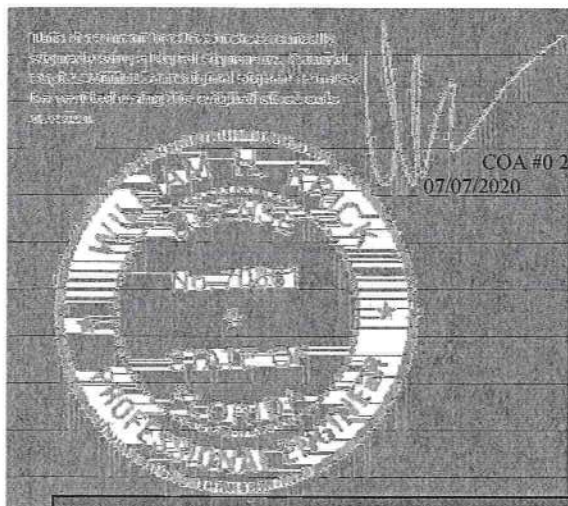




Alpine, an ITW Company
6750 Forum Drive, Suite 305
Orlando, FL 32821
Phone: (800)755-6001
www.alpineitw.com



Site Information:		Page 1:	
Customer: Seminole Trusses, Inc.		Job Number: B50573-F	
Job Description: -Knoper Floor 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 #: 1WVR8570001
	Roof Load (psf): None
	Floor Load (psf): 40.00-10.00- 0.00- 5.00

This package contains general notes pages, 5 truss drawing(s) and 4 detail(s).

Item	Drawing Number	Truss
1	189.20.1558.01113	F01
3	189.20.1558.21003	F03
5	189.20.1558.25917	F05
7	PB180160118	
9	STRBRIBR1014	

Item	Drawing Number	Truss
2	189.20.1558.02543	F02
4	189.20.1558.39860	F04
6	PB160160118	
8	REPCHRD1014	

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.

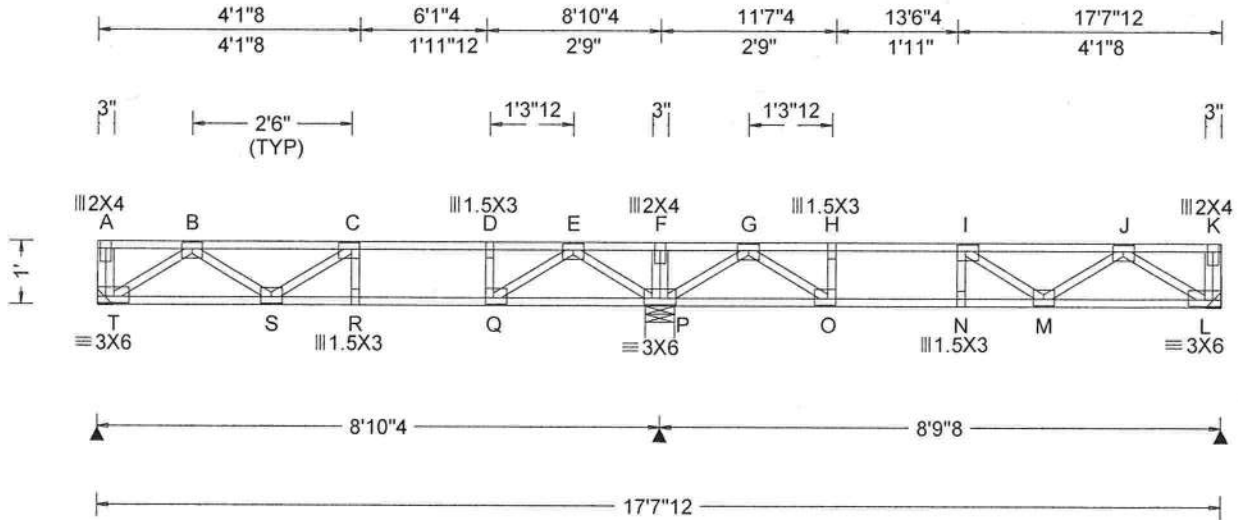
Refer to ASCE-7 for Wind and Seismic abbreviations.

