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 COA #0 278
 05/06/2021



Site Information:	Page 1:
Customer: Seminole Trusses, Inc.	Job Number: B53375a
Job Description: Flores Res	
Address: 336 SW Meadow Glen, LAKE CITY, FL	

Job Engineering Criteria:	
Design Code: FBC 7th Ed. 2020 Res	IntelliVIEW Version: 20.02.00A
	JRef #: 1X568570001
Wind Standard: ASCE 7-16	Wind Speed (mph): 130
Building Type: Closed	Design Loading (psf): 37.00

This package contains general notes pages, 33 truss drawing(s) and 6 detail(s).

Item	Drawing Number	Truss
1	126.21.0902.04891	GE1
3	126.21.0902.04658	GE4
5	126.21.0902.04750	S2
7	126.21.0902.04657	T-1
9	126.21.0902.04673	T-4
11	126.21.1121.24160	CJ6
13	126.21.0902.04719	GE5
15	126.21.1120.57983	MHG1
17	126.21.1121.01757	HJ6
19	126.21.1121.21033	GE2
21	126.21.1120.59223	MH1
23	126.21.1121.18110	H10B
25	126.21.1121.13277	H14B
27	126.21.1121.09577	H18A
29	126.21.1121.06100	H8A
31	126.21.1121.16920	H12A
33	126.21.1121.11990	H16A
35	CNNAILSP1014	
37	PB160160118	
39	REPCHRD1014	

Item	Drawing Number	Truss
2	126.21.0902.04922	GE3
4	126.21.0902.04813	S1
6	126.21.0902.04688	SG1
8	126.21.0902.04906	T-3
10	126.21.1121.22023	EJ8A
12	126.21.1121.26247	CJ2
14	126.21.1121.23103	EJ8
16	126.21.0902.04704	HJ6A
18	126.21.1120.56000	T-5
20	126.21.1121.03687	HG4A
22	126.21.1121.05027	H8B
24	126.21.1121.15813	H12B
26	126.21.1121.10760	H16B
28	126.21.1121.08437	H6A
30	126.21.1121.19280	H10A
32	126.21.1121.14723	H14A
34	A14015ENC160118	
36	GBLLETIN0118	
38	PB180160118	

11943

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.

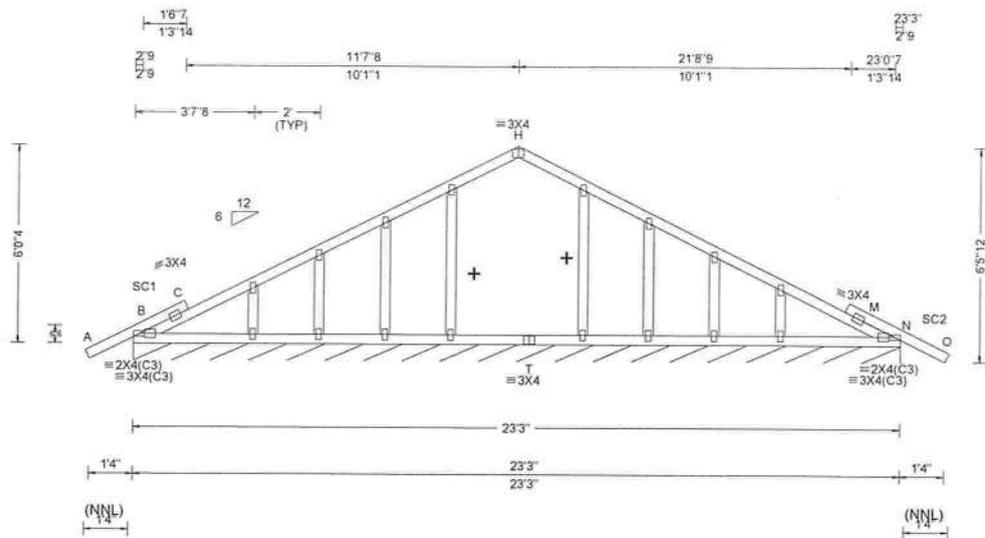
W = Width of non-hanger bearing, in inches.

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 Catoclin 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.



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: 130 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): 0.008 H 999 360 VERT(CL): 0.016 H 999 240 HORZ(LL): -0.003 G - - HORZ(TL): 0.006 G - - Creep Factor: 2.0 Max TC CSI: 0.192 Max BC CSI: 0.127 Max Web CSI: 0.063 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ / R- / Rh / Rw / U / RL N* 118 / - / - / 45 / - / 12 Wind reactions based on MWFRS N Brg Width = 279 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. B - C 433 -630 M - N 368 -656

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	35	-1.40	1.33
TC	75	0.00	11.63
TC	75	11.63	23.25
TC	35	21.92	24.65
BC	75	0.00	23.25

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

Additional Notes
See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.
Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.

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

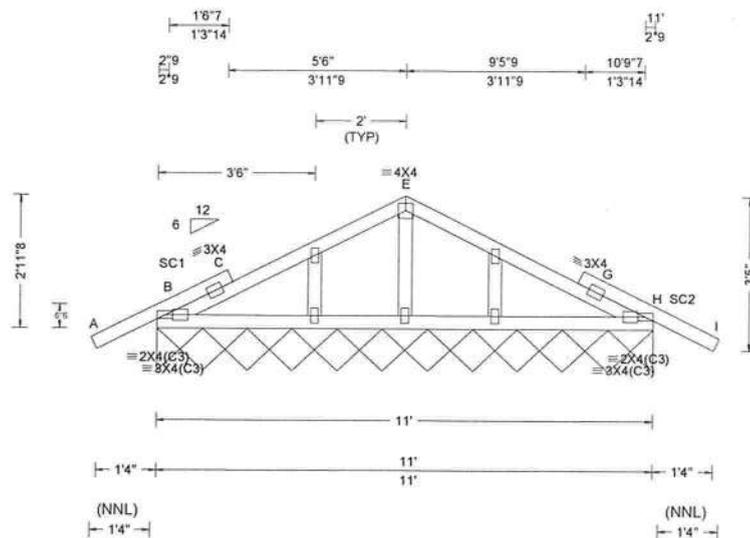
Loading
Truss designed to support 1-4-0 top chord outlookers and cladding load not to exceed 6.00 PSF one face and 24.0" span opposite face. Top chord must not be cut or notched, unless specified otherwise.

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



****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 BCSA (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSA. 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 BCSA 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





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: 130 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): 0.003 C 999 360 VERT(CL): 0.005 C 999 240 HORZ(LL): 0.001 C - - HORZ(TL): 0.002 C - - Creep Factor: 2.0 Max TC CSI: 0.156 Max BC CSI: 0.145 Max Web CSI: 0.028 VIEW Ver: 20.02.00A.1020.20	Gravity Loc R+ /R- /Rh /Rw /U /RL H* 120 /- /- /49 /- /4 Non-Gravity Wind reactions based on MWFRS H Brg Width = 132 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. B - C 534 -485 G - H 452 -497

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	35	-1.40	1.33
TC	73	0.00	5.50
TC	73	5.50	11.00
TC	35	9.67	12.40
BC	75	0.00	11.00

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

Loading

Truss designed to support 1-4-0 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 A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.
Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.



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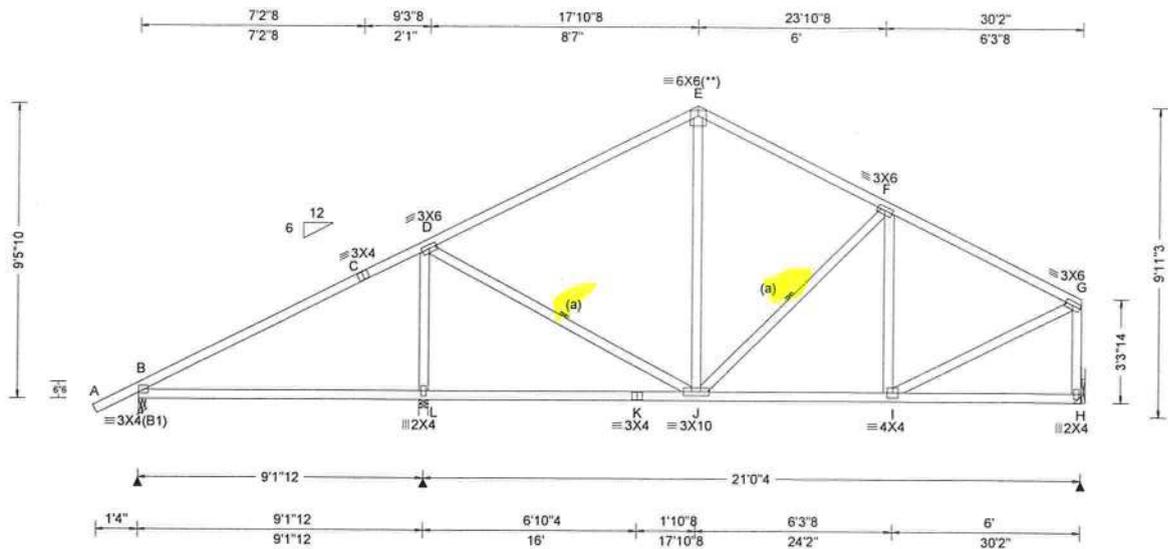
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Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions.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

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





Loading Criteria (psf) TCLL: 20.00 TCDL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: 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: 3.02 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.016 F 999 360 VERT(CL): 0.029 F 999 240 HORZ(LL): 0.009 L - - HORZ(TL): 0.021 L - - Creep Factor: 2.0 Max TC CSI: 0.999 Max BC CSI: 0.529 Max Web CSI: 0.338 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs)					
				Gravity Loc R+ / R- / Rh		Non-Gravity / Rw / U / RL			

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
 (**) 1 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	65	-1.40	17.88
TC	75	17.88	30.17
BC	120	0.17	30.17

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.
 Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Chords	Tens.Comp.	Chords	Tens. Comp.
B - C	55 -621	E - F	140 -702
C - D	64 -444	F - G	89 -812
D - E	137 -748		

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - L	457 -69	K - J	461 -69
L - K	461 -69	J - I	675 -33

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
L - D	166 -717	I - G	731 -31
D - J	394 -152	G - H	96 -809



COA #0618
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Hangers / Ties

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

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

Bearing at location x=29'11" uses the following support conditions: 29'11"

Bearing H (29'11", 10'1"2) HUS210
Supporting Member: (1)2x10 SP #2
(30) 0.148"x3" nails into supporting member,
(10) 0.148"x3" nails into supported member.

Bearing H (29'11", 10'1"2) HUS210
Supporting Member: (1)2x10 SP SS Dense
(30) 0.148"x3" nails into supporting member,
(10) 0.148"x3" nails into supported member.



05/06/2021

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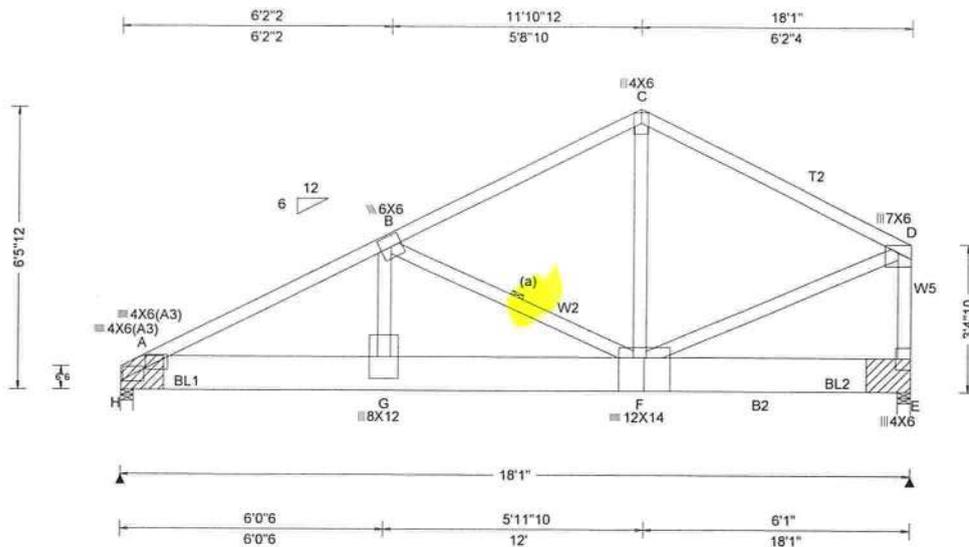
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6750 Forum Drive
Suite 305
Orlando FL, 32821



Loading Criteria (psf)

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 Criteria

Wind Std: ASCE 7-16
 Speed: 130 mph
 Enclosure: Closed
 Risk Category: II
 EXP: B Kzt: NA
 Mean Height: 15.00 ft
 TCCL: 4.2 psf
 BCCL: 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

Snow Criteria (Pg,Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 7th Ed. 2020 Res.
 TPI Std: 2014
 Rep Fac: Varies by Ld Case
 FT/RT: 20(0)/0(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/defl L/#
 VERT(LL): 0.125 G 999 360
 VERT(CL): 0.227 G 949 240
 HORZ(LL): 0.026 B - -
 HORZ(TL): 0.047 B - -
 Creep Factor: 2.0
 Max TC CSI: 0.935
 Max BC CSI: 0.777
 Max Web CSI: 0.841

VIEW Ver: 20.02.00A,1020.20

▲ Maximum Reactions (lbs)

Loc	Gravity		Non-Gravity	
	R+	/R-	/Rh	/Rw /U /RL
H	4918	-	-	/242 - -
E	4558	-	-	/217 - -

Wind reactions based on MWFRS
 H Brg Width = 3.5 Min Req = -
 E Brg Width = 3.5 Min Req = -
 Bearings H & E 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	0 - 6965	C - D	0 - 3784
B - C	0 - 3784		

Lumber

Top chord: 2x4 SP SS Dense; T2 2x4 SP #1;
 Bot chord: 2x10 SP SS Dense; B2 2x10 SP #2;
 Webs: 2x4 SP #1; W2,W5 2x4 SP #3;

Bracing

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

Special Loads

----- (Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
 TC: From 56 plf at 0.00 to 56 plf at 18.08
 BC: From 10 plf at 0.00 to 10 plf at 18.08
 BC: 1136 lb Conc. Load at 1.10, 3.10
 BC: 860 lb Conc. Load at 5.10, 7.10, 9.21,11.31
 13.31,15.31,17.31

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	24	0.00	11.90
BC	68	0.15	18.08

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

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.

