

12/28/2023

MO COA #2005000817

Alpine, an ITW company
155 Harlem Ave.
North Building, 4th Floor
Glenview, IL 60025
Phone: (800)326-4102 (314)344-9121
alpineitw.com

Site Information:	Page 1:
Customer: Mill Creek Truss	Job Number: JB-232208R
Job Description: Customer:CAPITAL BUILDERS LLC Address:100 NE Tudor Rd	
Address: 100 NE Tudor Rd, Lee Summit, MO 64086	

Job Engineering Criteria:	
Design Code: IBC 2018	IntelliVIEW Version: 23.01.02 JRef #: 1XW093160001
Wind Standard: ASCE 7-16 Building Type: Closed	Wind Speed (mph): 115 Design Loading (psf): 40.00

This package contains general notes pages, 8 truss drawing(s) and 2 detail(s).

Item	Drawing Number	Truss	Item	Drawing Number	Truss
1	362.23.1331.50283	A01	2	362.23.1331.29623	A02
3	362.23.1331.26343	A03	4	362.23.1331.08747	B01
5	362.23.1331.06633	B02	6	362.23.1331.03987	B03
7	362.23.1331.02227	B04	8	362.23.1327.42993	B05
9	BRCLBSUB0119		10	DEFLCAMB1014	

General Notes

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

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

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

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

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

Temporary Lateral Restraint and Bracing:

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

Permanent Lateral Restraint and Bracing:

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

Connector Plate Information:

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

Fire Retardant Treated Lumber:

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

General Notes (continued)

Key to Terms:

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

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

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

CL = Certified lumber.

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

FRT = Fire Retardant Treated lumber.

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

FRT-DC = Dricon Fire Retardant Treated lumber.

FRT-FP = FirePRO Fire Retardant Treated lumber.

FRT-FL = FlamePRO Fire Retardant Treated lumber.

FRT-FT = FlameTech Fire Retardant Treated lumber.

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

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).

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.

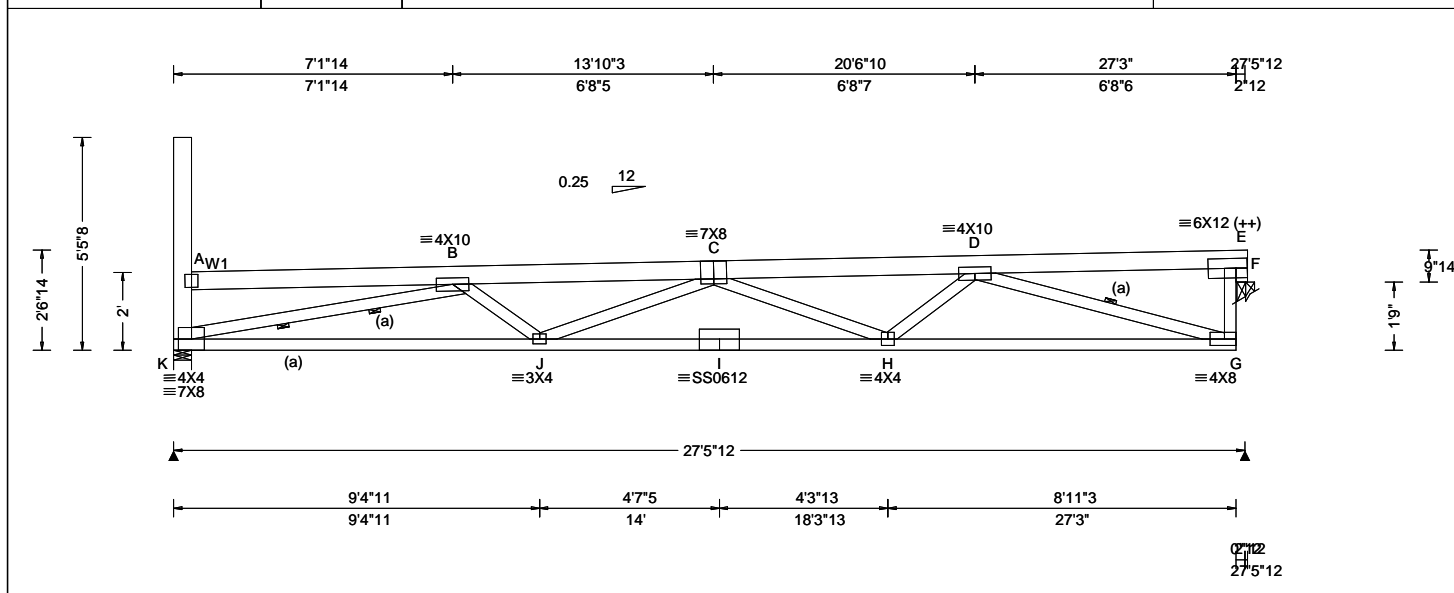
Refer to ASCE-7 for Wind and Seismic abbreviations.