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: 16840 FROM: JL	SY42 Ply: 1 Qty: 7	Job Number: B50573-F -Knoper Floor Trademark Const Group Truss Label: F01	Cust: R 857 JRef: 1WWR8570001 T35 DrwNo: 189.20.1558.01113 SSB / DF 07/07/2020
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 40.00 TCDL: 10.00 BCLL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0"	Wind Std: NA Speed: NA mph Enclosure: NA Category: NA EXP: NA Kzt: NA Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA C&C Dist a: NA ft Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	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: 4(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.062 R 999 360 VERT(CL): 0.097 R 999 240 HORZ(LL): 0.014 L - - HORZ(TL): 0.022 B - - Creep Factor: 2.0 Max TC CSI: 0.405 Max BC CSI: 0.496 Max Web CSI: 0.294 VIEW Ver: 17.02.02A.1213.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL T 512 /- /- /- /- /- P 949 /- /- /- /- /- L 510 /- /- /- /- /- T Brg Width = - Min Req = - P Brg Width = 5.5 Min Req = 1.5 L Brg Width = - Min Req = - Bearing P 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.

Lumber

Top chord: 4x2 SP #1;
Bot chord: 4x2 SP #1;
Webs: 4x2 SP #3;

Plating Notes

All plates are 3X4 except as noted.

Hangers / Ties

(J) Hanger Support Required, by others

Additional Notes

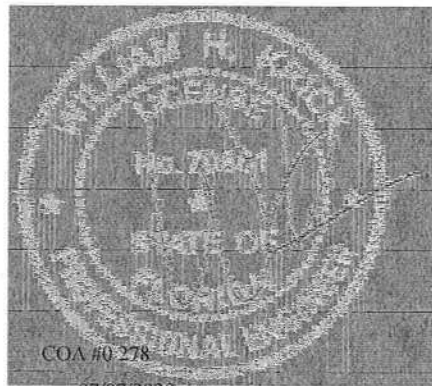
See detail STRBIR1014 for bracing and bridging recommendations.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

Truss must be installed as shown with top chord up.

Chords	Tens.Comp.	Chords	Tens. Comp.
T - S	637 0	P - O	721 0
S - R	1171 0	O - N	1157 0
R - Q	1168 0	N - M	1160 0
Q - P	722 0	M - L	634 0

Maximum Web Forces Per Ply (lbs)					
Webs		Tens.Comp.	Webs		Tens. Comp.
T - B		0 -783	P - G		0 -741
Q - E	618	0	G - O	611	0
E - P		0 -745	J - L		0 -778



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

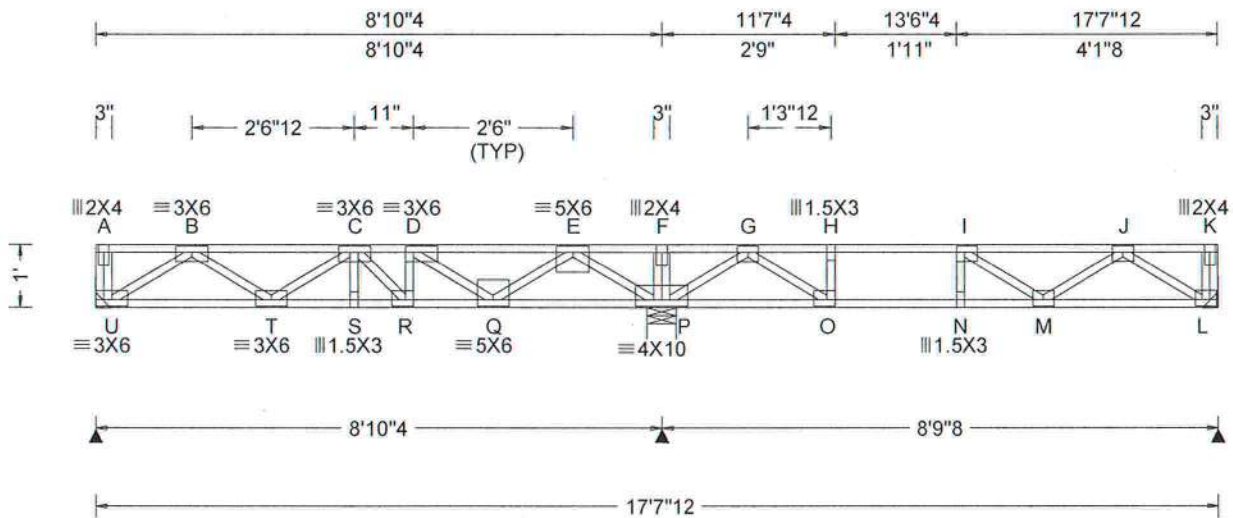
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