Bearing Block(s)

Brg blocks: 0.128"x3", min. nails
 brg x-loc #blocks length/blk #nails/blk wall plate
 1 0.000' 1 12" 17 SPF Standard
 2 17.792' 1 12" 14 SPF Standard
 Brg block to be same size and species as chord.
 Refer to drawing CNNAILSP1014 for more information.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.		
A - G	6187	0	G - F	6119	0

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.		
G - B	2579	0	F - D	3636	0
B - F	0 - 3156	D - E	0 - 3326		
C - F	2956	0			



05/06/2021

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Blocking

Blocking reinforcement required to prevent buckling of members over the bearings:
 Bearing 2 located at 17.8' (blocking >= 3.50" if used)



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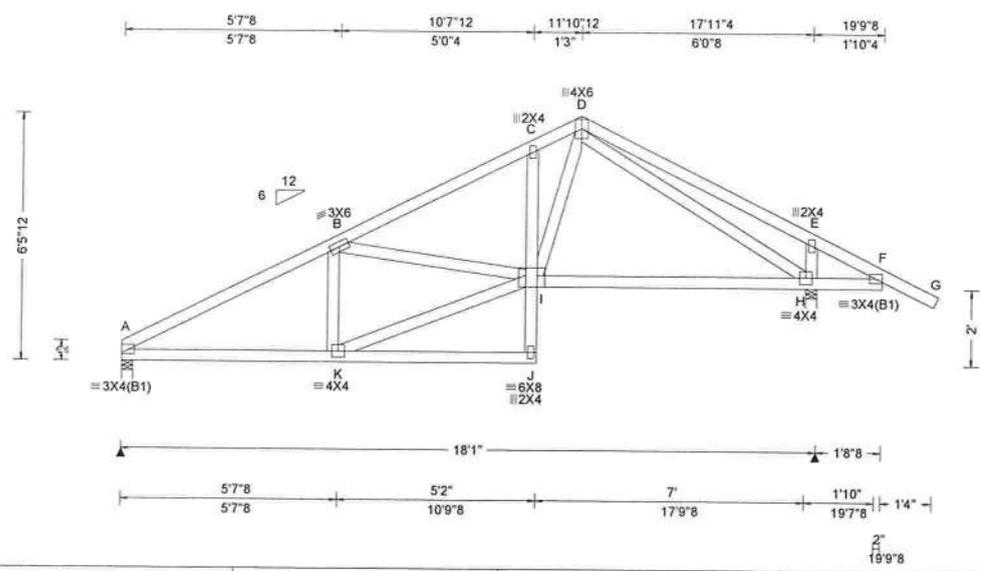
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Loading Criteria (psf) TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean 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	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.033 C 999 360 VERT(CL): 0.061 C 999 240 HORZ(LL): 0.015 E - - HORZ(TL): 0.028 E - - Creep Factor: 2.0 Max TC CSI: 0.992 Max BC CSI: 0.362 Max Web CSI: 0.820 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs)					
				Gravity Loc R+ / R- / Rh A 668 /- /- /359 /17 /119 H 927 /- /- /463 /46 /-		Non-Gravity / Rw / U / RL Wind reactions based on MWFRS A Brg Width = 3.5 Min Req = 1.5 H Brg Width = 3.5 Min Req = 1.5 Bearings A & H 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	139 - 1051	C - D	205 - 982		
				B - C	153 - 1006				

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

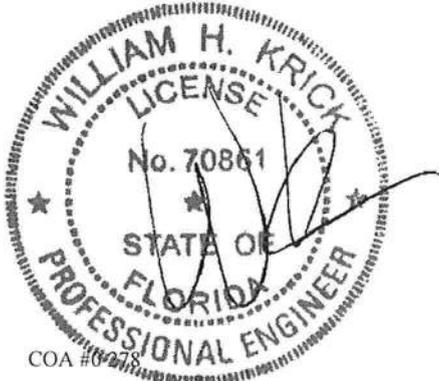
Plating Notes
 Plates sized for a minimum of 3.50 sq.in./piece.

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	71	0.10	11.90
TC	75	11.90	21.19
BC	120	0.17	10.65
BC	75	10.62	19.79

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

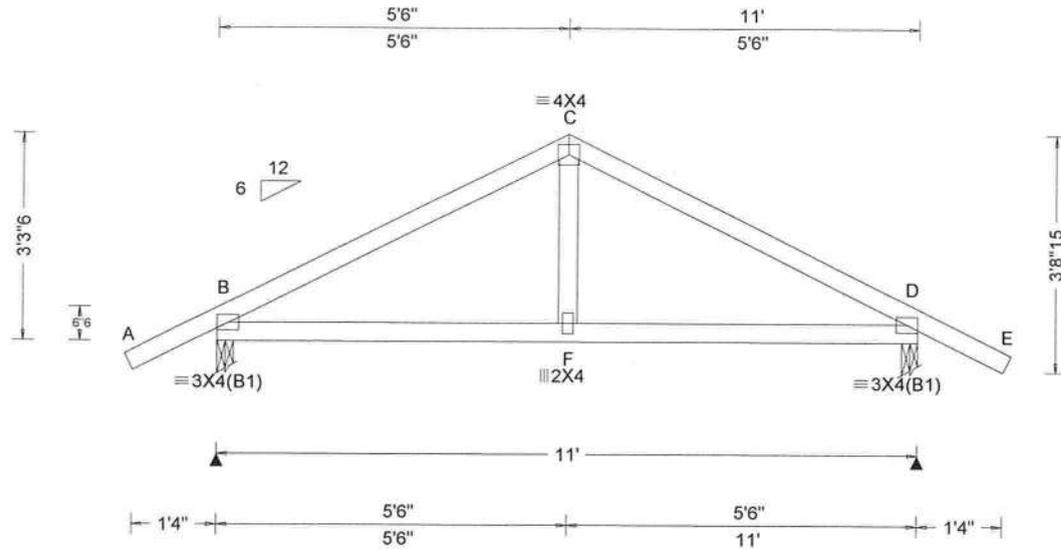
Wind
 Wind loads based on MWFRS with additional C&C member design.
 Right cantilever is not exposed to wind
 Wind loading based on both gable and hip roof types.



05/06/2021

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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	-1.40	5.50
TC	75	5.50	12.40
BC	120	0.17	10.83

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

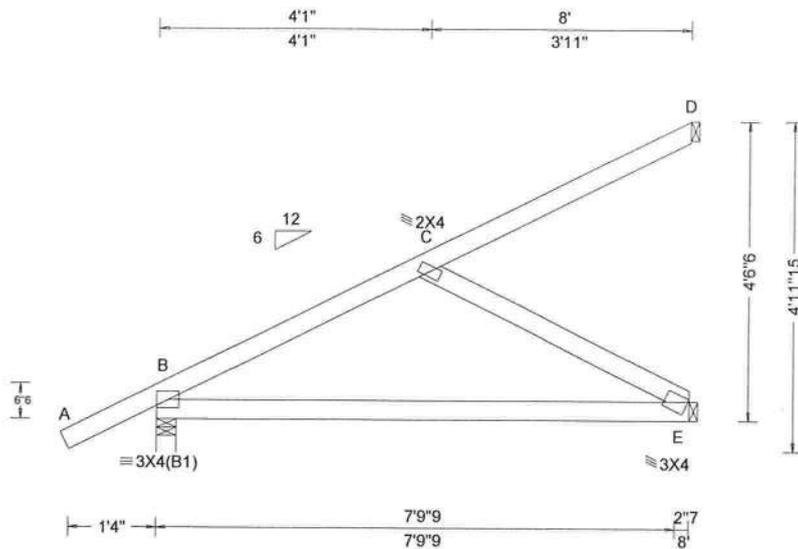
Wind
 Wind loads based on MWFRS with additional C&C member design.
 Wind loading based on both gable and hip roof types.



05/06/2021

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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)						
				Gravity			Non-Gravity			
				Loc	R+	/R-	/Rh	/Rw	/U	/RL
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: 130 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): -0.003 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: 0.334 Max BC CSI: 0.446 Max Web CSI: 0.121 VIEW Ver: 20.02.00A.1020.20	B 394	/-	/-	/226	/0	/109	
				E 205	/-	/-	/140	/1	/-	
				D 90	/-	/-	/43	/33	/-	
				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	-1.40	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.



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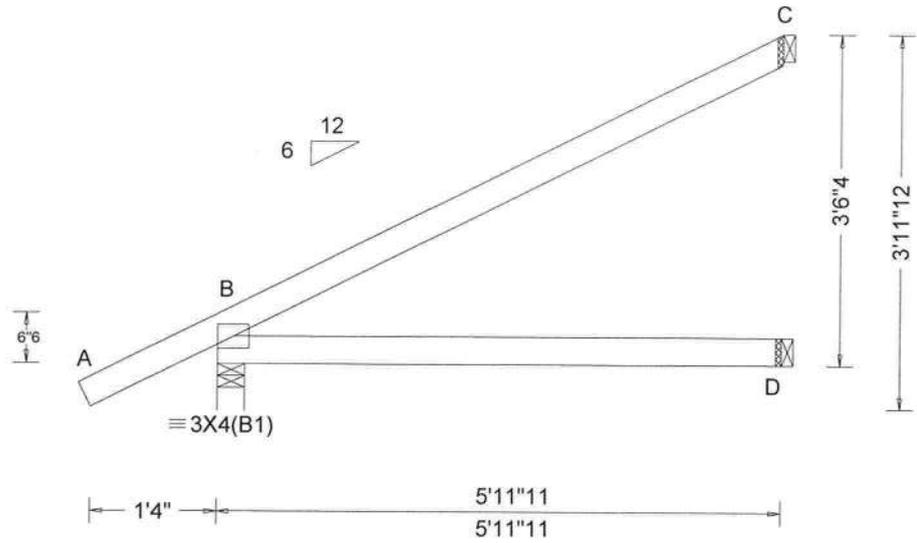
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Loc	Gravity			Non-Gravity																																
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B	324	-	-	/188	/4	/85																														
D	112	-	-	/59	-	-																														
C	147	-	-	/72	/53	-																														

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	-1.40	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.



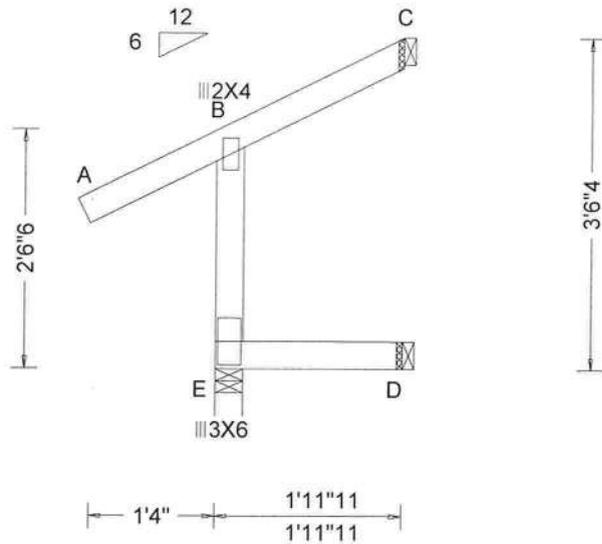
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Loading Criteria (psf) TCCL: 20.00 TCCL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCCL: 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	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.000 B 999 360 VERT(CL): 0.001 B 999 240 HORZ(LL): 0.000 B - - HORZ(TL): 0.000 B - - Creep Factor: 2.0 Max TC CSI: 0.094 Max BC CSI: 0.029 Max Web CSI: 0.125 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs)																																	
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D	39	/-	/-	/20	/-	/21																															
C	25	/-	/-	/17	/23	/56																															

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	45	-1.40	1.97
BC	24	0.00	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.

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

Wind loading based on both gable and hip roof types.



05/06/2021

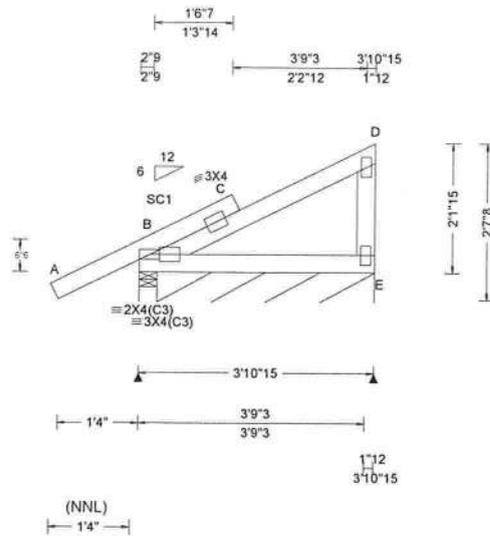
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Loading Criteria (psf) TCLL: 20.00 TCCL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCCL: 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	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.016 C 999 360 VERT(CL): 0.026 C 999 240 HORZ(LL): 0.006 C - - HORZ(TL): 0.009 C - - Creep Factor: 2.0 Max TC CSI: 0.215 Max BC CSI: 0.096 Max Web CSI: 0.028 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs), or *≠PLF <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>332</td> <td>-</td> <td>-</td> <td>/188</td> <td>/144</td> <td>/92</td> </tr> <tr> <td>E*</td> <td>44</td> <td>-</td> <td>-</td> <td>/20</td> <td>-</td> <td>-</td> </tr> </tbody> </table> Wind reactions based on MWFRS B Brg Width = 3.5 Min Req = 1.5 E Brg Width = 43.4 Min Req = - Bearings B & B Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Chords</th> <th>Tens.</th> <th>Comp.</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>465</td> <td>-538</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	332	-	-	/188	/144	/92	E*	44	-	-	/20	-	-	Chords	Tens.	Comp.	B - C	465	-538
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B - C	465	-538																																			

Lumber
 Top chord: 2x4 SP #1;
 Bot chord: 2x4 SP #1;
 Webs: 2x4 SP #3;
 Stack Chord: SC1 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	35	-1.40	1.33
TC	48	0.28	3.91
BC	47	0.00	3.91

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

Loading
 Truss designed to support 1-4-0 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.
 Right end vertical exposed to wind pressure.
 Deflection meets L/180.
 Wind loading based on both gable and hip roof types.

Additional Notes
 See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.
 Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice top chord in notchable area using 3x6.



