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.

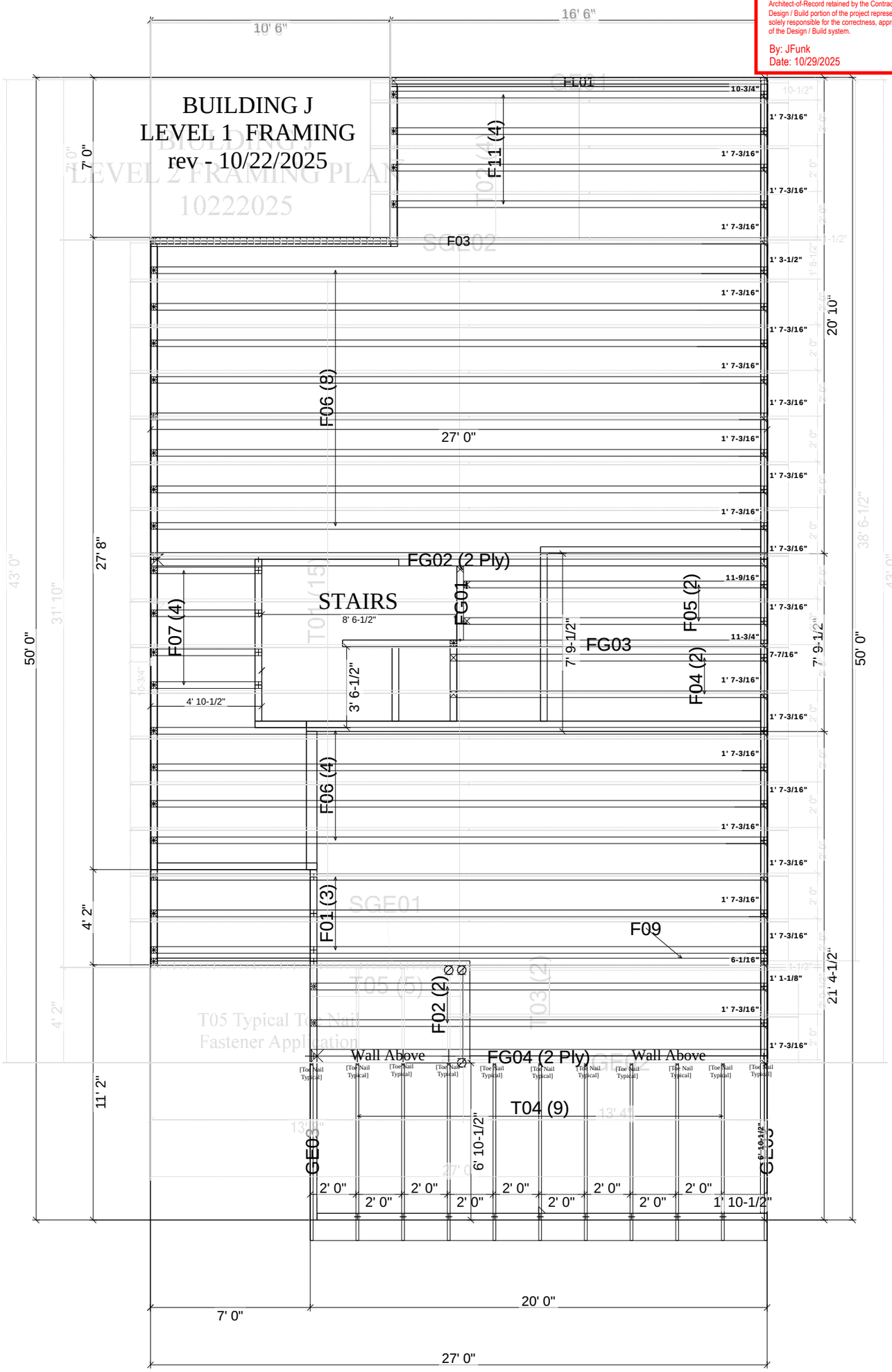
By: JFunk
Date: 10/29/2025

Joe Frogge
Digitally signed by Joe Frogge
DN: CN=Joe Frogge, OU=Development, OU=LS Users, DC=COLS, DC=LOC
Date: 2025.10.29 15:44:47-05'00'

RELEASED FOR CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
10/29/2025

BUILDING J
LEVEL 1 FRAMING
rev - 10/22/2025



RELEASED FOR CONSTRUCTION
As Noted on Plans Review

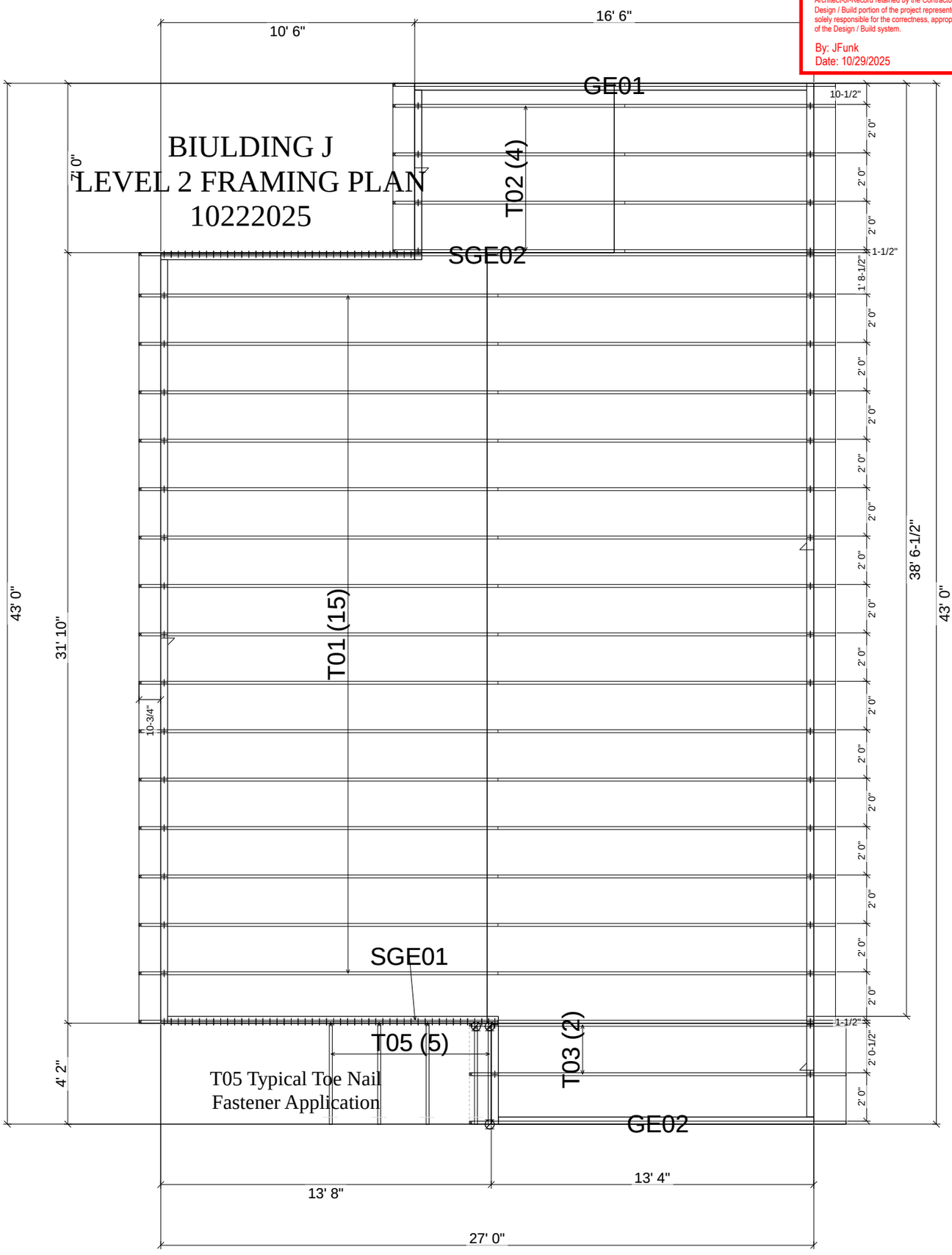
Development Services Department
Lee's Summit, Missouri
10/29/2025

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: 10/29/2025

BIULDING J
LEVEL 2 FRAMING PLAN
10222025



EAGLE METAL

RELEASED FOR CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
10/29/2025

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: **QU02705_BUILDING J - Rev_10222025** - 1250193
F01, F02, F03, F04, F05, F06, F07, F09, F11, FG01, FG02, FG03, FG04, FL01, GE01, GE02, GE03, SGE01, SGE02, T01, T02, T03, T04, T05

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
ANISH KEKRE
NUMBER PE-2024044263
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: 10/29/2025

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 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 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

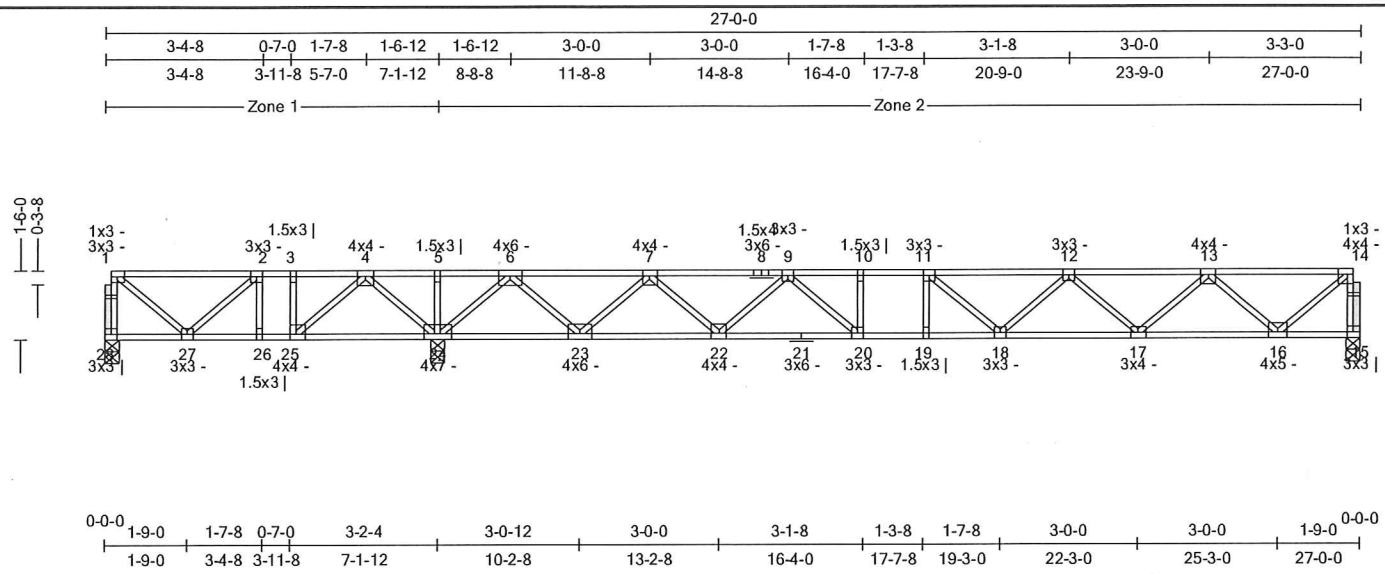
The plate shall be centered on joint and/or placed in accordance with the design drawing/QC full scale details.

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: QU02705_BUILDING J - Rev_1022202: Date: 10/24/25 12:13:01 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
27-0-0	0/12	3	0-0-0	0-0-0	1	19.19 in	139 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 40	Bldg Code:	IBC2018/	TC:	0.36 (2-3)	Vert TL:	0.27 in	L/870	(18-19)	L/240
TCDL: 10		TPI 1-2014	BC:	0.48 (18-19)	Vert LL:	0.16 in	L/999	(18-19)	L/360
BCLL: 0	Rep Mbr:	Yes	Web:	0.24 (6-23)	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	3.5 in	1.50 in	2,078 lbs	·	·	·	·	·
28	1	3.5 in	1.50 in	222 lbs	-245 lbs	·	·	-245 lbs	·
15	1	3.5 in	1.50 in	968 lbs	·	·	·	·	·

10/24/2025

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024001263
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	1-2	0.295	320 lbs		4-5	0.244	2,127 lbs		9-10	0.252		(-2,877 lbs)	12-13	0.211	(-2,320 lbs)
	2-3	0.362	759 lbs		5-6	0.293	2,127 lbs		10-11	0.244		(-2,877 lbs)	13-14	0.208	(-955 lbs)
	3-4	0.362	759 lbs		7-9	0.193		(-1,859 lbs)	11-12	0.301		(-2,891 lbs)			
BC	16-17	0.189	1,784 lbs		19-20	0.476	2,877 lbs		23-24	0.073		(-810 lbs)	26-27	0.265	(-759 lbs)
	17-18	0.278	2,752 lbs		20-22	0.366	2,440 lbs		24-25	0.231		(-1,322 lbs)			
	18-19	0.476	2,877 lbs		22-23	0.171	1,202 lbs		25-26	0.253		(-759 lbs)			
Web	1-27	0.058		(-426 lbs)	6-24	0.213		(-1,754 lbs)	12-17	0.073		(-587 lbs)			
	2-27	0.111	585 lbs		6-23	0.239	1,445 lbs		13-17	0.120	728 lbs				
	2-26	0.041		(-340 lbs)	7-23	0.156		(-1,285 lbs)	13-16	0.136		(-1,124 lbs)			
	3-25	0.036		(-310 lbs)	7-22	0.148	892 lbs		14-16	0.211	1,273 lbs				
	4-25	0.171	1,030 lbs		9-22	0.096		(-788 lbs)	14-15	0.101		(-947 lbs)			
	4-24	0.130		(-1,072 lbs)	9-20	0.118	622 lbs								

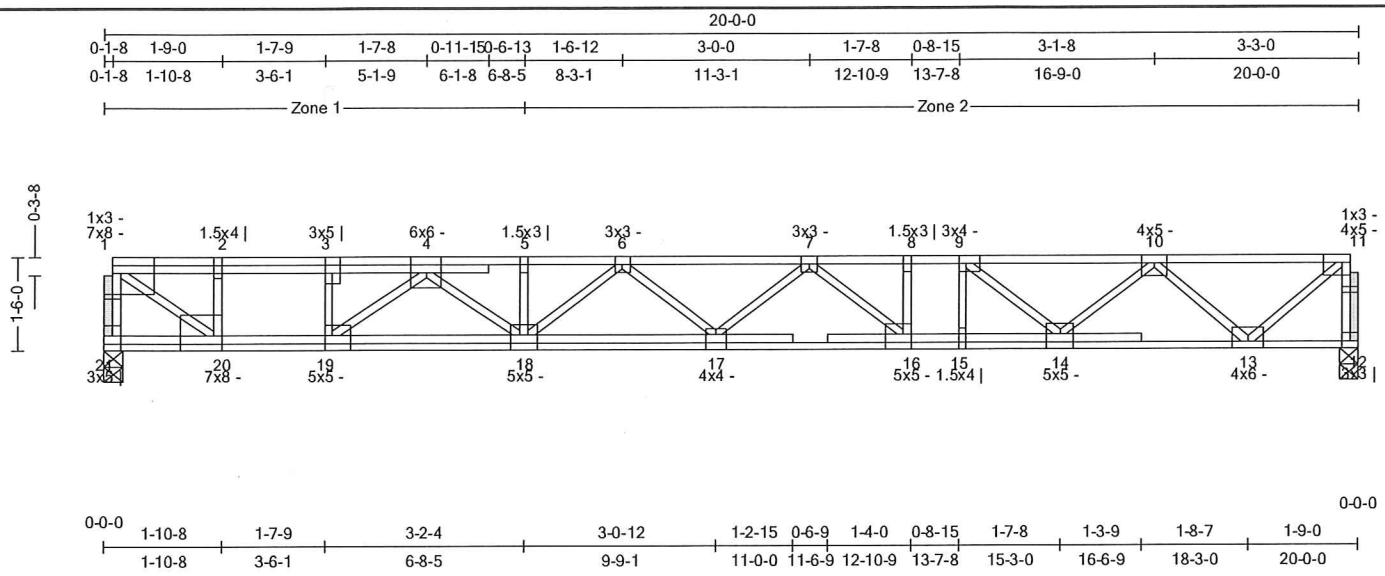
Notes

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 28 may need to be considered.