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: 180726 FROM: DCH	MONO Ply: 1 Qty: 6	Job Number: JB-232208R Customer: CAPITAL BUILDERS LLC Address: 100 NE Tudor Rd Truss Label: A01	Cust: R 9316 JRef: 1XW093160001 T9 DrwNo: 362.23.1331.50283 / DJR 12/28/2023
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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: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 115 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 15.0 Ct: 1.1 CAT: II Pf: 11.6 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2018 TPI Std: 2014 Rep Fac: Varies by Ld Case FT/RT: 10(0)/5(0) Plate Type(s): WAVE, 18SS	PP Deflection in loc L/def L/# VERT(LL): 0.347 C 946 240 VERT(CL): 0.580 C 565 240 HORZ(LL): 0.066 G - - HORZ(TL): 0.111 G - - Creep Factor: 2.0 Max TC CSI: 0.228 Max BC CSI: 0.475 Max Web CSI: 0.890 VIEW Ver: 23.01.02.0731.17	Gravity Loc R+ / R- / Rh / Rw / U / RL K 1358 - / - / - / 562 / 258 / 152 F 1344 - / - / - / 578 / 219 / - Wind reactions based on MWFRS K Brg Wid = 5.5 Min Req = 1.5 (Support) F Brg Wid = 2.5 Min Req = 1.5 (Support) Bearing F is a rigid surface. Bearing K Fcperp = 565psi. 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 DF-L 2400f-1.8E; Bot chord: 2x4 SP 2850f-2.3E; Webs: 2x4 SPF #1/#2; W1 2x6 SPF 1650f-1.5E; Rt Bearing Leg: 2x4 SPF 2100f-1.8E;	Deflection Max JT VERT DEFL: LL: 0.32" DL: 0.22". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.
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Bracing (a) Continuous lateral restraint equally spaced on member.	Additional Notes Provide for complete drainage of roof. Truss must be installed as shown with top chord up. Top Chord overhang(s) may be field trimmed.
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Special Loads ----- (Lumber Dur.Fac.=1.15 / Plate Dur.Fac.=1.15) TC: From 77 plf at 0.46 to 77 plf at 27.54 PLT: From 33 plf at 0.46 to 0 plf at 4.62 BC: From 20 plf at 0.00 to 20 plf at 27.25	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 4044 - 1573 I - H 4820 - 1658 J - I 4820 - 1658 H - G 3392 - 1164
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Plating Notes (++) - This plate works for both joints covered.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1419 - 3991 H - D 808 - 94 J - C 533 - 25 D - G 1175 - 3416 C - I 343 - 390 F - G 1081 - 302 I - H 461 - 907 E - F 1683 - 1955
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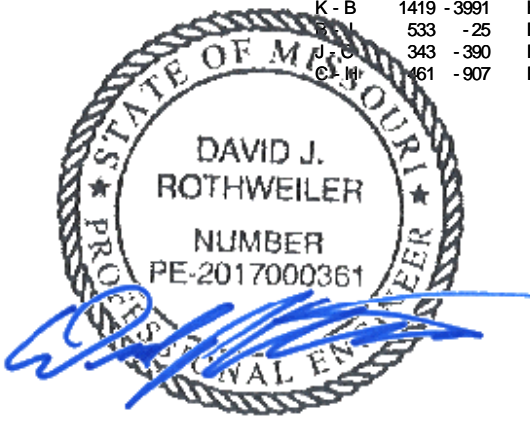
Loading Drifting snow load has been considered for only in plane loading as follows: Location Lu1 Lu2 Height Pd W 0.46 0.00 27.08 3.45 33.20 4.16 Where: Lu1 = leeward distance, Lu2 = windward distance Pd = max applied load, W = length of applied load.	Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.
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Plating Notes (++) - This plate works for both joints covered.	WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING! **IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information. Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2. For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbccomponents.com; ICC: iccsafe.org; AWC: awc.org
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Loading Drifting snow load has been considered for only in plane loading as follows: Location Lu1 Lu2 Height Pd W 0.46 0.00 27.08 3.45 33.20 4.16 Where: Lu1 = leeward distance, Lu2 = windward distance Pd = max applied load, W = length of applied load.	Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.
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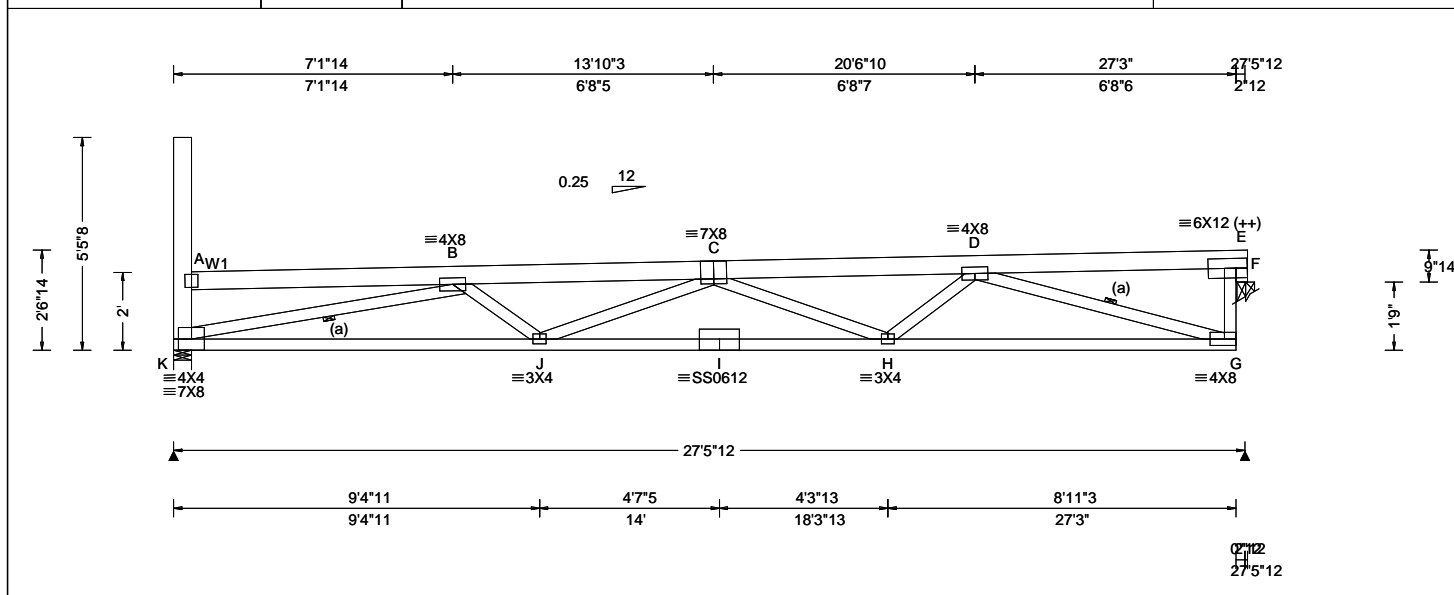
Plating Notes (++) - This plate works for both joints covered.	WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING! **IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have continuous lateral restraint (CLR), installed with diagonal bracing installed on the CLR per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information. Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2. For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbccomponents.com; ICC: iccsafe.org; AWC: awc.org
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MO COA #2005000817
12/28/2023 MO COA #2005000817



