



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

RE: HR0014 -

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

**Site Information:**

Customer Info: K Hovnanian Homes Project Name: HR0014 Model: Type A 4 Unit  
Lot/Block: Bldg. 14 Subdivision: Hawk's Ridge  
Address: 725-743 NE Hawks Ridge Way, .  
City: Port St Lucie 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: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7  
Wind Code: ASCE 7-22 Wind Speed: 170 mph  
Roof Load: 55.0 psf Floor Load: 65.0 psf

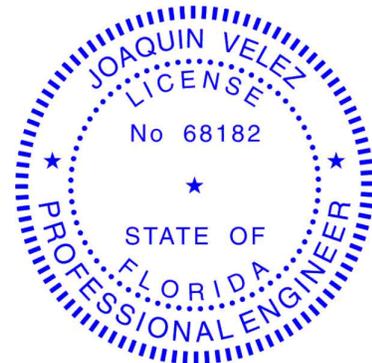
This package includes 55 individual, Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T32729093	C1	1/24/24	15	T32729107	FG01	1/24/24
2	T32729094	C3	1/24/24	16	T32729108	FG02	1/24/24
3	T32729095	C5	1/24/24	17	T32729109	FG03	1/24/24
4	T32729096	CJ01	1/24/24	18	T32729110	FG04	1/24/24
5	T32729097	CJ1	1/24/24	19	T32729111	FG05	1/24/24
6	T32729098	CJ03A	1/24/24	20	T32729112	FG06	1/24/24
7	T32729099	CJ3	1/24/24	21	T32729113	FG07	1/24/24
8	T32729100	CJ3A	1/24/24	22	T32729114	FL01	1/24/24
9	T32729101	E7	1/24/24	23	T32729115	FL02	1/24/24
10	T32729102	EJ01	1/24/24	24	T32729116	FL03	1/24/24
11	T32729103	EJ02	1/24/24	25	T32729117	FL04	1/24/24
12	T32729104	EJ03	1/24/24	26	T32729118	FL05	1/24/24
13	T32729105	EJ3	1/24/24	27	T32729119	FL06	1/24/24
14	T32729106	EJ04	1/24/24	28	T32729120	FL07	1/24/24

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 Builders FirstSource - Plant City.

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



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.

January 24,2024





Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	C3	Corner Jack	8	1	

T32729094

Builders FirstSource (Tampa, FL),

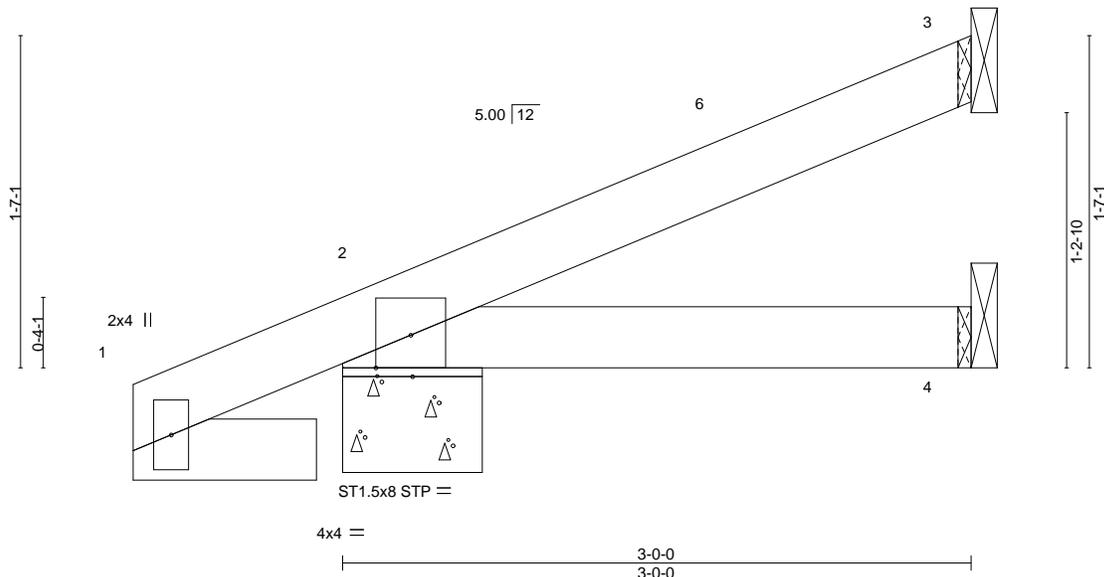
Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:25 2024 Page 1

ID:9GJ?lLrRdGLJ2VbHLXnt4OzLxQi-xIMfOcNuLxu9XzLG0PvhhFnhUTZdOtCHpEbWrzsChK



Scale = 1:10.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL	1.33	TC 0.30	Vert(LL)	-0.00 2-4	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.13	Vert(CT)	-0.01 2-4	>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/TP12014		Matrix-P					Weight: 12 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**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) 3=Mechanical, 2=0-8-0, 4=Mechanical  
 Max Horz 2=129(LC 12)  
 Max Uplift 3=65(LC 12), 2=-217(LC 12)  
 Max Grav 3=86(LC 1), 2=294(LC 1), 4=52(LC 3)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCCL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 2-11-4 zone; 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 3 and 217 lb uplift at joint 2.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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: January 24, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	<p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	C5	Corner Jack	8	1	T32729095

Builders FirstSource (Tampa, FL),

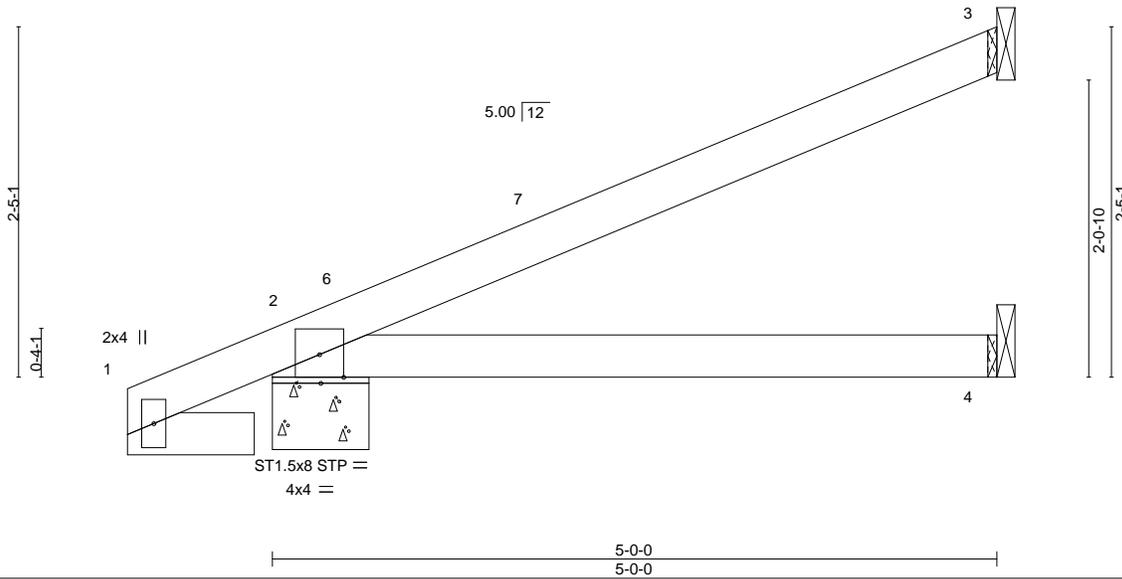
Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:26 2024 Page 1

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Scale = 1:15.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.82	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.26	Vert(LL) -0.03 2-4 >999 240		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.00	Vert(CT) -0.05 2-4 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) -0.00 3 n/a n/a		
	Code FBC2023/TP12014			Weight: 19 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x4 SP No.3

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

**REACTIONS.** (size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
 Max Horz 2=187(LC 12)  
 Max Uplift 3=-155(LC 12), 2=-245(LC 12)  
 Max Grav 3=190(LC 1), 2=391(LC 1), 4=92(LC 3)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCCL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 4-11-4 zone; 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 155 lb uplift at joint 3 and 245 lb uplift at joint 2.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

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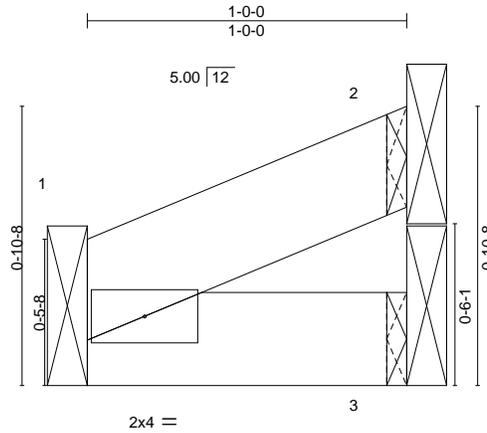
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
HR0014	CJ01	Corner Jack	24	1	T32729096

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:26 2024 Page 1

ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-PVw2byOXNe3InhYXqkw8Dvn0QtrcMr6LWT\_82HzsChJ



Scale = 1:7.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.04	Vert(LL) 0.00	1	>999	240	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.01	Vert(CT) -0.00	1	>999	180		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.00	Horz(CT) -0.00	1	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 3 lb	FT = 20%
	Code FBC2023/TPI2014							

**LUMBER-**  
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.** (size) 1=Mechanical, 2=Mechanical, 3=Mechanical  
Max Horz 2=40(LC 12)  
Max Uplift 1=-62(LC 12), 2=-19(LC 12), 3=-21(LC 8)  
Max Grav 1=54(LC 1), 2=44(LC 1), 3=20(LC 3)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; porch left 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 3-6-0 tall by 2-0-0 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 62 lb uplift at joint 1, 19 lb uplift at joint 2 and 21 lb uplift at joint 3.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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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:

January 24,2024

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

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

**MiTek®**

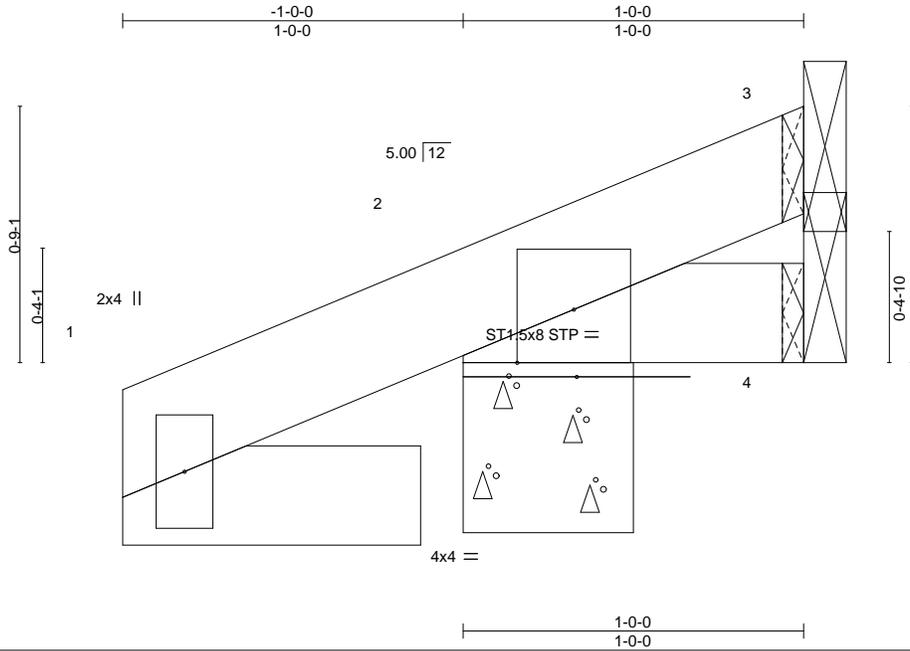
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job HR0014	Truss CJ1	Truss Type Corner Jack	Qty 8	Ply 1	Job Reference (optional) T32729097
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Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:28 2024 Page 1  
ID:9GJ?LrRdGLJ2VbHLXnt4OzLxQi-Mt2o0dPnvGJT0?iwy9yclKtJYhX2qlcezmTF6AzsChH



Scale = 1:6.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.33	TC 0.20	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.01	Vert(CT)	-0.00	2	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 6 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.3  
OTHERS 2x4 SP No.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) 3=Mechanical, 2=0-6-0, 4=Mechanical  
Max Horz 2=72(LC 12)  
Max Uplift 3=-11(LC 1), 2=-186(LC 12)  
Max Grav 3=29(LC 12), 2=199(LC 1), 4=19(LC 3)

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

- NOTES-** (7)
- Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 3 and 186 lb uplift at joint 2.
  - \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

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**MiTek®**

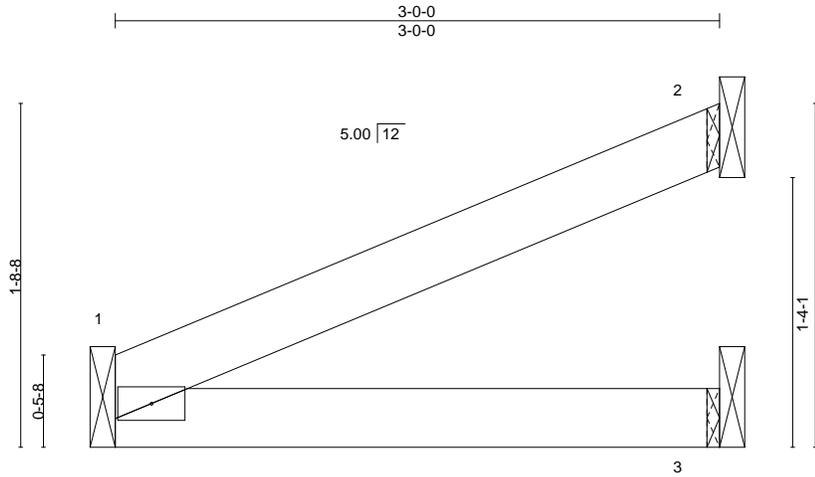
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job HR0014	Truss CJ03A	Truss Type Corner Jack	Qty 8	Ply 1	Job Reference (optional) T32729098
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Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:27 2024 Page 1  
ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-thUQoI09ByBcOr7kORRNm6K6SHAA5IMVl6jjajzsChl



Scale = 1:11.4

2x4 =

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.33	TC 0.35	Vert(LL)	0.01 1-3	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.12	Vert(CT)	-0.01 1-3	>999	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-P					Weight: 9 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) 1=Mechanical, 2=Mechanical, 3=Mechanical  
Max Horz 2=97(LC 12)  
Max Uplift 1=173(LC 12), 2=65(LC 12), 3=61(LC 8)  
Max Grav 1=158(LC 1), 2=129(LC 1), 3=58(LC 3)

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

**NOTES-** (7)

- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; porch left 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 3-6-0 tall by 2-0-0 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 173 lb uplift at joint 1, 65 lb uplift at joint 2 and 61 lb uplift at joint 3.
- 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 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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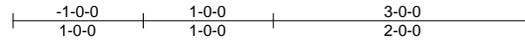
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job HR0014	Truss CJ3	Truss Type Corner Jack	Qty 4	Ply 1	Job Reference (optional) T32729099
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:29 2024 Page 1

ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-q4bADzQPgZRKe8H6VsTrrXPTg5quZCsoCQcfczChG



Scale = 1:17.6

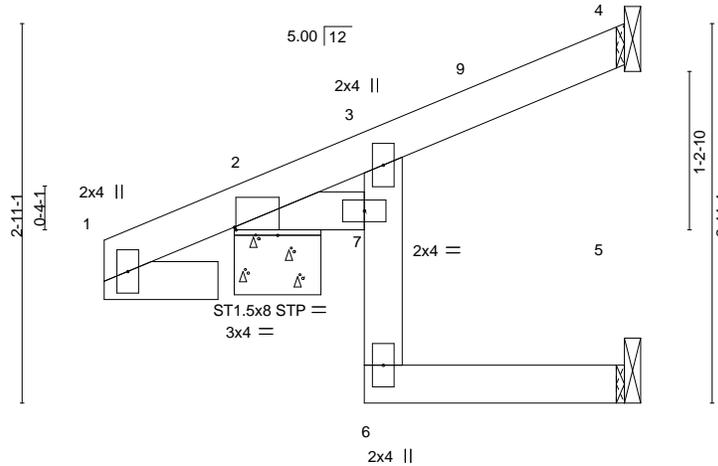


Plate Offsets (X,Y)--	[2:0-0,2,Edge]					PLATES	GRIP		
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL 1.33		TC 0.30	Vert(LL) 0.01	7	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33		BC 0.17	Vert(CT) -0.01	6	>999	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) -0.01	5	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-R						
								Weight: 15 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
3-6: 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 5=Mechanical, 2=0-8-0  
Max Horz 2=129(LC 12)  
Max Uplift 4=-60(LC 12), 2=-217(LC 12)  
Max Grav 4=87(LC 1), 5=40(LC 3), 2=294(LC 1)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 2-11-4 zone;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 3-6-0 tall by 2-0-0 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 60 lb uplift at joint 4 and 217 lb uplift at joint 2.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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Joaquin Velez PE No.68182  
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Chesterfield, MO 63017  
Date:

January 24, 2024

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Job HR0014	Truss E7	Truss Type Jack-Open	Qty 38	Ply 1	Job Reference (optional) T32729101
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:31 2024 Page 1

ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-mSjxefRfCBh2tSQVdHWJwyVefuNR16M4gkhvjUzsChE  
7-0-0 7-0-0

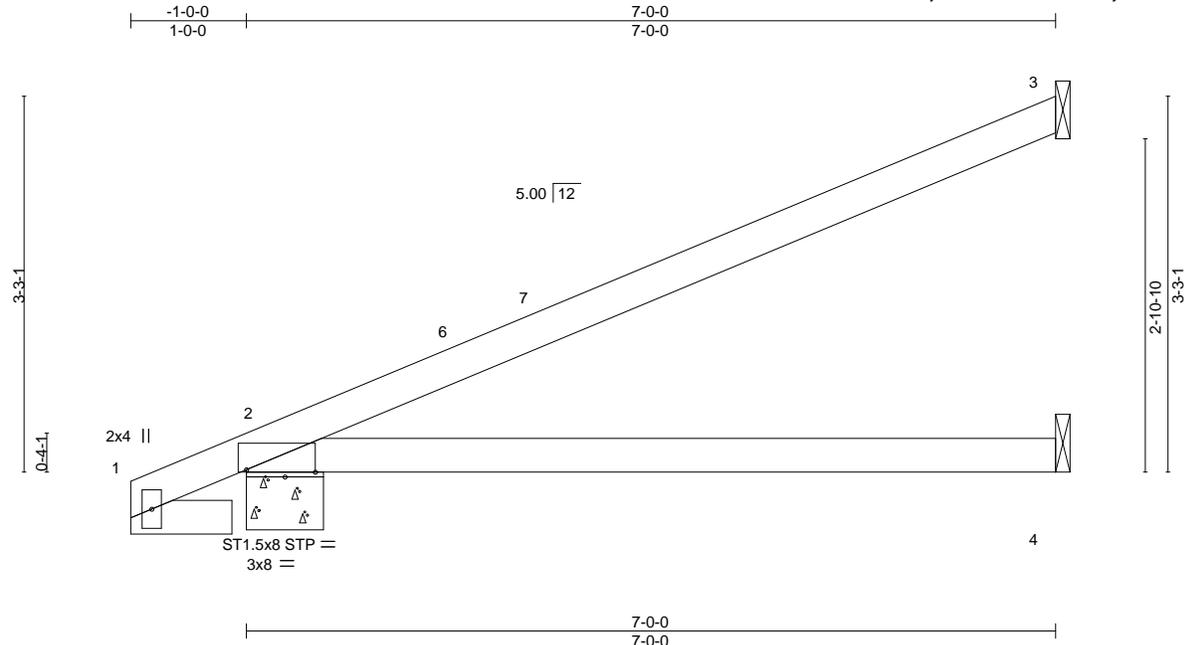


Plate Offsets (X,Y)-- [2:0-7-2,Edge]		CSI.		DEFL.				PLATES	GRIP
LOADING (psf)	SPACING- 2-0-0	TC	0.91	in	(loc)	l/defl	L/d	MT20	244/190
TCLL 30.0	Plate Grip DOL 1.33	BC	0.74	Vert(LL)	0.16 2-4	>482	240		
TCDL 15.0	Lumber DOL 1.33	WB	0.00	Vert(CT)	-0.21 2-4	>383	180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH		Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014							Weight: 25 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
 Max Horz 2=245(LC 12)  
 Max Uplift 3=-209(LC 12), 2=-282(LC 12), 4=-6(LC 12)  
 Max Grav 3=263(LC 1), 2=495(LC 1), 4=125(LC 3)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 6-11-4 zone;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 3-6-0 tall by 2-0-0 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 209 lb uplift at joint 3, 282 lb uplift at joint 2 and 6 lb uplift at joint 4.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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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:

January 24, 2024

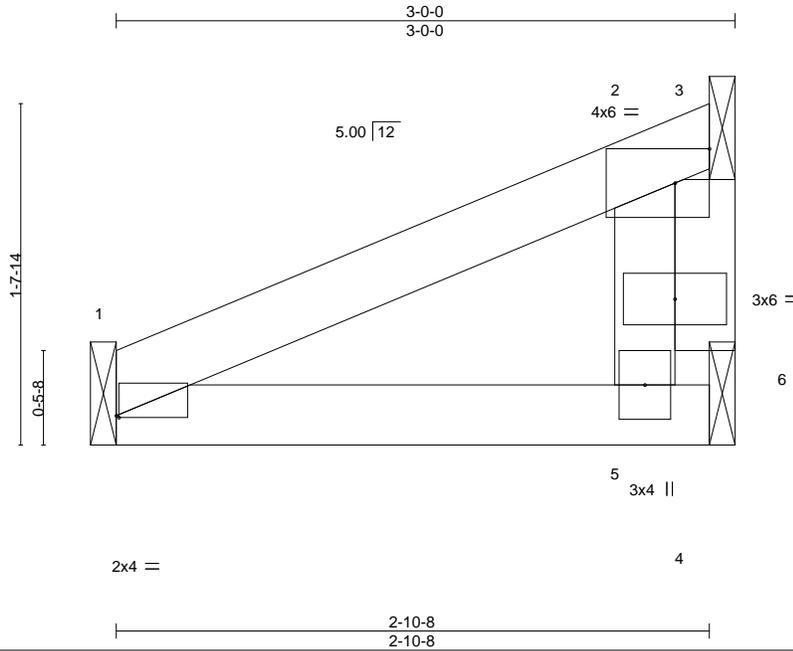
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.          Chesterfield, MO 63017          314.434.1200 / MiTek-US.com</p>
--	--

