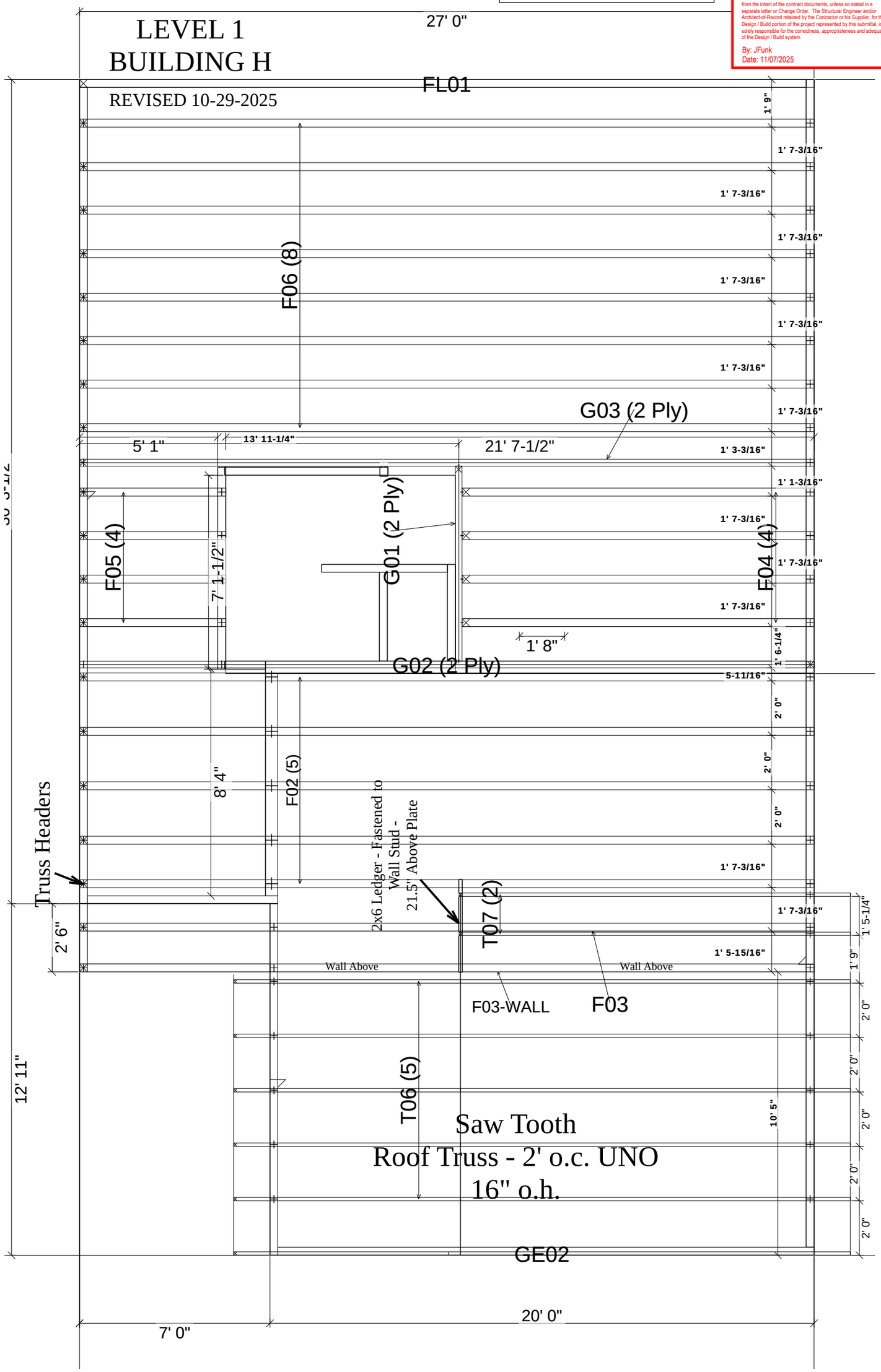
# LEVEL 1
# BUILDING H

REVISED 10-29-2025



RELEASED FOR CONSTRUCTION
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
11/07/2025

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

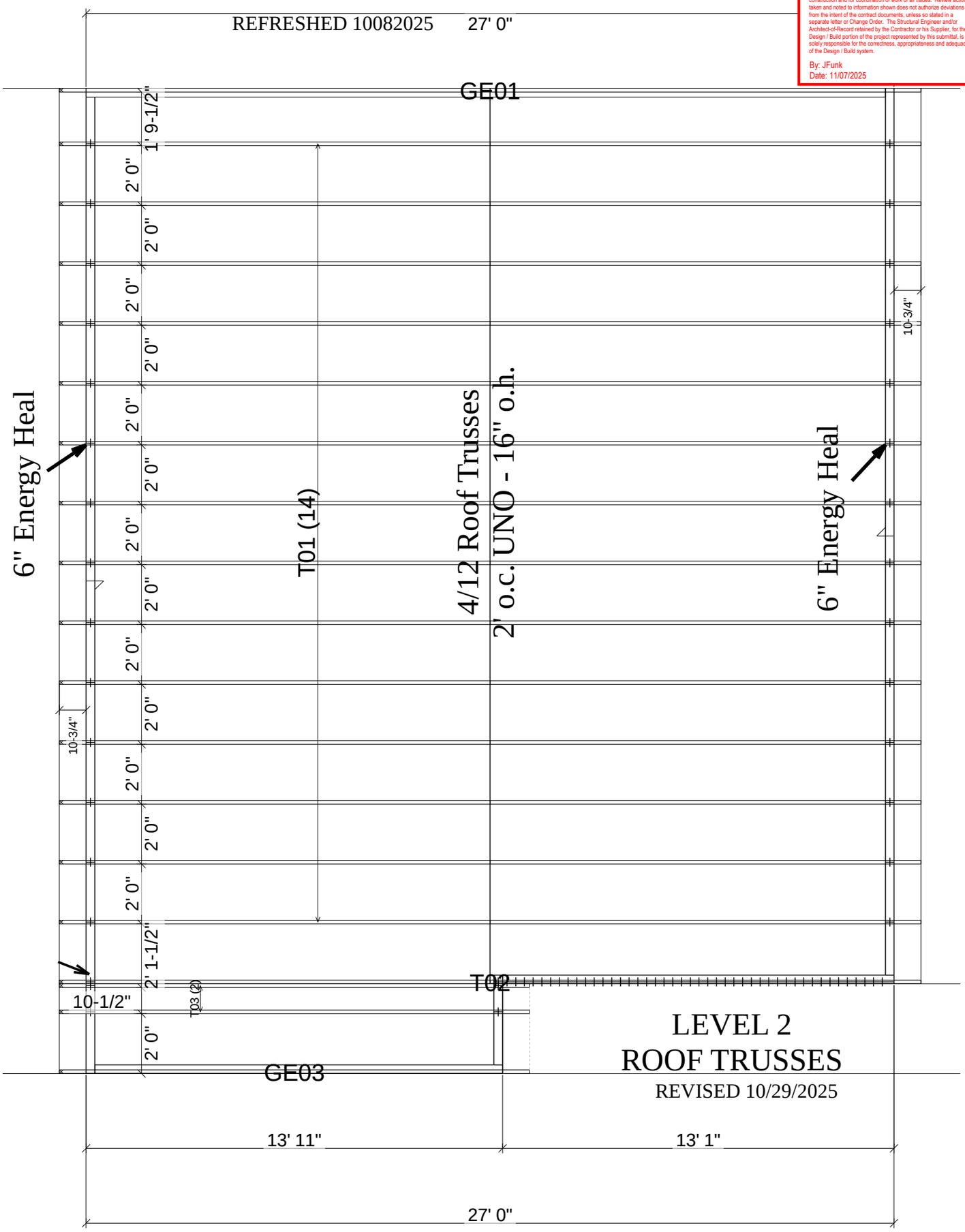
☒ Reviewed ☐ Revise and Resubmit
☐ Reviewed as Noted ☐ Rejected
☐ Not required by the Contract Documents
☐ For Record Only



By: JFunk
Date: 11/07/2025

# BUILDING H - LEVEL 2

REFRESHED 10082025




## LEVEL 2
## ROOF TRUSSES

REVISED 10/29/2025

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: **QU03400_RESERVE_BUILDING H_REFRESH_10082025** - 1250902
F02, F03, F03-WALL, F04, F05, F06, FL01, G01, G02, G03, GE01, GE02, GE03, T01, T02, T03, T06, T07

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.

10/30/2025
STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

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

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

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

By: JFunk
Date: 11/07/2025

---

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

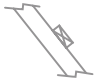
**3X4** - The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

-, /, 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

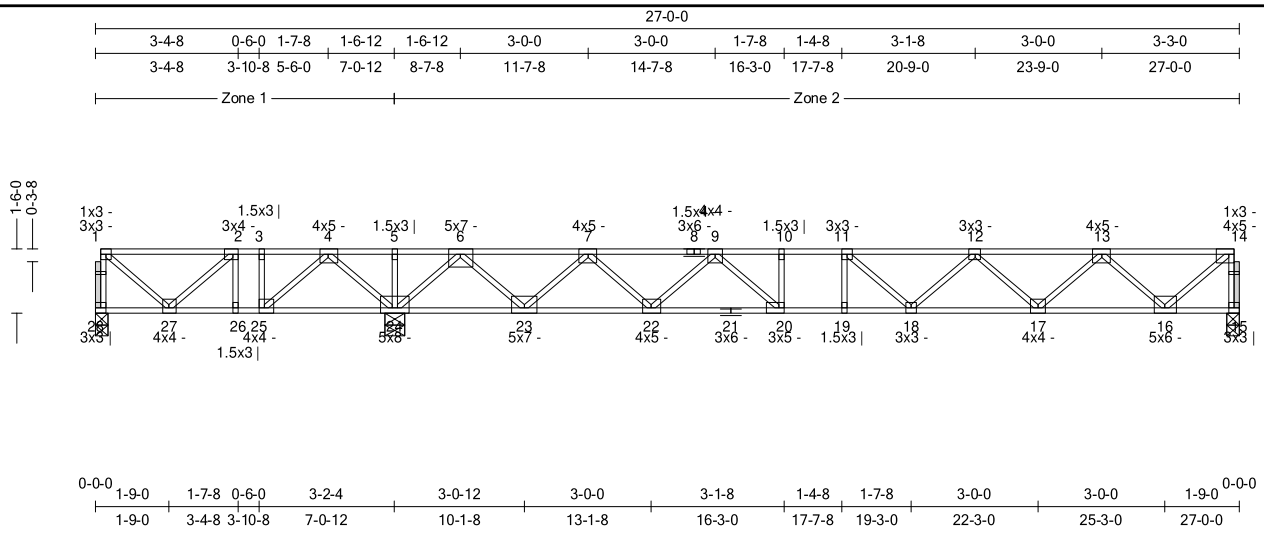


1250902 0002/0026

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

Truss:F02
Job: QU03400_RESERVE_BUILDING H_R
Date: 10/30/25 08:18:42
Page: 1 of 1

| SPAN | PITCH | QTY | OHL | OHR | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|
| 27-0-0 | 0/12 | 5 | 0-0-0 | 0-0-0 | 1 | 24 in | 141 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 : | 0.44 (2-3) | Vert TL: | 0.34 in | L / 677 | (18-19) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.61 (19-20) | Vert LL: | 0.2 in | L / 999 | (18-19) | L / 360 |
| BCLL : | 0 | Rep Mbr : | Yes | Web : | 0.30 (6-23) | Horz TL: | 0.04 in | | 15 | |
| BCDL : | 10 | Lumber D.O.L. : | 100 % | | | | | | | |

10/30/2025

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 |
|---|---|---|---|---|---|---|---|---|---|
| 24 | 1 | 5.5 in | 1.50 in | 2,628 lbs | · | · | · | · | · |
| 28 | 1 | 3.5 in | 1.50 in | 264 lbs | -327 lbs | · | · | -327 lbs | · |
| 15 | 1 | 3.5 in | 1.50 in | 1,211 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 | 0.362 | 423 lbs | | 4-5 | 0.311 | 2,747 lbs | | 9-10 | 0.344 | (-3,595 lbs) | 12-13 | 0.280 | (-2,904 lbs) |
| | 2-3 | 0.441 | 988 lbs | | 5-6 | 0.372 | 2,747 lbs | | 10-11 | 0.334 | (-3,595 lbs) | 13-14 | 0.265 | (-1,196 lbs) |
| | 3-4 | 0.441 | 988 lbs | | 7-9 | 0.251 | | (-2,286 lbs) | 11-12 | 0.408 | (-3,618 lbs) | | | |
| BC | 16-17 | 0.236 | 2,232 lbs | | 19-20 | 0.614 | 3,595 lbs | | 23-24 | 0.097 | (-1,088 lbs) | 26-27 | 0.314 | (-988 lbs) |
| | 17-18 | 0.351 | 3,446 lbs | | 20-22 | 0.474 | 3,026 lbs | | 24-25 | 0.262 | (-1,722 lbs) | | | |
| | 18-19 | 0.614 | 3,595 lbs | | 22-23 | 0.210 | 1,452 lbs | | 25-26 | 0.300 | (-988 lbs) | | | |
| Web | 1-28 | 0.063 | 329 lbs | | 4-24 | 0.166 | | (-1,366 lbs) | 9-20 | 0.152 | 799 lbs | 14-15 | 0.126 | (-1,185 lbs) |
| | 1-27 | 0.076 | | (-564 lbs) | 6-24 | 0.268 | | (-2,210 lbs) | 12-18 | 0.061 | 319 lbs | | | |
| | 2-27 | 0.143 | 752 lbs | | 6-23 | 0.302 | 1,823 lbs | | 12-17 | 0.091 | (-736 lbs) | | | |
| | 2-26 | 0.054 | | (-443 lbs) | 7-23 | 0.197 | | (-1,623 lbs) | 13-17 | 0.151 | 911 lbs | | | |
| | 3-25 | 0.044 | | (-379 lbs) | 7-22 | 0.187 | 1,131 lbs | | 13-16 | 0.171 | (-1,406 lbs) | | | |
| | 4-25 | 0.216 | 1,304 lbs | | 9-22 | 0.122 | | (-1,004 lbs) | 14-16 | 0.264 | 1,593 lbs | | | |

