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.

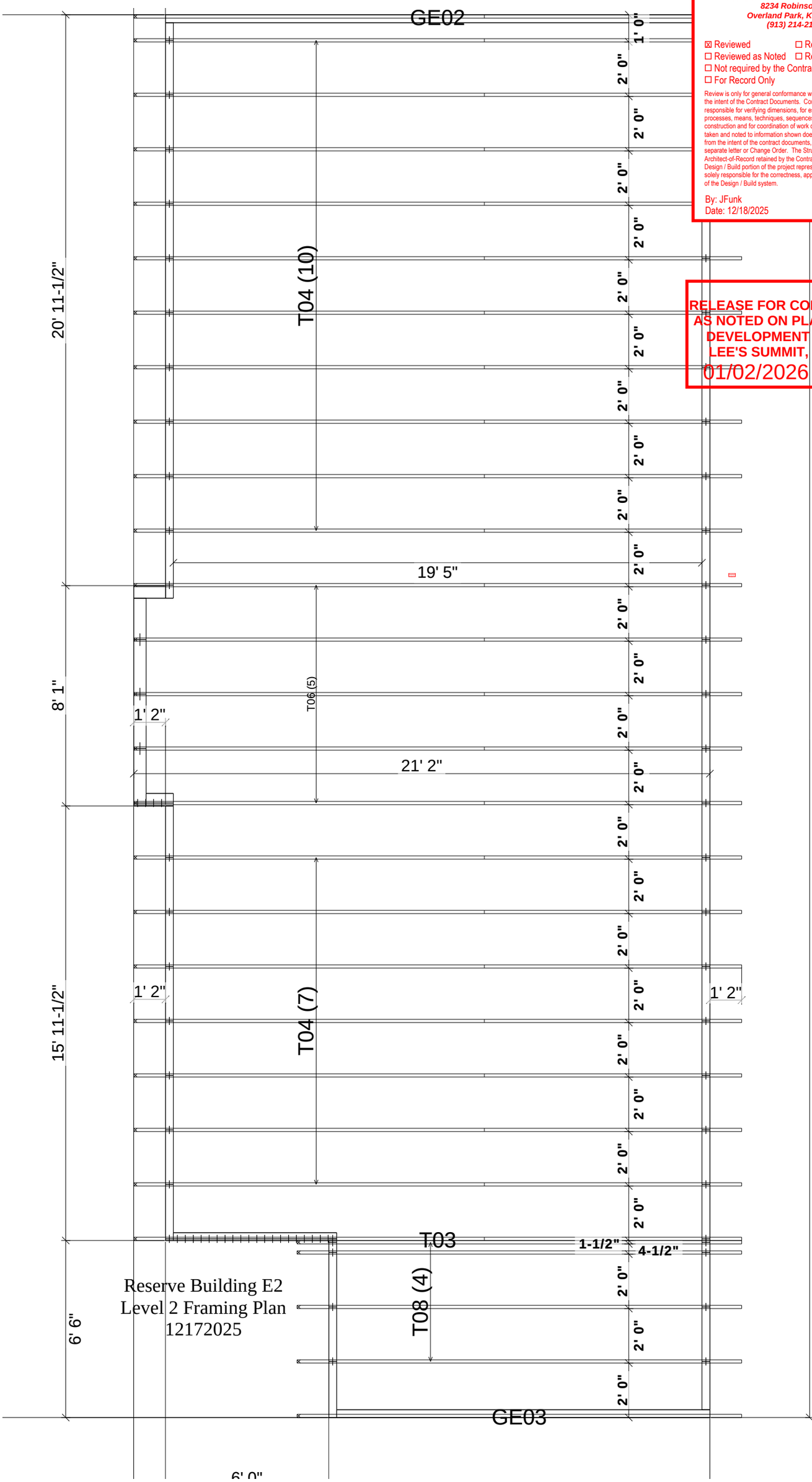
By: JFunk
Date: 12/18/2025

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/02/2026 9:18:45

Joe Frogge

RESERVE BUILDING E2
LEVEL 1 FRAMING
12172025

FL01
FL03
FL02
FG01
F05
F01 (13)
F01 (8)
F02 (3)
F03 (2)
F07 (3)
LVL-By_Other
G01
T01 (6)
T05
F07-Wall
GE01
Tension Fastener 800 lbs
43.36 lbs
3" 7"
10' 1-1/2"
9' 6-1/2"
5' 9-3/8"
10' 4"
15' 2-3/4"
20' 0"
20' 11-1/2"
8' 1"
11' 6-1/2"
13' 0"
53' 7"
3-1/2"
2' 0"
1' 8-1/2"
1' 7-3/16"
1' 4-1/4"
1' 2-1/4"
1' 10-1/2"
1' 9"
1' 3-1/8"
1' 8-3/8"
1' 5-3/4"
1' 11-3/16"
1' 3-3/16"
1' 8-7/16"
2' 0-1/2"
[Tie-Nut Typical]



Reserve Building E2
Level 2 Framing Plan
12172025

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By: JFunk
Date: 12/18/2025

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/02/2026 9:18:35

EAGLE METAL

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: **QU02688_RESERVE BLDG E2_REFRESHED_11212024** - 1254610
F01, F02, F03, F05, F07, F07-Wall, FG01, FL01, FL02, FL03, G01, GE01, GE02, GE03, LVL-By_Other, T01, T03, T04, T05, T06, T08

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

Please refer to individual truss designs for specific design criteria.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/02/2026 9:18:21

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

☒ Reviewed ☐ Revise and Resubmit
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☐ 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: 12/18/2025

Arturo A. Hernandez (MO, 2006000095)
My license expiration date for the state of MO is 12/31/2026.

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

DESIGN NOTES

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

DESIGN LIMITATIONS

3. The Truss Design Drawing is based upon specifications provided by the Building Designer in accordance with ANS1 / TPI 1. Neither the Truss Designer, Eagle, nor an engineer who seals this design (if any) assumes any responsibility for the adequacy or accuracy of specifications provided by the Building Designer.
4. The Building Designer is solely responsible for the suitability based upon the Truss Design Drawing and shall be responsible for reviewing and verifying that the information shown is in general conformance with the design of the Building.
5. Each Truss Design Drawing is for the individual building component (a truss). A seal on the Truss Design Drawing indicates acceptance of professional engineering responsibility solely for the individual truss.
6. Each Truss Design Drawing assumes trusses will be suitably protected from the environment.

HANDLING, INSTALLING, & BRACING

7. Refer to Building Component Safety Information (BCSI) for handling, installing, restraining and bracing trusses. Copies can be obtained from the Structural Building Components Association, www.sbcindustry.com.
8. Bracing shown on each Truss Design Drawing is for lateral support of individual truss components only to reduce buckling lengths. All temporary and permanent bracing, including lateral load and diagonal or cross bracing, are the responsibility, respectively, of the erector and Building Designer.
9. Eagle is not responsible for improper truss fabrication, handling, erection or bracing.
10. Compression chords shall be laterally braced by the roof or floor sheathing, directly attached, or have purlins provided at spacing shown, unless noted otherwise.
11. Bottom chord required bracing shall be at 1Oft spacing or less, if no structural rated ceiling is installed, unless noted otherwise.
12. Strongbacking shall be installed on all parallel chord trusses, including flooring systems, to limit deflection and reduce vibration. Refer to BCSI-B7.
13. Never exceed the design loading shown. Never stack building or other materials on inadequately braced truss; refer to BCSI.
14. Concentration of construction loads greater than the design loads shall not be applied to the trusses at any time; refer to BCSI.
15. Trusses shall be handled with care prior to erection to avoid damage. Refer to BCSI for recommended truss handling and erection.

MATERIALS & FABRICATION

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

OTHER NOTES

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

SYMBOLS

PLATE SIZE

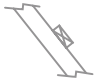
3X4 - The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

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

20 Ga Gr40 connectors required
3X10-20HS - 20 Ga Gr60 connectors required
8X10-18HS - 18 Ga Gr60 connectors required

LATERAL BRACING

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



BEARING

Indicates location where bearings (supports) occur.

PLATE LOCATION & ORIENTATION

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

REFERENCES

•**ANSI / TPI 1:** National Design Standard for Metal Plate Connected Wood Trusses

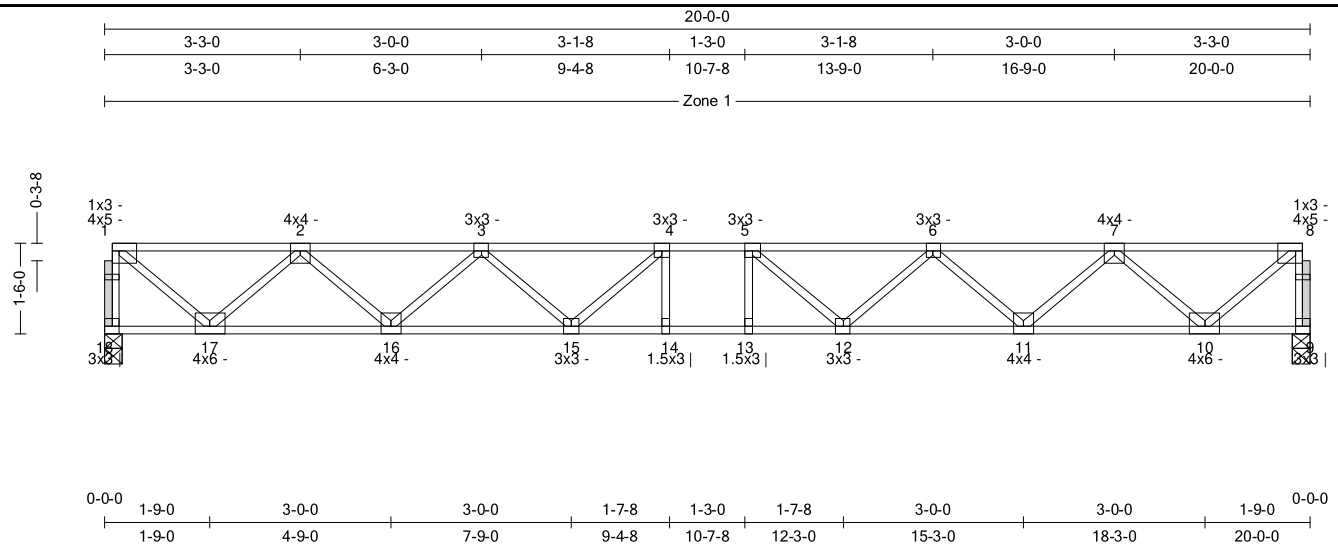
•**BCSI:** Building Component & Safety Information - Guide to Good Practice for Handling, Installing, Restraining, & Bracing of Metal Plate Connected Wood Trusses.