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	EJ01	Monopitch	12	1	T32729102

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:32 2024 Page 1

ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-EfHJs?SlzUpvVc?hB?1YTA1xEIs6mZbEuORTFxsChD



Scale = 1:11.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.41	Vert(LL)	0.01	1-5	>999	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.13	Vert(CT)	0.01	1-5	>999		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.00	Horz(CT)	-0.00	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 12 lb	FT = 20%
	Code FBC2023/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

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

**REACTIONS.** (size) 1=Mechanical, 5=Mechanical, 2=Mechanical  
Max Horz 5=94(LC 12)  
Max Uplift 1=-113(LC 12), 5=-35(LC 10), 2=-159(LC 12)  
Max Grav 1=144(LC 1), 5=63(LC 3), 2=124(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
BOT CHORD 1-5=-79/288

- NOTES-** (8)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; porch left 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 3-6-0 tall by 2-0-0 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 113 lb uplift at joint 1, 35 lb uplift at joint 5 and 159 lb uplift at joint 2.
  - 7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 8) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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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:

January 24, 2024

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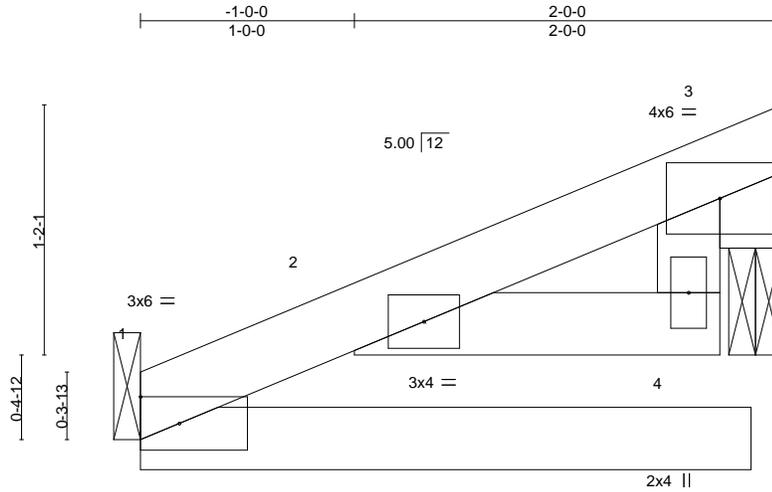
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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job HR0014	Truss EJ02	Truss Type Monopitch	Qty 10	Ply 1	Job Reference (optional) T32729103
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:33 2024 Page 1  
ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-irrh3LTwkoxm6maukiYn?Na9GiBDV0rN72A0oNzsChC



Scale = 1:10.7

VERTICAL SUPPORT OF FREE END OF CHORD IS REQUIRED.

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.33	TC	0.20	Vert(LL)	0.01 2 >999 240	MT20	244/190		
TCDL	15.0	Lumber DOL	1.33	BC	0.21	Vert(CT)	-0.01 2 >999 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00 1 n/a n/a				
BCDL	10.0	Code	FBC2023/TP12014	Matrix-SH						Weight: 13 lb FT = 20%	

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 1=Mechanical, 4=Mechanical  
Max Horz 4=77(LC 12)  
Max Uplift 1=63(LC 12), 4=85(LC 12)  
Max Grav 1=138(LC 1), 4=151(LC 1)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; 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 3-6-0 tall by 2-0-0 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 63 lb uplift at joint 1 and 85 lb uplift at joint 4.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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Chesterfield, MO 63017  
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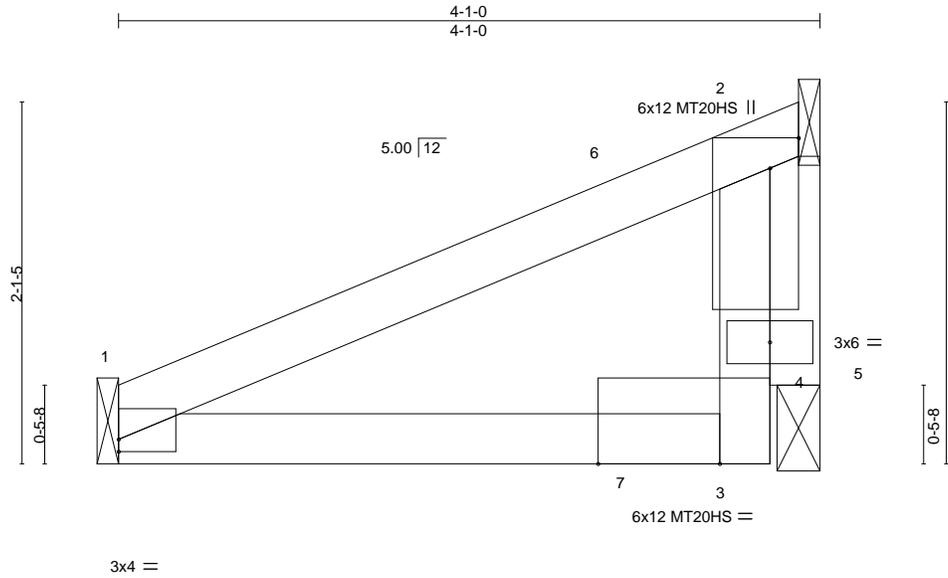
Job HR0014	Truss EJ03	Truss Type Monopitch	Qty 4	Ply 1	Job Reference (optional) T32729104
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Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:34 2024 Page 1

ID:9GJ?lLrRdGLJ2VbHLXnt4OzLxQi-A1P3HhUYV63ckw94IP30Yb7GL6XmENAXMiwZKpzsChB



Scale = 1:13.3

Plate Offsets (X,Y)-- [1:0-0-0,0-0-14], [2:Edge,0-2-0], [3:0-8-8,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.33	TC 0.50	Vert(LL)	0.02 1-3	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.25	Vert(CT)	0.02 1-3	>999	180	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	-0.00 1	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-R						
								Weight: 16 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 2=Mechanical, 5=0-3-0  
Max Horz 5=117(LC 12)  
Max Uplift 1=-175(LC 12), 2=-132(LC 12), 5=-66(LC 12)  
Max Grav 1=196(LC 1), 2=214(LC 1), 5=3(LC 3)

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

- NOTES-** (10)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 0-0-12 to 3-0-12, Zone1 3-0-12 to 3-7-12 zone; porch left 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) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint 1, 132 lb uplift at joint 2 and 66 lb uplift at joint 5.
  - 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 10) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017

Date:

January 24, 2024

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	EJ3	Jack-Open	12	1	

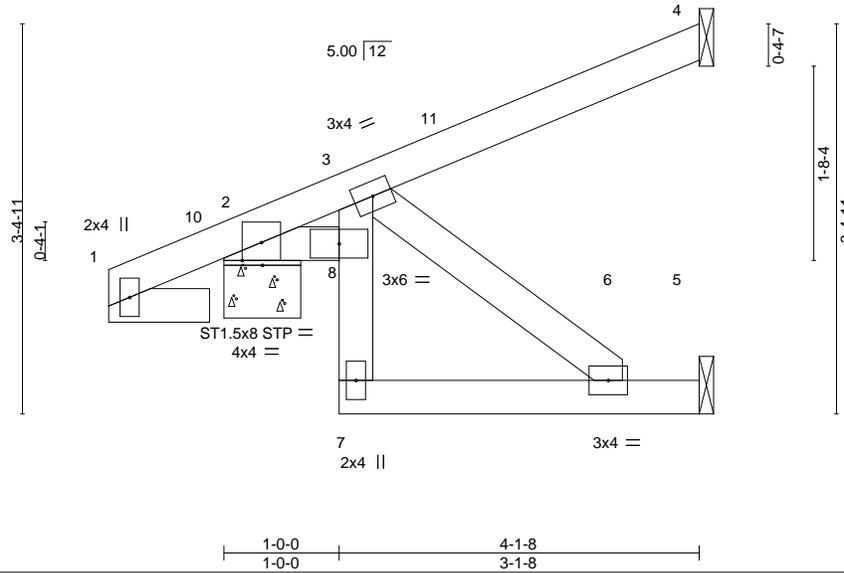
T32729105

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:36 2024 Page 1  
 ID:9GJ?iLrRdGLJ2VbHLXnt4OzLxQi-7QXqhMVo0jJK\_DJSQq6Ud0Cfgy8kiNqp0PgOizsCh9



Scale = 1:19.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL	1.33	TC 0.31	Vert(LL)	-0.01 6-7	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.47	Vert(CT)	-0.01 6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.01 5	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014		Matrix-P					Weight: 22 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 3-7: 2x4 SP No.3  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 8-11-5 oc bracing: 2-8.

**REACTIONS.** (size) 4=Mechanical, 5=Mechanical, 2=0-8-0  
 Max Horz 2=161(LC 12)  
 Max Uplift 4=96(LC 12), 5=12(LC 9), 2=231(LC 12)  
 Max Grav 4=121(LC 1), 5=78(LC 3), 2=347(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-302/273  
 BOT CHORD 2-8=-443/352

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCCL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 4-0-12 zone;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 3-6-0 tall by 2-0-0 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 96 lb uplift at joint 4, 12 lb uplift at joint 5 and 231 lb uplift at joint 2.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

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Job HR0014	Truss EJ04	Truss Type Monopitch Structural Gable	Qty 4	Ply 1	Job Reference (optional) T32729106
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Builders FirstSource (Tampa, FL),

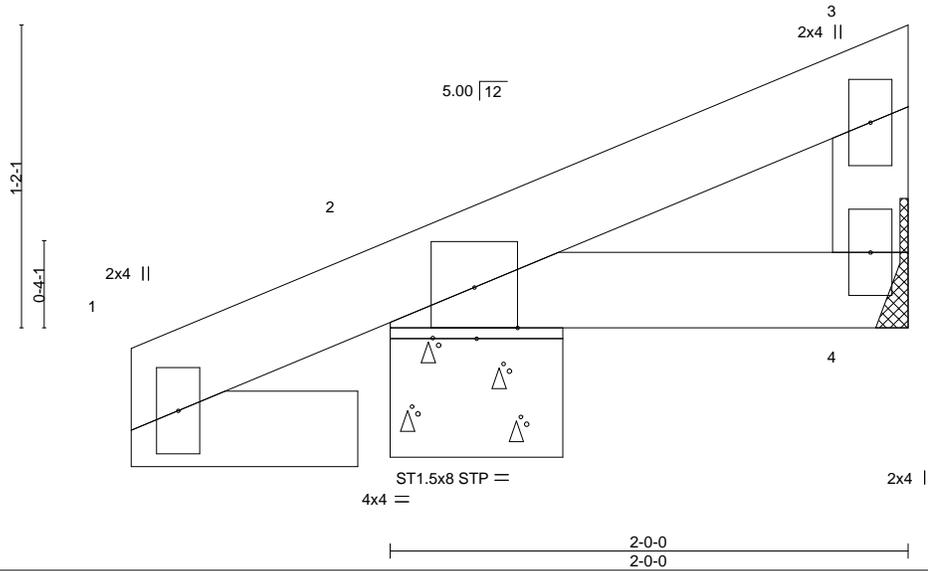
Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:35 2024 Page 1

ID:9GJ?lLrRdGLJ2VbHLXnt4OzLxQi-eDzRU1VAGPBtm3kGs7aF4ofUfWwOzwLgaMf7sGzsChA



Scale = 1:8.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.33	TC 0.27	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.03	Vert(CT)	-0.00	2-4	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 10 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 4=Mechanical, 2=0-8-0  
 Max Horz 2=97(LC 12)  
 Max Uplift 4=-30(LC 9), 2=-176(LC 12)  
 Max Grav 4=70(LC 17), 2=223(LC 1)

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

**NOTES-** (9)

- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 4 and 176 lb uplift at joint 2.
- 9) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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

January 24, 2024

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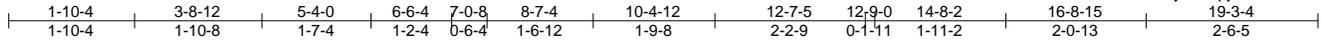
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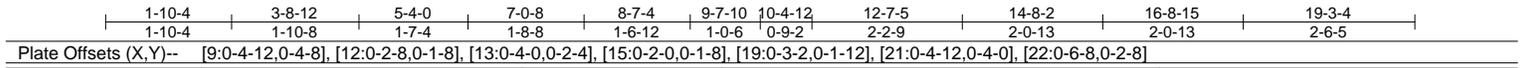
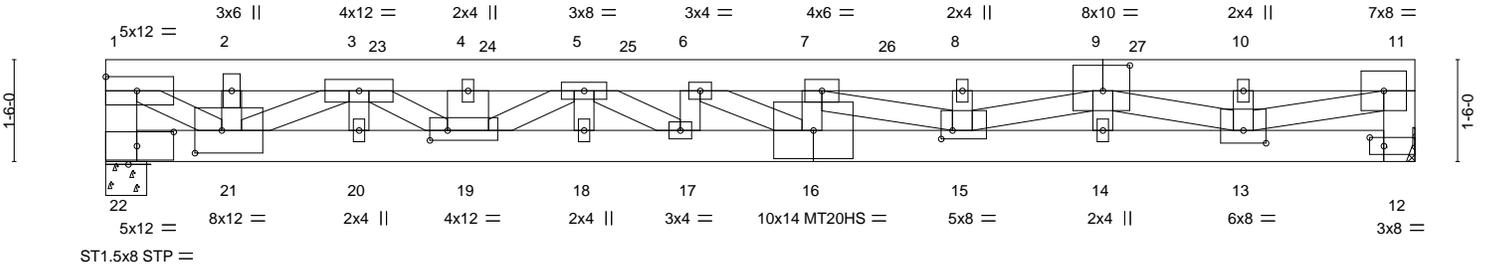
Job HR0014	Truss FG01	Truss Type FLAT GIRDER	Qty 2	Ply 4	Job Reference (optional) T32729107
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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:38 2024 Page 1  
ID:9GJ?LrRdGLJ2VbHLXnt4OzLxQi-3oea62X2YKa2DXTrXF8yirHxpjliA116HKunTbzCh7



Scale = 1:33.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 30.0	Plate Grip DOL	1.00	TC 0.53	Vert(LL)	-0.24	17	>935	360	MT20	244/190
TCDL 15.0	Lumber DOL	1.00	BC 0.83	Vert(CT)	-0.46	17	>496	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.96	Horz(CT)	0.07	12	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-SH	Wind(LL)	0.25	17	>909	240		Weight: 504 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP M 26	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 1-22,11-12: 2x6 SP No.2, 4-19: 2x8 SP 2400F 2.0E 1-21,5-19,5-17: 2x4 SP 2850F 2.0E or 2x4 SP M 31	

**REACTIONS.** (size) 22=0-7-4, 12=Mechanical  
Max Uplift 22=5041(LC 4), 12=1482(LC 5)  
Max Grav 22=13312(LC 1), 12=3729(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-22=-12111/4589, 1-2=-18768/7238, 2-3=-18768/7238, 3-4=-35593/13900,  
4-5=-35593/13900, 5-6=-29401/11518, 6-7=-25162/9869, 7-8=-19669/7740,  
8-9=-19669/7740, 9-10=-7235/2865, 10-11=-7235/2865, 11-12=-3321/1334  
BOT CHORD 21-22=-766/2008, 20-21=-11792/30485, 19-20=-11792/30485, 18-19=-13066/33344,  
17-18=-13066/33344, 16-17=-11518/29401, 15-16=-9886/25210, 14-15=-5423/13726,  
13-14=-5423/13726, 12-13=-363/914  
WEBS 4-19=-4923/2005, 2-21=-4891/1895, 1-21=-7688/19908, 5-18=-188/521, 5-19=-977/2634,  
3-19=-2535/6090, 3-21=-13404/5210, 6-17=-956/2491, 5-17=-4739/1861, 7-16=-918/2410,  
11-13=-2747/6942, 9-13=-7267/2863, 9-15=-2634/6655, 7-15=-6124/2418,  
6-16=-4889/1922

- NOTES-** (14)
- 4-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.

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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

January 24, 2024

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	FG01	FLAT GIRDER	2	4	

T32729107

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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:38 2024 Page 2  
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**NOTES-** (14)

- 10) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5041 lb uplift at joint 22 and 1482 lb uplift at joint 12.
- 12) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5538 lb down and 2409 lb up at 1-10-4, and 2765 lb down and 1203 lb up at 3-8-12, and 5543 lb down and 2412 lb up at 5-4-0 on top chord, and 293 lb down and 127 lb up at 5-3-4, and 112 lb down and 49 lb up at 1-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-24=-200, 11-24=-90, 21-22=-20, 19-21=-55(F=-35), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-5543 19=-293(F) 2=-5538 21=-112(F) 3=-2765
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-24=-185, 11-24=-75, 21-22=-20, 19-21=-50(F=-30), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-4787 19=-253(F) 2=-4783 21=-97(F) 3=-2388
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-24=-140, 11-24=-30, 21-22=-40, 19-21=-62(F=-22), 12-19=-40  
Concentrated Loads (lb)  
Vert: 4=-3527 19=-186(F) 2=-3524 21=-71(F) 3=-1760
- 4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-56, 24-25=54, 25-27=52, 11-27=31, 21-22=-6, 19-21=9(F=15), 12-19=-6  
Concentrated Loads (lb)  
Vert: 4=2412 19=127(F) 2=2409 21=49(F) 3=1203
- 5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-23=-79, 23-24=-58, 24-26=52, 11-26=54, 21-22=-6, 19-21=9(F=15), 12-19=-6  
Concentrated Loads (lb)  
Vert: 4=2412 19=127(F) 2=2409 21=49(F) 3=1203
- 6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-142, 11-24=-32, 21-22=-20, 19-21=-40(F=-20), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-3102 19=-164(F) 2=-3099 21=-63(F) 3=-1547
- 7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-142, 11-24=-32, 21-22=-20, 19-21=-40(F=-20), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-3102 19=-164(F) 2=-3099 21=-63(F) 3=-1547
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-58, 11-24=52, 21-22=-6, 19-21=9(F=15), 12-19=-6  
Concentrated Loads (lb)  
Vert: 4=2333 19=123(F) 2=2331 21=47(F) 3=1164
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-90, 11-24=20, 21-22=-6, 19-21=-2(F=4), 12-19=-6  
Concentrated Loads (lb)  
Vert: 4=682 19=36(F) 2=682 21=14(F) 3=340
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-142, 11-24=-32, 21-22=-20, 19-21=-40(F=-20), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-3102 19=-164(F) 2=-3099 21=-63(F) 3=-1547
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-142, 11-24=-32, 21-22=-20, 19-21=-40(F=-20), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-3102 19=-164(F) 2=-3099 21=-63(F) 3=-1547
- 12) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-24=-140, 11-24=-30, 21-22=-20, 19-21=-36(F=-16), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-2520 19=-133(F) 2=-2517 21=-51(F) 3=-1257
- 13) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-186, 11-24=-76, 21-22=-20, 19-21=-53(F=-33), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-5224 19=-276(F) 2=-5219 21=-106(F) 3=-2606

Continued on page 3

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Job HR0014	Truss FG01	Truss Type FLAT GIRDER	Qty 2	Ply <b>4</b>	Job Reference (optional) T32729107
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:38 2024 Page 3  
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**LOAD CASE(S)** Standard

- 14) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-186, 11-24=-76, 21-22=-20, 19-21=-53(F=-33), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-5224 19=-276(F) 2=-5219 21=-106(F) 3=-2606
- 15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-186, 11-24=-76, 21-22=-20, 19-21=-53(F=-33), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-5224 19=-276(F) 2=-5219 21=-106(F) 3=-2606
- 16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-24=-186, 11-24=-76, 21-22=-20, 19-21=-53(F=-33), 12-19=-20  
Concentrated Loads (lb)  
Vert: 4=-5224 19=-276(F) 2=-5219 21=-106(F) 3=-2606
- 17) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-24=-118, 11-24=-8, 21-22=-6, 19-21=-11(F=-5), 12-19=-6  
Concentrated Loads (lb)  
Vert: 4=-726 19=-38(F) 2=-725 21=-15(F) 3=-362
- 18) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-24=-118, 11-24=-8, 21-22=-6, 19-21=-11(F=-5), 12-19=-6  
Concentrated Loads (lb)  
Vert: 4=-726 19=-38(F) 2=-725 21=-15(F) 3=-362

**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))

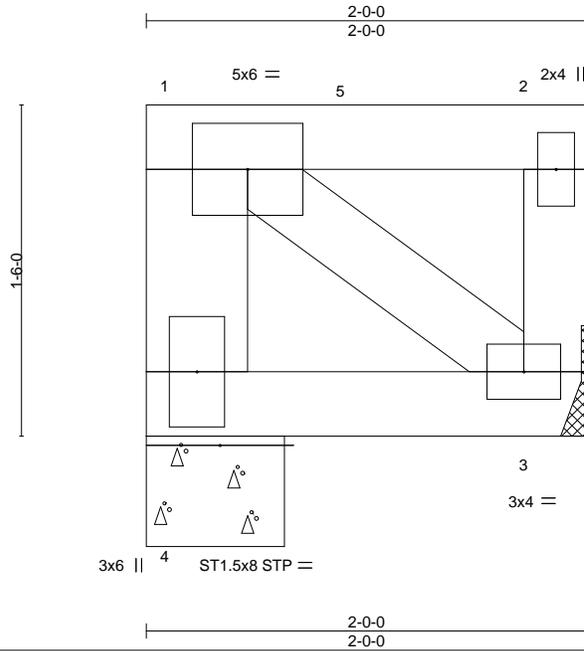
**MiTek®**

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

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	FG02	FLAT GIRDER	2	2	T32729108

