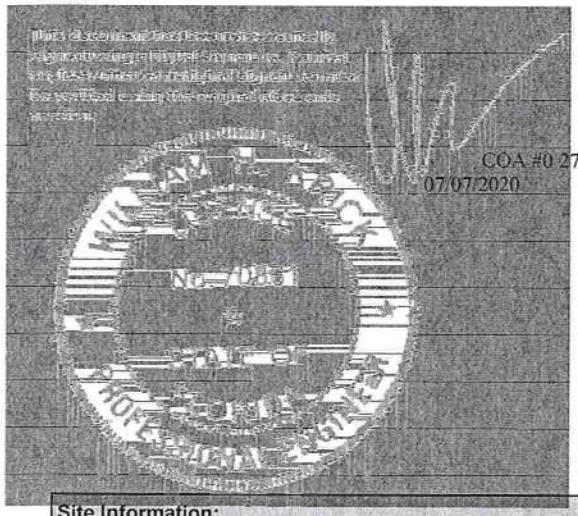

Alpine, an ITW Company
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Phone: (800)755-6001
www.alpineitw.com

Site Information:	Page 1:
Customer: Seminole Trusses, Inc.	*Job Number:* B50573-R
Job Description: - Knoper Roof Trademark Const Group	
Address: NW Scenic Lake Dr., LAKE CITY, FL	

Job Engineering Criteria:	
Design Code: FBC 2017 RES	*IntelliVIEW Version:* 17.02.02A *JRef #:* 1WWR8570002
Wind Standard: ASCE 7-10 *Wind Speed (mph):* 130 *Building Type:* Closed	*Roof Load (psf):* 20.00-10.00- 0.00-10.00 *Floor Load (psf):* None

This package contains general notes pages, 30 truss drawing(s) and 10 detail(s).

Item	Drawing Number	Truss
1	189.20.1601.00697	A01
3	189.20.1603.40100	A03
5	189.20.1604.23780	A04A
7	189.20.1605.40677	A06A
9	189.20.1602.07473	B02
11	189.20.1602.26027	B04
13	189.20.1602.31697	B06
15	189.20.1602.34563	B08
17	189.20.1602.49847	B10
19	189.20.1602.53003	B12
21	189.20.1602.56290	C02
23	189.20.1603.06727	D02
25	189.20.1605.57307	GR1
27	189.20.1603.17203	M02
29	189.20.1603.23360	M04
31	PB160160118	
33	REPCHRD1014	
35	GBLLETIN0118	
37	DEFLCAMB1014	
39	CNNAILSP1014	

Item	Drawing Number	Truss
2	189.20.1601.20183	A02
4	189.20.1601.40940	A04
6	189.20.1601.49080	A06
8	189.20.1602.04917	B01
10	189.20.1602.22757	B03
12	189.20.1602.30320	B05
14	189.20.1602.33120	B07
16	189.20.1602.45490	B09
18	189.20.1602.51537	B11
20	189.20.1602.54850	C01
22	189.20.1603.03270	D01
24	189.20.1604.09073	FG1
26	189.20.1603.15487	M01
28	189.20.1603.21910	M03
30	189.20.1603.25527	PB01
32	PB180160118	
34	A14030ENC101014	
36	A14015ENC101014	
38	BRCLBSUB0119	
40	PB160101014	

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.

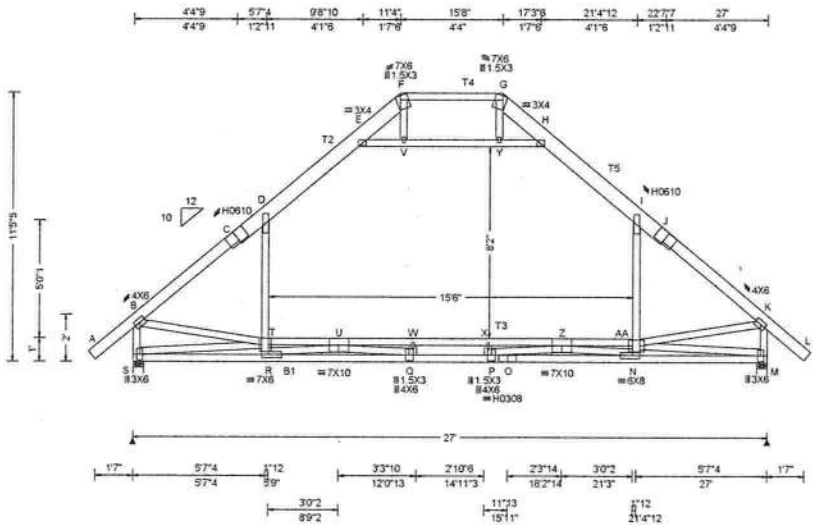
BCDL = Bottom Chord standard design Dead Load in pounds per square foot.
BCLL = Bottom Chord standard design Live Load in pounds per square foot.
CL = Certified lumber.
Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.
FRT = Fire Retardant Treated lumber.
FRT-DB = D-Blaze 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.: 13723 Riverport Drive, Suite 200, Maryland Heights, MO 63043; 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: 16556 ATIC FROM: JL	Ply: 1 Qty: 7	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A01	Cust: R 857 JRef: 1WWR8570002 T25 DrwNo: 189.20.1601.00697 SSB / DF 07/07/2020



Loading Criteria (psf)		**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL:	20.00	Wind Std: ASCE 7-10	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL:	10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.558 G 580 240
BCLL:	0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 1.004 G 322 180
BCDL:	10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.252 D - -
Des Ld:	40.00	EXP: B Kzt: NA		HORZ(TL): 0.511 D - -
NCBCLL:	10.00	Mean Height: 15.94 ft	Building Code:	Creep Factor: 2.0
Soffit:	2.00	TCDL: 4.2 psf	FBC 2017 RES	Max TC CSI: 0.946
Load Duration:	1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.857
Spacing:	24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.959
		C&C Dist a: 3.00 ft	FT/RT:10(0)/4(0)	
		Loc. from endwall: Any	Plate Type(s):	
		GCpi: 0.18	WAVE, HS	VIEW Ver: 17.02.02A.1213.20
		Wind Duration: 1.60		

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
S	2200	/-	/-	/743	/76	/284
M	2200	/-	/-	/743	/76	/-

Wind reactions based on MWFRS
S Brg Width = 5.5 Min Req = 2.2
M Brg Width = 5.5 Min Req = 2.6
Bearings S & M 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	230	-2323	G - H	376	-48
C - D	237	-2139	H - I	306	-1645
D - E	307	-1646	I - J	239	-2141
F - G	790	-0	J - K	232	-2324

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
S - R	865	-620	P - O	3687	-87
R - Q	3739	-240	O - N	3687	-87
Q - P	5216	-35	N - M	774	-429

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - S	296	-2136	W - X	21	-3661
B - T	1568	-15	X - P	58	-377
S - T	403	-802	X - Z	22	-3596
D - T	922	-34	P - Z	1943	-195
T - R	1050	-16	Y - G	390	-45
T - U	1815	-509	Y - H	376	-2425
R - U	218	-3569	Z - N	231	-3577
U - Q	1913	-188	Z -AA	1824	-604
U - W	21	-3596	N -AA	1046	-18
E - V	376	-2425	AA- I	923	-41
F - V	393	-46	AA- K	1567	-22
V - Y	370	-2380	AA- M	436	-736
Q - W	55	-379	K - M	298	-2138

Lumber

Top chord: 2x6 SP #1; T2,T5 2x8 SP SS Dense;
T3 2x4 SP M-30; T4 2x4 SP #1;
Bot chord: 2x4 SP #1; B1 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Plating Notes

All plates are 3X10 except as noted.

Loading

Attic room loading from 5-9-0 to 21-3-0: Live Load: 40 PSF. Dead Load: 10 PSF Ceiling: 5 PSF, Kneewalls: 5 PSF

Purlins

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

Wind

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

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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

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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: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

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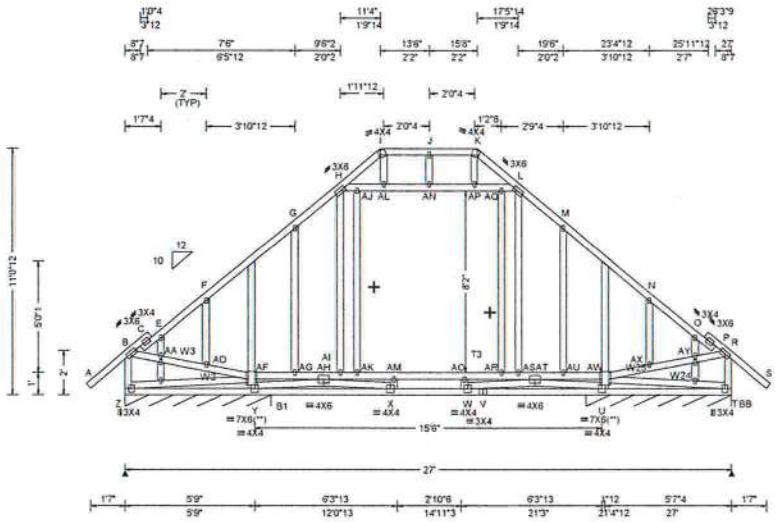
SEQN: 16766 ATIC FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A02		Cust: R 857 JRef: 1WWR8570002 T18 DrwNo: 189.20.1601.20183 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.94 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Varies by Ld Case
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.139	I	999	240
VERT(CL): 0.251	I	740	180
HORZ(LL): 0.052	F	-	-
HORZ(TL): 0.094	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.856
Max BC CSI: 0.641
Max Web CSI: 0.952

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
Z*	389	/-	/-	/109	/17	/5
BB*	388	/-	/-	/109	/17	/-

Wind reactions based on MWFRS
Z Brg Width = 77.5 Min Req = -
BB Brg Width = 77.5 Min Req = -
Bearings Z & U 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	64	-1732	J - K	71	-496
C - E	56	-1699	K - L	90	-669
E - F	53	-1778	L - M	58	-1835
F - G	62	-1867	M - N	62	-1866
G - H	58	-1834	N - O	53	-1780
H - I	90	-670	O - P	56	-1700
I - J	71	-496	P - R	64	-1734

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
Y - X	1403	-117	W - V	1378	-115
X - W	2783	-42	V - U	1378	-115

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - Z	95	-1501	AM-AO	25	-1418
B - AA	1413	-30	AN-AP	2	-879
AA-AD	1408	-34	AO-AR	25	-1412
AD-AF	1353	-24	W -AT	1442	0
AF-AG	1668	-26	AP-AQ	3	-904
Y -AH	131	-1755	AQ- L	3	-911
AG-AH	1670	-27	AR-AS	25	-1412
AH-AI	26	-1419	AS- L	388	0
AH- X	1420	0	AS-AT	25	-1416
H -AI	380	0	AT-AU	1683	-29
H -AJ	3	-911	AT- U	131	-1744
AI-AK	26	-1416	AU-AW	1680	-28
AJ-AK	377	0	AW-AX	1351	-24
AJ-AL	3	-904	AX-AY	1406	-34
AK-AM	26	-1416	AY- R	1410	-30
AL-AN	2	-879	R - T	95	-1496

Lumber

Top chord: 2x4 SP #1; T3 2x4 SP M-30;
Bot chord: 2x4 SP #1; B1 2x4 SP SS Dense;
Webs: 2x4 SP #3; W2,W3,W24,W25 2x4 SP #1;

Plating Notes

All plates are 1.5X3 except as noted.

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

Loading

Attic room loading from 5-9-0 to 21-3-0: Live Load: 40 PSF. Dead Load: 10 PSF Ceiling: 5 PSF, Kneewalls: 5 PSF

Purlins

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

Wind

Wind loads based on MWFRS.

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

Top Chord overhang(s) may be field trimmed.

Laterally brace chord above/ below filler at 24" OC (or as designed) including a lateral brace on chord directly below both ends of filler (if no rigid diaphragm exists at that point)

+ Member to be laterally braced for out of plane wind loads

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

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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: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

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6750 Forum Drive
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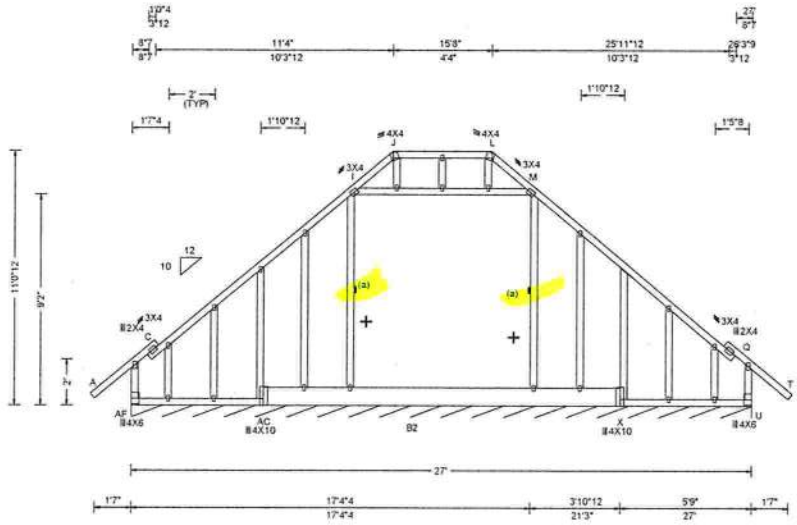
SEQN: 16777 GABL FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A03	Cust: R 857 JRef: 1WWR8570002 T1 DrwNo: 189.20.1603.40100 SSB / DF 07/07/2020



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 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.79 ft TCDL: 4.2 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 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:10(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.012 K 999 240 VERT(CL): 0.024 K 999 180 HORZ(LL): -0.212 L - - HORZ(TL): 0.322 L - - Creep Factor: 2.0 Max TC CSI: 0.194 Max BC CSI: 0.174 Max Web CSI: 0.472 VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
U*	95	/-	/-	/51	/4	/11

Wind reactions based on MWFRS
U Brg Width = 323 Min Req = -
Bearing AF is a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1; B2 2x10 SP #2;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 1x4 #3SRB SPF-S or better "T" reinforcement. 80% length of web member. Attached with 8d Box or Gun (0.113"x2.5",min.)nails @ 6" oc.

Fasten rated sheathing to one face of this frame.

Plating Notes

All plates are 1.5X3 except as noted.

Wind

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

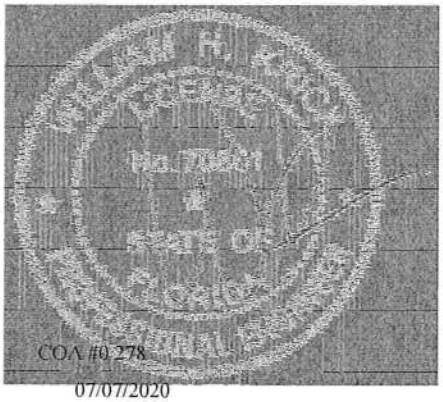
End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

See DWGS A14030ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

Top Chord overhang(s) may be field trimmed.

