

RE: 4789439 - METZGER RES.

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:
Customer Info: JOE METZGER Project Name: Metzger Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 329 SW William Young Lane, N/A
City: Lake City, FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: _____ License #: _____
Address: _____
City: _____ State: _____

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

Design Code: FBC2023/TPI2014

Design Program: MiTek 20/20 8.8

Wind Code: ASCE 7-22

Wind Speed: 130 mph

Roof Load: 40.0 psf

Floor Load: 55.0 psf

This package includes 21 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	No.	Seal#	Truss Name	Date
1	T38467786	F01	9/9/25	15	T38467800	T05G	9/9/25
2	T38467787	F02	9/9/25	16	T38467801	T06	9/9/25
3	T38467788	PB01	9/9/25	17	T38467802	T07	9/9/25
4	T38467789	PB01G	9/9/25	18	T38467803	T07G	9/9/25
5	T38467790	PB02	9/9/25	19	T38467804	T08	9/9/25
6	T38467791	PB03	9/9/25	20	T38467805	T12	9/9/25
7	T38467792	PB03G	9/9/25	21	T38467806	T13	9/9/25
8	T38467793	T01	9/9/25				
9	T38467794	T01G	9/9/25				
10	T38467795	T02	9/9/25				
11	T38467796	T02G	9/9/25				
12	T38467797	T03G	9/9/25				
13	T38467798	T04	9/9/25				
14	T38467799	T05	9/9/25				

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date adjacent to the seal.

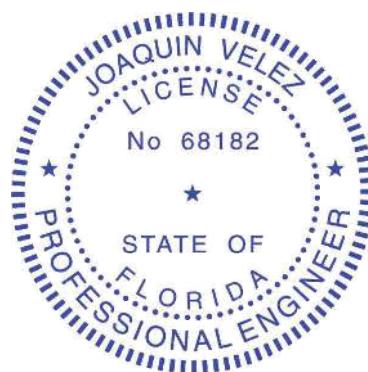
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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, 2027.

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.



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

September 9,2025

Job 4789439	Truss F01	Truss Type FLOOR	Qty 9	Ply 1	METZGER RES.	T38467786
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:40 2025 Page 1
ID:urBi2CDpEN7mWD6LziUSOYz8IDX-0uqvLdR?yd03xRt1tYNQAYZD?YjpP?gyF6yeqyfhjn

0-1-8
H | 1-3-0 | 0-9-4 | 1-11-11 | Scale = 1:33.6

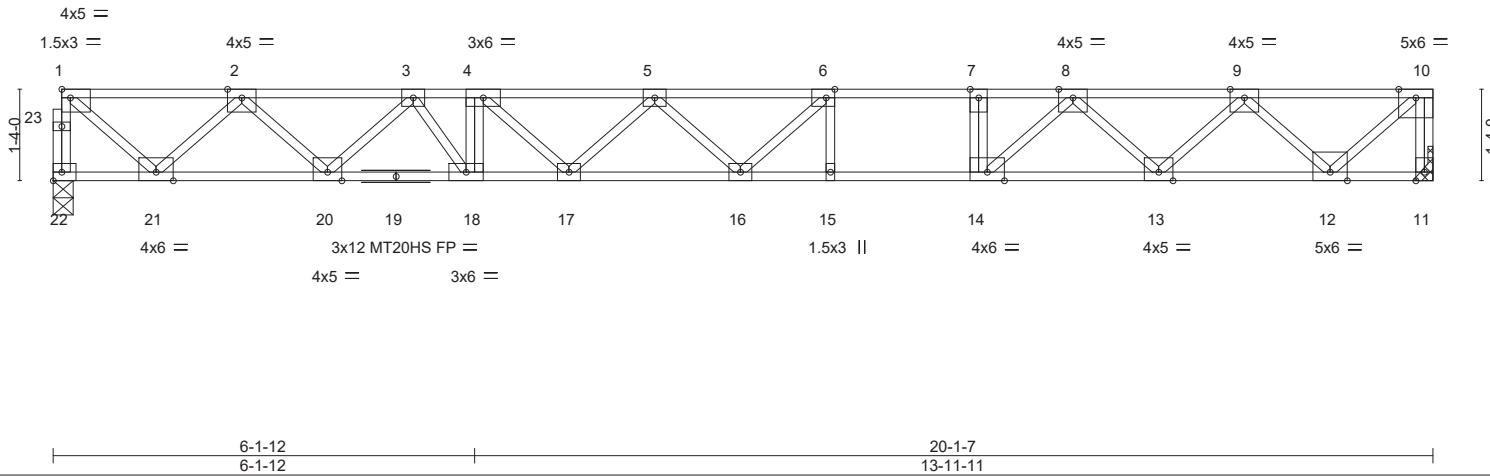


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-1-8,Edge]		LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
		TCLL 40.0	Plate Grip DOL	2-0-0	TC 0.69	Vert(LL)	-0.40	15-16	>590	360
		TCDL 10.0	Lumber DOL	1.00	BC 0.95	Vert(CT)	-0.55	15-16	>430	240
		BCLL 0.0	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.07	11	n/a	n/a
		BCDL 5.0	Code FBC2023/TPI2014	Matrix-S					Weight: 108 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)
BOT CHORD 2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)
WEBS 2x4 SP No.3(flat)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 14-15.

REACTIONS. (size) 22=0-3-8, 11=Mechanical
Max Grav 22=1087(LC 1), 11=1093(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-22=-1081/0, 10-11=-1094/0, 1-2=-1118/0, 2-3=-2792/0, 3-4=-3806/0, 4-5=-4159/0, 5-6=-4444/0, 6-7=-4203/0, 7-8=-4203/0, 8-9=-2756/0, 9-10=-1129/0
BOT CHORD 20-21=0/2109, 18-20=0/3450, 17-18=0/3806, 16-17=0/4485, 15-16=0/4203, 14-15=0/4203, 13-14=0/3461, 12-13=0/2107
WEBS 4-18=-455/0, 1-21=0/1444, 2-21=-1378/0, 2-20=0/950, 3-20=-916/0, 3-18=0/598, 10-12=0/1502, 4-17=0/470, 9-12=-1361/0, 5-17=-453/0, 9-13=0/902, 8-13=-981/0, 6-16=-217/552, 8-14=0/1157, 7-14=-479/0, 6-15=-356/11

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x4 MT20 unless otherwise indicated.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpiinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

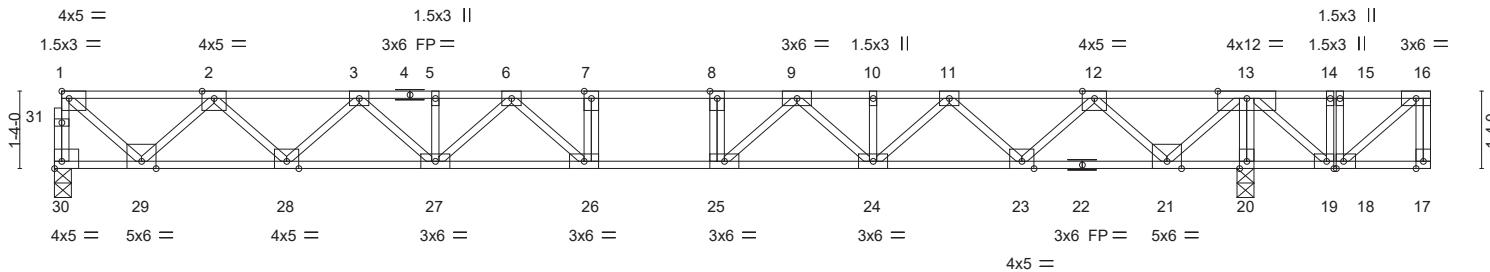
MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss F02	Truss Type FLOOR	Qty 2	Ply 1	METZGER RES.	T38467787
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:40 2025 Page 1
ID:urBi2CDpEN7mWD6LziUSOYZ81DX-0uqvLdR?yd03xRtJ1tYNQAYd8?dKpPugyF6yeqyfhjn

0-1-8
H 1-3-0 | 1-11-0 | 0-0-8
Scale = 1:39.7



1-6-0 | 4-0-0 | 9-1-8 | 16-8-0 | 19-2-0 | 20-6-8 20-8-0 | 23-8-8
1-6-0 | 2-6-0 | 5-1-8 | 7-6-8 | 2-6-0 | 1-4-8 0-1-8 | 3-0-8

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [18:0-1-8,Edge], [19:0-1-8,Edge], [30:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.44	Vert(LL)	-0.32 25-26	>763	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.59	Vert(CT)	-0.44 25-26	>561	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.07 20	n/a	n/a		
BCDL 5.0	Code FBC2023/TPI2014		Matrix-S					Weight: 132 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)
BOT CHORD 2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)
WEBS 2x4 SP No.3(flat)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21,19-20,18-19.

REACTIONS.