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

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

SEQN: 16847 FROM: JL	SY42 Qty: 1	Ply: 1 Qty: 1	Job Number: B50573-F -Knoper Floor Trademark Const Group Truss Label: F02	Cust: R 857 JRef: 1VWR8570001 T19 DrwNo: 189.20.1558.02543 SSB / DF 07/07/2020
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 40.00 TCDL: 10.00 BCLL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0"	Wind Std: NA Speed: NA mph Enclosure: NA Category: NA EXP: NA Kzt: NA Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA C&C Dist a: NA ft Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	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: 4(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.083 D 999 360 VERT(CL): 0.115 D 900 240 HORZ(LL): 0.020 L - - HORZ(TL): 0.027 L - - Creep Factor: 2.0 Max TC CSI: 0.698 Max BC CSI: 0.767 Max Web CSI: 0.720 VIEW Ver: 17.02.02A.1213.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity Loc R+ / R- / Rh / Rw / U / RL U 901 /- /- /- /- /- P 1708 /- /- /- /- /- L 411 /- /- /- /- /- U Brg Width = - Min Req = - P Brg Width = 5.5 Min Req = 1.5 L Brg Width = - Min Req = - Bearing P 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.

Lumber

Top chord: 4x2 SP #1;
Bot chord: 4x2 SP #1;
Webs: 4x2 SP #3;

Special Loads

---(Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)
TC: From 100 plf at 0.00 to 100 plf at 17.65
BC: From 10 plf at 0.00 to 10 plf at 17.65
TC: 1079 lb Conc. Load at 4.98

Plating Notes

All plates are 3X4 except as noted.

Hangers / Ties

(J) Hanger Support Required, by others

Additional Notes

See detail STRBRIBR1014 for bracing and bridging recommendations.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

Truss must be installed as shown with top chord up.



Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
U - T	1184 0	Q - P	878 0
T - S	2909 0	O - N	613 0
S - R	2909 0	N - M	623 0
R - Q	3304 0	M - L	515 0

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
U - B	0 -1450	Q - E	1512 0
B - T	1052 0	E - P	0 -1984
T - C	0 -1038	P - G	0 -860
C - R	504 0	G - O	805 0
R - D	0 -400	J - L	0 -633
D - Q	0 -1450		

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

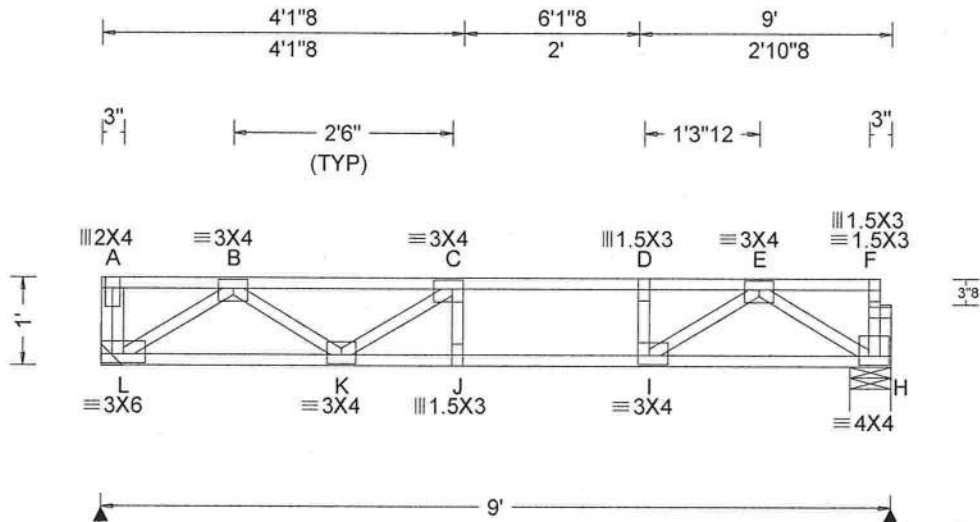
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

