Joe Frogge

Digitally signed by Joe Frogge
DN: CN=Joe Frogge, OU=Development, OU=LS Users, DC=COLS, DC=LOC
Date: 2025.11.12 13:57:58-06'00'

RELEASED FOR CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
11/12/2025

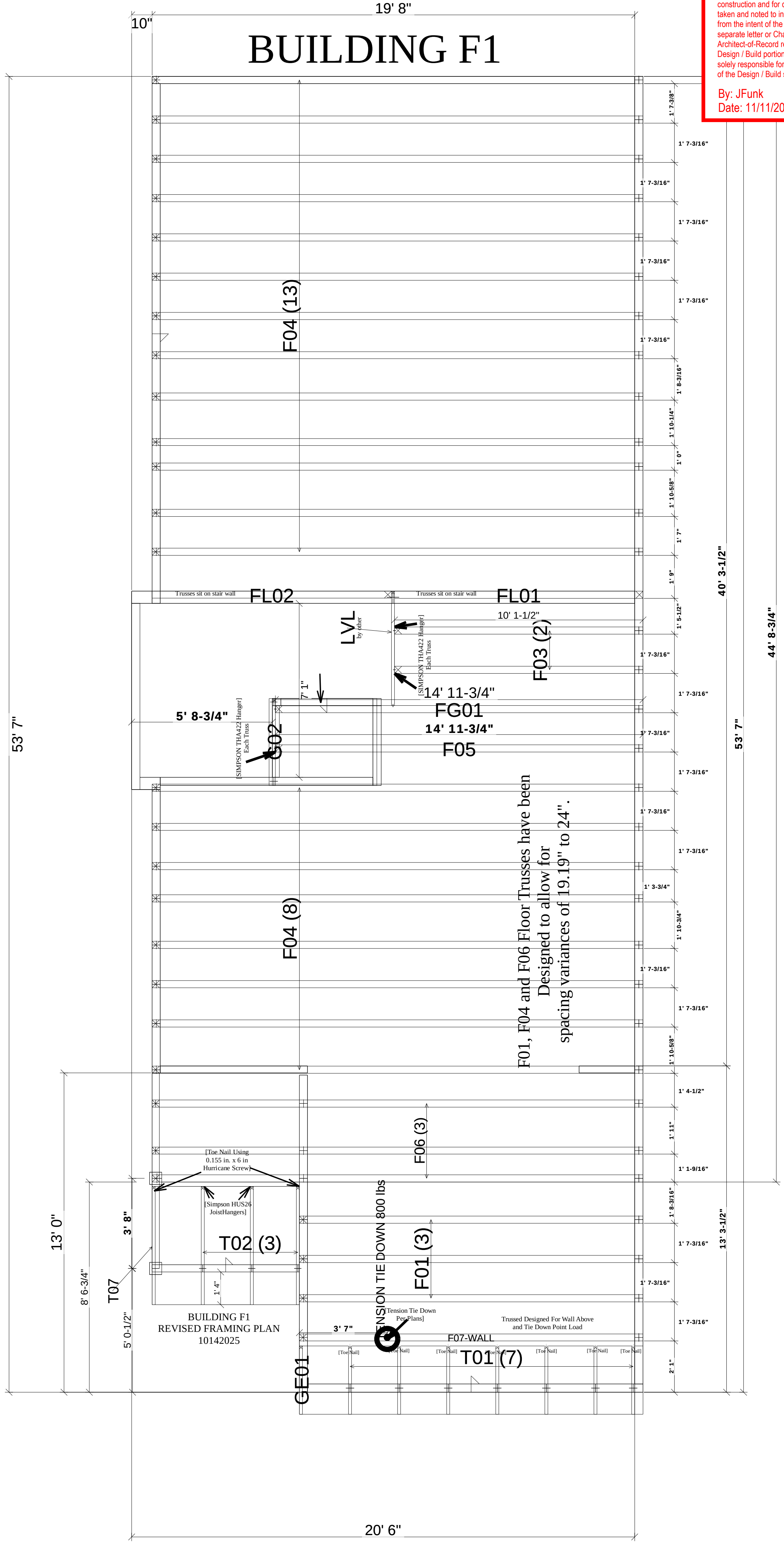
STAND STRUCTURAL ENGINEERING
8234 Robinson St
Overland Park, KS 66204
(913) 214-2169

☒ Reviewed ☐ Revise and Resubmit
☐ Reviewed as Noted ☐ Rejected
☐ Not required by the Contract Documents
☐ For Record Only

Review is only for general conformance with the design concept and the intent of the Contract Documents. Contractor is solely responsible for verifying dimensions, for establishing fabrication processes, means, techniques, sequences and procedures of construction and for coordination of work of all trades. Review action taken and noted to information shown does not authorize deviations from the intent of the contract documents, unless so stated in a separate letter or Change Order. The Structural Engineer and/or Architect-of-Record retained by the Contractor or his Supplier, for the Design / Build portion of the project represented by this submittal, is solely responsible for the correctness, appropriateness and adequacy of the Design / Build system.

By: JFunk
Date: 11/11/2025

BUILDING F1



BUILDING F1
REVISED FRAMING PLAN
10142025

RELEASED FOR CONSTRUCTION
As Noted on Plans Review

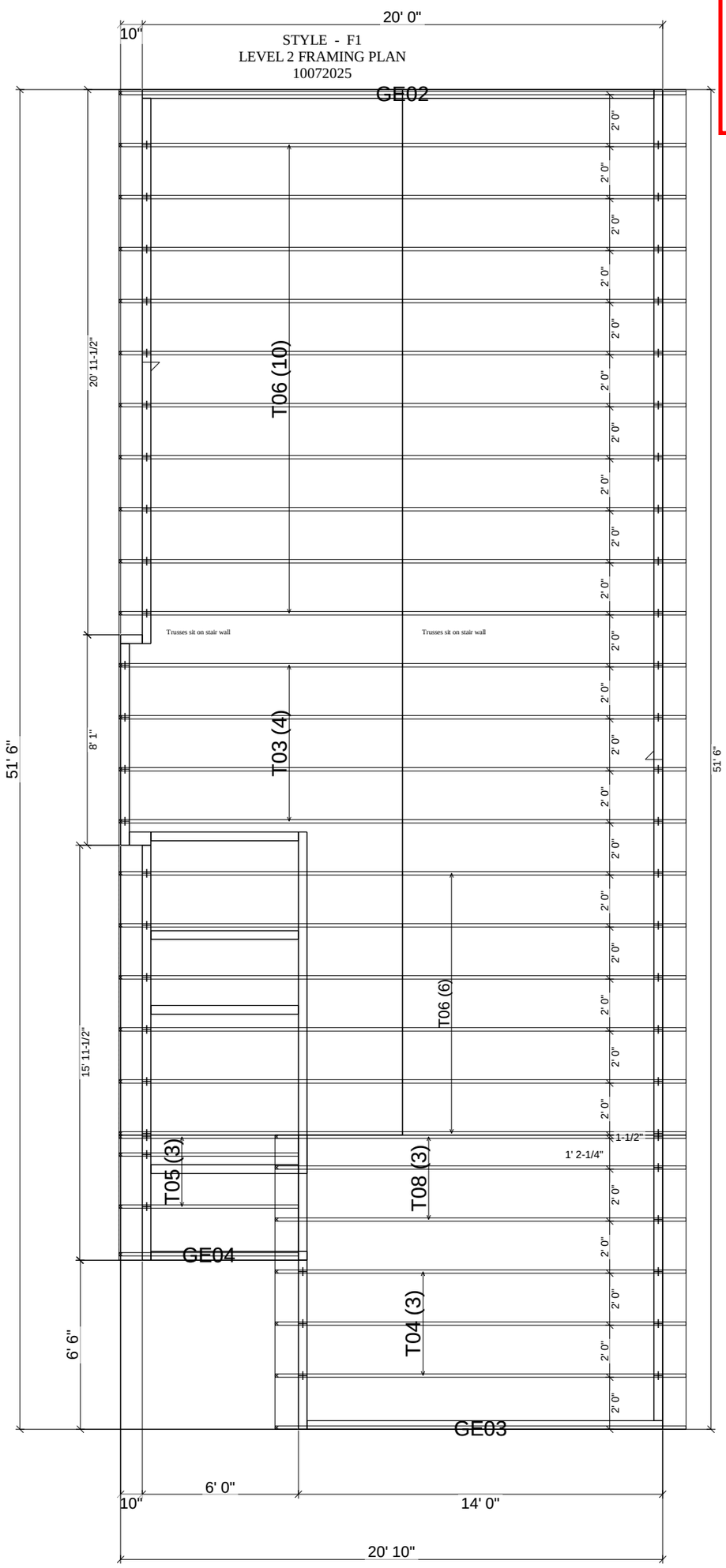
Development Services Department
Lee's Summit, Missouri
11/12/2025

STAND STRUCTURAL ENGINEERING
8234 Robinson St
Overland Park, KS 66204
(913) 214-2169

☒ Reviewed ☐ Revise and Resubmit
☐ Reviewed as Noted ☐ Rejected
☐ Not required by the Contract Documents
☐ For Record Only

By: JFunk
Date: 11/11/2025

STYLE - F1
LEVEL 2 FRAMING PLAN
10072025



EAGLE METAL

RELEASED FOR CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
11/12/2025

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: **QU03420_RESERVE_BUILD F1_REVISED FRAMING_10142025** - 1250416
F01, F03, F04, F05, F06, F07-WALL, FG01, FL01, FL02, G02, GE01, GE02, GE03, GE04, T01, T02, T03, T04, T05, T06, T07, T08

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.

10/24/2025
STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

STAND STRUCTURAL ENGINEERING
8234 Robinson St
Overland Park, KS 66204
(913) 214-2169

☒ Reviewed ☐ Revise and Resubmit
☐ Reviewed as Noted ☐ Rejected
☐ Not required by the Contract Documents
☐ For Record Only

Review is only for general conformance with the design concept and the intent of the Contract Documents. Contractor is solely responsible for verifying dimensions, for establishing fabrication processes, means, techniques, sequences and procedures of construction and for coordination of work of all trades. Review action taken and noted to information shown does not authorize deviations from the intent of the contract documents, unless so stated in a separate letter or Change Order. The Structural Engineer and/or Architect-of-Record retained by the Contractor or his Supplier, for the Design / Build portion of the project represented by this submittal, is solely responsible for the correctness, appropriateness and adequacy of the Design / Build system.