•**NDS:** National Design Specification for Wood Construction

•**ESR:** 1082 published by the International Code Council. www.icc-es.org

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F01 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:33 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
20-0-0	0/12	21	0-0-0	0-0-0	1	19.19 in	101 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL :	40	Bldg Code :	IBC 2018/	TC :	0.33 (3-4)	Vert TL:	0.32 in	L / 725	(13-14)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.44 (12-13)	Vert LL:	0.18 in	L / 999	(13-14)	L / 360
BCLL :	0	Rep Mbr :	Yes	Web :	0.25 (1-17)	Horz TL:	0.06 in		9	
BCDL :	10	Lumber D.O.L. :	100 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
18	1	3.5 in	1.50 in	1,119 lbs	·	·	·	·	·
9	1	3.5 in	1.50 in	1,119 lbs	·	·	·	·	·

12/17/2025

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

Material

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

Loads

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

Member Forces

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

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

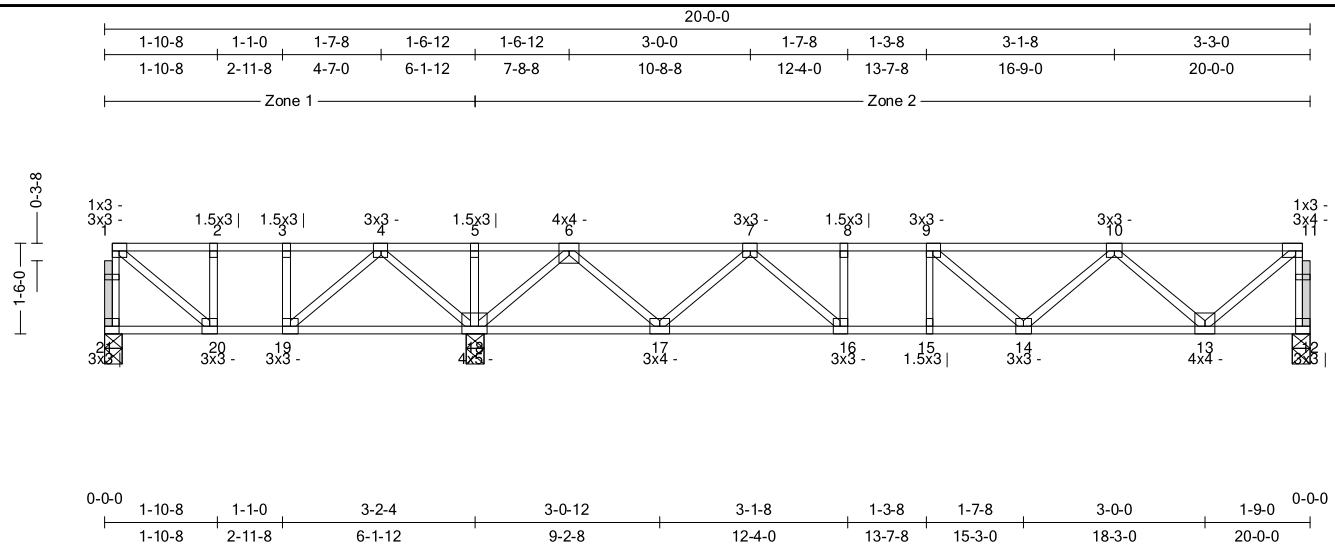
Notes

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

TrueBuild®Truss Software v5.8.14
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F02 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:35 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
20-0-0	0/12	3	0-0-0	0-0-0	1	19.19 in	103 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 40	Bldg Code:	IBC 2018/	TC:	0.24 (9-10)	Vert TL:	0.09 in	L / 999	(14-15)	L / 240
TCDL: 10		TPI 1-2014	BC:	0.28 (14-15)	Vert LL:	0.06 in	L / 999	(14-15)	L / 360
BCLL: 0	Rep Mbr:	Yes	Web:	0.15 (11-13)	Horz TL:	0.01 in		12	
BCDL: 10	Lumber D.O.L.:	100 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
18	1	3.5 in	1.50 in	1,356 lbs	·	·	·	·	·
21	1	3.5 in	1.50 in	222 lbs	-19 lbs	·	·	-19 lbs	·
12	1	3.5 in	1.50 in	708 lbs	·	·	·	·	·

12/17/2025

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

Material

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

Loads

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

Member Forces

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

TC	4-5	0.103	716 lbs		7-8	0.149		(-1,540 lbs)	10-11	0.224	(-665 lbs)
	5-6	0.207	716 lbs		8-9	0.143		(-1,540 lbs)			
	6-7	0.143		(-732 lbs)	9-10	0.235		(-1,440 lbs)			
BC	13-14	0.157	1,217 lbs		16-17	0.221	1,233 lbs				
	14-15	0.282	1,540 lbs		18-19	0.077		(-302 lbs)			
	15-16	0.282	1,540 lbs								
Web	4-19	0.073	438 lbs		7-16	0.083	434 lbs				
	4-18	0.073		(-599 lbs)	10-14	0.050	303 lbs				
	6-18	0.138		(-1,139 lbs)	10-13	0.094		(-749 lbs)			
	6-17	0.133	805 lbs		11-13	0.147	886 lbs				
	7-17	0.083		(-679 lbs)	11-12	0.074		(-686 lbs)			

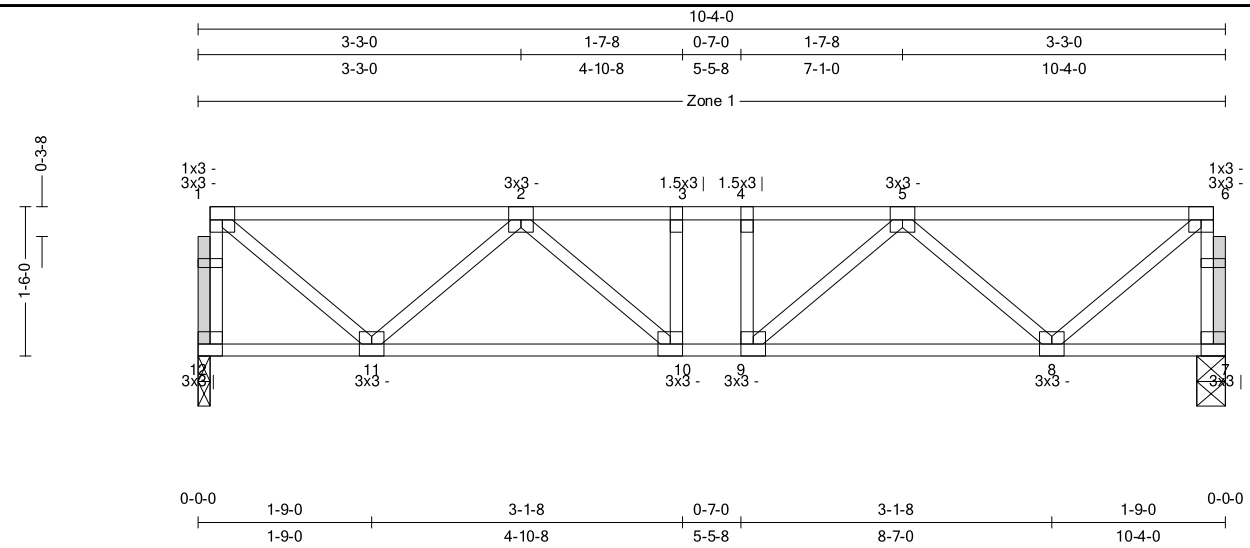
Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
4) A creep factor of 2.00 has been applied for this truss analysis.
5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
6) ▭ Indicates non-structural members.
7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 21 may need to be considered.

TrueBuild®Truss Software v5.8.14
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F03 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:57 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
10-4-0	0/12	2	0-0-0	0-0-0	1	19.19 in	56 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 :	0.24 (5-6)	Vert TL:	0.04 in	L / 999	(8-9)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.14 (9-10)	Vert LL:	0.02 in	L / 999	(9-10)	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.11 (1-11)	Horz TL:	0.01 in		7	
BCDL :	10	Lumber D.O.L. :	100 %							

12/17/2025

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

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
12	1	1.5 in	1.50 in	578 lbs	·	·	·	·	·
7	1	3.5 in	1.50 in	578 lbs	·	·	·	·	·

Material

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

Loads

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

Member Forces

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

TC	1-2	0.235		(-513 lbs)	3-4	0.087		(-1,030 lbs)	5-6	0.235	(-513 lbs)
	2-3	0.196		(-1,030 lbs)	4-5	0.196		(-1,030 lbs)			
BC	8-9	0.136	911 lbs		10-11	0.136	911 lbs				
	9-10	0.142	1,030 lbs								
Web	1-12	0.060		(-559 lbs)	5-8	0.067		(-540 lbs)			
	1-11	0.113	683 lbs		6-8	0.113	683 lbs				
	2-11	0.067		(-540 lbs)	6-7	0.060		(-559 lbs)			

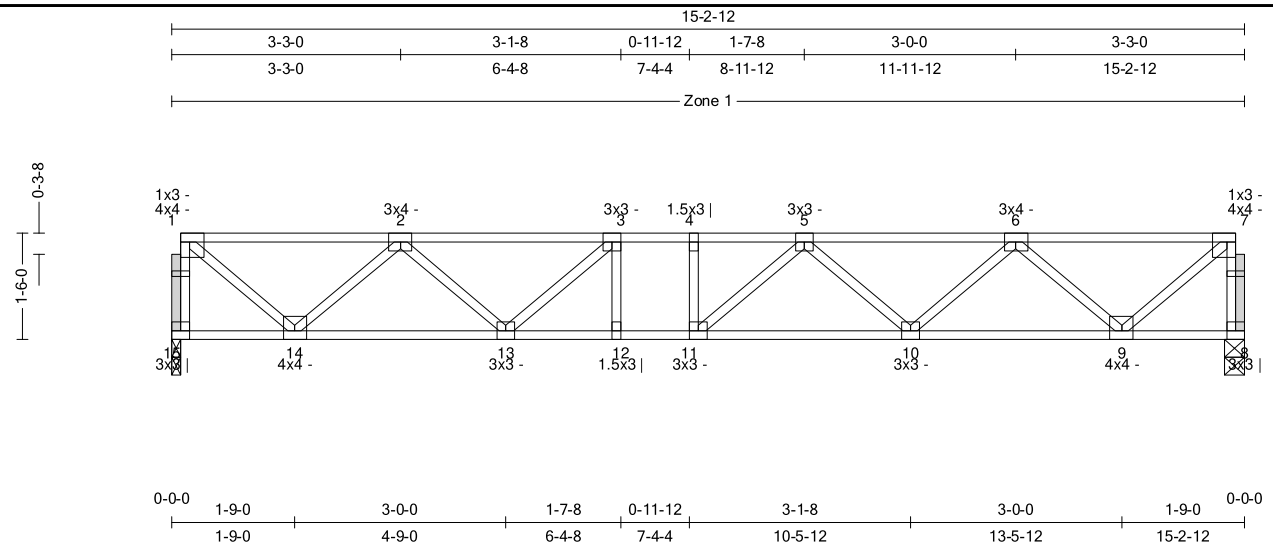
Notes

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 v5.8.14
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F05 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:58 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
15-2-12	0/12	1	0-0-0	0-0-0	1	19.19 in	79 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL :	40	Bldg Code :	IBC 2018/	TC :	0.42 (2-3)	Vert TL:	0.15 in	L / 999	(10-11)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.54 (11-12)	Vert LL:	0.08 in	L / 999	(10-11)	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.18 (1-14)	Horz TL:	0.03 in		8	
BCDL :	10	Lumber D.O.L. :	100 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
15	1	1.5 in	1.50 in	852 lbs	·	·	·	·	·
8	1	3.5 in	1.50 in	852 lbs	·	·	·	·	·