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

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

SEQN: 16814 FROM: JL	SY42 Qty: 6	Ply: 1	Job Number: B50573-F -Knoper Floor Trademark Const Group Truss Label: F03	Cust: R 857 JRef: 1WWR8570001 T3 DrwNo: 189.20.1558.21003 SSB / DF 07/07/2020
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 40.00 TCDL: 10.00 BCLL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0"	Wind Std: NA Speed: NA mph Enclosure: NA Category: NA EXP: NA Kzt: NA Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA C&C Dist a: NA ft Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	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: 4(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.063 J 999 360 VERT(CL): 0.098 J 999 240 HORZ(LL): 0.015 B - - HORZ(TL): 0.023 B - - Creep Factor: 2.0 Max TC CSI: 0.404 Max BC CSI: 0.498 Max Web CSI: 0.280 VIEW Ver: 17.02.02A.1213.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL L 495 /- /- /- /- /- H 482 /- /- /- /- /- L Brg Width = - Min Req = - H Brg Width = 5.5 Min Req = 1.5 Bearing H is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 0 -892 D - E 0 -1052 C - D 0 -1070

Lumber

Top chord: 4x2 SP #1;
Bot chord: 4x2 SP #1;
Webs: 4x2 SP #3;

Hangers / Ties

(J) Hanger Support Required, by others

Additional Notes

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

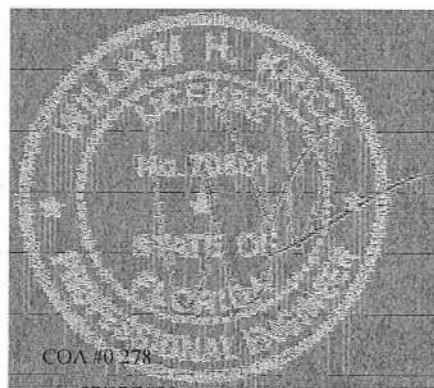
Truss must be installed as shown with top chord up.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
L - K	617	J - I	1070
K - J	1075	I - H	582

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
L - B	0	E - H	0
I - E	588		0



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

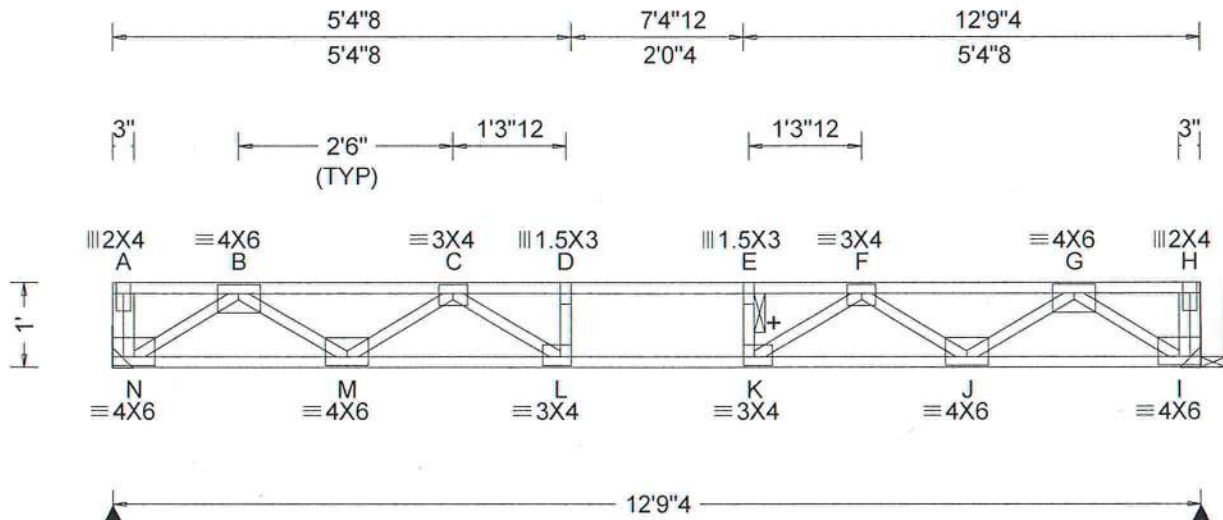
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