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:39 2024 Page 1  
 ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-X?CyKOYhJeivr215zfBFeqBZ7HdvjKGV\_dK?1zsCh6



Scale = 1:10.4

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL	1.00	TC 0.21	Vert(LL)	-0.00 4	>999	360	MT20	244/190
TCDL 15.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	-0.00 4	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P	Wind(LL)	0.00 4	****	240		
								Weight: 24 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 1-4: 2x6 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-7-8, 3=Mechanical  
 Max Uplift 4=-129(LC 8)  
 Max Grav 4=592(LC 1), 3=276(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-4=-576/842, 2-3=-260/260

- NOTES-** (14)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCCL=4.2psf; BCDL=3.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 4.
  - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 312 lb down and 575 lb up at 0-2-12, and 199 lb down and 367 lb up at 1-0-5 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

**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.**

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**MiTek®**

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 Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	
HR0014	FG02	FLAT GIRDER	2	2	T32729108

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:39 2024 Page 2  
 ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-X?CyKOYhJeivrH21zfbFeqBZ7HdvjKGV\_dK?1zsCh6

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 1-2=-200, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-312 5=-199
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 1-2=-185, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-269 5=-172
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-140, 3-4=-40  
 Concentrated Loads (lb)  
 Vert: 1=-199 5=-127
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=99, 3-4=-6  
 Concentrated Loads (lb)  
 Vert: 1=575 5=367
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=99, 3-4=-6  
 Concentrated Loads (lb)  
 Vert: 1=575 5=367
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-171, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-229 5=-146
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-171, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-229 5=-146
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-56, 3-4=-6  
 Concentrated Loads (lb)  
 Vert: 1=136 5=87
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-56, 3-4=-6  
 Concentrated Loads (lb)  
 Vert: 1=136 5=87
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-142, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-175 5=-111
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-142, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-175 5=-111
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-58, 3-4=-6  
 Concentrated Loads (lb)  
 Vert: 1=131 5=84
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-90, 3-4=-6  
 Concentrated Loads (lb)  
 Vert: 1=38 5=24
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-142, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-175 5=-111
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-142, 3-4=-20  
 Concentrated Loads (lb)  
 Vert: 1=-175 5=-111

Continued on page 3

**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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Job	Truss	Truss Type	Qty	Ply	
HR0014	FG02	FLAT GIRDER	2	2	T32729108

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:39 2024 Page 3  
 ID:9GJ?lLrRdGLJ2VbHLXnt4OzLxQi-X?CyKOYhJeivr215zfBFeqBZ7HdvjKGV\_dK?1zsCh6

Job Reference (optional)

**LOAD CASE(S)** Standard

- 16) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
 Uniform Loads (plf)  
     Vert: 1-2=-140, 3-4=-20  
 Concentrated Loads (lb)  
     Vert: 1=-142 5=-90
- 17) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
     Vert: 1-2=-186, 3-4=-20  
 Concentrated Loads (lb)  
     Vert: 1=-294 5=-188
- 18) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
     Vert: 1-2=-186, 3-4=-20  
 Concentrated Loads (lb)  
     Vert: 1=-294 5=-188
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
     Vert: 1-2=-186, 3-4=-20  
 Concentrated Loads (lb)  
     Vert: 1=-294 5=-188
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
     Vert: 1-2=-186, 3-4=-20  
 Concentrated Loads (lb)  
     Vert: 1=-294 5=-188
- 21) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
     Vert: 1-2=-135, 3-4=-6  
 Concentrated Loads (lb)  
     Vert: 1=-41 5=-26
- 22) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
     Vert: 1-2=-102, 3-4=-6  
 Concentrated Loads (lb)  
     Vert: 1=-41 5=-26

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	FG03	FLOOR	4	2	T32729109

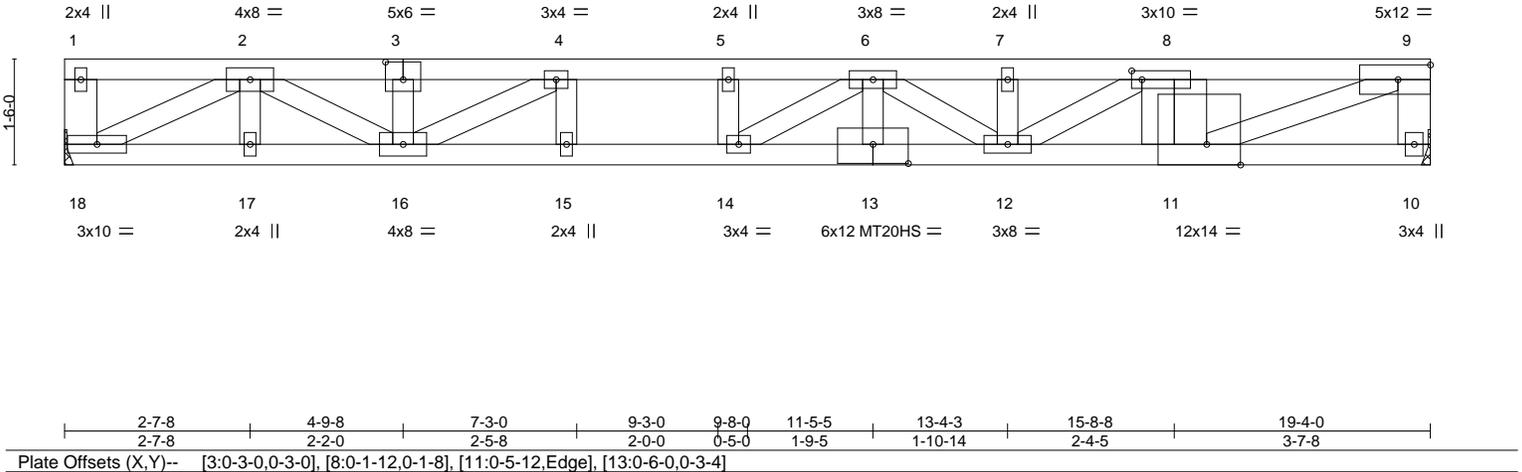
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:40 2024 Page 1

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Scale = 1:32.5



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 0.78	Vert(LL)	-0.34	13-14	>662	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.96	Vert(CT)	-0.55	13-14	>410	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.99	Horz(CT)	0.07	10	n/a		
BCDL 5.0	Code	FBC2023/TPI2014	Matrix-SH						
								Weight: 194 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 3-9: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 1-18,9-10,8-11: 2x6 SP No.2, 9-11: 2x4 SP No.1	

**REACTIONS.** (size) 18=Mechanical, 10=Mechanical  
Max Grav 18=1837(LC 1), 10=4008(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5576/0, 3-4=-5576/0, 4-5=-8511/0, 5-6=-8511/0, 6-7=-10529/0, 7-8=-10529/0, 8-9=-10163/0, 9-10=-3812/0  
BOT CHORD 17-18=0/3317, 16-17=0/3317, 15-16=0/8511, 14-15=0/8511, 13-14=0/10281, 12-13=0/10281, 11-12=0/10163, 10-11=0/403  
WEBS 4-15=0/781, 5-14=0/419, 2-18=-3572/0, 2-16=0/2587, 4-16=-3469/0, 8-11=-342/98, 9-11=0/10359, 6-13=0/405, 6-14=-2387/0, 7-12=-262/0, 6-12=0/453, 8-12=-12/412

- NOTES-** (8)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 3 rows staggered at 0-2-0 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 floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - Refer to girder(s) for truss to truss connections.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3391 lb down at 15-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.\*

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-9=-120, 10-18=-10

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:

January 24, 2024

Continued on page 2

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**MiTek®**

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314.434.1200 / MiTek-US.com

Job HR0014	Truss FG03	Truss Type FLOOR	Qty 4	Ply <b>2</b>	Job Reference (optional)	T32729109
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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:40 2024 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 11=-3391(F)

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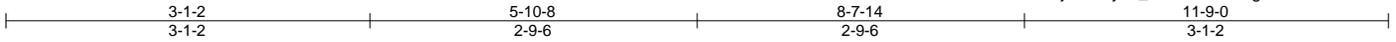
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Job HR0014	Truss FG04	Truss Type FLOOR	Qty 2	Ply 2	Job Reference (optional) T32729110
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:41 2024 Page 1  
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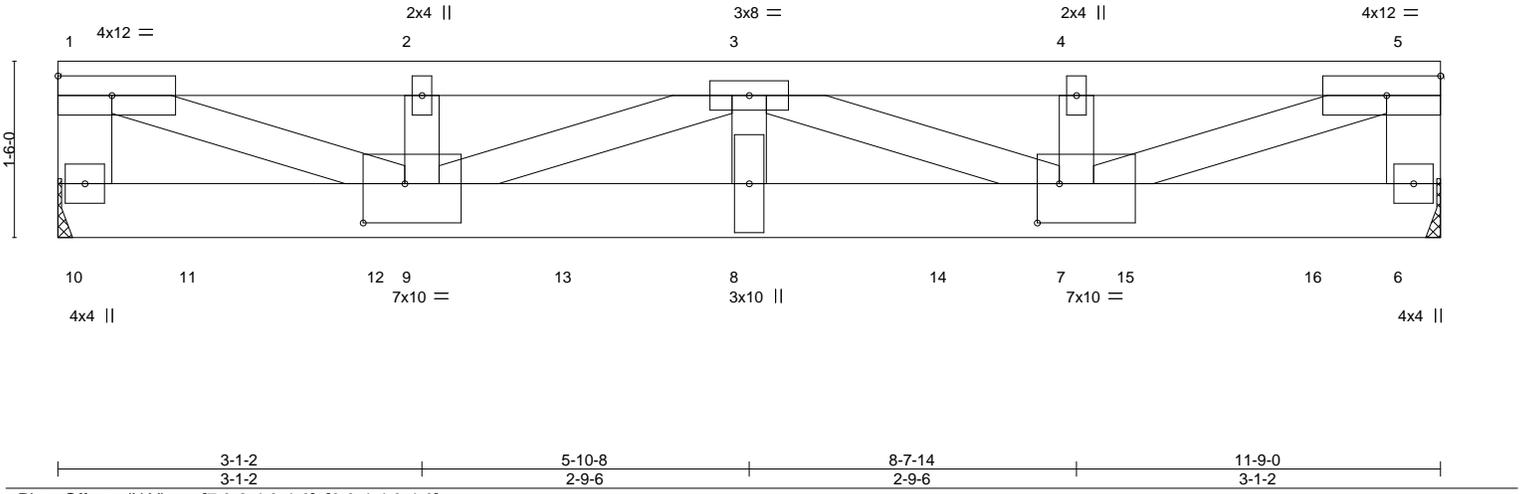


Plate Offsets (X,Y)--	[7:0-2-4,0-4-0], [9:0-4-4,0-4-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.43	Vert(LL) -0.11 8 >999 360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.49	Vert(CT) -0.18 8 >758 240		
BCLL 0.0	Rep Stress Incr NO	WB 0.84	Horz(CT) 0.02 6 n/a n/a		
BCDL 5.0	Code FBC2023/TPI2014	Matrix-SH			
				Weight: 134 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins, except end verticals.
BOT CHORD 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 1-10,5-6: 2x6 SP No.2, 3-8,2-9,4-7: 2x4 SP No.3	

**REACTIONS.** (size) 10=Mechanical, 6=Mechanical  
Max Grav 10=3401(LC 1), 6=3487(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-10=-2434/0, 1-2=-6188/0, 2-3=-6188/0, 3-4=-6146/0, 4-5=-6146/0, 5-6=-2415/0  
BOT CHORD 9-10=0/645, 8-9=0/8733, 7-8=0/8733, 6-7=0/650  
WEBS 1-9=0/5954, 3-8=0/1668, 5-7=0/5905, 3-9=-2746/0, 3-7=-2790/0

- NOTES-** (6)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Refer to girder(s) for truss to truss connections.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 774 lb down at 1-2-6, 774 lb down at 2-9-8, 774 lb down at 4-4-10, 774 lb down at 5-11-12, 774 lb down at 7-6-14, and 774 lb down at 9-2-0, and 775 lb down at 10-9-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-5=-120, 6-10=-10  
Concentrated Loads (lb)  
Vert: 8=-774(F) 11=-774(F) 12=-774(F) 13=-774(F) 14=-774(F) 15=-774(F) 16=-775(F)

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Date:

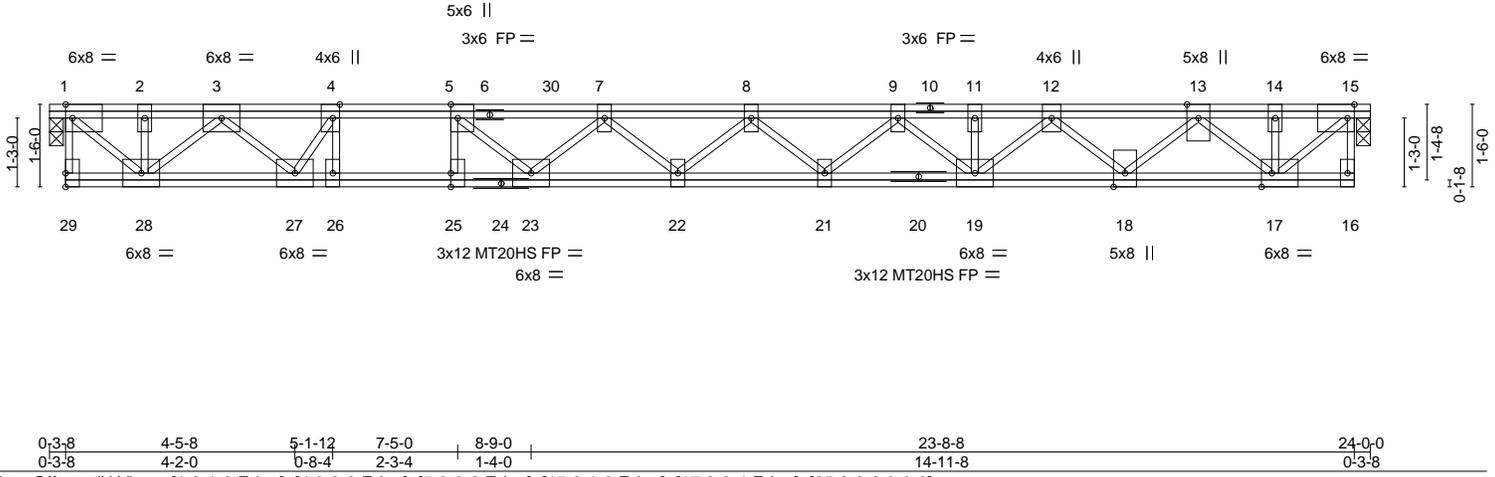
January 24, 2024

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Job	Truss	Truss Type	Qty	Ply		T32729111
HR0014	FG05	Floor Girder	4	1		

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:45 2024 Page 1  
ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-M9ZDaRcRvUS3ZcVBRDmbUv42mY7cJEP8uw4fDhzsCh0



LOADING (psf)	SPACING-	1-7-2	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 40.0	Plate Grip DOL	1.00	TC 0.93	Vert(LL)	-0.37	22	>754	360	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.87	Vert(CT)	-0.60	22	>464	240	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.86	Horz(CT)	-0.09	15	n/a	n/a		
BCDL 5.0	Code FBC2023/TPI2014		Matrix-SH							

Weight: 190 lb FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)  
WEBS 2x4 SP No.3(flat) \*Except\*  
1-28,15-17: 2x4 SP No.2(flat)

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-0, 15=0-3-0  
Max Grav 1=1445(LC 1), 15=1509(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1536/0, 2-3=-1536/0, 3-4=-4111/0, 4-5=-5397/0, 5-7=-6604/0, 7-8=-7033/0, 8-9=-6607/0, 9-11=-5624/0, 11-12=-5624/0, 12-13=-3986/0, 13-14=-1576/0, 14-15=-1576/0  
BOT CHORD 27-28=0/2797, 26-27=0/5397, 25-26=0/5397, 23-25=0/5397, 22-23=0/7193, 21-22=0/6909, 19-21=0/6268, 18-19=0/4918, 17-18=0/3030  
WEBS 1-28=0/2075, 15-17=0/2130, 3-28=-1693/0, 3-27=0/1802, 13-17=-1951/0, 13-18=0/1310, 12-18=-1279/0, 12-19=0/947, 9-19=-865/0, 9-21=0/465, 8-21=-413/0, 4-26=0/1551, 4-27=-2521/0, 7-23=-858/0, 5-23=0/1708, 5-25=-1077/0

**NOTES-** (8)  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are MT20 plates unless otherwise indicated.  
3) All plates are 3x6 MT20 unless otherwise indicated.  
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.  
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 346 lb down at 9-1-8, and 196 lb down at 20-8-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.  
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).  
8) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 16-29=-8, 1-15=-96  
Concentrated Loads (lb)  
Vert: 13=-196(F) 30=-346(F)

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Chesterfield, MO 63017  
Date:

January 24, 2024

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Job HR0014	Truss FG06	Truss Type Floor Girder	Qty 2	Ply 1	Job Reference (optional) T32729112
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:46 2024 Page 1  
ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-qL7cond4goavAm4N?xHq17dPdxfl2tSI6aqCI7zsCh?

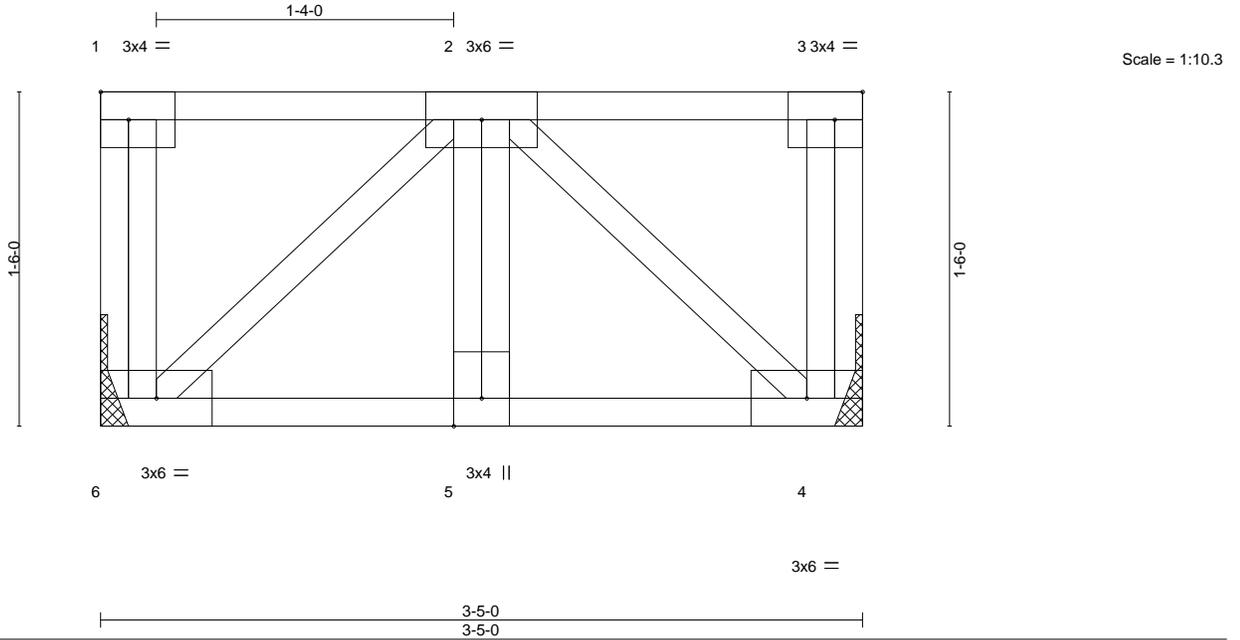


Plate Offsets (X,Y)--	[3:0-1-8,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	1-7-2	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.16	Vert(LL)	-0.00	5	>999	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.11	Vert(CT)	-0.00	5	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.10	Horz(CT)	0.00	4	n/a		
BCDL 5.0	Code	FBC2023/TPI2014	Matrix-P						
								Weight: 27 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 6=Mechanical, 4=Mechanical  
Max Grav 6=346(LC 1), 4=346(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
BOT CHORD 5-6=0/323, 4-5=0/323  
WEBS 2-6=-428/0, 2-4=-428/0

**NOTES-** (5)  
1) Refer to girder(s) for truss to truss connections.  
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
3) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 364 lb down at 1-8-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.  
4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).  
5) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-6=-8, 1-3=-96  
Concentrated Loads (lb)  
Vert: 2=-364(F)

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Chesterfield, MO 63017  
Date:

