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

COA #0 278
07/13/2021

Site Information:	Page 1:
Customer: Seminole Trusses, Inc.	Job Number: B53392a
Job Description: Busscher SPec	
Address: Ivy Glen, Lake City, FL	

Job Engineering Criteria:
Design Code: FBC 7th Ed. 2020 Res
IntelliVIEW Version: 20.02.00A
JRef #: 1X718570008
Wind Standard: ASCE 7-16
Wind Speed (mph): 140
Design Loading (psf): 37.00
Building Type: Closed

This package contains general notes pages, 35 truss drawing(s) and 8 detail(s).

Item	Drawing Number	Truss
1	194.21.1118.12770	CJ1
3	194.21.1118.19010	CJ4
5	194.21.1118.29753	CJ6
7	194.21.1118.36840	EJ4
9	194.21.1118.47063	EJ8A
11	194.21.1119.05123	GE1
13	194.21.1119.21200	GE3
15	194.21.1119.28047	H12A
17	194.21.1119.36063	H14A
19	194.21.1119.43107	H16A
21	194.21.1119.49967	HG3A
23	194.21.1120.08670	HJ11
25	194.21.1120.17410	HJ5
27	194.21.1120.55093	MH1
29	194.21.1121.13110	S1
31	194.21.1121.21550	T-2
33	194.21.1121.30837	T-4
35	194.21.1121.40893	TG-1
37	PB180160118	
39	A14015ENC160118	
41	A14030ENC160118	
43	BRCLBSUB0119	

Item	Drawing Number	Truss
2	194.21.1118.16393	CJ2
4	194.21.1118.24480	CJ4A
6	194.21.1118.32817	CJ6A
8	194.21.1118.39330	EJ8
10	194.21.1118.53300	EJ8B
12	194.21.1119.12407	GE2
14	194.21.1119.25190	H10A
16	194.21.1119.31907	H12B
18	194.21.1119.40260	H14B
20	194.21.1119.47590	H16B
22	194.21.1119.55117	HG8A
24	194.21.1120.14820	HJ11A
26	194.21.1120.20847	M1
28	194.21.1121.09010	MHG1
30	194.21.1121.16970	T-1
32	194.21.1121.24293	T-3
34	194.21.1121.34250	T-5
36	PB160160118	
38	REPCHRD1014	
40	GBLLETIN0118	
42	CNNAILSP1014	

General Notes

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

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

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

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

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

Temporary Lateral Restraint and Bracing:

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

Permanent Lateral Restraint and Bracing:

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

Connector Plate Information:

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

Fire Retardant Treated Lumber:

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

General Notes (continued)

Key to Terms:

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

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

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

CL = Certified lumber.

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

FRT = Fire Retardant Treated lumber.

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

FRT-DC = Dricon Fire Retardant Treated lumber.

FRT-FP = FirePRO Fire Retardant Treated lumber.

FRT-FL = FlamePRO Fire Retardant Treated lumber.

FRT-FT = FlameTech Fire Retardant Treated lumber.

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

g = green lumber.

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

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

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

Ic = Incised lumber.

FJ = Finger Jointed lumber.

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

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

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

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

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

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

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

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

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

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

PP = Panel Point.

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

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

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

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

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

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

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

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

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

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

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

VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.

W = Width of non-hanger bearing, in inches.

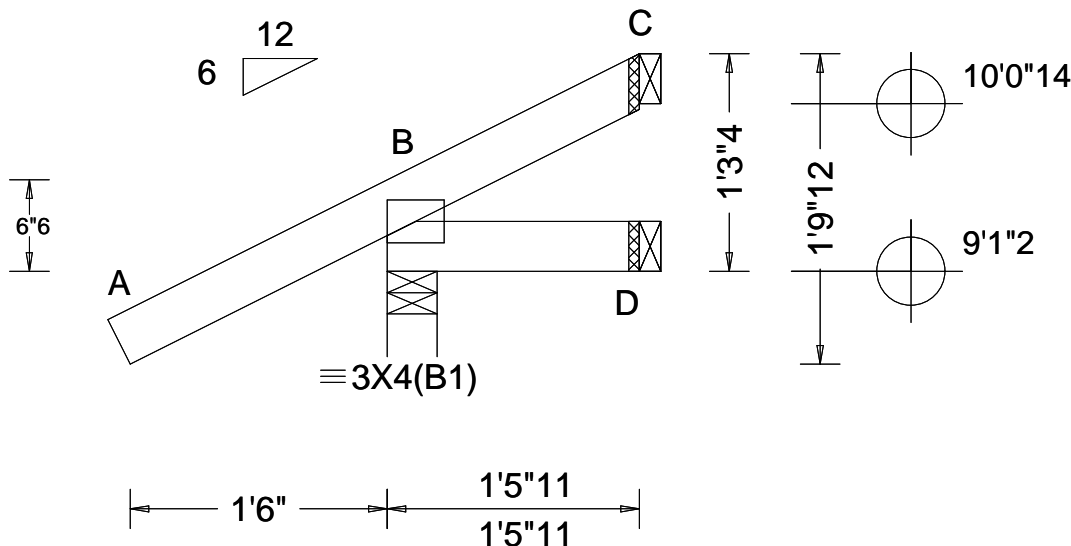
Refer to ASCE-7 for Wind and Seismic abbreviations.

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

References:

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

SEQN: 61827 FROM: RNB	JACK Ply: 1 Qty: 4	Job Number: B53392a Busscher SPec Truss Label: CJ1	Cust: R 857 JRef: 1X718570008 T23 DrwNo: 194.21.1118.12770 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.001 C - - HORZ(TL): 0.001 C - - Creep Factor: 2.0 Max TC CSI: 0.173 Max BC CSI: 0.023 Max Web CSI: 0.000 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 212 /- /- /141 /39 /38 D 24 /- /- /12 /- /- C - /-10 /- /23 /24 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

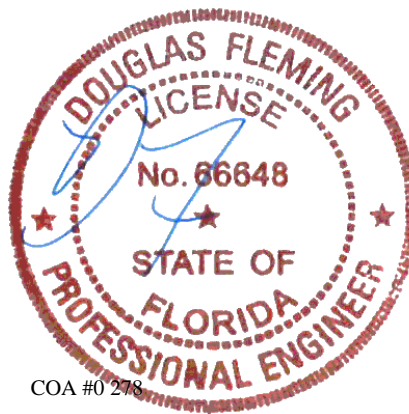
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	41	-1.57	1.47
BC	16	0.17	1.47

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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

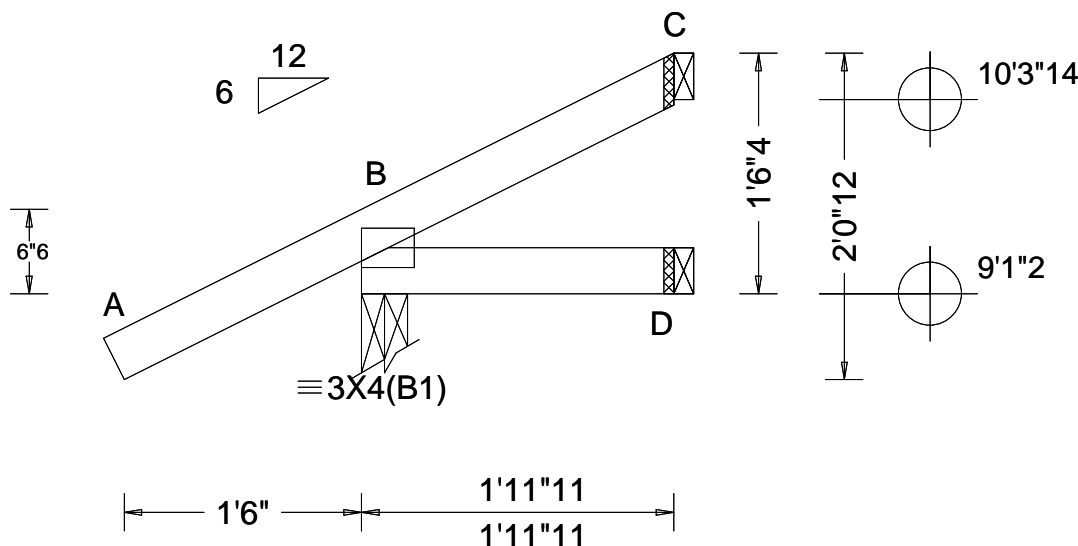
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

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

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6750 Forum Drive
Suite 305
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SEQN: 61805 FROM: RNB	JACK Qty: 4	Ply: 1 Qty: 4	Job Number: B53392a Busscher SPec Truss Label: CJ2	Cust: R 857 JRef: 1X718570008 T28 DrwNo: 194.21.1118.16393 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.001 C - - HORZ(TL): 0.001 C - - Creep Factor: 2.0 Max TC CSI: 0.173 Max BC CSI: 0.023 Max Web CSI: 0.000 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 215 /- /- /141 /30 /45 D 34 /- /- /17 /- /- C 17 /- /- /20 /14 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

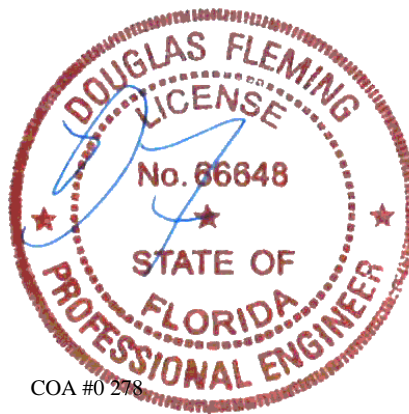
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	47	-1.57	1.97
BC	22	0.17	1.97

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



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07/13/2021

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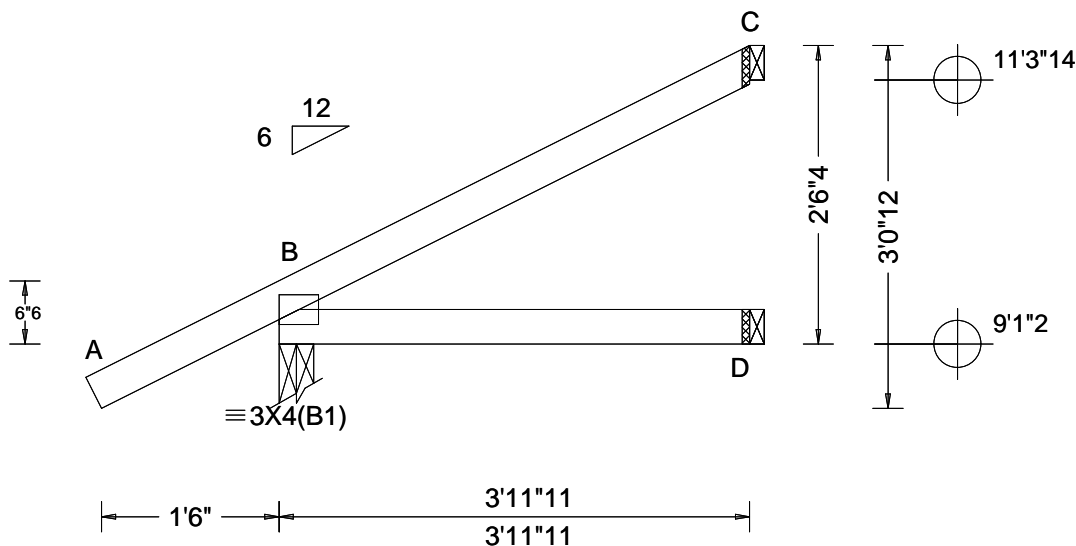
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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Suite 305
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SEQN: 61807 FROM: RNB	JACK Ply: 1 Qty: 2	Job Number: B53392a Busscher SPec Truss Label: CJ4	Cust: R 857 JRef: 1X718570008 T27 DrwNo: 194.21.1118.19010 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.001 D - - HORZ(TL): 0.002 D - - Creep Factor: 2.0 Max TC CSI: 0.220 Max BC CSI: 0.111 Max Web CSI: 0.000 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 269 - / - / - /168 /23 /73 D 73 - / - / - /38 - / - C 88 - / - / - /43 /42 - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

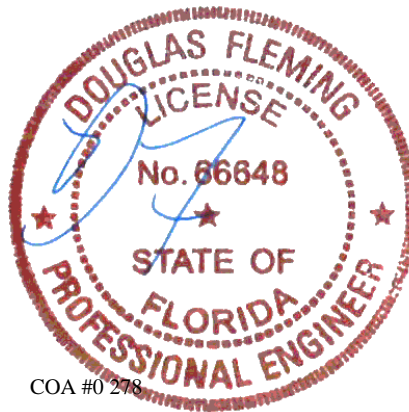
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	74	-1.57	3.97
BC	46	0.17	3.97

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



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07/13/2021

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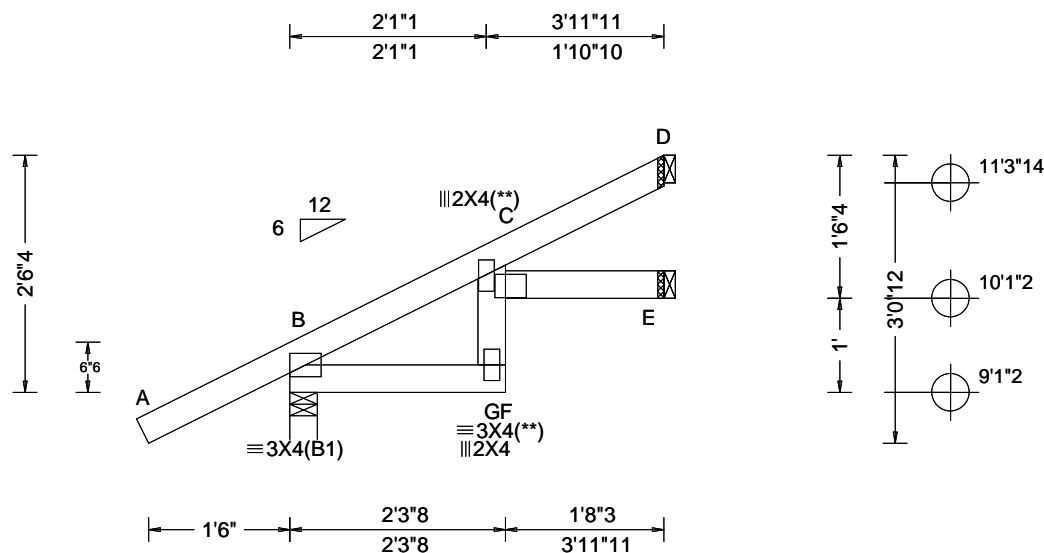
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For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org

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SEQN: 61813 FROM: RNB	JACK Ply: 1 Qty: 2	Job Number: B53392a Busscher SPec Truss Label: CJ4A	Cust: R 857 JRef: 1X718570008 T35 DrwNo: 194.21.1118.24480 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.016 F 999 360 VERT(CL): 0.029 F 999 240 HORZ(LL): 0.009 C - - HORZ(TL): 0.016 C - - Creep Factor: 2.0 Max TC CSI: 0.138 Max BC CSI: 0.034 Max Web CSI: 0.064 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 269 - / - / - /168 /23 /73 E 41 - / - / - /22 /- /- D 100 - / - / - /58 /30 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. 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

(**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.
Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

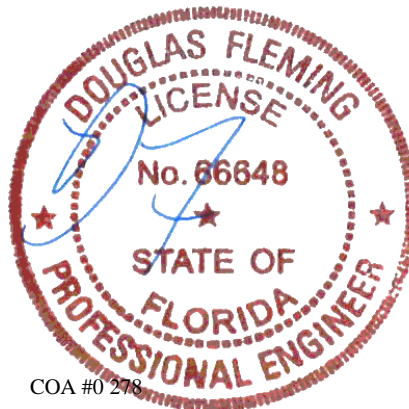
In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	74	-1.57	3.97
BC	25	0.17	2.29
BC	20	2.29	3.97

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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



COA #0 278
07/13/2021

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

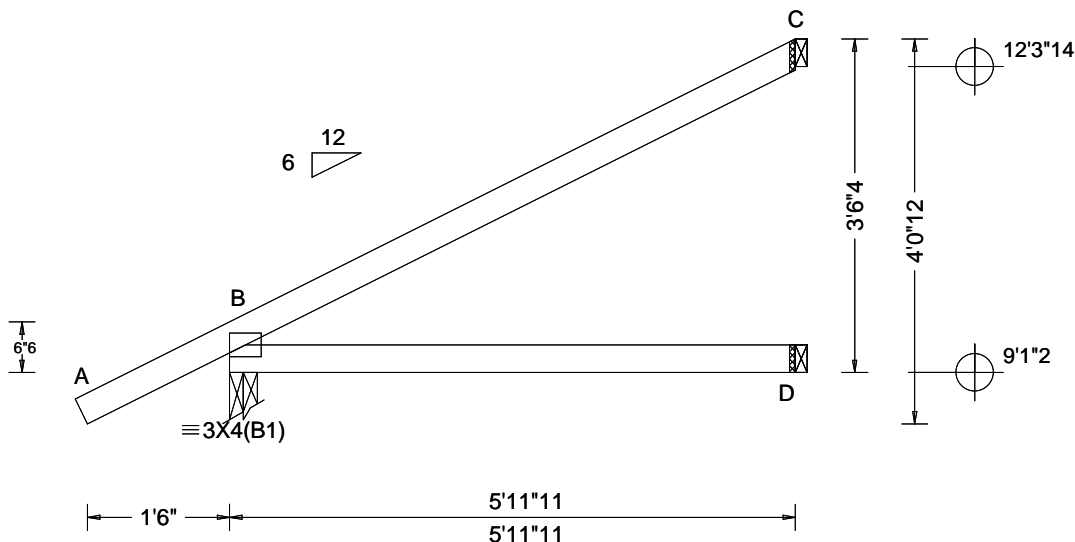
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI.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

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

SEQN: 61809 FROM: RNB	JACK Ply: 1 Qty: 2	Job Number: B53392a Busscher SPec Truss Label: CJ6	Cust: R 857 JRef: 1X718570008 T26 DrwNo: 194.21.1118.29753 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.005 D - - HORZ(TL): 0.010 D - - Creep Factor: 2.0 Max TC CSI: 0.376 Max BC CSI: 0.277 Max Web CSI: 0.000 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 337 -/- /- /206 /21 /100 D 111 -/- /- /58 -/- /- C 146 -/- /- /75 /65 -/- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

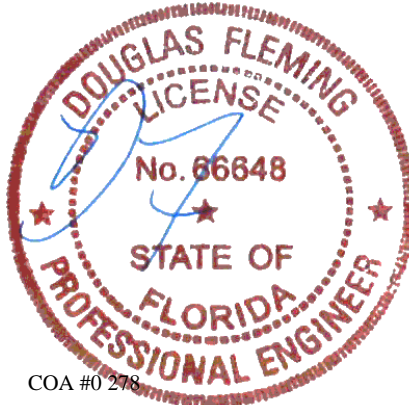
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-1.57	5.97
BC	70	0.17	5.97

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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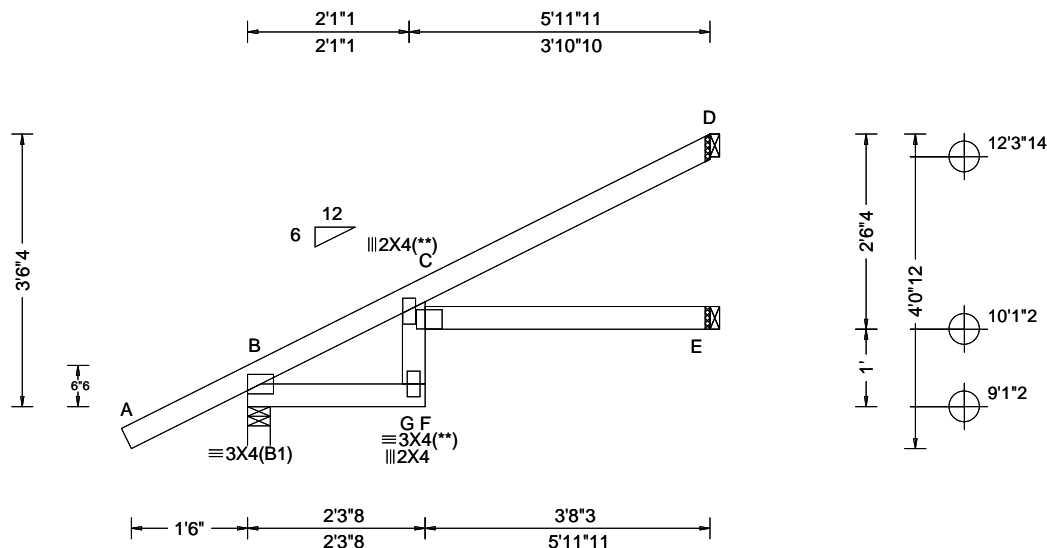
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ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61815 FROM: RNB	JACK Qty: 2	Ply: 1 Qty: 2	Job Number: B53392a Busscher SPec Truss Label: CJ6A	Cust: R 857 JRef: 1X718570008 T34 DrwNo: 194.21.1118.32817 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.089 F 795 360 VERT(CL): 0.161 F 440 240 HORZ(LL): 0.051 C - - HORZ(TL): 0.092 C - - Creep Factor: 2.0 Max TC CSI: 0.467 Max BC CSI: 0.147 Max Web CSI: 0.187 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B 337 - / - / 206 / 21 / 100 E 83 - / - / 45 - / - D 158 - / - / 88 / 55 - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. 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