(size) 30=0-3-8, 20=0-3-8
Max Grav 30=1110(LC 3), 20=1482(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-30=-1105/0, 1-2=-1144/0, 2-3=-2868/0, 3-5=-4057/0, 5-6=-4057/0, 6-7=-4646/0,

7-8=-4646/0, 8-9=-4646/0, 9-10=-4014/0, 10-11=-4014/0, 11-12=-2795/0,

12-13=-1054/69

BOT CHORD 28-29=0/2159, 27-28=0/3551, 26-27=0/4415, 25-26=0/4646, 24-25=0/4388, 23-24=0/3496,
21-23=0/2065, 20-21=-403/0, 19-20=-403/0

WEBS 13-20=-1457/0, 1-29=0/1478, 13-21=0/1518, 2-29=-1411/0, 12-21=-1430/0, 2-28=0/986,
12-23=0/1043, 3-28=-950/0, 11-23=-1001/0, 3-27=0/689, 11-24=0/728, 6-27=-488/0,

9-24=-537/0, 6-26=-187/681, 9-25=-101/767, 7-26=-330/31, 8-25=-367/0, 13-19=0/407

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are 3x4 MT20 unless otherwise indicated.

3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.
Strongbacks to be attached to walls at their outer ends or restrained by other means.

4) CAUTION, Do not erect truss backwards.

This item has been
digitally signed and
sealed by Velez, Joaquin, PE
on the date indicated here.
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document are not considered
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on any electronic copies.

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss PB01	Truss Type Piggyback	Qty 17	Ply 1	METZGER RES.	T38467788
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

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ID:urBi2CDpEN7mWD6LziUSOYz8IDX-U4OHYzSdjx9wZbSVba3cyN4t1P5DY1DqBvrVBHyfhjm

2-6-0 5-0-0
2-6-0 2-6-0

Scale = 1:14.6

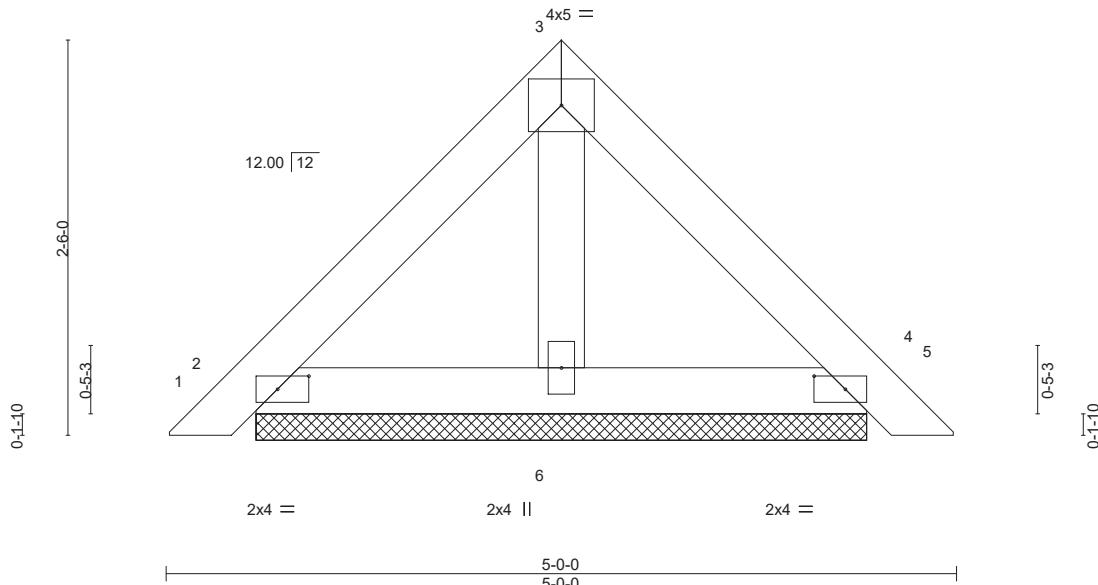


Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.11	Vert(LL)	0.00	4	n/r	120	
TCDL 10.0	Lumber DOL	1.25	BC 0.04	Vert(CT)	0.00	5	n/r	120	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 19 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=3-10-6, 4=3-10-6, 6=3-10-6
Max Horz 2=-56(LC 10)
Max Uplift 2=-37(LC 13), 4=-43(LC 13), 6=-5(LC 12)
Max Grav 2=116(LC 1), 4=116(LC 1), 6=120(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-2-10 to 2-6-0, Zone1 2-6-0 to 4-9-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Cable requires continuous bottom chord bearing.
- 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 2, 43 lb uplift at joint 4 and 5 lb uplift at joint 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025



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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 with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see [ANSI/TPI1 Quality Criteria and DSB-22](#) available from the Truss Plate Institute (www.tpiinst.org) and [BCSI Building Component Safety Information](#) available from the Structural Building Component Association (www.sbcsccomponents.com)

Job 4789439	Truss PB01G	Truss Type PIGGYBACK	Qty 2	Ply 1	METZGER RES.	T38467789
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:42 2025 Page 1

ID:urBi2CDpEN7mWD6LziUSOYz8IDX-zHxfmJTGUFHnBl1h8larVbd2UpRgHUWzPZb3jjyfhjl

2-1-1 2-1-1 4-2-2 2-1-1

Scale = 1:12.5

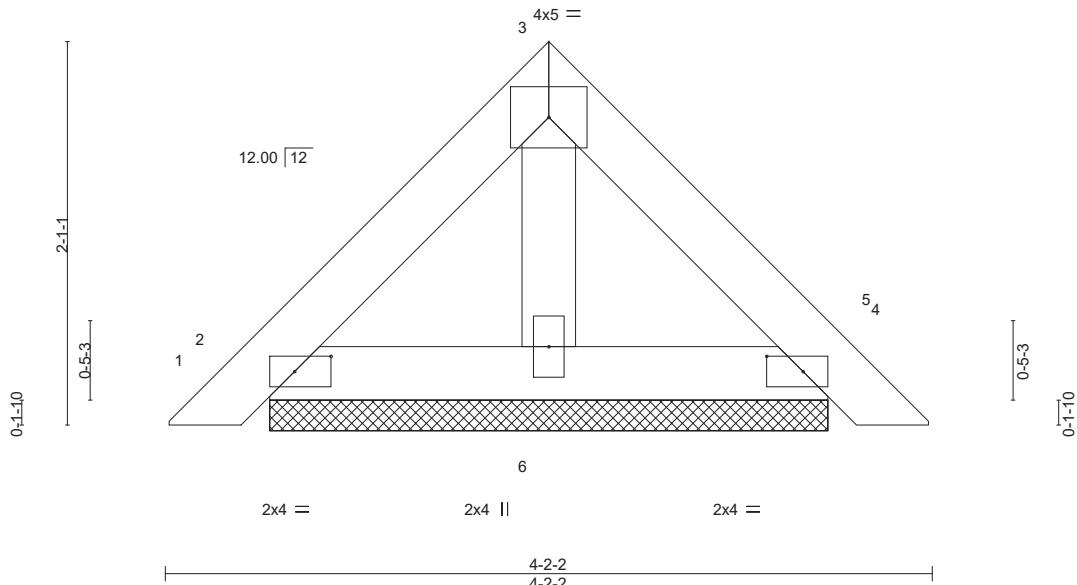


Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.07	Vert(LL)	0.00	4	n/r	120	
TCDL 10.0	Lumber DOL	1.25	BC 0.02	Vert(CT)	0.00	4	n/r	120	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 15 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=3-0-8, 4=3-0-8, 6=3-0-8
Max Horz 2=-46(LC 10)
Max Uplift 2=-31(LC 12), 4=-36(LC 13), 6=-3(LC 12)
Max Grav 2=96(LC 1), 4=96(LC 1), 6=94(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl.,
GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-2-10 to 2-1-1, Zone1 2-1-1 to 3-11-8 zone; C-C for members and
forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Cable requires continuous bottom chord bearing.
- 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2, 36 lb uplift at joint 4
and 3 lb uplift at joint 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
designer.