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

SEQN: 16845 FROM: JL	SY42 Qty: 1	Job Number: B50573-F -Knoper Floor Trademark Const Group Truss Label: F04	Cust: R 857 JRef: 1WWR8570001 T40 DrwNo: 189.20.1558.39860 SSB / DF 07/07/2020
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 40.00 TCCL: 10.00 BCCL: 0.00 BCDL: 5.00 Des Ld: 55.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.00 Spacing: 24.0"	Wind Std: NA Speed: NA mph Enclosure: NA Category: NA EXP: NAKzt: NA Mean Height: NA ft TCDL: NA psf BCDL: NA psf MWFRS Parallel Dist: NA C&C Dist a: NA ft Loc. from endwall: NA I: NA GCpi: NA Wind Duration: NA	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: 4(0)/4(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.165 D 890 360 VERT(CL): 0.227 D 647 240 HORZ(LL): 0.035 I - - HORZ(TL): 0.048 I - - Creep Factor: 2.0 Max TC CSI: 0.713 Max BC CSI: 0.821 Max Web CSI: 0.563 VIEW Ver: 17.02.02A.1213.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL N 1205 /- /- /- /- /- I 1079 /- /- /- /- /- N Brg Width = - Min Req = - I 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. B - C 0 - 2463 E - F 0 - 3871 C - D 0 - 3869 F - G 0 - 2499 D - E 0 - 3891

Lumber

Top chord: 4x2 SP SS Dense;
Bot chord: 4x2 SP #1;
Webs: 4x2 SP #3;

Special Loads

---(Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)
TC: From 50 plf at 0.00 to 50 plf at 12.77
BC: From 5 plf at 0.00 to 5 plf at 12.77
TC: 264 lb Conc. Load at 0.69, 2.94, 4.94, 6.94
8.94, 10.94

Hangers / Ties

(J) Hanger Support Required, by others

Additional Notes

+ 2x6 continuous strongback. See detail
STRBRI1014 for bracing and bridging
recommendations.

Deflection estimate assumes composite action with
single layer of the appropriate span rated glue-nailed
wood sheathing.

Truss must be installed as shown with top chord up.



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

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

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

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

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

Technical drawing of a roof truss section. The drawing includes the following dimensions and labels:

- Top horizontal dimensions: $1'7''8$, $3'2''$, and $4'9''8$.
- Typical spacing dimension: $1'3''$ (TYP).
- Vertical dimension on the left: $3''$.
- Member labels:
 - Top chord: $\equiv 2 \times 4$ A, $\equiv 3 \times 4$ B, $\equiv 3 \times 4$ C, $\equiv 2 \times 4$ D.
 - Bottom chord: $\equiv 3 \times 4$ H, $\equiv 1.5 \times 3$ G, $\equiv 1.5 \times 3$ F, $\equiv 3 \times 4$ E.
- Vertical dimension on the right: $3''$.
- Overall horizontal dimension at the bottom: $4'9''8$.

Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 40.00	Wind Std: NA	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	Gravity Non-Gravity
TCDL: 10.00	Speed: NA mph	Pf: NA Ce: NA	VERT(LL): 0.005 G 999 360	Loc R+ / R- / Rh / Rw / U / RL
BCLL: 0.00	Enclosure: NA	Lu: NA Cs: NA	VERT(CL): 0.008 G 999 240	H 264 /- /- /- /- /-
BCDL: 5.00	Category: NA	Snow Duration: NA	HORZ(LL): 0.002 B - -	E 264 /- /- /- /- /-
Des Ld: 55.00	EXP: NA Kzt: NA		HORZ(TL): 0.004 B - -	H Brg Width = - Min Req = -
NCBCLL: 0.00	Mean Height: NA ft	Building Code:	Creep Factor: 2.0	E Brg Width = - Min Req = -
Soffit: 2.00	TCDL: NA psf	FBC 2017 RES	Max TC CSI: 0.116	Members not listed have forces less than 375#
Load Duration: 1.00	BCDL: NA psf	TPI Std: 2014	Max BC CSI: 0.087	
Spacing: 24.0 "	MWFRS Parallel Dist: NA	Rep Fac: Yes	Max Web CSI: 0.075	
	C&C Dist a: NA ft	FT/RT:4(0)/4(0)		
	Loc. from endwall: NA	Plate Type(s):		
	l: NA GCpi: NA	WAVE		
	Wind Duration: NA		VIEW Ver: 17.02.02A.1213.20	

Lumber

Top chord: 4x2 SP #1;
Bot chord: 4x2 SP #1;
Webs: 4x2 SP #3;

Hangers / Ties

(J) Hanger Support Required, by others

Additional Notes

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

Truss must be installed as shown with top chord up.