TrueBuild®Truss Software v5.8.11
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: F02 Job: QU02705_BUILDING J - Rev_102220 Date: 10/24/25 12:13:03 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
20-0-0	0/12	2	0-0-0	0-0-0	1	19.19 in	135 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 40	Bldg Code:	IBC2018/ TPI 1-2014	TC:	0.41 (6-7)	Vert TL:	0.41 in	L/569	(16-17)	L/240
TCDL: 10			BC:	0.49 (16-17)	Vert LL:	0.22 in	L/999	(16-17)	L/360
BCLL: 0	Rep Mbr:	No	Web:	0.42 (1-20)	Horz TL:	0.05 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
21	1	3.5 in	1.50 in	1,148 lbs	·	·	·	·	·
12	1	3.5 in	1.50 in	1,134 lbs	·	·	·	·	·

10/24/2025

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024001263
PROFESSIONAL ENGINEER

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

Load Case D1: Std Dead Load

Point Loads

Member	Location	Direction	Load	Trib Width
Top	6-8-5	Down	43 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	0.349		(-1,987 lbs)	4-5	0.334		(-3,860 lbs)	7-8	0.330		(-3,809 lbs)	10-11	0.247	(-1,145 lbs)
	2-3	0.350		(-1,987 lbs)	5-6	0.334		(-3,854 lbs)	8-9	0.322		(-3,809 lbs)			
	3-4	0.349		(-1,987 lbs)	6-7	0.414		(-4,234 lbs)	9-10	0.295		(-2,993 lbs)			
BC	13-14	0.260	2,199 lbs		16-17	0.490	4,177 lbs		19-20	0.488	1,987 lbs				
	14-15	0.373	3,809 lbs		17-18	0.242	4,173 lbs								
	15-16	0.373	3,809 lbs		18-19	0.471	3,299 lbs								
Web	1-21	0.140		(-1,346 lbs)	4-18	0.118	711 lbs		10-14	0.175	1,057 lbs				
	1-20	0.415	2,507 lbs		6-18	0.050		(-418 lbs)	10-13	0.173		(-1,428 lbs)			
	2-20	0.091		(-860 lbs)	7-16	0.073		(-547 lbs)	11-13	0.253	1,526 lbs				
	3-19	0.104	627 lbs		9-15	0.079	417 lbs		11-12	0.119		(-1,114 lbs)			
	4-19	0.196		(-1,679 lbs)	9-14	0.127		(-1,065 lbs)							

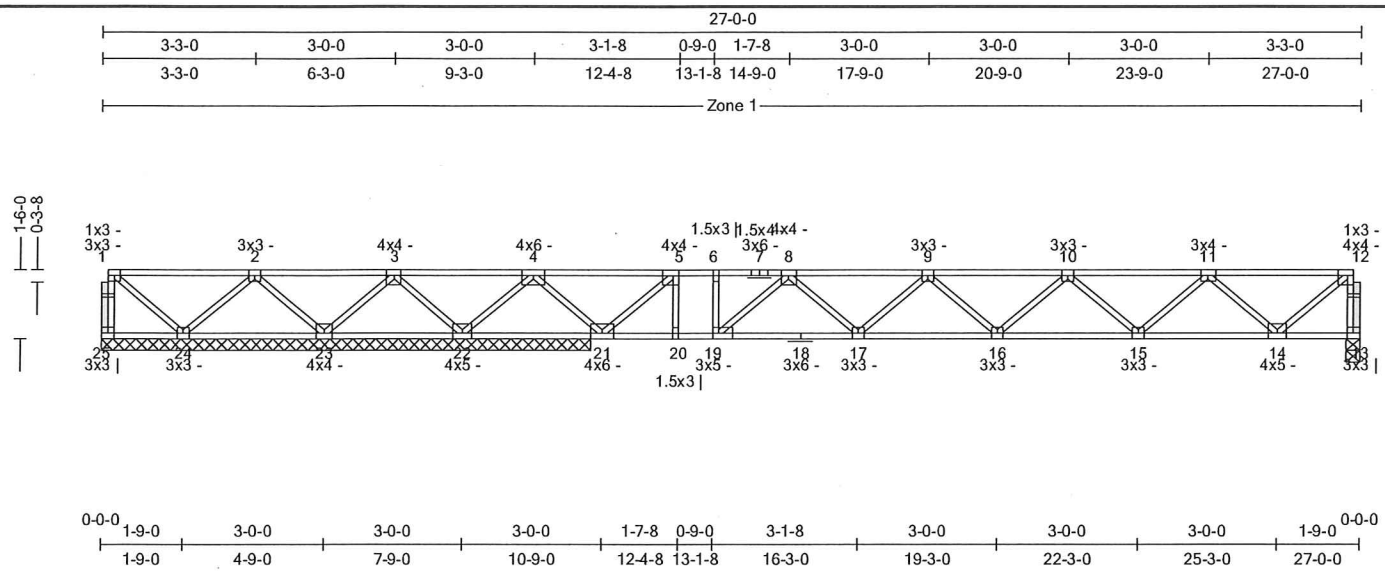
Notes

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: QU02705_BUILDING J - Rev_102202 Date: 10/24/25 12:13:05 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
27-0-0	0/12	1	0-0-0	0-0-0	1	19.19 in	136 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 (4-5)	Vert TL:	0.28 in	L/690	(18-19)	L/240
TCDL: 10		TPI 1-2014	BC:	0.61 (19-20)	Vert LL:	0.15 in	L/999	(18-19)	L/360
BCLL: 0	Rep Mbr:	No	Web:	0.24 (4-21)	Horz TL:	0.03 in		13	
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
13	1	3.5 in	1.50 in	900 lbs	·	·	·	·	·
22	1	126 in	N/A	2,238 lbs	·	·	·	·	1,547 lbs
23	1	126 in	N/A	64 lbs	-281 lbs	·	·	-281 lbs	-1,209 lbs
24	1	126 in	N/A	129 lbs	-38 lbs	·	·	-38 lbs	-337 lbs
25	1	126 in	N/A	37 lbs	-74 lbs	·	·	-74 lbs	·

10/24/2025

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024044263
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	2-3	0.333	799 lbs		6-8	0.453		(-999 lbs)	10-11	0.246	(-2,093 lbs)
	3-4	0.440	2,563 lbs		8-9	0.232		(-2,273 lbs)	11-12	0.240	(-879 lbs)
	5-6	0.422		(-999 lbs)	9-10	0.246		(-2,524 lbs)			
BC	14-15	0.211	1,637 lbs		17-19	0.502	1,843 lbs		21-22	0.124	(-1,270 lbs)
	15-16	0.280	2,436 lbs		19-20	0.609	999 lbs				
	16-17	0.375	2,527 lbs		20-21	0.609	999 lbs				
Web	2-23	0.077		(-626 lbs)	5-20	0.081	461 lbs		11-15	0.102	619 lbs
	3-23	0.168	1,014 lbs		6-19	0.074	448 lbs		11-14	0.125	(-1,028 lbs)
	3-22	0.167		(-1,379 lbs)	8-19	0.137		(-1,124 lbs)	12-14	0.194	1,171 lbs
	4-22	0.213		(-1,754 lbs)	8-17	0.097	584 lbs		12-13	0.094	(-878 lbs)
	4-21	0.242	1,463 lbs		9-17	0.046		(-344 lbs)			
	5-21	0.192		(-1,586 lbs)	10-15	0.057		(-466 lbs)			

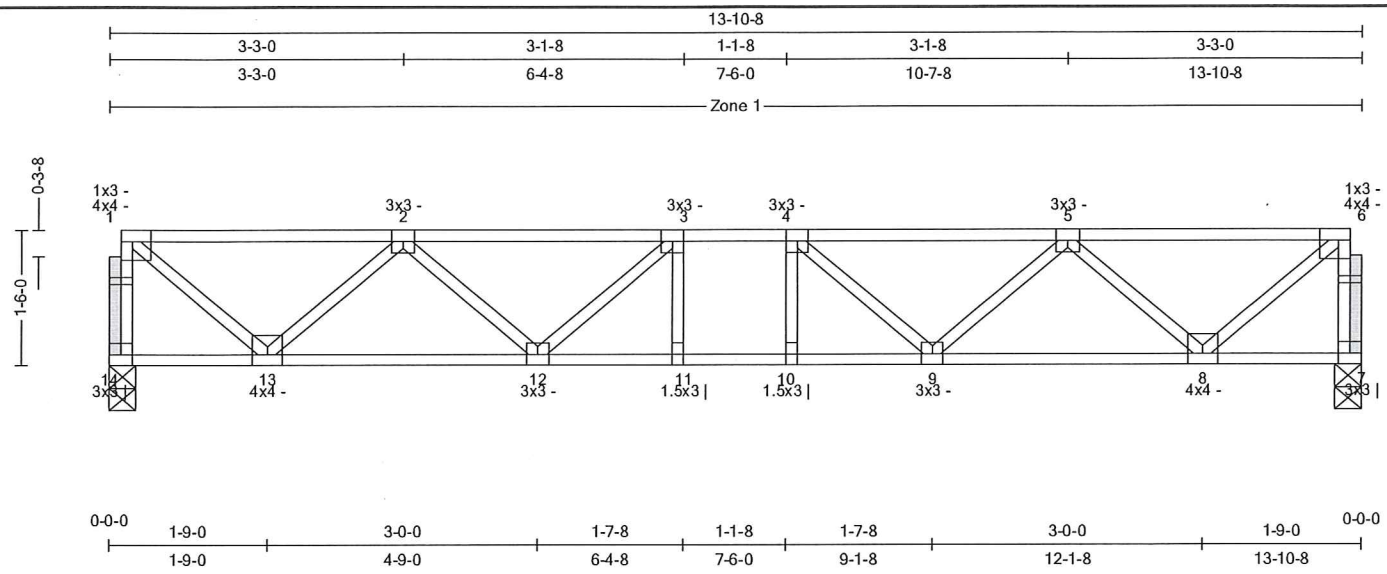
Notes

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 joints 23, 24, 25 may need to be considered.

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: QU02705_BUILDING J - Rev_1022202: Date: 10/24/25 12:13:06 Page: 1 of 1

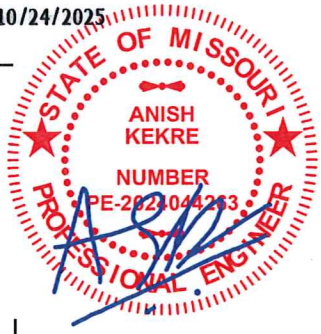
SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
13-10-8	0/12	2	0-0-0	0-0-0	1	19.19 in	72 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL:	40	Bldg Code:	IBC2018/ TPI 1-2014	TC:	0.43 (4-5)	Vert TL:	0.09 in	L/999	(10-11)	L/240
TCDL:	10			BC:	0.48 (10-11)	Vert LL:	0.05 in	L/999	(9-10)	L/360
BCLL:	0	Rep Mbr:	No	Web:	0.16 (1-13)	Horz TL:	0.02 in		7	
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
14	1	3.5 in	1.50 in	776 lbs	·	·	·	·	·
7	1	3.5 in	1.50 in	776 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	0.414		(-743 lbs)	3-4	0.194		(-1,885 lbs)	5-6	0.414		(-743 lbs)		
	2-3	0.430		(-1,666 lbs)	4-5	0.430		(-1,666 lbs)						
BC	8-9	0.317	1,364 lbs		10-11	0.480	1,885 lbs		12-13	0.317	1,364 lbs			
	9-10	0.480	1,885 lbs		11-12	0.480	1,885 lbs							
Web	1-14	0.081		(-756 lbs)	2-12	0.068	410 lbs		5-9	0.068	410 lbs		6-7	0.081	(-756 lbs)
	1-13	0.164	989 lbs		3-12	0.046		(-339 lbs)	5-8	0.102		(-843 lbs)		
	2-13	0.102		(-843 lbs)	4-9	0.046		(-339 lbs)	6-8	0.164	989 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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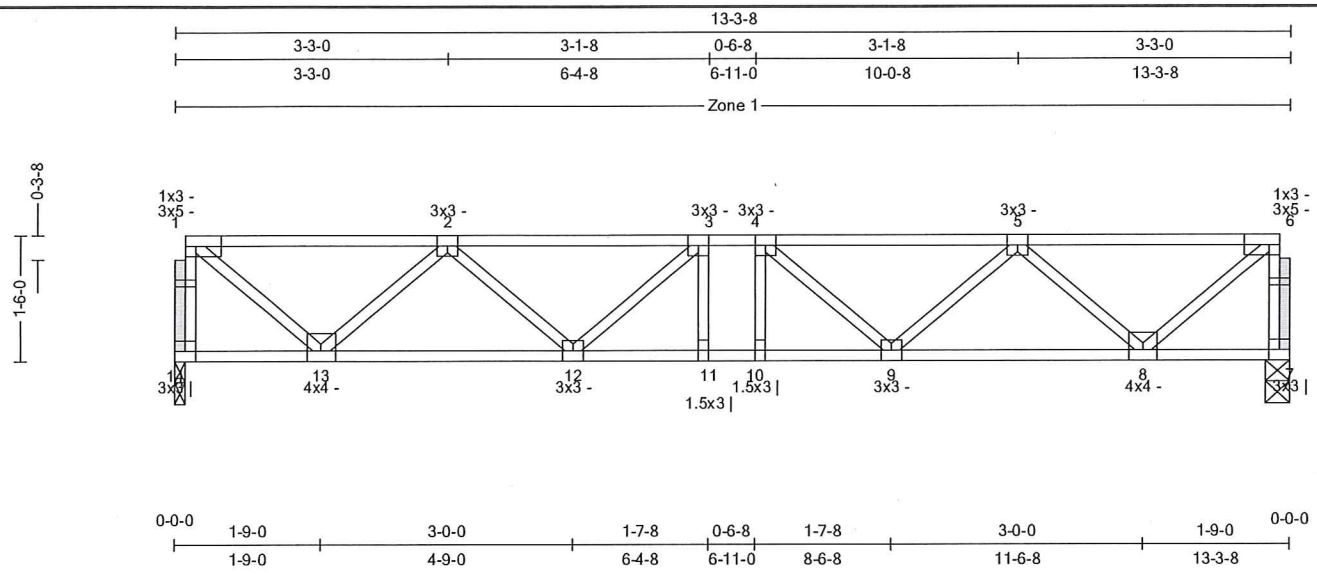
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F05 Job: QU02705_BUILDING J - Rev_10222025 Date: 10/24/25 12:13:07 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
13-3-8	0/12	2	0-0-0	0-0-0	1	19.19 in	70 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 40	Bldg Code: IBC2018/	TC: 0.41 (2-3)	Vert TL: 0.08 in	L/999	(10-11)	L/240
TCDL: 10	TPI 1-2014	BC: 0.38 (9-10)	Vert LL: 0.04 in	L/999	(10-11)	L/360
BCLL: 0	Rep Mbr: No	Web: 0.16 (1-13)	Horz TL: 0.02 in		7	
BCDL: 10	Lumber D.O.L.: 100 %					