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Date:

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and [BCSI Building Component Safety Information](#) available from the Structural Building Component Association (www.sbcsccomponents.com)

MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss PB02	Truss Type PIGGYBACK	Qty 2	Ply 2	METZGER RES.	T38467790
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:42 2025 Page 1

ID:urBi2CDpEN7mWD6LziUSOYz8IDX-zHxfmJTGUFHnBl1h8larVbd2ipROHUTzPZb3jjyfhjl
2-6-0 5-0-0
2-6-0

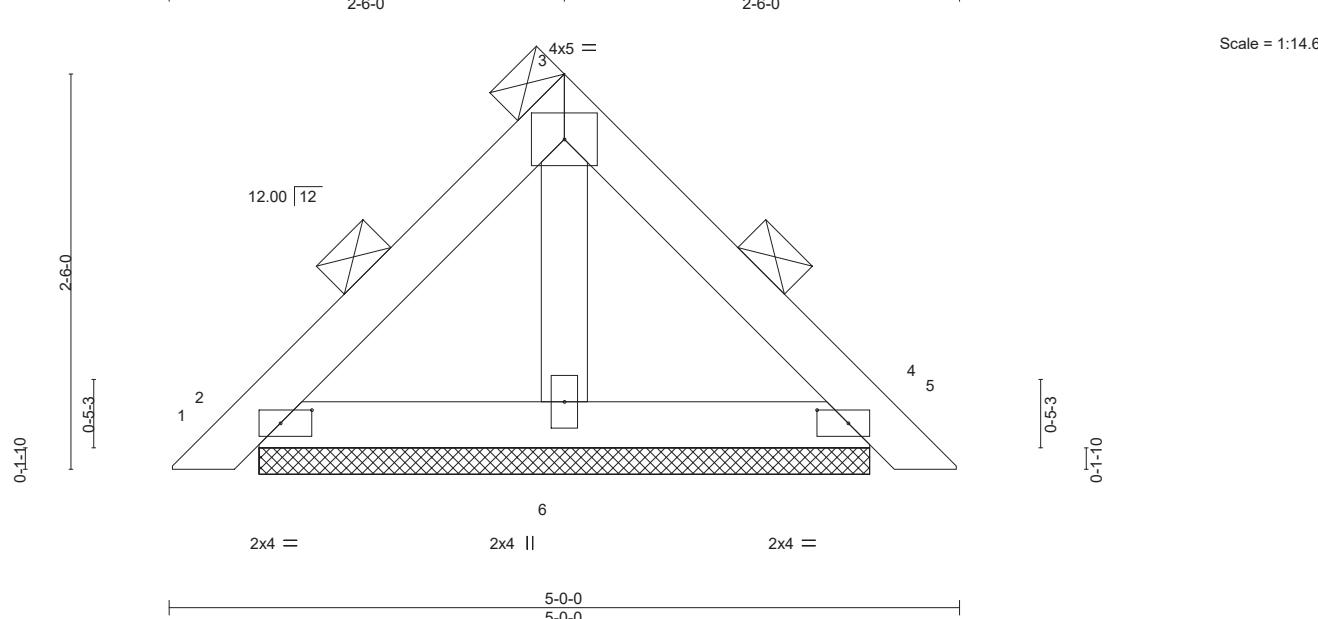


Plate Offsets (X,Y)-- [2:0-2-6,0-1-0], [4:0-2-6,0-1-0]

LOADING (psf)	SPACING-	4-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.12	Vert(LL)	0.00	4	n/r	120	
TCDL 10.0	Lumber DOL	1.25	BC 0.04	Vert(CT)	0.00	5	n/r	120	
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.01	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 37 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD 2-0-0 oc purlins
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=3-10-6, 4=3-10-6, 6=3-10-6
Max Horz 2=113(LC 10)
Max Uplift 2=-75(LC 13), 4=-85(LC 13), 6=-10(LC 12)
Max Grav 2=232(LC 1), 4=232(LC 1), 6=240(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-2-10 to 2-6-0, Zone1 2-6-0 to 4-9-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 2, 85 lb uplift at joint 4 and 10 lb uplift at joint 6.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

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Job 4789439	Truss PB03	Truss Type Piggyback	Qty 11	Ply 1	METZGER RES.	T38467791
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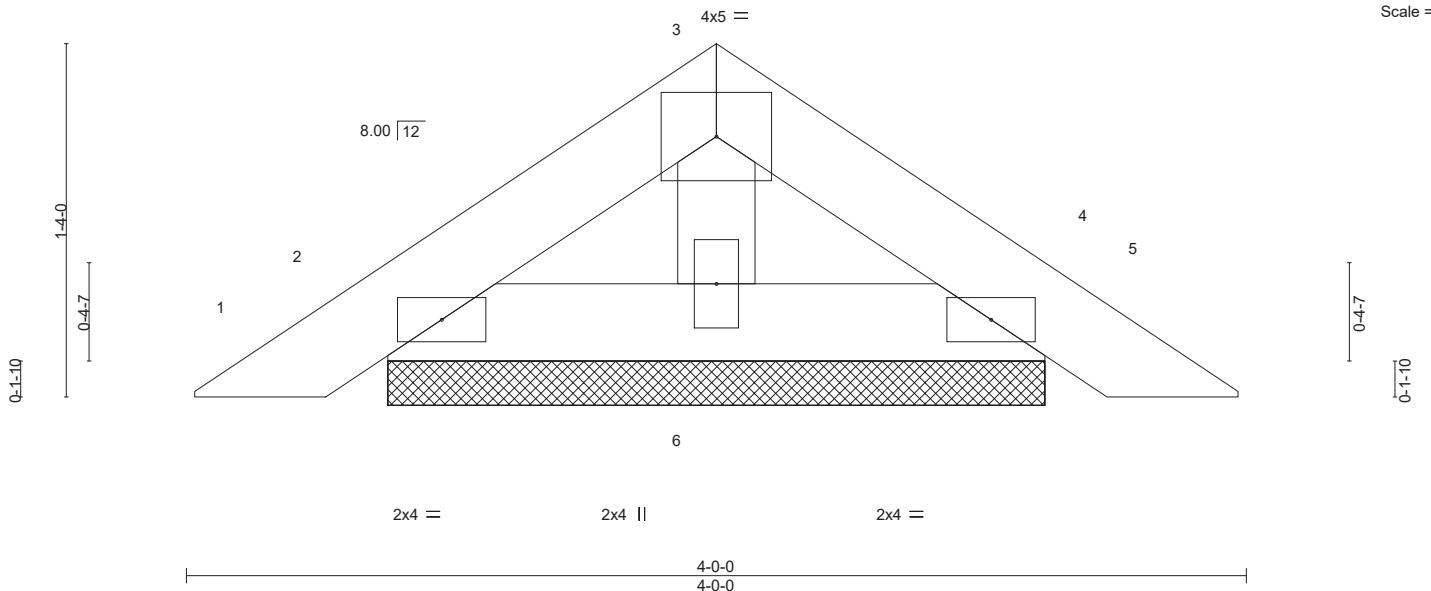
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:43 2025 Page 1

ID:urBi2CDpEN7mWD6LziUSOYz8IDX-RTV2zfUuFYPeovcui?642oAEqCn20xn7eDKcF9yfhjk

4-0-0
4-0-0

Scale = 1:8.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.03	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.02	Vert(CT)	0.00	4	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P						Weight: 12 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=2-5-12, 4=2-5-12, 6=2-5-12
Max Horz 2=28(LC 10)
Max Uplift 2=33(LC 12), 4=36(LC 13), 6=5(LC 12)
Max Grav 2=87(LC 1), 4=87(LC 1), 6=83(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 bearing.
- 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 2, 36 lb uplift at joint 4 and 5 lb uplift at joint 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss PB03G	Truss Type PIGGYBACK	Qty 1	Ply 1	METZGER RES.	T38467792
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:43 2025 Page 1
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1-5-11
1-5-11

2-11-6

1-5-11

Scale = 1:6.9

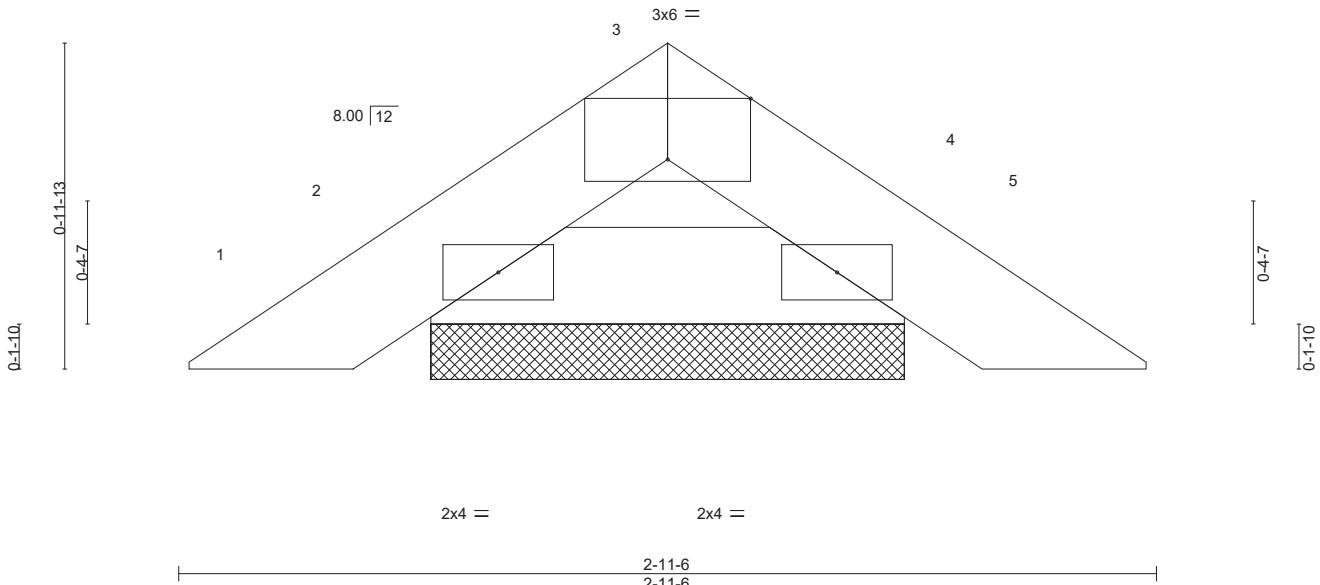


Plate Offsets (X,Y)-- [3:0-3-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.02	Vert(LL)	-0.00	4	n/r	120	
TCDL 10.0	Lumber DOL	1.25	BC 0.02	Vert(CT)	-0.00	4	n/r	120	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 7 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=1-5-2, 4=1-5-2
Max Horz 2=20(LC 10)
Max Uplift 2=26(LC 12), 4=26(LC 13)
Max Grav 2=86(LC 1), 4=86(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCPi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 bearing.
- 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2 and 26 lb uplift at joint 4.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T01	Truss Type Common	Qty 2	Ply 1	METZGER RES.	T38467793
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:44 2025 Page 1
ID:urBi2CDpEN7mWD6LziUSOYz8IDX-vf3QB?VW0sXVQ2B4GjdJa0iFFc?MINBGt49ncyhj

