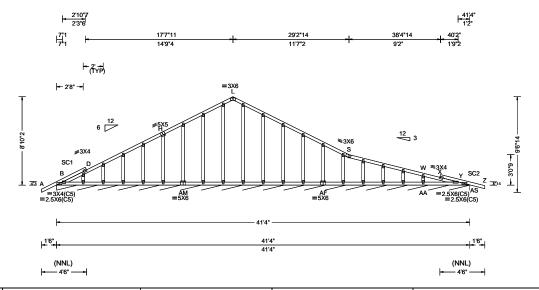
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.



SEQN: 619868 GABL Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 Qty: 1 FROM: CDM DrwNo: 103.21.1407.01720 Steedley Residence Truss Label: B04 / DF 04/13/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.018 X 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.034 X 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.009 N
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.015 N
NCBCLL: 10.00	Mean Height: 15.00 ft TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.557
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.207
Spacing: 24.0 "	C&C Dist a: 4.13 ft	Rep Fac: Varies by Ld Case	Max Web CSI: 0.196
	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.01.01A.0724.11

### Lumber

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

# **Plating Notes**

All plates are 2X4 except as noted.

### Loading

Truss designed to support 2-0-0 top chord outlookers and cladding load not to exceed 2.30 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

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

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

# **Additional Notes**

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

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

The overall height of this truss excluding overhang is

### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /R /Rw / U /RL AS\*163 /-Wind reactions based on MWFRS AS Brg Width = 496 Min Req = -Bearing B is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. S - W 98 - 440 X - Y 220 - 522 W - X 97 - 465

### Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. AM-AF 588 - 113 560 - 100

### Maximum Gable Forces Per Ply (lbs) Gables Tens.Comp.

AA- W 183 - 426

576 - 106

AF-AA



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

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

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

6750 Forum Drive Suite 305 Orlando FL, 32821

SEQN: 619869 COMN Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 FROM: CDM DrwNo: 103.21.1407.04897 Qty: 5 Steedley Residence Truss Label: C01 / DF 04/13/2021 5'3" 9'11"8 14'8" 19'4"8 24'1" 29'4" 5'3' 4'8"8 4'8"8 4'8"8 **₹**525 =6X8 ≡3X4 =3X4 =4X4(A2) =4X4(A2) 29'4" 7'7"4 7'0"12 7'0"12 7'7"4 1'6" 7'7"4 14'8" 21'8"12 29'4"

Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s):	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.097 K 999 240 VERT(CL): 0.196 K 999 180 HORZ(LL): 0.040 J HORZ(TL): 0.080 J Creep Factor: 2.0 Max TC CSI: 0.292 Max BC CSI: 0.728 Max Web CSI: 0.472
Lumbar	Wind Duration: 1.60	WAVE	VIEW Ver: 20.01.01A.0724.11

### Lumber

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

### Wind

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

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

### **Additional Notes**

The overall height of this truss excluding overhang is

	▲ Maxir	num Rea	ctions (	lbs)		
		Gravity		No	on-Grav	/ity
)	Loc R	- /R-	/ Rh	/ Rw	/ U	/ RL
)	B 130	8 /-	/-	/776	/213	/219
	H 130	8 /-	/-	/776	/213	/-
	Wind re	actions b	ased on	MWFRS		
	B Brg	Width =	4.0	Min Re	q = 1.5	;
	H Brg	Width =	4.0	Min Re	q = 1.5	;
	Bearing	sB&Ha	re a rigio	d surface.	-	
	Member	rs not liste	ed have	forces les	s than 3	375#
	Maximu	ım Top C	hord Fo	orces Per	Ply (lb	s)
	Chords	Tens.Co	omp.	Chords	Tens.	Ćomp.
_	B-C	946	2167		688	- 1399
	C-D		∠167 1964	F-G	810	- 1399
	-					
	D - E	688 -	1399	G-H	846	- 2167

### Maximum Bot Chord Forces Per Ply (lbs) Chords Tens. Comp. Chords Tens.Comp.

3 - L	1876 - 646	K-J	1550	- 449	
K	1550 - 471	J - H	1876	- 627	

# Maximum Web Forces Per Ply (lbs)

webs	rens.con	np.	vvebs	rens. C	Jonip.	
L-D	405 -	-82	K-F	312	- 518	
D - K	312 -	518	F-J	405	-82	
E - K	896 - 3	365				



