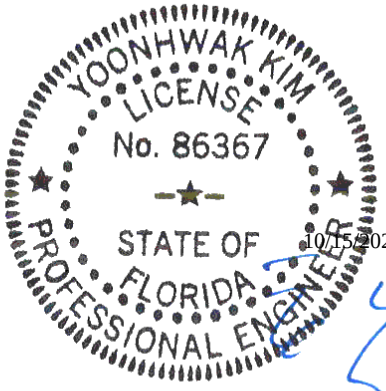


10/15/2021

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

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

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

Site Information:	Page 1:
Customer: W. B. Howland Company, Inc.	*Job Number:* 21-5954
Job Description: Arata	
Address: FL	

Job Engineering Criteria:	
Design Code: FBC 7th Ed. 2020 Res.	*IntelliVIEW Version:* 21.01.01A *JRef #:* 1X9O2150001
Wind Standard: ASCE 7-16 *Wind Speed (mph):* 130 *Building Type:* Closed	*Design Loading (psf):* 40.00

This package contains general notes pages, 42 truss drawing(s) and 5 detail(s).

Item	Drawing Number	Truss
1	288.21.0914.39627	A01
3	288.21.0914.30910	A03
5	288.21.0914.26480	A05
7	288.21.0914.21757	A07
9	288.21.0838.05118	A09
11	288.21.0838.05494	A10
13	288.21.0838.05588	A12
15	288.21.0914.18757	A14
17	288.21.0838.05555	A16
19	288.21.0838.04666	A18
21	288.21.0838.05259	A20
23	288.21.0914.16130	B01
25	288.21.0914.09207	B03
27	288.21.0838.05495	C01
29	288.21.0838.04806	C03
31	288.21.0838.05306	HJ02
33	288.21.0838.05009	J02
35	288.21.0838.05463	J04
37	288.21.0838.05120	J06
39	288.21.0838.05415	J08
41	288.21.0838.04634	PB02
43	A14015ENC160118	
45	BRCLBSUB0119	
47	PB160160118	

Item	Drawing Number	Truss
2	288.21.0914.33980	A02
4	288.21.0914.28533	A04
6	288.21.0914.23970	A06
8	288.21.0838.05119	A08
10	288.21.0838.05524	A09
12	288.21.0838.05291	A11
14	288.21.0838.05447	A13
16	288.21.0838.05244	A15
18	288.21.0838.04805	A17
20	288.21.0838.04650	A19
22	288.21.0838.05339	A21
24	288.21.0914.13257	B02
26	288.21.0914.11353	B03
28	288.21.0838.05338	C02
30	288.21.0838.05509	HJ01
32	288.21.0838.05337	J01
34	288.21.0838.05025	J03
36	288.21.0838.04978	J05
38	288.21.0838.04994	J07
40	288.21.0838.04681	PB01
42	288.21.0838.04807	PB03
44	A14030ENC160118	
46	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.

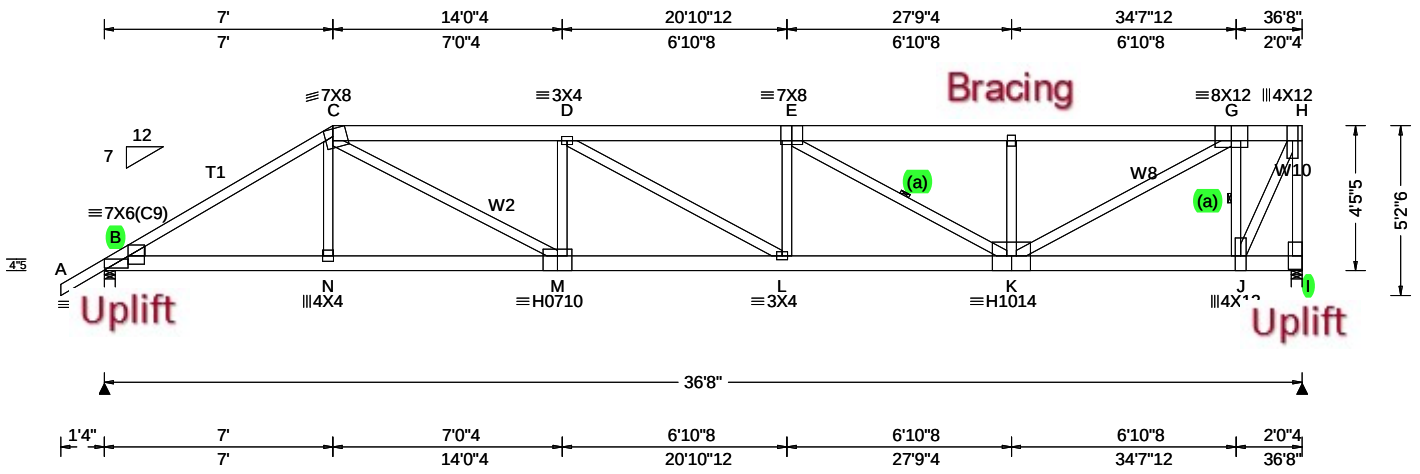
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
CL = Certified lumber.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
FRT = Fire Retardant Treated lumber.
FRT-DB = D-Blaze 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; www.alpineitw.com.
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: 636334 HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A01		Cust: R 215 JRef:1X9O2150001 T48 DrwNo: 288.21.0914.39627 / YK 10/15/2021	



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.67 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA 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: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
HS, WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.348	L	999	240
VERT(CL): 0.700	L	626	180
HORZ(LL): 0.079	C	-	-
HORZ(TL): 0.160	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.588
Max BC CSI: 0.567
Max Web CSI: 0.950

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	3724	/-	/-	/-	/858	/-
I	3692	/-	/-	/-	/912	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 3.1
I Brg Width = 4.0 Min Req = 3.1
Bearings B & I 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	1569	- 6762	E - F	1629	- 6616
C - D	2059	- 8534	F - G	1629	- 6616
D - E	2134	- 8760	G - H	431	- 1773

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	5770	- 1328	L - K	8730	- 2143
N - M	5742	- 1331	K - J	2021	- 504
M - L	8611	- 2095			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
N - C	767	0	F - K	450	- 906
C - M	3230	- 842	K - G	5340	- 1306
M - D	513	- 1075	G - J	1005	- 3387
L - E	412	0	J - H	4149	- 1008
E - K	597	- 2457	H - I	884	- 3720

Lumber

Top chord: 2x6 SP 2400f-2.0E; T1 2x4 SP M-31;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP #3; W2,W10 2x4 SP #2;
W8 2x4 SP M-31;
Lt Wedge: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Special Loads

------(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	63 plf at	-1.33 to	63 plf at	7.00
TC: From	32 plf at	7.00 to	32 plf at	36.67
BC: From	5 plf at	-1.33 to	5 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	7.03
BC: From	10 plf at	7.03 to	10 plf at	36.67

TC: 441 lb Conc. Load at 7.03
TC: 193 lb Conc. Load at 9.06,11.06,13.06,15.06 17.06,19.06,21.06,23.06,25.06,27.06,29.06,31.06 33.06,35.06
BC: 526 lb Conc. Load at 7.03
BC: 131 lb Conc. Load at 9.06,11.06,13.06,15.06 17.06,19.06,21.06,23.06,25.06,27.06,29.06,31.06 33.06,35.06

Wind

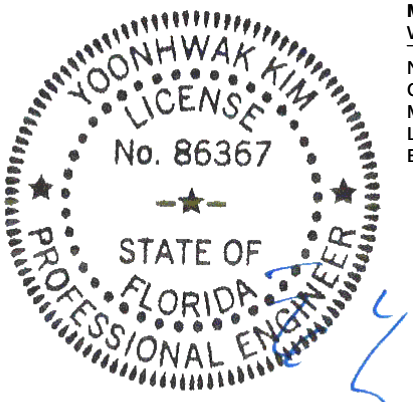
Wind loads and reactions based on MWFRS.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 4-5-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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

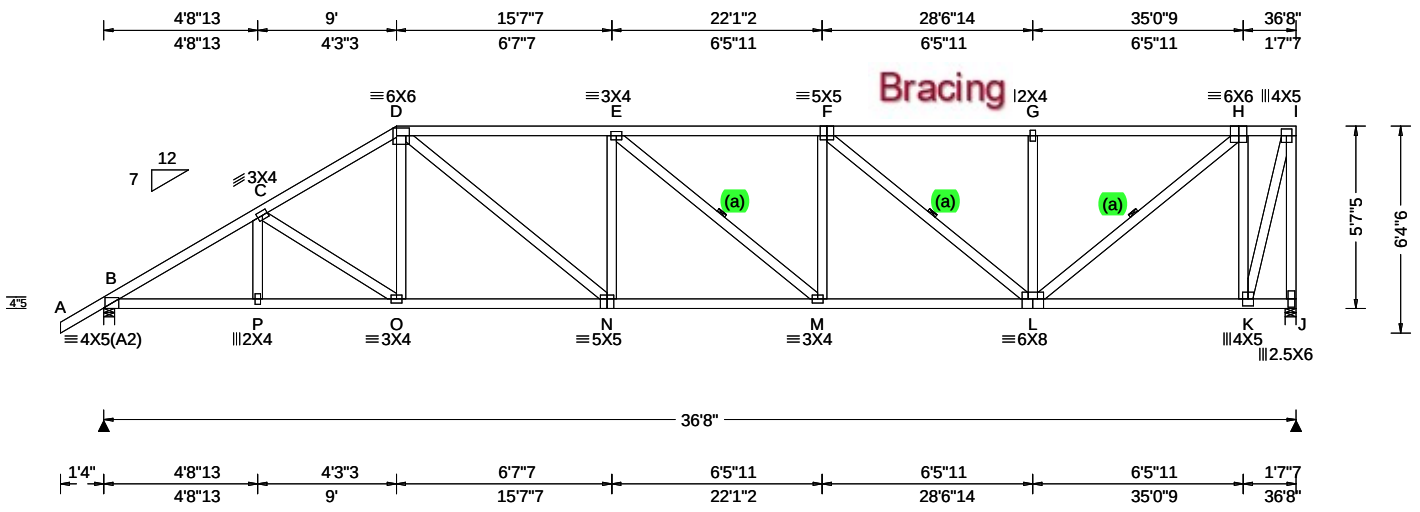
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636337 HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A02		Cust: R 215 JRef:1X9O2150001 T18 DrwNo: 288.21.0914.33980 / YK 10/15/2021	



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 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: h/2 to h C&C Dist a: 3.67 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	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	PP Deflection in loc L/defl L/# VERT(LL): 0.164 E 999 240 VERT(CL): 0.338 E 999 180 HORZ(LL): 0.054 K - - HORZ(TL): 0.112 K - - Creep Factor: 2.0 Max TC CSI: 0.536 Max BC CSI: 0.725 Max Web CSI: 0.853 VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
B	1623	/-	/-	/957	/279	/207
J	1516	/-	/-	/770	/292	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.9
J Brg Width = 4.0 Min Req = 1.8
Bearings B & J 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	934	- 2571	F - G	882	- 1851
C - D	965	- 2313	G - H	882	- 1851
D - E	1201	- 2578	H - I	203	- 430
E - F	1195	- 2540			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - P	2147	- 927	N - M	2599	- 1219
P - O	2146	- 929	M - L	2531	- 1197
O - N	1951	- 884	L - K	509	- 246

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - N	810	- 444	L - H	1753	- 830
N - E	350	- 385	H - K	797	- 1450
F - L	415	- 887	K - I	1608	- 758
G - L	336	- 418	I - J	710	- 1528

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

Wind

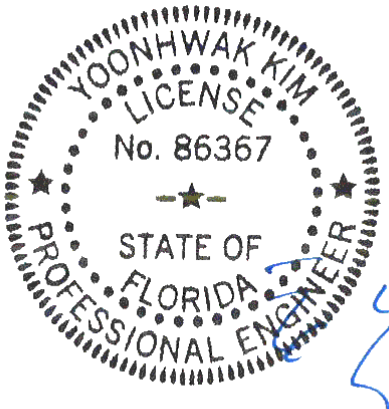
Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 5-7-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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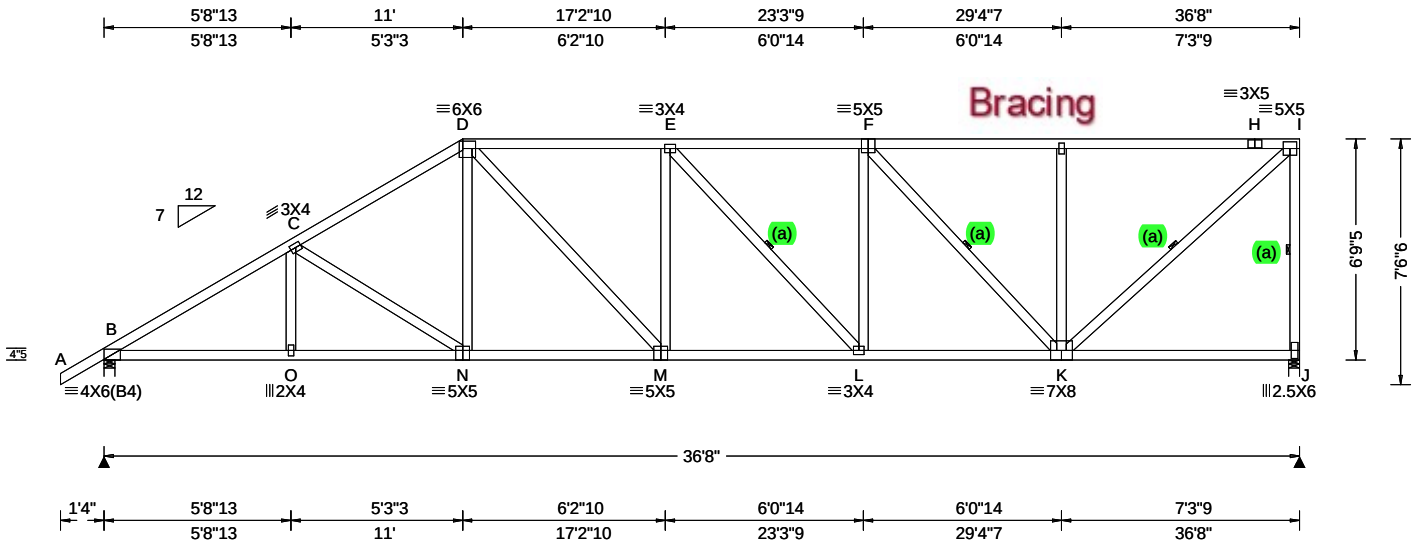
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636340 HIPM FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A03		Cust: R 215 JRef:1X9O2150001 T45 DrwNo: 288.21.0914.30910 / YK 10/15/2021	



Loading Criteria (psf)

TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria

Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.67 ft
Loc. from endwall: not in 9.00 ft
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): 0.164	E	999	240
VERT(CL): 0.303	E	999	180
HORZ(LL): 0.059	K	-	-
HORZ(TL): 0.110	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.987
Max BC CSI: 0.773
Max Web CSI: 0.824

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1766	/-	/-	/978	/270	/248
J	1762	/-	/-	/782	/298	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.8
J Brg Width = 4.0 Min Req = 2.1
Bearings B & J 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	860	- 2830	F - G	672	- 1617
C - D	875	- 2465	G - H	672	- 1617
D - E	988	- 2470	H - I	672	- 1617
E - F	932	- 2306			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - O	2363	- 897	M - L	2479	- 1000
O - N	2362	- 898	L - K	2289	- 931
N - M	2060	- 802			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - N	400	- 21	G - K	396	- 490
D - M	598	- 308	K - I	2163	- 900
L - F	398	- 19	I - J	749	- 1624
F - K	387	- 995			

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

Loading

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

Wind

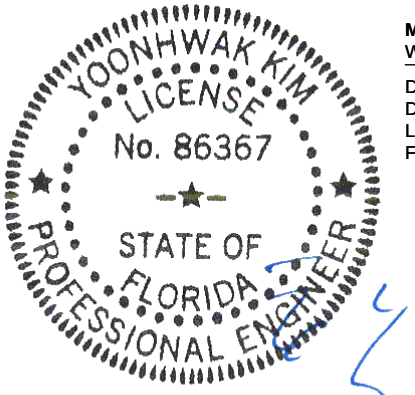
Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 6-9-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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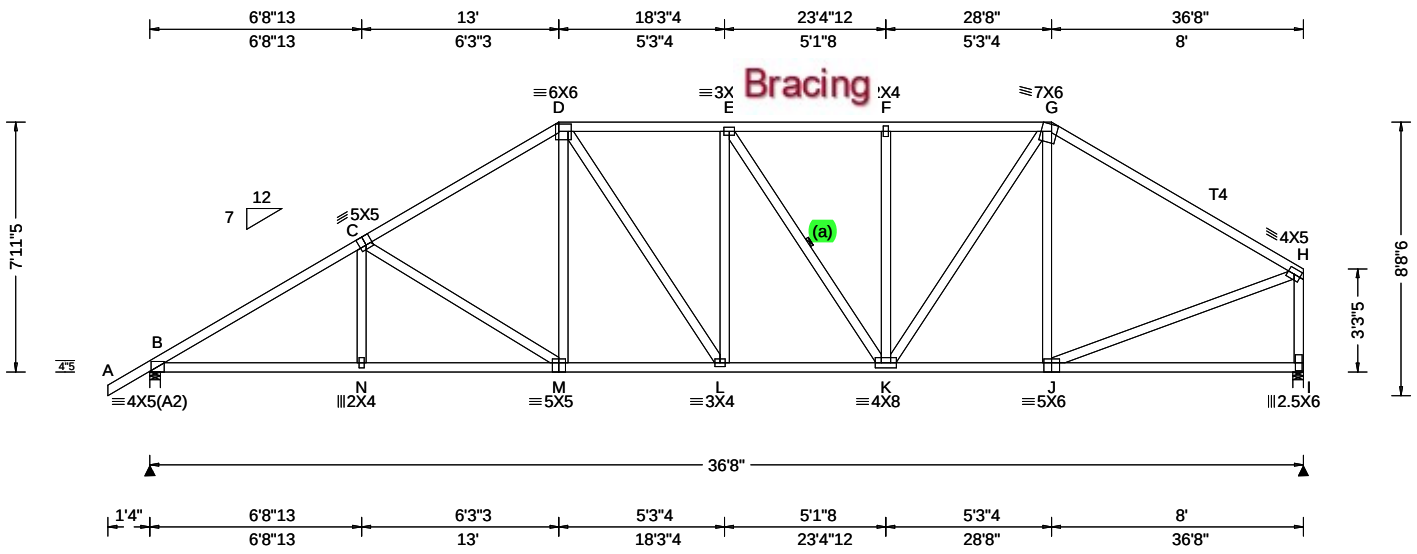
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636342 HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A04		Cust: R 215 JRef:1X9O2150001 T26 DrwNo: 288.21.0914.28533 / YK 10/15/2021	



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): 0.123 E 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.234 E 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.050 I - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.095 I - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.591
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.648
Spacing: 24.0 "	MWFRS Parallel Dist: h/2 to h	Rep Fac: Yes	Max Web CSI: 0.628
	C&C Dist a: 3.67 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	VIEW Ver: 21.01.01A.0521.20
	GCpi: 0.18	WAVE	
	Wind Duration: 1.60		

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

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.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 7-11-5.

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
B	1749	/-	/-	/980	/282	/214
I	1674	/-	/-	/823	/268	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.1
I Brg Width = 4.0 Min Req = 2.0
Bearings B & I are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

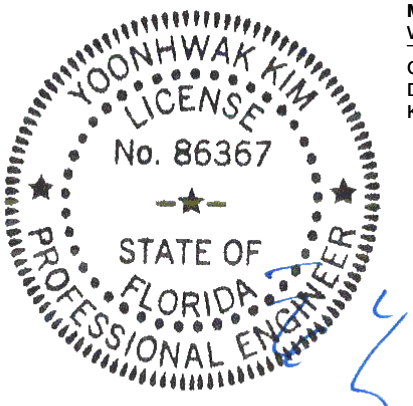
Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	794	- 2779	E - F	786	- 1920
C - D	791	- 2295	F - G	786	- 1920
D - E	827	- 2083	G - H	614	- 1804

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	2311	- 702	L - K	2086	- 665
N - M	2309	- 703	K - J	1459	- 434
M - L	1893	- 562			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - M	173	- 496	J - H	1521	- 452
D - M	456	- 38	H - I	539	- 1606
K - G	811	- 338			



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10/15/2021

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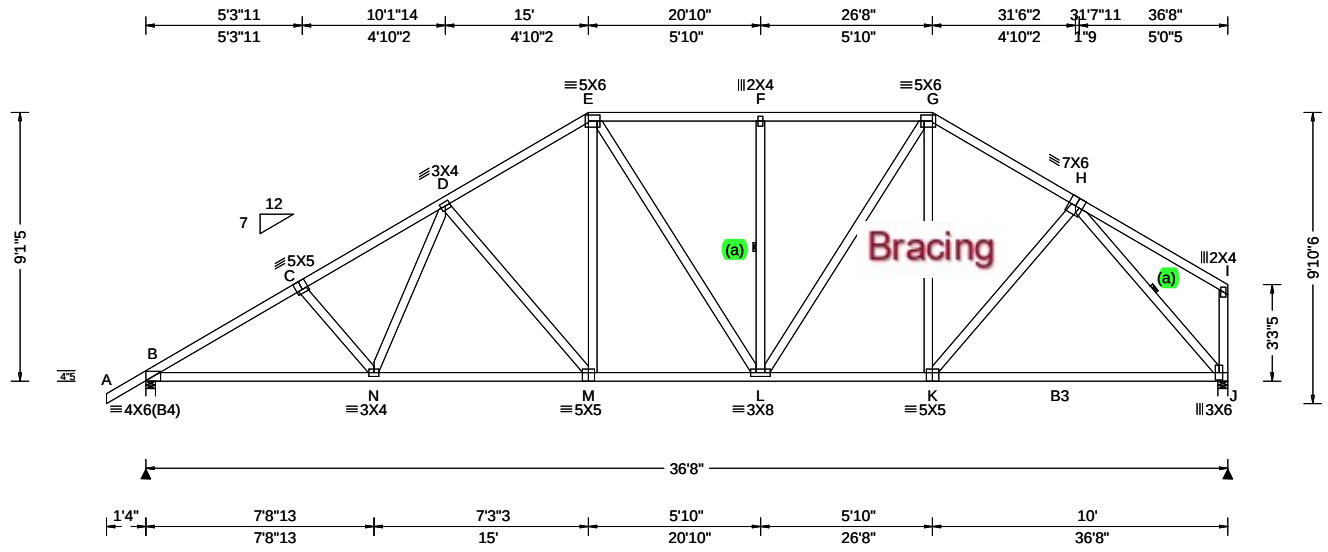
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636344 HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A05	Cust: R 215 JRef:1X9O2150001 T47 DrwNo: 288.21.0914.26480 / YK 10/15/2021



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): 0.131 M 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.238 M 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.057 J - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.104 J - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.467
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.938
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.655
	C&C Dist a: 3.67 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

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.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 9-1-5.

