

The truss designs referenced below have been prepared by me or under my direct supervision based on the truss design criteria and requirements ("design criteria") provided by **Quality Line Truss**.

These truss designs are intended for the fabrication of individual building components that will perform to the design criteria provided. Any variance from the design criteria will render the affected truss designs inapplicable.

Listed below are the truss designs included in this package and covered by this seal.

Job: **QU02697_RESERVE_BLDG F1_REFRESHED_11252024** - 1243593

GE01, GE02, GE03, GE04, T01, T02, T03, T04, T05, T06, T07, T08, F01, F02, F03, F04, F05-ALL, F05

Any location identification is for file reference only. No determination of the appropriateness of design criteria for any specific project has been made in preparing the truss designs.

Please refer to individual truss designs for specific design criteria.

08/01/2025



Anish Kekre (MO, 2024044263)

My license expiration date for the state of MO is 12/31/2026.

IMPORTANT NOTE: The responsibility of the engineer sealing this package, as a Truss Engineer, is solely for design of individual trusses as individual building components based upon design criteria provided by others and set forth in the referenced truss drawings. The truss design criteria for the components have not been verified as appropriate for any particular building, project or use. Adequacy and suitability of design criteria and requirements for the truss designs for any specific project are the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

DESIGN NOTES

1. The Truss Design Drawing(s) provided with these Design Notes have been prepared under and are subject to ANSI / TPI 1 published by the Truss Plate Institute, www.tpinst.org. Capitalized terms have the meanings provided in ANSI / TPI 1.
2. Copies of each Truss Design Drawing shall be furnished to the installation contractor, Building Designer, Owner and all persons fabricating, handling, installing, bracing, or erecting the trusses.

DESIGN LIMITATIONS

3. The Truss Design Drawing is based upon specifications provided by the Building Designer in accordance with ANSI / TPI 1. Neither the Truss Designer, Eagle, nor an engineer who seals this design (if any) assumes any responsibility for the adequacy or accuracy of specifications provided by the Building Designer.
4. The Building Designer is solely responsible for the suitability based upon the Truss Design Drawing and shall be responsible for reviewing and verifying that the information shown is in general conformance with the design of the Building.
5. Each Truss Design Drawing is for the individual building component (a truss). A seal on the Truss Design Drawing indicates acceptance of professional engineering responsibility solely for the individual truss.
6. Each Truss Design Drawing assumes trusses will be suitably protected from the environment.

HANDLING, INSTALLING, & BRACING

7. Refer to Building Component Safety Information (BCSI) for handling, installing, restraining and bracing trusses. Copies can be obtained from the Structural Building Components Association, www.sbcindustry.com.
8. Bracing shown on each Truss Design Drawing is for lateral support of individual truss components only to reduce buckling lengths. All temporary and permanent bracing, including lateral load and diagonal or cross bracing, are the responsibility, respectively, of the erector and Building Designer.
9. Eagle is not responsible for improper truss fabrication, handling, erection or bracing.
10. Compression chords shall be laterally braced by the roof or floor sheathing, directly attached, or have purlins provided at spacing shown, unless noted otherwise.

11. Bottom chord required bracing shall be at 10ft spacing or less, if no structural rated ceiling is installed, unless noted otherwise.
12. Strongbacking shall be installed on all parallel chord trusses, including flooring systems, to limit deflection and reduce vibration. Refer to BCSI-B7.
13. Never exceed the design loading shown. Never stack building or other materials on inadequately braced truss; refer to BCSI.
14. Concentration of construction loads greater than the design loads shall not be applied to the trusses at any time; refer to BCSI.
15. Trusses shall be handled with care prior to erection to avoid damage. Refer to BCSI for recommended truss handling and erection.

MATERIALS & FABRICATION

16. Lumber moisture content shall be 19% or less at the time of fabrication unless noted otherwise.
17. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
18. Unless expressly noted, the truss designs are not applicable for use with fire retardant or preservative treated lumber.
19. Plates shall be applied on both faces of truss at each joint and embedded fully. Knots and wane at joint locations shall be regulated in accordance with ANSI / TPI 1.
20. For a specified plate gauge and grade, the specified size is a minimum.
21. Connections not shown are the responsibility of others.
22. Adequate support shall be provided to resist gravity, lateral and uplift loads.
23. For 4X2 truss orientation, locate plates 0 - 1/16" from outside the edge of the truss.
24. Fabrication of truss shall be in accordance with ANSI / TPI 1.

OTHER NOTES

25. Camber is a non-structural consideration and is the responsibility of truss fabricator.
26. Do not cut or alter any truss member or plate without prior approval from a professional engineer.
27. Lumber design values are in accordance with ANSI / TPI 1; lumber design values are by others.
28. Install specified hangers per manufacturer recommendations.

SYMBOLS

PLATE SIZE

3X4 - The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

-, /, I, Indicates required direction of slots; Reference "Joint Details" for more information.

20 Ga Gr40 connectors required

3X10-20HS - 20 Ga Gr60 connectors required

8X10-18HS - 18 Ga Gr60 connectors required

LATERAL BRACING

When this symbol shown, continuous lateral bracing is required on the member of the truss.



BEARING

Indicates location where bearings (supports) occur.



PLATE LOCATION & ORIENTATION

The plate shall be centered on joint and/or placed in accordance with the design drawing/QC full scale details.



REFERENCES

- ANSI / TPI 1:** National Design Standard for Metal Plate Connected Wood Trusses
- BCSI:** Building Component & Safety Information - Guide to Good Practice for Handling, Installing, Restraining, & Bracing of Metal Plate Connected Wood Trusses.
- NDS:** National Design Specification for Wood Construction
- ESR:** 1082 published by the International Code Council. www.icc-es.org

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss:F01

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:25

Page: 1 of 1

SPAN
14-0-0

PITCH
0/12

QTY
4

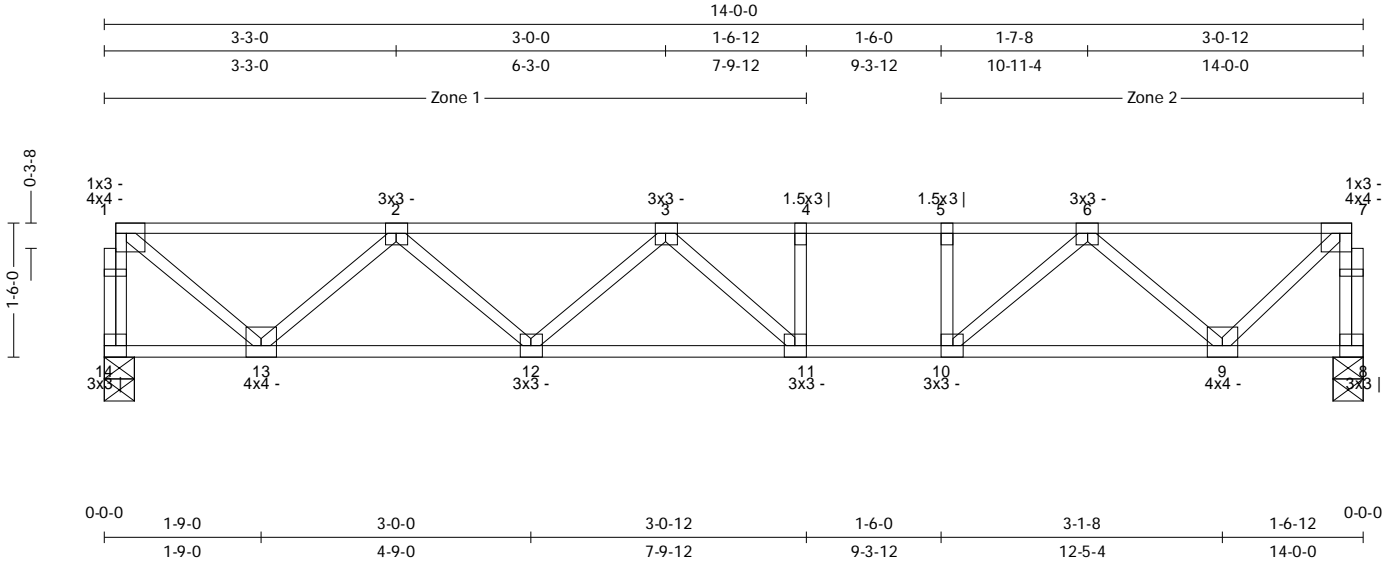
OHL
0-0-0

OHR
0-0-0

PLYS
1

SPACING
19.19 in

WGT/PLY
72 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 40	Bldg Code: IBC 2018/	TC: 0.43 (5-6)	Vert TL: 0.19 in	L/859	(11-12)	L/240
TCDL: 10	TPI 1-2014	BC: 0.58 (10-11)	Vert LL: 0.11 in	L/999	(11-12)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.16 (1-13)	Horz TL: 0.02 in		8	
BCDL: 10	Lumber D.O.L.: 100 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
14	1	4 in	1.50 in	783 lbs	.	.	.	.	.
8	1	4 in	1.50 in	783 lbs	.	.	.	.	.

