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10/04/2024
 ABCD Engineering, PLLC NC COA 0838

Site Information:	Page 1:
Customer: Structural Building Solutions LLC	Job Number: Q2409-242
Job Description: The Farm at Neills Creek	
Address:	

Job Engineering Criteria:	
Design Code: IRC 2021	IntelliVIEW Version: 23.02.04A JRef #: 1Y3T98360006
Wind Standard: ASCE 7-16 Wind Speed (mph): 120	Design Loading (psf): 40.00
Building Type: Closed	

This package contains general notes pages, 38 truss drawing(s) and 7 detail(s).

Item	Drawing Number	Truss
1	278.24.0921.01777	A3G
3	278.24.0921.00821	A3A
5	278.24.0921.01151	A3T
7	278.24.0921.01715	PB2
9	278.24.0921.02012	V5
11	278.24.0921.02061	P1
13	278.24.0921.00743	V1
15	278.24.0921.01464	V3
17	278.24.0921.02028	VA2
19	278.24.0921.01385	VG1
21	278.24.0921.00837	VG3
23	278.24.0921.00774	VG4
25	278.24.0921.01417	T1G
27	278.24.0921.01307	PB1G
29	278.24.0921.01463	PB1
31	278.24.1027.30803	A1G
33	278.24.1026.16317	M1
35	278.24.1027.36327	A2T
37	278.24.1026.21000	M2
39	A12015ENC160118	
41	BRCLBSUB0119	
43	GBLLETIN0118	
45	VALTN160118	

Item	Drawing Number	Truss
2	278.24.0921.01182	PB4G
4	278.24.0921.00868	PB4
6	278.24.1027.59090	A3
8	278.24.0921.01135	PB2G
10	278.24.0921.01716	V2
12	278.24.0921.01761	V4
14	278.24.0921.02075	P1G
16	278.24.0921.01073	P1D
18	278.24.0921.01746	VA1
20	278.24.0921.01811	VG2
22	278.24.0921.01483	VG5
24	278.24.0921.01448	T1
26	278.24.0921.02060	G1G
28	278.24.0921.01166	G1
30	278.24.0921.00775	G2
32	278.24.1026.18863	M1G
34	278.24.1025.40810	A1
36	278.24.1026.23337	M2A
38	278.24.1027.34137	A2
40	A12030ENC160118	
42	GABRST160118	
44	PB160160118	

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.

Bearing Information:

The bearing area factor, C_b , is considered for the allowable capacity of solid sawn wood bearings supporting trusses that are located a minimum of 3" from the end of the lumber piece.

General Notes (continued)

Coated Lumber:

Coated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Coated lumber has no adjustments to lumber properties. Coated lumber may be more brittle than uncoated lumber. Special handling care must be taken to prevent breakage during all handling activities. Refer to manufacturer literature, specifications, and code evaluation reports for restrictions, details, and requirements.

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.

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.

C = Coated lumber.

C-AT = AtTEK coated lumber.

C-FX = FX Lumber Guard coated lumber.

C-TE = TechWood 4400 coated lumber.

CL = Certified lumber.

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

FRT = Fire Retardant Treated lumber.

FRT-BF = Borafire 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-ON = OnWood Fire Retardant Treated lumber.

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

FRT-PR = ProWood 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 all load cases.

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

Max Web CSI = Maximum bending and axial Combined Stress Index for Webs for 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).

General Notes (continued)

Key to Terms (continued):

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

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

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

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

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

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

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

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

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

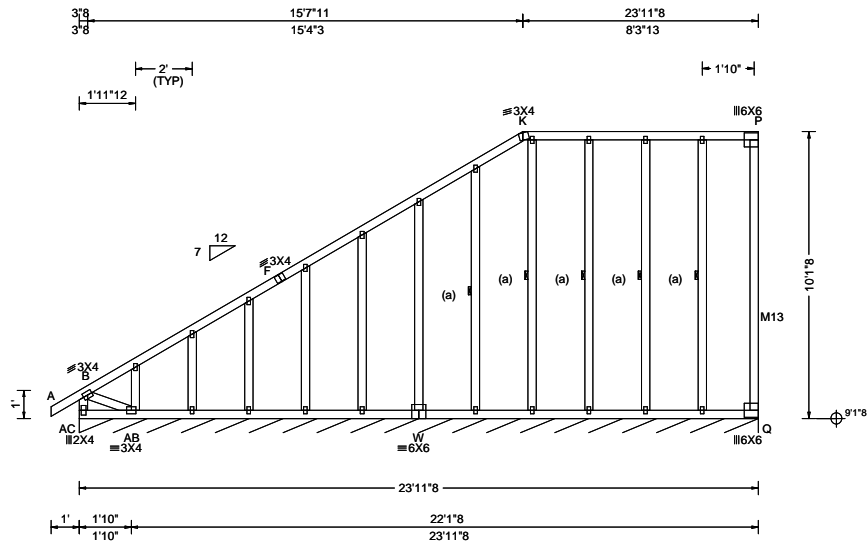
Refer to ASCE-7 for Wind and Seismic abbreviations.

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

References:

1. AWC: American Wood Council; 222 Catoctin Circle SE, Suite 201; Leesburg, VA 20175; www.awc.org.
2. ICC: International Code Council; www.iccsafe.org.
3. Alpine, a division of ITW Building Components Group Inc.: 155 Harlem Ave, North Building, 4th Floor, Glenview, IL 60025; 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.sbcacomponents.com

SEQN: 4276 / FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: A3G	Cust: R 9836 JRef: 1Y3T98360006 T4 / DrwNo: 278.24.0921.01777 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.82 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): -0.002 K 999 240 VERT(CL): 0.003 K 999 240 HORZ(LL): -0.012 P - - HORZ(TL): 0.016 P - - Creep Factor: 2.0 Max TC CSI: 0.236 Max BC CSI: 0.240 Max Web CSI: 0.767 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL Q* 86 /- /- /50 /- /19 Wind reactions based on MWFRS Q Brg Wid = 287 Min Req = - Bearing AC is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - F 198 -494 F - K 308 -389 Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. AB- W 493 -153 Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. B -AB 414 -145 Maximum Gable Forces Per Ply (lbs) Gables Tens.Comp. AC- B 130 -413
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Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3; M13 2x4 SP SS;

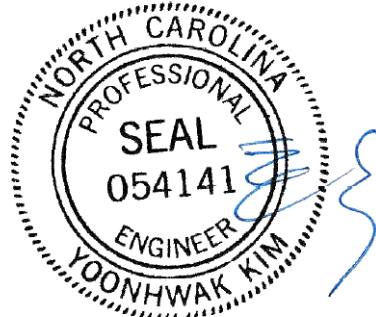
Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 1.5X3 except as noted.

Loading
Bottom chord checked for 10.00 psf non-concurrent live load.

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.

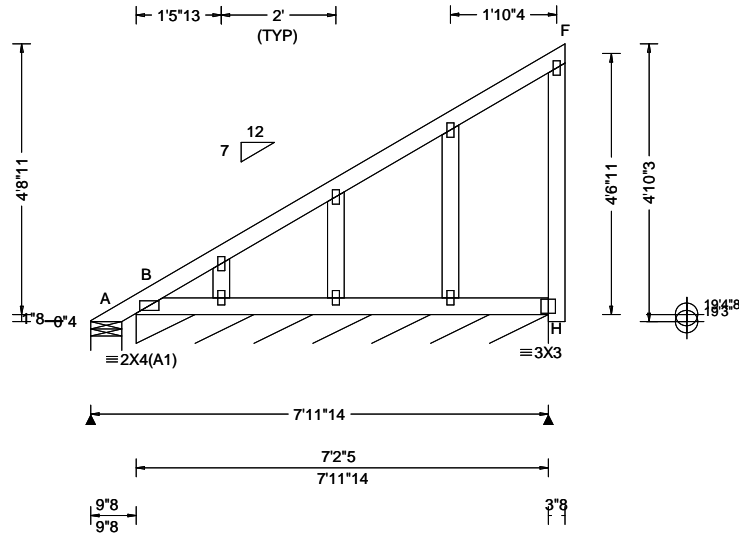
Additional Notes
See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.



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Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.
For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbccomponents.com; ICC: iccsafe.org; AWC: awc.org





Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.82 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.000 E 999 240 VERT(CL): 0.001 E 999 240 HORZ(LL): -0.001 E - - HORZ(TL): 0.001 E - - Creep Factor: 2.0 Max TC CSI: 0.052 Max BC CSI: 0.014 Max Web CSI: 0.038 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL A 14 /- /- /57 /17 /103 B* 84 /- /- /59 /15 /- Wind reactions based on MWFRS A Brg Wid = 6.5 Min Req = 1.5 (Truss) B Brg Wid = 86.3 Min Req = - Bearings A & B are a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

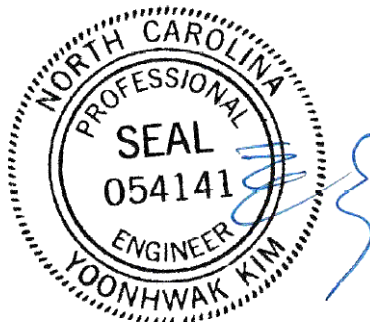
Gable end supports 8" max rake overhang. Top chord must not be cut or notched.
Bottom chord checked for 10.00 psf non-concurrent live load.

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

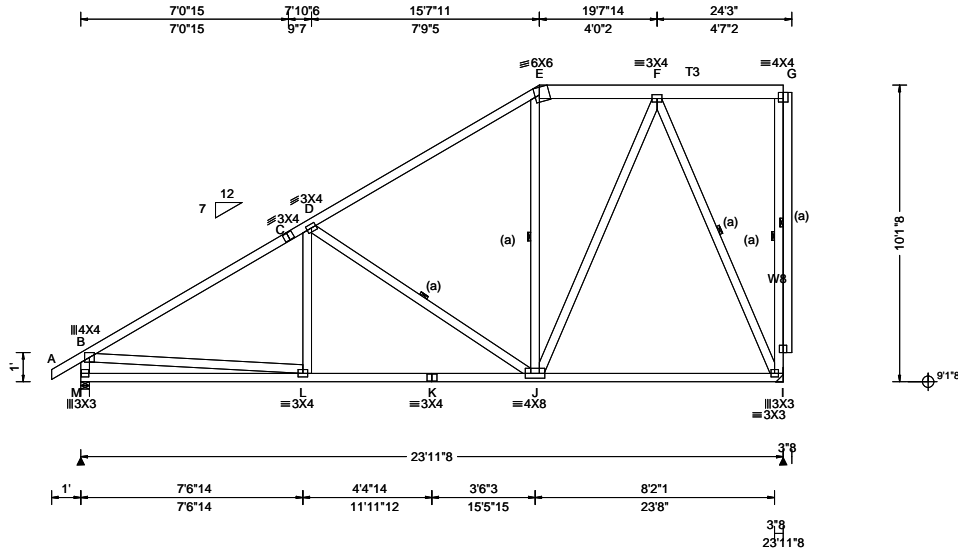
See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.
Refer to DWG PB160160118 for piggyback details.



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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.82 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.035 L 999 240 VERT(CL): 0.072 L 999 240 HORZ(LL): 0.010 I - - HORZ(TL): 0.021 I - - Creep Factor: 2.0 Max TC CSI: 0.862 Max BC CSI: 0.702 Max Web CSI: 0.517 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL M 1065 -/- /- /626 -/- /226 I 995 -/- /- /571 -/- /- Wind reactions based on MWFRS M Brg Wid = 3.5 Min Req = 1.5 (Truss) I Brg Wid = - Min Req = - Bearing M is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 0 -1367 D - E 0 -823 C - D 0 -1142 E - F 31 -597
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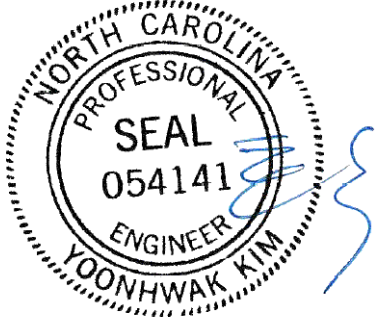
Lumber
Top chord: 2x4 SP #2; T3 2x6 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3; W8 2x4 SP #2;

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

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

Loading
Bottom chord checked for 10.00 psf non-concurrent live load.

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

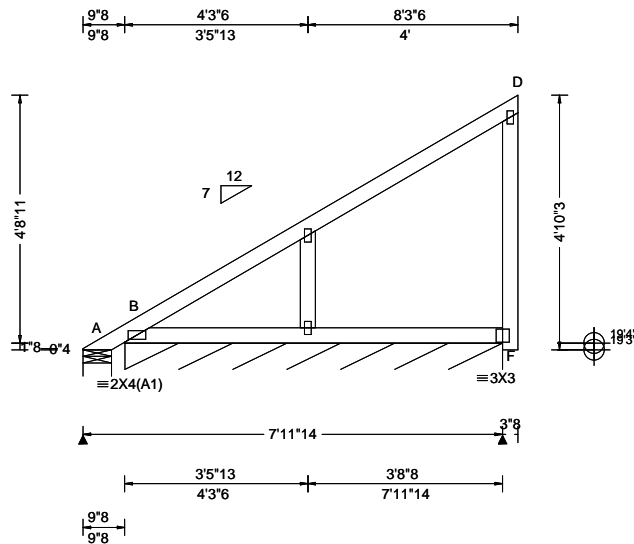


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For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org



SEQN: 4516 / FROM:	GABL Ply: 1 Qty: 10	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: PB4	Cust: R 9836 JRef: 1Y3T98360006 T30 / DrwNo: 278.24.0921.00868 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCCL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.82 ft TCCL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.001 B 999 240 VERT(CL): 0.002 B 999 240 HORZ(LL): -0.001 D - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.263 Max BC CSI: 0.068 Max Web CSI: 0.059 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF <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>A</td> <td>-</td> <td>/-30</td> <td>/-</td> <td>/65</td> <td>/42</td> <td>/103</td> </tr> <tr> <td>B*</td> <td>91</td> <td>/-</td> <td>/-</td> <td>/63</td> <td>/16</td> <td>/-</td> </tr> </tbody> </table> Wind reactions based on MWFRS A Brg Wid = 6.5 Min Req = 1.5 (Truss) B Brg Wid = 86.3 Min Req = - Bearings A & B are a rigid surface. Members not listed have forces less than 375#	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	A	-	/-30	/-	/65	/42	/103	B*	91	/-	/-	/63	/16	/-
				Loc		Gravity			Non-Gravity																						
R+	/R-	/Rh	/Rw		/U	/RL																									
A	-	/-30	/-	/65	/42	/103																									
B*	91	/-	/-	/63	/16	/-																									
Lumber Top chord: 2x4 SP #2; Bot chord: 2x4 SP #2; Webs: 2x4 SP #3;																															

Plating Notes

All plates are 1.5X3 except as noted.

Loading

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

Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

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

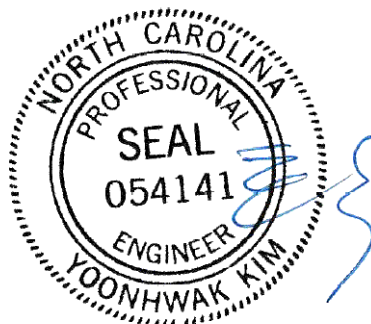
Right end vertical not exposed to wind pressure.

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

Refer to DWG PB160160118 for piggyback details.