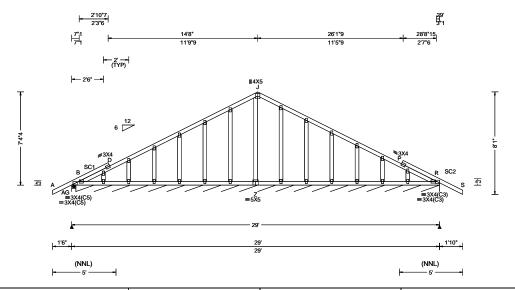
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.



SEQN: 619870 GABL Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 T19 Qty: 1 FROM: CDM DrwNo: 103.21.1407.08767 Steedley Residence Truss Label: C02 / DF 04/13/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.004 T 804 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.008 T 421 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.001 D
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.002 D
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.702
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.227
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Varies by Ld Case	Max Web CSI: 0.107
	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.01.01A.0724.11
Lauraban		A dalistana di Massa	

# Lumber

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

# **Plating Notes**

All plates are 2X4 except as noted.

### Loading

Truss designed to support 2-0-0 top chord outlookers and cladding load not to exceed 2.30 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Wind loads based on MWFRS with additional C&C

Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

# **Additional Notes**

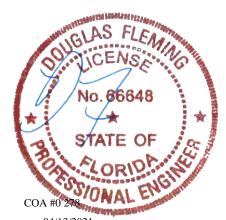
See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

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

The overall height of this truss excluding overhang is

### ▲ Maximum Reactions (lbs), or \*=PLF Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL AG 523 /322 /84 R\* 154 /69 Wind reactions based on MWFRS AG Brg Width = 4.0 Min Rea = 1.5R Brg Width = 343 Min Rea = Bearings AG & B are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. 162 P - R 455 - 341 - 163

Maximum Bot Chord Forces Per Ply (lbs)						
Chords	Tens.C	omp.	Chords	Tens.	Comp.	
B-Z	425	- 48	Z-R	427	- 46	



04/13/2021

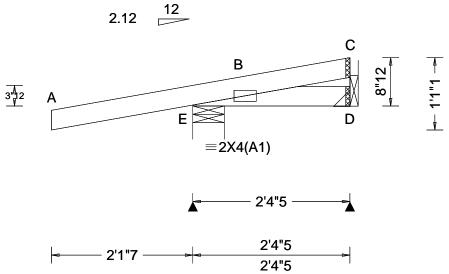
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.



SEQN: 619872 HIP\_ Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 T12 FROM: CDM DrwNo: 103.21.1407.10777 Qty: 1 Steedley Residence Truss Label: HJ01 / DF 04/13/2021



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.001 C 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.006 C 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.000 C
Des Ld: 40.00	EXP: C Kzt: NA Mean Height: 15.00 ft		HORZ(TL): 0.001 C
NCBCLL: 10.00	TCDL: 5.0 psf	Building Code:	Creep Factor: 2.0
Soffit: 2.00	BCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.129
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	TPI Std: 2014	Max BC CSI: 0.042
Spacing: 24.0 "	C&C Dist a: 3.00 ft	Rep Fac: Yes	Max Web CSI: 0.000
	Loc. from endwall: Any	FT/RT:20(0)/10(0)	
	GCpi: 0.18	Plate Type(s):	
	Wind Duration: 1.60	WAVE	VIEW Ver: 20.01.01A.0724.11

### ▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /Rh /Rw /U /RL 156 /-38 /-22 /-/13 /-Wind reactions based on MWFRS Brg Width = 5.7 Min Rea = 1.5Brg Width = -Min Req = -Bearing E is a rigid surface. Members not listed have forces less than 375#

### Lumber

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

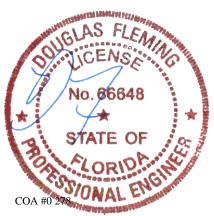
# Hangers / Ties

(J) Hanger Support Required, by others

Wind loads and reactions based on MWFRS. Wind loading based on both gable and hip roof types. Uplifts based on an elevation at or above 1000 ft.

# **Additional Notes**

The overall height of this truss excluding overhang is 0-8-12.