January 24, 2024

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Job HR0014	Truss FG07	Truss Type Floor Girder	Qty 2	Ply 1	Job Reference (optional) T32729113
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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:47 2024 Page 1  
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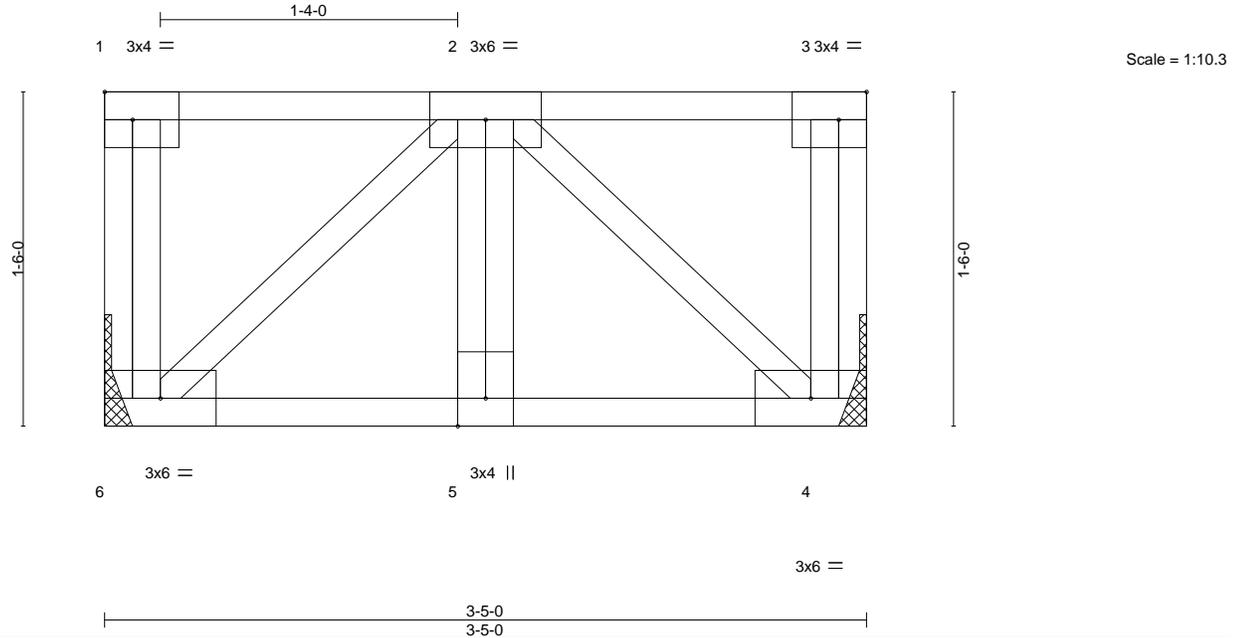


Plate Offsets (X,Y)--	[3:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-2	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/def L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.17	Vert(LL) -0.00 6 >999 360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.06	Vert(CT) -0.00 5 >999 240		
BCLL 0.0	Rep Stress Incr NO	WB 0.05	Horz(CT) 0.00 4 n/a n/a		
BCDL 5.0	Code FBC2023/TPI2014	Matrix-P		Weight: 27 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=Mechanical, 4=Mechanical  
Max Grav 6=196(LC 1), 4=196(LC 1)

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

- NOTES-** (5)
- 1) Refer to girder(s) for truss to truss connections.
  - 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 3) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down at 1-8-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 5) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-6=-8, 1-3=-96  
Concentrated Loads (lb)  
Vert: 2=-64(B)

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Chesterfield, MO 63017  
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January 24, 2024

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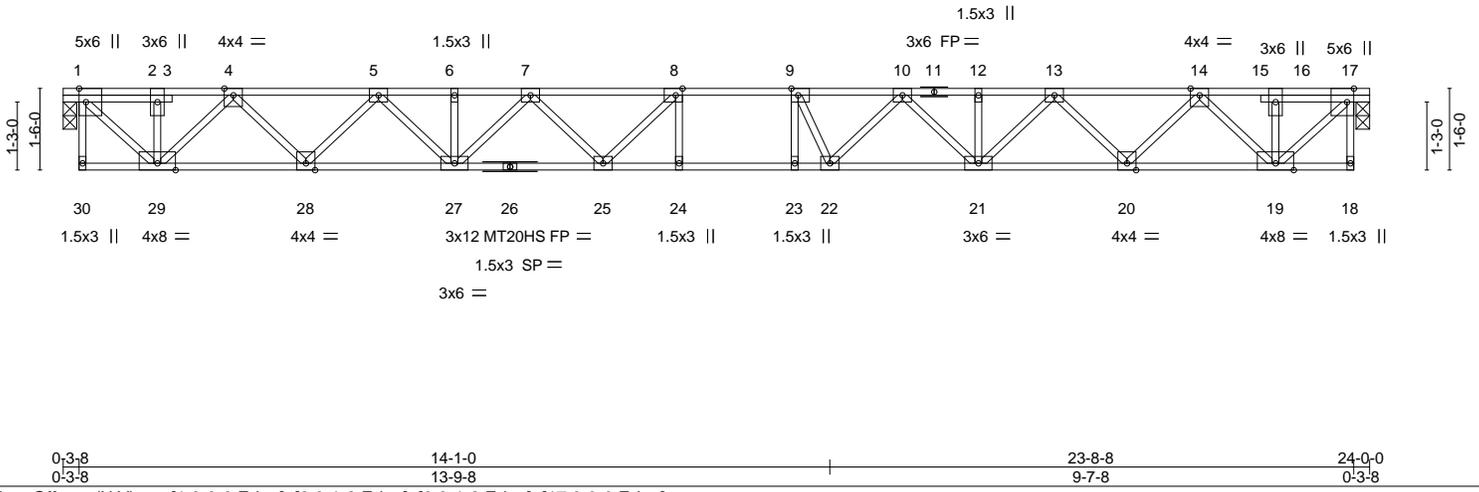
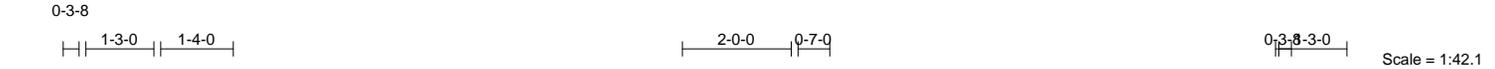
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	FL01	FLOOR	54	1	T32729114

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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:48 2024 Page 1  
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LOADING (psf)	SPACING-	1-7-2	CSI.	DEFL.	in (loc)	l/def	L/d	PLATES	GRIP	
TCLL 40.0	Plate Grip DOL	1.00	TC 0.40	Vert(LL)	-0.34	24	>813	360	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.75	Vert(CT)	-0.56	24	>501	240	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	YES	WB 0.76	Horz(CT)	-0.09	17	n/a	n/a		
BCDL 5.0	Code	FBC2023/TPI2014	Matrix-SH							
									Weight: 133 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31 (flat) *Except* 1-3,15-17: 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 17=0-3-0  
Max Grav 1=1206(LC 1), 17=1206(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1155/0, 2-4=-1155/0, 4-5=-2934/0, 5-6=-4224/0, 6-7=-4224/0, 7-8=-4906/0, 8-9=-5081/0, 9-10=-4933/0, 10-12=-4232/0, 12-13=-4232/0, 13-14=-2933/0, 14-16=-1155/0, 16-17=-1155/0  
BOT CHORD 28-29=0/2164, 27-28=0/3681, 25-27=0/4696, 24-25=0/5081, 23-24=0/5081, 22-23=0/5081, 21-22=0/4668, 20-21=0/3680, 19-20=0/2165  
WEBS 1-29=0/1597, 17-19=0/1597, 4-29=-1417/0, 4-28=0/1105, 5-28=-1073/0, 5-27=0/763, 7-27=-662/0, 7-25=0/452, 8-25=-538/102, 14-19=-1417/0, 14-20=0/1103, 13-20=-1074/0, 13-21=0/775, 10-21=-611/0, 10-22=0/553, 9-23=-218/353, 9-22=-678/113

- NOTES-** (7)
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - The Fabrication Tolerance at joint 26 = 11%
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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Chesterfield, MO 63017  
Date:

January 24, 2024

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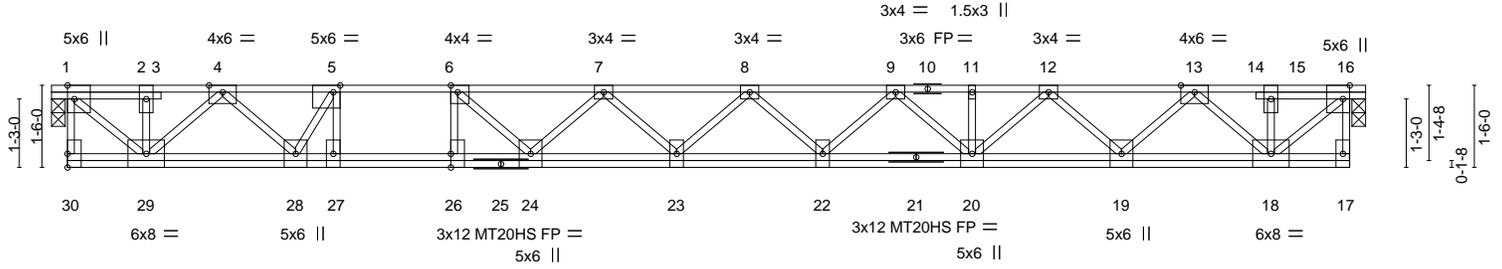
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	FL02	Floor	4	1	T32729115

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:50 2024 Page 1  
ID:9GJ?tlRdGLJ2VbHLXnt4OzLxQi-i6N6d9gai04LlNN9EmMmBznthZta\_Wjt1BoQtuzsCgx



0-3-8-3-0  
Scale = 1:41.9



0-3-8	4-5-8	5-1-12	7-5-0	8-9-0	11-5-0	23-8-8	24-0-0
0-3-8	4-2-0	0-8-4	2-3-4	1-4-0	2-8-0	12-3-8	0-3-8

Plate Offsets (X, Y)-- [1:0-3-0,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [16:0-3-0,Edge], [26:0-3-0,0-0-0]

LOADING (psf)	SPACING-	1-7-2	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.98	Vert(LL)	-0.37	23	>748	360	MT20 244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.69	Vert(CT)	-0.61	23	>461	240	MT20HS 187/143
BCLL 0.0	Rep Stress Incr	YES	WB 0.79	Horz(CT)	-0.11	16	n/a	n/a	
BCDL 5.0	Code FBC2023/TPI2014		Matrix-SH						Weight: 163 lb FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-10: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 16=0-3-0  
Max Grav 1=1206(LC 1), 16=1206(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1229/0, 2-4=-1229/0, 4-5=-3076/0, 5-6=-4048/0, 6-7=-4913/0, 7-8=-5272/0, 8-9=-5124/0, 9-11=-4399/0, 11-12=-4399/0, 12-13=-3057/0, 13-15=-1201/0, 15-16=-1201/0  
BOT CHORD 28-29=0/2214, 27-28=0/4048, 26-27=0/4048, 24-26=0/4048, 23-24=0/5246, 22-23=0/5324, 20-22=0/4890, 19-20=0/3836, 18-19=0/2256  
WEBS 1-29=0/1661, 16-18=0/1623, 4-29=-1352/0, 4-28=0/1209, 13-18=-1448/0, 13-19=0/1124, 12-19=-1093/0, 12-20=0/772, 9-20=-674/0, 9-22=0/329, 8-22=-280/0, 5-27=0/1474, 5-28=-1990/0, 6-26=-1014/0, 7-24=-510/0, 6-24=0/1278

- NOTES-** (6)
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 3x6 MT20 unless otherwise indicated.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com</p>
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Job HR0014	Truss FL03	Truss Type Floor	Qty 2	Ply 1	Job Reference (optional) T32729116
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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:51 2024 Page 1  
ID:9GJ7tLrRdGLJ2VbHLXnt4OzLxQi-AIxVrVhCUKCCHXyLoUt?kAK73y96j6U1GrXzPKzsCgw



Scale = 1:16.8

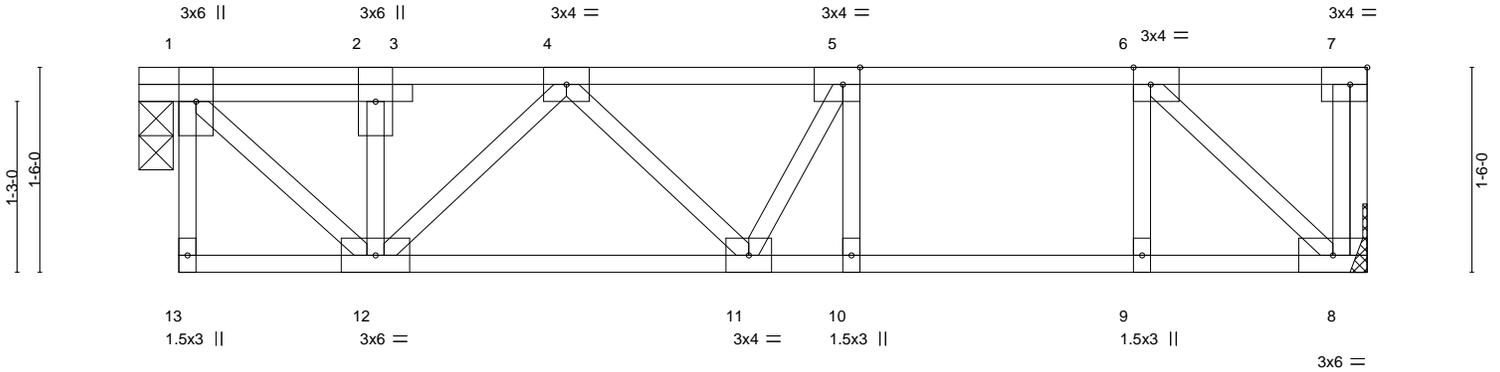


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge]					
<b>LOADING</b> (psf)	<b>SPACING</b> - 1-7-2	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.69	Vert(LL) -0.09 10 >999 360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.93	Vert(CT) -0.14 10 >733 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.25	Horz(CT) -0.03 8 n/a n/a		
BCDL 5.0	Code FBC2023/TPI2014	Matrix-SH		Weight: 53 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 9-10.

**REACTIONS.** (size) 1=0-3-0, 8=Mechanical  
Max Grav 1=440(LC 1), 8=440(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-372/0, 2-4=-372/0, 4-5=-648/0, 5-6=-553/0  
BOT CHORD 11-12=0/634, 10-11=0/553, 9-10=0/553, 8-9=0/553  
WEBS 1-12=0/515, 4-12=-367/0, 6-8=-745/0, 5-10=-277/0

- NOTES-** (6)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Refer to girder(s) for truss to truss connections.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 5) CAUTION, Do not erect truss backwards.
  - 6) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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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:

January 24, 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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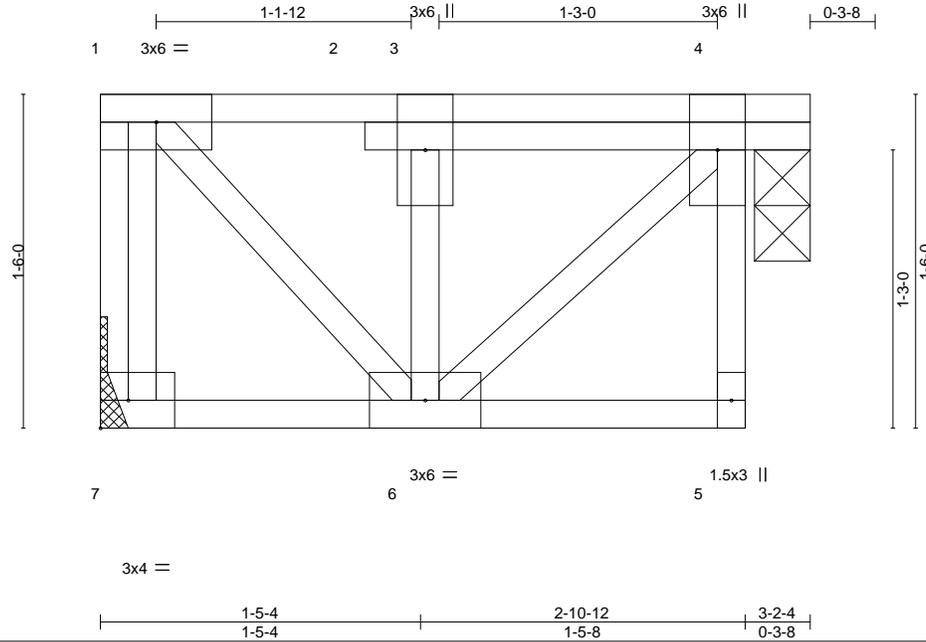
Job HR0014	Truss FL04	Truss Type Floor	Qty 2	Ply 1	Job Reference (optional) T32729117
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Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:51 2024 Page 1

ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-AixVrVhCUKCCCHyLoUt?kAKH\_yNWj9N1GrXzPKzsCgw



Scale = 1:10.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	1-7-2	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.05	Vert(LL)	-0.00	6	>999	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	-0.00	6	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	4	n/a		
BCDL 5.0	Code	FBC2023/TPI2014	Matrix-P					Weight: 24 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-2-4 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 7=Mechanical, 4=0-3-0  
 Max Grav 7=140(LC 1), 4=140(LC 1)

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

**NOTES-** (5)

- 1) Refer to girder(s) for truss to truss connections.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 3) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 4) CAUTION, Do not erect truss backwards.
- 5) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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

January 24, 2024

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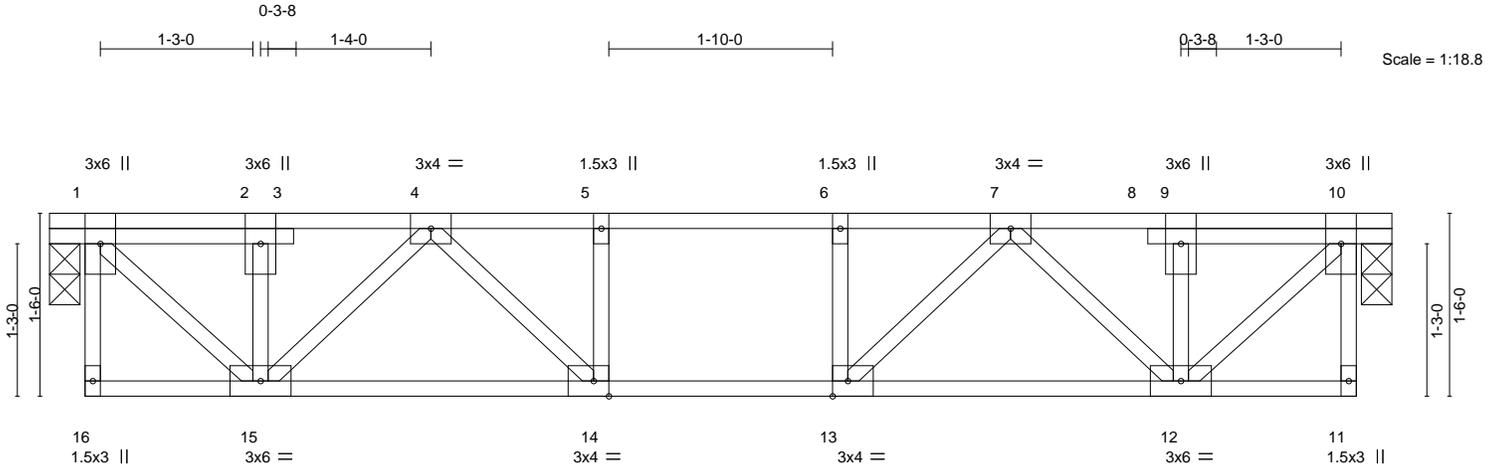
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	FL05	Floor	2	1	T32729118

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:53 2024 Page 1  
ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-7h2FGBiT0xSwWr6kvvTpbPYGm\_XB?pKj904UDzsCgu



0-3-8	10-8-8	11-0-0			
0-3-8	10-5-0	0-3-8			
Plate Offsets (X,Y)--	[13:0-1-8,Edge], [14:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-2	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.32	Vert(LL) -0.04 12-13 >999 360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.36	Vert(CT) -0.05 14-15 >999 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.32	Horz(CT) -0.01 10 n/a n/a		
BCDL 5.0	Code FBC2023/TPI2014	Matrix-SH		Weight: 64 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 10=0-3-0  
Max Grav 1=533(LC 1), 10=533(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-486/0, 2-4=-489/0, 4-5=-980/0, 5-6=-980/0, 6-7=-980/0, 7-9=-489/0, 9-10=-486/0  
BOT CHORD 14-15=0/787, 13-14=0/980, 12-13=0/787  
WEBS 1-15=0/672, 10-12=0/672, 4-15=-423/0, 4-14=0/349, 7-12=-423/0, 7-13=0/349

- NOTES-** (4)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 3) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 4) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

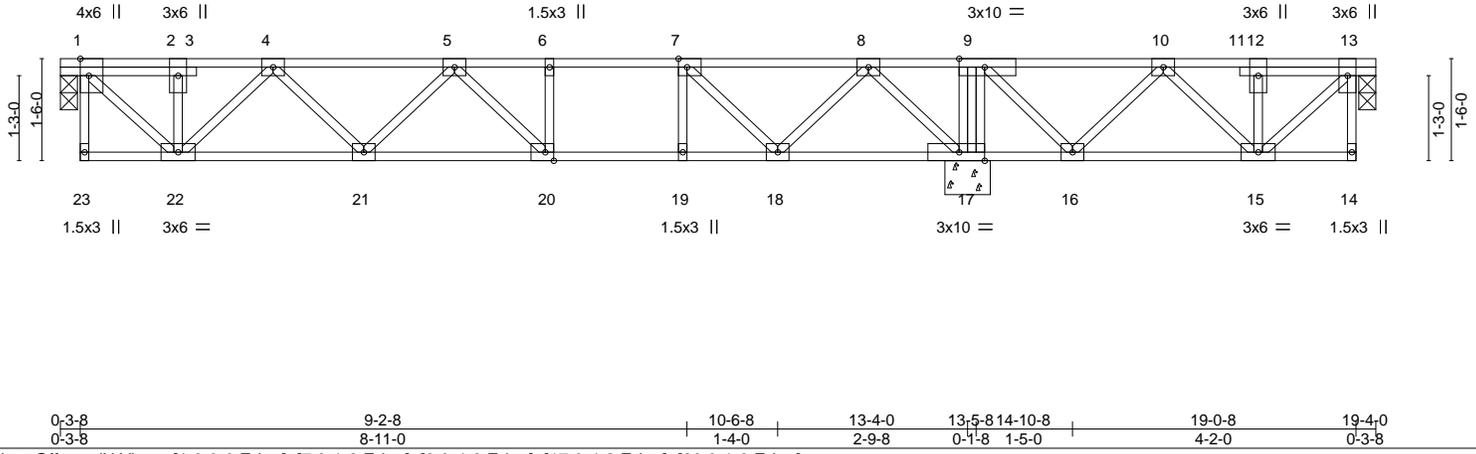
January 24, 2024

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Job HR0014	Truss FL06	Truss Type Floor	Qty 4	Ply 1	Job Reference (optional) T32729119
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:54 2024 Page 1  
ID:9GJ?tlRdGLJ2VbHLXnt4OzLxQi-btcdTWj5nFbn8\_hwTcQiMpyd6ABywrR4Typmd0fzscgT