Material

TC: SYP#1 4 x 2

BC: SYP#1 4 x 2

Web: SYP#1 4 x 2

Loads

1) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.339	(-743 lbs)	3-4	0.366	(-1,799 lbs)	5-6	0.426	(-1,799 lbs)
	2-3	0.340	(-1,712 lbs)	4-5	0.408	(-1,799 lbs)	6-7	0.325	(-648 lbs)
BC	9-10	0.504	1,305 lbs	11-12	0.538	1,896 lbs			
	10-11	0.578	1,799 lbs	12-13	0.373	1,381 lbs			
Web	1-14	0.081	(-759 lbs)	2-12	0.074	449 lbs	7-9	0.152	917 lbs
	1-13	0.164	990 lbs	6-10	0.119	659 lbs	7-8	0.081	(-755 lbs)
	2-13	0.105	(-865 lbs)	6-9	0.108	(-891 lbs)			

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
- 3) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
- 4) A creep factor of 2.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.



WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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Eagle Metal Products

1243593 0003/0020

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss:F02

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:26

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SPAN
20-0-0

PITCH
0/12

QTY
3

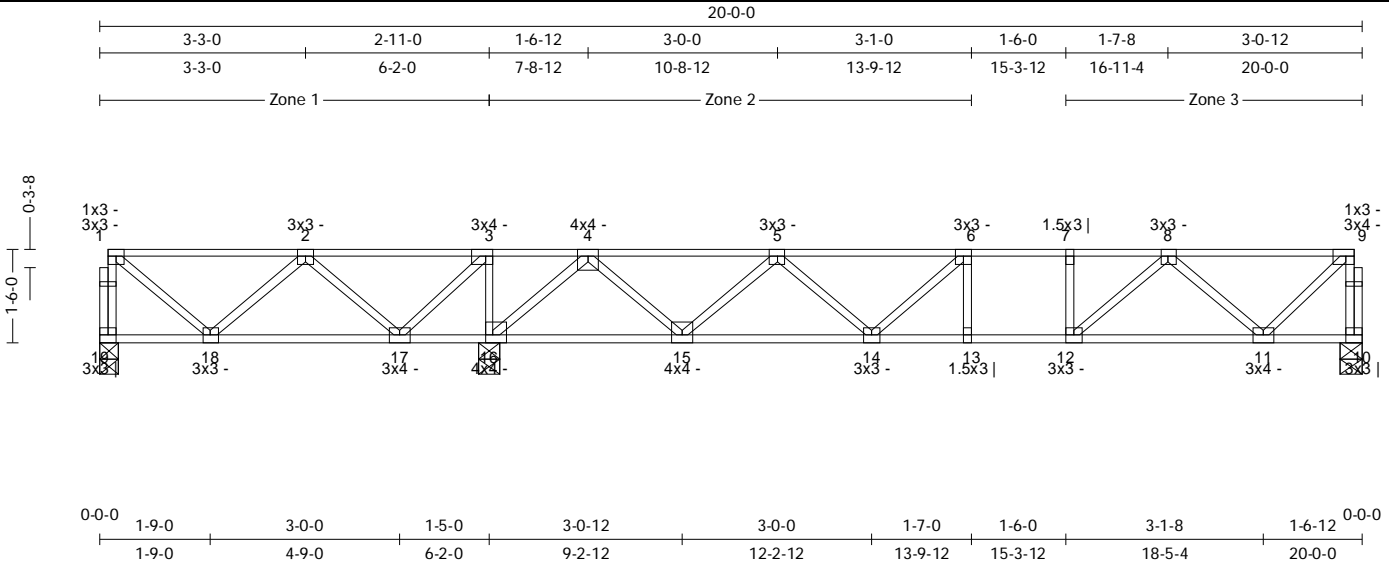
OHL
0-0-0

OHR
0-0-0

PLYS
1

SPACING
19.19 in

WGT/PLY
102 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL : 40	Bldg Code : IBC 2018/	TC : 0.52 (2-3)	Vert TL: 0.08 in	L/999	(13-14)	L/240
TCDL : 10	TPI 1-2014	BC : 0.35 (12-13)	Vert LL: 0.05 in	L/999	(13-14)	L/360
BCLL : 0	Rep Mbr : Yes	Web : 0.15 (4-15)	Horz TL: 0.01 in		10	
BCDL : 10	Lumber D.O.L. : 100 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
16	1	4 in	1.50 in	1,586 lbs	.	.	.	.	.
19	1	3.5 in	1.50 in	198 lbs	-179 lbs	.	.	-179 lbs	.
10	1	4 in	1.50 in	636 lbs	.	.	.	.	.

Material

TC: SYP#1 4 x 2

BC: SYP#1 4 x 2

Web: SYP#1 4 x 2

Loads

1) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	2-3	0.523	847 lbs	5-6	0.310	(-1,068 lbs)	7-8	0.241	(-1,247 lbs)
3-4	0.412	1,401 lbs	6-7	0.162	(-1,247 lbs)	8-9	0.296	(-515 lbs)	
BC	11-12	0.299	998 lbs	14-15	0.222	782 lbs	17-18	0.078	(-512 lbs)
12-13	0.347	1,247 lbs	15-16	0.088	(-489 lbs)				
13-14	0.347	1,247 lbs	16-17	0.133	(-1,401 lbs)				
Web	1-18	0.043	(-315 lbs)	4-16	0.148	(-1,218 lbs)	8-11	0.080	(-655 lbs)
2-18	0.071	374 lbs	4-15	0.155	933 lbs	9-11	0.121	728 lbs	
2-17	0.086	(-703 lbs)	5-15	0.096	(-787 lbs)	9-10	0.066	(-617 lbs)	
3-17	0.128	774 lbs	5-14	0.064	387 lbs				
3-16	0.076	(-705 lbs)	8-12	0.065	340 lbs				

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
- 3) The fabrication tolerance for this floor truss is 10 % ($C_q = 0.90$).
- 4) A creep factor of 2.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 6) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 19 may need to be considered.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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Eagle Metal Products