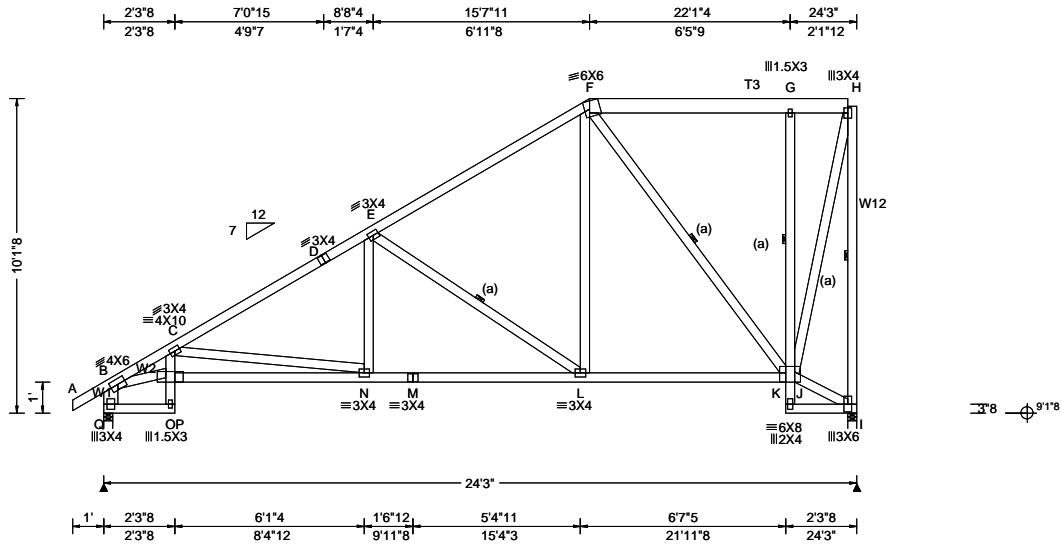


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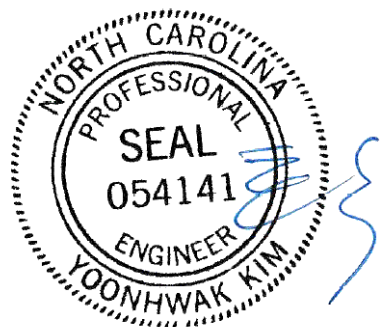
Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.075 N 999 240 VERT(CL): 0.155 N 999 240 HORZ(LL): 0.062 I - - HORZ(TL): 0.128 I - - Creep Factor: 2.0 Max TC CSI: 0.641 Max BC CSI: 0.728 Max Web CSI: 0.817 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL Q 1077 /- /- /616 /- /264 I 989 /- /- /563 /18 /- Wind reactions based on MWFRS Q Brg Wid = 3.5 Min Req = 1.5 (Truss) I Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings Q & I are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 332 -2590 D - E 175 -1400 C - D 166 -1555 E - F 204 -909
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Lumber
Top chord: 2x4 SP #2; T3 2x6 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3; W1 2x6 SP #2; W2 2x4 SP #2;
W12 2x4 SP SS;

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

Loading
Bottom chord checked for 10.00 psf non-concurrent live load.
Truss designed for unbalanced snow loads.

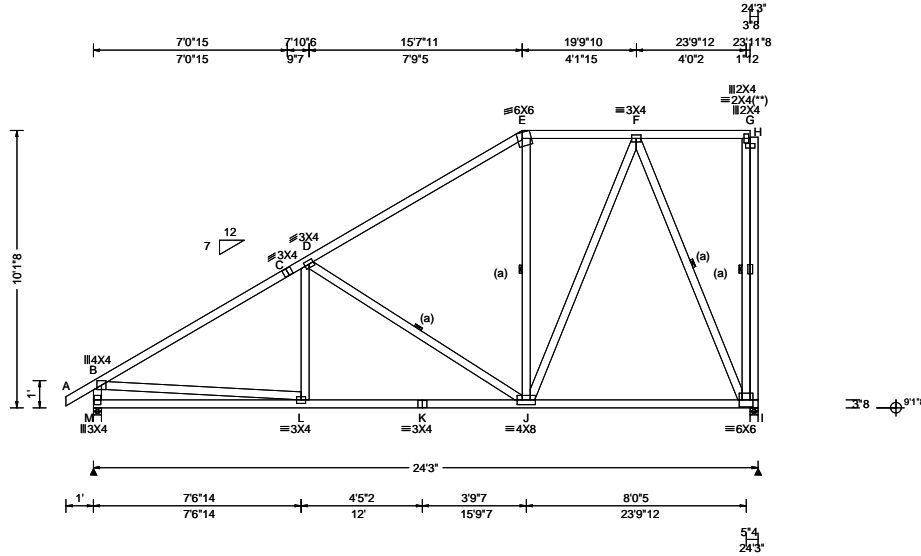
Wind
Wind loads based on MWFRS with additional C&C member design.
End verticals exposed to wind pressure. Deflection meets L/180.
Wind loading based on both gable and hip roof types.



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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.041 D 999 240 VERT(CL): 0.084 D 999 240 HORZ(LL): 0.011 D - - HORZ(TL): 0.023 D - - Creep Factor: 2.0 Max TC CSI: 0.877 Max BC CSI: 0.746 Max Web CSI: 0.515 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL M 1077 -/- /- /616 -/- /264 I 989 -/- /- /563 /19 -/ Wind reactions based on MWFRS M Brg Wid = 3.5 Min Req = 1.5 (Truss) I Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings M & I are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 161 -1390 D - E 207 -829 C - D 165 -1165 E - F 213 -596
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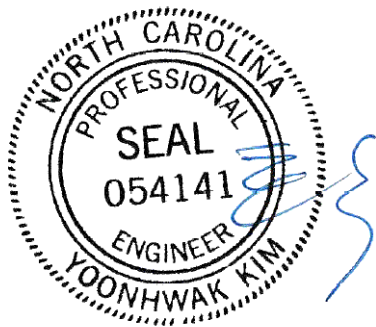
Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;
Rt Bearing Leg: 2x4 SP #2;

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

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

Loading
Bottom chord checked for 10.00 psf non-concurrent live load.
Truss designed for unbalanced snow loads.

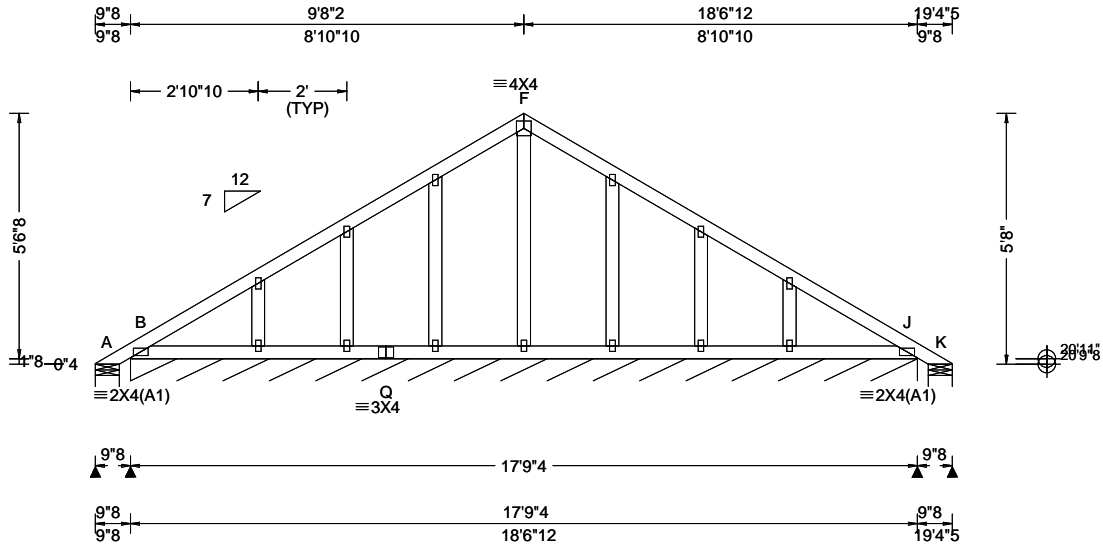
Wind
Wind loads based on MWFRS with additional C&C member design.
End verticals exposed to wind pressure. Deflection meets L/180.
Wind loading based on both gable and hip roof types.
It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data, including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.



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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 18.29 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.69 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.001 G 999 240 VERT(CL): 0.001 G 999 240 HORZ(LL): 0.001 I - - - HORZ(TL): 0.001 I - - - Creep Factor: 2.0 Max TC CSI: 0.079 Max BC CSI: 0.038 Max Web CSI: 0.071 VIEW Ver: 23.02.04A.0207.13	▲ 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>A</td> <td>-</td> <td>/-7</td> <td>/-</td> <td>/50</td> <td>/51</td> <td>/90</td> </tr> <tr> <td>B*</td> <td>83</td> <td>/-</td> <td>/-</td> <td>/49</td> <td>/7</td> <td>/-</td> </tr> <tr> <td>K</td> <td>-</td> <td>/-8</td> <td>/-</td> <td>/6</td> <td>/7</td> <td>/-</td> </tr> </tbody> </table> Wind reactions based on MWFRS A Brg Wid = 6.5 Min Req = 1.5 (Truss) B Brg Wid = 213 Min Req = - K Brg Wid = 6.5 Min Req = 1.5 (Truss) Bearings A, B, & K are a rigid surface. Members not listed have forces less than 375#	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	A	-	/-7	/-	/50	/51	/90	B*	83	/-	/-	/49	/7	/-	K	-	/-8	/-	/6	/7	/-
Loc	Gravity			Non-Gravity																																		
	R+	/R-	/Rh	/Rw	/U	/RL																																
A	-	/-7	/-	/50	/51	/90																																
B*	83	/-	/-	/49	/7	/-																																
K	-	/-8	/-	/6	/7	/-																																

Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

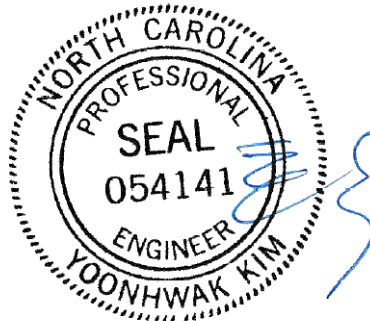
Gable end supports 8" max rake overhang. Top chord must not be cut or notched.
 Bottom chord checked for 10.00 psf non-concurrent live load.
 Truss designed for unbalanced snow loads.

Wind

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

Additional Notes

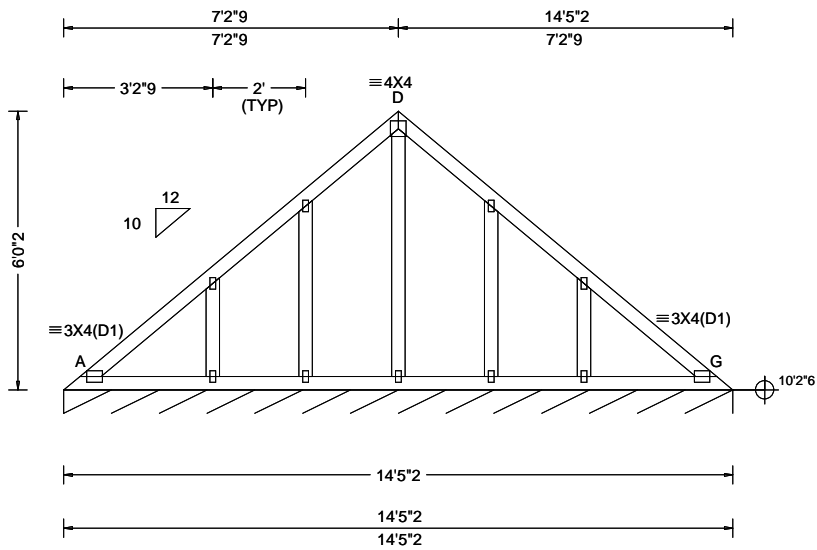
See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.003 A 999 240 VERT(CL): 0.006 A 999 240 HORZ(LL): -0.002 G - - HORZ(TL): 0.003 G - - Creep Factor: 2.0 Max TC CSI: 0.098 Max BC CSI: 0.077 Max Web CSI: 0.096 VIEW Ver: 23.02.04A.0207.13	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL G* 86 /- /- /46 /- /7 Wind reactions based on MWFRS G Brg Wid = 173 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#

Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

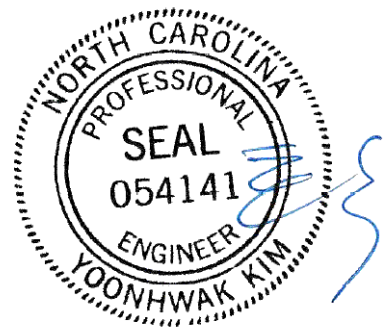
Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

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

Additional Notes

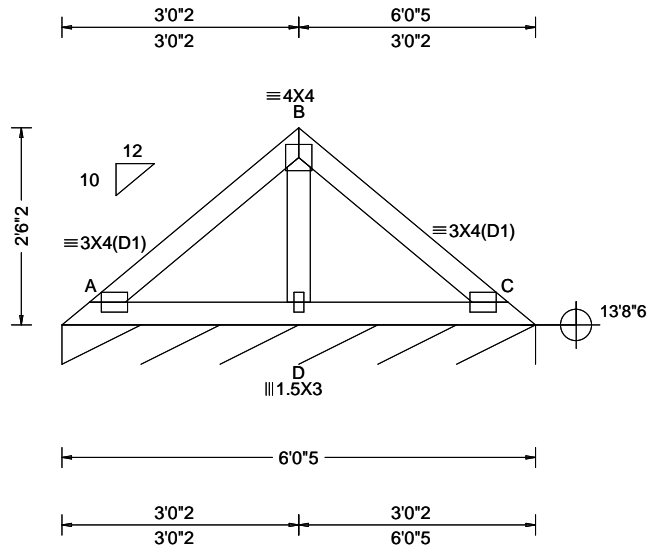
See DWGS A12015ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.



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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 TCCL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.10 ft TCCL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.002 A 999 240 VERT(CL): 0.005 A 999 240 HORZ(LL): -0.001 C - - HORZ(TL): 0.003 C - - Creep Factor: 2.0 Max TC CSI: 0.120 Max BC CSI: 0.094 Max Web CSI: 0.055 VIEW Ver: 23.02.04A.0207.13	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Gravity</th> <th colspan="4">Non-Gravity</th> </tr> <tr> <th>Loc</th> <th>R+ / R-</th> <th>/ Rh</th> <th>/ Rw</th> <th>/ U</th> <th>/ RL</th> </tr> </thead> <tbody> <tr> <td>C*</td> <td>85</td> <td>/-</td> <td>/-</td> <td>/44</td> <td>/-</td> <td>/6</td> </tr> </tbody> </table> Wind reactions based on MWFRS C Brg Wid = 72.3 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#	Gravity		Non-Gravity				Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL	C*	85	/-	/-	/44	/-	/6
Gravity		Non-Gravity																					
Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL																		
C*	85	/-	/-	/44	/-	/6																	

Lumber

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

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

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 DWG VALTN160118 for valley details.

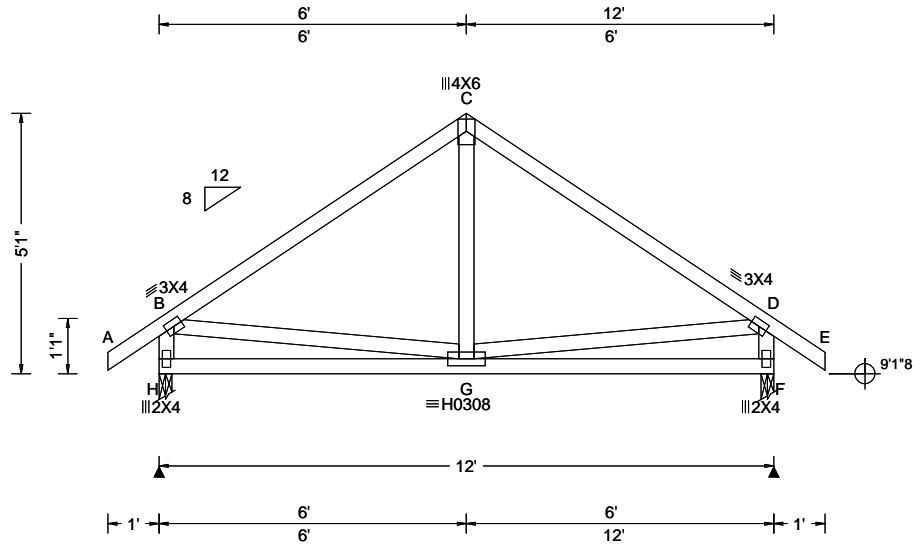


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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE, HS	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.006 G 999 240 VERT(CL): 0.013 G 999 240 HORZ(LL): 0.001 D - - HORZ(TL): 0.002 D - - Creep Factor: 2.0 Max TC CSI: 0.476 Max BC CSI: 0.323 Max Web CSI: 0.134 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL H 573 /- /- /322 /- /110 F 573 /- /- /322 /- /- Wind reactions based on MWFRS H Brg Wid = 3.0 Min Req = 1.5 (Truss) F Brg Wid = 3.0 Min Req = 1.5 (Truss) Bearings H & F are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 116 -541 C - D 116 -541
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Lumber

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

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

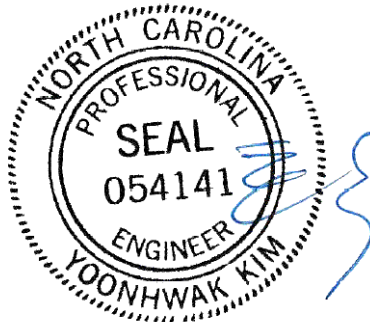
Wind loads based on MWFRS with additional C&C member design.