+ Member to be laterally braced for out of plane wind loads



07/07/2020

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

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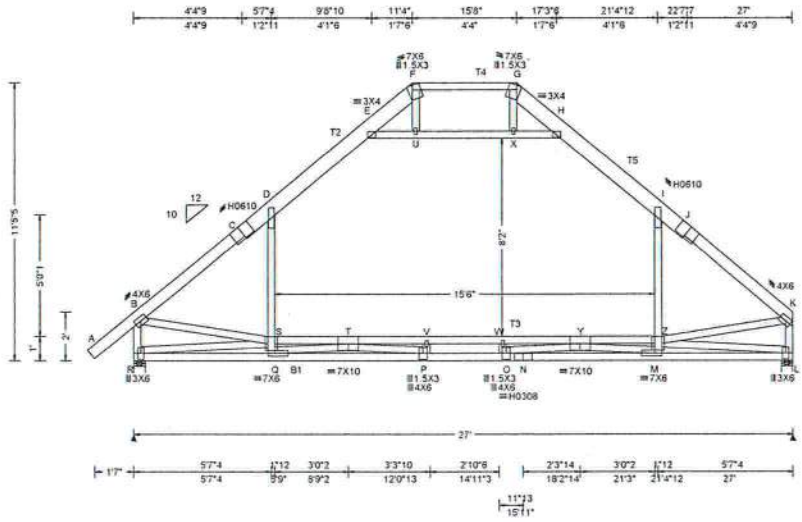
For more information see these web sites: Alpine: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

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

SEQN: 16851 ATIC FROM: JL	Ply: 1 Qty: 6	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A04	Cust: R 857 JRef: 1WWR8570002 T27 DrwNo: 189.20.1601.40940 SSB / DF 07/07/2020	



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.94 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.558	G	580	240
VERT(CL): 1.004	G	322	180
HORZ(LL): 0.252	D	-	-
HORZ(TL): 0.510	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.946
Max BC CSI: 0.856
Max Web CSI: 0.956

VIEW Ver: 17.02.02A.1213.20

▲Maximum Reactions (lbs)

Loc	Gravity R+	Gravity / R-	Gravity / Rh	Non-Gravity / Rw	Non-Gravity / U	Non-Gravity / RL
R	2200	/-	/-	/745	/75	/263
L	2072	/-	/-	/650	/57	/-

Wind reactions based on MWFRS
R Brg Width = 5.5 Min Req = 2.2
L Brg Width = 5.5 Min Req = 2.4
Bearings R & L 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	232	-2323	G - H	376	-48
C - D	239	-2139	H - I	310	-1645
D - E	309	-1646	I - J	231	-2140
F - G	790	-10	J - K	223	-2324

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
R - Q	845	-609	O - N	3687	-150
Q - P	3736	-218	N - M	3687	-150
P - O	5216	-96	M - L	774	-434

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - R	298	-2136	V - W	4	-3661
B - S	1568	-16	W - O	61	-375
R - S	403	-788	W - Y	4	-3596
D - S	922	-35	O - Y	1932	-201
S - Q	1050	-16	X - G	390	-48
S - T	1815	-516	X - H	390	-2425
Q - T	217	-3569	Y - M	237	-3563
T - P	1913	-187	Y - Z	1796	-605
T - V	3	-3596	M - Z	1043	-20
E - U	389	-2425	Z - I	918	-53
F - U	393	-46	Z - K	1567	-102
U - X	383	-2380	Z - L	441	-736
P - V	54	-379	K - L	208	-2004

Lumber

Top chord: 2x6 SP #1; T2,T5 2x8 SP SS Dense;
T3 2x4 SP M-30; T4 2x4 SP #1;
Bot chord: 2x4 SP #1; B1 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Plating Notes

All plates are 3X10 except as noted.

Loading

Attic room loading from 5-9-0 to 21-3-0: Live Load: 40 PSF. Dead Load: 10 PSF Ceiling: 5 PSF, Kneewalls: 5 PSF

Purlins

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

Wind

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

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

Top Chord overhang(s) may be field trimmed.

ALPINE
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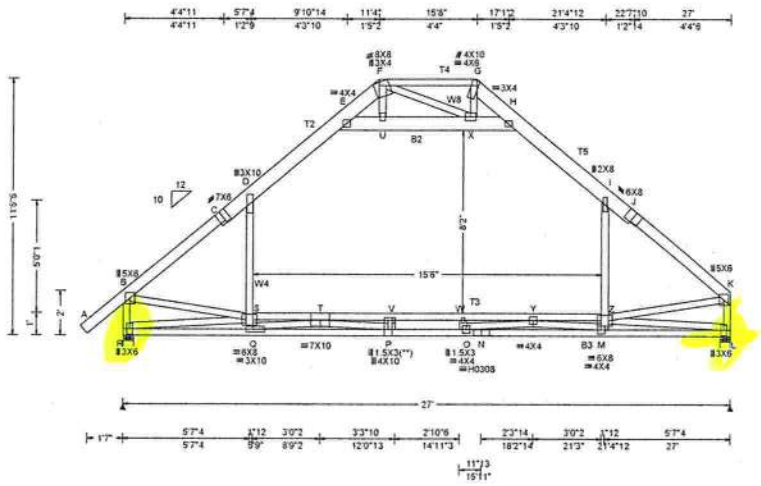
SEQN: 16834 ATIC FROM: JL	Ply: 4 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A04A		Cust: R 857 JRef: 1WWR8570002 T14 DrwNo: 189.20.1604.23780 SSB / DF 07/07/2020

4 Complete Trusses Required



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-10	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.475 G 681 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.782 G 414 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): -0.260 I - -
Des Ld: 40.00	EXP: B Kzt: NA		HORZ(TL): 0.428 I - -
NCBCLL: 10.00	Mean Height: 15.94 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 4.2 psf	FBC 2017 RES	Max TC CSI: 0.801
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.891
Spacing: 24.0 "	MWFRS Parallel Dist: 0 to h/2	Rep Fac: Yes	Max Web CSI: 0.981
	C&C Dist a: 3.00 ft	FT/RT:10(0)/4(0)	
	Loc. from endwall: Any	Plate Type(s):	
	GCpi: 0.18	WAVE, HS	VIEW Ver: 17.02.02A.1213.20
	Wind Duration: 1.60		

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
R	7898	/-	/-	/745	/1542	/263
L	8944	/-	/-	/650	/1636	/-

Wind reactions based on MWFRS
R Brg Width = 5.5 Min Req = 2.0
L Brg Width = 5.5 Min Req = 2.6
Bearings R & L 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	410	-2288	H - I	291	-2034
C - D	400	-2242	I - J	406	-2317
D - E	266	-1730	J - K	416	-2363
G - H	110	-549			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
R - Q	207	-655	O - N	3036	-673
Q - P	1947	-591	N - M	3036	-673
P - O	3983	-997	M - L	1443	-165

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - R	347	-1901	V - W	703	-2263
B - S	1655	-278	W - Y	698	-2269
R - S	688	-198	O - Y	981	-328
D - S	862	-223	X - G	483	-83
S - Q	1138	-266	X - H	456	-1571
S - T	2426	-284	Y - M	496	-1472
Q - T	596	-2710	Y - Z	420	-147
T - P	2061	-409	M - Z	835	-240
T - V	695	-2226	Z - I	444	-188
E - U	528	-2471	Z - K	1687	-280
F - U	483	-82	Z - L	158	-1403
F - X	1096	-92	K - L	352	-1935
U - X	515	-2395			

Lumber

Top chord: 2x6 SP #1; T2,T5 2x8 SP SS Dense;
T3 2x4 SP M-30; T4 2x4 SP #1;
Bot chord: 2x4 SP SS Dense; B2 2x8 SP SS Dense;
B3 2x4 SP M-30;
Webs: 2x4 SP #3; W4,W8 2x4 SP #1;

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @ 9.00" o.c.
Bot Chord: 1 Row @ 2.75" o.c.
Webs : 1 Row @ 4" o.c.
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.
In addition, apply (1) 0.22"-0.25" min/max dia. X 6.0" length wood screw at each joint location.

Special Loads

-----(Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)

TC: From	66 plf at	-1.88 to	66 plf at	27.00
TC: From	13 plf at	5.75 to	13 plf at	9.54
TC: From	13 plf at	17.46 to	13 plf at	21.25
PLT: From	10 plf at	10.22 to	10 plf at	16.78
PLT: From	100 plf at	5.75 to	100 plf at	21.25
BC: From	5 plf at	-1.88 to	5 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	27.00
BC: From	256 plf at	0.00 to	256 plf at	12.69
BC: From	256 plf at	14.69 to	256 plf at	27.00

BC: 50 lb Conc. Load at 5.75,21.25
BC: 411 lb Conc. Load at 13.69
PLB: 5766 lb Conc. Load at (16.25,19.21) +

Additional Notes

Top Chord overhang(s) may be field trimmed.

Plating Notes

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

Purlins

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

Wind

Wind loads based on MWFRS.

End verticals exposed to wind pressure. Deflection meets L/180.

+12-(0.131"x3.0") nails opposite hanger after third ply is attached.

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

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ALPINE
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Suite 305
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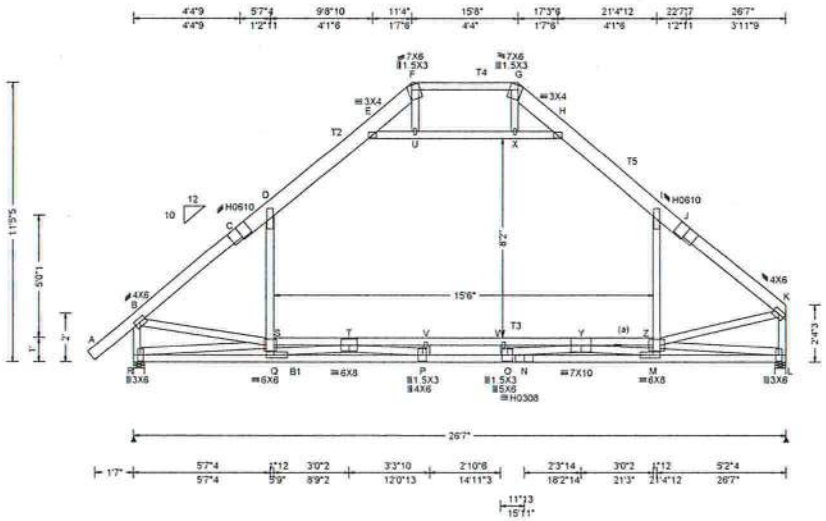
SEQN: 16564 ATIC FROM: JL	Ply: 1 Qty: 5	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A06		Cust: R 857 JRef: 1WWR8570002 T30 DrwNo: 189.20.1601.49080 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.94 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.539	F	592	240
VERT(CL): 0.975	F	327	180
HORZ(LL): 0.261	D	-	-
HORZ(TL): 0.526	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.930
Max BC CSI: 0.856
Max Web CSI: 0.998

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
R	2167	/-	/-	/735	/74	/263
L	2069	/-	/-	/635	/57	/-

Wind reactions based on MWFRS
R Brg Width = 5.5 Min Req = 2.2
L Brg Width = 5.5 Min Req = 2.4
Bearings R & L 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	224	-2251	H - I	304	-1603
C - D	231	-2068	I - J	224	-2068
D - E	302	-1597	J - K	217	-2234
F - G	735	0			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
R - Q	997	-586	O - N	3454	-121
Q - P	3789	-211	N - M	3454	-121
P - O	5121	-93	M - L	591	-703

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - R	292	-2080	W - O	55	-399
B - S	1511	-18	W - Y	0	-3565
R - S	345	-960	O - Y	2057	-185
D - S	883	-37	X - G	383	-46
S - Q	1012	-18	X - H	369	-2291
S - T	1531	-531	Y - M	223	-3738
Q - T	226	-3406	Y - Z	2126	-576
T - P	1760	-196	M - Z	1083	-18
T - V	0	-3573	Z - I	881	-53
E - U	369	-2289	Z - K	1545	-114
U - X	363	-2247	Z - L	725	-596
V - W	0	-3633	K - L	210	-2050

Lumber

Top chord: 2x6 SP #1; T2,T5 2x8 SP SS Dense; T3 2x4 SP M-30; T4 2x4 SP #1;
Bot chord: 2x4 SP #1; B1 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 1x4 #3SRB SPF-S or better "T" reinforcement. 80% length of web member. Attached with 8d Box or Gun (0.113"x2.5",min.)nails @ 6" oc.

Plating Notes

All plates are 3X10 except as noted.

Loading

Attic room loading from 5-9-0 to 21-3-0: Live Load: 40 PSF. Dead Load: 10 PSF Ceiling: 5 PSF, Kneewalls: 5 PSF

Purlins

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

Wind

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

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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

ALPINE
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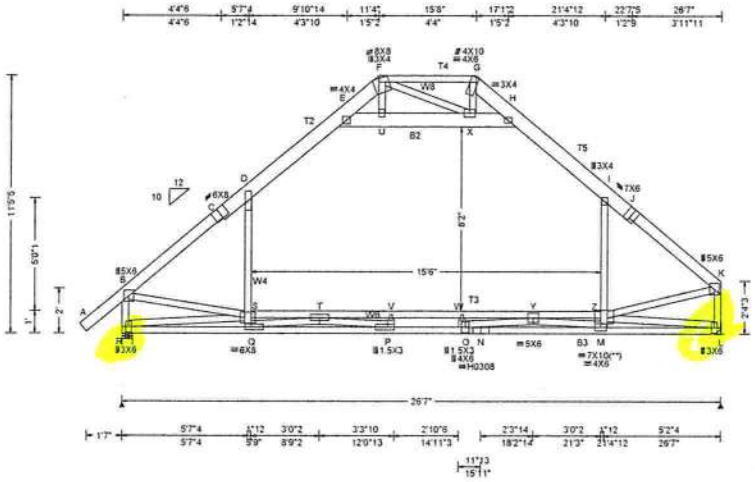
Orlando FL, 32821

SEQN: 16832 ATIC FROM: JL Page 1 of 2	Ply: 4 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A06A		Cust: R 857 JRef: 1WWR8570002 T33 DrwNo: 189.20.1605.40677 SSB / DF 07/07/2020

4 Complete Trusses Required



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.94 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.473	G	674	240
VERT(CL): 0.774	G	412	180
HORZ(LL): -0.225	I	-	-
HORZ(TL): 0.368	I	-	-

Creep Factor: 2.0
Max TC CSI: 0.771
Max BC CSI: 0.906
Max Web CSI: 0.836

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
R	7997	/-	/-	/736	/1517	/259
L	9194	/-	/-	/636	/1625	/-

Wind reactions based on MWFRS
R Brg Width = 5.5 Min Req = 2.0
L Brg Width = - Min Req = -
Bearing R 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	396	-2288	H - I	283	-2034
C - D	386	-2242	I - J	391	-2303
D - E	256	-1717	J - K	399	-2344
G - H	101	-561			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
R - Q	247	-499	O - N	3020	-626
Q - P	2227	-603	N - M	3020	-626
P - O	4382	-982	M - L	982	-152

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - R	336	-1909	V - W	700	-2670
B - S	1645	-267	W - Y	694	-2672
R - S	533	-237	O - Y	1403	-360
D - S	880	-215	X - G	491	-80
S - Q	1160	-258	X - H	429	-1554
S - T	2241	-228	Y - M	537	-1976
Q - T	562	-2817	Y - Z	619	-180
T - P	2187	-383	M - Z	937	-246
T - V	693	-2638	Z - I	427	-177
E - U	499	-2432	Z - K	1719	-277
F - U	475	-78	Z - L	158	-959
F - X	1075	-89	K - L	361	-2055
U - X	487	-2358			

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

Lumber

Top chord: 2x6 SP #1; T2,T5 2x8 SP SS Dense;
T3 2x4 SP M-30; T4 2x4 SP #1;
Bot chord: 2x4 SP SS Dense; B2 2x8 SP SS Dense;
B3 2x4 SP M-30;
Webs: 2x4 SP #3; W4,W6,W8 2x4 SP #1;

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @ 9.00" o.c.
Bot Chord: 1 Row @ 2.75" o.c.
Webs : 1 Row @ 4" o.c.
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.
In addition, apply (1) 0.22"-0.25" min/max dia. X 6.0" length wood screw at each joint location.

Special Loads

-----(Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)

TC: From	66 plf at	-1.88 to	66 plf at	26.58
TC: From	13 plf at	5.75 to	13 plf at	9.54
TC: From	13 plf at	17.46 to	13 plf at	21.25
PLT: From	10 plf at	10.22 to	10 plf at	16.78
PLT: From	100 plf at	5.75 to	100 plf at	21.25
BC: From	5 plf at	-1.88 to	5 plf at	0.00
BC: From	20 plf at	0.00 to	20 plf at	26.58
BC: From	256 plf at	0.00 to	256 plf at	12.69
BC: From	256 plf at	14.69 to	256 plf at	26.58

BC: 50 lb Conc. Load at 5.75,21.25
BC: 903 lb Conc. Load at 13.69
PLB: 5766 lb Conc. Load at (16.25,19.21) +

Hangers / Ties

(J) Hanger Support Required, by others

Plating Notes

All plates are 3X10 except as noted.
(**) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Purlins

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

Wind

Wind loads based on MWFRS.
End verticals exposed to wind pressure. Deflection meets L/180.
+12-(0.131"x3.0") nails opposite hanger after third ply is attached

07/07/2020

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6750 Forum Drive
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SEQN: 16832 ATIC FROM: JL Page 2 of 2	Ply: 4 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** A06A		Cust: R 857 JRef: 1WWR8570002 T33 DrwNo: 189.20.1605.40677 SSB / DF 07/07/2020

Additional Notes

Top Chord overhang(s) may be field trimmed.