1243593 0004/0020

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss:F04

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:27

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SPAN
20-0-0

PITCH
0/12

QTY
22

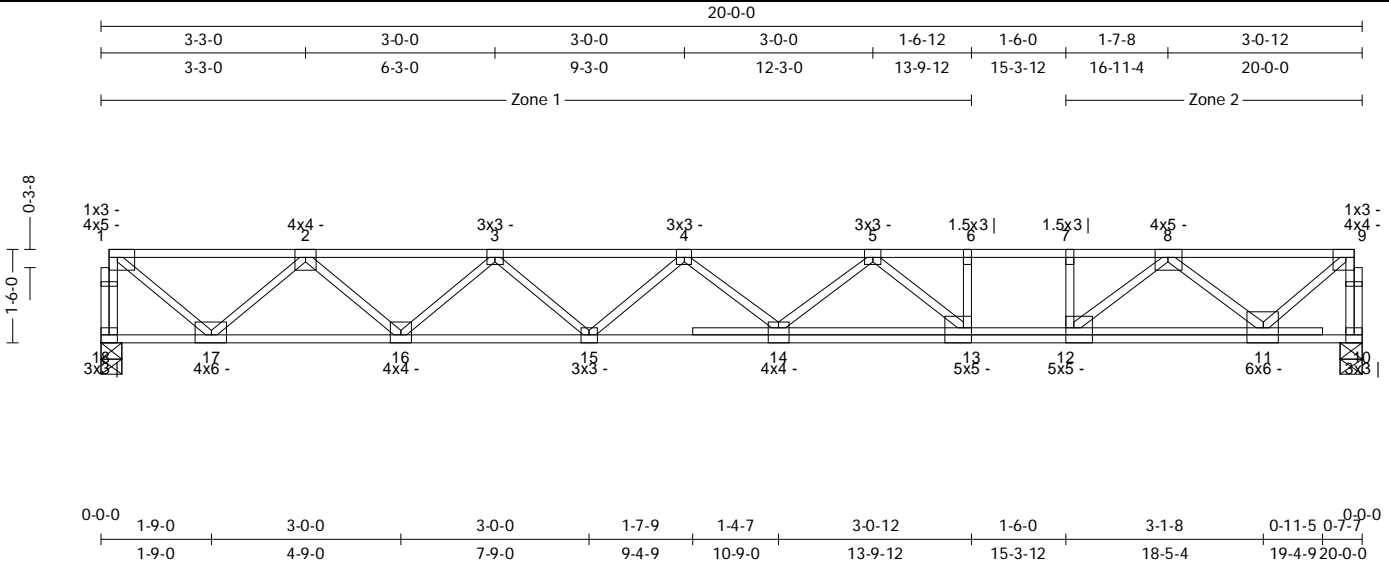
OHL
0-0-0

OHR
0-0-0

PLYS
1

SPACING
19.19 in

WGT/PLY
115 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 40	Bldg Code: IBC 2018/	TC: 0.48 (7-8)	Vert TL: 0.44 in	L/525	(13-14)	L/240
TCDL: 10	TPI 1-2014	BC: 0.78 (13-14)	Vert LL: 0.25 in	L/920	(13-14)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.25 (1-17)	Horz TL: 0.06 in		10	
BCDL: 10	Lumber D.O.L.: 100 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
18	1	4 in	1.50 in	1,119 lbs	.	.	.	.	.
10	1	4 in	1.50 in	1,119 lbs	.	.	.	.	.

Material

TC: SYP#1 4 x 2

BC: SYP#1 4 x 2

Web: SYP#1 4 x 2

Loads

1) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.352	(-1,127 lbs)	3-4	0.424	(-3,724 lbs)	5-6	0.447	(-3,213 lbs)	7-8	0.477	(-3,213 lbs)
	2-3	0.390	(-2,816 lbs)	4-5	0.469	(-4,120 lbs)	6-7	0.460	(-3,213 lbs)	8-9	0.346	(-1,002 lbs)
BC	11-12	0.619	2,173 lbs	13-14	0.776	3,832 lbs	15-16	0.601	3,398 lbs			
	12-13	0.729	3,213 lbs	14-15	0.776	4,054 lbs	16-17	0.409	2,123 lbs			
Web	1-18	0.117	(-1,097 lbs)	3-16	0.096	(-789 lbs)	5-13	0.104	(-823 lbs)	9-10	0.113	(-1,064 lbs)
	1-17	0.249	1,502 lbs	3-15	0.073	442 lbs	8-12	0.225	1,358 lbs			
	2-17	0.164	(-1,351 lbs)	4-15	0.055	(-446 lbs)	8-11	0.185	(-1,556 lbs)			
	2-16	0.156	940 lbs	5-14	0.069	383 lbs	9-11	0.229	1,385 lbs			

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
- 3) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
- 4) A creep factor of 2.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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Eagle Metal Products

1243593 0006/0020

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss:F05-ALL

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:28

Page: 1 of 1

SPAN
15-2-12

PITCH
0/12

QTY
14

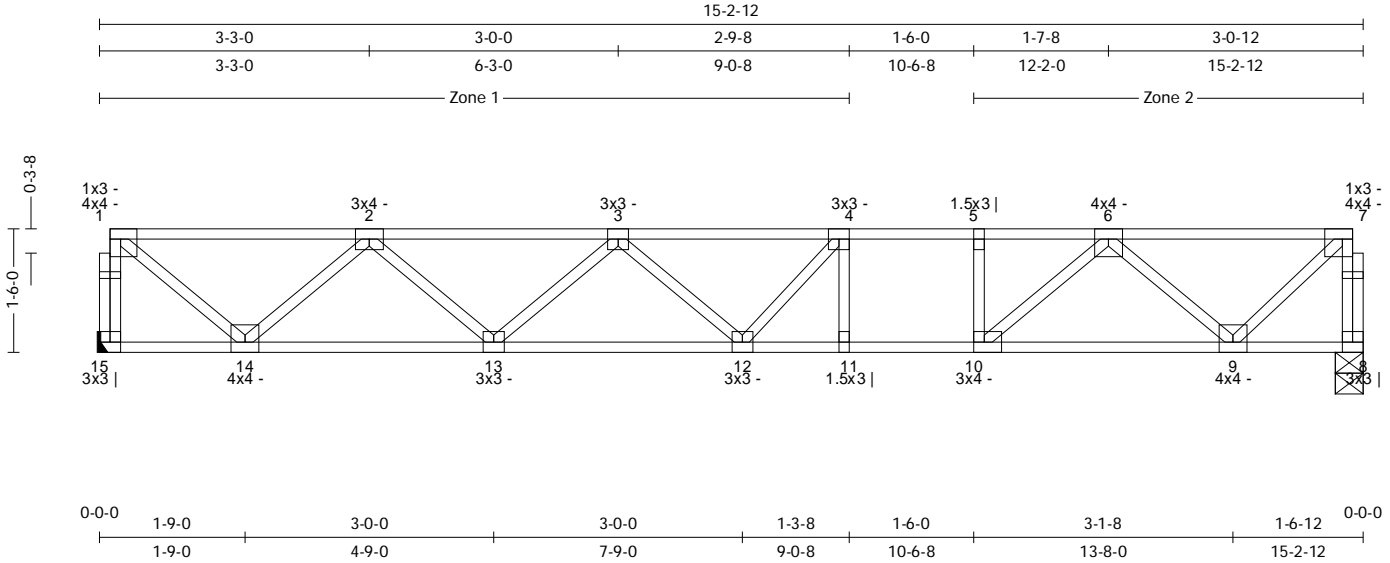
OHL
0-0-0

OHR
0-0-0

PLYS
1

SPACING
19.19 in

WGT/PLY
78 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 40	Bldg Code: IBC 2018/	TC: 0.31 (5-6)	Vert TL: 0.21 in	L/864	(11-12)	L/240
TCDL: 10	TPI 1-2014	BC: 0.53 (10-11)	Vert LL: 0.12 in	L/999	(11-12)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.18 (1-14)	Horz TL: 0.03 in		8	
BCDL: 10	Lumber D.O.L.: 100 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
15	1	1.5 in	---	852 lbs	.	.	.	.	.
8	1	4 in	1.50 in	852 lbs	.	.	.	.	.

Material

TC: SYP2400/1.8 4 x 2

BC: SYP2400/1.8 4 x 2

Web: SYP#1 4 x 2

Loads

1) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.207	(-824 lbs)	3-4	0.291	(-2,239 lbs)	5-6	0.308	(-2,061 lbs)
	2-3	0.199	(-1,932 lbs)	4-5	0.296	(-2,061 lbs)	6-7	0.205	(-707 lbs)
BC	9-10	0.393	1,454 lbs	11-12	0.533	2,061 lbs	13-14	0.168	1,525 lbs
	10-11	0.533	2,061 lbs	12-13	0.254	2,238 lbs			
Web	1-15	0.089	(-831 lbs)	3-13	0.052	(-415 lbs)	7-9	0.166	1,000 lbs
	1-14	0.182	1,097 lbs	4-12	0.059	309 lbs	7-8	0.087	(-815 lbs)
	2-14	0.115	(-951 lbs)	6-10	0.142	808 lbs			
	2-13	0.091	552 lbs	6-9	0.123	(-1,013 lbs)			

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
- 3) The fabrication tolerance for this floor truss is 10 % ($C_q = 0.90$).
- 4) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
- 5) A creep factor of 2.00 has been applied for this truss analysis.
- 6) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.



WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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Eagle Metal Products

1243593 0007/0020

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

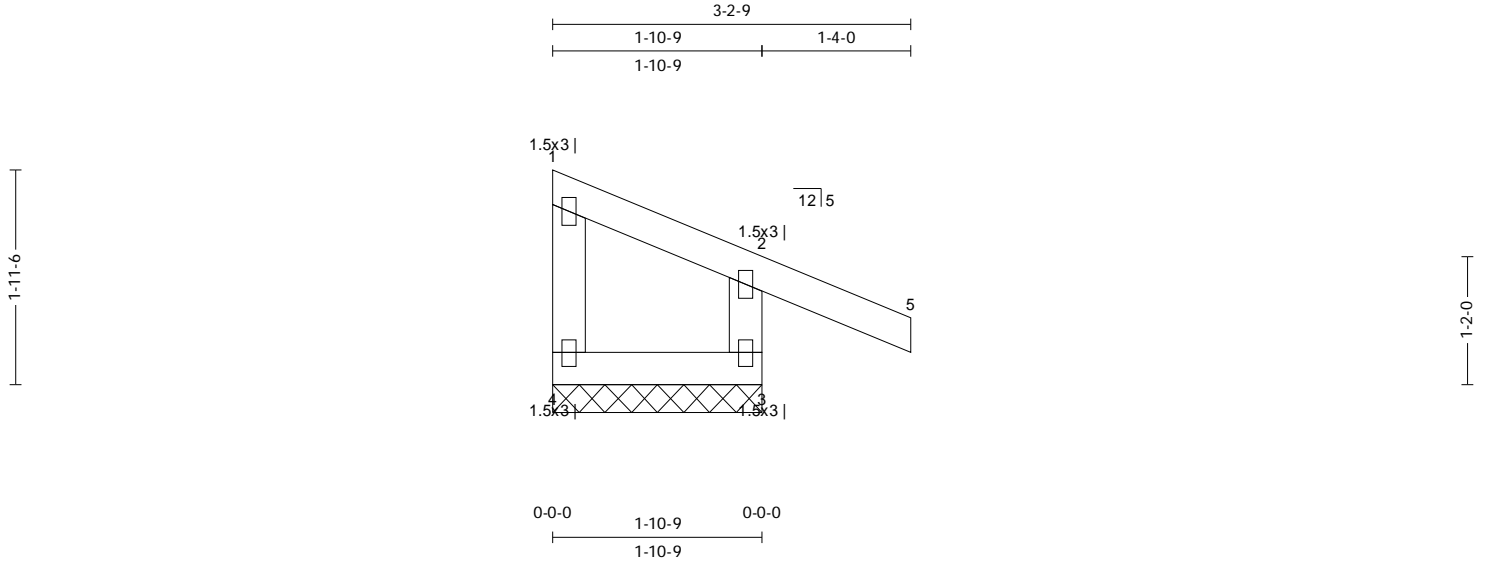
Truss:GE01

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:30

Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
1-10-9	-5/12	1	0-0-0	1-4-0	0-0-0	0-0-0	1	24 in	11 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.28 (2-5)	Vert TL: 0 in	L/999	(3-4)	L/240
TCDL: 10	TPI 1-2014	BC: 0.02 (3-4)	Vert LL: 0 in	L/999	3	L/360
BCLL: 0	Rep Mbr: No	Web: 0.31 (2-3)	Horz TL: 0 in			
BCDL: 10	Lumber D.O.L.: 115 %					

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	.	191 lbs	133 plf	-14 lbs	-37 lbs	-277 lbs	-277 lbs	-155 lbs

Material

TC: SYP#1 2 x 4
BC: SYP#1 2 x 4
Web: SYP#2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (14 psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has not been designed for the effects of unbalanced snow loads.
- 3) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 5) This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 6.43 ft², DOL = 115 %.

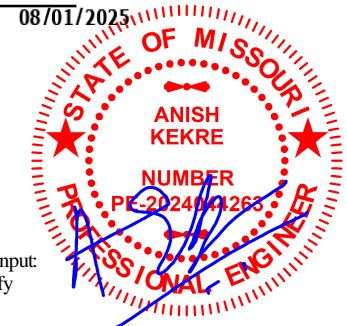
Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	BC	Web

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Gable requires continuous bottom chord bearing.
- 3) Gable webs placed at 24 " OC, U.N.O.
- 4) Attach gable webs with 1.5x3 20 ga plates, U.N.O.
- 5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- 6) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- 7) A creep factor of 2.00 has been applied for this truss analysis.
- 8) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 4 may need to be considered.
- 10) Listed wind uplift reactions based on MWFRS & C&C loading.



WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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Eagle Metal Products

1243593 0009/0020

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

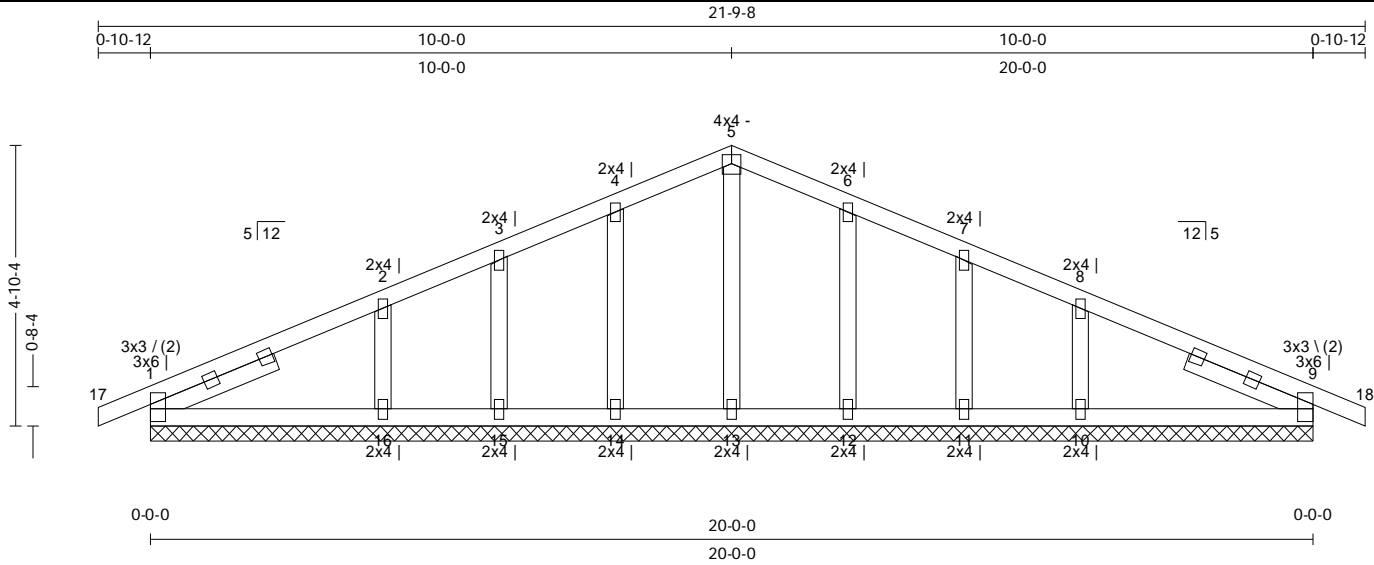
Truss:GE02

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:31

Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
20-0-0	5/12	1	0-10-12	0-10-12	0-0-0	0-0-0	1	24 in	98 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.10 (1-2)	Vert TL: 0 in	L/999	(9-10)	L/240
TCDL: 10	TPI 1-2014	BC: 0.05 (16-1)	Vert LL: 0 in	L/999	9	L/360
BCLL: 0	Rep Mbr: No	Web: 0.04 (6-12)	Horz TL: 0 in			
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1		429 lbs	119 plf	-160 lbs	-129 lbs	-268 lbs	-268 lbs	232 lbs

Material

TC: SYP#1 2 x 4
BC: SYP#1 2 x 4
Web: SYP#2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- This truss has been designed to account for the effects of ice dams forming at the eaves.
- This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 43.58 ft², DOL = 115 %.

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	
BC	
Web	

Notes

- Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- Gable requires continuous bottom chord bearing.
- Gable webs placed at 24" OC, U.N.O.
- Attach gable webs with 2x4 20ga plates, U.N.O.
- Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- A creep factor of 2.00 has been applied for this truss analysis.
- The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 9, 1 may need to be considered.
- Listed wind uplift reactions based on MWFRS & C&C loading.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss:GE03