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
B	1815	/-	/-	/989	/88	/245
J	1794	/-	/-	/834	/35	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.8
J Brg Width = 4.0 Min Req = 1.5
Bearings B & J are a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

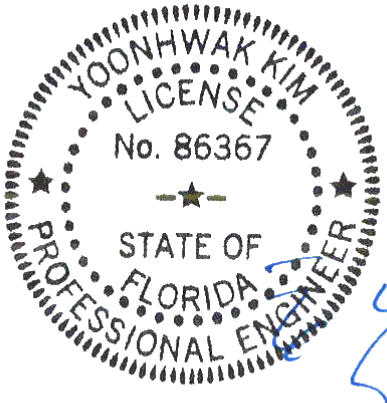
Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - C	731	- 2939	E - F	703	- 1853
C - D	737	- 2750	F - G	703	- 1853
D - E	708	- 2192	G - H	611	- 1869

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	2460	- 663	L - K	1543	- 357
N - M	2166	- 558	K - J	1304	- 352
M - L	1824	- 441			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
N - D	401	- 34	F - L	322	- 384
D - M	183	- 535	L - G	561	- 254
E - M	694	- 76	H - J	547	- 1968



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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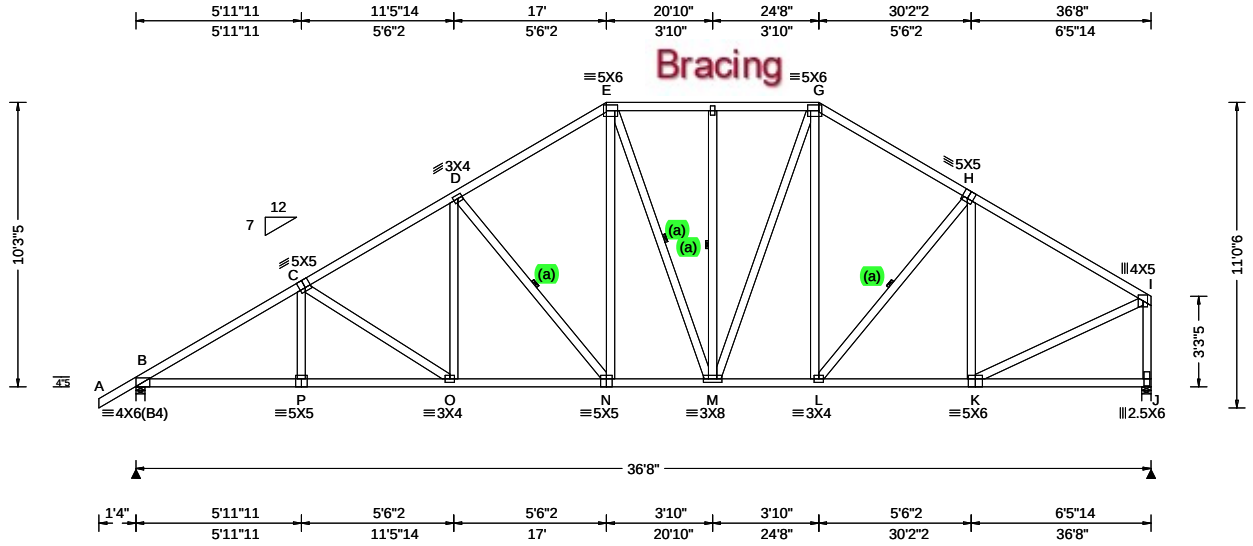
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636346 HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A06	Cust: R 215 JRef:1X9O2150001 T41 DrwNo: 288.21.0914.23970 / YK 10/15/2021



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): 0.125 O 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.234 O 999 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.051 J - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.094 J - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.657
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.751
Spacing: 24.0 "	MWFRS Parallel Dist: h to 2h	Rep Fac: Yes	Max Web CSI: 0.589
	C&C Dist a: 3.67 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1772	/-	/-	/993	/71	/277
J	1712	/-	/-	/840	/28	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.8
J Brg Width = 4.0 Min Req = 2.0
Bearings B & J 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	630	- 2838	F - G	585	- 1587
C - D	630	- 2452	G - H	575	- 1766
D - E	618	- 1958	H - I	440	- 1735
E - F	585	- 1587			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - P	2368	- 570	N - M	1610	- 320
P - O	2366	- 571	M - L	1437	- 278
O - N	2033	- 450	L - K	1436	- 309

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - O	144	- 386	M - G	415	- 158
O - D	414	- 25	H - K	208	- 451
D - N	209	- 676	K - I	1546	- 326
E - N	705	- 114	I - J	416	- 1661

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member.

Loading

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

Wind

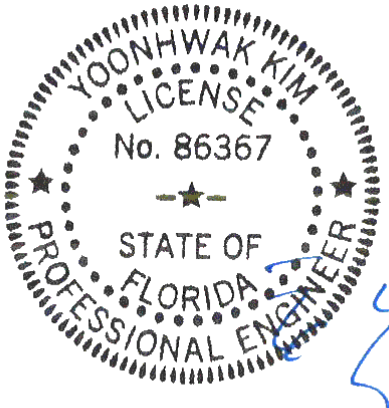
Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 10-3-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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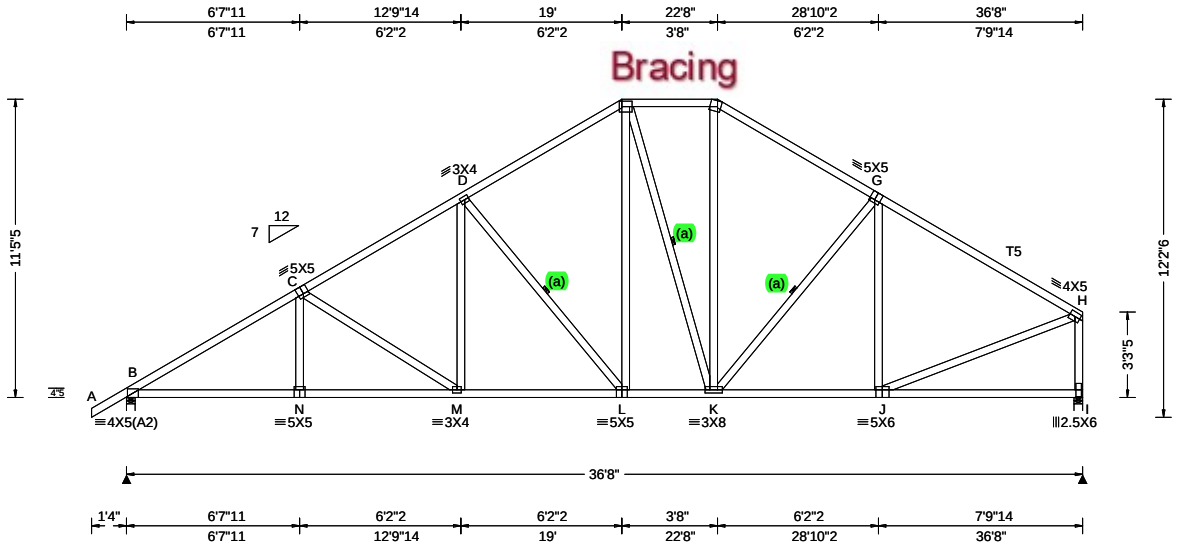
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636348 HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A07	Cust: R 215 JRef:1X9O2150001 T22 DrwNo: 288.21.0914.21757 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.67 ft
Loc. from endwall: not in 9.00 ft
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): 0.120	M	999	240
VERT(CL): 0.231	M	999	180
HORZ(LL): 0.046	I	-	-
HORZ(TL): 0.088	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.657
Max BC CSI: 0.707
Max Web CSI: 0.570

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1724	/-	/-	/994	/47	/308
I	1646	/-	/-	/842	/24	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.0
I Brg Width = 4.0 Min Req = 1.9
Bearings B & I 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	544	- 2728	E - F	480	- 1311
C - D	537	- 2276	F - G	508	- 1629
D - E	521	- 1704	G - H	399	- 1759

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - N	2268	- 488	L - K	1380	- 198
N - M	2266	- 489	K - J	1434	- 256
M - L	1870	- 346			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - M	171	- 459	K - F	502	- 101
M - D	488	- 30	J - H	1498	- 258
D - L	236	- 780	H - I	363	- 1586
E - L	726	- 135			

Lumber

Top chord: 2x4 SP #2; T5 2x4 SP M-31;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Loading

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

Wind

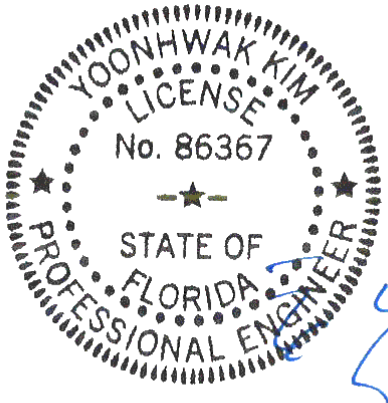
Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 11-5-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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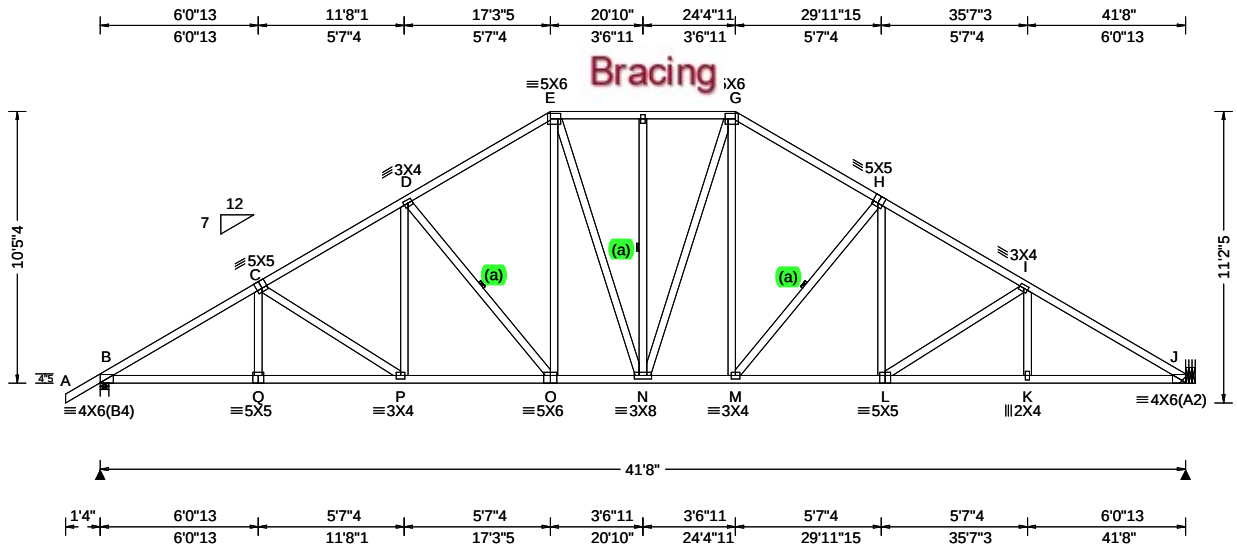
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634040 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A08	Cust: R 215 JRef:1X9O2150001 T20 / DrwNo: 288.21.0838.05119 / YK 10/15/2021



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.171	O	999	240
VERT(CL): 0.335	O	999	180
HORZ(LL): 0.082	J	-	-
HORZ(TL): 0.160	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.473
Max BC CSI: 0.806
Max Web CSI: 0.352

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1898	/-	/-	/1078	/31	/295
J	1826	/-	/-	/1019	/27	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.9
J Brg Width = - 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.
B - C	718	- 3126	F - G	671	- 1879
C - D	715	- 2734	G - H	701	- 2229
D - E	701	- 2227	H - I	718	- 2740
E - F	671	- 1879	I - J	725	- 3149

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - Q	2616	- 538	N - M	1843	- 279
Q - P	2614	- 539	M - L	2277	- 414
P - O	2274	- 413	L - K	2638	- 547
O - N	1841	- 278	K - J	2640	- 546

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - P	151	- 393	G - M	672	- 118
P - D	426	- 27	M - H	216	- 694
D - O	215	- 693	H - L	435	- 32
E - O	668	- 118	L - I	159	- 418

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

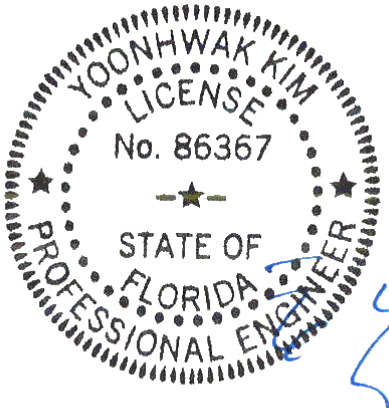
Bracing
(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties
(J) Hanger Support Required, by others

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.

Additional Notes
Refer to DWG PB160160118 for piggyback details.
The overall height of this truss excluding overhang is 10-5-4.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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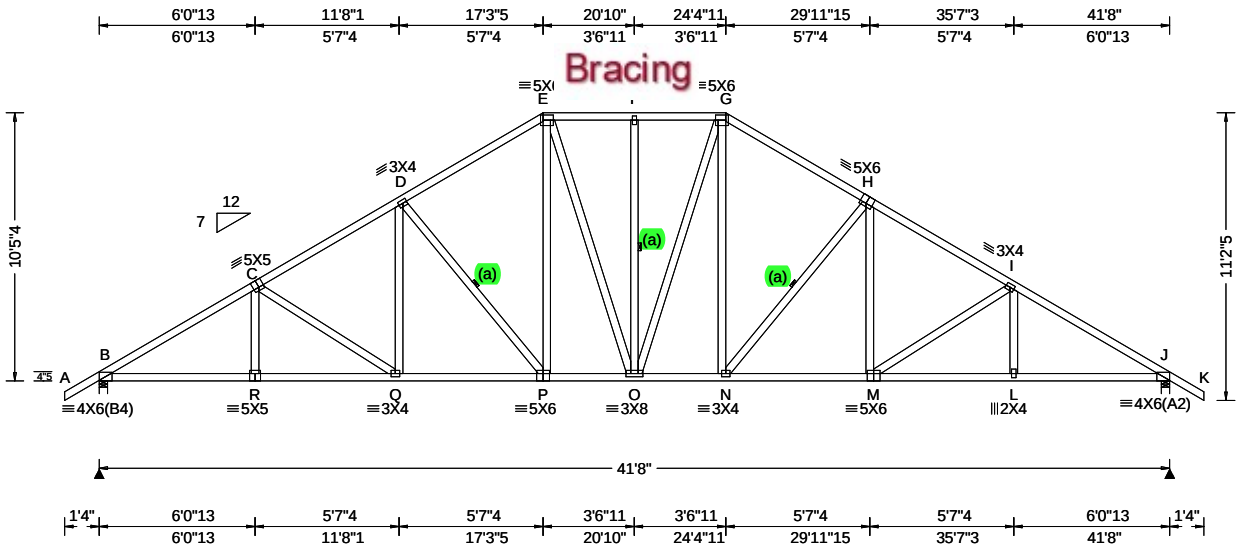
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634044 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A09	Cust: R 215 JRef:1X9O2150001 T9 / DrwNo: 288.21.0838.05118 / YK 10/15/2021



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.171	P	999	240
VERT(CL): 0.335	P	999	180
HORZ(LL): 0.082	J	-	-
HORZ(TL): 0.160	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.473
Max BC CSI: 0.805
Max Web CSI: 0.344

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1897	/-	/-	/1081	/-	/295
J	1827	/-	/-	/1023	/-	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.9
J Brg Width = 4.0 Min Req = 1.8
Bearings B & J 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	306	- 3124	F - G	261	- 1877
C - D	295	- 2732	G - H	277	- 2226
D - E	277	- 2226	H - I	297	- 2735
E - F	261	- 1877	I - J	312	- 3137

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - R	2614	- 184	O - N	1841	0
R - Q	2613	- 185	N - M	2274	- 50
Q - P	2273	- 50	M - L	2626	- 191
P - O	1839	0	L - J	2628	- 190

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - Q	162	- 394	G - N	670	- 121
Q - D	426	- 32	N - H	221	- 692
D - P	221	- 693	H - M	431	- 36
E - P	668	- 121	M - I	169	- 409

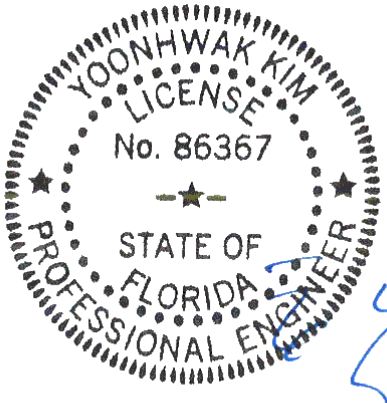
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing
(a) Continuous lateral restraint equally spaced on member.

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.

Additional Notes
Refer to DWG PB160160118 for piggyback details.
The overall height of this truss excluding overhang is 10-5-4.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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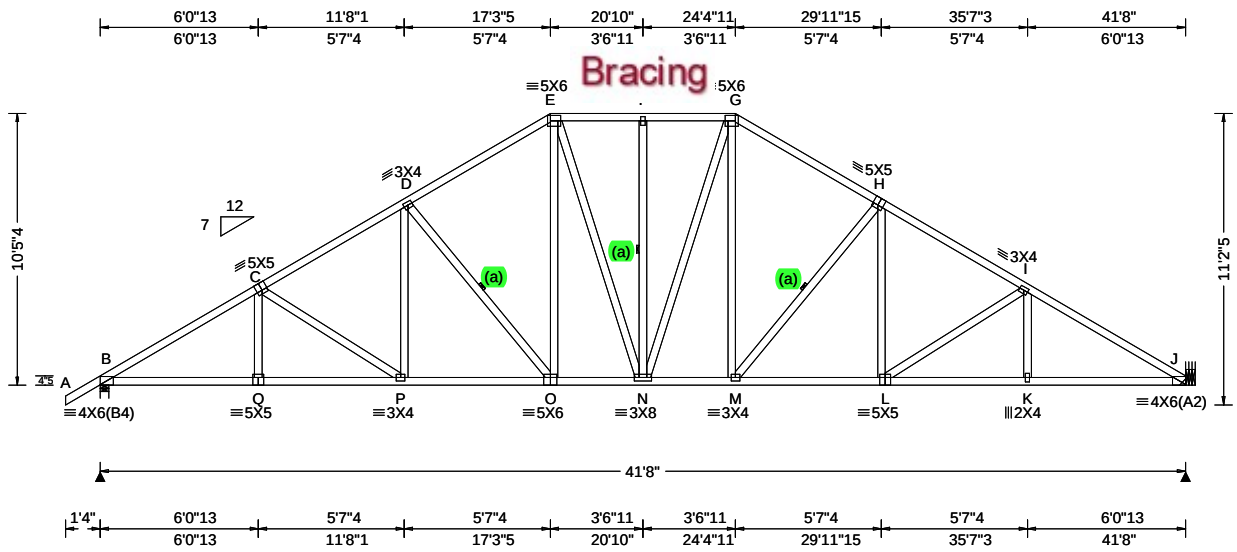
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634042 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A09	Cust: R 215 JRef:1X9O2150001 T15 / DrwNo: 288.21.0838.05524 / YK 10/15/2021



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.171	O	999	240
VERT(CL): 0.335	O	999	180
HORZ(LL): 0.082	J	-	-
HORZ(TL): 0.160	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.473
Max BC CSI: 0.806
Max Web CSI: 0.352

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1898	/-	/-	/1078	/31	/295
J	1826	/-	/-	/1019	/27	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.9
J Brg Width = - 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.
B - C	713	- 3126	F - G	667	- 1879
C - D	711	- 2734	G - H	697	- 2229
D - E	697	- 2227	H - I	714	- 2740
E - F	667	- 1879	I - J	721	- 3149

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - Q	2616	- 534	N - M	1843	- 277
Q - P	2614	- 535	M - L	2277	- 411
P - O	2274	- 410	L - K	2638	- 543
O - N	1841	- 276	K - J	2640	- 542

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - P	150	- 393	G - M	672	- 117
P - D	426	- 27	M - H	215	- 694
D - O	214	- 693	H - L	435	- 32
E - O	668	- 117	L - I	158	- 418

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

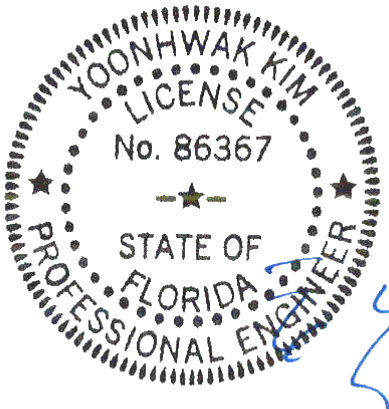
Bracing
(a) Continuous lateral restraint equally spaced on member.

Hangers / Ties
(J) Hanger Support Required, by others

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.