LOADING (psf)	SPACING-	CS.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-2	TC 0.76	in (loc) l/defl L/d	MT20	244/190
TCDL 20.0	Plate Grip DOL 1.00	BC 0.92	Vert(LL) -0.12 20-21 >999 360		
BCLL 0.0	Lumber DOL 1.00	WB 0.38	Vert(CT) -0.19 20-21 >825 240		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.02 17 n/a n/a		
	Code FBC2023/TPI2014			Weight: 111 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 13=0-3-0, 17=0-8-0  
Max Grav 1=644(LC 3), 13=293(LC 7), 17=1073(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-582/0, 2-4=-582/0, 4-5=-1276/0, 5-6=-1347/0, 6-7=-1347/0, 7-8=-840/0, 8-9=-46/465  
BOT CHORD 21-22=0/1038, 20-21=0/1457, 19-20=0/1347, 18-19=0/1347, 17-18=0/431, 16-17=-433/68, 15-16=-12/333  
WEBS 1-22=0/804, 13-15=0/314, 9-17=-482/0, 4-22=-640/0, 4-21=0/342, 5-21=-260/0, 8-17=-905/0, 8-18=0/628, 7-18=-723/0, 10-16=-350/0, 9-16=0/381

- NOTES-** (6)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - CAUTION, Do not erect truss backwards.
  - "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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Date:

January 24, 2024

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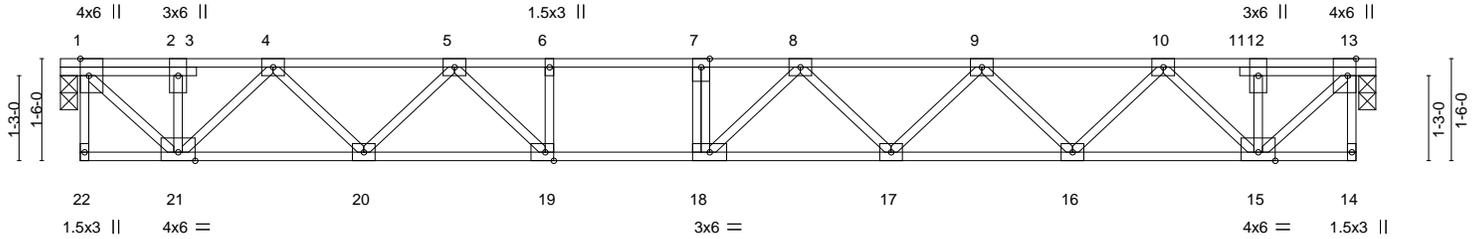
**MiTek®**

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Job	Truss	Truss Type	Qty	Ply		T32729120
HR0014	FL07	Floor	40	1		

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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:55 2024 Page 1  
ID:9GJ?tLRdGLJ2VbHLXnt4OzLxQi-34A?hskjYZjel8G61KxxuUIMaV3fqwdBTVAY5zsCgs



0-3-8	19-0-8	19-4-0
0-3-8	18-9-0	0-3-8

Plate Offsets (X,Y)-- [1:0-3-0,Edge], [13:0-3-0,Edge], [19:0-1-8,Edge]

LOADING (psf)	SPACING-	1-7-2	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.92	Vert(LL)	-0.25 17-18	>892	360	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.99	Vert(CT)	-0.40 17-18	>561	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.60	Horz(CT)	-0.05 13	n/a	n/a		
BCDL 5.0	Code FBC2023/TPI2014		Matrix-SH					Weight: 107 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-13: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3(flat)	2-2-0 oc bracing: 18-19,17-18.

**REACTIONS.** (size) 1=0-3-0, 13=0-3-0  
Max Grav 1=965(LC 1), 13=965(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-910/0, 2-4=-910/0, 4-5=-2196/0, 5-6=-3165/0, 6-7=-3165/0, 7-8=-3165/0,  
8-9=-3011/0, 9-10=-2213/0, 10-12=-912/0, 12-13=-912/0  
BOT CHORD 20-21=0/1681, 19-20=0/2727, 18-19=0/3165, 17-18=0/3224, 16-17=0/2741, 15-16=0/1675  
WEBS 1-21=0/1258, 13-15=0/1260, 4-21=-1083/0, 4-20=0/740, 5-20=-762/0, 5-19=0/786,  
6-19=-395/0, 10-15=-1072/0, 10-16=0/773, 9-16=-758/0, 9-17=0/389, 8-17=-315/0,  
8-18=-284/274

- NOTES-** (5)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 5) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

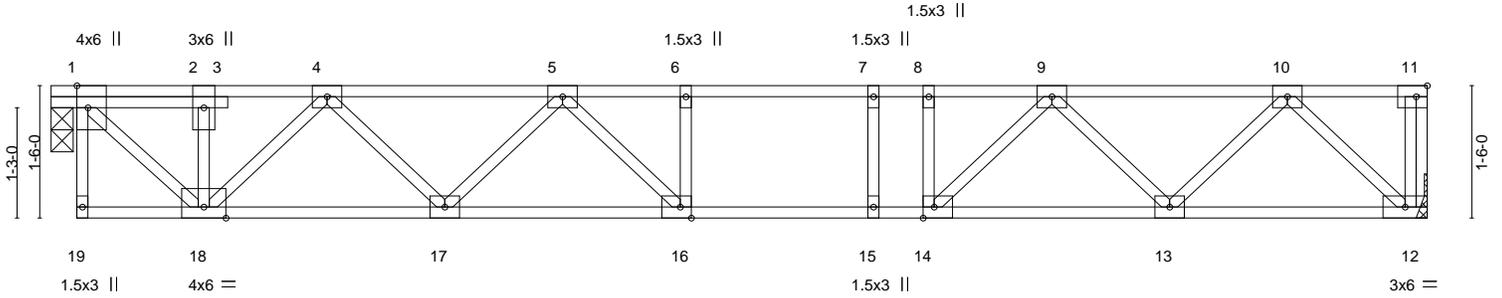
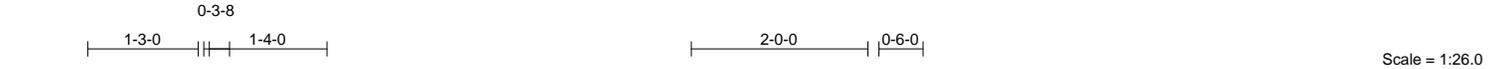
January 24, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply	
HR0014	FL08	Floor	14	1	T32729121

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:56 2024 Page 1  
ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-XGkNuCILJsrVNIrIb1SARE1x4zswOJ7mQ7Fk5YzsCgr



0-3-8	10-0-0	15-7-0
0-3-8	9-8-8	5-7-0
Plate Offsets (X,Y)--	[1:0-3-0,Edge], [11:0-1-8,Edge], [14:0-1-8,Edge], [16:0-1-8,Edge]	

LOADING (psf)	SPACING-	1-7-2	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.86	Vert(LL)	-0.20	16-17	>909	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.95	Vert(CT)	-0.28	16-17	>641		
BCLL 0.0	Rep Stress Incr	YES	WB 0.48	Horz(CT)	-0.03	12	n/a		
BCDL 5.0	Code	FBC2023/TPI2014	Matrix-SH						
								Weight: 86 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 12=Mechanical  
Max Grav 1=782(LC 1), 12=782(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-722/0, 2-4=-722/0, 4-5=-1679/0, 5-6=-2090/0, 6-7=-2090/0, 7-8=-2090/0, 8-9=-2090/0, 9-10=-1255/0  
BOT CHORD 17-18=0/1315, 16-17=0/2002, 15-16=0/2090, 14-15=0/2090, 13-14=0/1737, 12-13=0/778  
WEBS 1-18=0/998, 4-18=-832/0, 4-17=0/522, 5-17=-465/0, 10-12=-1069/0, 10-13=0/686, 9-13=-693/0, 9-14=0/642, 8-14=-282/0

- NOTES-** (7)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 6) CAUTION, Do not erect truss backwards.
  - 7) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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Chesterfield, MO 63017  
Date:

January 24, 2024

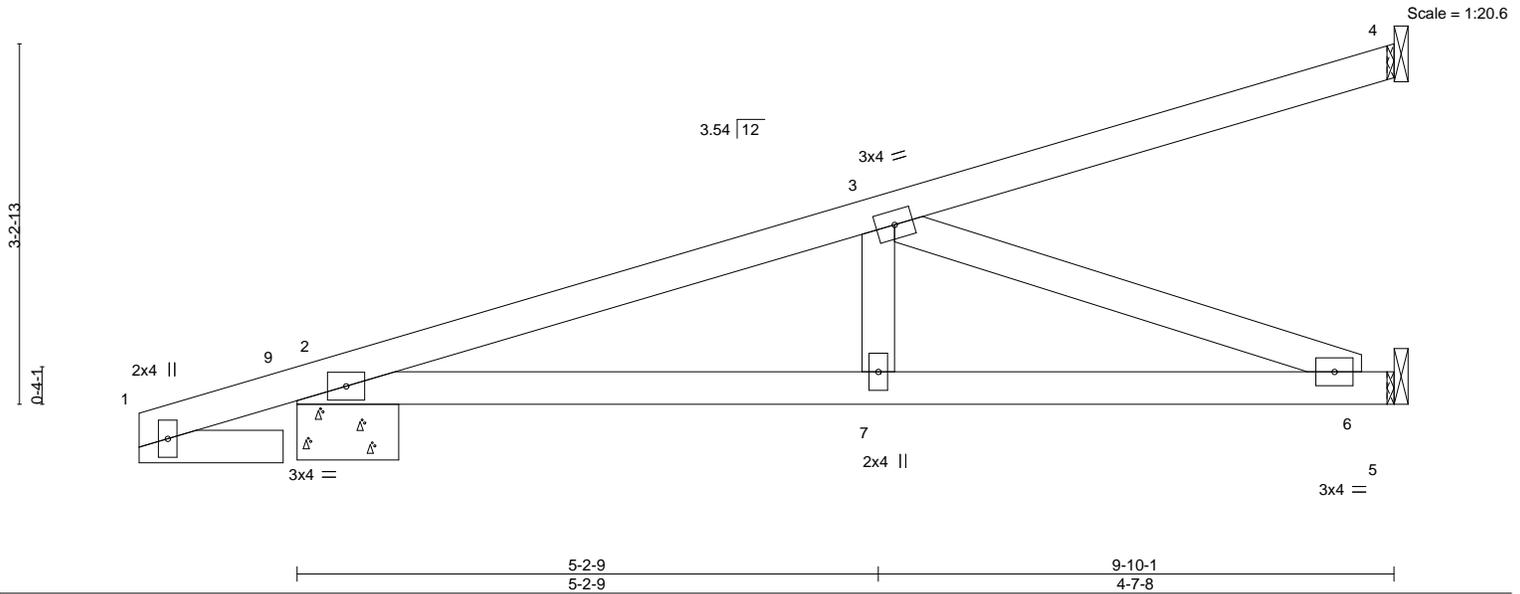
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply		T32729122
HR0014	H7	Diagonal Hip Girder	4	1		

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:57 2024 Page 1

ID:9GJ?1LrRdGLJ2VbHLXnt4OzLxQi-?Slm5Ymz4AzM?SQV8l\_P\_Ra64NHl7kSven\_Hd\_zsCgq



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.84	Vert(LL) 0.05	6-7	>999	240	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.60	Vert(CT) -0.10	6-7	>999	180		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.53	Horz(CT) 0.02	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH					Weight: 43 lb	FT = 20%
	Code FBC2023/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-10-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-10-15, 5=Mechanical  
Max Horz 2=294(LC 8)  
Max Uplift 4=-293(LC 8), 2=-338(LC 8), 5=-202(LC 8)  
Max Grav 4=402(LC 13), 2=598(LC 1), 5=481(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1227/424  
BOT CHORD 2-7=-639/1146, 6-7=-639/1146  
WEBS 3-6=-1219/680, 3-7=0/266

- NOTES-** (8)
- Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCCL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 293 lb uplift at joint 4, 338 lb uplift at joint 2 and 202 lb uplift at joint 5.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - \* This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-9=-90  
Trapezoidal Loads (plf)  
Vert: 9=0(F=45, B=45)-to-4=-221(F=-66, B=-66), 2=-2(F=9, B=9)-to-5=-49(F=-15, B=-15)

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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:

January 24, 2024

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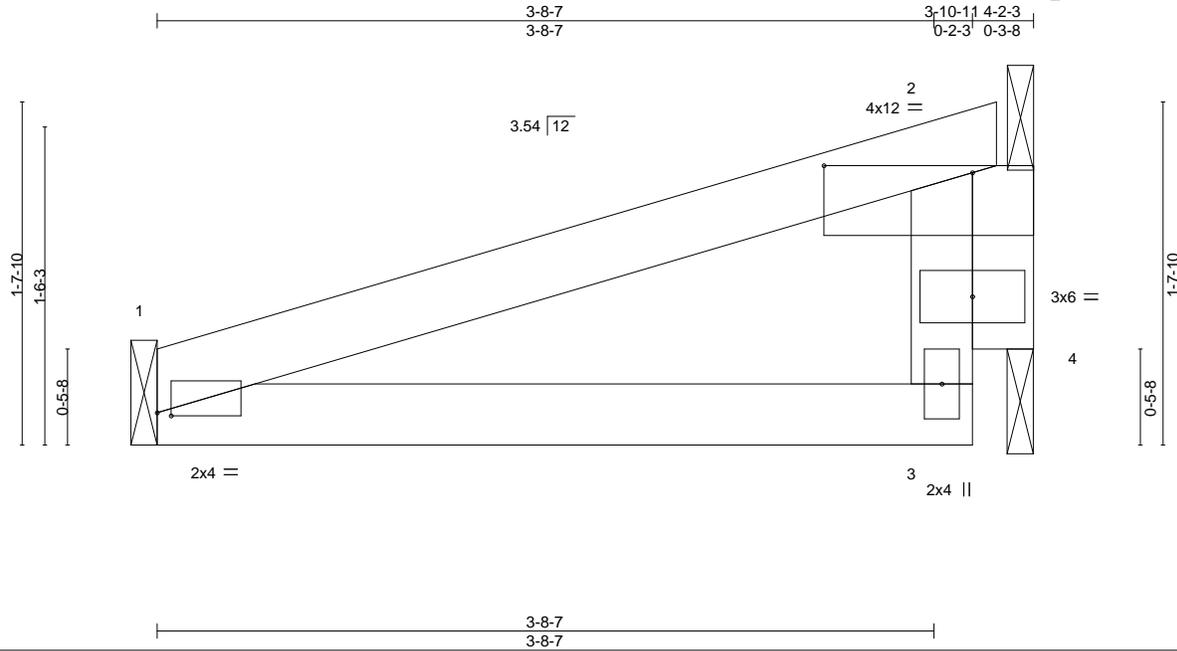
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	HJ01	Roof Special Girder	8	1	T32729123

Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:58 2024 Page 1  
 ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-Tfs8JumbrU5Dcc\_hiSveWf6SonkrsJ13tRkr9QzsCgp



Scale = 1:10.9

Plate Offsets (X,Y)--	[1:0-0-13,0-0-3], [2:0-8-8,0-0-6]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/def L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL 1.33	TC 0.14	Vert(LL) 0.03 1-3 >999 240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.16	Vert(CT) 0.03 1-3 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00 2 n/a n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-P		Weight: 15 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-2-3 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 1=Mechanical, 2=Mechanical, 4=0-1-8  
 Max Horz 4=61(LC 7)  
 Max Uplift 1=-160(LC 7), 2=-72(LC 8), 4=-82(LC 4)  
 Max Grav 1=65(LC 3), 2=103(LC 1), 4=60(LC 3)

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

- NOTES-** (11)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); porch left 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 160 lb uplift at joint 1, 72 lb uplift at joint 2 and 82 lb uplift at joint 4.
  - 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 11) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33  
 Trapezoidal Loads (plf)  
 Vert: 1=0(F=45, B=45)-to-2=-84(F=3, B=3), 1=0(F=10, B=10)-to-3=-19(F=1, B=1)

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 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 Date:

January 24, 2024

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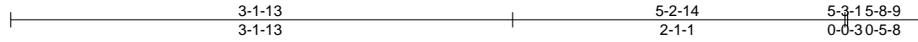
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	HJ03	Roof Special Girder	4	1	T32729124

Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:48:59 2024 Page 1

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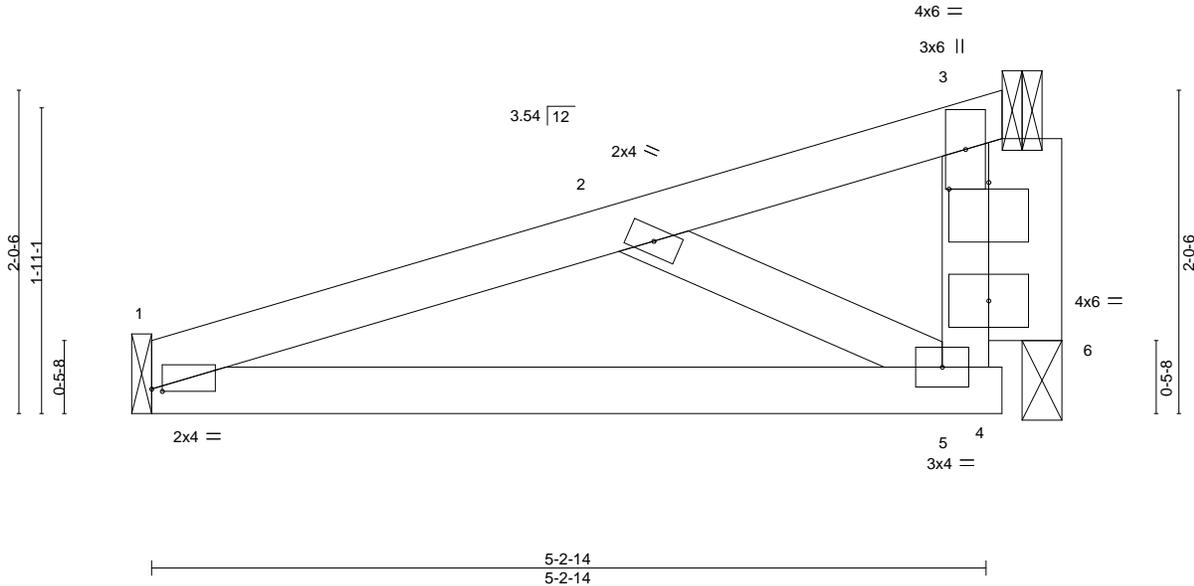


Plate Offsets (X,Y)--	[1:0-0-13,0-0-3], [3:0-3-0,0-0-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL	1.33	TC 0.10	Vert(LL)	0.09 1-5	>642	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.31	Vert(CT)	0.09 1-5	>697	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 25 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x6 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 6=0-3-0, 3=Mechanical  
 Max Horz 6=69(LC 7)  
 Max Uplift 1=191(LC 7), 6=171(LC 8), 3=78(LC 8)  
 Max Grav 1=118(LC 1), 6=136(LC 1), 3=107(LC 1)

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

- NOTES-** (10)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); porch left 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 191 lb uplift at joint 1, 171 lb uplift at joint 6 and 78 lb uplift at joint 3.
  - 8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 10) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33  
 Trapezoidal Loads (plf)  
 Vert: 1=0(F=45, B=45)-to-3=-115(F=-12, B=-12), 1=0(F=10, B=10)-to-4=-27(F=-3, B=-3)

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.

