



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

RE: 7396 - Thaddaeus Schmitt

MiTek, Inc.  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200

**Site Information:**

Customer Info: Thaddaeus Schmitt Project Name: Model:  
Lot/Block: Subdivision:  
Address: 2678 SW CR 778  
City: Fort White State: 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: FRC2023/TPI2014 Design Program: MiTek 20/20 25.4  
Wind Code: ASCE 7-22 Wind Speed: 121 mph  
Roof Load: 40.0 psf Floor Load: N/A psf

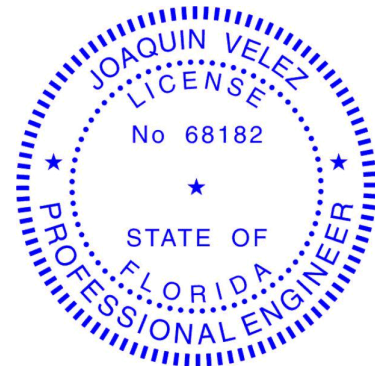
This package includes 8 individual, Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T40450488	A	3/13/26
2	T40450489	AGE	3/13/26
3	T40450490	F1	3/13/26
4	T40450491	F2	3/13/26
5	T40450492	F3	3/13/26
6	T40450493	F4	3/13/26
7	T40450494	P1	3/13/26
8	T40450495	P2	3/13/26

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date adjacent to the seal.  
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The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision based on the parameters  
provided by Bushnell Truss Enterprise, LLC.

Truss Design Engineer's Name: Velez, Joaquin  
My license renewal date for the state of Florida is February 28, 2027.



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

**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.

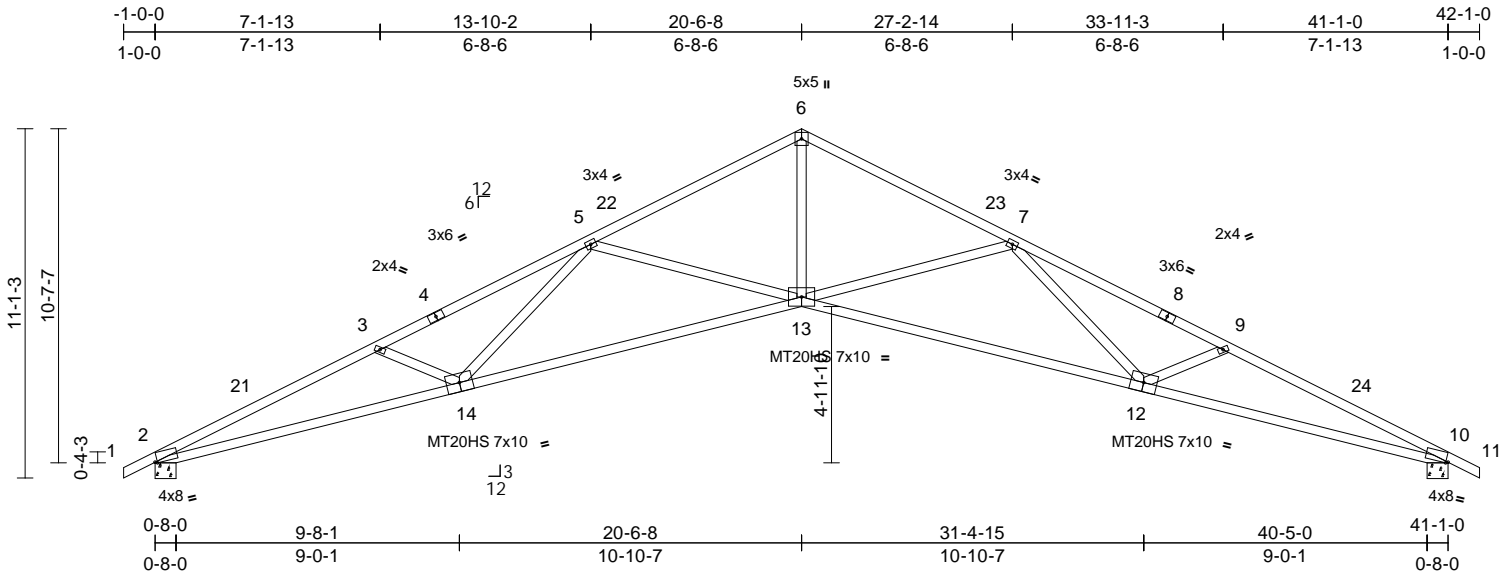
March 13,2026

Job 7396	Truss A	Truss Type Scissor	Qty 52	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450488
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

Run: 25.40 S Feb 10 2026 Print: 25.4.0 S Feb 10 2026 MITek Industries, Inc. Thu Mar 12 12:49:36  
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Page: 1



Scale = 1:73.2

Plate Offsets (X, Y): [2:0-0-14,Edge], [10:0-0-14,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	0.88	Vert(LL)	-0.62	12-13	>790	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-1.46	12-13	>338	180	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.85	10	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-AS								Weight: 189 lb FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.1 \*Except\* 1-4,8-11:2x4 SP SS  
BOT CHORD 2x4 SP No.1 \*Except\* 2-14,12-10:2x4 SP SS  
WEBS 2x4 SP No.1