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

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

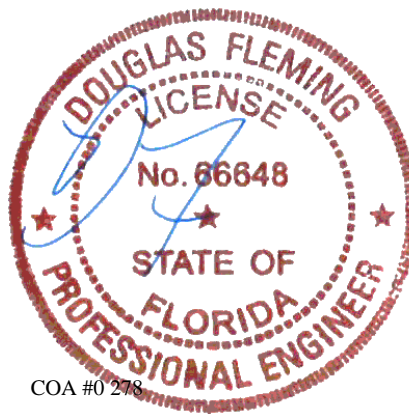
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-1.57	5.97
BC	25	0.17	2.29
BC	44	2.29	5.97

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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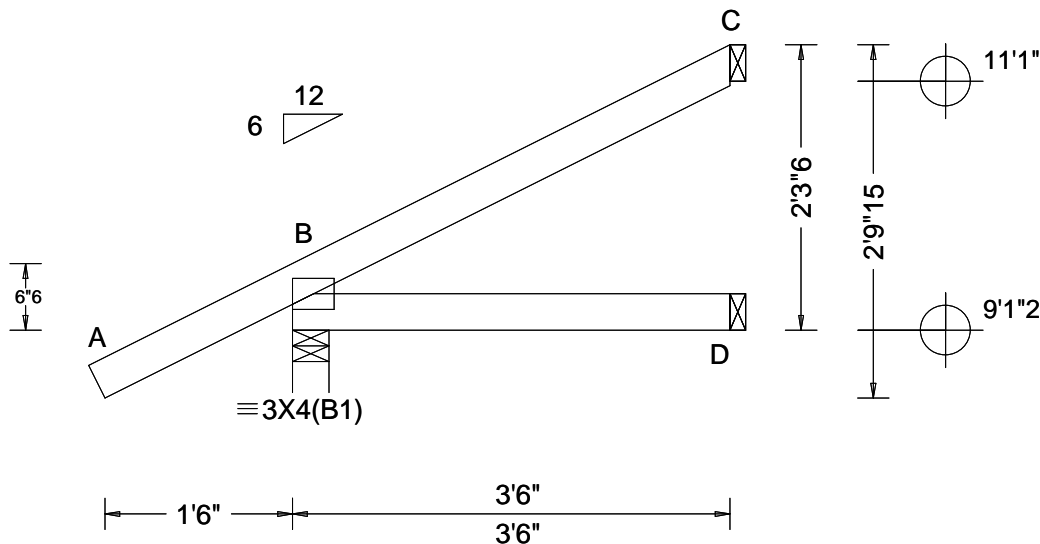
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ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61831 FROM: RNB	EJAC Ply: 1 Qty: 3	Job Number: B53392a Busscher SPec Truss Label: EJ4	Cust: R 857 JRef: 1X718570008 T24 DrwNo: 194.21.1118.36840 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	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: 0.130 Max BC CSI: 0.083 Max Web CSI: 0.000 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 254 /- /- /159 /24 /66 D 64 /- /- /33 /- /- C 74 /- /- /35 /36 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

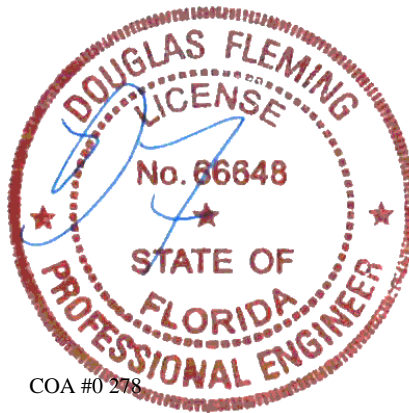
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	68	-1.57	3.50
BC	40	0.17	3.50

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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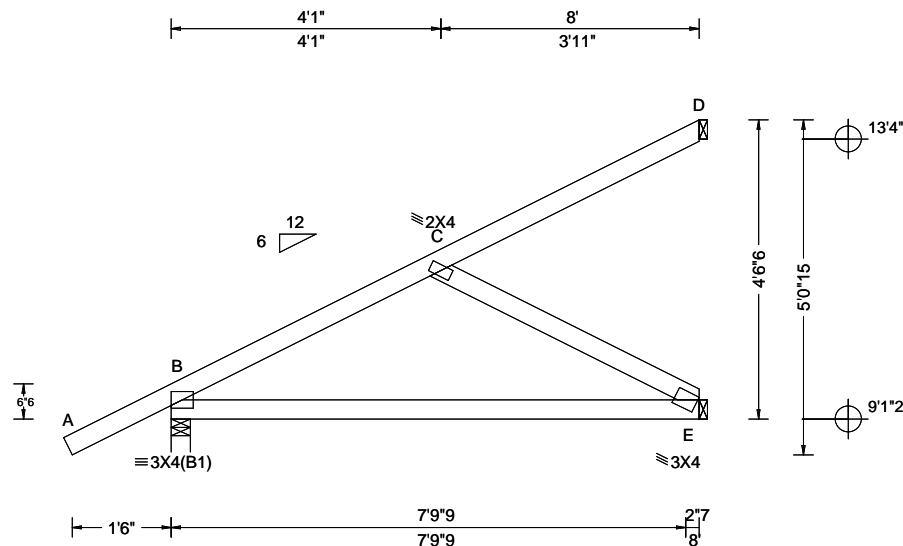
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AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61915 FROM: RNB	JACK Ply: 1 Qty: 12	Job Number: B53392a Busscher SPec Truss Label: EJ8	Cust: R 857 JRef: 1X718570008 T6 DrwNo: 194.21.1118.39330 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): -0.004 C 999 360 VERT(CL): -0.010 C 999 240 HORZ(LL): -0.003 E - - HORZ(TL): 0.009 E - - Creep Factor: 2.0 Max TC CSI: 0.331 Max BC CSI: 0.445 Max Web CSI: 0.119 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B 406 /- /- /244 /19 /129 E 202 /- /- /142 /11 /- D 91 /- /- /46 /41 /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. 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

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

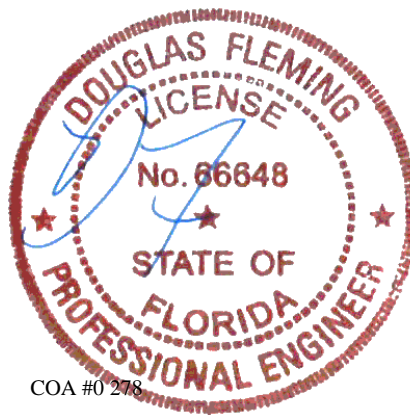
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-1.57	8.00
BC	75	0.17	7.84

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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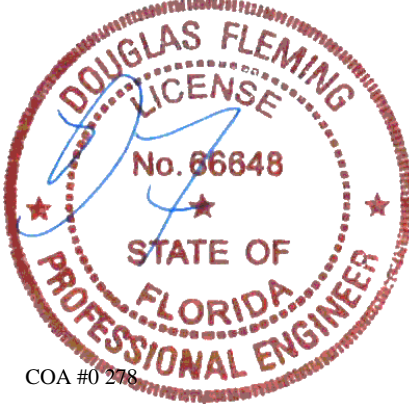
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AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

The diagram illustrates a roof truss system with the following components and dimensions:

- Members:**
 - Top chord: $\approx 2 \times 4$ (labeled D)
 - Bottom chord: $\approx 3 \times 4$ (labeled F)
 - Vertical member: $\approx 3 \times 4$ (labeled G, H)
 - Diagonal member: $\approx 2 \times 4$ (labeled C)
 - Horizontal member: $\approx 3 \times 4$ (labeled B1)
- Joints:** A, B, C, D, E, F, G, H.
- Dimensions:**
 - Horizontal:**
 - Top: $2'1''$, $4'9''15$, $8'$
 - Bottom: $1'6''$, $2'3''8$, $5'6''1$, $2'7''8$
 - Vertical:**
 - Left: $4'6''6$
 - Right: $3'6''6$, $5'0''15$, $1'$
- Other Labels:**
 - Joint C: $\approx 2 \times 4$ (**)
 - Joint G, H: $\approx 3 \times 4$ (**)
 - Joint B: $\approx 3 \times 4$ (B1)
 - Joint D: $\approx 2 \times 4$
 - Joint F: $\approx 3 \times 4$

<p>Lumber</p> <p>Top chord: 2x4 SP #1; Bot chord: 2x4 SP #1; Webs: 2x4 SP #3;</p> <p>Plating Notes</p> <p>(**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.</p> <p>Plates sized for a minimum of 3.50 sq.in./piece.</p> <p>Purlins</p> <p>In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:</p> <table> <tr> <th>Chord</th><th>Spacing(in oc)</th><th>Start(ft)</th><th>End(ft)</th></tr> <tr> <td>TC</td><td>75</td><td>-1.57</td><td>8.00</td></tr> <tr> <td>BC</td><td>24</td><td>0.17</td><td>2.15</td></tr> <tr> <td>BC</td><td>69</td><td>2.09</td><td>7.81</td></tr> </table> <p>Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.</p> <p>Wind</p> <p>Wind loads based on MWFRS with additional C&C member design.</p> <p>Wind loading based on both gable and hip roof types.</p>	Chord	Spacing(in oc)	Start(ft)	End(ft)	TC	75	-1.57	8.00	BC	24	0.17	2.15	BC	69	2.09	7.81	<p>Hangers / Ties</p> <p>Bearing at location $x=8'$, $y=10'1"2$ uses the following support conditions: 8'</p> <p>Bearing F (8', 10'1"2) THJU26</p> <p>Supporting Member: Unavailable</p> <p>(16) 0.148"x3" nails into supporting member,</p> <p>(8) 0.148"x3" nails into supported member.</p> <p>Recommended tie connection based on manufacturer tested capacities and calculations for vertical reactions. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.</p>	<p>D - F 279 - 391</p>
Chord	Spacing(in oc)	Start(ft)	End(ft)															
TC	75	-1.57	8.00															
BC	24	0.17	2.15															
BC	69	2.09	7.81															
																		

COA #0 278


07/13/2021

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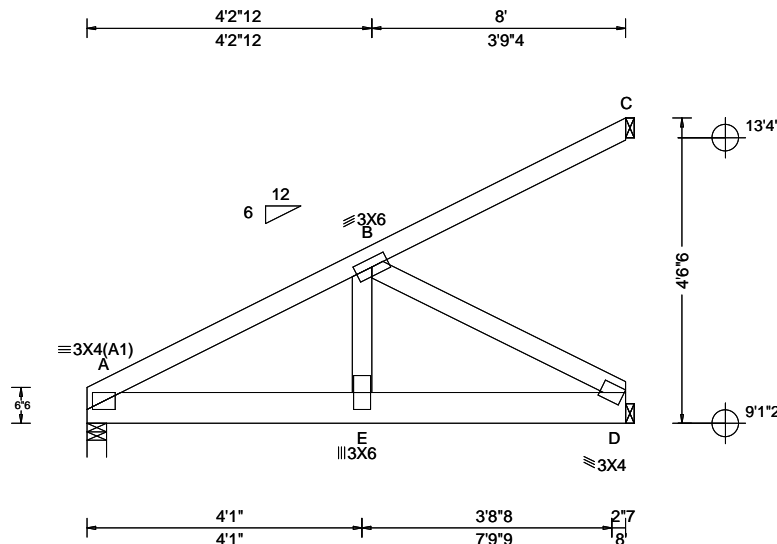
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6750 Forum Drive
 Suite 305
 Orlando FL, 32821

SEQN: 61890 FROM: RNB	EJAC Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: EJG8	Cust: R 857 JRef: 1X718570008 T5 DrwNo: 194.21.1118.53300 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.014 E 999 360 VERT(CL): 0.025 E 999 240 HORZ(LL): -0.004 C - - HORZ(TL): 0.008 C - - Creep Factor: 2.0 Max TC CSI: 0.956 Max BC CSI: 0.375 Max Web CSI: 0.484 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity A 1486 -/- /- /162 -/ D 822 -/- /- /74 -/ C 89 -/- /- /27 -/ Wind reactions based on MWFRS A Brg Width = 3.5 Min Req = 1.9 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing A Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp.

Lumber

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

Special Loads

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
TC: From 56 plf at 0.00 to 56 plf at 8.00
BC: From 10 plf at 0.00 to 10 plf at 8.00
BC: 662 lb Conc. Load at 0.23
BC: 403 lb Conc. Load at 2.23, 4.23, 6.23

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

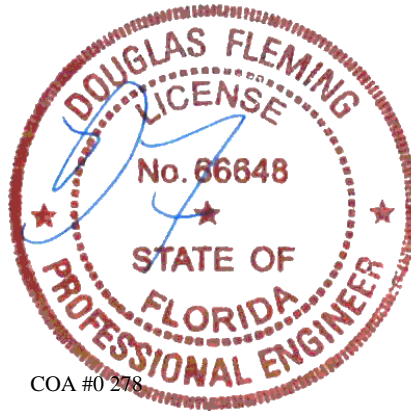
In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	65	0.00	8.00
BC	92	0.15	7.84

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

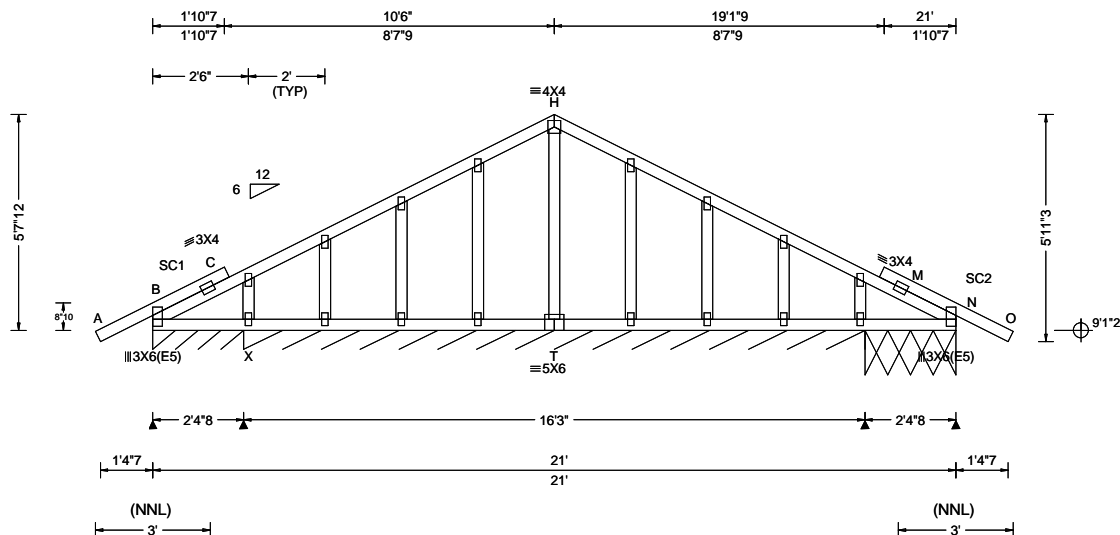


COA #0 278

07/13/2021

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



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *PLF
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.001 I 999 360 VERT(CL): 0.002 I 999 240 HORZ(LL): 0.000 M - - HORZ(TL): 0.001 M - - Creep Factor: 2.0 Max TC CSI: 0.166 Max BC CSI: 0.030 Max Web CSI: 0.050 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B* 124 /- /- /75 /25 /28 X* 129 /- /- /50 /- /- N* 124 /- /- /79 /25 /- Wind reactions based on MWFRS B Brg Width = 28.5 Min Req = - X Brg Width = 194 Min Req = - N Brg Width = 28.5 Min Req = - Bearings B, X, & P Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3;
Stack Chord: SC1 2x4 SP #1;
Stack Chord: SC2 2x4 SP #1;

Plating Notes

All plates are 2X4 except as noted.
Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	50	-1.43	2.43
TC	75	0.00	10.50
TC	75	10.50	21.00
TC	50	18.57	22.43
BC	120	0.00	21.00

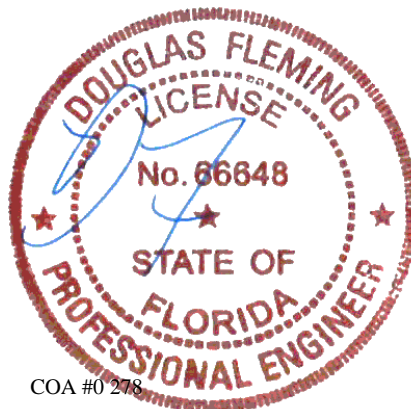
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Loading

Truss designed to support 1-6-0 top chord outlookers and cladding load not to exceed 6.00 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Wind

Wind loads based on MWFRS with additional C&C member design.
End verticals not exposed to wind pressure.
Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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

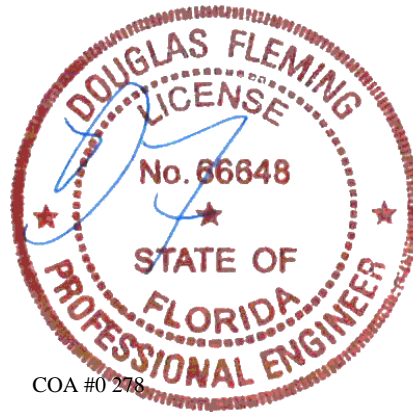
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AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61837	GABL	Ply: 1	Job Number: B53392a	Cust: R 857 JRef: 1X718570008 T2
FROM: RNB		Qty: 1	Busscher SPec	DrwNo: 194.21.1119.05123
Page 2 of 2			Truss Label: GE1	JB / DF 07/13/2021

Additional Notes

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

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



COA #0 278

07/13/2021

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

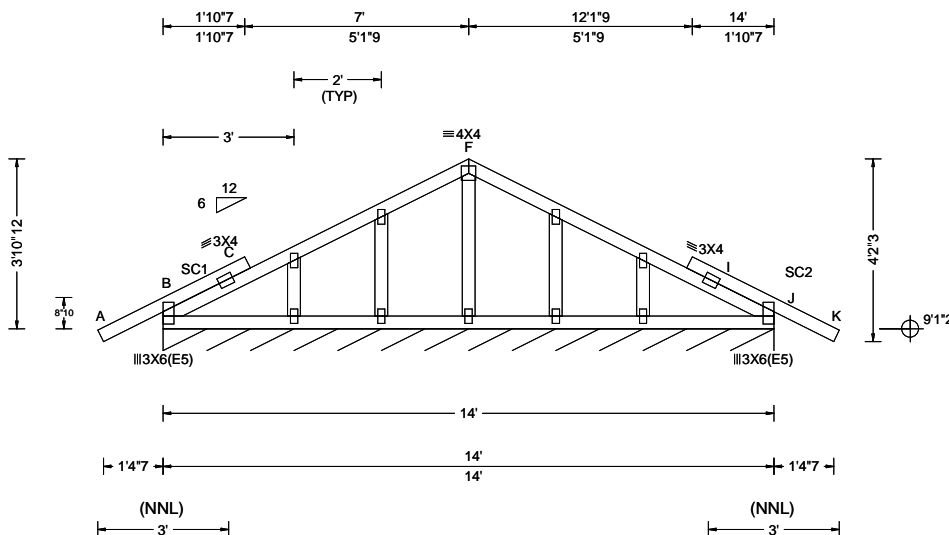
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.004 I 999 360 VERT(CL): 0.006 I 999 240 HORZ(LL): -0.002 I - - HORZ(TL): 0.003 I - - Creep Factor: 2.0 Max TC CSI: 0.165 Max BC CSI: 0.043 Max Web CSI: 0.030 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity J* 128 /- /- /51 /- /5 Wind reactions based on MWFRS J Brg Width = 168 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1;
Webs: 2x4 SP #3;
Stack Chord: SC1 2x4 SP #1;
Stack Chord: SC2 2x4 SP #1;

Plating Notes

All plates are 2X4 except as noted.
Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	38	-1.43	1.50
TC	75	0.00	7.00
TC	75	7.00	14.00
TC	38	12.50	15.43
BC	120	0.00	14.00

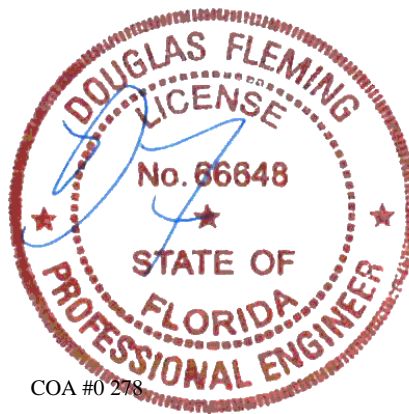
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Loading

Truss designed to support 1-6-0 top chord outlookers and cladding load not to exceed 6.00 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Wind

Wind loads based on MWFRS with additional C&C member design.
End verticals not exposed to wind pressure.
Wind loading based on both gable and hip roof types.