By: JFunk
Date: 11/11/2025

Arturo A. Hernandez (MO, 2006000095)
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 ANS1 / 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 1Oft 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

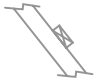
3X4 - The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

-, /, 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

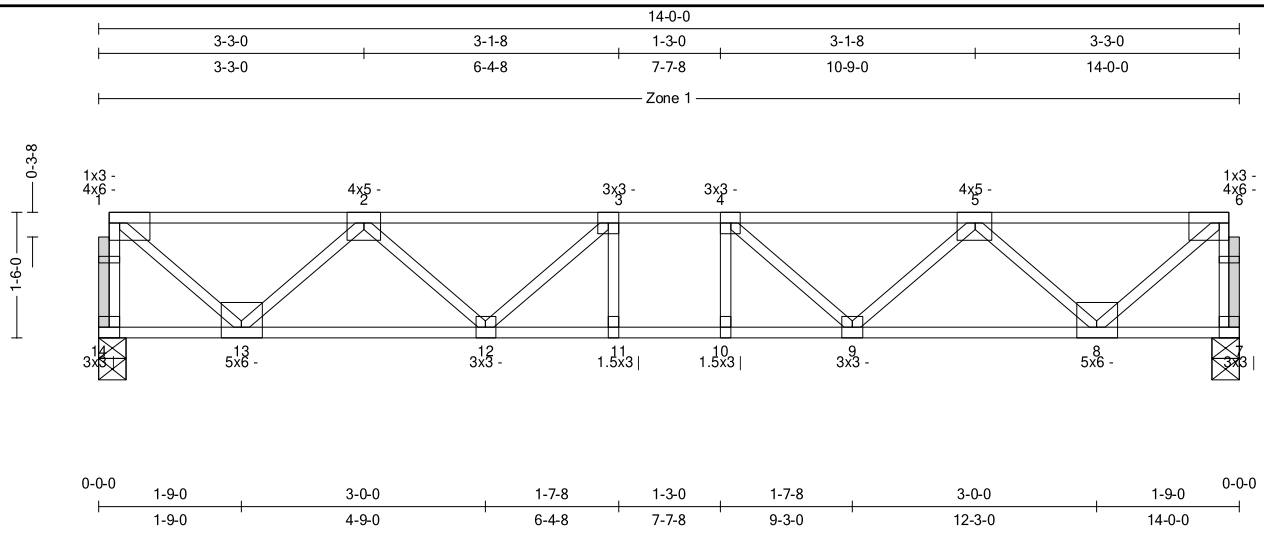
•**BCSI:** Building Component & Safety Information - Guide to Good Practice for Handling, Installing, Restraining, & Bracing of Metal Plate Connected Wood Trusses.

•**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: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:30 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
14-0-0	0/12	4	0-0-0	0-0-0	1	19.19 in	74 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 :	0.73 (2-3)	Vert TL:	0.15 in	L / 999	(10-11)	L / 480
TCDL :	50		TPI 1-2014	BC :	0.67 (10-11)	Vert LL:	0.06 in	L / 999	(9-10)	L / 720
BCLL :	0	Rep Mbr :	Yes	Web :	0.28 (1-13)	Horz TL:	0.04 in		7	
BCDL :	15	Lumber D.O.L. :	100 %							

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	1,287 lbs	·	·	·	·	·
7	1	4 in	1.50 in	1,287 lbs	·	·	·	·	·

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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	0.670		(-1,223 lbs)	3-4	0.329		(-3,155 lbs)	5-6	0.670		(-1,223 lbs)		
	2-3	0.733		(-2,769 lbs)	4-5	0.733		(-2,769 lbs)						
BC	8-9	0.449	2,283 lbs		10-11	0.668	3,155 lbs		12-13	0.449	2,283 lbs			
	9-10	0.668	3,155 lbs		11-12	0.668	3,155 lbs							
Web	1-14	0.141		(-1,261 lbs)	2-12	0.112	659 lbs		5-9	0.112	659 lbs		6-7	0.141	(-1,261 lbs)
	1-13	0.281	1,629 lbs		3-12	0.076		(-564 lbs)	5-8	0.182		(-1,438 lbs)		
	2-13	0.182		(-1,438 lbs)	4-9	0.076		(-564 lbs)	6-8	0.281	1,629 lbs			

Notes

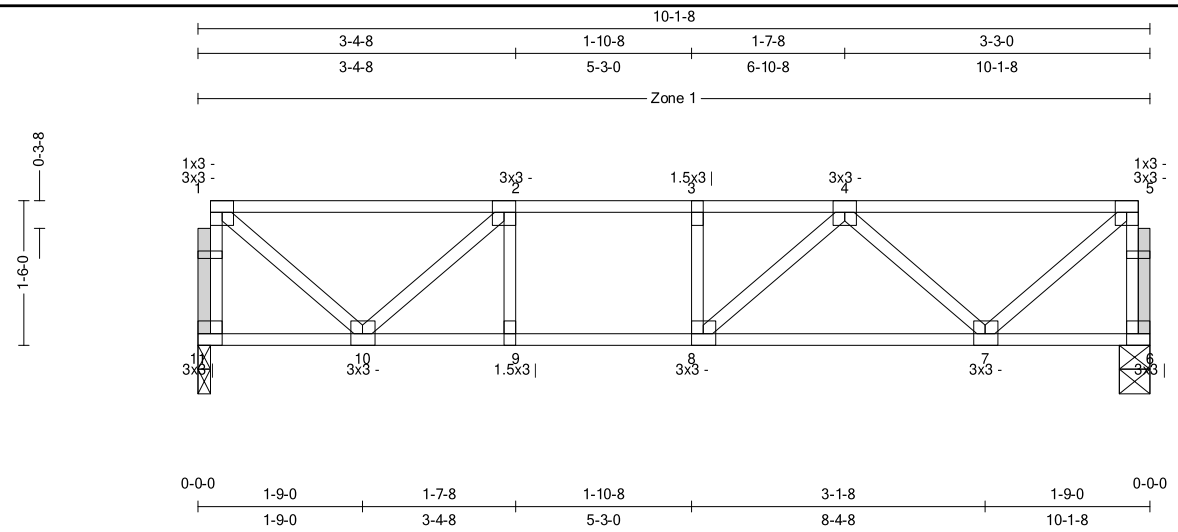
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
4) A creep factor of 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.
6) ▭ Indicates non-structural members.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

Quality Line Truss Co., LLC
34593 S 4350 RD
Address 2
Adair, OK 74330

Truss:F03
Job: QU03420_RESERVE_BUILD F1_REV
Date: 10/24/25 09:24:55
Page: 1 of 1

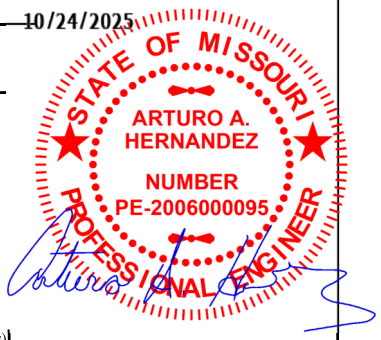
SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
10-1-8	0/12	2	0-0-0	0-0-0	1	19.19 in	53 lbs



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 :	0.42 (1-2)	Vert TL:	0.09 in	L / 999	(7-8)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.46 (8-9)	Vert LL:	0.07 in	L / 999	(7-8)	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.11 (5-7)	Horz TL:	0.01 in		6	
BCDL :	10	Lumber D.O.L. :	100 %							

10/24/2025



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
11	1	1.5 in	1.50 in	567 lbs	·	·	·	·	·
6	1	4 in	1.50 in	567 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	0.425		(-491 lbs)	2-3	0.407		(-952 lbs)	3-4	0.335		(-952 lbs)	4-5	0.380		(-507 lbs)
BC	7-8	0.346	882 lbs		9-10	0.464	952 lbs									
	8-9	0.464	952 lbs													
Web	1-11	0.057		(-535 lbs)	4-7	0.064		(-510 lbs)								
	1-10	0.108	655 lbs		5-7	0.112	675 lbs									
	2-10	0.075		(-614 lbs)	5-6	0.059		(-552 lbs)								

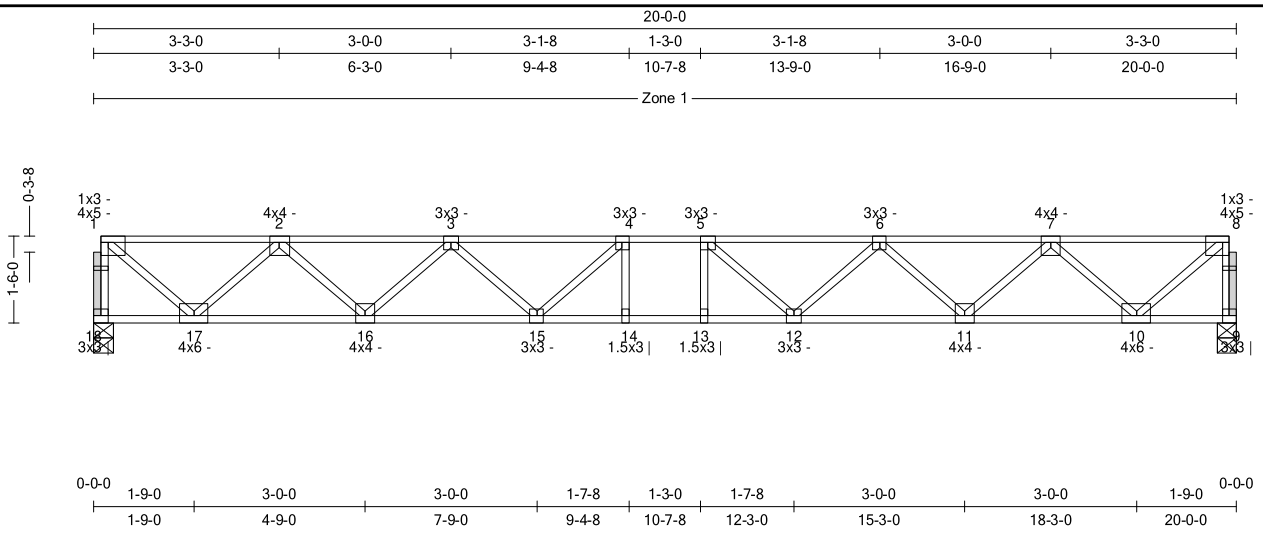
Notes

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.
6) ▭ Indicates non-structural members.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F04 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:32 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
20-0-0	0/12	21	0-0-0	0-0-0	1	19.19 in	101 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 :	0.33 (3-4)	Vert TL:	0.32 in	L / 722	(13-14)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.44 (12-13)	Vert LL:	0.18 in	L / 999	(13-14)	L / 360
BCLL :	0	Rep Mbr :	Yes	Web :	0.25 (1-17)	Horz TL:	0.06 in		9	
BCDL :	10	Lumber D.O.L. :	100 %							

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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	·	·	·	·	·
9	1	4 in	1.50 in	1,119 lbs	·	·	·	·	·

