



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

RE: 0322-048 - Tim Harvey

**MiTek, Inc.**

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200

**Site Information:**

Customer Info: Tim Harvey Project Name: . Model: .  
Lot/Block: . Subdivision: .  
Address: ., .  
City: Lake City State: FL

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

Name: License #:  
Address: State:  
City:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7  
Wind Code: ASCE 7-22 Wind Speed: 130 mph  
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 20 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	T33452295	A01	4/4/24
2	T33452296	A02	4/4/24
3	T33452297	A03	4/4/24
4	T33452298	A04	4/4/24
5	T33452299	A05	4/4/24
6	T33452300	A06	4/4/24
7	T33452301	B01	4/4/24
8	T33452302	B02	4/4/24
9	T33452303	CJ01	4/4/24
10	T33452304	CJ02	4/4/24
11	T33452305	G01	4/4/24
12	T33452306	J01	4/4/24
13	T33452307	J01A	4/4/24
14	T33452308	J01B	4/4/24
15	T33452309	J02	4/4/24
16	T33452310	J02A	4/4/24
17	T33452311	J03	4/4/24
18	T33452312	J03A	4/4/24
19	T33452313	J04	4/4/24
20	T33452314	J04A	4/4/24



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

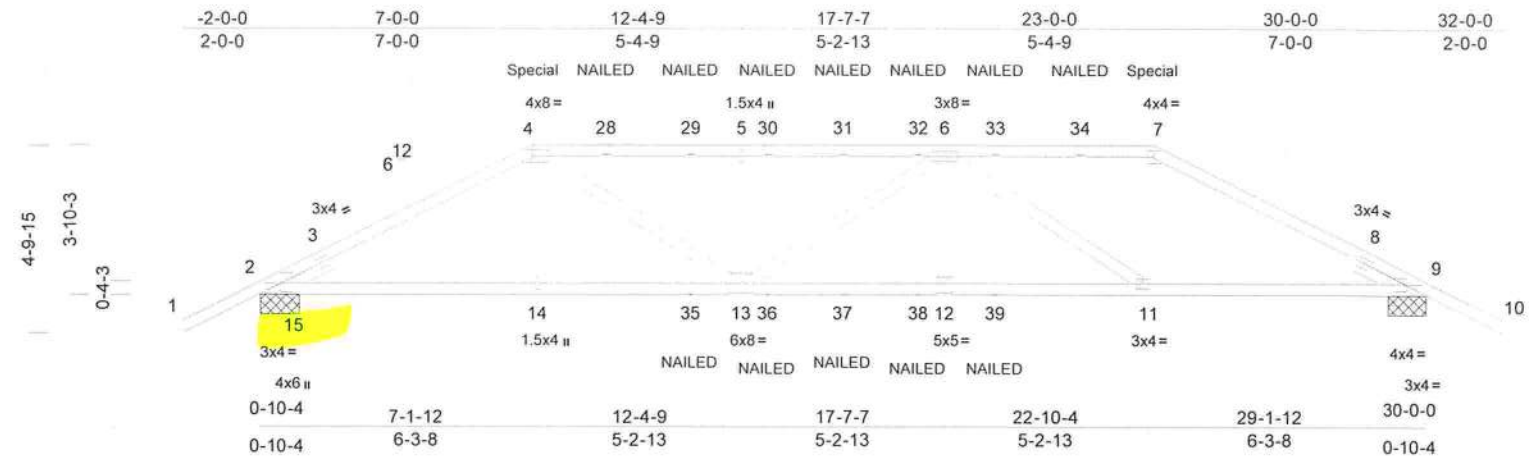
Truss Design Engineer's Name: Lee, Julius  
My license renewal date for the state of Florida is February 28, 2025.

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



Julius Lee PE No. 34869  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

April 5, 2024



Scale = 1:59.4  
 Plate Offsets (X, Y): [2:0-2-13,0-0-8], [4:0-5-4,0-2-0], [9:0-0-8,0-2-1], [12:0-2-8,0-3-0]

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	0.69	Vert(LL)	-0.14	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.28	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS								

Weight: 298 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -- 1-5-1, Right 2x4 SP No.2 -- 1-5-1

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-15.

**REACTIONS** (size) 2=1-0-0, 9=1-0-0, 15=0-3-8  
 Max Horiz 2=78 (LC 7)  
 Max Uplift 2=-397 (LC 8), 9=-227 (LC 8), 15=-959 (LC 20)  
 Max Grav 2=2800 (LC 1), 9=2072 (LC 1), 15=296 (LC 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-4=-3475/373, 4-5=-4425/400, 5-6=-4425/400, 6-7=-3006/335, 7-9=-3419/361, 9-10=0/54  
 BOT CHORD 2-15=-3049/3049, 14-15=-230/3049, 11-14=-279/4418, 9-11=-216/2965  
 WEBS 4-14=0/212, 4-13=-63/1713, 5-13=-684/161, 6-13=-12/28, 6-12=0/423, 6-11=-1755/78, 7-11=0/1009

**NOTES**  
 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 397 lb uplift at joint 2, 227 lb uplift at joint 9 and 959 lb uplift at joint 15.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 253 lb down and 137 lb up at 7-0-0, and 253 lb down and 137 lb up at 23-0-0 on top 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)

Vert: 1-4=-60, 4-7=-60, 7-10=-60, 16-20=-20, 15-20=20, 15-22=-20  
 Concentrated Loads (lb)  
 Vert: 4=-173 (B), 7=-173 (B), 28=-119 (B), 29=-121 (B), 30=-121 (B), 31=-121 (B), 32=-121 (B), 33=-121 (B), 34=-119 (B), 35=-59 (B), 36=-59 (B), 37=-59 (B), 38=-59 (B), 39=-59 (B)

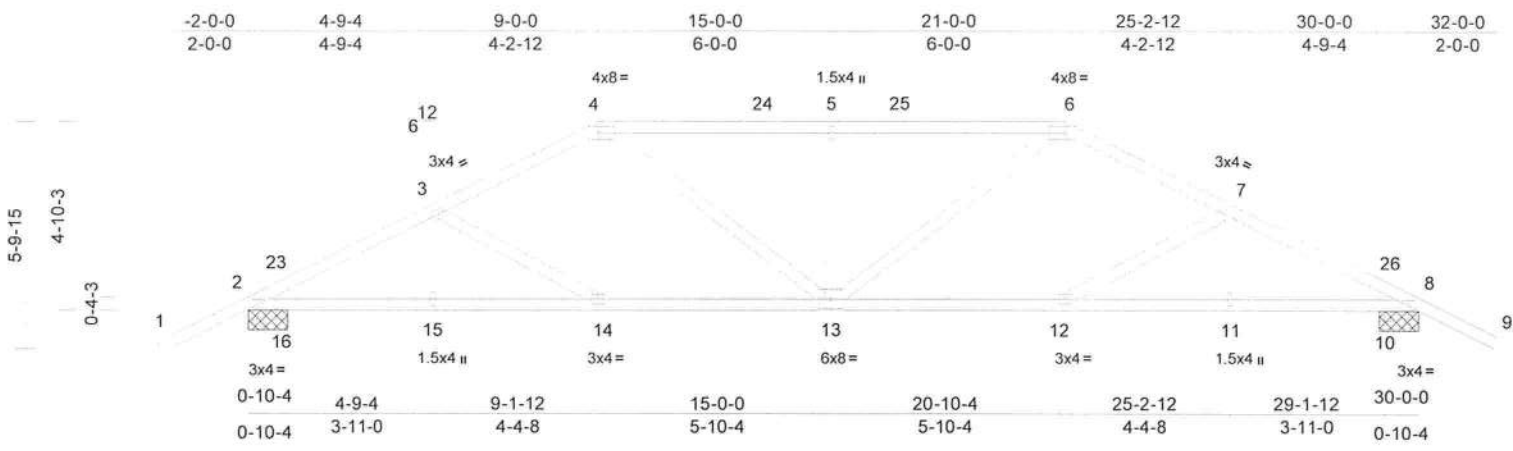


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 Date:

April 5, 2024

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

**MiTek**  
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 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com



Scale = 1:59.3  
 Plate Offsets (X, Y): [4:0-5-4,0-2-0], [6:0-5-4,0-2-0]

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	0.42 Vert(LL)	-0.11	13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.72 Vert(CT)	-0.22	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14 Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							