10/24/2025

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2021044263
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
14	1	1.5 in	1.50 in	744 lbs	·	·	·	·	·
7	1	3.5 in	1.50 in	744 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	0.404		(-705 lbs)	3-4	0.213		(-1,740 lbs)	5-6	0.404		(-705 lbs)
	2-3	0.412		(-1,559 lbs)	4-5	0.412		(-1,559 lbs)				
BC	8-9	0.304	1,290 lbs		10-11	0.381	1,740 lbs		12-13	0.304	1,290 lbs	
	9-10	0.381	1,740 lbs		11-12	0.381	1,740 lbs					
Web	1-14	0.077		(-724 lbs)	2-12	0.060	364 lbs		6-8	0.156	939 lbs	
	1-13	0.156	939 lbs		5-9	0.060	364 lbs		6-7	0.077		(-724 lbs)
	2-13	0.096		(-794 lbs)	5-8	0.096		(-794 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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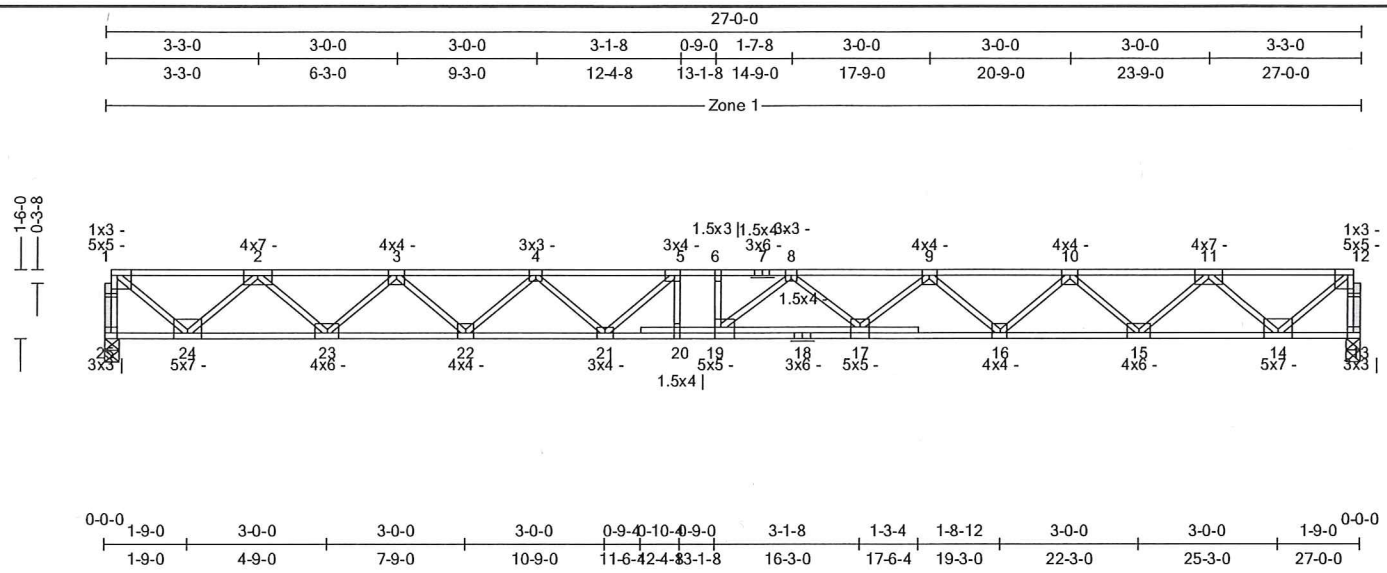
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F06 Job: QU02705_BUILDING J - Rev_102202 Date: 10/24/25 12:13:09 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
27-0-0	0/12	12	0-0-0	0-0-0	1	19.19 in	147 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 40	Bldg Code:	IBC2018/	TC:	0.64 (8-9)	Vert TL:	1 in	L/317	19	L/240
TCDL: 10		TPI 1-2014	BC:	0.66 (20-21)	Vert LL:	0.57 in	L/555	19	L/360
BCLL: 0	Rep Mbr:	Yes	Web:	0.35 (1-24)	Horz TL:	0.15 in		13	
BCDL: 10	Lumber D.O.L.:	100 %							

10/24/2025

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024041263
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
25	1	3.5 in	1.50 in	1,511 lbs	·	·	·	·	·
13	1	3.5 in	1.50 in	1,511 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	0.224		(-1,572 lbs)	4-5	0.620		(-6,921 lbs)	8-9	0.644		(-7,248 lbs)	11-12	0.224		(-1,572 lbs)
	2-3	0.365		(-4,113 lbs)	5-6	0.581		(-7,551 lbs)	9-10	0.523		(-5,885 lbs)				
	3-4	0.523		(-5,885 lbs)	6-8	0.594		(-7,551 lbs)	10-11	0.365		(-4,113 lbs)				
BC	14-15	0.289	2,993 lbs		17-19	0.355	7,523 lbs		21-22	0.578	6,542 lbs					
	15-16	0.455	5,125 lbs		19-20	0.341	7,551 lbs		22-23	0.457	5,124 lbs					
	16-17	0.597	6,691 lbs		20-21	0.665	7,557 lbs		23-24	0.288	2,994 lbs					
Web	1-25	0.159		(-1,488 lbs)	4-22	0.108		(-891 lbs)	9-17	0.123	744 lbs		12-14	0.347	2,094 lbs	
	1-24	0.347	2,094 lbs		4-21	0.105	549 lbs		9-16	0.132		(-1,090 lbs)	12-13	0.159		(-1,488 lbs)
	2-24	0.234		(-1,929 lbs)	5-21	0.111		(-840 lbs)	10-16	0.171	1,030 lbs					
	2-23	0.251	1,518 lbs		5-20	0.076	397 lbs		10-15	0.167		(-1,374 lbs)				
	3-23	0.166		(-1,372 lbs)	8-19	0.080	418 lbs	(-340 lbs)	11-15	0.252	1,519 lbs					
	3-22	0.171	1,032 lbs		8-17	0.059		(-441 lbs)	11-14	0.234		(-1,928 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, two strongbacks recommended at one third points of the truss span. Strongback spacing or strongback to support should not exceed 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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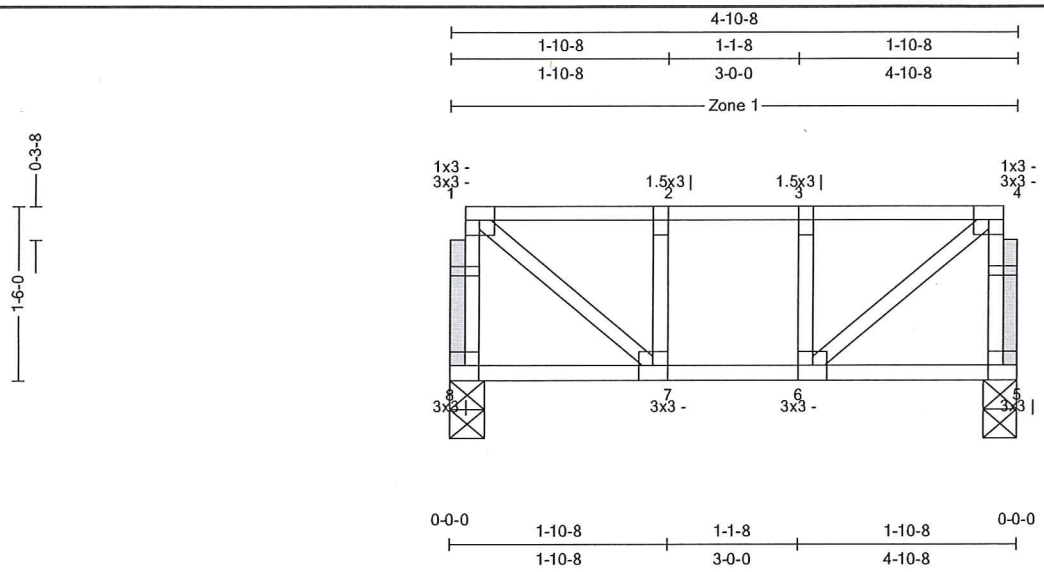
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F07 Job: QU02705_BUILDING J - Rev_10222(2: Date: 10/24/25 12:13:10 Page: 1 of 1

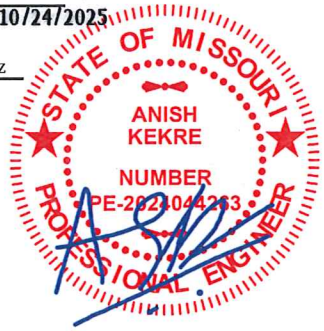
SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
4-10-8	0/12	4	0-0-0	0-0-0	1	24 in	30 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 40	Bldg Code: IBC2018/	TC: 0.13 (3-4)	Vert TL: 0.01 in	L/999	(5-6)	L/240
TCDL: 10	TPI 1-2014	BC: 0.11 (6-7)	Vert LL: 0.01 in	L/999	(5-6)	L/360
BCLL: 0	Rep Mbr: Yes	Web: 0.06 (1-7)	Horz TL: 0 in		5	
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
8	1	3.5 in	1.50 in	341 lbs	·	·	·	·	·
5	1	3.5 in	1.50 in	341 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								
BC								
Web	1-8	0.033		(-305 lbs)	4-6	0.058	350 lbs	
	1-7	0.058	350 lbs		4-5	0.033		(-305 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 floor truss is 10 % (Cq = 0.90).
3) A creep factor of 2.00 has been applied for this truss analysis.
4) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
5) ▭ Indicates non-structural members.

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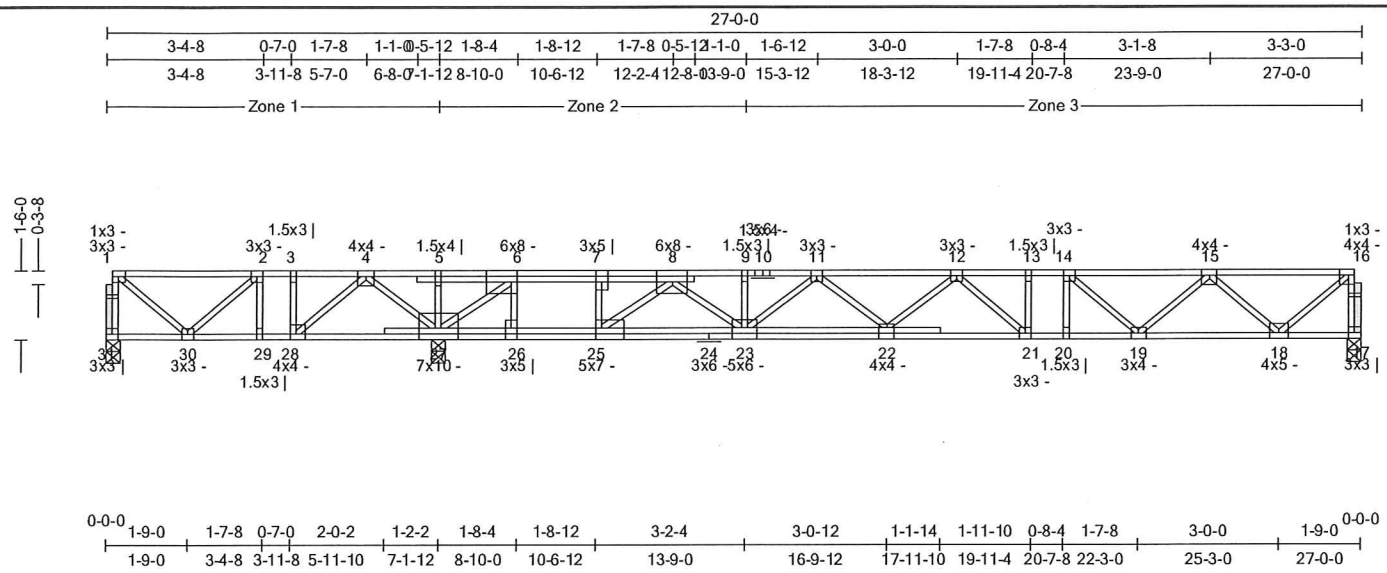
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F09 Job: QU02705_BUILDING J - Rev_102202 Date: 10/24/25 12:13:12 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
27-0-0	0/12	1	0-0-0	0-0-0	1	19.19 in	168 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 40	Bldg Code:	IBC2018/	TC:	0.64 (5-6)	Vert TL:	0.36 in	L/649	(21-22)	L/240
TCDL: 10		TPI 1-2014	BC:	0.51 (26-27)	Vert LL:	0.19 in	L/999	(21-22)	L/360
BCLL: 0	Rep Mbr:	No	Web:	0.34 (6-27)	Horz TL:	0.03 in		17	
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
27	1	3.5 in	1.50 in	2,040 lbs	·	·	·	·	·
31	1	3.5 in	1.50 in	229 lbs	-205 lbs	·	·	-205 lbs	·
17	1	3.5 in	1.50 in	1,000 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

Load Case D1: Std Dead Load

Point Loads

Member	Location	Direction	Load	Trib Width
Top	13-9-0	Down	43 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	2-3	0.357	656 lbs		8-9	0.227		(-2,581 lbs)	13-14	0.250		(-2,954 lbs)
	3-4	0.357	656 lbs		9-11	0.226		(-2,575 lbs)	14-15	0.253		(-2,416 lbs)
	4-5	0.238	2,104 lbs		11-12	0.315		(-3,227 lbs)	15-16	0.245		(-994 lbs)
	5-6	0.642	2,100 lbs		12-13	0.256		(-2,954 lbs)				
BC	18-19	0.230	1,852 lbs		22-23	0.221	3,033 lbs		29-30	0.274		(-656 lbs)
	19-20	0.427	2,954 lbs		23-25	0.466	1,776 lbs					
	20-21	0.427	2,954 lbs		27-28	0.255		(-1,189 lbs)				
	21-22	0.399	3,241 lbs		28-29	0.262		(-656 lbs)				
Web	1-30	0.049		(-365 lbs)	7-25	0.124	750 lbs		15-18	0.141		(-1,163 lbs)
	2-30	0.097	509 lbs		8-25	0.235		(-2,007 lbs)	16-18	0.219	1,325 lbs	
	2-29	0.039		(-317 lbs)	8-23	0.170	1,024 lbs		16-17	0.105		(-981 lbs)
	4-28	0.163	983 lbs		11-23	0.071		(-597 lbs)				
	4-27	0.146		(-1,226 lbs)	12-21	0.065		(-483 lbs)				
	6-27	0.341		(-2,913 lbs)	14-19	0.088		(-717 lbs)				
	6-26	0.131	788 lbs		15-19	0.127	765 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).