04/13/2021

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

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

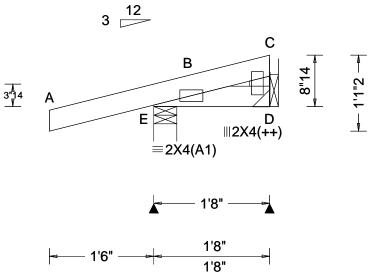
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

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

6750 Forum Drive Suite 305 Orlando FL, 32821

SEQN: 619871 **EJAC** Ply: 1 Job Number: 20-4515 Cust: R 215 JRef: 1X4J2150007 FROM: CDM Qty: 5 Steedley Residence DrwNo: 103.21.1407.17157 Truss Label: J01 / DF 04/13/2021



Loading Criteria (psf)   TCLL:	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.000 D HORZ(TL): 0.000 D Creep Factor: 2.0 Max TC CSI: 0.270 Max BC CSI: 0.041 Max Web CSI: 0.006  VIEW Ver: 20.01.01A.0724.11	▲ Maximum Reactio Gravity  Loc R+ /R- /I  E 228 /- /- D 24 /- /- Wind reactions basec E Brg Width = 4.0 D Brg Width = - Bearing E is a rigid su Members not listed ha
--------------------------------	---	---	---	---

### ions (lbs) Non-Gravity Rh /Rw /U /RL /132 /35 d on MWFRS Min Rea = 1.5Min Req = surface. have forces less than 375#

### Lumber

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

# **Plating Notes**

(++) - This plate works for both joints covered.

# Hangers / Ties

(J) Hanger Support Required, by others

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Uplifts based on an elevation at or above 1000 ft.

# **Additional Notes**

The overall height of this truss excluding overhang is



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

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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

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

6750 Forum Drive Suite 305 Orlando FL, 32821

# CLR Reinforcing Member Substitution

This detail is to be used when a Continuous Lateral Restraint (CLR) is specified on a truss design but an alternative web reinforcement method is desired.

# Notes:

This detail is only applicable for changing the specified CLR shown on single ply sealed designs to T-reinforcement or L-reinforcement or scab reinforcement.

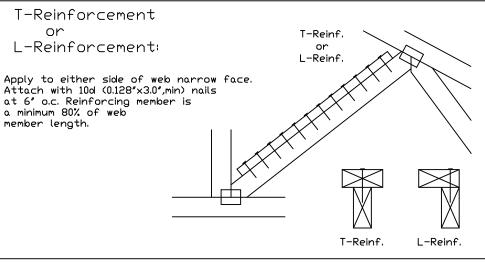
Alternative reinforcement specified in chart below may be conservative. For minimum alternative reinforcement, re-run design with appropriate reinforcement type.

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

Web Member	Specified CLR	Alternative Reir	
Size	Restraint	T- or L- Reinf.	
2x3 or 2x4	1 row	2×4	1-2×4
2x3 or 2x4	2 rows	2×6	2-2×4
2×6	1 row	2×4	1-2×6
2×6	2 rows	2×6	2-2×4( <b>米</b> )
5×8	1 row	2×6	1-2×8
5×8	2 rows		2-2×6( <del>*/</del> )

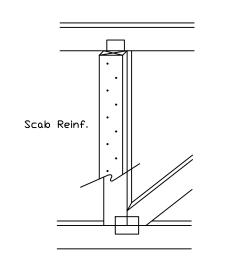
T-reinforcement, L-reinforcement, or scab reinforcement to be same species and grade or better than web member unless specified otherwise on Engineer's sealed design.

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



# Scab Reinforcement:

Apply scab(s) to wide face of web. No more than (1) scab per face. Attach with 10d (0.128"x3.0",min) nalls at 6" o.c. Reinforcing member is a minimum 80% of web member length.



est.	NAMES OF THE PERSON IS NOT THE PERSON IN	11/400	
Thursday C	LAS F	EARTH	k.
O	CEN	Da. "####	THE STATE OF
<del>\</del>		36.3	****

# \*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAVING \*\*\*IMPORTANT\*\*\* FURNISH THIS DRAVING TO ALL CONTRACTORS INCLUDING THE INSTALLER.