Weight: 160 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2

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

**REACTIONS** (size) 2=1-0-0, 8=1-0-0, 10=0-3-8, 16=0-3-8  
 Max Horiz 2=-95 (LC 10)  
 Max Uplift 2=-120 (LC 12), 8=-120 (LC 12)  
 Max Grav 2=859 (LC 1), 8=859 (LC 1), 10=461 (LC 1), 16=461 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-3=-2046/89, 3-4=-1803/104, 4-5=-1917/121, 5-6=-1917/121, 6-7=-1803/104, 7-8=-2046/88, 8-9=0/54  
 BOT CHORD 2-16=-2/1760, 15-16=-2/1760, 14-15=-2/1760, 12-14=0/1585, 11-12=-16/1760, 10-11=-16/1760, 8-10=-16/1760  
 WEBS 3-14=-217/53, 4-14=0/299, 4-13=-17/506, 5-13=-397/92, 6-13=-17/506, 6-12=0/299, 7-12=-219/53, 3-15=0/101, 7-11=0/101

- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 2 and 120 lb uplift at joint 8.
- 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

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust)  
 Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 21-0-0, Zone2 21-0-0 to 25-2-12, Zone1 25-2-12 to 32-0-0 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

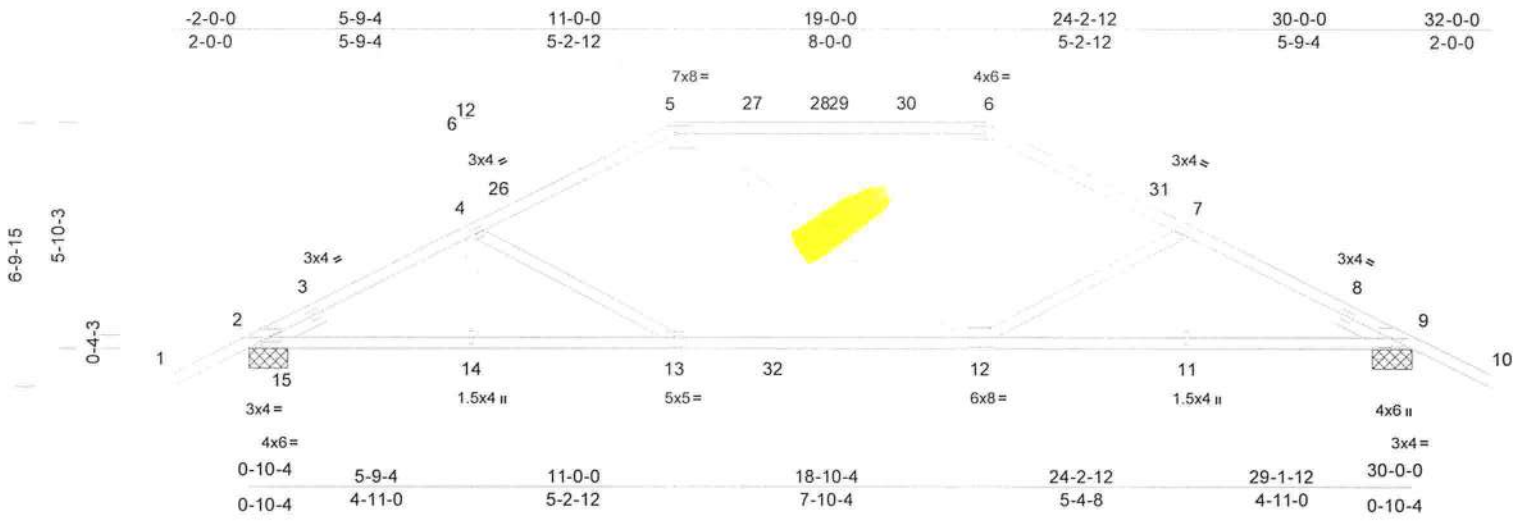


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 Date:

April 5, 2024

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Scale = 1:59.7  
 Plate Offsets (X, Y): [2:0-2-8,0-1-9], [2:0-2-8,0-3-2], [5:0-6-0,0-2-8], [6:0-3-8,0-2-4], [9:0-2-13,0-0-8], [13:0-2-8,0-3-4]

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	0.76	Vert(LL)	-0.17	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.33	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 159 lb	FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2 -- 1-6-0

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-12

**REACTIONS** (size) 2=1-0-0, 9=1-0-0, 15=0-3-8  
 Max Horiz 2=-112 (LC 10)  
 Max Uplift 2=-76 (LC 12), 9=-49 (LC 12)  
 Max Grav 2=859 (LC 17), 9=1450 (LC 18), 15=606 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-4=-2216/78, 4-5=-1848/103, 5-6=-1597/119, 6-7=-1801/104, 7-9=-2135/87, 9-10=0/54  
 BOT CHORD 2-15=-1996/1996, 14-15=0/1996, 11-14=0/1996, 9-11=0/1835  
 WEBS 4-14=0/172, 4-13=-382/55, 5-13=0/476, 5-12=-141/129, 6-12=0/431, 7-12=-327/51, 7-11=0/145

**NOTES**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-2-5, Zone1 1-2-5 to 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 19-0-0, Zone2 19-0-0 to 23-2-15, Zone1 23-2-15 to 32-0-0 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, with BCDL = 10.0psf.
- 7) All bearings are assumed to be SP No.2 .
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2 and 49 lb uplift at joint 9.
- 9) 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

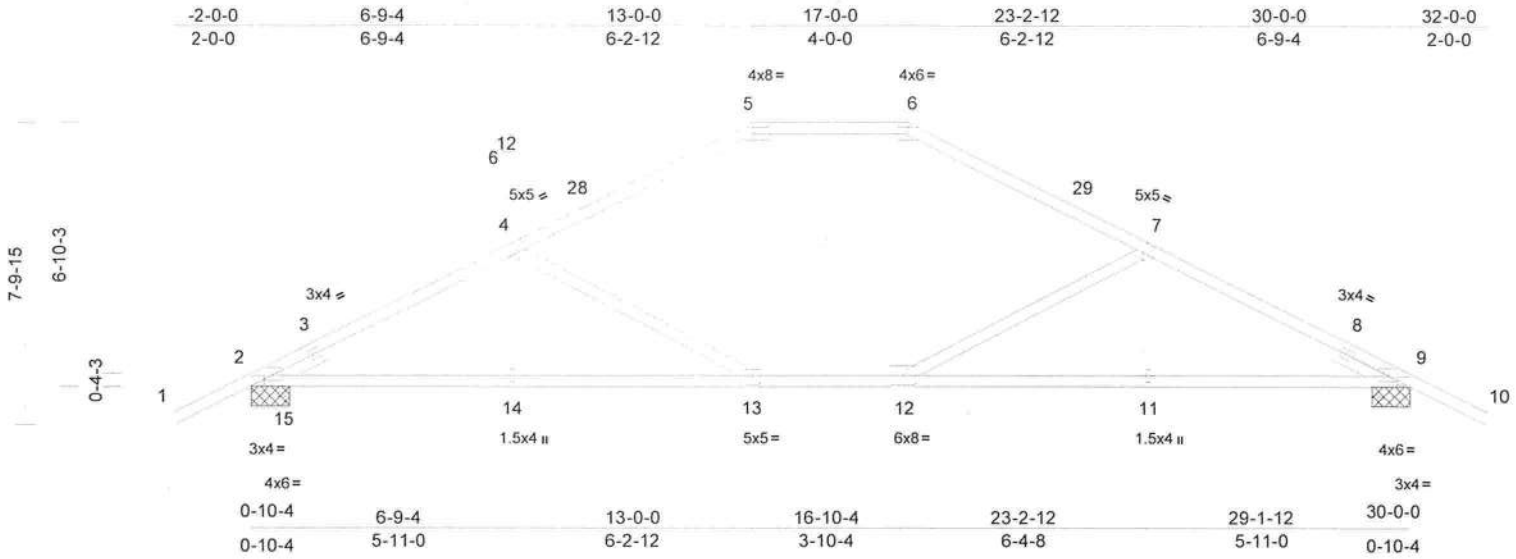


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 Date:

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 314.434.1200 / MiTek-US.com



Scale = 1:59.9

Plate Offsets (X, Y): [2:0-2-8,0-1-9], [2:0-2-8,0-3-2], [4:0-2-8,0-3-0], [5:0-5-4,0-2-0], [7:0-2-8,0-3-0], [9:0-2-8,0-1-9], [9:0-2-8,0-3-2], [12:0-3-8,0-3-0], [13:0-2-8,0-3-0]

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	0.53	Vert(LL)	-0.09	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.58	Vert(CT)	-0.22	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 164 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2 -- 1-6-0

**BRACING**

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

**REACTIONS**

(size) 2=1-0-0, 9=1-0-0, 15=0-3-8  
 Max Horiz 2=-129 (LC 10)  
 Max Uplift 2=-110 (LC 12), 9=-48 (LC 12), 15=-319 (LC 1)  
 Max Grav 2=1648 (LC 1), 9=1324 (LC 1), 15=72 (LC 12)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-5=-1954/114, 5-6=-1264/131, 6-9=-1927/115, 9-10=0/54  
 BOT CHORD 2-15=-1683/1683, 14-15=0/1683, 11-14=0/1681, 9-11=0/1655  
 WEBS 4-14=0/243, 4-13=-486/59, 5-13=0/377, 5-12=-139/141, 6-12=0/375, 7-12=-462/61, 7-11=0/231