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

Wind loading based on both gable and hip roof types.

Additional Notes

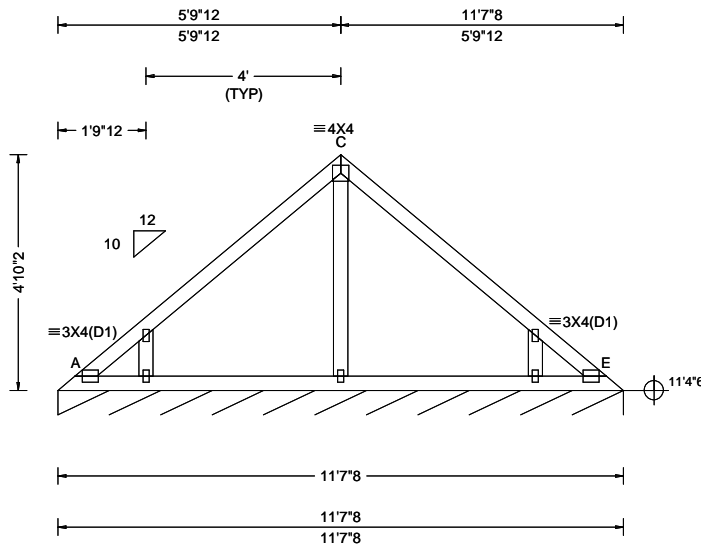
Lanai/Porch Loading : 14.7 PLF wind pressure applied to the bottom chord of the truss from 0.00 ft to 12.00 ft,



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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.001 C 999 240 VERT(CL): 0.001 C 999 240 HORZ(LL): -0.001 B - - HORZ(TL): 0.001 A - - Creep Factor: 2.0 Max TC CSI: 0.239 Max BC CSI: 0.119 Max Web CSI: 0.065 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL E* 86 /- /- /46 /- /7 Wind reactions based on MWFRS E Brg Wid = 139 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

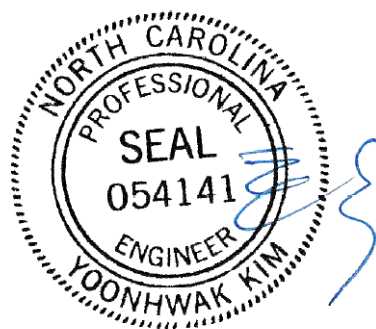
Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

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

Additional Notes

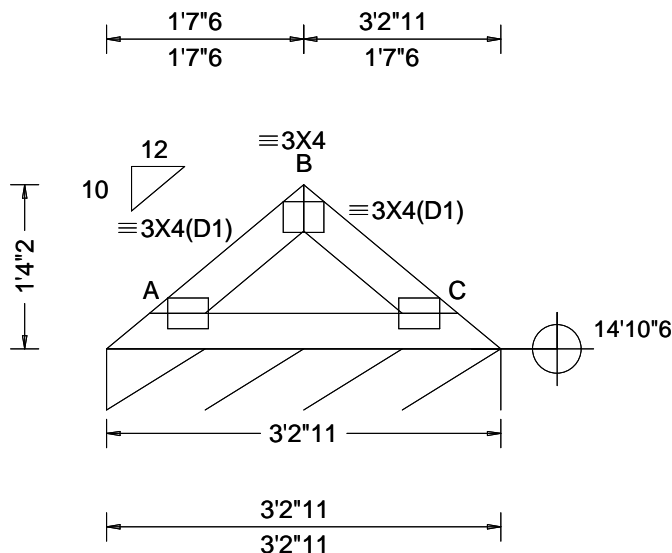
See DWGS A12015ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.



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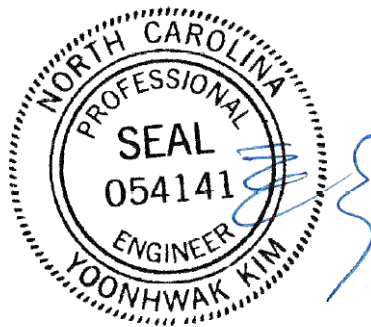
Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF																		
TCLL: 20.00 TCCL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.68 ft TCCL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.002 A 999 240 VERT(CL): 0.003 A 999 240 HORZ(LL): -0.001 C - - HORZ(TL): 0.002 C - - Creep Factor: 2.0 Max TC CSI: 0.049 Max BC CSI: 0.068 Max Web CSI: 0.000 VIEW Ver: 23.02.04A.0207.13	<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Gravity</th> <th colspan="4">Non-Gravity</th> </tr> <tr> <th>Loc</th> <th>R+ / R-</th> <th>/ Rh</th> <th>/ Rw</th> <th>/ U</th> <th>/ RL</th> </tr> </thead> <tbody> <tr> <td>C*</td> <td>85</td> <td>/-</td> <td>/-</td> <td>/41</td> <td>/5</td> </tr> </tbody> </table> Wind reactions based on MWFRS C Brg Wid = 38.7 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#	Gravity		Non-Gravity				Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL	C*	85	/-	/-	/41	/5
Gravity		Non-Gravity																				
Loc	R+ / R-	/ Rh	/ Rw	/ U	/ RL																	
C*	85	/-	/-	/41	/5																	

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

Loading
 Bottom chord checked for 10.00 psf non-concurrent live load.

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

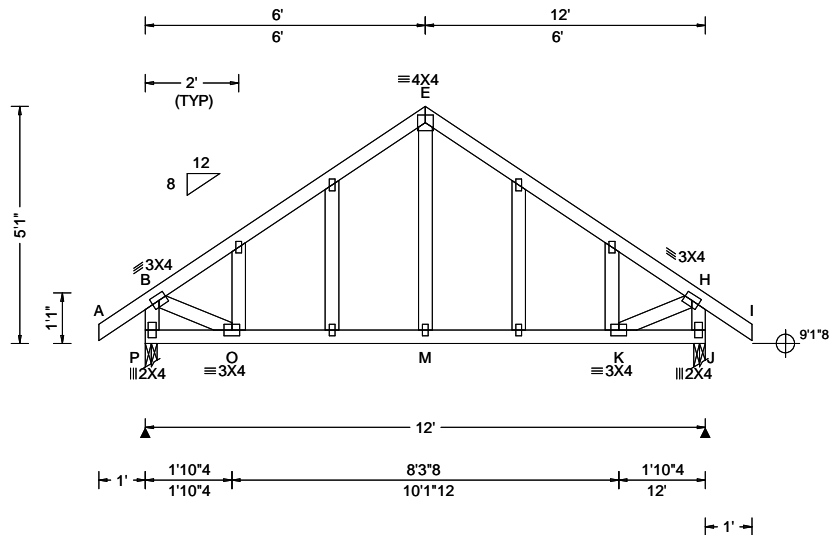
Additional Notes
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Loading Criteria (psf) TCLL: 20.00 TC DL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TC DL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.016 G 999 240 VERT(CL): 0.033 G 999 240 HORZ(LL): 0.015 C - - HORZ(TL): 0.030 C - - Creep Factor: 2.0 Max TC CSI: 0.251 Max BC CSI: 0.357 Max Web CSI: 0.158 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) <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>P</td> <td>573</td> <td>-</td> <td>-</td> <td>/322</td> <td>-</td> <td>/110</td> </tr> <tr> <td>J</td> <td>573</td> <td>-</td> <td>-</td> <td>/322</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS P Brg Wid = 3.0 Min Req = 1.5 (Truss) J Brg Wid = 3.0 Min Req = 1.5 (Truss) Bearings P & J are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - E</td> <td>161 -476</td> <td>E - H</td> <td>161 -476</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	P	573	-	-	/322	-	/110	J	573	-	-	/322	-	-	Chords	Tens.Comp.	Chords	Tens. Comp.	B - E	161 -476	E - H	161 -476
Loc	Gravity			Non-Gravity																																			
	R+	/R-	/Rh	/Rw	/U	/RL																																	
P	573	-	-	/322	-	/110																																	
J	573	-	-	/322	-	-																																	
Chords	Tens.Comp.	Chords	Tens. Comp.																																				
B - E	161 -476	E - H	161 -476																																				

Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

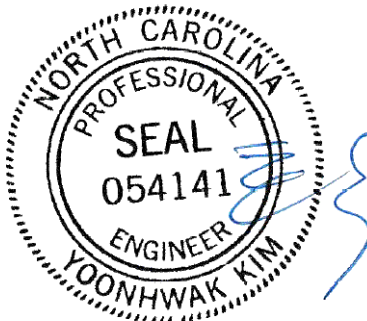
Gable end supports 8" max rake overhang. Top chord must not be cut or notched.
 Bottom chord checked for 10.00 psf non-concurrent live load.

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.

Additional Notes

See DWGS A12015ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

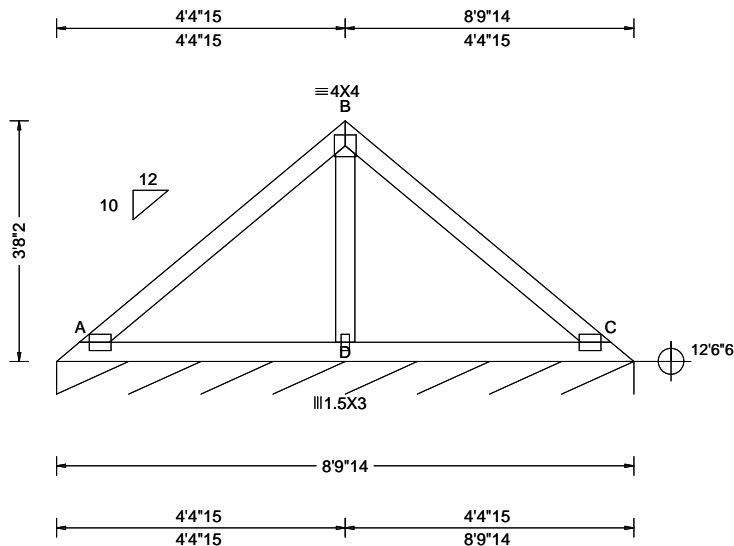


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SEQN: 4407 / FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: V3	Cust: R 9836 JRef: 1Y3T98360006 T12 / DrwNo: 278.24.0921.01464 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.007 A 999 240 VERT(CL): 0.016 A 999 240 HORZ(LL): -0.004 C - - HORZ(TL): 0.010 C - - Creep Factor: 2.0 Max TC CSI: 0.296 Max BC CSI: 0.228 Max Web CSI: 0.127 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL C* 86 /- /- /45 /- /6 Wind reactions based on MWFRS C Brg Wid = 105 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375# Maximum Gable Forces Per Ply (lbs) Gables Tens.Comp. B - D 208 -466
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Lumber

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

Plating Notes

All plates are 3X4(D1) except as noted.

Loading

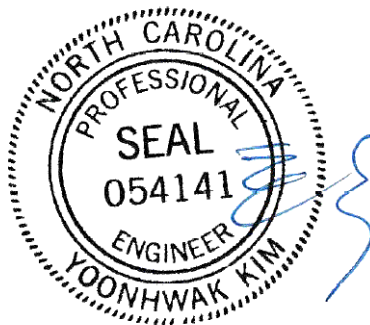
Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

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

Additional Notes

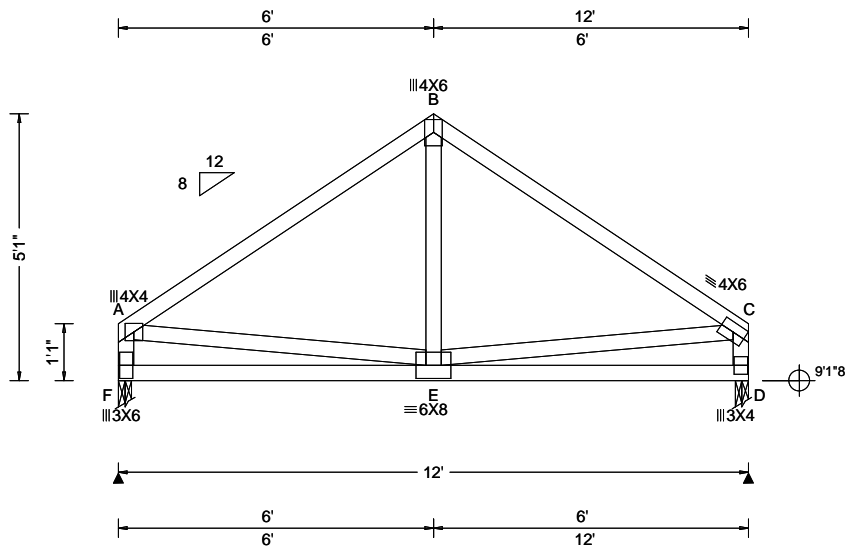
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Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP SS;
Webs: 2x4 SP #3;

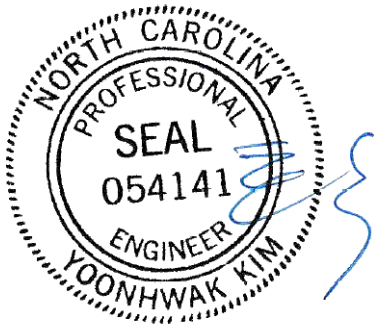
It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data, including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

Loading
Truss transfers a maximum horizontal load of 3000 # (250.00 plf) along top chord, from either direction, to supports where indicated. Diaphragm and connections are to be designed by Engineer of Record.
Drag Loads: Force(#) (PLF) Mbr Start End
Case 1: 3000 250.00 TC 0.00 12.00
3000 250.00 BC 0.00 12.00

Bottom chord checked for 10.00 psf non-concurrent live load.

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.

Additional Notes
Negative reaction(s) of -686# MAX. Requires uplift connection. See Maximum Reactions.
Lanai/Porch Loading : 14.7 PLF wind pressure applied to the bottom chord of the truss from 0.00 ft to 12.00 ft,

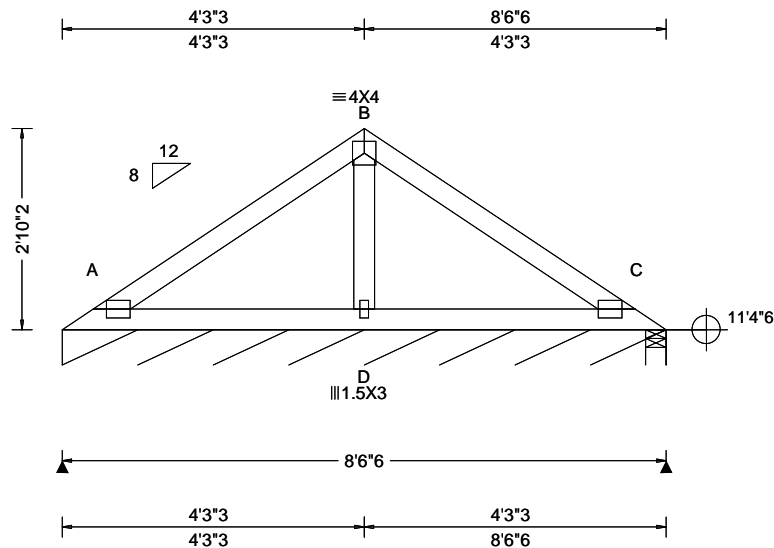


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SEQN: 4524 / FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: VA2	Cust: R 9836 JRef: 1Y3T98360006 T9 / DrwNo: 278.24.0921.02028 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.007 A 999 240 VERT(CL): 0.016 A 999 240 HORZ(LL): -0.004 C - - HORZ(TL): 0.008 C - - Creep Factor: 2.0 Max TC CSI: 0.259 Max BC CSI: 0.201 Max Web CSI: 0.098 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL A* 77 /- /- /40 /- /- C 61 /- /- /25 /- /40 Wind reactions based on MWFRS A Brg Wid = 102 Min Req = - C Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings A & C Fcperp = 565psi. Members not listed have forces less than 375# Maximum Gable Forces Per Ply (lbs) Gables Tens.Comp. B - D 182 -438
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Lumber

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

Plating Notes

All plates are 3X4(D1) except as noted.