Material

TC: SYP 2400/1.8 4 x 2
BC: SYP 2400/1.8 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	0.213		(-1,127 lbs)	3-4	0.333		(-3,717 lbs)	5-6	0.333		(-3,717 lbs)	7-8	0.213			(-1,127 lbs)
	2-3	0.250		(-2,818 lbs)	4-5	0.309		(-3,956 lbs)	6-7	0.250		(-2,818 lbs)					
BC	10-11	0.221	2,122 lbs		13-14	0.436	3,956 lbs		16-17	0.221	2,122 lbs						
	11-12	0.322	3,402 lbs		14-15	0.436	3,956 lbs										
	12-13	0.436	3,956 lbs		15-16	0.322	3,402 lbs										
Web	1-18	0.117		(-1,097 lbs)	3-16	0.096		(-793 lbs)	6-12	0.081	428 lbs		8-10	0.249	1,501 lbs		
	1-17	0.249	1,501 lbs		3-15	0.081	428 lbs		6-11	0.096		(-793 lbs)	8-9	0.117			(-1,097 lbs)
	2-17	0.164		(-1,350 lbs)	4-15	0.062		(-461 lbs)	7-11	0.156	944 lbs						
	2-16	0.156	944 lbs		5-12	0.062		(-461 lbs)	7-10	0.164		(-1,350 lbs)					

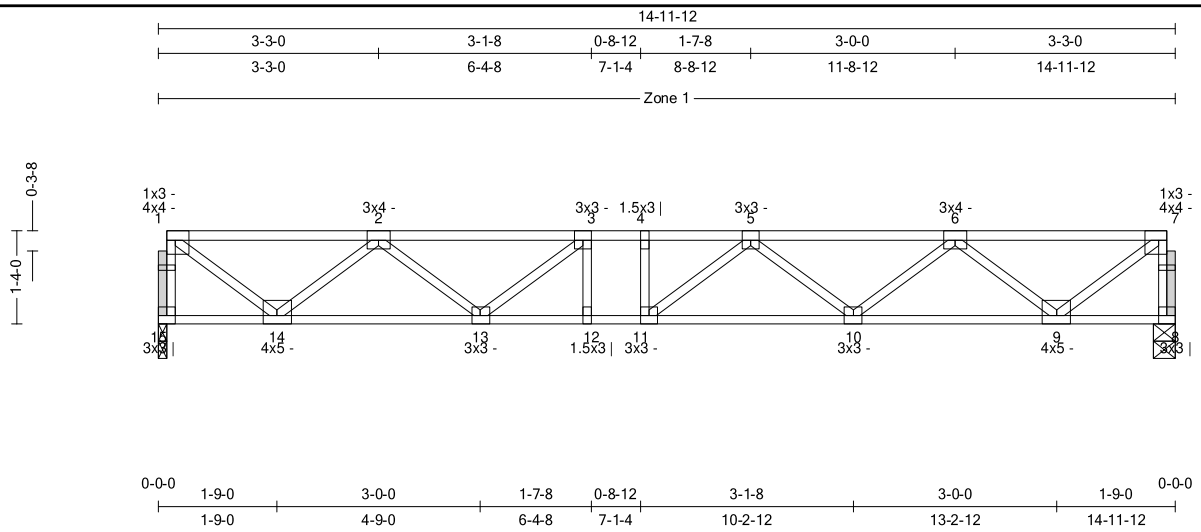
Notes

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.
6) ▭ Indicates non-structural members.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F05 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:56 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
14-11-12	0/12	1	0-0-0	0-0-0	1	19.19 in	76 lbs



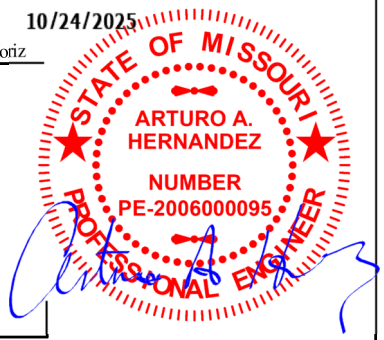
All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL :	40	Bldg Code :	IBC 2018/	TC :	0.43 (2-3)	Vert TL:	0.17 in	L / 999	(10-11)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.52 (10-11)	Vert LL:	0.09 in	L / 999	(10-11)	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.19 (1-14)	Horz TL:	0.03 in		8	
BCDL :	10	Lumber D.O.L. :	100 %							

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	1.50 in	838 lbs	·	·	·	·	·
8	1	4 in	1.50 in	838 lbs	·	·	·	·	·

10/24/2025



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	0.408		(-923 lbs)	3-4	0.252		(-2,479 lbs)	5-6	0.427		(-2,140 lbs)
	2-3	0.431		(-2,131 lbs)	4-5	0.260		(-2,479 lbs)	6-7	0.403		(-920 lbs)
BC	9-10	0.403	1,707 lbs		11-12	0.497	2,479 lbs		13-14	0.382	1,703 lbs	
	10-11	0.525	2,439 lbs		12-13	0.497	2,479 lbs					
Web	1-15	0.086		(-818 lbs)	3-13	0.058		(-440 lbs)	7-9	0.193	1,163 lbs	
	1-14	0.193	1,167 lbs		5-10	0.047		(-384 lbs)	7-8	0.086		(-816 lbs)
	2-14	0.118		(-1,002 lbs)	6-10	0.092	556 lbs					
	2-13	0.091	549 lbs		6-9	0.119		(-1,010 lbs)				

Notes

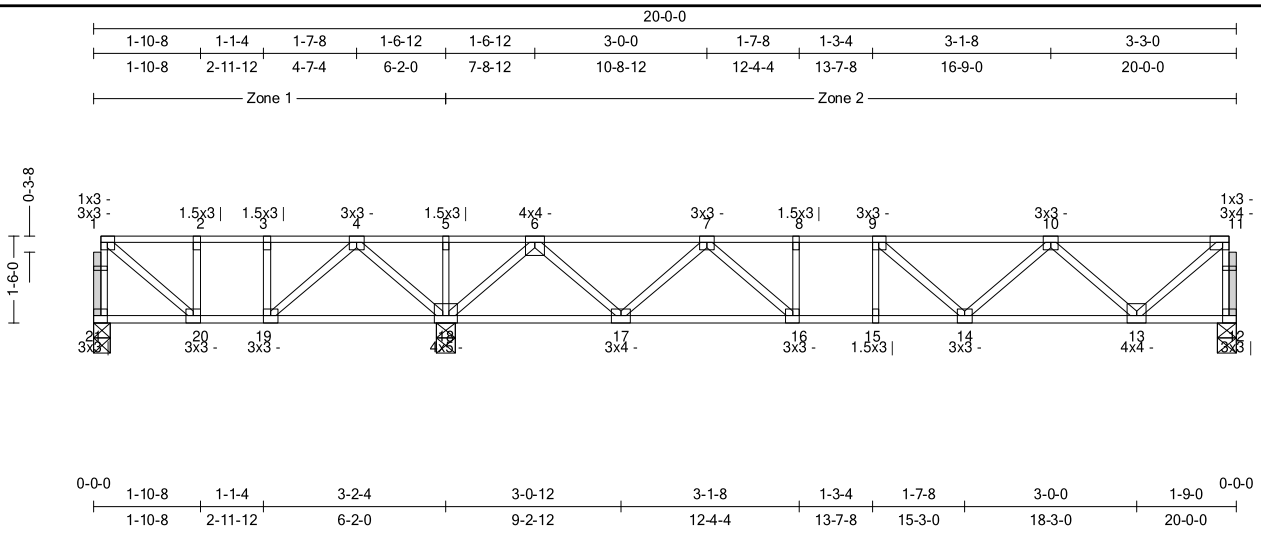
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
4) A creep factor of 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.
6) ▭ Indicates non-structural members.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

Quality Line Truss Co., LLC
34593 S 4350 RD
Address 2
Adair, OK 74330

Truss:F06
Job: QU03420_RESERVE_BUILD F1_REV
Date: 10/24/25 09:24:34
Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
20-0-0	0/12	3	0-0-0	0-0-0	1	19.19 in	103 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:	0.23 (9-10)	Vert TL:	0.09 in	L / 999	(14-15)	L / 240
TCDL:	10		TPI 1-2014	BC:	0.28 (14-15)	Vert LL:	0.05 in	L / 999	(14-15)	L / 360
BCLL:	0	Rep Mbr:	Yes	Web:	0.15 (11-13)	Horz TL:	0.01 in		12	
BCDL:	10	Lumber D.O.L.:	100 %							

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	1,355 lbs	·	·	·	·	·
21	1	3.5 in	1.50 in	223 lbs	-17 lbs	·	·	-17 lbs	·
12	1	4 in	1.50 in	707 lbs	·	·	·	·	·

10/24/2025
STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

Material

TC: SYP 2400/1.8 4 x 2
BC: SYP 2400/1.8 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	4-5	0.102	713 lbs		7-8	0.147	(-1,536 lbs)	10-11	0.224	(-664 lbs)
	5-6	0.207	713 lbs		8-9	0.141	(-1,536 lbs)			
	6-7	0.143		(-733 lbs)	9-10	0.235	(-1,437 lbs)			
BC	13-14	0.157	1,215 lbs		16-17	0.220	1,231 lbs			
	14-15	0.281	1,536 lbs							
	15-16	0.281	1,536 lbs							
Web	4-19	0.073	438 lbs		7-16	0.082	432 lbs			
	4-18	0.073		(-598 lbs)	10-14	0.050	302 lbs			
	6-18	0.138		(-1,137 lbs)	10-13	0.093		(-747 lbs)		
	6-17	0.133	803 lbs		11-13	0.147	885 lbs			
	7-17	0.082		(-676 lbs)	11-12	0.074		(-685 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.
6) ▭ Indicates non-structural members.
7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 21 may need to be considered.