12/17/2025

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

Material

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

Loads

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

Member Forces

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

TC	1-2	0.408		(-827 lbs)	3-4	0.259		(-2,250 lbs)	5-6	0.416	(-1,930 lbs)
	2-3	0.424		(-1,921 lbs)	4-5	0.322		(-2,250 lbs)	6-7	0.399	(-825 lbs)
BC	9-10	0.386	1,532 lbs		11-12	0.536	2,250 lbs		13-14	0.351	1,528 lbs
	10-11	0.498	2,206 lbs		12-13	0.536	2,250 lbs				
Web	1-15	0.089		(-833 lbs)	3-13	0.059		(-439 lbs)	7-9	0.182	1,098 lbs
	1-14	0.183	1,102 lbs		5-10	0.047		(-375 lbs)	7-8	0.088	(-830 lbs)
	2-14	0.115		(-950 lbs)	6-10	0.089	539 lbs				
	2-13	0.088	533 lbs		6-9	0.117		(-960 lbs)			

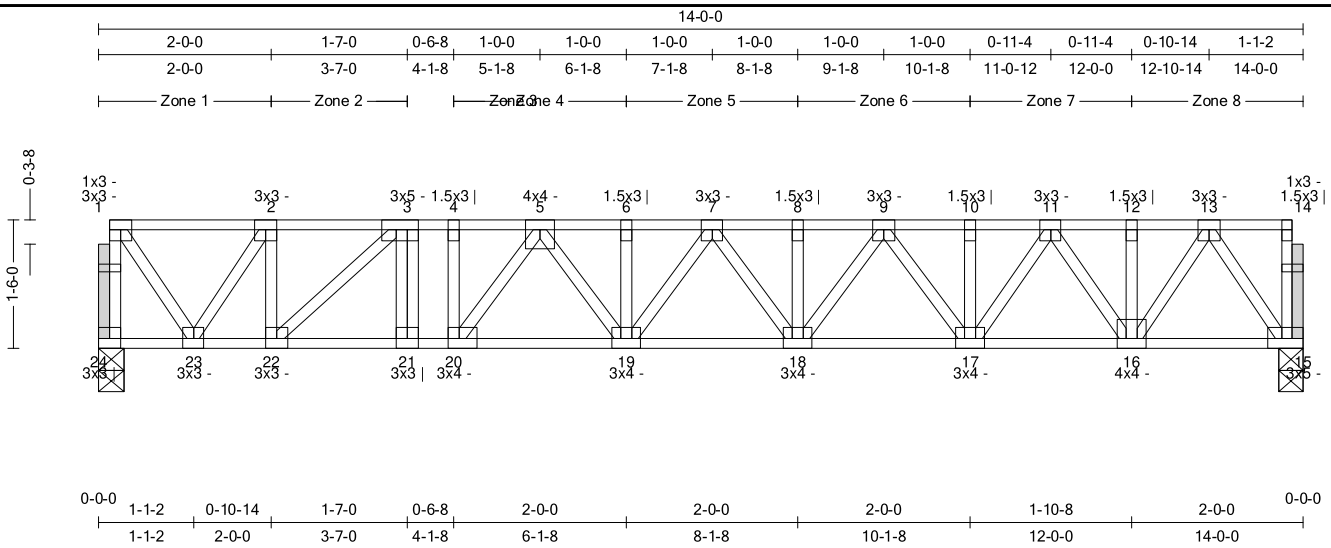
Notes

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 v5.8.14
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:F07-Wall Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:37 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
14-0-0	0/12	1	0-0-0	0-0-0	1	19.19 in	91 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 :	0.30 (4-5)	Vert TL:	0.07 in	L / 999	(19-20)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.29 (20-21)	Vert LL:	0.05 in	L / 999	(19-20)	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.10 (3-22)	Horz TL:	0.01 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	294 lbs	-266 lbs	·	·	-266 lbs	·
15	1	3.5 in	1.50 in	690 lbs	·	·	·	·	·

12/17/2025

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

Material

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

Loads

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

Load Case D1: Std Dead Load

Point Loads

Member	Location	Direction	Load	Trib Width
Top	2-0-0	Down	43 lbs	
Top	3-7-0	Up	800 lbs	
Top	4-1-8	Down	43 lbs	
Top	6-1-8	Down	43 lbs	
Top	8-1-8	Down	43 lbs	
Top	14-0-0	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	0.255	406 lbs		6-7	0.091		(-1,070 lbs)	10-11	0.098		(-1,151 lbs)
	3-4	0.300	772 lbs	(-303 lbs)	7-8	0.110		(-1,298 lbs)	11-12	0.060		(-710 lbs)
	4-5	0.300	772 lbs	(-303 lbs)	8-9	0.110		(-1,298 lbs)	12-13	0.060		(-710 lbs)
	5-6	0.091		(-1,070 lbs)	9-10	0.098		(-1,151 lbs)				
BC	15-16	0.060	383 lbs		18-19	0.182	1,218 lbs		21-22	0.290	303 lbs	(-772 lbs)
	16-17	0.109	958 lbs		19-20	0.256	771 lbs	(-490 lbs)	22-23	0.080		(-406 lbs)
	17-18	0.139	1,256 lbs		20-21	0.290	303 lbs	(-772 lbs)				
Web	1-23	0.048		(-349 lbs)	5-20	0.093		(-796 lbs)				
	2-23	0.082	390 lbs		5-19	0.089	509 lbs					
	2-22	0.048		(-355 lbs)	11-17	0.057	343 lbs					
	3-22	0.103	485 lbs		11-16	0.049		(-440 lbs)				
	3-21	0.032	378 lbs		13-16	0.098	595 lbs					
	4-20	0.062	365 lbs		13-15	0.077		(-696 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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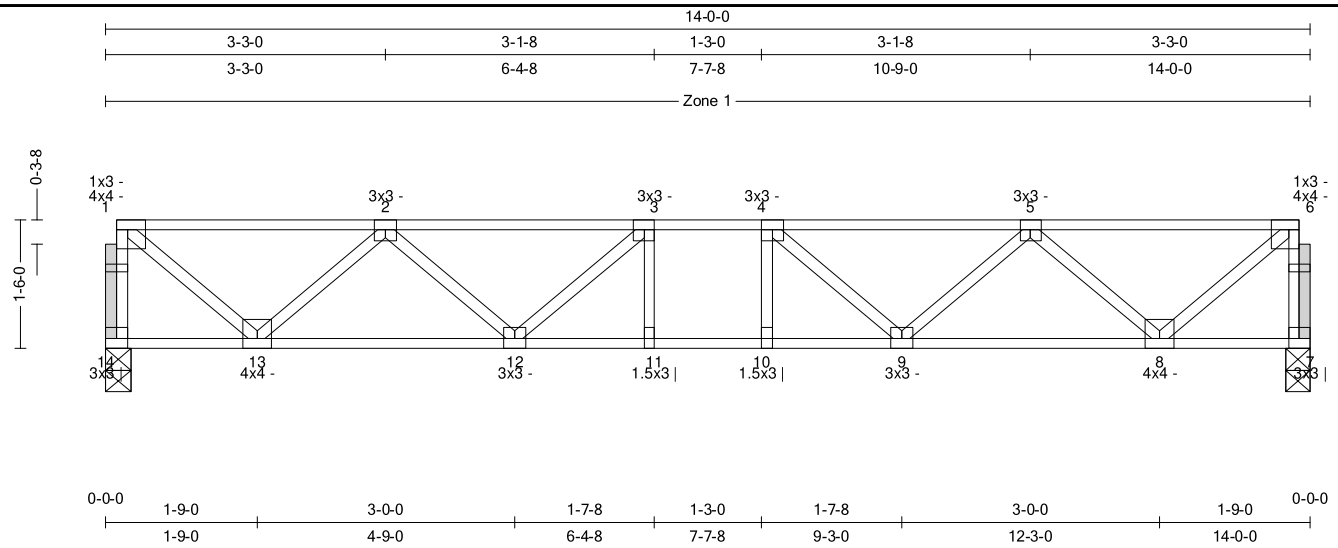
SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
14-0-0	0/12	1	0-0-0	0-0-0	1	19.19 in	91 lbs

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 24 may need to be considered.

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

Truss:F07
Job: QU02688_RESERVE BLDG E2_REFR
Date: 12/17/25 09:51:38
Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
14-0-0	0/12	3	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 :	IBC 2018/	TC :	0.23 (2-3)	Vert TL:	0.08 in	L / 999	(10-11)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.25 (10-11)	Vert LL:	0.05 in	L / 999	(9-10)	L / 360
BCLL :	0	Rep Mbr :	Yes	Web :	0.17 (1-13)	Horz TL:	0.02 in		7	
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
14	1	3.5 in	1.50 in	783 lbs	·	·	·	·	·
7	1	3.5 in	1.50 in	783 lbs	·	·	·	·	·

12/17/2025
STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

Material

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

Loads

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

Member Forces

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

TC	1-2	0.220		(-750 lbs)	3-4	0.150		(-1,916 lbs)	5-6	0.220		(-750 lbs)		
	2-3	0.228		(-1,689 lbs)	4-5	0.228		(-1,689 lbs)						
BC	8-9	0.158	1,379 lbs		10-11	0.255	1,916 lbs		12-13	0.158	1,379 lbs			
	9-10	0.255	1,916 lbs		11-12	0.255	1,916 lbs							
Web	1-14	0.081		(-763 lbs)	2-12	0.070	420 lbs		5-9	0.070	420 lbs		6-7	0.081	(-763 lbs)
	1-13	0.166	1,000 lbs		3-12	0.048		(-352 lbs)	5-8	0.103		(-853 lbs)		
	2-13	0.103		(-853 lbs)	4-9	0.048		(-352 lbs)	6-8	0.166	1,000 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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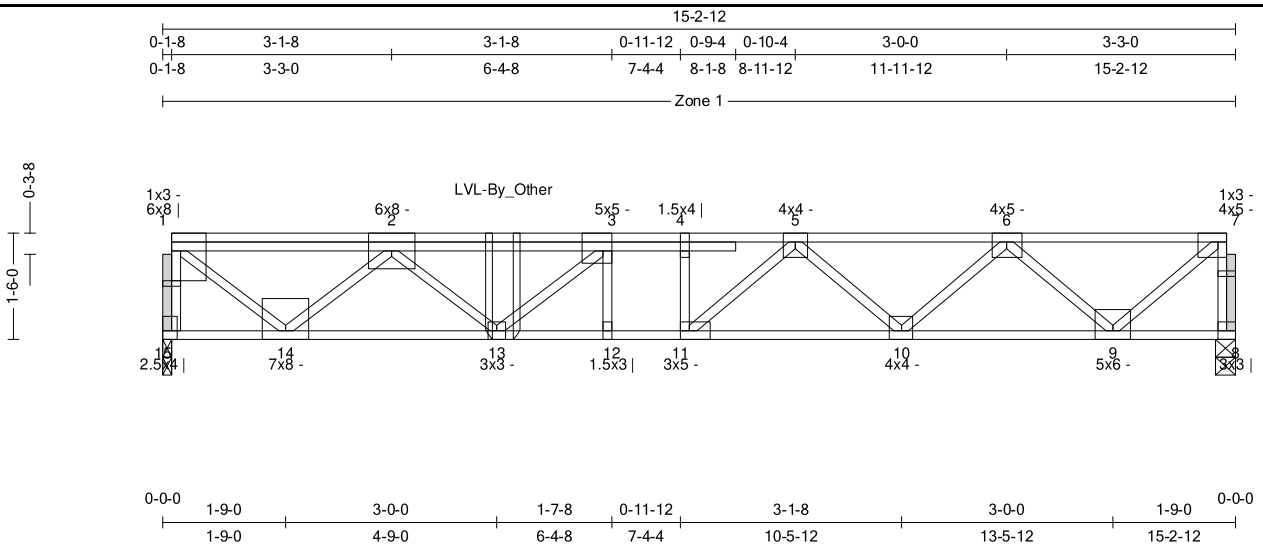
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FG01 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:52:01 Page: 1 of 2