## Notes

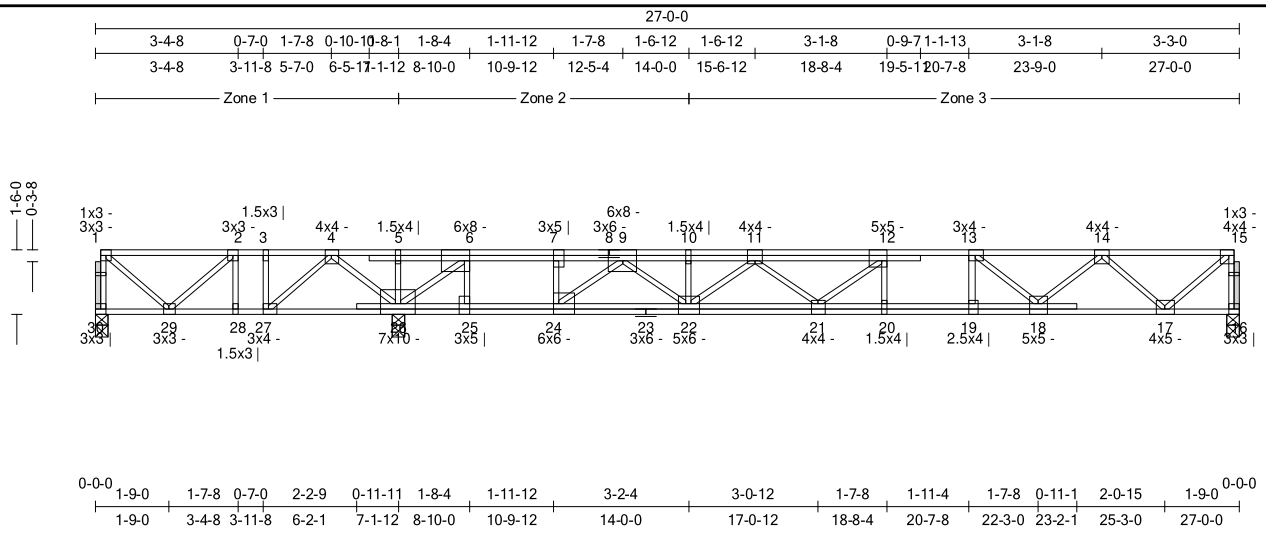
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
4) A creep factor of 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**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:F03-WALL<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:18:44<br>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 | 181 lbs |



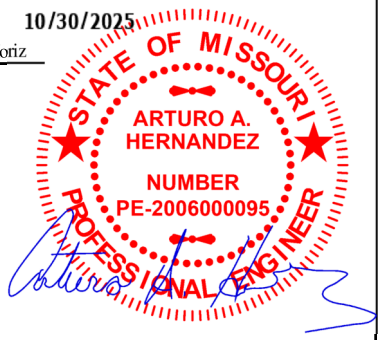

All plates shown to be Eagle 20 unless otherwise noted.

| Loading (psf) | | General | | CSI | | Deflection | | L/ | (loc) | Allowed |
|---|---|---|---|---|---|---|---|---|---|---|
| TCLL : | 40 | Bldg Code : | IBC 2018/ | TC : | 0.68 (5-6) | Vert TL: | 0.38 in | L / 620 | (23-24) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.56 (24-25) | Vert LL: | 0.21 in | L / 999 | (20-21) | L / 360 |
| BCLL : | 0 | Rep Mbr : | No | Web : | 0.35 (6-26) | Horz TL: | 0.03 in | | 16 | |
| 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 |
|---|---|---|---|---|---|---|---|---|---|
| 26 | 1 | 3.5 in | 1.50 in | 1,969 lbs | · | · | · | · | · |
| 30 | 1 | 3.5 in | 1.50 in | 245 lbs | -161 lbs | · | · | -161 lbs | · |
| 16 | 1 | 3.5 in | 1.50 in | 1,019 lbs | · | · | · | · | · |

10/30/2025




## 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 | 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 | 0.312 | 546 lbs | | 6-7 | 0.464 | (-559 lbs) | | 11-12 | 0.152 | (-3,507 lbs) |
| | 3-4 | 0.312 | 546 lbs | | 7-9 | 0.448 | (-559 lbs) | | 12-13 | 0.302 | (-3,329 lbs) |
| | 4-5 | 0.218 | 1,816 lbs | | 9-10 | 0.128 | (-2,983 lbs) | | 13-14 | 0.282 | (-2,599 lbs) |
| | 5-6 | 0.683 | 1,812 lbs | | 10-11 | 0.128 | (-2,983 lbs) | | 14-15 | 0.243 | (-1,015 lbs) |
| BC | 17-18 | 0.238 | 1,937 lbs | | 21-22 | 0.259 | 3,426 lbs | | 26-27 | 0.230 | (-1,013 lbs) |
| | 18-19 | 0.423 | 3,327 lbs | | 22-24 | 0.526 | 2,164 lbs | | 27-28 | 0.236 | (-546 lbs) |
| | 19-20 | 0.467 | 3,327 lbs | | 24-25 | 0.563 | 559 lbs | | 28-29 | 0.247 | (-546 lbs) |
| | 20-21 | 0.467 | 3,327 lbs | | 25-26 | 0.563 | 559 lbs | | | | |
| Web | 2-29 | 0.082 | 429 lbs | | 9-24 | 0.242 | (-2,074 lbs) | | 13-18 | 0.116 | (-950 lbs) |
| | 4-27 | 0.145 | 878 lbs | | 9-22 | 0.174 | 1,049 lbs | | 14-18 | 0.146 | 881 lbs |
| | 4-26 | 0.134 | | (-1,126 lbs) | 11-22 | 0.067 | (-568 lbs) | | 14-17 | 0.152 | (-1,249 lbs) |
| | 6-26 | 0.348 | | (-2,974 lbs) | 12-21 | 0.070 | 370 lbs | | 15-17 | 0.224 | 1,353 lbs |
| | 6-25 | 0.133 | 800 lbs | | 12-20 | 0.050 | (-419 lbs) | | 15-16 | 0.107 | (-1,000 lbs) |
| | 7-24 | 0.131 | 791 lbs | | 13-19 | 0.086 | 452 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.



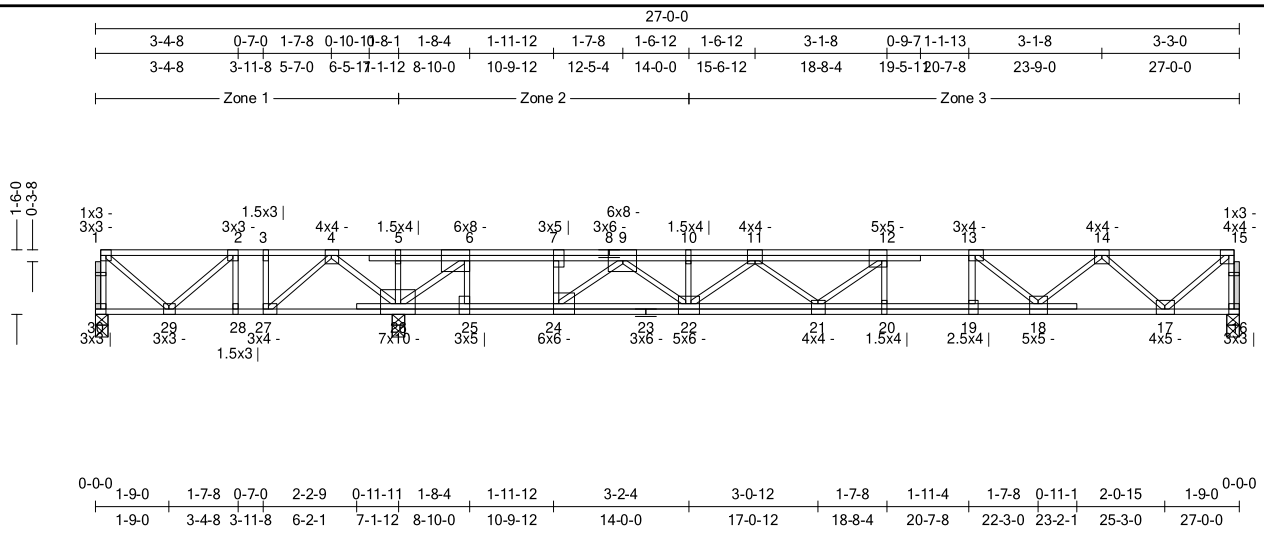
TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| 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 | 181 lbs |

7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 30 may need to be considered.

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:F03<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:18:47<br>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 | 181 lbs |



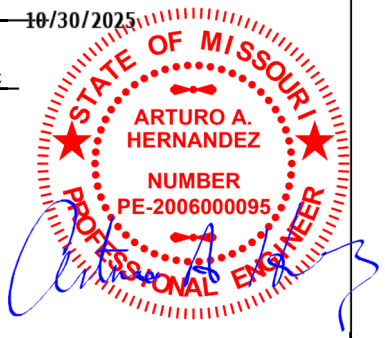




All plates shown to be Eagle 20 unless otherwise noted.

| Loading (psf) | | General | | CSI | | Deflection | | L/ | (loc) | Allowed |
|---|---|---|---|---|---|---|---|---|---|---|
| TCLL : | 40 | Bldg Code : | IBC 2018/ | TC : | 0.68 (5-6) | Vert TL: | 0.38 in | L / 620 | (23-24) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.56 (24-25) | Vert LL: | 0.21 in | L / 999 | (20-21) | L / 360 |
| BCLL : | 0 | Rep Mbr : | No | Web : | 0.35 (6-26) | Horz TL: | 0.03 in | | 16 | |
| BCDL : | 10 | Lumber D.O.L. : | 100 % | | | | | | | |

10/30/2025




## 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 |
|---|---|---|---|---|---|---|---|---|---|
| 26 | 1 | 3.5 in | 1.50 in | 1,969 lbs | · | · | · | · | · |
| 30 | 1 | 3.5 in | 1.50 in | 245 lbs | -161 lbs | · | · | -161 lbs | · |
| 16 | 1 | 3.5 in | 1.50 in | 1,019 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 | 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 | 0.312 | 546 lbs | | 6-7 | 0.464 | (-559 lbs) | | 11-12 | 0.152 | (-3,507 lbs) |
| | 3-4 | 0.312 | 546 lbs | | 7-9 | 0.448 | (-559 lbs) | | 12-13 | 0.302 | (-3,329 lbs) |
| | 4-5 | 0.218 | 1,816 lbs | | 9-10 | 0.128 | (-2,983 lbs) | | 13-14 | 0.282 | (-2,599 lbs) |
| | 5-6 | 0.683 | 1,812 lbs | | 10-11 | 0.128 | (-2,983 lbs) | | 14-15 | 0.243 | (-1,015 lbs) |
| BC | 17-18 | 0.238 | 1,937 lbs | | 21-22 | 0.259 | 3,426 lbs | | 26-27 | 0.230 | (-1,013 lbs) |
| | 18-19 | 0.423 | 3,327 lbs | | 22-24 | 0.526 | 2,164 lbs | | 27-28 | 0.236 | (-546 lbs) |
| | 19-20 | 0.467 | 3,327 lbs | | 24-25 | 0.563 | 559 lbs | | 28-29 | 0.247 | (-546 lbs) |
| | 20-21 | 0.467 | 3,327 lbs | | 25-26 | 0.563 | 559 lbs | | | | |
| Web | 2-29 | 0.082 | 429 lbs | | 9-24 | 0.242 | (-2,074 lbs) | | 13-18 | 0.116 | (-950 lbs) |
| | 4-27 | 0.145 | 878 lbs | | 9-22 | 0.174 | 1,049 lbs | | 14-18 | 0.146 | 881 lbs |
| | 4-26 | 0.134 | (-1,126 lbs) | | 11-22 | 0.067 | (-568 lbs) | | 14-17 | 0.152 | (-1,249 lbs) |
| | 6-26 | 0.348 | (-2,974 lbs) | | 12-21 | 0.070 | 370 lbs | | 15-17 | 0.224 | 1,353 lbs |
| | 6-25 | 0.133 | 800 lbs | | 12-20 | 0.050 | (-419 lbs) | | 15-16 | 0.107 | (-1,000 lbs) |
| | 7-24 | 0.131 | 791 lbs | | 13-19 | 0.086 | 452 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.



