

MiTek, Inc.

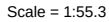
Floor Load: N/A psf

No.	Seal#	Truss Name	Date
1	T40828755	A01G	4/15/26
2	T40828756	A02	4/15/26
3	T40828757	A03	4/15/26
4	T40828758	A04	4/15/26
5	T40828759	A05	4/15/26
6	T40828760	A06	4/15/26
7	T40828761	A07	4/15/26
8	T40828762	CJ1	4/15/26
9	T40828763	CJ2	4/15/26
10	T40828764	CJ3	4/15/26
11	T40828765	CJ4	4/15/26
12	T40828766	CJ6	4/15/26
13	T40828767	EJ7	4/15/26
14	T40828768	HJ7	4/15/26

DAVID A. HESTER

1 of 1

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:08 Page: 1
ID:qATpTT35_JmRvW4hrqVRVyCOKy-RfC?PsB70Hq3NSgPqnL8w3uLTxbGKwCRD0i7J4zJC?f



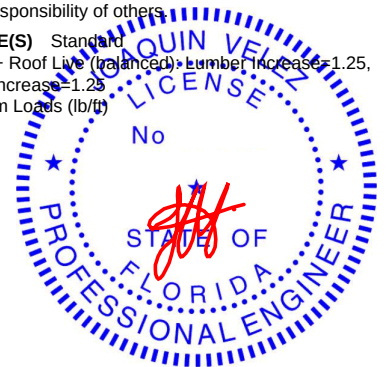
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	0.82	10	>499	360	MT20HS	187/143
TCDL	15.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-1.09	10	>373	240	MT20	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 354 lb	FT = 20%

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: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc,
Except member 2-12 2x4 - 1 row at 0-3-0 oc, Except member 6-8 2x4 - 1 row at 0-3-0 oc.

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 62 lb down and 81 lb up at 6-11-11, 62 lb down and 80 lb up at 9-0-12, 62 lb down and 80 lb up at 11-0-12, 62 lb down and 80 lb up at 13-0-12, 62 lb down and 80 lb up at 15-0-12, 62 lb down and 80 lb up at 16-11-4, 62 lb down and 80 lb up at 18-11-4, 62 lb down and 80 lb up at 20-11-4, 62 lb down and 80 lb up at 22-11-4, and 62 lb down and 80 lb up at 24-11-4, and 62 lb down and 81 lb up at 27-0-5 on top chord, and 369 lb down and 303 lb up at 6-11-6, 161 lb down and 85 lb up at 9-0-12, 161 lb down and 85 lb up at 11-0-12, 161 lb down and 85 lb up at 13-0-12, 161 lb down and 85 lb up at 15-0-12, 161 lb down and 85 lb up at 16-11-4, 161 lb down and 85 lb up at 18-11-4, 161 lb down and 85 lb up at 20-11-4, 161 lb down and 85 lb up at 22-11-4, and 161 lb down and 85 lb up at 24-11-4, and 369 lb down and 303 lb up at 26-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15, 2026

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 Components Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828755
4948514	A01G	Hip Girder	2	2	Job Reference (optional)	

Vert: 1-2=-70, 2-6=-70, 6-7=-70, 1-7=-20

Concentrated Loads (lb)

Vert: 2=-36 (F), 6=-36 (F), 12=-313 (F), 8=-313 (F),
10=-161 (F), 4=-36 (F), 21=-36 (F), 22=-36 (F),
24=-36 (F), 25=-36 (F), 26=-36 (F), 27=-36 (F),
29=-36 (F), 30=-36 (F), 31=-161 (F), 32=-161 (F),
33=-161 (F), 34=-161 (F), 35=-161 (F), 36=-161 (F),
37=-161 (F), 38=-161 (F)

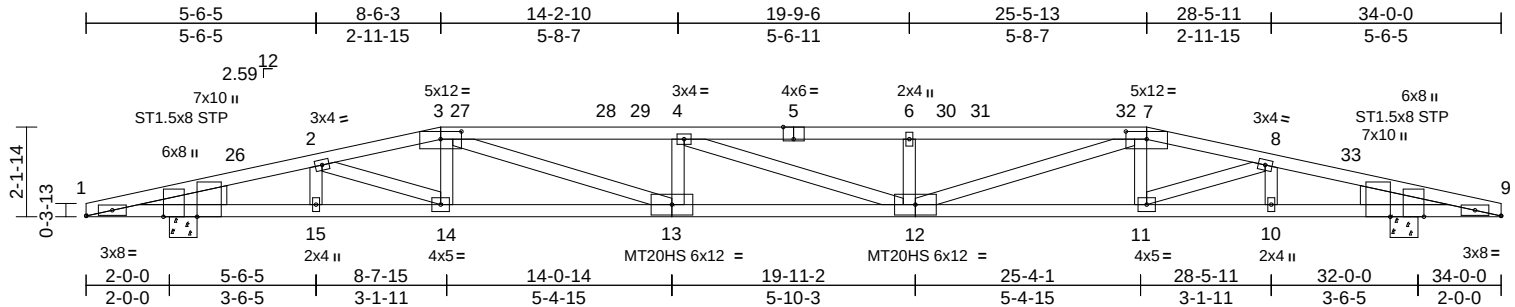
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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.sbcsccomponents.com)

Job	Truss	Truss Type	Qty	Ply	4948514	T40828756
4948514	A02	Hip	2	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:09
ID:yiq8s6LgPurfUYQRUM4qulyCO7g-Rfc?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:55.4

Plate Offsets (X, Y): [1:0-3-9,0-0-2], [1:0-0-4,Edge], [1:0-0-4,Edge], [3:0-6-0,0-2-3], [5:0-3-0,Edge], [7:0-6-0,0-2-3], [9:0-3-9,0-0-2], [9:0-0-4,Edge], [9:0-0-4,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.96	Vert(LL)	0.55	12-13	>742	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.98	12-13	>416	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.14	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS								
Weight: 157 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 3-5,5-7:2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING

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

REACTIONS

(size) 1=0-8-0, 9=0-8-0
Max Horiz 1=33 (LC 6)
Max Uplift 1=-520 (LC 10), 9=-520 (LC 10)
Max Grav 1=1530 (LC 1), 9=1530 (LC 1)

FORCES

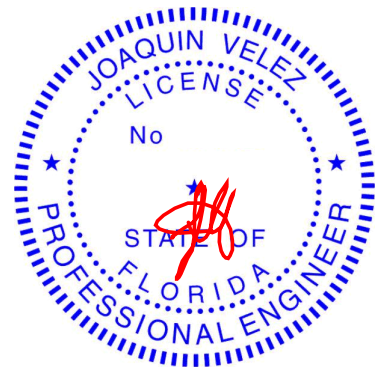
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3135/1716, 2-3=-3778/2045,
3-4=-5187/2680, 4-6=-5218/2701,
6-7=-5186/2678, 7-8=-3778/2046,
8-9=-3135/1716
BOT CHORD 1-15=-1576/3003, 14-15=-1576/3003,
11-14=-2560/5219, 10-11=-1576/3003,
9-10=-1576/3003
WEBS 3-14=-117/127, 7-11=-117/126,
4-13=-433/299, 3-13=-694/1674, 4-12=-97/99,
6-12=-408/299, 7-12=-691/1673,
2-14=-335/809, 8-11=-336/809,
2-15=-296/207, 8-10=-296/208

NOTES

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

- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=34ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 0-0-0 to 3-4-9,
Zone1 3-4-9 to 3-8-8, Zone2 3-8-8 to 13-3-14, Zone1
13-3-14 to 20-8-2, Zone2 20-8-2 to 30-3-8, Zone1 30-3-8
to 30-7-3, Zone3 30-7-3 to 34-0-0 zone; cantilever left
and right exposed ; 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
- 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.
- All plates are MT20 plates unless otherwise indicated.
- 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
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 520 lb uplift at joint
1 and 520 lb uplift at joint 9.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15,2026

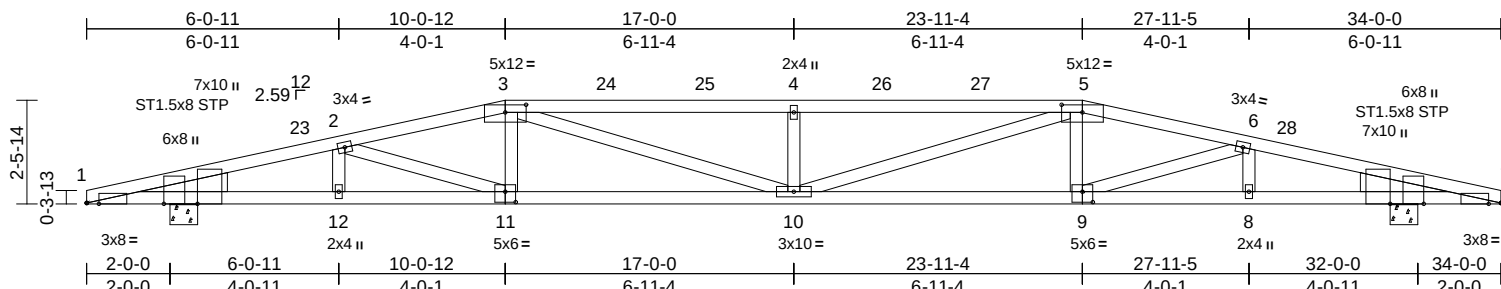
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbcsccomponents.com)

MiTek®

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

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID: wlZxy6ZuBFbXOf1HOv2eyCMSr-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:55.4

Plate Offsets (X, Y): [1:0-3-9,Edge], [1:0-0-4,Edge], [1:0-0-4,Edge], [3:0-6-0,0-2-3], [5:0-6-0,0-2-3], [7:0-3-9,Edge], [7:0-0-4,Edge], [7:0-0-4,Edge], [9:0-3-0,0-3-0], [11:0-3-0,0-3-0]

[illegible]

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 3-5:2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD	2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31 *Except* 9-11:2x4 SP No.2
WEBS	2x4 SP No.3
WEDGE	Left: 2x6 SP No.2 Right: 2x6 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-4-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size)	1=0-8-0, 7=0-8-0
Max Horiz	1=39 (LC 6)
Max Uplift	1=-520 (LC 10), 7=-520 (LC 10)
Max Grav	1=1530 (LC 1), 7=1530 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-3290/1835, 2-3=-3728/2089,
3-4=-4675/2599, 4-5=-4675/2599,
5-6=-3728/2089, 6-7=-3290/1835

BOT CHORD 1-12=-1698/3162, 10-12=-1919/3632,
8-10=-1919/3632, 7-8=-1698/3162

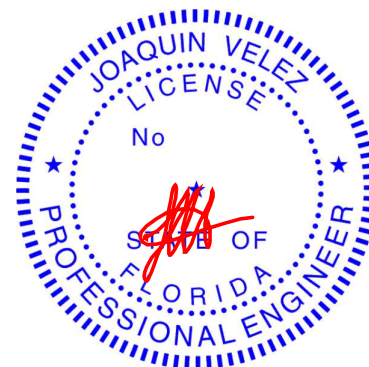
WEBS 2-11=-232/625, 3-11=-10/170,
3-10=-546/1241, 4-10=-543/431,
5-10=-546/1241, 5-9=-10/170, 6-9=-232/625,
2-12=-269/223, 6-8=-269/223

NOTES

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

- 2) Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=34ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 0-0-0 to 3-4-9,
Zone1 3-4-9 to 5-3-1, Zone2 5-3-1 to 14-10-7, Zone1
14-10-7 to 19-1-9, Zone2 19-1-9 to 28-8-15, Zone1
28-8-15 to 30-7-3, Zone3 30-7-3 to 34-0-0 zone;
cantilever left and right exposed ; 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) 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
3-06-00 tall by 2-00-00 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 520 lb uplift at joint
1 and 520 lb uplift at joint 7.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15, 2026