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 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 Date:

January 24, 2024

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	HJ3	Diagonal Hip Girder	4	1	T32729125

Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:01 2024 Page 1

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Scale = 1:19.6

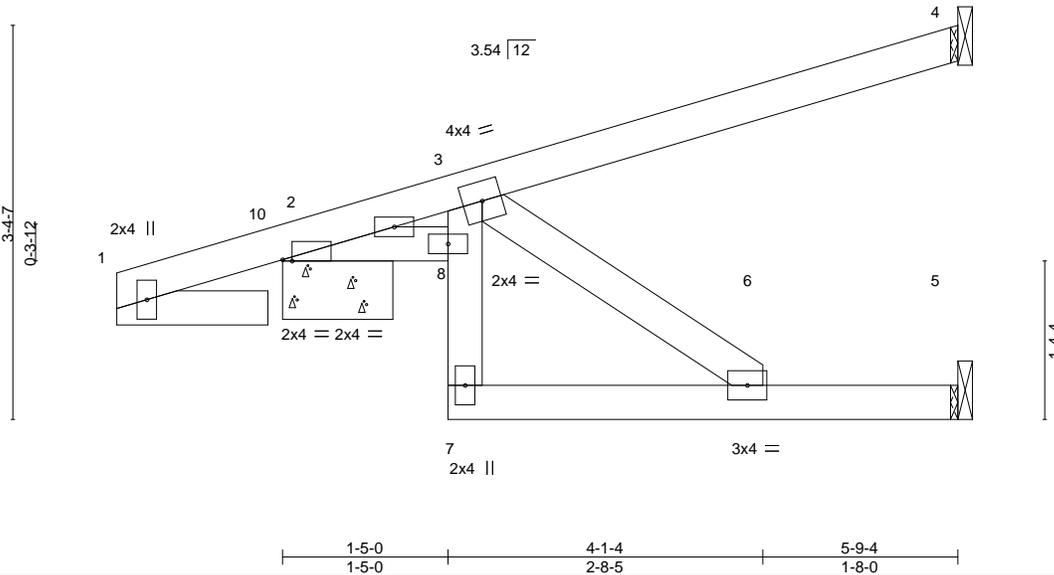


Plate Offsets (X,Y)--	[2:0-1-0,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL	1.33	TC 0.36	Vert(LL)	0.03	6-7	>999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.41	Vert(CT)	-0.05	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	-0.01	4	n/a		
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-SH						
								Weight: 28 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-9-4 oc purlins.
BOT CHORD	2x4 SP No.2 *Except* 3-7: 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3		
OTHERS	2x4 SP No.3		

**REACTIONS.** (size) 4=Mechanical, 5=Mechanical, 2=0-11-5  
 Max Horz 5=121(LC 8)  
 Max Uplift 4=-132(LC 8), 5=-36(LC 8), 2=-202(LC 8)  
 Max Grav 4=184(LC 1), 5=109(LC 3), 2=312(LC 1)

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

- NOTES-** (8)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); 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 3-6-0 tall by 2-0-0 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 132 lb uplift at joint 4, 36 lb uplift at joint 5 and 202 lb uplift at joint 2.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 8) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33

Uniform Loads (plf)  
 Vert: 1-10=-90  
 Trapezoidal Loads (plf)  
 Vert: 10=0(F=45, B=45)-to-4=-130(F=-20, B=-20), 7=-8(F=6, B=6)-to-5=-29(F=-4, B=-4), 2=-2(F=9, B=9)-to-8=-8(F=6, B=6)

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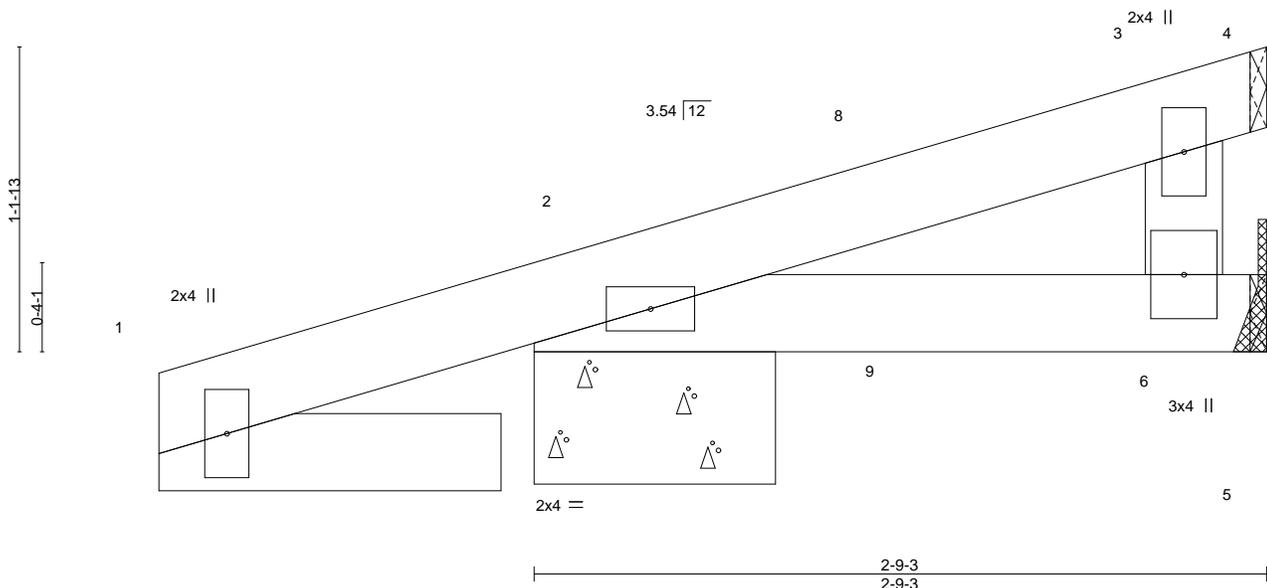
Joaquin Velez PE No.68182  
 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 Date:

January 24, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply		T32729126
HR0014	HJ04	Roof Special Girder	2	1		
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,						Job Reference (optional)

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:00 2024 Page 1  
 ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-Q1zukaosN5Lwsv84qtX6b4CmkaRIKDFMKIDxEJzsCgn



Scale = 1:8.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL	1.33	TC 0.31	Vert(LL)	-0.00 2-6	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.07	Vert(CT)	-0.00 2-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.02	Horz(CT)	0.00	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 13 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-10-15, 6=Mechanical  
 Max Horz 2=103(LC 8)  
 Max Uplift 2=-299(LC 8), 6=-55(LC 5)  
 Max Grav 2=359(LC 1), 6=112(LC 1)

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

- NOTES-** (11)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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.
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 299 lb uplift at joint 6.
  - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 14 lb down and 7 lb up at 1-5-0, and 14 lb down and 7 lb up at 1-5-0 on top chord, and 9 lb down and 5 lb up at 1-5-0, and 9 lb down and 5 lb up at 1-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 11) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33  
 Uniform Loads (plf)  
 Vert: 1-4=-90, 2-5=-20  
 Concentrated Loads (lb)  
 Vert: 8=-28(F=-14, B=-14) 9=-18(F=-9, B=-9)

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

January 24, 2024

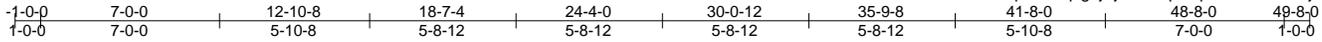
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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Job HR0014	Truss T01	Truss Type HIP GIRDER	Qty 2	Ply 4	Job Reference (optional) T32729127
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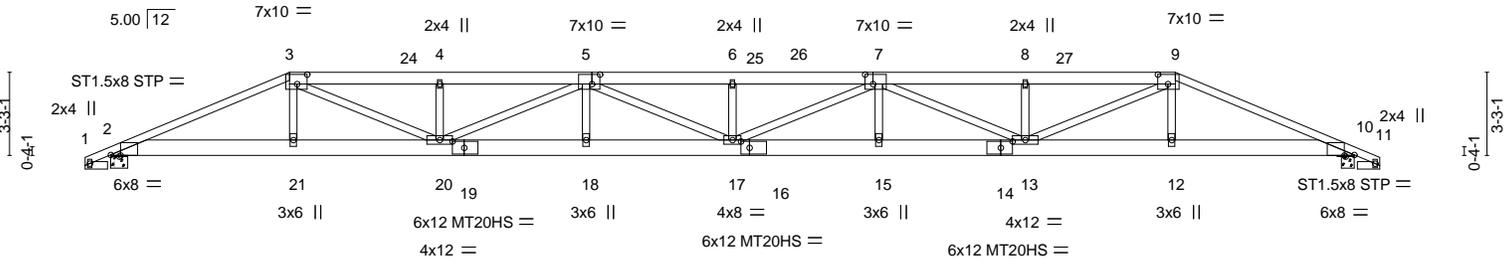
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:03 2024 Page 1

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Scale = 1:89.7



	7-0-0	12-10-8	18-7-4	24-4-0	30-0-12	35-9-8	41-8-0	48-8-0		
	7-0-0	5-10-8	5-8-12	5-8-12	5-8-12	5-8-12	5-10-8	7-0-0		
Plate Offsets (X,Y)--	[2:0-4-10,Edge],		[3:0-4-12,0-4-8],	[5:0-3-12,0-4-8],	[7:0-3-12,0-4-8],	[9:0-4-12,0-4-8],	[10:0-4-10,Edge],	[14:0-5-8,0-3-0],	[16:0-4-0,0-3-0],	[19:0-5-8,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL	1.33	TC 0.60	Vert(LL)	0.86	17	>671	240	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.28	Vert(CT)	-1.09	17	>530	180	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.82	Horz(CT)	0.12	10	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-SH						
									Weight: 1339 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 1-3,9-11: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 10=0-6-0  
 Max Horz 2=111(LC 7)  
 Max Uplift 2=-3661(LC 8), 10=-3645(LC 8)  
 Max Grav 2=6333(LC 13), 10=6314(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-15406/8684, 3-4=-22092/12732, 4-5=-22088/12728, 5-6=-28156/16262,  
 6-7=-28156/16262, 7-8=-22178/12780, 8-9=-22182/12784, 9-10=-15524/8752  
 BOT CHORD 2-21=-7852/14213, 20-21=-7883/14288, 18-20=-15450/27196, 17-18=-15450/27196,  
 15-17=-15477/27213, 13-15=-15477/27213, 12-13=-7961/14339, 10-12=-7930/14264  
 WEBS 3-21=-590/1422, 3-20=-5083/8772, 4-20=-1376/1022, 5-20=-5646/3284, 5-18=-155/609,  
 5-17=-664/1129, 6-17=-1105/854, 7-17=-638/1081, 7-15=-155/609, 7-13=-5595/3256,  
 8-13=-1376/1022, 9-13=-5055/8729, 9-12=-590/1422

- NOTES-** (12)
- 4-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, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 oc.  
 Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3661 lb uplift at joint 2 and 3645 lb

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:

January 24, 2024

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 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job HR0014	Truss T01	Truss Type HIP GIRDER	Qty 2	Ply <b>4</b>	Job Reference (optional) T32729127
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:03 2024 Page 2  
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**NOTES-** (12)

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1098 lb down and 554 lb up at 41-8-0, and 1098 lb down and 554 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-3=-90, 3-9=-188(F=-97), 9-11=-90, 2-21=-20, 12-21=-42(F=-22), 10-12=-20  
Concentrated Loads (lb)  
Vert: 21=-706(F) 12=-706(F)

**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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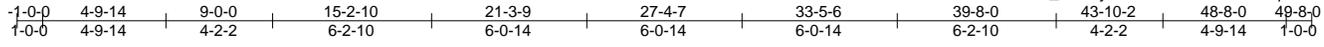
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T02	HIP	2	2	

T32729128

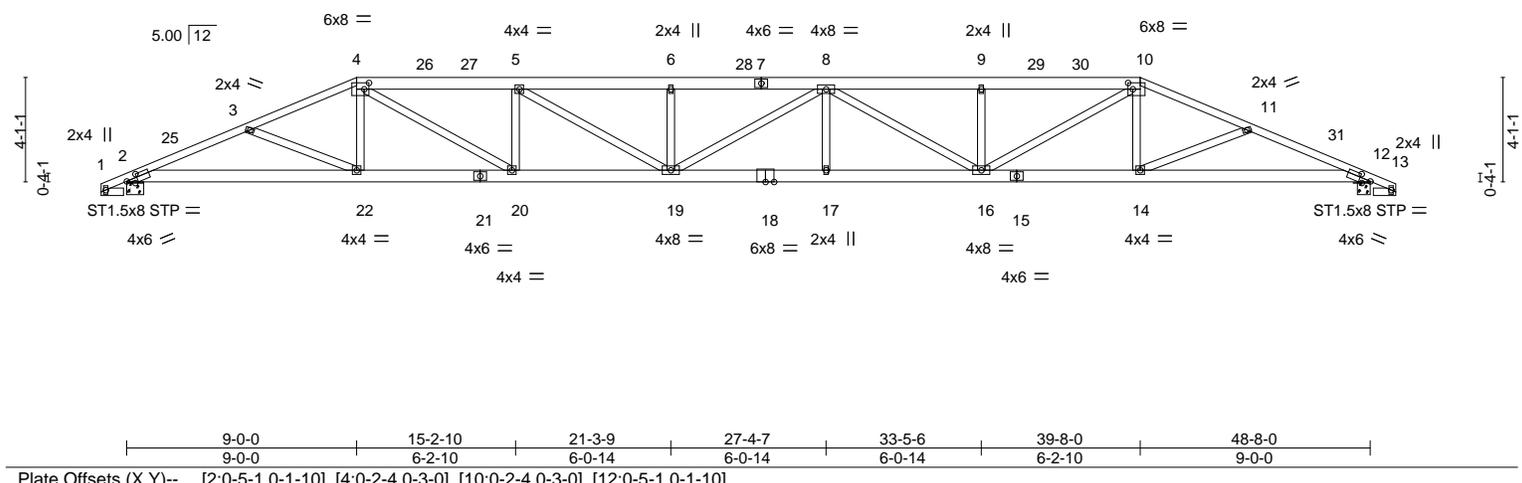
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:05 2024 Page 1

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Scale = 1:89.7



LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.38	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.66	Vert(LL) 0.50 17-19 >999 240		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.51	Vert(CT) -0.79 17-19 >730 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.16 12 n/a n/a		
	Code FBC2023/TPI2014			Weight: 623 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 4-7,7-10: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-1 oc purlins. BOT CHORD Rigid ceiling directly applied or 7-9-1 oc bracing.
BOT CHORD 2x6 SP No.2	
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 12=0-6-0  
 Max Horz 2=139(LC 11)  
 Max Uplift 2=-1468(LC 12), 12=-1460(LC 12)  
 Max Grav 2=2765(LC 1), 12=2757(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5974/3218, 3-4=-5625/2992, 4-5=-7518/4084, 5-6=-8627/4621, 6-8=-8627/4621,  
 8-9=-7536/4092, 9-10=-7538/4094, 10-11=-5669/3015, 11-12=-6063/3264  
 BOT CHORD 2-22=-2831/5398, 20-22=-2519/5153, 19-20=-3777/7516, 17-19=-4325/8641,  
 16-17=-4325/8641, 14-16=-2555/5194, 12-14=-2898/5495  
 WEBS 3-22=-282/341, 4-22=-84/362, 4-20=-1460/2841, 5-20=-1338/770, 5-19=-650/1380,  
 6-19=-536/366, 8-16=-1374/654, 9-16=-627/443, 10-16=-1444/2820, 10-14=-100/380,  
 11-14=-343/375

- NOTES-** (10)
- 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, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 39-8-0, Zone2 39-8-0 to 44-0-8, Zone1 44-0-8 to 49-8-0 zone;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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1468 lb uplift at joint 2 and 1460 lb uplift at joint 12.

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 Date:

January 24, 2024

Continued on page 2

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Job HR0014	Truss T02	Truss Type HIP	Qty 2	Ply <b>2</b>	Job Reference (optional) T32729128
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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:05 2024 Page 2  
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10) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**⚠ 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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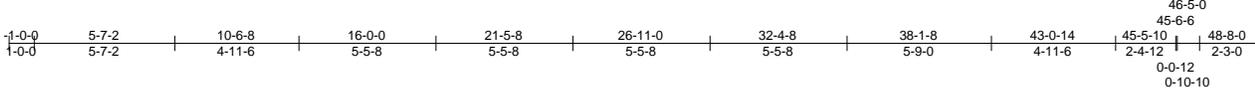
**MiTek®**

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T03	ROOF SPECIAL GIRDER	2	2	

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:07 2024 Page 1  
 ID:9GJ?lLrRdGLJ2VbHLXnt4OzLxQi-iNuYcZtFjFDxC\_BQkr9lNY\_sjPhmTBZOxLPp\_PzsCgg



Scale = 1:91.3

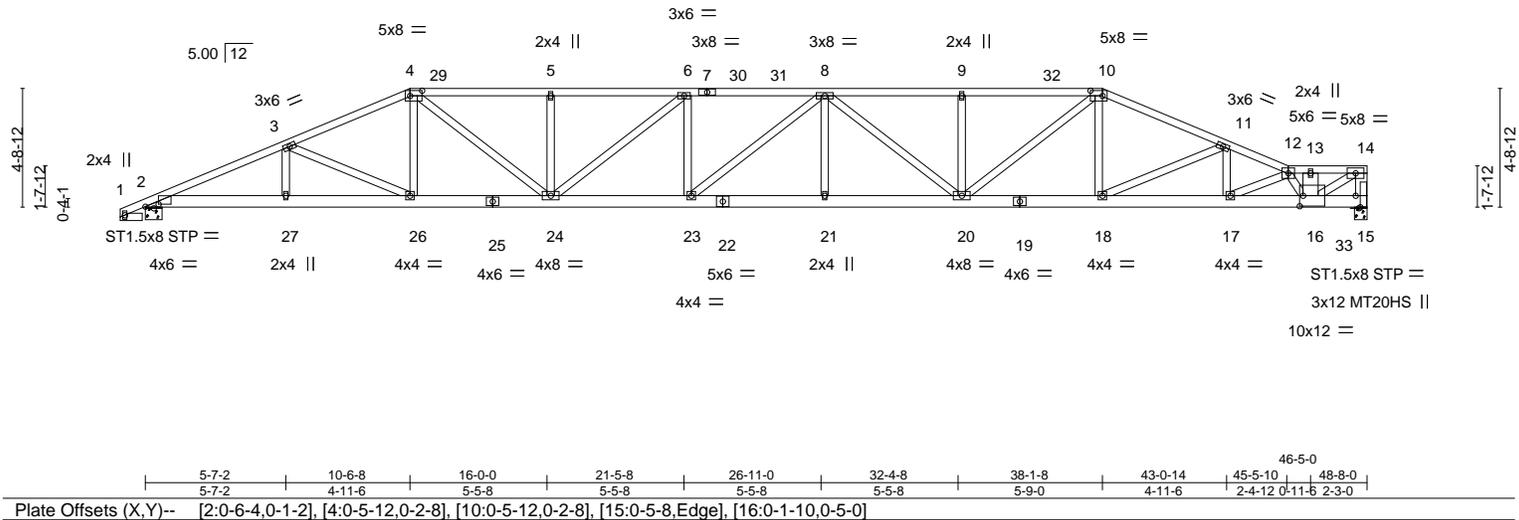


Plate Offsets (X, Y)--	[2:0-6-4,0-1-2], [4:0-5-12,0-2-8], [10:0-5-12,0-2-8], [15:0-5-8,Edge], [16:0-1-10,0-5-0]				
<b>LOADING</b> (psf)	<b>SPACING</b> - 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL 1.33	TC 0.64	Vert(LL) 0.50 21-23 >999 240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.68	Vert(CT) -0.77 21-23 >746 180	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.88	Horz(CT) 0.14 15 n/a n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-SH			
				Weight: 619 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2 *Except* 2-25,15-19: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 8-0-15 oc bracing.
WEBS 2x4 SP No.3 *Except* 14-15: 2x6 SP No.2, 13-16: 2x8 SP 2400F 2.0E, 14-16: 2x4 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 15=0-6-0, 2=0-8-0  
 Max Horz 2=150(LC 7)  
 Max Uplift 15=-2924(LC 5), 2=-1532(LC 8)  
 Max Grav 15=5580(LC 1), 2=2893(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6247/3105, 3-4=-5738/2940, 4-5=-6924/3640, 5-6=-6924/3640, 6-8=-7847/4106,  
 8-9=-7422/3889, 9-10=-7422/3888, 10-11=-6623/3381, 11-12=-8512/4301,  
 12-13=-7587/3970, 13-14=-7586/3969, 14-15=-4701/2491  
 BOT CHORD 2-27=-2849/5644, 26-27=-2849/5644, 24-26=-2563/5226, 23-24=-3889/7847,  
 21-23=-3979/8024, 20-21=-3979/8024, 18-20=-2983/6066, 17-18=-3958/7861,  
 16-17=-4771/9486, 15-16=-310/584  
 WEBS 3-26=-481/320, 4-26=-157/406, 10-18=-465/1001, 13-16=-164/380, 12-16=-3308/1678,  
 14-16=-4323/8272, 5-24=-525/354, 6-23=-91/316, 9-20=-521/350, 4-24=-1090/2270,  
 10-20=-873/1841, 6-24=-1279/596, 8-20=-871/392, 8-23=-329/197, 11-17=-688/1146,  
 11-18=-2008/1146, 12-17=-1838/1265

**NOTES-** (12)  
 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, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 3 rows staggered at 0-2-0 oc.  
 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.  
 3) Unbalanced roof live loads have been considered for this design.  
 4) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); 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) All plates are MT20 plates unless otherwise indicated.  
 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide is used between the bottom chord and any other members.