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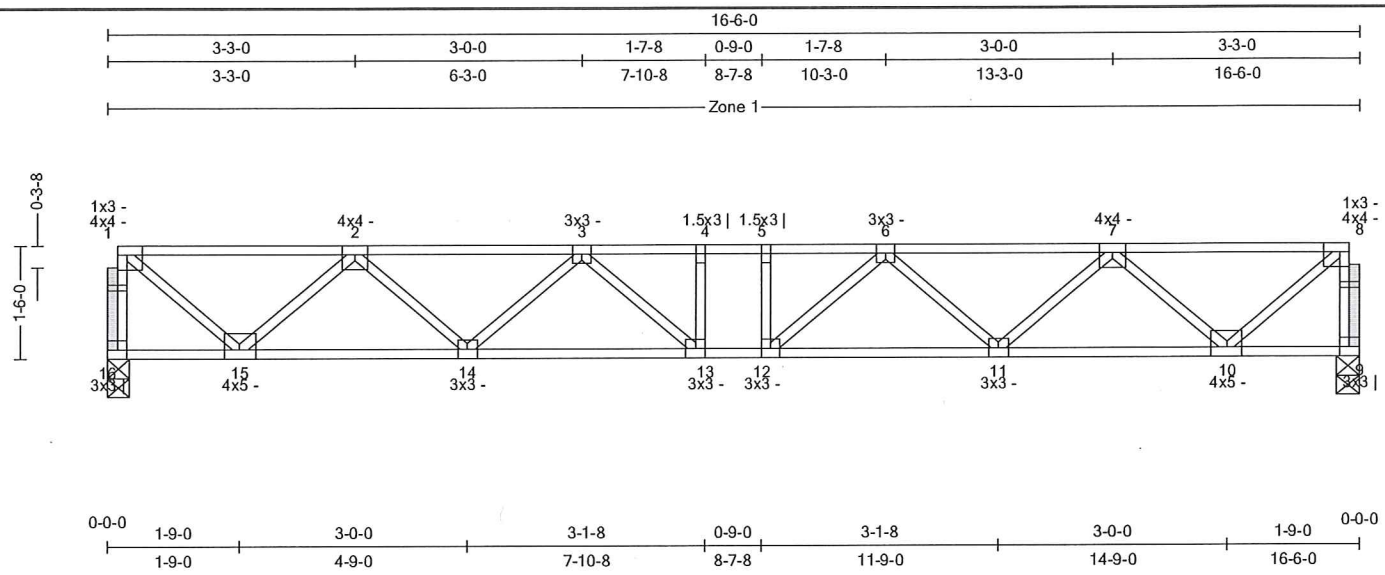
SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
27-0-0	0/12	1	0-0-0	0-0-0	1	19.19 in	168 lbs

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 31 may need to be considered.

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F11 Job: QU02705_BUILDING J - Rev_102220[illegible] Date: 10/24/25 12:13:14 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
16-6-0	0/12	4	0-0-0	0-0-0	1	19.19 in	85 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL:	40	Bldg Code:	IBC2018/	TC:	0.37 (2-3)	Vert TL:	0.17 in	L/999	(11-12)	L/240
TCDL:	10		TPI 1-2014	BC:	0.48 (13-14)	Vert LL:	0.1 in	L/999	(12-13)	L/360
BCLL:	0	Rep Mbr:	Yes	Web:	0.20 (1-15)	Horz TL:	0.04 in		9	
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
16	1	3.5 in	1.50 in	923 lbs	·	·	·	·	·
9	1	3.5 in	1.50 in	923 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	0.348		(-906 lbs)	3-4	0.255		(-2,674 lbs)	5-6	0.255		(-2,674 lbs)	7-8	0.348		(-906 lbs)
	2-3	0.371		(-2,162 lbs)	4-5	0.247		(-2,674 lbs)	6-7	0.371		(-2,162 lbs)				
BC	10-11	0.353	1,691 lbs		12-13	0.450	2,674 lbs		14-15	0.353	1,691 lbs					
	11-12	0.478	2,521 lbs		13-14	0.478	2,521 lbs									
Web	1-16	0.096		(-901 lbs)	3-14	0.060		(-486 lbs)	7-11	0.106	640 lbs					
	1-15	0.200	1,207 lbs		3-13	0.064	338 lbs		7-10	0.129		(-1,064 lbs)				
	2-15	0.129		(-1,064 lbs)	6-12	0.064	338 lbs		8-10	0.200	1,207 lbs					
	2-14	0.106	640 lbs		6-11	0.060		(-486 lbs)	8-9	0.096		(-901 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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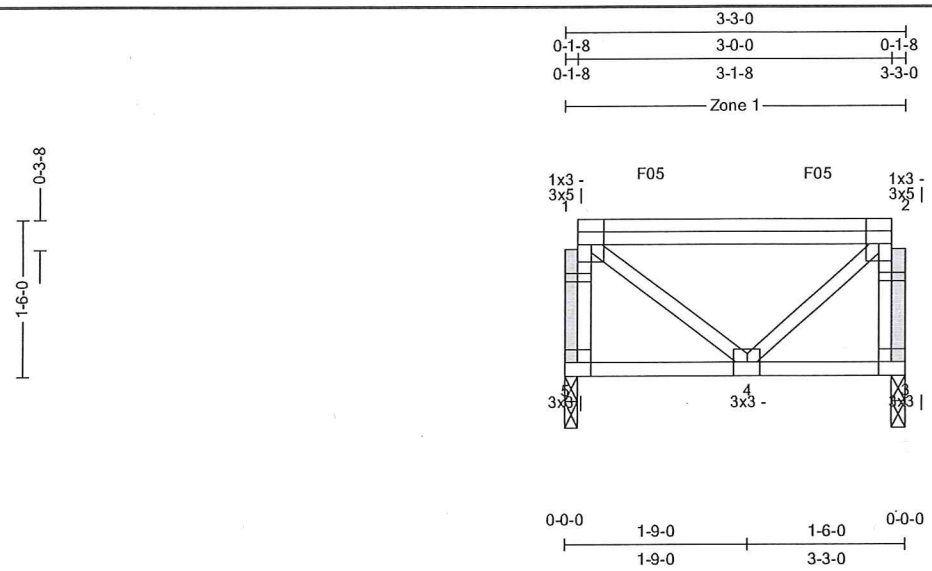
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FG01 Job: QU02705_BUILDING J - Rev_10222025 Date: 10/24/25 12:13:15 Page: 1 of 1

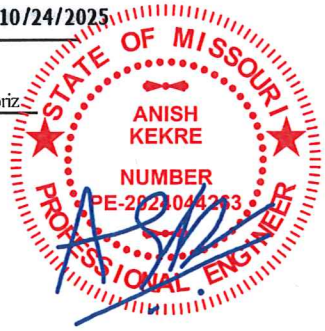
SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
3-3-0	0/12	1	0-0-0	0-0-0	1	12 in	25 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code:	IBC2018/	TC:	0.83 (1-2)	Vert TL:	0 in	L/999	(4-5)	L/240
TCLL: 40		TPI 1-2014	BC:	0.02 (4-5)	Vert LL:	0 in	L/999	(4-5)	L/360
TCDL: 10	Rep Mbr:	No	Web:	0.09 (1-5)	Horz TL:	0 in		3	
BCLL: 0	Lumber D.O.L.: 100 %								
BCDL: 10									

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
5	1	1.5 in	1.50 in	755 lbs	·	·	·	·	·
3	1	1.5 in	1.50 in	748 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						
BC						
Web	1-5	0.088	(-737 lbs)	2-3	0.087	(-733 lbs)

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
F05	TC	0-9-13
F05	TC	2-5-0

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 floor truss is 10 % (Cq = 0.90).
3) A creep factor of 2.00 has been applied for this truss analysis.
4) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
5) ▭ Indicates non-structural members.

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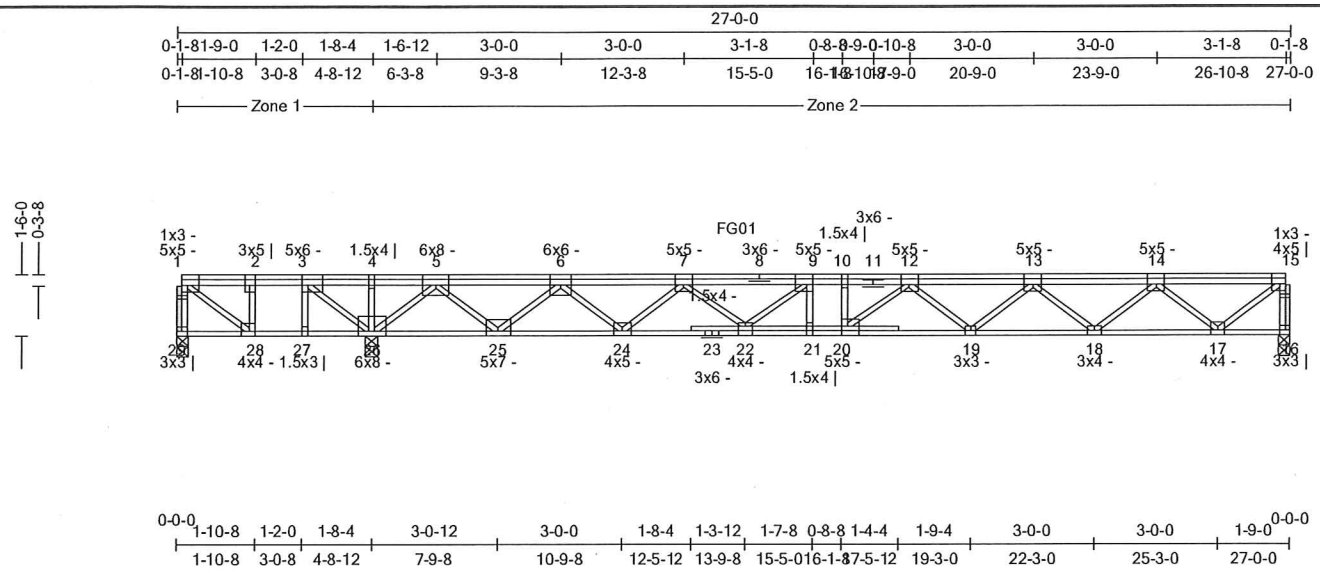
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: FG02 Job: QU02705_BUILDING J - Rev_102220[illegible] Date: 10/24/25 12:13:18 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
27-0-0	0/12	1	0-0-0	0-0-0	2	53.75 in	184 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code:	IBC2018/	TC:	0.94 (3-4)	Vert TL:	0.31 in	L/846	(21-22)	L/240
TCLL: 40		TPI 1-2014	BC:	0.74 (22-24)	Vert LL:	0.19 in	L/999	(21-22)	L/360
TCDL: 10	Rep Mbr:	No	Web:	0.31 (5-25)	Horz TL:	0.06 in		16	
BCLL: 0	Lumber D.O.L.:	100 %							
BCDL: 10									

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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
26	1	3.5 in	1.50 in	4,894 lbs	·	·	·	·	·
29	1	3.5 in	N/A	0 lbs	-1,321 lbs	·	·	-1,321 lbs	·
16	1	3.5 in	1.50 in	1,368 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

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	4-10-8	Down	Proj	9.79 plf	9.79 plf	
Top	4-10-8	13-1-8	Down	Proj	150.1 plf	150.1 plf	
Top	13-1-8	13-6-12	Down	Proj	73.75 plf	73.75 plf	
Top	13-6-12	27-0-0	Down	Proj	22.19 plf	22.19 plf	
Top	0-0-0	27-0-0	Down	Proj	29.06 plf	29.06 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	4-10-8	Down	Proj	2.45 plf	2.45 plf	
Top	4-10-8	13-1-8	Down	Proj	37.53 plf	37.53 plf	
Top	13-1-8	13-6-12	Down	Proj	18.44 plf	18.44 plf	
Top	13-6-12	27-0-0	Down	Proj	5.55 plf	5.55 plf	
Top	0-0-0	27-0-0	Down	Proj	7.27 plf	7.27 plf	
Bot	0-0-0	4-10-8	Down	Proj	2.45 plf	2.45 plf	
Bot	4-10-8	13-1-8	Down	Proj	37.53 plf	37.53 plf	
Bot	13-1-8	13-6-12	Down	Proj	18.44 plf	18.44 plf	
Bot	13-6-12	27-0-0	Down	Proj	5.55 plf	5.55 plf	
Bot	0-0-0	27-0-0	Down	Proj	7.27 plf	7.27 plf	

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SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
27-0-0	0/12	1	0-0-0	0-0-0	2	53.75 in	184 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	0.763	1,206 lbs		4-5	0.372	2,569 lbs		7-9	0.478		(-3,871 lbs)	12-13	0.154	(-2,900 lbs)
	2-3	0.829	1,206 lbs		5-6	0.120		(-690 lbs)	9-10	0.197		(-3,805 lbs)	13-14	0.105	(-1,993 lbs)
	3-4	0.945	2,569 lbs		6-7	0.234		(-2,826 lbs)	10-12	0.198		(-3,805 lbs)	14-15	0.054	(-749 lbs)
BC	17-18	0.276	1,432 lbs		20-21	0.549	3,805 lbs		24-25	0.501	1,929 lbs		27-28	0.358	(-1,206 lbs)
	18-19	0.466	2,507 lbs		21-22	0.549	3,805 lbs		25-26	0.156		(-715 lbs)			
	19-20	0.655	3,337 lbs		22-24	0.736	3,663 lbs		26-27	0.397		(-1,206 lbs)			
Web	1-29	0.123	721 lbs		6-25	0.200		(-1,646 lbs)	13-18	0.082		(-683 lbs)			
	1-28	0.184		(-1,551 lbs)	6-24	0.200	1,192 lbs		14-18	0.124	746 lbs				
	2-28	0.136	806 lbs		7-24	0.140		(-1,109 lbs)	14-17	0.108		(-908 lbs)			
	3-26	0.208		(-1,751 lbs)	12-20	0.105	600 lbs		15-17	0.163	978 lbs				
	5-26	0.288		(-2,421 lbs)	12-19	0.071		(-579 lbs)	15-16	0.072		(-675 lbs)			
	5-25	0.309	1,867 lbs		13-19	0.087	522 lbs								

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
FG01	TC	13-6-12

Notes

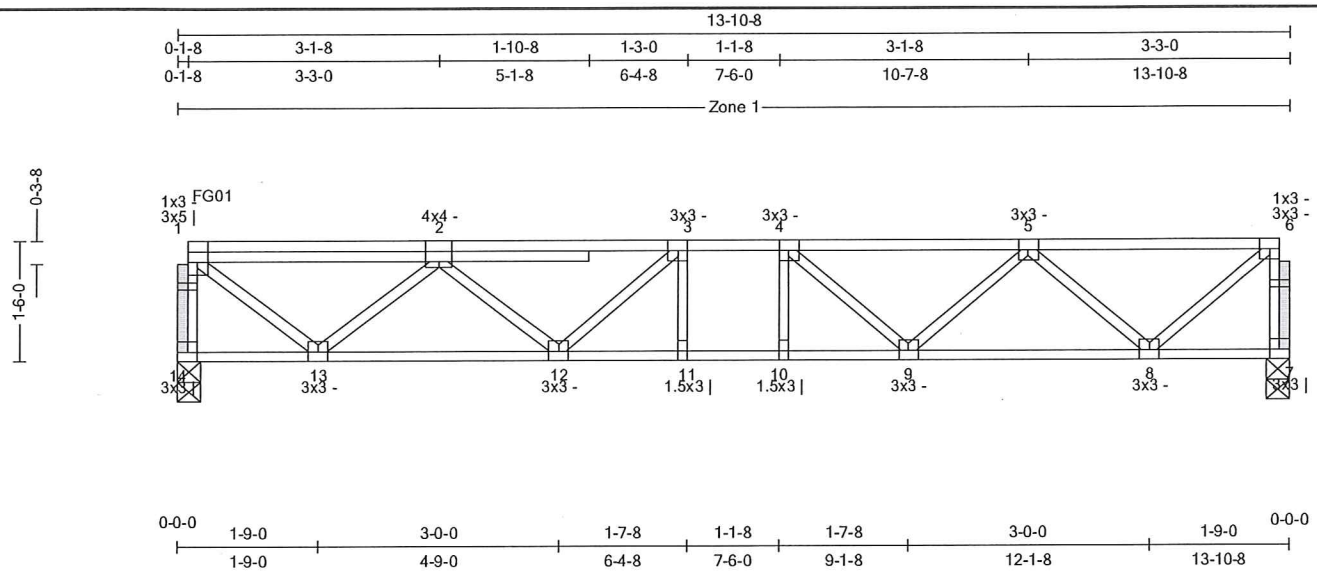
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
4) A creep factor of 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 29 may need to be considered.
8) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows: SDS Simpson 0.250"x6" Screws TC - 1 row @ 1-9-8 oc, BC - 1 row @ 2-0-0 oc, Webs - 1 @ 2-0-0 oc, minimum one fastener per web.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach girder plies with supplemental SDS Simpson 0.250"x6" Screws as follows within 24" of the location shown:
TC: 13-6-12,(2)Connectors

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
9) Screws shall be installed in the same truss ply that the hangers are attached to. If both plies are loaded, the screws shall be divided between the two plies, with the spacing on each side twice the minimum indicated.
10) Strongbacks shall be attached to each ply.
11) Center screw vertically on the 1-1/2" dimension of chords and webs. If splitting occurs, it may be necessary to pre-drill the holes in accordance with the NDS.
12) Install screws per manufacturer recommendations.