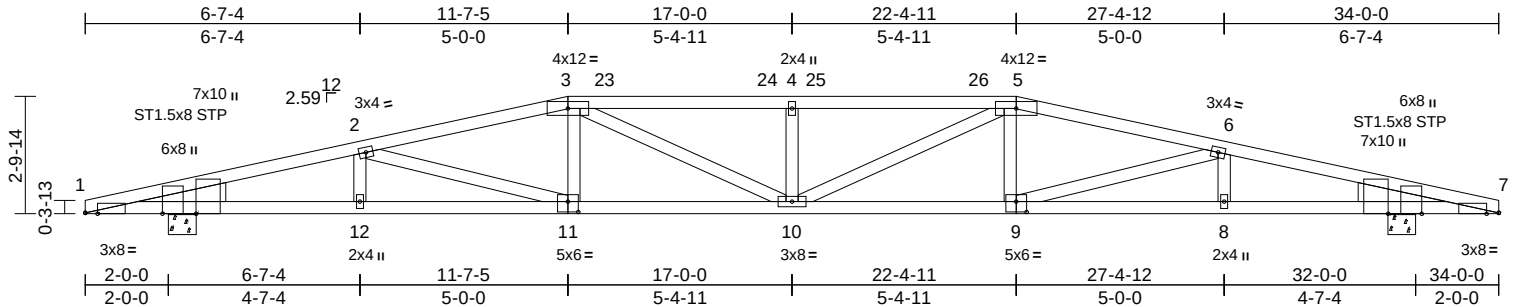
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TP1 Quality Criteria and DS-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcsccomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828758
4948514	A04	Hip	2	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:08B?NLKwrbZjKz0bWo876yyCMV6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:55.4

Plate Offsets (X, Y): [1:0-3-9,Edge], [1:0-0-4,Edge], [1:0-0-4,Edge], [7:0-3-9,Edge], [7:0-0-4,Edge], [7:0-0-4,Edge], [9:0-3-0,0-3-0], [11:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.97	Vert(LL)	0.40	10	>999	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.71	10	>575	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.13	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 157 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 *Except* 9-11:2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 4-2-9 oc bracing.

REACTIONS (size) 1=0-8-0, 7=0-8-0
Max Horiz 1=45 (LC 6)
Max Uplift 1=-520 (LC 10), 7=-520 (LC 10)
Max Grav 1=1530 (LC 1), 7=1530 (LC 1)

FORCES

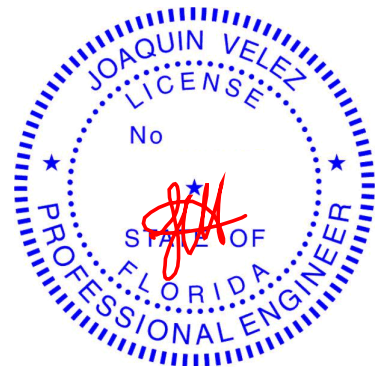
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3434/1943, 2-3=-3592/2113, 3-4=-3989/2402, 4-5=-3989/2402, 5-6=-3592/2113, 6-7=-3434/1943
BOT CHORD 1-12=-1806/3305, 10-12=-1928/3488, 8-10=-1928/3488, 7-8=-1806/3305
WEBS 2-11=-127/388, 3-11=0/230, 5-10=-327/714, 5-9=0/230, 6-9=-127/388, 2-12=-213/235, 6-8=-213/235, 4-10=-408/366, 3-10=-327/714

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=145mph (3-second gust) Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-4-9, Zone1 3-4-9 to 6-7-4, Zone2 6-7-4 to 16-5-0, Zone1 16-5-0 to 17-7-0, Zone2 17-7-0 to 27-4-12, Zone1 27-4-12 to 30-7-3, Zone3 30-7-3 to 34-0-0 zone; cantilever left and right exposed ; 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

- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 520 lb uplift at joint 1 and 520 lb uplift at joint 7.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15,2026

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.sbcsccomponents.com)

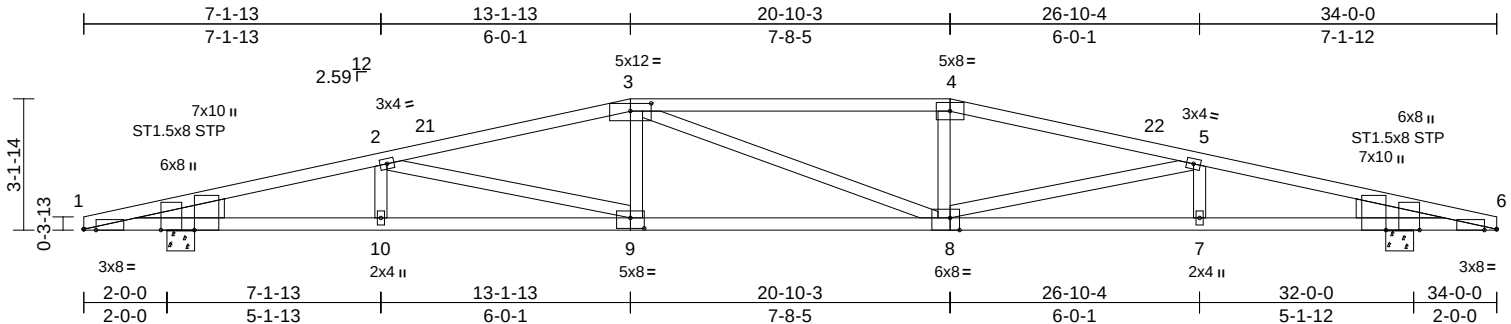
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828759
4948514	A05	Hip	2	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:YYIIZWT7NgzpCaGkSBYAVZyCM9_-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:55.4