07/07/2020

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
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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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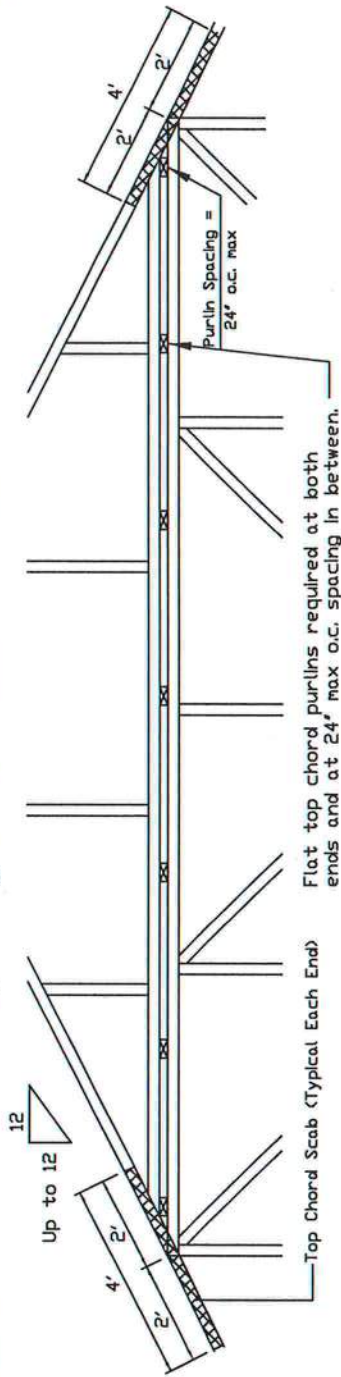
Piggyback Detail - ASCE 7-16: 160 mph, 30' Mean Height, Enclosed, Exposure C, Kzt=1.00

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.

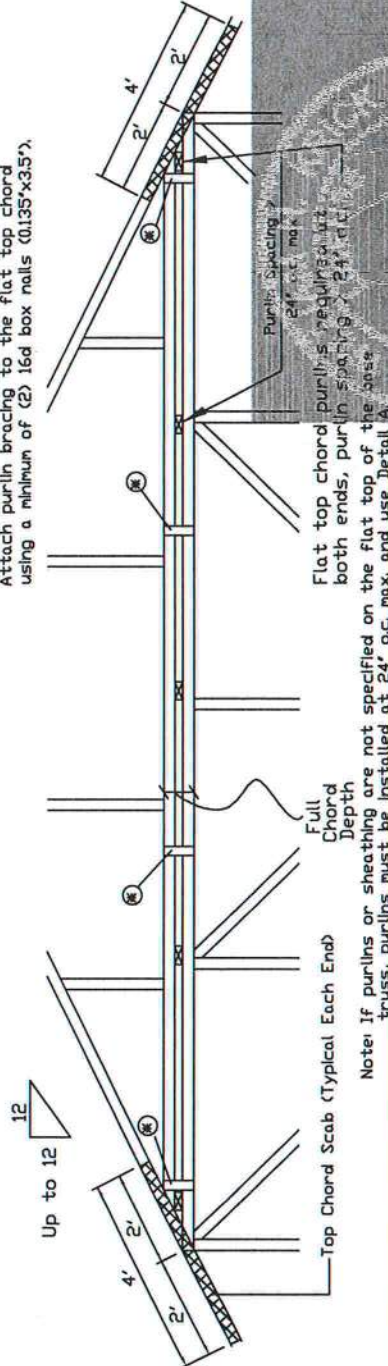
Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends. Maximum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



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



* 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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IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI Building Component Safety Information, by TPI and SBCA for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of walls shall have bracing installed per BCSI sections 13.37 or 13.40, as applicable. Apply plates to wall ends. Refer to drawings 160A-2 for standard plate positions.
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses.
A seal on this drawing or cover page listing the drafter, indicates acceptance of professional engineering and the responsibility of the drafter for the accuracy of the drawing.
For more information see this job's general notes page and these web sites:
ALPINE: www.alpineinc.com TPI: www.tpi.org SBCA: www.sbcaindustrial.org ICC: www.iccsafe.org

REF PIGGYBACK
DATE 01/02/2018
DRWG PBI60160118

SPACING 24.0'

COA 10-278 07/07/2020

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, Dr 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.