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-2-5, Zone1 1-2-5 to 13-0-0, Zone3 13-0-0 to 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 32-0-0 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2, 48 lb uplift at joint 9 and 319 lb uplift at joint 15.
- 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



Julius Lee PE No. 34869  
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 Date:

April 5, 2024

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Job	Truss	Truss Type	Qty	Ply	Tim Harvey	T33452299
0322-048	A05	Common	5	1	Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 04 09:46:40  
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Page: 1

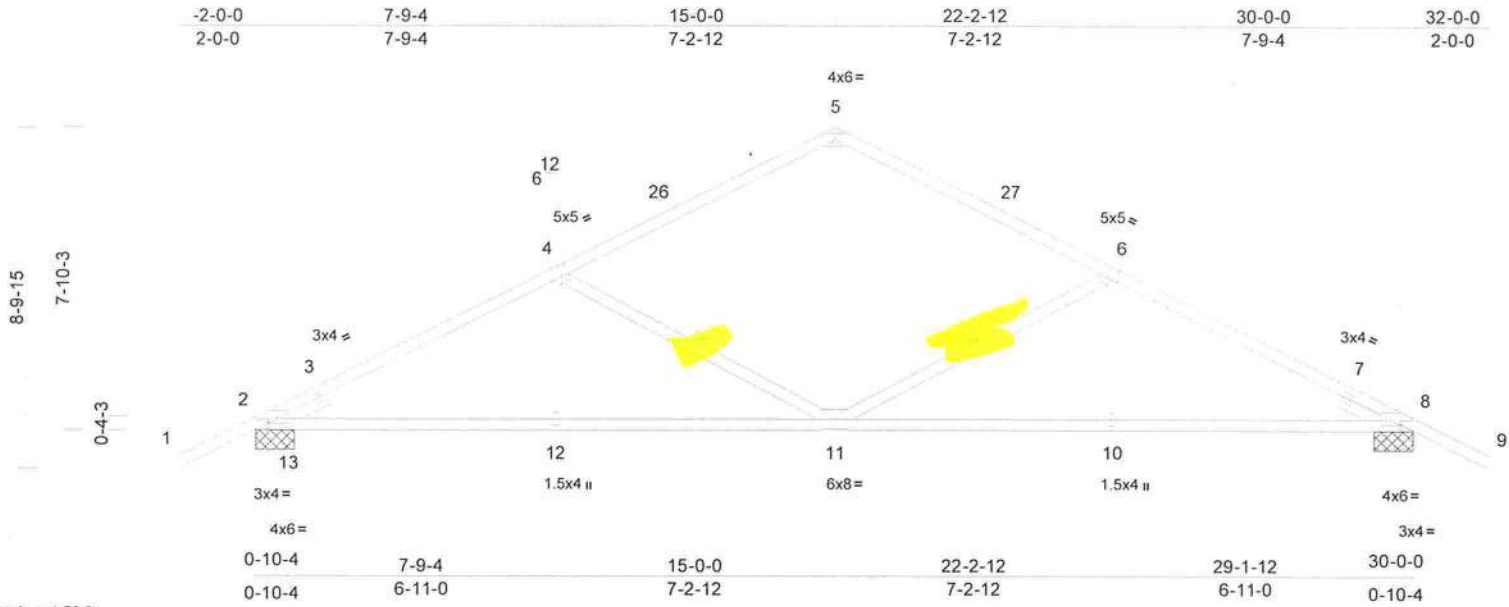


Plate Offsets (X, Y): [2:0-2-8,0-1-9], [2:0-2-8,0-3-2], [4:0-2-8,0-3-0], [6:0-2-8,0-3-0], [8:0-2-8,0-1-9], [8:0-2-8,0-3-2]

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	0.45	Vert(LL)	-0.09	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.22	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 151 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2 -- 1-6-0

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 4-11, 6-11

**REACTIONS**  
(size) 2=1-0-0, 8=1-0-0, 13=0-3-8  
Max Horiz 2=146 (LC 11)  
Max Uplift 2=-79 (LC 12), 8=-48 (LC 12), 13=-155 (LC 1)  
Max Grav 2=1486 (LC 1), 8=1322 (LC 1), 13=71 (LC 8)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/54, 2-5=-1912/130, 5-8=-1901/124, 8-9=0/54  
BOT CHORD 2-13=-1637/1637, 12-13=0/1637, 10-12=0/1634, 8-10=0/1626  
WEBS 4-12=0/277, 4-11=-600/76, 5-11=0/716, 6-11=-592/80, 6-10=0/269

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-22; Vult=130mph (3-second gust)  
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-2-5, Zone1 1-2-5 to 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 32-0-0 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.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 2, 48 lb uplift at joint 8 and 155 lb uplift at joint 13.
- 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



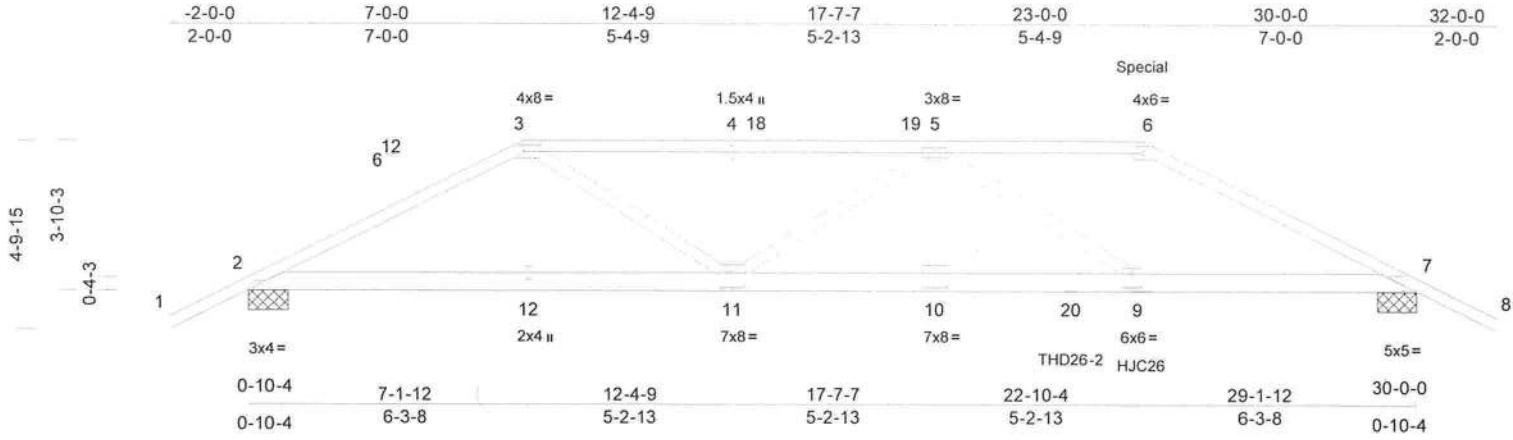
Julius Lee PE No. 34869  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

April 5, 2024

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Scale = 1:59.2

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

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	0.72	Vert(LL)	-0.14	9-10	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.27	9-10	>999	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.05	7	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 337 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP M 26 \*Except\* 11-10:2x6 SP No.2  
 WEBS 2x4 SP No.2

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=1-0-0, 7=0-3-8  
 Max Horiz 2=-78 (LC 6)  
 Max Grav 2=1773 (LC 1), 7=2770 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-3=-3222/0, 3-4=-4066/0, 4-5=-4066/0, 5-6=-4131/0, 6-7=-4665/0, 7-8=0/54  
 BOT CHORD 2-12=0/2802, 9-12=0/4948, 7-9=0/4063  
 WEBS 3-12=0/351, 3-11=0/1586, 4-11=-331/66, 5-11=-1104/0, 5-10=0/783, 5-9=-1008/48, 6-9=0/1630

- 4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be SP M 26.
- 10) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 21-1-8 from the left end to connect truss(es) to front face of bottom chord.
- 11) Use MiTek HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent at 22-11-10 from the left end to connect truss(es) to front face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 231 lb down and 83 lb up at 23-0-0 on top 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)  
 Vert: 1-3=-60, 3-6=-60, 6-8=-60, 2-7=-20  
 Concentrated Loads (lb)  
 Vert: 6=-184 (F), 9=-346 (F), 20=-1372 (F)

- 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.
  - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 3) Unbalanced roof live loads have been considered for this design.