COA #0 278
07/13/2021

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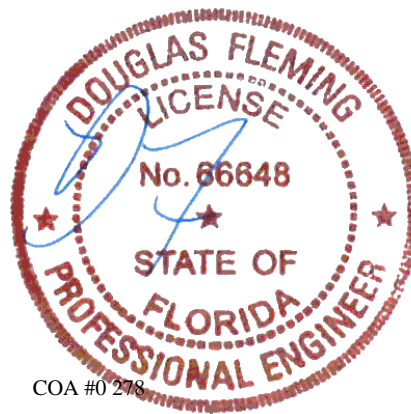
ALPINE
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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61833	GABL	Ply: 1	Job Number: B53392a	Cust: R 857 JRef: 1X718570008 T10
FROM: RNB		Qty: 1	Busscher SPec	DrwNo: 194.21.1119.12407
Page 2 of 2			Truss Label: GE2	JB / DF 07/13/2021

Additional Notes

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

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



COA #0 278

07/13/2021

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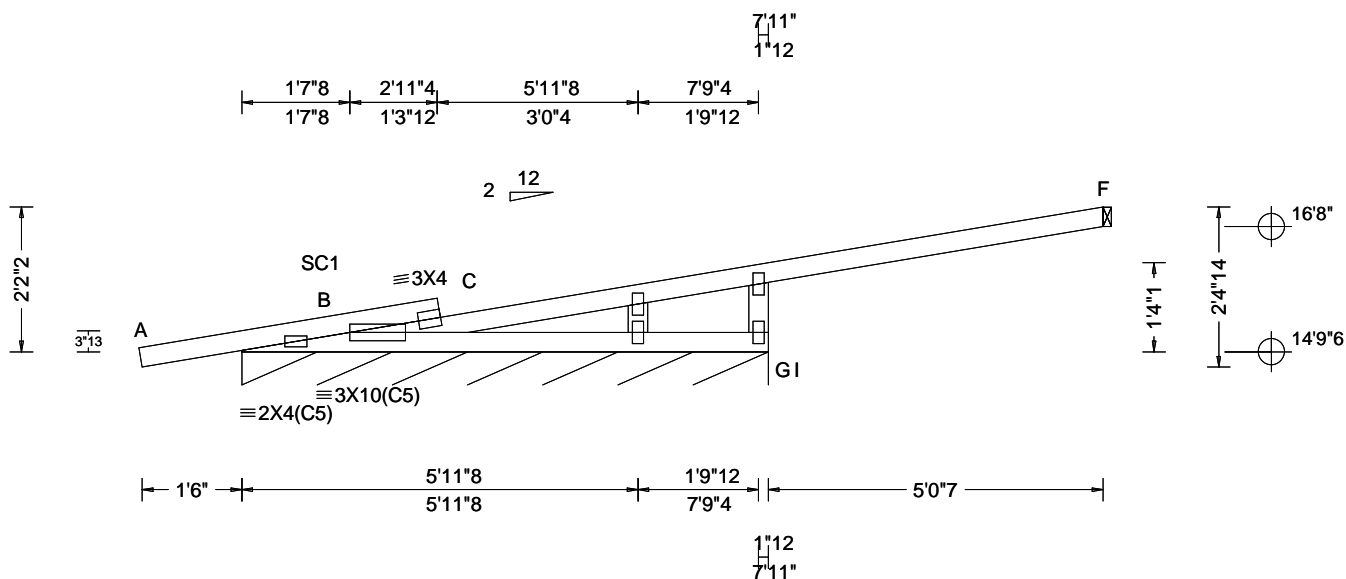
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SEQN: 61927 FROM: RNB	GABL Ply: 1 Qty: 2	Job Number: B53392a Busscher SPec Truss Label: GE3	Cust: R 857 JRef: 1X718570008 T8 DrwNo: 194.21.1119.21200 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *PLF
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.90 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.044 C 999 360 VERT(CL): 0.066 C 999 240 HORZ(LL): -0.005 F - - HORZ(TL): 0.008 F - - Creep Factor: 2.0 Max TC CSI: 0.430 Max BC CSI: 0.202 Max Web CSI: 0.043 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity Loc R+ / R- / Rh / Rw / U / RL I* 146 /- /- /59 /- /5 F 178 /- /- /47 /- /- Wind reactions based on MWFRS I Brg Width = 95.0 Min Req = - F Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. 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 2X4 except as noted.
Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	60	-1.52	3.41
TC	75	2.51	12.95
BC	92	0.29	7.92

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Loading

Truss designed to support 1-6-0 top chord outlookers and cladding load not to exceed 6.00 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

Wind

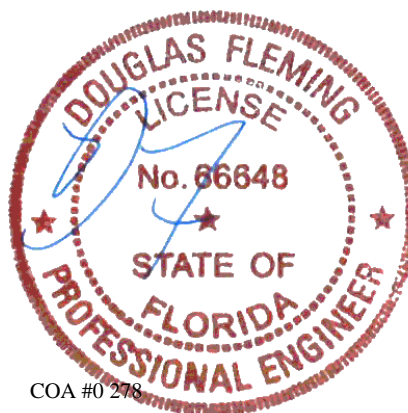
Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

Additional Notes

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

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



COA #0 278

07/13/2021

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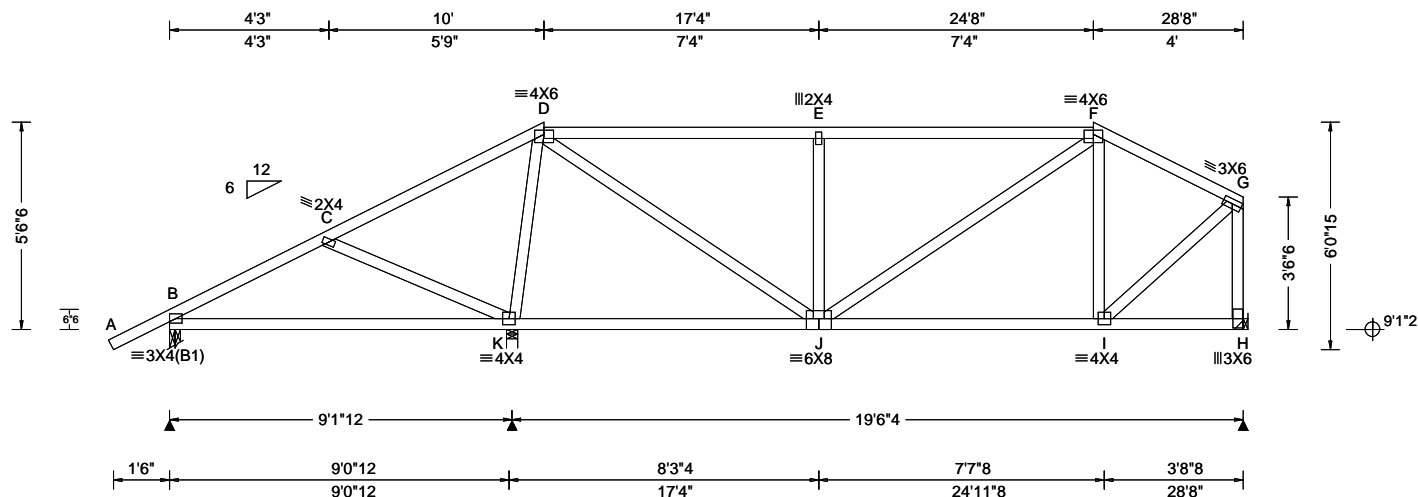
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Suite 305
Orlando FL, 32821

SEQN: 61850 FROM: RNB	HIPS Qty: 1	Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: H10A	Cust: R 857 JRRef: 1X718570008 T13 DrwNo: 194.21.1119.25190 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.025 E 999 360 VERT(CL): 0.047 E 999 240 HORZ(LL): -0.005 F - - HORZ(TL): 0.010 F - - Creep Factor: 2.0 Max TC CSI: 0.500 Max BC CSI: 0.466 Max Web CSI: 0.643 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 371 - / - / /230 - / /113 K 1226 - / - / /612 /191 - / H 721 - / - / /377 /42 - / Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 K Brg Width = 3.5 Min Req = 1.5 H Brg Width = - Min Req = - Bearings B & K Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-1.57	10.00
TC	24	10.00	24.67
TC	53	24.67	28.67
BC	75	0.17	28.67

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Hangers / Ties

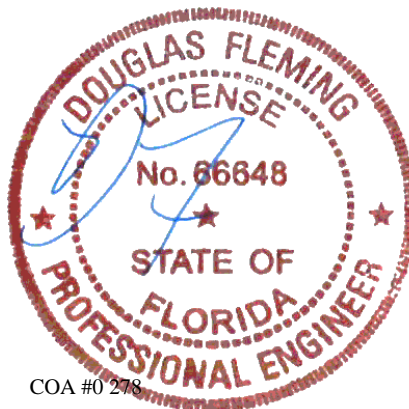
(J) Hanger Support Required, by others

Wind

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

Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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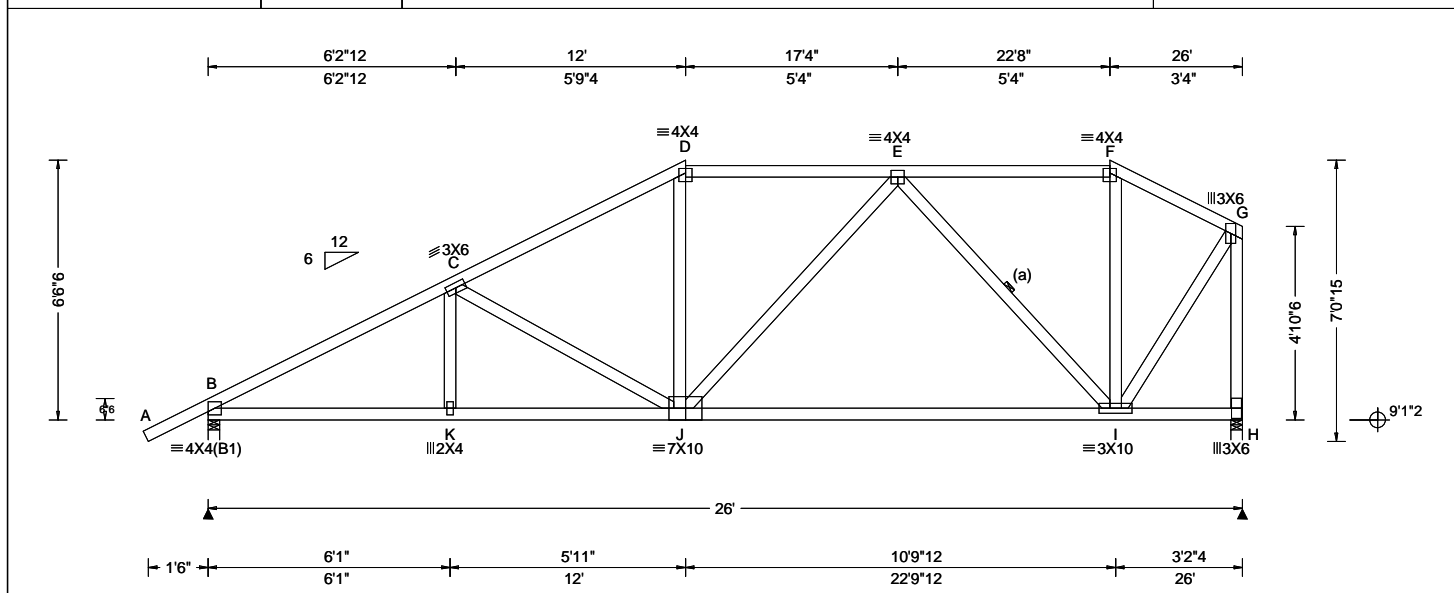
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SEQN: 61879 FROM: RNB	HIPS Qty: 1	Ply: 1 Qty: 1	Job Number: B53392a Busscher Spec Truss Label: H12B	Cust: R 857 JRef: 1X718570008 T45 DrwNo: 194.21.1119.31907 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.059 C 999 360 VERT(CL): 0.110 C 999 240 HORZ(LL): 0.023 I - - HORZ(TL): 0.042 I - - Creep Factor: 2.0 Max TC CSI: 0.969 Max BC CSI: 0.663 Max Web CSI: 0.535 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 1084 - / - / /609 /105 /196 H 977 - / - / /465 /89 - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 H Brg Width = 3.5 Min Req = 1.5 Bearings B & H Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 418 - 1643 E - F 269 - 489 C - D 425 - 1263 F - G 257 - 569 D - E 418 - 1067

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 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

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	52	-1.57	12.00
TC	24	12.00	22.67
TC	44	22.67	26.00
BC	120	0.17	26.00

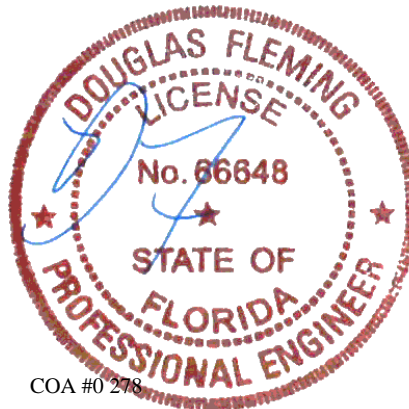
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

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

Wind loading based on both gable and hip roof types.



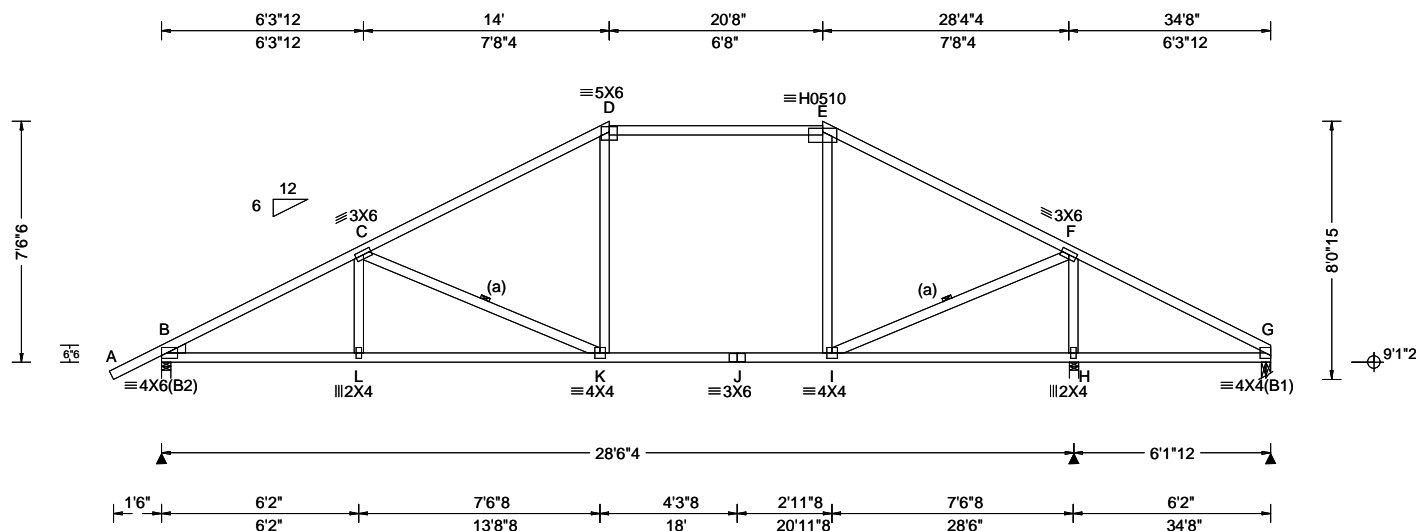
COA #0 278

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Suite 305
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SEQN: 61856 FROM: RNB	HIPS Qty: 1	Ply: 1 Qty: 1	Job Number: B53392a Busscher Spec Truss Label: H14A	Cust: R 857 JRef: 1X718570008 T21 DrwNo: 194.21.1119.36063 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.47 ft Loc. from endwall: not in 9.00 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.284 D 999 360 VERT(CL): 0.602 D 566 240 HORZ(LL): 0.115 D - - HORZ(TL): 0.244 D - - Creep Factor: 2.0 Max TC CSI: 0.994 Max BC CSI: 0.775 Max Web CSI: 0.481 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 1328 - / - / - /780 /14 /165 H 892 - /71 - / - /544 /244 - G 1140 - / - / - /634 /56 - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.7 H Brg Width = 3.5 Min Req = 1.5 G Brg Width = 3.5 Min Req = 1.5 Bearings B, H, & G Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

Lumber

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

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

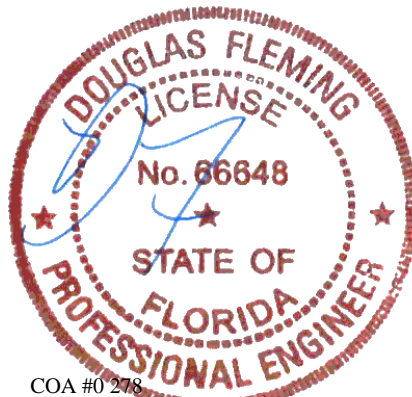
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	43	-1.57	14.00
TC	24	14.00	20.67
TC	48	20.67	34.56
BC	120	0.17	34.50

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



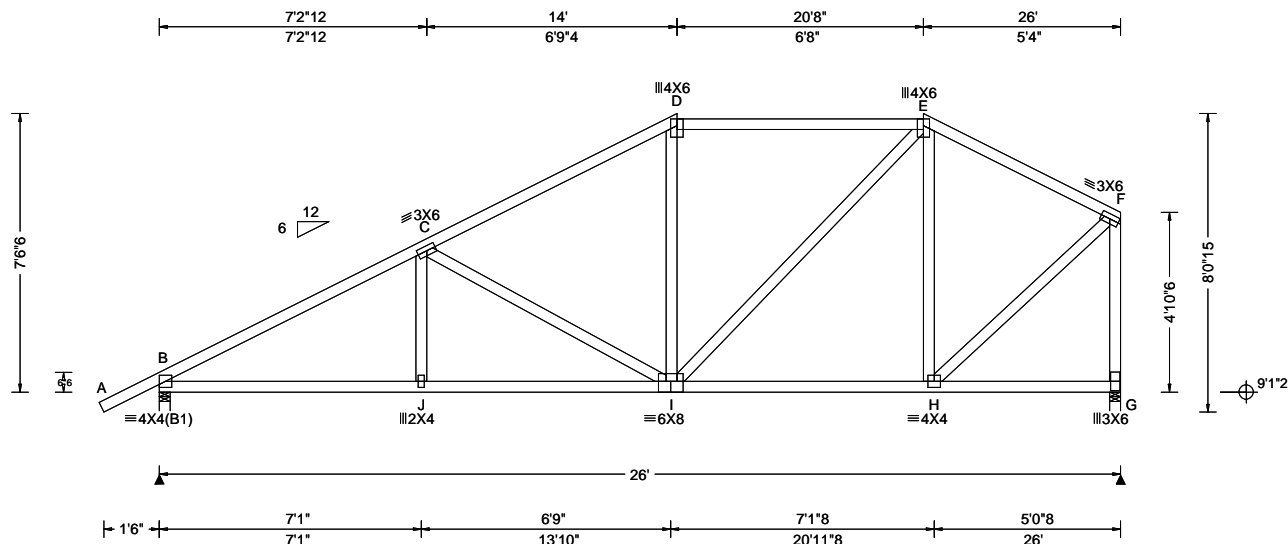
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SEQN: 61875 FROM: RNB	HIPS Qty: 1	Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: H14B	Cust: R 857 JRef: 1X718570008 T44 DrwNo: 194.21.1119.40260 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.059 J 999 360 VERT(CL): 0.110 J 999 240 HORZ(LL): 0.020 H - - HORZ(TL): 0.037 H - - Creep Factor: 2.0 Max TC CSI: 0.982 Max BC CSI: 0.417 Max Web CSI: 0.588 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 1084 -/- /- /612 -/- /216 G 977 -/- /- /469 /0 -/ Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 G Brg Width = 3.5 Min Req = 1.5 Bearings B & G Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 351 -1628 D - E 369 -920 C - D 364 -1111 E - F 284 -710

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	52	-1.57	14.00
TC	24	14.00	20.67
TC	71	20.67	26.00
BC	120	0.17	26.00

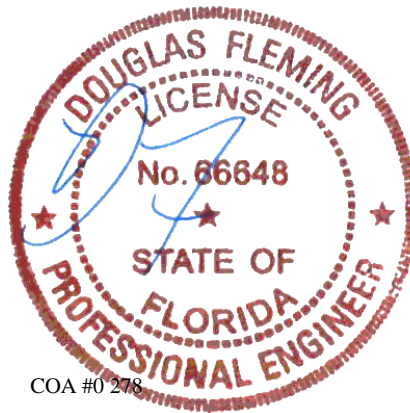
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

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

Wind loading based on both gable and hip roof types.