Trusses require extreme care in fabricating, handling, shipping, installing into installing and bracing. Reference and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing po BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bo on shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint if visions in the shall have bracing installed per BCSI sections B3, B7 or BIO, as applicable. Apply plates to each of truss and position as shown above and on the Joint Betalls, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

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

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

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

STATE OF CORIOR OF CORIOR

TC LL	PSF
TC DL	PSF
BC DL	PSF
BC LL	PSF
ТПТ. LD.	PSF
DUR. FAC.	

SPACING

REF CLR Subst.

DATE 01/02/19

DRWG BRCLBSUB0119



514 Earth City Expressway Suite 242 Earth City, MO 63045

# Gable Stud Reinforcement Detail

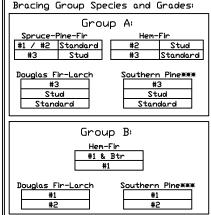
ASCE 7-16: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Dr: 120 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00

Dr: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00

Or: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure D. Kzt = 1.00

						· 100 (1p/)	wind opeca, 15 Heart Heights, 1 at starty Enclosed, Exposure 2, 120 - 100							
		2x4 Vertica	Brace	No	(1) 1×4 "L	" Brace *	(1) 2×4 *L	" Brace *	(2) 2×4 *L	* Brace **	(1) 2×6 *L	" Brace *	(2) 2×6 L	Brace **
Max Gable Vertical Length	Spacing	Species	Grade	Braces	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B
	24" O.C.	SPF	#1 / #2	4′ 3″	7′ 3″	7′ 7 <b>″</b>	8′ 7 <b>″</b>	8′ 11 <b>″</b>	10′ 3″	10′ 8 <b>″</b>	13′ 6 <b>″</b>	14′ 0″	14′ 0″	14′ 0″
			#3	4′ 1″	6′ 7″	7′ 1″	8′ 6 <b>″</b>	8′ 10 <b>″</b>	10′ 1″	10′ 6″	13′ 4″	13′ 10″	14′ 0″	14′ 0″
		HF	Stud	4′ 1″	6′ 7 <b>″</b>	7′ 0″	8′ 6 <b>″</b>	8′ 10 <b>″</b>	10′ 1″	10′ 6″	13′ 4″	13′ 10″	14′ 0″	14′ 0″
		1 11	Standard	4′ 1″	5′ 8″	6′ 0 <b>″</b>	7′ 7″	8′ 1 <b>″</b>	10′ 1″	10′ 6″	11′ 10″	12′ 8″	14′ 0″	14′ 0″
		SP	#1	4′ 6″	7′ 4″	7′ 8″	8′ 8 <b>″</b>	9′ 0″	10′ 4″	10′ 9″	13′ 8″	14′ 0″	14′ 0″	14′ 0″
			#2	4′ 3″	7′ 3″	7′ 7″	8′ 7 <b>″</b>	8′ 11 <b>″</b>	10′ 3″	10′ 8″	13′ 6″	14′ 0″	14′ 0″	14′ 0″
		DFL	#3	4′ 2″	6′ 0″	6′ 4″	7′ 11″	8′ 6 <b>″</b>	10′ 2″	10′ 7″	12′ 5 <b>′</b>	13′ 4″	14′ 0″	14′ 0″