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
15-2-12	0/12	1	0-0-0	0-0-0	1	36.94 in	93 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)		Bldg Code :	IBC 2018/	TC :	0.59 (2-3)	Vert TL:	0.19 in	L / 920	(12-13)	L / 240
TCLL :	40		TPI 1-2014	BC :	0.68 (11-12)	Vert LL:	0.12 in	L / 999	(12-13)	L / 360
TCDL :	10	Rep Mbr :	No	Web :	0.41 (1-14)	Horz TL:	0.05 in		8	
BCLL :	0	Lumber D.O.L. :	100 %							
BCDL :	10									

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
15	1	1.5 in	1.50 in	1,671 lbs	·	·	·	·	·
8	1	3.5 in	1.50 in	1,126 lbs	·	·	·	·	·

12/17/2025

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

Material

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

Loads

1) This truss has been designed for the effects of (psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case L1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	15-2-12	Down	Proj	33.96 plf	33.96 plf	
Top	0-0-0	4-10-0	Down	Proj	89.17 plf	89.17 plf	
Top	4-10-0	15-2-12	Down	Proj	31.98 plf	31.98 plf	

Load Case D1: Std Dead Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	15-2-12	Down	Proj	8.49 plf	8.49 plf	
Top	0-0-0	4-10-0	Down	Proj	22.29 plf	22.29 plf	
Top	4-10-0	15-2-12	Down	Proj	7.99 plf	7.99 plf	
Bot	0-0-0	15-2-12	Down	Proj	8.49 plf	8.49 plf	
Bot	0-0-0	4-10-0	Down	Proj	22.29 plf	22.29 plf	
Bot	4-10-0	15-2-12	Down	Proj	7.99 plf	7.99 plf	

Member Forces

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

TC	1-2	0.294		(-1,746 lbs)	3-4	0.182		(-3,985 lbs)	5-6	0.314	(-2,792 lbs)
	2-3	0.585		(-3,726 lbs)	4-5	0.377		(-3,992 lbs)	6-7	0.265	(-1,135 lbs)
BC	9-10	0.252	2,127 lbs		11-12	0.676	3,985 lbs		13-14	0.408	3,246 lbs
	10-11	0.507	3,367 lbs		12-13	0.676	3,985 lbs				
Web	1-15	0.183		(-1,630 lbs)	3-13	0.057		(-427 lbs)	6-10	0.156	902 lbs
	1-14	0.406	2,280 lbs		4-11	0.044		(-366 lbs)	6-9	0.171	(-1,346 lbs)
	2-14	0.263		(-1,993 lbs)	5-11	0.159	834 lbs		7-9	0.260	1,512 lbs
	2-13	0.106	638 lbs		5-10	0.105		(-781 lbs)	7-8	0.123	(-1,105 lbs)

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

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Eagle Metal Products

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
15-2-12	0/12	1	0-0-0	0-0-0	1	36.94 in	93 lbs

Truss to Truss Connection Summary

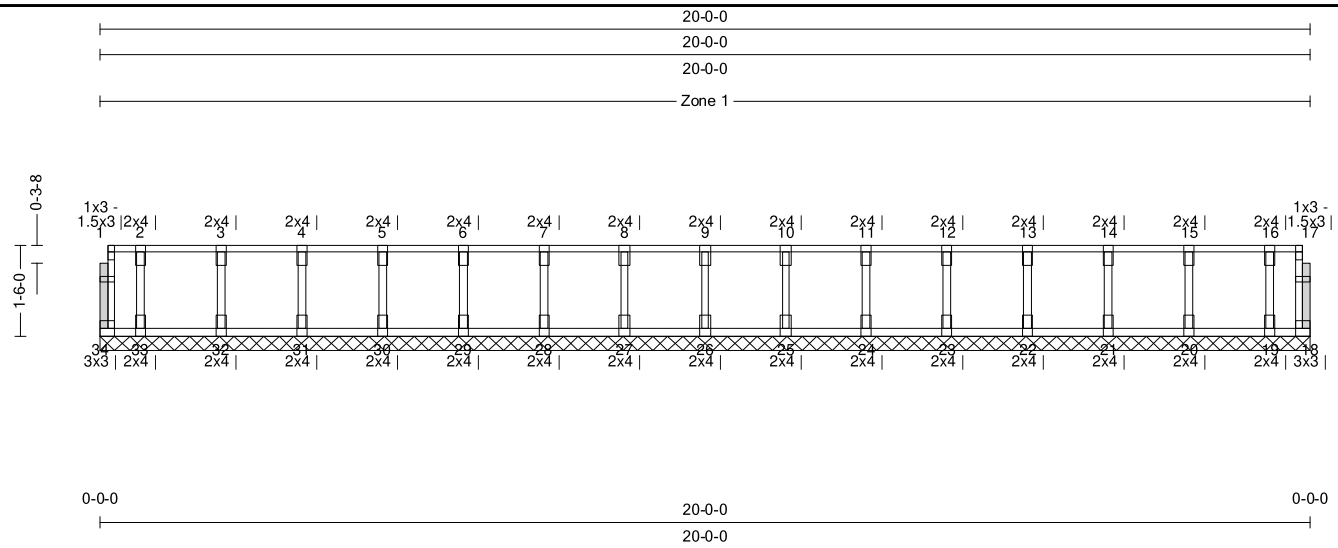
Carried Truss	Carrying Chord	Carrying Offset
LVL-By_Other	TC	4-10-0

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:FL01 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:41 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
20-0-0	0/12	1	0-0-0	0-0-0	1	19.19 in	92 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL : 40	Bldg Code :	IBC 2018/	TC :	0.06 (3-4)	Vert TL:	0 in	L / 999	18	L / 240
TCDL : 10		TPI 1-2014	BC :	0.02 (19-20)	Vert LL:	0 in	L / 999	18	L / 360
BCLL : 0	Rep Mbr :	No	Web :	0.01 (3-32)	Horz TL:	0 in			
BCDL : 10	Lumber D.O.L. :	100 %							

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	·	142 lbs	101 plf	-7 lbs	·	·	-7 lbs	·

12/17/2025

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

Material

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

Member Forces

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

TC
BC
Web

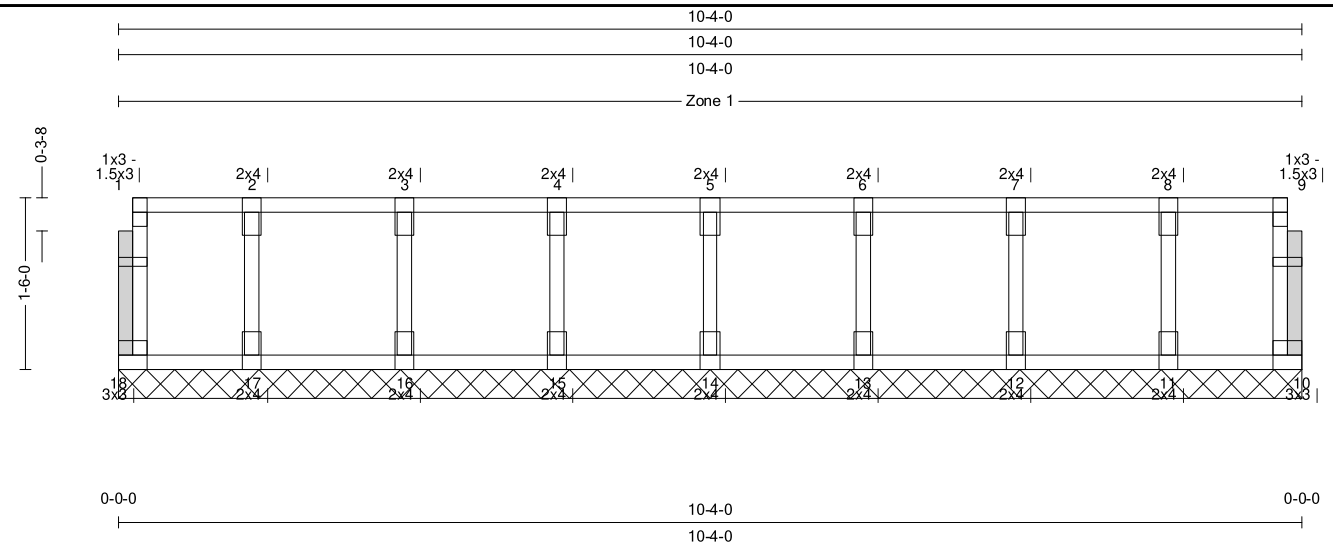
Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) Gable requires continuous bottom chord bearing.
4) Continuous bearing knee-wall/ladder floor trusses are not designed for any loads from levels above. Additional blocking, by others, may be required in order to transfer loads.
5) Gable webs placed at 16 " OC, U.N.O.
6) Attach gable webs with 2x4 20ga plates, U.N.O.
7) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
8) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
9) A creep factor of 2.00 has been applied for this truss analysis.
10) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
11) ▭ Indicates non-structural members.
12) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 18, 34 may need to be considered.