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:32

Page: 1 of 1

SPAN
14-0-0

PITCH
-5/12

QTY
1

OHL
0-10-12

OHR
0-10-12

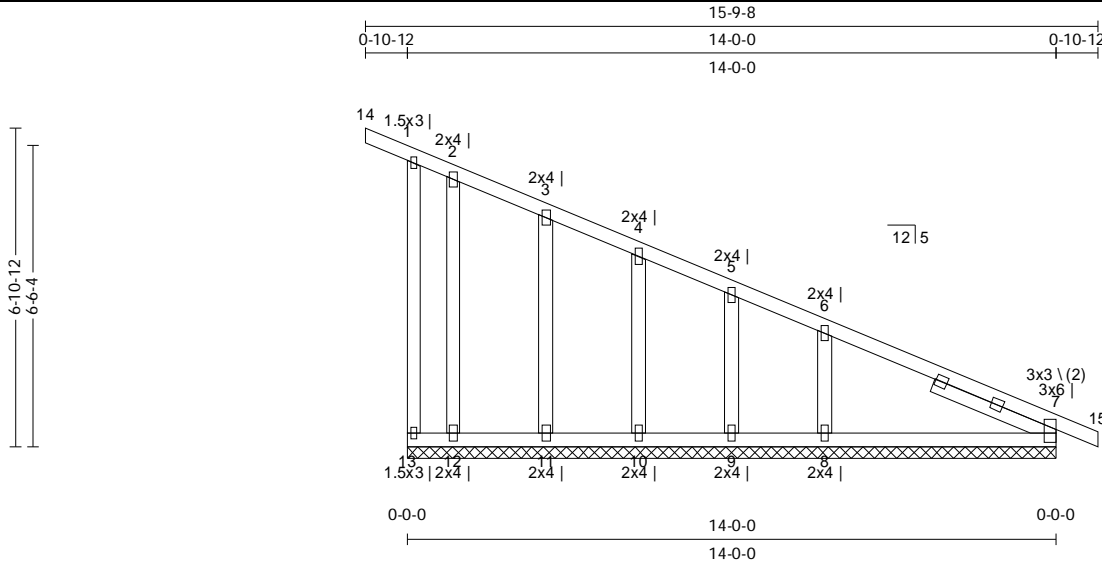
CANT L
0-0-0

CANT R
0-0-0

PLYS
1

SPACING
24 in

WGT/PLY
84 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.31 (1-2)	Vert TL: 0.01 in	L/999	(7-8)	L/240
TCDL: 10	TPI 1-2014	BC: 0.08 (7-8)	Vert LL: 0 in	L/999	7	L/360
BCLL: 0	Rep Mbr: No	Web: 0.37 (1-13)	Horz TL: 0 in			
BCDL: 10	Lumber D.O.L.: 115 %					

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1		813 lbs	161 plf	-520 lbs	-284 lbs	-557 lbs	-557 lbs	-419 lbs

Material

TC: SYP#1 2 x 4
BC: SYP#1 2 x 4
Web: SYP#2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- This truss has been designed to account for the effects of ice dams forming at the eaves.
- This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 31.58 ft², DOL = 115 %.

Member Forces

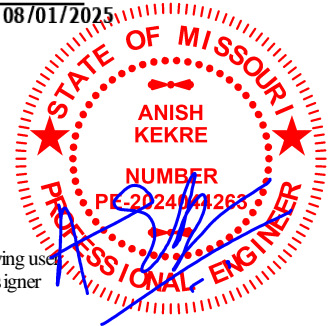
Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

	TC	BC	Web
	6-7	0.158	663 lbs (-591 lbs)

Notes

- Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- Gable requires continuous bottom chord bearing.
- Gable webs placed at 24" OC, U.N.O.
- Attach gable webs with 2x4 20ga plates, U.N.O.
- Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCEA.
- The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- A creep factor of 2.00 has been applied for this truss analysis.
- The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 7 may need to be considered.
- Listed wind uplift reactions based on MWFRS & C&C loading.

08/01/2025



WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

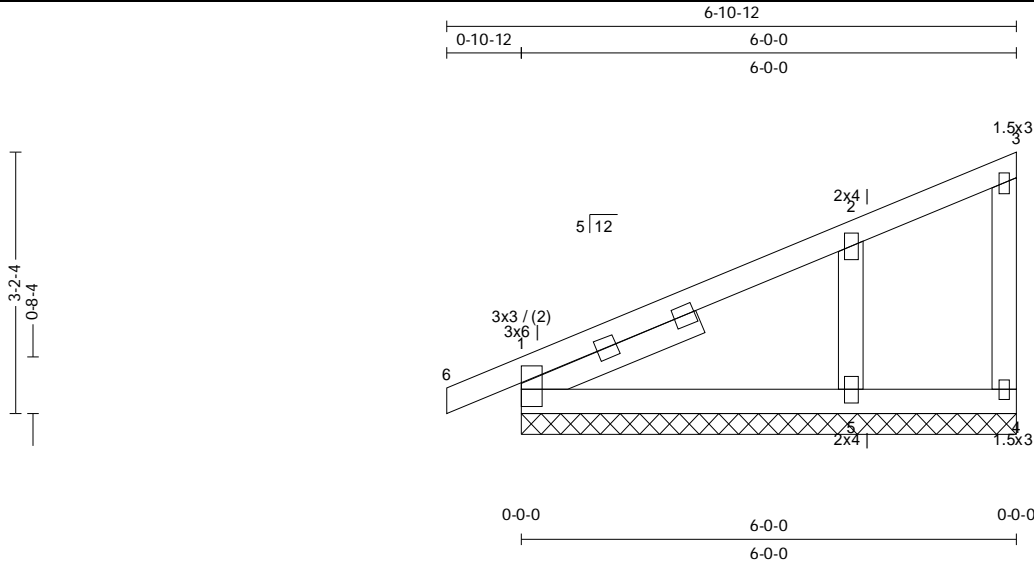
Truss:GE04

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:33

Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
6-0-0	5/12	1	0-10-12	0-0-0	0-0-0	0-0-0	1	24 in	29 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.12 (1-2)	Vert TL: 0 in	L/999	(5-1)	L/240
TCDL: 10	TPI 1-2014	BC: 0.05 (5-1)	Vert LL: 0 in	L/999	4	L/360
BCLL: 0	Rep Mbr: No	Web: 0.10 (3-4)	Horz TL: 0 in			
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1		487 lbs	179 plf	-203 lbs	-147 lbs	-553 lbs	-553 lbs	411 lbs

Material

TC: SYP#1 2 x 4
BC: SYP#1 2 x 4
Web: SYP#2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- This truss has been designed to account for the effects of ice dams forming at the eaves.
- This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 13.79 ft², DOL = 115 %.

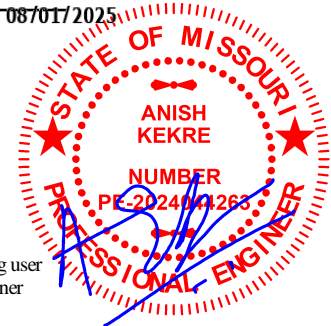
Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.121	349 lbs	(-507 lbs)
BC				
Web				

Notes

- Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- Gable requires continuous bottom chord bearing.
- Gable webs placed at 24" OC, U.N.O.
- Attach gable webs with 1.5x3 20 ga plates, U.N.O.
- Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- A creep factor of 2.00 has been applied for this truss analysis.
- The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
- Listed wind uplift reactions based on MWFRS & C&C loading.



WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

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Eagle Metal Products

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Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss: T01