Plate Offsets (X, Y): [1:0-0-3,Edge], [1:0-0-4,Edge], [1:0-0-4,Edge], [3:0-6-0,0-2-3], [6:0-3-9,Edge], [6:0-0-4,Edge], [6:0-0-4,Edge], [8:0-2-12,Edge], [9:0-4-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.89	Vert(LL)	0.34	9-10	>999	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.61	9-10	>672	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.12	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 153 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1 *Except* 3-4:2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD 2x4 SP 2700F 2.2E or 2x4 SP 2850F 2.0E or 2x4 SP M 31 *Except* 8-9:2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING

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

REACTIONS

(size) 1=0-8-0, 6=0-8-0
Max Horiz 1=51 (LC 6)
Max Uplift 1=-520 (LC 10), 6=-520 (LC 10)
Max Grav 1=1530 (LC 1), 6=1530 (LC 1)

FORCES

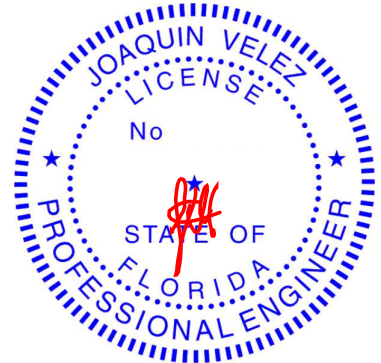
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-3540/1922, 2-3=-3449/1998, 3-4=-3348/2003, 4-5=-3453/1999, 5-6=-3538/1922
BOT CHORD 1-10=-1784/3407, 7-10=-1808/3407, 6-7=-1783/3405
WEBS 2-9=-133/220, 3-9=0/331, 3-8=-245/252, 4-8=0/332, 5-8=-129/224, 2-10=-148/202, 5-7=-150/203

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-4-9, Zone1 3-4-9 to 8-4-2, Zone2 8-4-2 to 25-7-14, Zone1 25-7-14 to 30-7-3, Zone3 30-7-3 to 34-0-0 zone; cantilever left and right exposed ; 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

- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 520 lb uplift at joint 1 and 520 lb uplift at joint 6.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15,2026

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.sbcsccomponents.com)

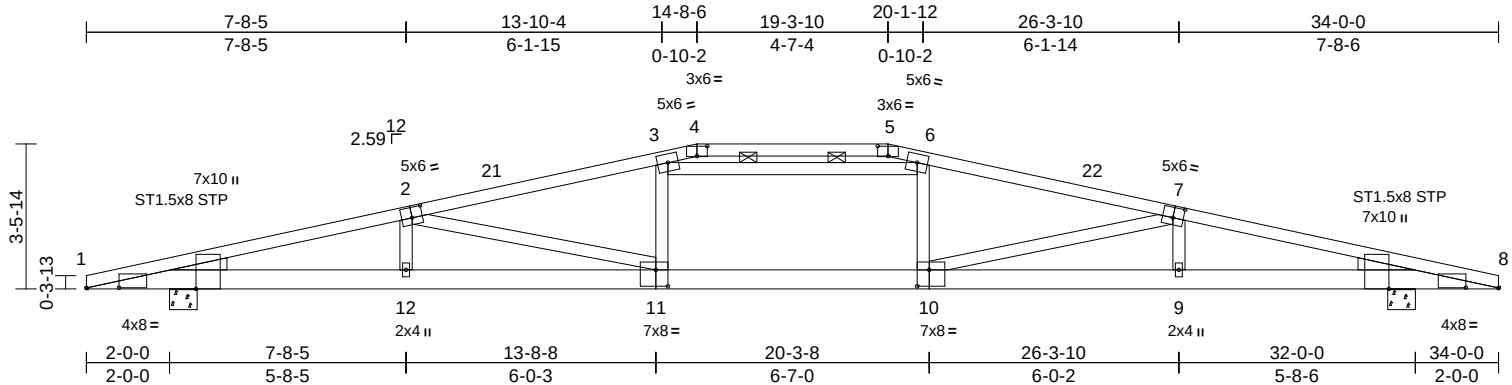
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828760
4948514	A06	Attic	2	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:1jEbSA00kZqMTIpku_r6b9yCNCD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?r

Page: 1



Scale = 1:55.5

Plate Offsets (X, Y): [1:0-9-7,0-0-1], [1:0-0-4,Edge], [2:0-3-0,0-3-0], [4:0-3-0,0-2-14], [5:0-3-0,0-2-14], [7:0-3-0,0-3-0], [8:0-9-7,0-0-1], [8:0-0-4,Edge], [10:0-3-8,0-4-12], [11:0-3-8,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.94	Vert(LL)	0.27	11-12	>999	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.61	10-11	>664	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS		Attic	-0.11	10-11	>722	360	Weight: 173 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-4-4 oc bracing.
WEBS 2 Rows at 1/3 pts 3-6

REACTIONS

(size) 1=0-8-0, 8=0-8-0
Max Horiz 1=57 (LC 6)
Max Uplift 1=-352 (LC 10), 8=-352 (LC 10)
Max Grav 1=1769 (LC 18), 8=1769 (LC 18)

FORCES

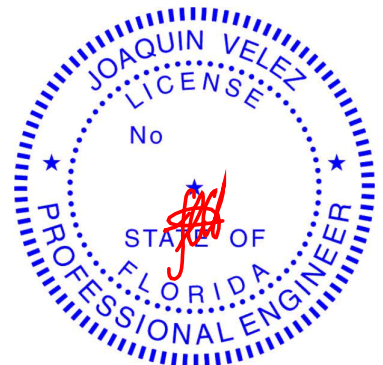
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-4558/1162, 3-4=-1464/165,
4-5=-1435/156, 5-6=-1464/165,
6-8=-4558/1162
BOT CHORD 1-12=-1050/4064, 9-12=-1065/4402,
8-9=-1050/4064
WEBS 2-11=-167/637, 3-11=0/459, 6-10=0/459,
3-6=-2972/1001, 2-12=-441/218,
7-10=-167/637, 7-9=-441/218