07/07/2020

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6750 Forum Drive
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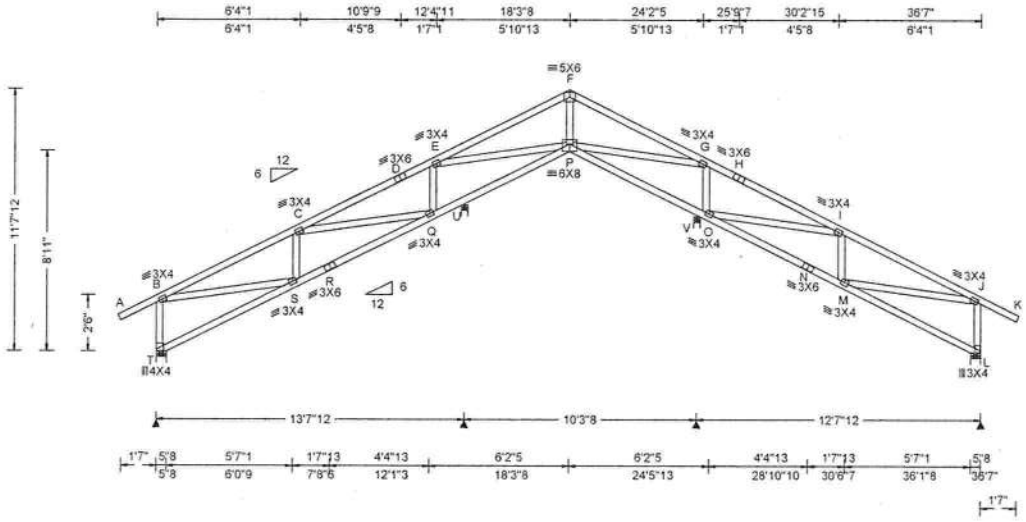
SEQN: 16547 COMN FROM: JL	Ply: 1 Qty: 7	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B01		Cust: R 857 JRef: 1WWR8570002 T17 DrwNo: 189.20.1602.04917 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 16.64 ft
TCDL: 4.2 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.66 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.080	E	999	240
VERT(CL): 0.168	E	967	180
HORZ(LL): 0.078	L	-	-
HORZ(TL): 0.165	L	-	-

Creep Factor: 2.0
Max TC CSI: 0.481
Max BC CSI: 0.930
Max Web CSI: 0.753

VIEW Ver: 17.02.02A.1213.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
T	818	/-	/-	/410	/110	/274
U	605	/-	/-	/425	/5	/-
V	1386	/-	/-	/760	/-	/-
L	589	/-	/-	/418	/110	/-

Wind reactions based on MWFRS
T Brg Width = 5.5 Min Req = 1.5
U Brg Width = 3.5 Min Req = 1.5
V Brg Width = 3.5 Min Req = 1.5
L Brg Width = 5.5 Min Req = 1.5
Bearings T, U, V, & L 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	549	-1434	F - G	132	-688
C - D	449	-1075	G - H	668	-84
D - E	455	-949	H - I	631	-103
E - F	100	-696	I - J	399	-793

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
S - R	1342	-511	P - O	453	-782
R - Q	1387	-503	O - N	740	-189
Q - P	2166	-575	N - M	695	-197

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - T	419	-756	G - O	224	-801
B - S	1240	-363	O - I	402	-1036
C - Q	208	-423	M - J	653	-200
E - P	506	-492	L - J	345	-531
P - G	1052	-127			

Lumber

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

Wind

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

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

Shim all supports to solid bearing.

Top Chord overhang(s) may be field trimmed.

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6750 Forum Drive
Suite 305
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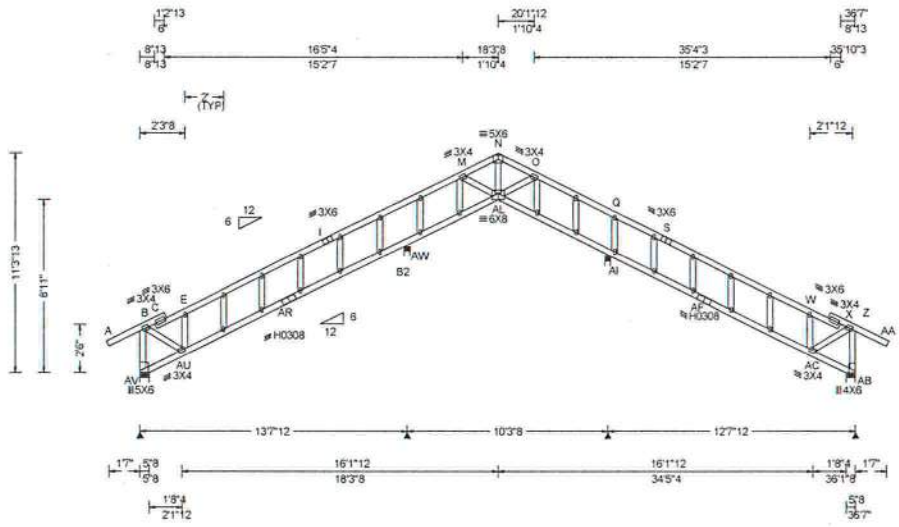
SEQN: 16761 GABL FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B02	Cust: R 857 JRef: 1WWR8570002 T4 DrwNo: 189.20.1602.07473 SSB / DF 07/07/2020	



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 16.48 ft
TCDL: 4.2 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.66 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#	
VERT(LL):	0.348	AQ	466	240
VERT(CL):	0.860	AQ	188	180
HORZ(LL):	0.227	H	-	-
HORZ(TL):	0.586	G	-	-

Creep Factor: 2.0
Max TC CSI: 0.672
Max BC CSI: 0.806
Max Web CSI: 0.387

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
AV	765	/-	/-	/406	/130	/267
AW	979	/-	/-	/643	/-	/-
AI	893	/-	/-	/491	/-	/-
AB	719	/-	/-	/501	/117	/-

Wind reactions based on MWFRS
AV Brg Width = 5.5 Min Req = 1.5
AW Brg Width = 3.5 Min Req = 1.5
AI Brg Width = 3.5 Min Req = 1.5
AB Brg Width = 5.5 Min Req = 1.5
Bearings AV, AW, AI, & AB 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	527	- 843	O - Q	761	- 956
C - E	534	- 827	Q - S	671	- 831
E - I	791	- 1090	S - W	642	- 1004
I - M	883	- 1008	W - X	462	- 762
M - N	548	- 1118	X - Z	456	- 778
N - O	557	- 1083			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
AU-AR	951	- 521	AI-AF	971	- 444
AR-AL	1909	- 1012	AF-AC	894	- 432
AL-AI	909	- 404			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B -AU	1017	- 586	AL- O	531	- 295
M -AL	632	- 167	AC- Z	940	- 436
N -AL	715	- 531			

Maximum Gable Forces Per Ply (lbs)

Gables	Tens.	Comp.	Gables	Tens.	Comp.
AV- B	607	- 898	W -AC	294	- 621
AU- E	390	- 667	Z -AB	526	- 837
AI- Q	134	- 470			

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1; B2 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Plating Notes

All plates are 1.5X3 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.

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

See DWGS A14030ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

Shim all supports to solid bearing.

Top Chord overhang(s) may be field trimmed.

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6750 Forum Drive
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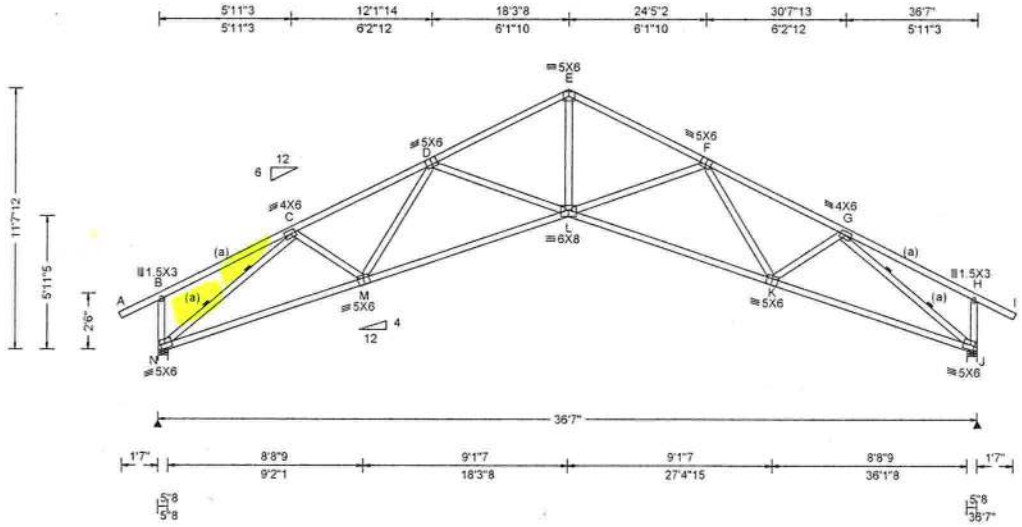
SEQN: 16545 COMN FROM: JL	Ply: 1 Qty: 3	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B03	Cust: R 857 JRef: 1WWR8570002 T7 DrwNo: 189.20.1602.22757 SSB / DF 07/07/2020



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 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.64 ft TCDL: 4.2 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.66 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 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:10(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.250 L 999 240 VERT(CL): 0.518 L 847 180 HORZ(LL): 0.244 J - - HORZ(TL): 0.504 J - - Creep Factor: 2.0 Max TC CSI: 0.384 Max BC CSI: 0.864 Max Web CSI: 0.928 VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
N	1639	/-	/-	/916	/107	/254
J	1639	/-	/-	/916	/107	/-

Wind reactions based on MWFRS
N Brg Width = 5.5 Min Req = 1.8
J Brg Width = 5.5 Min Req = 1.8
Bearings N & 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.
C - D	492	-3135	E - F	460	-3044
D - E	444	-3044	F - G	481	-3135

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
N - M	2458	-376	L - K	3054	-330
M - L	3054	-361	K - J	2458	-337

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
N - C	378	-3047	K - G	539	0
C - M	539	0	G - J	384	-3047
E - L	2263	-265			

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Wind

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

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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6750 Forum Drive
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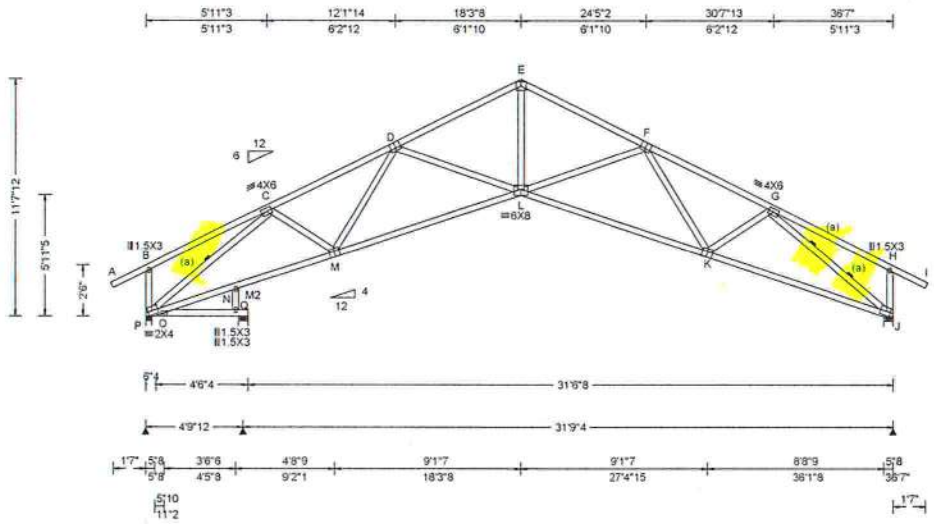
SEQN: 16543 COMN FROM: JL	Ply: 1 Qty: 8	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B04	Cust: R 857 JRef: 1WWR8570002 T10 DrwNo: 189.20.1602.26027 SSB / DF 07/07/2020	



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 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.64 ft TCDL: 4.2 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.66 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 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:10(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.242 L 999 240 VERT(CL): 0.489 L 774 180 HORZ(LL): 0.235 J - - HORZ(TL): 0.487 J - - Creep Factor: 2.0 Max TC CSI: 0.399 Max BC CSI: 0.905 Max Web CSI: 0.999 VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	1511	/-	/-	/801	/120	/261
Q	187	/-	/0	/124	/-	/0
J	1618	/-	/-	/900	/109	/-

Wind reactions based on MWFRS
P Brg Width = 3.5 Min Req = 1.7
Q Brg Width = 5.5 Min Req = 1.5
J Brg Width = 5.5 Min Req = 1.8
Bearings P, Q, & 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.
C - D	494	-2934	E - F	460	-2971
D - E	444	-2971	F - G	482	-3077

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
P - O	2274	-367	M - L	2918	-363
O - N	2286	-365	L - K	2995	-331
N - M	2283	-361	K - J	2417	-337

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
P - C	379	-2889	E - L	2198	-266
C - M	519	0	K - G	518	0
M - D	53	-458	G - J	385	-2994

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3; M2 2x4 SP #1;
Filler: 2x4 SP #1;

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Plating Notes

All plates are 5X6 except as noted.

Purlins

Laterally brace BC at 24" oc in lieu of rigid ceiling.
Laterally brace BC above filler at 24" oc.

Wind

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

End verticals exposed to wind pressure. Deflection meets L/180.

Additional Notes

Shim all supports to solid bearing.

Top Chord overhang(s) may be field trimmed.

07/07/2020

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ALPINE
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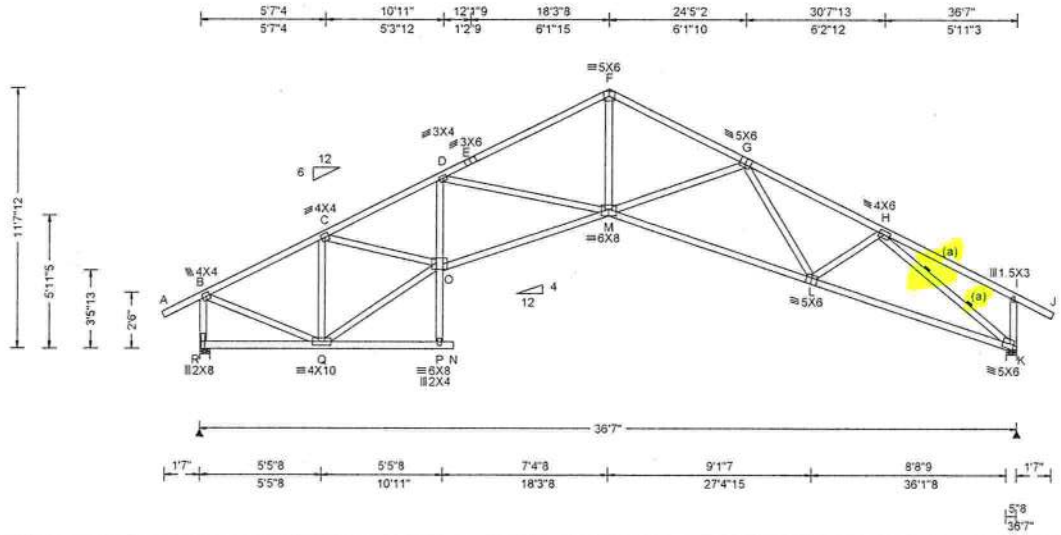
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16570 COMN FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B05	Cust: R 857 JRef: 1WWR8570002 T6 DrwNo: 189.20.1602.30320 SSB / DF 07/07/2020



Loading Criteria (psf)	**Wind Criteria**	**Snow Criteria** (Pg,Pf in PSF)	**Defl/CSI Criteria**
TCLL: 20.00	Wind Std: ASCE 7-10	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): 0.240 M 999 240
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): 0.493 M 889 180
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.222 K - -
Des Ld: 40.00	EXP: B Kzt: NA		HORZ(TL): 0.457 K - -
NCBCLL: 10.00	Mean Height: 16.64 ft	Building Code:	Creep Factor: 2.0
Soffit: 2.00	TCDL: 4.2 psf	FBC 2017 RES	Max TC CSI: 0.720
Load Duration: 1.25	BCDL: 5.0 psf	TPI Std: 2014	Max BC CSI: 0.932
Spacing: 24.0 "	MWFRS Parallel Dist: > 2h	Rep Fac: Yes	Max Web CSI: 0.926
	C&C Dist a: 3.66 ft	FT/RT:10(0)/4(0)	
	Loc. from endwall: not in 9.00 ft	Plate Type(s):	
	GCpi: 0.18	WAVE	VIEW Ver: 17.02.02A.1213.20
	Wind Duration: 1.60		

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
R	1628	/-	/-	/921	/-	/214
K	1636	/-	/-	/916	/-	/-

Wind reactions based on MWFRS
R Brg Width = 5.5 Min Req = 1.9
K Brg Width = 5.5 Min Req = 1.8
Bearings R & 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	290	- 1712	E - F	411	- 3028
C - D	493	- 3435	F - G	400	- 3042
D - E	386	- 3064	G - H	449	- 3128