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:34

Page: 1 of 1

SPAN
1-10-9

PITCH
-5/12

QTY
7

OHL
0-0-0

OHR
1-4-0

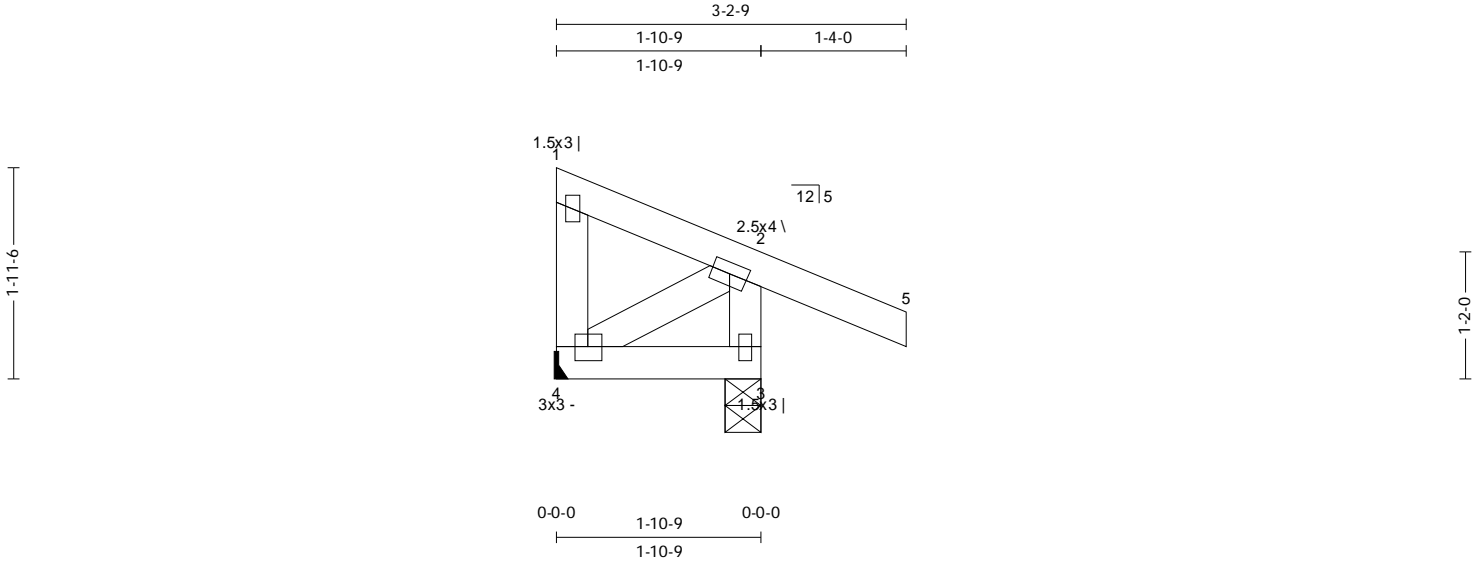
CANT L
0-0-0

CANT R
0-0-0

PLYS
1

SPACING
24 in

WGT/PLY
13 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.25 (1-2)	Vert TL: 0 in	L/999	(3-4)	L/240
TCDL: 10	TPI 1-2014	BC: 0.02 (3-4)	Vert LL: 0 in	L/999	(3-4)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.04 (2-3)	Horz TL: 0 in		3	
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
4	1	1.5 in	---	60 lbs	-14 lbs	-32 lbs	-61 lbs	-61 lbs	-130 lbs
3	1	4 in	1.50 in	209 lbs	.	-37 lbs	-277 lbs	-277 lbs	.

Material

TC: SYP#1 2 x 4
BC: SYP#1 2 x 4
Web: SYP#1 2 x 4

Bracing

TC: Sheathed or Purlins at 6'-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10'-0-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (14 psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has not been designed for the effects of unbalanced snow loads.
- 3) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 5) This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 6.43 ft², DOL = 115 %.
- 6) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	BC	Web

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- 3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
- 4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 5) A creep factor of 2.00 has been applied for this truss analysis.
- 6) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 4 may need to be considered.
- 8) Listed wind uplift reactions based on MWFRS & C&C loading.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

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Eagle Metal Products

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Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss: T02

Job: QU02697_RESERVE_BLDG FI_REFERENCE

Date: 08/01/25 15:37:35

Page: 1 of 1

SPAN
3-2-4

PITCH
-5/12

QTY
3

OHL
0-0-0

OHR
1-7-8

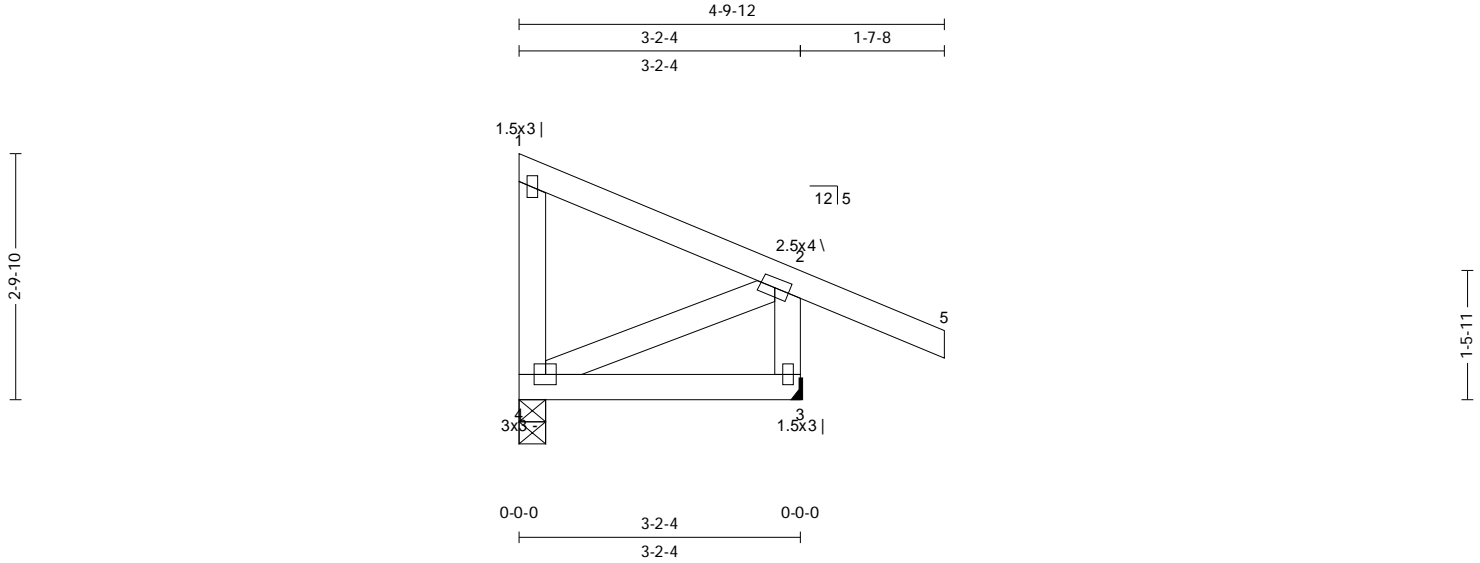
CANT L
0-0-0

CANT R
0-0-0

PLYS
1

SPACING
24 in

WGT/PLY
20 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.35 (1-2)	Vert TL: 0.01 in	L/999	(3-4)	L/240
TCDL: 10	TPI 1-2014	BC: 0.08 (3-4)	Vert LL: 0 in	L/999	(3-4)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.07 (1-4)	Horz TL: 0 in		4	
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
4	1	3.5 in	1.50 in	125 lbs	.	-37 lbs	-149 lbs	-149 lbs	.
3	1	1.5 in	---	282 lbs	.	-34 lbs	-341 lbs	-341 lbs	-183 lbs

Material

TC: SYP #1 2 x 4
BC: SYP #1 2 x 4
Web: SYP #1 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (14 psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has not been designed for the effects of unbalanced snow loads.
- 3) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 5) This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 9.63 ft², DOL = 115 %.
- 6) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	BC	Web
2-3	0.060	360 lbs

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- 3) Hanger is for graphical interpretation only. Install hanger per manufacturer's recommendation.
- 4) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 5) A creep factor of 2.00 has been applied for this truss analysis.
- 6) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 7) Listed wind uplift reactions based on MWFRS & C&C loading.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

This design is for an individual building component (a truss), not a truss system, and is based only on parameters shown and provided by the Building Designer. The applicability of the design parameters must be verified by the Building Designer and should properly incorporate this design into the overall building design before use. Bracing shown is only to prevent buckling of individual truss web and/or chord members. Additional temporary and permanent bracing is always required to prevent collapse and provide stability. Design valid only when Eagle Metal connectors are used. A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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1243593 0015/0020

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss: T04

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:37

Page: 1 of 1

SPAN
14-0-0

PITCH
-5 /12

QTY
3

OHL
0-10-12

OHR
0-10-12

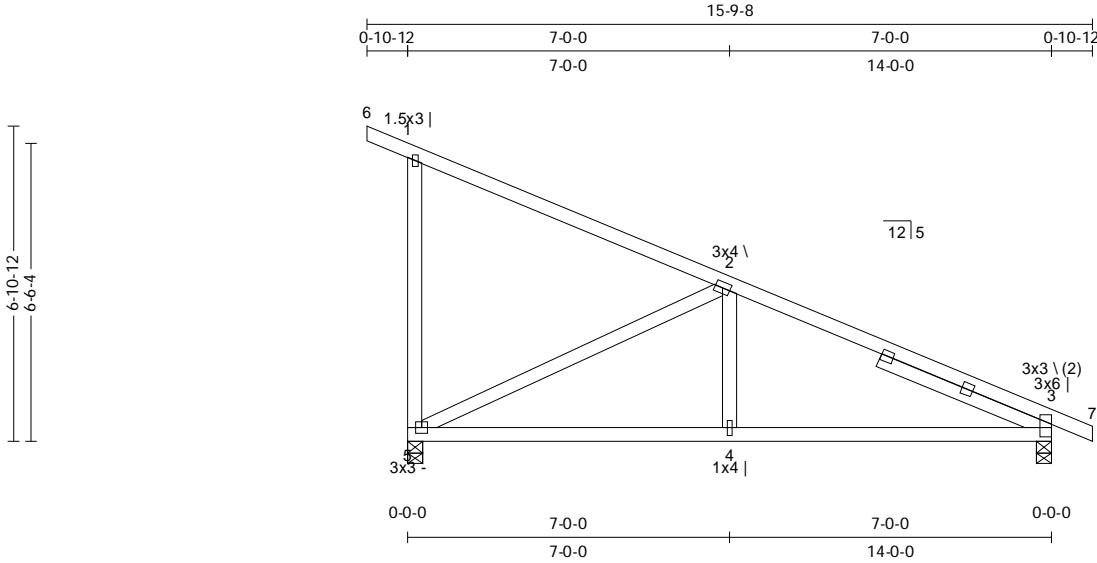
CANT L
0-0-0

CANT R
0-0-0

PLYS
1

SPACING
24 in

WGT/PLY
72 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.47 (1-2)	Vert TL: 0.14 in	L/999	(4-5)	L/240
TCDL: 10	TPI 1-2014	BC: 0.56 (3-4)	Vert LL: 0.06 in	L/999	(4-5)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.82 (2-5)	Horz TL: 0.02 in		3	
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
5	1	4 in	1.50 in	746 lbs	.	-110 lbs	-297 lbs	-297 lbs	-240 lbs
3	1	4 in	1.50 in	730 lbs	.	-14 lbs	-227 lbs	-227 lbs	.