TrueBuild®Truss Software v5.8.14
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FL02 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:42 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
10-4-0	0/12	1	0-0-0	0-0-0	1	19.19 in	49 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL : 40	Bldg Code :	IBC 2018/	TC :	0.06 (6-7)	Vert TL:	0 in UP	L / 999	10	L / 240
TCDL : 10		TPI 1-2014	BC :	0.02 (15-16)	Vert LL:	0 in	L / 999	10	L / 360
BCLL : 0	Rep Mbr :	No	Web :	0.01 (3-16)	Horz TL:	0 in			
BCDL : 10	Lumber D.O.L. :	100 %							

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	139 lbs	102 plf	-	-	-	-	2 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	

12/17/2025

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

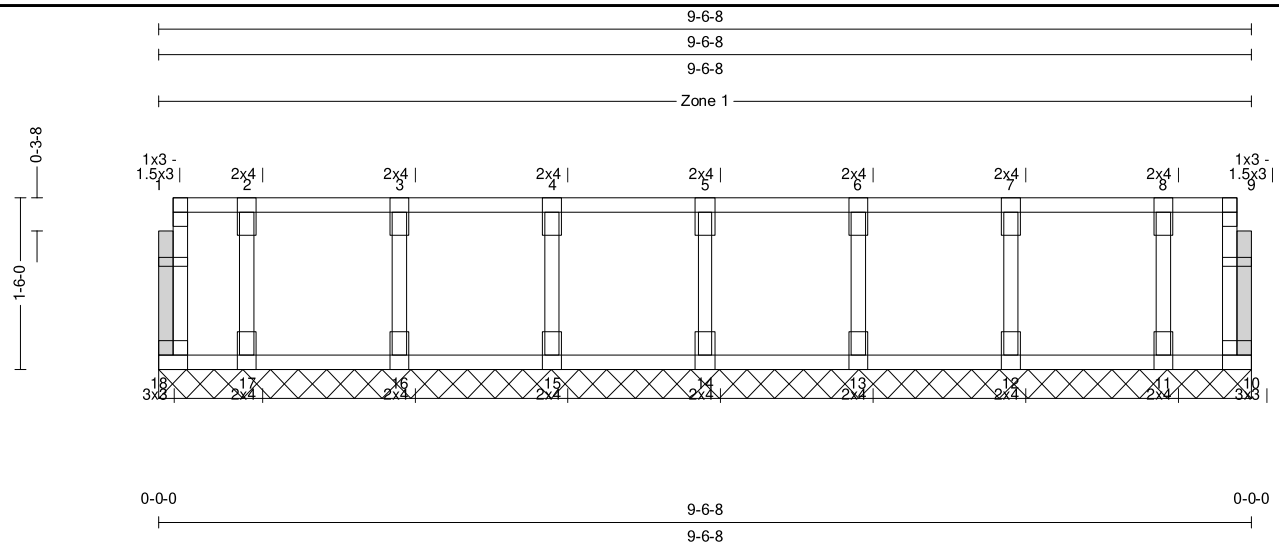
Notes

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

TrueBuild®Truss Software v5.8.14
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:FL03 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:44 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	PLY(S)	SPACING	WGT/PLY
9-6-8	0/12	1	0-0-0	0-0-0	1	19.19 in	47 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL :	40	Bldg Code :	IBC 2018/	TC :	0.06 (6-7)	Vert TL:	0 in	L / 999	10	L / 240
TCDL :	10		TPI 1-2014	BC :	0.02 (11-12)	Vert LL:	0 in	L / 999	10	L / 360
BCLL :	0	Rep Mbr :	No	Web :	0.01 (3-16)	Horz TL:	0 in			
BCDL :	10	Lumber D.O.L. :	100 %							

12/17/2025

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	142 lbs	104 plf	-2 lbs	-	-	-2 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		

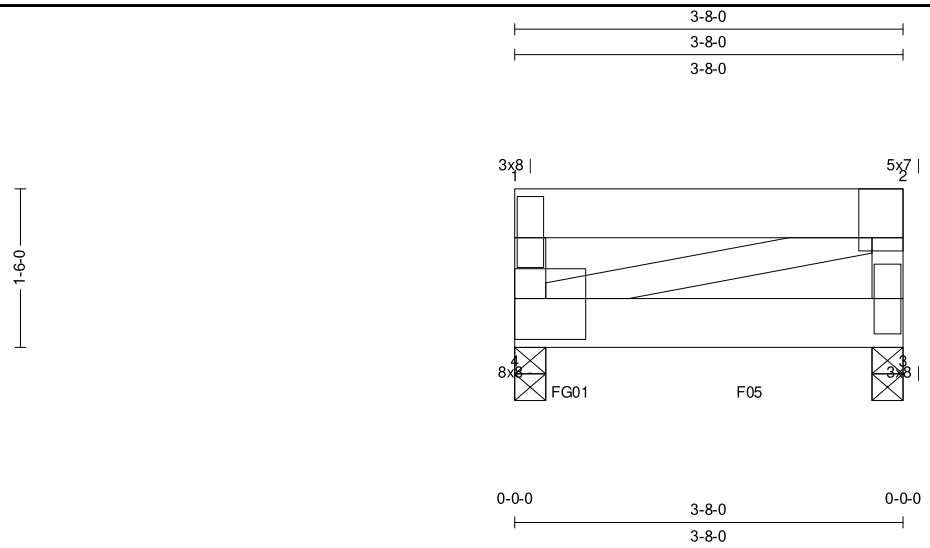
Notes

1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable requires continuous bottom chord bearing.
3) Continuous bearing knee-wall/ladder floor trusses are not designed for any loads from levels above. Additional blocking, by others, may be required in order to transfer loads.
4) Gable webs placed at 16 " OC, U.N.O.
5) Attach gable webs with 2x4 20ga plates, U.N.O.
6) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
7) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
8) A creep factor of 2.00 has been applied for this truss analysis.
9) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
10) ▭ Indicates non-structural members.
11) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 10, 18 may need to be considered.

TrueBuild®Truss Software v5.8.14
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:G01 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:52:02 Page: 1 of 2

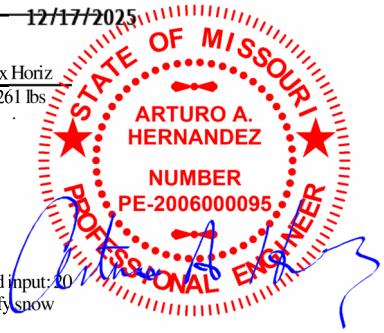
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
3-8-0	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	124.8 in	25 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
Carried Loads (psf)	Bldg Code :	IBC 2018/	TC :	0.75 (1-2)	Vert TL:	0.04 in	L / 921	(3-4)	L / 240
TCLL : 40		TPI 1-2014	BC :	0.67 (3-4)	Vert LL:	0.02 in	L / 999	(3-4)	L / 360
TCDL : 10	Rep Mbr :	No	Web :	0.17 (2-3)	Horz TL:	0 in		3	
BCLL : 0	Lumber D.O.L. :	115 %							
BCDL : 10									

12/17/2025



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	3.20 in	2,712 lbs	·	·	-326 lbs	-326 lbs	-261 lbs
3	1	3.5 in	1.71 in	1,452 lbs	·	-95 lbs	-622 lbs	-622 lbs	·

Material

TC: SYP#1 2 x 6
BC: SYP#1 2 x 6
Web: SYP#1 2 x 4

Bracing

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

Loads

1) This truss has been designed for the effects of balanced (20 psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Load Case Lr1: Std Live Load

Distributed Loads

Member	Location 1	Location 2	Direction	Spread	Start Load	End Load	Trib Width
Top	0-0-0	0-3-8	Down	Proj	43.75 plf	43.75 plf	
Top	0-3-8	3-8-0	Down	Proj	112.92 plf	112.92 plf	
Top	0-0-0	0-4-8	Down	Proj	97.92 plf	97.92 plf	
Top	0-4-8	3-8-0	Down	Proj	302.92 plf	302.92 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	0-3-8	Down	Proj	10.94 plf	10.94 plf	
Top	0-3-8	3-8-0	Down	Proj	28.23 plf	28.23 plf	
Top	0-0-0	0-4-8	Down	Proj	24.48 plf	24.48 plf	
Top	0-4-8	3-8-0	Down	Proj	75.73 plf	75.73 plf	
Bot	0-0-0	0-3-8	Down	Proj	10.94 plf	10.94 plf	
Bot	0-3-8	3-8-0	Down	Proj	28.23 plf	28.23 plf	

Member Forces

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

TC								
BC								
Web	1-4	0.163	720 lbs	(-833 lbs)	2-3	0.165	742 lbs	(-952 lbs)

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Eagle Metal Products

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
3-8-0	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	124.8 in	25 lbs

Truss to Truss Connection Summary

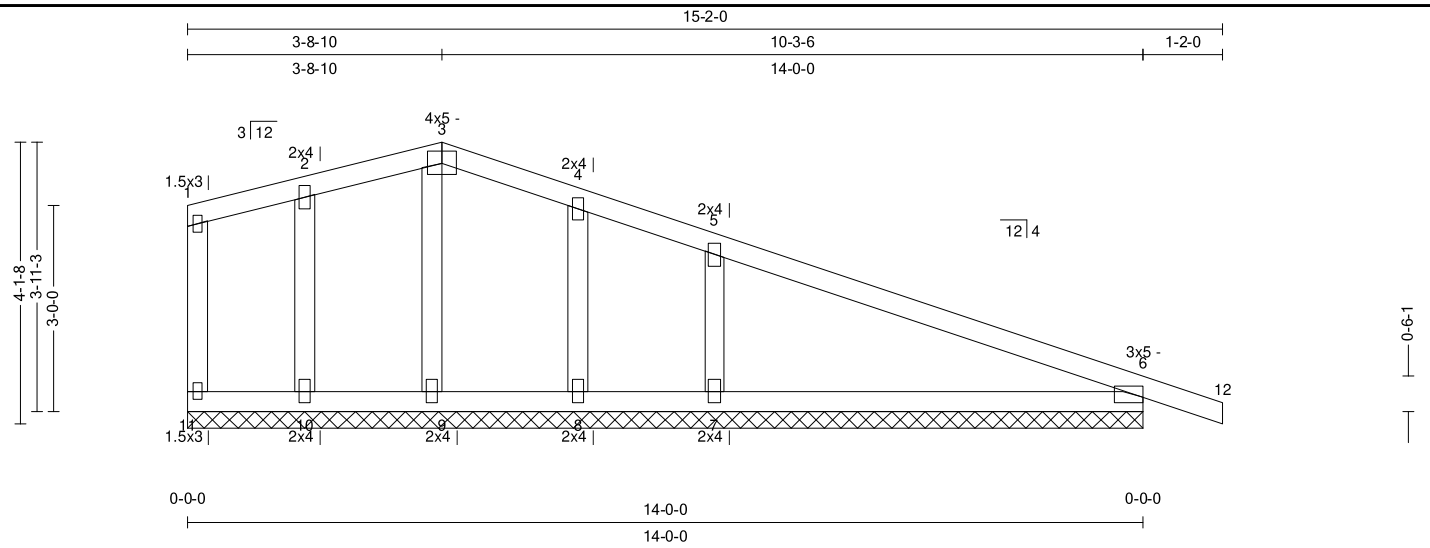
Carried Truss	Carrying Chord	Carrying Offset
FG01	BC	0-6-4
F05	BC	2-2-10

Notes

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

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:GE01 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:45 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
14-0-0	3/12	1	0-0-0	1-2-0	0-0-0	0-0-0	1	24 in	62 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:	0.38 (5-6)	Vert TL:	0.02 in	L / 999	(6-7)	L / 240
TCDL:	10		TPI 1-2014	BC:	0.14 (6-7)	Vert LL:	0 in UP	L / 999	(6-7)	L / 360
BCLL:	0	Rep Mbr:	No	Web:	0.08 (1-11)	Horz TL:	0 in			
BCDL:	10	Lumber D.O.L.:	115 %							

12/17/2025

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	1,314 lbs	197 plf	-966 lbs	-183 lbs	-639 lbs	-966 lbs	-707 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) 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	0.381	1,140 lbs	(-590 lbs)
BC				
Web	5-7	0.051		(-366 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 joint 6 may need to be considered.
10) Listed wind uplift reactions based on MWFRS & C&C loading.