-1-6-0 7-0-0 14-0-0
1-6-0 7-0-0 7-0-0

Scale = 1:32.9

4x5 =

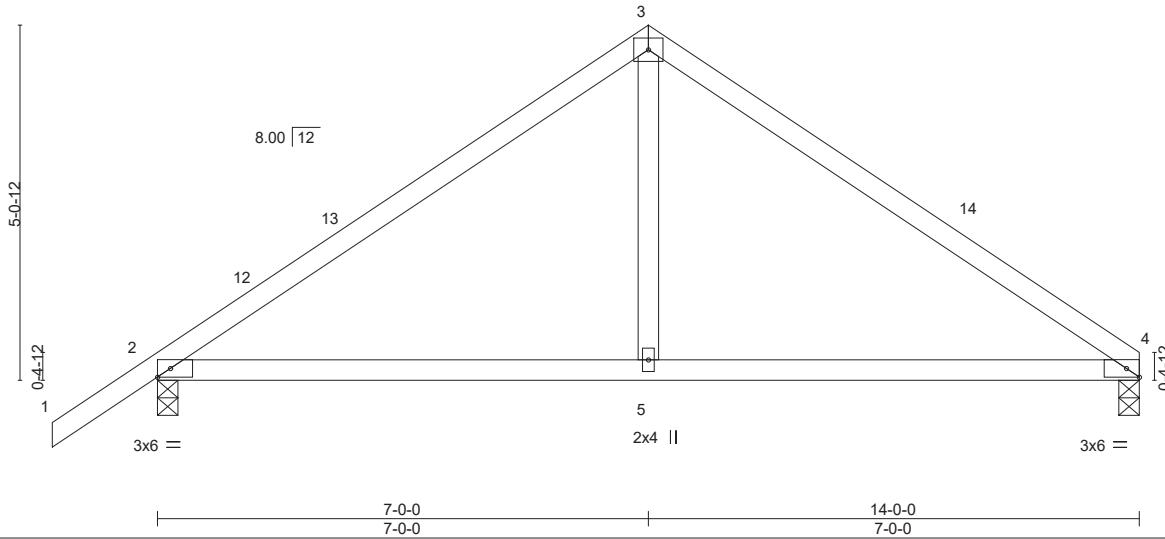


Plate Offsets (X,Y)-- [4:0-2-3,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.62	Vert(LL)	0.10	5-8	>999	240	
TCDL 10.0	Lumber DOL	1.25	BC 0.52	Vert(CT)	-0.15	5-8	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.01	2	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 56 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=0-3-8, 2=0-3-8
Max Horz 2=132(LC 9)
Max Uplift 4=-126(LC 13), 2=-167(LC 12)
Max Grav 4=555(LC 1), 2=655(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-682/197, 3-4=-680/211

BOT CHORD 2-5=-70/477, 4-5=-70/477

WEBS 3-5=-16/333

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 7-0-0, Zone2 7-0-0 to 11-2-15, Zone1 11-2-15 to 14-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 4 and 167 lb uplift at joint 2.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T01G	Truss Type Common Supported Gable	Qty 1	Ply 1	METZGER RES.	T38467794
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:44 2025 Page 1
ID:urBi2CDpEN7mWD6LziUSOYz8IDX-vf3QB?VV0sXVQ2B4GjdJa0McC7b1OSGt49ncyhj

-1-6-0 7-0-0 14-0-0
1-6-0 7-0-0 7-0-0

Scale = 1:30.0

4x5 =

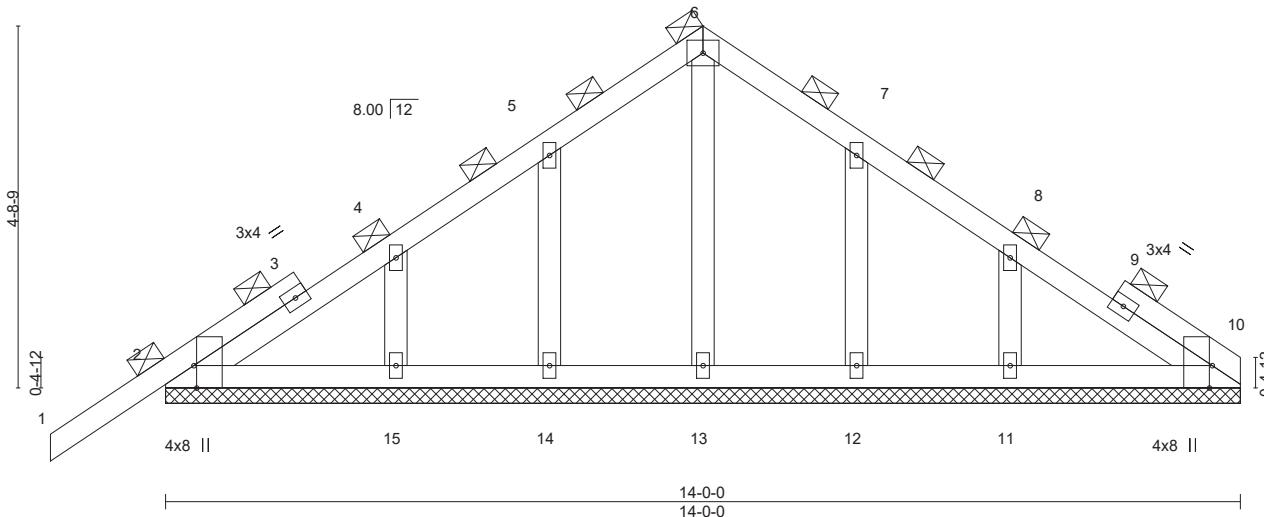


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [10:0-3-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15	Vert(LL)	-0.00	1	n/r	120	
TCDL 10.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	-0.00	1	n/r	120	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	10	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S					Weight: 72 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 14-0-0.
(lb) - Max Horz 2=124(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 14, 15, 12 except 11=108(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 13, 14, 15, 12, 11

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 14, 15, 12 except (jt=lb) 11=108.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

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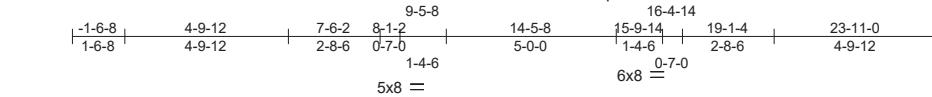
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Job 4789439	Truss T02	Truss Type Attic	Qty 17	Ply 1	METZGER RES.	T38467795
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:45 2025 Page 1

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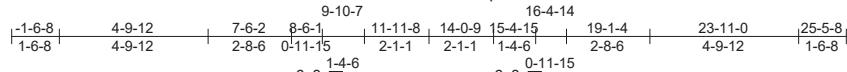


Job 4789439	Truss T02G	Truss Type GABLE	Qty 1	Ply 1	METZGER RES.	T38467796
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 Mitek Industries, Inc. Mon Sep 8 12:27:46 2025 Page 1

ID:urBi2CdpEn7mWD6Lz1USOYz8IDX-r2BAchWmYTnDfMLTN8fnfRnbqQcAD5eZKBZGsUyfhjh



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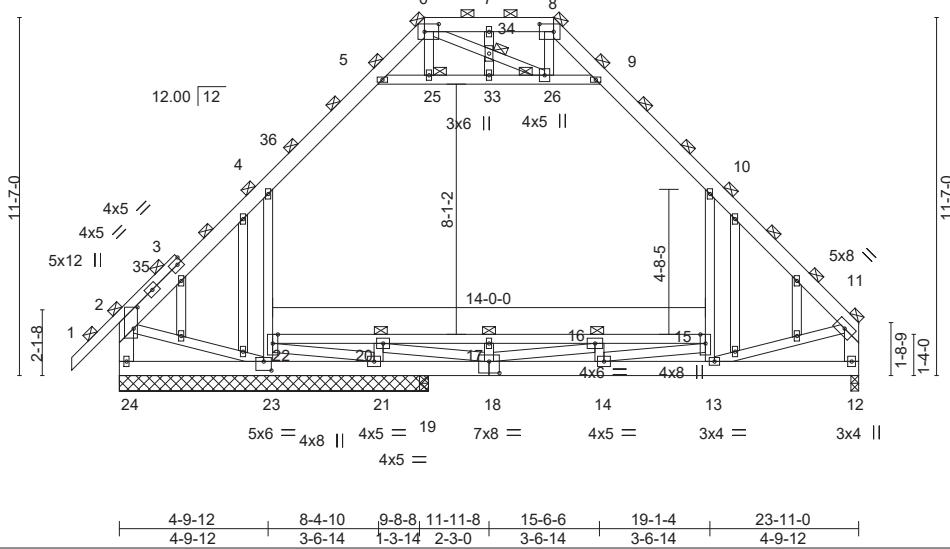