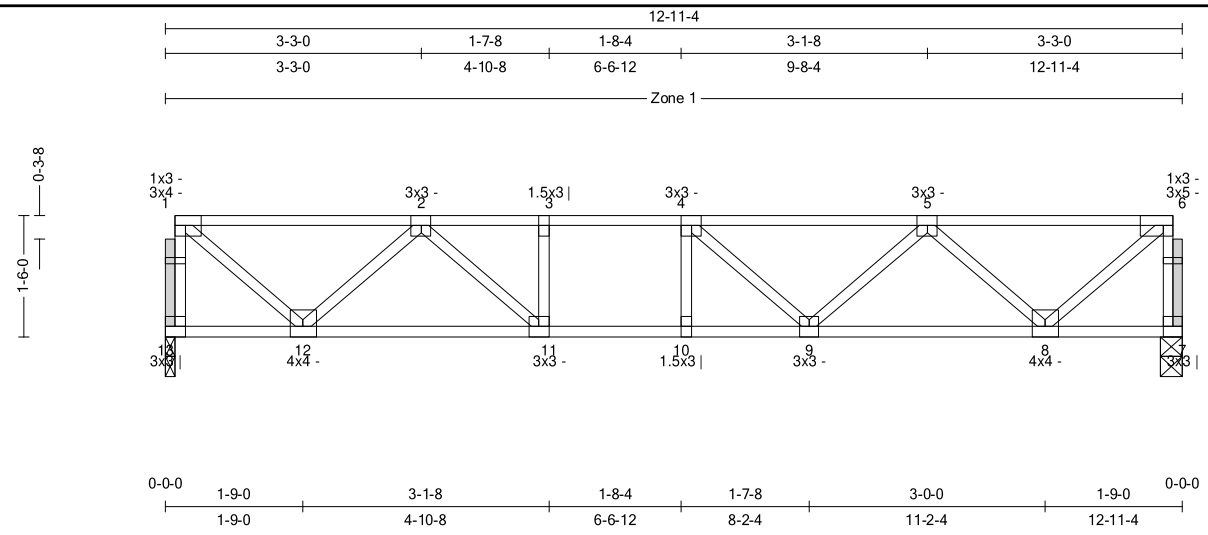
TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| 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 | 181 lbs |

7) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 30 may need to be considered.

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:F04<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:19:08<br>Page: 1 of 1 |

| SPAN | PITCH | QTY | OHL | OHR | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|
| 12-11-4 | 0/12 | 4 | 0-0-0 | 0-0-0 | 1 | 19.19 in | 66 lbs |



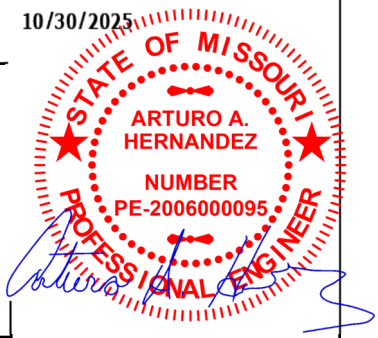

All plates shown to be Eagle 20 unless otherwise noted.

| Loading (psf) | | General | | CSI | | Deflection | | L/ | (loc) | Allowed |
|---|---|---|---|---|---|---|---|---|---|---|
| TCLL : | 40 | Bldg Code : | IBC 2018/ | TC : | 0.40 (4-5) | Vert TL: | 0.11 in | L / 999 | (9-10) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.55 (9-10) | Vert LL: | 0.08 in | L / 999 | (9-10) | L / 360 |
| BCLL : | 0 | Rep Mbr : | Yes | Web : | 0.15 (6-8) | 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 |
|---|---|---|---|---|---|---|---|---|---|
| 13 | 1 | 1.5 in | 1.50 in | 724 lbs | · | · | · | · | · |
| 7 | 1 | 3.5 in | 1.50 in | 724 lbs | · | · | · | · | · |

10/30/2025




## Material

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

## Loads

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

## Member Forces

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

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TC | 1-2 | 0.359 | | (-666 lbs) | 3-4 | 0.301 | | (-1,591 lbs) | 5-6 | 0.373 | (-683 lbs) |
| | 2-3 | 0.314 | | (-1,591 lbs) | 4-5 | 0.402 | | (-1,490 lbs) | | | |
| BC | 8-9 | 0.297 | 1,254 lbs | | 10-11 | 0.552 | 1,591 lbs | | | | |
| | 9-10 | 0.552 | 1,591 lbs | | 11-12 | 0.445 | 1,239 lbs | | | | |
| Web | 1-13 | 0.074 | | (-696 lbs) | 2-11 | 0.094 | 494 lbs | | 6-8 | 0.151 | 910 lbs |
| | 1-12 | 0.147 | 887 lbs | | 5-9 | 0.054 | 320 lbs | | 6-7 | 0.075 | (-702 lbs) |
| | 2-12 | 0.095 | | (-778 lbs) | 5-8 | 0.094 | | (-774 lbs) | | | |

## Notes

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

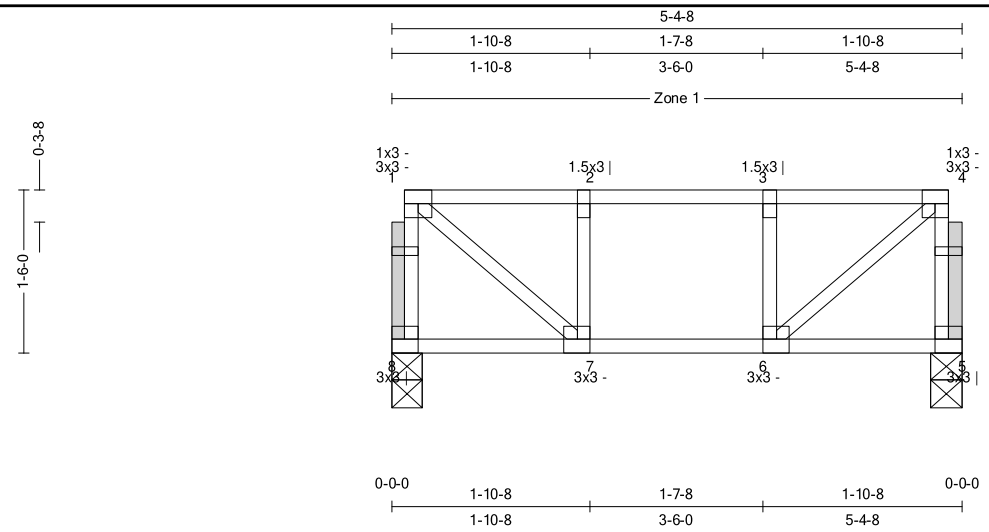


TrueBuild®Truss Software v5.8.11
Eagle Metal Products

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

Truss:F05
Job: QU03400_RESERVE_BUILDING H_R
Date: 10/30/25 08:18:48
Page: 1 of 1

| SPAN | PITCH | QTY | OHL | OHR | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|
| 5-4-8 | 0/12 | 4 | 0-0-0 | 0-0-0 | 1 | 19.19 in | 31 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 : | 0.09 (1-2) | Vert TL: | 0.01 in | L / 999 | (5-6) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.10 (6-7) | Vert LL: | 0.01 in | L / 999 | (5-6) | L / 360 |
| BCLL : | 0 | Rep Mbr : | Yes | Web : | 0.05 (1-7) | Horz TL: | 0 in | | 5 | |
| 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 |
|---|---|---|---|---|---|---|---|---|---|
| 8 | 1 | 3.5 in | 1.50 in | 301 lbs | · | · | · | · | · |
| 5 | 1 | 3.5 in | 1.50 in | 301 lbs | · | · | · | · | · |

10/30/2025
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 | | | |
| BC | | | |
| Web | 1-7 | 0.055 | 330 lbs |
| | 4-6 | 0.055 | 330 lbs |

## Notes

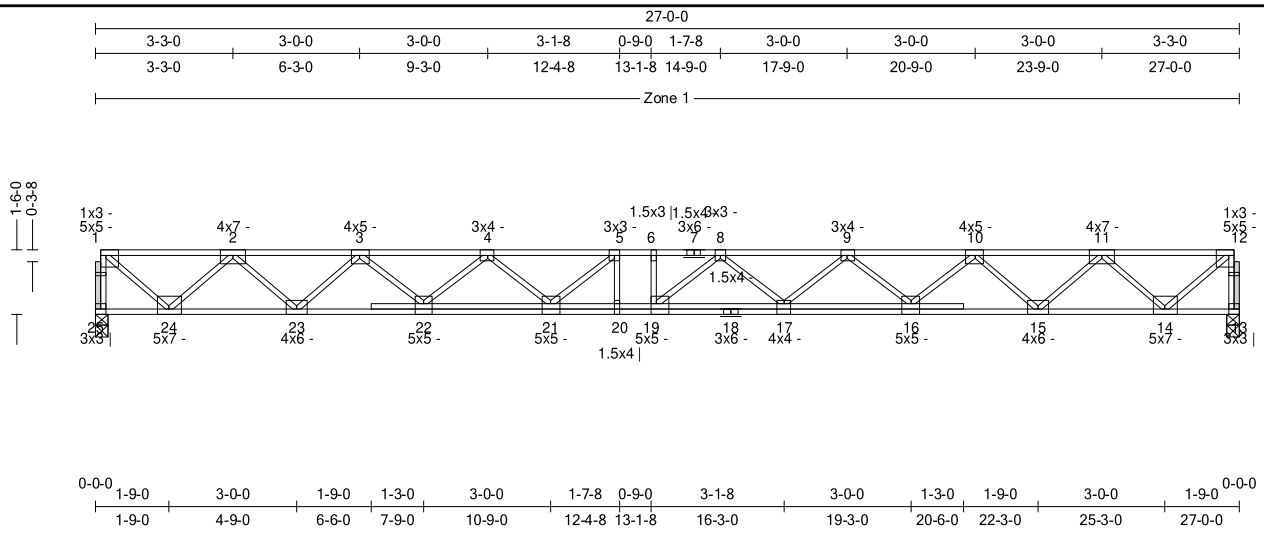
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this floor truss is 10 % (Cq = 0.90).
3) A creep factor of 2.00 has been applied for this truss analysis.
4) The "SYP" label shown in the "Material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



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:F06<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:18:50<br>Page: 1 of 1 |
|---|---|---|

| SPAN | PITCH | QTY | OHL | OHR | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|
| 27-0-0 | 0/12 | 8 | 0-0-0 | 0-0-0 | 1 | 19.19 in | 158 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 : | 0.65 (4-5) | Vert TL: | 0.91 in | L / 347 | (18-19) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.48 (15-16) | Vert LL: | 0.52 in | L / 609 | 19 | L / 360 |
| BCLL : | 0 | Rep Mbr : | Yes | Web : | 0.35 (1-24) | Horz TL: | 0.12 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 |
|---|---|---|---|---|---|---|---|---|---|
| 25 | 1 | 3.5 in | 1.50 in | 1,511 lbs | · | · | · | · | · |
| 13 | 1 | 3.5 in | 1.50 in | 1,511 lbs | · | · | · | · | · |

10/30/2025

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 | 0.224 | | (-1,572 lbs) | 4-5 | 0.645 | | (-7,204 lbs) | 8-9 | 0.641 | | (-7,223 lbs) | 11-12 | 0.224 | | (-1,57 lbs) |
| | 2-3 | 0.365 | | (-4,114 lbs) | 5-6 | 0.581 | | (-7,553 lbs) | 9-10 | 0.547 | | (-6,158 lbs) | | | | |
| | 3-4 | 0.547 | | (-6,160 lbs) | 6-8 | 0.594 | | (-7,553 lbs) | 10-11 | 0.365 | | (-4,114 lbs) | | | | |
| BC | 14-15 | 0.286 | 2,994 lbs | | 17-19 | 0.365 | 7,511 lbs | | 21-22 | 0.330 | 6,827 lbs | | | | | |
| | 15-16 | 0.475 | 5,242 lbs | | 19-20 | 0.336 | 7,553 lbs | | 22-23 | 0.473 | 5,242 lbs | | | | | |
| | 16-17 | 0.317 | 6,834 lbs | | 20-21 | 0.349 | 7,553 lbs | | 23-24 | 0.287 | 2,994 lbs | | | | | |
| Web | 1-25 | 0.159 | | (-1,488 lbs) | 4-22 | 0.106 | | (-887 lbs) | 9-16 | 0.107 | | (-898 lbs) | 12-13 | 0.159 | | (-1,488 lbs) |
| | 1-24 | 0.347 | 2,093 lbs | | 4-21 | 0.103 | 541 lbs | | 10-16 | 0.202 | 1,220 lbs | | | | | |
| | 2-24 | 0.234 | | (-1,930 lbs) | 5-21 | 0.085 | | (-638 lbs) | 10-15 | 0.185 | | (-1,527 lbs) | | | | |
| | 2-23 | 0.251 | 1,518 lbs | | 8-19 | 0.077 | 404 lbs | (-304 lbs) | 11-15 | 0.252 | 1,519 lbs | | | | | |
| | 3-23 | 0.185 | | (-1,528 lbs) | 8-17 | 0.059 | | (-441 lbs) | 11-14 | 0.234 | | (-1,931 lbs) | | | | |
| | 3-22 | 0.202 | 1,222 lbs | | 9-17 | 0.088 | 517 lbs | | 12-14 | 0.347 | 2,093 lbs | | | | | |

## Notes

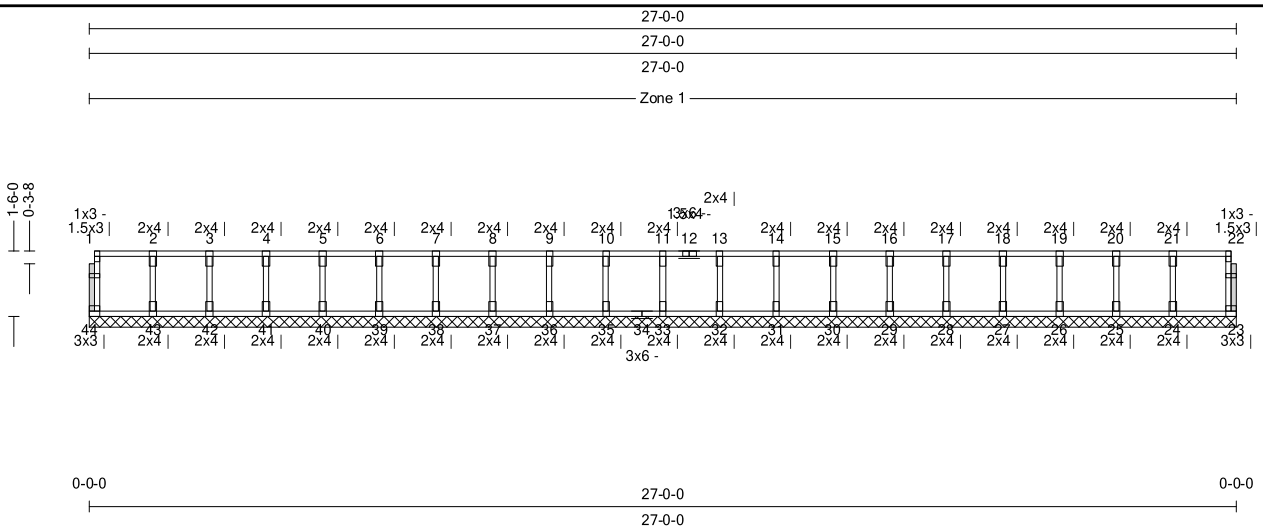
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, two strongbacks recommended at one third points of the truss span. Strongback spacing or strongback to support should not 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.