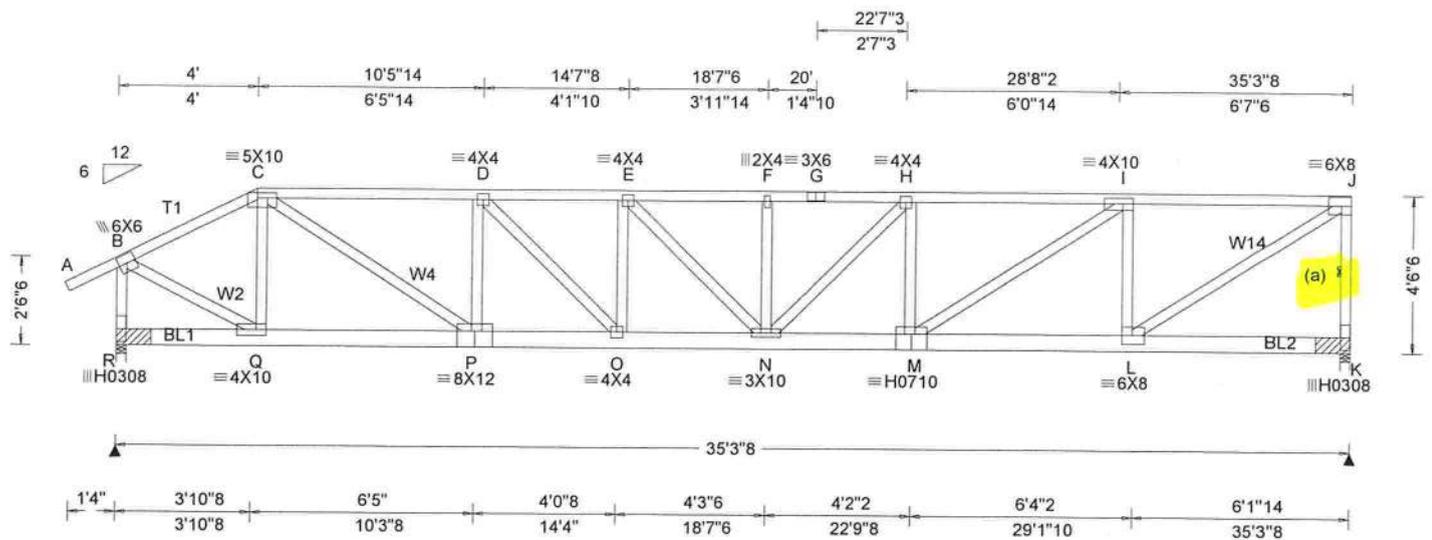
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Loading Criteria (psf) TCLL: 20.00 TCDL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.53 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT: 20(0)/0(0) Plate Type(s): WAVE, HS	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.366 F 999 360 VERT(CL): 0.678 F 624 240 HORZ(LL): 0.092 C - - HORZ(TL): 0.171 C - - Creep Factor: 2.0 Max TC CSI: 0.951 Max BC CSI: 0.998 Max Web CSI: 0.970	▲ Maximum Reactions (lbs) <table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>R</td> <td>3232</td> <td>-</td> <td>-</td> <td>-</td> <td>295</td> <td>-</td> </tr> <tr> <td>K</td> <td>3256</td> <td>-</td> <td>-</td> <td>-</td> <td>305</td> <td>-</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS R Brg Width = 3.5 Min Req = - K Brg Width = 3.5 Min Req = - Bearings R & K Fcperp = 425psi. Members not listed have forces less than 375#</p>						Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	R	3232	-	-	-	295	-	K	3256	-	-	-	305	-							
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Lumber
 Top chord: 2x4 SP SS Dense; T1 2x4 SP #1;
 Bot chord: 2x6 SP #1;
 Webs: 2x4 SP #3; W2,W4,W14 2x4 SP #1;

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

Special Loads
 -----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
 TC: From 56 plf at -1.46 to 56 plf at 4.00
 TC: From 28 plf at 4.00 to 28 plf at 35.29
 BC: From 4 plf at -1.46 to 4 plf at 0.00
 BC: From 20 plf at 0.00 to 20 plf at 4.06
 BC: From 10 plf at 4.06 to 10 plf at 35.29
 TC: 171 lb Conc. Load at 4.06
 TC: 90 lb Conc. Load at 6.13, 8.13,10.13,12.13,14.13,16.13,18.13,20.13,22.13,24.13,26.13,28.13,30.13,32.13,34.13
 BC: 318 lb Conc. Load at 4.06
 BC: 205 lb Conc. Load at 6.13, 8.13,10.13,12.13,14.13,16.13,18.13,20.13,22.13,24.13,26.13,28.13,30.13,32.13,34.13

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	36	-1.40	4.00
TC	24	4.00	35.29
BC	117	0.00	35.29

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

Wind
 Wind loads and reactions based on MWFRS.
 End verticals exposed to wind pressure. Deflection meets L/180.
 Wind loading based on both gable and hip roof types.



Maximum Bot Chord Forces Per Ply (lbs)

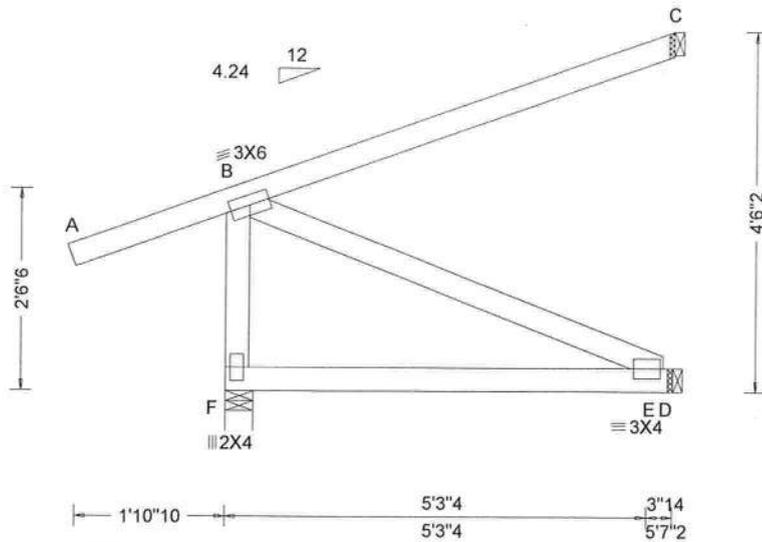
Chords	Tens.Comp.	Chords	Tens. Comp.
Q - P	2966 -262	N - M	6477 -608
P - O	5936 -554	M - L	4332 -412
O - N	6798 -633		

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
B - R	313 -3247	N - H	740 -62
B - Q	3360 -298	H - M	163 -895
C - Q	212 -931	M - I	2547 -227
C - P	3463 -332	I - L	310 -2011
P - D	222 -1321	L - J	5046 -469
D - O	1223 -107	J - K	320 -2992
O - E	103 -460		

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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 -1.98 to 55 plf at -0.10
 TC: From 2 plf at -0.10 to 2 plf at 5.59
 BC: From 0 plf at -1.98 to 4 plf at -0.10
 BC: From 2 plf at 0.00 to 2 plf at 5.59
 TC: 173 lb Conc. Load at 2.79
 BC: 151 lb Conc. Load at 2.79

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	-1.93	5.59
BC	67	0.00	5.59

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

Wind

Wind loads and reactions based on MWFRS.
 Left end vertical exposed to wind pressure. Deflection meets L/180.
 Wind loading based on both gable and hip roof types.



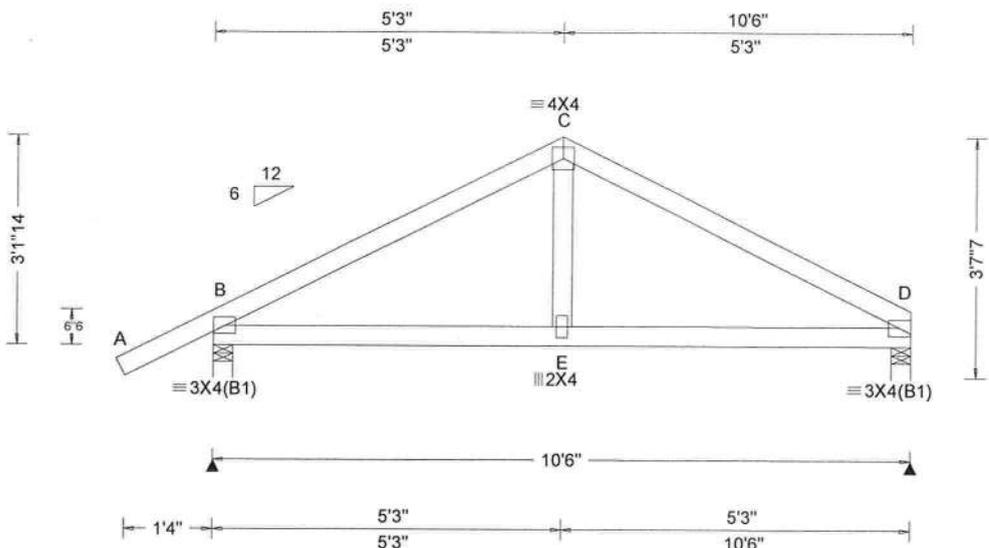
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Loading Criteria (psf) TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean 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	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.007 E 999 360 VERT(CL): 0.014 E 999 240 HORZ(LL): 0.003 E - - HORZ(TL): 0.006 E - - Creep Factor: 2.0 Max TC CSI: 0.417 Max BC CSI: 0.183 Max Web CSI: 0.085 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 488 /- /- /262 /29 /61 D 391 /- /- /205 /11 /- 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 210 -507 C - D 210 -503
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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	-1.40	5.25
TC	69	5.25	10.40
BC	120	0.17	10.33

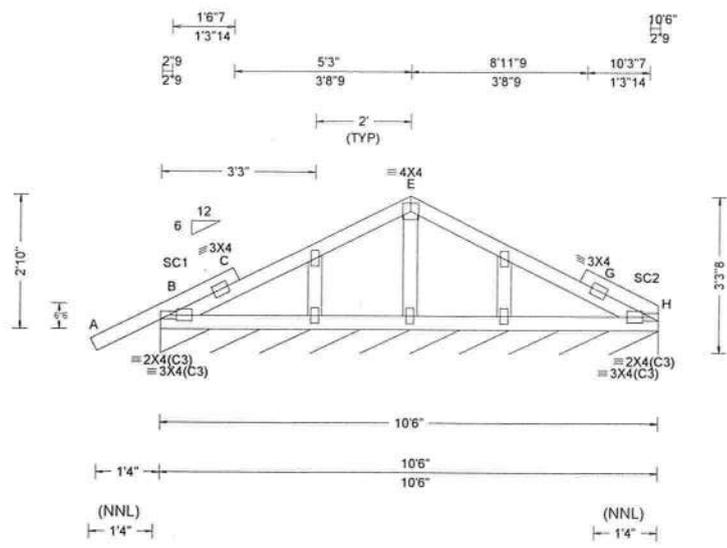
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

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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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: 130 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): 0.005 G 999 360 VERT(CL): 0.009 G 999 240 HORZ(LL): -0.002 G - - HORZ(TL): 0.004 G - - Creep Factor: 2.0 Max TC CSI: 0.152 Max BC CSI: 0.140 Max Web CSI: 0.031 VIEW Ver: 20.02.00A.1020.20	Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL H* 109 /- /- /49 /- /3 Wind reactions based on MWFRS H Brg Width = 126 Min Req = - Bearing B Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. B - C 521 -478

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	35	-1.40	1.33
TC	69	0.00	5.25
TC	69	5.25	10.50
TC	17	9.17	10.50
BC	75	0.00	10.50

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

Loading
Truss designed to support 1-4-0 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 A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

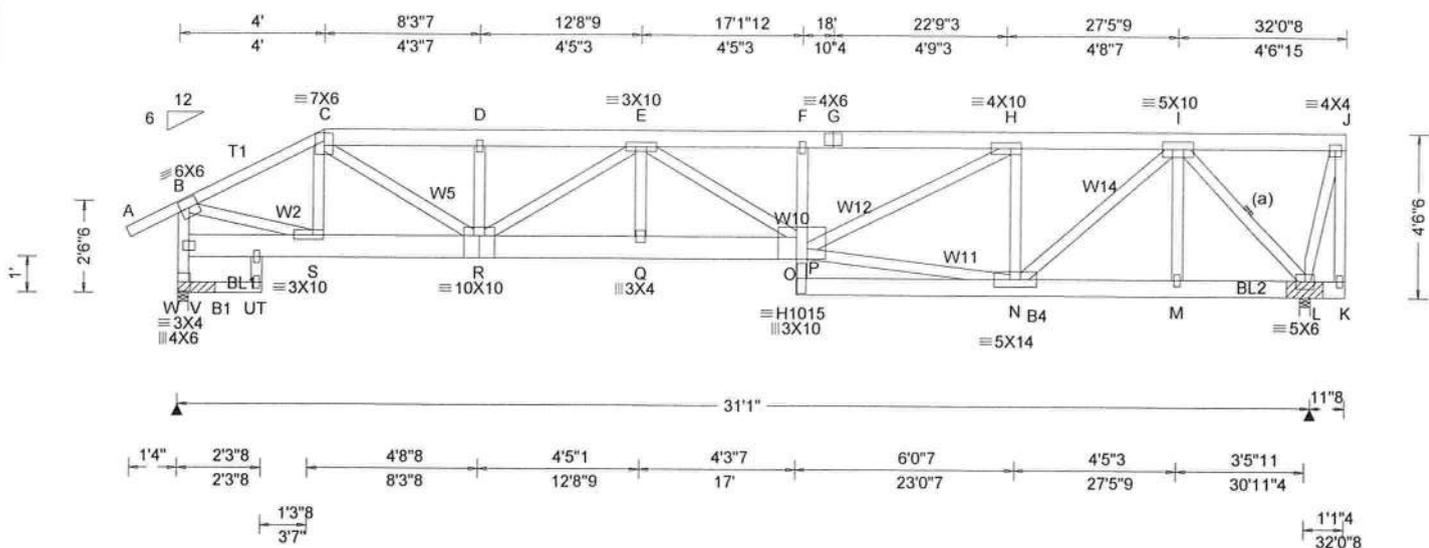
Stacked top chord must NOT be notched or cut in area (NNL). Dropped top chord braced at 24" oc intervals. Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" oc. Center plate on stacked/dropped chord interface, plate length perpendicular to chord length. Splice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