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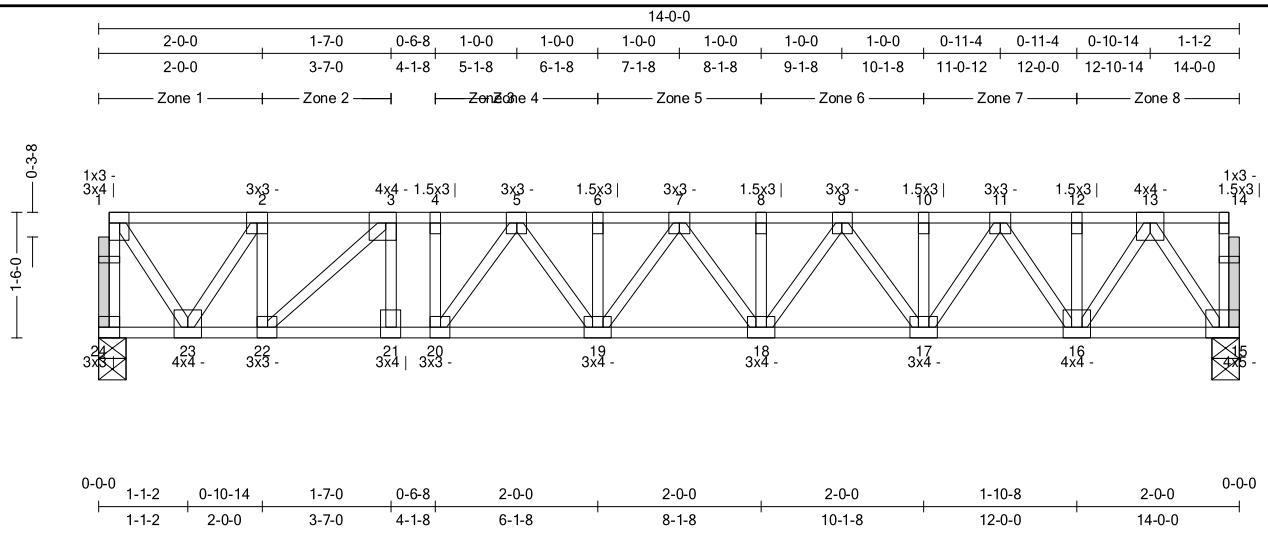
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F07-WALL Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:35 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
14-0-0	0/12	1	0-0-0	0-0-0	1	19.19 in	90 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:	0.27 (4-5)	Vert TL:	0.1 in	L / 999	(19-20)	L / 240
TCDL: 10		TPI 1-2014	BC:	0.46 (19-20)	Vert LL:	0.06 in	L / 999	(19-20)	L / 360
BCLL: 0	Rep Mbr:	No	Web:	0.19 (3-21)	Horz TL:	0.03 in		15	
BCDL: 10	Lumber D.O.L.:	100 %							

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
24	1	4 in	1.50 in	783 lbs	·	·	·	·	·
15	1	4 in	1.50 in	783 lbs	·	·	·	·	·

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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

Load Case D1: Std Dead Load

Point Loads

Member	Location	Direction	Load	Trib Width
Bot	3-7-0	Down	800 lbs	
Top	3-7-0	Up	800 lbs	

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	0.136		(-458 lbs)	5-6	0.193		(-1,893 lbs)	9-10	0.155	(-1,517 lbs)
	2-3	0.212		(-887 lbs)	6-7	0.193		(-1,893 lbs)	10-11	0.154	(-1,517 lbs)
	3-4	0.263		(-1,503 lbs)	7-8	0.190		(-1,865 lbs)	11-12	0.091	(-890 lbs)
	4-5	0.269		(-1,503 lbs)	8-9	0.190		(-1,865 lbs)	12-13	0.091	(-890 lbs)
BC	15-16	0.121	473 lbs		18-19	0.398	1,911 lbs		21-22	0.461	1,503 lbs
	16-17	0.245	1,231 lbs		19-20	0.462	1,763 lbs		22-23	0.195	887 lbs
	17-18	0.335	1,722 lbs		20-21	0.461	1,503 lbs				
Web	1-24	0.082		(-765 lbs)	5-20	0.054		(-442 lbs)			
	1-23	0.138	832 lbs		9-17	0.039		(-349 lbs)			
	2-23	0.086		(-780 lbs)	11-17	0.084	508 lbs				
	2-22	0.088	529 lbs		11-16	0.067		(-605 lbs)			
	3-22	0.098		(-815 lbs)	13-16	0.126	759 lbs				
	3-21	0.188	1,011 lbs		13-15	0.095		(-859 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.
6) ▭ Indicates non-structural members.

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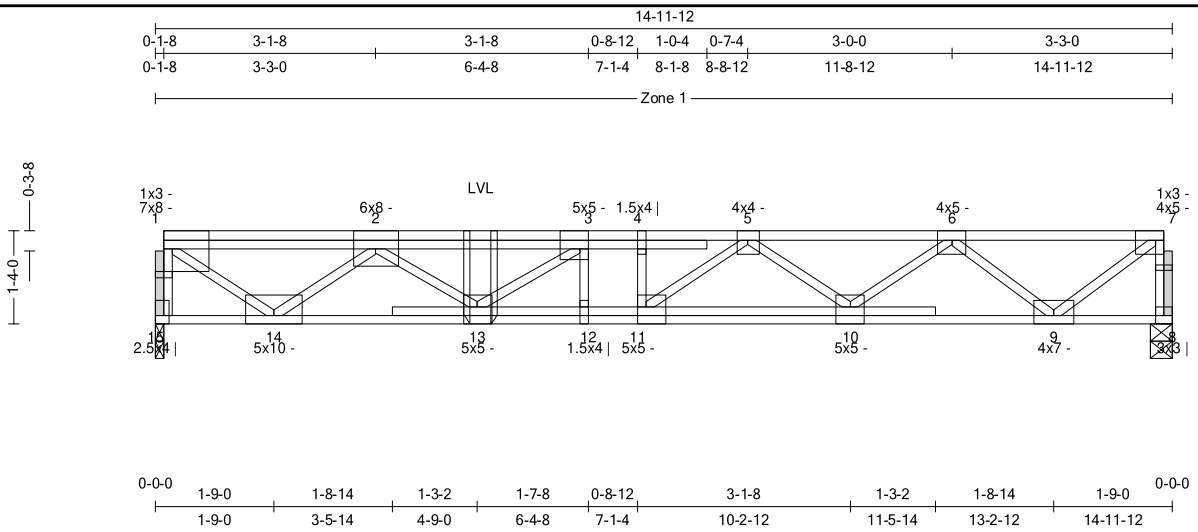
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FG01 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:58 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
14-11-12	0/12	1	0-0-0	0-0-0	1	37.56 in	100 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)		Bldg Code :	IBC 2018/	TC :	0.82 (2-3)	Vert TL:	0.21 in	L / 817	(12-13)	L / 240
TCLL :	40		TPI 1-2014	BC :	0.82 (13-14)	Vert LL:	0.13 in	L / 999	(12-13)	L / 360
TCDL :	10	Rep Mbr :	No	Web :	0.42 (1-14)	Horz TL:	0.05 in		8	
BCLL :	0	Lumber D.O.L. :	100 %							
BCDL :	10									

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	1.50 in	1,650 lbs	·	·	·	·	·
8	1	4 in	1.50 in	1,090 lbs	·	·	·	·	·

10/24/2025
STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

Material

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

Loads

1) This truss has been designed for the effects of (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) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case L1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	14-11-12	Down	Proj	31.98 plf	31.98 plf	
Top	0-0-0	4-9-8	Down	Proj	93.23 plf	93.23 plf	
Top	4-9-8	14-11-12	Down	Proj	31.98 plf	31.98 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	14-11-12	Down	Proj	7.99 plf	7.99 plf	
Top	0-0-0	4-9-8	Down	Proj	23.31 plf	23.31 plf	
Top	4-9-8	14-11-12	Down	Proj	7.99 plf	7.99 plf	
Bot	0-0-0	14-11-12	Down	Proj	7.99 plf	7.99 plf	
Bot	0-0-0	4-9-8	Down	Proj	23.31 plf	23.31 plf	
Bot	4-9-8	14-11-12	Down	Proj	7.99 plf	7.99 plf	

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	0.401		(-1,949 lbs)	3-4	0.261		(-4,637 lbs)	5-6	0.528	(-3,242 lbs)
	2-3	0.820		(-4,410 lbs)	4-5	0.513		(-4,643 lbs)	6-7	0.425	(-1,248 lbs)
BC	9-10	0.512	2,402 lbs		11-12	0.786	4,637 lbs		13-14	0.819	3,718 lbs
	10-11	0.477	3,919 lbs		12-13	0.786	4,637 lbs				
Web	1-15	0.175		(-1,608 lbs)	3-13	0.052		(-406 lbs)	6-10	0.179	1,058 lbs
	1-14	0.420	2,416 lbs		3-12	0.049		(-419 lbs)	6-9	0.181	(-1,479 lbs)
	2-14	0.279		(-2,223 lbs)	5-11	0.163	890 lbs		7-9	0.268	1,578 lbs
	2-13	0.142	857 lbs		5-10	0.109		(-852 lbs)	7-8	0.116	(-1,070 lbs)

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.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
14-11-12	0/12	1	0-0-0	0-0-0	1	37.56 in	100 lbs

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
LVL	TC	4-9-8

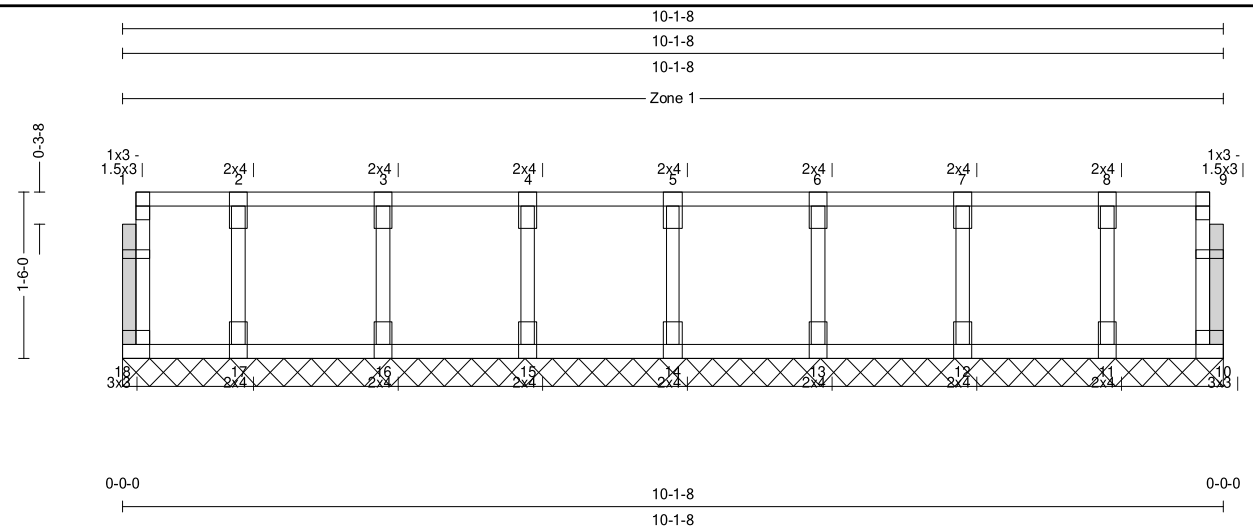
Notes

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.
6) ▭ Indicates non-structural members.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FL01 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:37 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
10-1-8	0/12	1	0-0-0	0-0-0	1	19.19 in	49 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 :	0.06 (2-3)	Vert TL:	0 in UP	L / 999	10	L / 240
TCDL :	10		TPI 1-2014	BC :	0.02 (11-12)	Vert LL:	0 in	L / 999	10	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.01 (3-16)	Horz TL:	0 in			
BCDL :	10	Lumber D.O.L. :	100 %							