SEQN: 180729 FROM: DCH	MONO Qty: 33	Ply: 1	Job Number: JB-232208R Customer: CAPITAL BUILDERS LLC Address: 100 NE Tudor Rd Truss Label: A02	Cust: R 9316 JRef: 1XW093160001 T7 DrwNo: 362.23.1331.29623 / DJR 12/28/2023
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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: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 109 mph Enclosure: Closed Risk Category: II EXP: B Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h 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: 20.0(specified) Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2018 TPI Std: 2014 Rep Fac: Yes FT/RT: 10(0)/5(0) Plate Type(s): WAVE, 18SS	PP Deflection in loc L/defl L/# VERT(LL): 0.292 C 999 240 VERT(CL): 0.563 C 583 240 HORZ(LL): 0.061 G - - HORZ(TL): 0.117 G - - Creep Factor: 2.0 Max TC CSI: 0.229 Max BC CSI: 0.533 Max Web CSI: 0.914 VIEW Ver: 23.01.02.0731.17	Gravity Loc R+ / R- / Rh / Rw / U / RL K 1148 - / - / 546 - / 92 F 1108 - / - / 559 - / - Wind reactions based on MWFRS K Brg Wid = 5.5 Min Req = 1.5 (Truss) F Brg Wid = 2.5 Min Req = 1.5 (Support) Bearing F is a rigid surface. Bearing K Fcperp = 565psi. 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 SPF 1650f-1.5E; Bot chord: 2x4 SPF 2100f-1.8E; Webs: 2x4 SPF #1/#2; W1 2x6 SPF 1650f-1.5E; Rt Bearing Leg: 2x4 SPF #1/#2;	Additional Notes Provide for complete drainage of roof. Truss must be installed as shown with top chord up. Top Chord overhang(s) may be field trimmed.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 3363 -608 I - H 3975 -569 J - I 3975 -569 H - G 2798 -397
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Bracing (a) Continuous lateral restraint equally spaced on member.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 515 -3311 D - G 403 -2812 B - J 483 0 F - G 903 -74 J - H 222 -720 E - F 1127 -1451 H - G 700 0
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Plating Notes (++) - This plate works for both joints covered.	Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - B 515 -3311 D - G 403 -2812 B - J 483 0 F - G 903 -74 J - H 222 -720 E - F 1127 -1451 H - G 700 0
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Loading
Drifting snow load has been considered for only in plane loading as follows:
Location Lu1 Lu2 Height Pd W
0.46 0.00 27.08 3.45 37.90 4.57
Where: Lu1 = leeward distance, Lu2 = windward distance
Pd = max applied load, W = length of applied load.

Wind
Wind loads based on MWFRS with additional C&C member design.
End verticals not exposed to wind pressure.

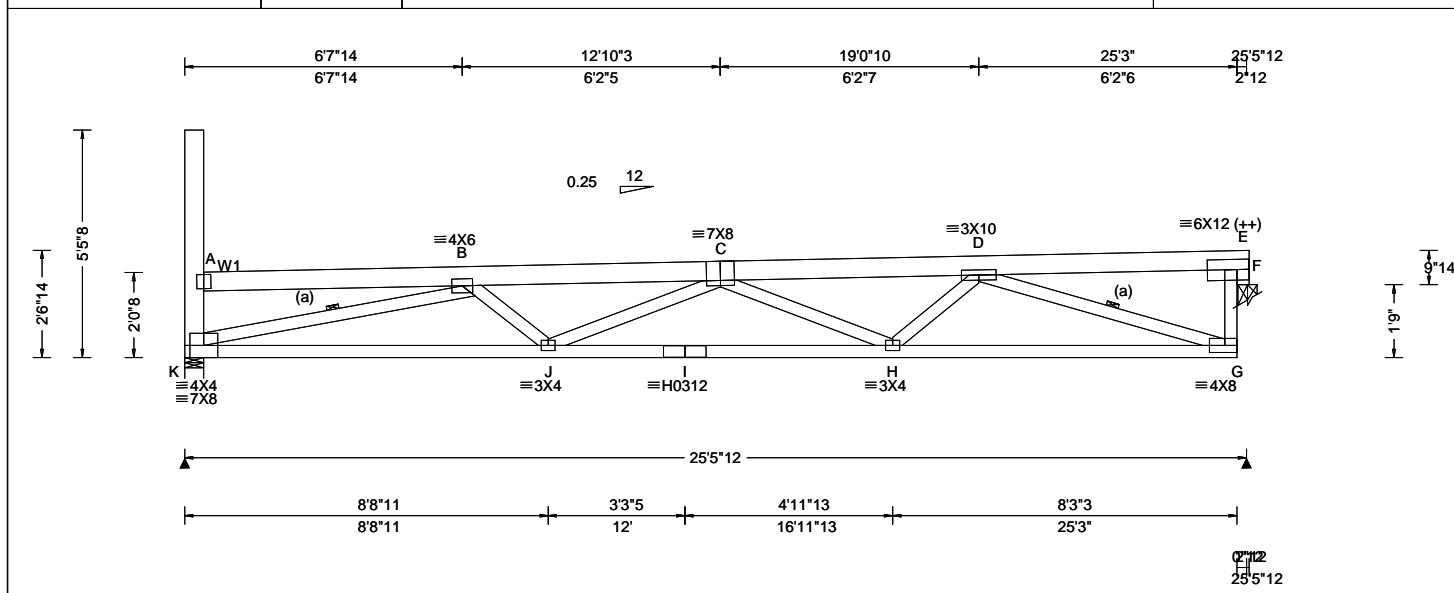
Deflection
Max JT VERT DEFL: LL: 0.27" DL: 0.26". See detail DEFLCAMB1014 for camber recommendations.
Provide for adequate drainage of roof.