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=34ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 0-0-0 to 3-4-9,
Zone1 3-4-9 to 9-10-11, Zone2 9-10-11 to 24-1-5, Zone1
24-1-5 to 30-7-3, Zone3 30-7-3 to 34-0-0 zone; cantilever
left and right exposed ; 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

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 200.0lb AC unit load placed on the top chord, 17-0-0 from left end, supported at two points, 5-0-0 apart.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-6; Wall dead load (5.0psf) on member(s).3-11, 6-10
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 10-11
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 352 lb uplift at joint 1 and 352 lb uplift at joint 8.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15,2026

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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

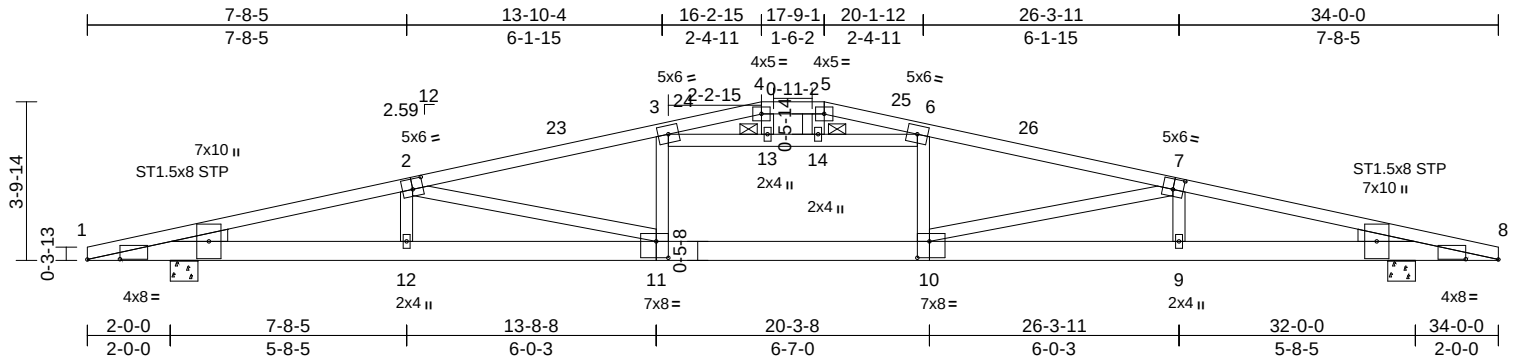
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828761
4948514	A07	Attic	2	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:lj0tb0st6VOGDUSjKOfzq1yCOUF-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:55.5

Plate Offsets (X, Y): [1:0-9-7,0-0-1], [2:0-3-0,0-3-0], [7:0-3-0,0-3-0], [8:0-9-7,0-0-1], [10:0-3-8,0-4-12], [11:0-3-8,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.89	0.27	11-12	>999	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.60	10-11	>679		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.09	8	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS		Attic	-0.12	10-11	>664	Weight: 175 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2 Rows at 1/3 pts 3-6

REACTIONS

(size) 1=0-8-0, 8=0-8-0
Max Horiz 1=63 (LC 6)
Max Uplift 1=-352 (LC 10), 8=-352 (LC 10)
Max Grav 1=1769 (LC 18), 8=1769 (LC 18)

FORCES

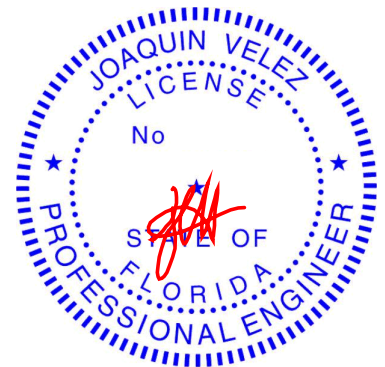
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 4-5=-1810/464, 1-3=-4584/1029,
3-4=-1840/466, 5-6=-1840/466,
6-8=-4584/1029
BOT CHORD 1-12=-919/4054, 9-12=-933/4432,
8-9=-919/4054
WEBS 2-11=-188/659, 3-11=-1/460, 6-10=-1/460,
7-10=-188/659, 3-13=-2694/609,
13-14=-2625/596, 6-14=-2694/609,
4-13=-48/293, 5-14=-48/293, 2-12=-435/195,
7-9=-435/195

NOTES

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

- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=34ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 0-0-0 to 3-4-9,
Zone1 3-4-9 to 11-5-4, Zone2 11-5-4 to 22-6-12, Zone1
22-6-12 to 30-7-3, Zone3 30-7-3 to 34-0-0 zone;
cantilever left and right exposed ; 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
- Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 200.0lb AC unit load placed on the top chord, 17-0-0 from
left end, supported at two points, 5-0-0 apart.
- 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
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-13, 13-14,
6-14; Wall dead load (5.0psf) on member(s).3-11, 6-10
- Bottom chord live load (40.0 psf) and additional bottom
chord dead load (5.0 psf) applied only to room. 10-11
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 352 lb uplift at joint
1 and 352 lb uplift at joint 8.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15,2026

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.sbcsccomponents.com)

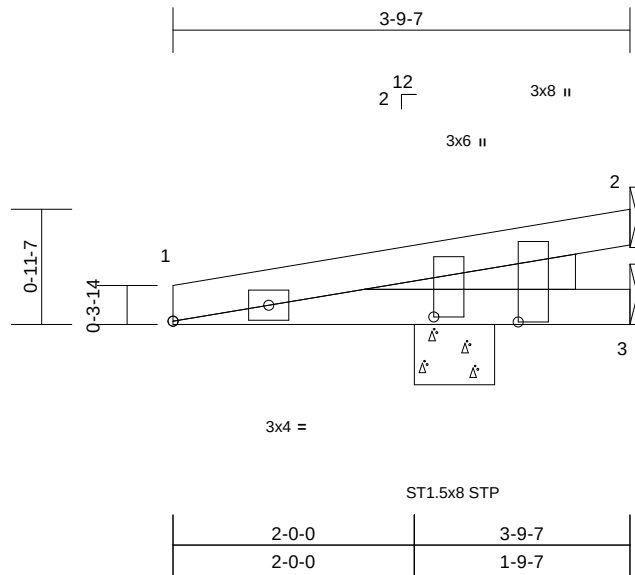
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828762
4948514	CJ1	Jack-Open	4	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:MD6DbKqonDudicuUxu2yxQyCKze-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:19.1