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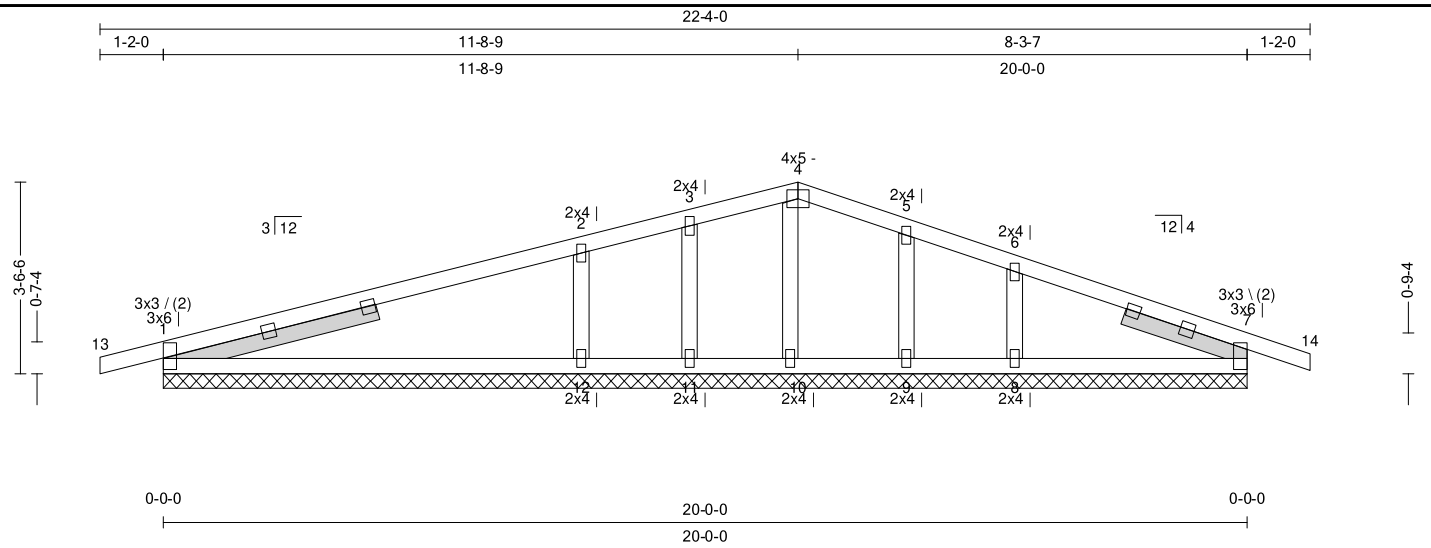
Eagle Metal Products

	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:GE02 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:46 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
20-0-0	3/12	1	1-2-0	1-2-0	0-0-0	0-0-0	1	24 in	87 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:	0.30 (1-2)	Vert TL:	0.03 in	L / 999	(12-1)	L / 240
TCDL: 10		TPI 1-2014	BC:	0.19 (12-1)	Vert LL:	0 in	L / 999	7	L / 360
BCLL: 0	Rep Mbr:	No	Web:	0.04 (2-12)	Horz TL:	0 in			
BCDL: 10	Lumber D.O.L.:	115 %							

12/17/2025

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	914 lbs	133 plf	-403 lbs	-159 lbs	-370 lbs	-403 lbs	972 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	0.301	938 lbs	(-440 lbs)
	6-7	0.124	333 lbs	
BC				
Web				

Notes

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

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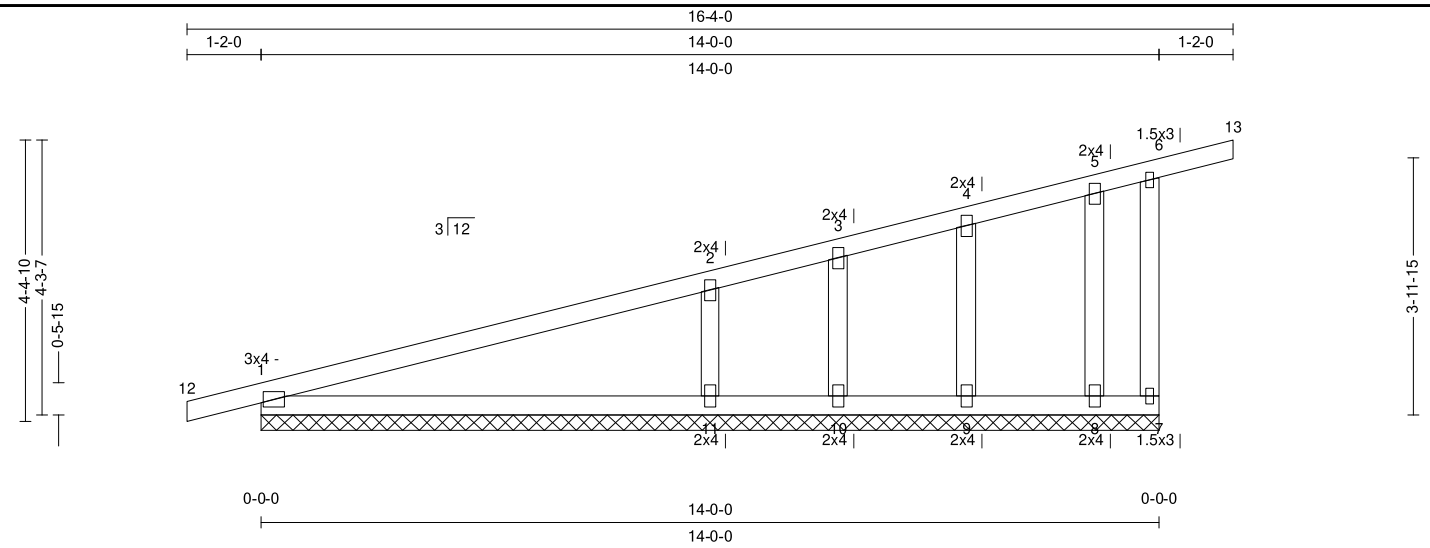
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:GE03 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:48 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
14-0-0	3/12	1	1-2-0	1-2-0	0-0-0	0-0-0	1	24 in	62 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:	0.64 (1-2)	Vert TL:	0.03 in	L / 999	(11-1)	L / 240
TCDL: 10		TPI 1-2014	BC:	0.18 (11-1)	Vert LL:	0 in	L / 999	(11-1)	L / 360
BCLL: 0	Rep Mbr:	No	Web:	0.15 (6-7)	Horz TL:	0 in			
BCDL: 10	Lumber D.O.L.:	115 %							

Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	-	1,583 lbs	221 plf	-1,138 lbs	-172 lbs	-624 lbs	-1,138 lbs	-1,106 lbs

12/17/2025

Material

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

Bracing

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

Loads

1) This truss has been designed for the effects of balanced (20 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	0.639	1,527 lbs	(-676 lbs)
BC				
Web	2-11	0.053		(-412 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 8, 10, 1 may need to be considered.
10) Listed wind uplift reactions based on MWFRS & C&C loading.

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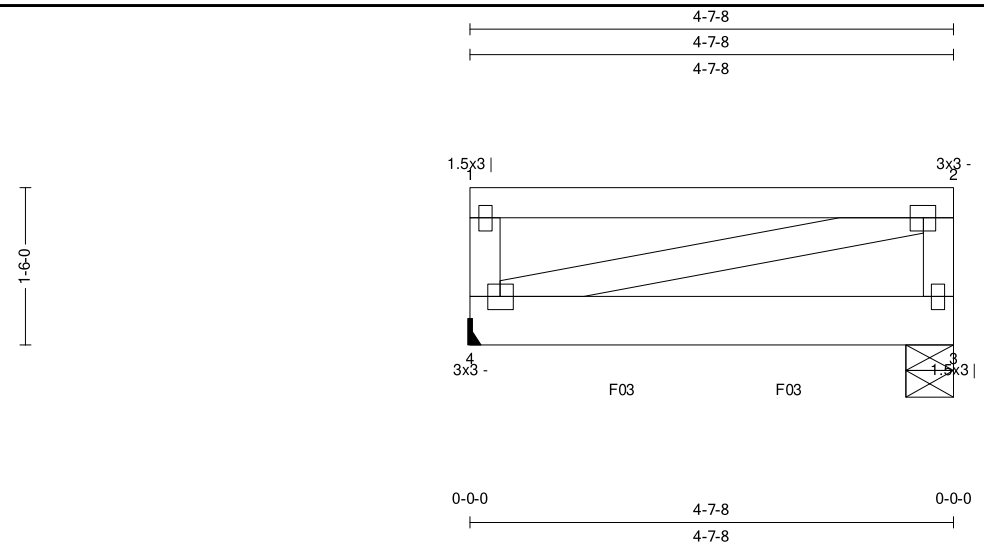
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:LVL-By_Other Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:59 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
4-7-8	0/12	1	0-0-0	0-0-0	0-0-0	0-0-0	1	12 in	24 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	**General**		**CSI**		**Deflection**		**L/**	**(loc)**	**Allowed**
Carried Loads (psf)	Bldg Code :	IBC 2018/	TC :	0.27 (1-2)	Vert TL:	0.09 in	L / 570	(3-4)	L / 240
TCLL : 40		TPI 1-2014	BC :	0.75 (3-4)	Vert LL:	0.05 in	L / 912	(3-4)	L / 360
TCDL : 10	Rep Mbr :	No	Web :	0.02 (1-4)	Horz TL:	0 in		3	
BCLL : 0	Lumber D.O.L. :	115 %							
BCDL : 10									

12/17/2025

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

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
4	1	1.5 in	---	648 lbs	·	·	·	·	-25 lbs
3	1	5.5 in	1.50 in	621 lbs	·	·	·	·	·

Material

TC: SYP#1 2 x 4
BC: SYP#1 2 x 6
Web: SYP#1 2 x 4

Bracing

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

Loads

1) This truss has been designed for the effects of balanced (20 psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
4) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

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				

Truss to Truss Connection Summary

Carried Truss	Carrying Chord	Carrying Offset
F03	BC	1-5-7
F03	BC	3-0-10

Notes

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

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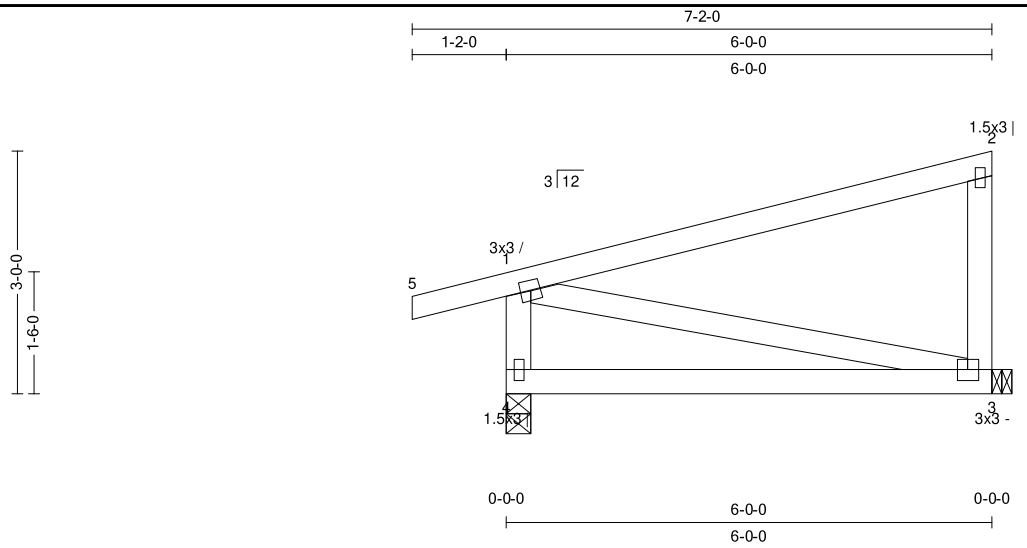
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T01 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:49 Page: 1 of 1