Material

TC: SYP #1 2 x 4
BC: SYP #1 2 x 4
Web: SYP #1 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 4) This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 31.58 ft², DOL = 115 %.
- 5) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	2-3	0.425	(918 lbs)				
BC	3-4	0.564	849 lbs	4-5	0.564	849 lbs	
Web	2-5	0.824	375 lbs	2-4	0.056	338 lbs	

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- 3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 4) A creep factor of 2.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 6) Listed wind uplift reactions based on MWFRS & C&C loading.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

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Eagle Metal Products

1243593 0016/0020

Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss: T05

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:38

Page: 1 of 1

SPAN
6-0-0

PITCH
5/12

QTY
3

OHL
0-10-12

OHR
0-0-0

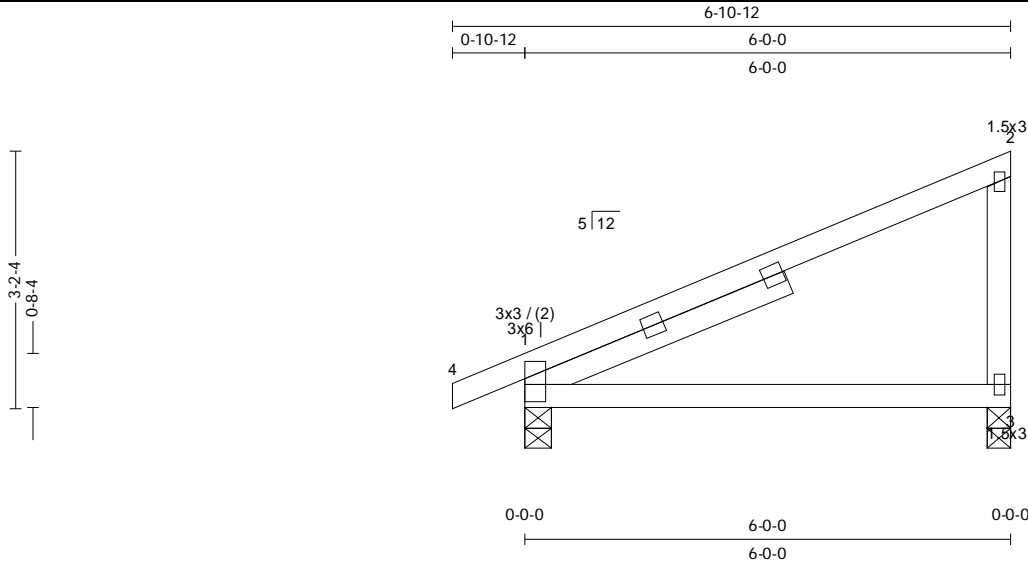
CANT L
0-0-0

CANT R
0-0-0

PLYS
1

SPACING
24 in

WGT/PLY
28 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.50 (1-2)	Vert TL: 0.12 in	L/543	(3-1)	L/240
TCDL: 10	TPI 1-2014	BC: 0.32 (3-1)	Vert LL: 0.07 in UP	L/909	(3-1)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.11 (2-3)	Horz TL: 0 in		3	
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	4 in	1.50 in	364 lbs	.	-15 lbs	-250 lbs	-250 lbs	144 lbs
3	1	3.5 in	1.50 in	297 lbs	.	-40 lbs	-207 lbs	-207 lbs	.

Material

TC: SYP #1 2 x 4
BC: SYP #1 2 x 4
Web: SYP #1 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE 7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- This truss has been designed to account for the effects of ice dams forming at the eaves.
- This truss has been designed for the effects of wind loads in accordance with ASCE 7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 13.79 ft², DOL = 115 %.
- Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.501	(459 lbs)
BC			
Web			

Notes

- Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- A creep factor of 2.00 has been applied for this truss analysis.
- The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- Listed wind uplift reactions based on MWFRS & C&C loading.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

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Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

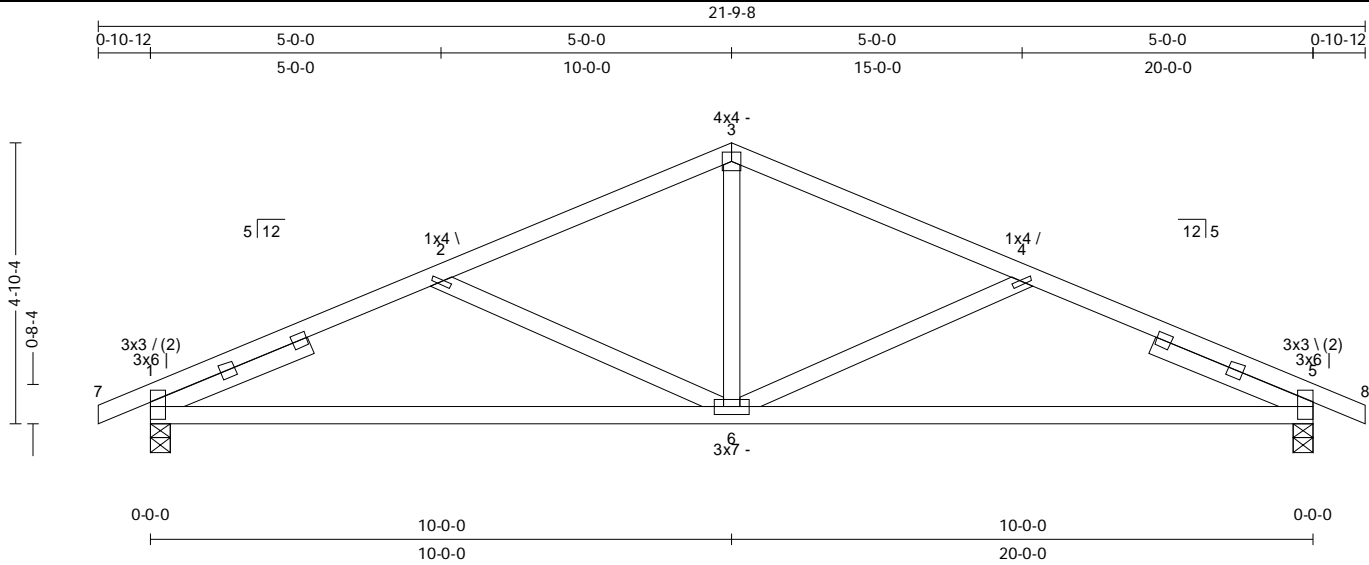
Truss: T06

Job: QU02697_RESERVE_BLDG F1_REFERENCE

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SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
20-0-0	5/12	16	0-10-12	0-10-12	0-0-0	0-0-0	1	24 in	91 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.26 (3-4)	Vert TL: 0.26 in	L/886	(5-6)	L/240
TCDL: 10	TPI 1-2014	BC: 0.83 (5-6)	Vert LL: 0.11 in	L/999	(5-6)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.17 (4-6)	Horz TL: 0.04 in		5	
BCDL: 10	Lumber D.O.L.: 115 %					

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	4 in	1.50 in	1,032 lbs	-	-81 lbs	-309 lbs	-309 lbs	18 lbs
5	1	4 in	1.50 in	1,032 lbs	-	-81 lbs	-309 lbs	-309 lbs	-

Material

TC: SYP #1 2 x 4
BC: SYP #1 2 x 4
Web: SYP #1 2 x 4

Bracing

TC: Sheathed or Purlins at 5'-1-0, Purlin design by Others.
BC: Sheathed or Purlins at 10'-0-0, Purlin design by Others.