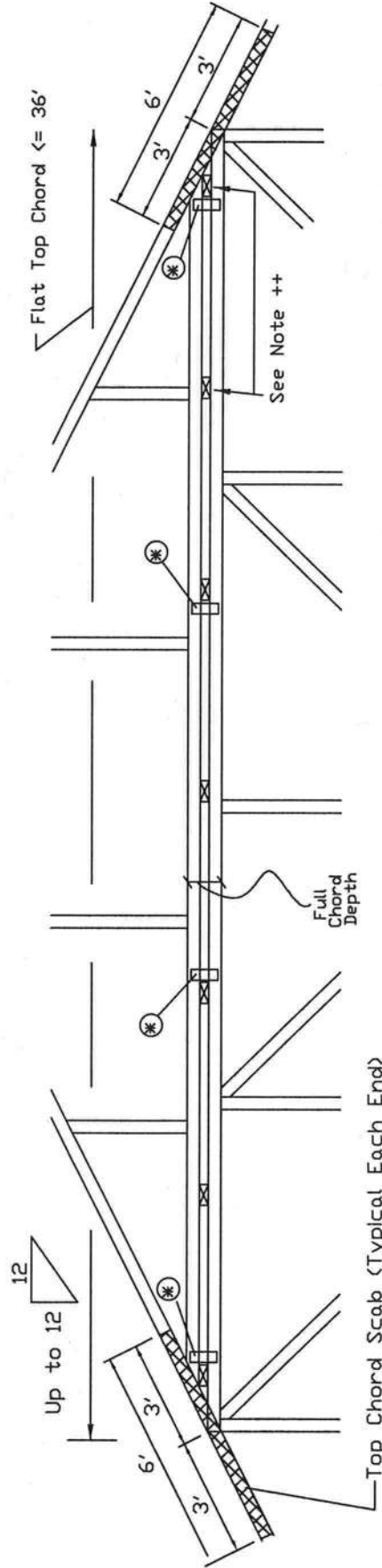
Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The Building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends.

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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IMPORTANT! READ AND FOLLOW ALL NOTES ON THIS DRAWING
Trusses require extreme care in fabrication, handling, shipping, installing and bracing. Refer to the latest edition of BCSI Guiding Component Safety Information, by TPI and SBCA for all practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached roof ceiling. Locations shown for permanent lateral restraint of truss members are for reference only. Truss members shall be installed in accordance with the details of truss and position as shown above and on the joint details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positions.

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

A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design of the truss. The seal of the professional engineer is required for any structural steel work. For more information see this job's general notes and these details.

ALPINE: www.alpineinc.com TPI: www.tpiinc.com SBCA: www.sbcainc.com ICD: www.icdinc.com

REF	PIGGYBACK
DATE	01/02/2018
DRWG	PB180160118

SPACING 24.0'

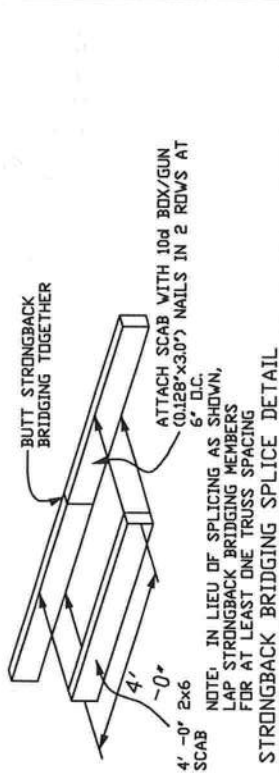
STRONGBACK BRIDGING RECOMMENDATIONS

- All scab-on blocks shall be a minimum 2x4 'stress graded lumber.'
- All strongback bridging and bracing shall be a minimum 2x6 'stress graded lumber.'
- The purpose of strongback bridging is to develop load sharing between individual trusses, resulting in an overall increase in the stiffness of the floor system. 2x6 strongback bridging, positioned as shown in details, is recommended at 10' -0" o.c. (max.)