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

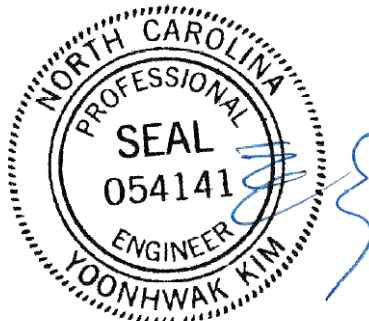
Wind

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 A12015ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

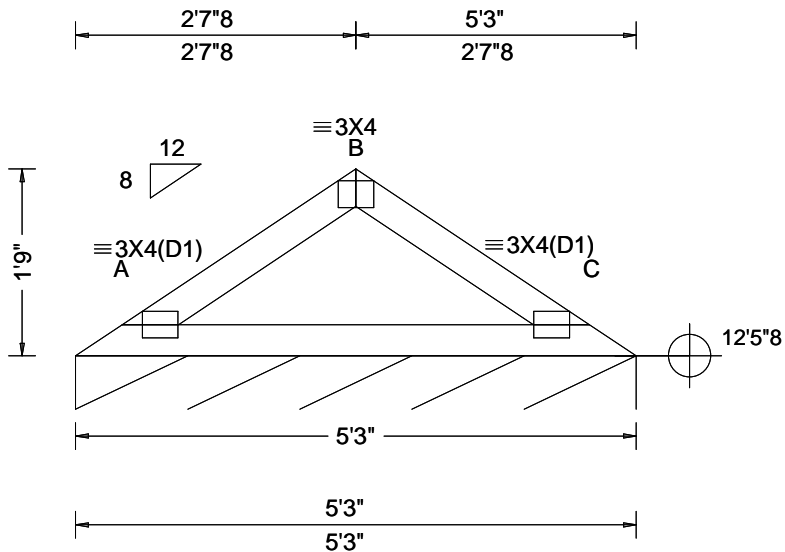


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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.007 A 999 240 VERT(CL): 0.013 A 999 240 HORZ(LL): -0.003 C - - HORZ(TL): 0.006 C - - Creep Factor: 2.0 Max TC CSI: 0.135 Max BC CSI: 0.166 Max Web CSI: 0.000 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL C* 83 /- /- /41 /- /4 Wind reactions based on MWFRS C Brg Wid = 63.0 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Loading

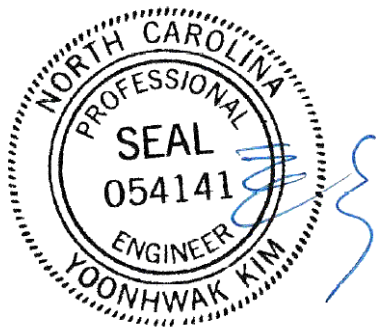
Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

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

Additional Notes

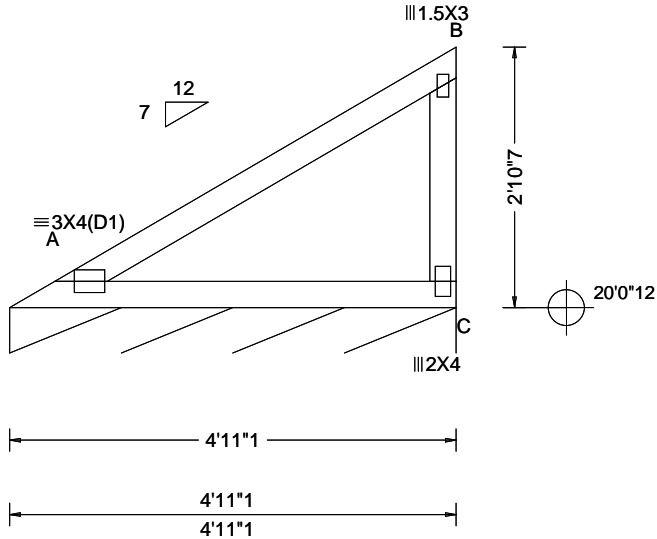
See DWG VALTN160118 for valley details.



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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 21.64 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.006 A - - HORZ(TL): 0.012 A - - Creep Factor: 2.0 Max TC CSI: 0.323 Max BC CSI: 0.294 Max Web CSI: 0.126 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL C* 83 /- /- /48 /3 /15 Wind reactions based on MWFRS C Brg Wid = 59.1 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Loading

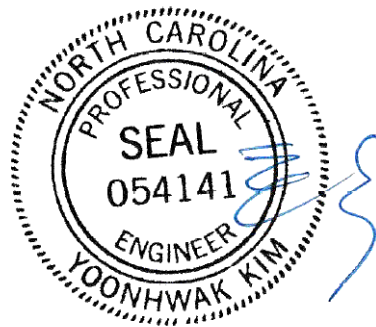
Bottom chord checked for 10.00 psf non-concurrent live load.

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 DWG VALTN160118 for valley details.

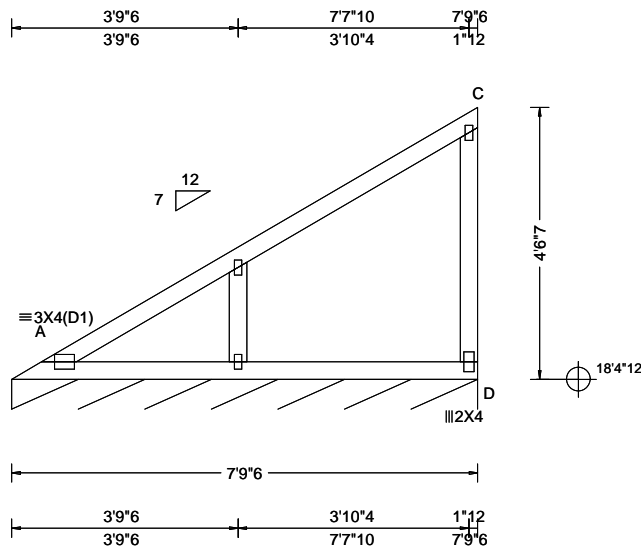


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SEQN: 4541 / FROM:	GABL Ply: 1 Qty: 2	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: VG2	Cust: R 9836 JRef: 1Y3T98360006 T34 / DrwNo: 278.24.0921.01811 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 20.81 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.004 A 999 240 VERT(CL): 0.008 A 999 240 HORZ(LL): -0.001 C - - HORZ(TL): 0.002 A - - Creep Factor: 2.0 Max TC CSI: 0.136 Max BC CSI: 0.165 Max Web CSI: 0.252 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL D* 83 /- /- /49 /3 /16 Wind reactions based on MWFRS D Brg Wid = 93.4 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

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 A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

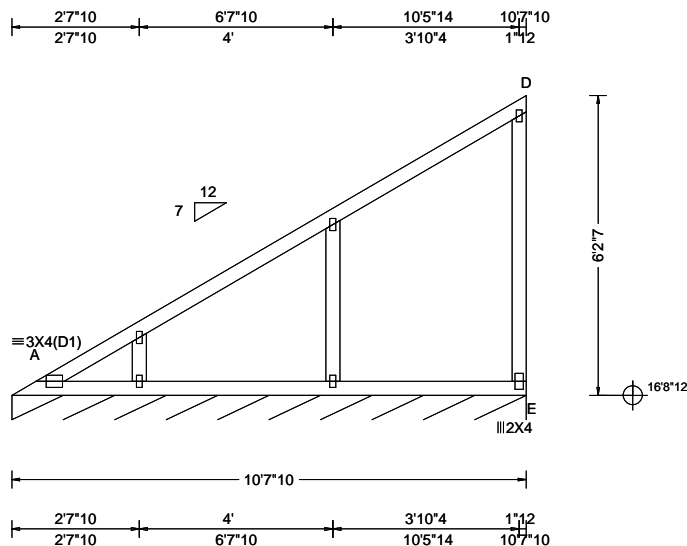


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SEQN: 4543 / FROM:	GABL Ply: 1 Qty: 2	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: VG3	Cust: R 9836 JRef: 1Y3T98360006 T17 / DrwNo: 278.24.0921.00837 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 19.98 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.001 A 999 240 VERT(CL): 0.002 A 999 240 HORZ(LL): -0.003 D - - HORZ(TL): 0.004 D - - Creep Factor: 2.0 Max TC CSI: 0.226 Max BC CSI: 0.130 Max Web CSI: 0.478 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL E* 83 /- /- /50 /2 /16 Wind reactions based on MWFRS E Brg Wid = 127 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

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 A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

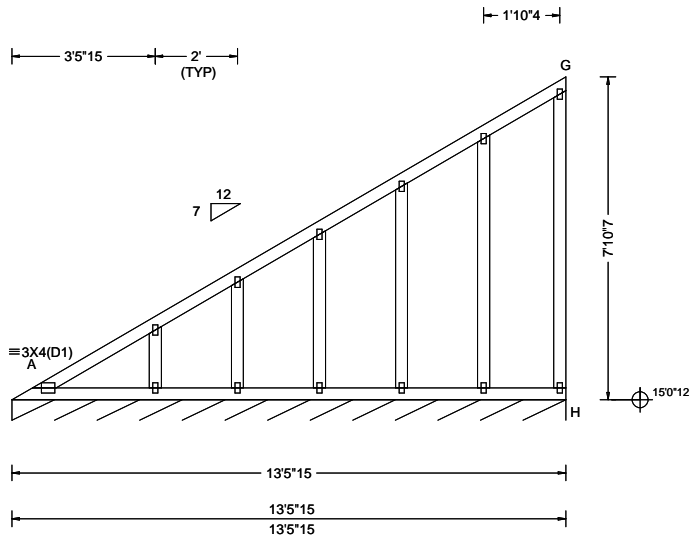


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SEQN: 4549 / FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: VG5	Cust: R 9836 JRef: 1Y3T98360006 T10 / DrwNo: 278.24.0921.01483 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 19.14 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.004 A 999 240 VERT(CL): 0.008 A 999 240 HORZ(LL): -0.004 G - - HORZ(TL): 0.006 G - - Creep Factor: 2.0 Max TC CSI: 0.062 Max BC CSI: 0.084 Max Web CSI: 0.777 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL H* 83 /- /- /50 /2 /16 Wind reactions based on MWFRS H Brg Wid = 161 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

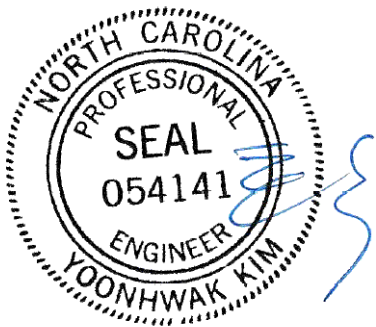
Wind loads based on MWFRS with additional C&C member design.

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 A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

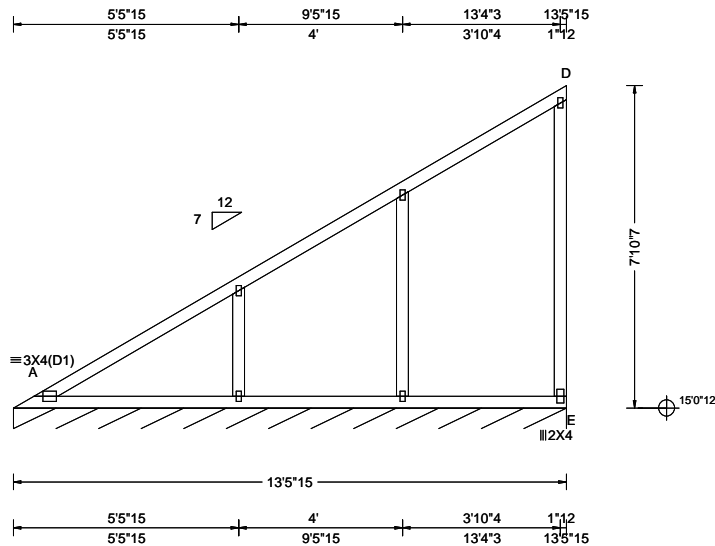


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SEQN: 4545 / FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: VG4	Cust: R 9836 JRef: 1Y3T98360006 T6 DrwNo: 278.24.0921.00774 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 19.14 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.016 A 999 240 VERT(CL): 0.034 A 999 240 HORZ(LL): 0.005 A - - HORZ(TL): 0.010 A - - Creep Factor: 2.0 Max TC CSI: 0.173 Max BC CSI: 0.237 Max Web CSI: 0.730 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL E* 83 /- /- /50 /2 /16 Wind reactions based on MWFRS E Brg Wid = 161 Min Req = - Bearing A is a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Plating Notes

All plates are 1.5X3 except as noted.

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

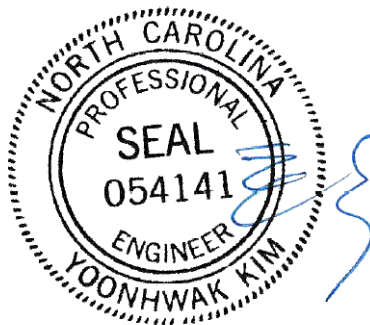
Wind loads based on MWFRS with additional C&C member design.

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

Wind loading based on both gable and hip roof types.

Additional Notes

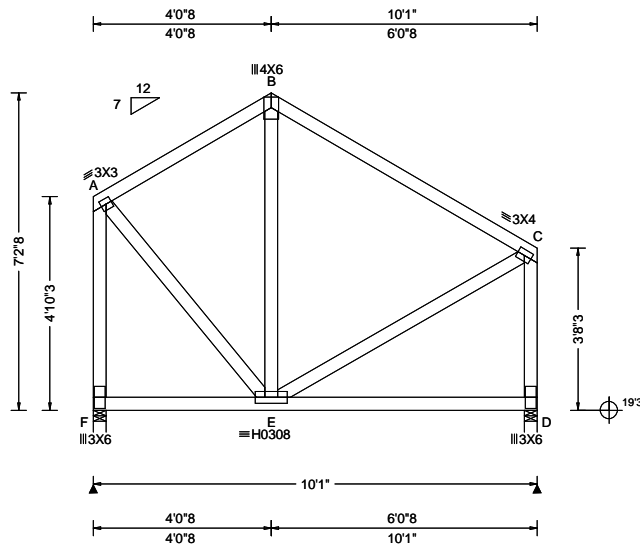
See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.



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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 24.70 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.004 B 999 240 VERT(CL): 0.008 B 999 240 HORZ(LL): 0.001 B - - HORZ(TL): 0.002 B - - Creep Factor: 2.0 Max TC CSI: 0.693 Max BC CSI: 0.302 Max Web CSI: 0.386 VIEW Ver: 23.02.04A.0207.13	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL F 435 /- /- /254 /40 /170 D 438 /- /- /244 /31 /- Wind reactions based on MWFRS F Brg Wid = 3.5 Min Req = 1.5 (Truss) D Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings F & D are a rigid surface. Members not listed have forces less than 375# Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. A - F 204 -410 C - D 187 -386

Lumber

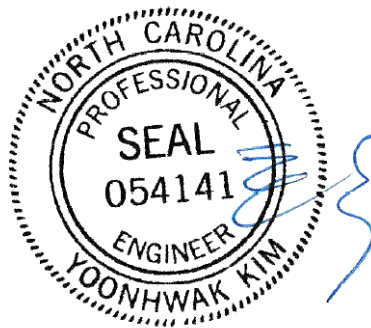
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP #2;
Webs: 2x4 SP #3;

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.
Truss designed for unbalanced snow loads.

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.