Loads

- This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- This truss has been designed to account for the effects of ice dams forming at the eaves.
- This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 43.58 ft², DOL = 115 %.
- Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.185	478 lbs	(-1,586 lbs)	3-4	0.256	380 lbs	(-1,323 lbs)
	2-3	0.256	380 lbs	(-1,323 lbs)	4-5	0.185	478 lbs	(-1,586 lbs)
BC	5-6	0.828	1,456 lbs	(-313 lbs)	6-1	0.828	1,456 lbs	(-313 lbs)
Web	2-6	0.173	(-358 lbs)		3-6	0.108	651 lbs	
					4-6	0.173	(-358 lbs)	

Notes

- Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- A creep factor of 2.00 has been applied for this truss analysis.
- The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- Listed wind uplift reactions based on MWFRS & C&C loading.

WARNING: Verify all design parameters and follow all notes on this drawing and in the Eagle Metal Design Notes.

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Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss: T07

Job: QU02697_RESERVE_BLDG FI_REFERENCE

Date: 08/01/25 15:37:39

Page: 1 of 1

SPAN
3-2-5

PITCH
-5/12

QTY
1

OHL
0-0-0

OHR
1-7-8

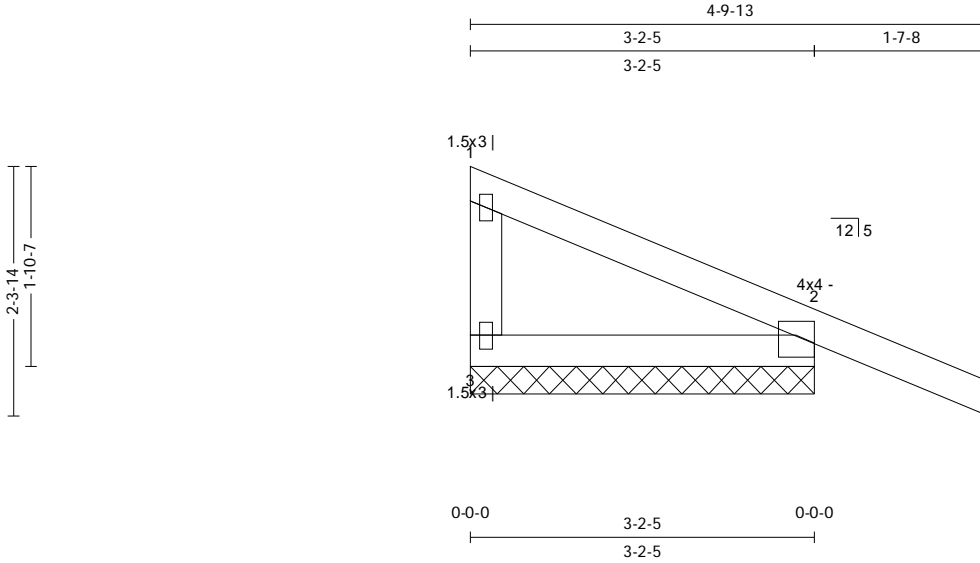
CANT L
0-0-0

CANT R
0-0-0

PLYS
1

SPACING
24 in

WGT/PLY
14 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.31 (1-2)	Vert TL: 0 in	L/999	(2-3)	L/240
TCDL: 10	TPI 1-2014	BC: 0.07 (2-3)	Vert LL: 0 in	L/999	3	L/360
BCLL: 0	Rep Mbr: No	Web: 0.10 (1-3)	Horz TL: 0 in			
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	.	238 lbs	111 plf	.	-38 lbs	-389 lbs	-389 lbs	-204 lbs

Material

TC: SYP#1 2 x 4
BC: SYP#1 2 x 4
Web: SYP#2 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (14 psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has not been designed for the effects of unbalanced snow loads.
- 3) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 4) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 5) This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 9.64 ft², DOL = 115 %.

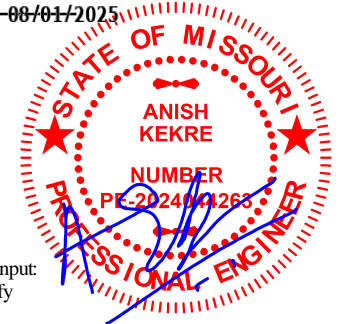
Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	BC	Web

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Gable requires continuous bottom chord bearing.
- 3) Gable webs placed at 24 " OC, U.N.O.
- 4) Attach gable webs with 1.5x3 20 ga plates, U.N.O.
- 5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- 6) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- 7) A creep factor of 2.00 has been applied for this truss analysis.
- 8) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 9) Listed wind uplift reactions based on MWFRS & C&C loading.



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Eagle Metal Products

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Quality Line Truss Co., LLC

34593 S 4350 RD

Address 2

Adair, OK 74330

Truss: T08

Job: QU02697_RESERVE_BLDG F1_REFERENCE

Date: 08/01/25 15:37:40

Page: 1 of 1

SPAN
14-0-0

PITCH
-5/12

QTY
3

OHL
0-10-12

OHR
0-10-12

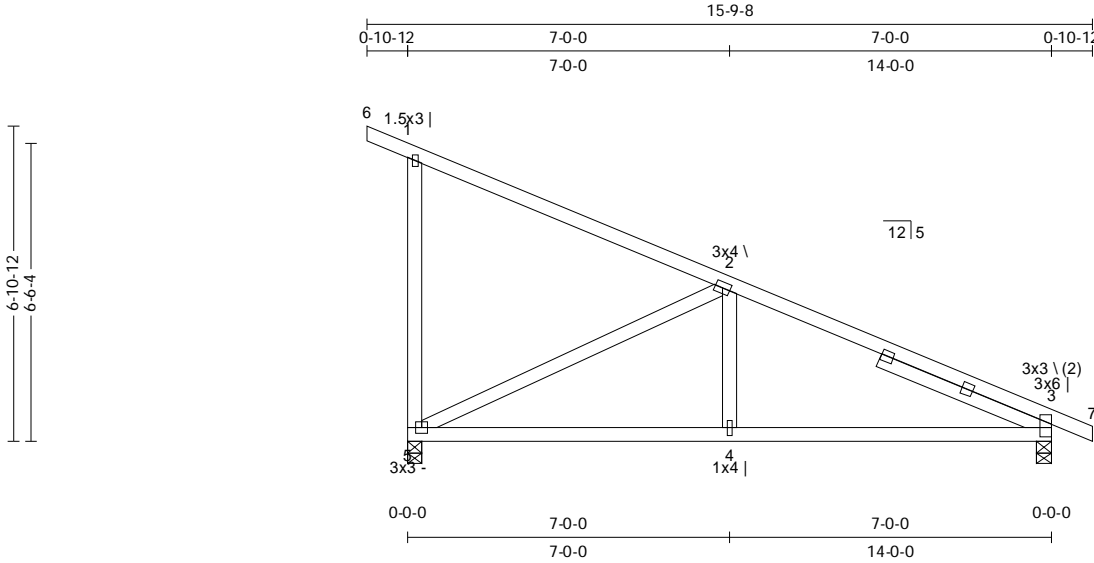
CANT L
0-0-0

CANT R
0-0-0

PLYS
1

SPACING
24 in

WGT/PLY
72 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2018/	TC: 0.47 (1-2)	Vert TL: 0.14 in	L/999	(4-5)	L/240
TCDL: 10	TPI 1-2014	BC: 0.56 (3-4)	Vert LL: 0.06 in	L/999	(4-5)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.82 (2-5)	Horz TL: 0.02 in		5	
BCDL: 10	Lumber D.O.L.: 115 %					

08/01/2025

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
5	1	3.5 in	1.50 in	746 lbs	.	-110 lbs	-297 lbs	-297 lbs	.
3	1	4 in	1.50 in	730 lbs	.	-14 lbs	-227 lbs	-227 lbs	-240 lbs

Material

TC: SYP #1 2 x 4
BC: SYP #1 2 x 4
Web: SYP #1 2 x 4

Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE 7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE 7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 4) This truss has been designed for the effects of a 19 psf live load computed in accordance with IBC 2018 assuming slope = 5/12 and area supported = 31.58 ft², DOL = 115 %.
- 5) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces

Table indicates: Member ID, max CSI, max tension force, (max compression force). Only forces greater than 300lbs are shown in this table.

TC	2-3	0.425	(918 lbs)				
BC	3-4	0.564	849 lbs	4-5	0.564	849 lbs	
Web	2-5	0.824	374 lbs	2-4	0.056	338 lbs	

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
- 3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 4) A creep factor of 2.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 6) Listed wind uplift reactions based on MWFRS & C&C loading.

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