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	140 lbs	102 plf	-	-	-	-	-1 lbs

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

Material

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

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

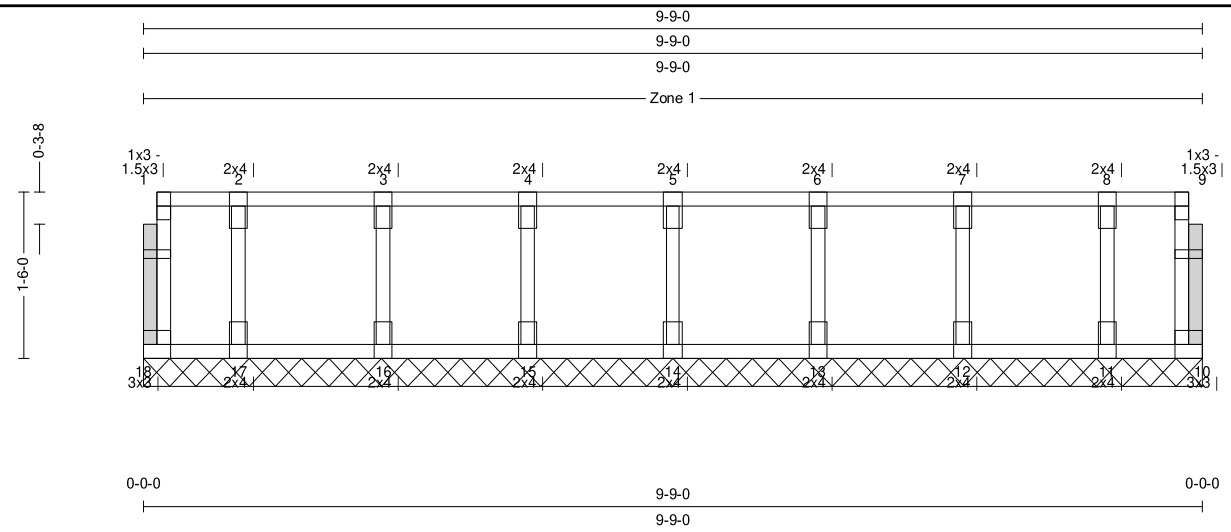
Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) Gable requires continuous bottom chord bearing.
4) Continuous bearing knee-wall/ladder floor trusses are not designed for any loads from levels above. Additional blocking, by others, may be required in order to transfer loads.
5) Gable webs placed at 16 " OC, U.N.O.
6) Attach gable webs with 2x4 20ga plates, U.N.O.
7) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
8) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
9) A creep factor of 2.00 has been applied for this truss analysis.
10) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
11) ▭ Indicates non-structural members.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FL02 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:38 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
9-9-0	0/12	1	0-0-0	0-0-0	1	19.19 in	48 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 :	0.06 (2-3)	Vert TL:	0 in	L / 999	10	L / 240
TCDL :	10		TPI 1-2014	BC :	0.02 (15-16)	Vert LL:	0 in	L / 999	10	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.01 (3-16)	Horz TL:	0 in			
BCDL :	10	Lumber D.O.L. :	100 %							

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	142 lbs	103 plf	-	-	-	-	-

10/24/2025

Material

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

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		

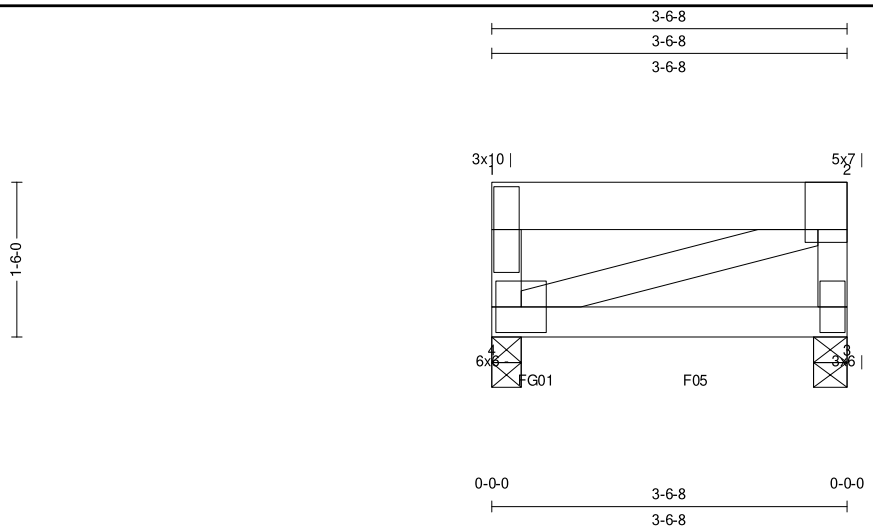
Notes

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) Continuous bearing knee-wall/ladder floor trusses are not designed for any loads from levels above. Additional blocking, by others, may be required in order to transfer loads.
4) Gable webs placed at 16 " OC, U.N.O.
5) Attach gable webs with 2x4 20ga plates, U.N.O.
6) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
7) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
8) A creep factor of 2.00 has been applied for this truss analysis.
9) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
10) ▭ Indicates non-structural members.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:G02 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:25:00 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-6-8	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	123 in	21 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)		Bldg Code :	IBC 2018/	TC :	0.45 (1-2)	Vert TL:	0.11 in	L / 307	(3-4)	L / 240
TCLL :	40		TPI 1-2014	BC :	0.91 (3-4)	Vert LL:	0.07 in	L / 535	(3-4)	L / 360
TCDL :	10	Rep Mbr :	No	Web :	0.24 (1-4)	Horz TL:	0 in		3	
BCLL :	0	Lumber D.O.L. :	115 %							
BCDL :	10									

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	2.34 in	2,829 lbs	·	·	-943 lbs	-943 lbs	257 lbs
3	1	4 in	1.50 in	1,516 lbs	·	-230 lbs	-1,169 lbs	-1,169 lbs	·

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

Material

TC: SYP 2400/1.7 2 x 6
BC: SYP 2400/1.8 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 (20 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 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) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	3-6-8	Down	Proj	112.5 plf	112.5 plf	
Top	0-0-0	0-3-7	Down	Proj	97.08 plf	97.08 plf	
Top	0-3-7	3-6-8	Down	Proj	297.5 plf	297.5 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	3-6-8	Down	Proj	80 plf	80 plf	
Top	0-0-0	3-6-8	Down	Proj	28.13 plf	28.13 plf	
Top	0-0-0	0-3-7	Down	Proj	24.27 plf	24.27 plf	
Top	0-3-7	3-6-8	Down	Proj	74.38 plf	74.38 plf	
Bot	0-0-0	3-6-8	Down	Proj	28.13 plf	28.13 plf	

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	1-4	0.241	1,340 lbs	(-1,250 lbs)	2-3	0.234	1,282 lbs	(-1,322 lbs)

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Eagle Metal Products

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-6-8	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	123 in	21 lbs

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
FG01	BC	0-5-3
F05	BC	2-0-6

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) Provide adequate drainage to prevent ponding.
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.

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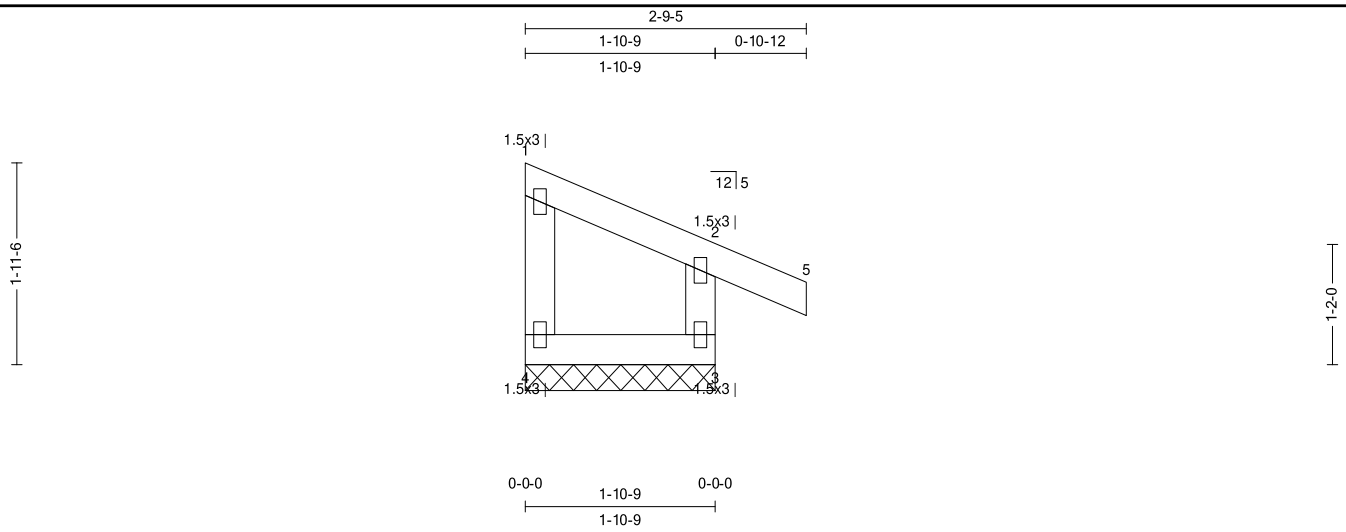
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:GE01 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:39 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
1-10-9	-5/12	1	0-0-0	0-10-12	0-0-0	0-0-0	1	24 in	10 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:	0.14 (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:	0.22 (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	·	145 lbs	112 plf	·	-32 lbs	-181 lbs	-181 lbs	-119 lbs