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (size) 2=0-8-0, 10=0-8-0  
Max Horiz 2=-254 (LC 10)  
Max Uplift 2=-325 (LC 12), 10=-325 (LC 12)  
Max Grav 2=1703 (LC 1), 10=1703 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/27, 2-3=-5565/1208, 3-5=-5167/1087, 5-6=-3695/775, 6-7=-3695/760, 7-9=-5167/1073, 9-10=-5565/1195, 10-11=0/27  
BOT CHORD 2-13=-996/5034, 10-13=-997/5034  
WEBS 6-13=-482/2853, 7-13=-1010/398, 7-12=-97/759, 9-12=-362/235, 5-13=-1005/398, 5-14=-96/759, 3-14=-355/235

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=121mph (3-second gust) Vasd=94mph; TCDL=4.2psf; BCDL=4.2psf; h=15ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Zone3 -1-0-0 to 3-1-5, Zone1 3-1-5 to 20-6-8, Zone2 20-6-8 to 26-4-4, Zone1 26-4-4 to 42-1-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.
  - The Fabrication Tolerance at joint 13 = 12%
  - 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.
- Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 325 lb uplift at joint 2 and 325 lb uplift at joint 10.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

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:

March 13,2026

**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)

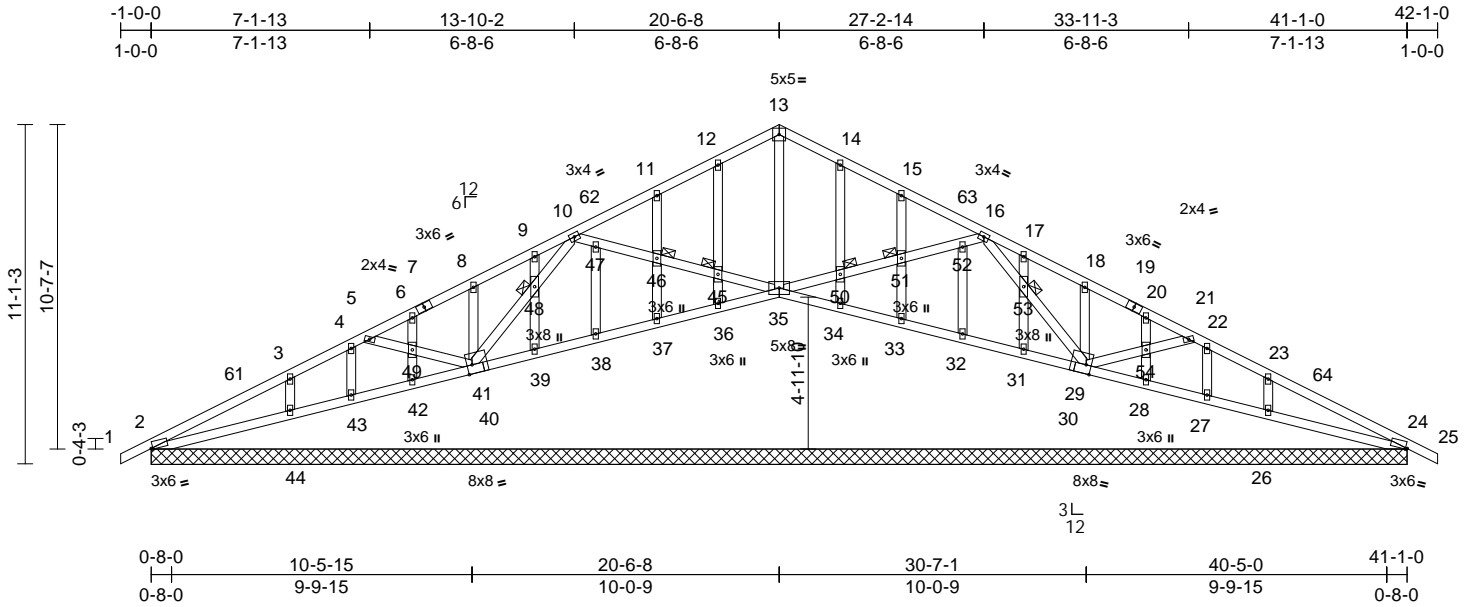
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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 7396	Truss AGE	Truss Type Scissor	Qty 2	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450489
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

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Page: 1



Scale = 1:75.4  
Plate Offsets (X, Y): [2:0-0-10,Edge], [24:0-0-10,Edge], [30:0-2-0,Edge], [40:0-2-0,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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	58	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-AS								Weight: 253 lb FT = 20%

