

RE: 4133896 - LAMNECK - POOLE RES.

MITek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information: Customer Info: JEFF JOHNSON Project Name: Natalie Lamneck Model: Custom

Lot/Block: N/A Address: 929 SW Old Lake City Terrace, N/A

City: Columbia City State: FL

Name: Address:

City:

State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions): Design Code: FBG2023/TP12014

Wind Code: ASCE 7-22

Design Program: MITek 20/20 8.8

Wind Speed: 140 mph

Floor Load: N/A psf

Roof Load: 37.0 psf

This package includes 8 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No. Seal# Truss Name Date

1	T36051866	PB01	1/15/25
2	T36051867	PB01G	1/15/25
3	T36051868	T01	1/15/25
4	T36051869	T01G	1/15/25
5	T36051870	T02	1/15/25
6	T36051871	T03	1/15/25
7	T36051872	T04	1/15/25
8	T36051873	T05	1/15/25

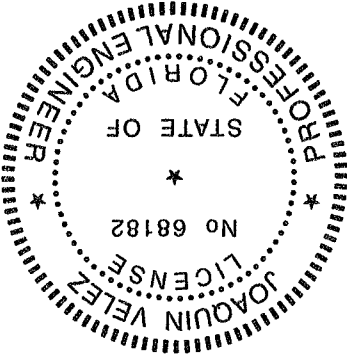


This item has been digitally signed and sealed by Velez, Joaquin, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

The truss drawing(s) referenced above have been prepared by MITek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Lake City, FL. Truss Design Engineer's Name: Velez, Joaquin My license renewal date for the state of Florida is February 28, 2025.

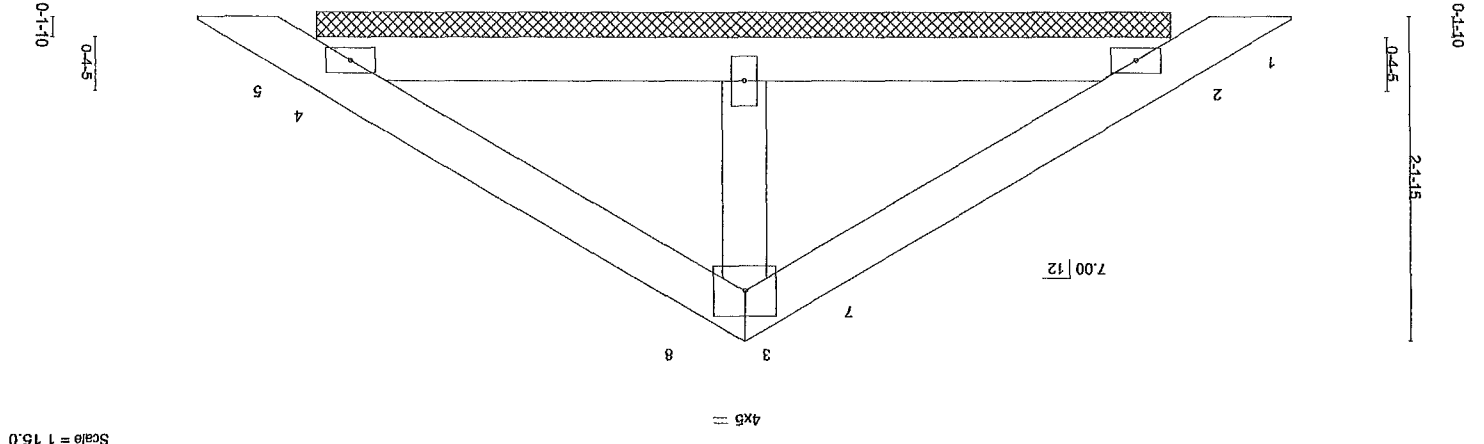
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.