Plate Offsets (X, Y): [1:0-7-8,0-0-1], [1:0-0-7,2-1-15], [1:0-0-1,2-10-5]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.30	Vert(LL)	0.04	4	>999	360	MT20
TCDL	15.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	0.03	4	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	1	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 14 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.3

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 2, 15 lb uplift at joint 3 and 320 lb uplift at joint 1.

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-8-0, 2= Mechanical, 3= Mechanical
Max Horiz 1=41 (LC 6)
Max Uplift 1=-320 (LC 6), 2=-12 (LC 1), 3=-15 (LC 1)
Max Grav 1=362 (LC 1), 2=7 (LC 6), 3=9 (LC 6)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-244/142
BOT CHORD 1-3=-133/224

NOTES

- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed ; 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
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15,2026

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.sbcsccomponents.com)

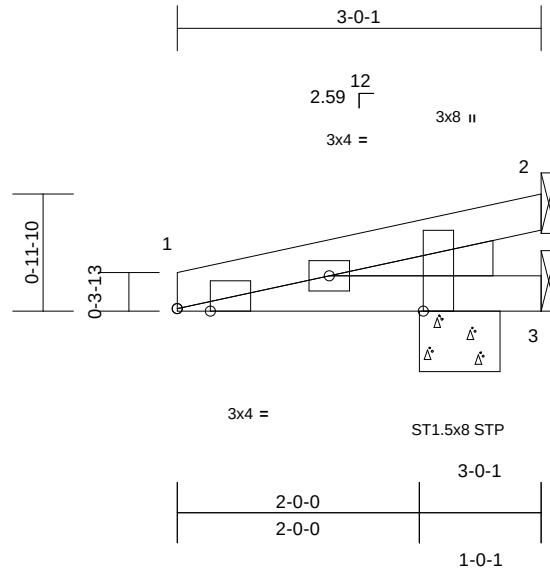
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828763
4948514	CJ2	Jack-Open	4	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:MD6DbKqonDUdicuUxu2yxQyCKze-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDOI7J4zJC?f

Page: 1



Scale = 1:19

Plate Offsets (X, Y): [1:0-3-5,Edge], [1:0-0-4,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	0.06	4	>638	360	MT20
TCDL	15.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	0.05	4	>757	240	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 11 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.3

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 2, 267 lb uplift at joint 3 and 517 lb uplift at joint 1.

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-8-0, 2= Mechanical, 3= Mechanical
Max Horiz 1=39 (LC 6)
Max Uplift 1=-517 (LC 6), 2=-108 (LC 1), 3=-267 (LC 1)
Max Grav 1=639 (LC 1), 2=84 (LC 6), 3=210 (LC 6)

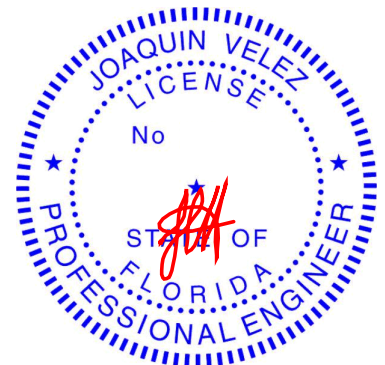
FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-196/115
BOT CHORD 1-3=-93/196

NOTES

- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed; 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
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15, 2026

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.sbcsccomponents.com)

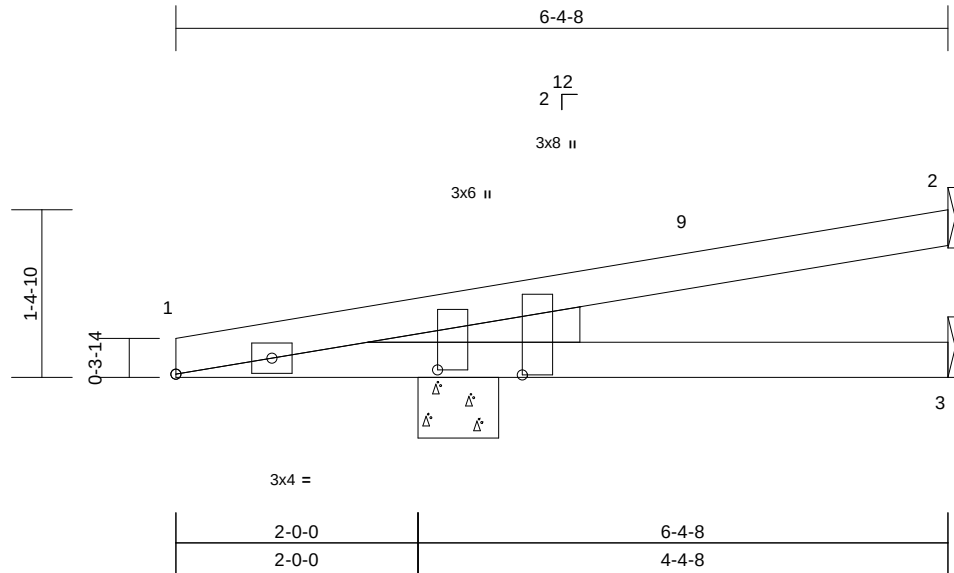
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828764
4948514	CJ3	Jack-Open	4	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:MD6DbKqonDUDicuUxu2yxQyCKze-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDOI7J4zJC?f

Page: 1



Scale = 1:19

Plate Offsets (X, Y): [1:0-7-8,0-0-1], [1:0-0-7,2-1-15], [1:0-0-1,2-10-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.23	Vert(LL)	0.02	3-8	>999	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.02	3-8	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 22 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.3

- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 2, 2 lb uplift at joint 3 and 205 lb uplift at joint 1.