Additional Notes
The overall height of this truss excluding overhang is 10-5-4.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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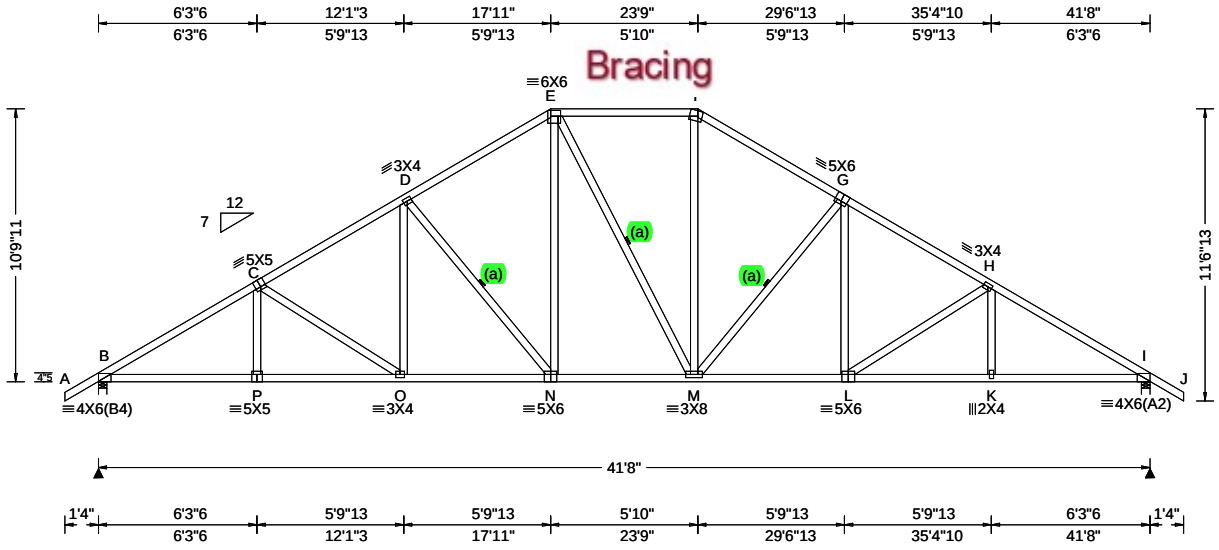
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634046 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A10	Cust: R 215 JRef:1X9O2150001 T21 / DrwNo: 288.21.0838.05494 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.192	N	999	240
VERT(CL): 0.362	N	999	180
HORZ(LL): 0.089	I	-	-
HORZ(TL): 0.168	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.501
Max BC CSI: 0.783
Max Web CSI: 0.381

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1973	/-	/-	/1078	/30	/316
I	1967	/-	/-	/1078	/30	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.0
I Brg Width = 4.0 Min Req = 2.0
Bearings B & I 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	683	- 3265	F - G	659	- 2308
C - D	677	- 2851	G - H	677	- 2839
D - E	662	- 2330	H - I	683	- 3255
E - F	619	- 1923			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - P	2734	- 480	M - L	2360	- 350
P - O	2732	- 481	L - K	2724	- 486
O - N	2372	- 350	K - I	2725	- 485
N - M	1930	- 215			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - O	161	- 417	M - F	754	- 107
O - D	436	- 31	M - G	215	- 704
D - N	216	- 705	G - L	439	- 32
E - N	784	- 111	L - H	162	- 421

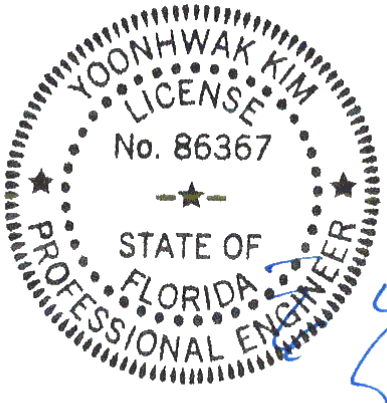
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing
(a) Continuous lateral restraint equally spaced on member.

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.

Additional Notes
The overall height of this truss excluding overhang is 10-9-11.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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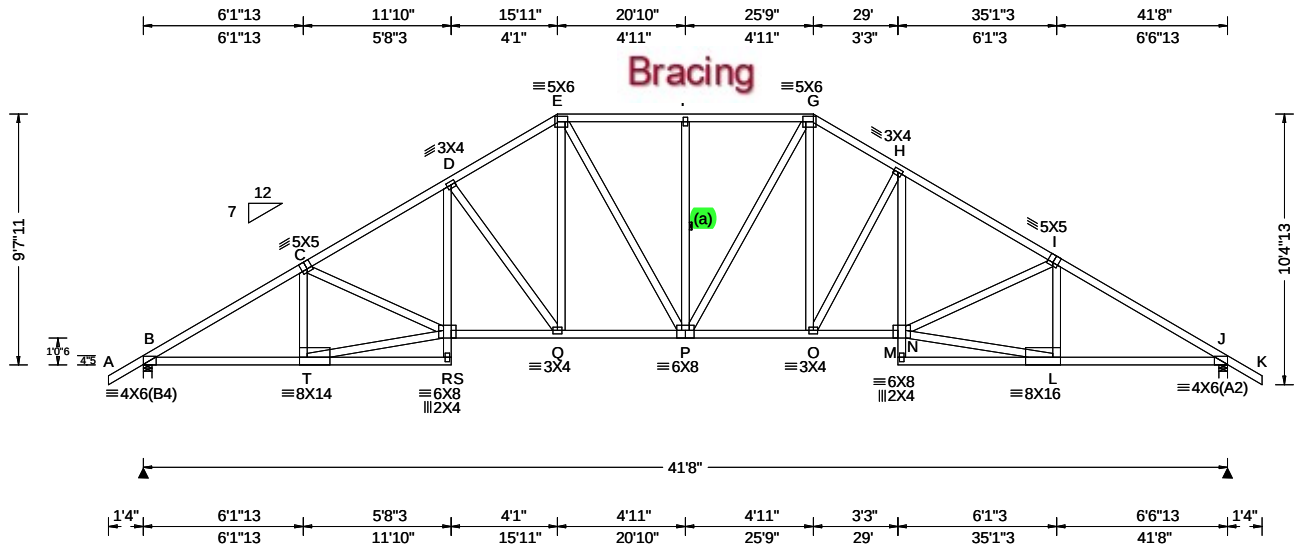
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634048 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A11	Cust: R 215 JRef:1X9O2150001 T10 / DrwNo: 288.21.0838.05291 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.212	F	999	240
VERT(CL): 0.414	F	999	180
HORZ(LL): 0.112	J	-	-
HORZ(TL): 0.219	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.520
Max BC CSI: 0.747
Max Web CSI: 0.990

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1895	/-	/-	/1074	/34	/284
J	1895	/-	/-	/1074	/34	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.9
J Brg Width = 4.0 Min Req = 1.9
Bearings B & J 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	760	- 3125	F - G	792	- 2355
C - D	865	- 3229	G - H	818	- 2624
D - E	811	- 2636	H - I	846	- 3120
E - F	792	- 2355	I - J	761	- 3116

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - T	2614	- 552	P - O	2211	- 366
R - Q	2715	- 520	O - M	2612	- 487
Q - P	2213	- 371	L - J	2603	- 547

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - T	187	- 457	O - H	257	- 859
T - R	2599	- 549	G - O	817	- 163
R - D	680	- 112	H - M	687	- 122
D - Q	256	- 865	M - L	2579	- 544
E - Q	784	- 142	L - I	179	- 399

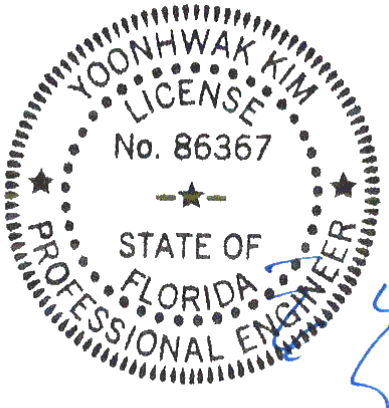
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing
(a) Continuous lateral restraint equally spaced on member.

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.

Additional Notes
The overall height of this truss excluding overhang is 9-7-11.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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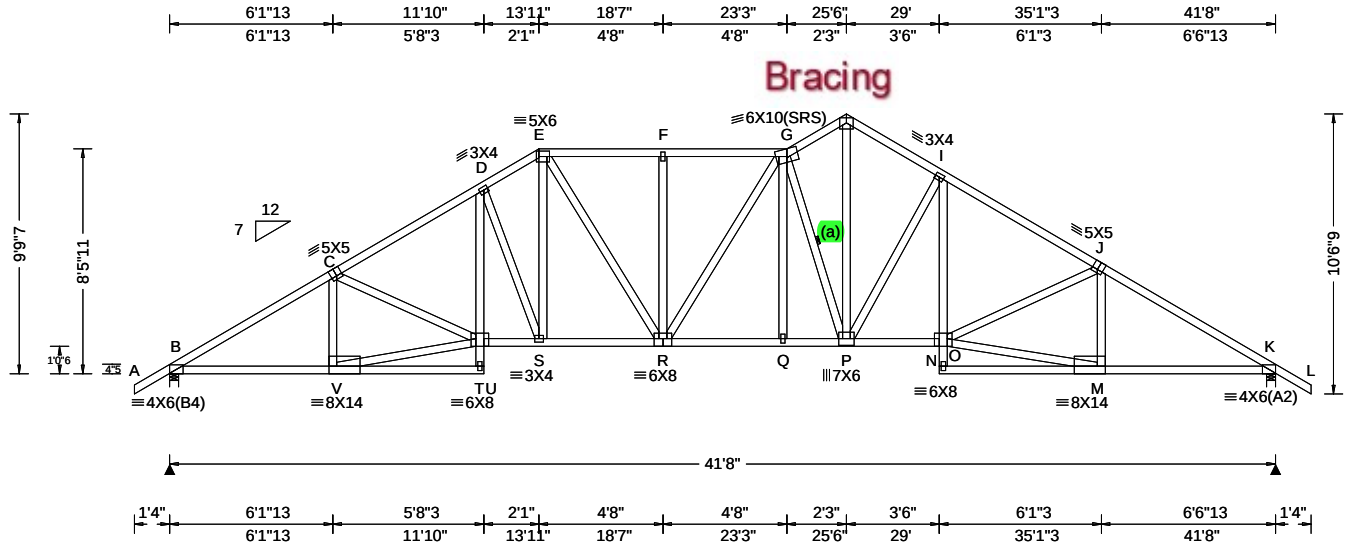
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634053 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A12	Cust: R 215 JRef:1X9O2150001 T28 / DrwNo: 288.21.0838.05588 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.225	Q	999	240
VERT(CL): 0.464	Q	999	180
HORZ(LL): 0.105	K	-	-
HORZ(TL): 0.217	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.486
Max BC CSI: 0.699
Max Web CSI: 0.974

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
B	1800	/-	/-	/1066	/33	/288
K	1800	/-	/-	/1070	/80	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.8
K Brg Width = 4.0 Min Req = 1.8
Bearings B & K 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	778	-2947	G - H	783	-2342
C - D	882	-3006	H - I	778	-2388
D - E	868	-2619	I - J	809	-2902
E - F	857	-2476	J - K	730	-2936
F - G	857	-2476			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - V	2462	-564	Q - P	2453	-498
T - S	2522	-534	P - N	2423	-456
S - R	2220	-443	M - K	2449	-522
R - Q	2454	-497			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - V	190	-421	G - P	562	-1481
V - T	2445	-561	H - P	2136	-713
T - D	717	-142	P - I	256	-841
D - S	256	-859	I - N	671	-112
E - S	727	-169	N - M	2428	-519
E - R	468	-203			

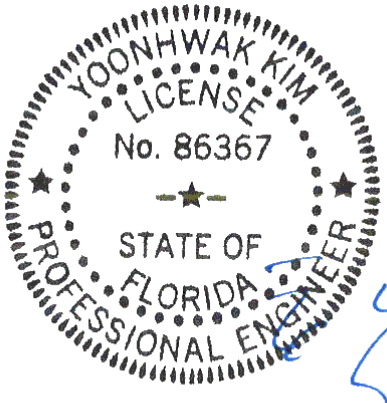
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 2X4 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.

Additional Notes
The overall height of this truss excluding overhang is 9-9-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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ALPINE
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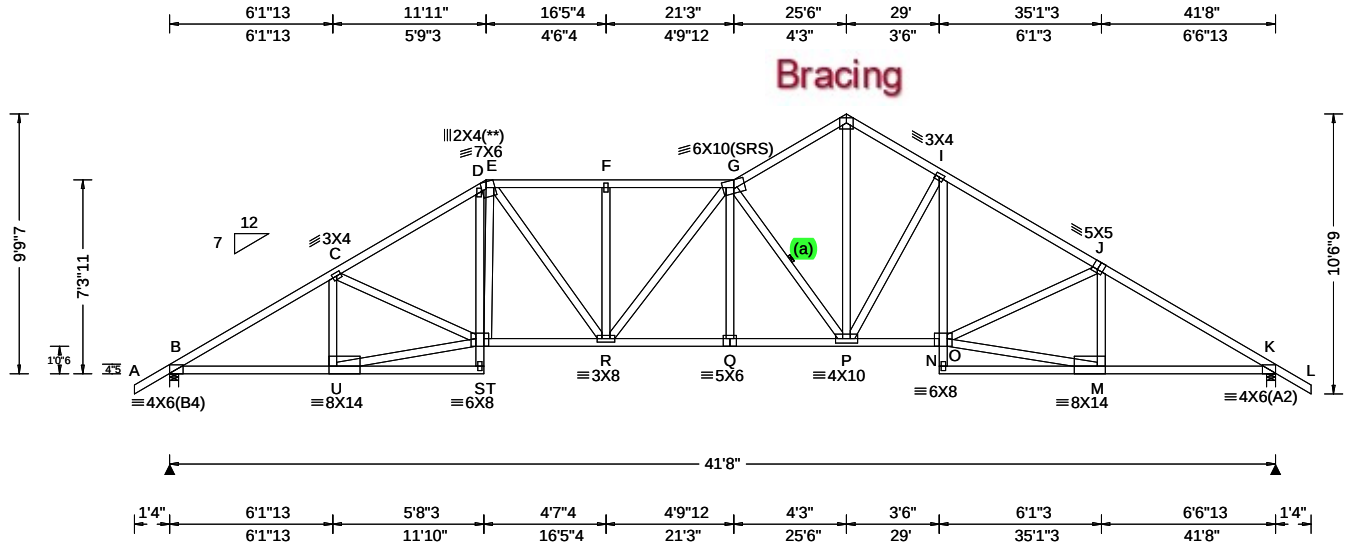
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634056 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A13	Cust: R 215 JRef:1X9O2150001 T25 / DrwNo: 288.21.0838.05447 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.247	Q	999	240
VERT(CL): 0.510	Q	973	180
HORZ(LL): 0.111	K	-	-
HORZ(TL): 0.229	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.489
Max BC CSI: 0.702
Max Web CSI: 0.935

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
B	1800	/-	/-	/1058	/34	/288
K	1800	/-	/-	/1065	/69	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.8
K Brg Width = 4.0 Min Req = 1.8
Bearings B & K 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	797	- 2948	G - H	744	- 2389
C - D	908	- 3010	H - I	754	- 2388
D - E	956	- 2899	I - J	786	- 2901
E - F	945	- 2857	J - K	711	- 2936
F - G	945	- 2857			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - U	2463	- 581	Q - P	2981	- 676
S - R	2496	- 548	P - N	2422	- 442
R - Q	2983	- 675	M - K	2449	- 505

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - U	194	- 425	P - I	253	- 836
U - S	2455	- 578	H - P	2097	- 654
S - E	778	- 241	I - N	670	- 112
E - R	602	- 233	N - M	2428	- 503
G - P	605	- 1676			

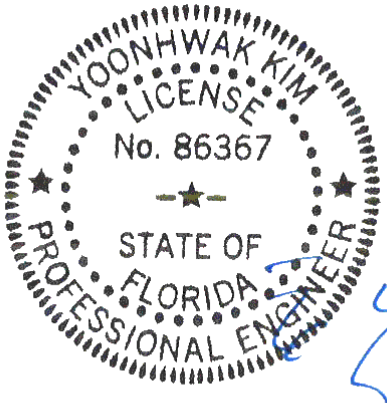
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

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.

Wind
Wind loads based on MWFRS with additional C&C member design.
Wind loading based on both gable and hip roof types.

Additional Notes
The overall height of this truss excluding overhang is 9-9-7.



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10/15/2021

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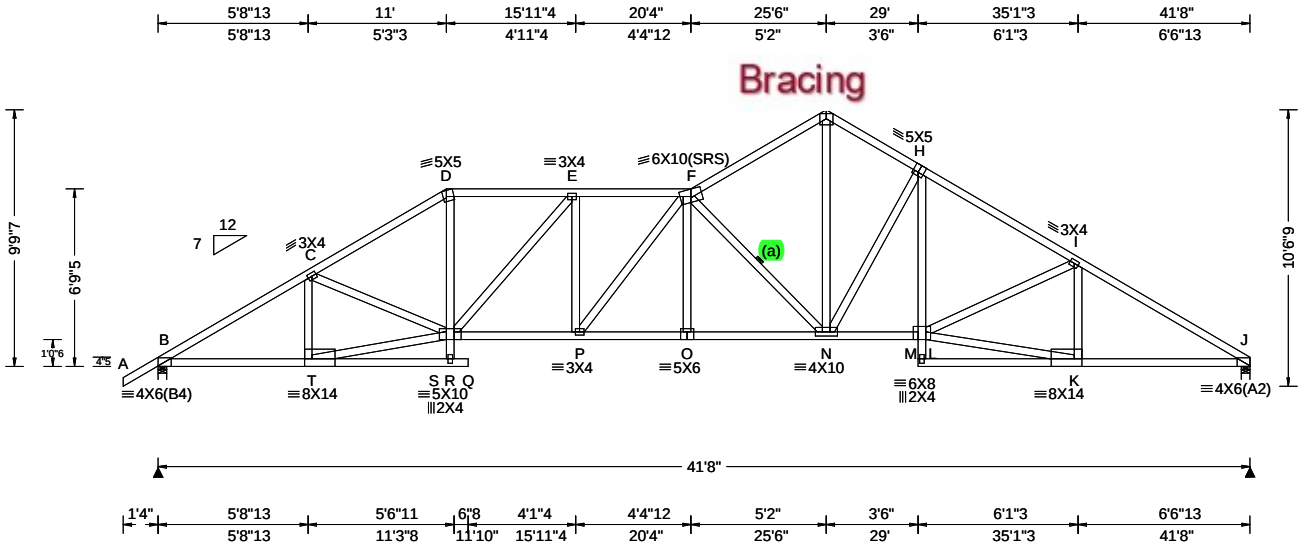
Suite 305
Orlando FL, 32821

SEQN: 403093 SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A14	Cust: R 215 JRef:1X9O2150001 T19 DrwNo: 288.21.0914.18757 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.268	O	999	240
VERT(CL): 0.553	O	897	180
HORZ(LL): 0.119	J	-	-
HORZ(TL): 0.245	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.484
Max BC CSI: 0.779
Max Web CSI: 0.936

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1825	/-	/-	/1074	/40	/284
J	1731	/-	/-	/1005	/56	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.8
J Brg Width = 4.0 Min Req = 1.7
Bearings B & J 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	802	- 2949	F - G	732	- 2411
C - D	933	- 3087	G - H	748	- 2390
D - E	856	- 2630	H - I	783	- 2905
E - F	1006	- 3102	I - J	709	- 2948

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - T	2465	- 613	O - N	3278	- 780
R - P	3091	- 775	N - L	2424	- 454
P - O	3281	- 779	K - J	2462	- 526

Maximum Web Forces Per Ply (lbs)

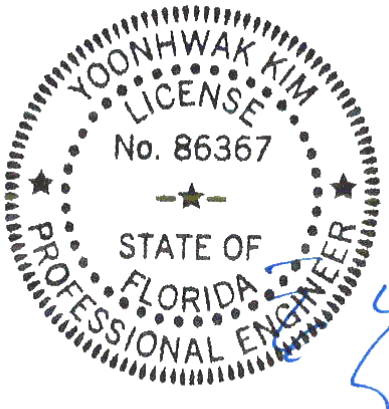
Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - T	204	- 456	G - N	2063	- 625
T - R	2457	- 608	N - H	250	- 825
D - R	1193	- 289	H - L	674	- 120
R - E	255	- 695	L - K	2441	- 524
F - N	653	- 1832			

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

Bracing
(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.