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****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS
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For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcacomponents.com; ICC: iccsafe.org; AWC: awc.org



SEQN: 180736 FROM: DCH	MONO Ply: 1 Qty: 35	Job Number: JB-232208R Customer: CAPITAL BUILDERS LLC Address: 100 NE Tudor Rd Truss Label: A03	Cust: R 9316 JRef: 1XW093160001 T10 DrwNo: 362.23.1331.26343 / DJR 12/28/2023
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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: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 115 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 15.0 Ct: 1.1 CAT: II Pf: 11.6 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2018 TPI Std: 2014 Rep Fac: Yes FT/RT: 10(0)/5(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.172 C 999 240 VERT(CL): 0.345 C 882 240 HORZ(LL): 0.035 G - - HORZ(TL): 0.071 G - - Creep Factor: 2.0 Max TC CSI: 0.119 Max BC CSI: 0.313 Max Web CSI: 0.677 VIEW Ver: 23.01.02.0731.17	Gravity Loc R+ / R- / Rh / Rw / U / RL K 988 - / - / 522 / 60 / 150 F 1022 - / - / 538 / 65 / - Wind reactions based on MWFRS K Brg Wid = 5.5 Min Req = 1.5 (Support) F Brg Wid = 2.5 Min Req = 1.5 (Support) Bearing F is a rigid surface. Bearing K Fcperp = 565psi. 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 DF-L 2400f-1.8E; Bot chord: 2x4 SP 2850f-2.3E; Webs: 2x4 SPF #1/#2; W1 2x6 SPF 1650f-1.5E; Rt Bearing Leg: 2x4 SPF #1/#2;	Additional Notes Provide for complete drainage of roof. Truss must be installed as shown with top chord up. Top Chord overhang(s) may be field trimmed.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 2768 - 1426 I - H 3346 - 1499 J - I 3346 - 1499 H - G 2370 - 1061
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Bracing (a) Continuous lateral restraint equally spaced on member.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1293 - 2755 D - G 1081 - 2407 B - J 435 - 34 F - G 833 - 302 H - I 411 - 601 E - F 1390 - 1486 610 - 93
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Plating Notes (++) - This plate works for both joints covered.	Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 512 - 558 C - D 1116 - 2805 B - C 1352 - 3100
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Loading Drifting snow load has been considered for only in plane loading as follows: Location Lu1 Lu2 Height Pd W 0.46 0.00 25.08 3.41 31.45 3.94 Where: Lu1 = leeward distance, Lu2 = windward distance Pd = max applied load, W = length of applied load.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 2768 - 1426 I - H 3346 - 1499 J - I 3346 - 1499 H - G 2370 - 1061
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Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1293 - 2755 D - G 1081 - 2407 B - J 435 - 34 F - G 833 - 302 H - I 411 - 601 E - F 1390 - 1486 610 - 93
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 512 - 558 C - D 1116 - 2805 B - C 1352 - 3100
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Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 2768 - 1426 I - H 3346 - 1499 J - I 3346 - 1499 H - G 2370 - 1061
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1293 - 2755 D - G 1081 - 2407 B - J 435 - 34 F - G 833 - 302 H - I 411 - 601 E - F 1390 - 1486 610 - 93
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Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.	Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 512 - 558 C - D 1116 - 2805 B - C 1352 - 3100
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 2768 - 1426 I - H 3346 - 1499 J - I 3346 - 1499 H - G 2370 - 1061
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1293 - 2755 D - G 1081 - 2407 B - J 435 - 34 F - G 833 - 302 H - I 411 - 601 E - F 1390 - 1486 610 - 93
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Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.	Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 512 - 558 C - D 1116 - 2805 B - C 1352 - 3100
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 2768 - 1426 I - H 3346 - 1499 J - I 3346 - 1499 H - G 2370 - 1061
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1293 - 2755 D - G 1081 - 2407 B - J 435 - 34 F - G 833 - 302 H - I 411 - 601 E - F 1390 - 1486 610 - 93
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Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.	Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 512 - 558 C - D 1116 - 2805 B - C 1352 - 3100
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 2768 - 1426 I - H 3346 - 1499 J - I 3346 - 1499 H - G 2370 - 1061
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1293 - 2755 D - G 1081 - 2407 B - J 435 - 34 F - G 833 - 302 H - I 411 - 601 E - F 1390 - 1486 610 - 93
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Wind Wind loads based on MWFRS with additional C&C member design. End verticals not exposed to wind pressure.	Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. A - B 512 - 558 C - D 1116 - 2805 B - C 1352 - 3100
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Bot Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. K - J 2768 - 1426 I - H 3346 - 1499 J - I 3346 - 1499 H - G 2370 - 1061
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Deflection Max JT VERT DEFL: LL: 0.16" DL: 0.16". See detail DEFLCAMB1014 for camber recommendations. Provide for adequate drainage of roof.	Maximum Web Forces Per Ply (lbs) Webs Tens.Comp. Webs Tens. Comp. K - B 1293 - 2755 D - G 1081 - 2407 B - J 435 - 34 F - G 833 - 302 H - I 411 - 601 E - F 1390 - 1486 610 - 93
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0.25 12

(a)

W1

W9

T2

6X12 (++)

4X4

7X8

4X8

6X6

H0312

3X4

3'8"

3'8"

4'5"1

4'1'9

13'11"3

9'6"2

20'1"12

6'2"9

27'0"8

6'10"12

3'8"

3'8"

4'1'1

5'3"15

9'5"

3'10"8

13'3"8

4'8"8

18'

9'0"8

27'0"8

3'14

1'9"

57'14

8'9"8

31'10

27'0"8

		Wave, No	A - B	1050 - 2116	C - D	1501 - 3101
Lumber	Wind		B - C	1366 - 3195	D - E	800 - 919

A - B	1050 - 2116	C - D	1501 - 3101
B - C	1366 - 3195	D - E	800 - 919

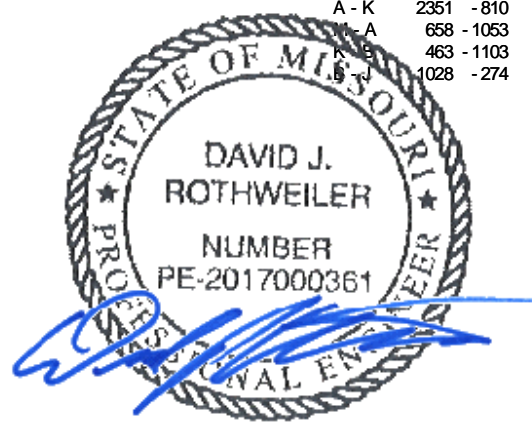
Loading

Drifting snow load has been considered for only in plane loading as follows:

Location	Lu1	Lu2	Height	Pd	W
	25.52	0.00	26.58	5.67	32.77

Where: Lu1 = leeward distance, Lu2 = windward distance
Pd = max applied load, W = length of applied load.