BRACING

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

LOAD CASE(S)

Standard

REACTIONS

(size) 1=0-8-0, 2= Mechanical, 3= Mechanical
Max Horiz 1=70 (LC 6)
Max Uplift 1=-205 (LC 6), 2=-85 (LC 6), 3=-2 (LC 6)
Max Grav 1=416 (LC 1), 2=105 (LC 1), 3=65 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-118/98
BOT CHORD 1-3=-84/48

NOTES

- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 0-0-0 to 4-2-15,
Zone2 4-2-15 to 6-3-12 zone; cantilever left and right exposed; 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
- 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'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15, 2026

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.sbcsccomponents.com)

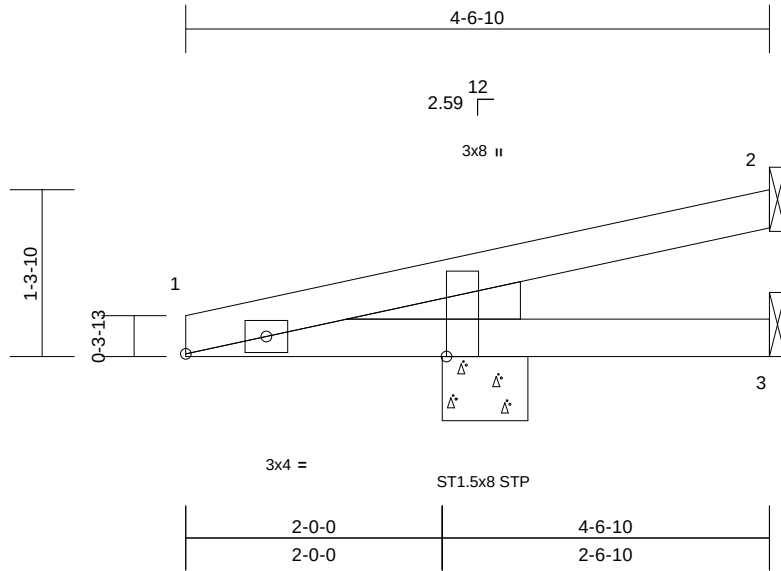
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	4948514	T40828765
4948514	CJ4	Jack-Open	4	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:10
ID:MD6DbKqonDudicuUxu2yxQyCKze-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:18

Plate Offsets (X, Y): [1:0-5-9,0-0-2], [1:0-0-4,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	0.06	4	>919	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.29	Vert(CT)	-0.06	4	>866	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 16 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.2 P

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-6-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-8-0, 2= Mechanical, 3= Mechanical
Max Horiz 1=59 (LC 6)
Max Uplift 1=-175 (LC 6), 2=-39 (LC 6), 3=-41 (LC 1)
Max Grav 1=421 (LC 1), 2=24 (LC 1), 3=32 (LC 6)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-143/116
BOT CHORD 1-3=-105/146

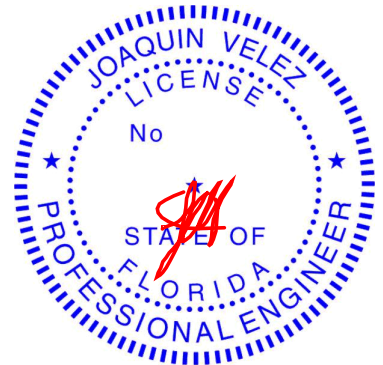
NOTES

- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed; 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
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Lumber designated with a "P" is pressure-treated with preservatives. Plate lateral resistance values have been reduced 20% where used in this lumber. Plates should be protected from corrosion per the recommendation of the treatment company. Borate or other suitable treatment may be used if it does not corrode the plates. If ACQ, CBA, or CA-B treated lumber is used, improved corrosion protection is required, and G185 galvanized plates may be used with this design. Incising factors have not been considered for this design. Building designer to verify suitability of this product for its intended use.

- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2, 41 lb uplift at joint 3 and 175 lb uplift at joint 1.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15, 2026

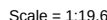
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbcsccomponents.com)

MiTek®

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

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:11 Page: 1
ID:MD6DbKgonDUldicUlxu2vxOvCKze-RfC?PsB70Ha3NSaPanL8w3uITxbGKWrcDai7J4zJC?f

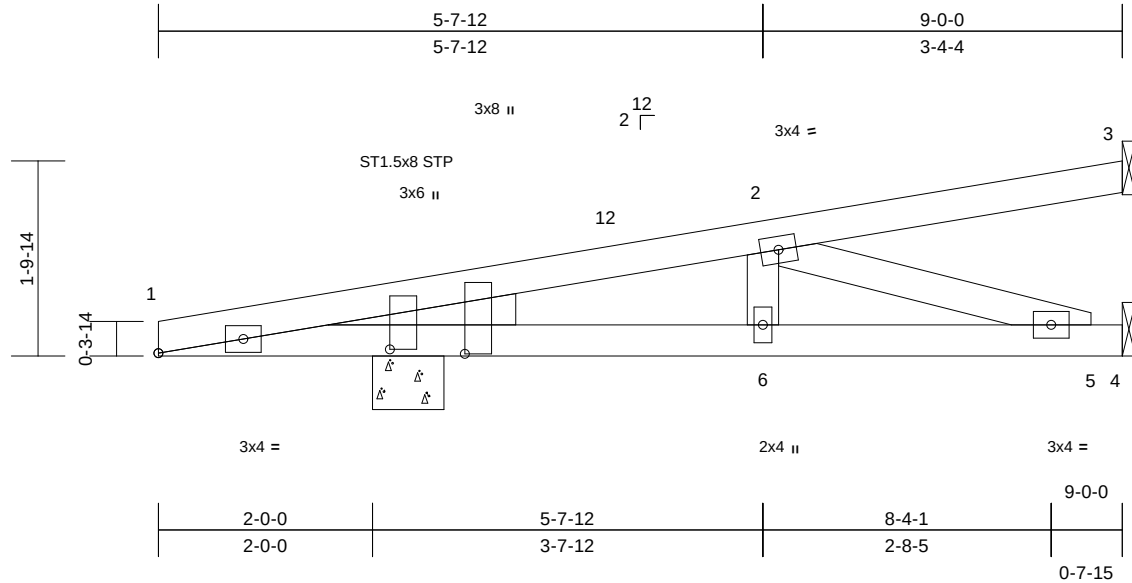


Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TP1 Quality Criteria and DS-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcsccomponents.com)