Additional Notes
The overall height of this truss excluding overhang is 9-9-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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ALPINE
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Suite 305
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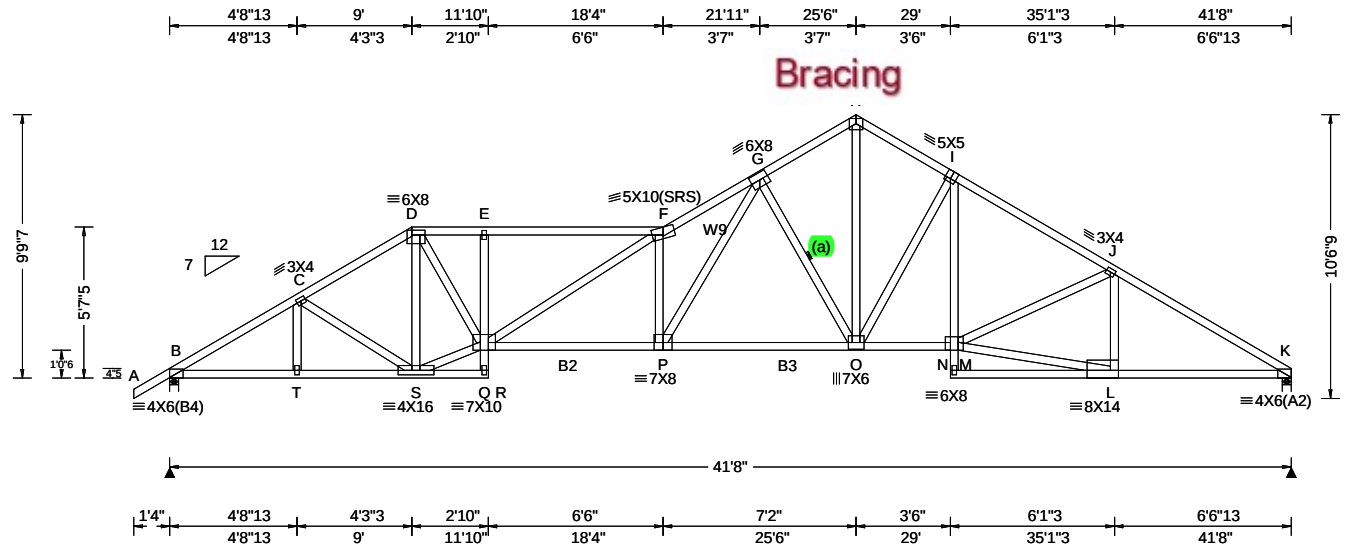
SEQN: 634060 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A15	Cust: R 215 JRef:1X9O2150001 T39 / DrwNo: 288.21.0838.05244 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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): 0.374	F	999	240
VERT(CL): 0.751	F	661	180
HORZ(LL): 0.129	K	-	-
HORZ(TL): 0.259	K	-	-

Creep Factor: 2.0
Max TC CSI: 0.928
Max BC CSI: 0.866
Max Web CSI: 0.962

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	1851	/-	/-	/1046	/44	/277
K	1786	/-	/-	/1001	/45	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.9
K Brg Width = 4.0 Min Req = 1.8
Bearings B & K 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	824	- 3061	G - H	719	- 2521
C - D	834	- 2787	H - I	726	- 2527
D - E	1119	- 3630	I - J	760	- 3033
E - F	1123	- 3644	J - K	690	- 3054
F - G	1466	- 5098			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - T	2571	- 644	P - O	2960	- 586
T - S	2571	- 645	O - M	2534	- 434
Q - P	4358	- 1023	L - K	2553	- 510

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
D - S	224	- 805	G - O	556	- 1655
D - Q	2388	- 685	O - I	256	- 821
S - Q	2505	- 588	H - O	2260	- 631
Q - F	108	- 838	I - M	655	- 118
F - P	888	- 2414	M - L	2524	- 508
P - G	2872	- 895	L - J	169	- 383

Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2; B2,B3 2x4 SP M-31;
Webs: 2x4 SP #3; W9 2x4 SP #2;

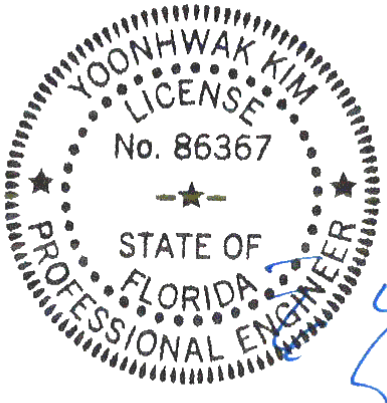
Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 2X4 except as noted.

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.

Additional Notes
The overall height of this truss excluding overhang is 9-9-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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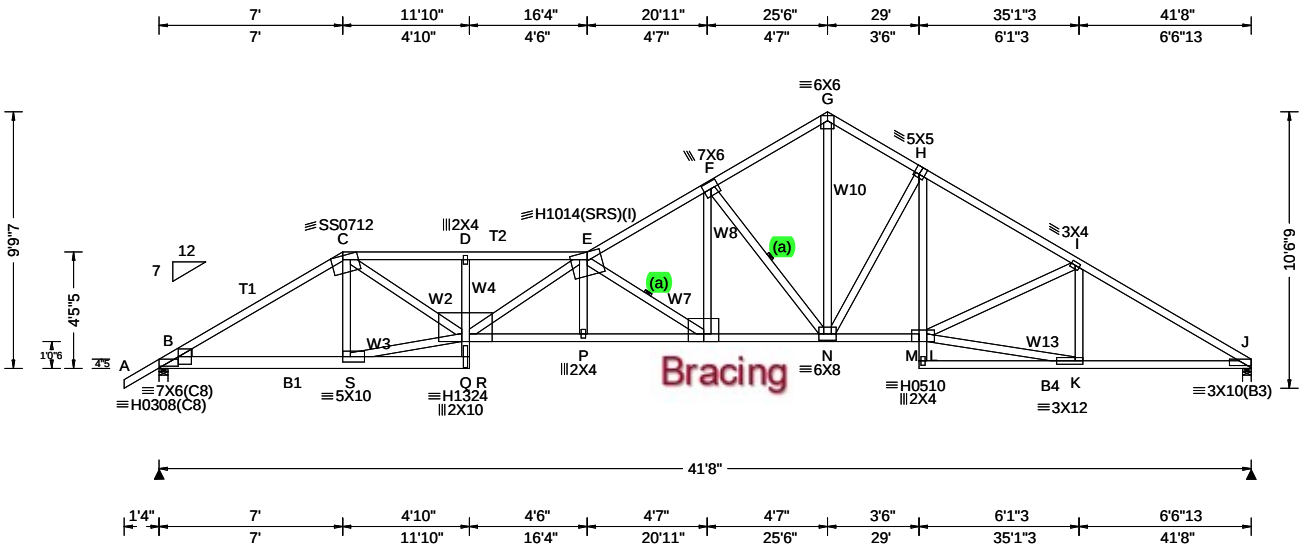
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634089 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A16	Cust: R 215 JRef:1X9O2150001 T11 / DrwNo: 288.21.0838.05555 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 4.17 ft
Loc. from endwall: not in 13.00 ft
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: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
HS, WAVE, 18SS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL):	0.597 E	832	240
VERT(CL):	1.219 E	407	180
HORZ(LL):	0.194 J	-	-
HORZ(TL):	0.396 J	-	-

Creep Factor: 2.0
Max TC CSI: 0.840
Max BC CSI: 0.958
Max Web CSI: 0.931

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	3472	/-	/-	/-	/493	/-
J	2138	/-	/-	/-	/326	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 2.9
J Brg Width = 4.0 Min Req = 2.5
Bearings B & J 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	868	- 6290	F - G	499	- 3301
C - D	1181	- 8836	G - H	494	- 3285
D - E	1187	- 8889	H - I	597	- 3847
E - F	789	- 5413	I - J	582	- 3724

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - S	5338	- 715	O - N	4511	- 647
Q - P	8738	- 1210	N - L	3239	- 484
P - O	8741	- 1213	K - J	3129	- 471

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - Q	4123	- 567	F - N	394	- 2812
S - Q	5306	- 695	N - H	158	- 915
Q - R	474	- 4	G - N	3004	- 386
Q - E	186	- 587	H - L	768	- 70
E - O	675	- 5027	L - K	3101	- 469
O - F	2974	- 342	K - I	166	- 509

Lumber

Top chord: 2x4 SP #2; T1,T2 2x4 SP M-31;
Bot chord: 2x4 SP M-31; B1 2x6 SP 2400f-2.0E;
B4 2x4 SP #2;
Webs: 2x4 SP #3; W2,W4,W7,W8,W10,W13 2x4 SP #2;
W3 2x4 SP M-31;
Lt Wedge: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Special Loads

------(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	63 plf at	-1.00 to	63 plf at	7.00
TC: From	32 plf at	7.00 to	32 plf at	9.21
TC: From	63 plf at	9.21 to	63 plf at	41.67
BC: From	5 plf at	-1.00 to	5 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	7.03
BC: From	10 plf at	7.03 to	10 plf at	9.21
BC: From	20 plf at	9.21 to	20 plf at	41.67

TC: 441 lb Conc. Load at 7.03
BC: 526 lb Conc. Load at 7.03
BC: 1201 lb Conc. Load at 9.21

Plating Notes

(I) - plates so marked were sized using 0% Fabrication Tolerance, 0 degrees Rotational Tolerance, and/or zero Positioning Tolerance.

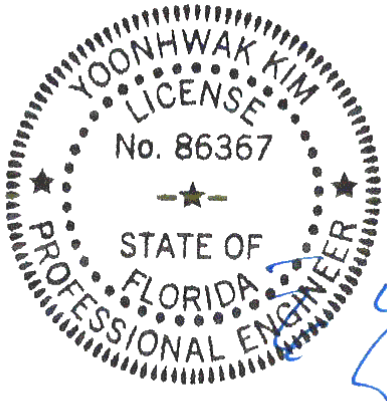
Wind

Wind loads and reactions based on MWFRS.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 9-9-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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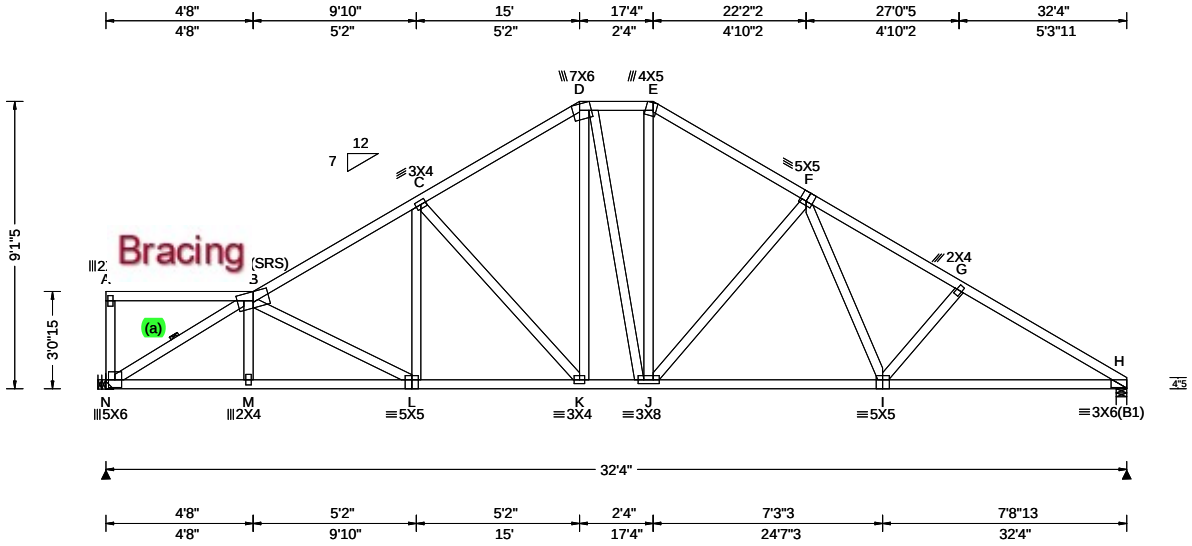
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 396062 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A17	Cust: R 215 JRef:1X9O2150001 T29 / DrwNo: 288.21.0838.04805 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.23 ft
Loc. from endwall: not in 9.00 ft
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): 0.102	K	999	240
VERT(CL): 0.204	K	999	180
HORZ(LL): 0.047	H	-	-
HORZ(TL): 0.094	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.393
Max BC CSI: 0.715
Max Web CSI: 0.690

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
N	1370	/-	/-	/708	/40	/225
H	1416	/-	/-	/787	/15	/-

Wind reactions based on MWFRS
N Brg Width = - Min Req = -
H Brg Width = 4.0 Min Req = 1.7
Bearing H 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.
B - C	508	- 2006	E - F	480	- 1583
C - D	487	- 1576	F - G	523	- 2186
D - E	454	- 1303	G - H	519	- 2378

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
N - M	1983	- 402	K - J	1280	- 137
M - L	1978	- 405	J - I	1661	- 261
L - K	1667	- 280	I - H	1985	- 378

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
N - B	576	- 2292	J - E	533	- 110
C - K	217	- 589	J - F	198	- 566
D - K	451	- 134	F - I	442	- 47

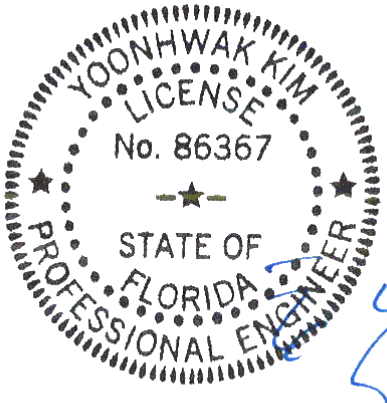
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing
(a) Continuous lateral restraint equally spaced on member.

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.
Left end vertical not exposed to wind pressure.
Wind loading based on both gable and hip roof types.

Additional Notes
The overall height of this truss excluding overhang is 9-1-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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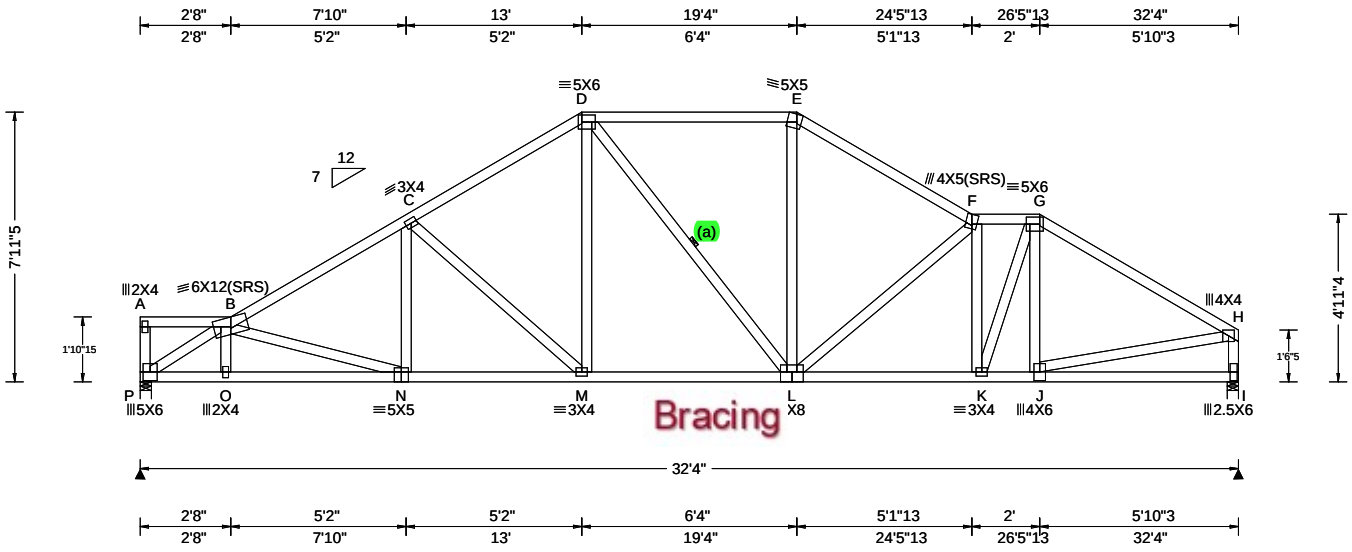
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 633497 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A18	Cust: R 215 JRef:1X9O2150001 T32 / DrwNo: 288.21.0838.04666 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.23 ft
Loc. from endwall: not in 9.00 ft
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): 0.099	M	999	240
VERT(CL): 0.197	M	999	180
HORZ(LL): 0.040	I	-	-
HORZ(TL): 0.080	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.606
Max BC CSI: 0.588
Max Web CSI: 0.565

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1406	/-	/-	/742	/231	/164
I	1396	/-	/-	/753	/226	/-

Wind reactions based on MWFRS
P Brg Width = 4.0 Min Req = 1.7
I Brg Width = 4.0 Min Req = 1.6
Bearings P & I 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	641	- 2239	E - F	629	- 1788
C - D	629	- 1828	F - G	610	- 1774
D - E	597	- 1494	G - H	550	- 1821

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
P - O	2140	- 575	M - L	1506	- 355
O - N	2135	- 580	L - K	1819	- 502
N - M	1869	- 482	K - J	1499	- 404

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
P - B	682	- 2490	F - K	254	- 719
C - M	173	- 492	K - G	794	- 239
D - M	543	- 58	J - H	1483	- 396
L - E	471	- 50	H - I	411	- 1344
L - F	185	- 444			

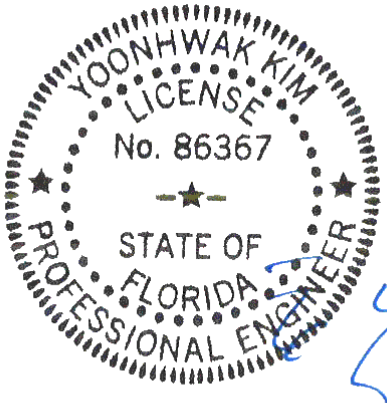
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Bracing
(a) Continuous lateral restraint equally spaced on member.

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.
End verticals not exposed to wind pressure.
Wind loading based on both gable and hip roof types.

Additional Notes
The overall height of this truss excluding overhang is 7-11-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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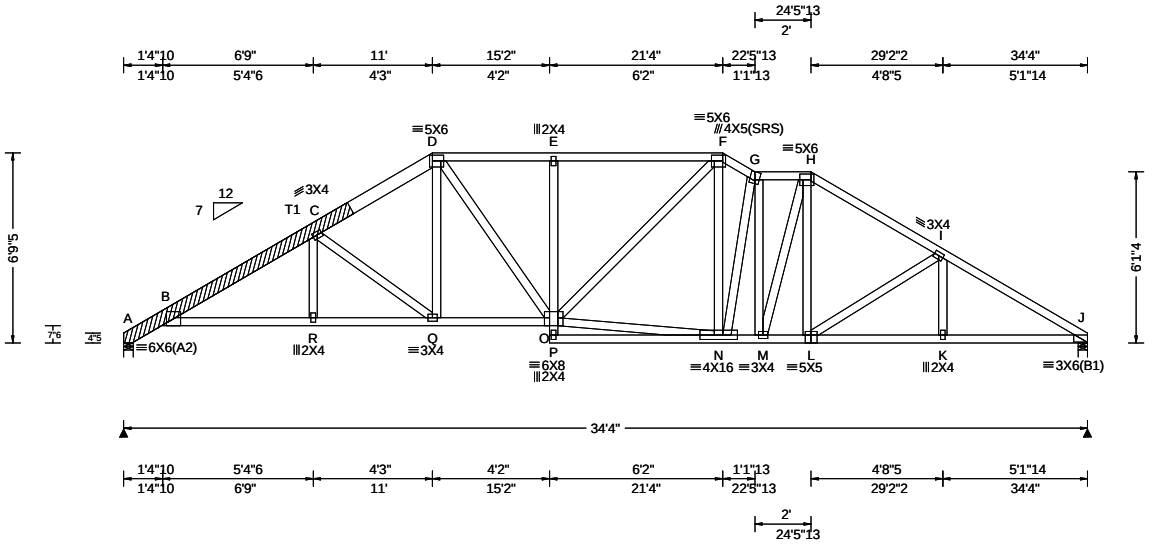
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 633494 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A19	Cust: R 215 JRef:1X9O2150001 T40 / DrwNo: 288.21.0838.04650 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.43 ft
Loc. from endwall: not in 9.00 ft
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): 0.149	E	999	240
VERT(CL): 0.308	E	999	180
HORZ(LL): 0.095	J	-	-
HORZ(TL): 0.196	J	-	-

Creep Factor: 2.0
Max TC CSI: 0.391
Max BC CSI: 0.621
Max Web CSI: 0.643

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	1406	/-	/-	/796	/258	/168
J	1421	/-	/-	/815	/242	/-

Wind reactions based on MWFRS
A Brg Width = 4.0 Min Req = 1.5
J Brg Width = 4.0 Min Req = 1.7
Bearings A & J 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.
A - B	231	- 699	F - G	822	- 1971
B - C	857	- 2604	G - H	770	- 1828
C - D	841	- 2178	H - I	779	- 2047
D - E	905	- 2087	I - J	775	- 2395
E - F	901	- 2078			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - R	2332	- 694	M - L	1701	- 498
R - Q	2329	- 693	L - K	1998	- 601
Q - O	1792	- 518	K - J	2000	- 600
N - M	1852	- 571			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - Q	223	- 683	N - F	403	- 44
D - Q	457	- 79	N - G	168	- 444
D - O	487	- 286	G - M	229	- 473
O - N	1687	- 515	M - H	449	- 247
O - F	434	- 202			

Lumber

Top chord: 2x4 SP #2; T1 2x6 SP 2400f-2.0E;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Tray Scab(s)

(1) 2x6x9-4-12 x SP 2400f-2.0E scab at left end. Attach scab to face of chord with: 0.128"x3", min. nails @ 8" oc, plus additional nail clusters at: BRG.: (6), heel: (7), 1st panel point: (2).