LUMBER	FORCES	REMARKS
TOP CHORD 2x4 SP No.1	(lb) - Maximum Compression/Maximum Tension	2) Wind: ASCE 7-22; Vult=121mph (3-second gust) Vasd=94mph; TC DL=4.2psf; BCDL=4.2psf; h=15ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Zone3 -1-0-0 to 3-1-5, Zone1 3-1-5 to 20-6-8, Zone2 20-6-8 to 26-4-4, Zone1 26-4-4 to 42-1-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
BOT CHORD 2x4 SP No.1	TOP CHORD	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.
WEBS 2x4 SP No.1	4-5=-152/133, 5-6=-111/99, 6-8=-101/86, 8-9=-90/122, 9-10=-74/143, 10-11=-88/103, 11-12=-71/130, 12-13=-72/162, 13-14=-72/166, 14-15=-56/134, 15-16=-36/93, 16-17=-69/148, 17-18=-63/128, 18-20=-47/92, 20-21=-29/61, 21-22=-121/139, 22-23=-167/159, 23-24=-149/81, 24-25=0/27	4) All plates are 2x4 (  ) MT20 unless otherwise indicated.
OTHERS 2x4 SP No.1	37-38=-98/138, 36-37=-98/138, 35-36=-99/138, 34-35=-51/146, 33-34=-51/147, 32-33=-51/147, 31-32=-51/147, 29-31=-51/146, 28-29=0/99, 27-28=0/101, 26-27=0/92, 24-26=0/109	5) Gable requires continuous bottom chord bearing.
BRACING	BOT CHORD	6) Gable studs spaced at 2-0-0 oc.
TOP CHORD Structural wood sheathing directly applied.	42-43=-92/197, 41-42=-94/195, 39-41=-98/138, 38-39=-98/138, 37-38=-98/138, 36-37=-98/138, 35-36=-99/138, 34-35=-51/146, 33-34=-51/147, 32-33=-51/147, 31-32=-51/147, 29-31=-51/146, 28-29=0/99, 27-28=0/101, 26-27=0/92, 24-26=0/109	7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD Rigid ceiling directly applied.	13-35=-135/10, 35-50=-90/105, 50-51=-90/104, 51-52=-88/104, 16-52=-102/110, 16-53=-86/0, 29-53=-86/0, 29-54=-111/112, 21-54=-110/111, 10-47=-88/111, 46-47=-72/106, 45-46=-73/105, 35-45=-73/106, 41-48=-86/0, 10-48=-86/0, 5-49=-99/110, 41-49=-100/111, 12-45=-120/90, 36-45=-121/86, 11-46=-159/114, 37-46=-146/116, 38-47=-47/16, 9-48=-97/33, 39-48=-99/31, 8-41=-125/70, 6-49=-123/54, 42-49=-120/49, 4-43=-46/27, 3-44=-260/157, 14-50=-119/90, 34-50=-119/86, 15-51=-156/114, 33-51=-148/116, 32-52=-38/17, 17-53=-90/33, 31-53=-91/30, 18-29=-128/70, 20-54=-120/53, 28-54=-116/49, 22-27=-47/27, 23-26=-257/156	8) * 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.
JOINTS 1 Brace at Jt(s): 45, 46, 48, 50, 51, 53	WEBS	
REACTIONS (size)	NOTES	
Max Horiz 2=-254 (LC 10)	1) Unbalanced roof live loads have been considered for this design.	
Max Uplift 2=-88 (LC 12), 24=-88 (LC 12), 26=-96 (LC 12), 27=-8 (LC 11), 28=-30 (LC 12), 29=-92 (LC 12), 31=-15 (LC 12), 33=-58 (LC 12), 34=-33 (LC 12), 36=-33 (LC 12), 37=-58 (LC 12), 39=-15 (LC 12), 41=-92 (LC 12), 42=-30 (LC 12), 43=-1 (LC 10), 44=-96 (LC 12)		
Max Grav 2=251 (LC 18), 24=245 (LC 24), 26=368 (LC 18), 27=32 (LC 12), 28=167 (LC 18), 29=266 (LC 18), 31=130 (LC 24), 32=95 (LC 3), 33=187 (LC 18), 34=160 (LC 18), 35=249 (LC 17), 36=163 (LC 17), 37=185 (LC 17), 38=95 (LC 3), 39=138 (LC 17), 41=262 (LC 23), 42=172 (LC 17), 43=32 (LC 12), 44=376 (LC 17)		

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: March 13, 2026

Job 7396	Truss AGE	Truss Type Scissor	Qty 2	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450489
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

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Page: 2

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 2, 88 lb uplift at joint 24, 92 lb uplift at joint 29, 92 lb uplift at joint 41, 33 lb uplift at joint 36, 58 lb uplift at joint 37, 15 lb uplift at joint 39, 30 lb uplift at joint 42, 1 lb uplift at joint 43, 96 lb uplift at joint 44, 33 lb uplift at joint 34, 58 lb uplift at joint 33, 15 lb uplift at joint 31, 30 lb uplift at joint 28, 8 lb uplift at joint 27, 96 lb uplift at joint 26, 88 lb uplift at joint 2 and 88 lb uplift at joint 24.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 35, 29, 41, 36, 37, 38, 39, 42, 43, 44, 34, 33, 32, 31, 28, 27, 26.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