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
O - M	3184	- 285	L - K	2455	- 299
M - L	3043	- 281			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - R	352	- 1582	D - M	185	- 385
B - Q	1566	- 185	F - M	2211	- 210
Q - C	192	- 1484	L - H	534	0
Q - O	1803	- 184	H - K	374	- 3042
C - O	1563	- 120			

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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ALPINE
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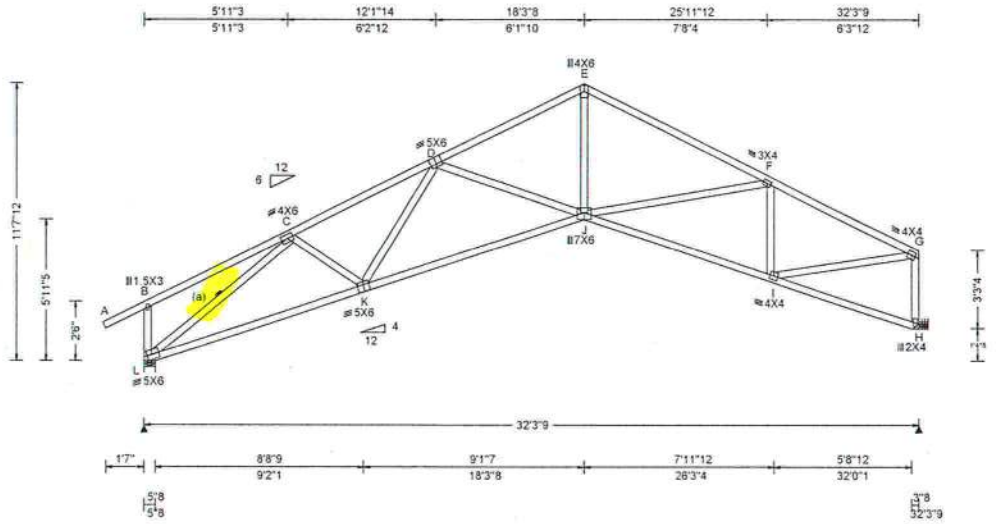
SEQN: 16697 COMN FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B06	Cust: R 857 JRef: 1WWR8570002 T22 DrwNo: 189.20.1602.31697 SSB / DF 07/07/2020	



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 16.64 ft
TCDL: 4.2 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: > 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.150	D	999	240
VERT(CL): 0.312	D	999	180
HORZ(LL): 0.141	H	-	-
HORZ(TL): 0.293	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.548
Max BC CSI: 0.888
Max Web CSI: 0.908

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
L	1460	/-	/-	/826	/-	/170
H	1347	/-	/-	/714	/-	/-

Wind reactions based on MWFRS
L Brg Width = 5.5 Min Req = 1.6
H Brg Width = - Min Req = -
Bearing L 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.
C - D	441	-2662	E - F	400	-2401
D - E	394	-2370	F - G	331	-1993

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
L - K	2128	-378	J - I	1875	-253
K - J	2526	-356			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
L - C	365	-2627	F - I	155	-711
C - K	440	0	I - G	1734	-237
E - J	1612	-205	G - H	244	-1301

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Hangers / Ties

(J) Hanger Support Required, by others

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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ALPINE
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6750 Forum Drive
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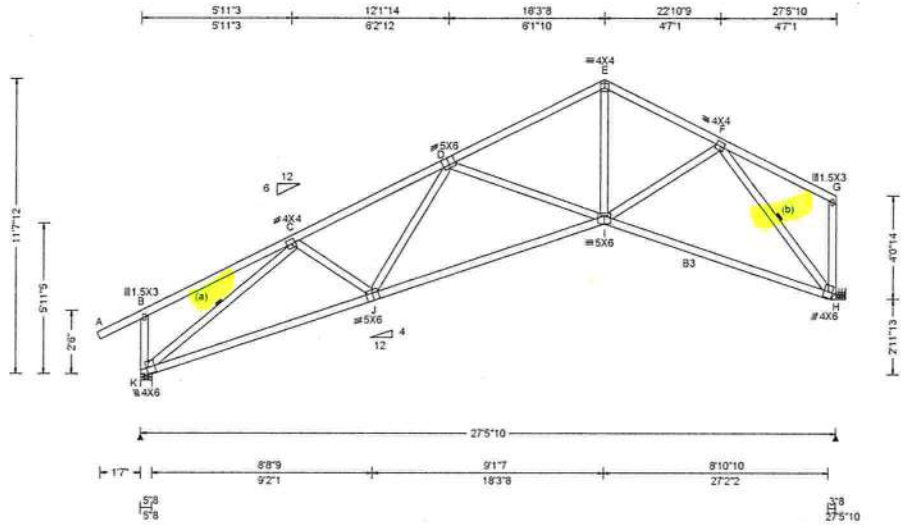
SEQN: 16692 COMN FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B07		Cust: R 857 JRef: 1WWR8570002 T21 DrwNo: 189.20.1602.33120 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 16.64 ft
TCDL: 4.2 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: > 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.094	D	999	240
VERT(CL): 0.196	D	999	180
HORZ(LL): 0.083	H	-	-
HORZ(TL): 0.173	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.314
Max BC CSI: 0.789
Max Web CSI: 0.890

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
K	1259	/-	/-	/724	/-	/166
H	1146	/-	/-	/607	/-	/-

Wind reactions based on MWFRS
K Brg Width = 5.5 Min Req = 1.5
H Brg Width = - Min Req = -
Bearing K 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.
C - D	387	-2127	E - F	329	-1574
D - E	309	-1603			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
K - J	1750	-414	I - H	1018	-182
J - I	1945	-370			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
K - C	318	-2147	I - F	502	-21
D - I	172	-496	F - H	279	-1548
E - I	1019	-165			

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1; B3 2x4 SP M-30;
Webs: 2x4 SP #3;

Bracing

(b) Continuous lateral restraint equally spaced on member. Or 2x4 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

(a) Continuous lateral restraint equally spaced on member. Or 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Hangers / Ties

(J) Hanger Support Required, by others

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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ALPINE
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6750 Forum Drive
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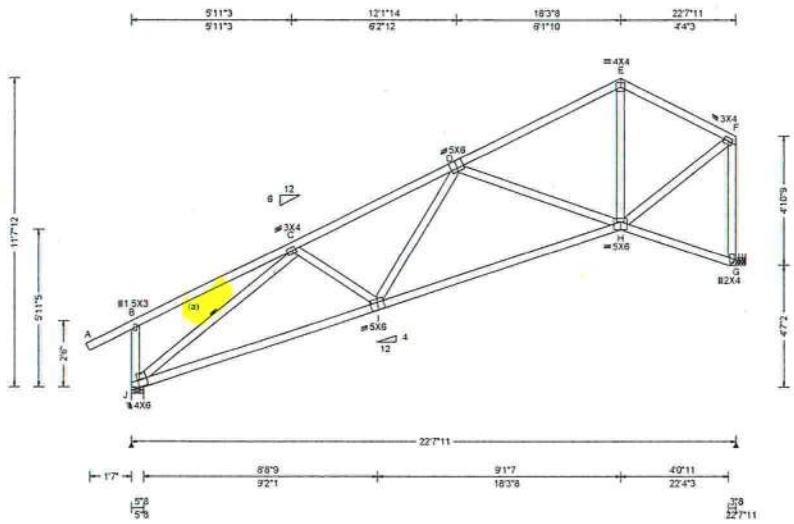
Orlando FL, 32821

SEQN: 16688 COMN FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B08	Cust: R 857 JRef: 1WWR8570002 T20 DrwNo: 189.20.1602.34563 SSB / DF 07/07/2020	



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 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.64 ft TCDL: 4.2 psf BCDL: 5.0 psf MWFRS Parallel Dist: > 2h C&C Dist a: 3.00 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 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:10(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.055 I 999 240 VERT(CL): 0.115 I 999 180 HORZ(LL): 0.037 G - - HORZ(TL): 0.077 G - - Creep Factor: 2.0 Max TC CSI: 0.308 Max BC CSI: 0.760 Max Web CSI: 0.580 VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
J	1059	/-	/-	/621	/-	/163
G	945	/-	/-	/542	/-	/-

Wind reactions based on MWFRS
J Brg Width = 5.5 Min Req = 1.5
G Brg Width = - Min Req = -
Bearing J 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.
C - D	301	- 1599	E - F	200	- 783
D - E	192	- 827			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
J - I	1380	- 426	I - H	1350	- 349

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
J - C	242	- 1677	H - F	820	- 174
D - H	186	- 636	F - G	230	- 918
E - H	381	- 35			

Lumber

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

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Hangers / Ties

(J) Hanger Support Required, by others

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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ALPINE
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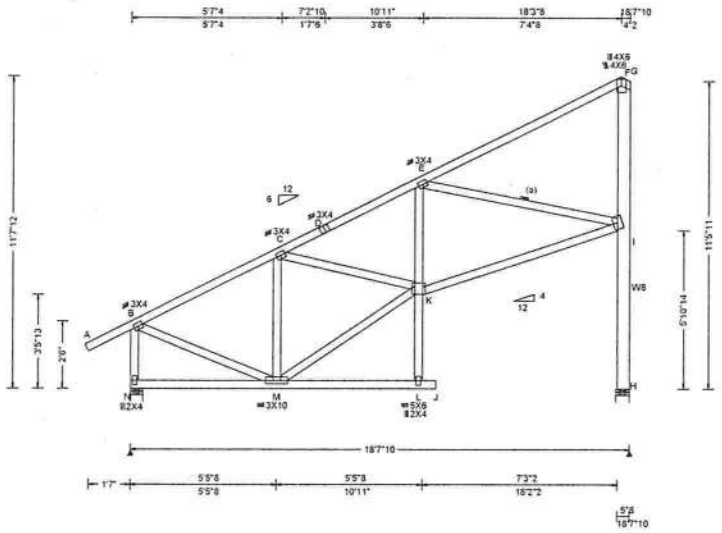
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16672 SPEC FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B09	Cust: R 857 JRef: 1WWR8570002 T23 DrwNo: 189.20.1602.45490 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 16.64 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.085	F	999	240
VERT(CL): 0.174	F	999	180
HORZ(LL): -0.043	F	-	-
HORZ(TL): 0.087	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.638
Max BC CSI: 0.546
Max Web CSI: 0.723

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
N	874	/-	/-	/539	/-	/178
H	783	/-	/-	/480	/24	/-

Wind reactions based on MWFRS
N Brg Width = 5.5 Min Req = 1.5
H Brg Width = 6.3 Min Req = 6.3
Bearings N & H 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	40	- 773	D - E	137	- 1076
C - D	122	- 1123			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
K - I	1025	- 238

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - N	148	- 830	M - K	774	- 209
B - M	660	0	E - I	290	- 993
M - C	149	- 558	I - H	223	- 783

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3; W8 2x6 SP #1;

Bracing

(a) Continuous lateral restraint equally spaced on member. Or 1x4 #3SRB SPF-S or better "T" reinforcement. 80% length of web member. Attached with 8d Box or Gun (0.113"x2.5",min.)nails @ 6" oc.

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Shim all supports to solid bearing.

Top Chord overhang(s) may be field trimmed.

Drop leg is not designed to resist any lateral loading from wind pressure on the wall. End vertical does not provide support for wall.

07/07/2020

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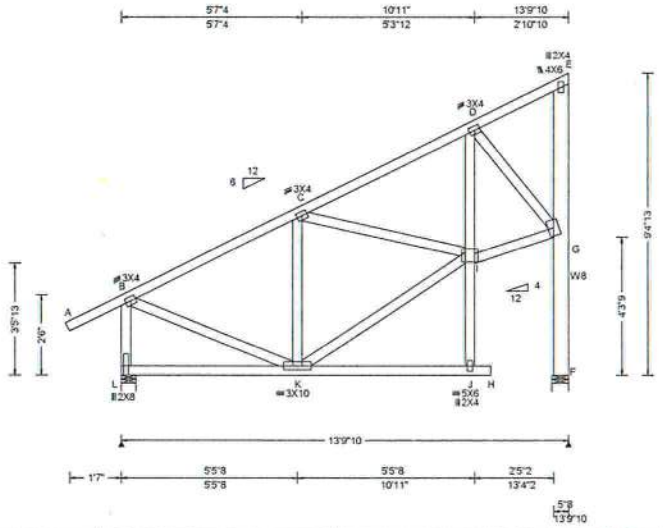
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16676 MONO FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B10		Cust: R 857 JRef: 1WWR8570002 T15 DrwNo: 189.20.1602.49847 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.52 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.010	C	999	240
VERT(CL): 0.020	C	999	180
HORZ(LL): -0.003	E	-	-
HORZ(TL): 0.006	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.278
Max BC CSI: 0.241
Max Web CSI: 0.245

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
L	676	/-	/-	/414	/-	/218
F	580	/-	/-	/358	/93	/-

Wind reactions based on MWFRS
L Brg Width = 5.5 Min Req = 1.5
F Brg Width = 6.3 Min Req = 6.3
Bearings L & 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	58	-532	C - D	81	-460

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
L - K	103	-431

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - L	236	-631	D - G	344	-526
B - K	437	0	G - F	392	-580
K - I	511	-317			

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3; W8 2x6 SP #1;

Wind

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

Left end vertical exposed to wind pressure. Deflection meets L/180.

Right end vertical not exposed to wind pressure.

Additional Notes

Shim all supports to solid bearing.

Top Chord overhang(s) may be field trimmed.

Drop leg is not designed to resist any lateral loading from wind pressure on the wall. End vertical does not provide support for wall.

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ALPINE
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6750 Forum Drive
Suite 305
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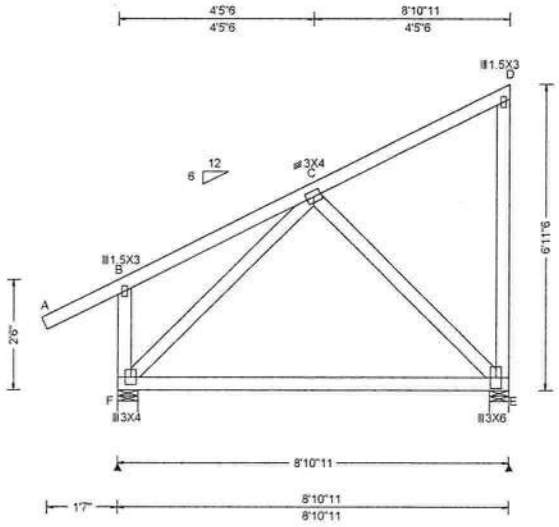
SEQN: 16748 MONO FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B11		Cust: R 857 JRef: 1WWR8570002 T9 DrwNo: 189.20.1602.51537 SSB / DF 07/07/2020



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 7-10 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 5.0 psf MWFRS Parallel Dist: > 2h C&C Dist a: 3.00 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 2017 RES TPI Std: 2014 Rep Fac: Yes FT/RT:10(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.002 C 999 240 VERT(CL): 0.005 C 999 180 HORZ(LL): 0.001 E - - HORZ(TL): 0.002 E - - Creep Factor: 2.0 Max TC CSI: 0.256 Max BC CSI: 0.369 Max Web CSI: 0.288 VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
F	487	/-	/-	/295	/-	/68
E	366	/-	/-	/234	/22	/-

Wind reactions based on MWFRS
F Brg Width = 5.5 Min Req = 1.5
E Brg Width = 5.3 Min Req = 1.5
Bearings F & E are a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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6750 Forum Drive
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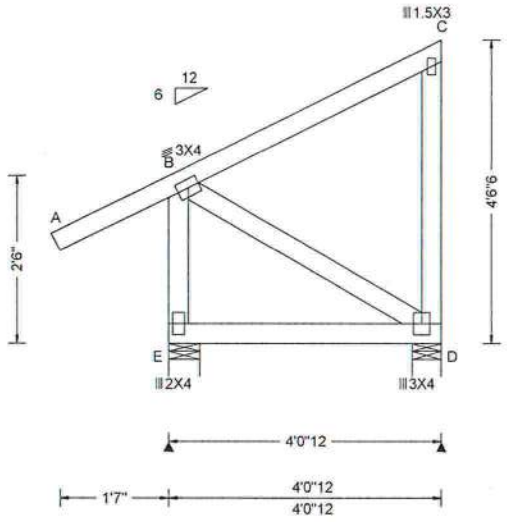
Orlando FL, 32821

SEQN: 16742 MONO FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** B12	Cust: R 857 JRef: 1WWR8570002 T2 DrwNo: 189.20.1602.53003 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.00 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(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	C	-	-
HORZ(TL): 0.001	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.208
Max BC CSI: 0.143
Max Web CSI: 0.063

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
E	300	/-	/-	/177	/-	/37
D	167	/-	/-	/104	/20	/-

Wind reactions based on MWFRS
E Brg Width = 5.5 Min Req = 1.5
D Brg Width = 5.3 Min Req = 1.5
Bearings E & D are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Top Chord overhang(s) may be field trimmed.