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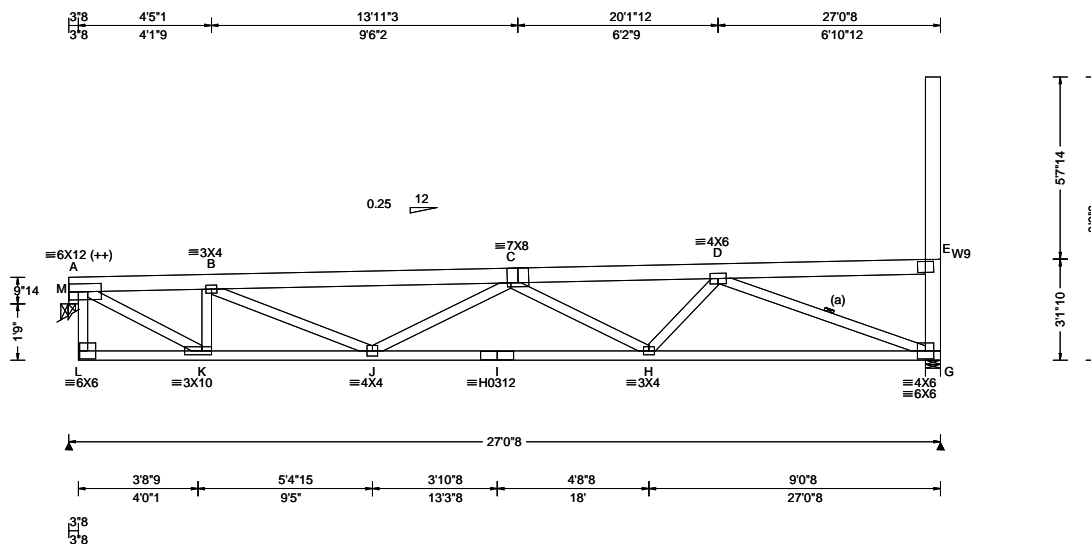


MO COA #2005000817

12/28/2023 MO COA #2005000817



SEQN: 180691 FROM: DCH	MONO Qty: 14	Ply: 1	Job Number: JB-232208R Customer: CAPITAL BUILDERS LLC Address: 100 NE Tudor Rd Truss Label: B02	Cust: R 9316 JRef: 1XW093160001 T15 DrwNo: 362.23.1331.06633 / DJR 12/28/2023
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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: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 115 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 15.0 Ct: 1.1 CAT: II Pf: 11.6 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2018 TPI Std: 2014 Rep Fac: Yes FT/RT: 10(0)/5(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/defl L/# VERT(LL): 0.163 C 999 240 VERT(CL): 0.326 C 991 240 HORZ(LL): 0.024 G - - HORZ(TL): 0.048 G - - Creep Factor: 2.0 Max TC CSI: 0.302 Max BC CSI: 0.917 Max Web CSI: 0.846 VIEW Ver: 23.01.02.0731.17	Gravity Loc R+ / R- / Rh / Rw / U / RL M 1080 - / - / /586 /78 /264 G 1050 - / - / /565 /81 - Wind reactions based on MWFRS M Brg Wid = 2.5 Min Req = 1.5 (Support) G Brg Wid = 5.5 Min Req = 1.6 (Truss) Bearing M is a rigid surface. Bearing G Fcperp = 565psi. 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 SPF 1650f-1.5E;
Bot chord: 2x4 SPF #1/#2;
Webs: 2x4 SPF #1/#2; W9 2x6 SPF 1650f-1.5E;
Lt Bearing Leg: 2x4 SPF #1/#2;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

(++) - This plate works for both joints covered.

Loading

Drifting snow load has been considered for only in plane loading as follows:
Location Lu1 Lu2 Height Pd W
25.52 0.00 26.58 5.67 32.77 4.11
Where: Lu1 = leeward distance, Lu2 = windward distance
Pd = max applied load, W = length of applied load.

Wind

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

End verticals not exposed to wind pressure.

Deflection

Max JT VERT DEFL: LL: 0.14" DL: 0.14". See detail DEFLCAMB1014 for camber recommendations.
Provide for adequate drainage of roof.

Additional Notes

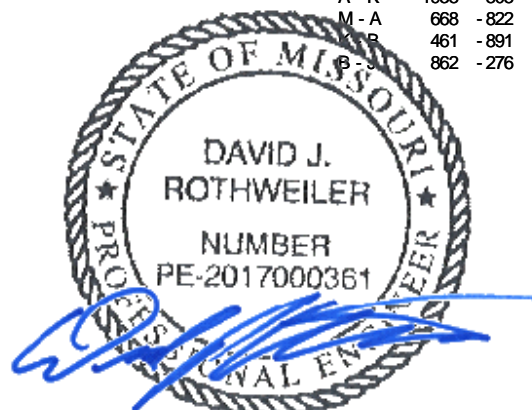
Provide for complete drainage of roof.
Truss must be installed as shown with top chord up.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
K - J	1846 -739	I - H	3000 -1332
J - I	3000 -1332	H - G	2155 -1113

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
A - K	1938 -808	J - C	395 -428
M - A	668 -822	C - H	428 -543
B - B	461 -891	H - D	593 -129
B - J	862 -276	D - G	969 -2239