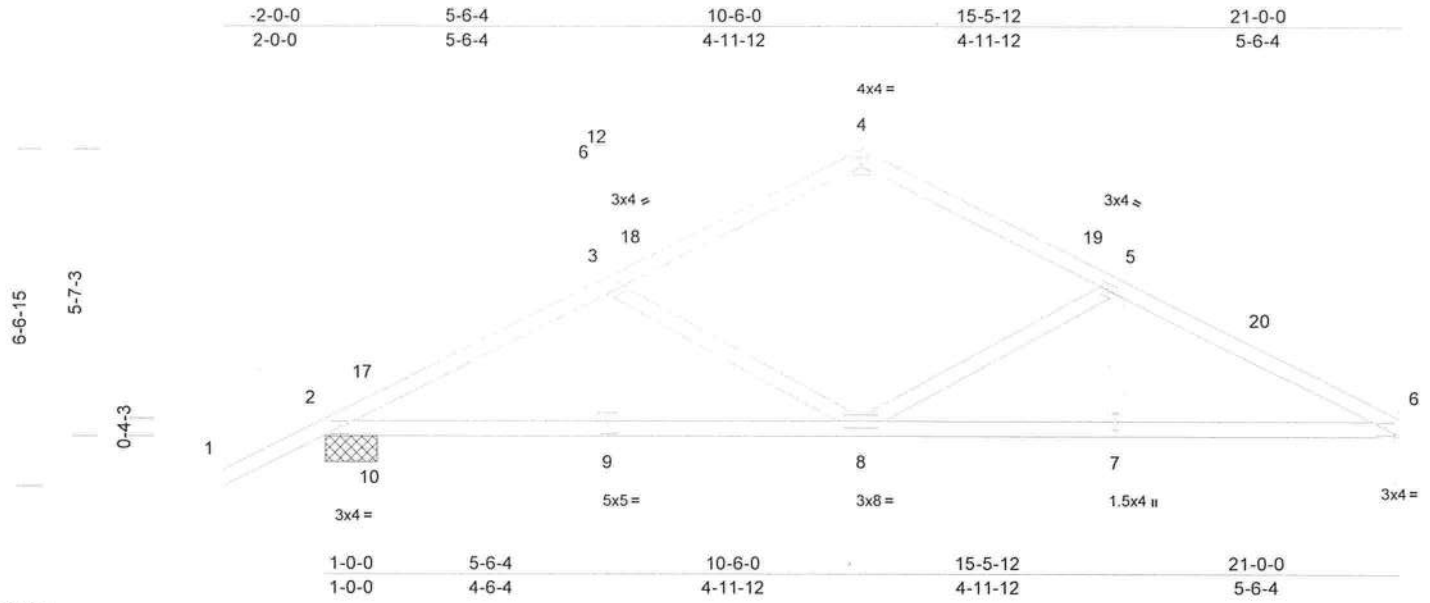


Julius Lee PE No. 34869  
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 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

April 5, 2024

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Scale = 1:45.1

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

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	0.31	Vert(LL)	-0.05	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.11	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 101 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 2=1-0-0, 6= Mechanical, 10=0-3-8  
 Max Horiz 2=99 (LC 11)  
 Max Uplift 2=111 (LC 12)  
 Max Grav 2=662 (LC 1), 6=821 (LC 1),  
 10=316 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/54, 2-3=-1364/114, 3-4=-987/125,  
 4-5=-992/134, 5-6=-1444/131  
 BOT CHORD 2-10=-49/1154, 8-10=-49/1154, 7-8=-51/1255,  
 6-7=-51/1255  
 WEBS 3-9=0/174, 3-8=-400/79, 4-8=-17/536,  
 5-8=-510/85, 5-7=0/217

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 10-6-0, Zone2 10-6-0 to 14-8-15, Zone1 14-8-15 to 21-0-0 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) 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) Bearings are assumed to be: Joint 2 SP No.2, Joint 10 SP No.2.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 2.
  - 9) 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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 Date:

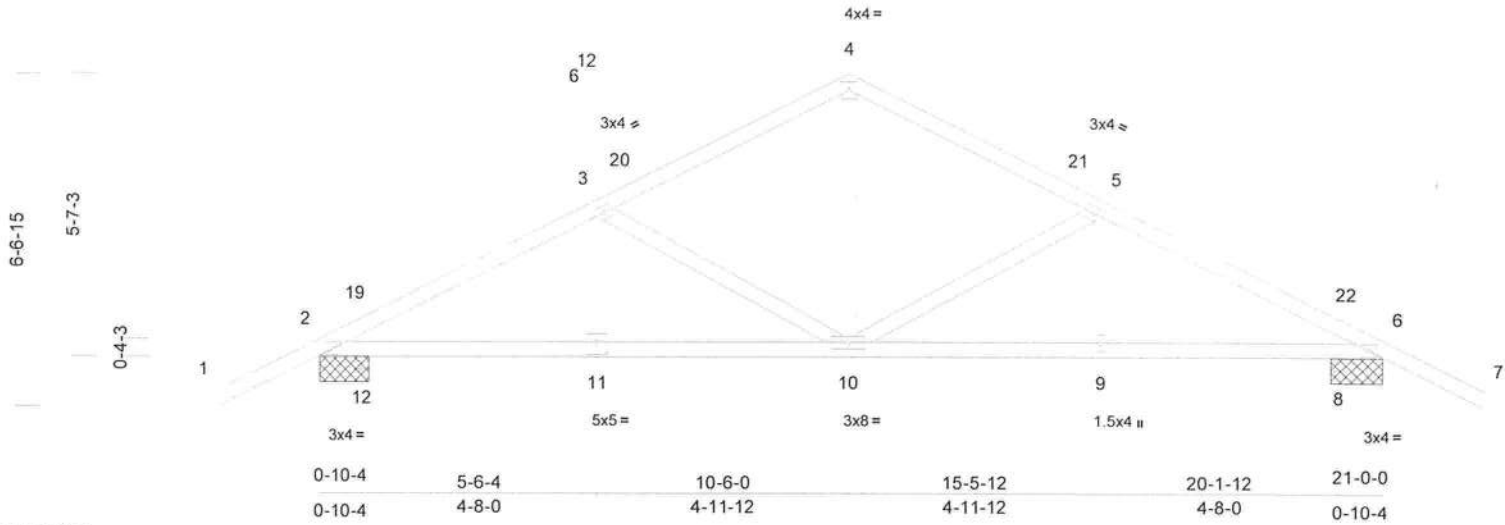
April 5, 2024

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-2-0-0	5-6-4	10-6-0	15-5-12	21-0-0	23-0-0
2-0-0	5-6-4	4-11-12	4-11-12	5-6-4	2-0-0



Scale = 1:45.7  
 Plate Offsets (X, Y): [11:0-2-8,0-3-0]

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	0.30	Vert(LL)	-0.04	9-10	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.10	10-11	>999	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.04	6	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 104 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2

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

**REACTIONS** (size) 2=1-0-0, 6=1-0-0, 8=0-3-8, 12=0-3-8  
 Max Horiz 2=-103 (LC 10)  
 Max Uplift 2=-114 (LC 12), 6=-114 (LC 12)  
 Max Grav 2=644 (LC 1), 6=644 (LC 1), 8=316 (LC 1), 12=316 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-3=-1322/104, 3-4=-950/123, 4-5=-950/123, 5-6=-1322/103, 6-7=0/54  
 BOT CHORD 2-12=0/1116, 10-12=0/1116, 9-10=-20/1116, 8-9=-20/1116, 6-8=-20/1116  
 WEBS 3-11=0/171, 3-10=-397/79, 4-10=-5/490, 5-10=-397/79, 5-9=0/171

- 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) All bearings are assumed to be SP No.2.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 2 and 114 lb uplift at joint 6.
  - 8) 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

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 10-6-0, Zone2 10-6-0 to 14-8-15, Zone1 14-8-15 to 23-0-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

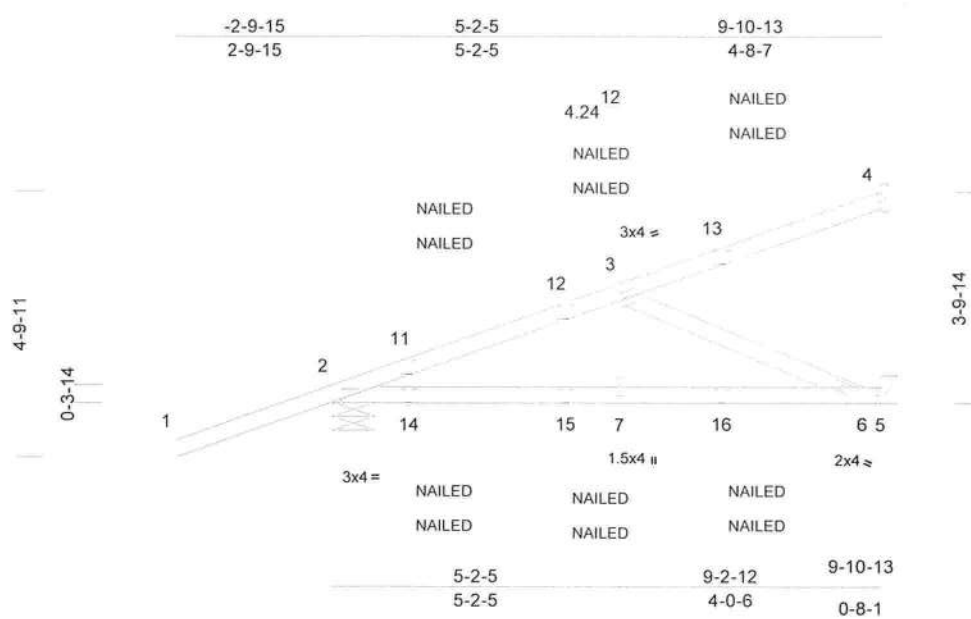


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April 5, 2024

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Scale = 1:41.8  
 Plate Offsets (X, Y): [2:0-1-15,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	0.62	Vert(LL)	-0.07	7-10	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	0.06	7-10	>999	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.01	6	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 44 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2