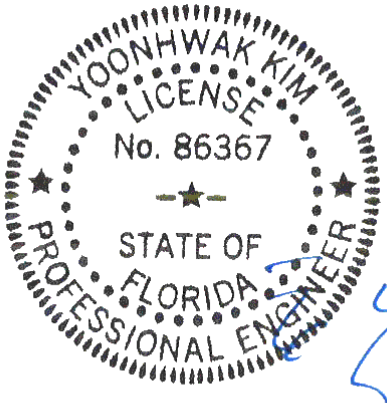
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 6-9-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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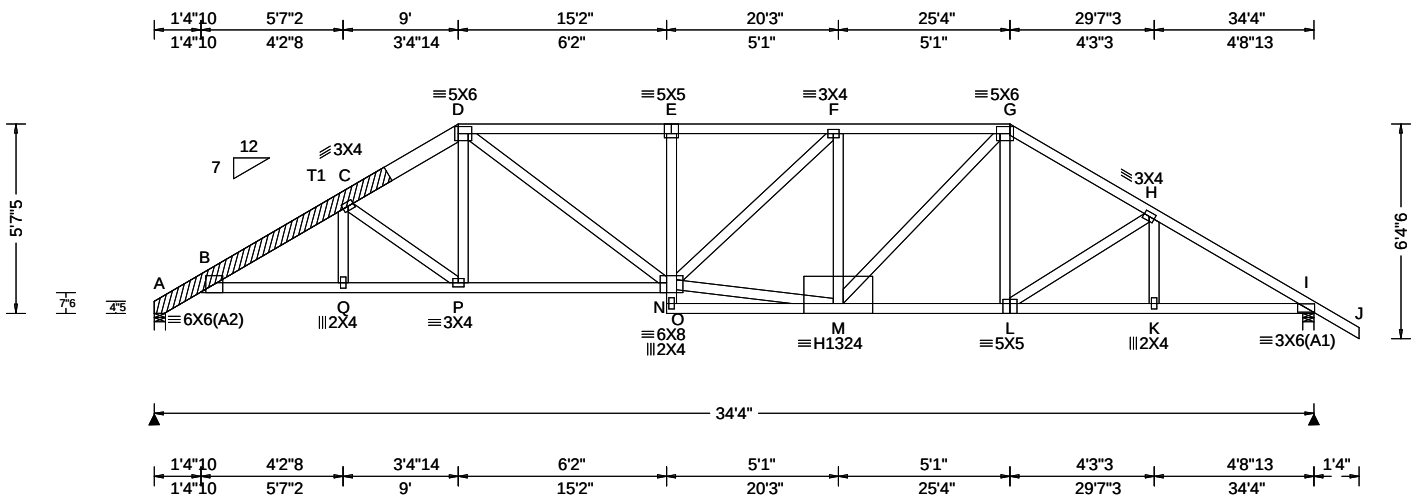
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634062 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A20	Cust: R 215 JRef:1X9O2150001 T8 / DrwNo: 288.21.0838.05259 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.43 ft
Loc. from endwall: not in 9.00 ft
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, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.178	E	999	240
VERT(CL): 0.364	E	999	180
HORZ(LL): 0.097	I	-	-
HORZ(TL): 0.198	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.473
Max BC CSI: 0.685
Max Web CSI: 0.817

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	1405	/-	/-	/784	/262	/157
I	1490	/-	/-	/862	/264	/-

Wind reactions based on MWFRS
A Brg Width = 4.0 Min Req = 1.5
I Brg Width = 4.0 Min Req = 1.8
Bearings A & I 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.
A - B	288	- 699	E - F	1199	- 2625
B - C	991	- 2690	F - G	1019	- 2196
C - D	986	- 2390	G - H	876	- 2099
D - E	1205	- 2641	H - I	855	- 2382

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - Q	2450	- 813	M - L	1759	- 586
Q - P	2445	- 812	L - K	1987	- 649
P - N	2016	- 678	K - I	1988	- 648

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - P	171	- 546	N - M	2146	- 780
D - P	451	- 30	F - M	434	- 695
D - N	765	- 410	M - G	631	- 349
N - F	564	- 239			

Lumber

Top chord: 2x4 SP #2; T1 2x6 SP 2400f-2.0E;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Tray Scab(s)

(1) 2x6x8-0-11 x SP 2400f-2.0E scab at left end. Attach scab to face of chord with: 0.128"x3", min. nails @ 8" oc, plus additional nail clusters at: BRG.: (6), heel: (7), 1st panel point: (2).

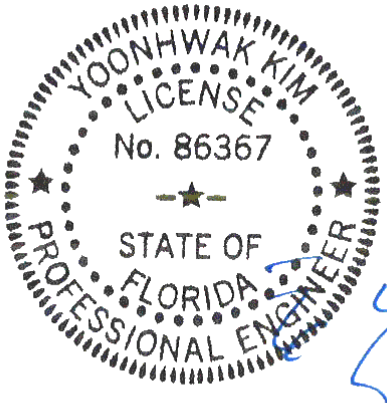
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 5-7-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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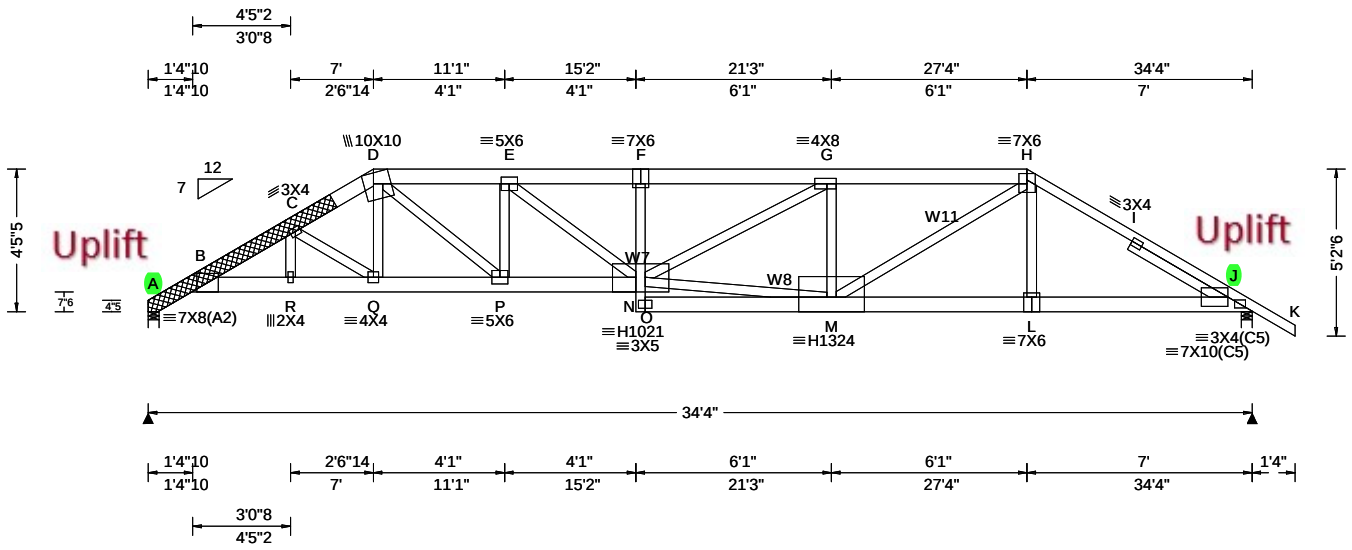
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634087 / HIPS FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** A21	Cust: R 215 JRef:1X9O2150001 T38 / DrwNo: 288.21.0838.05339 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.43 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA 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: Varies by Ld Case
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL):	0.433 F	936	240
VERT(CL):	0.869 F	465	180
HORZ(LL):	0.178 J	-	-
HORZ(TL):	0.359 J	-	-

Creep Factor: 2.0
Max TC CSI: 0.797
Max BC CSI: 0.565
Max Web CSI: 0.976

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	3457	/-	/-	/-	/819	/-
J	3611	/-	/-	/-	/831	/-

Wind reactions based on MWFRS
A Brg Width = 4.0 Min Req = 3.4
J Brg Width = 4.0 Min Req = 3.0
Bearings A & J 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.
A - B	409	- 1733	F - G	2523	- 10217
B - C	1766	- 7474	G - H	1915	- 7940
C - D	1772	- 7426	H - I	1476	- 6369
D - E	2036	- 8388	I - J	1518	- 6483
E - F	2546	- 10308			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - R	7099	- 1673	O - M	728	- 164
R - Q	7083	- 1669	M - L	5443	- 1268
Q - P	6434	- 1532	L - J	5470	- 1267
P - N	8553	- 2084			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
R - C	209	- 705	F - N	324	- 617
C - Q	170	- 803	N - G	2503	- 660
D - Q	1197	- 124	N - M	7362	- 1797
D - P	2563	- 661	G - M	790	- 2172
P - E	523	- 1677	M - H	2989	- 774
E - N	2243	- 587	H - L	758	0

Lumber

Top chord: 2x6 SP 2400f-2.0E; T4 2x4 SP #2;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP #3; W7,W8 2x4 SP M-31;
W11 2x4 SP #2;
Rt Slider: 2x4 SP #3; block length = 3.449'

Special Loads

------(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	63 plf at	0.00 to	63 plf at	7.00
TC: From	32 plf at	7.00 to	32 plf at	27.33
TC: From	63 plf at	27.33 to	63 plf at	35.33
BC: From	20 plf at	1.38 to	20 plf at	7.03
BC: From	10 plf at	7.03 to	10 plf at	27.48
BC: From	20 plf at	27.48 to	20 plf at	34.33
BC: From	5 plf at	34.33 to	5 plf at	35.33

TC: 474 lb Conc. Load at 7.03
TC: 130 lb Conc. Load at 9.06,11.06,13.06,15.06
TC: 387 lb Conc. Load at 17.17
TC: 193 lb Conc. Load at 19.27,21.27,23.27,25.27
TC: 441 lb Conc. Load at 27.30
BC: 462 lb Conc. Load at 7.03
BC: 162 lb Conc. Load at 9.06,11.06,13.06,15.06
BC: 262 lb Conc. Load at 17.17
BC: 131 lb Conc. Load at 19.27,21.27,23.27,25.27
BC: 526 lb Conc. Load at 27.30

Tray Scab(s)

(2) 2x6x6-8-8 x SP 2400f-2.0E scabs at left end. Attach one scab to each outer face of chord with: 0.128"x3", min. nails @ 8" oc, Plus additional nail clusters at: BRG.: (9), heel: (14), 1st panel point: (5).

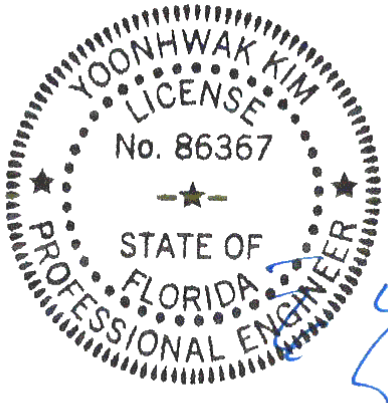
Wind

Wind loads and reactions based on MWFRS.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 4-5-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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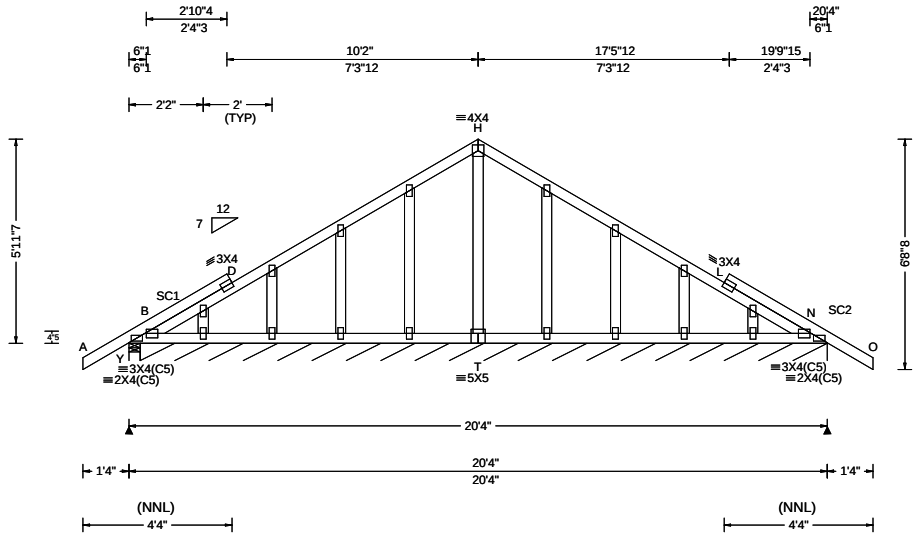
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636325 GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** B01	Cust: R 215 JRef:1X9O2150001 T4 DrwNo: 288.21.0914.16130 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: 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): 0.002	D	999	240
VERT(CL): 0.003	D	999	180
HORZ(LL): 0.001	L	-	-
HORZ(TL): 0.002	L	-	-

Creep Factor: 2.0
Max TC CSI: 0.200
Max BC CSI: 0.026
Max Web CSI: 0.065

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
Y	249	/-	/-	/172	/50	/82
N*	81	/-	/-	/45	/-	/-

Wind reactions based on MWFRS
Y Brg Width = 4.0 Min Req = 1.5
N Brg Width = 240 Min Req = -
Bearings Y & B are a rigid surface.
Members not listed have forces less than 375#

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.

Wind

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

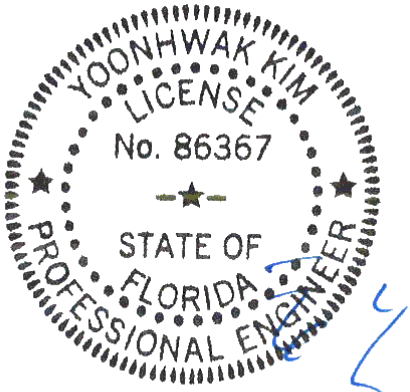
Wind loading based on both gable and hip roof types.

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 5-11-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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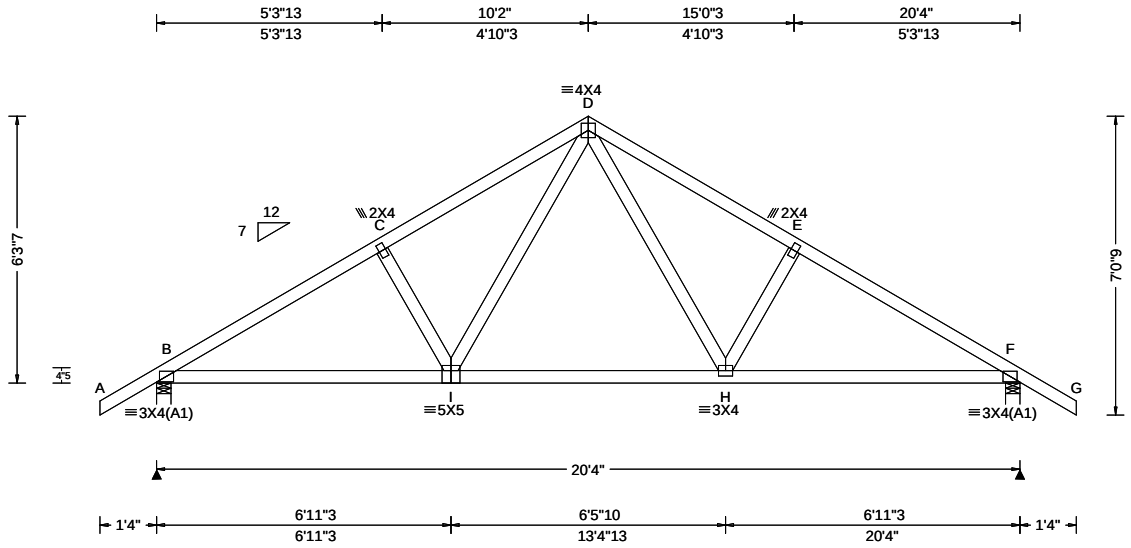
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636328 SPEC FROM: CDM	Ply: 1 Qty: 9	**Job Number:** 21-5954 Arata **Truss Label:** B02	Cust: R 215 JRef:1X9O2150001 T23 DrwNo: 288.21.0914.13257 / YK 10/15/2021	



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: 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): 0.039	H	999	240
VERT(CL): 0.076	H	999	180
HORZ(LL): 0.016	F	-	-
HORZ(TL): 0.032	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.239
Max BC CSI: 0.459
Max Web CSI: 0.181

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	978	/-	/-	/563	/161	/192
F	978	/-	/-	/563	/161	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 4.0 Min Req = 1.5
Bearings B & F 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	451	- 1358	D - E	486	- 1213
C - D	487	- 1212	E - F	450	- 1359

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - I	1107	- 253	H - F	1107	- 263
I - H	754	- 67			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - D	472	- 169	D - H	474	- 168

Lumber

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

Loading

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

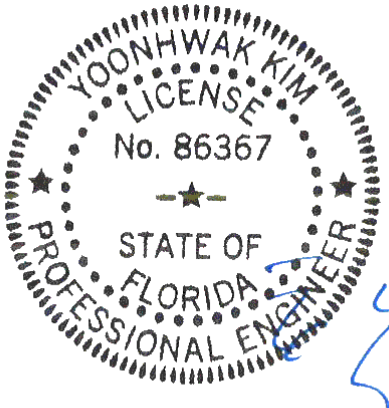
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 6-3-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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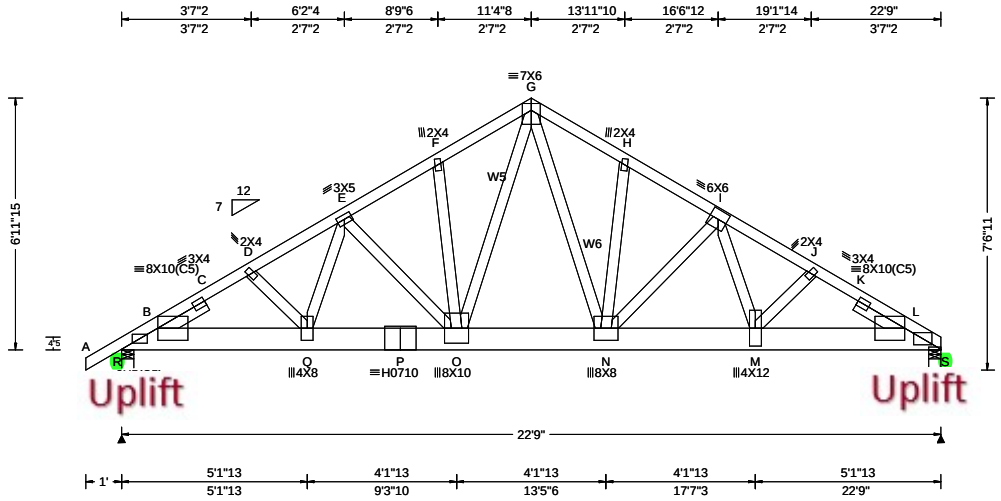
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 633667 COMN FROM: CDM	Ply: 2 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** B03	Cust: R 215 JRef:1X9O2150001 T35 DrwNo: 288.21.0914.09207 / YK 10/15/2021	

2 Complete Trusses Required



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	0.00
Soffit:	2.00
Load Duration:	1.25
Spacing:	24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
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: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.166	N	999	240
VERT(CL): 0.330	N	805	180
HORZ(LL): 0.047	E	-	-
HORZ(TL): 0.093	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.508
Max BC CSI: 0.714
Max Web CSI: 0.798

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
R	8265	/-	/-	/-	/1451	/-
S	10857	/-	/-	/-	/1070	/-

Wind reactions based on MWFRS
R Brg Width = 4.0 Min Req = 3.4
S Brg Width = 4.0 Min Req = 3.8
Bearings R & S 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	1383	- 7773	G - H	921	- 6670
C - D	1364	- 7708	H - I	930	- 6721
D - E	1362	- 7724	I - J	942	- 8617
E - F	1113	- 6784	J - K	950	- 8631
F - G	1099	- 6722	K - L	965	- 8667

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - Q	6561	- 1159	O - N	4759	- 717
Q - P	6431	- 1108	N - M	6892	- 815
P - O	6431	- 1108	M - L	7435	- 812

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
Q - E	983	- 255	G - N	3346	- 246
E - O	232	- 900	N - I	30	- 1655
O - G	3537	- 773	I - M	2088	0

Lumber

Top chord: 2x4 SP M-31;
Bot chord: 2x8 SP 2400f-2.0E;
Webs: 2x4 SP #3; W5,W6 2x4 SP #2;
Lt Slider: 2x4 SP #3; block length = 1.500'
Rt Slider: 2x4 SP #3; block length = 1.500'

Wind

Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 2 Rows @ 4.00" o.c. (Each Row)
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Special Loads

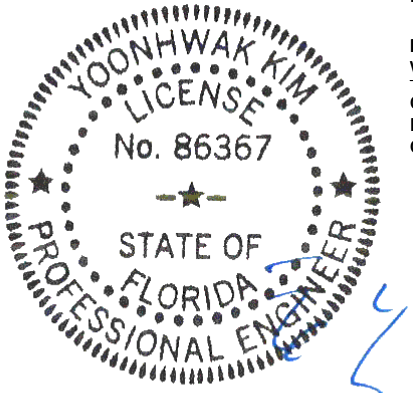
------(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	63 plf at	-1.00 to	63 plf at	7.06
TC: From	32 plf at	7.06 to	32 plf at	11.38
TC: From	63 plf at	11.38 to	63 plf at	22.75
BC: From	5 plf at	-1.00 to	5 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	7.06
BC: From	10 plf at	7.06 to	10 plf at	22.75

BC: 4323 lb Conc. Load at 7.06
BC: 1725 lb Conc. Load at 9.06
BC: 2013 lb Conc. Load at 11.06
BC: 1869 lb Conc. Load at 13.06
BC: 1947 lb Conc. Load at 15.06
BC: 1903 lb Conc. Load at 17.06
BC: 1848 lb Conc. Load at 19.06
BC: 1826 lb Conc. Load at 21.06

Additional Notes

The overall height of this truss excluding overhang is 6-11-15.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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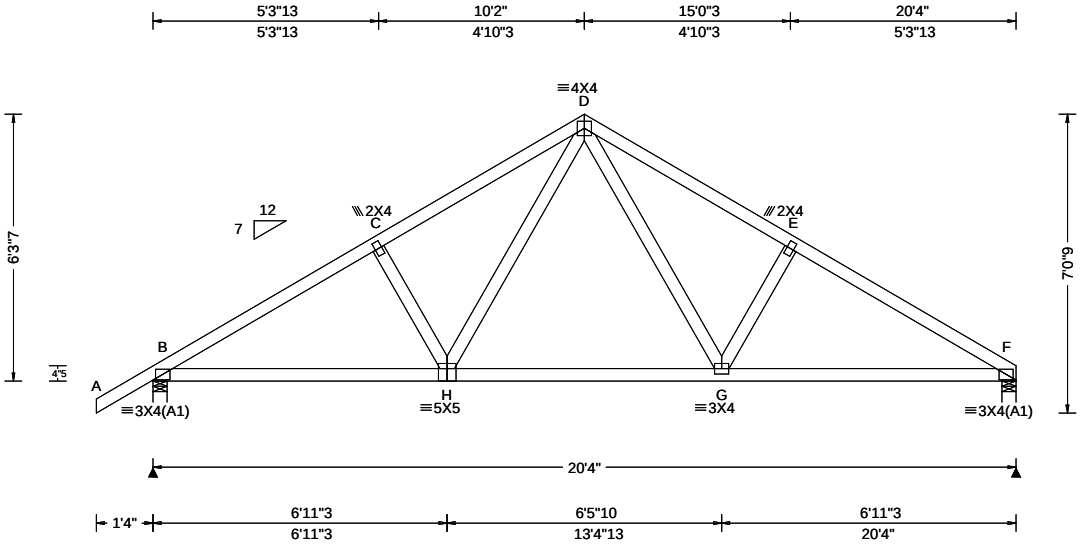
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 636331 SPEC FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 21-5954 Arata **Truss Label:** B03		Cust: R 215 JRef:1X9O2150001 T1 DrwNo: 288.21.0914.11353 / YK 10/15/2021	



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
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): 0.039	H	999	240
VERT(CL): 0.076	H	999	180
HORZ(LL): 0.016	F	-	-
HORZ(TL): 0.032	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.257
Max BC CSI: 0.469
Max Web CSI: 0.188

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	982	/-	/-	/563	/16	/177
F	884	/-	/-	/486	/9	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 4.0 Min Req = 1.5
Bearings B & F 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	255	-1365	D - E	294	-1232
C - D	289	-1218	E - F	261	-1378

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - H	1112	-151	G - F	1128	-157
H - G	760	-31			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
H - D	471	-87	D - G	493	-96

Lumber

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

Loading

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

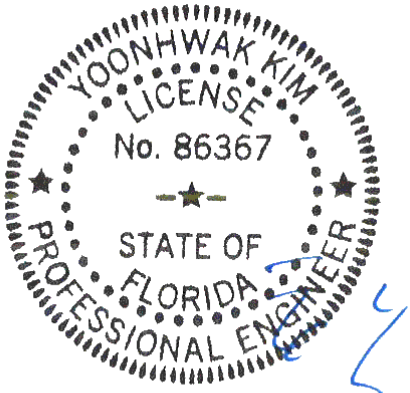
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 6-3-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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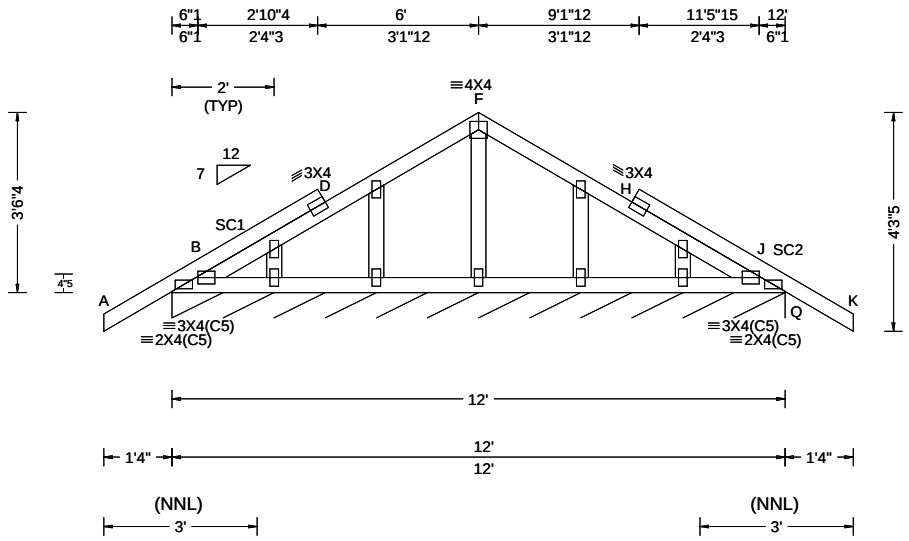
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634076 / GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** C01	Cust: R 215 JRef:1X9O2150001 T44 / DrwNo: 288.21.0838.05495 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: 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): 0.001	D	999	240
VERT(CL): 0.003	D	999	180
HORZ(LL): -0.001	D	-	-
HORZ(TL): 0.001	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.141
Max BC CSI: 0.026
Max Web CSI: 0.033

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
Q*	94	/-	/-	/48	/-	/6

Wind reactions based on MWFRS
Q Brg Width = 144 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

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.