MO COA #2005000817

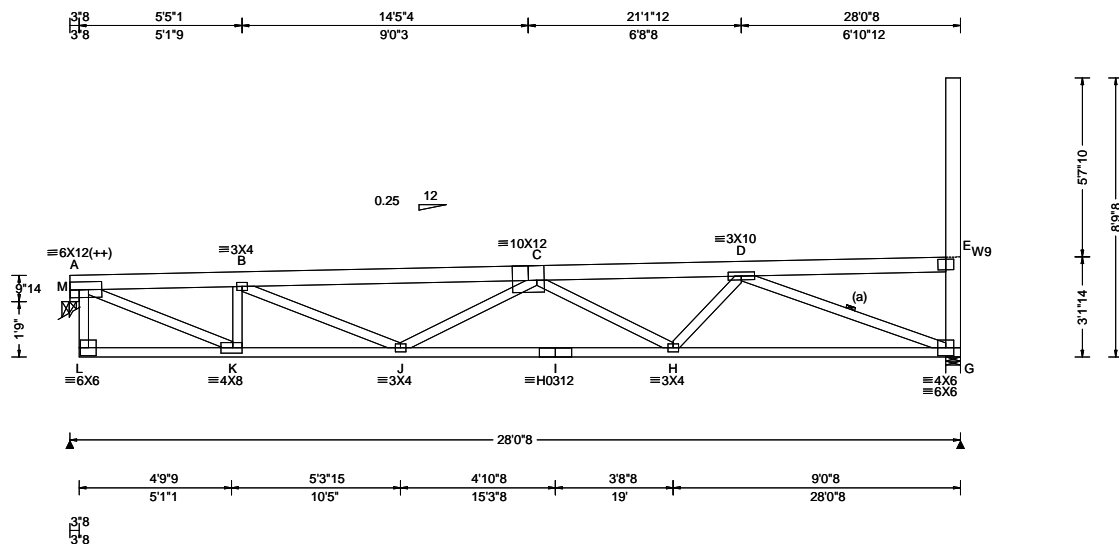
12/28/2023

MO COA #2005000817

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

ALPINE
AN ITW COMPANY
155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 180679 FROM: DCH	MONO Qty: 19	Ply: 1	Job Number: JB-232208R Customer: CAPITAL BUILDERS LLC Address: 100 NE Tudor Rd Truss Label: B03	Cust: R 9316 JRef: 1XW093160001 T13 DrwNo: 362.23.1331.03987 / DJR 12/28/2023
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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: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 115 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 15.0 Ct: 1.1 CAT: II Pf: 11.6 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2018 TPI Std: 2014 Rep Fac: Yes FT/RT: 10(0)/5(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/defl L/# VERT(LL): 0.185 C 999 240 VERT(CL): 0.370 C 906 240 HORZ(LL): 0.027 G - - HORZ(TL): 0.054 G - - Creep Factor: 2.0 Max TC CSI: 0.315 Max BC CSI: 0.959 Max Web CSI: 0.840 VIEW Ver: 23.01.02.0731.17	Gravity Loc R+ / R- / Rh / Rw / U / RL M 1120 -/- /- /605 /79 /264 G 1090 -/- /- /585 /81 -/ Wind reactions based on MWFRS M Brg Wid = 2.5 Min Req = 1.5 (Support) G Brg Wid = 5.5 Min Req = 1.7 (Truss) Bearing M is a rigid surface. Bearing G Fcperp = 565psi. 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 SPF 1650f-1.5E;
Bot chord: 2x4 SPF #1/#2;
Webs: 2x4 SPF #1/#2; W9 2x6 SPF 1650f-1.5E;
Lt Bearing Leg: 2x4 SPF #1/#2;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

(++) - This plate works for both joints covered.

Loading

Drifting snow load has been considered for only in plane loading as follows:
Location Lu1 Lu2 Height Pd W
26.52 0.00 27.58 5.64 33.62 4.22
Where: Lu1 = leeward distance, Lu2 = windward distance
Pd = max applied load, W = length of applied load.

Wind

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

End verticals not exposed to wind pressure.

Deflection

Max JT VERT DEFL: LL: 0.16" DL: 0.17". See detail DEFLCAMB1014 for camber recommendations.
Provide for adequate drainage of roof.

Additional Notes

Provide for complete drainage of roof.
Truss must be installed as shown with top chord up.

Maximum Bot Chord Forces Per Ply (lbs)

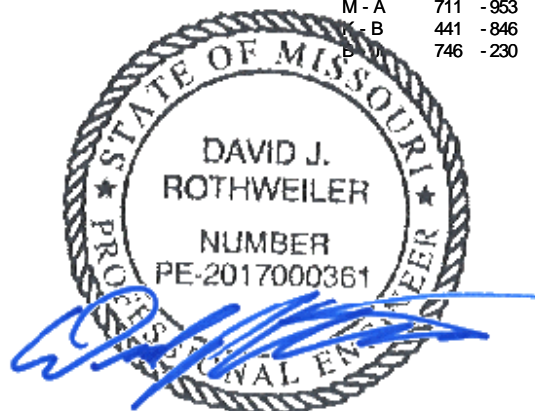
Chords	Tens.Comp.	Chords	Tens. Comp.
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K - J	2219 -863	I - H	3188 -1375
J - I	3188 -1375	H - G	2242 -1126

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
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A - K	2245 -903	C - H	444 -624
M - A	711 -953	H - D	646 -140
K - B	441 -846	D - G	972 -2334
B - C	746 -230		