Plate Offsets (X,Y)-- [2:0-8-4,0-1-8], [6:0-5-8,0-3-0], [8:0-5-8,0-3-0], [18:0-4-0,0-4-8], [23:0-3-0,0-3-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	-0.12	15-16	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.88	Vert(CT)	-0.24	15-16	>687		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.01	22	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS	Attic	-0.07	15-22	2419	360	Weight: 260 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
2-6: 2x6 SP 2400F 2.0E or 2x6 SP M 26, 1-3: 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26 *Except*
15-22: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-24,11-12: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 19-21,18-19.
4-5-0 oc bracing: 15-22

JOINTS 1 Brace at Jt(s): 2, 6, 8, 11, 25, 26, 34

REACTIONS.

All bearings 10-0-0 except (jt=length) 12=0-3-0, 19=0-3-8.
(lb) - Max Horz 24=315(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 12, 19 except 24=-130(LC 8),
23=-814(LC 21), 22=-215(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 23 except 24=1075(LC 21),
22=717(LC 20), 12=1076(LC 2), 21=307(LC 18), 19=1348(LC 21)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-979/177, 4-5=-727/192, 5-6=-271/152, 9-10=-710/159, 10-11=-958/7,
2-24=-1022/137, 11-12=-901/0

BOT CHORD 23-24=-259/304, 21-23=-60/428, 19-21=-933/231, 18-19=-933/231, 14-18=0/1519,
13-14=0/731, 20-22=-115/1361, 17-20=-256/545, 16-17=-256/545, 15-16=-1128/0

WEBS 22-23=-36/778, 4-22=-271/326, 13-15=-329/99, 10-15=-74/287, 5-25=-775/282,
25-33=-768/282, 26-33=-768/282, 9-26=-679/209, 2-23=-102/569, 11-13=-60/422,
17-18=-420/0, 20-21=-743/0, 21-22=-1249/112, 18-20=0/958, 16-18=-1613/141,
14-15=0/988

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCPi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 1-6-8 to 1-5-8, Zone1 1-5-8 to 9-10-7, Zone3 9-10-7 to 14-0-9, Zone1 14-0-9 to 23-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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

Corridor between the bottom chord and any other members.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9, 2025

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from the Truss Plate Institute (www.tpiinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T02G	Truss Type GABLE	Qty 1	Ply 1	METZGER RES.	T38467796
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:46 2025 Page 2
ID:urBi2CDpEN7mWD6LziUSOYz8IDX-r2BAchWmYTnDfMLTN8fnfRnbqQcAD5eZKBZGsUyfhjh

NOTES-

- 10) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-25, 25-33, 26-33, 9-26; Wall dead load (5.0psf) on member(s).4-22, 10-15
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 17-20, 16-17, 15-16
- 12) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 19 except (jt=lb) 24=130, 23=814, 22=215.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.



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Job 4789439	Truss T03G	Truss Type GABLE	Qty 1	Ply 1	METZGER RES.	T38467797
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:47 2025 Page 2
ID:urBi2CDpEN7mWD6LziUSOYz8IDX-JEiYp0XOJnv4HWvfxrA0CeKs9p7OyjriZqlqOwyfhjg

NOTES-

- 12) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 12 except (jt=lb) 22=129, 21=239, 13=302.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

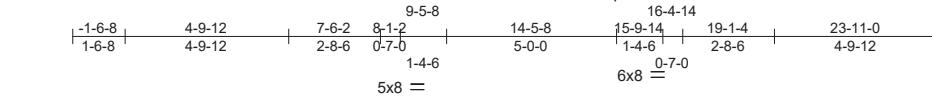
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see [ANSI/TPI1 Quality Criteria and DSB-22](#) available from Truss Plate Institute (www.tpinst.org) and [BCSI Building Component Safety Information](#) available from the Structural Building Component Association (www.sbcscocomponents.com)

Job 4789439	Truss T04	Truss Type ATTIC	Qty 2	Ply 2	METZGER RES.	T38467798
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 Mitek Industries, Inc. Mon Sep 8 12:27:48 2025 Page 1

ID:urBi2CDpEN7mWD6LziUSOYz8IDX-nQJx0MY0451xvgUrVZhFlst_mDNLh20soU2NxNyfjhj



Scale = 1:67.8

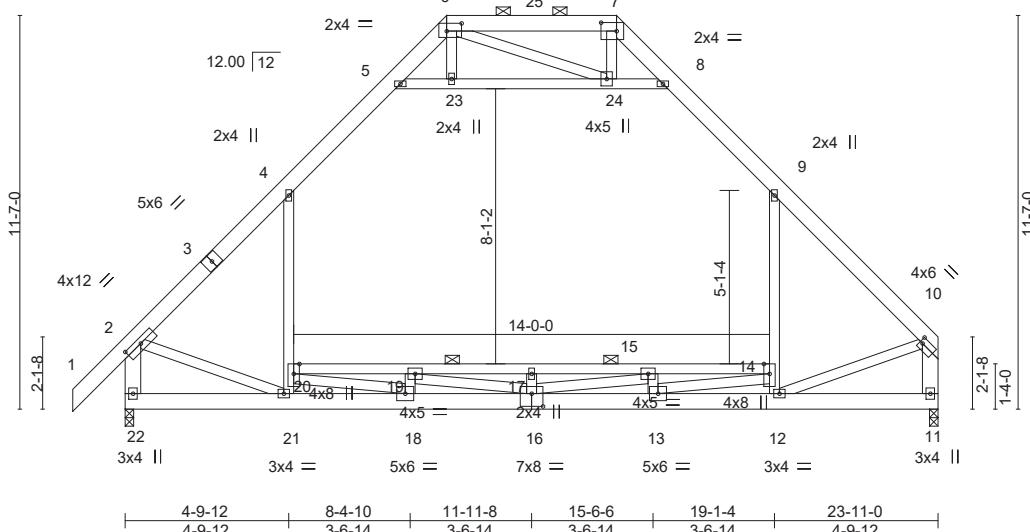


Plate Offsets (X,Y)-- [2:0-6-0,0-1-12], [6:0-5-4,0-2-12], [7:0-5-8,0-3-0], [10:0-1-0,0-2-0], [16:0-4-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.40	Vert(LL)	-0.15	17	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.46	Vert(CT)	-0.28	17	>996	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.59	Horz(CT)	0.02	11	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS	Attic	-0.09	14-20	1959	360		Weight: 483 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26 *Except*
6-7: 2x6 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26 *Except*
14-20: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-22,10-11: 2x6 SP No.2

REACTIONS.

(size) 22=0-3-0, 11=0-3-0
Max Horz 22=324(LC 5)
Max Uplift 22=-172(LC 8), 11=-129(LC 9)
Max Grav 22=3712(LC 16), 11=3606(LC 17)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3543/205, 4-5=-2640/387, 5-6=-725/155, 7-8=-686/150, 8-9=-2644/389,
9-10=-3508/194, 2-22=-3670/151, 10-11=-3588/138
BOT CHORD 21-22=-408/714, 18-21=-139/2244, 16-18=0/4438, 13-16=0/4281, 12-13=0/2102,
11-12=-133/378, 19-20=-2383/0, 17-19=-3192/0, 15-17=-3192/0, 14-15=-2414/0
WEBS 20-21=-555/144, 4-20=-49/549, 12-14=-640/165, 9-14=-81/495, 5-23=-2261/561,
23-24=-2254/562, 8-24=-2314/576, 2-21=0/1779, 10-12=0/1885, 16-17=-396/0,
18-19=-684/0, 13-15=-675/0, 18-20=0/2449, 16-19=-97/915, 15-16=-109/873,
13-14=0/2459

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCPi=0.18; MWFRs (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 8-9, 5-23, 23-24, 8-24; Wall dead load (5.0psf) on member(s).4-20, 9-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-20, 17-19, 15-17, 14-15

Continued on page 2

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see [ANSI/TPI1 Quality Criteria and DSB-22](#) available from the Truss Plate Institute ([www.tpiinst.org](#)) and [BCSI Building Component Safety Information](#) available from the Structural Building Component Association ([www.sbcsccomponents.com](#))

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9, 2025

MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T04	Truss Type ATTIC	Qty 2	Ply 2	METZGER RES.	T38467798
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:48 2025 Page 2
ID:urBi2CDpEN7mWD6LziUSOYz8IDX-nQJx0MY0451xvgUrVZhFlst_mDNLh20soU2NxNyfhjf

NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=172, 11=129.
- 12) Girder carries tie-in span(s): 6-0-0 from 0-0-0 to 23-11-0
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-60, 2-4=-160(B=-100), 4-5=-170(B=-100), 5-6=-160(B=-100), 6-7=-160(B=-100), 7-8=-160(B=-100), 8-9=-170(B=-100), 9-10=-160(B=-100), 11-22=-20,

14-20=-40, 5-8=-10

Drag: 4-20=-10, 9-14=-10

Job 4789439	Truss T05G	Truss Type GABLE	Qty 1	Ply 1	METZGER RES.	T38467800
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 Mitek Industries, Inc. Mon Sep 8 12:27:49 2025 Page 1

ID:urBi2CDpEN7mWD6LziUSOYz8IDX-FdtJEiYfqO9oWq323GCUH3PDUpLQcA?08nwTpyfhje

13-8-14

16-8-4

31-8-0

33-2-0

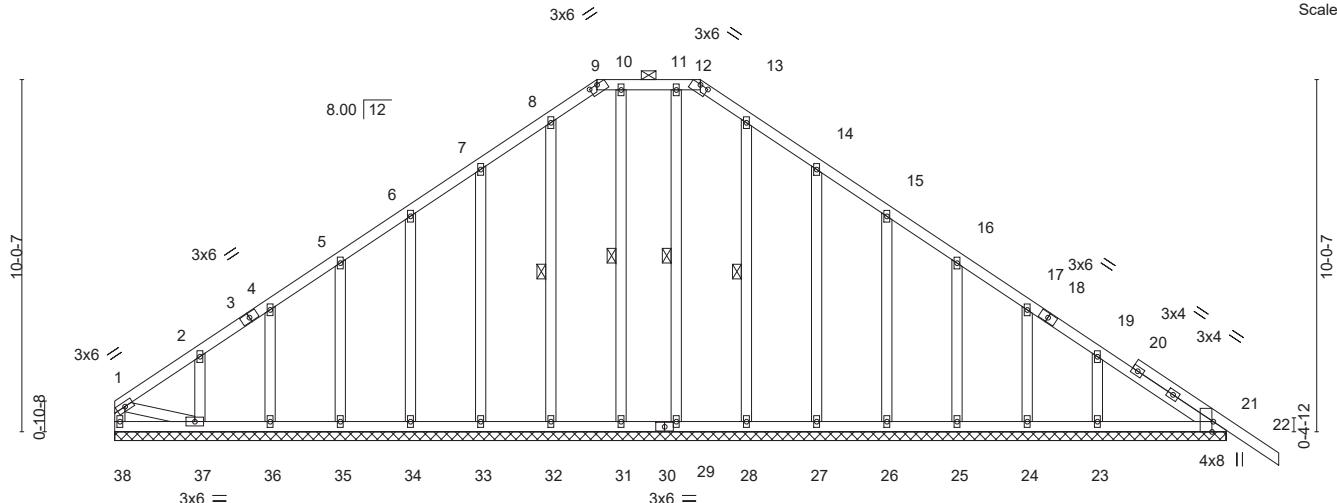
13-8-14

2-11-6

14-11-12

1-6-0

Scale = 1:65.7



31-8-0
31-8-0

Plate Offsets (X,Y)-- [9:0-3-0,0-0-2], [12:0-3-0,0-0-2], [21:0-3-8,Edge]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.14	Vert(LL)	-0.00	22	n/r	MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.09	Vert(CT)	-0.01	22	n/r		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT)	0.01	21	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-S					Weight: 236 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-32, 10-31, 11-29, 13-28

REACTIONS.

All bearings 31-8-0.
(lb) - Max Horz 38=-254(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 38, 36, 35, 34, 33, 32, 31, 29, 28, 27, 26, 25, 24, 23, 21 except 37=-161(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 38, 36, 35, 34, 33, 32, 31, 29, 28, 27, 26, 25, 24, 37 except 23=255(LC 20), 21=251(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 36, 35, 34, 33, 32, 31, 29, 28, 27, 26, 25, 24, 23, 21 except (jt=lb) 37=161.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

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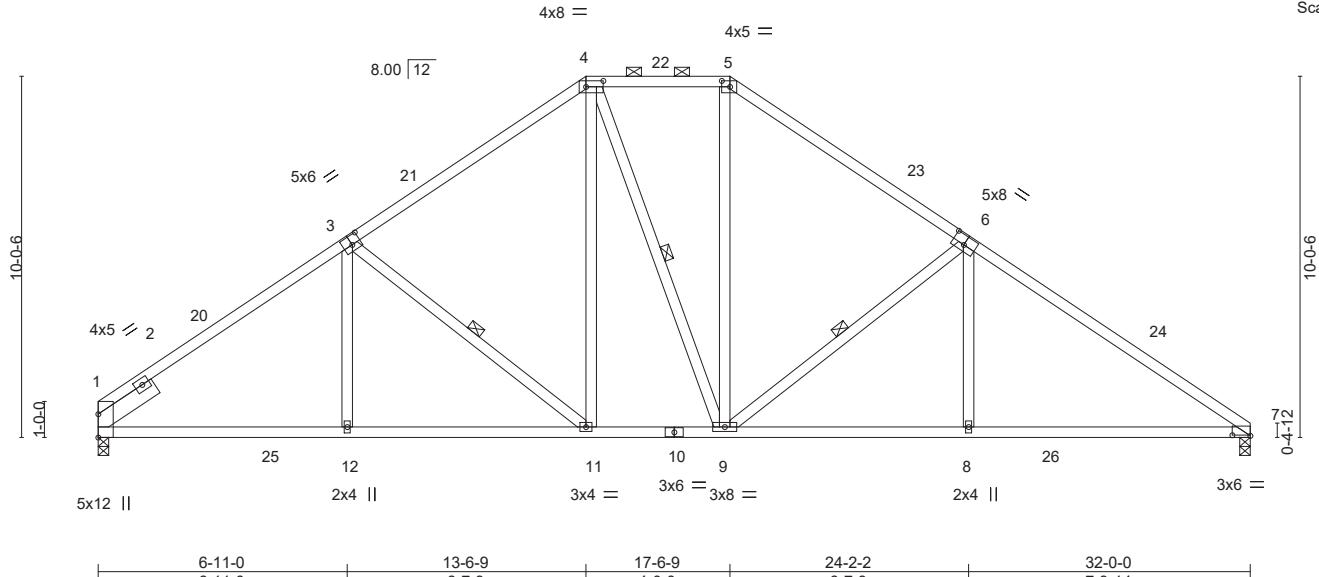
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Job 4789439	Truss T06	Truss Type Piggyback Base	Qty 6	Ply 1	METZGER RES.	T38467801
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:50 2025 Page 1 ID:urBi2CDpEN7mWD6LziUSOYz8IDX-kpQhR2ZhbIhf8zeEcZkjHb113r9119FoXu?Fyfhjd

6-11-0 13-6-9 17-6-9 24-2-2 32-0-0
6-11-0 6-7-9 4-0-0 6-7-9 7-9-14

Scale: 3/16"=1'



6-11-0 13-6-9 17-6-9 24-2-2 32-0-0
6-11-0 6-7-9 4-0-0 6-7-9 7-9-14

Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-5-12,0-2-0], [5:0-2-12,0-2-0], [6:0-4-0,0-3-0], [7:0-6-0,0-0-3]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.99	Vert(LL)	-0.13	8-19	>999	240	
TCDL 10.0	Lumber DOL	1.25	BC 0.45	Vert(CT)	-0.25	8-19	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.05	7	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 191 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-11-8

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-4-11 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-11, 4-9, 6-9

REACTIONS. (size) 1=0-3-8, 7=0-3-8

Max Horz 1=-237(LC 8)
Max Uplift 1=-292(LC 12), 7=-300(LC 13)
Max Grav 1=1409(LC 19), 7=1418(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-3=-1851/400, 3-4=-1452/368, 4-5=-1141/374, 5-6=-1473/378, 6-7=-2075/438
BOT CHORD 1-12=-367/1602, 11-12=-367/1600, 9-11=-158/1187, 8-9=-251/1648, 7-8=-251/1651
WEBS 3-12=0/263, 3-11=-538/269, 4-11=-134/538, 5-9=-136/574, 6-9=-777/320, 6-8=0/374

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCPi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-2-6, Zone1 3-2-6 to 13-6-9, Zone3 13-6-9 to 17-6-9, Zone2 17-6-9 to 22-0-14, Zone1 22-0-14 to 32-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 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 100 lb uplift at joint(s) except (jt=lb) 1=292, 7=300.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9, 2025

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T07	Truss Type Common	Qty 2	Ply 1	METZGER RES.	T38467802
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