**⚠ 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcsccomponents.com](http://www.sbcsccomponents.com))

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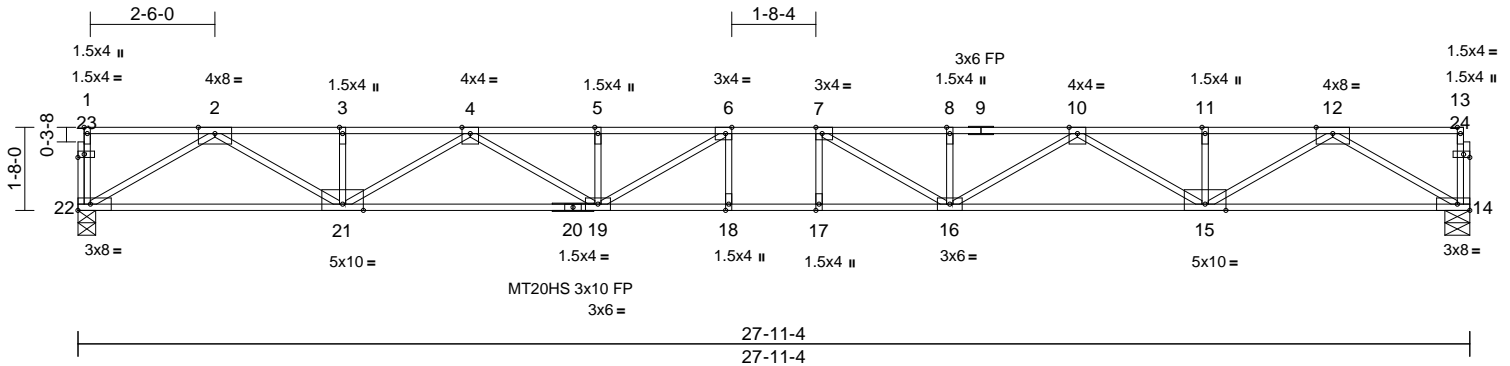
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Chesterfield, MO 63017  
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Job 7396	Truss F1	Truss Type Floor	Qty 19	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450490
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

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Page: 1



Scale = 1:46.2

Plate Offsets (X, Y): [1:Edge,0-0-12], [6:0-1-8,Edge], [7:0-1-8,Edge], [23:0-1-8,0-0-12], [24:0-1-8,0-0-12]

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	0.97	Vert(LL)	-0.75	17-18	>443	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-1.03	17-18	>322	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.16	14	n/a	n/a		
BCDL	5.0	Code	FRC2023/TPI2014	Matrix-AS								Weight: 146 lb FT = 10%F, 0%E

**LUMBER**

TOP CHORD 2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP SS(flat)  
 WEBS 2x4 SP No.1(flat)  
 OTHERS 2x4 SP No.1(flat)

6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.

**LOAD CASE(S)** Standard

**BRACING**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS**

(size) 14=0-6-0, 22=0-4-4  
 Max Grav 14=1517 (LC 1), 22=1517 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-103/0, 13-14=-103/0, 1-2=-4/0, 2-3=-4204/0, 3-4=-4204/0, 4-5=-6423/0, 5-6=-6423/0, 6-7=-6820/0, 7-8=-6423/0, 8-10=-6423/0, 10-11=-4204/0, 11-12=-4204/0, 12-13=-4/0  
 BOT CHORD 21-22=0/2374, 19-21=0/5528, 18-19=0/6820, 17-18=0/6820, 16-17=0/6820, 15-16=0/5528, 14-15=0/2374  
 WEBS 12-14=-2748/0, 2-22=-2748/0, 12-15=0/2136, 2-21=0/2136, 11-15=-251/0, 3-21=-251/0, 10-15=-1545/0, 4-21=-1545/0, 10-16=0/1045, 4-19=0/1045, 8-16=-334/23, 5-19=-334/23, 7-16=-961/227, 6-19=-961/227, 6-18=-165/200, 7-17=-165/200

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 20 = 0%
- 4) Plates checked for a plus or minus 0 degree rotation about its center.
- 5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the 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:

March 13,2026

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

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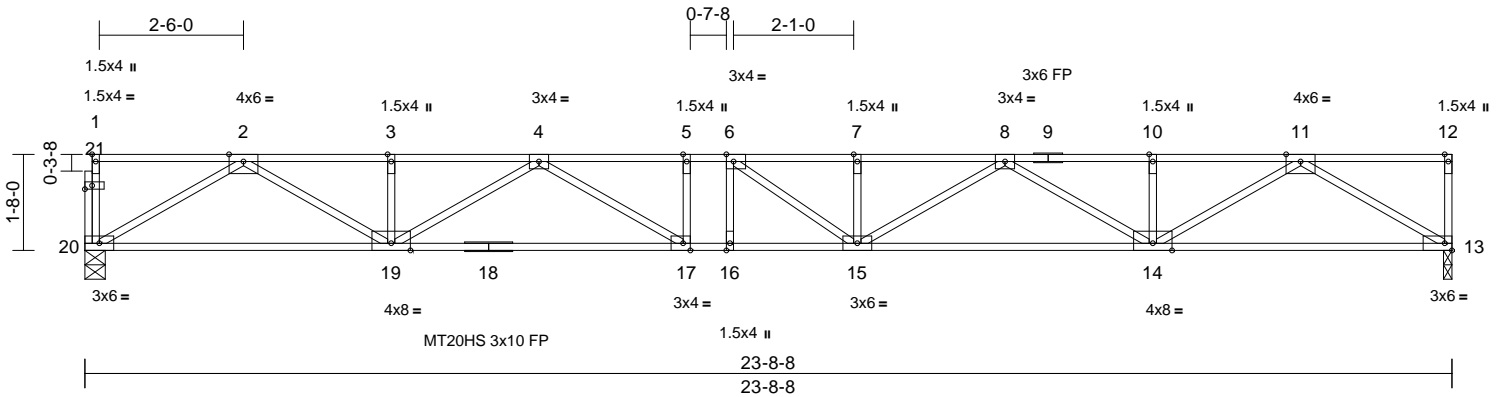
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 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 7396	Truss F2	Truss Type Floor	Qty 26	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450491
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