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:FL01<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:18:54<br>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 | 121 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 (21-22) | Vert TL: | 0 in UP | L / 999 | 23 | L / 240 |
| TCDL : 10 | | TPI 1-2014 | BC : | 0.02 (23-24) | Vert LL: | 0 in | L / 999 | 23 | L / 360 |
| BCLL : 0 | Rep Mbr : | No | Web : | 0.03 (1-44) | 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 | - | 148 lbs | 101 plf | - | - | - | - | -4 lbs |

10/30/2025

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

## Material

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

## Member Forces

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

TC
BC
Web

## Notes

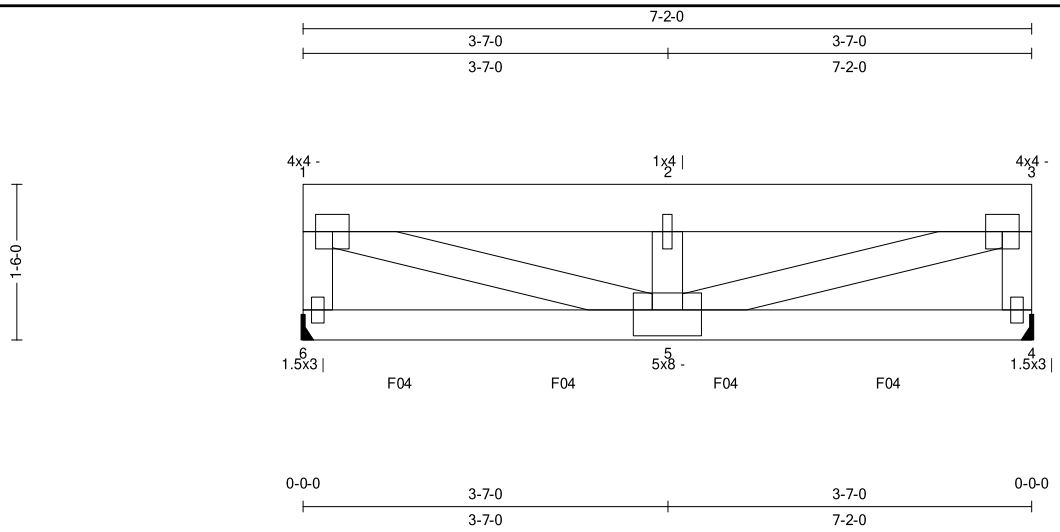
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Unless otherwise specified by the Building Designer, one strongback every 10'-0".
3) Gable requires continuous bottom chord bearing.
4) Continuous bearing knee-wall/ladder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



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | Quality Line Truss Co., LLC<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:G01<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:19:09<br>Page: 1 of 2 |
|---|---|---|

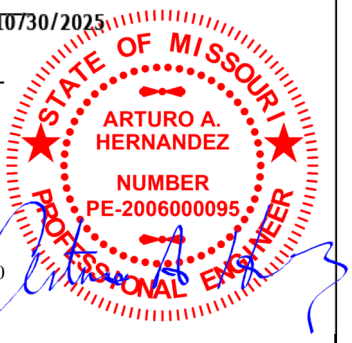
| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 7-2-0 | 0/12 | 1 | 0-0-0 | 0-0-0 | 0-0-0 | 0-0-0 | 2 | 1.5 in | 39 lbs |




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 : | 0.08 (2-3) | Vert TL: | 0.05 in | L / 999 | (5-6) | L / 240 |
| TCLL : | 40 | | TPI 1-2014 | BC : | 0.42 (5-6) | Vert LL: | 0.04 in | L / 999 | (5-6) | L / 360 |
| TCDL : | 10 | Rep Mbr : | No | Web : | 0.23 (1-5) | Horz TL: | 0 in | | 4 | |
| BCLL : | 0 | Lumber D.O.L. : | 100 % | | | | | | | |
| BCDL : | 10 | | | | | | | | | |

10/30/2025




## 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 |
|---|---|---|---|---|---|---|---|---|---|
| 6 | 1 | 1.5 in | --- | 1,351 lbs | · | · | · | · | · |
| 4 | 1 | 1.5 in | --- | 1,185 lbs | · | · | · | · | · |

## Material

TC: SYP 2400/1.7 2 x 6
BC: SYP 2400/1.8 2 x 4
Web: SYP #1 2 x 4

## Bracing

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

## Loads

1) This truss has been designed for the effects of balanced (20 psf) sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
2) This truss has not been designed for the effects of unbalanced snow loads.
3) 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 | 7-2-0 | Down | Proj | 5 plf | 5 plf | |

Load Case D1: Std Dead Load

Distributed Loads

| Member | Location 1 | Location 2 | Direction | Spread | Start Load | End Load | Trib Width |
|---|---|---|---|---|---|---|---|
| Top | 0-0-0 | 7-2-0 | Down | Proj | 1.25 plf | 1.25 plf | |
| Bot | 0-0-0 | 7-2-0 | Down | Proj | 1.25 plf | 1.25 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 | 0.079 | | (-1,136 lbs) | 2-3 | 0.079 | | (-1,136 lbs) | | | |
| BC | | | | | | | | | | | |
| Web | 1-6 | 0.049 | | (-419 lbs) | 3-5 | 0.228 | 1,196 lbs | | | | |
| | 1-5 | 0.228 | 1,196 lbs | | 3-4 | 0.049 | | (-419 lbs) | | | |

## Truss to Truss Connection Summary

| Carried Truss | Carrying Chord | Carrying Offset |
|---|---|---|
| F04 | BC | 0-11-7 |
| F04 | BC | 2-6-10 |
| F04 | BC | 4-1-13 |
| F04 | BC | 5-9-0 |



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

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



| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 7-2-0 | 0/12 | 1 | 0-0-0 | 0-0-0 | 0-0-0 | 0-0-0 | 2 | 1.5 in | 39 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) Hangers are for graphical interpretation only. Install hangers per manufacturer's recommendations.
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) 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, per ply: 10d Nails or Gun Nails [min 0.120"x2.875"] TC - 2 staggered rows @ 1-0-0 oc, BC - 1 row @ 1-0-0 oc , Webs - 1 row @ 1-0-0 oc.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach each pair of girder plies with supplemental 10d Nails or Gun Nails [min 0.120"x2.875"] as follows within 24" of the location shown:
BC: 0-11-7,(5)Connectors
BC: 2-6-10,(5)Connectors
BC: 4-1-13,(5)Connectors
BC: 5-9-0,(5)Connectors

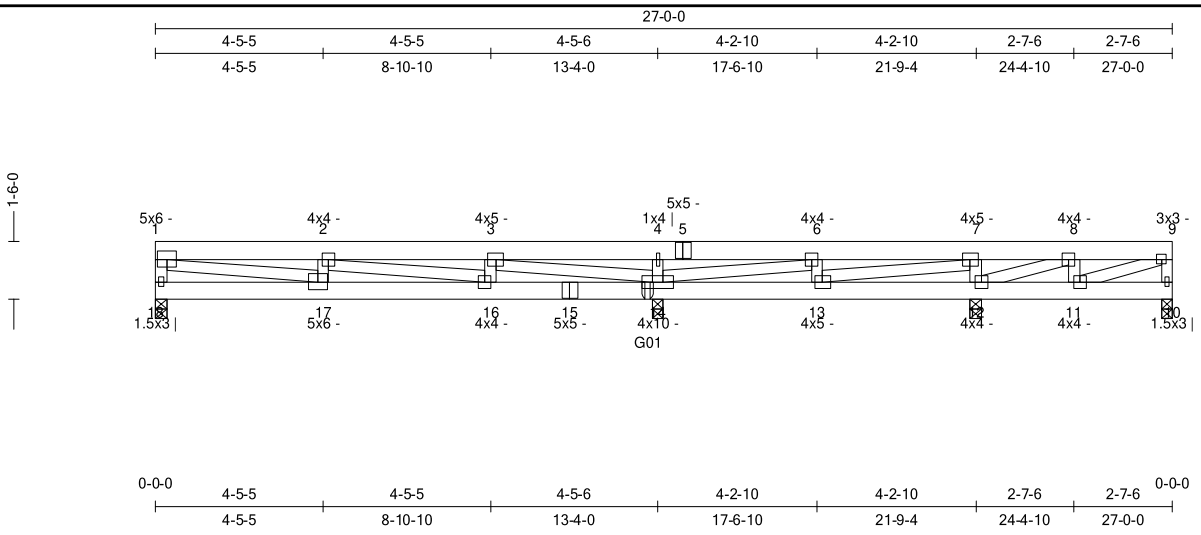
Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
9) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
10) Lateral bracing shall be attached to each ply.
11) All fasteners minimum 2-1/2" long, unless otherwise noted.
12) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | Quality Line Truss Co., LLC<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:G02<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:19:11<br>Page: 1 of 2 |
|---|---|---|

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 27-0-0 | 0/12 | 1 | 0-0-0 | 0-0-0 | 0-0-0 | 0-0-0 | 2 | 96.38 in | 164 lbs |




All plates shown to be Eagle 20 unless otherwise noted.

| Loading (psf) | | General | | CSI | | Deflection | | L/ | (loc) | Allowed |
|---|---|---|---|---|---|---|---|---|---|---|
| Carried Loads (psf) | | Bldg Code : | IBC 2018/ | TC : | 0.45 (3-4) | Vert TL: | 0.17 in | L / 911 | (16-17) | L / 240 |
| TCLL : | 40 | | TPI 1-2014 | BC : | 0.39 (14-16) | Vert LL: | 0.11 in | L / 999 | (16-17) | L / 360 |
| TCDL : | 10 | Rep Mbr : | No | Web : | 0.43 (1-17) | Horz TL: | 0.02 in | | 10 | |
| BCLL : | 0 | Lumber D.O.L. : | 100 % | | | | | | | |
| BCDL : | 10 | | | | | | | | | |

10/30/2025

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

## Reaction

| JT | Brg Combo | Brg Width | Rqd Brg Width | Max React | Max Grav Uplift | Max MWFRS Uplift | Max C&C Uplift | Max Uplift | Max Horiz |
|---|---|---|---|---|---|---|---|---|---|
| 18 | 1 | 3.5 in | 1.50 in | 2,026 lbs | · | · | · | · | · |
| 14 | 1 | 3.5 in | 3.46 in | 5,870 lbs | · | · | · | · | · |
| 12 | 1 | 3.5 in | 2.36 in | 4,006 lbs | · | · | · | · | · |
| 10 | 1 | 3.5 in | 1.50 in | 1,099 lbs | · | · | · | · | · |

## Material

TC: SYP 2400/1.7 2 x 6
BC: SYP 2400/1.7 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) 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 | 13-0-12 | Down | Proj | 30.78 plf | 30.78 plf | |
| Top | 13-0-12 | 27-0-0 | Down | Proj | 148.33 plf | 148.33 plf | |
| Top | 0-0-0 | 16-10-8 | Down | Proj | 172.92 plf | 172.92 plf | |
| Top | 16-10-8 | 27-0-0 | Down | Proj | 172.92 plf | 172.92 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 | 13-0-12 | Down | Proj | 7.7 plf | 7.7 plf | |
| Top | 13-0-12 | 27-0-0 | Down | Proj | 37.08 plf | 37.08 plf | |
| Top | 0-0-0 | 16-10-8 | Down | Proj | 43.23 plf | 43.23 plf | |
| Top | 16-10-8 | 27-0-0 | Down | Proj | 43.23 plf | 43.23 plf | |
| Bot | 0-0-0 | 13-0-12 | Down | Proj | 7.7 plf | 7.7 plf | |
| Bot | 13-0-12 | 27-0-0 | Down | Proj | 37.08 plf | 37.08 plf | |
| Bot | 0-0-0 | 16-10-8 | Down | Proj | 43.23 plf | 43.23 plf | |
| Bot | 16-10-8 | 27-0-0 | Down | Proj | 43.23 plf | 43.23 plf | |