05/06/2021

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Loading Criteria (psf) TCCL: 20.00 TCCL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCCL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.20 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/0(0) Plate Type(s): WAVE, HS	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.309 F 999 360 VERT(CL): 0.570 F 651 240 HORZ(LL): 0.102 L - - HORZ(TL): 0.188 L - - Creep Factor: 2.0 Max TC CSI: 0.947 Max BC CSI: 0.549 Max Web CSI: 0.867 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL W 2811 /- /- /- /274 /- L 3261 /- /- /- /313 /- Wind reactions based on MWFRS W Brg Width = 3.5 Min Req = - L Brg Width = 3.5 Min Req = - Bearings W & L 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 358 - 3745 F - G 741 - 7612 C - D 562 - 5886 G - H 741 - 7612 D - E 562 - 5885 H - I 400 - 4250 E - F 745 - 7661					

Lumber
 Top chord: 2x6 SP #1; T1 2x4 SP #1;
 Bot chord: 2x8 SP SS Dense; B1 2x4 SP #1;
 B4 2x6 SP #1;
 Webs: 2x4 SP #3; W2,W5,W10,W11,W12,
 W14 2x4 SP #1;

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

Special Loads
 -----(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)
 TC: From 56 plf at -1.46 to 56 plf at 4.00
 TC: From 28 plf at 4.00 to 28 plf at 32.04
 BC: From 4 plf at -1.46 to 4 plf at 0.00
 BC: From 20 plf at 0.00 to 20 plf at 2.29
 BC: From 10 plf at 2.29 to 10 plf at 32.04
 TC: 96 lb Conc. Load at 4.06
 TC: 59 lb Conc. Load at 6.13, 8.13,10.13,12.13
 14.13,16.13
 TC: 90 lb Conc. Load at 18.13,20.13,22.13,24.13
 26.13,28.13,30.13,31.69
 BC: 371 lb Conc. Load at 4.06
 BC: 243 lb Conc. Load at 6.13, 8.13,10.13,12.13
 14.13,16.13
 BC: 205 lb Conc. Load at 18.13,20.13,22.13,24.13
 26.13,28.13,30.13,31.69

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	35	-1.40	4.00
TC	24	4.00	32.04
BC	28	0.00	2.29
BC	120	0.00	17.15
BC	120	17.15	32.04

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

Maximum Bot Chord Forces Per Ply (lbs)
 Chords Tens.Comp. Chords Tens. Comp.
 S - R 3357 -320 N - M 2186 -212
 R - Q 7265 -696 M - L 2186 -212
 Q - O 7277 -697

Maximum Web Forces Per Ply (lbs)
 Webs Tens.Comp. Webs Tens. Comp.
 B - V 290 -2774 E - O 475 -58
 B - S 3419 -321 O - H 3673 -369
 W - V 287 -2782 O - N 4134 -393
 S - C 110 -432 H - N 293 -2045
 C - R 3114 -296 N - I 2805 -256
 R - E 162 -1670 I - L 347 -3411
 E - Q 420 0



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Wind

Wind loads and reactions based on MWFRS.
 End verticals exposed to wind pressure. Deflection meets L/180.
 Right cantilever is not exposed to wind
 Wind loading based on both gable and hip roof types.

Bearing Block(s)

Brg blocks: 0.128"x3", min. nails
 brg x-loc #blocks length/blk #nails/blk wall plate
 1 0.000' 1 12" 4 SPF Standard
 2 30.792' 1 12" 4 SPF Standard
 Brg block to be same size and species as chord.
 Refer to drawing CNNAILSP1014 for more information.



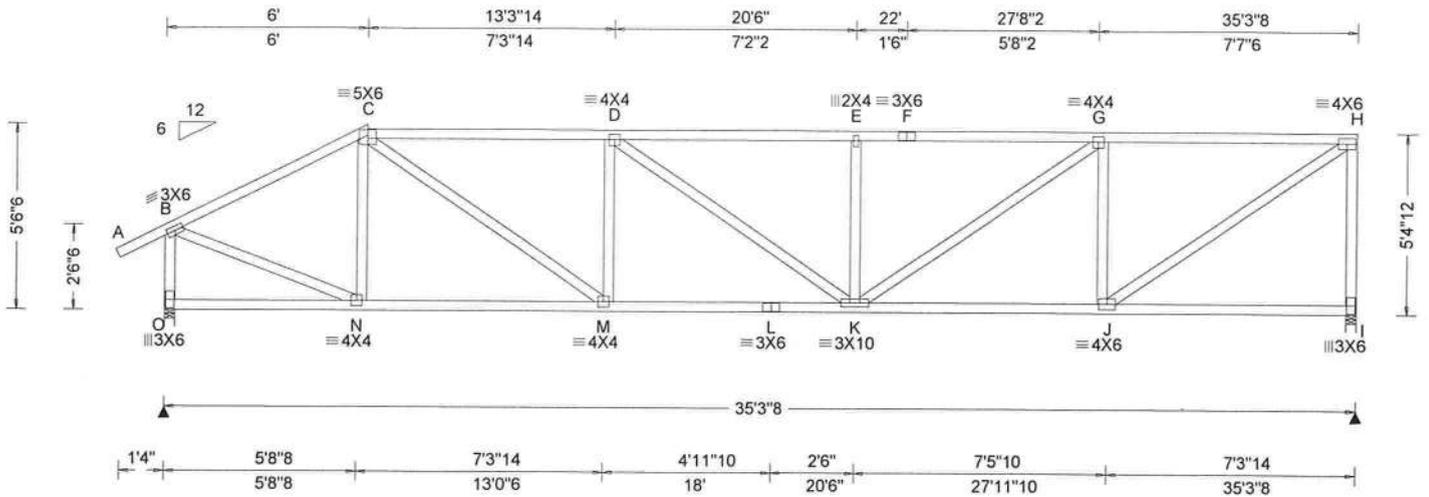
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Loading Criteria (psf) TCLL: 20.00 TCDL: 7.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.53 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.137 E 999 360 VERT(CL): 0.258 E 999 240 HORZ(LL): 0.038 C - - HORZ(TL): 0.072 C - - Creep Factor: 2.0 Max TC CSI: 0.986 Max BC CSI: 0.494 Max Web CSI: 0.841 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL O 1421 /- /- /717 /68 /152 I 1333 /- /- /624 /70 /- Wind reactions based on MWFRS O Brg Width = 3.5 Min Req = 1.8 I Brg Width = 3.5 Min Req = 1.7 Bearings O & I 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 395 - 1520 E - F 679 - 2298 C - D 639 - 2199 F - G 679 - 2298 D - E 679 - 2298 G - H 496 - 1585
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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	-1.40	6.00
TC	24	6.00	35.29
BC	120	0.00	35.29

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.
End verticals exposed to wind pressure. Deflection meets L/180.
Wind loading based on both gable and hip roof types.

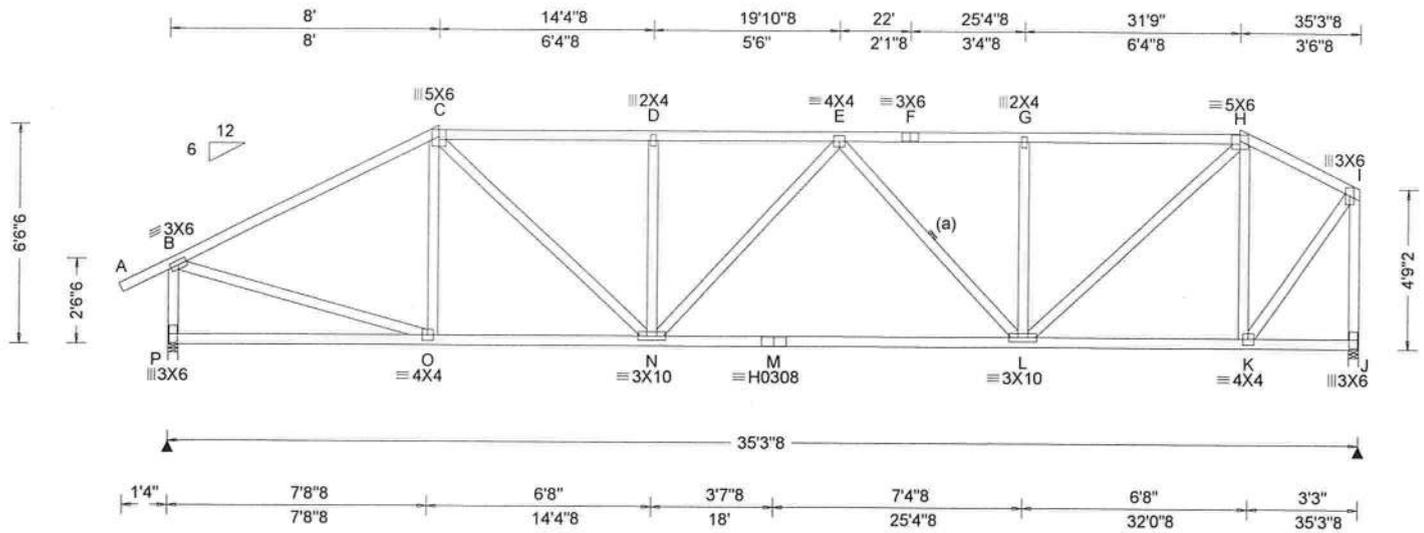


Maximum Bot Chord Forces Per Ply (lbs)
Chords Tens.Comp. Chords Tens. Comp.
N - M 1328 - 508 L - K 2225 - 736
M - L 2225 - 736 K - J 1639 - 535

Maximum Web Forces Per Ply (lbs)
Webs Tens.Comp. Webs Tens. Comp.
B - O 377 - 1376 K - G 809 - 238
B - N 1389 - 304 G - J 423 - 940
C - M 1079 - 323 J - H 1932 - 562
M - D 282 - 490 H - I 425 - 1274
E - K 220 - 376

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Loading Criteria (psf) TCLL: 20.00 TCDL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: 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: 3.53 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg.Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE, HS	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.097 D 999 360 VERT(CL): 0.182 D 999 240 HORZ(LL): 0.027 K - - HORZ(TL): 0.050 K - - Creep Factor: 2.0 Max TC CSI: 0.997 Max BC CSI: 0.778 Max Web CSI: 0.628 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL P 1421 /- /- /728 /66 /161 J 1333 /- /- /627 /58 /- Wind reactions based on MWFRS P Brg Width = 3.5 Min Req = 1.8 J Brg Width = 3.5 Min Req = 1.7 Bearings P & J 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 401 - 1623 F - G 493 - 1613 C - D 545 - 1907 G - H 494 - 1615 D - E 544 - 1906 H - I 266 - 774 E - F 493 - 1613 Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. O - N 1388 - 462 M - L 1893 - 610 N - M 1893 - 610 L - K 712 - 242 Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. B - P 359 - 1351 L - H 1254 - 339 B - O 1394 - 284 H - K 303 - 837 C - N 721 - 219 K - I 1140 - 312 E - L 187 - 418 I - J 346 - 1308					

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	45	-1.40	8.00
TC	24	8.00	31.75
TC	47	31.75	35.29
BC	120	0.00	35.29

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.

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

Wind loading based on both gable and hip roof types.



COA #0078
 05/06/2021

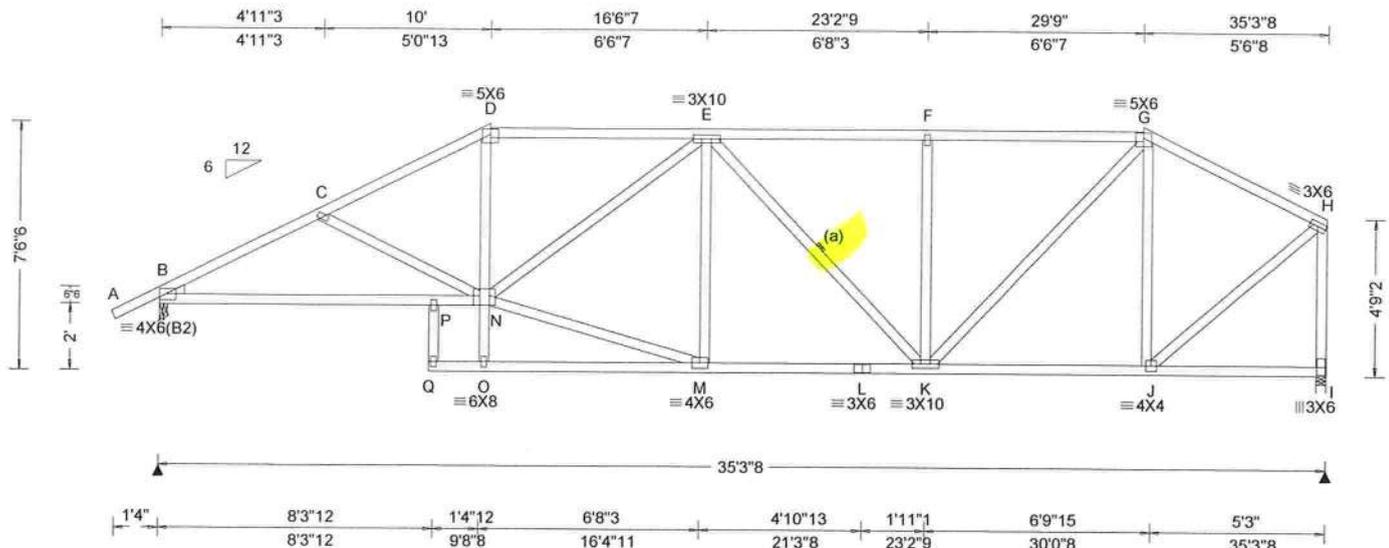
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Loading Criteria (psf)

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 Criteria

Wind Std: ASCE 7-16
 Speed: 130 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: 3.53 ft
 Loc. from endwall: not in 9.00 ft
 GCpi: 0.18
 Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 7th Ed. 2020 Res.
 TPI Std: 2014
 Rep Fac: Yes
 FT/RT:20(0)/0(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/defl L/#
 VERT(LL): 0.126 O 999 360
 VERT(CL): 0.237 O 999 240
 HORZ(LL): 0.051 J - -
 HORZ(TL): 0.096 J - -
 Creep Factor: 2.0
 Max TC CSI: 0.996
 Max BC CSI: 0.630
 Max Web CSI: 0.657

VIEW Ver: 20.02.00A.1020.20

▲ Maximum Reactions (lbs)

Loc	Gravity			Non-Gravity		
	R+	/R-	/Rh	/Rw	/U	/RL
B	1424	-	-	/749	-	/167
I	1330	-	-	/647	/0	-

Wind reactions based on MWFRS
 B Brg Width = 3.0 Min Req = 1.8
 I Brg Width = 3.5 Min Req = 1.7
 Bearings B & I 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	511	-2379	E - F	480	-1522
C - D	486	-2162	F - G	481	-1523
D - E	476	-1883	G - H	307	-1027

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

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.