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FG03 Job: QU02705_BUILDING J - Rev_10222(2: Date: 10/24/25 12:13:20 Page: 1 of 2

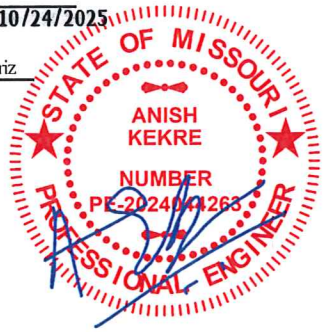
SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
13-10-8	0/12	1	0-0-0	0-0-0	1	25.84 in	78 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code:	IBC2018/	TC:	0.20 (1-2)	Vert TL:	0.04 in	L/999	11	L/240
TCLL: 40		TPI 1-2014	BC:	0.14 (11-12)	Vert LL:	0.03 in	L/999	(11-12)	L/360
TCDL: 10	Rep Mbr:	No	Web:	0.13 (1-14)	Horz TL:	0.01 in		7	
BCLL: 0	Lumber D.O.L.:	100 %	Shear:	0.54 (1-2)					
BCDL: 10									

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
14	1	3.5 in	1.50 in	1,108 lbs	·	·	·	·	·
7	1	3.5 in	1.50 in	400 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

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	13-10-8	Down	Proj	12.4 plf	12.4 plf	
Top	0-0-0	0-5-4	Down	Proj	19.58 plf	19.58 plf	
Top	0-5-4	13-10-8	Down	Proj	19.58 plf	19.58 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	13-10-8	Down	Proj	3.1 plf	3.1 plf	
Top	0-0-0	0-5-4	Down	Proj	4.9 plf	4.9 plf	
Top	0-5-4	13-10-8	Down	Proj	4.9 plf	4.9 plf	
Bot	0-0-0	13-10-8	Down	Proj	3.1 plf	3.1 plf	
Bot	0-0-0	0-5-4	Down	Proj	4.9 plf	4.9 plf	
Bot	0-5-4	13-10-8	Down	Proj	4.9 plf	4.9 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	0.202		(-447 lbs)	3-4	0.086		(-1,004 lbs)	5-6	0.123		(-385 lbs)
	2-3	0.157		(-944 lbs)	4-5	0.124		(-875 lbs)				
BC	8-9	0.091	708 lbs		10-11	0.143	1,004 lbs		12-13	0.101	829 lbs	
	9-10	0.137	1,004 lbs		11-12	0.143	1,004 lbs					
Web	1-14	0.126		(-1,097 lbs)	5-8	0.053		(-439 lbs)				
	1-13	0.097	584 lbs		6-8	0.085	513 lbs					
	2-13	0.062		(-508 lbs)	6-7	0.042		(-390 lbs)				

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
13-10-8	0/12	1	0-0-0	0-0-0	1	25.84 in	78 lbs

Truss to Truss Connection Summary

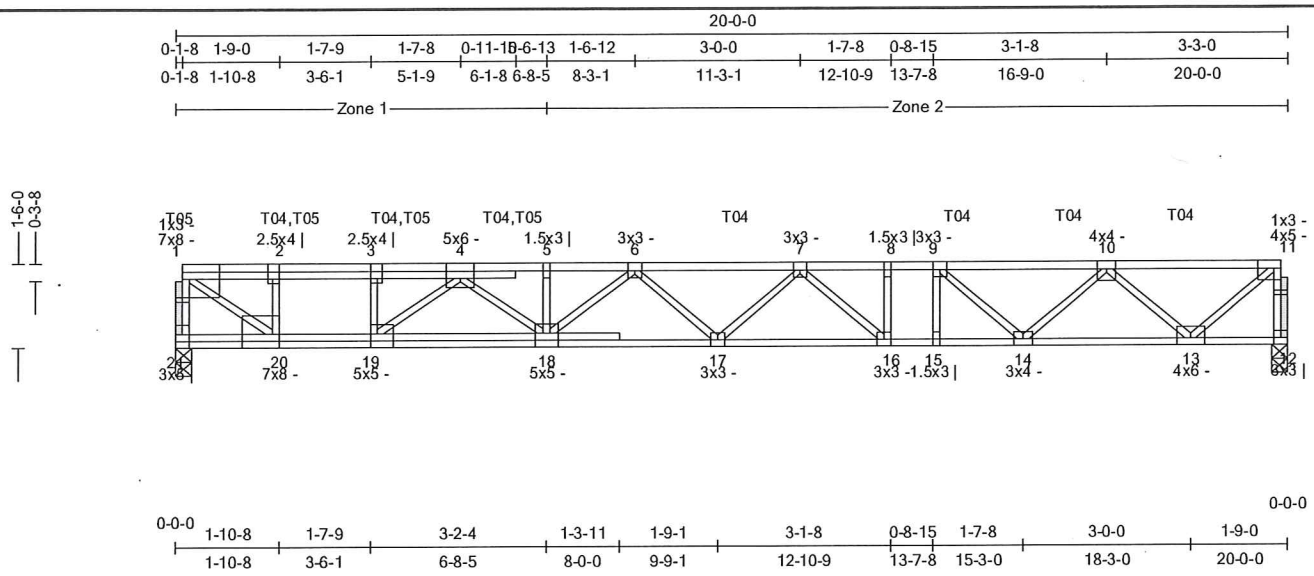
Carried Truss	Carrying Chord	Carrying Offset
FG01	TC	0-5-4

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.

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: FG04 Job: QU02705_BUILDING J - Rev_10222025 Date: 10/24/25 12:13:23 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
20-0-0	0/12	1	0-0-0	0-0-0	2	8.688 in	124 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code:	IBC2018/	TC:	0.50 (6-7)	Vert TL:	0.34 in	L/683	(16-17)	L/240
TCLL: 40		TPI 1-2014	BC:	0.50 (18-19)	Vert LL:	0.15 in	L/999	(16-17)	L/360
TCDL: 10	Rep Mbr:	No	Web:	0.45 (1-20)	Horz TL:	0.05 in		12	
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
21	1	3.5 in	1.50 in	2,268 lbs	·	·	·	·	·
12	1	3.5 in	1.50 in	1,822 lbs	·	·	·	·	·

10/24/2025

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024044203
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) 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	7-0-12	20-0-0	Down	Proj	28.96 plf	28.96 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	7-0-12	20-0-0	Down	Proj	7.24 plf	7.24 plf	
Bot	7-0-12	20-0-0	Down	Proj	7.24 plf	7.24 plf	

Point Loads

Member	Location	Direction	Load	Trib Width
Top	6-8-5	Down	43 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	0.363		(-1,885 lbs)	4-5	0.344		(-3,283 lbs)	7-8	0.285		(-2,876 lbs)	10-11	0.373	(-950 lbs)
	2-3	0.363		(-1,885 lbs)	5-6	0.324		(-3,274 lbs)	8-9	0.288		(-2,876 lbs)			
	3-4	0.347		(-1,885 lbs)	6-7	0.504		(-3,227 lbs)	9-10	0.380		(-2,345 lbs)			
BC	13-14	0.213	1,850 lbs		16-17	0.397	3,193 lbs		19-20	0.501	1,885 lbs				
	14-15	0.368	2,876 lbs		17-18	0.372	3,322 lbs								
	15-16	0.368	2,876 lbs		18-19	0.504	3,000 lbs								

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SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
20-0-0	0/12	1	0-0-0	0-0-0	2	8.688 in	124 lbs

Web	1-21	0.159		(-1,337 lbs)	4-18	0.067	350 lbs		11-13	0.241	1,266 lbs	
	1-20	0.453	2,379 lbs		7-16	0.057		(-421 lbs)	11-12	0.110		(-908 lbs)
	2-20	0.107		(-896 lbs)	9-14	0.096		(-708 lbs)				
	3-19	0.085	444 lbs		10-14	0.128	671 lbs					
	4-19	0.187		(-1,428 lbs)	10-13	0.165		(-1,221 lbs)				

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
T05	TC	0-0-12
T05	TC	2-0-12
T04	TC	2-0-12
T05	TC	4-0-12
T04	TC	4-0-12
T05	TC	6-0-12
T04	TC	6-0-12
T04	TC	10-0-12
T04	TC	14-0-12
T04	TC	16-0-12
T04	TC	18-0-12

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) The forces shown for this multi-ply truss are per ply and the reactions are for all plies. Two identical trusses shall be built and attached as follows: SDS Simpson 0.250"x6" Screws TC - 1 row @ 2-0-0 oc, BC - 1 row @ 2-0-0 oc, Webs - 1 @ 2-0-0 oc, minimum one fastener per web.

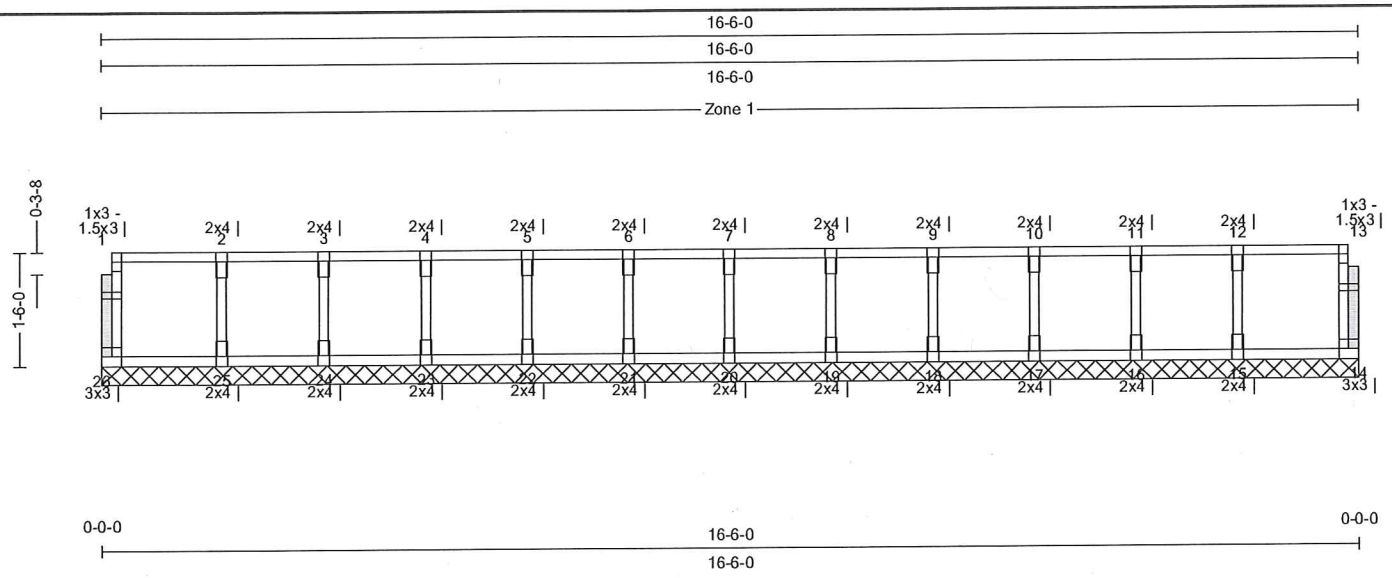
Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach girder plies with supplemental SDS Simpson 0.250"x6" Screws as follows within 24" of the location shown:

TC: 0-0-12,(1)Connectors
TC: 2-0-12,(2)Connectors
TC: 4-0-12,(2)Connectors
TC: 6-0-12,(2)Connectors
TC: 6-8-5,(1)Connectors
TC: 10-0-12,(1)Connectors
TC: 14-0-12,(1)Connectors
TC: 16-0-12,(1)Connectors
TC: 18-0-12,(1)Connectors

Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
8) Screws shall be installed in the same truss ply that the hangers are attached to. If both plies are loaded, the screws shall be divided between the two plies, with the spacing on each side twice the minimum indicated.
9) Strongbacks shall be attached to each ply.
10) Center screw vertically on the 1-1/2" dimension of chords and webs. If splitting occurs, it may be necessary to pre-drill the holes in accordance with the NDS.
11) Install screws per manufacturer recommendations.

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: FL01 Job: QU02705_BUILDING J - Rev_1022202: Date: 10/24/25 12:13:25 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLYS	SPACING	WGT/PLY
16-6-0	0/12	1	0-0-0	0-0-0	1	19.19 in	75 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:	0.07 (12-13)	Vert TL:	0 in UP	L/999	14	L/240
TCDL: 10		TPI 1-2014	BC:	0.02 (15-16)	Vert LL:	0 in	L/999	14	L/360
BCLL: 0	Rep Mbr:	No	Web:	0.04 (1-26)	Horz TL:	0 in			
BCDL: 10	Lumber D.O.L.:	100 %							

10/24/2025

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024044263
PROFESSIONAL ENGINEER

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	154 lbs	101 plf	-	-	-	-	-5 lbs

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.

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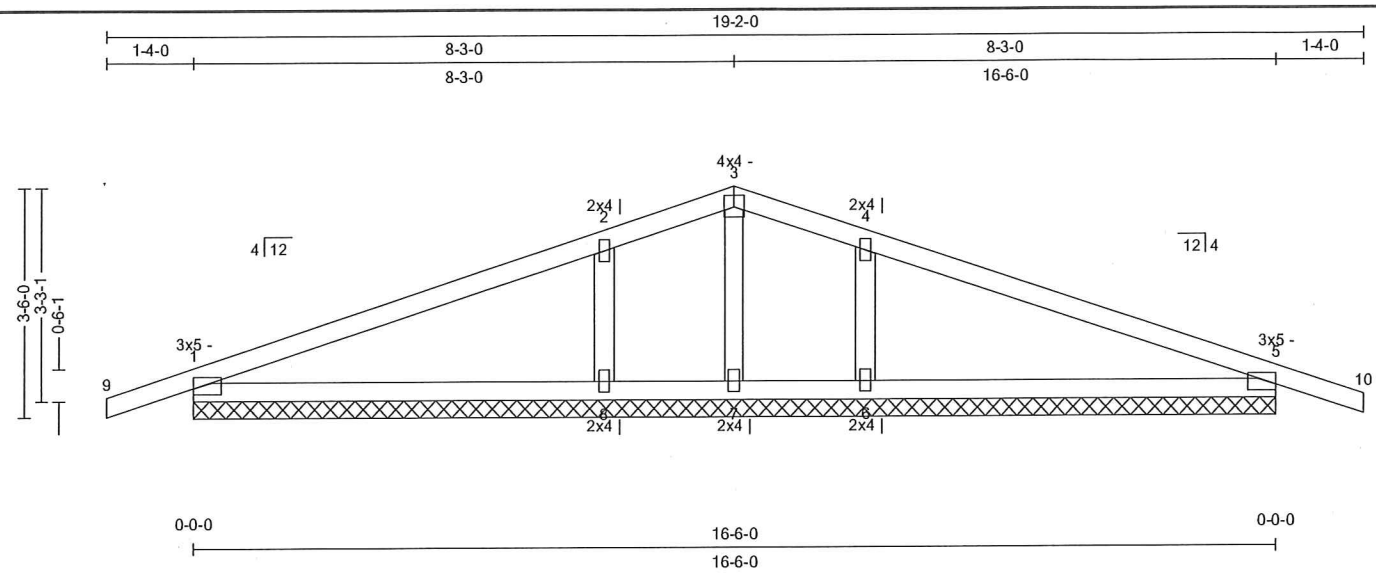
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: GE01 Job: QU02705_BUILDING J - Rev_102220[illegible] Date: 10/24/25 12:13:27 Page: 1 of 1

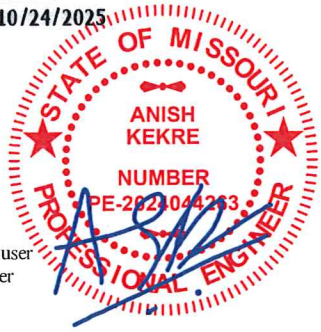
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
16-6-0	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	61 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC2018/	TC:	0.44 (4-5)	Vert TL:	0.04 in	L/999	(5-6)	L/240
TCDL: 15		TPI 1-2014	BC:	0.22 (6-7)	Vert LL:	0.02 in	L/999	(5-6)	L/360
BCLL: 10	Rep Mbr:	No	Web:	0.06 (4-6)	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	-	1,654 lbs	299 plf	-1,168 lbs	-179 lbs	-370 lbs	-1,168 lbs	937 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

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	0.438	1,399 lbs	(-353 lbs)					
	4-5	0.438	1,399 lbs	(-353 lbs)					
BC									
Web	2-8	0.057		(-407 lbs)	4-6	0.057		(-407 lbs)	

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) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 7, 5, 1 may need to be considered.
10) Listed wind uplift reactions based on MWFRS & C&C loading.