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

**REACTIONS** (size) 2=0-9-2, 4= Mechanical, 6= Mechanical  
 Max Horiz 2=152 (LC 8)  
 Max Uplift 2=-208 (LC 8), 4=-57 (LC 8), 6=-29 (LC 8)  
 Max Grav 2=571 (LC 13), 4=144 (LC 13), 6=368 (LC 14)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/57, 2-3=-789/227, 3-4=-96/40  
 BOT CHORD 2-7=-236/718, 6-7=-143/718, 5-6=0/0  
 WEBS 3-7=0/223, 3-6=-780/156

- NOTES**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* 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.
  - 5) Bearings are assumed to be: , Joint 2 SP No.2 .

- 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 4, 208 lb uplift at joint 2 and 29 lb uplift at joint 6.
  - 8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 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: 1-4=-60, 5-8=-20  
 Concentrated Loads (lb)  
 Vert: 11=72 (F=36, B=36), 13=-71 (F=-36, B=-36), 14=82 (F=41, B=41), 15=6 (F=3, B=3), 16=-49 (F=-24, B=-24)



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 Date:

April 5, 2024

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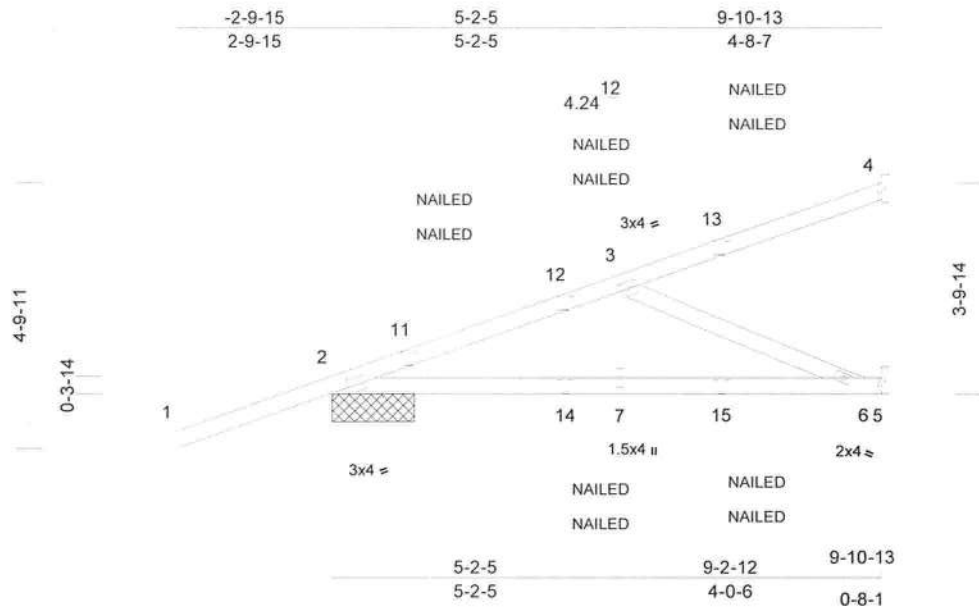


Job	Truss	Truss Type	Qty	Ply	Tim Harvey	T33452304
0322-048	CJ02	Diagonal Hip Girder	1	1	Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066.

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 04 09:46:41  
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Page: 1



Scale = 1:41.8

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

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	0.62	Vert(LL)	-0.04	7-10	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.08	6-7	>999	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01	5	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							

Weight: 44 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2

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

**REACTIONS** (size) 2=1-5-12, 4= Mechanical, 5= Mechanical  
 Max Horiz 2=120 (LC 8)  
 Max Uplift 2=-94 (LC 8), 4=-34 (LC 8)  
 Max Grav 2=561 (LC 1), 4=139 (LC 1), 5=317 (LC 14)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/57, 2-3=-751/122, 3-4=-76/37  
 BOT CHORD 2-7=-147/663, 6-7=0/663, 5-6=0/0  
 WEBS 3-7=0/271, 3-6=-720/0

- NOTES**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* 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.
  - 5) Bearings are assumed to be: , Joint 2 SP No.2 .
  - 6) Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 4 and 94 lb uplift at joint 2.
  - 8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 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: 1-4=-60, 5-8=-20  
 Concentrated Loads (lb)  
 Vert: 11=73 (F=37, B=37), 13=-71 (F=-36, B=-36), 14=-4 (F=-2, B=-2), 15=-49 (F=-24, B=-24)



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 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

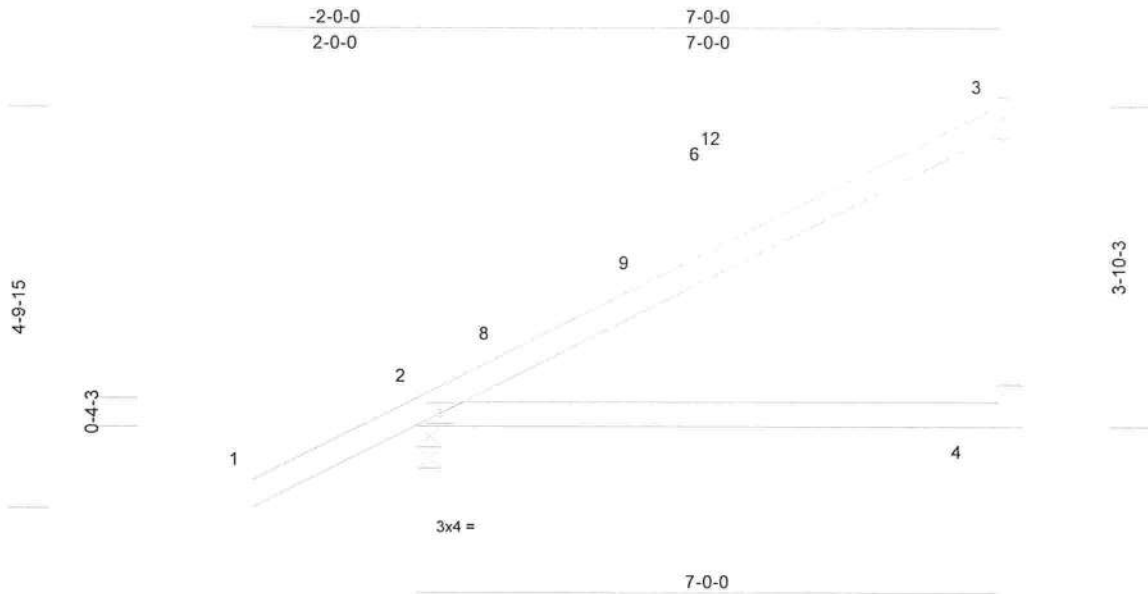
April 5, 2024

**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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Scale = 1:27.8

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	0.55	Vert(LL)	0.09	4-7	>913	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.16	4-7	>476	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 26 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 2=0-3-8, 3= Mechanical, 4= Mechanical  
 Max Horiz 2=152 (LC 12)  
 Max Uplift 2=-63 (LC 12), 3=-77 (LC 12)  
 Max Grav 2=410 (LC 1), 3=199 (LC 17), 4=117 (LC 3)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/54, 2-3=-229/75  
 BOT CHORD 2-4=-45/102

**NOTES**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)  
 Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;  
 B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 6-11-4 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* 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.
- 5) Bearings are assumed to be: , Joint 2 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 3 and 63 lb uplift at joint 2.