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.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.		Chords	Tens. Comp.	
B - P	2044	-565	L - K	1681	-469
P - N	2022	-544	K - J	899	-257
M - L	1681	-469			

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	36	-1.40	10.00
TC	24	10.00	29.75
TC	72	29.75	35.29
BC	117	0.17	9.90
BC	75	8.17	35.29

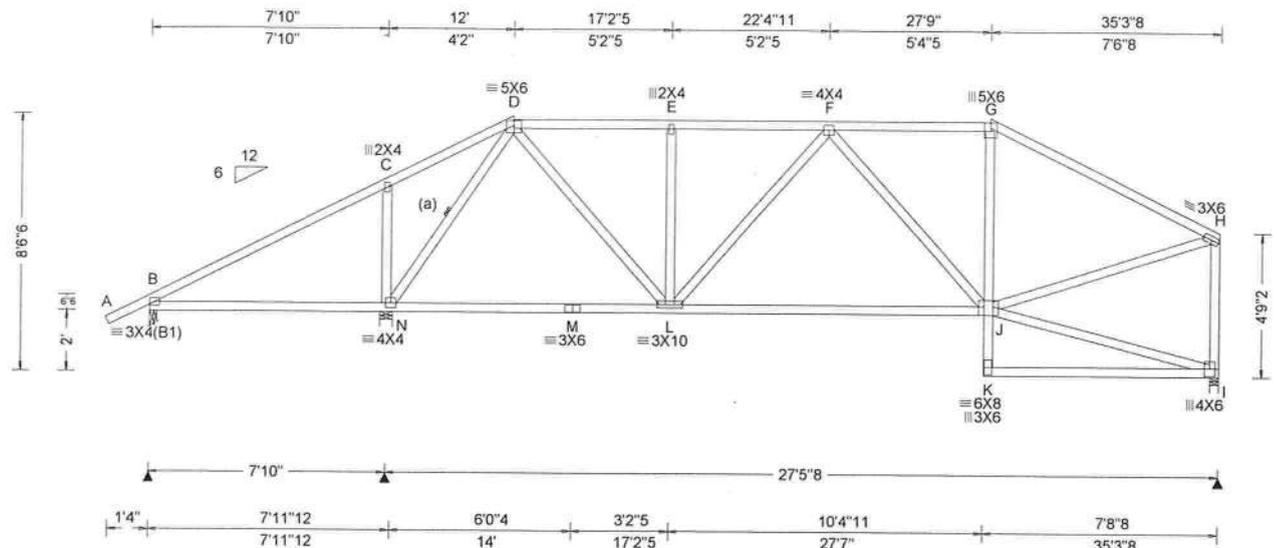
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.



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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





Loading Criteria (psf) 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 Criteria Wind Std: ASCE 7-16 Speed: 130 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: 3.53 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.042 F 999 360 VERT(CL): 0.078 F 999 240 HORZ(LL): 0.020 I - - HORZ(TL): 0.038 I - - Creep Factor: 2.0 Max TC CSI: 0.994 Max BC CSI: 0.781 Max Web CSI: 0.942 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 460 /- /- /232 /- /185 N 1327 /- /- /679 /8 /- I 1032 /- /- /534 /- /- Wind reactions based on MWFRS B Brg Width = 3.0 Min Req = 1.5 N Brg Width = 4.9 Min Req = 1.7 I Brg Width = 3.5 Min Req = 1.5 Bearings B, N, & I Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.
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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	75	-1.40	12.00
TC	24	12.00	27.75
TC	53	27.75	35.29
BC	75	0.17	27.73
BC	75	27.73	35.29

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.



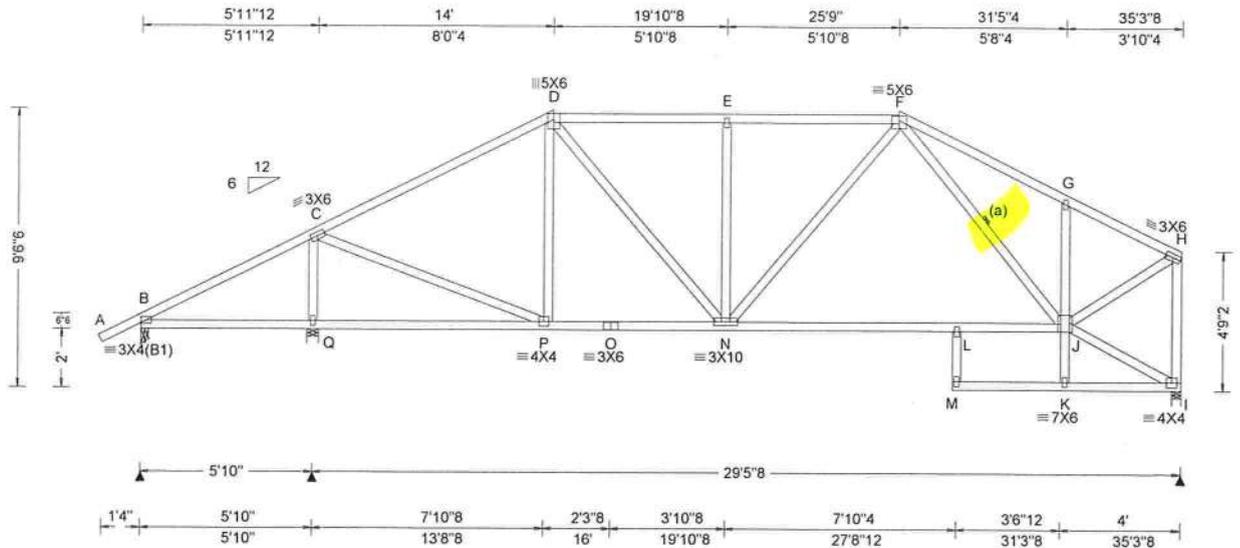
	D - E	341 -1090	F - G	318 -990
	E - F	339 -1088	G - H	297 -1174

Maximum Bot Chord Forces Per Ply (lbs)				
Chords	Tens.Comp.	Chords	Tens. Comp.	
N - M	565 -175	L - J	1155 -350	
M - L	565 -175			

Maximum Web Forces Per Ply (lbs)				
Webs	Tens.Comp.	Webs	Tens. Comp.	
C - N	175 -404	J - H	1029 -232	
N - D	265 -1033	H - I	234 -960	
D - L	837 -178			

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Loading Criteria (psf)

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 Criteria

Wind Std: ASCE 7-16
 Speed: 130 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: 3.53 ft
 Loc. from endwall: not in 9.00 ft
 GCpi: 0.18
 Wind Duration: 1.60

Snow Criteria (Pg, Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 7th Ed. 2020 Res.
 TPI Std: 2014
 Rep Fac: Yes
 FT/RT: 20(0)/0(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/defl L/#
 VERT(LL): 0.180 L 999 360
 VERT(CL): 0.509 L 694 240
 HORZ(LL): 0.022 M - -
 HORZ(TL): 0.040 M - -
 Creep Factor: 2.0
 Max TC CSI: 0.998
 Max BC CSI: 0.692
 Max Web CSI: 0.469

VIEW Ver: 20.02.00A.1020.20

▲ Maximum Reactions (lbs)

Loc	Gravity			Non-Gravity		
	R+	/R-	/Rh	/Rw	/U	/RL
B	336	-	-	135	-	203
Q	1387	-	-	752	-	-
I	1103	-	-	578	-	-

Wind reactions based on MWFRS
 B Brg Width = 3.0 Min Req = 1.5
 Q Brg Width = 4.9 Min Req = 1.7
 I Brg Width = 3.5 Min Req = 1.5
 Bearings B, Q, & I 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	271 - 1122	F - G	246 - 1113
D - E	342 - 1171	G - H	166 - 1081
E - F	343 - 1171		

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
 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	62	-1.40	14.00
TC	24	14.00	25.75
TC	69	25.75	35.29
BC	75	0.17	31.46
BC	75	27.58	35.29

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.



Maximum Bot Chord Forces Per Ply (lbs)

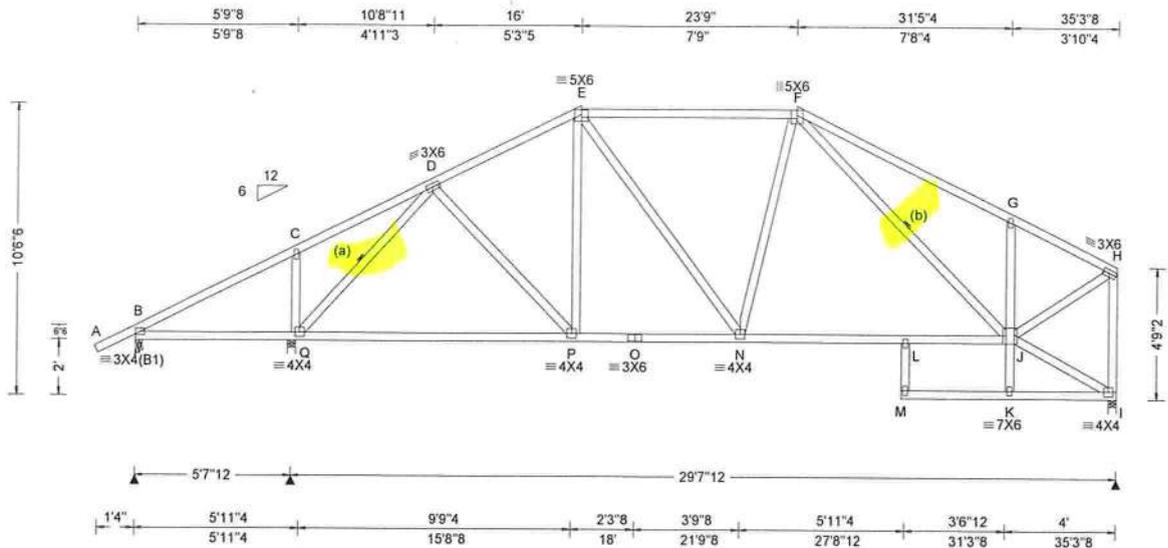
Chords	Tens.Comp.	Chords	Tens. Comp.
P - O	924 - 232	N - L	995 - 251
O - N	924 - 232	L - J	1013 - 231

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
Q - C	352 - 1225	J - H	1093 - 164
C - P	1003 - 203	H - I	170 - 1102
D - N	392 - 93		

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Loading Criteria (psf)

TCLL: 20.00
 TCCL: 7.00
 BCCL: 0.00
 BCDL: 10.00
 Des Ld: 37.00
 NCBCLL: 10.00
 Soffit: 2.00
 Load Duration: 1.25
 Spacing: 24.0"

Wind Criteria

Wind Std: ASCE 7-16
 Speed: 130 mph
 Enclosure: Closed
 Risk Category: II
 EXP: B Kzt: NA
 Mean Height: 15.00 ft
 TCCL: 4.2 psf
 BCDL: 6.0 psf
 MWFRS Parallel Dist: h to 2h
 C&C Dist a: 3.53 ft
 Loc. from endwall: not in 9.00 ft
 GCpi: 0.18
 Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 7th Ed. 2020 Res.
 TPI Std: 2014
 Rep Fac: Yes
 FT/RT:20(0)/0(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/defl L/#
 VERT(LL): 0.115 M 999 360
 VERT(CL): 0.326 M 999 240
 HORZ(LL): 0.034 M - -
 HORZ(TL): 0.064 M - -
 Creep Factor: 2.0
 Max TC CSI: 0.980
 Max BC CSI: 0.594
 Max Web CSI: 0.689

VIEW Ver: 20.02.00A.1020.20

▲ Maximum Reactions (lbs)

Loc	Gravity			Non-Gravity		
	R+	/R-	/Rh	/Rw	/U	/RL
B	409	-	-	/219	-	/221
Q	1208	-	-	/652	-	-
I	1139	-	-	/595	-	-

Wind reactions based on MWFRS
 B Brg Width = 3.0 Min Req = 1.5
 Q Brg Width = 3.5 Min Req = 1.5
 I Brg Width = 3.5 Min Req = 1.5
 Bearings B, Q, & I 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	31 -429	E - F	273 -1041
C - D	97 -400	F - G	246 -1176
D - E	261 -1182	G - H	149 -1112

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
 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	68	-1.40	16.00
TC	24	16.00	23.75
TC	64	23.75	35.29
BC	120	0.17	31.46
BC	75	27.58	35.29

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.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - Q	639 -129	O - N	1007 -204
Q - P	908 -203	N - L	1023 -209
P - O	1007 -204	L - J	1030 -197

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
Q - D	226 -1015	J - H	1135 -158
J - G	146 -385	H - I	157 -1120



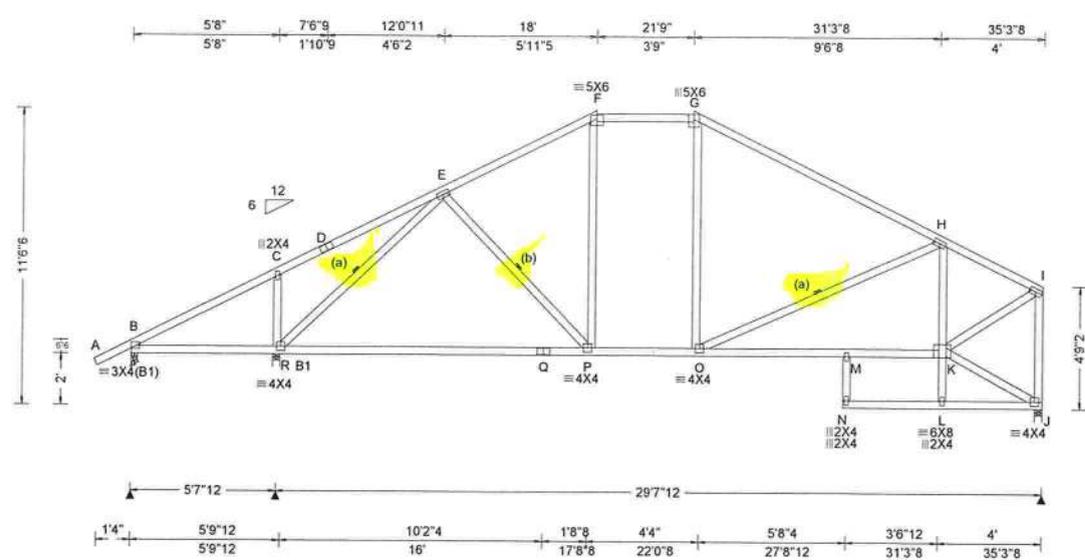
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Loading Criteria (psf)