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Page: 1



Scale = 1:40

Plate Offsets (X, Y): [1:Edge,0-0-12], [6:0-1-8,Edge], [17:0-1-8,Edge], [21:0-1-8,0-0-12]

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	0.51	Vert(LL)	-0.43	15-16	>651	360	MT20HS 187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.59	15-16	>476	240	MT20 244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.11	13	n/a	n/a	
BCDL	5.0	Code	FRC2023/TPI2014	Matrix-AS							Weight: 125 lb FT = 10%F, 0%E

**LUMBER**

TOP CHORD 2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP No.1(flat)  
 WEBS 2x4 SP No.1(flat)  
 OTHERS 2x4 SP No.1(flat)

- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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.
- 7) CAUTION, Do not erect truss backwards.

**BRACING**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**LOAD CASE(S)** Standard

**REACTIONS**

(size) 13=0-1-12, 20=0-4-4  
 Max Grav 13=1294 (LC 1), 20=1287 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-20=-103/0, 12-13=-103/0, 1-2=-4/0,  
 2-3=-3434/0, 3-4=-3434/0, 4-5=-4898/0,  
 5-6=-4898/0, 6-7=-4888/0, 7-8=-4888/0,  
 8-10=-3405/0, 10-11=-3405/0, 11-12=0/0  
 BOT CHORD 19-20=0/1983, 17-19=0/4381, 16-17=0/4898,  
 15-16=0/4898, 14-15=0/4361, 13-14=0/1944  
 WEBS 11-13=-2268/0, 2-20=-2295/0, 11-14=0/1706,  
 2-19=0/1693, 10-14=-248/0, 3-19=-246/0,  
 8-14=-1116/0, 4-19=-1106/0, 8-15=0/614,  
 4-17=0/824, 7-15=-293/0, 5-17=-240/0,  
 6-15=-453/391, 6-16=-174/95

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Plates checked for a plus or minus 0 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
- 5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the 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:

March 13,2026

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

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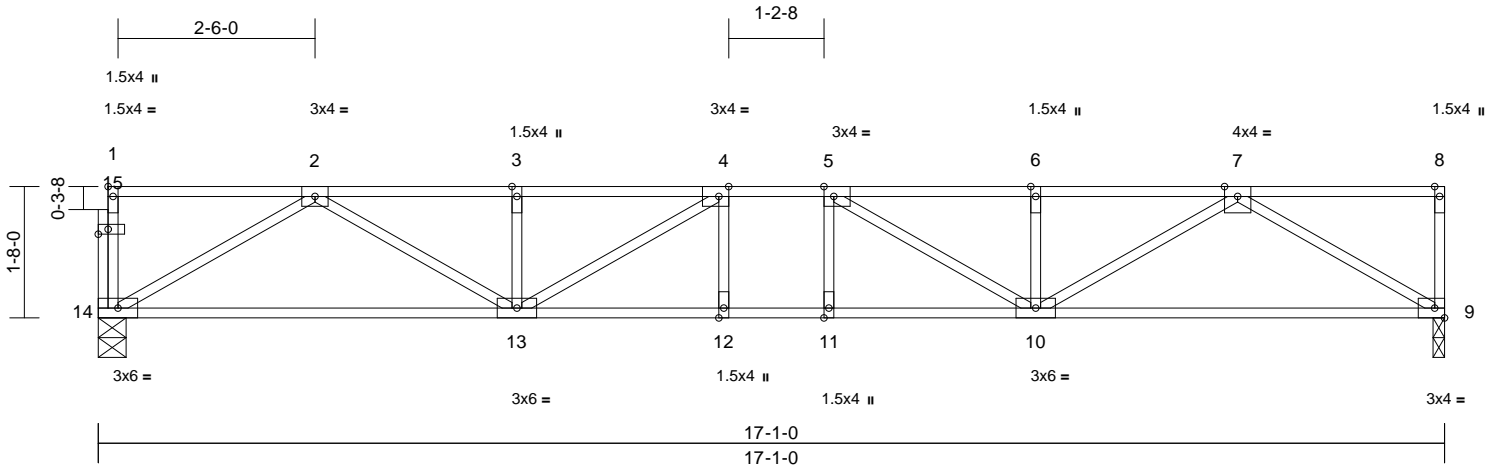
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 7396	Truss F3	Truss Type Floor	Qty 26	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450492
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

Run: 25.40 S Feb 10 2026 Print: 25.4.0 S Feb 10 2026 MITek Industries, Inc. Thu Mar 12 12:49:37  
ID:4?M6l2joRD?VYupX2NoEHZj?Hc-RfC?PsB70Hq3NSgPqnl8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.2