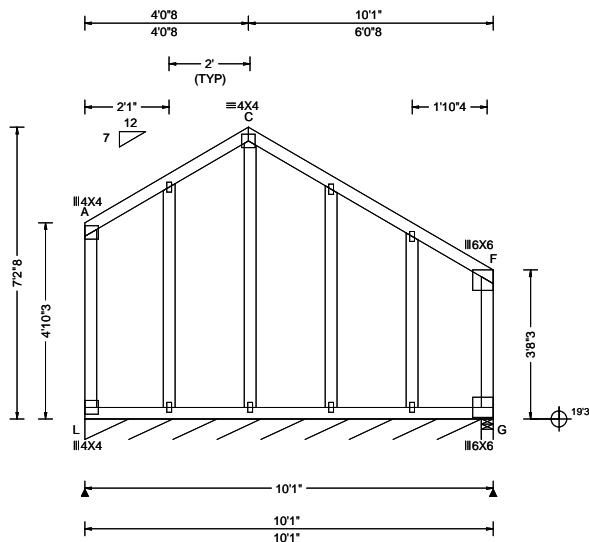


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SEQN: 4369 / FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: T1G	Cust: R 9836 JRef: 1Y3T98360006 T33 / DrwNo: 278.24.0921.01417 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 24.70 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.008 E 999 240 VERT(CL): 0.015 E 999 240 HORZ(LL): 0.515 A - - HORZ(TL): 0.755 A - - Creep Factor: 2.0 Max TC CSI: 0.241 Max BC CSI: 0.255 Max Web CSI: 0.563 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL L* 79 /- /- /58 /8 /17 G 69 /- /- /216 /142 /- Wind reactions based on MWFRS L Brg Wid = 117 Min Req = - G Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings L & G are a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Bracing

Fasten rated sheathing to one face of this frame.

Plating Notes

All plates are 1.5X3 except as noted.

Loading

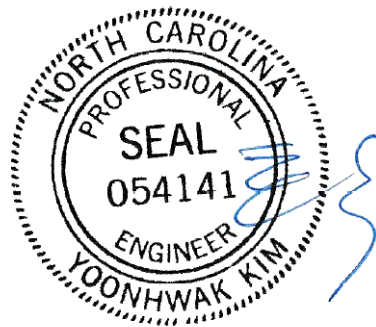
Bottom chord checked for 10.00 psf non-concurrent live load.
Truss designed for unbalanced snow loads.

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.

Additional Notes

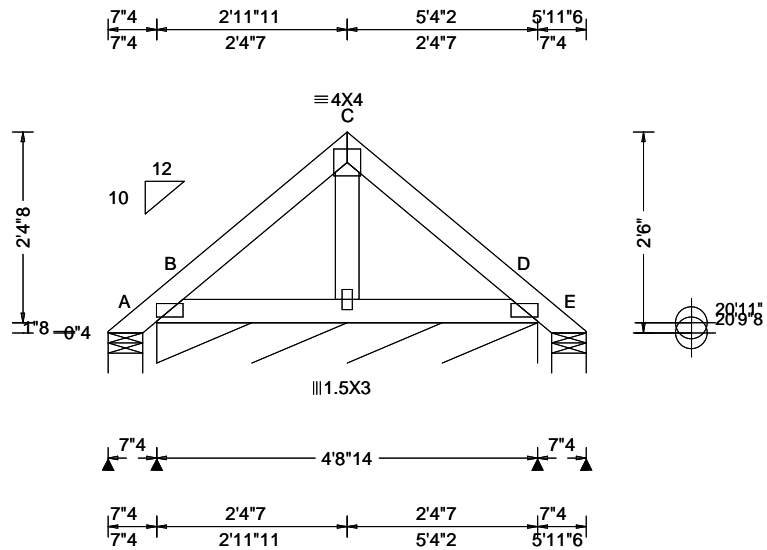
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.71 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.000 B 999 240 VERT(CL): 0.000 B 999 240 HORZ(LL): 0.000 B - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.064 Max BC CSI: 0.039 Max Web CSI: 0.012 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity A - /-14 /- /36 /39 /41 B* 106 /- /- /63 /3 /- E - /-14 /- /11 /12 /- Wind reactions based on MWFRS A Brg Wid = 5.2 Min Req = 1.5 (Truss) B Brg Wid = 56.9 Min Req = - E Brg Wid = 5.2 Min Req = 1.5 (Truss) Bearings A, B, & E are a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Plating Notes

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

Loading

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.
Bottom chord checked for 10.00 psf non-concurrent live load.

Purlins

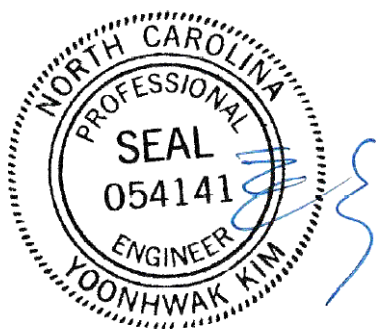
In lieu of rigid ceiling use purlins to brace BC @ 24" oc.

Wind

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

Additional Notes

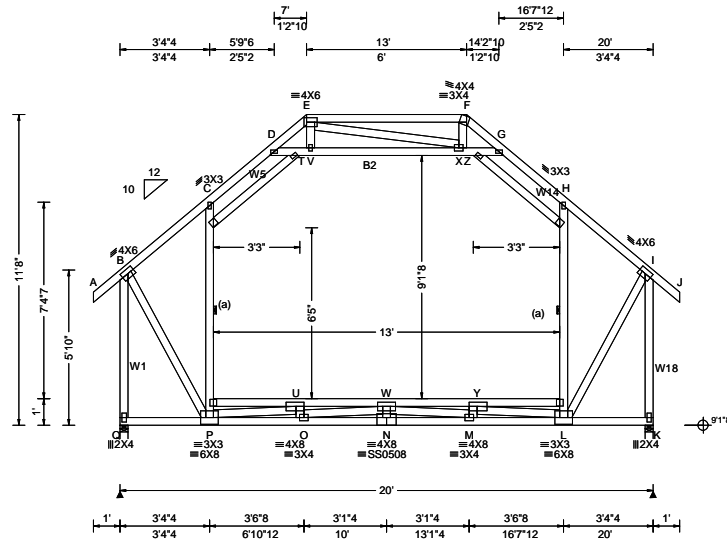
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.71 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: varies Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE, 18SS	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.168 N 999 240 VERT(CL): 0.469 N 511 240 HORZ(LL): 0.133 H - - HORZ(TL): 0.217 H - - Creep Factor: 2.0 Max TC CSI: 0.658 Max BC CSI: 0.591 Max Web CSI: 0.949 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL Q 1646 -/ - /516 - /274 K 1646 -/ - /516 - /- Wind reactions based on MWFRS Q Brg Wid = 3.5 Min Req = 1.9 (Truss) K Brg Wid = 3.5 Min Req = 1.9 (Truss) Bearings Q & K are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 113 -856 F - G 44 -608 C - D 263 -751 G - H 262 -748 D - E 54 -623 H - I 111 -856 E - F 53 -524
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Lumber
Top chord: 2x4 SP #2;
Bot chord: 2x4 SP SS; B2 2x4 SP #2;
Webs: 2x4 SP #3; W1,W5,W14,W18 2x4 SP #2;

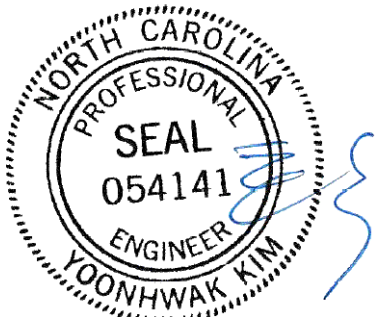
Bracing
(a) Continuous lateral restraint equally spaced on member.

Plating Notes
All plates are 1.5X3 except as noted.

Loading
Bottom chord checked for 10.00 psf non-concurrent live load.
Live loads applied in combination per ASCE 7 sec. 2.4.1 use 0.75 factor for multiple live loads.
Attic room loading from 3-6-0 to 16-6-0: Live Load: 40 PSF. Dead Load: 10 PSF Ceiling: 10 PSF, Kneewalls: 10 PSF
Truss designed for unbalanced snow loads.

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

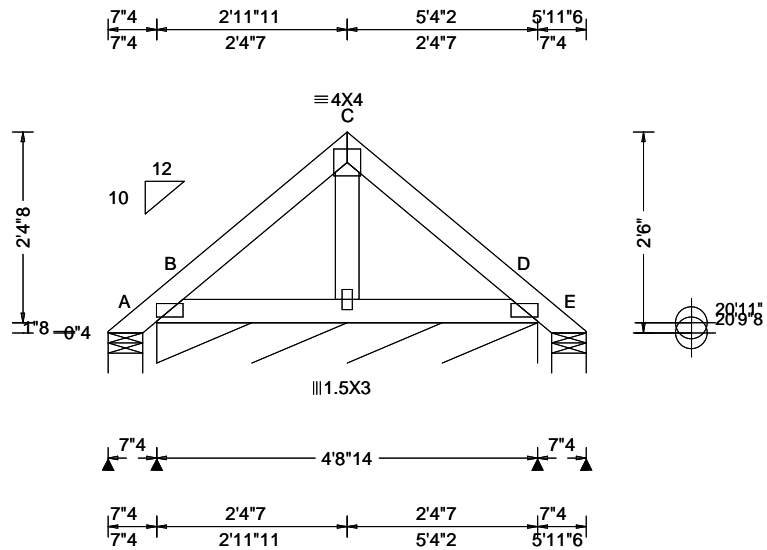
Wind
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End verticals exposed to wind pressure. Deflection meets L/180.
Wind loading based on both gable and hip roof types.



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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs), or *=PLF
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 16.71 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 0.93 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/def L/# VERT(LL): 0.000 B 999 240 VERT(CL): 0.000 B 999 240 HORZ(LL): 0.000 B - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.064 Max BC CSI: 0.039 Max Web CSI: 0.012 VIEW Ver: 23.02.04A.0207.13	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity A - /-14 /- /36 /39 /41 B* 106 /- /- /63 /3 /- E - /-14 /- /11 /12 /- Wind reactions based on MWFRS A Brg Wid = 5.2 Min Req = 1.5 (Truss) B Brg Wid = 56.9 Min Req = - E Brg Wid = 5.2 Min Req = 1.5 (Truss) Bearings A, B, & E are a rigid surface. Members not listed have forces less than 375#

Lumber

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

Plating Notes

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

Loading

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.
Bottom chord checked for 10.00 psf non-concurrent live load.

Purlins

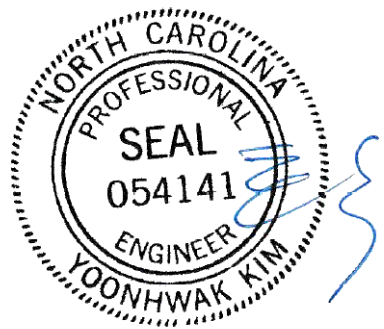
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Wind

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Wind loading based on both gable and hip roof types.

Additional Notes

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Refer to DWG PB160160118 for piggyback details.

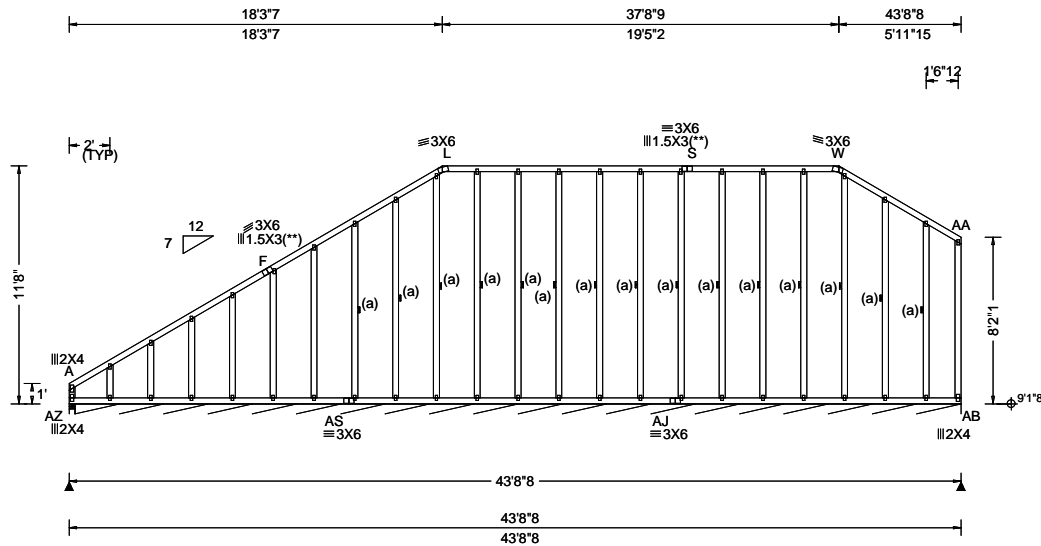


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SEQN: 4432 FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: A1G	Cust: R 9836 JRef: 1Y3T98360006 T8 DrwNo: 278.24.1027.30803 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TC DL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TC DL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 4.37 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.002 L 999 240 VERT(CL): 0.004 R 999 240 HORZ(LL): -0.049 AA - - HORZ(TL): 0.088 AA - - Creep Factor: 2.0 Max TC CSI: 0.144 Max BC CSI: 0.144 Max Web CSI: 0.809 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF <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>AZ 80</td> <td>-</td> <td>-</td> <td>-</td> <td>/237</td> <td>/115</td> <td>/269</td> </tr> <tr> <td>AB* 82</td> <td>-</td> <td>-</td> <td>-</td> <td>/48</td> <td>-</td> <td>-</td> </tr> </tbody> </table> Wind reactions based on MWFRS AZ Brg Wid = 3.5 Min Req = 1.5 (Truss) AB Brg Wid = 521 Min Req = - Bearings AZ & AZ are a rigid surface. Members not listed have forces less than 375#	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	AZ 80	-	-	-	/237	/115	/269	AB* 82	-	-	-	/48	-	-
Loc	Gravity			Non-Gravity																											
	R+	/R-	/Rh	/Rw	/U	/RL																									
AZ 80	-	-	-	/237	/115	/269																									
AB* 82	-	-	-	/48	-	-																									

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

Bracing
 (a) Continuous lateral restraint equally spaced on member.
 Fasten rated sheathing to one face of this frame.

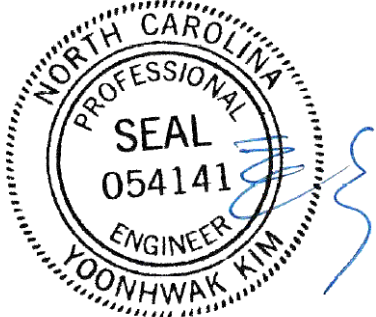
Plating Notes
 All plates are 1.5X3 except as noted.
 (**) 2 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

Loading
 Bottom chord checked for 10.00 psf non-concurrent live load.
 Truss designed for unbalanced snow loads.

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.

Additional Notes
 See DWGS A12030ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

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

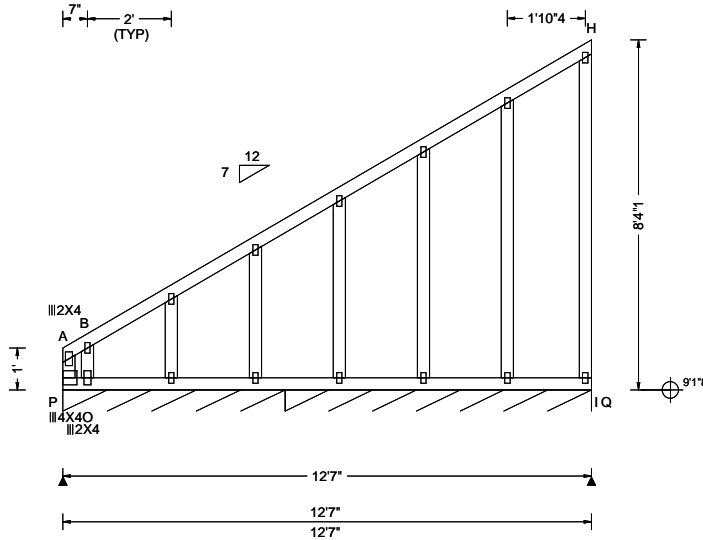


10/04/2024
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SEQN: 4803 FROM:	GABL Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: M1G	Cust: R 9836 JRef: 1Y3T98360006 T44 DrwNo: 278.24.1026.18863 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.003 B 999 240 VERT(CL): 0.005 B 999 240 HORZ(LL): -0.043 H - - HORZ(TL): 0.061 H - - Creep Factor: 2.0 Max TC CSI: 0.171 Max BC CSI: 0.160 Max Web CSI: 0.611 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL P* 87 /- /- /48 /- /40 Q* 80 /- /- /53 /2 /- Wind reactions based on MWFRS P Brg Wid = 63.5 Min Req = - Q Brg Wid = 87.5 Min Req = - Bearings P & M are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. A - B 121 -552
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Lumber

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

Bracing

Fasten rated sheathing to one face of this frame.