			Stud	4′ 2″	6′ 0″	6′ 4″	7′ 11″	8′ 6 <b>″</b>	10′ 2″	10′ 7″	12′ 5 <b>′</b>	13′ 4″	14′ 0″	14′ 0″
			Standard	4′ 0″	5′ 3″	5′ 7 <b>″</b>	7′ 0 <b>″</b>	7′ 6″	9′ 6″	10′ 2″	11′ 0″	11′ 10″	14′ 0″	14′ 0″
	16″ o.c.	SPF HF	#1 / #2	4′ 11″	8′ 4″	8′ 8 <b>″</b>	9′ 10″	10′ 3″	11′ 8″	12′ 2″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			#3	4′ 8″	8′ 1 <b>″</b>	8′ 8 <b>″</b>	9′ 8″	10′ 1″	11′ 7″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			Stud	4′ 8″	8′ 1″	8′ 6 <b>″</b>	9′ 8″	10′ 1″	11′ 7″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			Standard	4′ 8″	6′ 11″	7′ 5 <b>″</b>	9′ 3 <b>″</b>	9′ 11″	11′ 7″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
		SP	#1	5′ 1 <b>″</b>	8′ 5 <b>″</b>	8′ 9 <b>″</b>	9′ 11″	10′ 4″	11′ 10″	12′ 4″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			#2	4′ 11″	8′ 4″	8′ 8 <b>″</b>	9′ 10″	10′ 3″	11′ 8″	12′ 2 <b>″</b>	14′ 0″	14′ 0″	14′ 0″	14′ 0″
		DFL	#3	4′ 9″	7′ 4″	7′ 9″	9′ 9″	10′ 2″	11′ 8″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			Stud	4′ 9″	7′ 4″	7′ 9″	9′ 9″	10′ 2″	11′ 8″	12′ 1″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			Standard	4′ 8″	6′ 5″	6′ 10 <b>″</b>	8′ 7 <b>″</b>	9′ 2″	11′ 7″	12′ 1″	13′ 6″	14′ 0″	14′ 0″	14′ 0″
		SPF	#1 / #2	5′ 5 <b>″</b>	9′ 2″	9′ 6″	10′ 10 <b>″</b>	11′ 3″	11′ 8″	13′ 5 <b>″</b>	14′ 0″	14′ 0″	14′ 0″	14′ 0″
	12″ o.c.	SLL	#3	5′ 1 <b>′</b>	9′ 0″	9′ 4″	10′ 8″	11′ 1″	12′ 9″	13′ 3″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
		HF	Stud	5′ 1 <b>″</b>	9′ 0″	9′ 4″	10′ 8″	11′ 1″	12′ 9″	13′ 3″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
		1 11	Standard	5′ 1 <b>″</b>	8′ 0″	8′ 6 <b>″</b>	10′ 8″	11′ 1″	12′ 9″	13′ 3″	14′ 0 <b>″</b>	14′ 0″	14′ 0″	14′ 0″
		SP	#1	5′ 8 <b>″</b>	9′ 3″	9′ 8″	10′ 11″	11′ 4″	13′ 0″	13′ 6 <b>″</b>	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			#2	5′ 5″	9′ 2″	9′ 6″	10′ 10″	11′ 3″	12′ 11″	13′ 5″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
		ъ-,	#3	5′ 3 <b>″</b>	8′ 5 <b>″</b>	9′ 0″	10′ 9″	11′ 2″	12′ 10″	13′ 4″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
		DFL	Stud	5′ 3″	8′ 5 <b>″</b>	9′ 0″	10′ 9″	11′ 2″	12′ 10″	13′ 4″	14′ 0″	14′ 0″	14′ 0″	14′ 0″
			Standard	5′ 1 <b>″</b>	7′ 5″	7′ 11″	9′ 11″	10′ 7″	12′ 9″	13′ 3″	14′ 0″	14′ 0″	14′ 0″	14′ 0″