Plate Offsets (X, Y): [1:Edge,0-0-12], [4:0-1-8,Edge], [5:0-1-8,Edge], [15:0-1-8,0-0-12]

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	0.38	Vert(LL)	-0.13	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.17	11-12	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	FRC2023/TPI2014	Matrix-AS							Weight: 91 lb	FT = 10%F, 0%E

**LUMBER**

TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.1(flat)  
OTHERS 2x4 SP No.1(flat)

**LOAD CASE(S)** Standard

**BRACING**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS**

(size) 9=0-1-12, 14=0-4-4  
Max Grav 9=929 (LC 1), 14=923 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-14=-104/0, 8-9=-104/0, 1-2=-4/0, 2-3=-2214/0, 3-4=-2214/0, 4-5=-2548/0, 5-6=-2199/0, 6-7=-2199/0, 7-8=0/0  
BOT CHORD 13-14=0/1363, 12-13=0/2548, 11-12=0/2548, 10-11=0/2548, 9-10=0/1337  
WEBS 7-9=-1561/0, 2-14=-1576/0, 7-10=0/1005, 2-13=0/994, 6-10=-295/0, 3-13=-296/0, 5-10=-591/0, 4-13=-579/0, 4-12=-96/111, 5-11=-92/115

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 0 degree rotation about its center.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 4) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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:

March 13,2026

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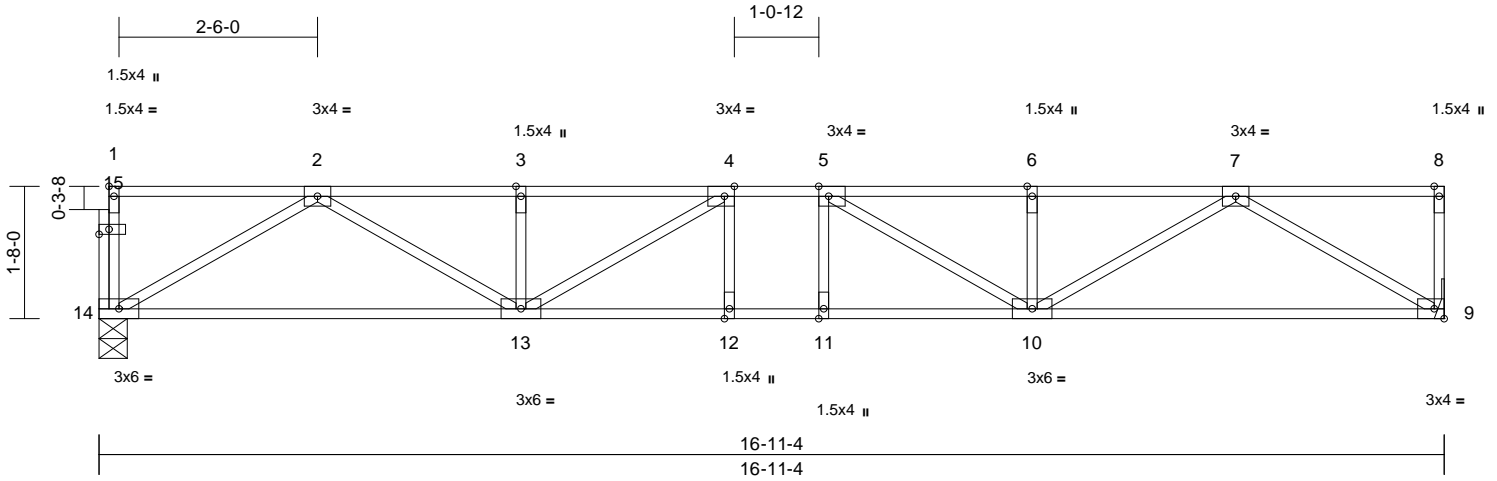
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job 7396	Truss F4	Truss Type Floor	Qty 10	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450493
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

Run: 25.40 S Feb 10 2026 Print: 25.4.0 S Feb 10 2026 MiTek Industries, Inc. Thu Mar 12 12:49:37  
ID:Rss?nRDaEKdvRylNJP0Jizj?Fg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?F

Page: 1



Scale = 1:29

Plate Offsets (X, Y): [1:Edge,0-0-12], [4:0-1-8,Edge], [5:0-1-8,Edge], [15:0-1-8,0-0-12]

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	0.35	Vert(LL)	-0.12	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.54	Vert(CT)	-0.17	11-12	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	FRC2023/TPI2014	Matrix-AS							Weight: 90 lb	FT = 10%F, 0%E

**LUMBER** **LOAD CASE(S)** Standard

TOP CHORD 2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP No.1(flat)  
 WEBS 2x4 SP No.1(flat)  
 OTHERS 2x4 SP No.1(flat)

**BRACING**

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (size) 9= Mechanical, 14=0-4-4  
 Max Grav 9=921 (LC 1), 14=915 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-14=-104/0, 8-9=-104/0, 1-2=-4/0, 2-3=-2187/0, 3-4=-2187/0, 4-5=-2507/0, 5-6=-2172/0, 6-7=-2172/0, 7-8=0/0