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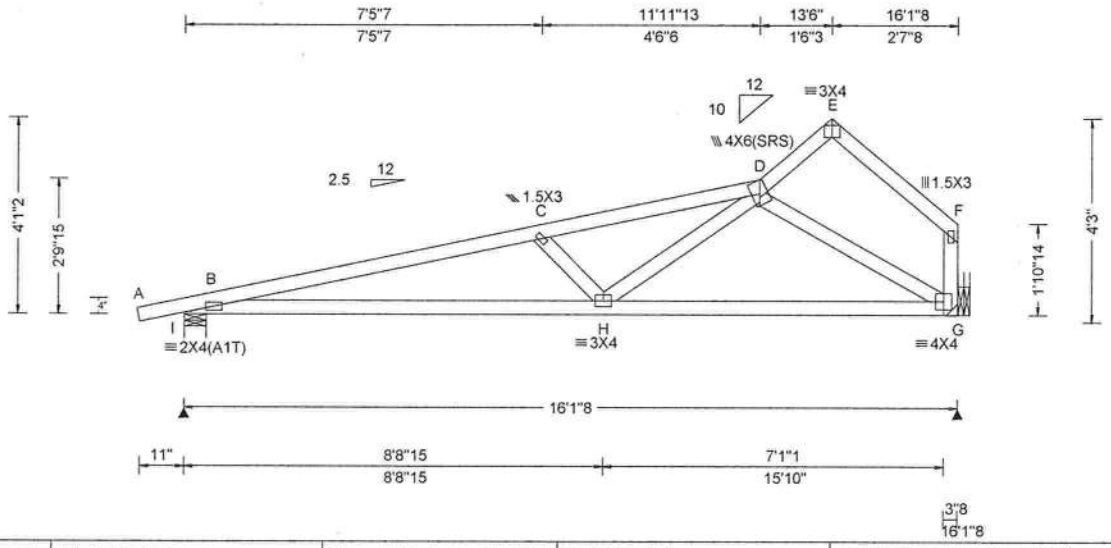
SEQN: 16853 COMN FROM: JL	Ply: 1 Qty: 7	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** C01	Cust: R 857 JRef: 1WWR8570002 T29 DrwNo: 189.20.1602.54850 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 21.27 ft
TCDL: 4.2 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.065	C	999	240
VERT(CL): 0.131	C	999	180
HORZ(LL): 0.025	F	-	-
HORZ(TL): 0.052	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.489
Max BC CSI: 0.609
Max Web CSI: 0.401

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
I	721	/-	/-	/368	/103	/69
G	657	/-	/-	/342	/38	/-

Wind reactions based on MWFRS
I Brg Width = 5.5 Min Req = 1.5
G Brg Width = - Min Req = -
Bearing I 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	340	- 1828	C - D	285	- 1546

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - H	1759	- 348	H - G	802	- 173

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - H	135	- 433	D - G	207	- 899
H - D	860	- 111			

Lumber
Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3;

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

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

Additional Notes
Top Chord overhang(s) may be field trimmed.

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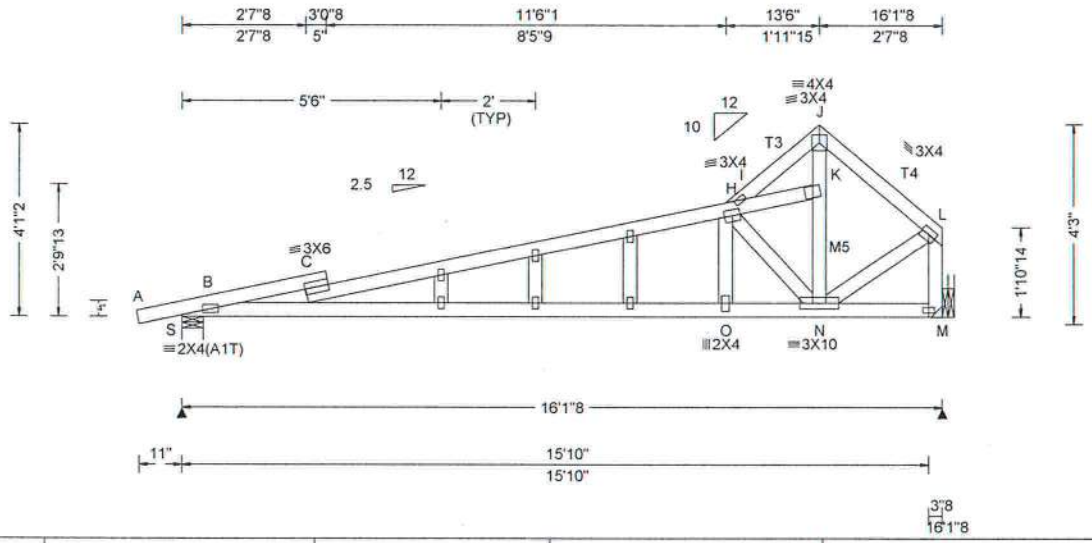
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16724 GABL FROM: JL	Ply: 1 Qty: 2	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** C02	Cust: R 857 JRef: 1WWR8570002 T28 DrwNo: 189.20.1602.56290 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 21.27 ft
TCDL: 4.2 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.513	R	373	240
VERT(CL): 1.045	R	183	180
HORZ(LL): 0.077	C	-	-
HORZ(TL): 0.157	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.799
Max BC CSI: 0.687
Max Web CSI: 0.376

VIEW Ver: 17.02.02A.1213.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
S	721	/-	/-	/371	/92	/70
M	657	/-	/-	/344	/34	/-

Wind reactions based on MWFRS
S Brg Width = 5.5 Min Req = 1.5
M Brg Width = - Min Req = -
Bearing S 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	278	- 1561	I - J	135	- 529
C - H	313	- 1543	J - L	124	- 534
H - I	110	- 499			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - O	1506	- 304	O - N	1466	- 296

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
H - N	357	- 1656	L - M	127	- 606
N - L	426	- 67			

Maximum Gable Forces Per Ply (lbs)

Gables	Tens.	Comp.	Gables	Tens.	Comp.
O - H	637	- 113	K - N	728	- 155
J - K	494	- 109			

Lumber

Top chord: 2x4 SP SS Dense; T3,T4 2x4 SP M-30;
Bot chord: 2x4 SP SS Dense;
Webs: 2x4 SP #3; M5 2x4 SP #1;

Plating Notes

All plates are 1.5X3 except as noted.

Hangers / Ties

(J) Hanger Support Required, by others

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.

Additional Notes

See DWGS A14030ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

Top Chord overhang(s) may be field trimmed.

Laterally brace chord above/ below filler at 24" OC (or as designed) including a lateral brace on chord directly below both ends of filler (if no rigid diaphragm exists at that point)

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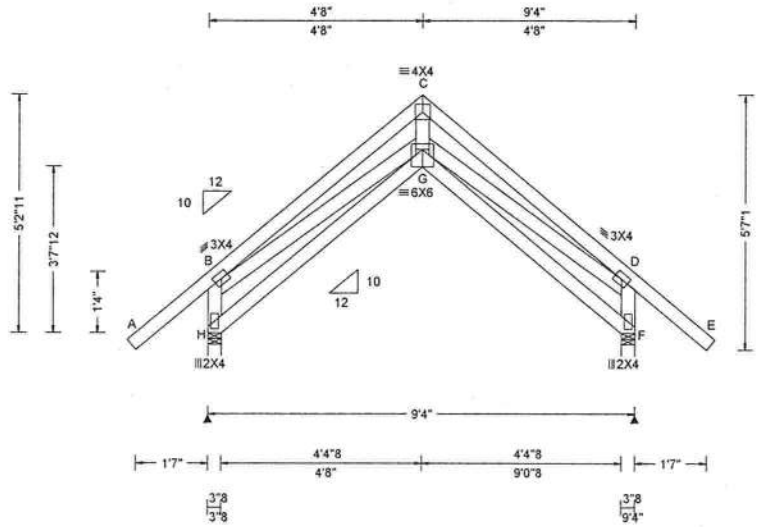
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16787 COMN FROM: JL	Ply: 1 Qty: 4	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** D01	Cust: R 857 JRef: 1WWR8570002 T11 DrwNo: 189.20.1603.03270 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.00 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.045	G	999	240
VERT(CL): 0.103	G	999	180
HORZ(LL): 0.075	F	-	-
HORZ(TL): 0.172	F	-	-

Creep Factor: 2.0
Max TC CSI: 0.274
Max BC CSI: 0.151
Max Web CSI: 0.443

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
H	561	/-	/-	/330	/17	/133
F	561	/-	/-	/330	/17	/-

Wind reactions based on MWFRS
H Brg Width = 3.5 Min Req = 1.5
F Brg Width = 3.5 Min Req = 1.5
Bearings H & 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	66	- 1264	C - D	106	- 1264

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - H	184	- 493	C - G	1164	- 122
B - G	1030	0	F - D	156	- 493
G - D	1030	- 135			

Lumber

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

Wind

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

Additional Notes

Top Chord overhang(s) may be field trimmed.

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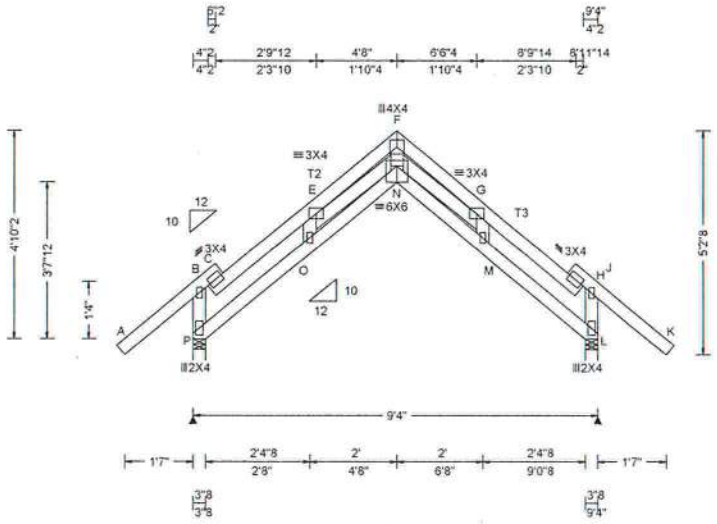
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16784 GABL FROM: JL	Ply: 1 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** D02	Cust: R 857 JRef: 1WWR8570002 T13 DrwNo: 189.20.1603.06727 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.00 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.202	N	546	240
VERT(CL): 0.465	N	237	180
HORZ(LL): 0.338	L	-	-
HORZ(TL): 0.779	L	-	-

Creep Factor: 2.0
Max TC CSI: 0.510
Max BC CSI: 0.578
Max Web CSI: 0.652

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
P	561	/-	/-	/331	/6	/124
L	561	/-	/-	/331	/6	/-

Wind reactions based on MWFRS
P Brg Width = 3.5 Min Req = 1.5
L Brg Width = 3.5 Min Req = 1.5
Bearings P & L 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.
E - F	100	- 1656	F - G	121	- 1656

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
O - N	384	- 180

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
O - E	37	- 393	N - G	1258	- 144
E - N	1258	- 15	G - M	35	- 393
F - N	1712	- 147			

Maximum Gable Forces Per Ply (lbs)

Gables	Tens.	Comp.	Gables	Tens.	Comp.
B - P	185	- 437	L - J	164	- 437

Lumber

Top chord: 2x4 SP SS Dense; T2,T3 2x4 SP #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3;

Plating Notes

All plates are 1.5X3 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.

Additional Notes

See DWGS A14015ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

Top Chord overhang(s) may be field trimmed.

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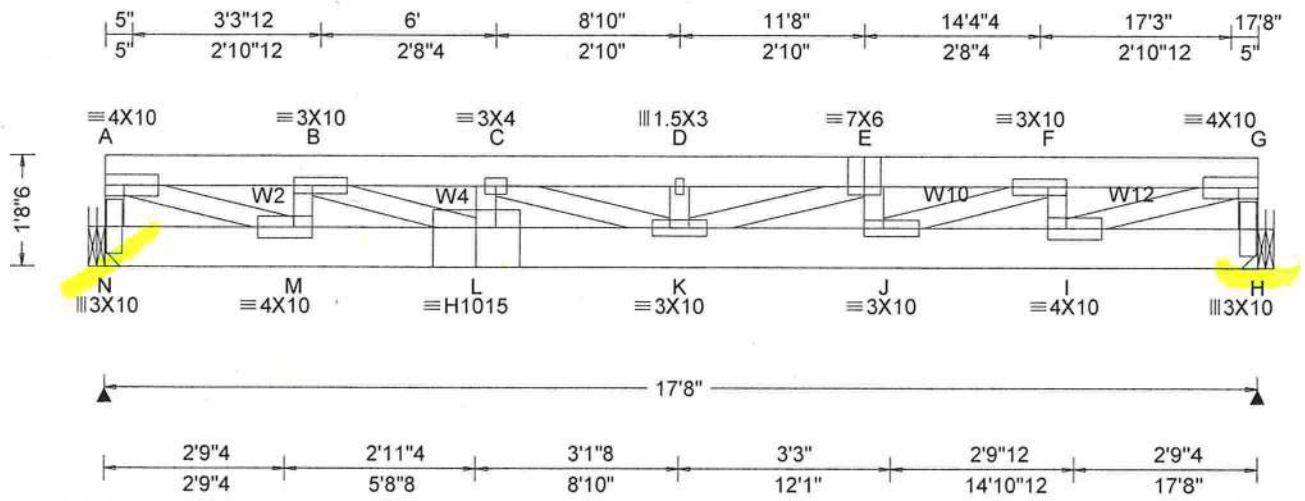
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16726 FLAT FROM: JL	Ply: 2 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** FG1		Cust: R 857 JRef: 1WWR8570002 T31 DrwNo: 189.20.1604.09073 SSB / DF 07/07/2020

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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 20.85 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: No
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.294	D	719	240
VERT(CL): 0.580	D	365	180
HORZ(LL): 0.046	A	-	-
HORZ(TL): 0.090	A	-	-

Creep Factor: 2.0
Max TC CSI: 0.748
Max BC CSI: 0.735
Max Web CSI: 0.882

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
N	5767	/-	/-	/267	/634	/-
H	5799	/-	/-	/275	/640	/-

Wind reactions based on MWFRS
N Brg Width = - Min Req = -
H Brg Width = - Min Req = -
Members not listed have forces less than 375#

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	590	-5372	D - E	1095	-9903
B - C	979	-8870	E - F	978	-8865
C - D	1095	-9903	F - G	592	-5392

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
M - L	5833	-650	K - J	9072	-1008
L - K	9075	-1009	J - I	5850	-652

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - N	283	-2440	K - E	899	-94
A - M	5764	-632	E - J	125	-853
M - B	248	-1901	J - F	3322	-359
B - L	3346	-362	F - I	246	-1885
L - C	124	-843	I - G	5785	-635
C - K	896	-93	G - H	285	-2449

Lumber
Top chord: 2x6 SP #1;
Bot chord: 2x8 SP SS Dense;
Webs: 2x4 SP #3; W2,W4,W10,W12 2x4 SP #1;

Nailnote
Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @ 9.75" o.c.
Bot Chord: 1 Row @ 4.50" 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 310 plf at 0.00 to 310 plf at 17.67
BC: From 10 plf at 0.00 to 10 plf at 17.67
BC: 657 lb Conc. Load at 0.90, 2.90, 4.90, 6.90 8.90,10.90,12.90,14.90,16.77

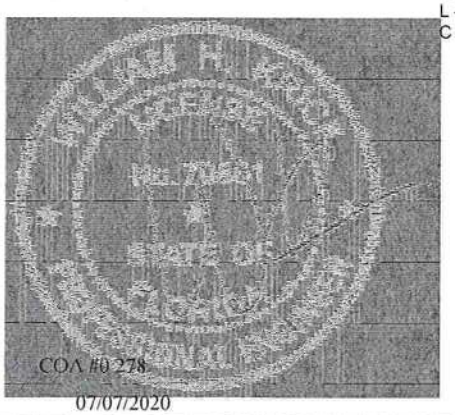
Hangers / Ties
(J) Hanger Support Required, by others

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

Wind
Wind loads and reactions based on MWFRS.