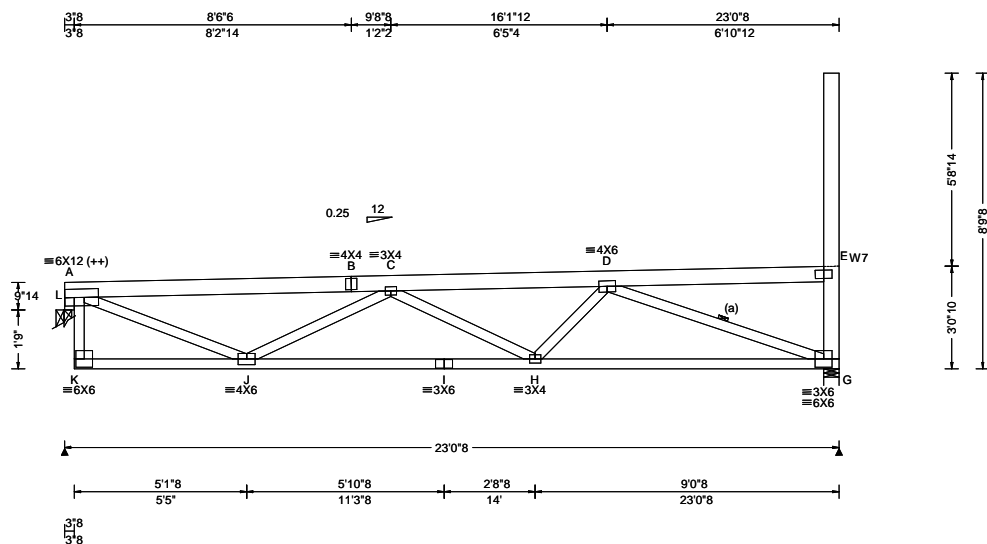
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155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 180694 FROM: DCH	MONO Ply: 1 Qty: 20	Job Number: JB-232208R Customer: CAPITAL BUILDERS LLC Address: 100 NE Tudor Rd Truss Label: B04	Cust: R 9316 JRef: 1XW093160001 T11 DrwNo: 362.23.1331.02227 / DJR 12/28/2023
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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: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 115 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: 15.0 Ct: 1.1 CAT: II Pf: 11.6 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2018 TPI Std: 2014 Rep Fac: Yes FT/RT: 10(0)/5(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.102 C 999 240 VERT(CL): 0.204 C 999 240 HORZ(LL): 0.026 G - - HORZ(TL): 0.052 G - - Creep Factor: 2.0 Max TC CSI: 0.329 Max BC CSI: 0.751 Max Web CSI: 0.672 VIEW Ver: 23.01.02.0731.17	Gravity Loc R+ / R- / Rh / Rw / U / RL L 920 - / - / - / 511 / 75 / 266 G 890 - / - / - / 488 / 80 / - Wind reactions based on MWFRS L Brg Wid = 2.5 Min Req = 1.5 (Support) G Brg Wid = 5.5 Min Req = 1.5 (Truss) Bearing L is a rigid surface. Bearing G Fcperp = 565psi. 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 SPF 1650f-1.5E;
Bot chord: 2x4 SPF #1/#2;
Webs: 2x4 SPF #1/#2; W7 2x6 DF-L 2400f-1.8E;
Lt Bearing Leg: 2x4 SPF #1/#2;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

(++) - This plate works for both joints covered.

Loading

Drifting snow load has been considered for only in plane loading as follows:
Location Lu1 Lu2 Height Pd W
21.52 0.00 22.58 5.75 29.14 3.65
Where: Lu1 = leeward distance, Lu2 = windward distance
Pd = max applied load, W = length of applied load.

Wind

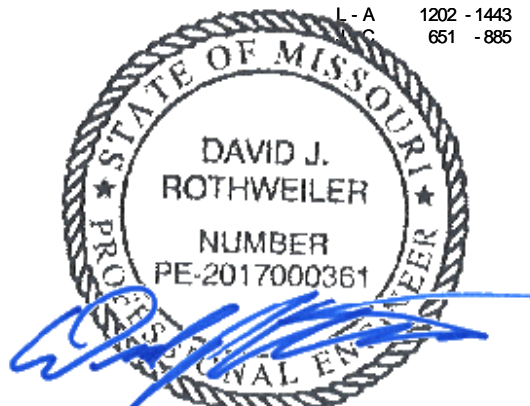
Wind loads based on MWFRS with additional C&C member design.

End verticals not exposed to wind pressure.

Additional Notes

Provide for complete drainage of roof.

Truss must be installed as shown with top chord up.



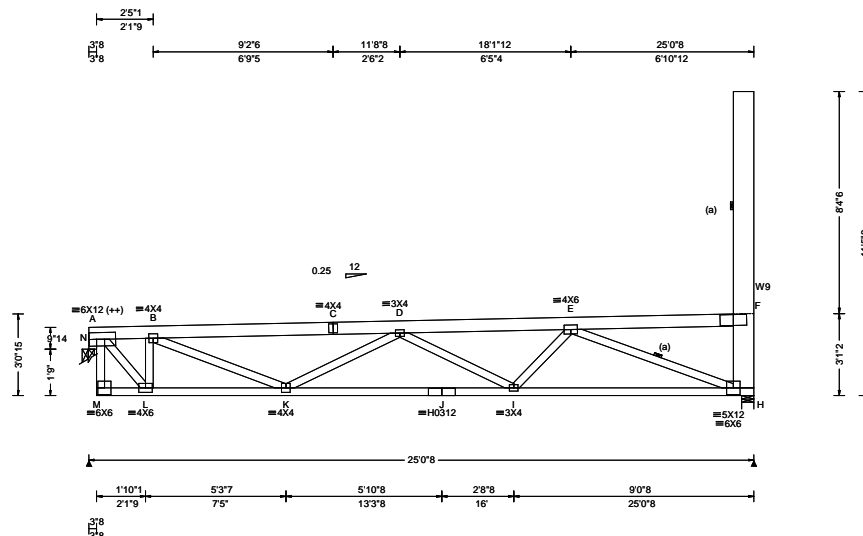
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155 Harlem Ave
North Building, 4th Floor
Glenview, IL 60025

SEQN: 180698 FROM: DCH	MONO Qty: 15	Job Number: JB-232208R Customer: CAPITAL BUILDERS LLC Address: 100 NE Tudor Rd Truss Label: B05	Cust: R 9316 JRef: 1XW093160001 T14 DrwNo: 362.23.1327.42993 / DJR 12/28/2023
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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: 0.00 Soffit: 2.00 Load Duration: 1.15 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 115 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 6.0 psf BCDL: 6.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: Any GCp: 0.18 Wind Duration: 1.60	Pg: 15.0 Ct: 1.1 CAT: II Pf: 11.6 Ce: 1.0 Lu: - Cs: 1.00 Snow Duration: 1.15 Building Code: IBC 2018 TPI Std: 2014 Rep Fac: Yes FT/RT: 10(0)/5(0) Plate Type(s): WAVE, HS	PP Deflection in loc L/def L/# VERT(LL): 0.126 D 999 240 VERT(CL): 0.254 D 999 240 HORZ(LL): 0.020 H - - HORZ(TL): 0.040 H - - Creep Factor: 2.0 Max TC CSI: 0.246 Max BC CSI: 0.817 Max Web CSI: 0.622 VIEW Ver: 23.01.02.0731.17	Gravity Loc R+ / R- / Rh / Rw / U / RL N 999 - / - / - / 586 / 102 / 383 H 952 - / - / - / 546 / 114 / - Non-Gravity Wind reactions based on MWFRS N Brg Wid = 2.5 Min Req = 1.5 (Support) H Brg Wid = 5.5 Min Req = 1.5 (Truss) Bearing N is a rigid surface. Bearing H Fcperp = 565psi. 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 SPF 1650f-1.5E;
Bot chord: 2x4 SPF #1/#2;
Webs: 2x4 SPF #1/#2; W9 2x10 DF-L 1950f-1.7E;
Lt Bearing Leg: 2x4 SPF #1/#2;

Bracing

(a) Continuous lateral restraint equally spaced on member.