BOT CHORD 13-14=0/1349, 12-13=0/2507, 11-12=0/2507, 10-11=0/2507, 9-10=0/1324

WEBS 7-9=-1545/0, 2-14=-1560/0, 7-10=0/990, 2-13=0/978, 6-10=-292/0, 3-13=-293/0, 5-10=-568/0, 4-13=-556/1, 4-12=-97/111, 5-11=-94/114

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 0 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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:

March 13,2026

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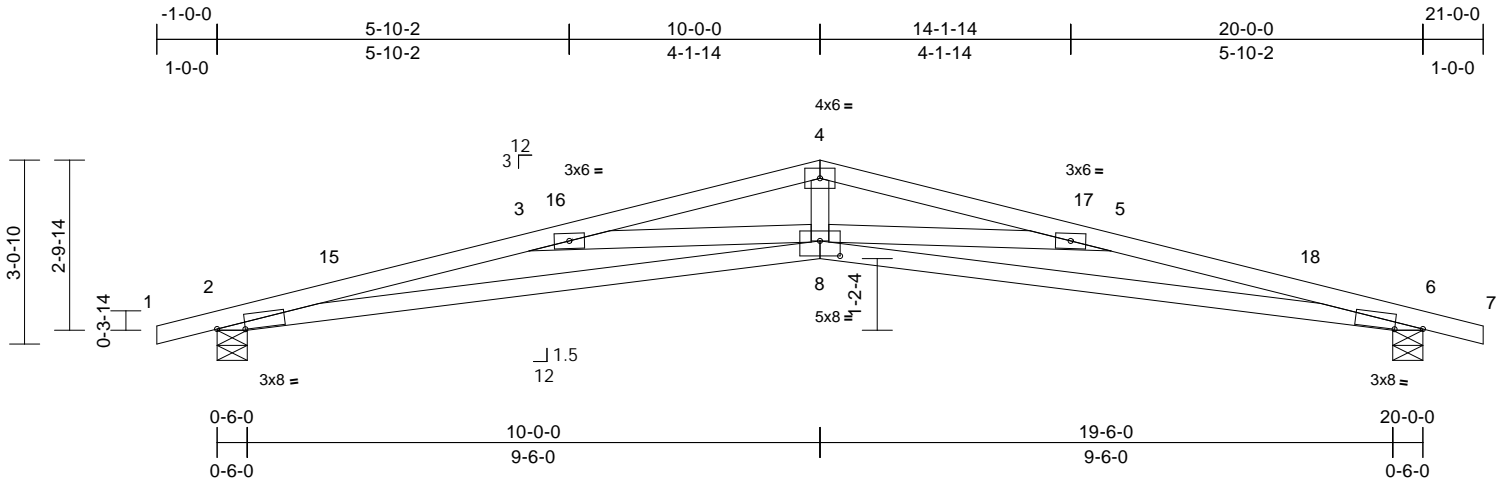
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 7396	Truss P1	Truss Type Scissor	Qty 2	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450494
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

Run: 25.40 S Feb 10 2026 Print: 25.4.0 S Feb 10 2026 MiTek Industries, Inc. Thu Mar 12 12:49:37  
ID:ZEwvZ4LwdHvugy8gbl6Vyzj?93-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:38.2

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

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	0.39	Vert(LL)	-0.35	8	>694	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.71	8-14	>338	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.26	6	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-AS							Weight: 79 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.1

**BRACING**

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS**

(size) 2=0-6-0, 6=0-6-0  
Max Horiz 2=-27 (LC 9)  
Max Uplift 2=-178 (LC 12), 6=-178 (LC 12)  
Max Grav 2=860 (LC 1), 6=860 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/15, 2-3=-4008/1320, 3-4=-3223/968,  
4-5=-3223/959, 5-6=-4008/1328, 6-7=0/15  
BOT CHORD 2-8=-1237/3909, 6-8=-1254/3909  
WEBS 4-8=-248/1191, 5-8=-900/394, 3-8=-900/396

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=121mph (3-second gust)  
Vasd=94mph; TCDL=4.2psf; BCDL=4.2psf; h=15ft;  
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;  
MWFERS (directional) and C-C Zone3 -1-0-0 to 2-0-0,  
Zone1 2-0-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1  
14-2-15 to 21-0-0 zone; cantilever left and right  
exposed ;C-C for members and forces & MWFERS for  
reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 2, 6 considers parallel to grain value  
using ANSI/TPI 1 angle to grain formula. Building  
designer should verify capacity of bearing surface.

- Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 178 lb uplift at joint  
2 and 178 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2" gypsum sheetrock be applied directly to  
the bottom chord.