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 Criteria

Wind Std: ASCE 7-16
 Speed: 130 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: 3.53 ft
 Loc. from endwall: not in 9.00 ft
 GCpi: 0.18
 Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 7th Ed. 2020 Res.
 TPI Std: 2014
 Rep Fac: Yes
 FT/RT:20(0)/0(0)
 Plate Type(s):
 WAVE

Defl/CSI Criteria

PP Deflection in loc L/defl L/#
 VERT(LL): 0.125 N 999 360
 VERT(CL): 0.283 N 999 240
 HORZ(LL): -0.039 G - -
 HORZ(TL): 0.091 G - -
 Creep Factor: 2.0
 Max TC CSI: 0.996
 Max BC CSI: 0.761
 Max Web CSI: 0.946

VIEW Ver: 20.02.00A.1020.20

▲ Maximum Reactions (lbs)

Loc	Gravity			Non-Gravity		
	R+	/R-	/Rh	/Rw	/U	/RL
B	686	-	-	/318	/102	/239
R	1427	-	-	/895	/59	-
J	1148	-	-	/624	-	-

Wind reactions based on MWFRS
 B Brg Width = 3.0 Min Req = 1.5
 R Brg Width = 3.5 Min Req = 1.8
 J Brg Width = 3.5 Min Req = 1.5
 Bearings B, R, & J 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	373 -939	F - G	271 -968
C - D	360 -873	G - H	240 -1206
D - E	378 -860	H - I	151 -1168
E - F	273 -1166		

Lumber
 Top chord: 2x4 SP #1;
 Bot chord: 2x4 SP #1; B1 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 3X6 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	65	-1.40	18.00
TC	24	18.00	21.75
TC	49	21.75	35.29
BC	75	0.17	31.41
BC	75	27.58	35.29

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.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
B - R	1540 -332	P - O	968 -147
R - Q	1001 -207	O - M	1048 -180
Q - P	1001 -207	M - K	1057 -168

Maximum Web Forces Per Ply (lbs)

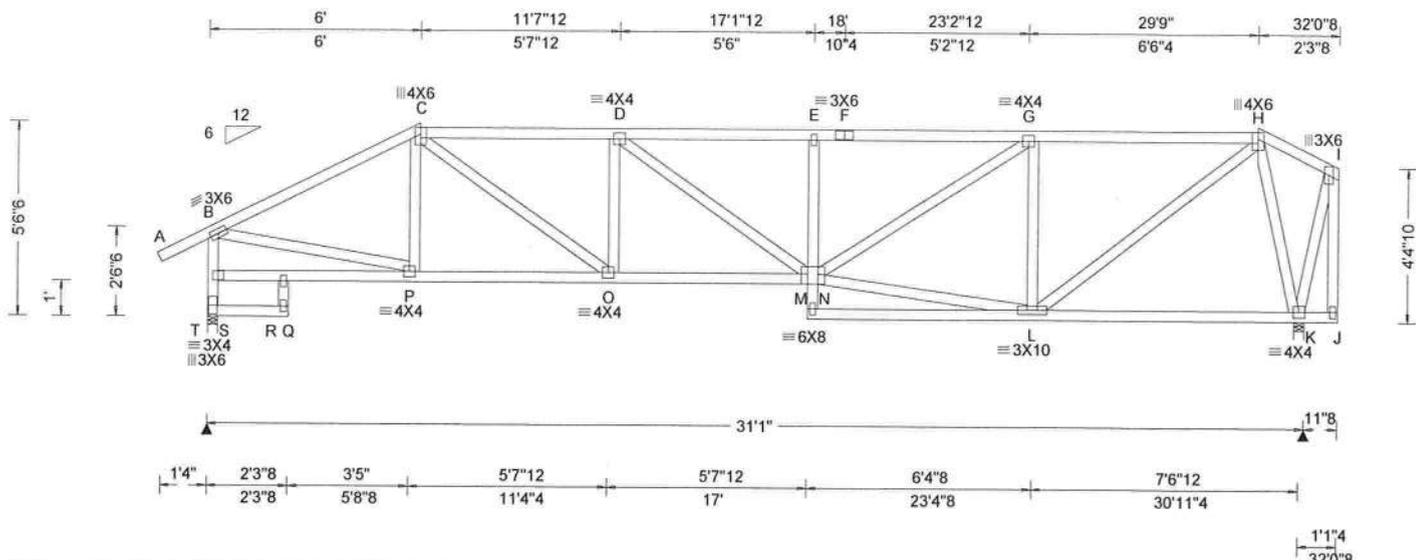
Webs	Tens.Comp.	Webs	Tens. Comp.
R - E	150 -1172	K - I	1198 -155
H - K	165 -409	I - J	137 -1128



05/06/2021

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Loading Criteria (psf)	
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 Criteria	
Wind Std:	ASCE 7-16
Speed:	130 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:	3.20 ft
Loc. from endwall:	not in 9.00 ft
GCpi:	0.18
Wind Duration:	1.60

Snow Criteria (Pg,Pf in PSF)	
Pg:	NA Ct: NA CAT: NA
Pf:	NA Ce: NA
Lu:	NA Cs: NA
Snow Duration:	NA
Building Code:	
FBC 7th Ed. 2020 Res.	
TPI Std: 2014	
Rep Fac: Yes	
FT/RT: 20(0)/0(0)	
Plate Type(s):	
WAVE	

Defl/CSI Criteria	
PP Deflection in	loc L/defl L/#
VERT(LL):	0.123 E 999 360
VERT(CL):	0.230 E 999 240
HORZ(LL):	0.041 K - -
HORZ(TL):	0.077 K - -
Creep Factor:	2.0
Max TC CSI:	0.990
Max BC CSI:	0.413
Max Web CSI:	0.624
VIEW Ver: 20.02.00A.1020.20	

▲ Maximum Reactions (lbs)						
	Gravity			Non-Gravity		
Loc	R+	/R-	/Rh	/Rw	/U	/RL
T	1256	-	-	/636	/61	/138
K	1253	-	-	/583	/56	-
Wind reactions based on MWFRS						
T	Brg Width = 3.5		Min Req = 1.6			
K	Brg Width = 3.5		Min Req = 1.6			
Bearings T & K 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	476	-1605	E - F	722	-2270	
C - D	656	-2075	F - G	722	-2270	
D - E	725	-2283	G - H	460	-1363	

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	57	-1.40	6.00
TC	24	6.00	29.75
TC	30	29.75	32.04
BC	28	0.00	2.29
BC	120	0.00	17.15
BC	120	17.15	32.04

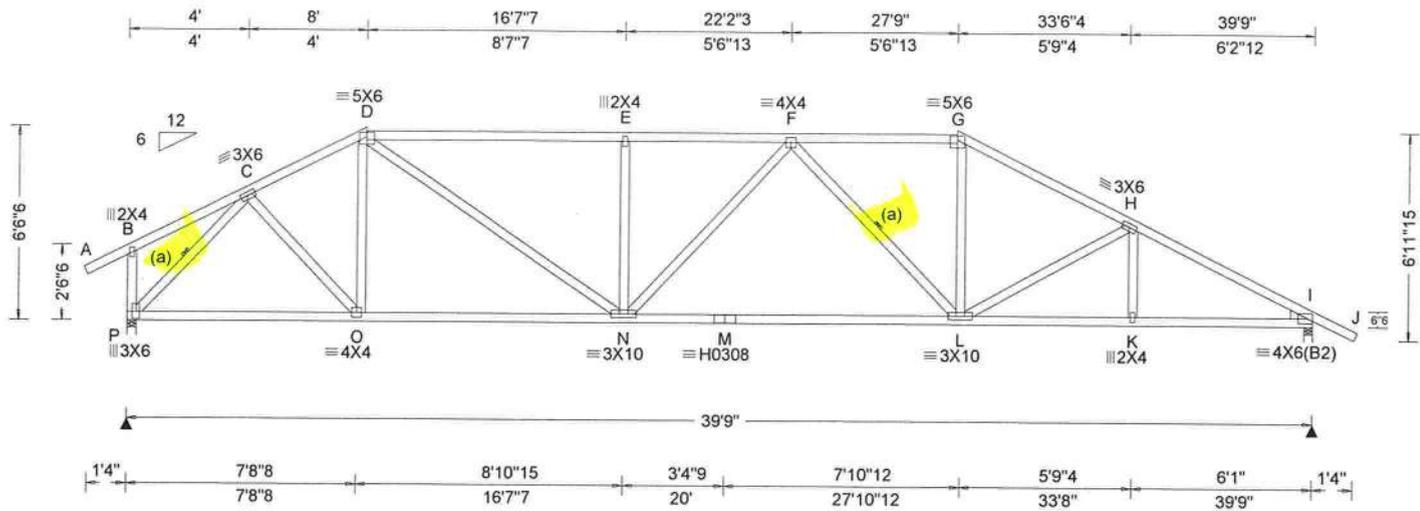
Apply purlins to any chords above or below fillers at 24" OC unless shown otherwise above.

Wind
 Wind loads based on MWFRS with additional C&C member design.
 End verticals exposed to wind pressure. Deflection meets L/180.
 Right cantilever is not exposed to wind
 Wind loading based on both gable and hip roof types.



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Loading Criteria (psf)

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 Criteria

Wind Std: ASCE 7-16
 Speed: 130 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: 3.97 ft
 Loc. from endwall: not in 9.00 ft
 GCpi: 0.18
 Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)

Pg: NA Ct: NA CAT: NA
 Pf: NA Ce: NA
 Lu: NA Cs: NA
 Snow Duration: NA

Building Code:
 FBC 7th Ed. 2020 Res.
 TPI Std: 2014
 Rep Fac: Yes
 FT/RT:20(0)/0(0)
 Plate Type(s):
 WAVE, HS

Defl/CSI Criteria

PP Deflection in loc L/defl L/#

VERT(LL):	0.176	F	999	360
VERT(CL):	0.328	F	999	240
HORZ(LL):	0.072	K	-	-
HORZ(TL):	0.134	K	-	-

Creep Factor: 2.0
 Max TC CSI: 0.997
 Max BC CSI: 0.883
 Max Web CSI: 0.750

VIEW Ver: 20.02.00A.1020.20

Maximum Reactions (lbs)

Loc	Gravity			Non-Gravity		
	R+	R-	Rh	Rw	U	RL
P	1584	-	-	798	775	1158
I	1591	-	-	842	774	-

Wind reactions based on MWFRS
 P Brg Width = 3.5 Min Req = 2.0
 I Brg Width = 3.5 Min Req = 2.0
 Bearings P & I 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	436 - 1792	F - G	495 - 2065
D - E	610 - 2443	G - H	508 - 2381
E - F	609 - 2441	H - I	485 - 2689

Lumber
 Top chord: 2x4 SP #1;
 Bot chord: 2x4 SP #1;
 Webs: 2x4 SP #3;
 Rt 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	52	-1.40	8.00
TC	24	8.00	27.75
TC	37	27.75	41.15
BC	120	0.00	39.58

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.
 Left end vertical exposed to wind pressure. Deflection meets L/180.
 Wind loading based on both gable and hip roof types.



Maximum Bot Chord Forces Per Ply (lbs)

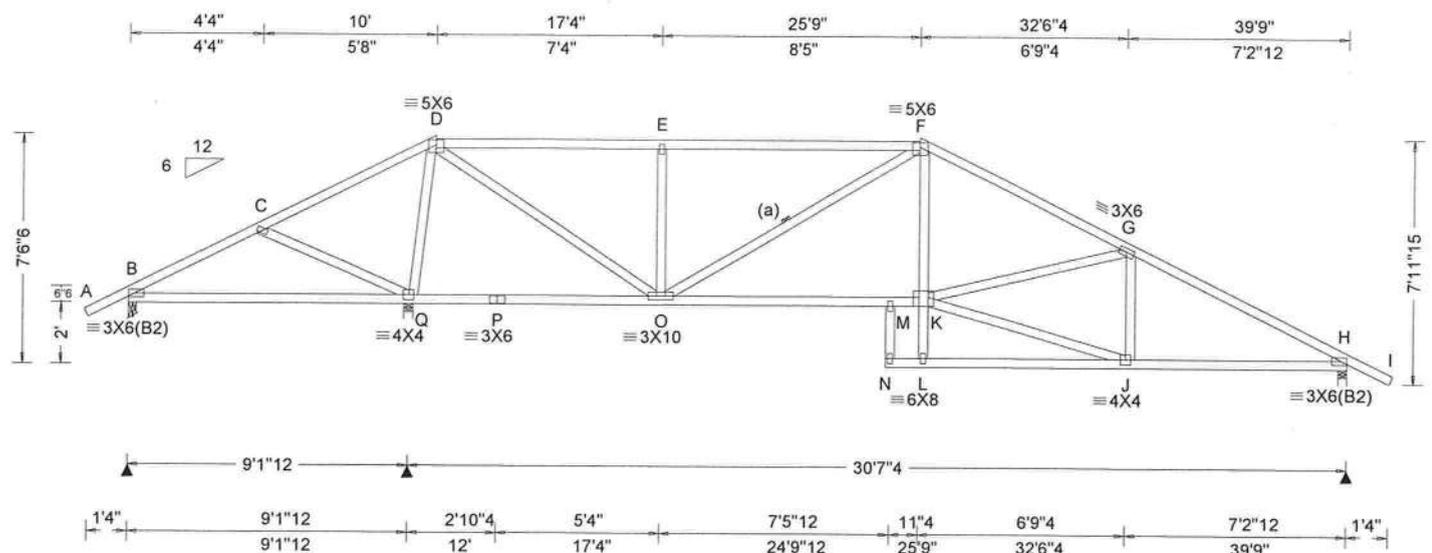
Chords	Tens.Comp.	Chords	Tens. Comp.
P - O	1241 - 216	M - L	2387 - 434
O - N	1599 - 257	L - K	2317 - 365
N - M	2387 - 434	K - I	2317 - 364

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
P - C	330 - 1794	E - N	254 - 454
C - O	520 - 85	F - L	223 - 473
D - N	1035 - 255	G - L	699 - 73

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Loading Criteria (psf) TCLL: 20.00 TCCL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCCL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCCL: 4.2 psf BCDL: 6.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.97 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.104 K 999 360 VERT(CL): 0.197 K 999 240 HORZ(LL): 0.032 J - - HORZ(TL): 0.059 J - - Creep Factor: 2.0 Max TC CSI: 0.971 Max BC CSI: 0.563 Max Web CSI: 0.888 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs)																																																			
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Plating Notes
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Purlins
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Chord	Spacing(in oc)	Start(ft)	End(ft)
TC	75	-1.40	10.00
TC	24	10.00	25.75
TC	49	25.75	41.15
BC	75	0.17	25.85
BC	120	24.67	39.58

