



MiTek, Inc.
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Re: 250109
84 Lumber / Reunion @ Blackwell / Clubhouse

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Heartland Truss, LLC..

Pages or sheets covered by this seal: I74491521 thru I74491521

My license renewal date for the state of Missouri is December 31, 2026.

Missouri COA: Engineering 001193

These truss designs are based upon the building code shown. This code has been specified by the project engineer/architect, or building designer. The applicability of this code in any particular jurisdiction should be confirmed with the building official prior to truss fabrication. This determination is not the responsibility of the component/truss designer. This applies to all truss design drawings in this job.



June 27, 2025

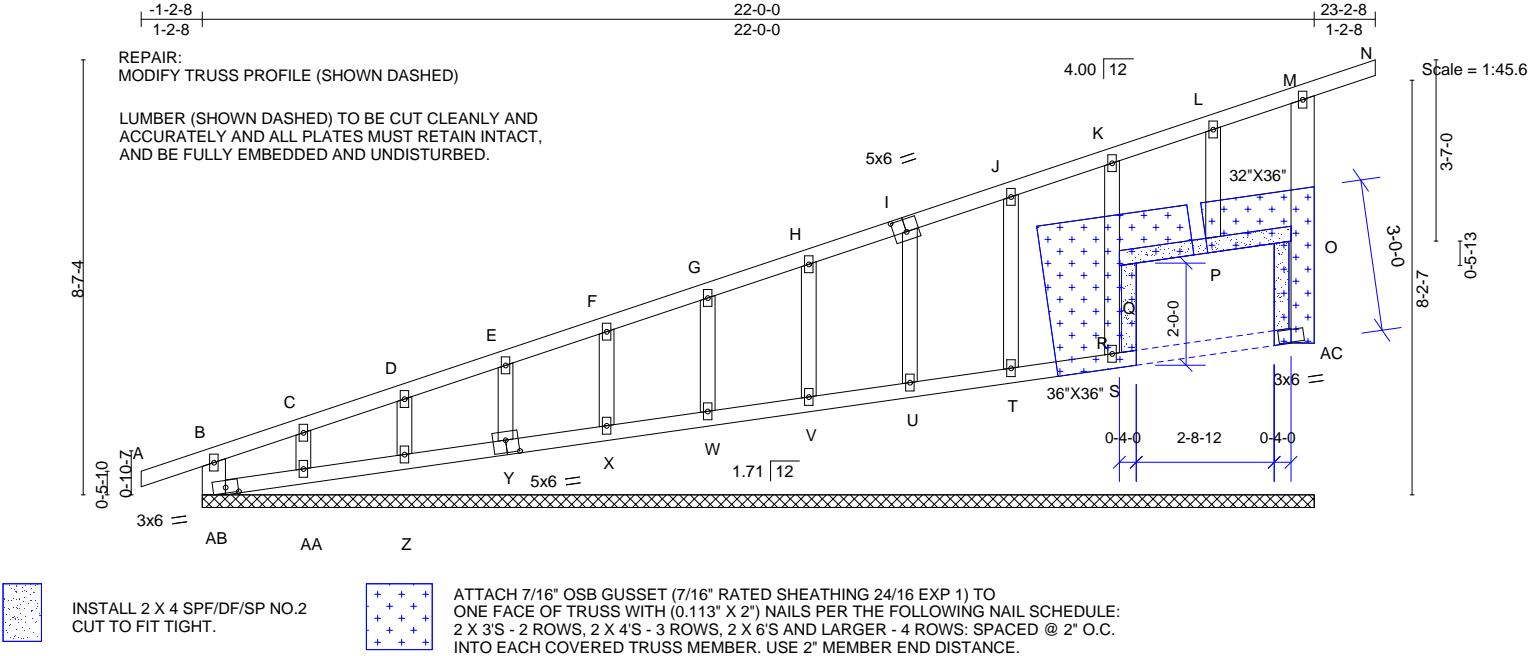
Lu, Jie ,Engineer

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	84 Lumber / Reunion @ Blackwell / Clubhouse	174491521
250109	B1	GABLE	1	1	Job Reference (optional)	

Heartland Truss, LLC, Plattsburg, MO.

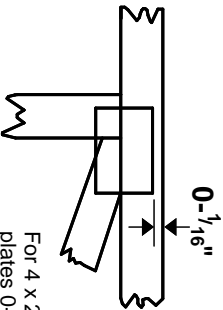
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		18-5-12							21-6-8		22-0-0	
		18-5-12							3-0-12		0-5-8	
Plate Offsets (X,Y)-- [I:0-3-0,0-3-0], [Y:0-3-0,0-3-0], [AB:0-3-0,0-1-6]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP		
TCLL	20.0	Plate Grip DOL 1.15		TC	0.17	Vert(LL)	-0.00 M	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL 1.15		BC	0.11	Vert(TL)	-0.01 N	n/r	120			
BCLL	10.0 *	Rep Stress Incr YES		WB	0.29	Horz(TL)	0.03 AC	n/a	n/a			
BCDL	10.0	Code IBC2006/TPI2002		Matrix-R						Weight: 121 lb FT = 20%		

Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

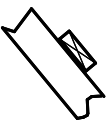
—
This symbol indicates the required direction of slots in connector plates.

* Plate location details available in MITek software or upon request.

PLATE SIZE

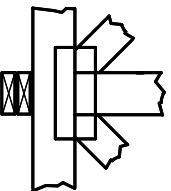
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

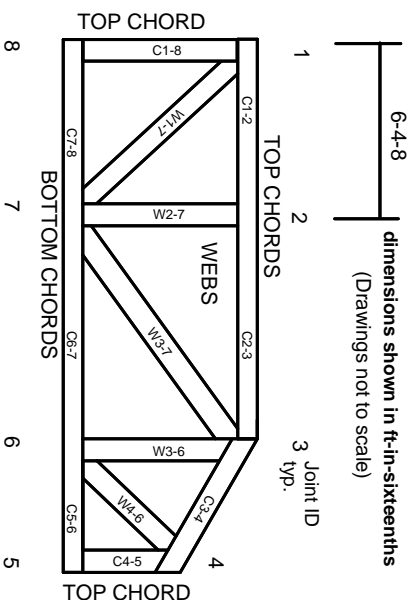


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.