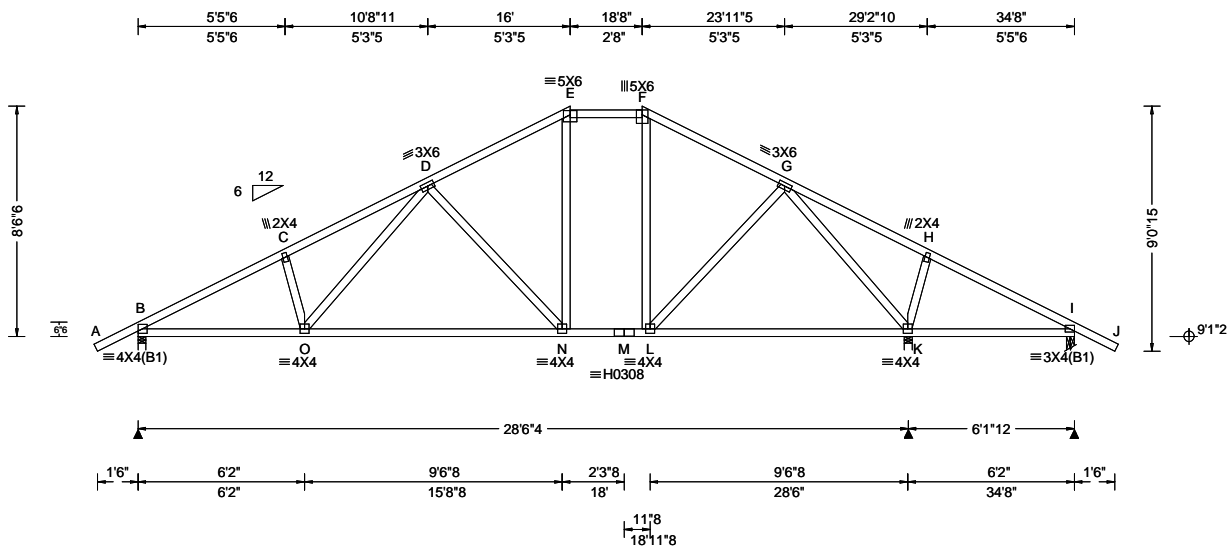
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Suite 305
Orlando FL, 32821

SEQN: 61859 FROM: RNB	HIPS Ply: 1 Qty: 1	Job Number: B53392a Busscher Spec Truss Label: H16A	Cust: R 857 JRRef: 1X718570008 T17 DrwNo: 194.21.1119.43107 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.47 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.147 N 999 360 VERT(CL): 0.309 N 999 240 HORZ(LL): 0.047 E - - HORZ(TL): 0.101 E - - Creep Factor: 2.0 Max TC CSI: 0.997 Max BC CSI: 0.674 Max Web CSI: 0.994 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B 1202 - / - / 694 - / 198 K 1181 - / - / 721 - / - I 565 - / - / 227 / 37 - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 K Brg Width = 3.5 Min Req = 1.5 I Brg Width = 3.5 Min Req = 1.5 Bearings B, K, & I Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

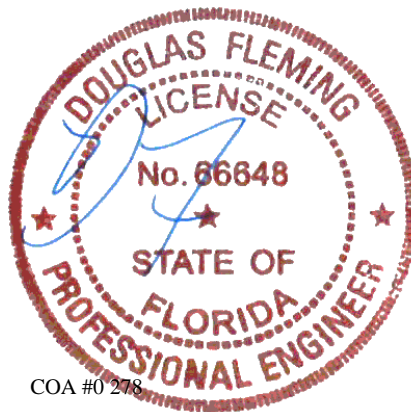
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	46	-1.57	16.00
TC	24	16.00	18.67
TC	69	18.67	36.23
BC	120	0.17	34.50

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



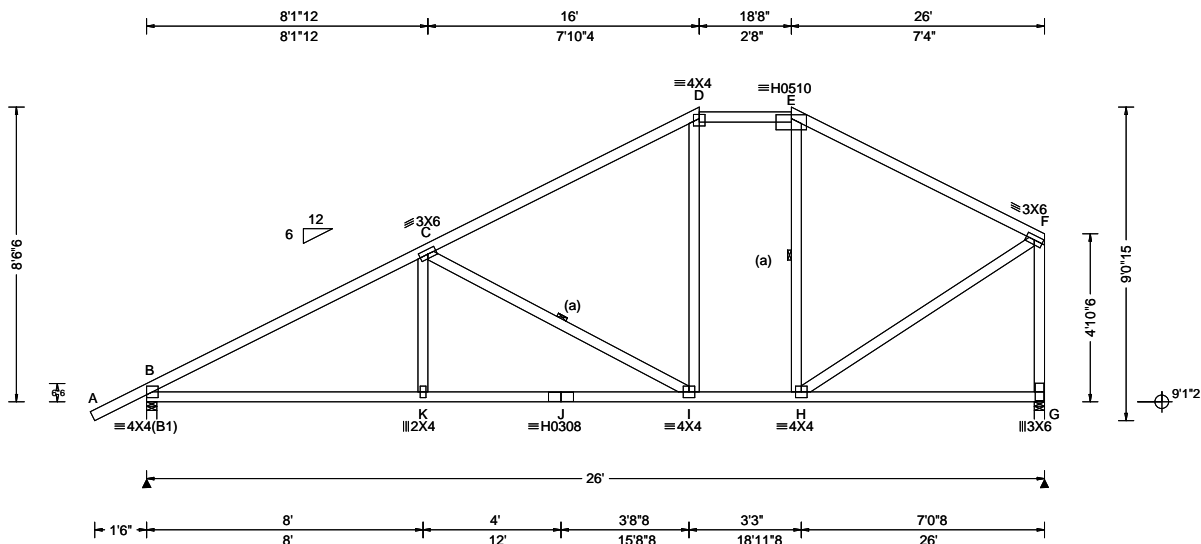
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SEQN: 61871 FROM: RNB	HIPS Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: H16B	Cust: R 857 JRef: 1X718570008 T43 DrwNo: 194.21.1119.47590 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.205 D 999 360 VERT(CL): 0.447 D 695 240 HORZ(LL): 0.087 D - - HORZ(TL): 0.189 D - - Creep Factor: 2.0 Max TC CSI: 0.995 Max BC CSI: 0.708 Max Web CSI: 0.743 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 1084 -/- /- /611 -/- /236 G 977 -/- /- /473 -/- /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 G Brg Width = 3.5 Min Req = 1.5 Bearings B & G Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 287 -1633 D - E 291 -713 C - D 280 -926 E - F 251 -852

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 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

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	51	-1.57	16.00
TC	24	16.00	18.67
TC	55	18.67	26.00
BC	120	0.17	26.00

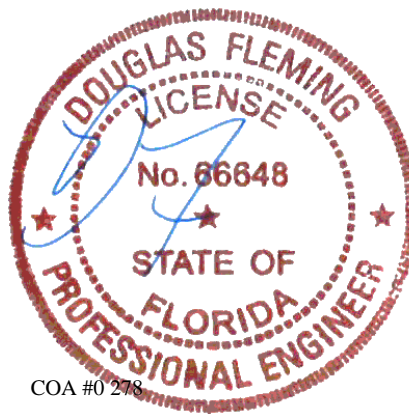
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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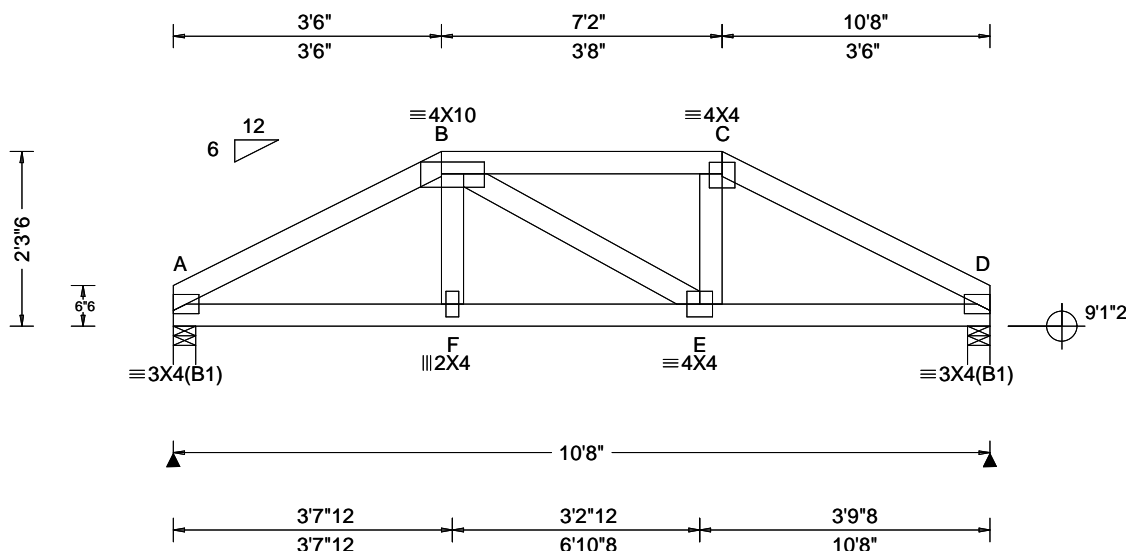
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Suite 305
Orlando FL, 32821

SEQN: 61887 FROM: RNB	HIPS Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: HG3A	Cust: R 857 JRef: 1X718570008 T4 DrwNo: 194.21.1119.49967 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.024 F 999 360 VERT(CL): 0.044 F 999 240 HORZ(LL): 0.012 E - - HORZ(TL): 0.022 E - - Creep Factor: 2.0 Max TC CSI: 0.387 Max BC CSI: 0.340 Max Web CSI: 0.075 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL A 662 -/- /- /- /67 -/ D 662 -/- /- /- /67 -/ Wind reactions based on MWFRS A Brg Width = 3.5 Min Req = 1.5 D Brg Width = 3.5 Min Req = 1.5 Bearings A & D Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 125 -1070 C - D 127 -1067 B - C 91 -932

Lumber

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

Special Loads

-----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
TC: From 56 plf at 0.00 to 56 plf at 3.50
TC: From 28 plf at 3.50 to 28 plf at 7.17
TC: From 56 plf at 7.17 to 56 plf at 10.67
BC: From 20 plf at 0.00 to 20 plf at 3.53
BC: From 10 plf at 3.53 to 10 plf at 7.14
BC: From 20 plf at 7.14 to 20 plf at 10.67
TC: 106 lb Conc. Load at 3.53, 7.14
TC: 74 lb Conc. Load at 5.33
BC: 152 lb Conc. Load at 3.53, 7.14
BC: 64 lb Conc. Load at 5.33

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	46	0.10	3.50
TC	24	3.50	7.17
TC	46	7.17	10.56
BC	120	0.17	10.50

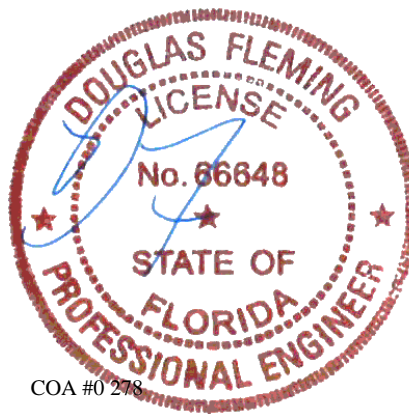
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
A - F	906 -99	E - D	903 -101
F - E	920 -95		



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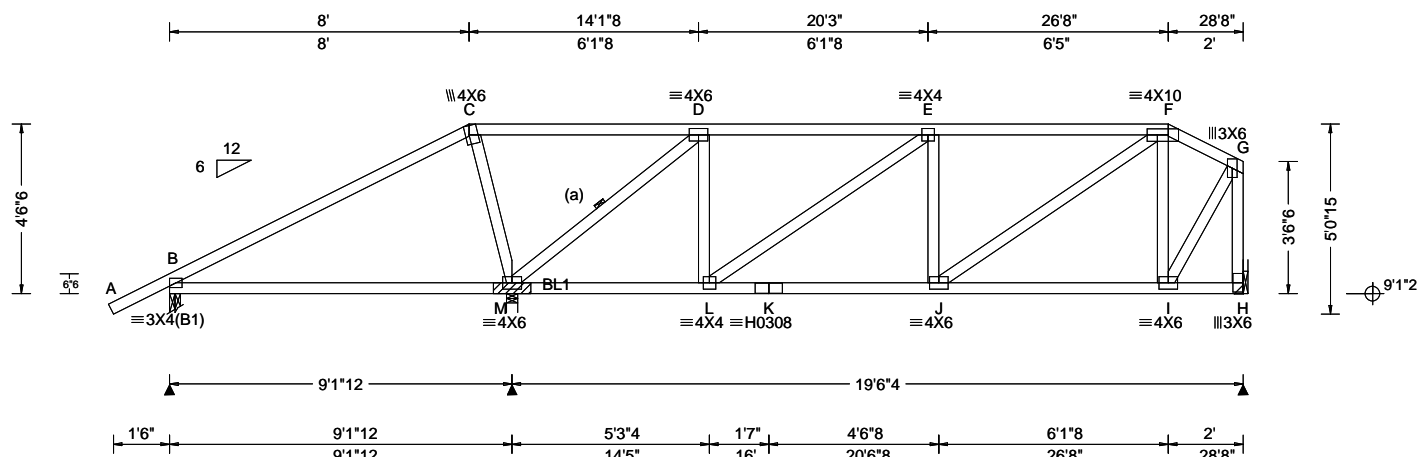
****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
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Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) 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.

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6750 Forum Drive
Suite 305
Orlando FL, 32821



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT: 20(0)/0(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.067 E 999 360 VERT(CL): 0.123 E 999 240 HORZ(LL): 0.015 M - - HORZ(TL): 0.028 M - - Creep Factor: 2.0 Max TC CSI: 0.896 Max BC CSI: 0.753 Max Web CSI: 0.774 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 509 -/- /- /- /42 -/ M 3104 -/- /- /- /488 -/ H 1766 -/- /- /- /280 -/ Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 M Brg Width = 3.5 Min Req = - H Brg Width = - Min Req = - Bearings B & M Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

Lumber	Purlins	▲ Maximum Reactions (lbs)
Top chord: 2x4 SP #1; Bot chord: 2x4 SP SS Dense; Webs: 2x4 SP #3;	In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows: Chord Spacing(in oc) Start(ft) End(ft) TC 75 -1.57 8.00 TC 24 8.00 26.67 TC 27 26.67 28.67 BC 75 0.17 28.67 Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.	D - E 257 -1768 F - G 151 -980 E - F 347 -2294

Bracing	Maximum Bot Chord Forces Per Ply (lbs)
(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.	Chords Tens.Comp. Chords Tens. Comp. M - L 1701 -252 K - J 2302 -357 L - K 2302 -357 J - I 880 -138

Special Loads	Wind	Maximum Web Forces Per Ply (lbs)
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25) TC: From 56 plf at -1.63 to 56 plf at 8.00 TC: From 28 plf at 8.00 to 28 plf at 26.67 TC: From 56 plf at 26.67 to 56 plf at 28.67 BC: From 4 plf at -1.63 to 4 plf at 0.00 BC: From 20 plf at 0.00 to 20 plf at 8.03 BC: From 10 plf at 8.03 to 10 plf at 28.67 TC: 215 lb Conc. Load at 8.03 TC: 91 lb Conc. Load at 10.06,12.06,14.06,16.06 18.06,18.60,20.60,22.60,24.60,26.60 BC: 664 lb Conc. Load at 8.03 BC: 202 lb Conc. Load at 10.06,12.06,14.06,16.06 18.06,18.60,20.60,22.60,24.60,26.60	Wind loads and reactions based on MWFRS. Right end vertical exposed to wind pressure. Deflection meets L/180. Wind loading based on both gable and hip roof types.	Webs Tens.Comp. Webs Tens. Comp. C - M 224 -523 J - F 1718 -253 M - D 452 -2377 F - I 227 -920 D - L 1027 -81 I - G 1668 -262 L - E 123 -741 G - H 284 -1848

Plating Notes
Plates sized for a minimum of 3.50 sq.in./piece.

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



COA #0 278
07/13/2021

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

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

SEQN: 61920	HIPS	Ply: 1	Job Number: B53392a	Cust: R 857 JRef: 1X718570008 T18
FROM: RNB		Qty: 1	Busscher SPec	DrwNo: 194.21.1119.55117
Page 2 of 2			Truss Label: HG8A	JB / DF 07/13/2021

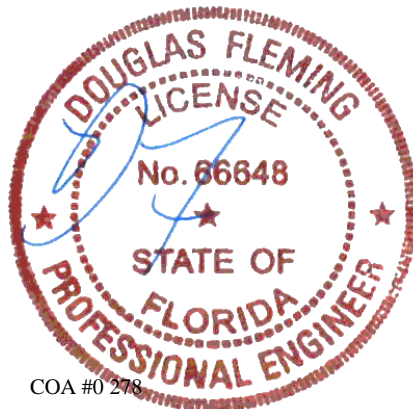
Bearing Block(s)

Brg blocks: 0.128"x3", min. nails

brg	x-loc	#blocks	length/blk	#nails/blk	wall plate
2	9.000'	1	12"	4	SPF Standard

Brg block to be same size and species as chord.

Refer to drawing CNNAILSP1014 for more information.