Deflection
Max JT VERT DEFL: LL: 0.29" DL: 0.29". See detail DEFLCAMB1014 for camber recommendations.
Provide for adequate drainage of roof.

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.



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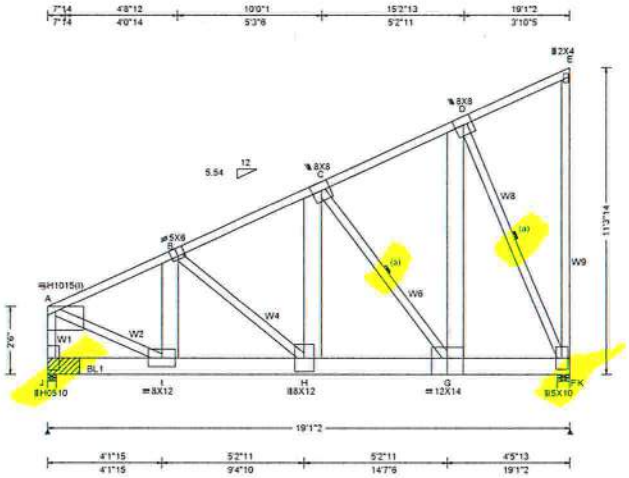
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16843 MONO FROM: JL Page 1 of 2	Ply: 3 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** GR1		Cust: R 857 JRef: 1WWR8570002 T8 DrwNo: 189.20.1605.57307 SSB / DF 07/07/2020

3 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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 16.91 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
HS, WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.108	H	999	240
VERT(CL): 0.212	H	999	180
HORZ(LL): -0.044	E	-	-
HORZ(TL): 0.087	E	-	-

Creep Factor: 2.0
Max TC CSI: 0.603
Max BC CSI: 0.575
Max Web CSI: 0.974

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs)

	Gravity			Non-Gravity	
Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL
J	16472 /-	/-	/-	/1602	/-
K	12159 /-	/-	/-	/1363	/-

Wind reactions based on MWFRS
J Brg Width = 4.1 Min Req = -
K Brg Width = 5.5 Min Req = 4.1
Bearings J & 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.
A - B	549	-5607	C - D	252	-2231
B - C	566	-5504			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
I - H	5071	-497	G - F	1728	-194
H - G	4581	-473			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
A - J	477	-4855	C - G	427	-4441
A - I	5639	-550	G - D	4822	-528
H - C	4965	-468	D - F	487	-4325

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x8 SP SS Dense;
Webs: 2x8 SP SS Dense; W1,W6 2x4 SP #1;
W2 2x4 SP SS Dense; W4,W9 2x4 SP #3;
W8 2x4 SP M-30;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Nailnote

Nail Schedule:0.128"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 3 Rows @ 3.00" o.c. (Each Row)
Webs : 1 Row @ 4" o.c.
Repeat nailing as each layer is applied. Use equal spacing between rows and stagger nails in each row to avoid splitting.

Special Loads

------(Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)
TC: From 31 plf at 0.00 to 31 plf at 14.91
TC: From 62 plf at 14.91 to 62 plf at 19.09
BC: From 10 plf at 0.00 to 10 plf at 9.89
BC: From 20 plf at 9.89 to 20 plf at 19.09
BC: 2069 lb Conc. Load at 0.91, 2.91, 4.91, 6.91 8.91
BC: 1347 lb Conc. Load at 4.46
BC: 10340 lb Conc. Load at 9.76
BC: 945 lb Conc. Load at 14.91
BC: 1212 lb Conc. Load at 14.99
PL: 1347 lb Conc. Load at (4.46,10.04)
PL: 1146 lb Conc. Load at (9.69,10.04)
PL: 945 lb Conc. Load at (14.91,10.04)

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.

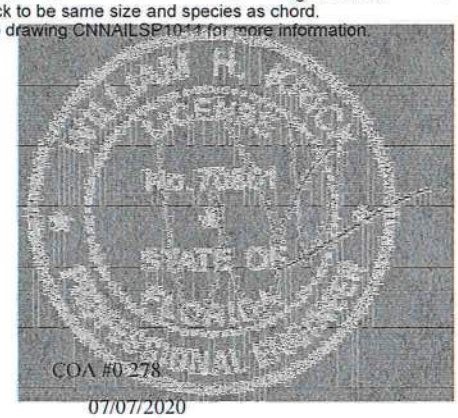
End verticals not exposed to wind pressure.

Bearing Block(s)

Brg blocks:0.128"x3", min. nails

brg	x-loc	#blocks	length/blk	#nails/blk	wall plate
1	0.000'	2	14"	22	Rigid Surface

Brg block to be same size and species as chord.
Refer to drawing CNNAILSP10**1 for more information.



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SEQN: 16843 MONO FROM: JL Page 2 of 2	Ply: 3 Qty: 1	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** GR1	Cust: R 857 JRef: 1WWR8570002 T8 DrwNo: 189.20.1605.57307 SSB / DF 07/07/2020

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data,including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

COA #0 278

07/07/2020

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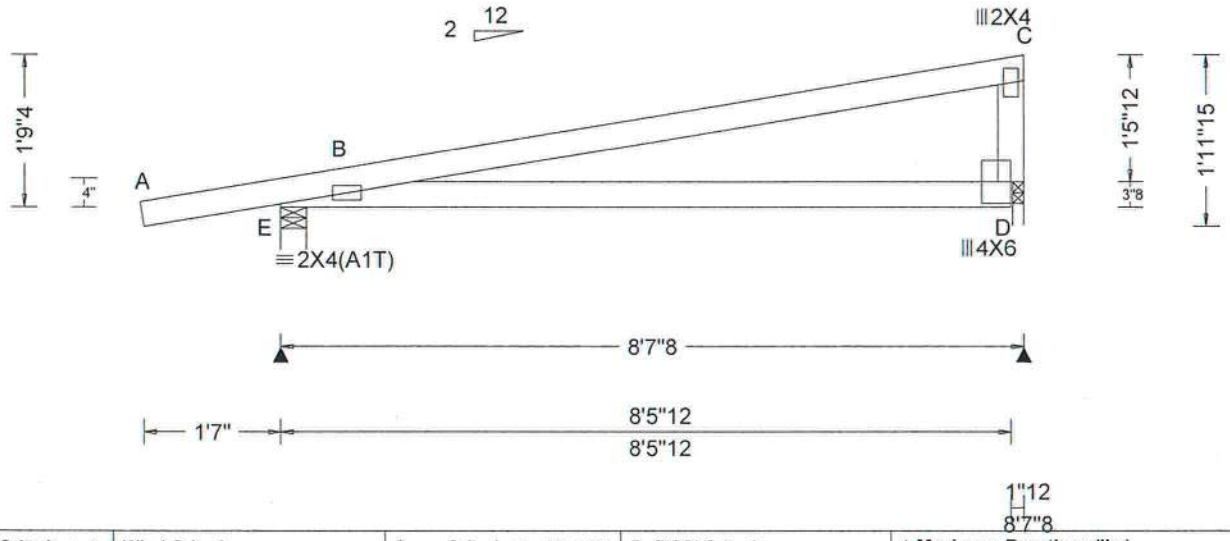
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16849 MONO FROM: JL	Ply: 1 Qty: 10	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** M01	Cust: R 857 JRef: 1WWR8570002 T26 DrwNo: 189.20.1603.15487 SSB / DF 07/07/2020	



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.00 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): NA			
VERT(CL): NA			
HORZ(LL): 0.022	D	-	-
HORZ(TL): 0.045	D	-	-

Creep Factor: 2.0
Max TC CSI: 0.679
Max BC CSI: 0.331
Max Web CSI: 0.325

VIEW Ver: 17.02.02A.1213.20

▲Maximum Reactions (lbs)

Loc	Gravity R+	/ R-	/ Rh	Non-Gravity / Rw	/ U	/ RL
E	461	/-	/-	/237	/71	/38
D	343	/-	/-	/170	/25	/-

Wind reactions based on MWFRS
E Brg Width = 3.5 Min Req = 1.5
D Brg Width = 1.5 Min Req = 1.5
Bearings E & D are a rigid surface.
Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Wind

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

Additional Notes

Top Chord overhang(s) may be field trimmed.

07/07/2020

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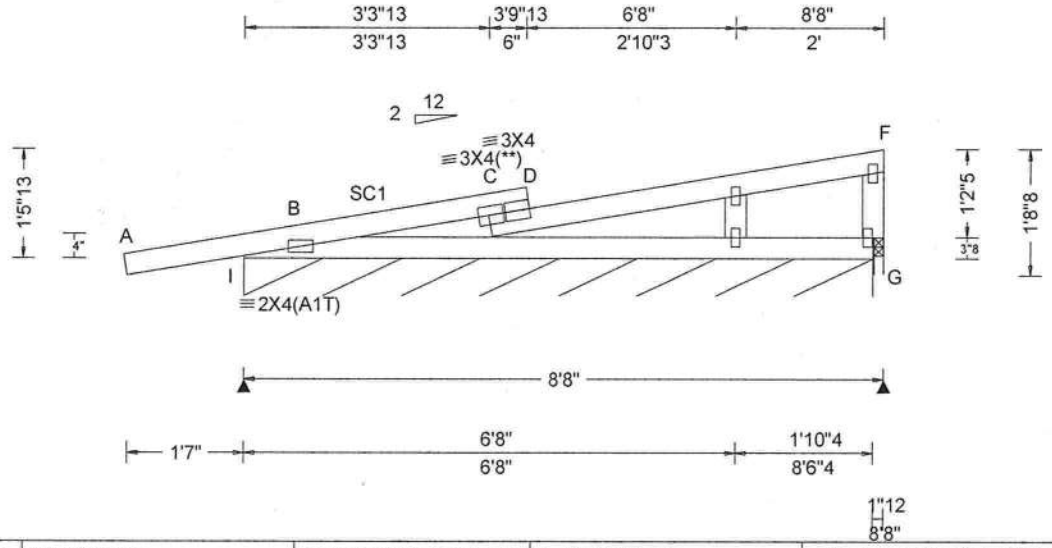
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16794 GABL FROM: JL	Ply: 1 Qty: 2	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** M02		Cust: R 857 JRef: 1WWR8570002 T16 DrwNo: 189.20.1603.17203 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.00 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.035	H	999	240
VERT(CL): 0.070	H	999	180
HORZ(LL): 0.007	H	-	-
HORZ(TL): 0.014	H	-	-

Creep Factor: 2.0
Max TC CSI: 0.374
Max BC CSI: 0.293
Max Web CSI: 0.204

VIEW Ver: 17.02.02A.1213.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
I*	105	/-	/-	/52	/11	/4
G	-	/-100	/-	/5	/35	/-

Wind reactions based on MWFRS
I Brg Width = 102 Min Req = -
G Brg Width = 1.5 Min Req = 1.5
Bearings I & G are a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Bracing

Fasten rated sheathing to one face of this frame.

Plating Notes

All plates are 1.5X3 except as noted.

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

Loading

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

Wind

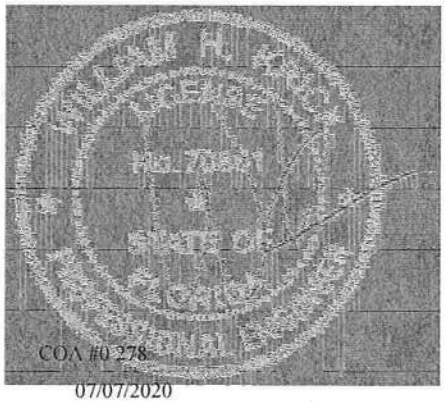
Wind loads based on MWFRS with additional C&C member design.

Additional Notes

See DWGS A14015ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

Stacked top chord must NOT be notched or cut in area (NNL). 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.

Top Chord overhang(s) may be field trimmed.



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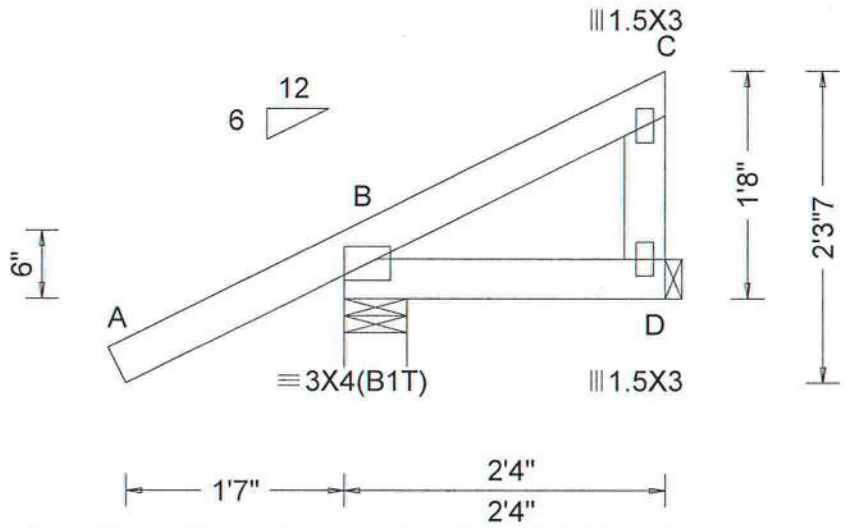
ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16678 MONO FROM: JL	Ply: 1 Qty: 7	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** M03	Cust: R 857 JRef: 1WWR8570002 T12 DrwNo: 189.20.1603.21910 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.00 ft
TCDL: 4.2 psf
BCDL: 5.0 psf
MWFRS Parallel Dist: h/2 to h
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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria
PP Deflection in loc L/defl L/#
VERT(LL): NA
VERT(CL): NA
HORZ(LL): -0.001 D - -
HORZ(TL): 0.001 D - -
Creep Factor: 2.0
Max TC CSI: 0.158
Max BC CSI: 0.031
Max Web CSI: 0.018

VIEW Ver: 17.02.02A.1213.20

▲Maximum Reactions (lbs)

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
B	258	/-	/-	/168	/24	/39
D	91	/-	/-	/47	/3	/-

Wind reactions based on MWFRS
B Brg Width = 5.5 Min Req = 1.5
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 #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3;

Wind

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

Additional Notes

Top Chord overhang(s) may be field trimmed.

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ALPINE
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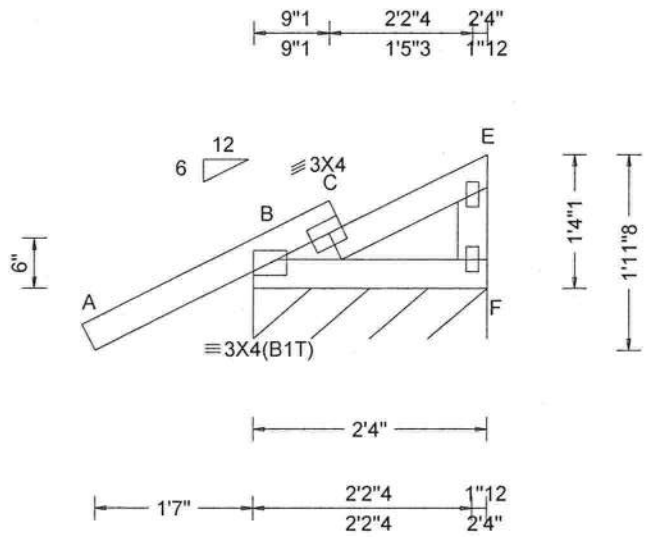
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 16683 GABL FROM: JL	Ply: 1 Qty: 2	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** M04	Cust: R 857 JRef: 1WWR8570002 T5 DrwNo: 189.20.1603.23360 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 15.00 ft
TCDL: 4.2 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.002	C	999	240
VERT(CL): 0.004	C	999	180
HORZ(LL): 0.001	C	-	-
HORZ(TL): 0.003	C	-	-

Creep Factor: 2.0
Max TC CSI: 0.158
Max BC CSI: 0.031
Max Web CSI: 0.007

VIEW Ver: 17.02.02A.1213.20

▲ Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
F*	130	/-	/-	/82	/9	/15

Wind reactions based on MWFRS
F Brg Width = 28.0 Min Req = -
Bearing B is a rigid surface.
Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Wind

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

Additional Notes

See DWGS A14015ENC101014 & GBLLETIN0118 for gable wind bracing and other requirements.

Top Chord overhang(s) may be field trimmed.