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MITek Inc. DBA MITek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017



Job	Truss	Truss Type	Piggyback	Qty	26	LAMNECK - POOLE RES	1	Job Reference (optional)
4133896	PB01							

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.830 s Nov 8 2024 MITEK Industries, Inc. Tue Jan 14 10:37:51 2025 Page 1
ID:NIQKPKv0ijv52F2dA3Ad5P4ZC2NR-7HNp3GGEInCda5cyfnqJ9M1dgoAvwv7UJS2Lp5MzvT8U
3-8-8 3-8-8 7-5-0 3-8-8



LOADING (psf)	SPACING	CSL	DEFL.	in (loc)	l/dell	L/d	PLATES	GRIP	Weight, 23 lb	FT = 20%
TCLL 20.0	Plate Grip DOL 1.25	TC 0.28	Vert(LL) 0.00	5	n/r	120	MT20	244/190		
TCDL 7.0	Lumber DOL 1.25	BC 0.08	Vert(CT) 0.01	5	n/r	120				
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	4	n/a	n/a				
BCDL 10.0	Code FBC2023/TP12014	Matrix-P								

LUMBER-	BRACING-	OTHERS	REACTIONS.	FORCES.	NOTES-
TOP CHORD 2x4 SP No.2	TOP CHORD	2x4 SP No.2	Max Horiz 2=-73(LC 10)	Max Uplift 2=-95(LC 12), 4=-105(LC 13), 6=-56(LC 12)	1) Unbalanced roof live loads have been considered for this design
BOT CHORD 2x4 SP No.3	BOT CHORD	2x4 SP No.3	(size) 2=-5-8-11, 4=-5-8-11, 6=-5-8-11	Max Grav 2=-142(LC 1), 4=-146(LC 20), 6=-199(LC 1)	2) Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph; TCPL=4.2psf; BCPL=3.0psf; h=20ft, Cal. II, Exp C, Encl
					3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
					4) Gable requires continuous bottom chord bracing
					5) This truss has been designed for a live load of 20 psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members
					6) * This truss has been designed for a live load of 20 psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members
					7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (1)=b
					8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer

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MITEK Inc DBA MITEK USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesapeake, MD 20759
Date: January 15, 2025

Joaquín Velez PE No. 68182
MITEK Inc. DBA MITEK USA FL Cert 6634
16023 Swingle Ridge Rd.
Chesterfield, MO 63017
Date.

Job	Truss	PB01G	Truss Type	GABLE	2	Qty	1	Ply	LAMNECK - POOLE RES.	Job Reference (optional)	8,830 s Nov 8 2024 MITEK Industries, Inc. Tue Jan 14 10:37:51 2025 Page 1	ID N1QKPKK0vji52F5dA3AD54P4zC2NRR-7HNp3G5EhICDAz5cyfngqJ9M1fR0BNu7eJS2LP5M7vZLU	3-1-9	3-1-9	3-1-9
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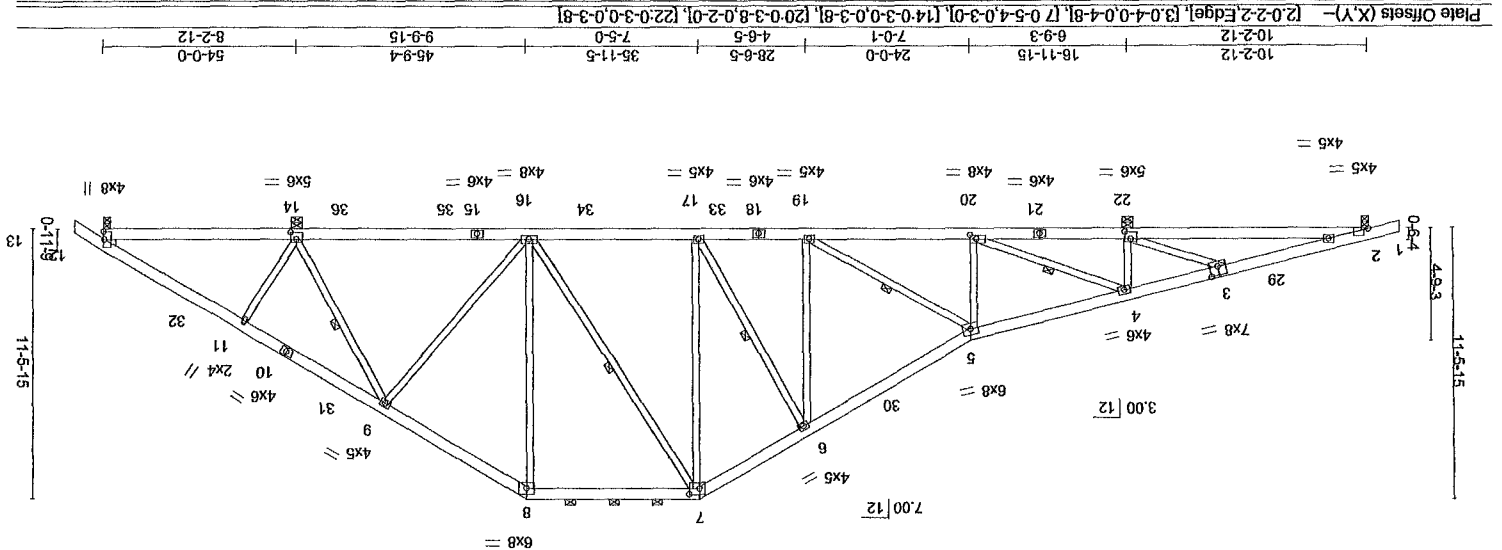
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- 3) Building designer / Project engineer responsible for verifying applied loads and load sharing concerns from loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 414 lb uplift at joint 2, 1000 lb uplift at joint 22, 721 lb uplift at joint 14 and 241 lb uplift at joint 12
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