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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 = 5.55 ft^2, 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 20ga 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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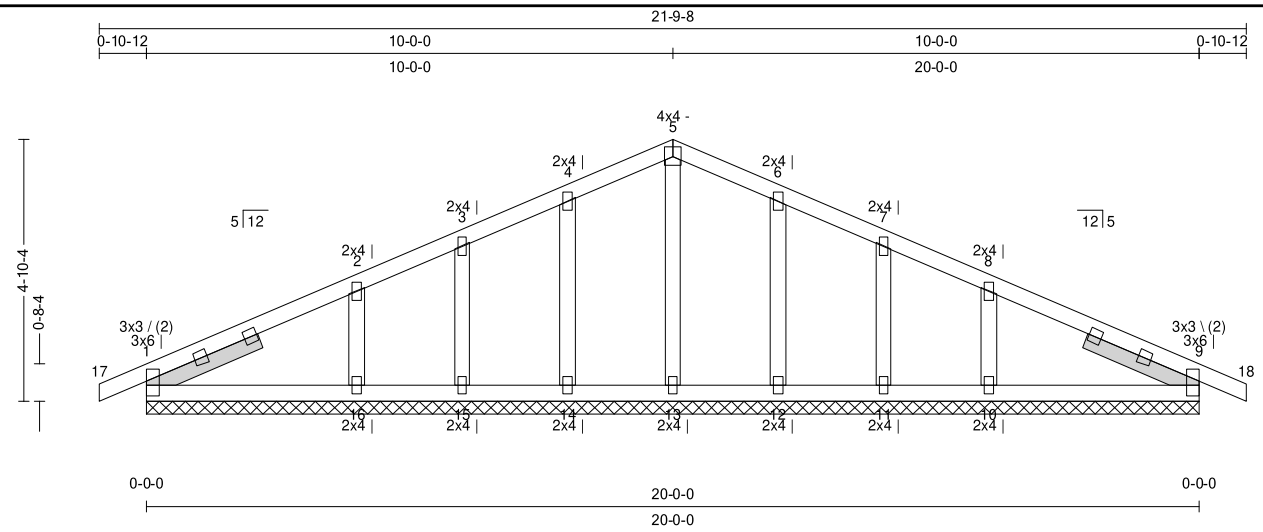
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:GE02 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:41 Page: 1 of 1

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



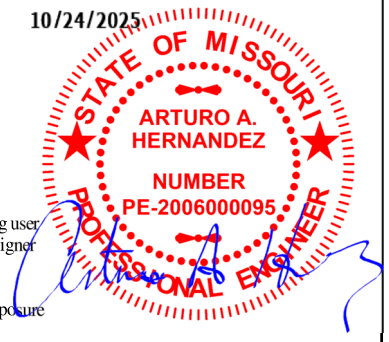
All plates shown to be Eagle 20 unless otherwise noted.

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 %							

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

10/24/2025



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) 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 = 43.58 ft^2, 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 2x4 20ga 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) ▭ Indicates non-structural members.
10) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 9, 1 may need to be considered.
11) Listed wind uplift reactions based on MWFRS & C&C loading.

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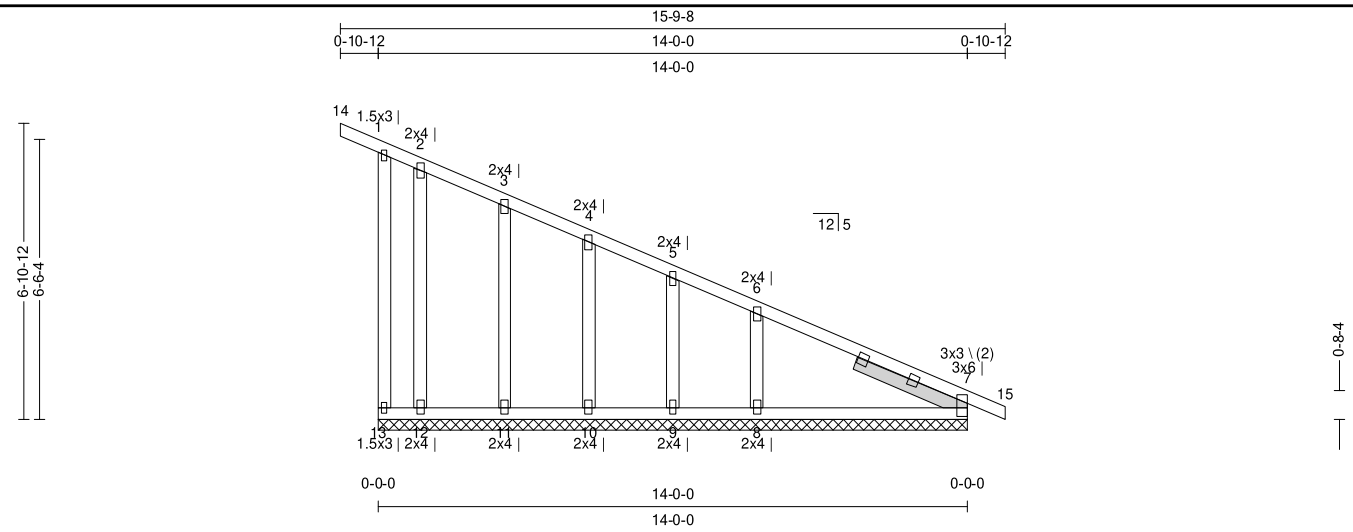
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:GE03 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:43 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
14-0-0	-5/12	1	0-10-12	0-10-12	0-0-0	0-0-0	1	24 in	84 lbs



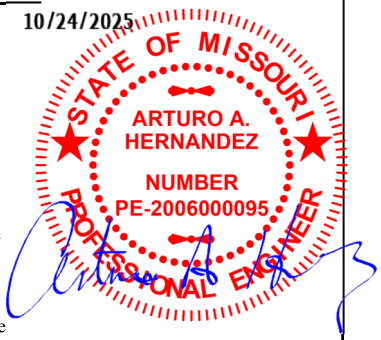
All plates shown to be Eagle 20 unless otherwise noted.

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

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

10/24/2025



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) 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 ft^2, 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	6-7	0.158	663 lbs	(-591 lbs)
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 2x4 20ga 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) ▭ Indicates non-structural members.
10) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 7 may need to be considered.
11) Listed wind uplift reactions based on MWFRS & C&C loading.

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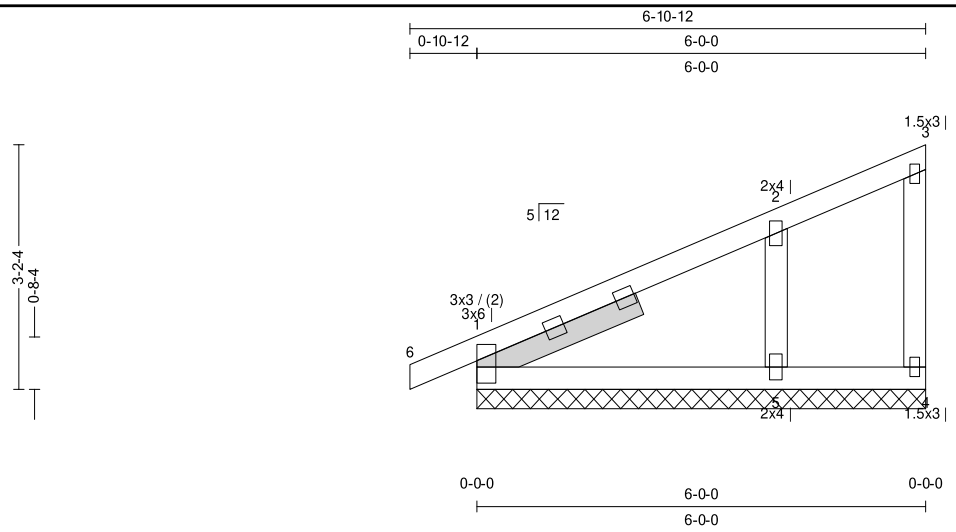
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:GE04 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:44 Page: 1 of 1

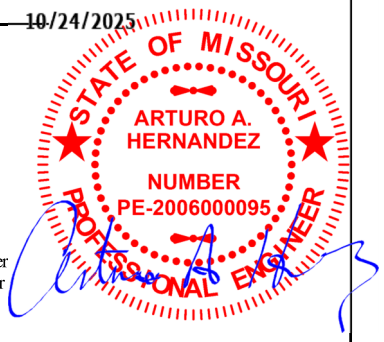
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
6-0-0	5/12	1	0-10-12	0-0-0	0-0-0	0-0-0	1	24 in	29 lbs



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 %							

10/24/2025



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

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 = 13.79 ft^2, 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

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 20ga 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) ▭ Indicates non-structural members.
10) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
11) Listed wind uplift reactions based on MWFRS & C&C loading.

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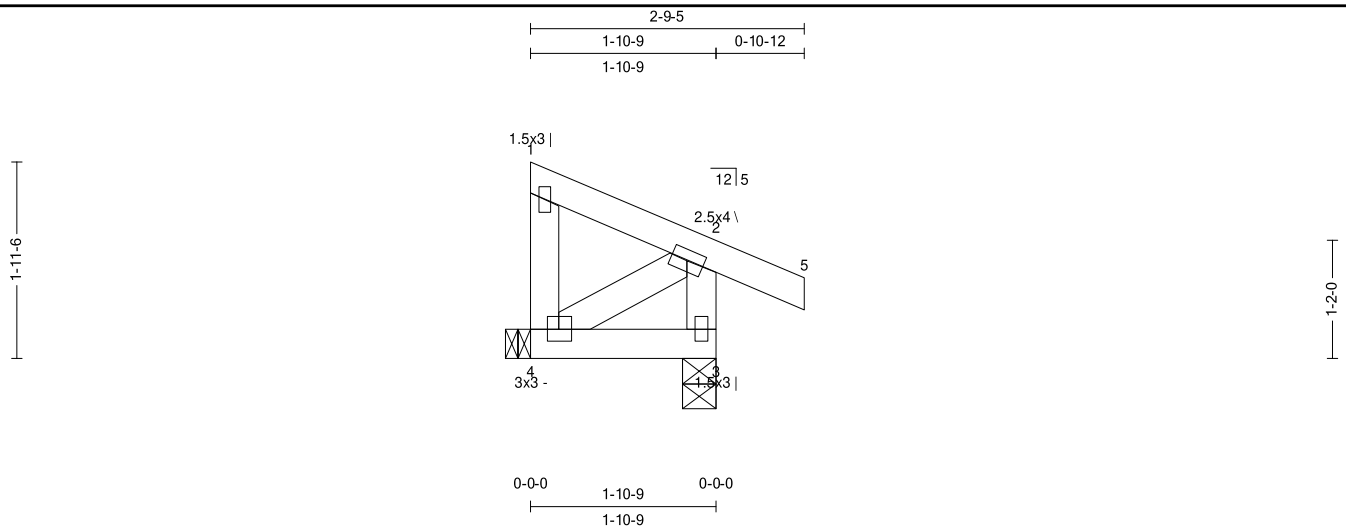
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T01 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:45 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
1-10-9	-5/12	7	0-0-0	0-10-12	0-0-0	0-0-0	1	24 in	12 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	(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 :	0.03 (1-4)	Horz TL:	0 in		3	
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
4	1	1.5 in	1.50 in	73 lbs	·	-32 lbs	-100 lbs	-100 lbs	-104 lbs
3	1	4 in	1.50 in	164 lbs	·	-23 lbs	-181 lbs	-181 lbs	·

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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 = 5.55 ft^2, 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) Nailing schedule shall be specified by truss manufacturer per NDS.
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.