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

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

January 24, 2024

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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Job HR0014	Truss T03	Truss Type ROOF SPECIAL GIRDER	Qty 2	Ply <b>2</b>	Job Reference (optional) T32729129
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:07 2024 Page 2  
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**NOTES-** (12)

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2924 lb uplift at joint 15 and 1532 lb uplift at joint 2.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 112 lb down and 22 lb up at 47-6-15, and 2950 lb down and 1931 lb up at 46-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33

Uniform Loads (plf)

Vert: 1-4=-90, 4-10=-90, 10-12=-90, 12-14=-90, 2-15=-20

Concentrated Loads (lb)

Vert: 16=-2950(B) 33=-112(B)

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Job	Truss	Truss Type	Qty	Ply		T32729130
HR0014	T04	Hip	2	1		

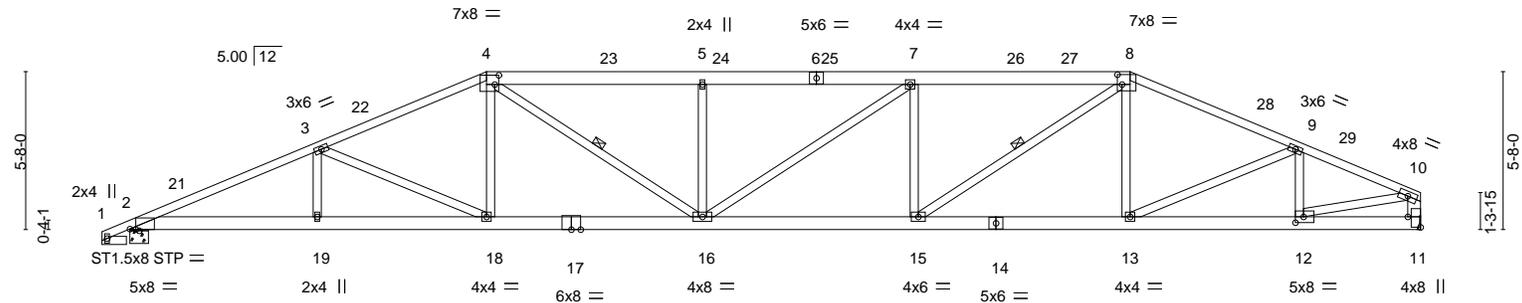
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:09 2024 Page 1

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Scale = 1:82.2



	6-8-10	12-9-8	20-6-7	28-1-9	35-10-8	40-11-4	41-11-6	46-3-8
	6-8-10	6-0-14	7-8-15	7-7-3	7-8-15	5-0-12	1-0-2	4-4-2
Plate Offsets (X, Y)--	[2:0-2-9,Edge], [4:0-1-12,0-4-0], [8:0-2-0,0-4-4], [11:Edge,0-5-8], [12:0-3-8,0-2-8]							

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.33	TC 0.97	Vert(LL)	0.49 15-16	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.93	Vert(CT)	-0.77 15-16	>711	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.20 11	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-SH					Weight: 304 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 *Except* 4-6,6-8: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 10-11: 2x6 SP No.2, 10-12: 2x4 SP No.2	WEBS 1 Row at midpt 4-16, 8-15
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 11=Mechanical  
 Max Horz 2=183(LC 11)  
 Max Uplift 2=-1404(LC 12), 11=-1271(LC 12)  
 Max Grav 2=2637(LC 1), 11=2513(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5632/2973, 3-4=-4843/2644, 4-5=-5527/3112, 5-7=-5526/3111, 7-8=-5350/3034,  
 8-9=-4271/2350, 9-10=-3811/2053, 10-11=-2404/1336  
 BOT CHORD 2-19=-2708/5072, 18-19=-2708/5072, 16-18=-2227/4392, 15-16=-2723/5348,  
 13-15=-1936/3853, 12-13=-1832/3463  
 WEBS 3-18=-765/532, 4-18=-194/492, 4-16=-722/1566, 5-16=-760/530, 7-16=-126/329,  
 7-15=-948/584, 8-15=-951/1949, 9-13=-154/651, 10-12=-1757/3314, 9-12=-807/518

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 12-9-8, Zone2 12-9-8 to 17-0-7, Zone1 17-0-7 to 35-10-8, Zone2 35-10-8 to 40-1-7, Zone1 40-1-7 to 46-0-12 zone;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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1404 lb uplift at joint 2 and 1271 lb uplift at joint 11.
  - \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

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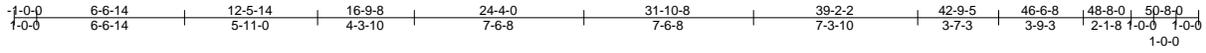


Job	Truss	Truss Type	Qty	Ply	
HR0014	T06	ROOF SPECIAL GIRDER	2	2	T32729132

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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:13 2024 Page 1

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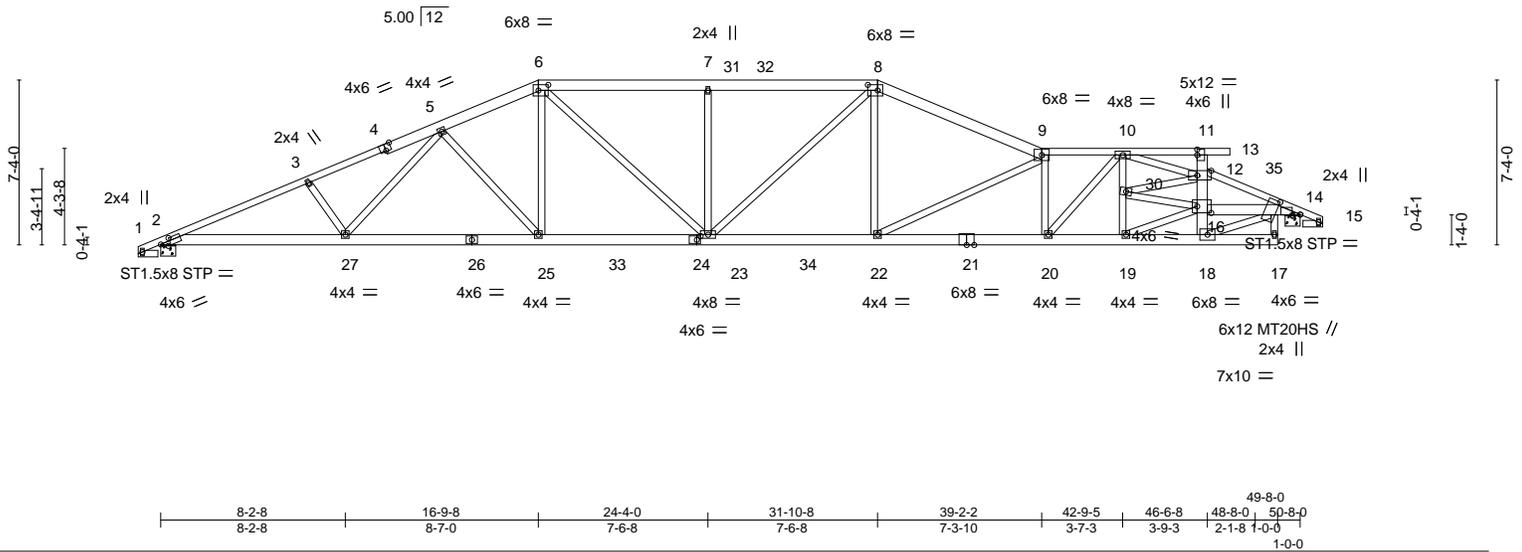


Plate Offsets (X, Y)-- [2:0-5-1,0-1-10], [4:0-3-0,Edge], [6:0-5-4,0-3-0], [8:0-5-4,0-3-0], [11:0-3-0,0-0-0], [13:0-7-8,0-2-8], [14:0-2-0,1-0-6], [14:0-4-4,Edge], [16:0-7-8,0-3-8], [24:0-2-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.52	Vert(LL) 0.33	22-23	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.75	Vert(CT) -0.52	22-23	>999	180	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.98	Horz(CT) 0.09	14	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-SH						
							Weight: 763 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 9-12,13-15,1-4: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-3 oc purlins, except end verticals. Except:
BOT CHORD 2x6 SP No.2	6-0-0 oc bracing: 11-13
WEBS 2x4 SP No.3 *Except* 11-18: 2x6 SP No.2, 14-18: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-10-3 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 14=0-8-0  
 Max Horz 2=265(LC 8)  
 Max Uplift 2=-1624(LC 8), 14=-3033(LC 5)  
 Max Grav 2=3172(LC 13), 14=6392(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-6914/3347, 3-5=-6677/3308, 5-6=-5597/2882, 6-7=-6049/3147, 7-8=-6049/3147,  
 8-9=-6612/3211, 9-10=-8985/4211, 10-11=-952/443, 16-18=-2968/1496,  
 13-16=-3052/1698, 11-13=-3888/2148, 13-14=-9390/4440  
**BOT CHORD** 2-27=-3183/6386, 25-27=-2811/5733, 23-25=-2459/5211, 22-23=-2820/6134,  
 20-22=-4187/9094, 19-20=-3461/7674, 18-19=-3614/7662, 14-16=-619/1398  
**WEBS** 3-27=-367/335, 5-27=-292/744, 5-25=-822/546, 6-25=-378/970, 6-23=-571/1367,  
 7-23=-749/496, 8-23=-277/458, 8-22=-757/1923, 9-22=-3381/1693, 9-20=-1555/887,  
 19-30=-164/359, 10-30=-334/649, 10-13=-6969/3290, 10-20=-1047/2195,  
 14-18=-3710/7870, 16-19=-437/479, 16-30=-430/743, 13-30=-803/474

- NOTES-** (12)
- 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; 2x6 - 2 rows staggered at 0-8-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide with 16-0-0 on the bottom chord and any other members, with BCDL = 10.0psf.

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: January 24, 2024

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Job HR0014	Truss T06	Truss Type ROOF SPECIAL GIRDER	Qty 2	Ply <b>2</b>	Job Reference (optional) T32729132
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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:13 2024 Page 2  
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**NOTES-** (12)

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1624 lb uplift at joint 2 and 3033 lb uplift at joint 14.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3614 lb down and 1846 lb up at 46-3-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33

Uniform Loads (plf)

Vert: 1-6=-90, 6-8=-90, 8-9=-90, 9-11=-90, 11-12=-90, 2-17=-20, 14-16=-20, 13-35=-30, 15-35=-90

Concentrated Loads (lb)

Vert: 11=-2820(F)

**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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**MiTek®**

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

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T07	Roof Special	2	1	T32729133

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:16 2024 Page 1

ID:9GJ?tlRrDGLJ2VbHLXnt4OzLxQi-y6xx52\_uc0MfnNN8mEpsFSsLA1ho4DLi0E5ooOzsCgX



Scale = 1:102.2

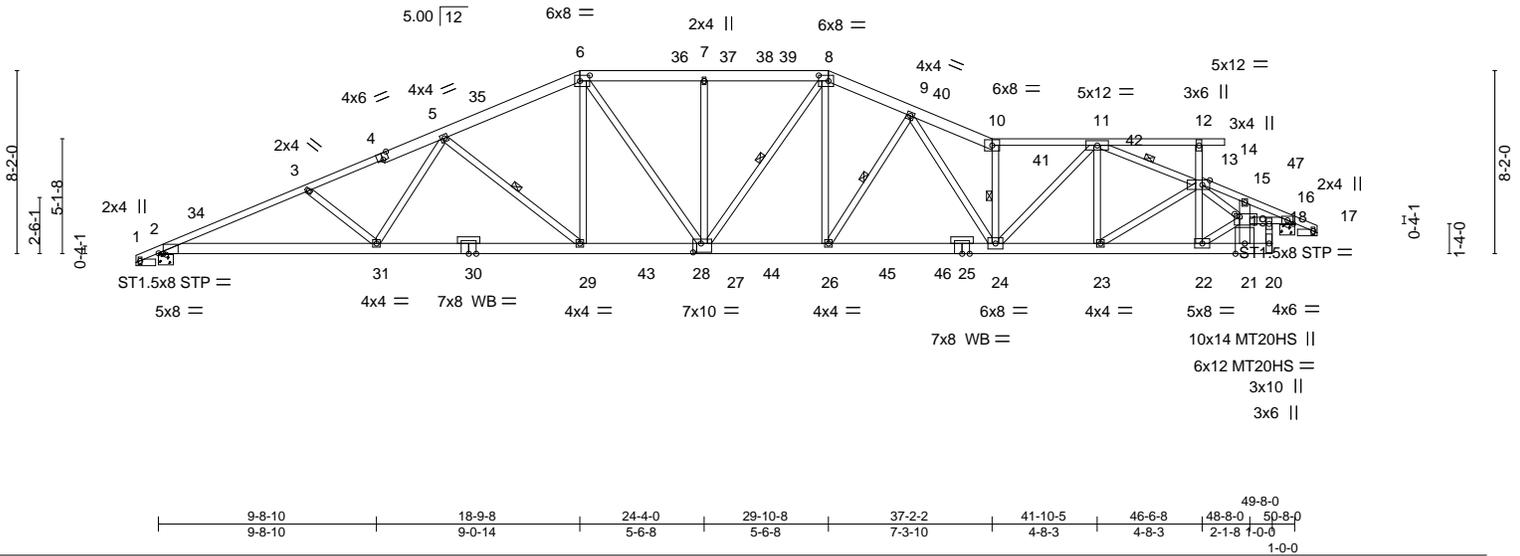


Plate Offsets (X, Y)-- [2:0-2-9,Edge], [4:0-3-0,Edge], [6:0-5-4,0-3-0], [8:0-5-4,0-3-0], [14:0-4-0,0-2-8], [19:0-2-12,0-1-8], [27:0-4-4,0-4-12]

LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.92	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.94	Vert(LL) 0.49 24-26 >999 240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.33	WB 0.97	Vert(CT) -0.82 24-26 >736 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.16 16 n/a n/a		
	Code FBC2023/TPI2014			Weight: 393 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 10-13,14-17: 2x4 SP No.2, 1-4: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals. Except: 6-0-0 oc bracing: 12-14
BOT CHORD 2x6 SP No.2 *Except* 2-30,20-25: 2x6 SP M 26, 16-19: 2x4 SP 2850F 2.0E or 2x4 SP M 31	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 12-22: 2x4 SP No.2, 15-21: 2x6 SP No.2	WEBS 1 Row at midpt 5-29, 8-27, 9-26, 10-24, 11-14
OTHERS 2x4 SP No.3	

REACTIONS.
(size) 2=0-8-0, 16=0-8-0
Max Horz 2=341(LC 12)
Max Uplift 2=1510(LC 12), 16=1644(LC 12)
Max Grav 2=2971(LC 17), 16=2977(LC 19)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6364/3480, 3-5=-6015/3342, 5-6=-4821/2860, 6-7=-4686/2929, 7-8=-4686/2929, 8-9=-4975/3016, 9-10=-6458/3845, 10-11=-5876/3465, 14-22=-1115/798, 12-14=-298/522, 19-21=-1430/978, 15-19=-436/818, 14-15=-3734/2521, 15-16=-5018/3258
BOT CHORD 2-31=-3271/5868, 29-31=-2902/5238, 27-29=-2349/4420, 26-27=-2441/4568, 24-26=-2863/5189, 23-24=-2451/4287, 22-23=-2213/3476, 21-22=-823/1247, 18-19=-2811/4508, 16-18=-2784/4458
WEBS 3-31=-424/374, 5-31=-209/696, 5-29=-1090/731, 6-29=-435/1011, 6-27=-311/758, 7-27=-532/403, 8-27=-143/540, 8-26=-691/1402, 9-26=-1252/830, 10-24=-2730/1685, 11-23=-411/282, 19-22=-1711/2738, 14-23=-505/972, 11-14=-4475/2792, 11-24=-1239/2302, 9-24=-875/1474, 18-20=-784/1195

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 18-9-8, Zone2 18-9-8 to 23-0-7, Zone1 23-0-7 to 29-10-8, Zone2 29-10-8 to 34-1-7, Zone1 34-1-7 to 51-8-0 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1510 lb uplift at joint 2 and 1644 lb uplift at joint 16.

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:

January 24, 2024

Graphical representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

Job	Truss	Truss Type	Qty	Ply	
HR0014	T07	Roof Special	2	1	T32729133

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:16 2024 Page 2  
 ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-y6xx52\_uc0MfnNN8mEpsFSsLA1ho4DLi0E5ooOzsCgX

10) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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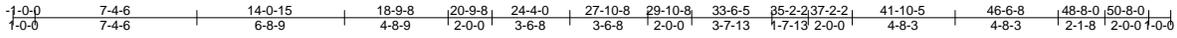
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 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T08	Roof Special	2	1	T32729134

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:18 2024 Page 1  
 ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-uV3iWk087dcN0gWXffsKktxiARnVYAV?TYausGzsCgV



Scale = 1:104.3

Plate Offsets (X,Y)--	[2:0-2-9,Edge], [4:0-3-0,Edge], [6:0-5-4,0-3-0], [12:0-4-12,0-2-8], [17:0-2-12,0-1-12], [23:0-3-8,0-4-8]
-----------------------	--

LOADING (psf)	SPACING-	CSi.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.88	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.90	Vert(LL) 0.44 23-24 >999 240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.33	WB 0.80	Vert(CT) -0.70 23-24 >857 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.17 14 n/a n/a		
	Code FBC2023/TPI2014			Weight: 379 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 8-11,1-4: 2x4 SP 2850F 2.0E or 2x4 SP M 31, 12-15: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 10-12
BOT CHORD 2x6 SP No.2 *Except* 2-27,18-22: 2x6 SP M 26, 14-17: 2x4 SP 2850F 2.0E or 2x4 SP M 31	BOT CHORD Rigid ceiling directly applied or 4-2-9 oc bracing.
WEBS 2x4 SP No.2 *Except* 13-19: 2x6 SP No.2, 16-18: 2x4 SP No.3	WEBS 1 Row at midpt 9-12, 9-23, 6-24, 8-24, 5-26
OTHERS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 12

REACTIONS.
(size) 2=0-8-0, 14=0-8-0
Max Horz 2=458(LC 12)
Max Uplift 2=-1498(LC 12), 14=-1656(LC 12)
Max Grav 2=2972(LC 17), 14=2949(LC 19)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6411/3433, 3-5=-5515/3136, 5-6=-4517/2726, 6-7=-4183/2680, 8-9=-5414/3237, 12-20=-1156/816, 10-12=-259/499, 17-19=-1383/973, 13-17=-446/829, 12-13=-3703/2536, 13-14=-4974/3275, 7-8=-4598/2781
BOT CHORD 2-28=-3287/5894, 27-28=-3287/5894, 26-27=-2849/5102, 24-26=-2248/4106, 23-24=-3074/5450, 21-23=-2082/3638, 20-21=-2226/3435, 19-20=-818/1224, 16-17=-2826/4467, 14-16=-2799/4418
WEBS 17-20=-1728/2708, 12-21=-95/254, 9-12=-4136/2610, 9-23=-1336/2338, 16-18=-785/1177, 8-23=-1344/931, 7-24=-512/1184, 6-26=-469/1132, 6-24=-247/495, 8-24=-1603/992, 5-27=-167/627, 5-26=-1322/793, 3-28=0/288, 3-27=-869/497

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 20-9-8, Zone2 20-9-8 to 25-0-7, Zone1 25-0-7 to 27-10-8, Zone2 27-10-8 to 32-1-7, Zone1 32-1-7 to 51-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1498 lb uplift at joint 2 and 1656 lb uplift at joint 14.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

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

January 24, 2024

Continued on page 2

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 Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	
HR0014	T08	Roof Special	2	1	T32729134

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:18 2024 Page 2  
 ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-uV3iWk087dcN0gWXifsKKtxiArNvYAV?TYausGzsCgV

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Job	Truss	Truss Type	Qty	Ply	
HR0014	T09	Roof Special	2	1	T32729135

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:21 2024 Page 2  
 ID:9GJ?tlRdGLJ2VbHLXnt4OzLxQi-I4Iq8l21QY\_yt8F6YnP1yVZB82P6lVrR9WoZTbzsCgS

10) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T11	Roof Special Girder	2	3	

T32729137

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:25 2024 Page 1

ID:9GJ?lRdGLJ2VbHLXnt4OzLxQi-Br\_L\_75XUnVNMIZndUz6LKyNfsYhMB148mmcMzsCgO

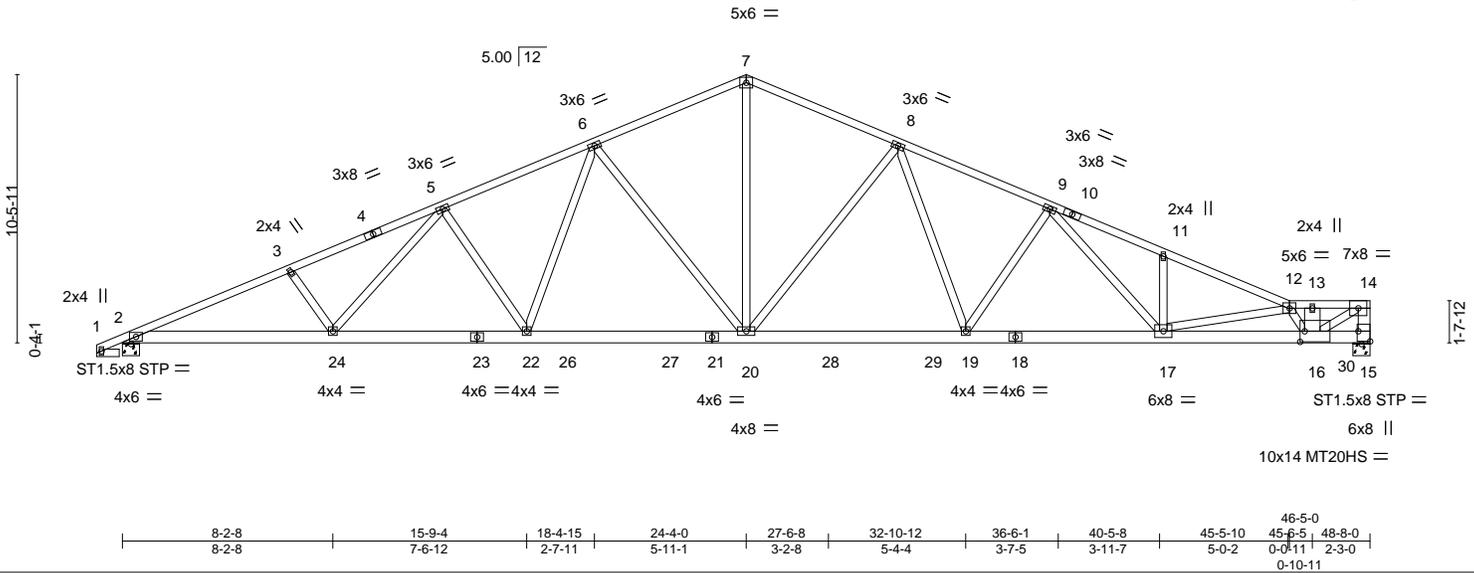
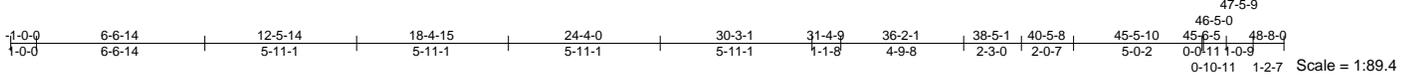


Plate Offsets (X, Y)-- [15:Edge,0-5-8], [16:0-2-2,0-5-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.63	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.52	Vert(LL) 0.26 19 >999 240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.33	WB 0.74	Vert(CT) -0.41 19-20 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.09 15 n/a n/a		
	Code FBC2023/TPI2014			Weight: 963 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2 *Except* 2-23,15-18: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 14-15: 2x6 SP No.2, 14-16: 2x4 SP No.1, 13-16: 2x8 SP 2400F 2.0E	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 15=0-8-0, 2=0-8-0  
 Max Horz 2=343(LC 7)  
 Max Uplift 15=5771(LC 5), 2=1635(LC 8)  
 Max Grav 15=10190(LC 1), 2=3141(LC 15)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6886/3377, 3-5=-6642/3331, 5-6=-5712/2963, 6-7=-4523/2461, 7-8=-4524/2462,  
 8-9=-6602/3432, 9-11=-10157/5269, 11-12=-10136/5114, 12-13=-14082/7943,  
 13-14=-14078/7941, 14-15=-8719/4945  
 BOT CHORD 2-24=-3087/6357, 22-24=-2672/5657, 20-22=-2216/4857, 19-20=-2478/5339,  
 17-19=-3447/7055, 16-17=-8678/16138, 15-16=-562/979  
 WEBS 3-24=-441/377, 5-24=-328/758, 5-22=-825/565, 9-19=-2060/1196, 14-16=-8717/15474,  
 7-20=-1553/2989, 6-20=-1344/799, 6-22=-467/1091, 8-20=-2143/1226, 8-19=-1003/2107,  
 9-17=-2061/3577, 11-17=-455/365, 12-17=-7104/4620, 13-16=-435/840,  
 12-16=-3616/1882

- NOTES-** (13)
- na
  - 3-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, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-3-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 4 rows staggered at 0-4-0 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=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide is attached to the bottom chord and any other members, with BCDL = 10.0psf.