Plating Notes

(++) - This plate works for both joints covered.

Loading

Drifting snow load has been considered for only in plane loading as follows:
Location Lu1 Lu2 Height Pd W
23.21 0.00 24.27 8.38 30.72 3.85
Where: Lu1 = leeward distance, Lu2 = windward distance
Pd = max applied load, W = length of applied load.

Wind

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

End verticals not exposed to wind pressure.

Additional Notes

Provide for complete drainage of roof.

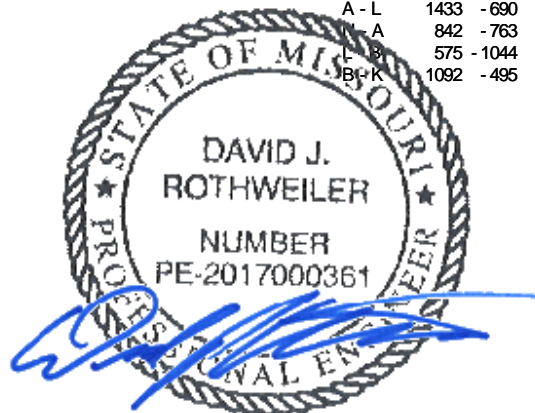
Truss must be installed as shown with top chord up.

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.Comp.	Chords	Tens. Comp.
L - K	1091 -483	J - I	2615 -1446
K - J	2615 -1446	I - H	1973 -1391

Maximum Web Forces Per Ply (lbs)

Webs	Tens.Comp.	Webs	Tens. Comp.
A - L	1433 -690	K - D	588 -608
L - A	842 -763	D - I	507 -385
L - B	575 -1044	I - E	480 -178
B - K	1092 -495	E - H	1154 -2020



MO COA #2005000817

12/28/2023 MO COA #2005000817

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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

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AN ITW COMPANY
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North Building, 4th Floor
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CLR Reinforcing Member Substitution

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

Notes:

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

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

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

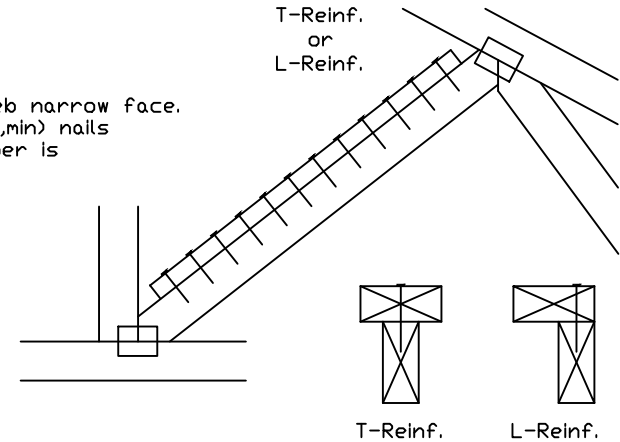
Web Member Size	Specified CLR Restraint	Alternative Reinforcement T- or L- Reinf.	Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4(*)
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6(*)

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

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

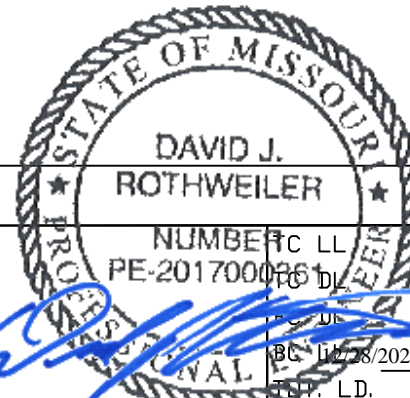
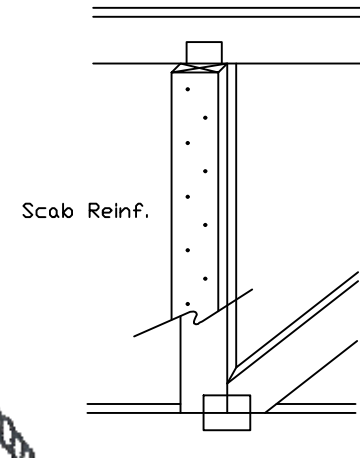
T-Reinforcement or L-Reinforcement:

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



Scab Reinforcement:

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



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PSF	REF	CLR Subst.
PSF	DATE	01/02/19
PSF	DRWG	BRCLBSUB0119
PSF	BC #	107/8/2023
PSF	STP. LD.	
	DUR. FAC.	
	MO COA #	2005000817
	SPACING	

Commentary: Deflection and Camber

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

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

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

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

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

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

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

Recommended Truss Deflection Limits

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

Truss Type	Recommended Camber
Pitched Trusses	1.00 x Deflection from Actual Dead Load
Sloping Parallel Chord Trusses	1.5 x Vertical Deflection from Actual Dead Load
Floor Trusses	(0.25 x Deflection from Live Load) + Actual Dead Load
Flat Roof Trusses	(0.25 x Deflection from Live Load) + (0.5 x Design Dead Load Deflection)

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

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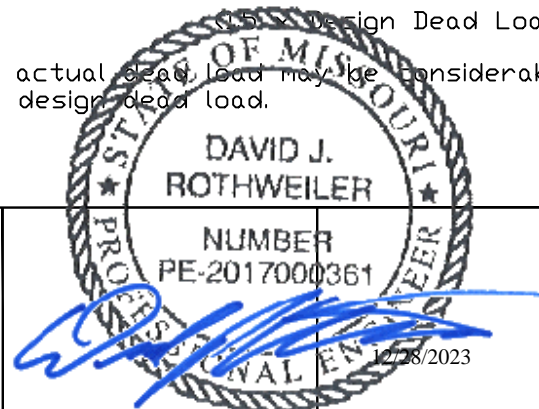
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REF	DEFLEC/CAMB
DATE	10/01/14
DRWG	DEFLCAMB1014