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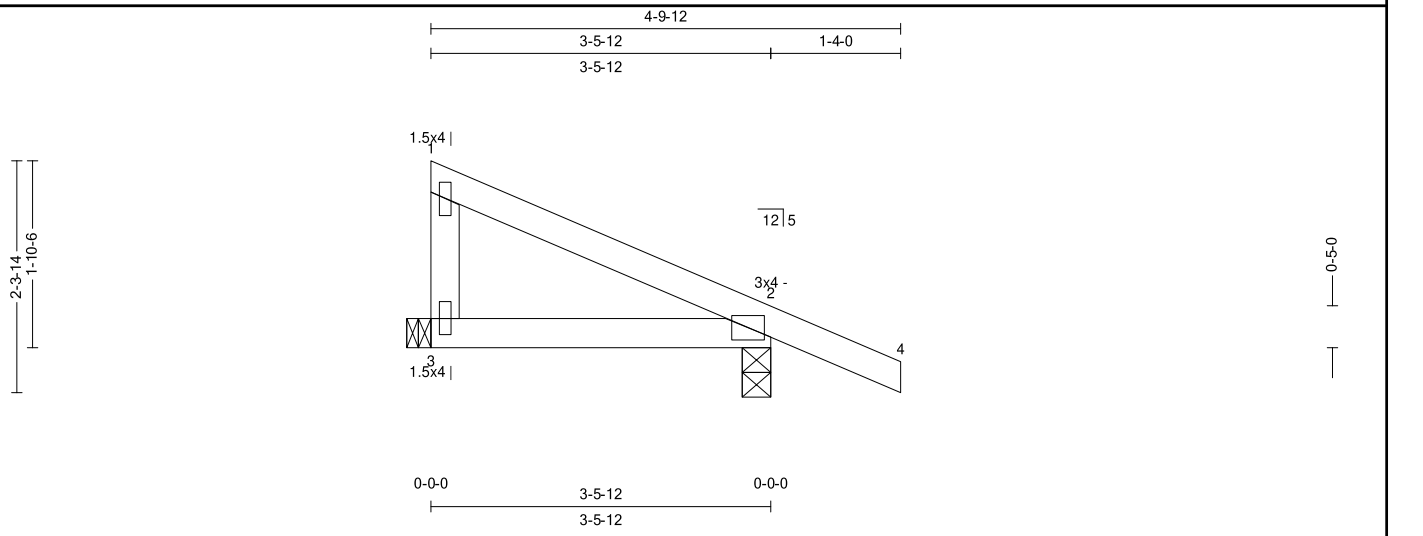
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T02 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:46 Page: 1 of 1

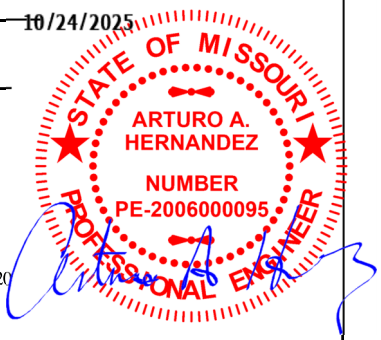
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-5-12	-5/12	3	0-0-0	1-4-0	0-0-0	0-0-0	1	24 in	14 lbs



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 :	0.15 (2-4)	Vert TL:	0.01 in	L / 999	(2-3)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.08 (2-3)	Vert LL:	0 in	L / 999	(2-3)	L / 360
BCLL :	0	Rep Mbr :	Yes	Web :	0.12 (1-3)	Horz TL:	0 in		3	
BCDL :	10	Lumber D.O.L. :	115 %							

10/24/2025



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
3	1	3.5 in	1.50 in	163 lbs	·	-17 lbs	-137 lbs	-137 lbs	·
2	1	3.5 in	1.50 in	256 lbs	·	-31 lbs	-339 lbs	-339 lbs	-166 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 ft^2, 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) Nailing schedule shall be specified by truss manufacturer per NDS.
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.

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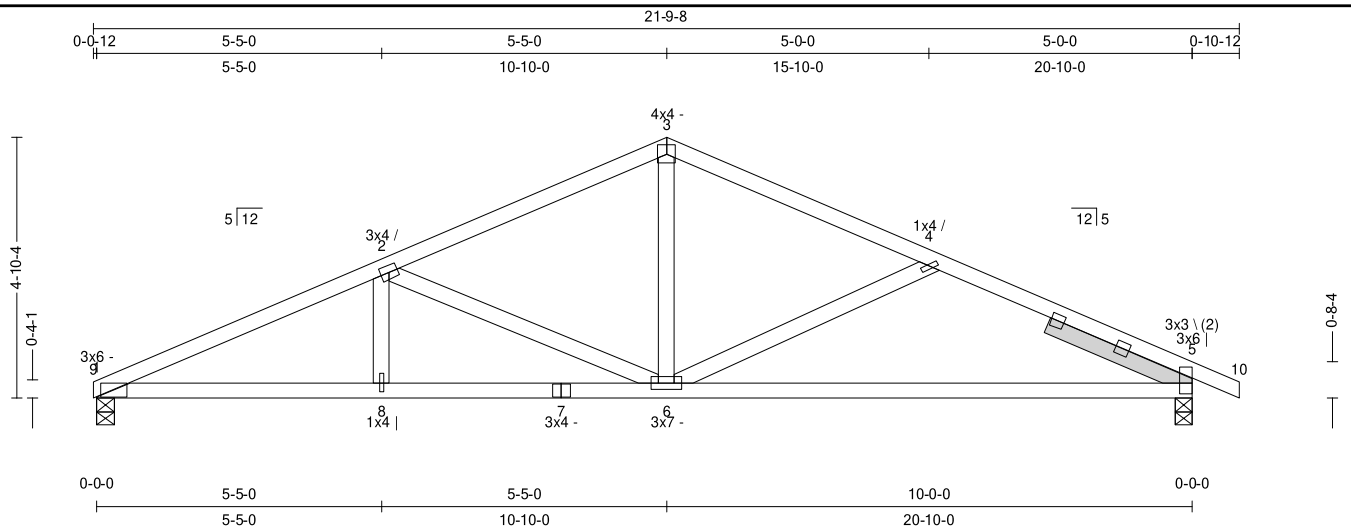
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T03 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:47 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
20-10-0	5/12	4	0-0-12	0-10-12	0-0-0	0-0-0	1	24 in	91 lbs



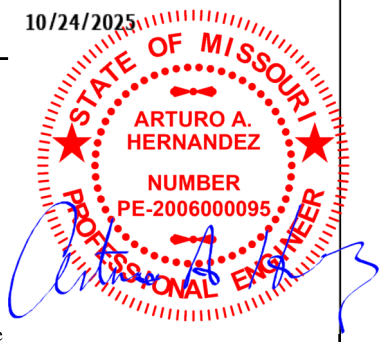
All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL :	20	Bldg Code :	IBC 2018/	TC :	0.28 (1-2)	Vert TL:	0.33 in	L / 728	(5-6)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.72 (6-8)	Vert LL:	0.15 in	L / 999	(5-6)	L / 360
BCLL :	0	Rep Mbr :	Yes	Web :	0.36 (2-6)	Horz TL:	0.05 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	1,023 lbs	·	-68 lbs	-269 lbs	-269 lbs	-29 lbs
5	1	4 in	1.50 in	1,074 lbs	·	-84 lbs	-315 lbs	-315 lbs	·

10/24/2025



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 4-2-0, 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 = 43.58 ft^2, 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	1-2	0.276	529 lbs	(-2,065 lbs)	3-4	0.261	405 lbs	(-1,403 lbs)				
	2-3	0.268	407 lbs	(-1,409 lbs)	4-5	0.192	496 lbs	(-1,670 lbs)				
BC	5-6	0.712	1,534 lbs	(-328 lbs)	6-8	0.725	1,865 lbs	(-386 lbs)	8-1	0.502	1,865 lbs	(-386 lbs)
Web	2-6	0.360		(-694 lbs)	3-6	0.119	716 lbs		4-6	0.177		(-367 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) ▭ Indicates non-structural members.
7) Listed wind uplift reactions based on MWFRS & C&C loading.

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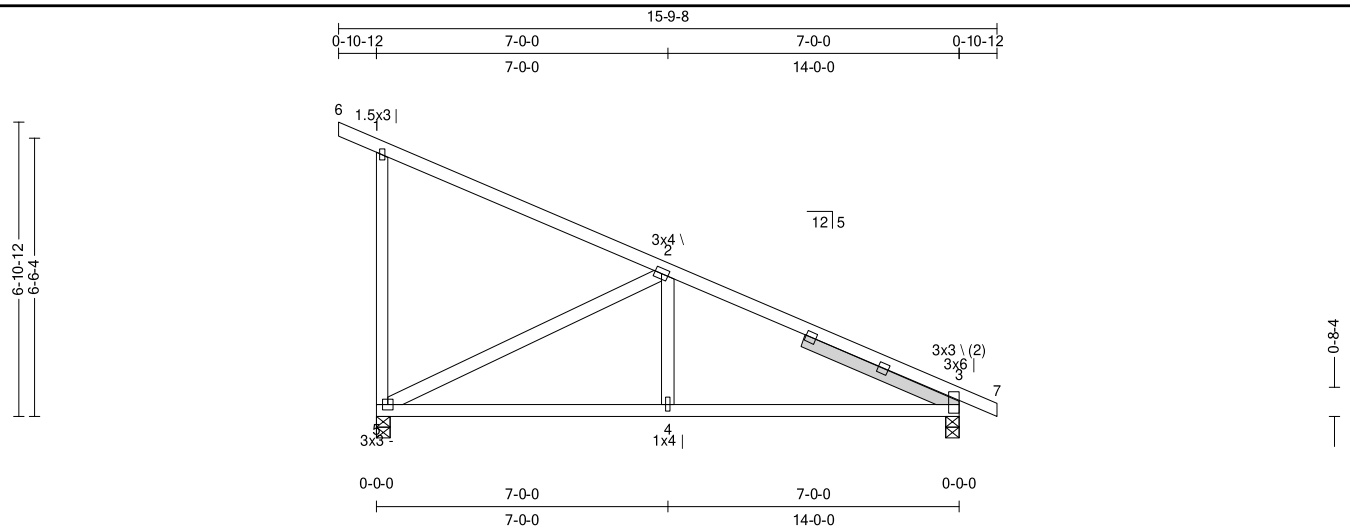
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T04 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:49 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
14-0-0	-5/12	3	0-10-12	0-10-12	0-0-0	0-0-0	1	24 in	72 lbs



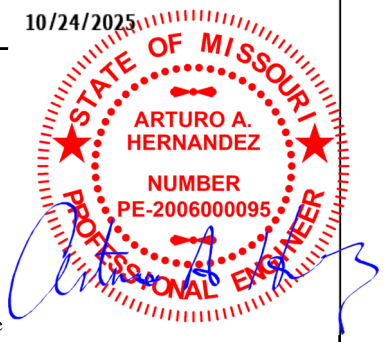
All plates shown to be Eagle 20 unless otherwise noted.