COA #0 278

07/13/2021

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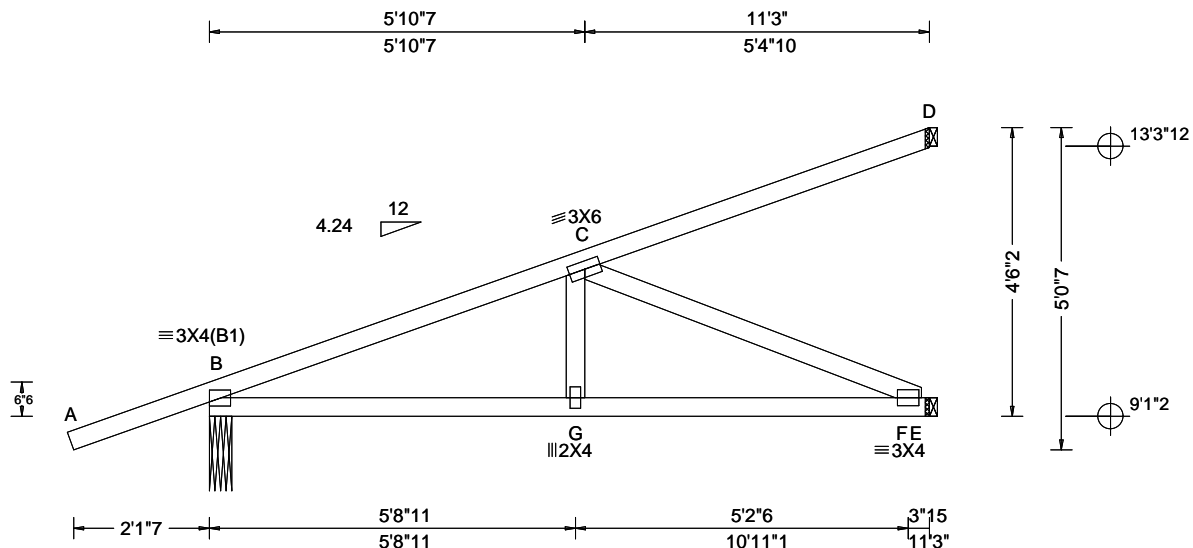
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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61811 FROM: RNB	HIP_	Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: HJ11	Cust: R 857 JRef: 1X718570008 T39 DrwNo: 194.21.1120.08670 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.037 G 999 360 VERT(CL): 0.070 G 999 240 HORZ(LL): 0.010 F - - HORZ(TL): 0.019 F - - Creep Factor: 2.0 Max TC CSI: 0.991 Max BC CSI: 0.713 Max Web CSI: 0.647 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 459 -/- /- /60 -/ E 462 -/- /- /22 -/ D 124 -/- /- /46 -/ Wind reactions based on MWFRS B Brg Width = 4.2 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp.

Lumber

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

Special Loads

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

TC: From	0 plf at	-2.22 to	55 plf at	-0.10
TC: From	2 plf at	-0.10 to	2 plf at	11.25
BC: From	0 plf at	-2.22 to	4 plf at	-0.10
BC: From	2 plf at	0.00 to	2 plf at	11.25
TC:	33 lb Conc. Load at	2.79		
TC:	177 lb Conc. Load at	5.62		
TC:	291 lb Conc. Load at	8.45		
BC:	68 lb Conc. Load at	2.79		
BC:	146 lb Conc. Load at	5.62		
BC:	223 lb Conc. Load at	8.45		

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

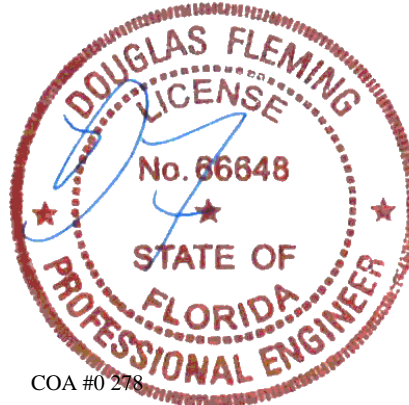
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	70	-2.17	11.25
BC	120	0.19	11.25

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

Wind loads and reactions based on MWFRS.

Wind loading based on both gable and hip roof types.



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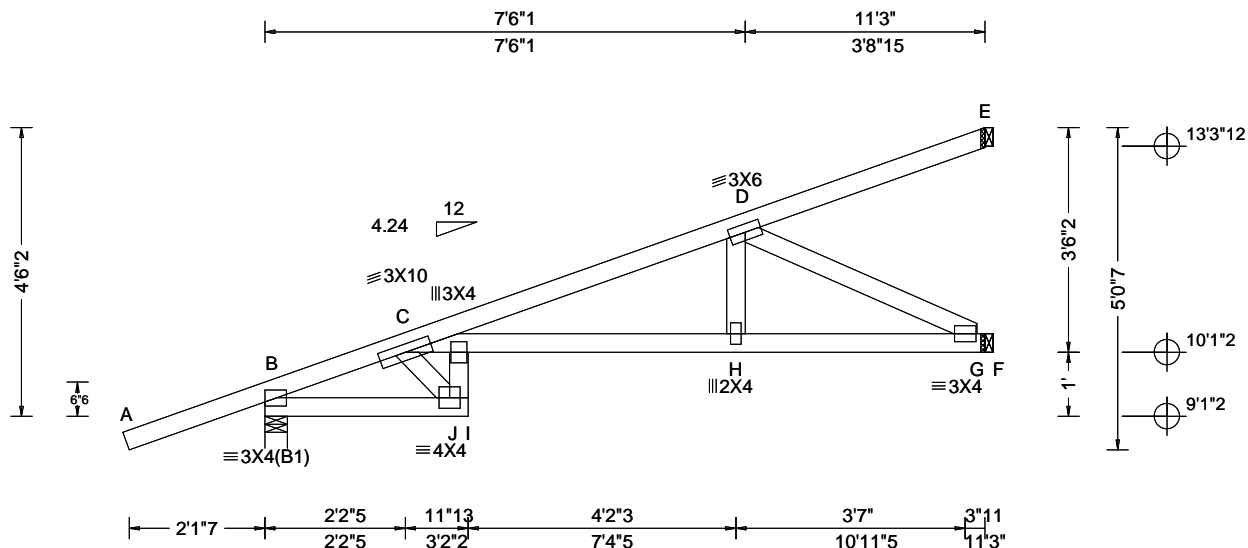
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6750 Forum Drive
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Orlando FL, 32821

SEQN: 61820 FROM: RNB	HIP_	Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: HJ11A	Cust: R 857 JRef: 1X718570008 T9 DrwNo: 194.21.1120.14820 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.187 I 716 360 VERT(CL): 0.356 I 376 240 HORZ(LL): 0.061 G - - HORZ(TL): 0.116 G - - Creep Factor: 2.0 Max TC CSI: 0.975 Max BC CSI: 0.845 Max Web CSI: 0.447 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B 432 -/- /- /- /60 -/- F 519 -/- /- /- /59 -/- E 22 -/- /- /- /10 -/- Wind reactions based on MWFRS B Brg Width = 4.2 Min Req = 1.5 F Brg Width = 1.5 Min Req = - E Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

Lumber	Hangers / Ties	Maximum Bot Chord Forces Per Ply (lbs)
Top chord: 2x4 SP #1; Bot chord: 2x4 SP #1; Webs: 2x4 SP #3; Special Loads ----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25) TC: From 0 plf at -2.22 to 55 plf at -0.10 TC: From 2 plf at -0.10 to 2 plf at 11.25 BC: From 0 plf at -2.22 to 4 plf at -0.10 BC: From 2 plf at 0.00 to 2 plf at 11.25 TC: 33 lb Conc. Load at 2.79 TC: 200 lb Conc. Load at 5.62 TC: 315 lb Conc. Load at 8.45 BC: 68 lb Conc. Load at 2.79 BC: 82 lb Conc. Load at 5.62 BC: 166 lb Conc. Load at 8.45	Bearing at location x=11'3" ,y=10'1"2 uses the following support conditions: 11'3" Bearing F (11'3", 10'1"2) THJU26 Supporting Member: Unavailable (16) 0.148"x3" nails into supporting member, (8) 0.148"x3" nails into supported member. Recommended tie connection based on manufacturer tested capacities and calculations for vertical reactions. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.	Chords Tens.Comp. Chords Tens. Comp. B - C 86 -555 C - D 157 -1158 Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. C - I 116 -737 H - D 400 0 J - I 559 -66 D - G 157 -1196

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

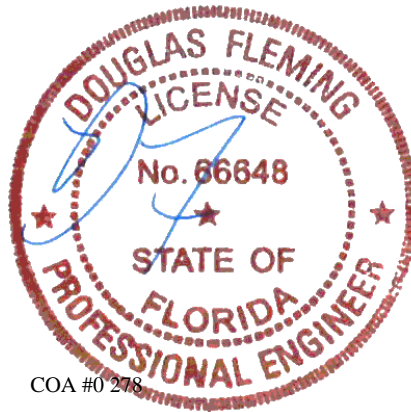
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	53	-2.17	11.25
BC	36	0.19	3.18
BC	109	2.15	11.25

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

Wind loads and reactions based on MWFRS.

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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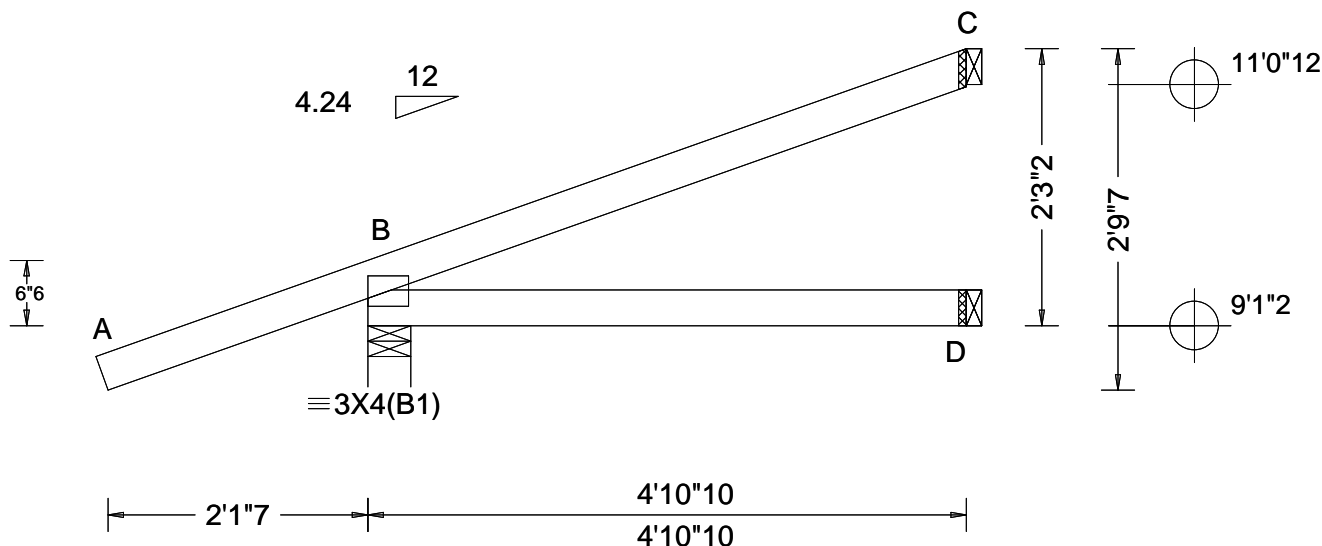
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AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61829 FROM: RNB	HIP_	Ply: 1 Qty: 2	Job Number: B53392a Busscher SPec Truss Label: HJ5	Cust: R 857 JRef: 1X718570008 T38 DrwNo: 194.21.1120.17410 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.001 D - - HORZ(TL): 0.003 D - - Creep Factor: 2.0 Max TC CSI: 0.092 Max BC CSI: 0.169 Max Web CSI: 0.000 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 188 /- /- /- /41 /- D 88 /- /- /2 /- /- C 33 /-4 /- /- /12 /- Wind reactions based on MWFRS B Brg Width = 4.2 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375#

Lumber

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

Special Loads

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

TC: From 0 plf at -2.22 to 55 plf at -0.10
TC: From 2 plf at -0.10 to 2 plf at 4.89
BC: From 0 plf at -2.22 to 4 plf at -0.10
BC: From 2 plf at 0.00 to 2 plf at 4.89
TC: -9 lb Conc. Load at 2.08
BC: 47 lb Conc. Load at 2.08

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

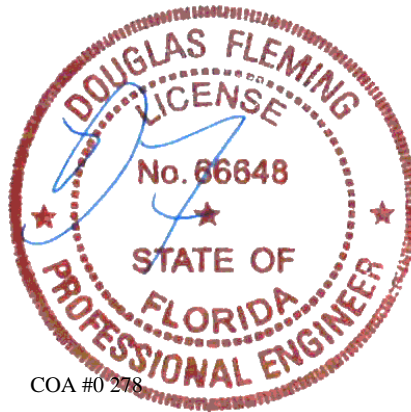
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-2.17	4.89
BC	56	0.19	4.89

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

Wind loads and reactions based on MWFRS.

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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

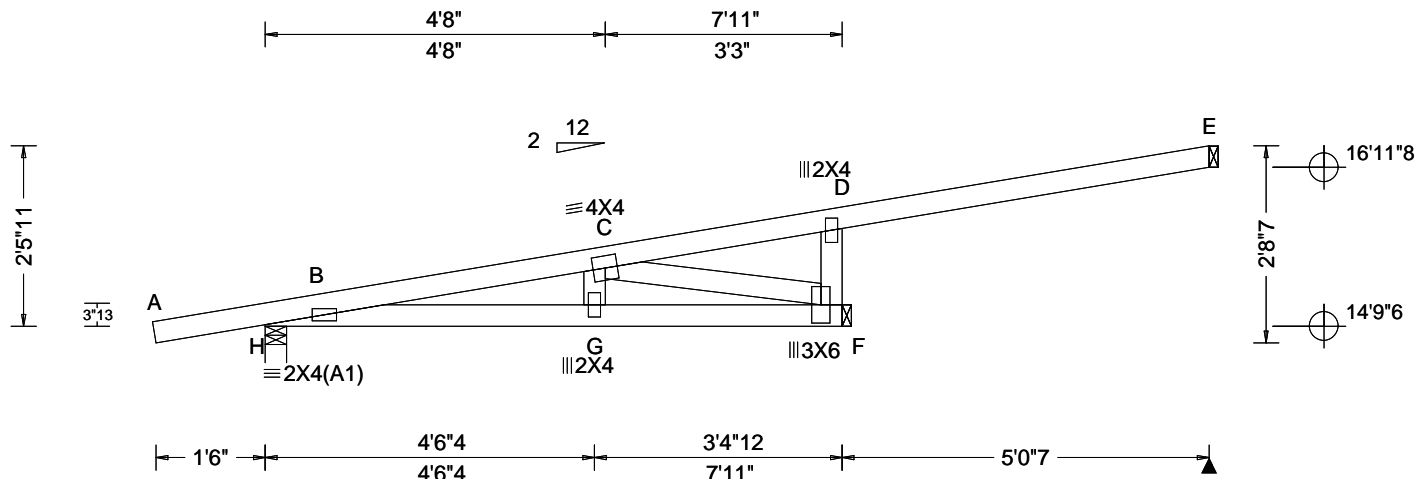
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ALPINE
AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61934 FROM: RNB	MONO Ply: 1 Qty: 3	Job Number: B53392a Busscher SPec Truss Label: M1	Cust: R 857 JRef: 1X718570008 T20 DrwNo: 194.21.1120.20847 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.05 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.020 G 999 360 VERT(CL): 0.036 G 999 240 HORZ(LL): 0.004 F - - HORZ(TL): 0.007 F - - Creep Factor: 2.0 Max TC CSI: 0.523 Max BC CSI: 0.184 Max Web CSI: 0.167 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL H 390 - / - / 187 / 81 / 74 F 462 - / - / 187 / 104 / - E 112 - / - / 29 / 44 / - Non-Gravity Wind reactions based on MWFRS H Brg Width = 3.5 Min Req = 1.5 F Brg Width = 1.5 Min Req = - E Brg Width = 1.5 Min Req = - Bearing H Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp.

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

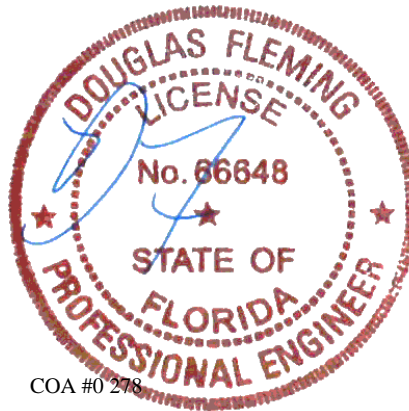
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-1.52	12.95
BC	93	0.15	7.92

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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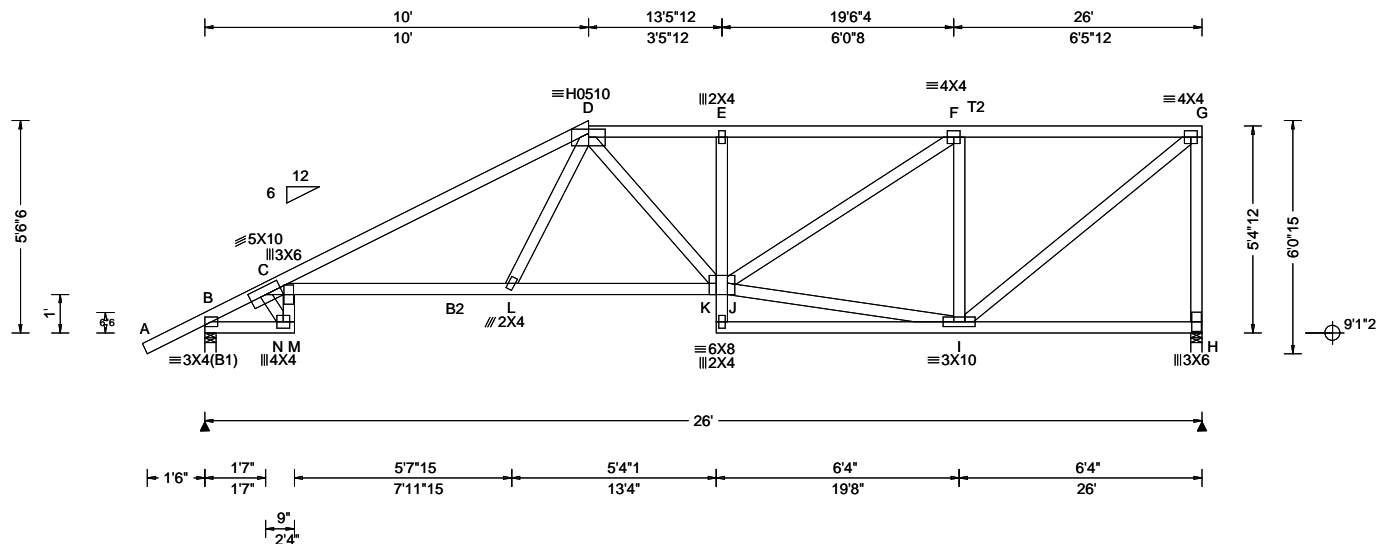
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AN ITW COMPANY
6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61881 FROM: RNB	HIPM Ply: 1 Qty: 1	Job Number: B53392a Busscher SPec Truss Label: MH1	Cust: R 857 JRef: 1X718570008 T46 DrwNo: 194.21.1120.55093 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/defl L/# VERT(LL): 0.389 M 799 360 VERT(CL): 0.726 M 428 240 HORZ(LL): 0.188 I - - HORZ(TL): 0.350 I - - Creep Factor: 2.0 Max TC CSI: 0.989 Max BC CSI: 0.863 Max Web CSI: 0.676 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 1084 - / - / - /602 /105 /184 H 977 - / - / - /478 /96 - /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 H Brg Width = 3.5 Min Req = 1.5 Bearings B & H Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 419 - 1318 E - F 663 - 1589 C - D 630 - 2013 F - G 472 - 976 D - E 667 - 1597

Lumber

Top chord: 2x4 SP SS Dense; T2 2x4 SP #1;
Bot chord: 2x4 SP #1; B2 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	35	-1.57	10.00
TC	24	10.00	26.00
BC	26	0.17	2.33
BC	89	1.52	13.48
BC	120	13.48	26.00

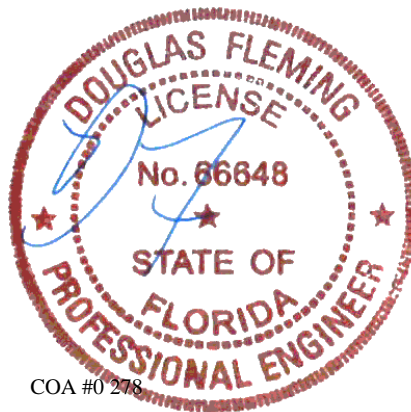
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

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

Wind loading based on both gable and hip roof types.