**LOAD CASE(S)** Standard

This item has been  
digitally signed and  
sealed by Velez, Joaquin, PE  
on the date indicated here.  
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Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

March 13,2026

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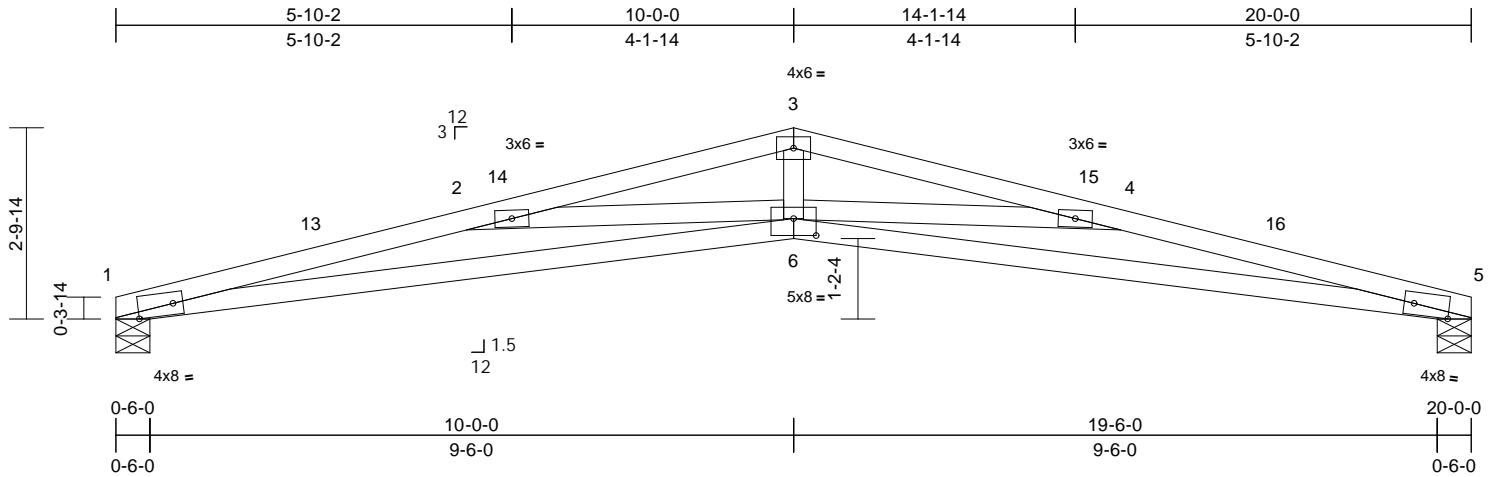
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 7396	Truss P2	Truss Type Scissor	Qty 1	Ply 1	Thaddaeus Schmitt Job Reference (optional)	T40450495
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Bushnell Truss Enterprise, LLC, Bushnell, FL - 33513,

Run: 25.40 S Feb 10 2026 Print: 25.4.0 S Feb 10 2026 MiTek Industries, Inc. Thu Mar 12 12:49:37  
ID:ZEvvZ4LwdHvugy8gbl6Vyzj?93-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:34

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

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	0.39	Vert(LL)	-0.35	6	>686	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.72	6-9	>334	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.26	5	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-AS							Weight: 76 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.1

**BRACING**

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS**

(size) 1=0-6-0, 5=0-6-0  
Max Horiz 1=24 (LC 11)  
Max Uplift 1=-140 (LC 12), 5=-140 (LC 12)  
Max Grav 1=800 (LC 1), 5=800 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4049/1382, 2-3=-3247/1026,  
3-4=-3247/1023, 4-5=-4049/1384  
BOT CHORD 1-6=-1311/3951, 5-6=-1317/3951  
WEBS 3-6=-279/1204, 4-6=-919/394, 2-6=-919/395

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=121mph (3-second gust)  
Vasd=94mph; TCDL=4.2psf; BCDL=4.2psf; h=15ft;  
B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed;  
MWFERS (directional) and C-C Zone3 0-0-0 to 3-0-0,  
Zone1 3-0-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1  
14-2-15 to 20-0-0 zone; cantilever left and right  
exposed ;C-C for members and forces & MWFERS for  
reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 1 and 140 lb uplift at joint 5.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

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

March 13,2026

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

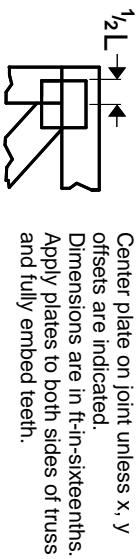
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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®**

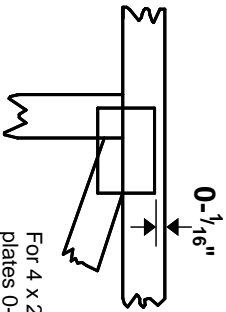
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

# 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.

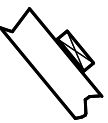
\* Plate location details available in MITtek software or upon request.

## PLATE SIZE

4 X 4

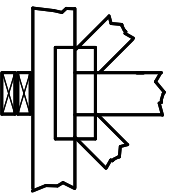
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

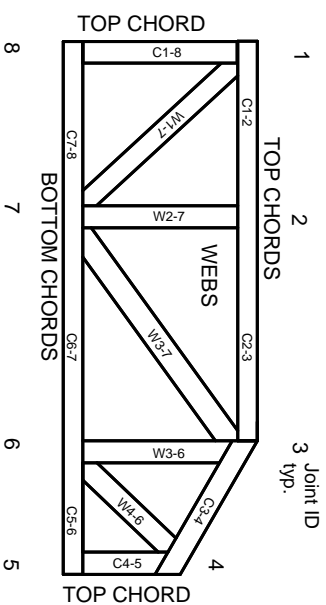


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TFP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

ESR-1-1988, 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/TFP 1 section 6.3. These truss designs rely on Lumber values established by others.

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

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