1x4 Braces shall be SRB (Stress-Rated Board) \*\*For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards, Group B values may be used with these grades.

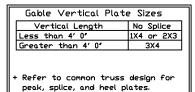
Gable Truss Detail Notes: Wind Load deflection criterion is L/240.

Provide uplift connections for 55 plf over continuous bearing (5 psf TC Dead Load).

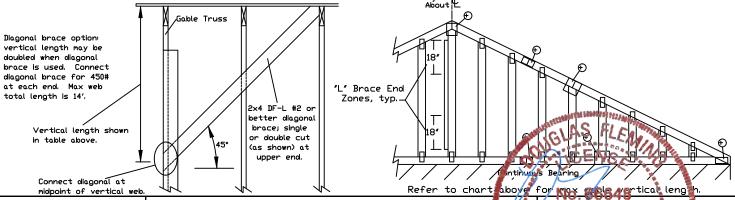
Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12" plywood overhang.

Attach "L" braces with 10d (0.128"x3.0" min) nails. \* For (1) "L" brace: space nails at 2" o.c. in 18" end zones and 4" o.c. between zones. ₩¥For (2) "L" braces: space nails at 3" o.c. in 18" end zones and 6" o.c. between zones.

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



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



\*\*\*VARNINGI\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWINGI
\*\*\*\*IMPORTANT\*\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLER

Trusses require extreme care in fabricating, handling, shipping, installing interministrating in fabricating, handling, shipping, installing and bracing. Refer the follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for spractices prior to performing these functions. Installers shall provide temporary bracing performed to the misse, top chord shall have properly attached structural sheathing and boos shall have a properly attached rigid celling. Locations shown for permanent lateral restraint shall have bracing installed per BCSI sections B3, B7 or B10, as applicable. Apply plates to eat of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITV Building Components Group Inc. shall not be responsible for any deviation of this drawing, any fallure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping; installation & bracing of trusses.

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

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

MAX, TOT, LD, 60 PSF MAX. SPACING 24.0"

514 Earth City Expressway Suite 242 Earth City, MO 63045

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

# Gable Detail For Let-in Verticals Gable Truss Plate Sizes Refer to appropriate Alpine gable detail for minimum plate sizes for vertical studs. +) Refer to Engineered truss design for peak, splice, web, and heel plates. \*If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web. Gable Example: Length typ.

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.

10d Common (0.148"x3".min) Toenails at 4" o.c. plus

(4) toenails in the top and bottom chords.

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

ASCE 7-05 Gable Detail Drawings

A13015051014, A12015051014, A11015051014, A10015051014, A14015051014, A13030051014, A12030051014, A11030051014, A10030051014, A14030051014

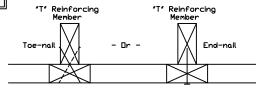
ASCE 7-10 & ASCE 7-16 Gable Detail Drawings

A11515ENC100118, A12015ENC100118, A14015ENC100118, A16015ENC100118, A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118, A11530ENC100118, A12030ENC100118, A14030ENC100118, A16030ENC100118, A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118, S11515ENC100118, S12015ENC100118, S14015ENC100118

\$18015ENC100118, \$20015ENC100118, \$20015END100118, \$20015EPE 100118, \$11530ENC100118, \$12030ENC100118, \$14030ENC.00118, \$14030ENC.0018, \$14030 S18030ENC100118, S20030ENC100118, S20030 NITCOLES, S20030PED100118

See appropriate Alpine gable detail for maxium preinforced gable vertical length.

"T" Reinforcement Attachment Detail



To convert from "L" to "T" reinforcing members, multiply "T" increase by length (based on appropriate Alpine gable detail).

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

"T" reinforcing member material must match size, specie, and grade of the "L" reinforcing member.

Web Length Increase w/ "T" Brace

"T" Reinf.	"T"				
Mbr. Size	Increase				
2×4	30 %				
2x6	20 %				

### Example:

ASCE 7-10 Wind Speed = 120 mph Mean Roof Height = 30 ft, Kzt = 1.00 Gable Vertical = 24°o.c. SP #3 "T" Reinforcing Member Size = 2x4

"T" Brace Increase (From Above) = 30% = 1.30 (1) 2x4 "L" Brace Length = 8' 7"

Maximum "T" Reinforced Gable Vertical Length  $1.30 \times 8' \ 7'' = 11' \ 2''$ 

# \*\*\*VARNING|\*\* READ AND FOLLOW ALL NOTES ON THIS DRAVING \*\*\*\*IMPORTANT\*\*\* FURNISH THIS DRAVING TO ALL CONTRACTORS INCLUDING THE INSTALLER:

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Ref. of follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) fc spractices prior to performing these functions. Installers shall provide temporary bracing pe Unless noted otherwise, top chord shall have properly attached structural sheathing and bo shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint shall have bracing installed per BCSI sections B3, B7 or BIO, as applicable. Apply plates to ear of truss and position as shown above and on the Joint Details, unless noted otherwise.

Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITV Building Components Group Inc. shall not be responsible for any deviation of this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping:
A seal on this drawing or cover page listing this drawing, indicates acceptance of professional

engineering responsibility solely for the design shown. The sultability and use of this for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2. For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.org; ICC: www.iccsafe.org MAX, TOT, LD, 60 PSF DUR. FAC. ANY

Rigid Sheathing

Ceiling

4 Nails

Nails

Spaced At

4 Nails

Reinforcing Member

Gable

Truss

514 Earth City Expressway Suite 242 Earth City, MO 63045

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

MAX. SPACING 24.0"