8) 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



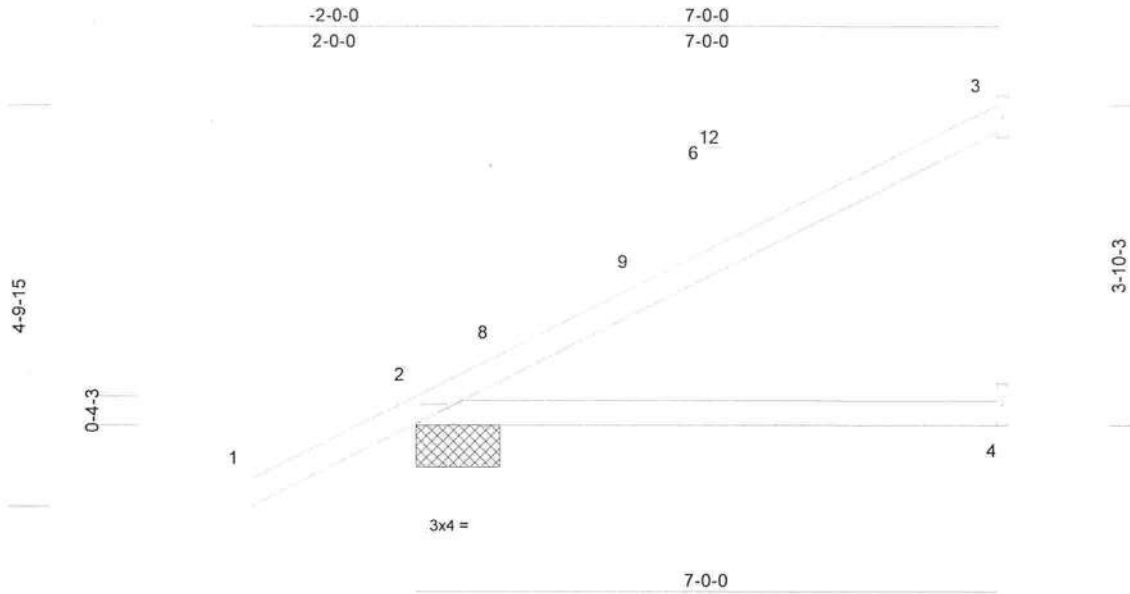
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 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

April 5, 2024

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Scale = 1:27.8

Plate Offsets (X, Y): [2:0-0-8,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	0.57	Vert(LL)	-0.09	4-7	>969	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.20	4-7	>408	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 26 lb FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 2=1-0-0, 3= Mechanical, 4= Mechanical  
 Max Horiz 2=119 (LC 12)  
 Max Uplift 2=-37 (LC 12), 3=-42 (LC 12)  
 Max Grav 2=415 (LC 1), 3=181 (LC 1), 4=123 (LC 3)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/54, 2-3=-227/64  
 BOT CHORD 2-4=-44/124

**NOTES**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)  
 Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;  
 B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;  
 MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0,  
 Zone1 1-0-0 to 6-11-4 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
- 2) Building Designer / Project engineer responsible for  
 verifying applied roof live load shown covers rain loading  
 requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom  
 chord live load nonconcurrent with any other live loads.
- 4) \* 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.
- 5) Bearings are assumed to be: , Joint 2 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to  
 bearing plate capable of withstanding 42 lb uplift at joint  
 3 and 37 lb uplift at joint 2.
  - 8) 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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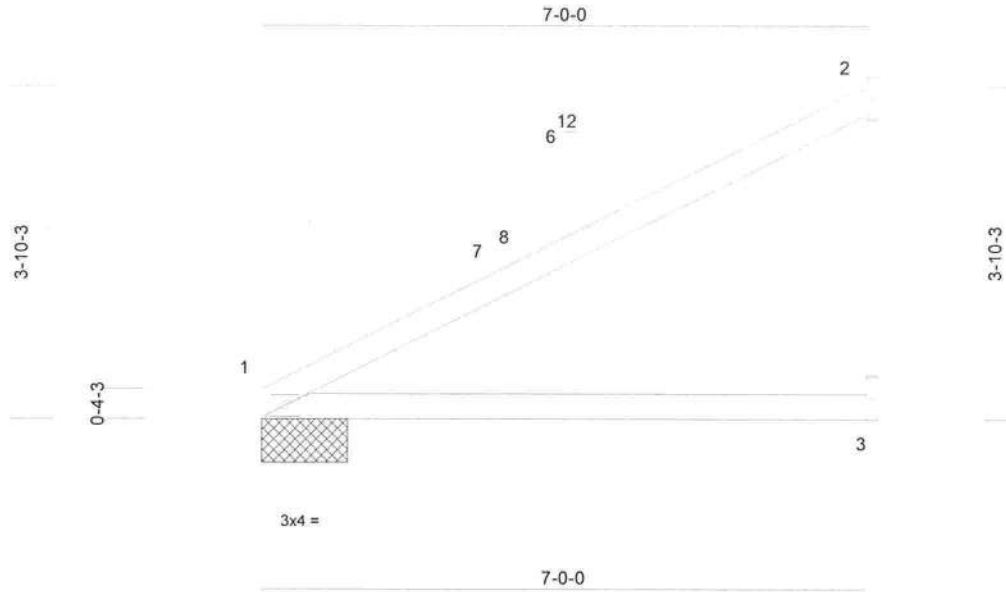
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Job	Truss	Truss Type	Qty	Ply	Tim Harvey	T33452308
0322-048	J01B	Jack-Open	1	1	Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 04 09:46:41  
 ID:1uklu4XmRFqBVcZ2QOV8dUzU8ze-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRcDoi7J4zJC?7

Page: 1



Scale = 1:26.7

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	0.63	Vert(LL)	-0.09	3-6	>896	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.22	3-6	>375	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 22 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 1=1-0-0, 2= Mechanical, 3= Mechanical  
 Max Horiz 1=83 (LC 12)  
 Max Uplift 2=-47 (LC 12)  
 Max Grav 1=278 (LC 1), 2=191 (LC 1), 3=126 (LC 3)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-115/68  
 BOT CHORD 1-3=-75/108

**NOTES**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)  
 Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;  
 B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;  
 MWFRS (directional) and C-C Zone3 0-0-0 to 3-0-0,  
 Zone1 3-0-0 to 6-11-4 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
- 2) Building Designer / Project engineer responsible for  
 verifying applied roof live load shown covers rain loading  
 requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom  
 chord live load nonconcurrent with any other live loads.
- 4) \* 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.
- 5) Bearings are assumed to be: , Joint 1 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to  
 bearing plate capable of withstanding 47 lb uplift at joint  
 2.

8) 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



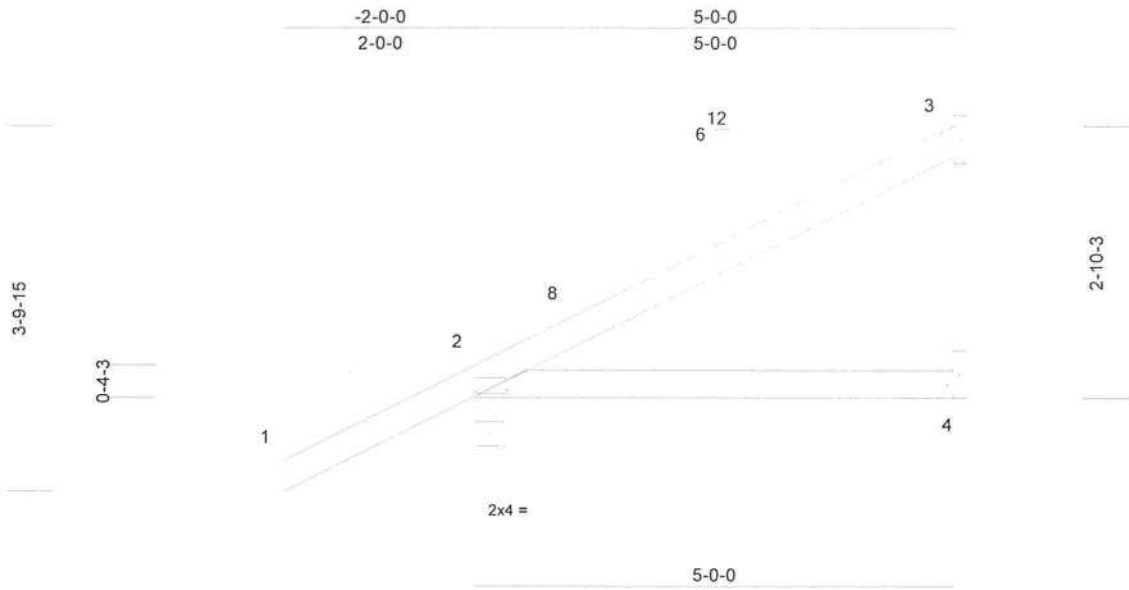
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Scale = 1:24.2

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

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	0.26 Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23 Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00 Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS						Weight: 19 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS** (size) 2=0-3-8, 3= Mechanical, 4= Mechanical  
 Max Horiz 2=119 (LC 12)  
 Max Uplift 2=-64 (LC 12), 3=-50 (LC 12)  
 Max Grav 2=342 (LC 1), 3=135 (LC 17), 4=86 (LC 3)