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

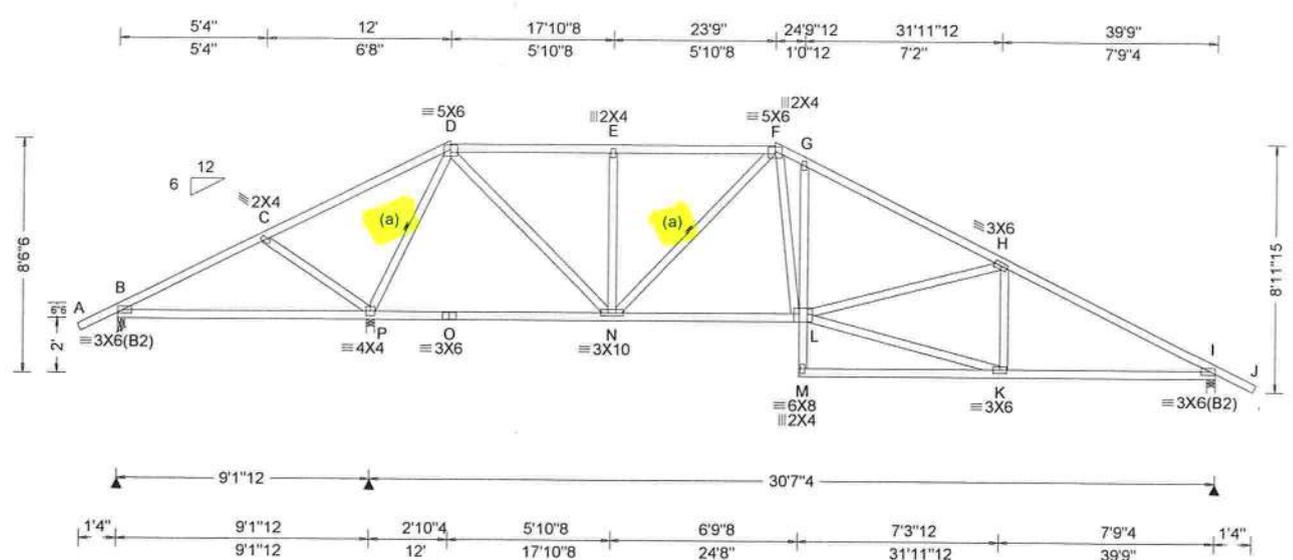
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05/06/2021

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

Bracing
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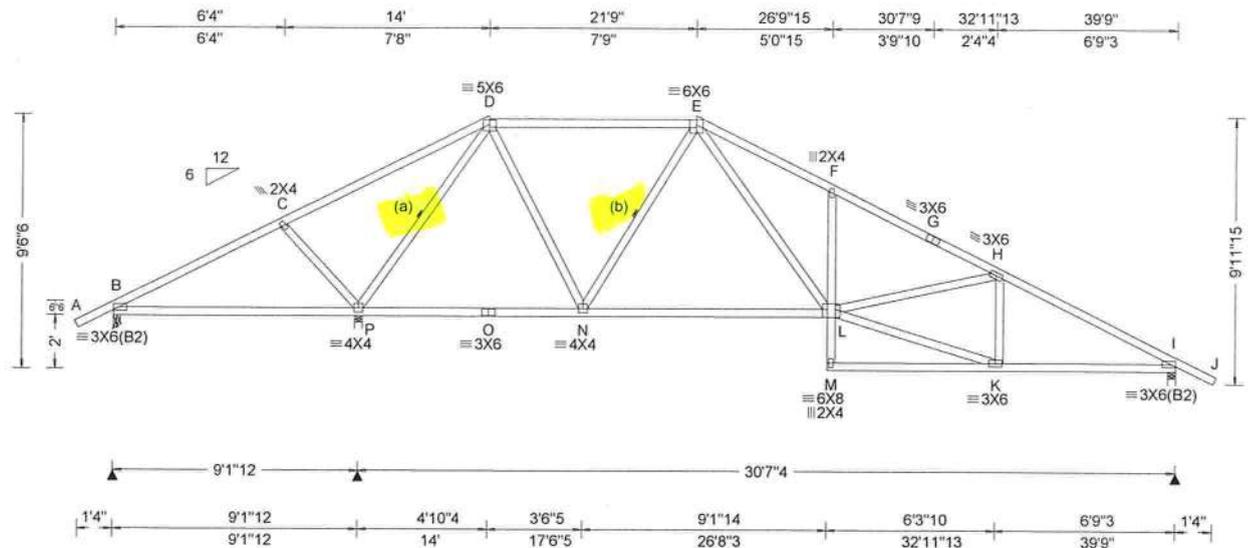
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NCBCLL:	10.00
Soffit:	2.00
Load Duration:	1.25
Spacing:	24.0"

Wind Criteria	
Wind Std:	ASCE 7-16
Speed:	130 mph
Enclosure:	Closed
Risk Category:	II
EXP:	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:	3.97 ft
Loc. from endwall:	not in 9.00 ft
GCpi:	0.18
Wind Duration:	1.60

Snow Criteria (Pg,Pf in PSF)	
Pg:	NA
Ct:	NA
CAT:	NA
Pf:	NA
Ce:	NA
Lu:	NA
Cs:	NA
Snow Duration:	NA

Building Code:	
FBC 7th Ed.	2020 Res.
TPI Std:	2014
Rep Fac:	Yes
FT/RT:	20(0)/0(0)
Plate Type(s):	
WAVE	

Defl/CSI Criteria	
PP Deflection in loc L/defl L/#	
VERT(LL):	0.112 F 999 360
VERT(CL):	0.210 F 999 240
HORZ(LL):	0.037 K - -
HORZ(TL):	0.069 K - -
Creep Factor:	2.0
Max TC CSI:	0.962
Max BC CSI:	0.623
Max Web CSI:	0.655
VIEW Ver:	20.02.00A.1020.20

▲ Maximum Reactions (lbs)						
Loc	Gravity			Non-Gravity		
	R+	/R-	/Rh	/Rw	/U	/RL
B	332	-75	-	145	-	188
P	1846	-	-	889	-	-
I	1167	-	-	686	-	-

Wind reactions based on MWFRS

Member	Brg Width	Min Req
B	3.0	1.5
P	3.5	2.3
I	3.5	1.5

Bearings B, P, & I 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	440 -113	F - G	234 -1905
C - D	659 -79	G - H	218 -1966
D - E	165 -709	H - I	182 -1839
E - F	304 -1933		

Lumber
Top chord: 2x4 SP #1;
Bot chord: 2x4 SP #1;
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 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Plating Notes
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	-1.40	14.00
TC	24	14.00	21.75
TC	48	21.75	41.15
BC	75	0.17	26.85
BC	75	26.83	39.58

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.

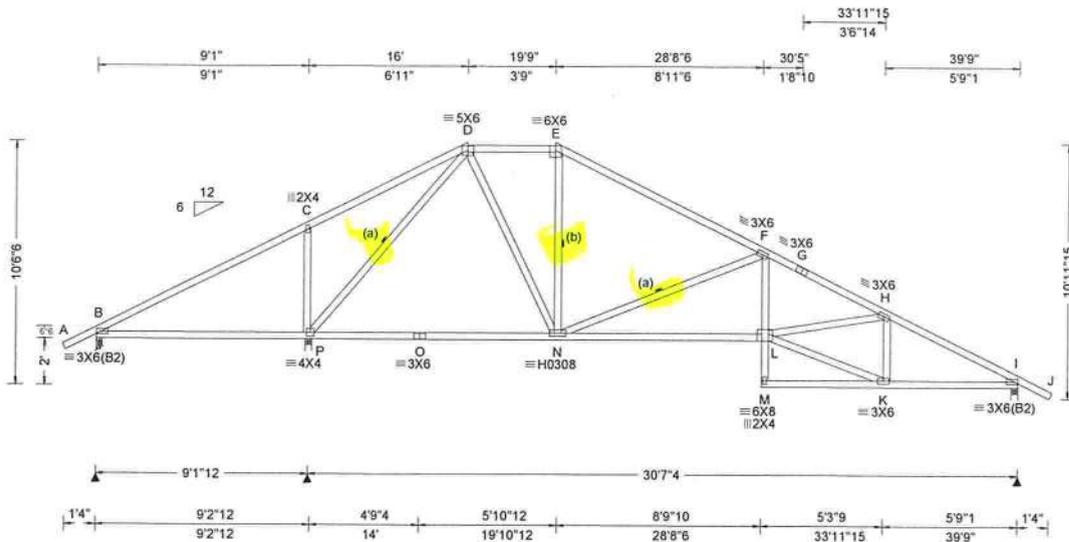


Maximum Bot Chord Forces Per Ply (lbs)			
Chords	Tens.Comp.	Chords	Tens. Comp.
N - L	1018 -3	K - I	1563 -92

Maximum Web Forces Per Ply (lbs)			
Webs	Tens.Comp.	Webs	Tens. Comp.
C - P	184 -458	E - L	1148 -89
P - D	275 -1577	L - K	1637 -89
D - N	775 -55	K - H	121 -436
N - E	192 -608		

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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





Loading Criteria (psf) TCCL: 20.00 TCDL: 7.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 37.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Criteria Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: 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: 3.97 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/0(0) Plate Type(s): WAVE, HS	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.141 L 999 360 VERT(CL): 0.255 L 999 240 HORZ(LL): 0.052 K - - HORZ(TL): 0.098 K - - Creep Factor: 2.0 Max TC CSI: 0.956 Max BC CSI: 0.777 Max Web CSI: 0.831 VIEW Ver: 20.02.00A.1020.20	▲ Maximum Reactions (lbs)																																																																	
				<table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="3">Gravity</th> <th colspan="3">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>/R-</th> <th>/Rh</th> <th>/Rw</th> <th>/U</th> <th>/RL</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>462</td> <td>-48</td> <td>-</td> <td>/198</td> <td>/28</td> <td>/207</td> </tr> <tr> <td>P</td> <td>1685</td> <td>-</td> <td>-</td> <td>/825</td> <td>-</td> <td>-</td> </tr> <tr> <td>I</td> <td>1198</td> <td>-</td> <td>-</td> <td>/687</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS B Brg Width = 3.0 Min Req = 1.5 P Brg Width = 3.5 Min Req = 2.1 I Brg Width = 3.5 Min Req = 1.5 Bearings B, P, & I Fcperp = 425psi. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs)</p> <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.</th> <th>Comp.</th> <th>Chords</th> <th>Tens.</th> <th>Comp.</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>448</td> <td>-280</td> <td>F - G</td> <td>254</td> <td>-2416</td> </tr> <tr> <td>C - D</td> <td>485</td> <td>-203</td> <td>G - H</td> <td>247</td> <td>-2507</td> </tr> <tr> <td>D - E</td> <td>231</td> <td>-923</td> <td>H - I</td> <td>164</td> <td>-1903</td> </tr> <tr> <td>E - F</td> <td>196</td> <td>-1142</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	462	-48	-	/198	/28	/207	P	1685	-	-	/825	-	-	I	1198	-	-	/687	-	-	Chords	Tens.	Comp.	Chords	Tens.	Comp.	B - C	448	-280	F - G	254	-2416	C - D	485	-203	G - H	247	-2507	D - E	231	-923	H - I	164	-1903	E - F	196
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 (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 2x6 #3 or better "T" reinforcement. 80% length of web member. Attached with 10d Box or Gun (0.128"x3",min.)nails @ 6" oc.

Plating Notes
 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	-1.40	16.00
TC	24	16.00	19.75
TC	41	19.75	41.15
BC	75	0.17	28.81
BC	120	28.84	39.58

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



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

Gable Stud Reinforcement Detail

Dr: 120 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00
 Dr: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00
 Dr: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

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

Bracing Group Species and Grades:

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

Group A: Spruce-Pine-Fir #1 / #2 Standard Stud, #3 Standard Stud; Hen-Fir #2 Standard Stud, #3 Standard Stud; Douglas Fir-Larch #3 Standard Stud; Southern Pine*** #3 Standard Stud.

Group B: Hen-Fir #1 & Btr #1; Douglas Fir-Larch #1 Standard Stud, #2 Standard Stud; Southern Pine*** #1 Standard Stud, #2 Standard Stud.

Notes:
 * 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.
 *** Southern Pine***

Gable Truss Detail Notes:
 Wind Load deflection criterion is L/240.
 Provide uplift connections for 55 psf 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.

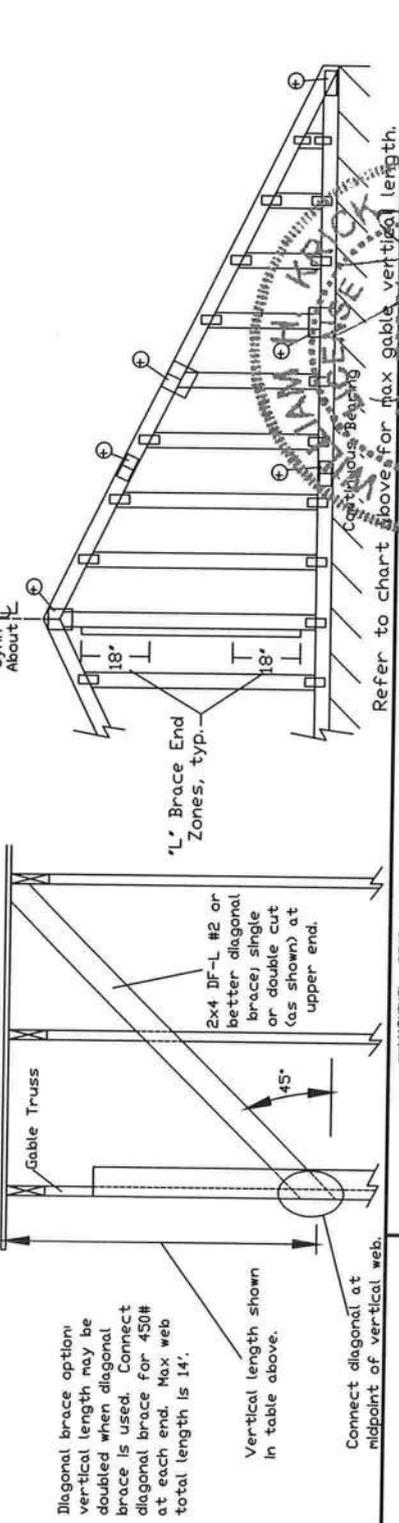
Gable Vertical Plate Sizes

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.