REACTIONS.	TOP CHORD	BOT CHORD	WEBS
All bearings 0-3-8 except (l=length) 22=0-5-8, 14=0-5-8 (b) - Max Horiz 2=436(LC 11) Max Uplift All uplift 100 lb or less at joint(s) except 2=-414(LC 8), 22=-1000(LC 12), 14=-721(LC 13), 12=-241(LC 8) Max Grav All reactions 250 lb or less at joint(s) except 2=293(LC 25), 22=2070(LC 2) 2) 14=1964(LC 2), 12=325(LC 26)	(b) - Max. Comp./Max Ten. - All forces 250 (lb) or less except when shown. 2-3=-142/436, 3-4=-419/611, 4-5=-1555/848, 5-6=-1629/1040, 6-7=-1315/1053, 7-8=-890/901, 8-9=-11098/917, 9-11=-34/356, 11-12=-147/314 2-22=-324/172, 20-22=-541/455, 19-20=-628/1554, 17-19=-493/1433, 16-17=-366/1120, 14-16=-253/508 3-22=-462/562, 4-22=-1545/874, 4-20=-8127/2156, 5-20=-612/508, 6-19=-68/342, 6-17=-670/462, 7-17=-381/810, 7-16=-464/261, 8-16=-83/293, 9-16=-208/645, 9-14=-1490/832, 11-14=-355/402		

LUMBER- TOP CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 "except" WEDGE 7-16, 2x4 SP No.2 Right: 2x4 SP No.3	BRACING- TOP CHORD Structural wood sheathing directly applied or 5-5-1 cc purlins, except 2-0 cc purlins (6-0-0 max.); 7-8 Rigid ceiling directly applied or 6-0-0 cc bracing BOT CHORD WEBS 1 Row at midpt 4-20, 5-19, 6-17, 7-16, 9-14
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LOADING (psf)	20.0	TCLL	7.0	TCDL	0.0 *	BCDL	10.0
SPACING- 2-0-0 Plate Grip DOL 1.25 Lumbar DOL 1.25 Rep Stress Incr YES Code FBC2023/TP12014							
CSL TC 0.43 BC 0.45 WB 0.87 Matkx-MS							
DEFL. h (loc) 0 10 22-25 -0 16 19-20 0 03 14 Vert(LL) >999 Vert(CT) >999 Horiz(CT) n/a							
L/d 240 180 n/a PLATES MTT20 244/190 GRIP FT = 20% Weight: 417 lb							



Scale: 1/8"=1'