Wind

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

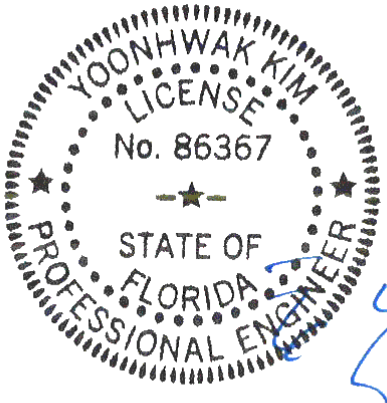
Wind loading based on both gable and hip roof types.

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 3-6-4.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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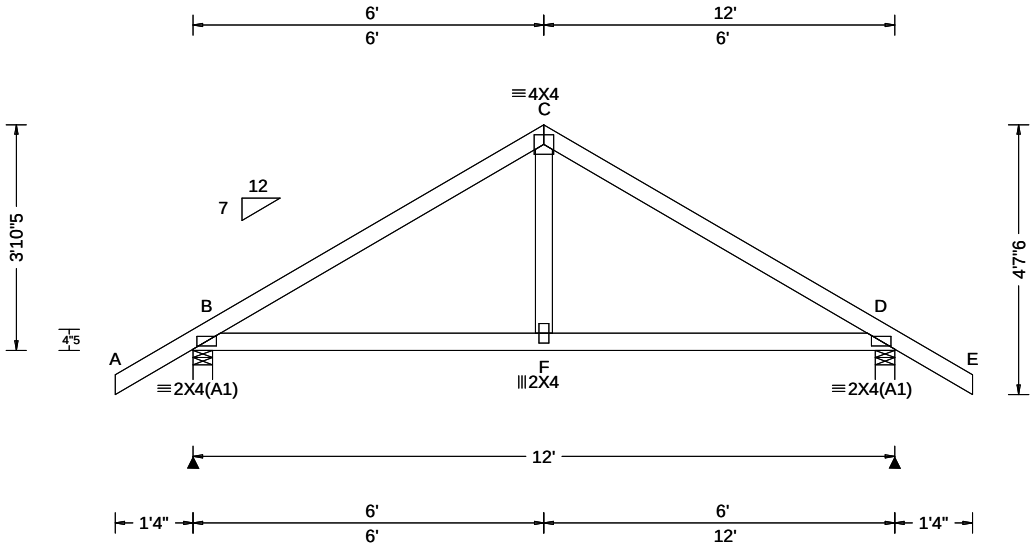
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634074 / COMN FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 21-5954 Arata **Truss Label:** C02	Cust: R 215 JRef:1X9O2150001 T43 / DrwNo: 288.21.0838.05338 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: 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): 0.007	F	999	240
VERT(CL): 0.014	F	999	180
HORZ(LL): 0.004	B	-	-
HORZ(TL): 0.008	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.346
Max BC CSI: 0.352
Max Web CSI: 0.102

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	567	/-	/-	/345	/97	/119
D	567	/-	/-	/345	/97	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 4.0 Min Req = 1.5
Bearings B & D 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	333	-619	C - D	333	-619

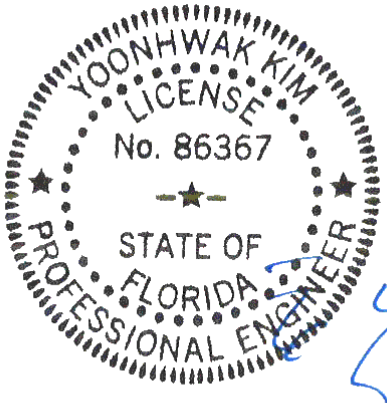
Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - F	465	-111	F - D	465	-111

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.

Additional Notes
The overall height of this truss excluding overhang is 3-10-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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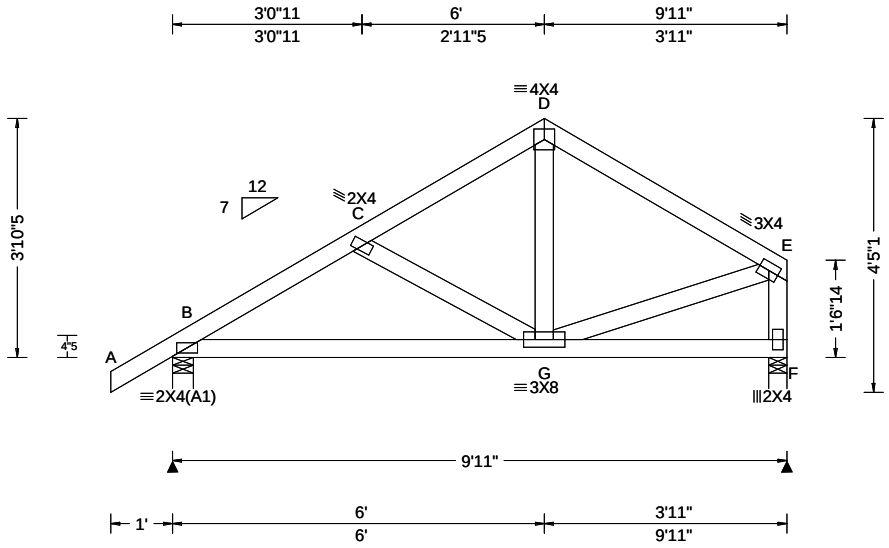
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 633528 / SPEC FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** C03	Cust: R 215 JRef:1X9O2150001 T36 / DrwNo: 288.21.0838.04806 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA 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): 0.006	C	999	240
VERT(CL): 0.012	C	999	180
HORZ(LL): 0.002	C	-	-
HORZ(TL): 0.004	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.197
Max BC CSI: 0.271
Max Web CSI: 0.113

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	491	/-	/-	/307	/82	/101
F	402	/-	/-	/215	/67	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
F Brg Width = 3.5 Min Req = 1.5
Bearings B & F 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	238	- 546	D - E	168	- 398
C - D	182	- 384			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - G	436	- 211

Lumber

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

Wind

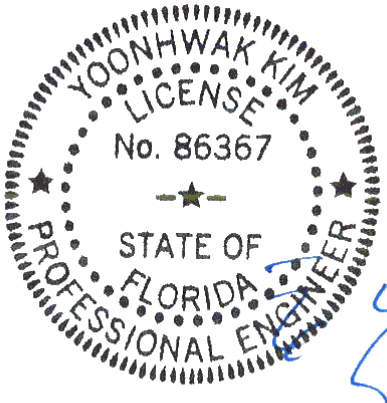
Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 3-10-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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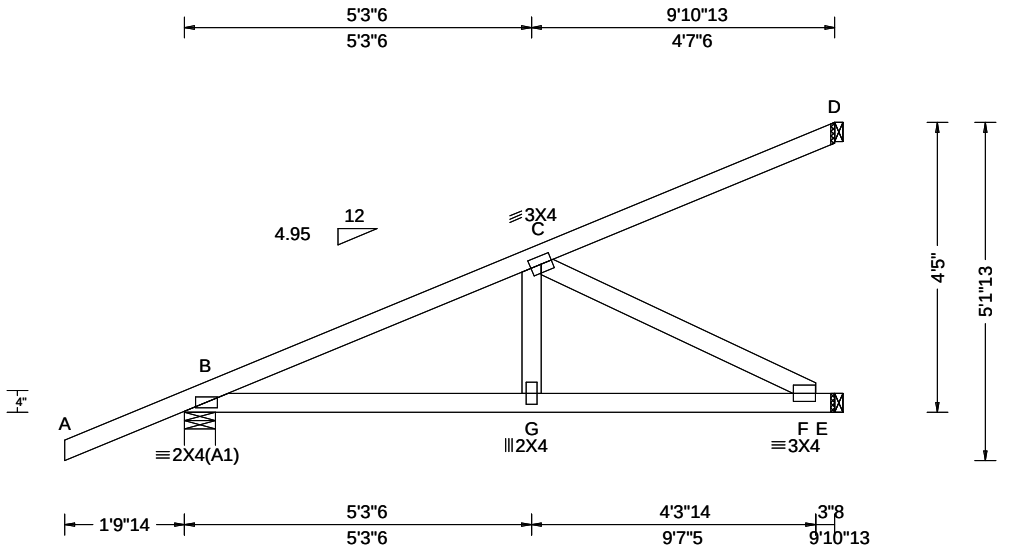
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634072 / HIP_ FROM: CDM	Ply: 1 Qty: 3	**Job Number:** 21-5954 Arata **Truss Label:** HJ01	Cust: R 215 JRef:1X9O2150001 T33 / DrwNo: 288.21.0838.05509 / YK 10/15/2021



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 0.00
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: NA
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: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.018	G	999	240
VERT(CL): 0.038	G	999	180
HORZ(LL): 0.005	F	-	-
HORZ(TL): 0.010	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.595
Max BC CSI: 0.527
Max Web CSI: 0.348

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	364	/-	/-	/-	/64	/-
E	396	/-	/-	/-	/15	/-
D	248	/-	/-	/-	/92	/-

Wind reactions based on MWFRS
B Brg Width = 5.7 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - C	121	- 717

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - G	645	- 106	G - F	639	- 109

Maximum Web Forces Per Ply (lbs)

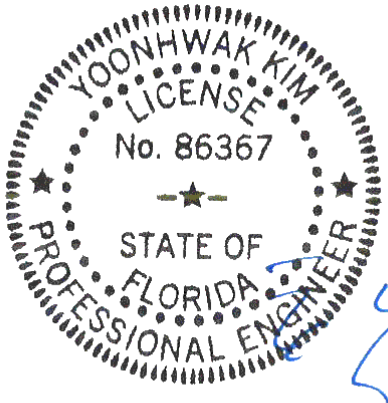
Webs	Tens.	Comp.
C - F	123	- 723

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

Loading
Hipjack supports 7-0-0 setback jacks with no webs.

Wind
Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.

Additional Notes
The overall height of this truss excluding overhang is 4-5-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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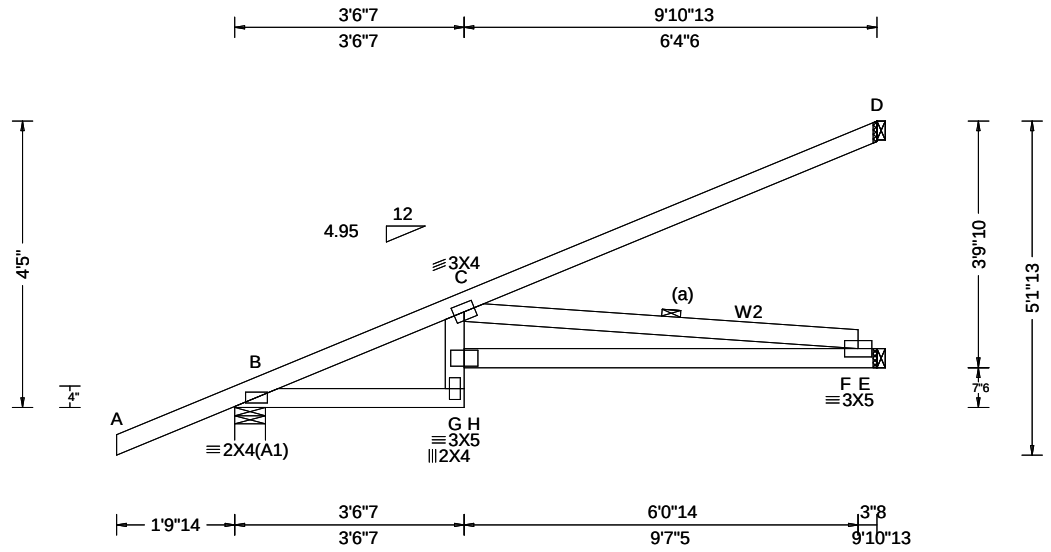
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634070 / HIP_ FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** HJ02	Cust: R 215 JRef:1X9O2150001 T2 / DrwNo: 288.21.0838.05306 / YK 10/15/2021



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 0.00
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: NA
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: No
FT/RT:20(0)/10(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.081	C	999	240
VERT(CL): 0.168	C	696	180
HORZ(LL): 0.034	F	-	-
HORZ(TL): 0.070	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.482
Max BC CSI: 0.867
Max Web CSI: 0.418

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	361	/-	/-	/-	/64	/-
E	300	/-	/0	/19	/-	/0
D	344	/-	/-	/-	/126	/-

Wind reactions based on MWFRS
B Brg Width = 5.7 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - C	185	-853

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - H	799	-178	G - F	1367	-288

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
C - F	290	-1380

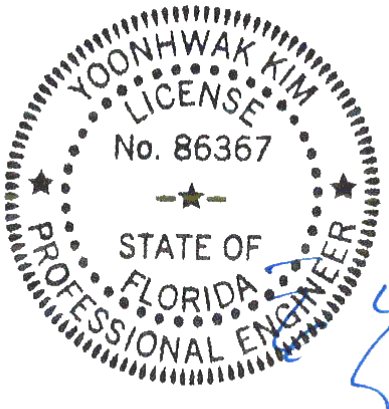
Lumber
Top chord: 2x4 SP M-31;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP M-31; W2 2x4 SP #3;

Bracing
(a) Continuous lateral restraint equally spaced on member.

Loading
Hipjack supports 7-0-0 setback jacks with no webs.

Wind
Wind loads and reactions based on MWFRS.
Wind loading based on both gable and hip roof types.

Additional Notes
The overall height of this truss excluding overhang is 4-5-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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ALPINE
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6750 Forum Drive
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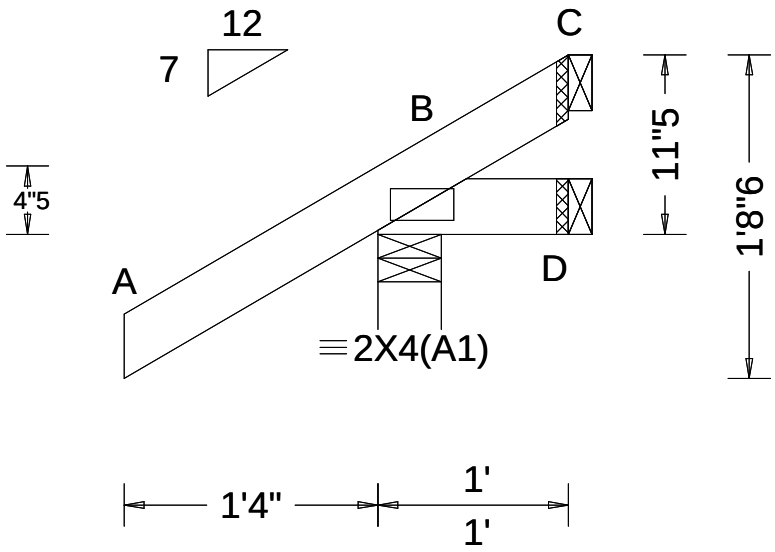
SEQN: 634018 / JACK FROM: CDM	Ply: 1 Qty: 8	**Job Number:** 21-5954 Arata **Truss Label:** J01	Cust: R 215 JRef:1X9O2150001 T46 / DrwNo: 288.21.0838.05337 / YK 10/15/2021



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): NA
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.000 B - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.000 B - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.106
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.014
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.000
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: Any	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	168	/-	/-	/129	/30	/36
D	11	/-2	/-	/11	/5	/-
C	-	/-15	/-	/18	/22	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

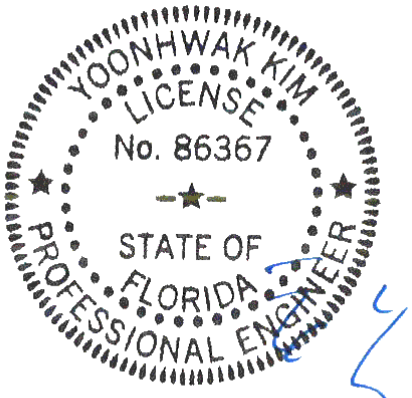
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 0-11-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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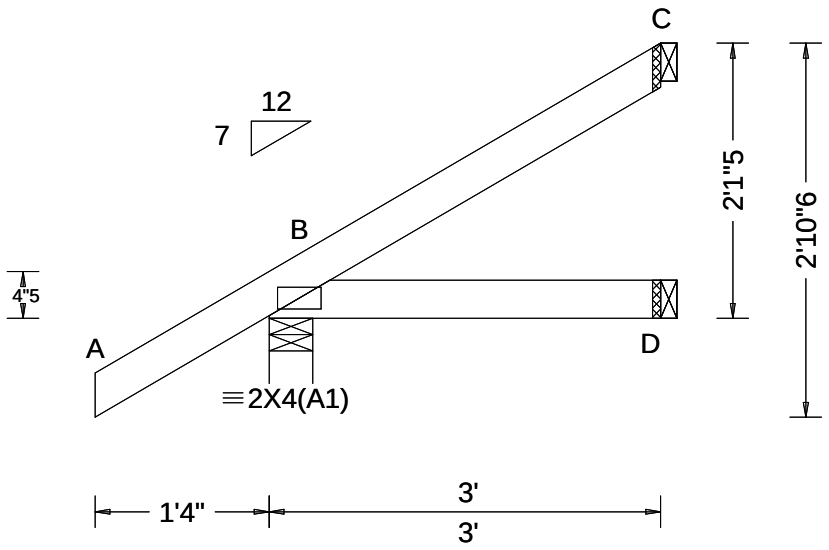
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634020 / JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 21-5954 Arata **Truss Label:** J02	Cust: R 215 JRef:1X9O2150001 T5 / DrwNo: 288.21.0838.05009 / YK 10/15/2021



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 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	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	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.001 B - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.114 Max BC CSI: 0.073 Max Web CSI: 0.000 VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	214	/-	/-	/149	/22	/77
D	52	/-	/-	/30	/-	/-
C	73	/-	/-	/47	/42	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

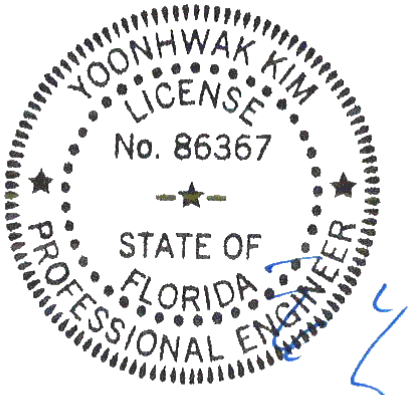
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 2-1-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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ALPINE
AN ITW COMPANY
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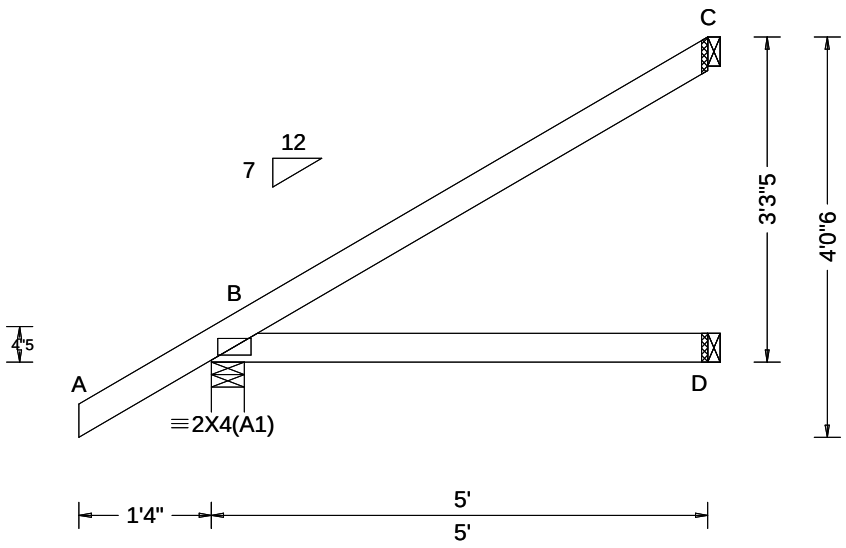
Suite 305
Orlando FL, 32821

SEQN: 634022 / JACK FROM: CDM	Ply: 1 Qty: 6	**Job Number:** 21-5954 Arata **Truss Label:** J03	Cust: R 215 JRef:1X9O2150001 T6 / DrwNo: 288.21.0838.05025 / YK 10/15/2021



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): NA
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.005 B - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.010 B - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.394
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.247
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.000
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: Any	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	291	/-	/-	/196	/22	/118
D	92	/-	/-	/52	/-	/-
C	135	/-	/-	/88	/73	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 3-3-5.

YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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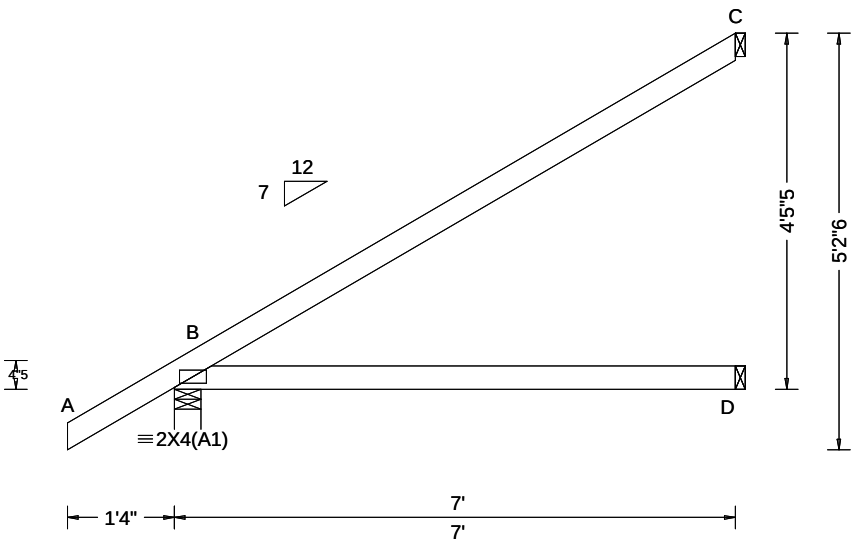
ALPINE AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634026 / EJAC FROM: CDM	Ply: 1 Qty: 23	**Job Number:** 21-5954 Arata **Truss Label:** J04	Cust: R 215 JRef:1X9O2150001 T42 / DrwNo: 288.21.0838.05463 / YK 10/15/2021



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA 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): 0.015 B - -
HORZ(TL): 0.030 B - -
Creep Factor: 2.0
Max TC CSI: 0.758
Max BC CSI: 0.530
Max Web CSI: 0.000

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

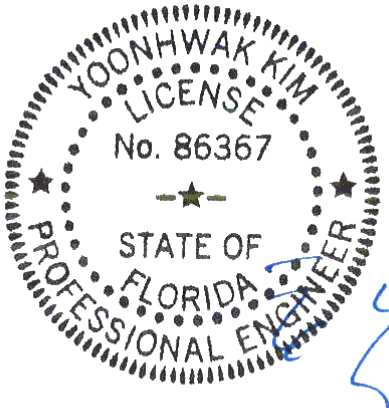
	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	371	/-	/-	/245	/23	/160
D	131	/-	/-	/76	/-	/-
C	193	/-	/-	/128	/104	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
D Brg Width = 1.5 Min Req = -
C Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

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

Wind
Wind loads based on MWFRS with additional C&C member design.
Wind loading based on both gable and hip roof types.

Additional Notes
The overall height of this truss excluding overhang is 4-5-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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AN ITW COMPANY
6750 Forum Drive
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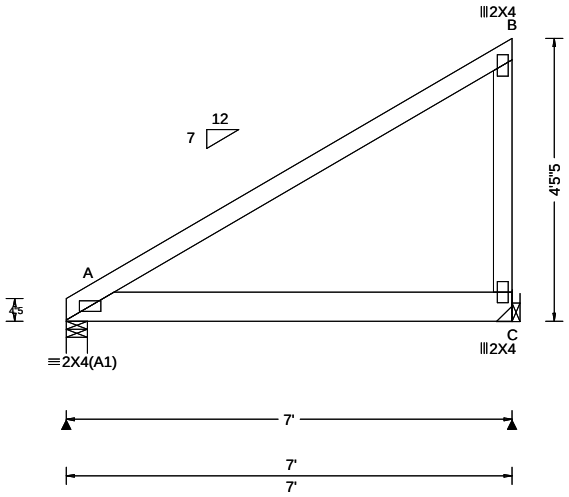
SEQN: 396064 / EJAC FROM: CDM Page 1 of 2	Ply: 2 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** J05	Cust: R 215 JRef:1X9O2150001 T17 / DrwNo: 288.21.0838.04978 / YK 10/15/2021

2 Complete Trusses Required



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: 0.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	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	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: No FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.014 A - - HORZ(TL): 0.028 A - - Creep Factor: 2.0 Max TC CSI: 0.458 Max BC CSI: 0.544 Max Web CSI: 0.105 VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	751	/-	/-	/-	/97	/119
C	1201	/-	/-	/-	/39	/-

Wind reactions based on MWFRS
A Brg Width = 4.0 Min Req = 1.5
C Brg Width = - Min Req = -
Bearing A is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #2;
Bot chord: 2x6 SP 2400f-2.0E;
Webs: 2x4 SP #3;

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 1 Row @ 7.50" o.c.
Webs : 1 Row @ 4" o.c.
Use equal spacing between rows and stagger nails in each row to avoid splitting.

Special Loads

------(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)

TC: From	63 plf at	0.00 to	63 plf at	7.00
BC: From	20 plf at	0.00 to	20 plf at	7.00

BC: 1370 lb Conc. Load at 4.73

Wind

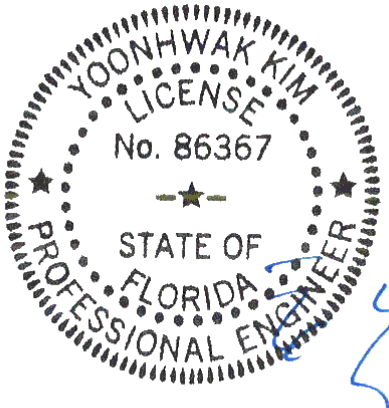
Wind loads and reactions based on MWFRS.

Right end vertical exposed to wind pressure.
Deflection meets L/360.

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 4-5-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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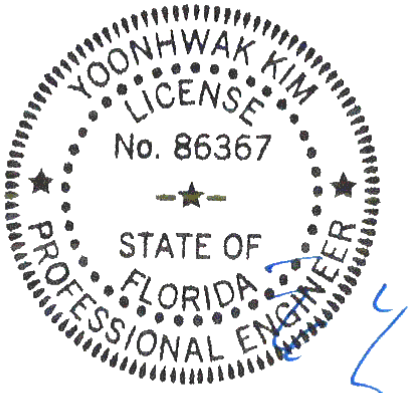
Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Hanger specified assumes connection to supporting chord is located a minimum of five times the depth of the supporting chord from any unsupported end, unless unsupported chord end has 85% plating coverage.

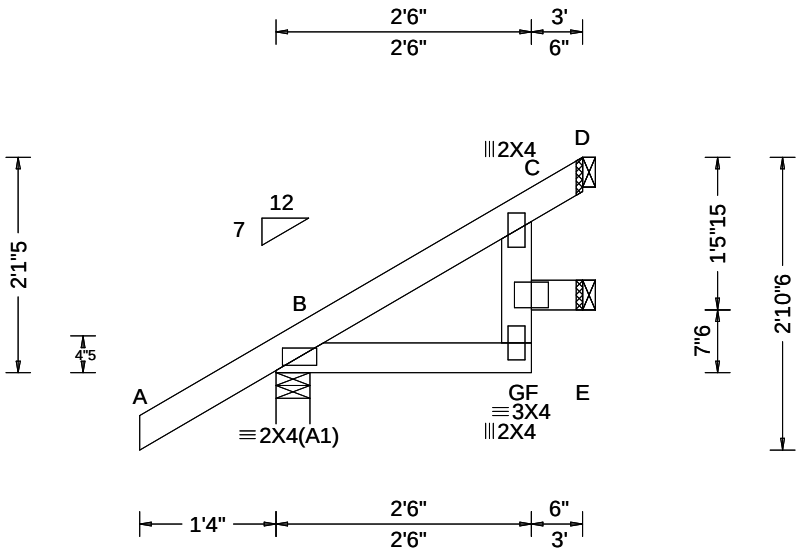
Bearing at location x=6'9" uses the following support conditions: 6'9"
Bearing C (6'9", 9'1"2) LUS26-2
Supporting Member: (1)2x6 SP 2400f-2.0E
(4) 0.162"x3.5" nails into supporting member,
(4) 0.162"x3.5" nails into supported member.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 634068 / JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 21-5954 Arata **Truss Label:** J06	Cust: R 215 JRef:1X9O2150001 T34 / DrwNo: 288.21.0838.05120 / YK 10/15/2021



Loading Criteria (psf)
TCLL: 20.00
TCDL: 10.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 40.00
NCBCLL: 10.00
Soffit: 2.00
Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: 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): 0.003	F	999	240
VERT(CL): 0.006	F	999	180
HORZ(LL): 0.002	C	-	-
HORZ(TL): 0.004	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.111
Max BC CSI: 0.050
Max Web CSI: 0.031

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

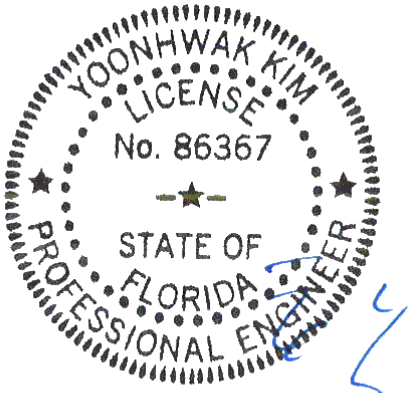
	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	214	/-	/-	/149	/22	/77
E	21	/-	/-	/15	/4	/-
D	84	/-	/-	/60	/31	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

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.

Additional Notes
The overall height of this truss excluding overhang is 2-1-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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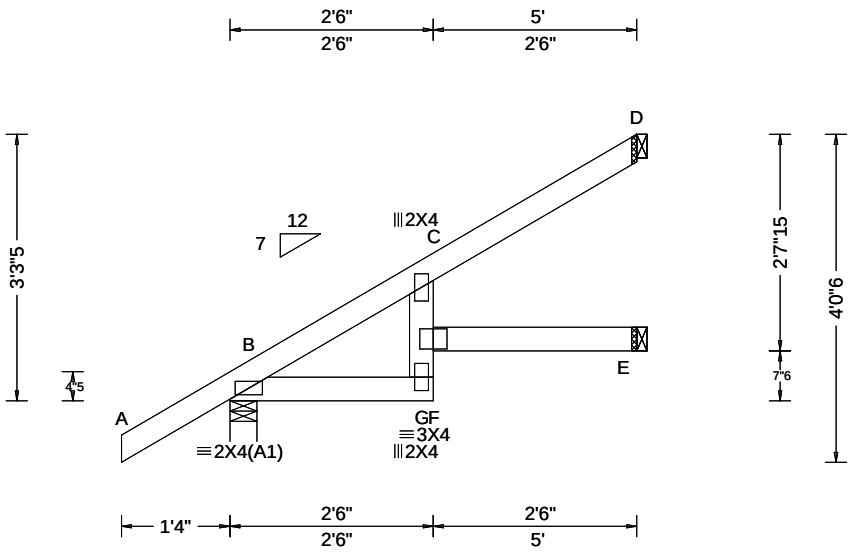
Orlando FL, 32821

SEQN: 634066 / JACK FROM: CDM	Ply: 1 Qty: 2	**Job Number:** 21-5954 Arata **Truss Label:** J07	Cust: R 215 JRef:1X9O2150001 T50 / DrwNo: 288.21.0838.04994 / YK 10/15/2021



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): 0.055 F 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.110 F 527 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.034 C - -
Des Ld: 40.00	EXP: C Kzt: NA		HORZ(TL): 0.069 C - -
NCBCLL: 10.00	Mean Height: 15.00 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 5.0 psf	FBC 7th Ed. 2020 Res.	Max TC CSI: 0.357
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.111
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.097
	C&C Dist a: 3.00 ft	FT/RT:20(0)/10(0)	
	Loc. from endwall: not in 4.50 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 21.01.01A.0521.20
	Wind Duration: 1.60		

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	291	/-	/-	/196	/22	/118
E	61	/-	/-	/36	/-	/-
D	151	/-	/-	/104	/68	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

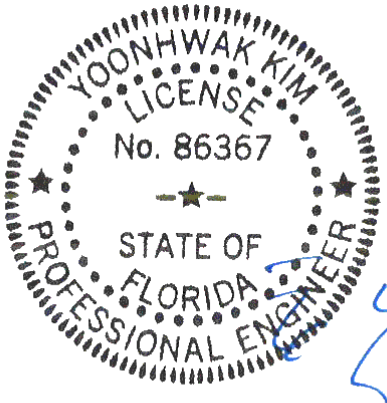
Wind

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

Wind loading based on both gable and hip roof types.

Additional Notes

The overall height of this truss excluding overhang is 3-3-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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ALPINE
AN ITW COMPANY
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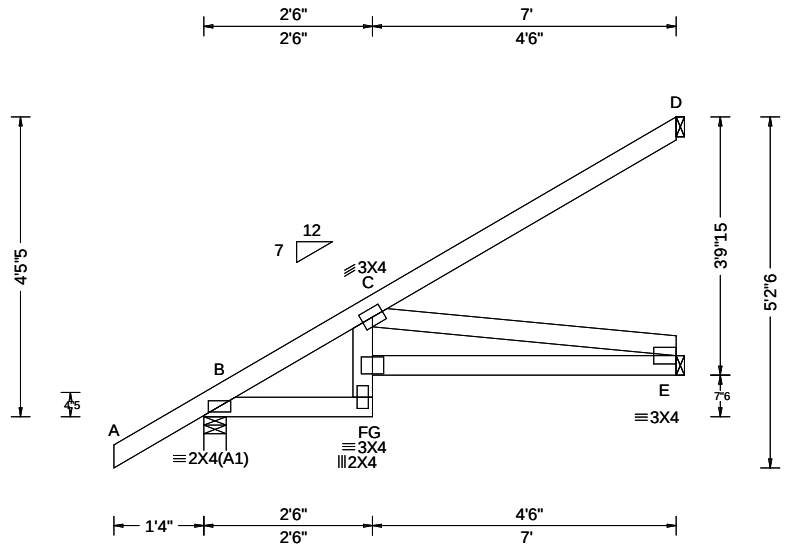
SEQN: 634064 / EJAC FROM: CDM	Ply: 1 Qty: 5	**Job Number:** 21-5954 Arata **Truss Label:** J08	Cust: R 215 JRef:1X9O2150001 T31 / DrwNo: 288.21.0838.05415 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: not in 4.50 ft
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: NA Ct: NA 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): 0.023	F	999	240
VERT(CL): 0.047	F	999	180
HORZ(LL): 0.014	E	-	-
HORZ(TL): 0.029	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.323
Max BC CSI: 0.330
Max Web CSI: 0.729

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	371	/-	/-	/245	/23	/160
E	162	/-	/-	/119	/17	/-
D	130	/-	/-	/85	/71	/-

Wind reactions based on MWFRS
B Brg Width = 4.0 Min Req = 1.5
E Brg Width = 1.5 Min Req = -
D Brg Width = 1.5 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - C	89	-402

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
F - E	549	-503

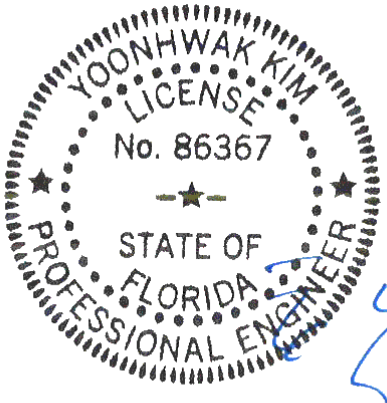
Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
C - E	508	-554

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.

Additional Notes
The overall height of this truss excluding overhang is 4-5-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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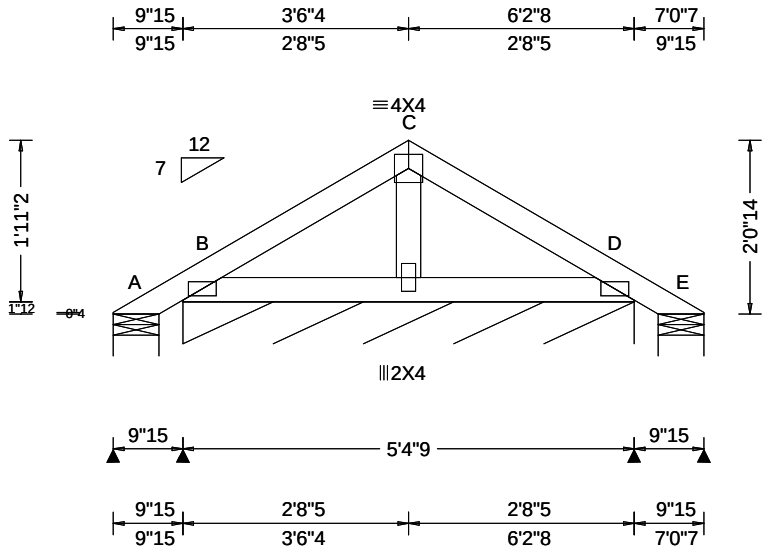
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 633684 / GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** PB01	Cust: R 215 JRef:1X9O2150001 T3 / DrwNo: 288.21.0838.04681 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.24 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 13.00 ft
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): 0.001	B	999	240
VERT(CL): 0.001	B	999	180
HORZ(LL): 0.000	B	-	-
HORZ(TL): 0.001	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.069
Max BC CSI: 0.035
Max Web CSI: 0.016

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-9	/-	/34	/33	/52
B*	85	/-	/-	/59	/10	/-
E	-	/-9	/-	/7	/7	/-

Wind reactions based on MWFRS
A Brg Width = 6.5 Min Req = 1.5
B Brg Width = 64.6 Min Req = -
E Brg Width = 6.5 Min Req = 1.5
Bearings A, B, & E are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4(A1) except as noted.

Loading

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

Wind

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

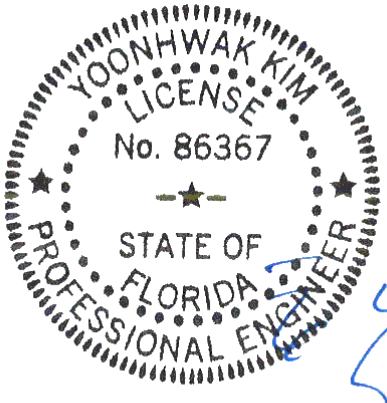
Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A14030ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 2-0-14.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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ALPINE
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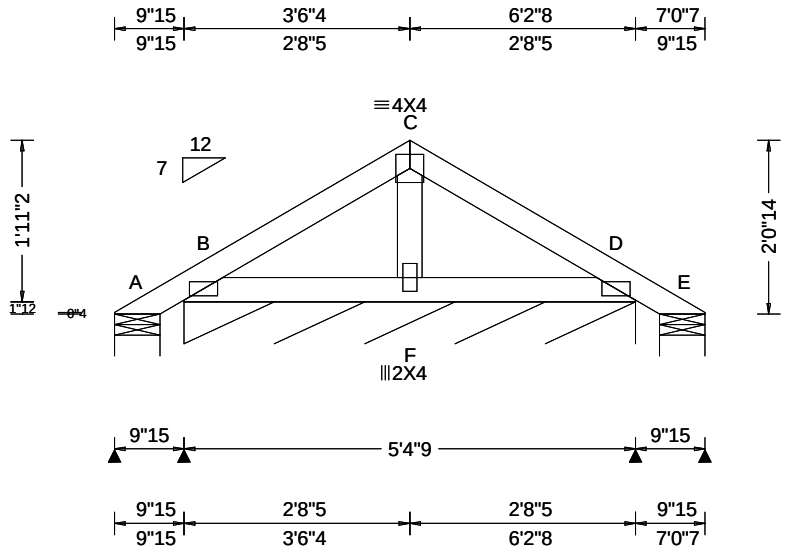
SEQN: 633698 / COMN FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** PB02	Cust: R 215 JRef:1X9O2150001 T16 / DrwNo: 288.21.0838.04634 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 20.58 ft
TCDL: 5.0 psf
BCDL: 2.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 9.00 ft
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): 0.001	B	999	240
VERT(CL): 0.001	B	999	180
HORZ(LL): 0.000	B	-	-
HORZ(TL): 0.001	B	-	-

Creep Factor: 2.0
Max TC CSI: 0.070
Max BC CSI: 0.035
Max Web CSI: 0.016

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	-	/-11	/-	/33	/39	/53
B*	84	/-	/-	/56	/16	/-
E	-	/-11	/-	/6	/13	/-

Wind reactions based on MWFRS
A Brg Width = 6.5 Min Req = 1.5
B Brg Width = 64.6 Min Req = -
E Brg Width = 6.5 Min Req = 1.5
Bearings A, B, & E are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4(A1) except as noted.