REF	ASCE7-16-GABI4015
DATE	01/26/2018
DRWG	A14015ENC160118



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For more information see this job's general notes page and these web sites:
 ALPINE: www.alphinetw.com, TPI: www.tpinetw.com, SRCA: www.srca.com

ALPINE
 AN ITW COMPANY
 11514(Earth) City Expressway
 Suite 242
 Earth City, MO 63045

MAX. TOT. LD. 60 PSF

NO. 10001

STATE OF FLORIDA PROFESSIONAL ENGINEER

05/06/2021

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)

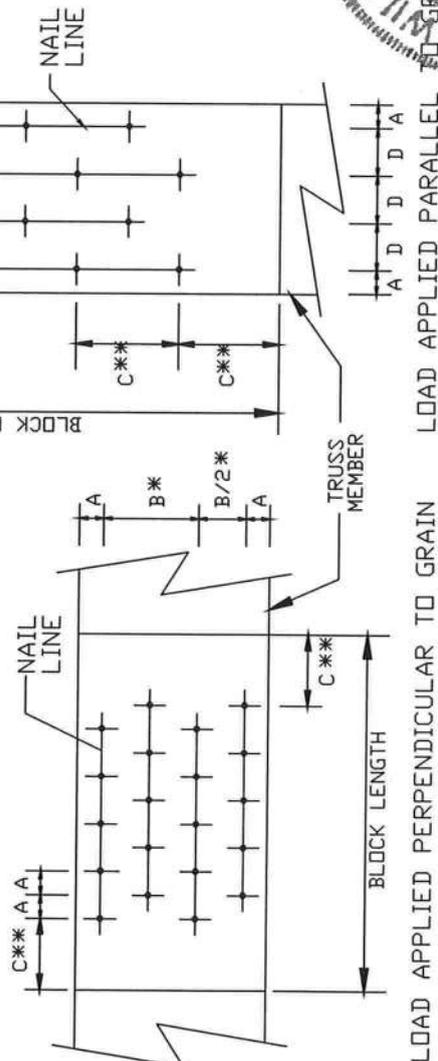
D - SPACING BETWEEN STAGGERED ROWS OF NAILS (7 1/2 NAIL DIAMETERS)

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%.

DIRECTION OF LOAD AND NAIL ROWS



MINIMUM NAIL SPACING DISTANCES

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

ALPINE
AN ITW COMPANY
11514 Earth City Expressway
11 Sulte 242
11 Earth City, MO 63045

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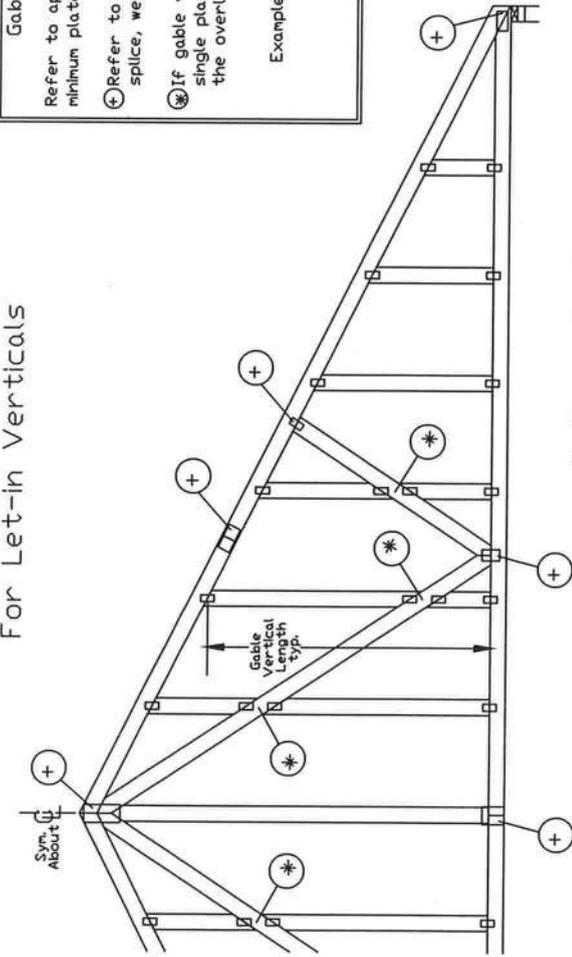
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For more information see this Job's general notes page and these web sites:
ALPINE: www.alpineitw.com TPI: www.tpinational.com BCSA: www.bcsaindustry.com ITC: www.itc.com

WILLIAM H. KRICK
LICENSE
No. 70881
STATE OF FLORIDA
PROFESSIONAL ENGINEER
06/2021

REF NAIL SPACE
DATE 10/01/14
DRWG C>NNAILSP1014

Gable Detail For Let-in Verticals



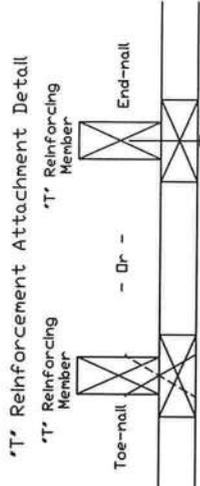
Gable Truss Plate Sizes

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: 2X4, 2X8



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"x 3".min) Nails at 4' o.c. plus
- (4) nails in the top and bottom chords.

Toenailed Nails:

- 10d Common (0.148"x 3".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, A1015051014, A10015051014, A14015051014, A13030051014, A12030051014, A1030051014, A10030051014, A14030051014
 - ASCE 7-10 & ASCE 7-16 Gable Detail Drawings
 - A11515ENC100118, A12015ENC100118, A14015ENC100118, A16015ENC100118, A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118, A11530ENC100118, A12030ENC100118, A14030ENC100118, A16030ENC100118, A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118, S11515ENC100118, S12015ENC100118, S14015ENC100118, S16015ENC100118, S11530ENC100118, S12030ENC100118, S14030ENC100118, S20030ENC100118, S18030ENC100118, S20030ENC100118, S20030END100118, S20030PED100118

See appropriate Alpine gable detail for maximum allowable vertical length.

IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING INCLUDING THE INSTALLER'S

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Components Safety Institute) Safety Manual, by TPI and SCSA for safety practices prior to performing these functions. Installers shall ensure that all bracing and fasteners shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of roof trusses and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 104-2 for standard plate positions.

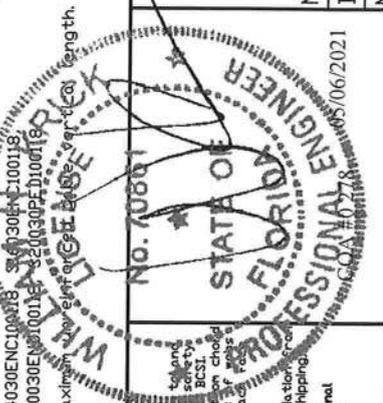
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from the design shown. The installer is responsible for building the truss in conformance with ANSI/TPI 1, or for handling, shipping, installing, bracing and fastening. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The liability and acceptance 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.alpine.com, TPI: www.tpi.com, SCSA: www.scsa.com

REF	LET-IN VERT
DATE	01/02/2018
DRWG	GBLLETIN0118
MAX. TOT. LD.	60 PSF
DUR. FAC.	ANY
MAY CONTACT	24 HR

ALPINE
 AN ITW COMPANY

115141 Earth City Expressway
 11 Sulei, 242
 11 Earth City, MO 63045



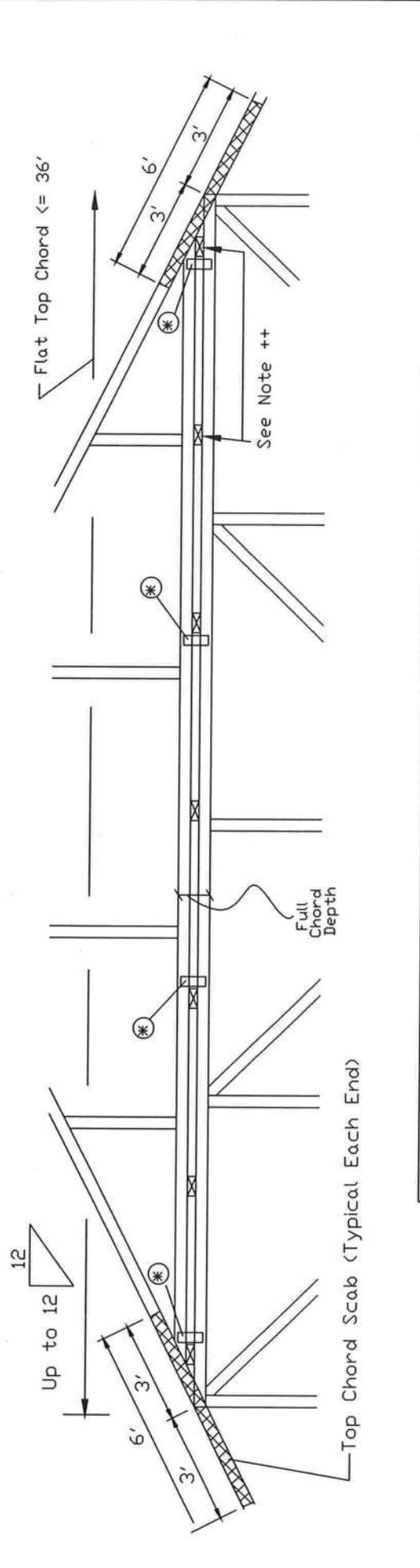
Piggyback Detail - ASCE 7-16: 180 mph, 30' Mean Hgt, Partially Enclosed, Exp. C, Kzt=1.00

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=1.00
 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=1.00

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.

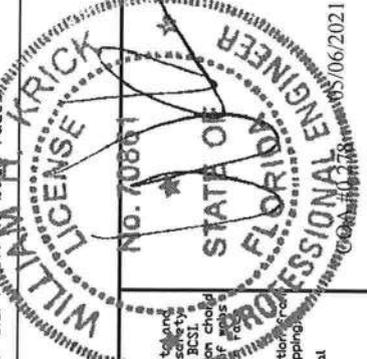
Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4' o.c.



++ 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").

<p>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.</p>	<p>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.</p>
<p>28PB Wave Piggyback Plate Use 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.</p>	<p>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.</p>

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



REF	PIGGYBACK
DATE	01/02/2018
DRWG	PB180160118

ALPINE ANITW COMPANY
 115141 Earth City Expressway
 11 Suite 1242
 11 Earth City, MO 63045

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 Components Safety Institute) for safety practices prior to performing these functions. Installer shall provide bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and shall have bracing attached rigid ceiling. Locations shown for permanent lateral restraint of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpha, 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 or use of the truss.

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 the 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.com
 alpine.com

Cracked or Broken Member Repair Detail

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#

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) = $(2)(L) + (B)$

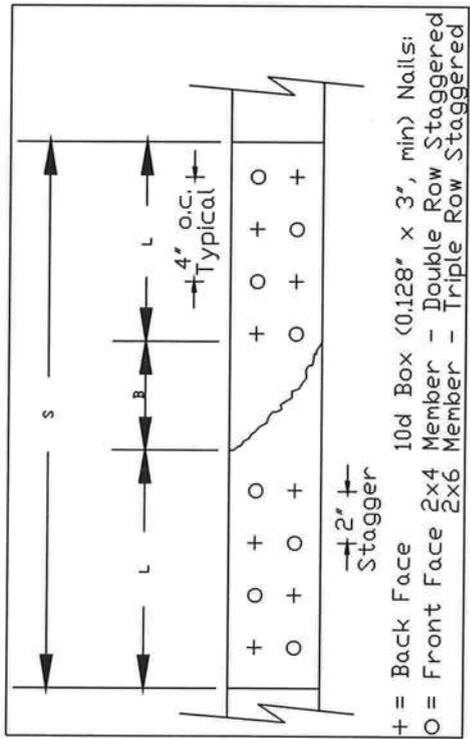
Scab member length (S) must be within the broken panel.
Nail into 2x4 members using two (2) rows at 4' o.c., rows staggered.
Nail into 2x6 members using three (3) rows at 4' o.c., rows staggered.
Nail using 10d box or gun nails (0.128"x3", min) into each side member.

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

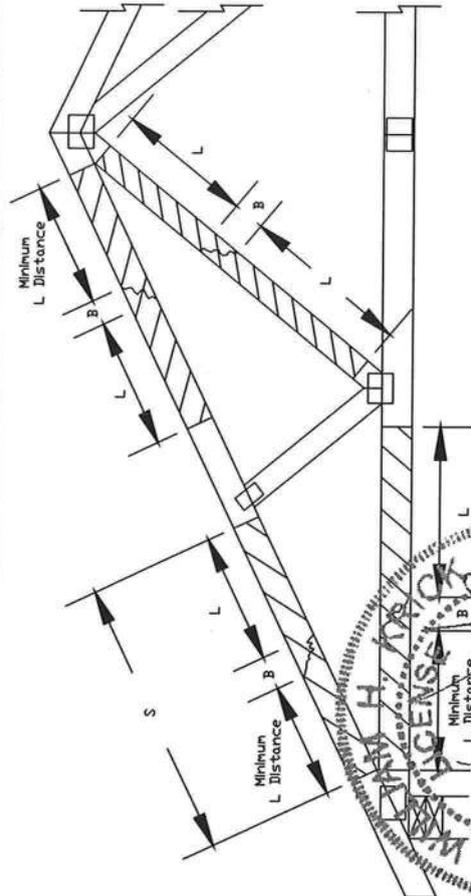
This repair detail may be used for broken connector plate at mid-panel splices.

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.



Nail Spacing Detail



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

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCSI Building Component Safety Manual for proper practices prior to performing these functions. Installers shall provide temporary bracing and bracing unless noted otherwise. Top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7 or B10, as applicable. Apply plates to each side of webs and post bracing shown above and on the joint details, unless noted otherwise. Refer to drawings for standard plate positions.

Alpha, a division of ITW Building Components Group Inc. shall not be responsible for any deviation of this drawing from the truss design. This drawing shall be used for the installation & bracing of trusses. A seal on this drawing or cover page listing 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.tpi-ct.com, BCSI: www.bcsi.com

REF	MEMBER REPAIR
DATE	10/01/14
DRWG	REPCHRD1014

No. 70881

STATE OF FLORIDA

PROFESSIONAL ENGINEER

06/2021

SPACTIC 3107 MAV

ALPINE
AN ITW COMPANY

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Suite 242
Earth City, MO 63045