Plating Notes

All plates are 1.5X3 except as noted.

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

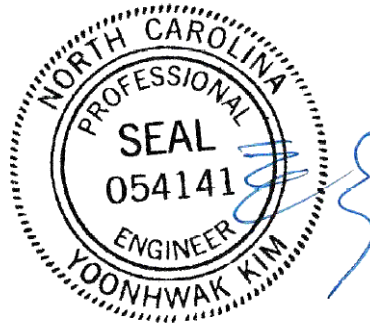
Wind loads based on MWFRS with additional C&C member design.

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

Wind loading based on both gable and hip roof types.

Additional Notes

See DWGS A12015ENC160118, GBLLETIN0118, & GABRST160118 for gable wind bracing and other requirements.

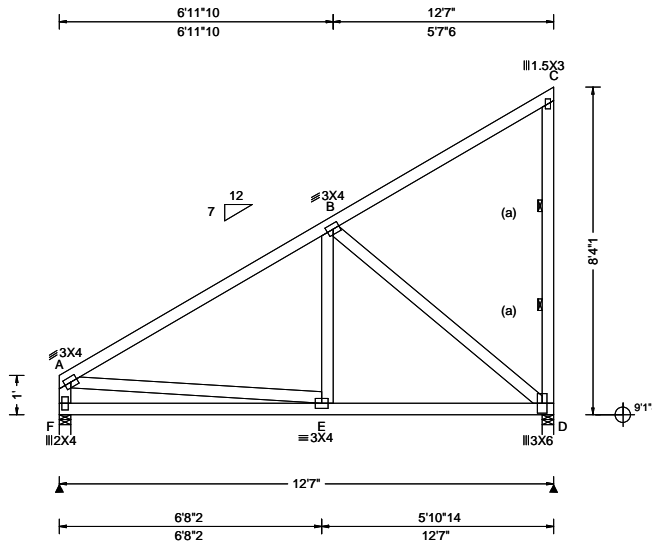


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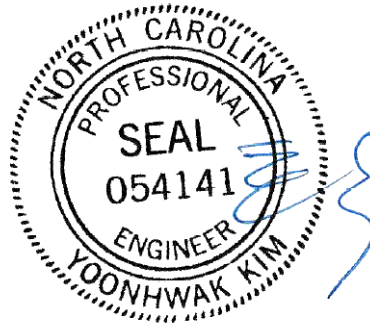


Loading Criteria (psf) TCCL: 20.00 TCCL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCCL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.008 E 999 240 VERT(CL): 0.018 E 999 240 HORZ(LL): -0.004 C - - HORZ(TL): 0.008 C - - Creep Factor: 2.0 Max TC CSI: 0.816 Max BC CSI: 0.529 Max Web CSI: 0.999 VIEW Ver: 23.02.04A.0207.13	▲ 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>F</td> <td>523</td> <td>-</td> <td>-</td> <td>/286</td> <td>-</td> <td>/209</td> </tr> <tr> <td>D</td> <td>523</td> <td>-</td> <td>-</td> <td>/353</td> <td>/25</td> <td>-</td> </tr> </tbody> </table> Wind reactions based on MWFRS F Brg Wid = 3.5 Min Req = 1.5 (Truss) D Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings F & D are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> </tr> </thead> <tbody> <tr> <td>A - B</td> <td>103 -591</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	F	523	-	-	/286	-	/209	D	523	-	-	/353	/25	-	Chords	Tens.Comp.	A - B	103 -591
				Loc		Gravity			Non-Gravity																										
R+	/R-	/Rh	/Rw		/U	/RL																													
F	523	-	-	/286	-	/209																													
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Lumber Top chord: 2x4 SP #2; Bot chord: 2x4 SP #2; Webs: 2x4 SP #3;				Maximum Bot Chord Forces Per Ply (lbs) <table border="1"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>F - E</td> <td>164 -464</td> <td>E - D</td> <td>426 -245</td> </tr> </tbody> </table>	Chords	Tens.Comp.	Chords	Tens. Comp.	F - E	164 -464	E - D	426 -245																							
Chords	Tens.Comp.	Chords	Tens. Comp.																																
F - E	164 -464	E - D	426 -245																																

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

Loading
Bottom chord checked for 10.00 psf non-concurrent live load.

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.

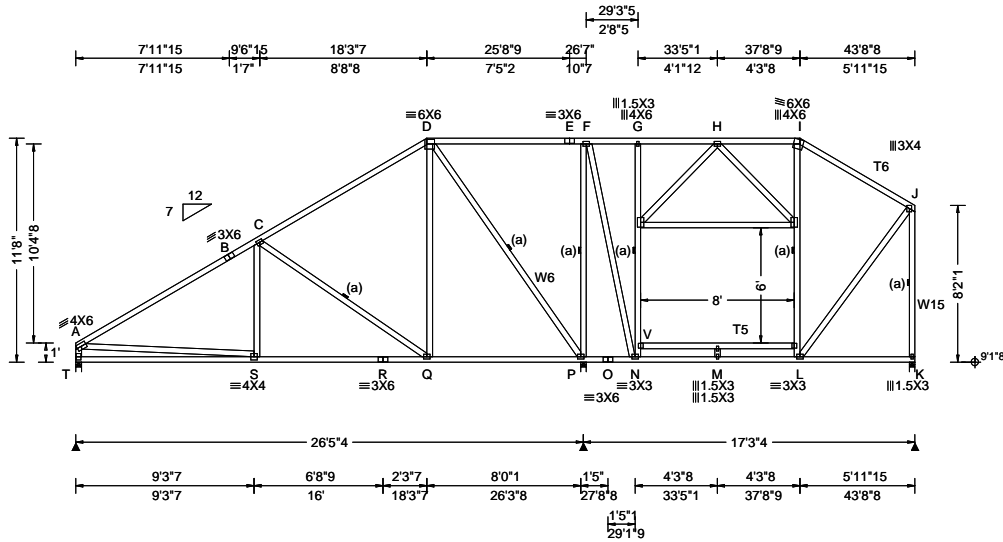


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SEQN: 4444 FROM:	SPEC Ply: 1 Qty: 6	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: A1	Cust: R 9836 JRef: 1Y3T98360006 T24 DrwNo: 278.24.1025.40810 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCCL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCCL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 4.37 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/defl L/# VERT(LL): 0.199 W 999 240 VERT(CL): 0.389 W 537 240 HORZ(LL): -0.023 U - - HORZ(TL): 0.045 U - - Creep Factor: 2.0 Max TC CSI: 0.913 Max BC CSI: 0.864 Max Web CSI: 0.748 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL T 1204 - / - / - /673 - / /269 P 1766 - / - / - /926 - / - K 1061 - / - / - /503 - / - Wind reactions based on MWFRS T Brg Wid = 3.5 Min Req = 1.5 (Truss) P Brg Wid = 3.5 Min Req = 1.7 (Truss) K Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings T, P, & K are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.					
				A - B 81 - 1699 G - H 137 - 450 B - C 89 - 1446 H - I 137 - 466 C - D 124 - 1020 I - J 116 - 616 F - G 137 - 455					

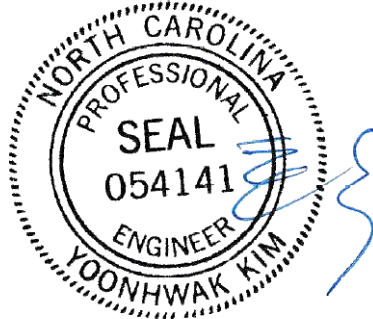
Lumber
 Top chord: 2x4 SP SS; T5,T6 2x4 SP #2;
 Bot chord: 2x4 SP #2;
 Webs: 2x4 SP #3; W6,W15 2x4 SP #2;

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

Plating Notes
 All plates are 3X4 except as noted.

Loading
 Bottom chord checked for 10.00 psf non-concurrent live load.
 Truss designed for unbalanced snow loads.
 Truss supports 250# mech unit; unit centered at 33-6-13; supported by TC; unit width 4-0-0; supported by 6 trusses.

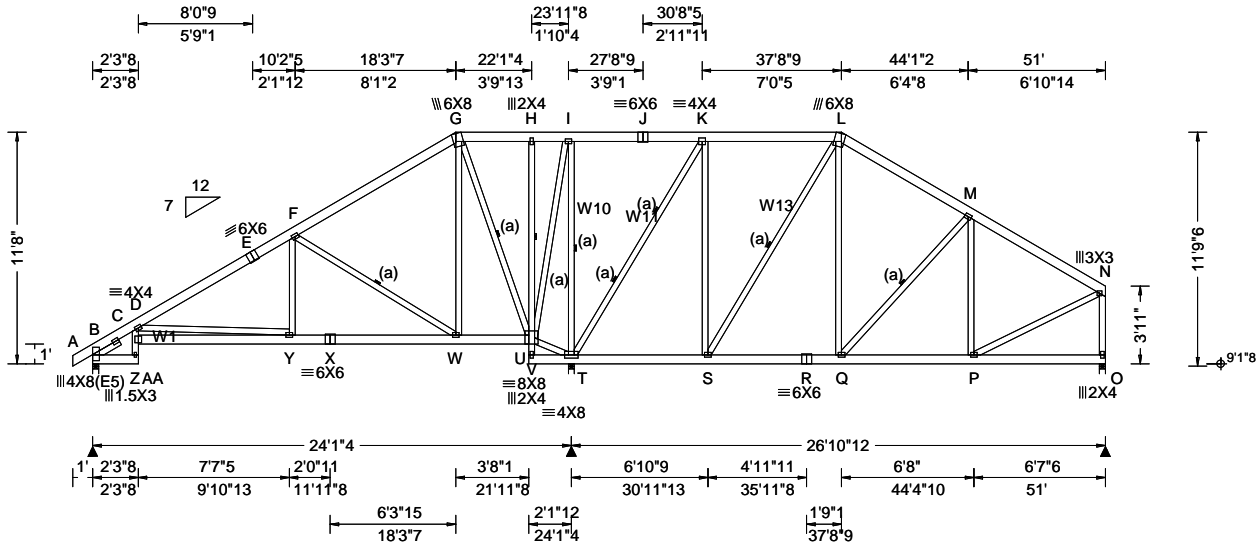
Wind
 Wind loads based on MWFRS with additional C&C member design.
 End verticals exposed to wind pressure. Deflection meets L/180.
 Wind loading based on both gable and hip roof types.
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Loading Criteria (psf) TCCL: 20.00 TCCL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCCL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 5.10 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.064 D 999 240 VERT(CL): 0.133 D 999 240 HORZ(LL): 0.048 O - - HORZ(TL): 0.099 O - - Creep Factor: 2.0 Max TC CSI: 0.548 Max BC CSI: 0.419 Max Web CSI: 0.849 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) <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>578</td> <td>-</td> <td>-</td> <td>/324</td> <td>-</td> <td>/228</td> </tr> <tr> <td>T</td> <td>3053</td> <td>-</td> <td>-</td> <td>/1797</td> <td>-</td> <td>-</td> </tr> <tr> <td>O</td> <td>758</td> <td>-</td> <td>-</td> <td>/521</td> <td>/6</td> <td>-</td> </tr> </tbody> </table> <p>Wind reactions based on MWFRS B Brg Wid = 3.5 Min Req = 1.5 (Truss) T Brg Wid = 3.5 Min Req = 3.2 (Truss) O Brg Wid = 3.5 Min Req = 1.5 (Truss)</p> <p>Bearings B, T, & O are a rigid surface. Members not listed have forces less than 375#</p> Maximum Top Chord Forces Per Ply (lbs) <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Chords</th> <th>Tens.Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>B - C</td> <td>95 -647</td> <td>H - I</td> <td>901 -46</td> </tr> <tr> <td>C - D</td> <td>98 -603</td> <td>I - J</td> <td>1027 -37</td> </tr> <tr> <td>D - E</td> <td>59 -423</td> <td>J - K</td> <td>1027 -37</td> </tr> <tr> <td>F - G</td> <td>610 -107</td> <td>L - M</td> <td>151 -486</td> </tr> <tr> <td>G - H</td> <td>900 -46</td> <td>M - N</td> <td>77 -660</td> </tr> </tbody> </table>	Loc	Gravity			Non-Gravity			R+	/R-	/Rh	/Rw	/U	/RL	B	578	-	-	/324	-	/228	T	3053	-	-	/1797	-	-	O	758	-	-	/521	/6	-	Chords	Tens.Comp.	Chords	Tens. Comp.	B - C	95 -647	H - I	901 -46	C - D	98 -603	I - J	1027 -37	D - E	59 -423	J - K	1027 -37	F - G	610 -107	L - M	151 -486	G - H	900 -46	M - N	77 -660
Loc	Gravity			Non-Gravity																																																										
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Lumber
 Top chord: 2x6 SP #2;
 Bot chord: 2x6 SP #2;
 Webs: 2x4 SP #3; W1 2x4 SP SS; W10,W11, W13 2x4 SP #2;
 Lt Slider: 2x4 SP #3; block length = 1.500'

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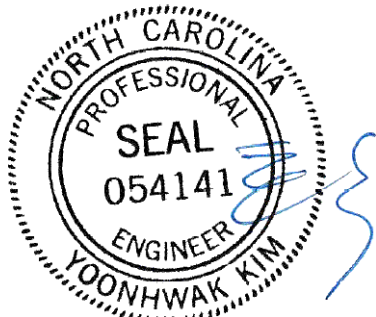
Bracing
 (a) Continuous lateral restraint equally spaced on member.

Plating Notes
 All plates are 3X4 except as noted.

Loading
 Bottom chord checked for 10.00 psf non-concurrent live load.
 Truss designed for unbalanced snow loads.

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
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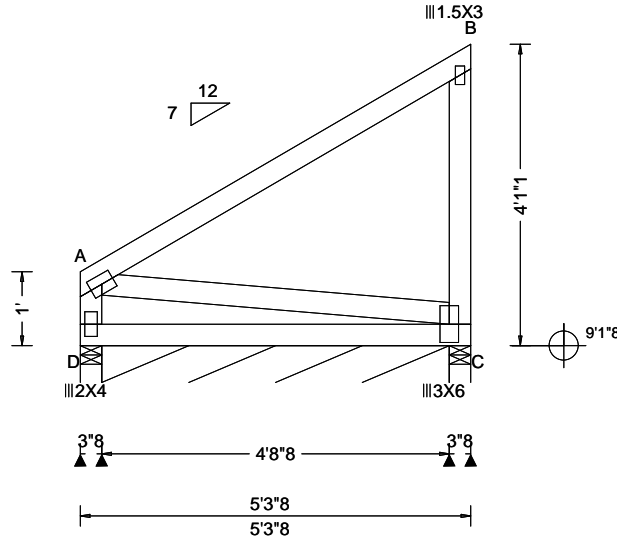


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SEQN: 4797 FROM:	MONO Ply: 1 Qty: 1	Job Number: Q2409-242 The Farm at Neills Creek Truss Label: M2A	Cust: R 9836 JRef: 1Y3T98360006 T46 DrwNo: 278.24.1026.23337 / YK 10/04/2024
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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.001 B 999 240 VERT(CL): 0.001 B 999 240 HORZ(LL): -0.001 B - - HORZ(TL): 0.002 B - - Creep Factor: 2.0 Max TC CSI: 0.499 Max BC CSI: 0.066 Max Web CSI: 0.231 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs), or *=PLF Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL D 188 /- /- /84 /6 /97 D* 27 /- /- /14 /- /- C 188 /- /- /121 /34 /- Wind reactions based on MWFRS D Brg Wid = 3.5 Min Req = 1.5 (Truss) D Brg Wid = 56.5 Min Req = - C Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings D, D, & C are a rigid surface. Members not listed have forces less than 375# Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. D - C 160 -587
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Lumber

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

Plating Notes

All plates are 3X4 except as noted.