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

TOP CHORD 1-2=0/54, 2-3=-216/72  
 BOT CHORD 2-4=-75/138

**NOTES**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-11-4 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* 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.
- 5) Bearings are assumed to be: , Joint 2 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 3 and 64 lb uplift at joint 2.
  - 8) 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



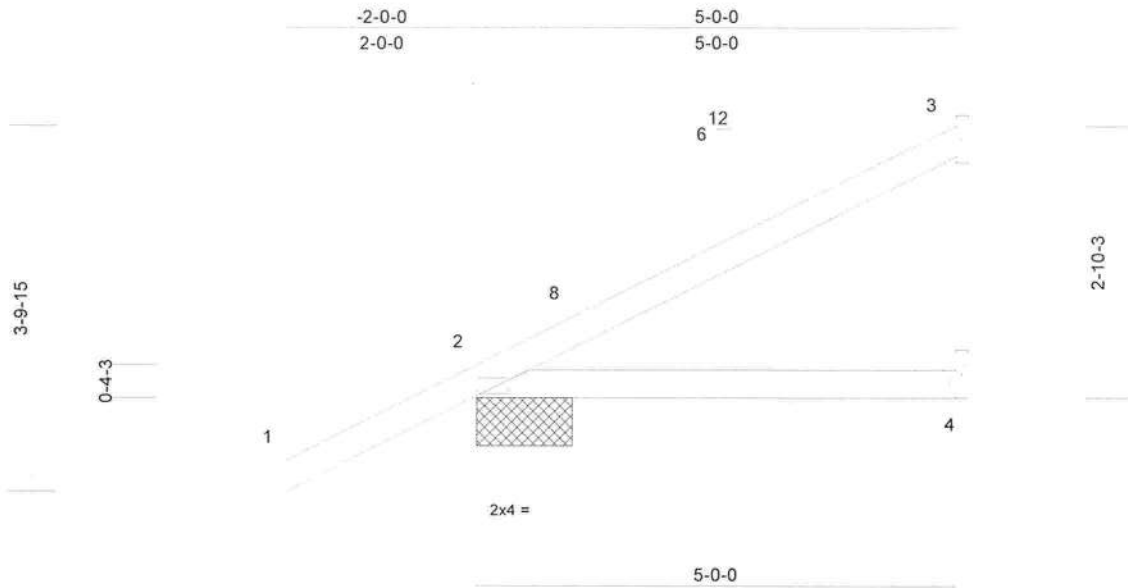
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Scale = 1:24.2

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

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	0.26	Vert(LL)	-0.02	4-7	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	4-7	>999	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 19 lb FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 2=1-0-0, 3= Mechanical, 4= Mechanical  
 Max Horiz 2=96 (LC 12)  
 Max Uplift 2=-47 (LC 12), 3=-26 (LC 12)  
 Max Grav 2=342 (LC 1), 3=121 (LC 1), 4=86 (LC 3)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/54, 2-3=-215/72  
 BOT CHORD 2-4=-75/153

**NOTES**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)  
 Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;  
 B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;  
 MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0,  
 Zone1 1-0-0 to 4-11-4 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
- 2) Building Designer / Project engineer responsible for  
 verifying applied roof live load shown covers rain loading  
 requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom  
 chord live load nonconcurrent with any other live loads.
- 4) \* 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.
- 5) Bearings are assumed to be: , Joint 2 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to  
 bearing plate capable of withstanding 26 lb uplift at joint  
 3 and 47 lb uplift at joint 2.
  - 8) 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



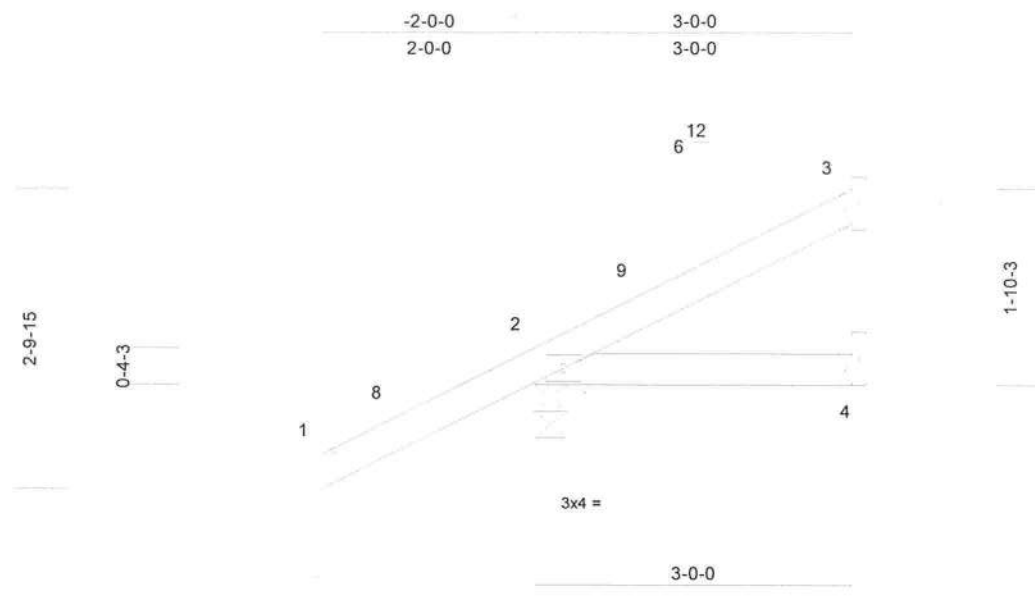
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April 5, 2024

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 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com



Scale = 1:21.8

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	0.27	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%

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

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

**REACTIONS** (size) 2=0-3-8, 3= Mechanical, 4= Mechanical  
 Max Horiz 2=85 (LC 12)  
 Max Uplift 2=-72 (LC 12), 3=-22 (LC 12)  
 Max Grav 2=278 (LC 1), 3=67 (LC 17), 4=47 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-3=-185/92  
 BOT CHORD 2-4=-102/157

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 3 and 72 lb uplift at joint 2.  
**LOAD CASE(S)** Standard

- NOTES**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 2-11-4 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
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* 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.
  - 5) Bearings are assumed to be: Joint 2 SP No.2 .
  - 6) Refer to girder(s) for truss to truss connections.



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 Date:

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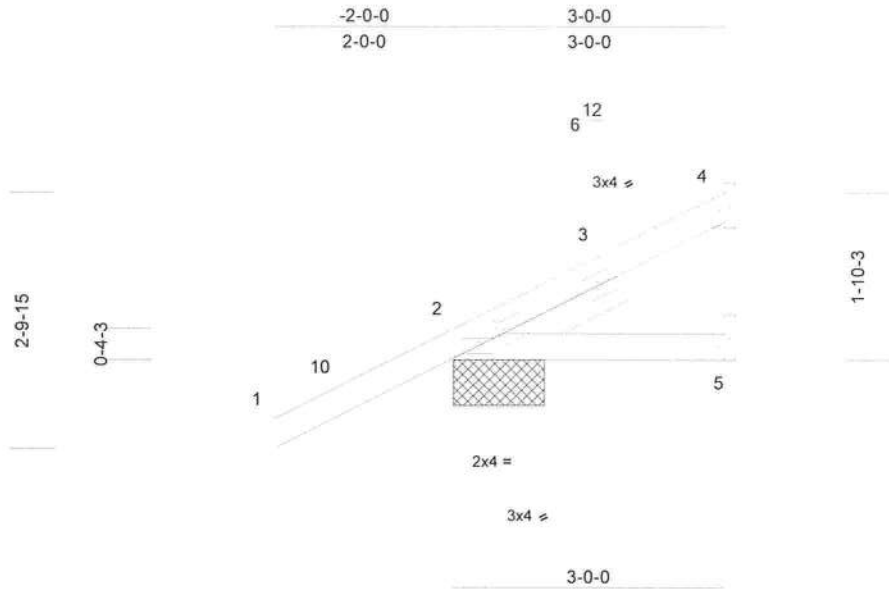


Job	Truss	Truss Type	Qty	Ply	Tim Harvey	
0322-048	J03A	Jack-Open	2	1		T33452312

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 04 09:46:41  
 ID:1uklu4XmRFqBVcZ2QOV8dUzU8ze-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?I

Page: 1



Scale = 1.25,5

Plate Offsets (X, Y): [2:0-0-8,0-1-8]

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	0.27	Vert(LL)	0.00	8	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	5-8	>999	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 15 lb FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -- 1-5-1

- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 4 and 62 lb uplift at joint 2.