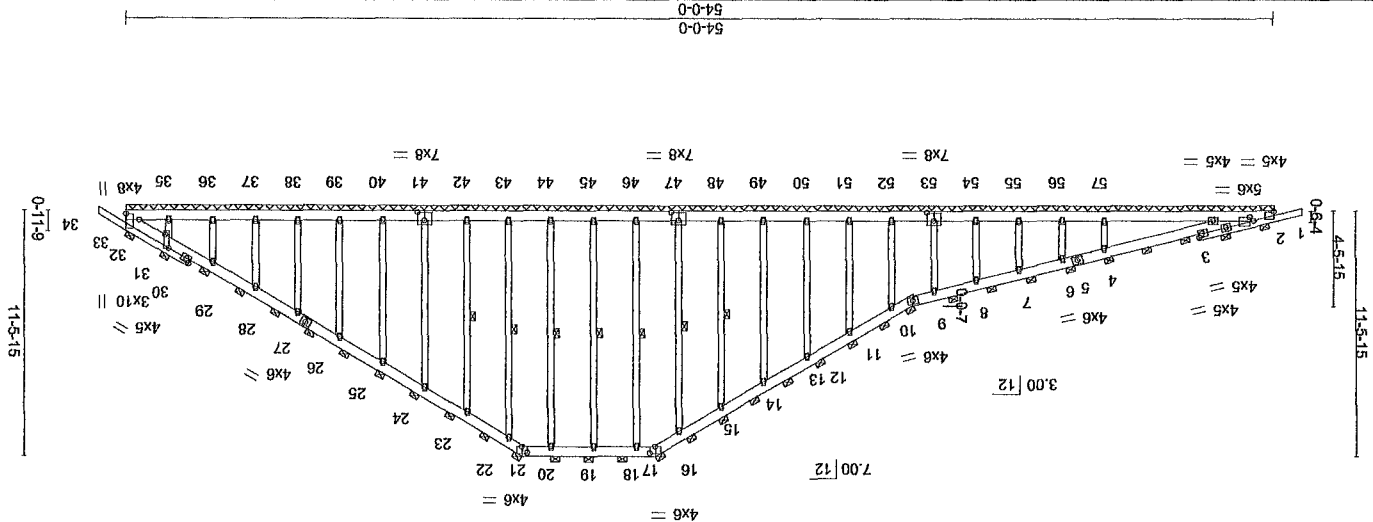
Weight: 480 lb FT = 20%

REACTIONS:	(lb) - Max Horz = 434(LC 11) All bearings 54-0-0
	Max Uplift All uplift 100 lb or less at joint(s) 54, 52, 47, 46, 45, 44, 33 except 2=-245(LC 8), 57=-398(LC 8), 55=-122(LC 1), 56=-122(LC 8), 53=-113(LC 8), 51=-129(LC 12), 50=-126(LC 12), 49=-129(LC 12), 48=-137(LC 12), 42=-132(LC 13), 41=-133(LC 13), 40=-125(LC 13), 39=-126(LC 13), 38=-126(LC 13), 37=-128(LC 13), 36=-108(LC 13), 35=-167(LC 13)
	Max Grav All reactions 250 lb or less at joint(s) 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 33 except 2=317(LC 1), 57=665(LC 1)
FORCES:	(lb) - Max Comp./Max Ten - All forces 250 (lb) or less except when shown 2-4=353/122, 4-6=-267/149, 6-7=-268/149, 13-14=-168/356, 14-15=-147/483, 15-16=-146/617, 16-17=-153/639, 17-18=-146/633, 18-19=-146/633, 19-20=-146/633, 20-21=-144/633, 21-22=-150/618, 22-23=-152/641, 23-24=-121/514, 24-25=-90/385, 25-26=-60/262, 32-33=-360/164
BOT CHORD	2-57=-151/401, 56-57=-151/401, 55-56=-151/401, 54-55=-151/401, 53-54=-151/401, 52-53=-151/401, 51-52=-151/401, 50-51=-151/401, 49-50=-151/401, 48-49=-151/401, 47-48=-151/401, 46-47=-151/401, 45-46=-151/401, 44-45=-151/401, 43-44=-151/401, 42-43=-151/401, 41-42=-151/401, 40-41=-151/401, 39-40=-151/401, 38-39=-151/401, 37-38=-151/401, 36-37=-151/401, 35-36=-151/401, 34-35=-145/386
WEBS	4-57=-458/696, 15-48=-132/251, 32-35=-137/272

LUMBER-	TOP CHORD	2x6 SP No.2 *Except†	1-3,31-34, 2x4 SP No.2	BOT CHORD	2x6 SP No.2	OTHERS	2x4 SP No.3
BRACING-	TOP CHORD	2-0-0 cc purlins (6-0-0	Rigid ceiling directly	1 Row at midpt	WEBS		

[illegible]