Loading

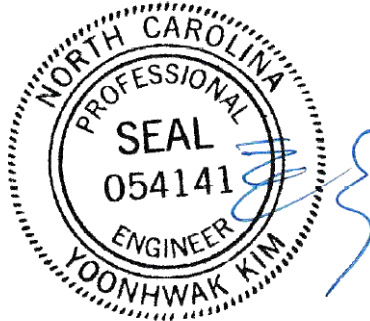
Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

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

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

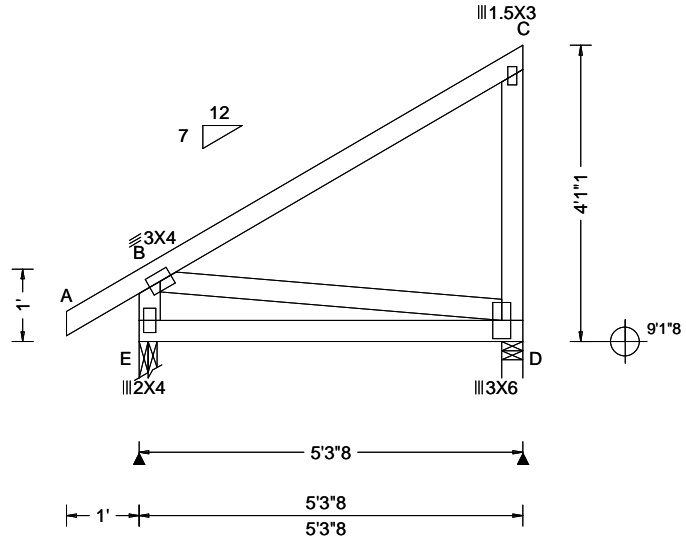
Wind loading based on both gable and hip roof types.



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Loading Criteria (psf) TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Criteria Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Snow Criteria (Pg,Pf in PSF) Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	Defl/CSI Criteria PP Deflection in loc L/def L/# VERT(LL): 0.001 C 999 240 VERT(CL): 0.001 C 999 240 HORZ(LL): -0.001 C - - HORZ(TL): 0.002 C - - Creep Factor: 2.0 Max TC CSI: 0.466 Max BC CSI: 0.299 Max Web CSI: 0.235 VIEW Ver: 23.02.04A.0207.13	▲ Maximum Reactions (lbs) Gravity Non-Gravity Loc R+ /R- /Rh /Rw /U /RL E 294 /- /- /160 /- /105 D 214 /- /- /150 /18 /- Wind reactions based on MWFRS E Brg Wid = 3.0 Min Req = 1.5 (Truss) D Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings E & D are a rigid surface. Members not listed have forces less than 375#
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Lumber

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

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.

Wind

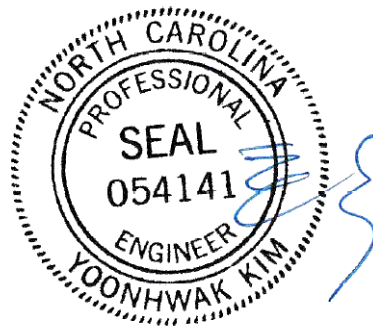
Wind loads based on MWFRS with additional C&C member design.

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

Wind loading based on both gable and hip roof types.

Additional Notes

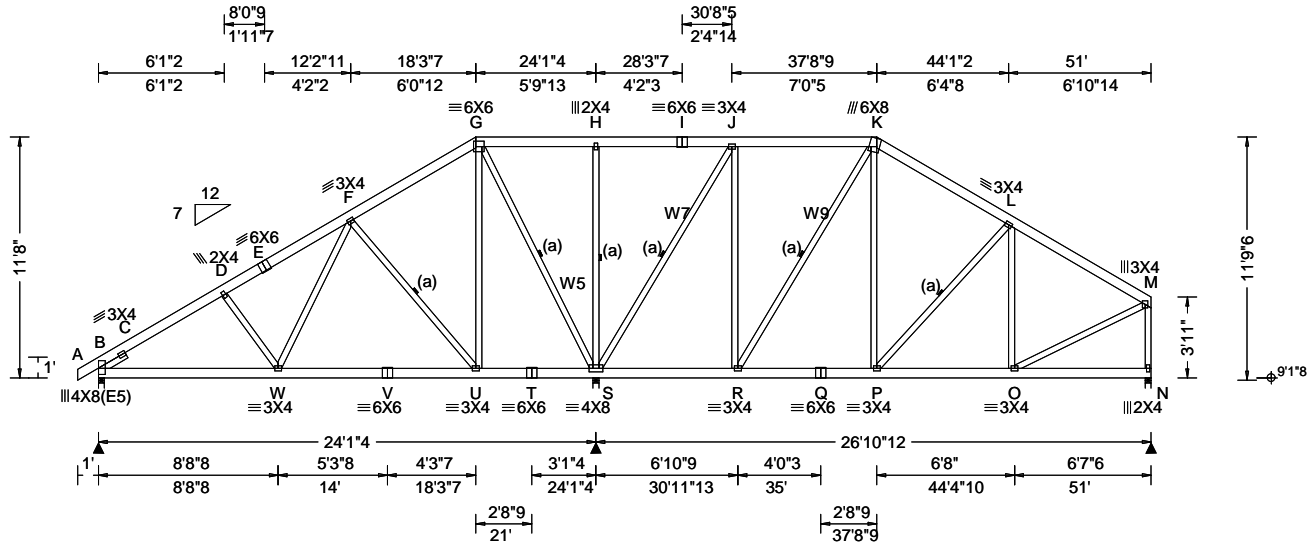
Lanai/Porch Loading : 14.7 PLF wind pressure applied to the bottom chord of the truss from 0.00 ft to 5.29 ft,



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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 120 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 5.10 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: 20.0 Ct: 1.1 CAT: II Pf: 15.4 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IRC 2021 TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.027 W 999 240 VERT(CL): 0.055 W 999 240 HORZ(LL): 0.011 N - - HORZ(TL): 0.022 N - - Creep Factor: 2.0 Max TC CSI: 0.308 Max BC CSI: 0.395 Max Web CSI: 0.886 VIEW Ver: 23.02.04A.0207.13	Gravity Loc R+ / R- / Rh / Rw / U / RL B 883 /- /- /526 /- /228 S 2475 /- /- /1371 /- /- N 948 /- /- /599 /- /- Non-Gravity Wind reactions based on MWFRS B Brg Wid = 3.5 Min Req = 1.5 (Truss) S Brg Wid = 3.5 Min Req = 2.5 (Truss) N Brg Wid = 3.5 Min Req = 1.5 (Truss) Bearings B, S, & N are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp.

Lumber

Top chord: 2x6 SP #2;
Bot chord: 2x6 SP #2;
Webs: 2x4 SP #3; W5, W7, W9 2x4 SP #2;
Lt Slider: 2x4 SP #3; block length = 1.50'

Bracing

(a) Continuous lateral restraint equally spaced on member.

Loading

Bottom chord checked for 10.00 psf non-concurrent live load.
Truss designed for unbalanced snow loads.

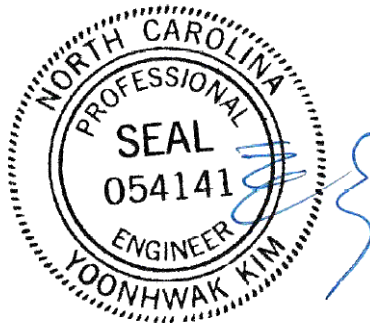
Wind

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

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Maximum Bot Chord Forces Per Ply (lbs)			
Chords	Tens.Comp.	Chords	Tens. Comp.
B - W	894 -117	R - Q	533 0
W - V	516 -51	Q - P	533 0
V - U	516 -51	P - O	659 0

Maximum Web Forces Per Ply (lbs)			
Webs	Tens.Comp.	Webs	Tens. Comp.
W - F	532 -9	J - R	587 0
F - U	152 -666	R - K	61 -508
G - U	666 -40	K - P	396 -49
G - S	33 -1010	O - M	729 0
H - S	0 -507	M - N	0 -893
S - J	0 -1171		

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Gable Stud Reinforcement Detail

ASCE 7-16: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00

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

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

Bracing Group Species and Grades:

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

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

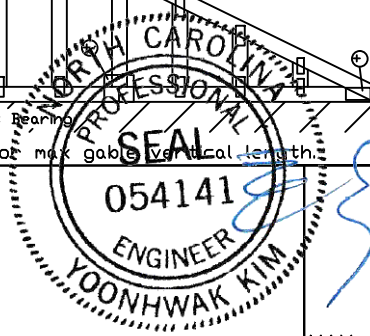
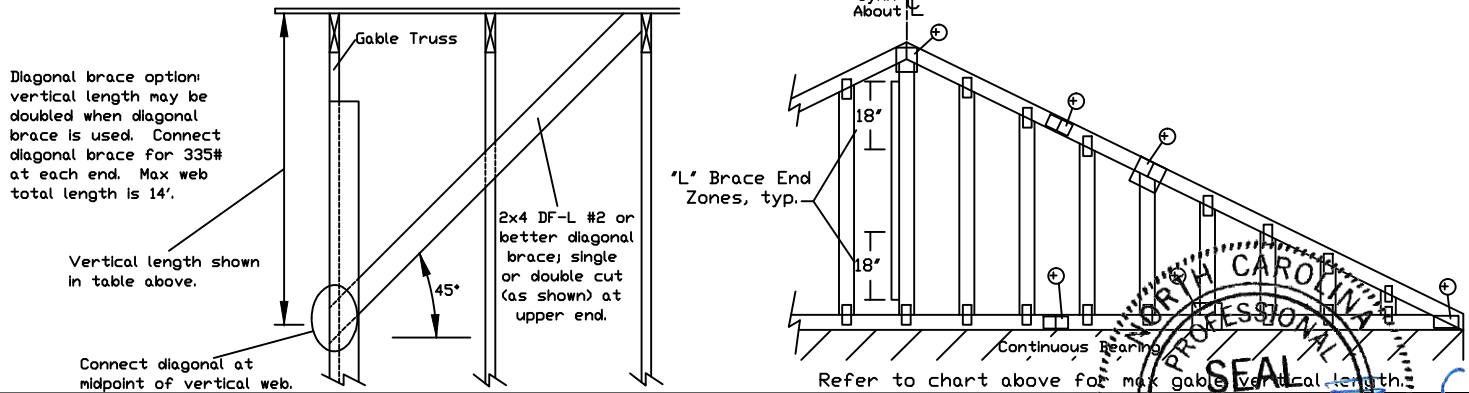
Gable Truss Detail Notes:
Wind Load deflection criterion is L/240.
Provide uplift connections for 35 plf over continuous bearing (5 psf TC Dead Load).
Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12' plywood overhang.

Attach 'L' braces with 10d (0.128"x3.0" min) nails.
* For (1) 'L' brace: space nails at 2' o.c. in 18' end zones and 4' o.c. between zones.
** For (2) 'L' braces: space nails at 3' o.c. in 18' end zones and 6' o.c. between zones.
'L' bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0", but less than 11' 6"	2X4
Greater than 11' 6"	3X4

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

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



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ABCD Engineering, PLLC NC COA 0838
10/04/2024
MAX. TOT. LD. 60 PSF
MAX. SPACING 24.0"

REF	ASCE7-16-GAB12015
DATE	01/26/2018
DRWG	A12015ENC160118

Gable Stud Reinforcement Detail

ASCE 7-16: 120 mph Wind Speed, 30' Mean Height, Enclosed, Exposure C, Kzt = 1.00

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

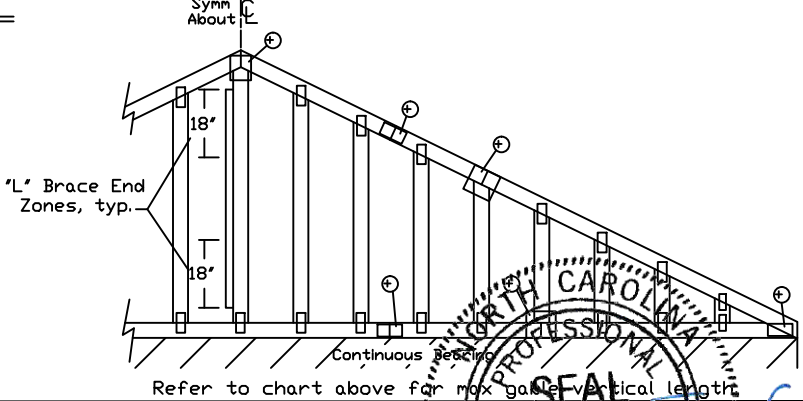
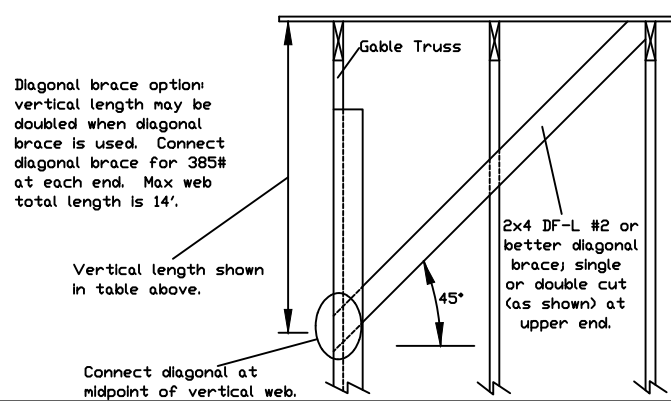
Max Gable Vertical Length	2x4 Gable Vertical		Brace Grade	No Braces	(1) 1x4 'L' Brace *		(1) 2x4 'L' Brace *		(2) 2x4 'L' Brace **		(1) 2x6 'L' Brace *		(2) 2x6 'L' Brace **	
	Spacing	Species			Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B
	24" o.c.	SPF	#1 / #2	#1 /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

Bracing Group Species and Grades:

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

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

Gable Truss Detail Notes:
Wind Load deflection criterion is L/240.
Provide uplift connections for 70 plf over continuous bearing (5 psf TC Dead Load).
Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12' plywood overhang.



Attach 'L' braces with 10d (0.128"x3.0" min) nails.
* For (1) 'L' brace: space nails at 2' o.c. in 18' end zones and 4' o.c. between zones.
** For (2) 'L' braces: space nails at 3' o.c. in 18' end zones and 6' o.c. between zones.
'L' bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0", but less than 11' 6"	2X4
Greater than 11' 6"	3X4

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

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

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

ABCD Engineering, PLLC
10/04/2024

REF	ASCE7-16-GAB12030
DATE	01/26/2018
DRWG	A12030ENC160118
MAX. TOT. LD. 60 PSF	
NC COA 0838	
MAX. SPACING 24.0"	

CLR Reinforcing Member Substitution

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

Notes:

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

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

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

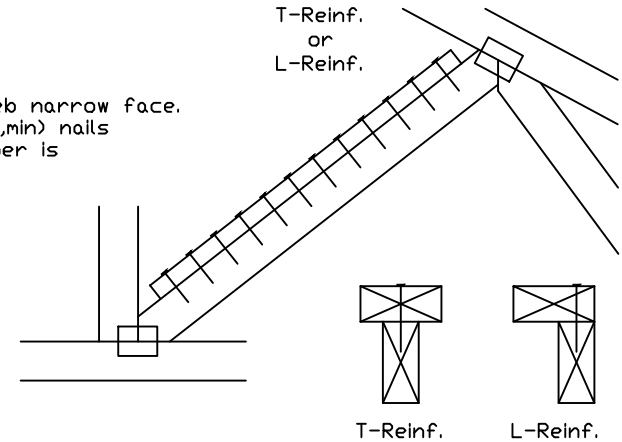
Web Member Size	Specified CLR Restraint	Alternative Reinforcement T- or L- Reinf.	Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6 or 2x4	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(*)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(*)

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

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

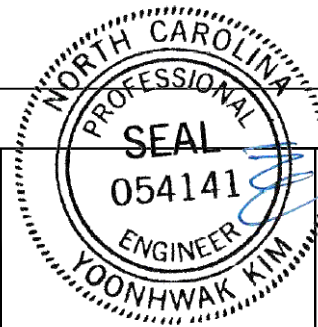
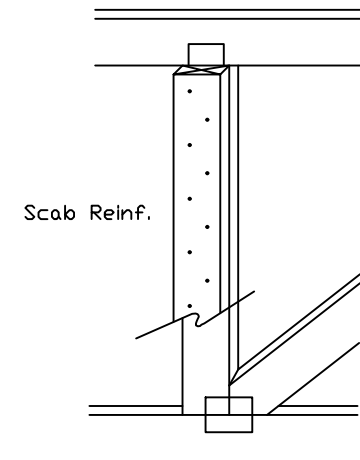
T-Reinforcement or L-Reinforcement:

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



Scab Reinforcement:

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



155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

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ABCD Engineering, PLLC
10/04/2024

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

ASCE 7-16: 120 mph, 30' Mean Height, Closed, Exposure C Common Residential Gable End Wind Bracing Requirements - Stiffeners

120 mph, 30ft. Mean Hgt, ASCE 7-16, Enclosed, Exp C, or
100 mph, 30ft. Mean Hgt, ASCE 7-16, Enclosed, Exp D, or
100 mph, 30ft. Mean Hgt, ASCE 7-16, Part. Enclosed, Exp C,
Kzt = 1.00, Wind TC DL=5.0 psf, Wind BC DL=5.0 psf.