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 %							

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	·

10/24/2025



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 ft^2, 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	(-943 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) ▭ Indicates non-structural members.
7) Listed wind uplift reactions based on MWFRS & C&C loading.

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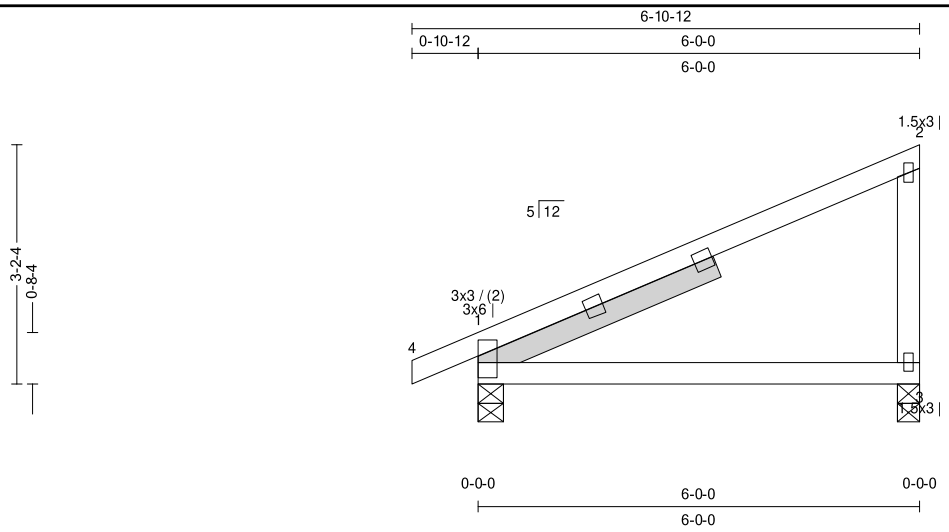
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T05 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:50 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
6-0-0	5/12	3	0-10-12	0-0-0	0-0-0	0-0-0	1	24 in	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 %							

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	·

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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 = 13.79 ft^2, 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	1-2	0.501	(-459 lbs)							
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) 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) ▭ Indicates non-structural members.
7) Listed wind uplift reactions based on MWFRS & C&C loading.

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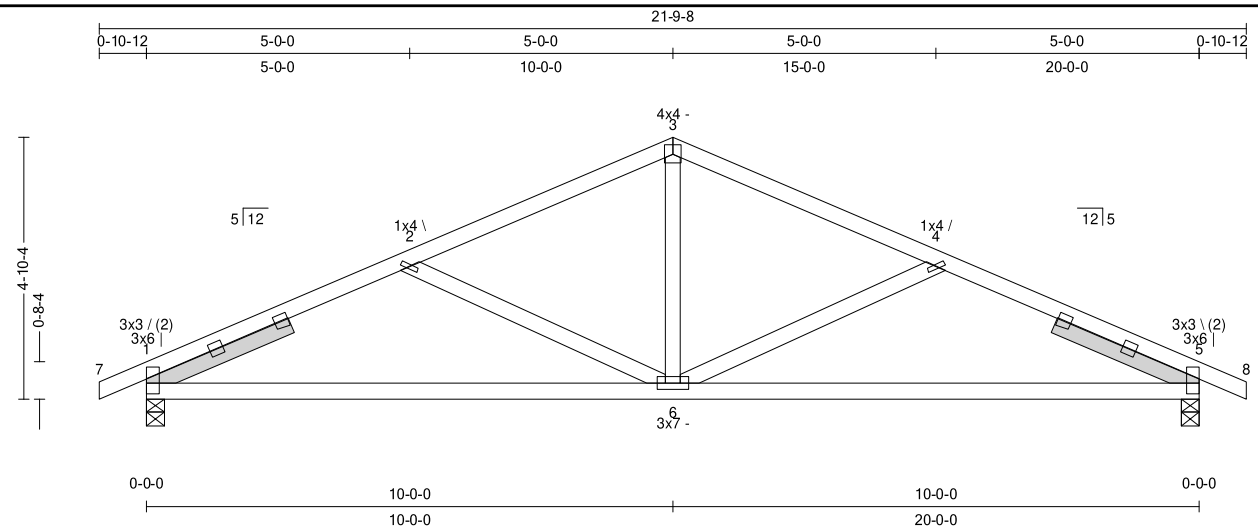
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T06 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:51 Page: 1 of 1

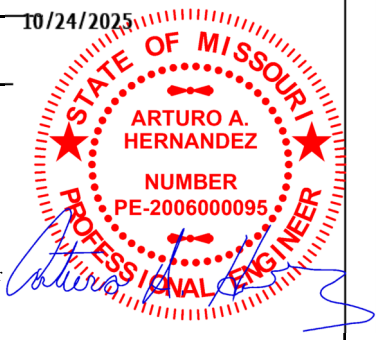
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
20-0-0	5/12	16	0-10-12	0-10-12	0-0-0	0-0-0	1	24 in	91 lbs



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 %							

10/24/2025



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	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

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 = 43.58 ft^2, 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	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

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) ▭ Indicates non-structural members.
7) Listed wind uplift reactions based on MWFRS & C&C loading.

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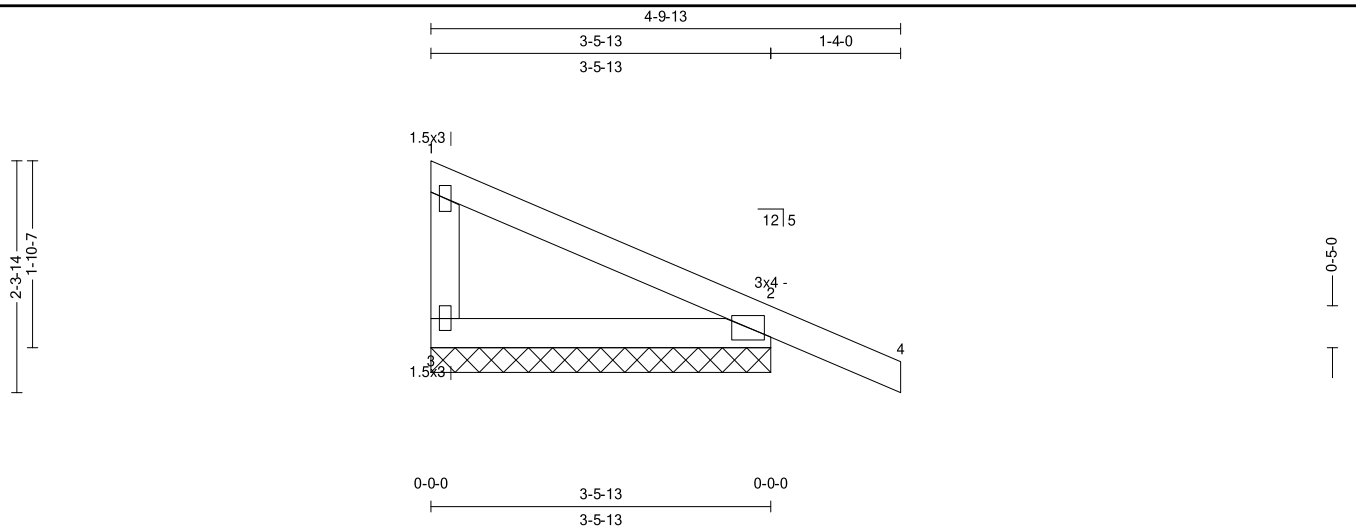
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T07 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:52 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
3-5-13	-5/12	1	0-0-0	1-4-0	0-0-0	0-0-0	1	24 in	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:	0.21 (1-2)	Vert TL:	0 in	L / 999	(2-3)	L / 240
TCDL: 10		TPI 1-2014	BC:	0.05 (2-3)	Vert LL:	0 in	L / 999	2	L / 360
BCLL: 0	Rep Mbr:	No	Web:	0.15 (1-3)	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	-	232 lbs	152 plf	-80 lbs	-103 lbs	-279 lbs	-279 lbs	-267 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.

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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 ft^2, 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 20ga 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 joints 2, 2 may need to be considered.
10) Listed wind uplift reactions based on MWFRS & C&C loading.

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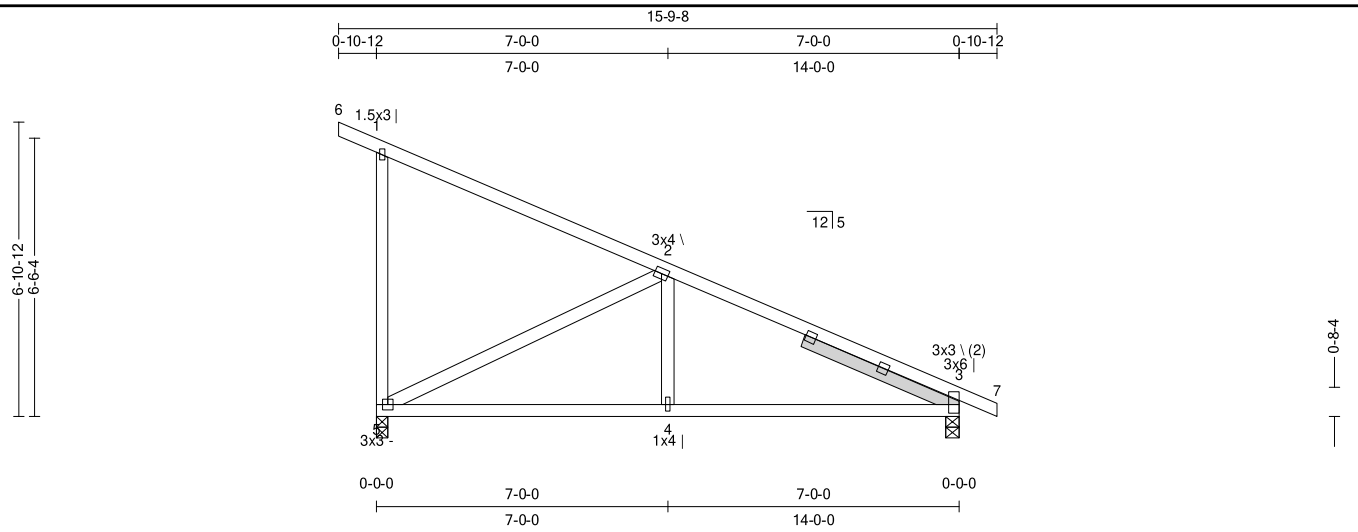
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T08 Job: QU03420_RESERVE_BUILD F1_REV Date: 10/24/25 09:24:54 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
14-0-0	-5/12	3	0-10-12	0-10-12	0-0-0	0-0-0	1	24 in	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 %							

10/24/2025

STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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 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 ft^2, 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	(-943 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) ▭ Indicates non-structural members.
7) Listed wind uplift reactions based on MWFRS & C&C loading.

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