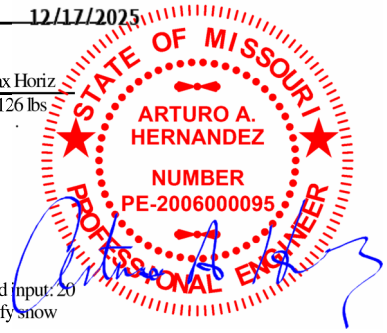
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
6-0-0	3/12	6	1-2-0	0-0-0	0-0-0	0-0-0	1	24 in	31 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL :	20	Bldg Code :	IBC 2018/	TC :	0.47 (1-2)	Vert TL:	0.11 in	L / 587	(3-4)	L / 240
TCDL :	10		TPI 1-2014	BC :	0.32 (3-4)	Vert LL:	0.06 in	L / 999	(3-4)	L / 360
BCLL :	0	Rep Mbr :	Yes	Web :	0.10 (2-3)	Horz TL:	0 in		3	
BCDL :	10	Lumber D.O.L. :	115 %							

12/17/2025



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	379 lbs	·	-44 lbs	-364 lbs	-364 lbs	126 lbs
3	1	1.5 in	1.50 in	291 lbs	·	-34 lbs	-256 lbs	-256 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	1-4	0.065	400 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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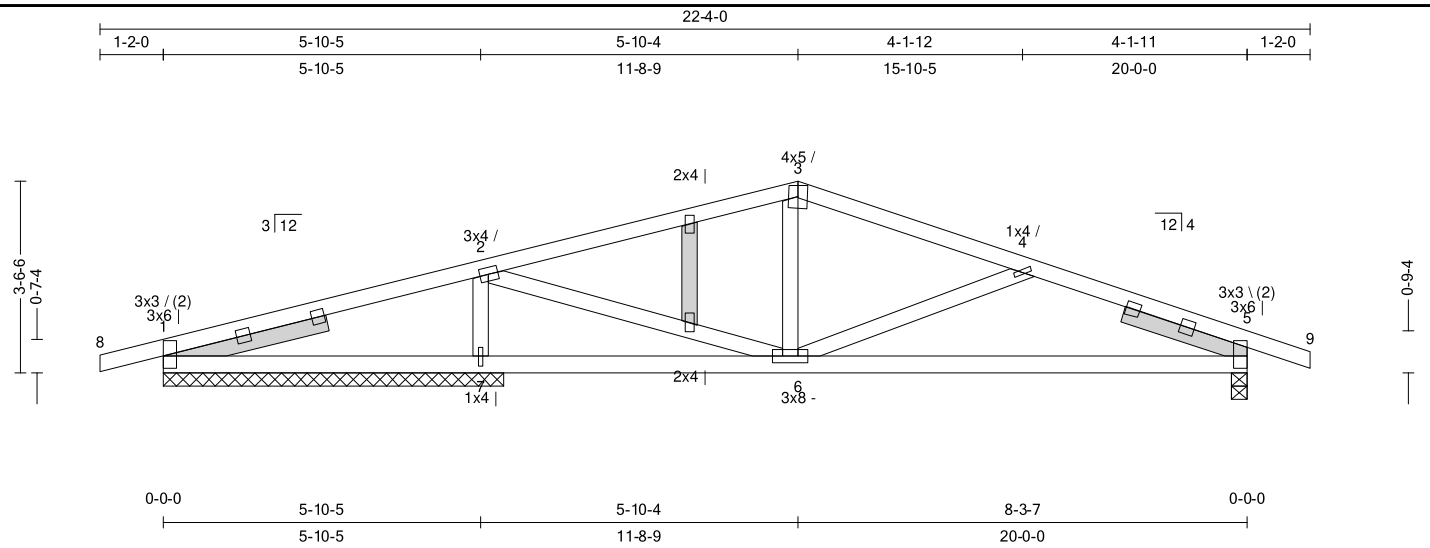
Eagle Metal Products

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

Truss:T03
Job: QU02688_RESERVE BLDG E2_REFR
Date: 12/17/25 09:51:50
Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
20-0-0	3/12	1	1-2-0	1-2-0	0-0-0	0-0-0	1	24 in	93 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:	0.42 (1-2)	Vert TL:	0.16 in	L / 999	(5-6)	L / 240
TCDL: 10		TPI 1-2014	BC:	0.59 (5-6)	Vert LL:	0.07 in	L / 999	(5-6)	L / 360
BCLL: 0	Rep Mbr:	No	Web:	0.14 (2-6)	Horz TL:	0.01 in		5	
BCDL: 10	Lumber D.O.L.:	115 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
5	1	3.5 in	1.50 in	753 lbs	·	-66 lbs	-268 lbs	-268 lbs	·
7	1	75.5 in	N/A	1,003 lbs	·	-62 lbs	-264 lbs	-264 lbs	121 lbs
1	1	75.5 in	N/A	45 lbs	-158 lbs	-28 lbs	-21 lbs	-158 lbs	-443 lbs
1	1	75.5 in	N/A	531 lbs	·	-55 lbs	-140 lbs	-140 lbs	373 lbs

12/17/2025

Material

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

Bracing

TC: Sheathed or Purlins at 5-11-0, 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	0.416	513 lbs		3-4	0.268		(-836 lbs)			
	2-3	0.332		(-833 lbs)	4-5	0.114	366 lbs	(-1,069 lbs)			
BC	5-6	0.586	1,001 lbs								
Web	2-7	0.087	318 lbs	(-796 lbs)	2-6	0.145	875 lbs		4-6	0.116	(-335 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 3x3 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) A creep factor of 2.00 has been applied for this truss analysis.
7) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
8) ▭ Indicates non-structural members.
9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
10) Listed wind uplift reactions based on MWFRS & C&C loading.

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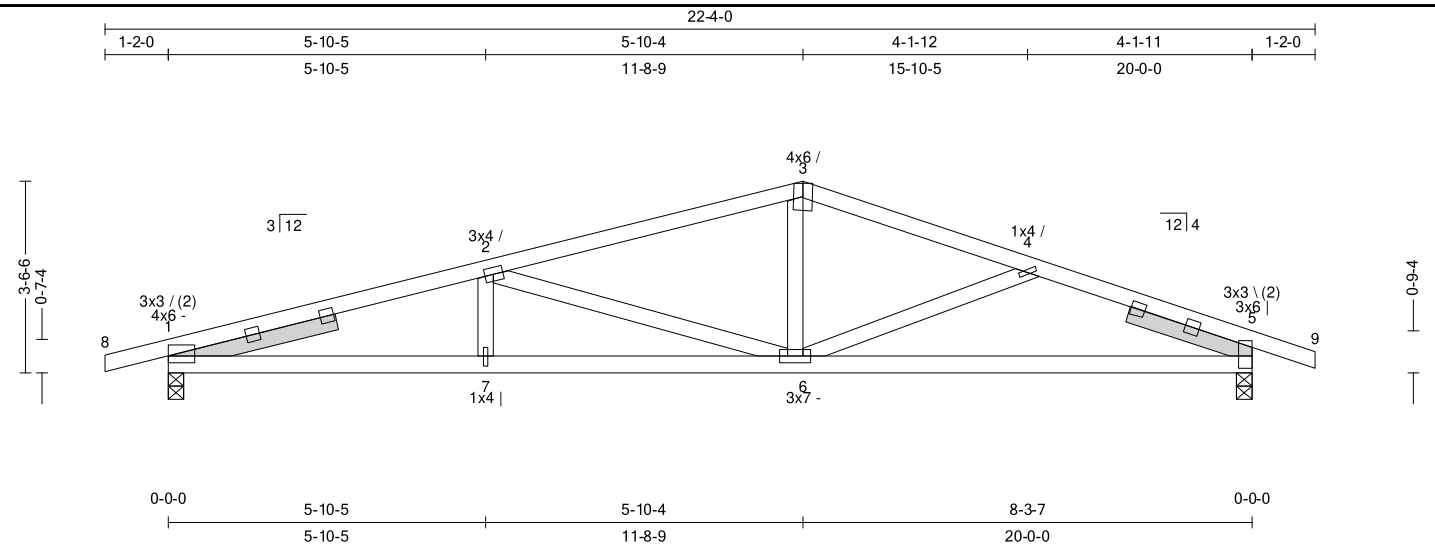
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
20-0-0	3/12	17	1-2-0	1-2-0	0-0-0	0-0-0	1	24 in	90 lbs



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)		General		CSI		Deflection		L/	(loc)	Allowed
TCLL :	20	Bldg Code :	IBC 2018/ TPI 1-2014	TC :	0.35 (2-3)	Vert TL:	0.21 in	L / 999	(5-6)	L / 240
TCDL :	10	Rep Mbr :	Yes	BC :	0.68 (6-7)	Vert LL:	0.08 in	L / 999	(5-6)	L / 360
BCLL :	0	Lumber D.O.L. :	115 %	Web :	0.44 (2-6)	Horz TL:	0.06 in		5	
BCDL :	10									

12/17/2025

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

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	3.5 in	1.50 in	1,070 lbs	·	-86 lbs	-341 lbs	-341 lbs	25 lbs
5	1	3.5 in	1.50 in	1,070 lbs	·	-86 lbs	-352 lbs	-352 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 3-11-0, Purlin design by Others.
BC: Sheathed or Purlins at 8-10-0, 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	0.252	665 lbs	(-2,460 lbs)	3-4	0.320	502 lbs	(-1,701 lbs)				
	2-3	0.352	500 lbs	(-1,701 lbs)	4-5	0.268	557 lbs	(-1,797 lbs)				
BC	5-6	0.632	1,664 lbs	(-405 lbs)	6-7	0.682	2,367 lbs	(-538 lbs)	7-1	0.530	2,367 lbs	(-538 lbs)
Web	2-6	0.438		(-814 lbs)	3-6	0.092	553 lbs					

Notes

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

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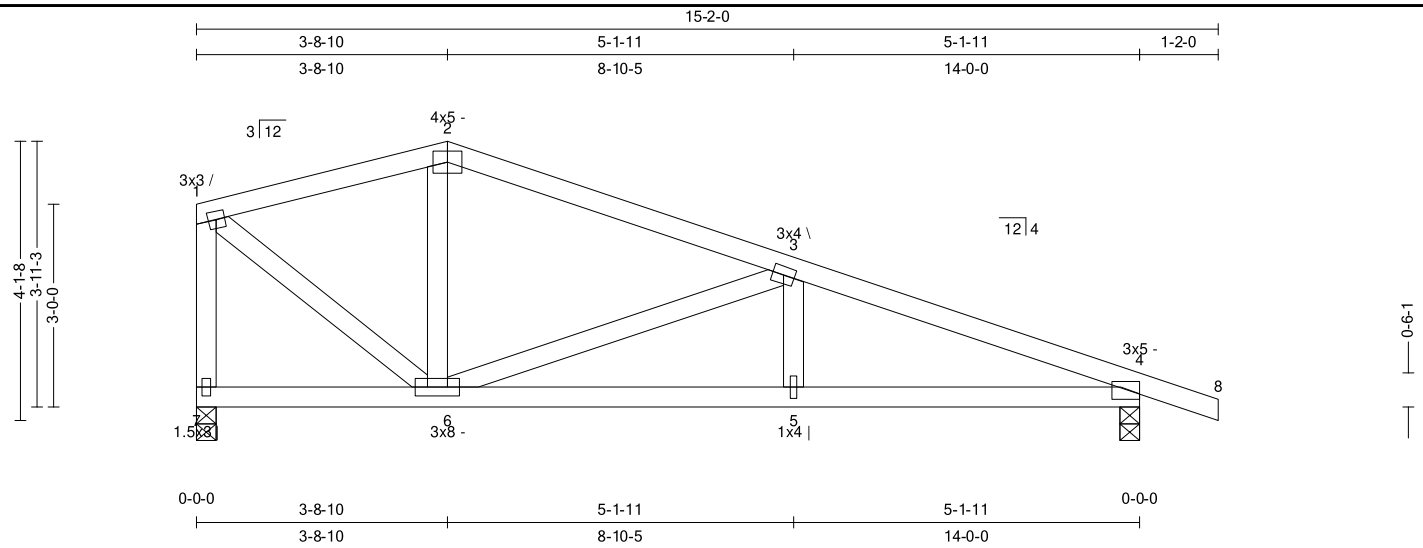
SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
14-0-0	3/12	1	0-0-0	1-2-0	0-0-0	0-0-0	1	24 in	66 lbs