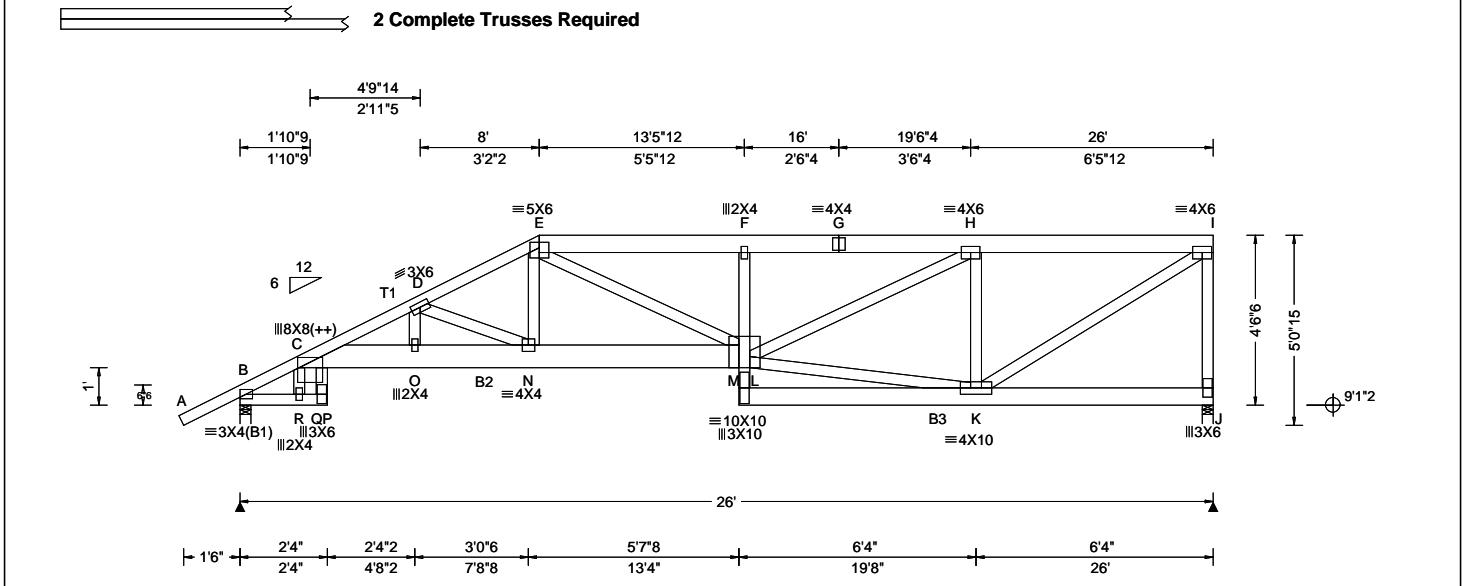


COA #0 278

07/13/2021

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



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 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	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: No FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.229 N 999 360 VERT(CL): 0.425 N 731 240 HORZ(LL): 0.155 K - - HORZ(TL): 0.288 K - - Creep Factor: 2.0 Max TC CSI: 0.990 Max BC CSI: 0.759 Max Web CSI: 0.740 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 2362 - / - / - / - /308 - / - J 2050 - / - / - / - /238 - / - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.6 J Brg Width = 3.5 Min Req = 1.5 Bearings B & J Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. C - D 442 -3507 F - G 401 -3115 D - E 382 -2986 G - H 401 -3115 E - F 404 -3134 H - I 174 -1476

Lumber
Top chord: 2x6 SP #1; T1 2x4 SP SS Dense;
Bot chord: 2x4 SP SS Dense; B2 2x8 SP SS Dense;
B3 2x6 SP #1;
Webs: 2x4 SP #3;

Nailnote
Nail Schedule: 0.128"x3", min. nails
Top Chord: 1 Row @12.00" o.c.
Bot Chord: 1 Row @12.00" 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 56 plf at -1.63 to 56 plf at 8.00
TC: From 28 plf at 8.00 to 28 plf at 16.00
TC: From 56 plf at 16.00 to 56 plf at 26.00
BC: From 4 plf at -1.63 to 4 plf at 0.00
BC: From 20 plf at 0.00 to 20 plf at 8.06
BC: From 10 plf at 8.06 to 10 plf at 15.27
BC: From 20 plf at 15.27 to 20 plf at 26.00
TC: 82 lb Conc. Load at 8.06
TC: 59 lb Conc. Load at 10.13, 12.13
TC: 91 lb Conc. Load at 14.13
TC: 89 lb Conc. Load at 15.27
BC: 760 lb Conc. Load at 8.06
BC: 241 lb Conc. Load at 10.13, 12.13
BC: 202 lb Conc. Load at 14.13
BC: 822 lb Conc. Load at 15.27

Plating Notes
(++) - This plate works for both joints covered.
Plates sized for a minimum of 3.50 sq.in./piece.

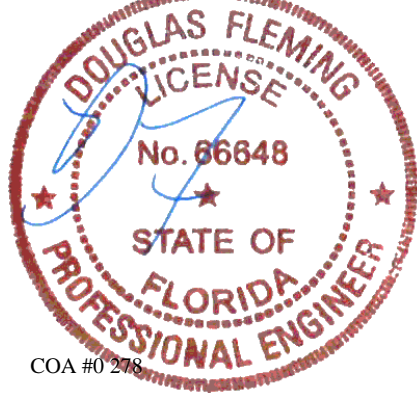
Purlins
In lieu of structural panels or rigid ceiling use purlins
to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	44	-1.57	8.00
TC	24	8.00	26.00
BC	26	0.17	2.33
BC	120	1.52	13.48
BC	120	13.48	26.00

Apply purlins to any chords above or below fillers
at 24" OC unless shown otherwise.

Maximum Bot Chord Forces Per Ply (lbs)	Chords	Tens.Comp.	Chords	Tens. Comp.
C - Q 2939 -369	O - N 3204 -401			
Q - O 3216 -401	N - L 2569 -329			

Maximum Web Forces Per Ply (lbs)	Webs	Tens.Comp.	Webs	Tens. Comp.
C - R 221 -1741	L - H 1774 -245			
Q - P 1182 -141	L - K 1420 -168			
D - N 73 -616	H - K 175 -980			
N - E 901 -75	K - I 1755 -207			
E - L 646 -85	I - J 135 -1022			
L - M 381 -20				



COA #0 278
07/13/2021

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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61918	HIPM	Ply: 2	Job Number: B53392a	Cust: R 857 JRef: 1X718570008 T7
FROM: RNB		Qty: 1	Busscher SPec	DrwNo: 194.21.1121.09010
Page 2 of 2			Truss Label: MHG1	JB / DF 07/13/2021

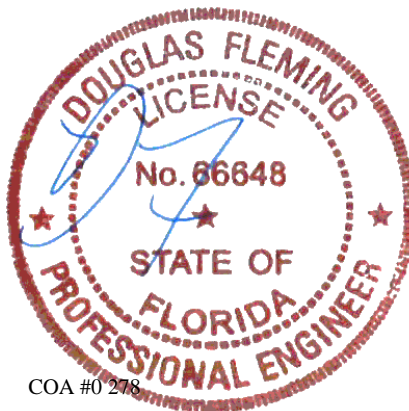
Wind

Wind loads and reactions based on MWFRS.

Right end vertical exposed to wind pressure.

Deflection meets L/180.

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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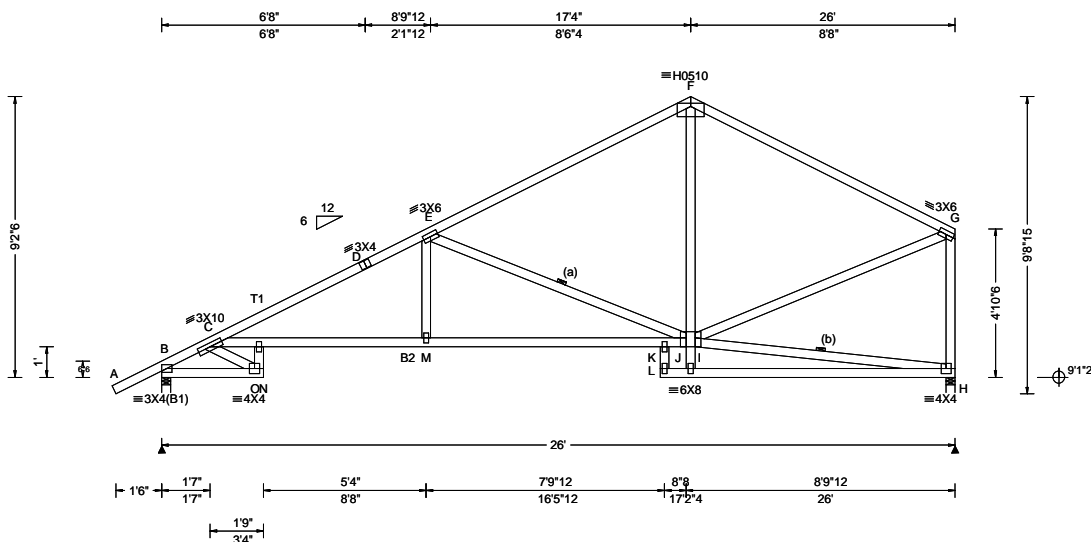
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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61868 FROM: RNB	SPEC Ply: 1 Qty: 2	Job Number: B53392a Busscher Spec Truss Label: S1	Cust: R 857 JRef: 1X718570008 T12 DrwNo: 194.21.1121.13110 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.428 N 726 360 VERT(CL): 0.799 N 388 240 HORZ(LL): 0.156 H - - HORZ(TL): 0.291 H - - Creep Factor: 2.0 Max TC CSI: 0.993 Max BC CSI: 0.748 Max Web CSI: 0.927 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 1084 -/- /- /609 -/- /250 H 977 -/- /- /478 -/- /- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 H Brg Width = 3.5 Min Req = 1.5 Bearings B & H Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 253 -1283 E - F 219 -971 C - D 265 -1994 F - G 197 -952 D - E 274 -1866

Lumber

Top chord: 2x4 SP #1; T1 2x4 SP SS Dense;
Bot chord: 2x4 SP #1; B2 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Bracing

(b) 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.
(a) 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.

Plating Notes

All plates are 2X4 except as noted.
Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	26	-1.57	17.33
BC	38	0.17	3.33
BC	112	1.52	17.33
BC	116	16.33	26.00

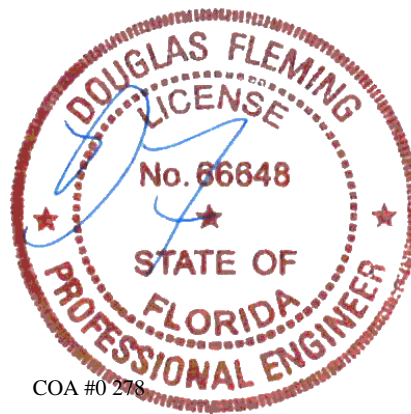
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

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

Wind loading based on both gable and hip roof types.



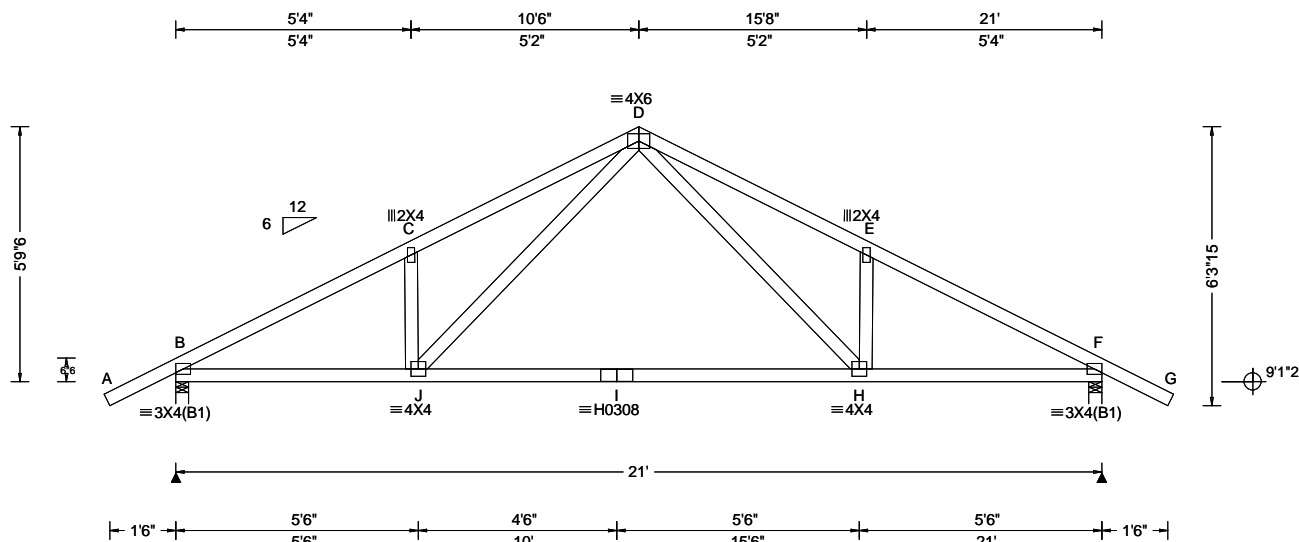
COA #0 278

07/13/2021

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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61840 FROM: RNB	COMN Ply: 1 Qty: 11	Job Number: B53392a Busscher SPec Truss Label: T-1	Cust: R 857 JRef: 1X718570008 T1 DrwNo: 194.21.1121.16970 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.055 J 999 360 VERT(CL): 0.101 J 999 240 HORZ(LL): 0.024 H - - HORZ(TL): 0.045 H - - Creep Factor: 2.0 Max TC CSI: 0.996 Max BC CSI: 0.546 Max Web CSI: 0.201 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 888 - / - / - /484 /87 /138 F 888 - / - / - /484 /87 - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 F Brg Width = 3.5 Min Req = 1.5 Bearings B & F Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 363 -1314 D - E 469 -1273 C - D 468 -1273 E - F 362 -1314

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	60	-1.57	10.50
TC	60	10.50	22.57
BC	120	0.17	20.83

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

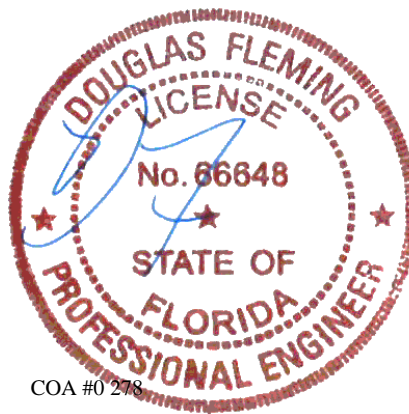
Loading

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

Wind

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

Wind loading based on both gable and hip roof types.

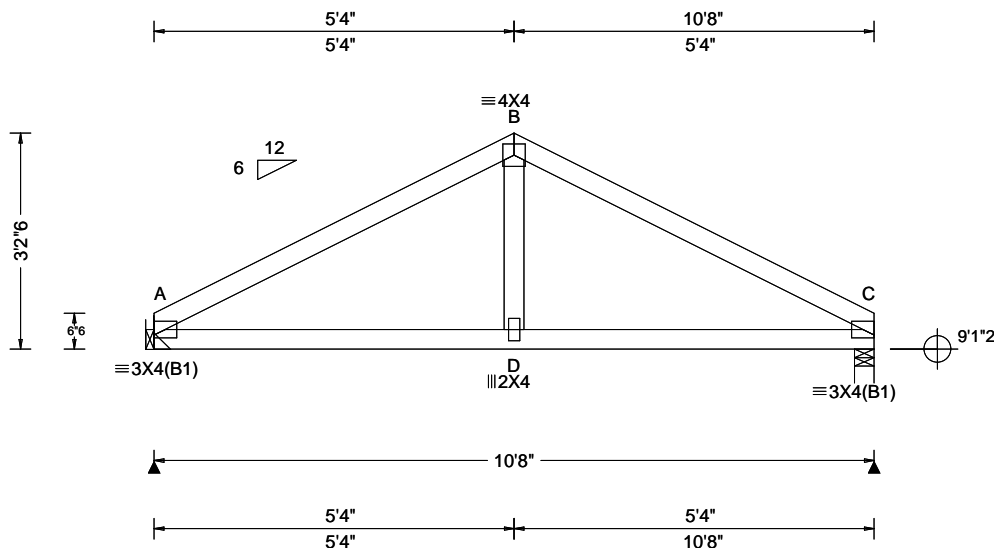


COA #0 278

07/13/2021

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



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.006 D 999 360 VERT(CL): 0.012 D 999 240 HORZ(LL): 0.003 D - - HORZ(TL): 0.006 D - - Creep Factor: 2.0 Max TC CSI: 0.317 Max BC CSI: 0.192 Max Web CSI: 0.087 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL A 403 -/- /- /211 /32 /53 C 403 -/- /- /211 /32 -/ Wind reactions based on MWFRS A Brg Width = - Min Req = - C Brg Width = 3.5 Min Req = 1.5 Bearing C Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 216 -530 B - C 215 -530 Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - D 419 -129 D - C 419 -129

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

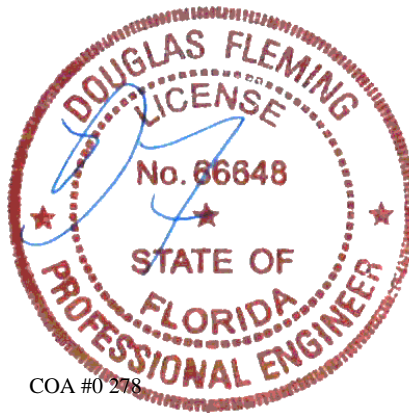
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	70	0.10	5.33
TC	70	5.33	10.56
BC	120	0.17	10.50

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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SEQN: 61885	COMN	Ply: 1	Job Number: B53392a	Cust: R 857 JRef: 1X718570008 T19
FROM: RNB		Qty: 3	Busscher SPec	DrwNo: 194.21.1121.21550
Page 2 of 2			Truss Label: T-2	JB / DF 07/13/2021

Hangers / Ties

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

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

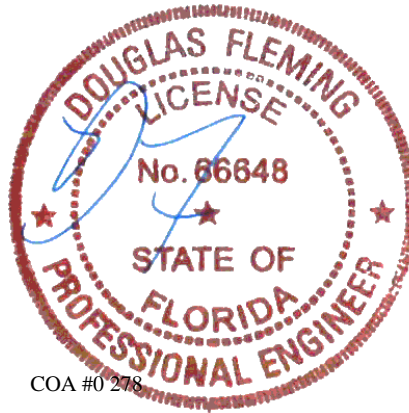
Bearing at location x=0' uses the following support conditions: 0'

Bearing A (0', 9'1"2) HUS26

Supporting Member: (1)2x6 SP #1

(14) 0.148"x3" nails into supporting member,

(4) 0.148"x3" nails into supported member.