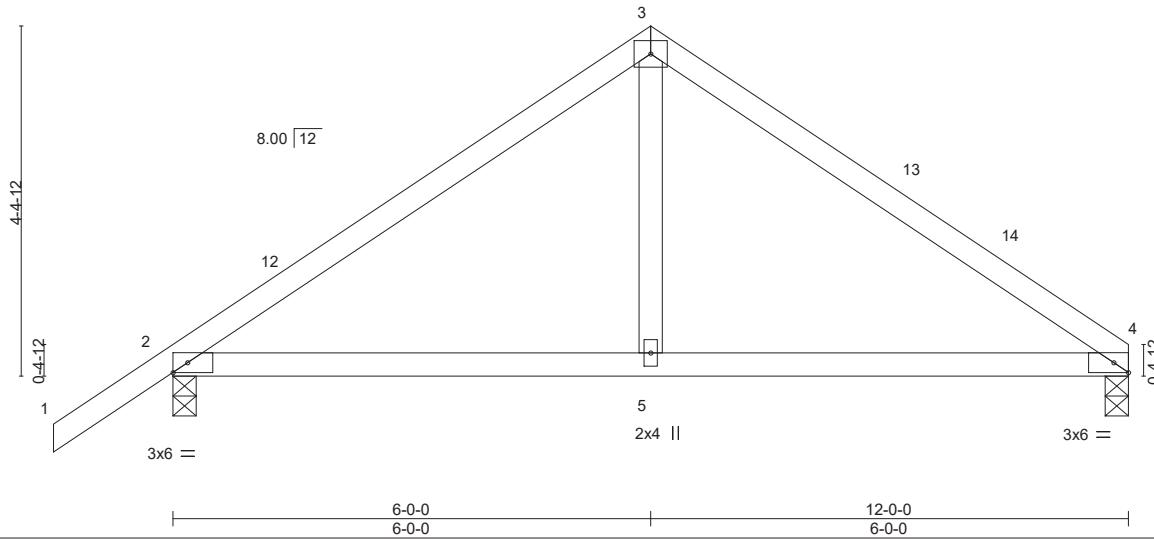
8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:51 2025 Page 1

ID:urBi2CDpEN7mWD6LziUSOYz8IDX-C?_3fOavM0PWm7DQAhFyMUVVXRQ8uXEIUSG1Xiyfhjc

|-1-6-0| 6-0-0 | 12-0-0
1-6-0 6-0-0 6-0-0

4x5 =

Scale = 1:28.9



6-0-0 | 12-0-0
6-0-0 6-0-0

Plate Offsets (X,Y)-- [4:0-2-3,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.43	Vert(LL)	-0.05	5-8	>999	240	
TCDL 10.0	Lumber DOL	1.25	BC 0.39	Vert(CT)	-0.09	5-8	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 48 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=0-3-8, 2=0-3-8
Max Horz 2=115(LC 9)
Max Uplift 4=-107(LC 13), 2=-149(LC 12)
Max Grav 4=474(LC 1), 2=576(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-578/198, 3-4=-575/209

BOT CHORD 2-5=-63/404, 4-5=-63/404

WEBS 3-5=-24/283

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-0-0, Zone2 6-0-0 to 10-2-15, Zone1 10-2-15 to 12-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=107, 2=149.

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Date:

September 9,2025

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T07G	Truss Type Common Supported Gable	Qty 1	Ply 1	METZGER RES.	T38467803
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:51 2025 Page 1
ID:urBi2CDpEN7mWD6LziUSOYz8IDX-C?_3fOavM0PWm7DQAhFyMUVzFWfuYGIUSG1Xiyfhjc

-1-6-0 6-0-0 12-0-0
1-6-0 6-0-0 6-0-0

Scale = 1:26.6

4x5 =

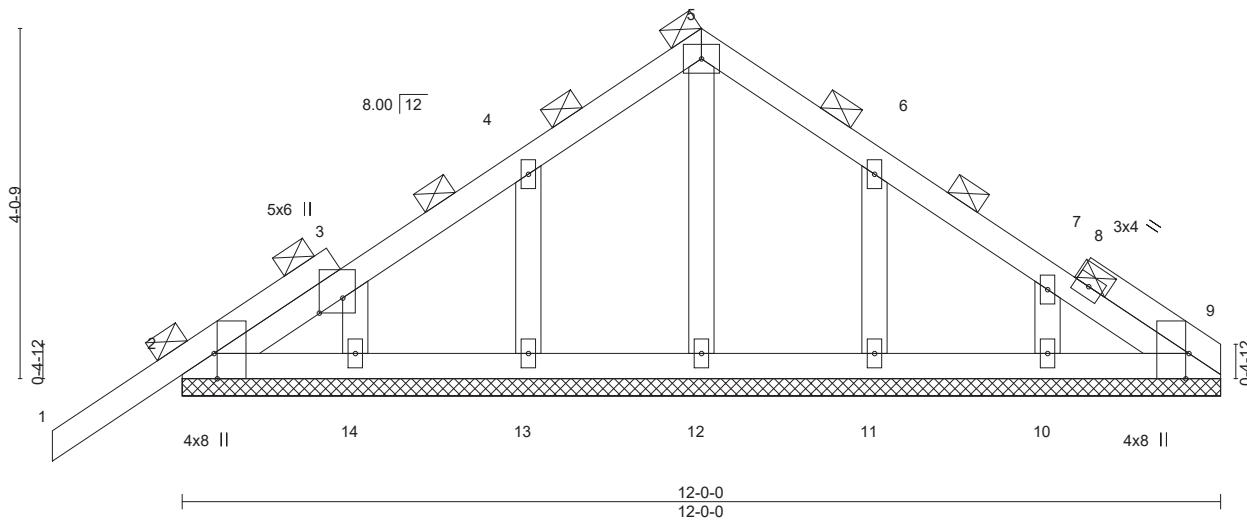


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-2-1,0-3-4], [9:0-3-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.17	Vert(LL)	-0.00	1	n/r	120	
TCDL 10.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	-0.00	1	n/r	120	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	9	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S					Weight: 61 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 12-0-0.
(lb) - Max Horz 2=107(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 9, 12, 13, 14, 11, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13, 14, 11, 10.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

September 9,2025

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Job 4789439	Truss T08	Truss Type Common Girder	Qty 1	Ply 2	METZGER RES.	T38467804
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:52 2025 Page 1
ID:urBi2CDpEN7mWD6LziUSOYz81DX-gCYRskbX7JXMNHockOmBvi1iqfmdozRj60a48yfhjb

3-3-11 6-0-0 8-8-5 12-0-0
3-3-11 2-8-5 2-8-5 3-3-11

4x5 ||

Scale = 1:26.6

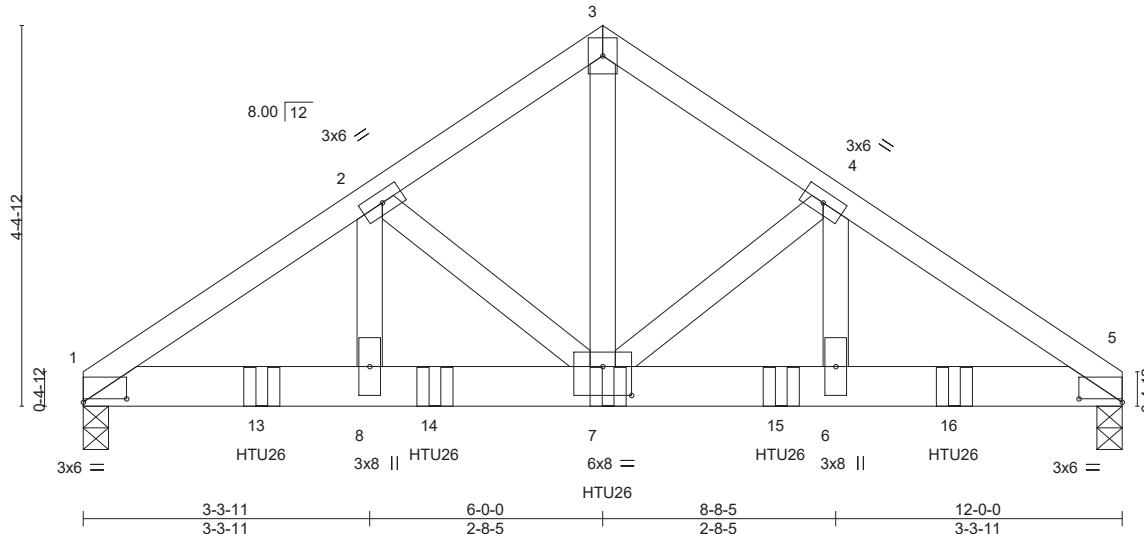


Plate Offsets (X,Y)-- [1:0-6,0,0-0-7], [5:0-6,0,0-0-7], [7:0-4-0,0-0-4-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.27	Vert(LL)	-0.05	7-8 >999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.87	Vert(CT)	-0.10	7-8 >999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.84	Horz(CT)	0.03	5 n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 140 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=99(LC 7)
Max Uplift 1=-867(LC 8), 5=-879(LC 9)
Max Grav 1=3822(LC 2), 5=3879(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5951/1347, 2-3=-4186/982, 3-4=-4187/982, 4-5=-5946/1347
BOT CHORD 1-8=-1138/4938, 7-8=-1138/4938, 6-7=-1078/4937, 5-6=-1078/4937
WEBS 3-7=-1012/4435, 4-7=-1896/505, 4-6=-439/2038, 2-7=-1898/504, 2-8=-440/2048