Wind

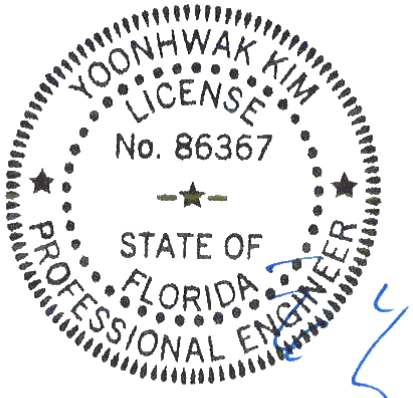
Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 2-0-14.



FL REG# 278, Yoonhwak Kim, FL PE #86367
10/15/2021

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ALPINE
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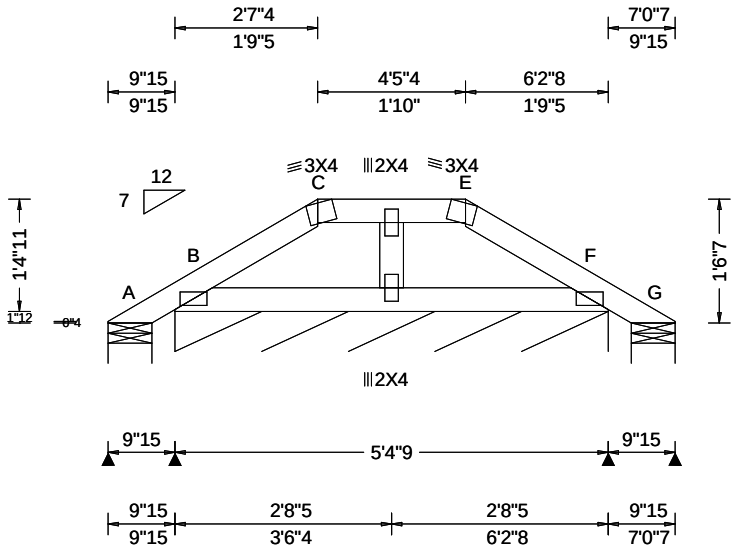
SEQN: 633700 / GABL FROM: CDM	Ply: 1 Qty: 1	**Job Number:** 21-5954 Arata **Truss Label:** PB03	Cust: R 215 JRef:1X9O2150001 T24 / DrwNo: 288.21.0838.04807 / YK 10/15/2021



Loading Criteria (psf)

TCLL:	20.00
TCDL:	10.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	40.00
NCBCLL:	10.00
Soffit:	2.00

Load Duration: 1.25
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-16
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C Kzt: NA
Mean Height: 15.00 ft
TCDL: 5.0 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h to 2h
C&C Dist a: 3.00 ft
Loc. from endwall: not in 13.00 ft
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): 0.001	C	999	240
VERT(CL): 0.002	C	999	180
HORZ(LL): 0.000	E	-	-
HORZ(TL): 0.001	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.033
Max BC CSI: 0.031
Max Web CSI: 0.017

VIEW Ver: 21.01.01A.0521.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	13	/-	/-	/31	/22	/38
B*	77	/-	/-	/53	/8	/-
G	13	/-	/-	/11	/3	/-

Wind reactions based on MWFRS
A Brg Width = 6.5 Min Req = 1.5
B Brg Width = 64.6 Min Req = -
G Brg Width = 6.5 Min Req = 1.5
Bearings A, B, & G are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 2X4(A1) except as noted.

Loading

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

Wind

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

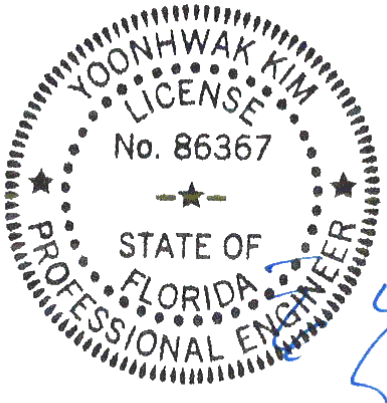
Wind loading based on both gable and hip roof types.

Additional Notes

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

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 1-6-7.



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10/15/2021

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ALPINE
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Orlando FL, 32821

Gable Stud Reinforcement Detail

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

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

Max Gable Vertical Length

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

Bracing Group Species and Grades:

Group A:

Spruce-Pine-Fir

#1 / #2	Standard
#3	Stud

Hem-Fir

#2	Stud
#3	Standard

Douglas Fir-Larch: #3, Stud, Standard

Southern Pine***: #3, Stud, Standard

Group B:

Hem-Fir: #1 & Btr, #1

Douglas Fir-Larch: #1, #2

Southern Pine***: #1, #2

1x4 Braces shall be SRB (Stress-Rated Board).

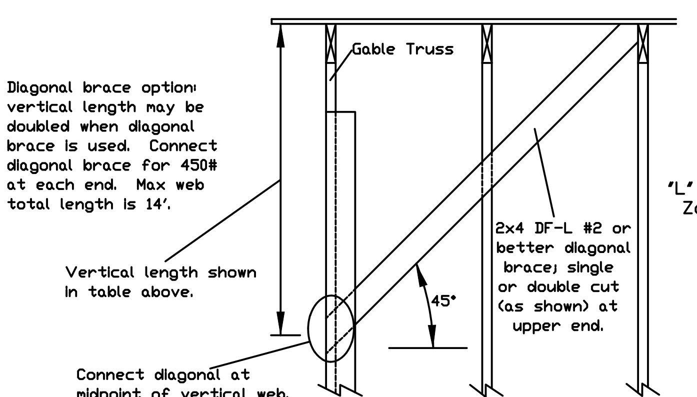
***For 1x4 So. Pine use only Industrial 55 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

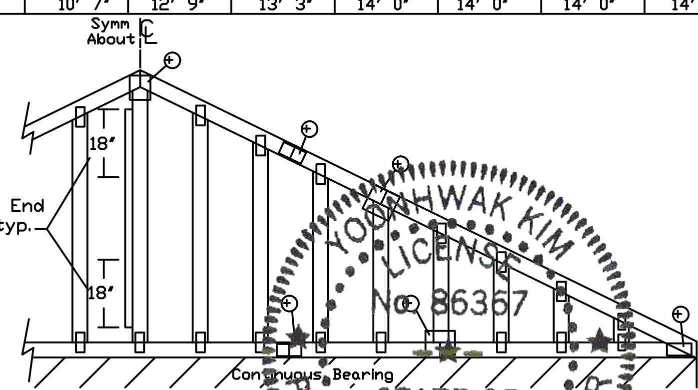
Gable Truss Detail Notes:

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.

Gable Vertical Plate Sizes

Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0"	3X4

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

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

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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

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YOONHWAK KIM LICENSE No 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

10/15/2021 FL REG# 278, Yoonhwak Kim, FL PE #86367

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

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

Gable Stud Reinforcement Detail

ASCE 7-16: 140 mph Wind Speed, 30' Mean Height, Enclosed, Exposure C, Kzt = 1.00

Or: 120 mph Wind Speed, 30' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00
Or: 120 mph Wind Speed, 30' Mean Height, Enclosed, Exposure D, Kzt = 1.00
Or: 100 mph wind speed, 30' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

Max Gable Vertical Length

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

Bracing Group Species and Grades:

Group A:

Spruce-Pine-Fir	
#1 / #2	Standard
#3	Stud

Hem-Fir	
#2	Stud
#3	Standard

Douglas Fir-Larch
#3
Stud
Standard

Southern Pine***
#3
Stud
Standard

Group B:

Hem-Fir
#1 & Btr
#1

Douglas Fir-Larch
#1
#2

Southern Pine***
#1
#2

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 100 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.

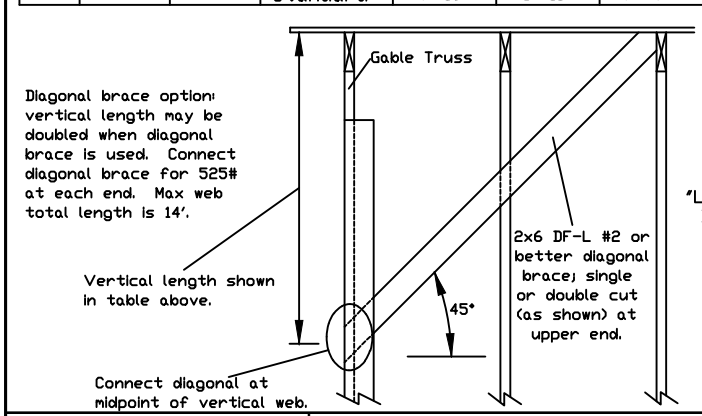
Attach "L" braces with 10d (0.128"x3.0" min) nails.

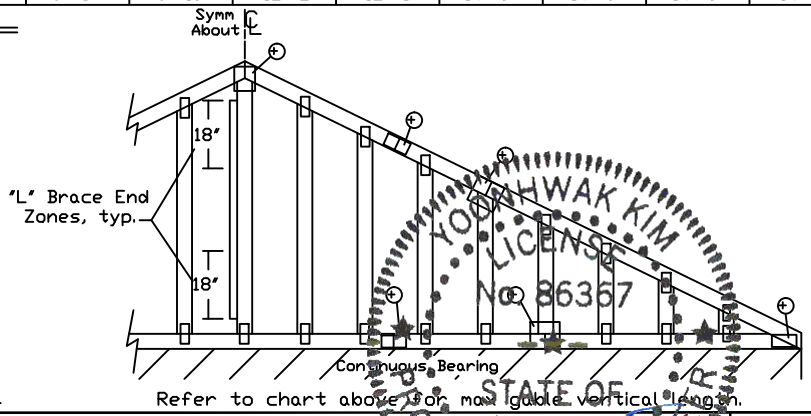
* For (1) "L" brace: space nails at 2" o.c. in 18" end zones and 4" o.c. between zones.

**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.

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 525# at each end. Max web total length is 14'.





Refer to chart above for max gable vertical length.

Gable Vertical Plate Sizes

Vertical Length	No Splice
Less than 4' 0"	2X4
Greater than 4' 0", but less than 11' 6"	3X4
Greater than 11' 6"	4X4

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

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MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-16-GAB14030
DATE	01/26/2018
DRWG	A14030ENC160118

01/5/2021
FL Reg# 278, Yoonhwak Kim, FL PE #86367

CLR Reinforcing Member Substitution

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

Notes:

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

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

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

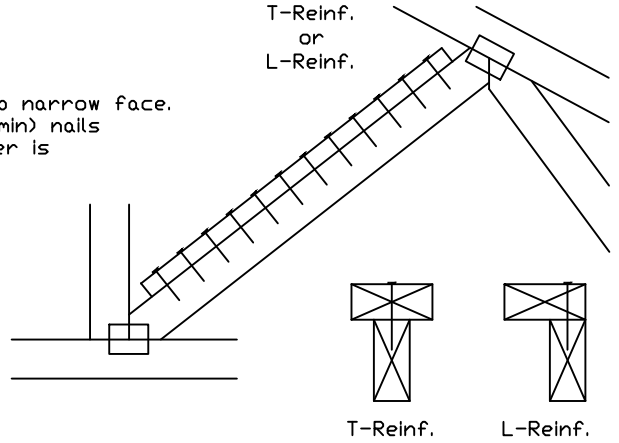
Web Member Size	Specified CLR Restraint	Alternative Reinforecement T- or L- Reinf.	Alternative Reinforecement Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(*)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(*)

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

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

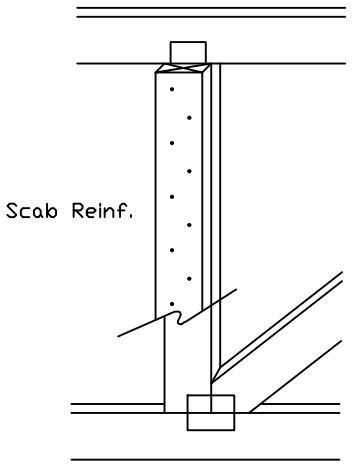
T-Reinforcement or L-Reinforcement:

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



Scab Reinforcement:

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



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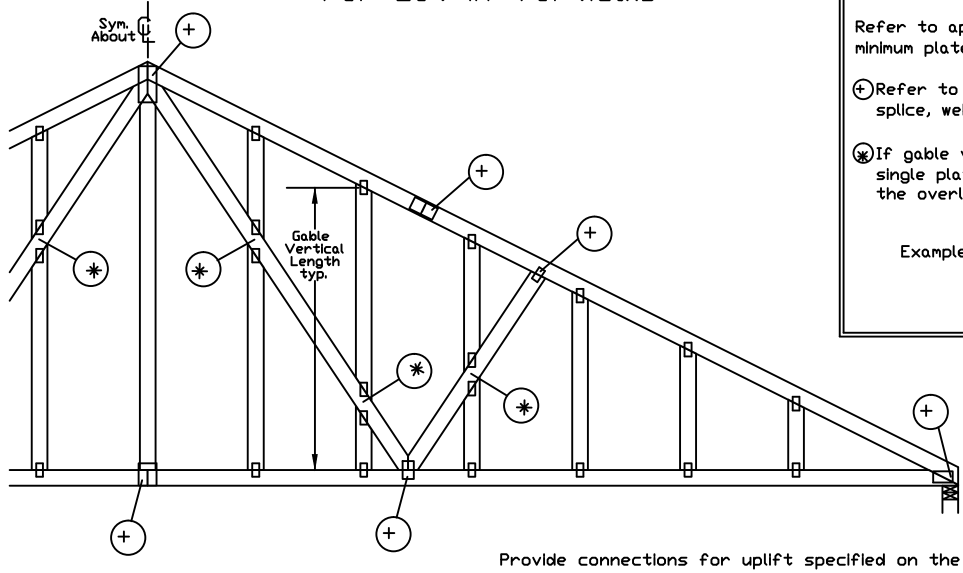
TC LL		PSF
TC DL		PSF
BC DL		PSF
BC LL		PSF
TOT. LD.		PSF
DUR. FAC.		
SPACING		

REF	CLR Subst.
DATE	01/02/19
DRWG	BRCLBSUB0119

10/15/2021
FL REG# 278, Yoonhwak Kim, FL PE #86367

Gable Detail

For Let-in Verticals



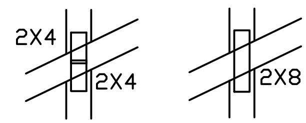
Gable Truss Plate Sizes

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

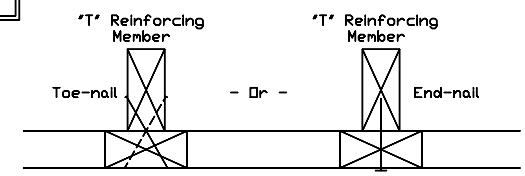
(+) Refer to Engineered truss design for peak, splice, web, and heel plates.

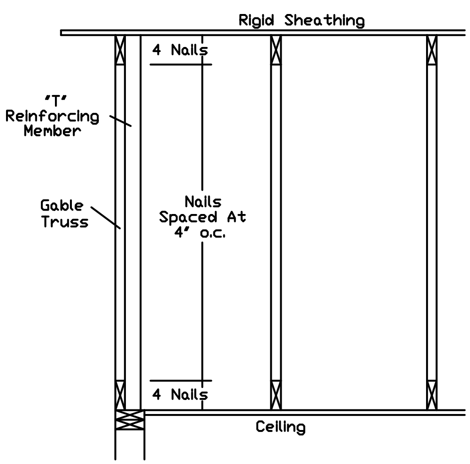
(✱) If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web.

Example:



"T" Reinforcement Attachment Detail





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"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, S16015ENC100118,
S18015ENC100118, S20015ENC100118, S20015END100118, S20015PED100118,
S11530ENC100118, S12030ENC100118, S14030ENC100118, S16030ENC100118,
S18030ENC100118, S20030ENC100118, S20030END100118, S20030PED100118

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

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

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

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

Web Length Increase w/ "T" Brace

"T" Reinf. Mbr. Size	"T" Increase
2x4	30 %
2x6	20 %

Example:
ASCE 7-10 Wind Speed = 120 mph
Mean Roof Height = 30 ft, 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 x 8' 7" = 11' 2"

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YOONHWAK KIM LICENSE No. 86367 STATE OF FLORIDA PROFESSIONAL ENGINEER

9/15/2021
FL REG# 278, Yoonhwak Kim, FL PE #86367

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

MAX. TOT. LD. 60 PSF
DUR. FAC. ANY
MAX. SPACING 24.0"

Piggyback Detail - ASCE 7-16: 160 mph, 30' Mean Height, Enclosed, Exposure C, Kzt=1.00

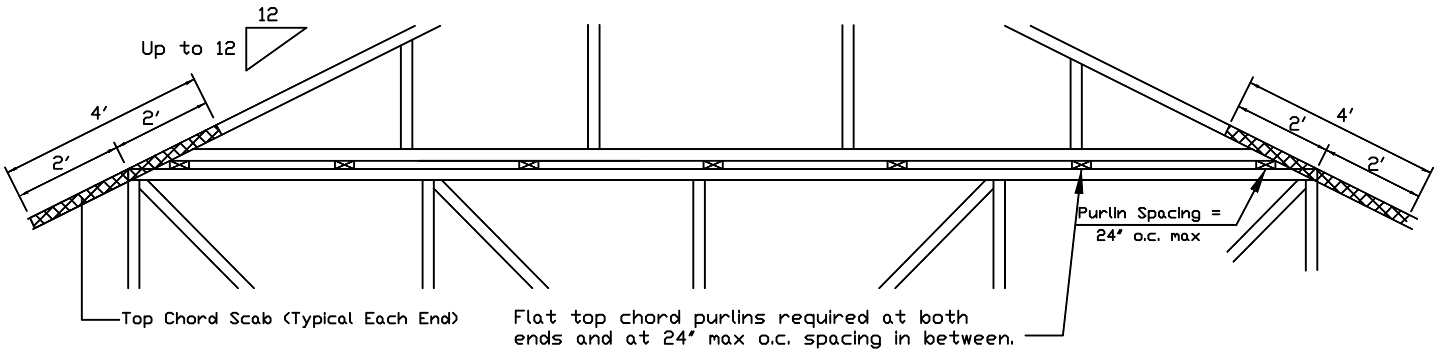
160 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg, located anywhere in roof, Exp C, wind DL= 5.0 psf (min), Kzt=1.0.
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg, located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends.

Maximum truss spacing is 24" o.c. detail is not applicable if cap supports additional loads such as cupola, steeple, chimney or drag strut loads.

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

Detail A : Purlin Spacing = 24" o.c. or less



Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4" o.c.

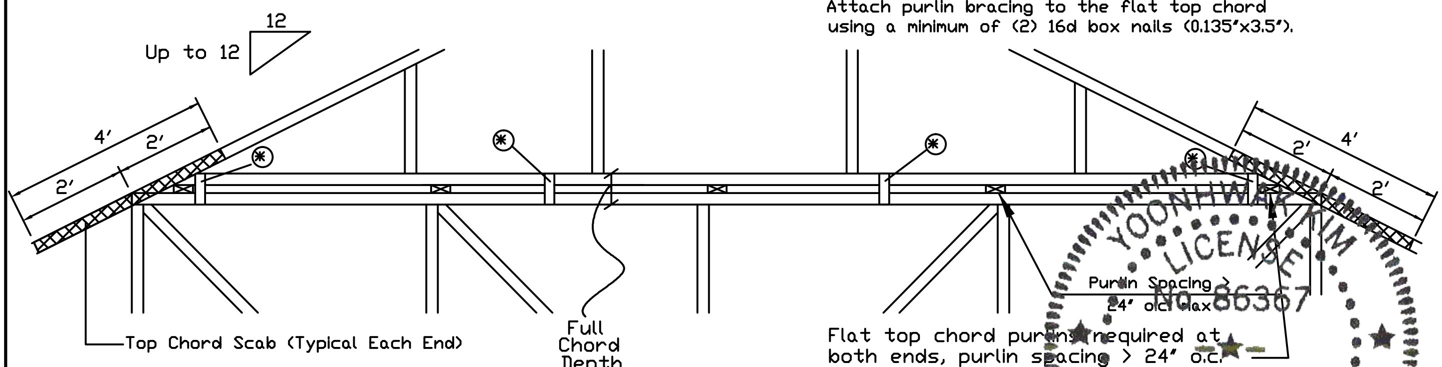
Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

The top chord #3 grade 2x4 scab may be replaced with either of the following: (1) 3X8 Trulox plate attached with (8) 0.120"x1.375" nails, (4) into cap TC & (4) into base truss TC or (1) 28PB wave piggyback plate plated to the piggyback truss TC and attached to the base truss TC with (4) 0.120"x1.375" nails. Note: Nailing thru holes of wave plate is acceptable.

Detail B : Purlin Spacing > 24" o.c.

Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4" o.c.

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



Note: If purlins or sheathing are not specified on the flat top of the base truss, purlins must be installed at 24" o.c. max. and use Detail A.

* In addition, provide connection with one of the following methods:
Trulox Use 3X8 Trulox plates for 2x4 chord member, and 3X10 Trulox plates for 2x6 and larger chord members. Attach to each face @ 8' o.c. with (4) 0.120"x1.375" nails into cap bottom chord and (4) in base truss top chord. Trulox plates may be staggered 4' o.c. front to back faces.
APA Rated Gusset 8"x8"x7/16" (min) APA rated sheathing gussets (each face). Attach @ 8' o.c. with (8) 6d common (0.113"x2") nails per gusset, (4) in cap bottom chord and (4) in base truss top chord. Gussets may be staggered 4' o.c. front to back faces.
2x4 Vertical Scabs 2x4 SPF #2, full chord depth scabs (each face). Attach @ 8' o.c. with (6) 10d box nails (0.128"x3") per scab, (3) in cap bottom chord and (3) in base truss top chord. Scabs may be staggered 4' o.c. front to back faces.
28PB Wave Piggyback Plate One 28PB wave piggyback plate to each face @ 8' o.c. Attach teeth to piggyback at time of fabrication. Attach to supporting truss with (4) 0.120"x1.375" nails per face per ply. Piggyback plates may be staggered 4' o.c. front to back faces.

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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.

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

A seal on this drawing or cover page 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

10/15/2021
FL REG# 278, Yoonhwak Kim, FL PE #86367

REF	PIGGYBACK
DATE	01/02/2018
DRWG	PB160160118
SPACING	24.0"