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6750 Forum Drive
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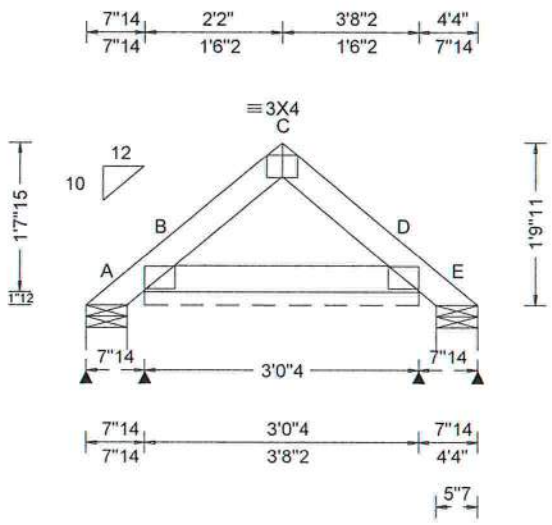
Orlando FL, 32821

SEQN: 16838 SPEC FROM: JL	Ply: 1 Qty: 22	**Job Number:** B50573-R - Knoper Roof Trademark Const Group **Truss Label:** PB01	Cust: R 857 JRef: 1WWR8570002 T24 DrwNo: 189.20.1603.25527 SSB / DF 07/07/2020



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 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: B Kzt: NA
Mean Height: 22.35 ft
TCDL: 4.2 psf
BCDL: 2.0 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 2017 RES
TPI Std: 2014
Rep Fac: Yes
FT/RT:10(0)/4(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	C	999	240
VERT(CL): 0.000	C	999	180
HORZ(LL): 0.000		-	-
HORZ(TL): 0.000		-	-

Creep Factor: 2.0
Max TC CSI: 0.012
Max BC CSI: 0.024
Max Web CSI: 0.000

VIEW Ver: 17.02.02A.1213.20

▲Maximum Reactions (lbs), or *=PLF

	Gravity			Non-Gravity		
Loc	R+	/ R-	/ Rh	/ Rw	/ U	/ RL
A	13	/-	/-	/32	/22	/35
B*	81	/-	/-	/64	/19	/-
E	13	/-	/-	/9	/3	/-

Wind reactions based on MWFRS
A Brg Width = 5.5 Min Req = 1.5
B Brg Width = 36.3 Min Req = -
E Brg Width = 5.5 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 #1;
Bot chord: 2x4 SP #1;

Plating Notes
All plates are 3X4(B1T) except as noted.

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

Additional Notes
Refer to DWG PB160101014 for piggyback details.

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

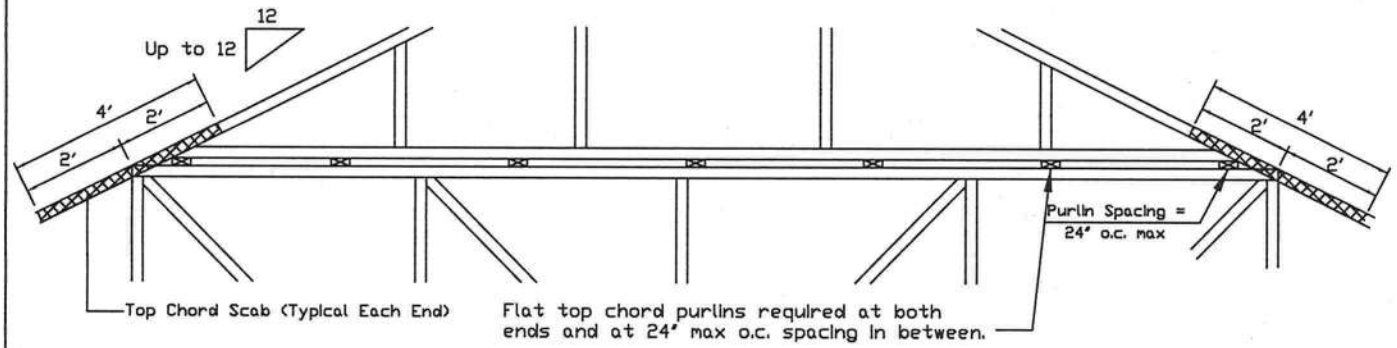
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

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.

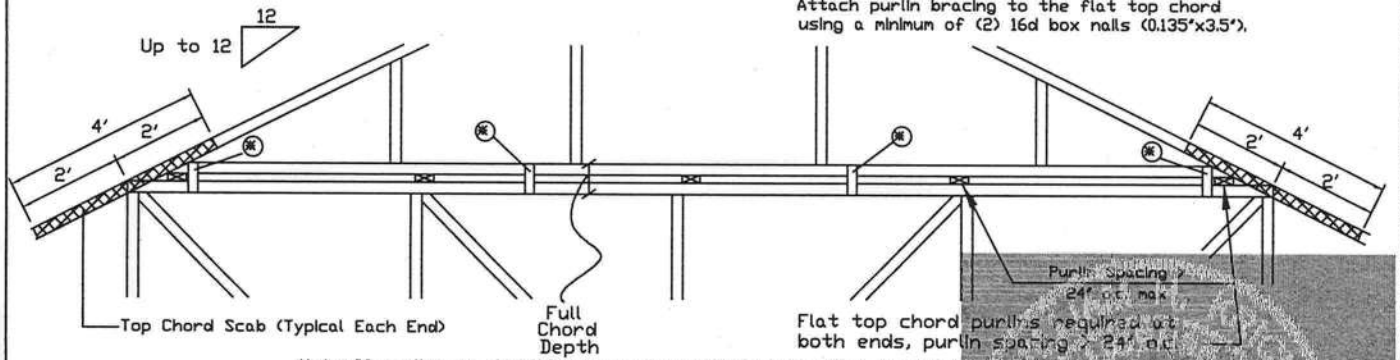
Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

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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13723 Riverport Drive
Suite 200
Maryland Heights, MO 63043

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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

COA #0278 07/07/2020

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

Piggyback Detail - ASCE 7-16: 180 mph, 30' Mean Hgt, Partially Enclosed, Exp. C, Kzt=1.00

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

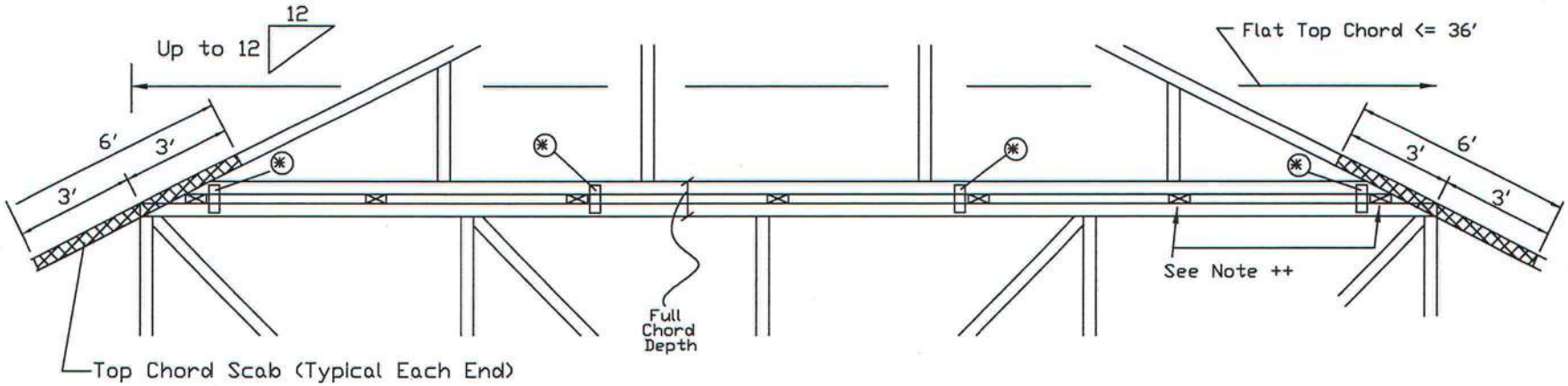
Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends.

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.

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.

++ Flat top chord purlins required at both ends and at a maximum of 24" intervals unless otherwise noted on base truss design drawing. Attach purlin bracing to the flat top chord using a minimum of (2) 16d box nails (0.135"x3.5").



* 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.	**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.
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.

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SPACING 24.0"

REF	PIGGYBACK
DATE	01/02/2018
DRWG	PB180160118

Cracked or Broken Member Repair Detail

This drawing specifies repairs for a truss with broken chord or web member.

This design is valid only for single ply trusses with 2x4 or 2x6 broken members. No more than one break per chord panel and no more than two breaks per truss are allowed. Contact the truss manufacturer for any repairs that do not comply with this detail.

(B) = Damaged area, 12" max length of damaged section
(L) = Minimum nailing distance on each side of damaged area (B)
(S) = Two 2x4 or two 2x6 side members, same size, grade, and species as damaged member. Apply one scab per face. Minimum side member length(s) = (2)(L) + (B)

Scab member length (S) must be within the broken panel.

Nail into 2x4 members using two (2) rows at 4" o.c., rows staggered.
Nail into 2x6 members using three (3) rows at 4" o.c., rows staggered.

Nail using 10d box or gun nails (0.128"x3", min) into each side member.

The maximum permitted lumber grade for use with this detail is limited to Visual grade #1 and MSR grade 1650f.

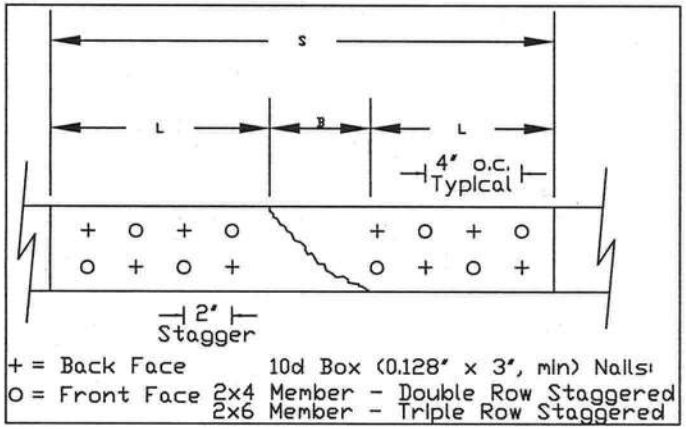
This repair detail may be used for broken connector plate at mid-panel splices.

This repair detail may not be used for damaged chord or web sections occurring within the connector plate area.

Broken chord may not support any tie-in loads.

Load Duration = 0%
Member forces may be increased for Duration of Load

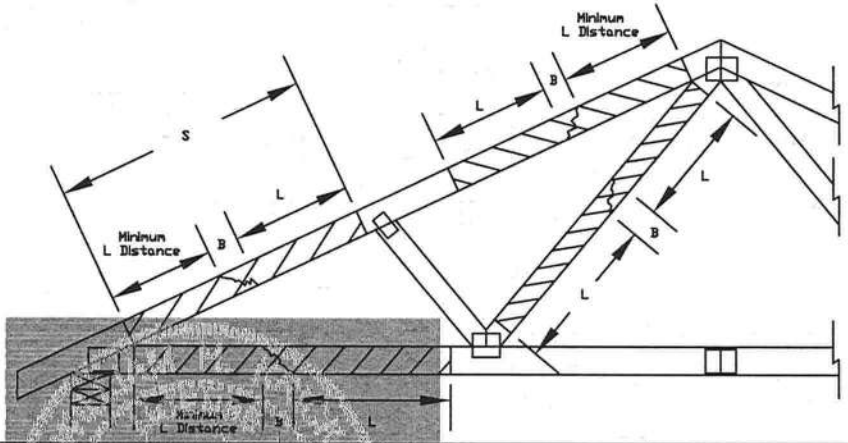
Member	Size	L	Maximum Member Axial Force SPF-C	HF	DF-L	SYP
Web Only	2x4	12"	620#	635#	730#	800#
Web Only	2x4	18"	975#	1055#	1295#	1415#
Web or Chord	2x4	24"	975#	1055#	1495#	1745#
Web or Chord	2x6		1465#	1585#	2245#	2620#
Web or Chord	2x4	30"	1910#	1960#	2315#	2555#
Web or Chord	2x6		2230#	2365#	3125#	3575#
Web or Chord	2x4	36"	2470#	2530#	2930#	3210#
Web or Chord	2x6		3535#	3635#	4295#	4745#
Web or Chord	2x4	42"	2975#	3045#	3505#	3835#
Web or Chord	2x6		4395#	4500#	5225#	5725#
Web or Chord	2x4	48"	3460#	3540#	4070#	4445#
Web or Chord	2x6		5165#	5280#	6095#	6660#



+ = Back Face
O = Front Face

10d Box (0.128" x 3", min) Nails:
2x4 Member - Double Row Staggered
2x6 Member - Triple Row Staggered

Nail Spacing Detail



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COA #0278 07/07/2020

SPACING 24.0" MAX

REF	MEMBER REPAIR
DATE	10/01/14
DRWG	REPCHRD1014

Gable Stud Reinforcement Detail

ASCE 7-10: 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 * 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' 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.

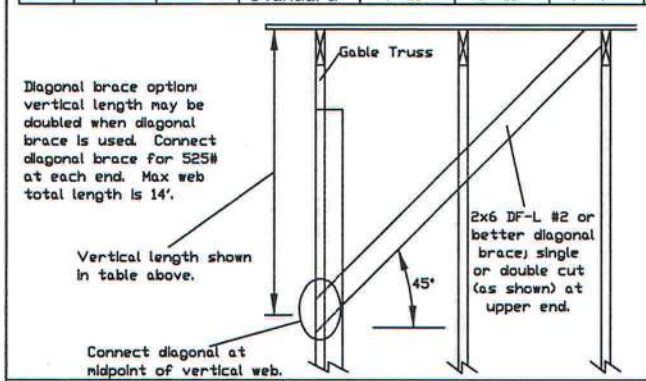
'L' bracing must be a minimum of 80% of web member length.

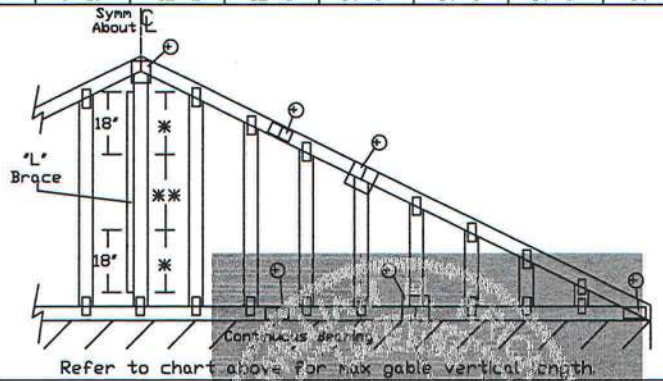
Gable Vertical Plate Sizes

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

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

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





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Maryland Heights, MO 63043

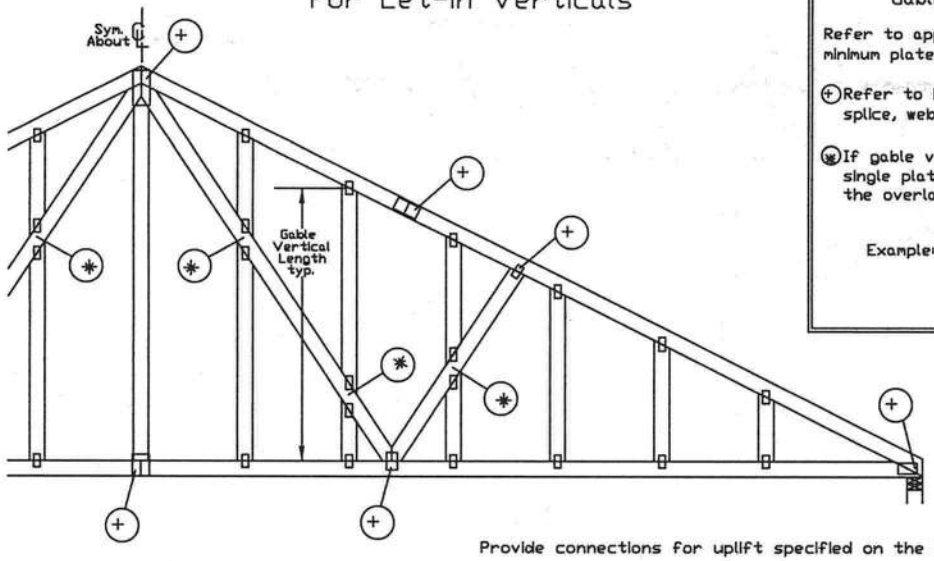
COA #0 278 07/07/2020

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-10-GAB14030
DATE	10/01/14
DRWG	A14030ENC101014

Gable Detail
For Let-in Verticals



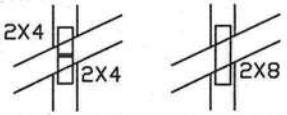
Gable Truss Plate Sizes

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

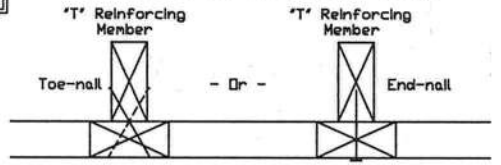
⊕ Refer to Engineered truss design for peak, splice, web, and heel plates.