Plate Offsets (X,Y) -- [2,Edge,0-4-14], [2-0-2-4,0-2-2], [17-0-3-0,0-3-12], [21-0-3-0,0-3-12], [32-0-7-8,Edge], [33-Edge,0-7-8], [41-0-4-0,0-4-8], [47-0-4-0,0-4-8], [53-0-4-0,0-4-8]



Scale = 1 105.4

[illegible]

Job	Truss	Truss Type	Piggyback Base	Qty	8	Ply	LAMNECK - POOLE RES	1	Job Reference (optional)
4133696	T02								

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LOAD CASE(S) Standard
1) Dead + Roof Live (balanced) Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (p/l)

Vert: 1-5=-54, 5-7=-54, 7-8=-54, 8-13=-54, 17-22=-20, 17-34=-80(F=-60), 25-34=-20

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 11/2023 BEFORE USE.
Design valid for use only with MITek@ connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse of trusses and truss systems, see **ANSI/TPI 1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpiins.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.structuralcomponents.com)

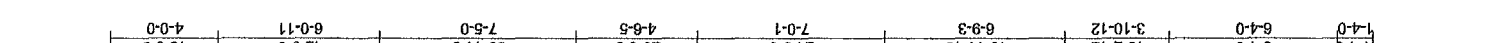
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REACTIONS.	(size)	2-0=3-8, 19-0=5-8	Max Horiz 2=460(LC 12)	Max Uprift 2=-387(LC 8), 19=-1039(LC 12), 11=-504(LC 13)	Max Grav 2=289(LC 25), 19=2112(LC 2), 11=1444(LC 2)
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except where noted					
TOP CHORD			2-3=-248/44/11, 3-4=-526/59/4, 4-5=-1601/69/4, 5-6=-1690/9/19		
BOT CHORD			2-19=-304/44/11, 17-9=-830/35/30, 9-10=-830/35/30, 10-11=-1392/1392		
WEBS			12-13=-366/68/9		
			3-19=-461/5/19, 4-19=-1587/9/12, 4-17=-1098/22/24, 5-17=-6-6-15=-663/44/7, 7-17=-354/8/40, 7-13=-440/240, 8-13=-84/34		
			9-12=-719/9/30, 10-12=-607/11/51		

LUMBER-	2x6 SP No.2	7-13	2x4 SP No.2
TOP CHORD	2x6 SP No.2	2x4 SP No.3,*except†	
WEBS			
BRACING-			
TOP CHORD	Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.). 7-8		
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing		
WEBS	1 Row at midpt		
	4-17, 5-16, 6-15, 7-13		

Plate Offsets (X,Y)-- [2 0-2-2,Edge], [3 0-4-0,0-4-8], [7 0-5-4,0-3-0], [17 0-3-8,0-2-0], [19 0-3-0,0-3-8]



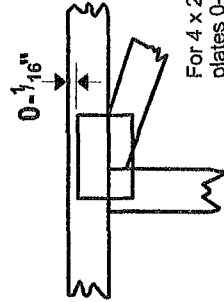
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
4133896	T03	Piggyback Base	1		LAMNECK - POOLE RES.
				1	

[illegible]

Symbols

PLATE LOCATION AND ORIENTATION

Center plate on joint unless x, y offsets are indicated
Dimensions are in ft-in-sixteenths
Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 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

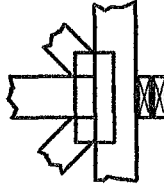
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

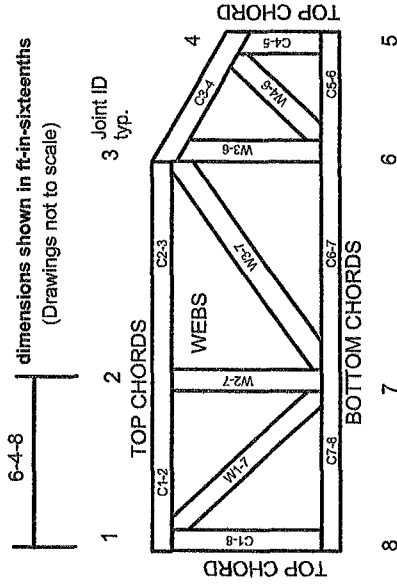


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur
Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1. 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2023

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 1 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/TPI 1
- 7 Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
- 21 The design does not take into account any dynamic or other loads other than those expressly stated