**BRACING**

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

LOAD CASE(S) Standard

**REACTIONS**

(size) 2=1-0-0, 4= Mechanical, 5= Mechanical  
 Max Horiz 2=72 (LC 12)  
 Max Uplift 2=-62 (LC 12), 4=-5 (LC 9)  
 Max Grav 2=278 (LC 1), 4=54 (LC 17), 5=41 (LC 3)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-4=-179/25  
 BOT CHORD 2-5=0/0

**NOTES**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)  
 Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;  
 B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;  
 MWFRS (directional) and C-C Zone3 -2-0-0 to 1-2-5,  
 Zone1 1-2-5 to 2-11-4 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
- 2) Building Designer / Project engineer responsible for  
 verifying applied roof live load shown covers rain loading  
 requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom  
 chord live load nonconcurrent with any other live loads.
- 4) \* 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.
- 5) Bearings are assumed to be: , Joint 2 SP No.2 .



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 Date:

April 5,2024

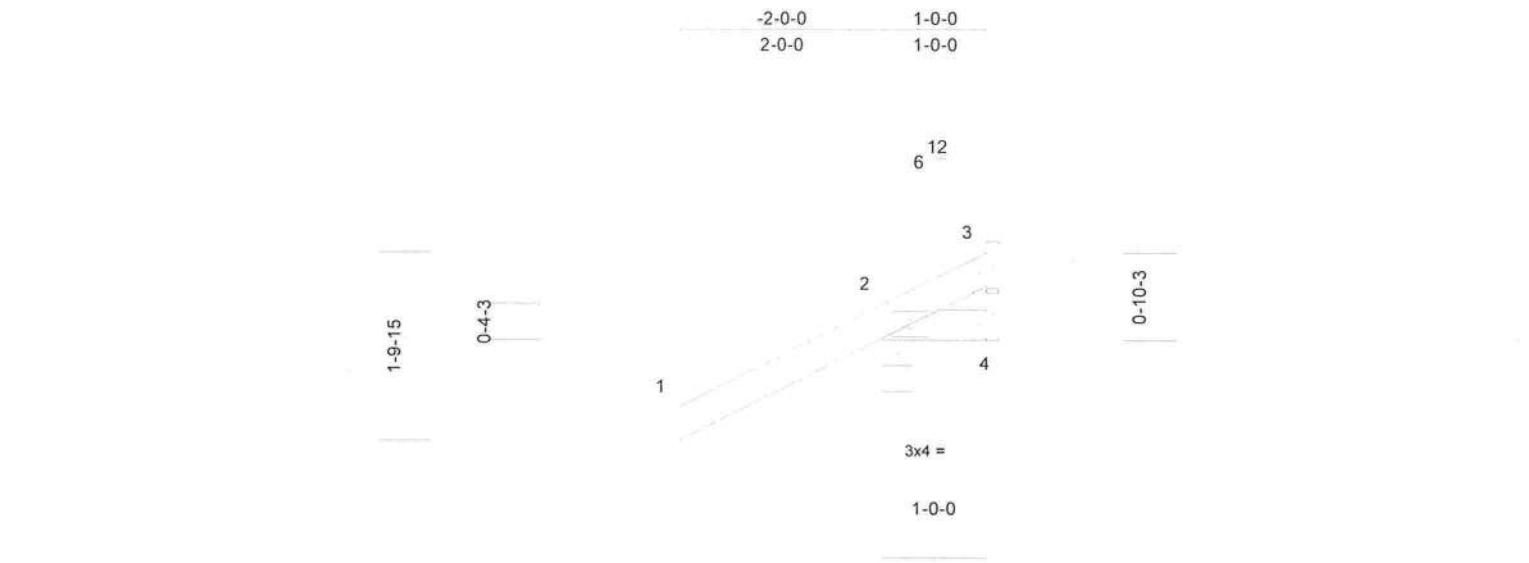
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Job	Truss	Truss Type	Qty	Ply	Tim Harvey	T33452313
0322-048	J04	Jack-Open	4	1	Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Thu Apr 04 09:46:41 Page: 1  
 ID: 1uklu4XmRFqBVcZ2QOV8dUzU8ze-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Loading	(psf)	Spacing	2-0-0	CSI	DEFLECT	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	0.00	7	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	0.00	7	>999	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 7 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 2, 53 lb uplift at joint 4 and 29 lb uplift at joint 3.

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

**REACTIONS** (size) 2=0-3-8, 3= Mechanical, 4= Mechanical  
 Max Horiz 2=53 (LC 12)  
 Max Uplift 2=-116 (LC 12), 3=-29 (LC 1), 4=-53 (LC 1)  
 Max Grav 2=281 (LC 1), 3=20 (LC 12), 4=37 (LC 12)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/54, 2-3=-126/87  
 BOT CHORD 2-4=-103/142

- NOTES**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially 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
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* 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.
  - 5) Bearings are assumed to be: , Joint 2 SP No.2 .
  - 6) Refer to girder(s) for truss to truss connections.



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 Date:

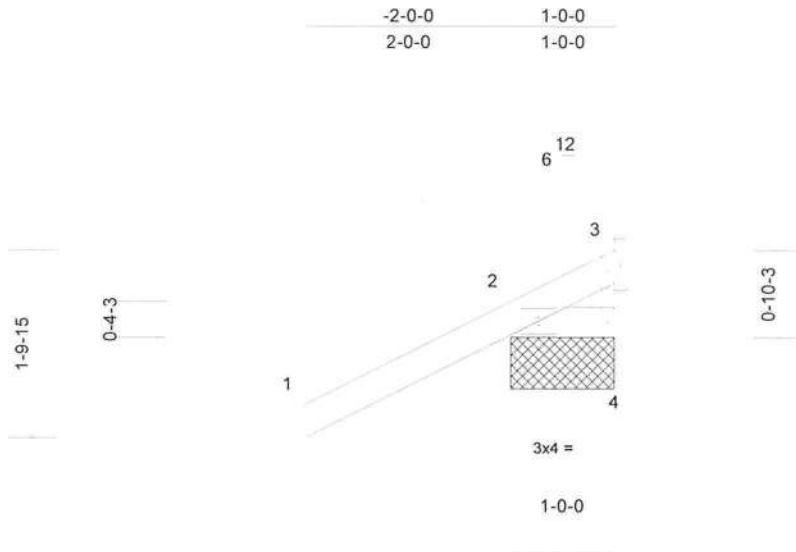
April 5,2024

Job	Truss	Truss Type	Qty	Ply	Tim Harvey	T33452314
0322-048	J04A	Jack-Open	2	1	Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066,

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Page: 1



Scale = 1:22.4

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	0.27	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	0.00	7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%

**LUMBER** LOAD CASE(S) Standard

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

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

**REACTIONS** All bearings 1-0-0, except 3= Mechanical  
(lb) - Max Horiz 2=48 (LC 12), 5=48 (LC 12)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
3, 4 except 2=-112 (LC 12), 5=-112 (LC 12)  
Max Grav All reactions 250 (lb) or less at joint (s) 3, 4 except 2=281 (LC 1), 5=281 (LC 1)

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

**NOTES**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)  
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;  
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;  
MWFRS (directional) and C-C 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 4, 3 except (jt=lb) 2=112, 2=112.



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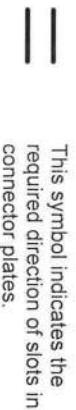
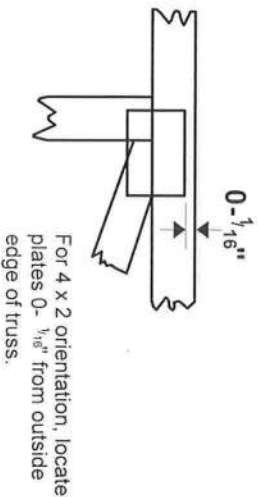
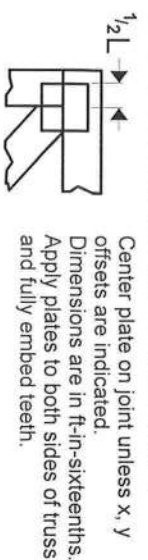
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# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

4 X 4

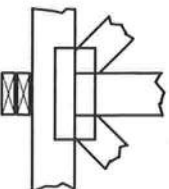
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

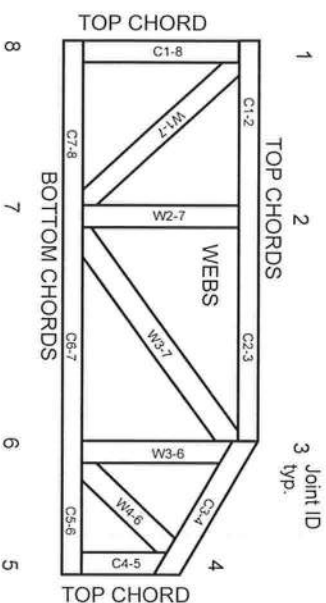


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

- ANSI/TPP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
- DSB-22: Design Standard for Bracing.
- BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

## Product Code Approvals

ICC-ES Reports:

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

## Design General Notes

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

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

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# MITtek®

MITtek Engineering Reference Sheet: Mill-7473 rev. 1/2/2023

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

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