⊛ 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.

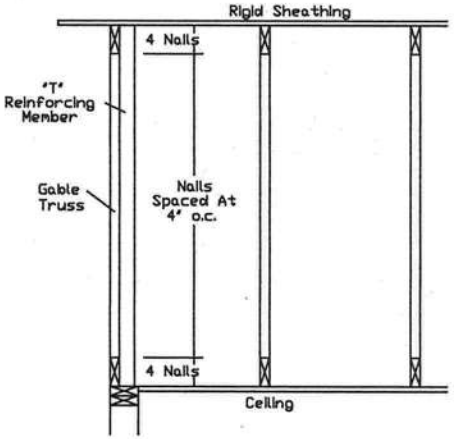
Toenailed Nails:
- 10d Common (0.148"x3",min) Toenails at 4" o.c. plus
- (4) toenails in the top and bottom chords.

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

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

Gable Stud Reinforcement Detail

ASCE 7-10: 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 *		(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' 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.

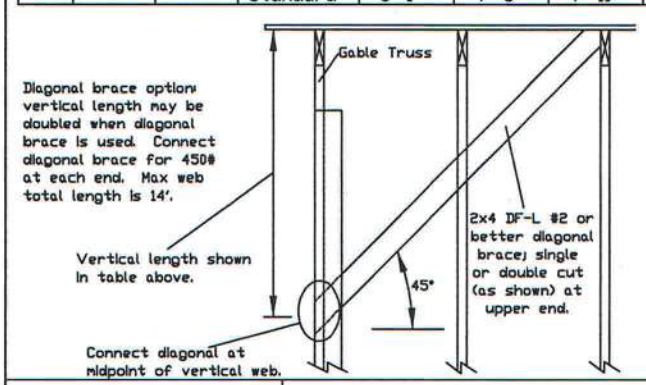
'L' bracing must be a minimum of 80% of web member length.

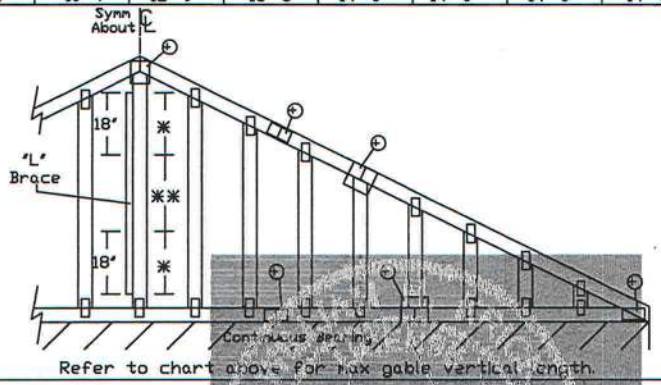
Gable Vertical Plate Sizes

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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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

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COA #0278 07/07/2020

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF	ASCE7-10-GAB14015
DATE	10/01/14
DRWG	A14015ENC101014

Commentary: Deflection and Camber

Camber may be built into trusses to compensate for the vertical deflection that results from the application of loads. Providing camber has the following advantages:

- Helps to ensure level ceilings and floors after dead loads are applied.
- Facilitates drainage to avoid ponding on flat or low slope roofs.
- Compensates for different deflection characteristics between adjacent trusses.
- Improves appearance of garage door headers and other long spans that can appear to 'sag.'
- Avoids 'dips' in roof ridgelines at the transition from the gable to adjacent clear span trusses.

In accordance with ANSI/TPI 1 the Building Designer, through the Construction Documents, shall provide the location, direction, and magnitude of all loads attributable to ponding that may occur due to the design of the roof drainage system. The Building Designer shall also specify any dead load, live load, and in-service creep deflection criteria for flat or low-slope roofs subject to ponding loads.

The amount of camber is dependent on the truss type, span, loading, application, etceteras.

More restrictive limits for allowable deflection and slenderness ratio (L/D) may be required to help control vibration.

The following tables are provided as guidelines for limiting deflection and estimating camber. Conditions or codes may exist that require exceeding these recommendations, or past experience may warrant using more stringent limitations.

L = Span of Truss (inches)
D = Depth of Truss at Deflection Point (inches)

Recommended Truss Deflection Limits

Truss Type	L/D	Deflection Limits	
		Live Load	Total Load
Pitched Roof Trusses	24	L/240 (vertical)	L/180 (vertical)
Floor of Room-In-Attic Trusses	24	L/360 (vertical)	L/240 (vertical)
Flat or Shallow Pitched Roof Trusses	24	L/360 (vertical)	L/240 (vertical)
Residential Floor Trusses	24	L/360 (vertical)	L/240 (vertical)
Commercial Floor Trusses	20	L/480 (vertical)	L/240 (vertical)
Scissors Trusses	24	0.75" (horizontal)	1.25" (horizontal)

Truss Type	Recommended Camber
Pitched Trusses	1.00 x Deflection from Actual Dead Load
Sloping Parallel Chord Trusses	1.5 x Vertical Deflection from Actual Dead Load
Floor Trusses	(0.25 x Deflection from Live Load) + Actual Dead Load
Flat Roof Trusses	(0.25 x Deflection from Live Load) + (1.5 x Design Dead Load Deflection)

Note: The actual dead load may be considerably less than the design dead load.

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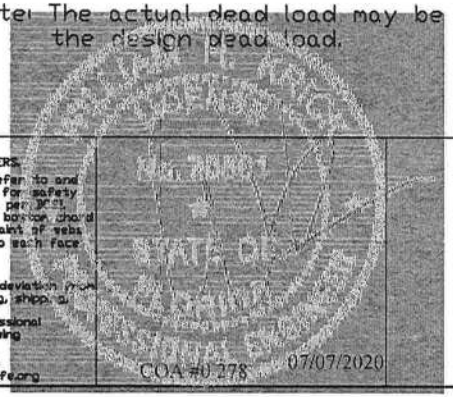


REF	DEFLEC/CAMB
DATE	10/01/14
DRWG	DEFLCAMB1014

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.

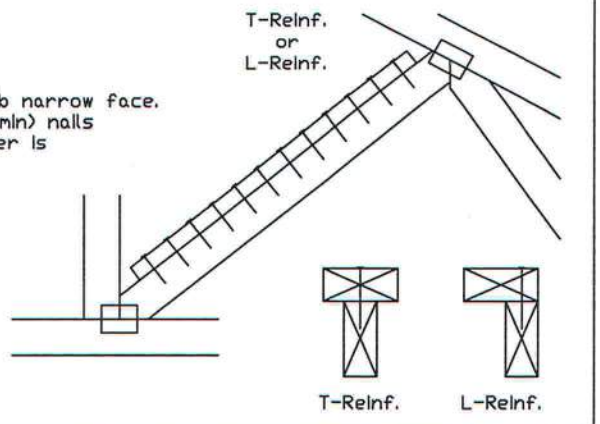
Web Member Size	Specified CLR Restraint	Alternative Reinforecement T- or L- Reinf.	Alternative Reinforecement Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(*)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(*)

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.

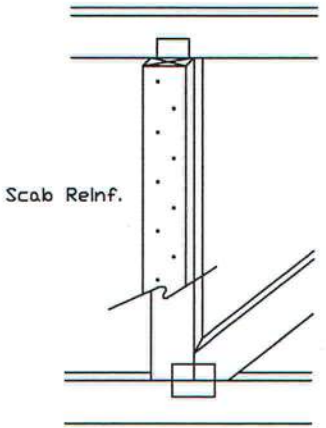
T-Reinforcement or L-Reinforcement:

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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COA #0278 07/07/2020

TC LL	PSF	REF CLR Subst.
TC DL	PSF	DATE 01/02/19
BC DL	PSF	DRWG BRCLBSUB0119
BC LL	PSF	
TOT. LD.	PSF	
DUR. FAC.		
SPACING		

NAIL SPACING DETAIL

MINIMUM SPACING FOR SINGLE BLOCK IS SHOWN. DOUBLE NAIL SPACINGS AND STAGGER NAILING FOR TWO BLOCKS. GREATER SPACING MAY BE REQUIRED TO AVOID SPLITTING.

BLOCK LOCATION, SIZE, LENGTH,GRADE AND TOTAL NUMBER AND TYPE OF NAILS ARE TO BE SPECIFIED ON SEALED DESIGN REFERENCING THIS DETAIL.

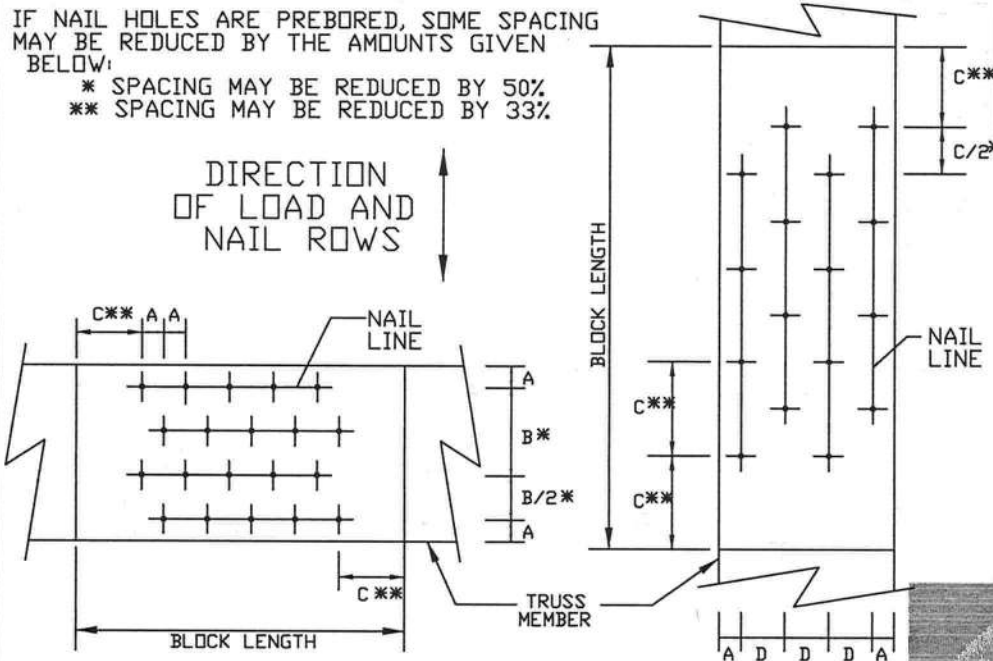
LOAD PERPENDICULAR TO GRAIN
A - EDGE DISTANCE AND SPACING BETWEEN STAGGERED ROWS OF NAILS (6 NAIL DIAMETERS)
B - SPACING OF NAILS IN A ROW (12 NAIL DIAMETERS)
C - END DISTANCE (15 NAIL DIAMETERS)

LOAD PARALLEL TO GRAIN
A - EDGE DISTANCE (6 NAIL DIAMETERS)
C - SPACING OF NAILS IN A ROW AND END DISTANCE (15 NAIL DIAMETERS)
D - SPACING BETWEEN STAGGERED ROWS OF NAILS (7 1/2 NAIL DIAMETERS)

IF NAIL HOLES ARE PREBORED, SOME SPACING MAY BE REDUCED BY THE AMOUNTS GIVEN BELOW:
* SPACING MAY BE REDUCED BY 50%
** SPACING MAY BE REDUCED BY 33%

MINIMUM NAIL SPACING DISTANCES

NAIL TYPE	DISTANCES A	B*	C**	D
8d BOX (0.113"X 2.5",MIN)	3/4"	1 3/8"	1 3/4"	7/8"
10d BOX (0.128"X 3.",MIN)	7/8"	1 5/8"	2"	1"
12d BOX (0.128"X 3.25",MIN)	7/8"	1 5/8"	2"	1"
16d BOX (0.135"X 3.5",MIN)	7/8"	1 5/8"	2 1/8"	1 1/8"
20d BOX (0.148"X 4.",MIN)	1"	1 7/8"	2 1/4"	1 1/8"
8d COMMON (0.131"X 2.5",MIN)	7/8"	1 5/8"	2"	1"
10d COMMON (0.148"X 3.",MIN)	1"	1 7/8"	2 1/4"	1 1/8"
12d COMMON (0.148"X 3.25",MIN)	1"	1 7/8"	2 1/4"	1 1/8"
16d COMMON (0.162"X 3.5",MIN)	1'	2"	2 1/2"	1 1/4"
GUN (0.120"X 2.5",MIN)	3/4"	1 1/2"	1 7/8"	1"
GUN (0.131"X 2.5",MIN)	7/8"	1 5/8"	2"	1"
GUN (0.120"X 3.",MIN)	3/4"	1 1/2"	1 7/8"	1"
GUN (0.131"X 3.",MIN)	7/8"	1 5/8"	2"	1"



LOAD APPLIED PERPENDICULAR TO GRAIN LOAD APPLIED PARALLEL TO GRAIN

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Maryland Heights, MO 63043

COA #0 278 07/07/2020

REF	NAIL SPACE
DATE	10/01/14
DRWG	CNNAILSP1014

Piggyback Detail - ASCE 7-10: 160 mph, 30' Mean Height, Enclosed, Exposure C, Kzt=1.00

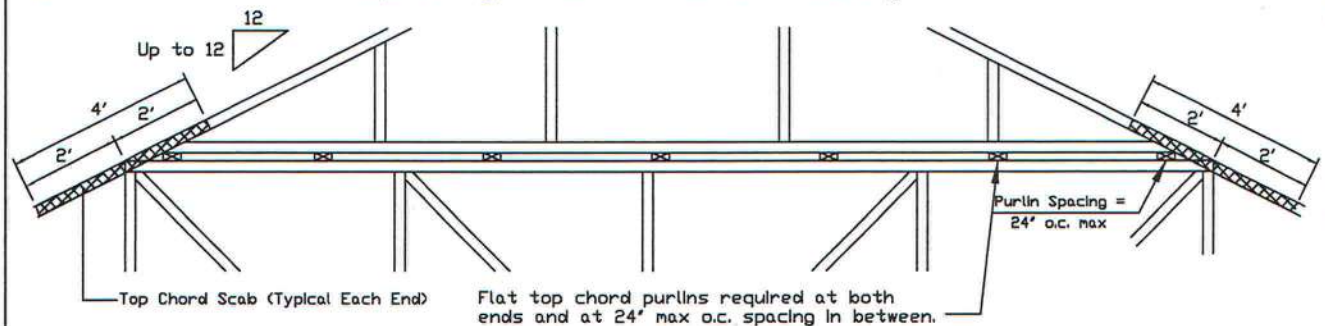
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-10, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-10, Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

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.

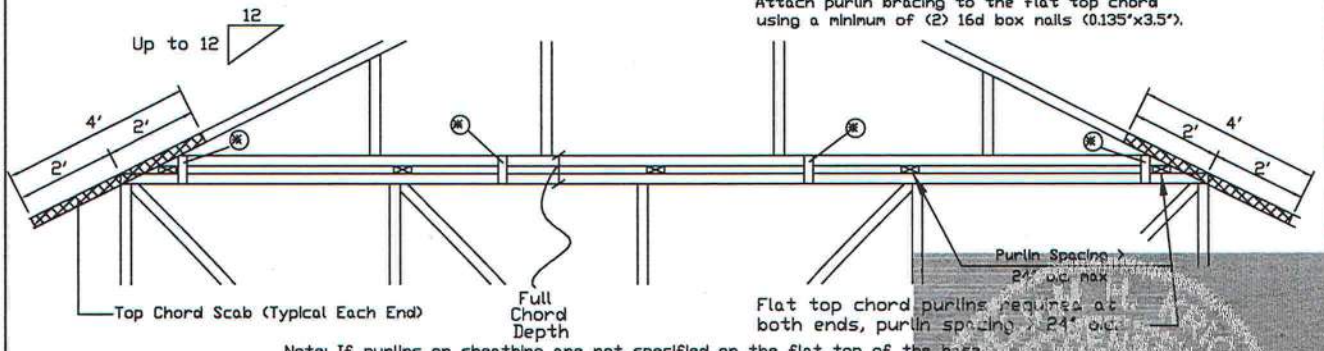
Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

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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COA #0278 07/07/2020

REF	PIGGYBACK
DATE	10/01/14
DRWG	PB160101014
SPACING	24.0"