COA #0 278

07/13/2021

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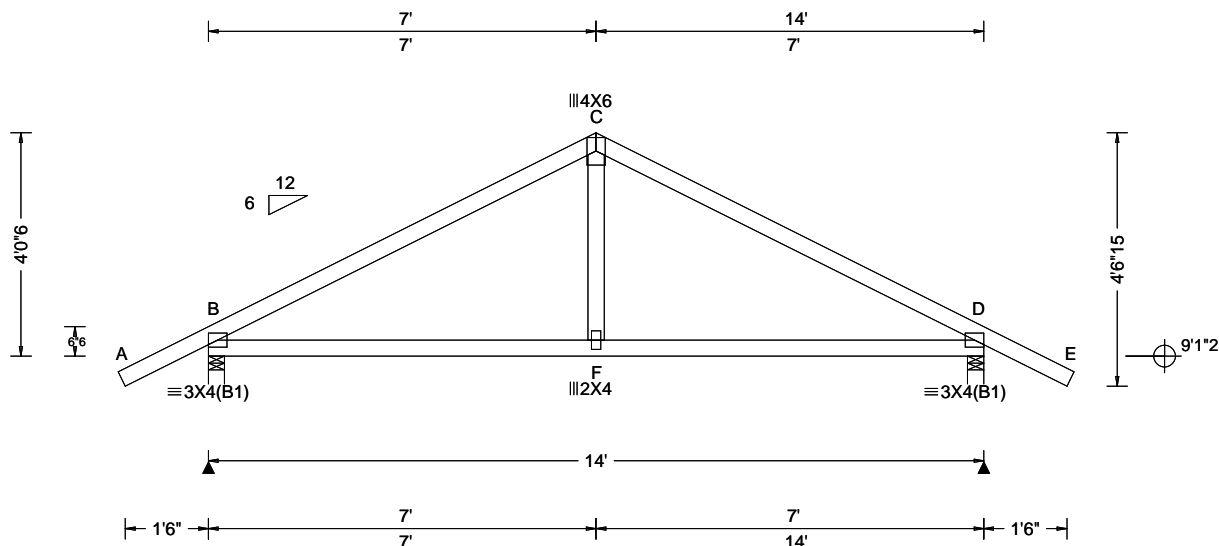
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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61842 FROM: RNB	COMN Ply: 1 Qty: 4	Job Number: B53392a Busscher SPec Truss Label: T-3	Cust: R 857 JRef: 1X718570008 T11 DrwNo: 194.21.1121.24293 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.012 F 999 360 VERT(CL): 0.021 F 999 240 HORZ(LL): 0.005 F - - HORZ(TL): 0.010 F - - Creep Factor: 2.0 Max TC CSI: 0.703 Max BC CSI: 0.326 Max Web CSI: 0.116 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 624 - / - / 347 / 65 / 103 D 624 - / - / 347 / 65 / - Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 D Brg Width = 3.5 Min Req = 1.5 Bearings B & D Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 290 -692 C - D 290 -692

Lumber

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

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

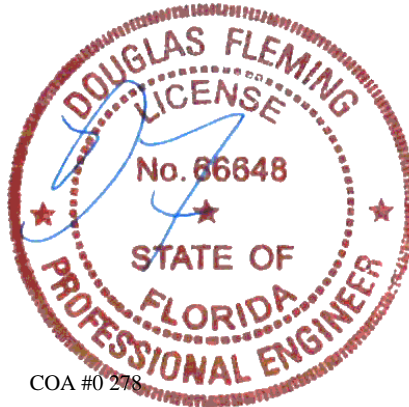
Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-1.57	7.00
TC	75	7.00	15.57
BC	120	0.17	13.83

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind

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

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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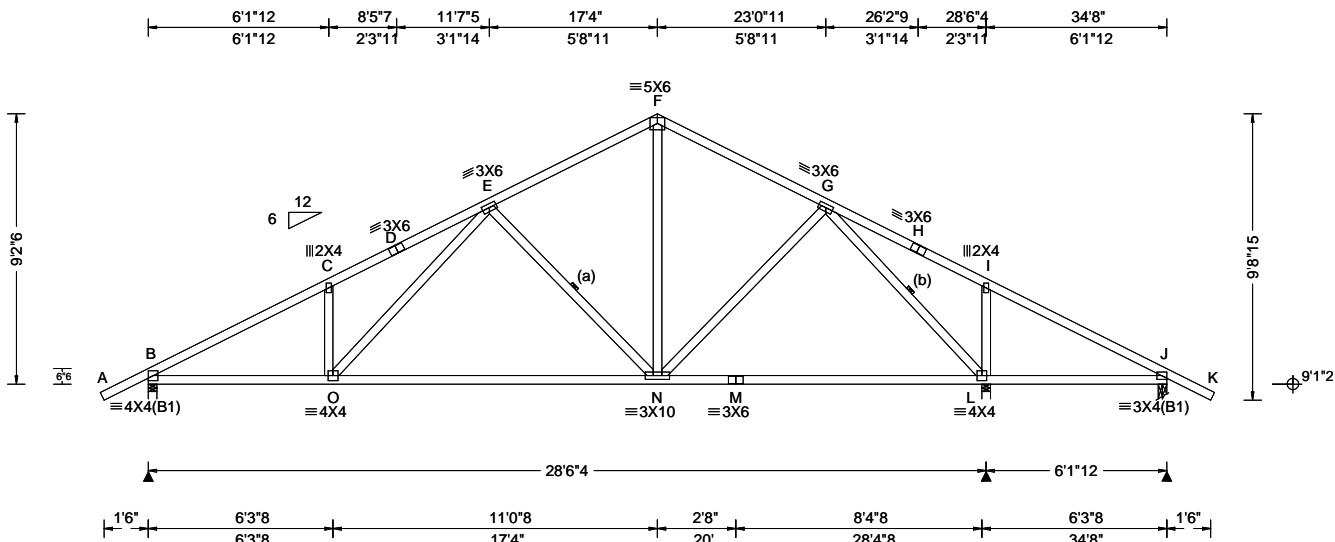
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6750 Forum Drive
Suite 305
Orlando FL, 32821

SEQN: 61925 FROM: RNB	COMN Ply: 1 Qty: 5	Job Number: B53392a Busscher Spec Truss Label: T-4	Cust: R 857 JRef: 1X718570008 T15 DrwNo: 194.21.1121.30837 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.47 ft Loc. from endwall: not in 9.00 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.075 C 999 360 VERT(CL): 0.141 O 999 240 HORZ(LL): 0.026 L - - HORZ(TL): 0.048 L - - Creep Factor: 2.0 Max TC CSI: 0.998 Max BC CSI: 0.807 Max Web CSI: 0.891 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL B 1139 -/- /- /636 -/- /212 L 1500 -/- /- /751 -/- /- J 282 -/66 -/- /147 /65 -/- Non-Gravity Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 L Brg Width = 3.5 Min Req = 1.9 J Brg Width = 3.5 Min Req = 1.5 Bearings B, L, & J Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

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 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.
(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.

Plating Notes

Plates sized for a minimum of 3.50 sq.in./piece.

Purlins

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	49	-1.57	17.33
TC	75	17.33	36.23
BC	75	0.17	34.50

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Loading

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

Wind

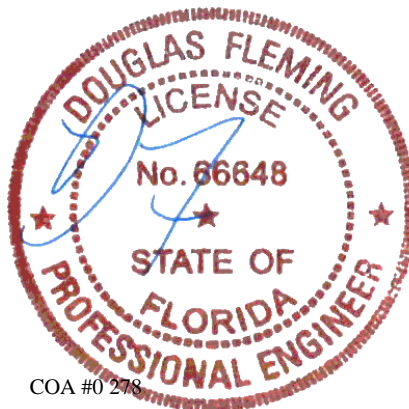
Wind loads based on MWFRS with additional C&C member design.
Wind loading based on both gable and hip roof types.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - C	205 -1790	E - F	230 -947
C - D	271 -1742	F - G	224 -945
D - E	284 -1683	G - H	388 -3

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
O - E	552 -46	F - N	514 -46
E - N	174 -526	G - L	145 -1325



COA #0 278

07/13/2021

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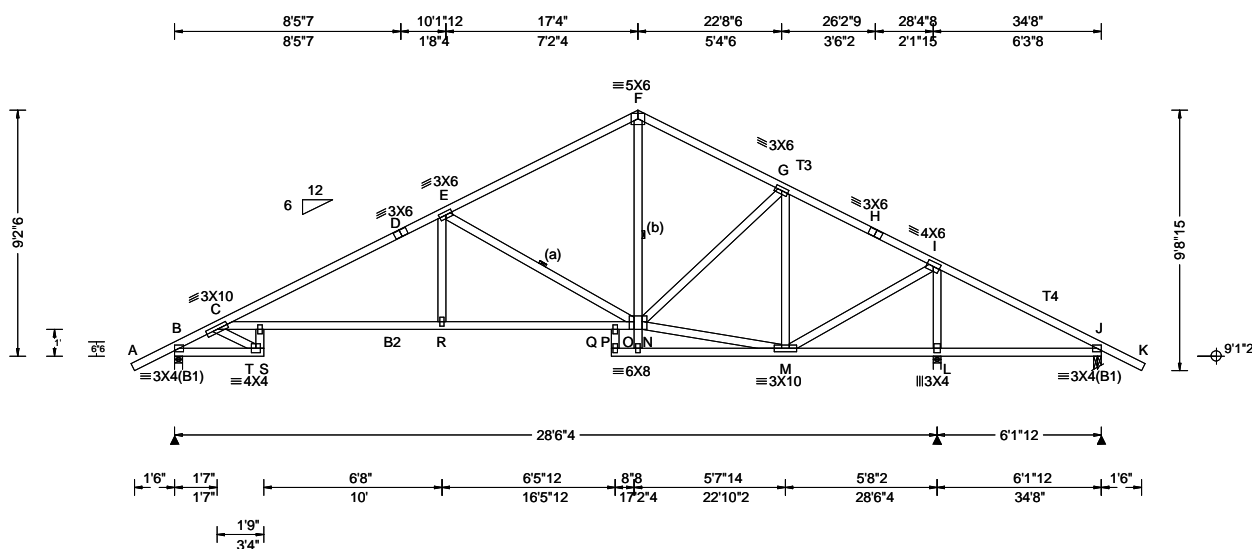
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Suite 305
Orlando FL, 32821

SEQN: 61865 FROM: RNB	COMN Ply: 1 Qty: 2	Job Number: B53392a Busscher Spec Truss Label: T-5	Cust: R 857 JRRef: 1X718570008 T16 DrwNo: 194.21.1121.34250 JB / DF 07/13/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 140 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.47 ft Loc. from endwall: not in 9.00 ft GCp: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.538 S 634 360 VERT(CL): 0.993 S 343 240 HORZ(LL): 0.184 M - - HORZ(TL): 0.342 M - - Creep Factor: 2.0 Max TC CSI: 0.993 Max BC CSI: 1.000 Max Web CSI: 0.849 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity B 1043 -/- /- /572 -/- /212 L 2104 -/- /- /1088 -/- /- J 65 -524 -/- /127 /336 -/- Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 L Brg Width = 3.5 Min Req = 2.6 J Brg Width = 3.5 Min Req = 1.5 Bearings B, L, & J Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

Lumber
Top chord: 2x4 SP SS Dense; T3,T4 2x4 SP #1;
Bot chord: 2x4 SP #1; B2 2x4 SP SS Dense;
Webs: 2x4 SP #3;

Bracing
(b) Continuous lateral restraint equally spaced on member.
(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 2X4 except as noted.
Plates sized for a minimum of 3.50 sq.in./piece.

Purlins
In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	42	-1.57	17.33
TC	75	17.33	36.23
BC	38	0.17	3.33
BC	104	1.52	17.33
BC	66	16.33	34.50

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Loading

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

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

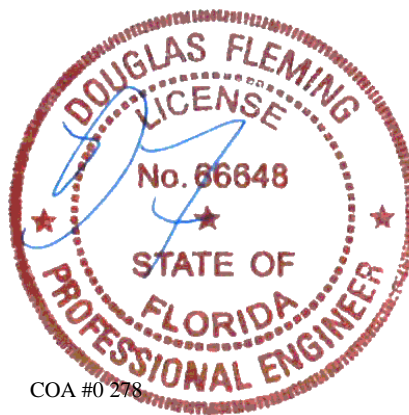
Additional Notes
Negative reaction(s) of -524# MAX. from a non-wind load case requires uplift connection. See Maximum Reactions.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - S	959 -205	P - N	1452 -76
C - T	1537 -89	M - L	158 -1096
T - R	1501 -78	L - J	165 -1140
R - P	1494 -80		

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
C - S	247 -1137	N - G	462 -49
T - S	545 -91	N - M	417 0
R - E	462 0	G - M	110 -764
E - N	180 -985	M - I	1660 -116
F - N	425 -31	I - L	278 -1878



COA #0 278
07/13/2021

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

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

Lumber	Bearing Block(s)	C - D	371 - 2929	E - F	583 - 4730
Top chord: 2x4 SP #1;	Brg blocks: 0.128"x3", min. nails	Maximum Bot Chord Forces Per Ply (lbs)			
Bot chord: 2x8 SP SS Dense;	Brg x-loc #blocks length/blk #nails/blk wall plate	Chords	Tens.Comp.	Chords	Tens. Comp.
Webs: 2x4 SP #3;	2 13.708' 1 12" 4 SPF Standard	B - H	2681 - 362	G - F	4190 - 510
Special Loads	Brg block to be same size and species as chord.	H - G	4124 - 504		
----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)	Refer to drawing CNNAILSP1014 for more information.	Maximum Web Forces Per Ply (lbs)			
TC: From 56 plf at -1.63 to 56 plf at 14.00		Webs	Tens.Comp.	Webs	Tens. Comp.
BC: From 4 plf at -1.63 to 4 plf at 0.00		D - H	2356 - 255	E - G	1626 - 155
BC: From 20 plf at 0.00 to 20 plf at 8.06		H - E	215 - 1803		
BC: From 10 plf at 8.06 to 10 plf at 14.00					
BC: 1766 lb Conc. Load at 8.06					
BC: 721 lb Conc. Load at 10.06					
BC: 1078 lb Conc. Load at 12.06					

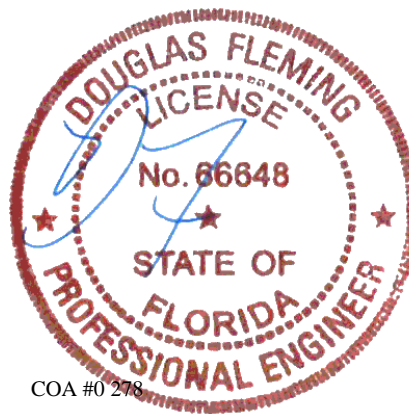
Plates sized for a minimum of 3.50 sq.in./piece.

In lieu of structural panels or rigid ceiling use purlins to laterally brace chords as follows:

Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind loads and reactions based on MWFRS.

Wind loading based on both gable and hip roof types.



COA #0 278

07/13/2021

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

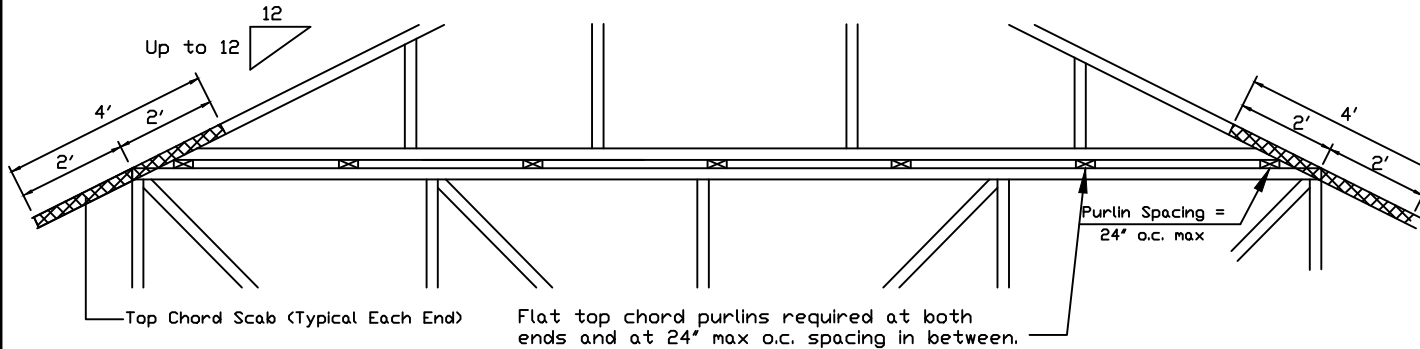
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

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

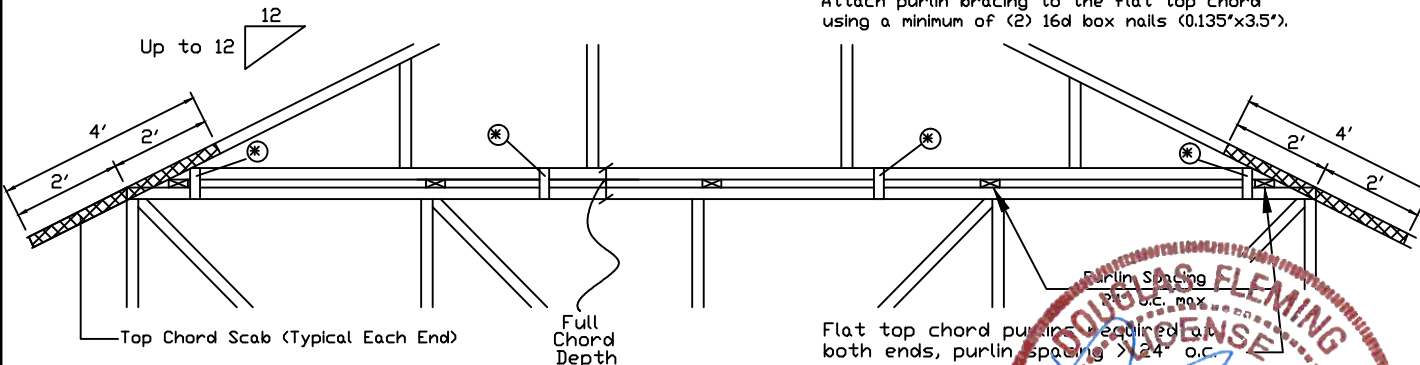


Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4' o.c.

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").

* In addition, provide connection with one of the following methods:

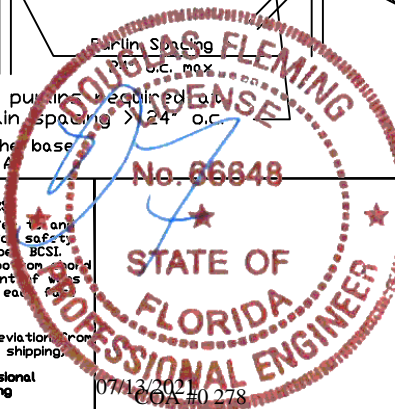
Trulox Use 3X8 Trulox plates for 2x4 chord member, and 3X10 Trulox plates for 2x6 and larger chord members. Attach to each face @ 8' o.c. with (4) 0.120"x1.375" nails into cap bottom chord and (4) in base truss top chord. Trulox plates may be staggered 4' o.c. front to back faces.
APA Rated Gusset 8"x8"x7/16" (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.

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.



13723 Riverport Drive
Suite 200
Maryland Heights, MO 63043

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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.

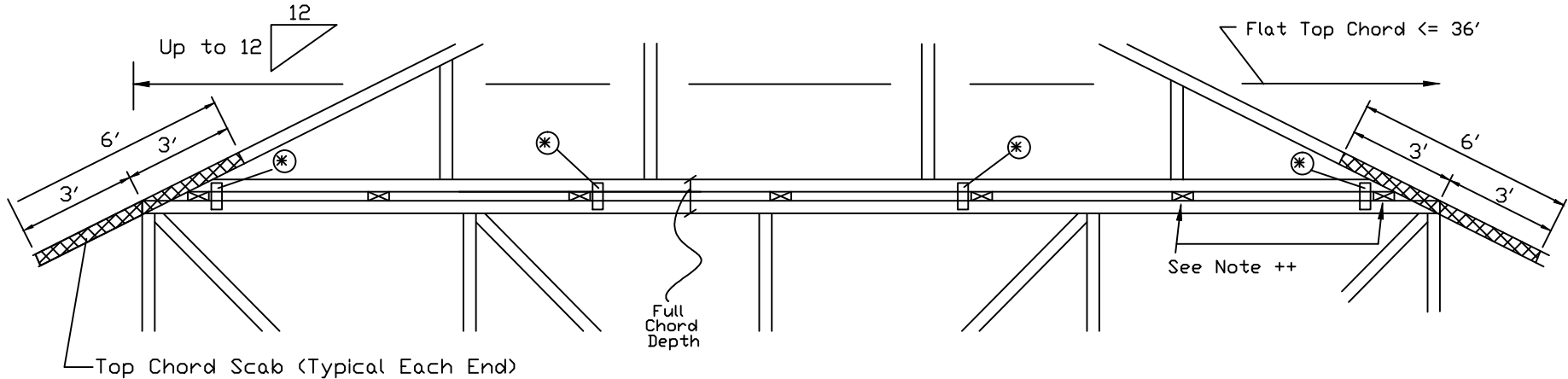
Note: Top chords of trusses supporting piggyback cap trusses must be adequately braced by sheathing or purlins. The building Engineer of Record shall provide diagonal bracing or any other suitable anchorage to permanently restrain purlins, and lateral bracing for out of plane loads over gable ends.