Lateral chord bracing requirements
Top: Continuous roof sheathing
Bot: Continuous ceiling diaphragm

See Engineer's sealed design referencing this detail for lumber, plates, and other information not shown on this detail.

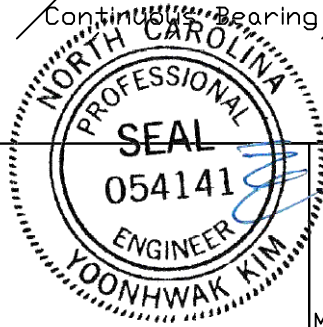
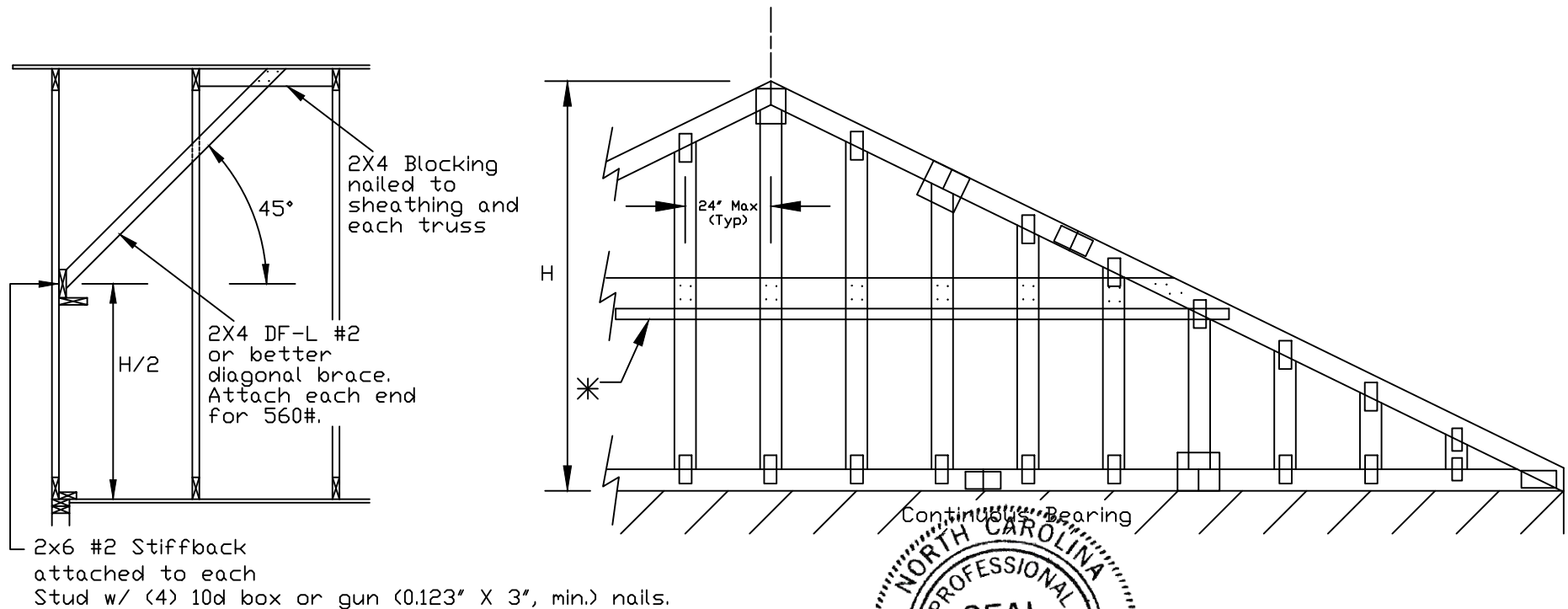
Nails: 10d box or gun (0.128"x3",min) nails.

H Less than 4'6" - no stud bracing required

H Greater than 4'6" to 7'6" in length
provide a 2x6 stiffback at mid-height and brace stiffback to roof diaphragm every 6'0" (see detail below or refer to DRWG A12030ENC160118).

H Greater than 7'6" to 12'0" max:
provide a 2x6 stiffback at mid-height and brace to roof diaphragm every 4'0" (see detail below or refer to DRWG A12030ENC160118).

* Optional 2x L-reinforcement attached to stiffback with 10d box or gun (0.128" x 3", min.) nails @ 6" o.c.



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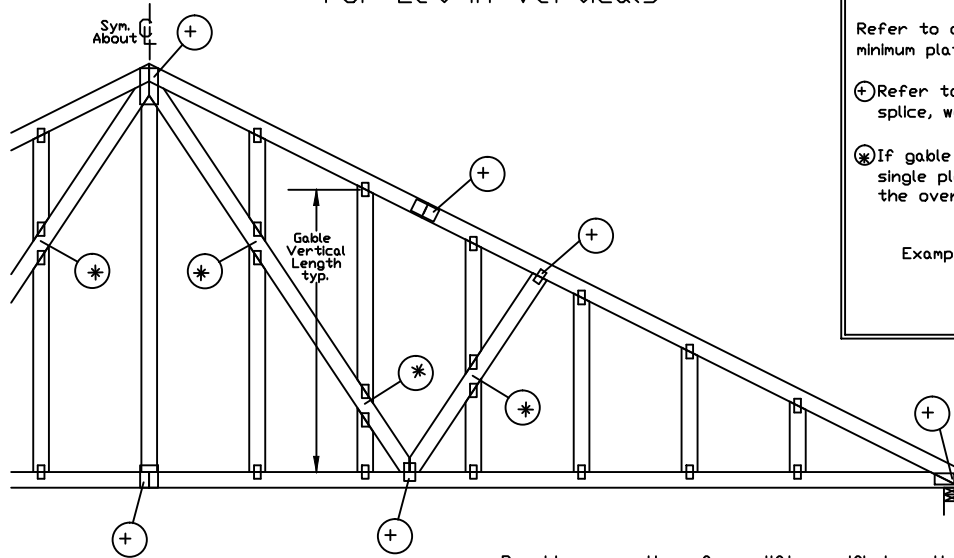
For more information see this Job's general notes page and these web sites:
ALPINE: www.alpneitw.com; TPI: www.tpinet.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

ABCD Engineering, PLLC
10/04/2024

MAX. TOT. LD. 60 PSF
NC COA 0838
MAX. SPACING

REF	GE WHALER
DATE	01/02/2018
DRWG	GABRST160118

Gable Detail For Let-in Verticals



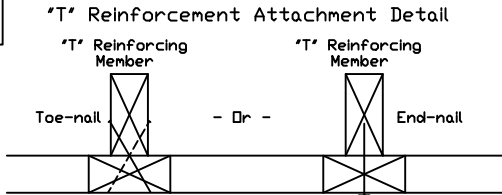
Gable Truss Plate Sizes

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: 2×4 2×4 2×8



Provide connections for uplift specified on the engineered truss design.

Attach each 'T' reinforcing member with
End Driven Nails:
10d Common (0.148"x3",min) Nails at 4' o.c. plus
(4) nails in the top and bottom chords.

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

This detail to be used with the appropriate Alpine gable detail for ASCE wind load.

- ASCE 7-05 Gable Detail Drawings
A13015051014, A12015051014, A11015051014, A10015051014, A14015051014,
A13030051014, A12030051014, A11030051014, A10030051014, A14030051014
- ASCE 7-10 & ASCE 7-16 Gable Detail Drawings
A11515ENC100118, A12015ENC100118, A14015ENC100118, A16015ENC100118,
A18015ENC100118, A20015ENC100118, A20015END100118, A20015PED100118,
A11530ENC100118, A12030ENC100118, A14030ENC100118, A16030ENC100118,
A18030ENC100118, A20030ENC100118, A20030END100118, A20030PED100118,
S11515ENC100118, S12015ENC100118, S14015ENC100118, S16015ENC100118,
S18015ENC100118, S20015ENC100118, S20015END100118, S20015PED100118,
S11530ENC100118, S12030ENC100118, S14030ENC100118, S16030ENC100118,
S18030ENC100118, S20030ENC100118, S20030END100118, S20030PED100118

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

To convert from 'L' to 'T' reinforcing members, multiply 'T' increase by length (based on appropriate Alpine gable detail).

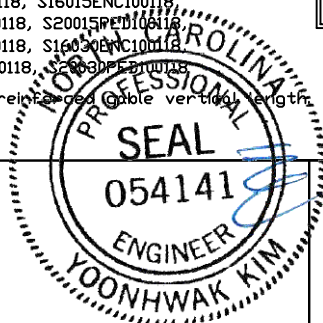
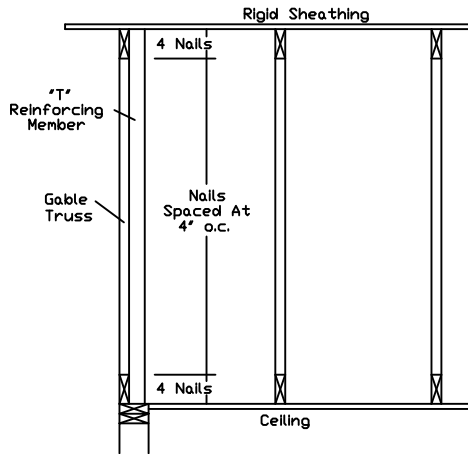
Maximum allowable 'T' reinforced gable vertical length is 14' from top to bottom chord.

'T' reinforcing member material must match size, specie, and grade of the 'L' reinforcing member.

Web Length Increase w/ 'T' Brace

'T' Reinf. Mbr. Size	'T' Increase
2x4	30 %
2x6	20 %

Example:
ASCE 7-10 Wind Speed = 120 mph
Mean Roof Height = 30 ft, $K_{zt} = 1.00$
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"



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

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

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

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

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

155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

ABCD Engineering, PLLC
10/04/2024

MAX. TOT. LD. 60 PSF
DUR OF AC 38 ANY
MAX. SPACING 24.0"

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

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

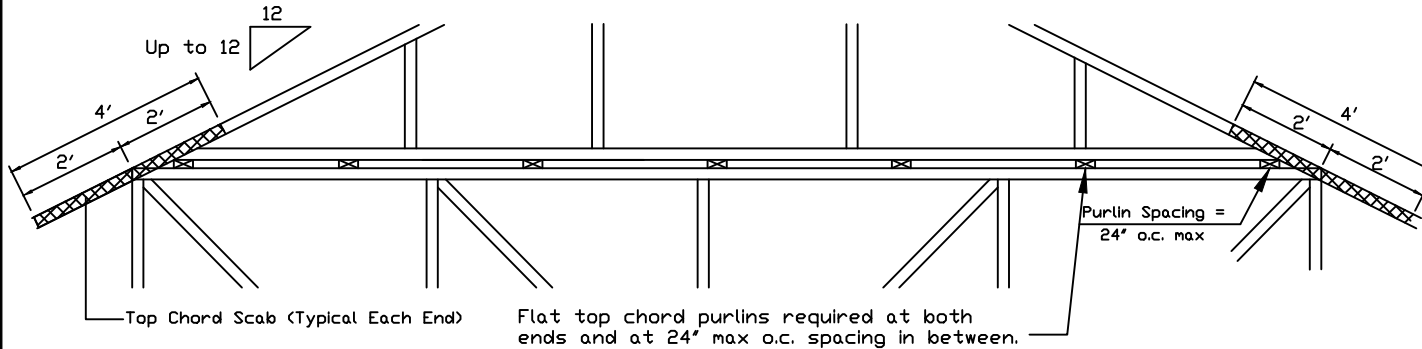
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.
 Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

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

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

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

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

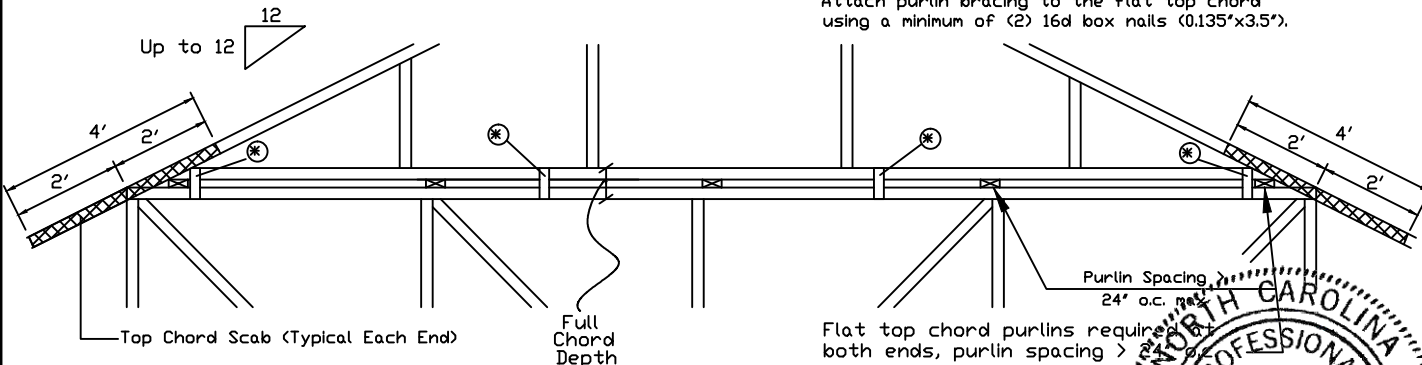


Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135x3.5) and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128x3) at 4' o.c.

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

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

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



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

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

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

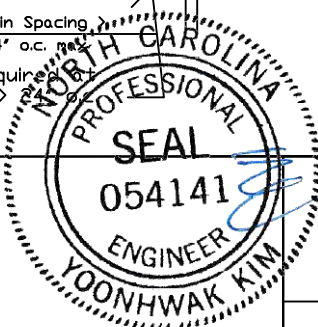
Trulox
 Use 3X8 Trulox plates for 2x4 chord member, and 3X10 Trulox plates for 2x6 and larger chord members. Attach to each face @ 8' o.c. with (4) 0.120x1.375 nails into cap bottom chord and (4) in base truss top chord. Trulox plates may be staggered 4' o.c. front to back faces.

APA Rated Gusset
 8"x8"x7/16" (min) APA rated sheathing gussets (each face). Attach @ 8' o.c. with (8) 6d common (0.113x2") nails per gusset, (4) in cap bottom chord and (4) in base truss top chord. Gussets may be staggered 4' o.c. front to back faces.

2x4 Vertical Scabs
 2x4 SPF #2, full chord depth scabs (each face). Attach @ 8' o.c. with (6) 10d box nails (0.128x3) per scab, (3) in cap bottom chord and (3) in base truss top chord. Scabs may be staggered 4' o.c. front to back faces.

28PB Wave Piggyback Plate
 One 28PB wave piggyback plate to each face @ 8' o.c. Attach teeth to piggyback at time of fabrication. Attach to supporting truss with (4) 0.120x1.375 nails per face per ply. Piggyback plates may be staggered 4' o.c. front to back faces.

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



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ABCD Engineering, PLLC NC COA 0838
 10/04/2024
 SPACING 24.0"

REF	PIGGYBACK
DATE	01/02/2018
DRWG	PB160160118