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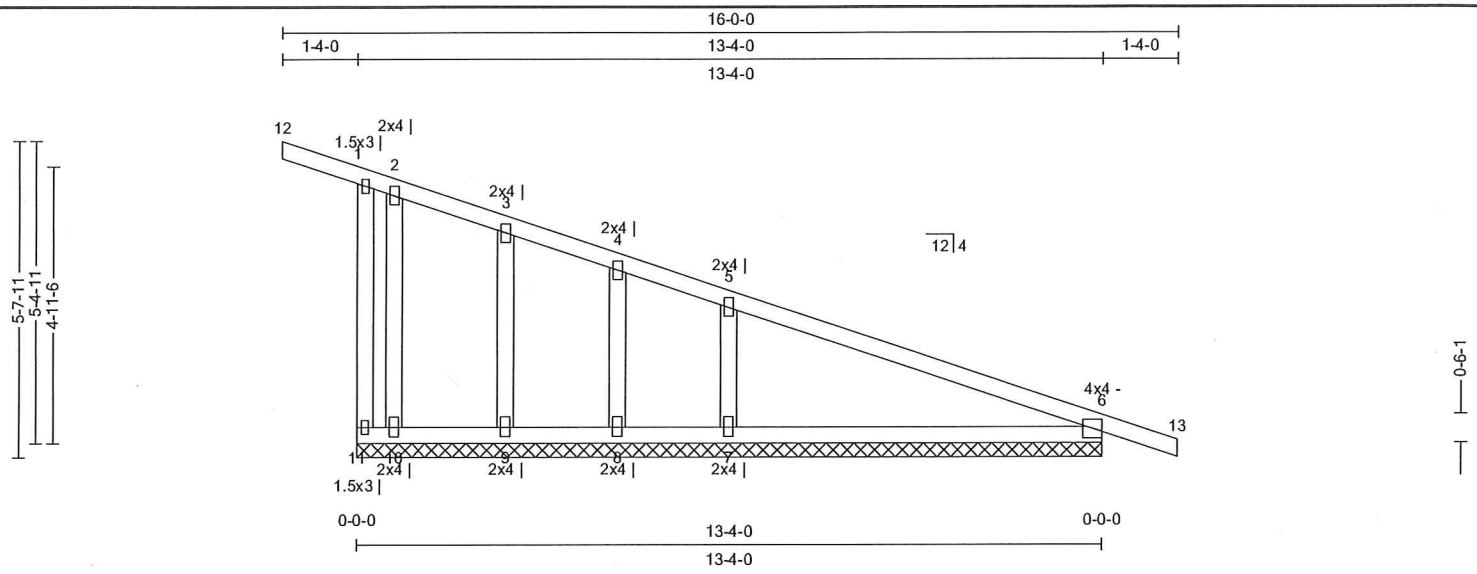
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: GE02 Job: QU02705_BUILDING J - Rev_102202 Date: 10/24/25 12:13:29 Page: 1 of 1

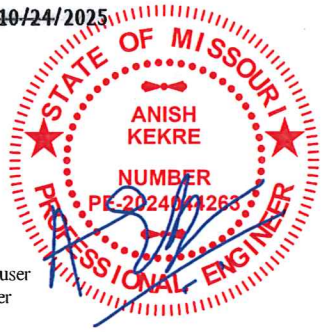
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-4-0	-4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	67 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC2018/	TC: 0.59 (5-6)	Vert TL: 0.05 in	L/999	(6-7)	L/240
TCDL: 15	TPI 1-2014	BC: 0.25 (6-7)	Vert LL: 0.03 in	L/999	(6-7)	L/360
BCLL: 10	Rep Mbr: No	Web: 0.23 (1-11)	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	-	1,980 lbs	283 plf	-1,492 lbs	-193 lbs	-688 lbs	-1,492 lbs	1,071 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

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	5-6	0.589	1,741 lbs	(-706 lbs)
BC				
Web	5-7	0.058		(-401 lbs)

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 20g a 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 8, 10, 6 may need to be considered.
10) Listed wind uplift reactions based on MWFRS & C&C loading.

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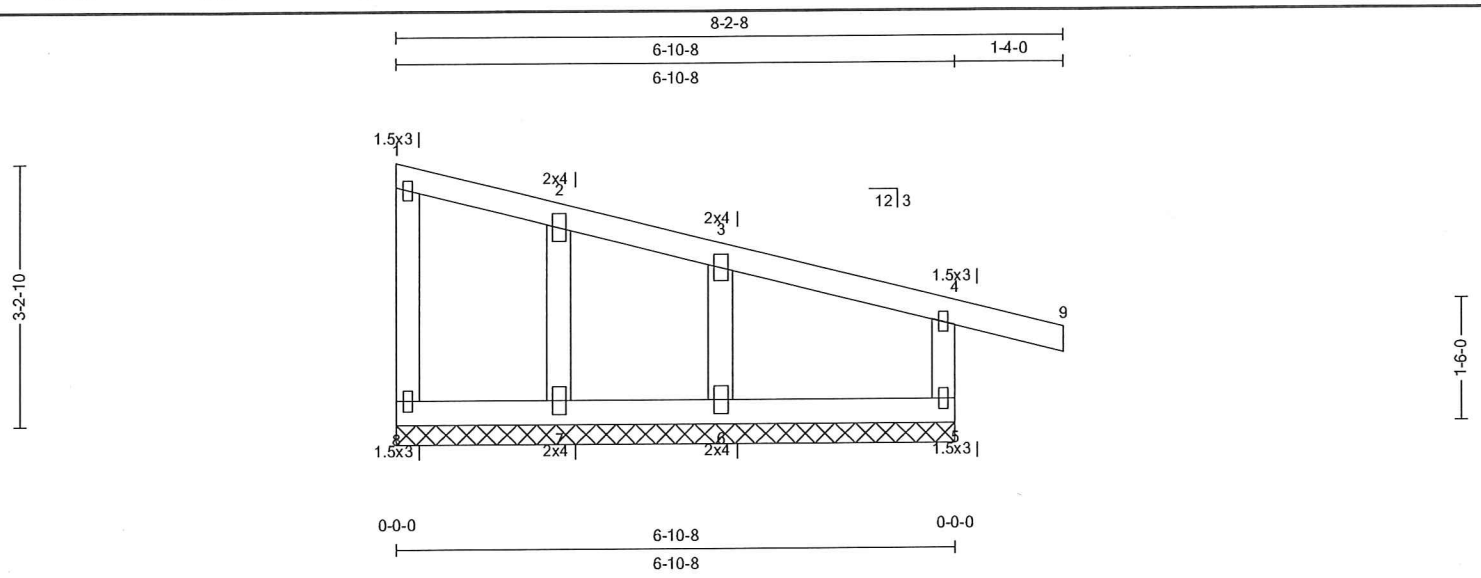
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: GE03 Job: QU02705_BUILDING J - Rev_102220(2: Date: 10/24/25 12:13:30 Page: 1 of 1

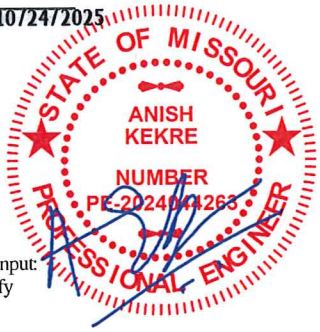
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
6-10-8	-3 /12	2	0-0-0	1-4-0	0-0-0	0-0-0	1	24 in	32 lbs



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 (4-9)	Vert TL:	0 in	L/999	(5-6)	L/240
TCDL: 15		TPI 1-2014	BC:	0.06 (6-7)	Vert LL:	0 in	L/999	(5-6)	L/360
BCLL: 10	Rep Mbr:	No	Web:	0.42 (4-5)	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	-	269 lbs	124 plf	-	-41 lbs	-215 lbs	-215 lbs	-172 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 (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 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

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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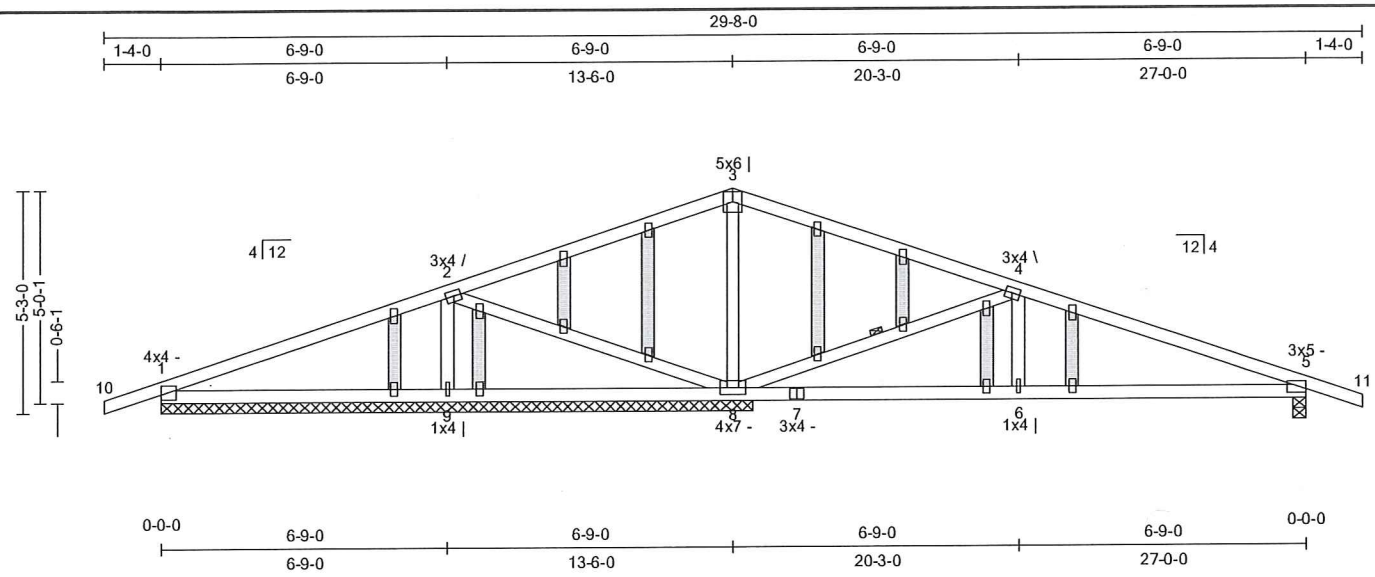
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:SGE01 Job: QU02705_BUILDING J - Rev_102220[illegible] Date: 10/24/25 12:13:32 Page: 1 of 2

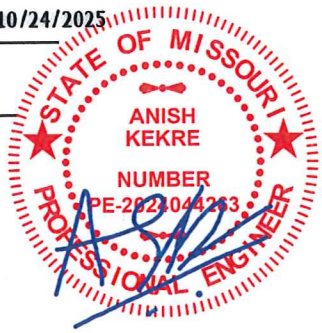
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
27-0-0	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	139 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC2018/	TC:	0.44 (3-4)	Vert TL:	0.14 in	L/999	(5-6)	L/240
TCDL: 15		TPI 1-2014	BC:	0.42 (5-6)	Vert LL:	0.06 in	L/999	(5-6)	L/360
BCLL: 10	Rep Mbr:	No	Web:	0.31 (4-8)	Horz TL:	0.02 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
5	1	3.5 in	1.50 in	806 lbs	·	-23 lbs	-144 lbs	-144 lbs	·
8	1	167.5 in	N/A	1,710 lbs	·	·	-170 lbs	-170 lbs	135 lbs
9	1	167.5 in	N/A	680 lbs	·	-11 lbs	-49 lbs	-49 lbs	·
1	1	167.5 in	N/A	24 lbs	-1,727 lbs	-208 lbs	-62 lbs	-1,727 lbs	-1,232 lbs
1	1	167.5 in	N/A	2,228 lbs	·	-43 lbs	-59 lbs	-59 lbs	1,126 lbs

Material

TC: SYP 2400/1.8 2 x 4
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.
Web: One Midpoint Row: 4-8

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) 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	0.388	2,019 lbs	3-4	0.435	475 lbs		
	2-3	0.422	476 lbs	4-5	0.322		(-1,055 lbs)	
BC	5-6	0.423	940 lbs	6-8	0.423	940 lbs		
Web	2-9	0.050	(-390 lbs)	4-8	0.310		(-1,405 lbs)	
	3-8	0.248	(-725 lbs)	4-6	0.071	426 lbs		

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20g a plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
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.