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 27-0-0 | 0/12 | 1 | 0-0-0 | 0-0-0 | 0-0-0 | 0-0-0 | 2 | 96.38 in | 164 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 | 0.175 | | (-2,415 lbs) | 3-4 | 0.455 | 1,347 lbs | | 6-7 | 0.206 | 422 lbs | (-946 lbs) | 8-9 | 0.073 | (-483 lbs) |
| | 2-3 | 0.169 | | (-1,666 lbs) | 4-6 | 0.455 | 1,347 lbs | | 7-8 | 0.293 | 560 lbs | | | | |
| BC | 11-12 | 0.180 | 483 lbs | | 13-14 | 0.324 | 946 lbs | (-422 lbs) | 16-17 | 0.274 | 2,415 lbs | | | | |
| | 12-13 | 0.130 | | (-560 lbs) | 14-16 | 0.390 | 1,666 lbs | | | | | | | | |
| Web | 1-18 | 0.094 | | (-869 lbs) | 3-14 | 0.382 | | (-3,033 lbs) | 7-13 | 0.263 | 1,380 lbs | | 9-10 | 0.054 | (-465 lbs) |
| | 1-17 | 0.431 | 2,485 lbs | | 4-14 | 0.112 | | (-1,007 lbs) | 7-12 | 0.142 | | (-1,224 lbs) | | | |
| | 2-17 | 0.052 | | (-451 lbs) | 6-14 | 0.228 | | (-1,870 lbs) | 8-12 | 0.095 | | (-855 lbs) | | | |
| | 2-16 | 0.105 | | (-832 lbs) | 6-13 | 0.042 | | (-367 lbs) | 9-11 | 0.100 | 524 lbs | | | | |

## Truss to Truss Connection Summary

| Carried Truss | Carrying Chord | Carrying Offset |
|---|---|---|
| G01 | BC | 13-0-12 |

## Notes

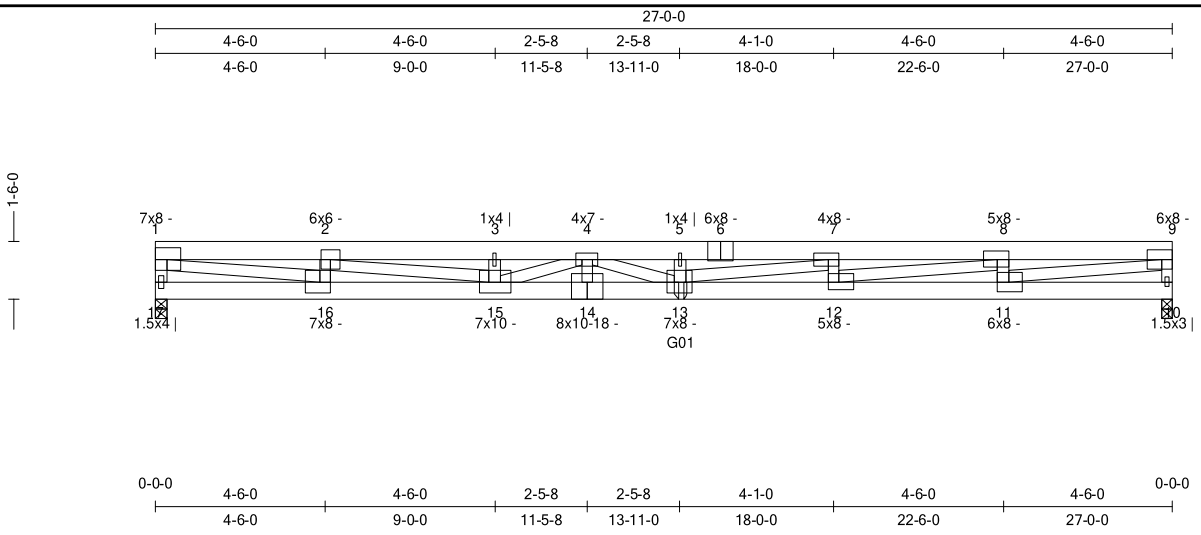
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
3) Provide adequate drainage to prevent ponding.
4) Brace bottom chord with approved sheathing or purlins 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) 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, per ply: 10d Nails or Gun Nails [min 0.120"x2.875"] TC - 2 staggered rows @ 0-8-4 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row @ 1-0-0 oc.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach each pair of girder plies with supplemental 10d Nails or Gun Nails [min 0.120"x2.875"] as follows within 24" of the location shown:
BC: 13-0-12,(9)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) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
9) Lateral bracing shall be attached to each ply.
10) All fasteners minimum 2-1/2" long, unless otherwise noted.
11) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:G03<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:19:14<br>Page: 1 of 2 |

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 27-0-0 | 0/12 | 1 | 0-0-0 | 0-0-0 | 0-0-0 | 0-0-0 | 2 | 48 in | 172 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 : | 0.55 (5-7) | Vert TL: | 1.27 in | L / 249 | (13-14) | L / 240 |
| TCLL : | 40 | | TPI 1-2014 | BC : | 0.83 (13-14) | Vert LL: | 0.6 in | L / 527 | (13-14) | L / 360 |
| TCDL : | 10 | Rep Mbr : | No | Web : | 0.94 (1-16) | Horz TL: | 0.09 in | | 10 | |
| 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 |
|---|---|---|---|---|---|---|---|---|---|
| 17 | 1 | 3.5 in | 1.70 in | 2,873 lbs | . | . | . | . | . |
| 10 | 1 | 3.5 in | 1.50 in | 1,767 lbs | . | . | . | . | . |

## Material

TC: SYP 2400/1.7 2 x 6
BC: SYP 2400/1.7 2 x 6
Web: SYP #1 2 x 4

## Bracing

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

10/30/2025
STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
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) 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 | 13-11-4 | 27-0-0 | Down | Proj | 11.67 plf | 11.67 plf | |
| Top | 0-0-0 | 27-0-0 | Down | Proj | 11.67 plf | 11.67 plf | |
| Top | 0-0-0 | 13-11-4 | Down | Proj | 148.33 plf | 148.33 plf | |

Load Case D1: Std Dead Load

Distributed Loads

| Member | Location 1 | Location 2 | Direction | Spread | Start Load | End Load | Trib Width |
|---|---|---|---|---|---|---|---|
| Top | 13-11-4 | 27-0-0 | Down | Proj | 2.92 plf | 2.92 plf | |
| Top | 0-0-0 | 27-0-0 | Down | Proj | 2.92 plf | 2.92 plf | |
| Bot | 0-0-0 | 1-4-0 | Down | Proj | 2.92 plf | 2.92 plf | |
| Bot | 13-11-4 | 27-0-0 | Down | Proj | 2.92 plf | 2.92 plf | |
| Bot | 0-0-0 | 27-0-0 | Down | Proj | 2.92 plf | 2.92 plf | |
| Top | 0-0-0 | 13-11-4 | Down | Proj | 37.08 plf | 37.08 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 | 0.301 | | (-4,780 lbs) | 3-4 | 0.470 | | (-7,628 lbs) | 5-7 | 0.555 | | (-8,730 lbs) | 8-9 | 0.210 | | (-3,333 lbs) |
| | 2-3 | 0.504 | | (-7,628 lbs) | 4-5 | 0.551 | | (-8,730 lbs) | 7-8 | 0.400 | | (-6,401 lbs) | | | | |
| BC | 11-12 | 0.362 | 3,333 lbs | | 13-14 | 0.833 | 8,659 lbs | | 15-16 | 0.553 | 4,780 lbs | | | | | |
| | 12-13 | 0.691 | 6,401 lbs | | 14-15 | 0.797 | 8,659 lbs | | | | | | | | | |



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 27-0-0 | 0/12 | 1 | 0-0-0 | 0-0-0 | 0-0-0 | 0-0-0 | 2 | 48 in | 172 lbs |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Web | 1-17 | 0.160 | | (-1,380 lbs) | 3-15 | 0.036 | | (-314 lbs) | 7-12 | 0.078 | | (-673 lbs) | 9-10 | 0.099 | | (-851 lbs) |
| | 1-16 | 0.936 | 4,915 lbs | | 4-15 | 0.135 | | (-1,119 lbs) | 8-12 | 0.600 | 3,148 lbs | | | | | |
| | 2-16 | 0.133 | | (-1,153 lbs) | 4-13 | 0.094 | 506 lbs | (-439 lbs) | 8-11 | 0.091 | | (-784 lbs) | | | | |
| | 2-15 | 0.557 | 2,923 lbs | | 7-13 | 0.458 | 2,404 lbs | | 9-11 | 0.653 | 3,428 lbs | | | | | |

## Truss to Truss Connection Summary

| Carried Truss | Carrying Chord | Carrying Offset |
|---|---|---|
| G01 | BC | 13-11-4 |

## 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) 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, per ply: 10d Nails or Gun Nails [min 0.120"x2.875"] TC - 2 staggered rows @ 1-0-0 oc, BC - 2 staggered rows @ 1-0-0 oc , Webs - 1 row @ 1-0-0 oc.

Provided the hanger connections do not adequately transfer the applied load to all plies: in addition to connectors shown above, attach each pair of girder plies with supplemental 10d Nails or Gun Nails [min 0.120"x2.875"] as follows within 24" of the location shown:
BC: 13-11-4,(10)Connectors

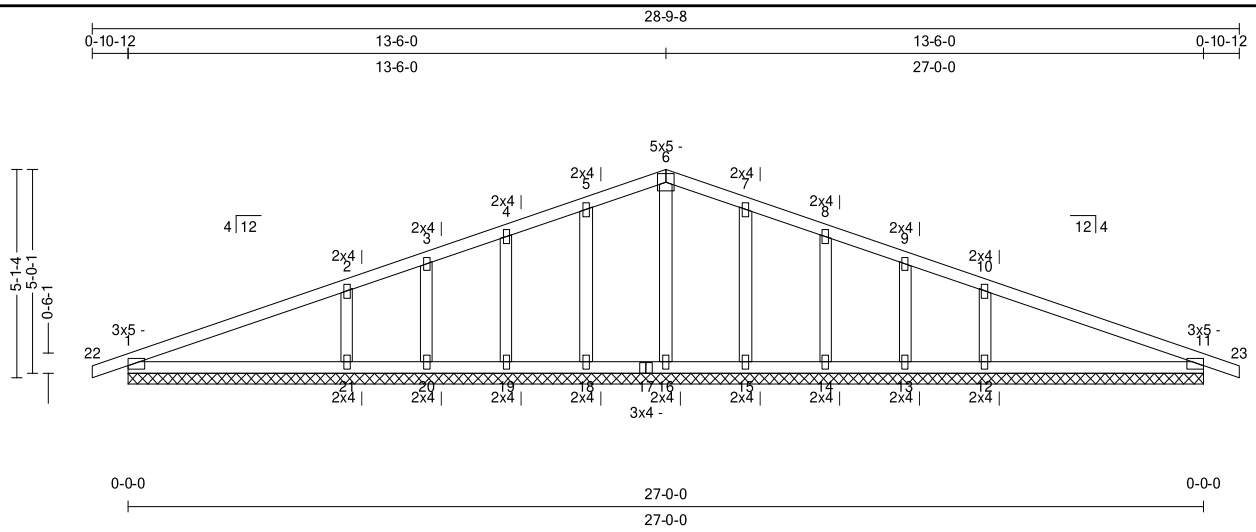
Connectors shall not encroach on other girder ply connectors or truss-to-truss connectors in accordance with the NDS or the connector manufacturer recommendations.
8) When applied loads are on one side of girder, do not flip girder during girder connector installation, install connectors on the girder side where supported loads are applied. When applied loads are on both sides of girder, double the spacing and install half of the connectors on one side of girder and then flip the girder to install the other half of the connectors on the opposite side (at double the connector spacing). Connectors on opposite sides of the girder shall be offset.
9) Lateral bracing shall be attached to each ply.
10) All fasteners minimum 2-1/2" long, unless otherwise noted.
11) Nails in 1st and 2nd ply shall be offset from successive plies by 1/2 the nail spacing.