Job	Truss	Truss Type	Qty	Ply	4948514	T40828767
4948514	EJ7	Jack-Partial	22	1	Job Reference (optional)	

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:11
ID:AskxbsltKtedVt46byJiz5yCNUz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:21.5

Plate Offsets (X, Y): [1:0-7-8,0-0-1], [1:0-0-7,2-1-15], [1:0-0-1,2-10-5]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.20	Vert(LL)	0.02	5-6	>999	360	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.03	5-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 35 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 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 7-8-6 oc bracing.

REACTIONS

(size) 1=0-8-0, 3= Mechanical, 4= Mechanical
Max Horiz 1=99 (LC 6)
Max Uplift 1=-255 (LC 6), 3=-86 (LC 6), 4=-73 (LC 6)
Max Grav 1=518 (LC 1), 3=106 (LC 1), 4=181 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

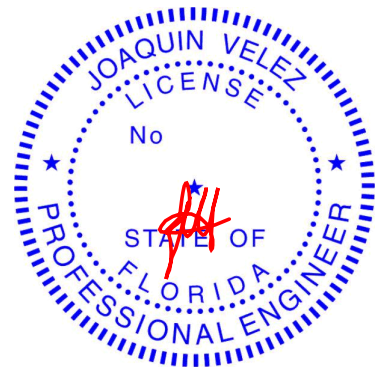
TOP CHORD 1-2=-513/501, 2-3=-30/15
BOT CHORD 1-6=-580/492, 5-6=-580/492, 4-5=0/0
WEBS 2-6=0/117, 2-5=-516/608

NOTES

- Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional) and C-C Zone3 0-0-0 to 4-2-15,
Zone2 4-2-15 to 8-11-4 zone; cantilever left and right
exposed; 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
- 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
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 86 lb uplift at joint
3, 73 lb uplift at joint 4 and 255 lb uplift at joint 1.
- Gap between inside of extended chord bearing and first
diagonal or vertical web shall not exceed 0.500in at joint
3.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 15, 2026

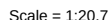
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbcsccomponents.com)

MiTek®

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

Run: 25.40 S Apr 2 2026 Print: 25.4.0 S Apr 2 2026 MiTek Industries, Inc. Tue Apr 14 14:23:11 Page: 1
ID:gOqbqorRYXckJkMtoVcZBTevCKzd-RfC?PsB70Hg3NSaPamI_8w3uITxhGKwRCDojZ14z1C?f



LUMBER

BRACING

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=145mph (3-second gust)
Vasd=112mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;
MWFRS (directional); cantilever left and right exposed ;
end vertical left and right exposed; 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
3-06-00 tall by 2-00-00 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 204 lb uplift at joint 4 and 670 lb uplift at joint 6.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 102 lb down and 126 lb up at 4-10-11, 157 lb down and 196 lb up at 5-0-7, 19 lb down and 45 lb up at 7-6-12, and 64 lb down and 86 lb up at 8-1-15, and 58 lb down and 80 lb up at 10-1-2 on top chord, and 48 lb up at 4-10-11, 195 lb down and 292 lb up at 5-0-7, 17 lb down and 66 lb up at 7-6-12, and 18 lb down and 22 lb up at 8-1-15, and 15 lb down and 10 lb up at 10-1-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25,
Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-70, 4-7=-20
Concentrated Loads (lb)
Vert: 10=156 (F=100, B=56), 13=-12 (F), 14=212
(F=171, B=41), 15=40 (F), 16=-15 (B), 17=-10 (F)



April 15, 2026

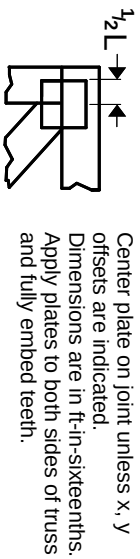


Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcsccomponents.com)

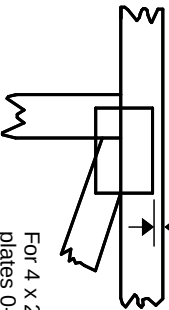
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



0- $\frac{1}{16}$ "



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

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

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

PLATE SIZE

4 X 4

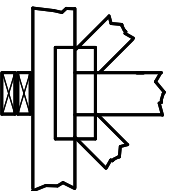
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

ANSI/TP1.1: 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.

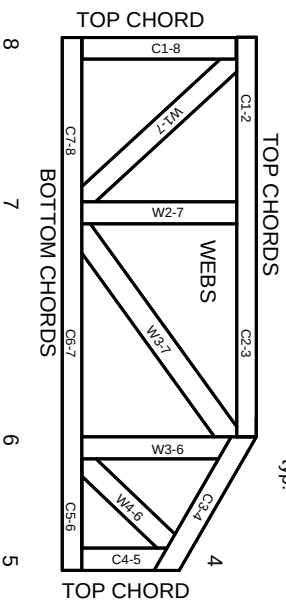
Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)

1

2

3 Joint ID typ.



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

© 2023 MITek® All Rights Reserved

MITek®

MITek Engineering Reference Sheet: MIL-7473 rev. 1/12/2023



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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