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	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:SGE01 Job: QU02705_BUILDING J - Rev_10222(2: Date: 10/24/25 12:13:33 Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
27-0-0	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	139 lbs

10) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
11) ☐ Indicates non-structural members.
12) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

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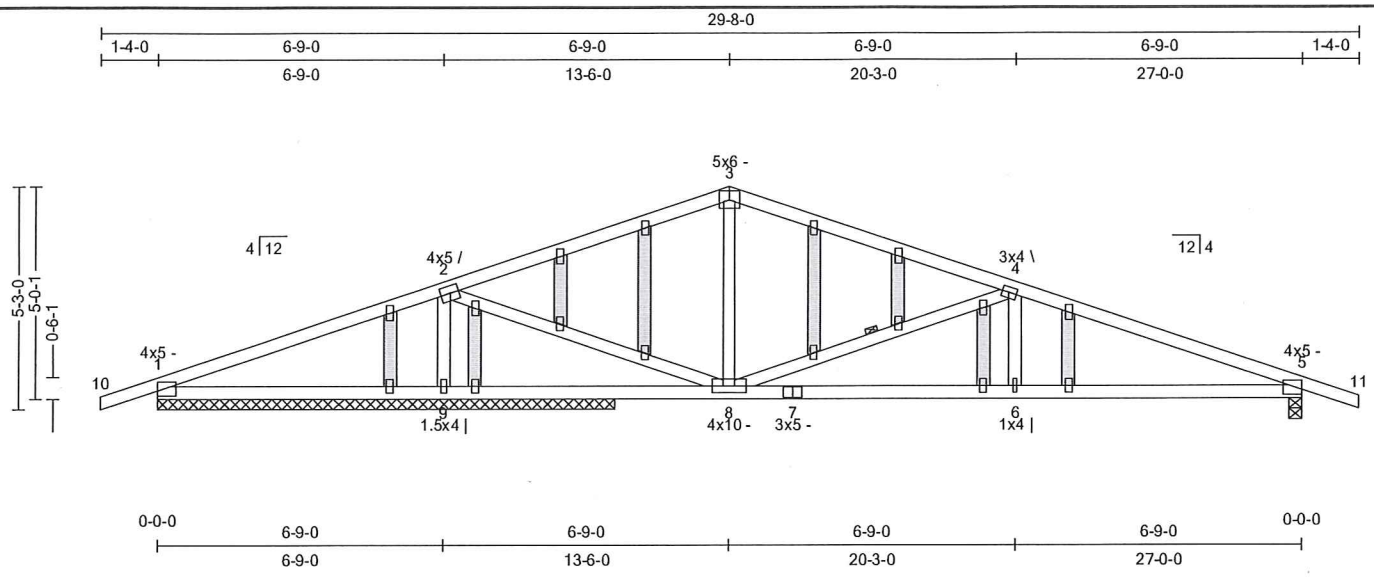
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: SGE02 Job: QU02705_BUILDING J - Rev_10222(2: Date: 10/24/25 12:13:34 Page: 1 of 2

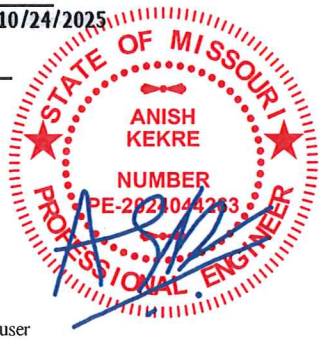
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
27-0-0	4 /12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	140 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC2018/	TC: 0.75 (1-2)	Vert TL: 0.23 in	L/815	(6-7)	L/240
TCDL: 15	TPI 1-2014	BC: 0.89 (6-8)	Vert LL: 0.1 in	L/999	(6-7)	L/360
BCLL: 10	Rep Mbr: No	Web: 0.30 (2-8)	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
5	1	3.5 in	1.55 in	1,310 lbs	·	-23 lbs	-198 lbs	-198 lbs	·
9	1	129.5 in	N/A	2,071 lbs	·	·	-176 lbs	-176 lbs	633 lbs
1	1	129.5 in	N/A	4 lbs	-2,291 lbs	-267 lbs	-35 lbs	-2,291 lbs	-1,562 lbs
1	1	129.5 in	N/A	2,607 lbs	·	-28 lbs	-76 lbs	-76 lbs	929 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 3-6-0, Purlin design by Others.
BC: Sheathed or Purlins at 7-4-0, Purlin design by Others.
Web: One Midpoint Row: 4-8

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) 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	0.754	2,586 lbs		3-4	0.511		(-1,195 lbs)			
	2-3	0.535		(-1,198 lbs)	4-5	0.478		(-2,479 lbs)			
BC	5-6	0.805	2,283 lbs		6-8	0.889	2,283 lbs		8-9	0.436	(-633 lbs)
Web	2-9	0.214		(-1,658 lbs)	4-8	0.286		(-1,297 lbs)			
	2-8	0.299	1,806 lbs		4-6	0.065	391 lbs				

Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable webs placed at 24 " OC, U.N.O.
3) Attach structural gable blocks with 2x4 20ga plates, U.N.O.
4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
5) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
6) Gable must be sheathed on one side or lateral bracing applied appropriately.
7) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
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.

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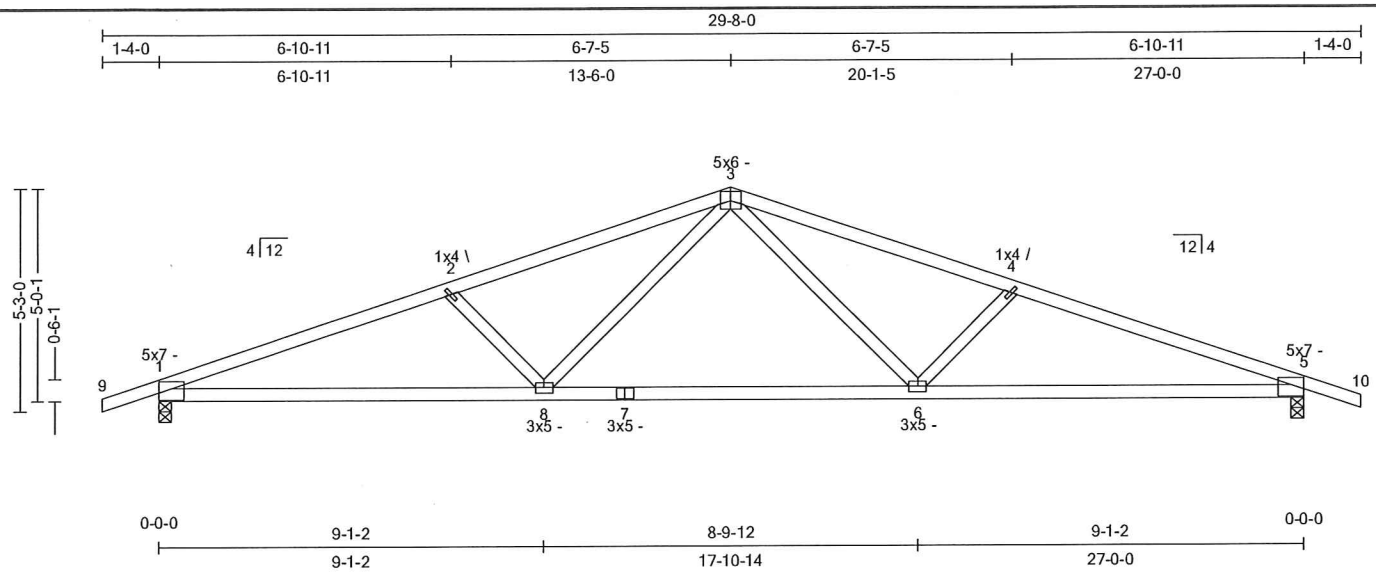
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
27-0-0	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	140 lbs

10) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
11) ☐ Indicates non-structural members.
12) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
13) Listed wind uplift reactions based on MWFRS & C&C loading.

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: T01 Job: QU02705_BUILDING J - Rev_10222(2: Date: 10/24/25 12:13:36 Page: 1 of 1

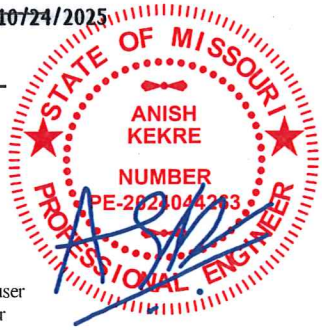
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
27-0-0	4/12	15	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	109 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC2018/	TC:	0.38 (4-5)	Vert TL:	0.58 in	L/549	(6-7)	L/240
TCDL: 15		TPI 1-2014	BC:	0.73 (8-1)	Vert LL:	0.25 in	L/999	(6-7)	L/360
BCLL: 10	Rep Mbr:	Yes	Web:	0.19 (3-8)	Horz TL:	0.11 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	3.5 in	1.53 in	1,848 lbs	·	-23 lbs	-242 lbs	-242 lbs	-6 lbs
5	1	3.5 in	1.53 in	1,848 lbs	·	-23 lbs	-242 lbs	-242 lbs	·

Material

TC: SYP 2400/1.8 2 x 4
BC: SYP 2400/1.8 2 x 4
Web: SYP #1 2 x 4

Bracing

TC: Sheathed or Purlins at 3-9-0, 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) 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	0.379	391 lbs	(-3,908 lbs)	3-4	0.345	370 lbs	(-3,572 lbs)						
	2-3	0.345	370 lbs	(-3,572 lbs)	4-5	0.379	391 lbs	(-3,908 lbs)						
BC	5-6	0.729	3,634 lbs		6-8	0.641	2,520 lbs		8-1	0.729	3,634 lbs			
Web	2-8	0.092		(-481 lbs)	3-8	0.195	1,174 lbs		3-6	0.195	1,174 lbs	4-6	0.092	(-481 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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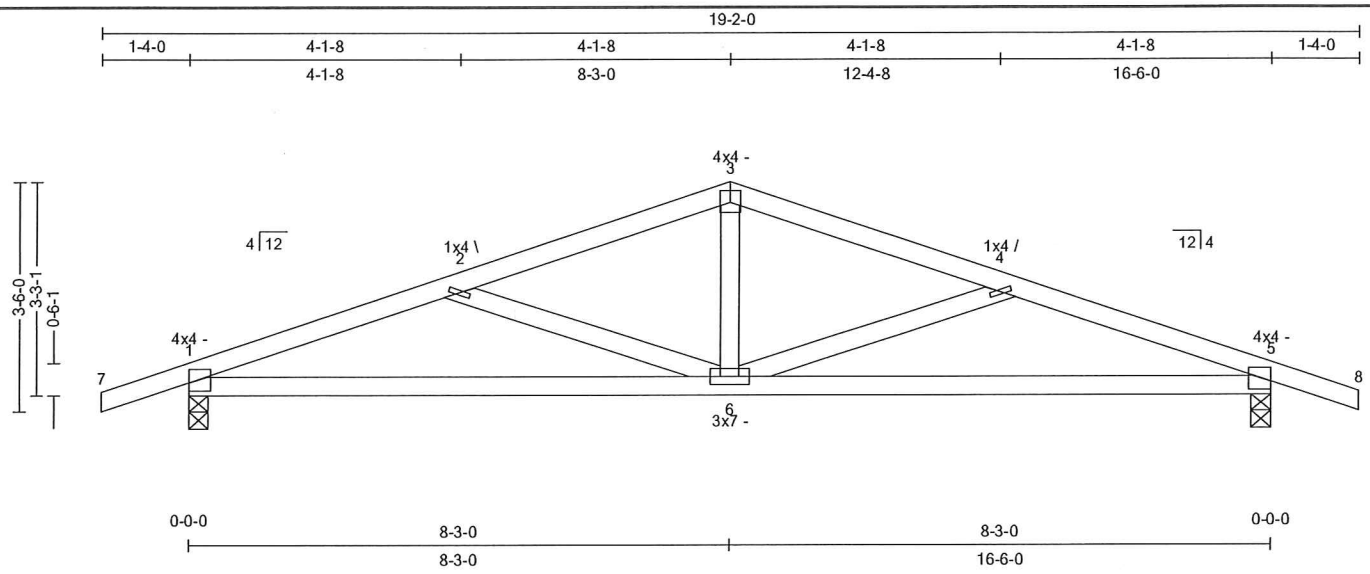
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: T02 Job: QU02705_BUILDING J - Rev_102202 Date: 10/24/25 12:13:38 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
16-6-0	4/12	4	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	68 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC2018/	TC:	0.24 (4-5)	Vert TL:	0.24 in	L/803	(5-6)	L/240
TCDL: 15		TPI 1-2014	BC:	0.90 (6-1)	Vert LL:	0.09 in	L/999	(5-6)	L/360
BCLL: 10	Rep Mbr:	Yes	Web:	0.14 (2-6)	Horz TL:	0.05 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	3.5 in	1.50 in	1,166 lbs	·	-21 lbs	-299 lbs	-299 lbs	-7 lbs
5	1	3.5 in	1.50 in	1,166 lbs	·	-21 lbs	-299 lbs	-299 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 4-3-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024044263
PROFESSIONAL ENGINEER

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) 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	0.240	490 lbs	(-2,146 lbs)	3-4	0.231	364 lbs	(-1,756 lbs)			
	2-3	0.231	364 lbs	(-1,756 lbs)	4-5	0.240	490 lbs	(-2,146 lbs)			
BC	5-6	0.904	1,995 lbs	(-359 lbs)	6-1	0.904	1,995 lbs	(-359 lbs)			
Web	2-6	0.137		(-442 lbs)	3-6	0.122	737 lbs		4-6	0.137	(-442 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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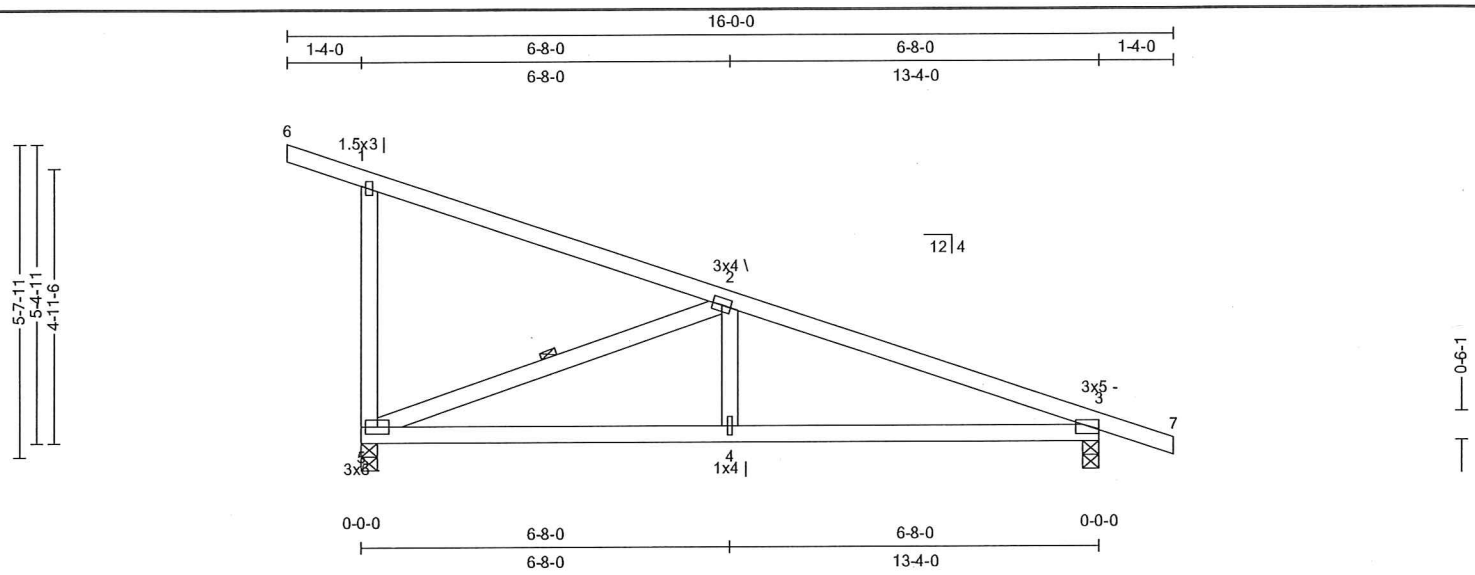
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: T03 Job: QU02705_BUILDING J - Rev_102220(2: Date: 10/24/25 12:13:40 Page: 1 of 1

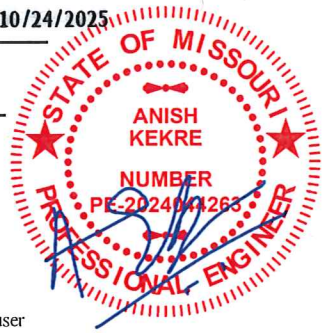
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-4-0	-4/12	2	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	60 lbs



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:	0.53 (1-2)	Vert TL:	0.18 in	L/835	(4-5)	L/240
TCDL: 15		TPI 1-2014	BC:	0.83 (3-4)	Vert LL:	0.07 in	L/999	(4-5)	L/360
BCLL: 10	Rep Mbr:	No	Web:	0.30 (2-5)	Horz TL:	0.03 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
5	1	3.5 in	1.50 in	971 lbs	·	-50 lbs	-350 lbs	-350 lbs	-183 lbs
3	1	3.5 in	1.50 in	949 lbs	·	·	-278 lbs	-278 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 4-8-0, Purlin design by Others.
BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.
Web: One Midpoint Row: 2-5

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) 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	0.527	(-1,503 lbs)								
BC	3-4	0.826	1,364 lbs	4-5	0.826	1,364 lbs					
Web	1-5	0.207	(-310 lbs)	2-5	0.305	408 lbs	(-1,456 lbs)	2-4	0.075	454 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) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
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) ☒ Indicates lateral bracing required perpendicular to the plane of the truss at either the midpoint (one shown) or third points (two shown), bracing by others. See BCSI-B3 for additional information.
8) Listed wind uplift reactions based on MWFRS & C&C loading.