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:GE01<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:18:56<br>Page: 1 of 1 |

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 27-0-0 | 4/12 | 1 | 0-10-12 | 0-10-12 | 0-0-0 | 0-0-0 | 1 | 24 in | 119 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 : | 0.29 (10-11) | Vert TL: | 0.01 in | L / 999 | (11-12) | L / 240 |
| TCDL : 10 | | TPI 1-2014 | BC : | 0.11 (11-12) | Vert LL: | 0 in | L / 999 | 11 | L / 360 |
| BCLL : 0 | Rep Mbr : | No | Web : | 0.04 (5-18) | 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 | - | 1,009 lbs | 155 plf | -706 lbs | -161 lbs | -318 lbs | -706 lbs | -537 lbs |

10/30/2025

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

## Material

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

## Bracing

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

## Loads

1) This truss has been designed for the effects of balanced (14 psf) 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 | 0.287 | 835 lbs | | | | |
| | 10-11 | 0.287 | 835 lbs | | | | |
| BC | | | | | | | |
| Web | | | | | | | |

## Notes

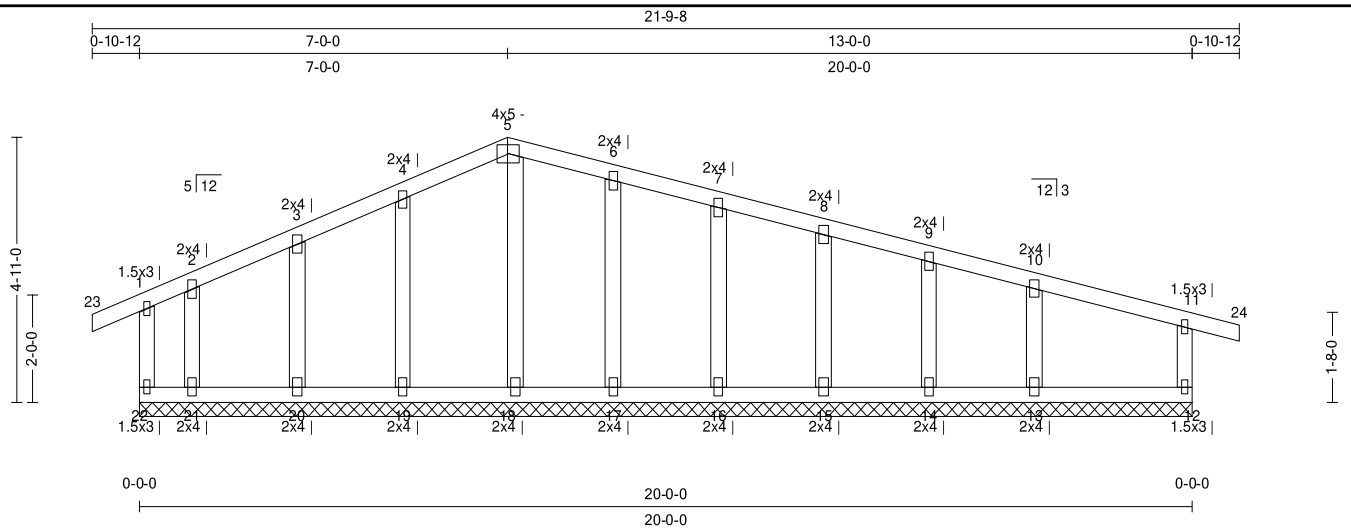
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable requires continuous bottom chord bearing.
3) Gable webs placed at 24 " OC, U.N.O.
4) Attach gable webs with 2x4 20ga plates, U.N.O.
5) Bracing shown is for in-plane requirements. 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) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 11, 1 may need to be considered.
10) Listed wind uplift reactions based on MWFRS & C&C loading.



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:GE02<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:18:58<br>Page: 1 of 1 |

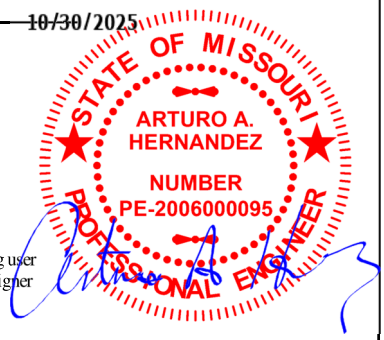
| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 20-0-0 | 5/12 | 1 | 0-10-12 | 0-10-12 | 0-0-0 | 0-0-0 | 1 | 24 in | 103 lbs |




All plates shown to be Eagle 20 unless otherwise noted.

| Loading (psf) | General | | CSI | | Deflection | | L/ | (loc) | Allowed |
|---|---|---|---|---|---|---|---|---|---|
| TCLL : 20 | Bldg Code : | IBC 2018/ | TC : | 0.10 (23-1) | Vert TL: | 0 in UP | L / 999 | 12 | L / 240 |
| TCDL : 10 | | TPI 1-2014 | BC : | 0.04 (12-13) | Vert LL: | 0 in | L / 999 | 12 | L / 360 |
| BCLL : 0 | Rep Mbr : | No | Web : | 0.07 (1-22) | Horz TL: | 0 in | | | |
| BCDL : 10 | Lumber D.O.L. : | 115 % | | | | | | | |

10/30/2025




## Reaction

| Brg Combo | Brg Width | Max React | Ave React | Max Grav Uplift | Max MWFRS Uplift | Max C&C Uplift | Max Uplift | Max Horiz |
|---|---|---|---|---|---|---|---|---|
| 1 | · | 215 lbs | 91 plf | · | -64 lbs | -130 lbs | -130 lbs | 42 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 | | |
| 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) Listed wind uplift reactions based on MWFRS & C&C loading.

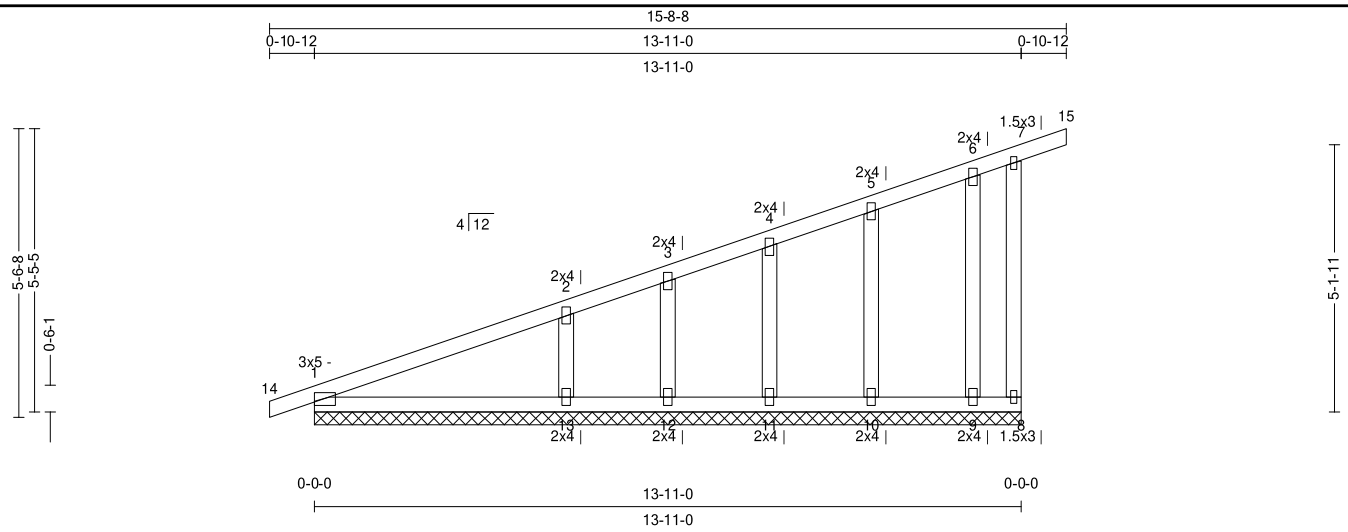


TrueBuild®Truss Software v5.8.11
Eagle Metal Products

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

Truss:GE03
Job: QU03400_RESERVE_BUILDING H_R
Date: 10/30/25 08:19:00
Page: 1 of 1

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 13-11-0 | 4/12 | 1 | 0-10-12 | 0-10-12 | 0-0-0 | 0-0-0 | 1 | 24 in | 70 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 : | 0.25 (1-2) | Vert TL: | 0.01 in | L / 999 | (13-1) | L / 240 |
| TCDL : | 10 | Rep Mbr : | No | BC : | 0.09 (13-1) | Vert LL: | 0 in | L / 999 | 8 | L / 360 |
| BCLL : | 0 | Lumber D.O.L. : | 115 % | Web : | 0.22 (7-8) | Horz TL: | 0 in | | | |
| BCDL : | 10 | | | | | | | | | |

## Reaction

| Brg Combo | Brg Width | Max React | Ave React | Max Grav Uplift | Max MWFRS Uplift | Max C&C Uplift | Max Uplift | Max Horiz |
|---|---|---|---|---|---|---|---|---|
| 1 | - | 917 lbs | 170 plf | -656 lbs | -207 lbs | -570 lbs | -656 lbs | -461 lbs |

10/30/2025
STATE OF MISSOURI
ARTURO A. HERNANDEZ
NUMBER PE-2006000095
PROFESSIONAL ENGINEER

## Material

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

## Bracing

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

## Loads

1) This truss has been designed for the effects of balanced (14 psf) 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 | 0.253 | 764 lbs | (-567 lbs) |
| BC | | | | |
| Web | | | | |

## Notes

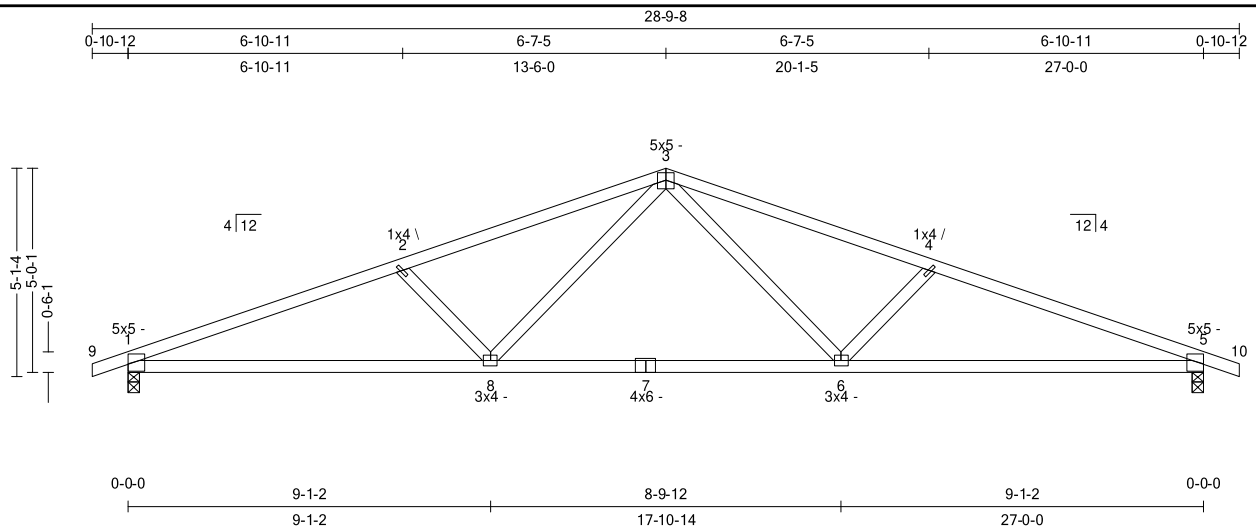
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) Gable requires continuous bottom chord bearing.
3) Gable webs placed at 24 " OC, U.N.O.
4) Attach gable webs with 2x4 20ga plates, U.N.O.
5) Bracing shown is for in-plane requirements. 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) 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.



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:T01<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:19:01<br>Page: 1 of 1 |

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 27-0-0 | 4/12 | 14 | 0-10-12 | 0-10-12 | 0-0-0 | 0-0-0 | 1 | 24 in | 107 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 : | 0.52 (2-3) | Vert TL: | 0.48 in | L / 663 | (6-7) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.89 (8-1) | Vert LL: | 0.16 in | L / 999 | (6-7) | L / 360 |
| BCLL : | 0 | Rep Mbr : | Yes | Web : | 0.14 (3-8) | Horz TL: | 0.1 in | | 5 | |
| BCDL : | 10 | Lumber D.O.L. : | 115 % | | | | | | | |

10/30/2025


## 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 | 1.66 in | 1,404 lbs | · | -104 lbs | -315 lbs | -315 lbs | -3 lbs |
| 5 | 1 | 3.5 in | 1.66 in | 1,404 lbs | · | -104 lbs | -315 lbs | -315 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 3-4-0, Purlin design by Others.
BC: Sheathed or Purlins at 9-5-0, 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 | 0.463 | 590 lbs | (-3,035 lbs) | 3-4 | 0.522 | 537 lbs | (-2,746 lbs) | | | | | | | |
| | 2-3 | 0.522 | 537 lbs | (-2,746 lbs) | 4-5 | 0.463 | 590 lbs | (-3,035 lbs) | | | | | | | |
| BC | 5-6 | 0.892 | 2,817 lbs | (-457 lbs) | 6-8 | 0.762 | 1,952 lbs | (-304 lbs) | 8-1 | 0.892 | 2,817 lbs | (-457 lbs) | | | |
| Web | 2-8 | 0.081 | | (-422 lbs) | 3-8 | 0.144 | 872 lbs | | 3-6 | 0.144 | 872 lbs | | 4-6 | 0.081 | (-422 lbs) |

## Notes

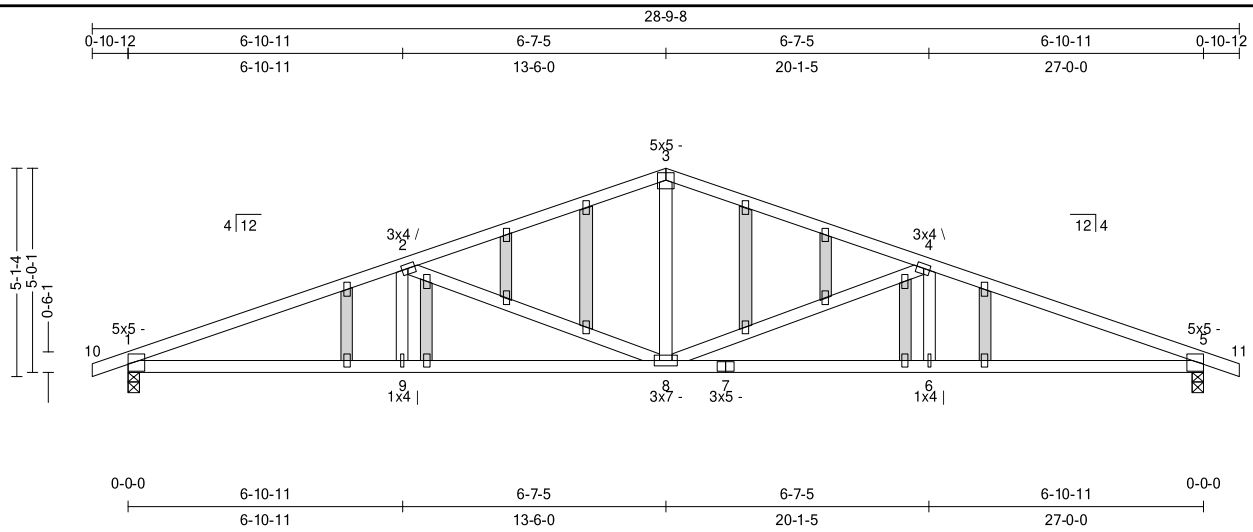
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) A creep factor of 2.00 has 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.