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:	0.33 (3-4)	Vert TL:	0.09 in	L / 999	(5-6)	L / 240
TCDL: 10		TPI 1-2014	BC:	0.44 (5-6)	Vert LL:	0.04 in	L / 999	(5-6)	L / 360
BCLL: 0	Rep Mbr:	No	Web:	0.44 (3-6)	Horz TL:	0.02 in		4	
BCDL: 10	Lumber D.O.L.:	115 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
7	1	3.5 in	1.50 in	723 lbs	·	-42 lbs	-283 lbs	-283 lbs	-100 lbs
4	1	3.5 in	1.50 in	883 lbs	·	-18 lbs	-314 lbs	-314 lbs	·

12/17/2025

Material

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

Bracing

TC: Sheathed or Purlins at 4-8-0, 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) 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

Load Case D1: Std Dead Load

Point Loads

Member	Location	Direction	Load	Trib Width
Top	10-1-8	Down	43 lbs	
Top	12-0-0	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	1-2	0.240		(-624 lbs)	2-3	0.302		(-701 lbs)	3-4	0.334	445 lbs	(-1,618 lbs)
BC	4-5	0.423	1,478 lbs		5-6	0.442	1,478 lbs					
Web	1-7	0.099		(-673 lbs)	3-6	0.444		(-934 lbs)				
	1-6	0.127	769 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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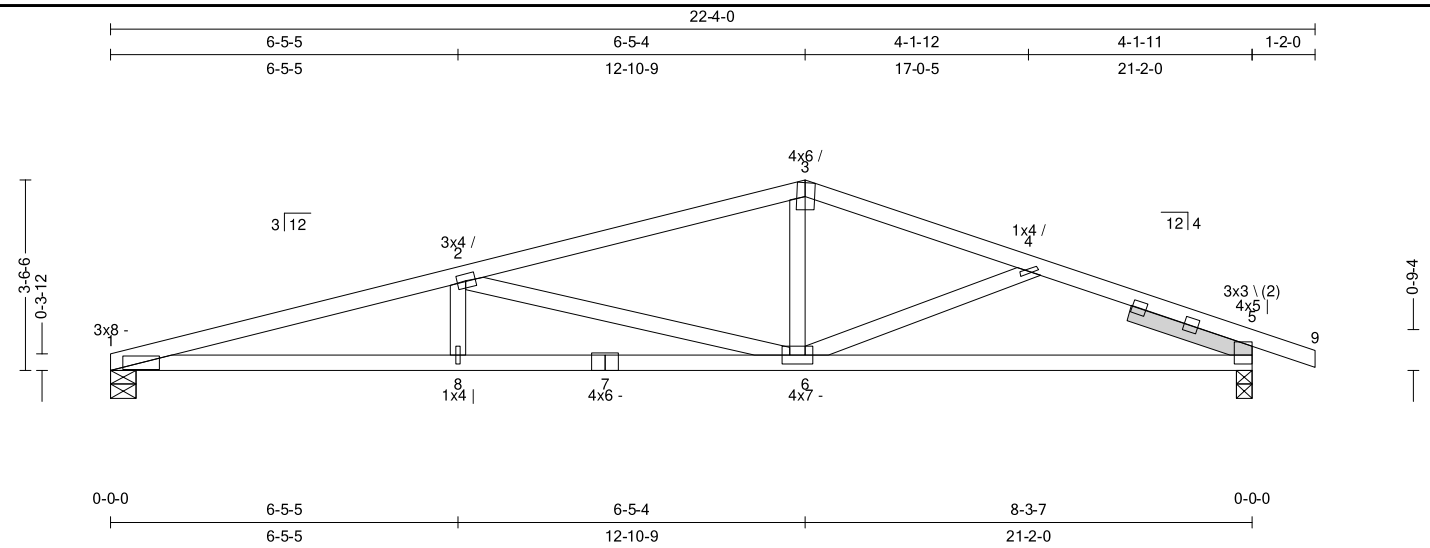
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T06 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:54 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
21-2-0	3/12	5	0-0-0	1-2-0	0-0-0	0-0-0	1	24 in	88 lbs



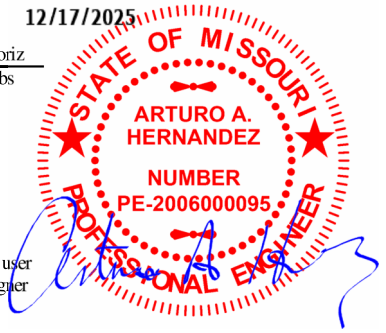
All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection		L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC 2018/ TPI 1-2014	TC:	0.56 (1-2)	Vert TL:	0.32 in	L / 763	(8-1)	L / 240
TCDL: 10			BC:	0.80 (8-1)	Vert LL:	0.12 in	L / 999	(8-1)	L / 360
BCLL: 0	Rep Mbr:	Yes	Web:	0.86 (2-6)	Horz TL:	0.08 in		5	
BCDL: 10	Lumber D.O.L.:	115 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	5.5 in	1.50 in	1,056 lbs	·	-68 lbs	-281 lbs	-281 lbs	-35 lbs
5	1	3.5 in	1.50 in	1,130 lbs	·	-91 lbs	-359 lbs	-359 lbs	·

12/17/2025



Material

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

Bracing

TC: Sheathed or Purlins at 2-11-0, Purlin design by Others.
BC: Sheathed or Purlins at 7-7-0, 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	0.560	824 lbs	(-3,206 lbs)	3-4	0.331	532 lbs	(-1,863 lbs)				
	2-3	0.356	530 lbs	(-1,874 lbs)	4-5	0.291	574 lbs	(-1,936 lbs)				
BC	5-6	0.658	1,790 lbs	(-421 lbs)	6-8	0.785	3,081 lbs	(-710 lbs)	8-1	0.802	3,081 lbs	(-710 lbs)
Web	2-6	0.863	372 lbs	(-1,351 lbs)	3-6	0.107	643 lbs					

Notes

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

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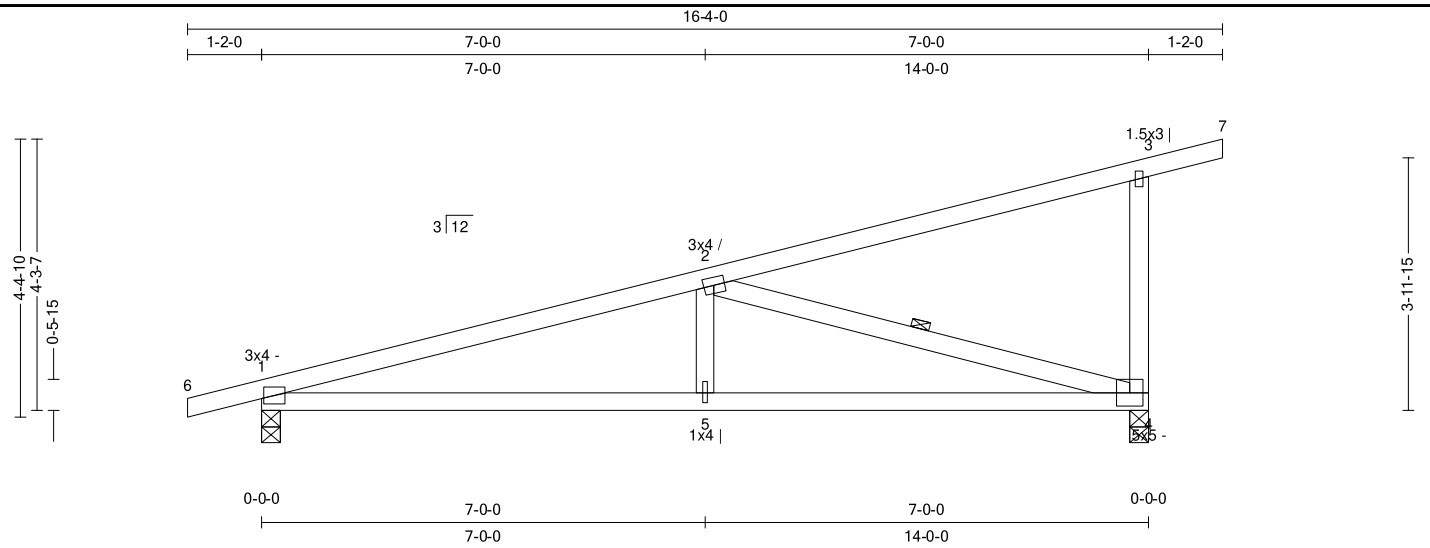
	Quality Line Truss Co., LLC 34593 S 4350 RD Address 2 Adair, OK 74330	Truss:T08 Job: QU02688_RESERVE BLDG E2_REFR Date: 12/17/25 09:51:56 Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLY(S)	SPACING	WGT/PLY
14-0-0	3/12	4	1-2-0	1-2-0	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 / 890	(4-5)	L / 240
TCDL:	10		TPI 1-2014	BC:	0.62 (5-1)	Vert LL:	0.07 in	L / 999	(4-5)	L / 360
BCLL:	0	Rep Mbr:	Yes	Web:	0.33 (2-4)	Horz TL:	0.03 in		4	
BCDL:	10	Lumber D.O.L.:	115 %							

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	3.5 in	1.50 in	814 lbs	·	-49 lbs	-326 lbs	-326 lbs	138 lbs
4	1	3.5 in	1.50 in	778 lbs	·	-85 lbs	-367 lbs	-367 lbs	·

12/17/2025

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

Material

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

Bracing

TC: Sheathed or Purlins at 4-4-0, Purlin design by Others.
BC: Sheathed or Purlins at 9-4-0, Purlin design by Others.
Web: One Midpoint Row: 2-4

Loads

1) This truss has been designed for the effects of balanced (20 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	0.528	463 lbs	(-1,526 lbs)				
BC	4-5	0.617	1,437 lbs	(-473 lbs)	5-1	0.617	1,437 lbs	(-473 lbs)
Web	2-5	0.055	332 lbs		2-4	0.326	571 lbs	(-1,494 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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