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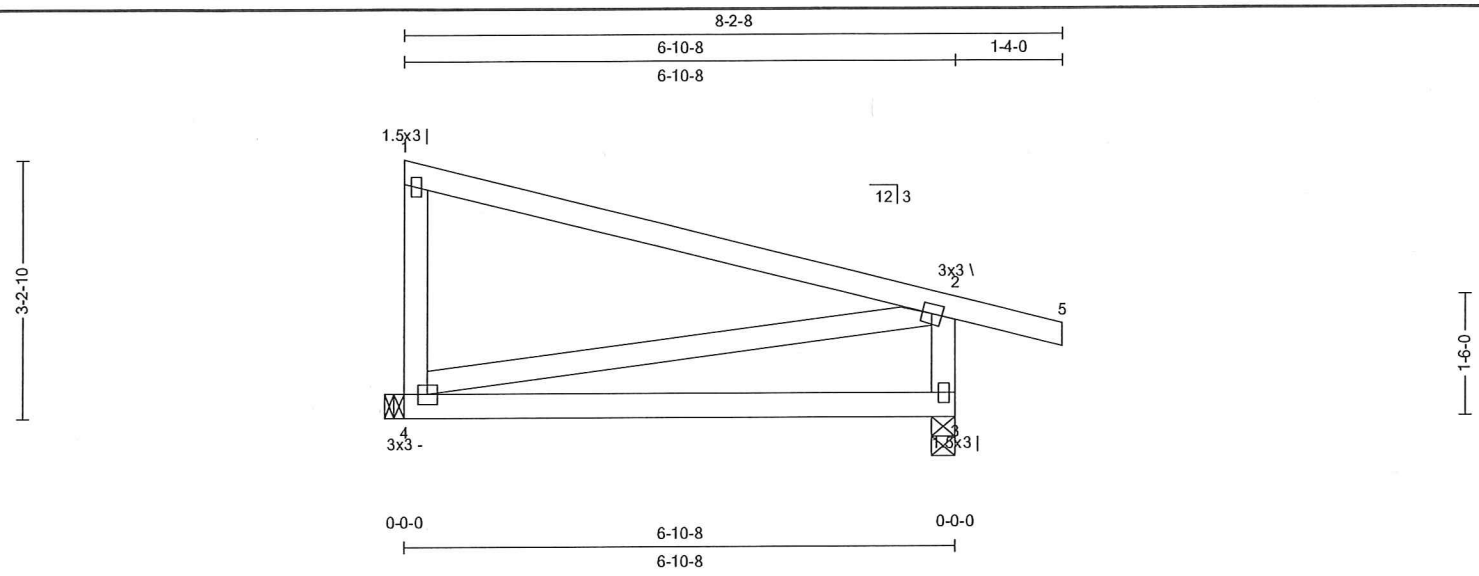
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: T04 Job: QU02705_BUILDING J - Rev_102220[illegible] Date: 10/24/25 12:13:41 Page: 1 of 1

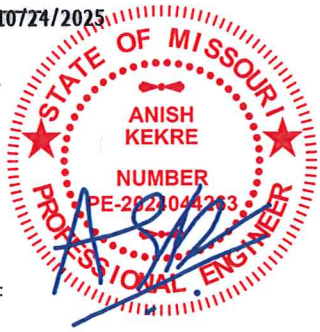
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
6-10-8	-3 /12	9	0-0-0	1-4-0	0-0-0	0-0-0	1	24 in	35 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC2018/	TC:	0.69 (1-2)	Vert TL:	0.3 in	L/251	(3-4)	L/240
TCDL: 15		TPI 1-2014	BC:	0.64 (3-4)	Vert LL:	0.1 in	L/752	(3-4)	L/360
BCLL: 10	Rep Mbr:	Yes	Web:	0.11 (1-4)	Horz TL:	0 in		4	
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
4	1	3.5 in	1.50 in	435 lbs	·	-18 lbs	-242 lbs	-242 lbs	·
3	1	3.5 in	1.50 in	552 lbs	·	-20 lbs	-353 lbs	-353 lbs	-130 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 (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 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) 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	0.064	394 lbs	(-345 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) 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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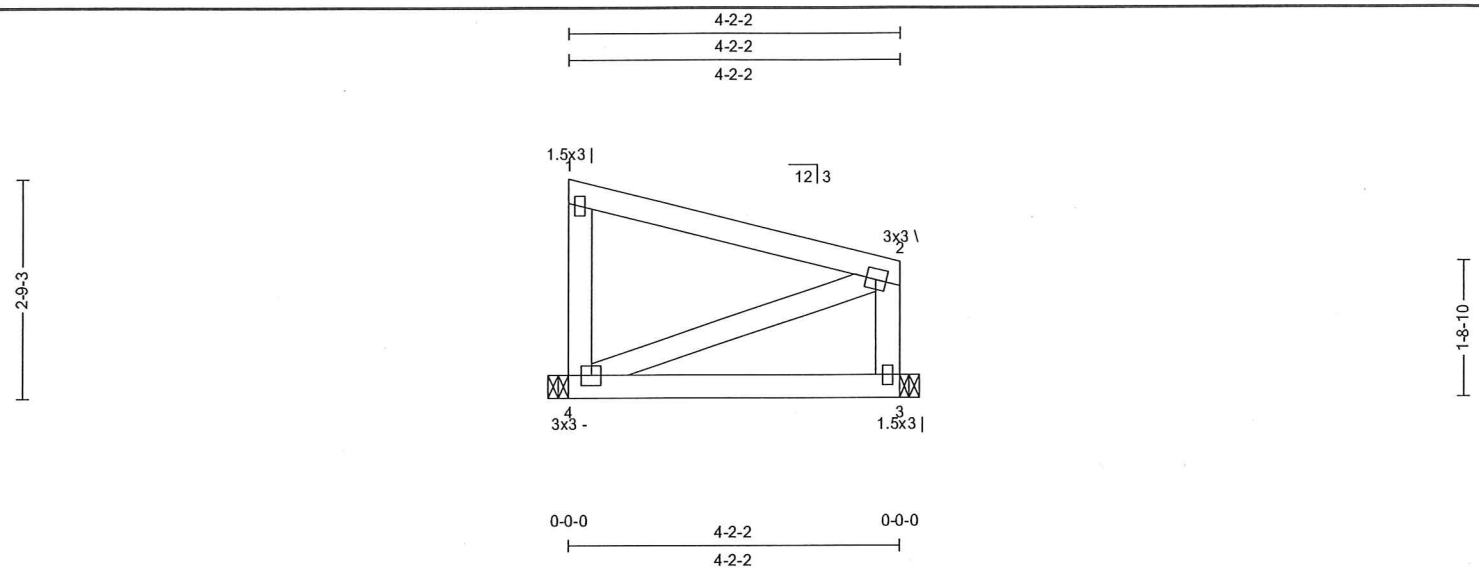
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss: T05 Job: QU02705_BUILDING J - Rev_10222(2: Date: 10/24/25 12:13:43 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
4-2-2	-3 /12	5	0-0-0	0-0-0	0-0-0	0-0-0	1	24 in	22 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC2018/	TC:	0.25 (1-2)	Vert TL:	0.04 in	L/999	(3-4)	L/240
TCDL: 15		TPI 1-2014	BC:	0.22 (3-4)	Vert LL:	0.01 in	L/999	(3-4)	L/360
BCLL: 10	Rep Mbr:	Yes	Web:	0.09 (1-4)	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
4	1	1.5 in	1.50 in	271 lbs	·	-17 lbs	-202 lbs	-202 lbs	-93 lbs
3	1	1.5 in	1.50 in	271 lbs	·	·	-136 lbs	-136 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.

STATE OF MISSOURI
ANISH KEKRE
NUMBER PE-2024044263
PROFESSIONAL ENGINEER

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

Member Forces

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

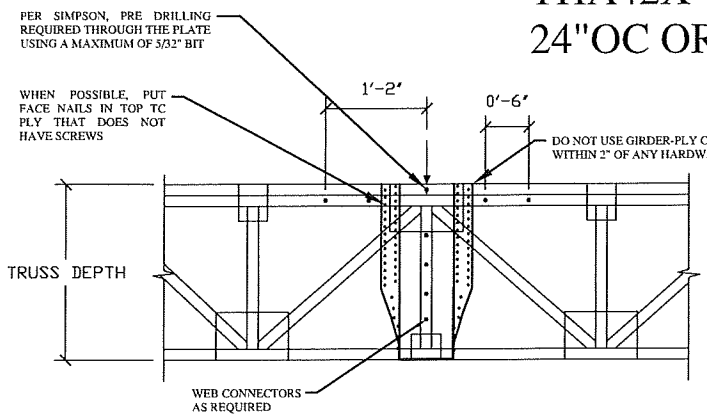
TC				
BC				
Web				

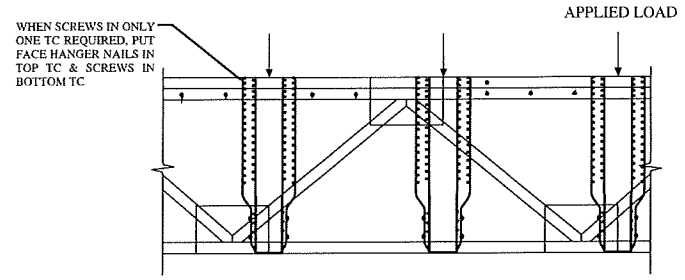
Notes

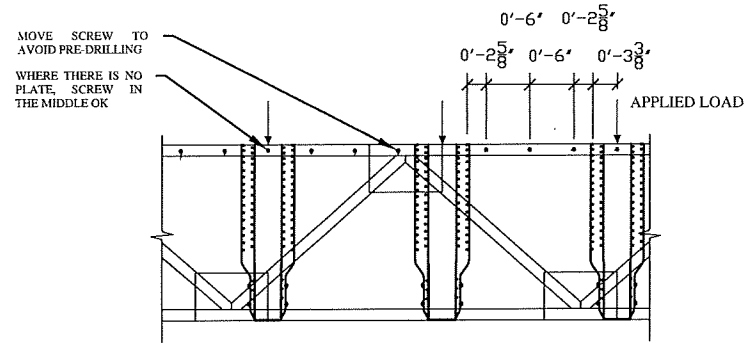
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
3) Nailing schedule shall be specified by truss manufacturer per NDS.
4) Brace bottom chord with approved 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.

TrueBuild® Truss Software v5.8.11
Eagle Metal Products

THA42X-2/THA4XX WITH TRUSSES @ 24"OC OR AN ISOLATED CONNECTION



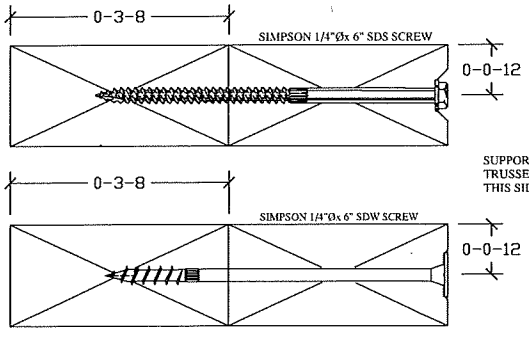




1. TO TRANSFER UNIFORM LOADS APPLIED TO SIMPLY SUPPORTED SPANS ON ASSEMBLY TOP CHORD:
   - 1.1. SPACE SCREWS AS REQUIRED TO TRANSFER HALF THE LOAD INTO THE SUPPORTING TRUSS.
   - 1.2. MINIMUM SCREW SPACING SHALL BE 4" O.C.
2. TO TRANSFER CONCENTRATED LOADS APPLIED TO SIMPLY SUPPORTED SPANS ON AN ASSEMBLY TOP CHORD OR VERTICAL WEB:
   - 2.1. CONCENTRATED LOADS MUST BE APPLIED AT THE PANEL JOINTS.
   - 2.2. SCREWS TO BE INSTALLED WITHIN 12" OF THE CONCENTRATED LOAD ON TOP-CHORD ASSEMBLY
3. GAP BETWEEN THE TRUSSES SHALL NOT EXCEED 1/8" O.C.
4. FLOOR SHEATHING SHALL BE SCREWED OR NAILED TO EACH TOP-CHORD PLY. (FASTENER SPACING PER THE APPLICABLE CODE REQUIREMENTS, OR 12" O.C.)
5. SDW SCREWS SHALL NOT BE INSTALLED IN AREAS WHERE LUMBER WANE EXCEEDS 1/4".
6. HANGERS ON SKEWED GIRDERS:
   - 6.1. HANGER LOADS NOT EXCEEDING 34" O.C. ON A SKEWED GIRDER (RESULTING FROM UNIFORMLY SPACED JOISTS UP TO 24" O.C.) MAY BE CONVERTED TO A UNIFORM LOAD.
   - 6.2. OR GIRDERS WITH HANGER LOAD SPACING IN EXCESS OF 34" O.C. THE LOADS SHALL BE CONSIDERED AS CONCENTRATED LOADS AT THE APPLICABLE LOCATIONS.
7. OTHER CONFIGURATIONS ACCEPTABLE AS LONG AS APPROVED BY TRUSS DESIGN ENGINEER.
8. CONNECTION HAS NO UP-LIFT CAPACITY

TRUSS DEPTH	TOTAL # SCREWS INTO TC (s)	AVAILABLE WEB SCREWS @ 4"OC	# WEB(S)	TOTAL SCREWS	SPF/HF CAPACITY	SP/DFL CAPACITY
1-0-0	3	1	0	3	1,200	1,680
1-0-0	3	1	1	4	1,600	2,240
1-0-0	3	1	2	5	2,000	2,800
1-0-0	3	1	3	6	2,400	3,360
1-0-0	6*	1	0	6*	2,400	3,360
1-2-0	3	1	0	3	1,200	1,680
1-2-0	3	1	1	4	1,600	2,240
1-2-0	3	1	2	5	2,000	2,800
1-2-0	3	1	3	6	2,400	3,360
1-2-0	6*	1	0	6*	2,400	3,360
1-4-0	3	2	0	3	1,200	1,680
1-4-0	3	2	1	5	2,000	2,800
1-4-0	3	2	2	7	2,800	3,920
1-4-0	6*	2	0	6*	2,400	3,360
1-6-0	3	3	0	3	1,200	1,680
1-6-0	3	3	1	6	2,400	3,360
1-6-0	6*	3	0	6*	2,800	3,360
1-8-0	3	3	0	3	1,200	1,680
1-8-0	3	3	1	6	2,400	3,360
1-8-0	6*	3	0	6*	2,400	3,360
1-10-0	3	3	0	3	1,200	1,680
1-10-0	3	3	1	6	2,400	3,360
1-10-0	6*	3	0	6*	2,400	3,360
2-0-0	3	4	0	3	1,200	1,680
2-0-0	3	4	1	7	2,800	3,920
2-0-0	6*	4	0	6*	2,400	3,360

* = DOUBLE TOP CHORD REQUIRED



EAGLE METAL

MULTI-PLY GIRDER CONNECTOR DETAIL

REV: 2.0	DRAWING NUMBER
ENG: MDV	DF-500
CAD: EEM	
DATE: 07/12/16	