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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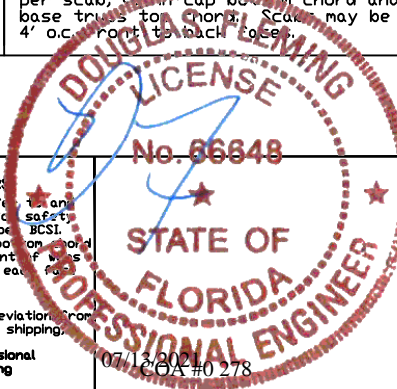
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514 Earth City Expressway
Suite 242
Earth City, MO 63045



REF PIGGYBACK

DATE 01/02/2018

DRWG PB180160118

SPACING 24.0"

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.

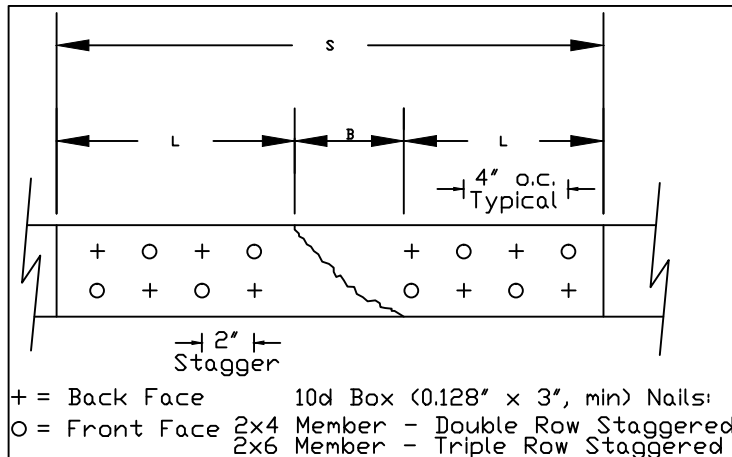
This repair detail may not be used for damaged chord or web sections occurring within the connector plate area.

Broken chord may not support any tie-in loads.

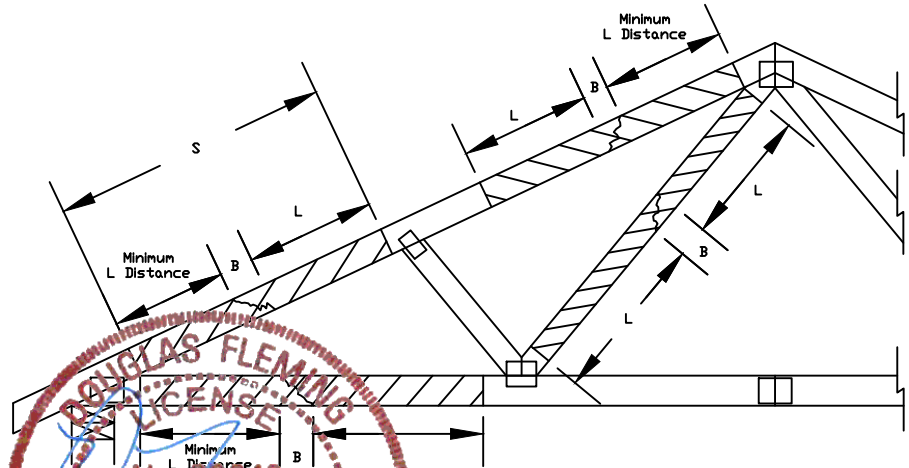
Load Duration = 0%

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#



Nail Spacing Detail



514 Earth City Expressway
Suite 242
Earth City, MO 63045

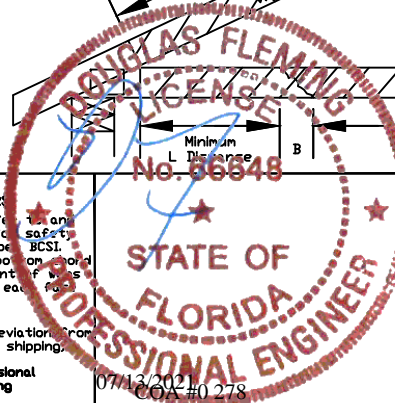
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REF MEMBER REPAIR
DATE 10/01/14
DRWG REPCHRD1014

SPACING 24.0" MAX

Gable Stud Reinforcement Detail

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

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

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

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

Max Gable Vertical Length	2x4 Gable Vertical		Brace Grade	No Braces	(1) 1x4 "L" Brace *		(1) 2x4 "L" Brace *		(2) 2x4 "L" Brace **		(1) 2x6 "L" Brace *		(2) 2x6 "L" Brace **		
	Spacing	Species			Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	
	24" O.C.	SPF	#1 / #2	4' 3"	7' 3"	7' 7"	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		#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"		
DFL		Standard	4' 0"	5' 3"	5' 7"	7' 0"	7' 6"	9' 6"	10' 2"	11' 0"	11' 10"	14' 0"	14' 0"		
		#1 / #2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"		
		16" O.C.	SPF	#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"		
#1	5' 1"			8' 5"	8' 9"	9' 11"	10' 4"	11' 10"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"		
SP	#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"		
	DFL		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	#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	#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"		
		DFL	#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		Hem-Fir	
#1 / #2	Standard	#2	Stud
#3	Stud	#3	Standard
Douglas Fir-Larch		Southern Pine***	
#3	Stud	#3	Stud
Standard	Standard	Standard	Standard

Group B:			
Hem-Fir			
#1 & Btr	#1		
Douglas Fir-Larch		Southern Pine***	
#1	#2	#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

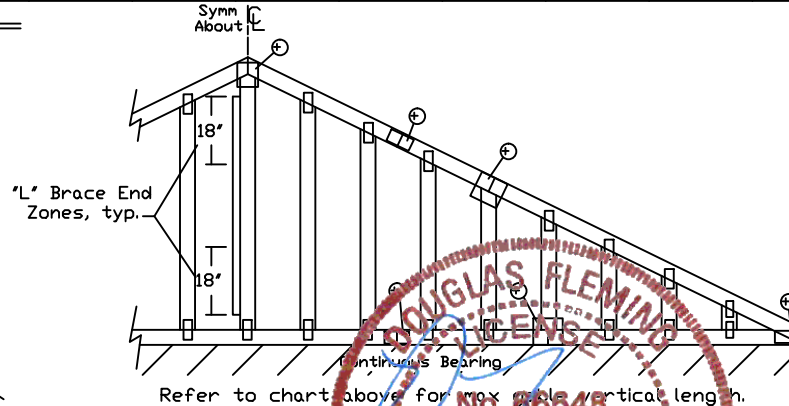
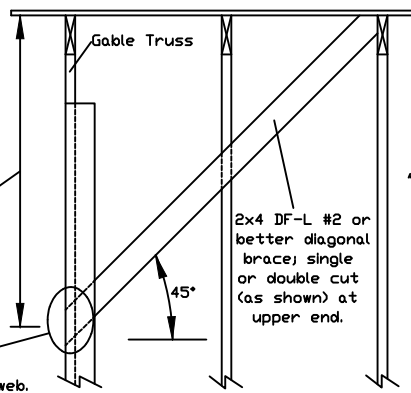
+ Refer to common truss design for peak, splice, and heel plates.

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

Diagonal brace option: vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450# at each end. Max web total length is 14'.

Vertical length shown in table above.

Connect diagonal at midpoint of vertical web.



Refer to chart above for max gable vertical length.

WARNING READ AND FOLLOW ALL NOTES ON THIS DRAWING
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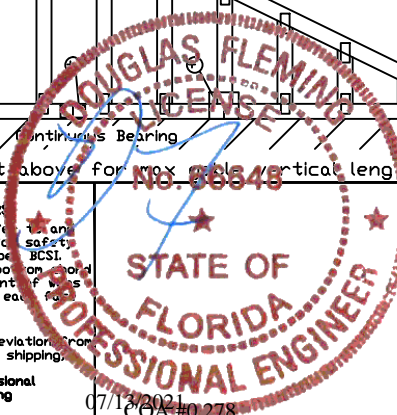
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MAX. TOT. LD. 60 PSF

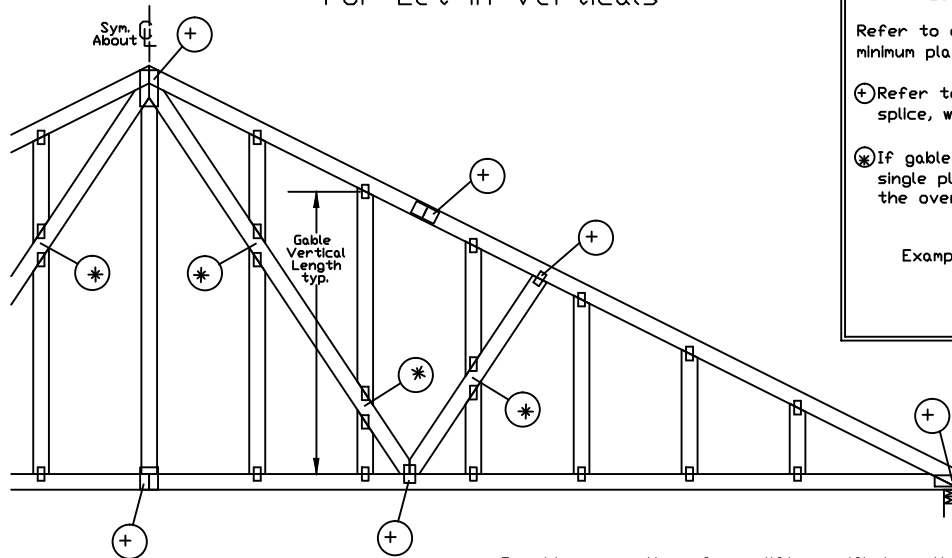
MAX. SPACING 24.0"

REF ASCE7-16-GAB14015

DATE 01/26/2018

DRWG A14015ENC160118

Gable Detail For Let-in Verticals



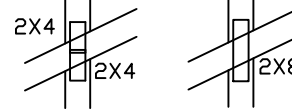
Gable Truss Plate Sizes

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

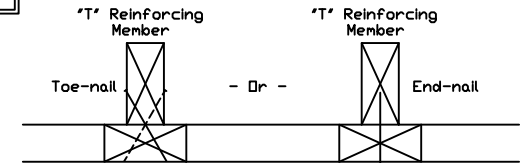
(+) Refer to Engineered truss design for peak, splice, web, and heel plates.

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

Example:



"T" Reinforcement Attachment Detail



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

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

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

Web Length Increase w/ "T" Brace

"T" Reinf. 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"

Provide connections for uplift specified on the engineered truss design.

Attach each "T" reinforcing member with

End Driven Nails:

10d Common (0.148"x3",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,

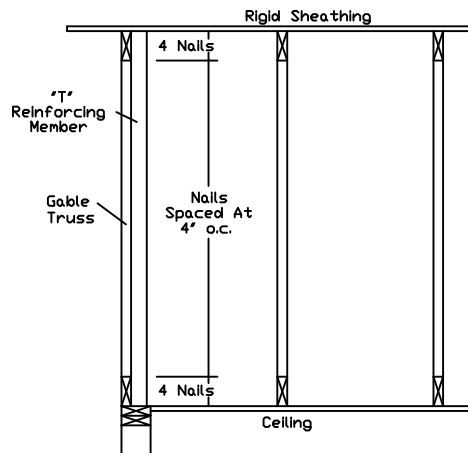
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S18015ENC100118, S20015ENC100118, S20015END100118, S20015PED100118,

S11530ENC100118, S12030ENC100118, S14030ENC100118, S16030ENC100118,

S18030ENC100118, S20030ENC100118, S20030END100118, S20030PED100118

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



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514 Earth City Expressway
Suite 242
Earth City, MO 63045

No. 66848

STATE OF

FLORIDA

PROFESSIONAL ENGINEER

07/12/2021 0 278

REF LET-IN VERT

DATE 01/02/2018

DRWG GBLLETIN0118

MAX. TOT. LD. 60 PSF

DUR. FAC. ANY

MAX. SPACING 24.0"

Gable Stud Reinforcement Detail

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

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

Or: 120 mph Wind Speed, 30' Mean Height, Enclosed, Exposure D, Kzt = 1.00

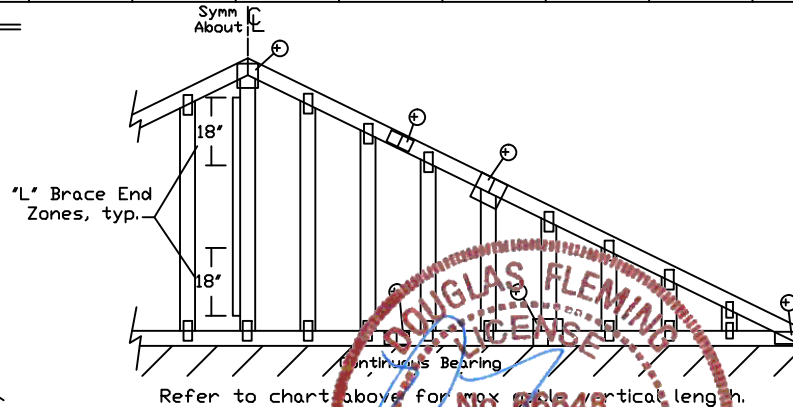
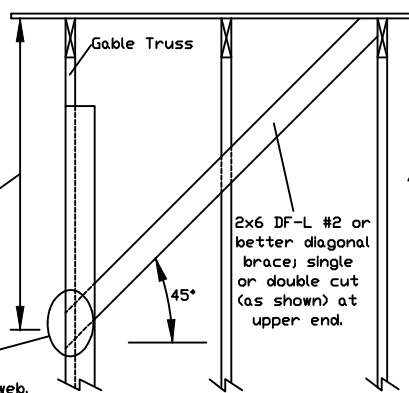
Or: 100 mph wind speed, 30' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

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

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

Vertical length shown in table above.

Connect diagonal at midpoint of vertical web.



Bracing Group Species and Grades:

Group A:			
Spruce-Pine-Fir		Hem-Fir	
#1 / #2	Standard	#2	Stud
#3	Stud	#3	Standard
Douglas Fir-Larch		Southern Pine***	
#3		#3	
Stud		Stud	
Standard		Standard	

Group B:			
Hem-Fir			
#1 & Btr			
#1			
Douglas Fir-Larch		Southern Pine***	
#1		#1	
#2		#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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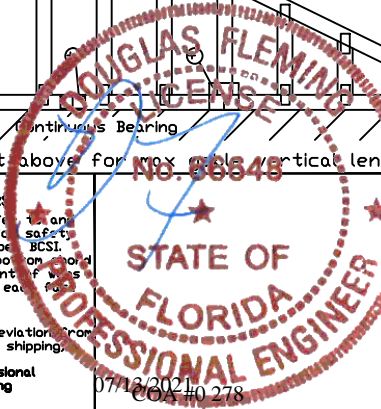
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REF ASCE7-16-GAB14030

DATE 01/26/2018

DRWG A14030ENC160118

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

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)

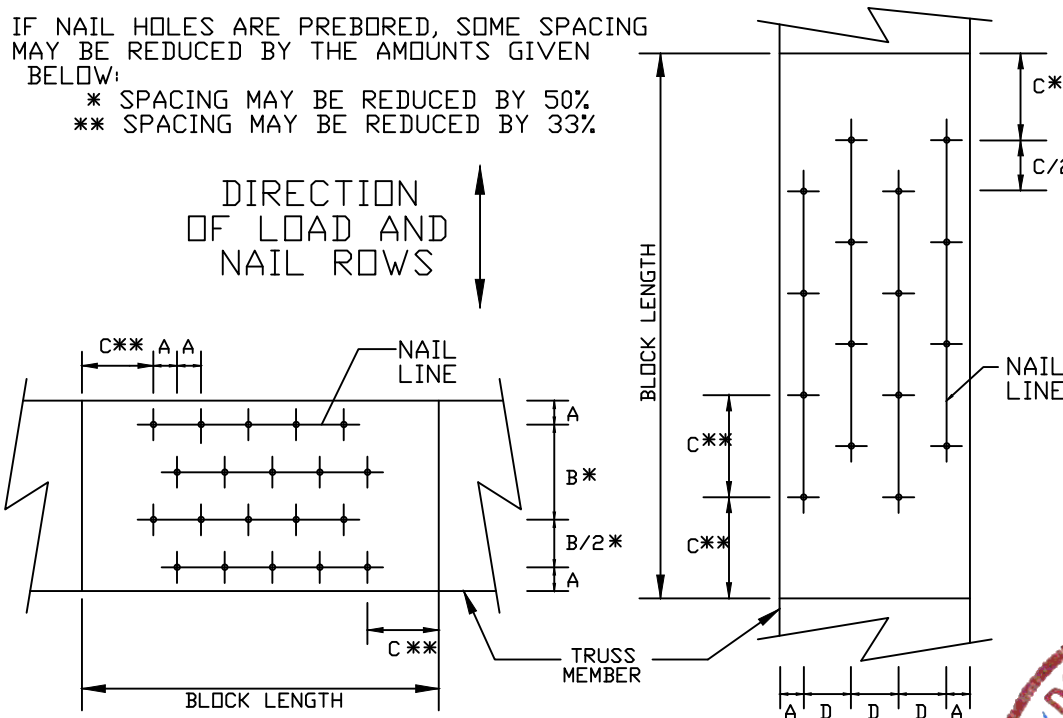
C - SPACING OF NAILS IN A ROW AND END DISTANCE (15 NAIL DIAMETERS)

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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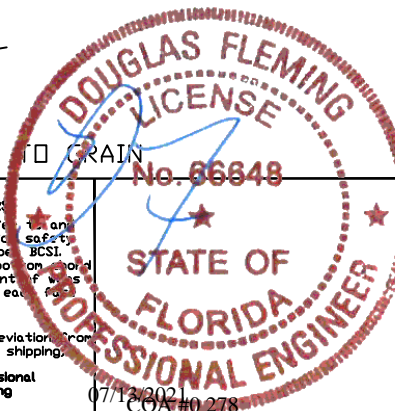
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514 Earth City Expressway
 Suite 242
 Earth City, MO 63045



REF NAIL SPACE
 DATE 10/01/14
 DRWG CNNAILSP1014

CLR Reinforcing Member Substitution

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

Notes:

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

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

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

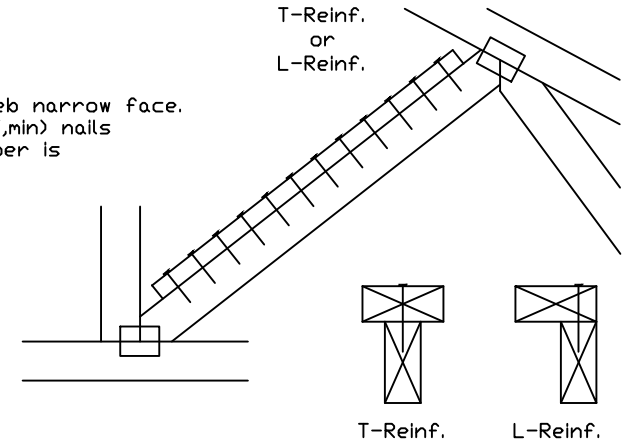
Web Member Size	Specified CLR Restraint	Alternative Reinforcement T- or L- Reinf.	Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(X)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(X)

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.

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

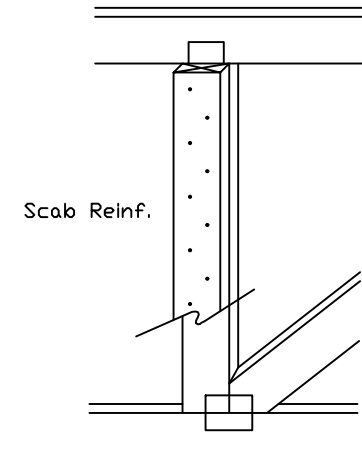
T-Reinforcement or L-Reinforcement:

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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Suite 242
Earth City, MO 63045

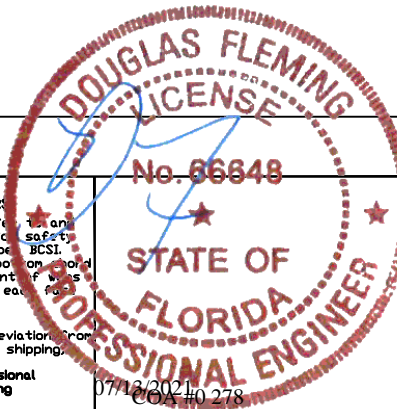
WARNING: READ AND FOLLOW ALL NOTES ON THIS DRAWING
IMPORTANT: FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLER

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

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

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

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



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		