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=-867, 5=879.
- Use Simpson Strong-Tie HTU26 (10-10d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 10-0-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)

Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 1-5=-20

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

Continued on page 2

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T08	Truss Type Common Girder	Qty 1	Ply 2	METZGER RES.	T38467804
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:52 2025 Page 2
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 7=-1260(B) 13=-1260(B) 14=-1260(B) 15=-1260(B) 16=-1260(B)



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Job 4789439	Truss T12	Truss Type MONOPITCH	Qty 16	Ply 1	METZGER RES.	T38467805
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:53 2025 Page 1

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-1-6-0 1-6-0 5-0-0 5-0-0

9-3-8 4-3-8 12-10-12 3-7-4

Scale = 1:27.3

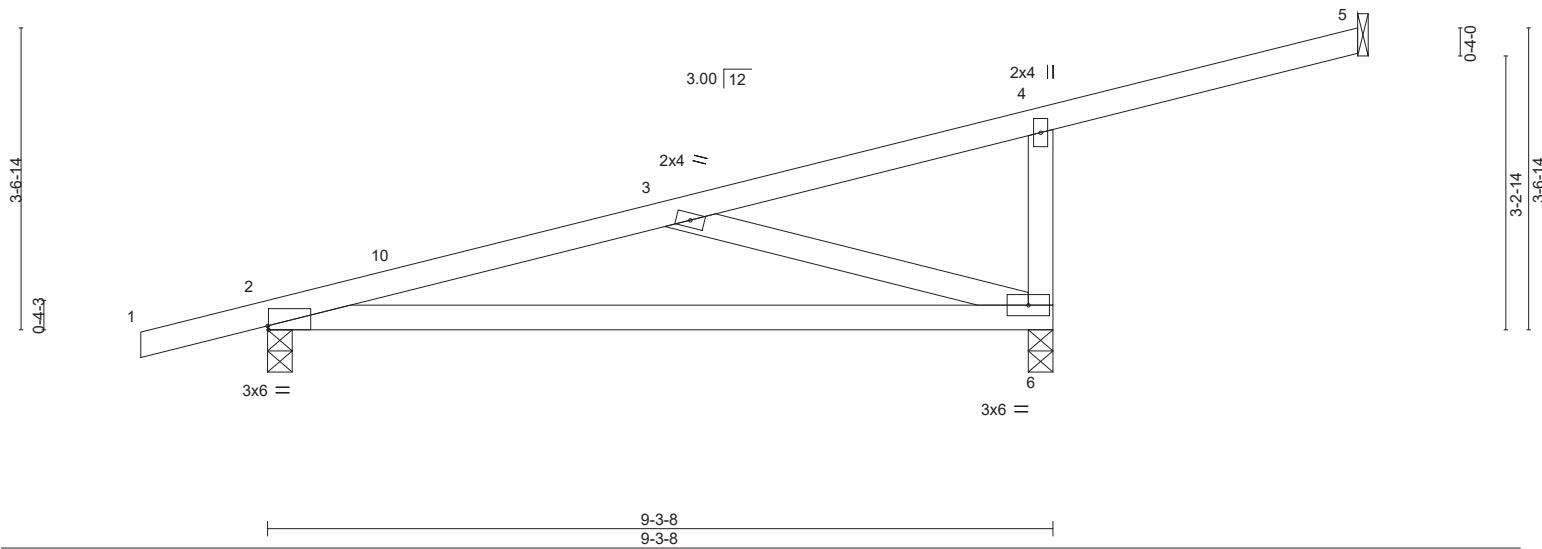


Plate Offsets (X,Y)-- [2:0-0-2,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.58	Vert(LL)	0.15	6-9	>715	240	
TCDL 10.0	Lumber DOL	1.25	BC 0.62	Vert(CT)	-0.30	6-9	>367	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(CT)	0.01	6	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 46 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-11-7 oc bracing.

REACTIONS.

(size) 5=Mechanical, 2=0-3-8, 6=0-3-8
Max Horz 2=143(LC 8)
Max Uplift 5=-46(LC 8), 2=-238(LC 8), 6=-281(LC 8)
Max Grav 5=83(LC 1), 2=452(LC 1), 6=508(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-650/357, 4-6=-260/174
BOT CHORD 2-6=-474/624
WEBS 3-6=-618/463

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., Gcpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 12-10-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=238, 6=281.

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Date:

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MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 4789439	Truss T13	Truss Type Monopitch	Qty 9	Ply 1	METZGER RES.	T38467806
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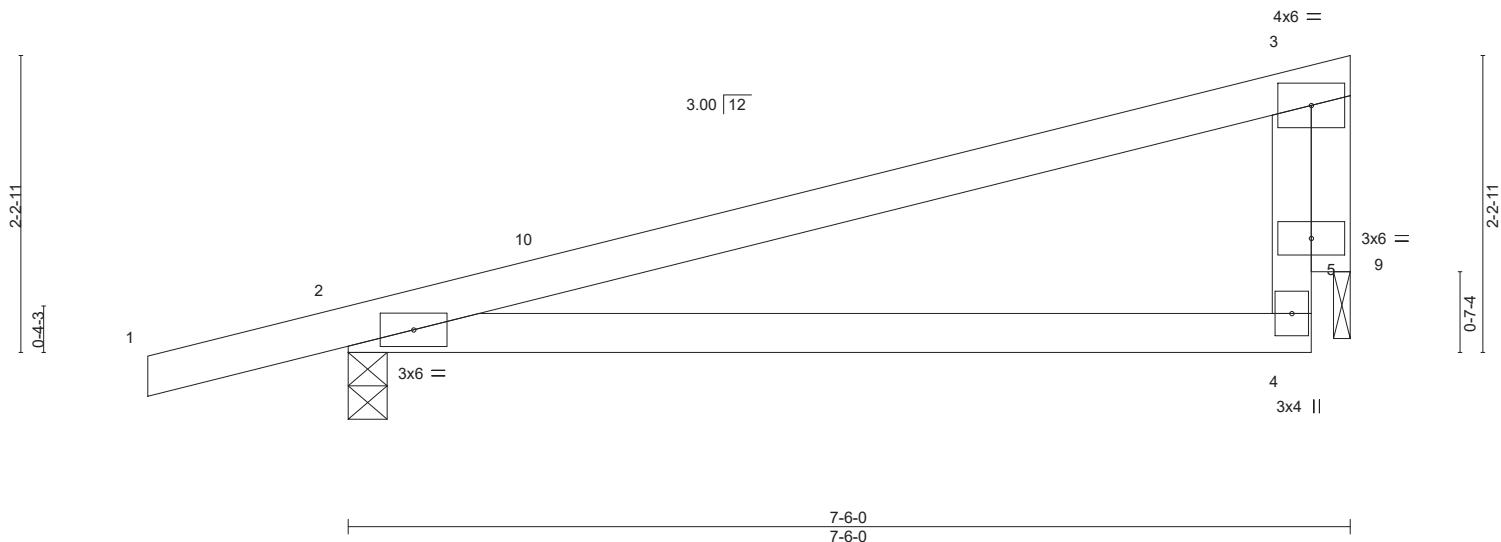
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Aug 14 2025 MiTek Industries, Inc. Mon Sep 8 12:27:53 2025 Page 1

ID:urBi2CDpEN7mWD6LziUSOYz8IDX-8O6q44c9udfD?RNpl6HQSVaqqE6gMO5bxml8cayfhja

-1-6-0 1-6-0 7-6-0 7-6-0

Scale = 1:17.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.51	Vert(LL) 0.12 in (loc) 4-8 l/defl >740 L/d 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.25	BC 0.45	Vert(CT) -0.16 4-8 >563 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.28	Horz(CT) 0.00 2 n/a n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-MR		Weight: 29 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 9=0-1-8
Max Horz 2=87(LC 8)

Max Uplift 2=-221(LC 8), 9=-145(LC 8)
Max Grav 2=396(LC 1), 9=259(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-9=283/239

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 7-0-12 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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.
- 6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=221, 9=145.

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

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
Date:

September 9,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see [ANSI/TPI1 Quality Criteria and DSB-22](#) available from Truss Plate Institute ([www.tpiinst.org](#)) and [BCSI Building Component Safety Information](#) available from the Structural Building Component Association ([www.sbcsccomponents.com](#))

MiTek
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / [MiTek-US.com](#)

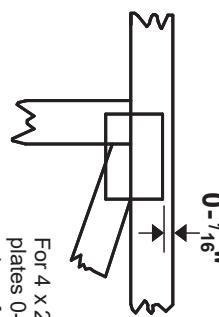
Symbols

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.

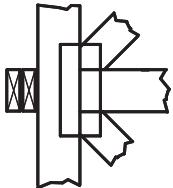
* Plate location details available in MiTek software or upon request.

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/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



dimensions shown in ft-in-sixteenths
(Drawings not to scale)

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.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.

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 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.