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:T02<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:19:03<br>Page: 1 of 1 |

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 27-0-0 | 4/12 | 1 | 0-10-12 | 0-10-12 | 0-0-0 | 0-0-0 | 1 | 24 in | 138 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 : | 0.65 (4-5) | Vert TL: | 0.37 in | L / 845 | (6-7) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.87 (5-6) | Vert LL: | 0.13 in | L / 999 | (8-9) | L / 360 |
| BCLL : | 0 | Rep Mbr : | No | Web : | 0.67 (2-8) | Horz TL: | 0.11 in | | 5 | |
| BCDL : | 10 | Lumber D.O.L. : | 115 % | | | | | | | |

10/30/2025


## 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 | 1.66 in | 1,404 lbs | · | -104 lbs | -315 lbs | -315 lbs | -3 lbs |
| 5 | 1 | 3.5 in | 1.66 in | 1,404 lbs | · | -104 lbs | -315 lbs | -315 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 3-1-0, Purlin design by Others.
BC: Sheathed or Purlins at 9-4-0, 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 | 0.654 | 562 lbs | (-3,076 lbs) | 3-4 | 0.518 | 495 lbs | (-2,189 lbs) | | | | | | | |
| | 2-3 | 0.518 | 495 lbs | (-2,189 lbs) | 4-5 | 0.654 | 562 lbs | (-3,076 lbs) | | | | | | | |
| BC | 5-6 | 0.870 | 2,851 lbs | (-432 lbs) | 6-8 | 0.865 | 2,851 lbs | (-432 lbs) | 8-9 | 0.865 | 2,851 lbs | (-432 lbs) | 9-1 | 0.870 | 2,851 lbs | (-432 lbs) |
| Web | 2-8 | 0.668 | | (-887 lbs) | 4-8 | 0.668 | | (-887 lbs) | | | | | | | |
| | 3-8 | 0.153 | 922 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) 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) Listed wind uplift reactions based on MWFRS & C&C loading.

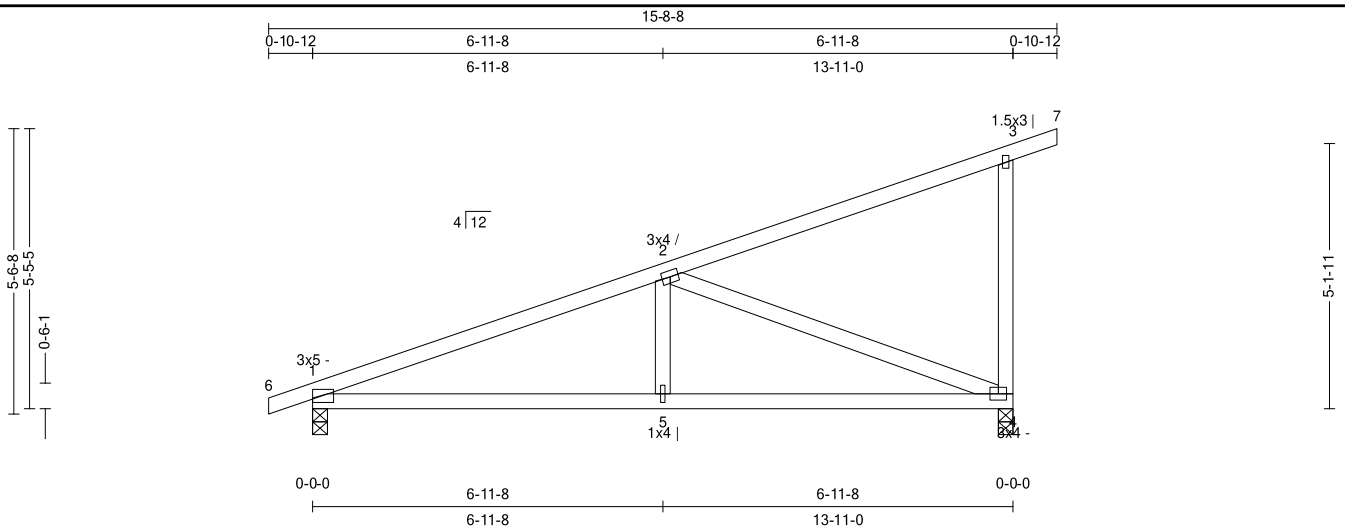


TrueBuild®Truss Software v5.8.11
Eagle Metal Products

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

Truss:T03
Job: QU03400_RESERVE_BUILDING H_R
Date: 10/30/25 08:19:04
Page: 1 of 1

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 13-11-0 | 4/12 | 2 | 0-10-12 | 0-10-12 | 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 : | IBC 2018/ | TC : | 0.55 (2-3) | Vert TL: | 0.14 in | L / 999 | (4-5) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.66 (5-1) | Vert LL: | 0.06 in | L / 999 | (4-5) | L / 360 |
| BCLL : | 0 | Rep Mbr : | No | Web : | 0.95 (2-4) | Horz TL: | 0.02 in | | 4 | |
| BCDL : | 10 | Lumber D.O.L. : | 115 % | | | | | | | |

10/30/2025


## 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 | 742 lbs | · | -32 lbs | -298 lbs | -298 lbs | 185 lbs |
| 4 | 1 | 3.5 in | 1.50 in | 758 lbs | · | -91 lbs | -360 lbs | -360 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 4-11-0, Purlin design by Others.
BC: Sheathed or Purlins at 9-10-0, 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 | 0.516 | 364 lbs | (-1,237 lbs) | | | | | | | |
| BC | 4-5 | 0.661 | 1,120 lbs | (-380 lbs) | 5-1 | 0.661 | 1,120 lbs | (-380 lbs) | | | |
| Web | 2-5 | 0.056 | 336 lbs | | 2-4 | 0.952 | 509 lbs | (-1,194 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.

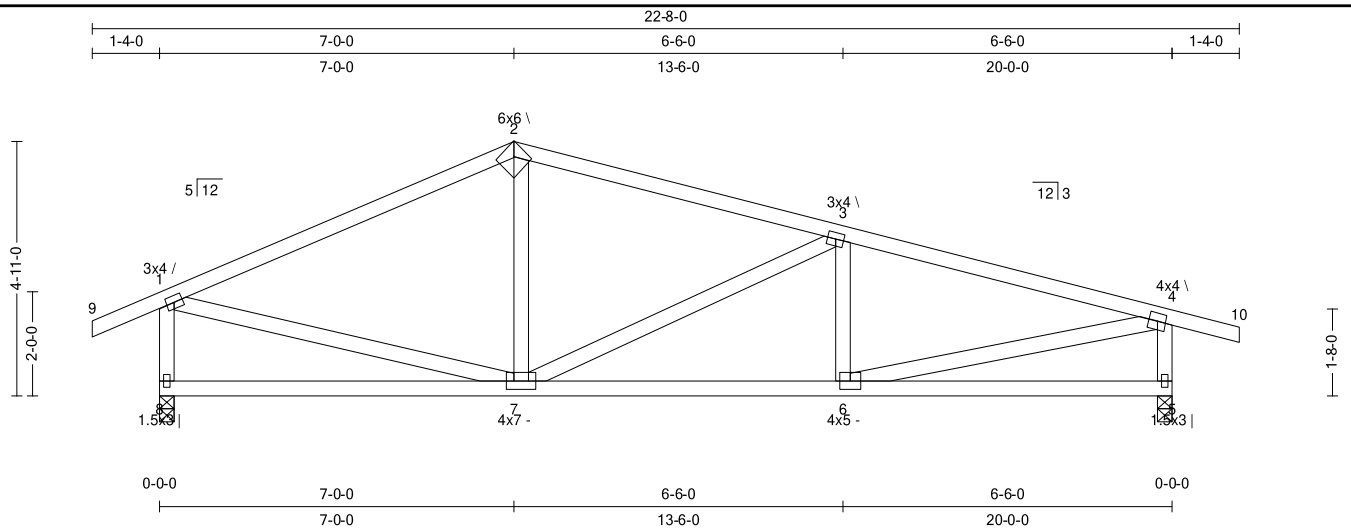


TrueBuild®Truss Software v5.8.11
Eagle Metal Products

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

Truss:T06
Job: QU03400_RESERVE_BUILDING H_R
Date: 10/30/25 08:19:05
Page: 1 of 1

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 20-0-0 | 5/12 | 5 | 1-4-0 | 1-4-0 | 0-0-0 | 0-0-0 | 1 | 24 in | 103 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 : | 0.61 (1-2) | Vert TL: | 0.18 in | L / 999 | (7-8) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.59 (6-7) | Vert LL: | 0.08 in | L / 999 | (7-8) | L / 360 |
| BCLL : | 0 | Rep Mbr : | Yes | Web : | 0.40 (3-7) | Horz TL: | 0.01 in | | 5 | |
| BCDL : | 10 | Lumber D.O.L. : | 115 % | | | | | | | |

10/30/2025

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 |
|---|---|---|---|---|---|---|---|---|---|
| 8 | 1 | 3.5 in | 1.50 in | 1,080 lbs | · | -90 lbs | -352 lbs | -352 lbs | -64 lbs |
| 5 | 1 | 3.5 in | 1.50 in | 1,080 lbs | · | -89 lbs | -345 lbs | -345 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 4-7-0, 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 | 0.607 | 372 lbs | (-1,195 lbs) | 3-4 | 0.380 | 437 lbs | (-1,596 lbs) | | | | |
| | 2-3 | 0.409 | 382 lbs | (-1,125 lbs) | | | | | | | | |
| BC | 6-7 | 0.590 | 1,509 lbs | | | | | | | | | |
| Web | 1-8 | 0.105 | 387 lbs | (-960 lbs) | 3-7 | 0.403 | | (-543 lbs) | 4-5 | 0.102 | 377 lbs | (-968 lbs) |
| | 1-7 | 0.178 | 1,072 lbs | | 4-6 | 0.256 | 1,546 lbs | (-329 lbs) | | | | |

## Notes

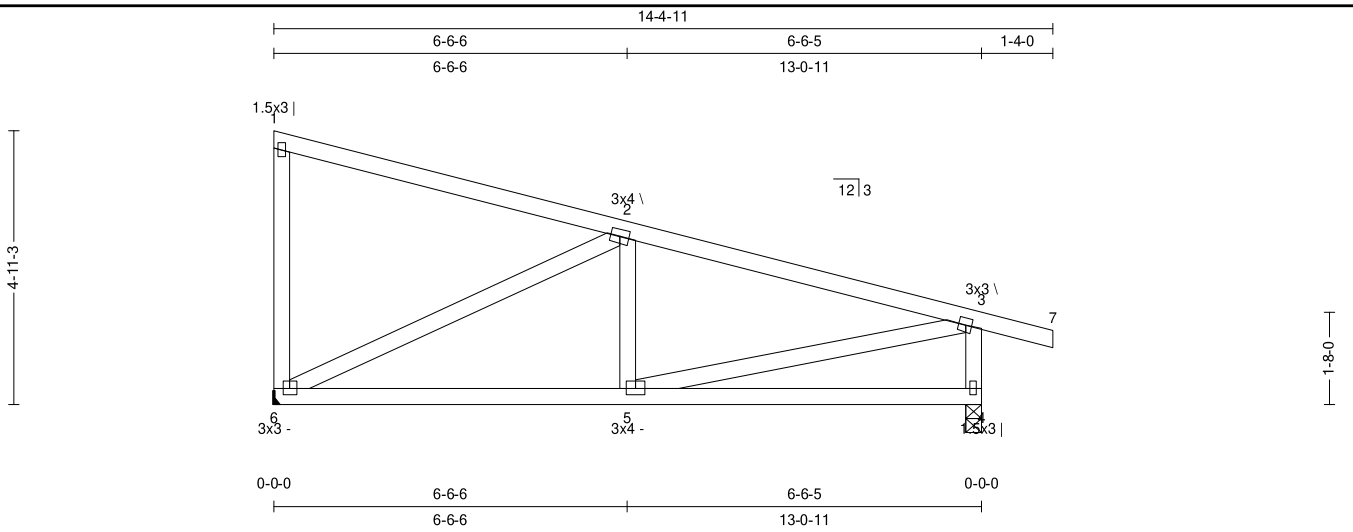
1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
2) The fabrication tolerance for this roof truss is 20 % (Cq = 0.80).
3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
4) A creep factor of 2.00 has 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.



TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| | | |
|---|---|---|
| | **Quality Line Truss Co., LLC**<br>34593 S 4350 RD<br>Address 2<br>Adair, OK 74330 | Truss:T07<br>Job: QU03400_RESERVE_BUILDING H_R<br>Date: 10/30/25 08:19:07<br>Page: 1 of 1 |

| SPAN | PITCH | QTY | OHL | OHR | CANT L | CANT R | PLYS | SPACING | WGT/PLY |
|---|---|---|---|---|---|---|---|---|---|
| 13-0-11 | -3/12 | 2 | 0-0-0 | 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 : | IBC 2018/ | TC : | 0.60 (2-3) | Vert TL: | 0.1 in | L / 999 | (4-5) | L / 240 |
| TCDL : | 10 | | TPI 1-2014 | BC : | 0.56 (5-6) | Vert LL: | 0.04 in | L / 999 | (4-5) | L / 360 |
| BCLL : | 0 | Rep Mbr : | No | Web : | 0.68 (2-6) | Horz TL: | 0.01 in | | 4 | |
| BCDL : | 10 | Lumber D.O.L. : | 115 % | | | | | | | |

10/30/2025

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 |
|---|---|---|---|---|---|---|---|---|---|
| 6 | 1 | 1.5 in | --- | 648 lbs | · | -65 lbs | -286 lbs | -286 lbs | -171 lbs |
| 4 | 1 | 3.5 in | 1.50 in | 792 lbs | · | -50 lbs | -351 lbs | -351 lbs | · |

## Material

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

## Bracing

TC: Sheathed or Purlins at 5-6-0, 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

## 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 | 0.602 | 330 lbs | (-886 lbs) | | | | | | | |
| BC | 5-6 | 0.565 | 822 lbs | | | | | | | | |
| Web | 2-6 | 0.679 | 419 lbs | (-908 lbs) | 3-4 | 0.072 | 381 lbs | (-688 lbs) | | | |
| | 3-5 | 0.139 | 842 lbs | | | | | | | | |

## Notes

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

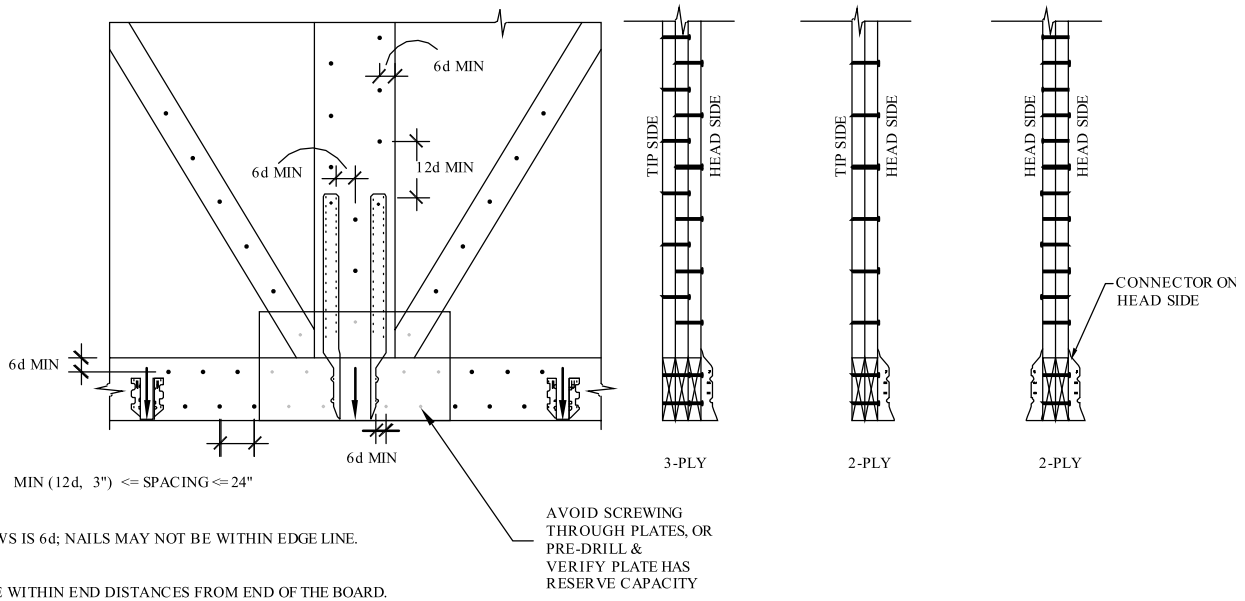


TrueBuild®Truss Software v5.8.11
Eagle Metal Products

| POINT LOAD,P | 8dx2.5" BOX | | | | 0.120 Ø GUN (3" MIN) | | | | 10, 12d BOX or 8d COMMON or 0.131Ø GUN (3" MIN) | | | | 16d BOX | | | | 12d COMMON OR 20d BOX | | | | 16d COMMON | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SP | | SPF | | SP | | SPF | | SP | | SPF | | SP | | SPF | | SP | | SPF | | SP | | SPF | |
| | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY | 2-PLY | 3-PLY |
| 500 | 4 | 5 | 5 | 6 | 3 | 4 | 4 | 5 | 3 | 4 | 3 | 5 | 2 | 3 | 3 | 4 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 |
| 1,000 | 7 | 10 | 9 | 12 | 6 | 7 | 7 | 10 | 5 | 7 | 7 | 9 | 4 | 6 | 6 | 9 | 4 | 5 | 5 | 7 | 3 | 4 | 4 | 6 |
| 1,500 | 11 | 14 | 14 | 19 | 8 | 11 | 11 | 14 | 8 | 11 | 10 | 14 | 7 | 9 | 10 | 13 | 6 | 8 | 8 | 10 | 5 | 6 | 6 | 8 |
| 2,000 | 14 | 19 | 19 | 25 | 11 | 15 | 14 | 19 | 11 | 14 | 14 | 18 | 9 | 12 | 13 | 17 | 8 | 10 | 10 | 13 | 6 | 9 | 8 | 11 |
| 2,500 | 18 | 24 | 23 | 31 | 14 | 19 | 18 | 24 | 13 | 18 | 17 | 23 | 11 | 15 | 16 | 22 | 10 | 13 | 13 | 17 | 8 | 11 | 10 | 14 |
| 3,000 | 21 | 29 | 28 | 37 | 17 | 22 | 22 | 29 | 16 | 21 | 21 | 28 | 13 | 18 | 19 | 26 | 12 | 16 | 15 | 20 | 10 | 13 | 13 | 17 |
| 3,500 | 25 | 33 | 32 | 43 | 20 | 26 | 25 | 34 | 19 | 25 | 24 | 32 | 15 | 21 | 23 | 30 | 14 | 18 | 18 | 23 | 11 | 15 | 15 | 19 |
| 4,000 | 29 | 38 | 37 | 49 | 22 | 30 | 29 | 39 | 21 | 29 | 28 | 37 | 18 | 24 | 26 | 34 | 16 | 21 | 20 | 27 | 13 | 17 | 17 | 22 |
| 4,500 | 32 | 43 | 42 | 56 | 25 | 34 | 33 | 43 | 24 | 32 | 31 | 42 | 20 | 27 | 29 | 39 | 18 | 23 | 23 | 30 | 15 | 19 | 19 | 25 |
| 5,000 | 36 | 48 | 46 | 62 | 28 | 37 | 36 | 48 | 27 | 36 | 35 | 46 | 22 | 29 | 32 | 43 | 20 | 26 | 25 | 33 | 16 | 22 | 21 | 28 |
| 5,500 | 39 | 52 | 51 | 68 | 31 | 41 | 40 | 53 | 29 | 39 | 38 | 51 | 24 | 32 | 36 | 47 | 21 | 29 | 28 | 37 | 18 | 24 | 23 | 31 |
| 6,000 | 43 | 57 | 56 | 74 | 34 | 45 | 43 | 58 | 32 | 43 | 42 | 55 | 27 | 35 | 39 | 52 | 23 | 31 | 30 | 40 | 19 | 26 | 25 | 33 |
| 6,500 | 46 | 62 | 60 | 80 | 37 | 49 | 47 | 63 | 35 | 46 | 45 | 60 | 29 | 38 | 42 | 56 | 25 | 34 | 33 | 43 | 21 | 28 | 27 | 36 |
| 7,000 | 50 | 67 | 65 | 86 | 39 | 52 | 51 | 68 | 38 | 50 | 49 | 65 | 31 | 41 | 45 | 60 | 27 | 36 | 35 | 47 | 23 | 30 | 29 | 39 |
| 7,500 | 54 | 71 | 69 | 93 | 42 | 56 | 54 | 72 | 40 | 54 | 52 | 69 | 33 | 44 | 48 | 65 | 29 | 39 | 38 | 50 | 24 | 32 | 31 | 42 |
| 8,000 | 57 | 76 | 74 | 99 | 45 | 60 | 58 | 77 | 43 | 57 | 55 | 74 | 35 | 47 | 52 | 69 | 31 | 42 | 40 | 53 | 26 | 35 | 33 | 44 |
| 8,500 | 61 | 81 | 79 | 105 | 48 | 64 | 62 | 82 | 46 | 61 | 59 | 79 | 38 | 50 | 55 | 73 | 33 | 44 | 43 | 57 | 28 | 37 | 35 | 47 |
| 9,000 | 64 | 86 | 83 | 111 | 51 | 67 | 65 | 87 | 48 | 64 | 62 | 83 | 40 | 53 | 58 | 77 | 35 | 47 | 45 | 60 | 29 | 39 | 38 | 50 |
| 9,500 | 68 | 90 | 88 | 117 | 53 | 71 | 69 | 92 | 51 | 68 | 66 | 88 | 42 | 56 | 61 | 82 | 37 | 49 | 48 | 63 | 31 | 41 | 40 | 53 |
| 10,000 | 71 | 95 | 93 | 123 | 56 | 75 | 72 | 97 | 54 | 72 | 69 | 92 | 44 | 59 | 65 | 86 | 39 | 52 | 50 | 67 | 32 | 43 | 41 | 56 |
| P = | P/70/2 | 2P/70/3 | P/54/2 | 2P/54/3 | P/89/2 | 2P/89/3 | P/69/2 | 2P/69/3 | P/93/2 | 2P/93/3 | P/72/2 | 2P/72/3 | P/113/2 | 2P/113/3 | P/77/2 | 2P/77/3 | P/128/2 | 2P/128/3 | P/100/2 | 2P/100/3 | P/154/2 | 2P/154/3 | P/120/2 | 2P/120/3 |

(DETAILS ARE NOT TO SCALE)

| NAIL TYPE | NAIL CHARACTERISTICS | | |
|---|---|---|---|
| | EDGE | MIN SPACING | END |
| 8d BOX (0.113Ø" x2.5") | 3/4 | 1 3/8 | 1 3/4 |
| 10d BOX (0.128Ø" x3") | 7/8 | 1 5/8 | 2 |
| 12d BOX (0.128Ø"x3.25") | 7/8 | 1 5/8 | 2 |
| 16d BOX (0.135Ø"x3.5") | 7/8 | 1 5/8 | 2 1/8 |
| 20d BOX (0.148Ø" x4") | 1 | 1 7/8 | 2 1/4 |
| 8d COMMON (0.131Ø"x2.5") | 7/8 | 1 5/8 | 2 |
| 10d COMMON (0.148Ø"x3.0") | 1 | 1 7/8 | 2 1/4 |
| 12d COMMON (0.148Ø"x3.25") | 1 | 1 7/8 | 2 1/4 |
| 16d COMMON (0.162Ø"x3.5") | 1 | 2 | 2 1/2 |
| 0.120"x2.5" GUN | 3/4 | 1 1/2 | 1 7/8 |
| 0.131"x2.5" GUN | 7/8 | 1 5/8 | 2 |
| 0.120"x3.0" GUN | 3/4 | 1 1/2 | 1 7/8 |
| 0.131" x3.0" GUN | 7/8 | 1 5/8 | 2 |




GENERAL NOTES

1. EDGE DISTANCE AND SPACING SPACING BETWEEN STAGGERED ROWS IS 6d; NAILS MAY NOT BE WITHIN EDGE LINE.
2. SPACING OF NAILS IN A ROW IS 12d.
3. END DISTANCE IS 15d; IN ADDITION TO NOTE #2, NAILS MAY NOT BE WITHIN END DISTANCES FROM END OF THE BOARD.
4. WHEN 3-PLIES ARE USED, INSTALL NAILS INTO 2-PLIES WITH 2x THE NAIL SPACING; THEN ADD THIRD PLY WITH 2x NAIL SPACING.
5. RECOMMEND 1 ROW FOR 2x4, 2 ROWS FOR 2x6 & 2x8, 3 ROWS FOR 2x10 & 2x12.
6. IF TRUSSES ARE SUPPORTED ON BOTH SIDES, DOUBLE THE SPACING AND ALTERNATE HEADS OF NAILS ON OPPOSING SIDES.

DRAWING NUMBER DR-1

REV: 2.1
ENG: MDV
CAD: RC
DATE: 03/16/18

# MULTI-PLY TRUSS GIRDER PLY CONNECTOR FOR ISOLATED POINT LOADS (NAILS)

EAGLE METAL

1250902 0026/0026