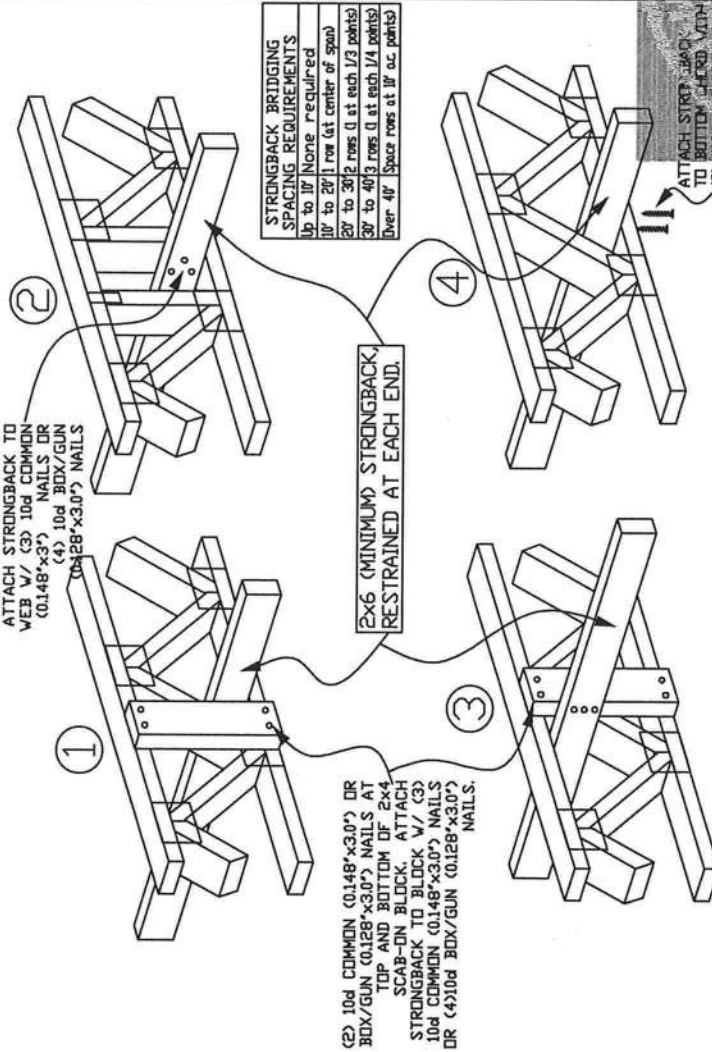
The terms 'bridging' and 'bracing' are sometimes mistakenly used interchangeably. 'Bracing' is an important structural requirement of any floor or roof system. Refer to the Truss Design Drawing (TDD) for the bracing requirements for each individual truss component. 'Bridging,' particularly 'strongback bridging' is a recommendation for a truss system to help control vibration. In addition to aiding in the distribution of point loads between adjacent truss, strongback bridging serves to reduce 'bounce' or residual vibration resulting from moving point loads, such as footsteps.

The performance of all floor systems are enhanced by the installation of strongback bridging and therefore is strongly recommended by Alpine.

For additional information regarding strongback bridging, refer to BCSI (Building Component Safety Information).



NOTE: Details 1 and 2 are the preferred attachment methods



STRONGBACK BRIDGING ATTACHMENT ALTERNATIVES

IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING. FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLER.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the instructions of BCSI (Building Component Safety Information) for proper practices prior to performing these functions. Installers shall provide temporary bracing and bracing. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall be used for all trusses. For trusses with 12' or greater depth, the 12' or greater depth of truss and position as shown above and on the Job. Details, unless noted otherwise. Refer to drawings 160A-2 for standard plate positions.

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

A seal on this drawing indicates the acceptance of the design by a professional engineer. The engineering responsibility is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2. For any structure is the responsibility of the Building Designer per page and these seal sites.

For more information see this job's general notes page and these seal sites:
ALPINE: www.alpineinc.com TPI: www.tpi.org SDCA: www.sdcaindustry.org ICC: www.iccsafe.org



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TC LL	PSF	REF	STRONGBACK
TC DL	PSF	DATE	10/01/14
BC DL	PSF	DRWG	STRBRIBR1014
BC LL	PSF		
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			

COA #0 273 07/07/2020