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:

January 24, 2024

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 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job HR0014	Truss T11	Truss Type Roof Special Girder	Qty 2	Ply <b>3</b>	Job Reference (optional) T32729137
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:25 2024 Page 2  
ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-Br\_L\_75XUnVNMIzTndUz6LkyNfsYhMB148mmcMzsCgO

**NOTES-** (13)

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5771 lb uplift at joint 15 and 1635 lb uplift at joint 2.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 112 lb down and 22 lb up at 47-6-15, and 7762 lb down and 5081 lb up at 46-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33

Uniform Loads (plf)

Vert: 1-7=-90, 7-12=-90, 12-14=-90, 2-15=-20

Concentrated Loads (lb)

Vert: 16=-7762(F) 30=-112(F)

**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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**MiTek®**

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

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T12	Common	8	1	T32729138

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:27 2024 Page 1

ID:9GJ?iLrRdGLJ2VbHLXnt4OzLxQi-7E66Op7n00I5b3iGv2WRBmpCTTS39ECKYsFthFzsCgM

1-0-0	6-6-14	12-5-14	18-4-15	30-3-1	36-2-2	42-1-2	48-8-0	49-8-0
1-0-0	6-6-14	5-11-1	5-11-1	11-10-2	5-11-1	5-11-1	6-6-14	1-0-0

Scale = 1:88.6

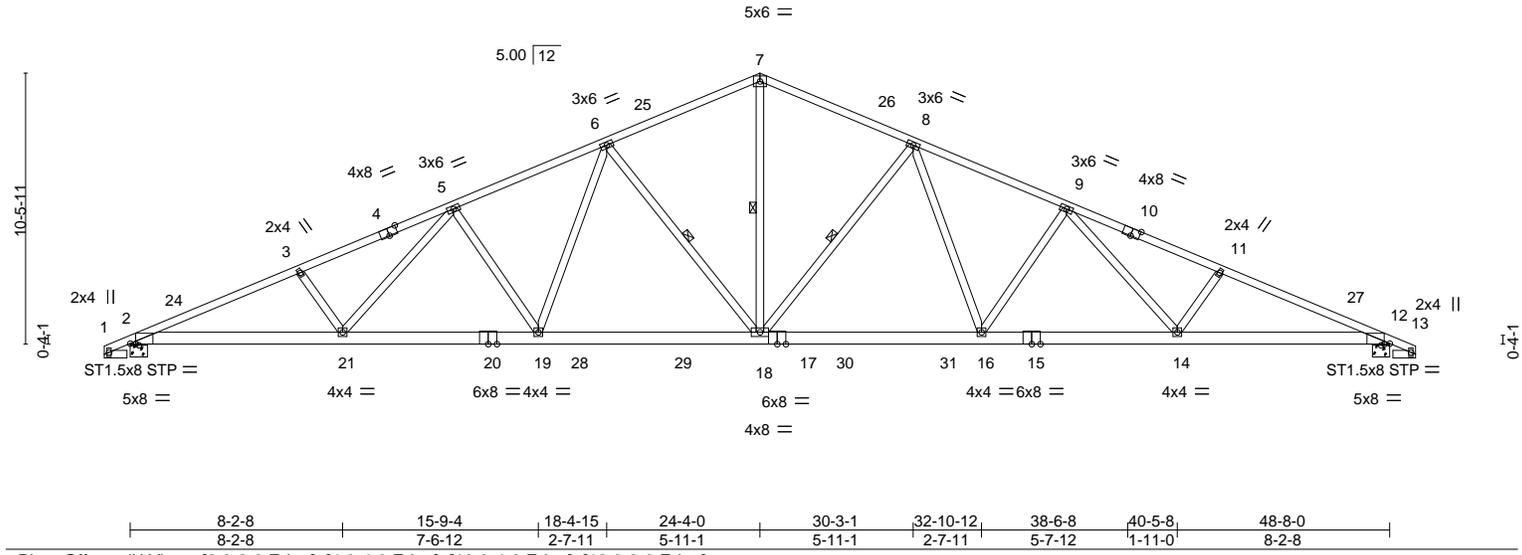


Plate Offsets (X, Y)--	[2:0-2-9,Edge], [4:0-4-0,Edge], [10:0-4-0,Edge], [12:0-2-9,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	Plate Grip DOL 1.33	TC 0.98	Vert(LL) 0.49 18 >999 240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.83	Vert(CT) -0.82 18-19 >704 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.19 12 n/a n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-SH		Weight: 308 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 1-4,10-13: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2 *Except* 12-15,2-20: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 4-11-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-18, 6-18, 8-18
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 12=0-8-0, 2=0-8-0  
 Max Horz 2=-355(LC 10)  
 Max Uplift 12=-1466(LC 12), 2=-1466(LC 12)  
 Max Grav 12=2824(LC 19), 2=2824(LC 19)

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

TOP CHORD 2-3=-6103/3124, 3-5=-5857/3076, 5-6=-4899/2692, 6-7=-3705/2190, 7-8=-3705/2190, 8-9=-4899/2692, 9-11=-5857/3076, 11-12=-6103/3124

BOT CHORD 2-21=-2704/5672, 19-21=-2266/4945, 18-19=-1815/4138, 16-18=-1838/4099, 14-16=-2290/4855, 12-14=-2727/5524

WEBS 9-16=-836/571, 9-14=-355/789, 11-14=-456/386, 5-19=-836/571, 5-21=-355/788, 3-21=-456/386, 7-18=-1253/2360, 6-18=-1350/857, 6-19=-470/1095, 8-18=-1351/857, 8-16=-470/1096

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 to 24-4-0, Zone2 24-4-0 to 28-6-15, Zone1 28-6-15 to 49-8-0 zone;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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1466 lb uplift at joint 12 and 1466 lb uplift at joint 2.
  - "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

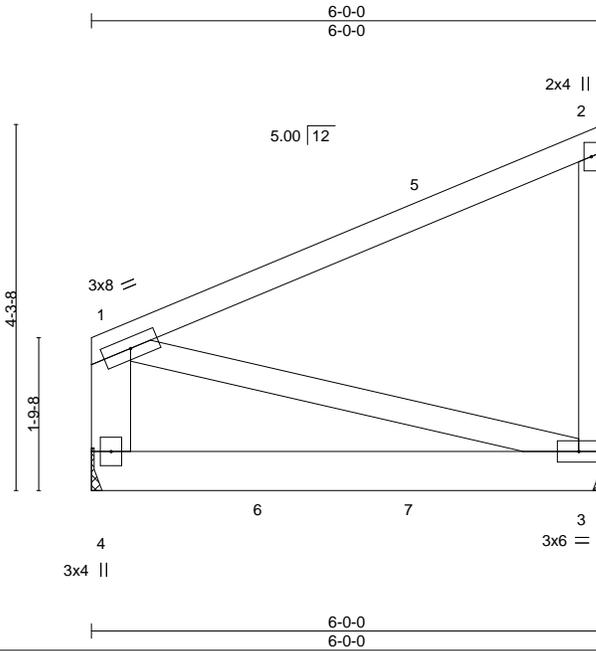
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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 <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcsccomponents.com)</p>	 <p>16023 Swingley Ridge Rd.        Chesterfield, MO 63017        314.434.1200 / MiTek-US.com</p>
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T13	Jack-Open Girder	2	2	T32729139

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:28 2024 Page 1

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Scale = 1:26.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.33	TC 0.51	Vert(LL)	0.22 3-4	>309	240	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.99	Vert(CT)	-0.35 3-4	>194	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.03	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					Weight: 80 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP M 26  
 WEBS 2x4 SP No.3 \*Except\*  
 1-4: 2x6 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 5-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 3=Mechanical  
 Max Horz 4=164(LC 8)  
 Max Uplift 4=-1425(LC 8), 3=-1526(LC 8)  
 Max Grav 4=2950(LC 1), 3=2821(LC 1)

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

TOP CHORD 1-4=-263/106  
 WEBS 2-3=-274/231

**NOTES-** (11)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1425 lb uplift at joint 4 and 1526 lb uplift at joint 3.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 91 lb down and 118 lb up at 4-0-12 on top chord, and 56 lb down and 54 lb up at 3-10-0, 43 lb down and 25 lb up at 4-0-12, and 2513 lb down and 1272 lb up at 2-0-12, and 2509 lb down and 1270 lb up at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- \* This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**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:

January 24, 2024

Continued on page 2

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Job HR0014	Truss T13	Truss Type Jack-Open Girder	Qty 2	Ply <b>2</b>	Job Reference (optional) T32729139
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Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:28 2024 Page 2  
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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33

Uniform Loads (plf)

Vert: 1-2=-90, 3-4=-20

Concentrated Loads (lb)

Vert: 5=-31(F) 6=-2513(B) 7=-2608(F=-99, B=-2509)

**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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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	T14	GABLE	2	2	

T32729140

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TOP CHORD MUST BE BRACED BY END JACKS, ROOF DIAPHRAGM, OR PROPERLY CONNECTED PURLINS AS SPECIFIED.

Scale = 1:34.5

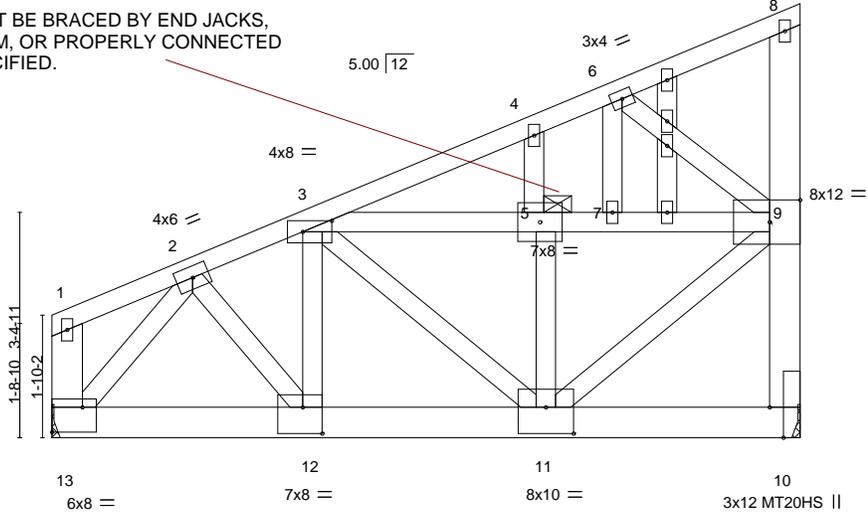


Plate Offsets (X,Y)--	[3:0-5-4,0-2-0], [9:0-5-8,0-4-0], [10:0-5-8,Edge], [11:0-5-0,0-4-12], [12:0-3-8,0-4-12], [13:Edge,0-4-8]
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LOADING (psf)	SPACING-	CS.I.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.37	Vert(LL) 0.06 11-12 >999 240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.33	WB 0.78	Vert(CT) -0.09 11-12 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.01 10 n/a n/a		
	Code FBC2023/TPI2014			Weight: 221 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals.
BOT CHORD 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	JOINTS 1 Brace at Jt(s): 5
1-13,8-10: 2x6 SP No.2, 3-11,9-11: 2x4 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 13=Mechanical, 10=Mechanical  
 Max Horz 13=315(LC 8)  
 Max Uplift 13=3816(LC 8), 10=-4114(LC 8)  
 Max Grav 13=7762(LC 1), 10=7910(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-13=-509/278, 1-2=-755/390, 2-3=-7223/3555, 3-4=-1609/687, 4-6=-1364/642, 9-10=-5746/3042, 3-5=-4441/2263, 5-7=-4436/2262, 7-9=-4436/2262  
 BOT CHORD 12-13=-2579/4654, 11-12=-3488/6591  
 WEBS 2-12=-1577/3342, 3-12=-1148/2206, 5-11=-357/833, 3-11=-1040/632, 9-11=-3832/7377, 6-7=-456/892, 6-9=-1841/998, 4-5=-151/453, 2-13=-6449/3130

- NOTES-** (16)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3816 lb uplift at joint 13 and 4114 lb

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:

January 24, 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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Job HR0014	Truss T14	Truss Type GABLE	Qty 2	Ply <b>2</b>	Job Reference (optional) T32729140
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8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:30 2024 Page 2  
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**NOTES-** (16)

- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 84 lb down and 43 lb up at 4-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33

Uniform Loads (plf)

Vert: 1-3=-90, 3-8=-90, 12-13=-1277(B=-1257), 10-12=-1309(F=-32, B=-1257), 3-9=-61(F)

Concentrated Loads (lb)

Vert: 12=-84(F) 3=-184(F)

**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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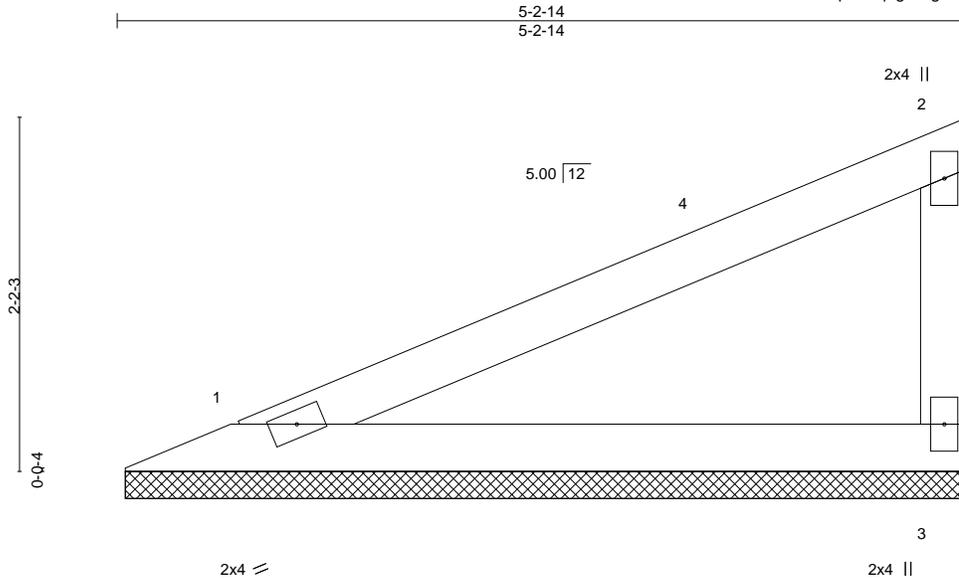
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	V01	Valley	2	1	T32729141

Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:30 2024 Page 1

ID:9GJ?tlRdGLJ2VbHLXnt4OzLxQi-XpnE1q9gJJ7gSWRraA48pORn9gbjMoymEQUXlazsCgJ



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.75	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.39	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 17 lb	FT = 20%
	Code FBC2023/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.3  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-2-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-2-5, 3=5-2-5  
Max Horz 1=127(LC 12)  
Max Uplift 1=94(LC 12), 3=-148(LC 12)  
Max Grav 1=239(LC 1), 3=239(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-224/375

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 0-9-1 to 3-9-1, Zone1 3-9-1 to 5-1-2 zone; 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) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 1 and 148 lb uplift at joint 3.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 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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**MiTek®**

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Chesterfield, MO 63017  
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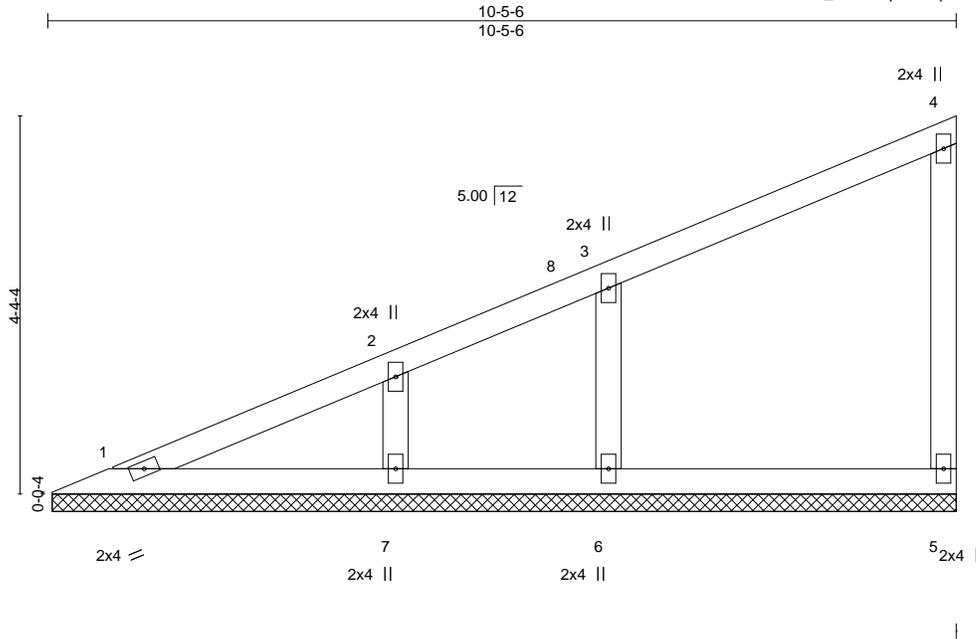
Job HR0014	Truss V07	Truss Type Valley	Qty 2	Ply 1	Job Reference (optional) T32729143
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Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:32 2024 Page 1

ID:9GJ?tlRrRdGLJ2VbHLXnt4OzLxQi-UBv\_SWBwqwNOiqbDib6cupWFTUKnqgR3hkzeMSzCgH



Scale = 1:26.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 30.0	Plate Grip DOL	1.33	TC 0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-SH						Weight: 42 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 10-4-13.

(lb) - Max Horz 1=280(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) except 5=-116(LC 12), 6=-233(LC 12), 7=-204(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=380(LC 1), 7=328(LC 1)

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

TOP CHORD 1-2=-361/177, 2-3=-258/115

WEBS 3-6=-319/436, 2-7=-247/318

**NOTES-** (7)

- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 0-9-1 to 4-0-0, Zone1 4-0-0 to 10-3-10 zone;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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 5, 233 lb uplift at joint 6 and 204 lb uplift at joint 7.
- 7) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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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:

January 24, 2024

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	V08	Valley	2	1	

T32729144

Builders FirstSource (Tampa, FL),

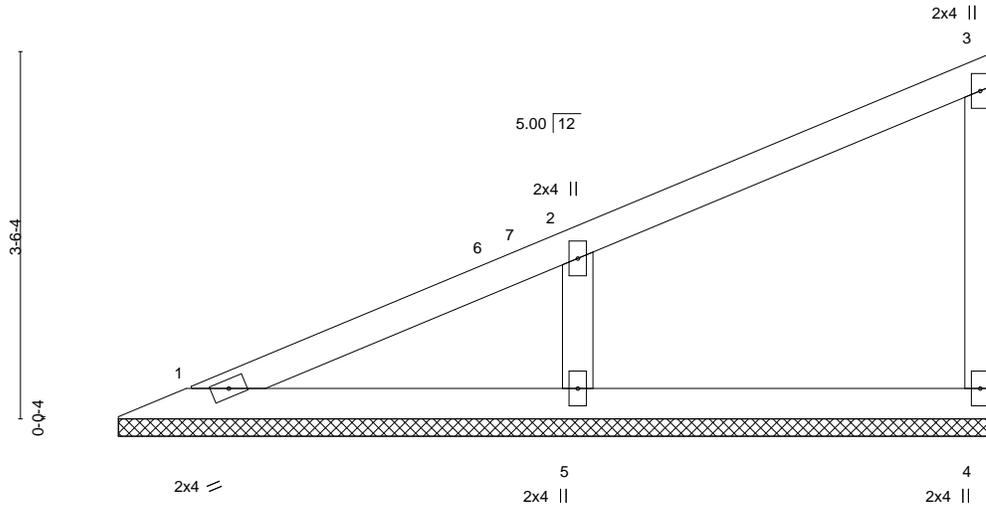
Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:33 2024 Page 1

ID:9GJ?lLrRdGLJ2VbHLXnt4OzLxQi-yOTNfsBYbEVFJ\_AQFIdrR13PZueTZ65DwOiBuuzsCgG



Scale = 1:22.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 30.0	Plate Grip DOL	1.33	TC 0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.26	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-SH						Weight: 31 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 1=8-4-13, 4=8-4-13, 5=8-4-13  
 Max Horz 1=221(LC 12)  
 Max Uplift 1=6(LC 12), 4=105(LC 12), 5=310(LC 12)  
 Max Grav 1=159(LC 1), 4=169(LC 1), 5=503(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-313/153  
 WEBS 2-5=-403/563

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 0-9-1 to 3-9-1, Zone1 3-9-1 to 8-3-10 zone;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) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 1, 105 lb uplift at joint 4 and 310 lb uplift at joint 5.
  - 7) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

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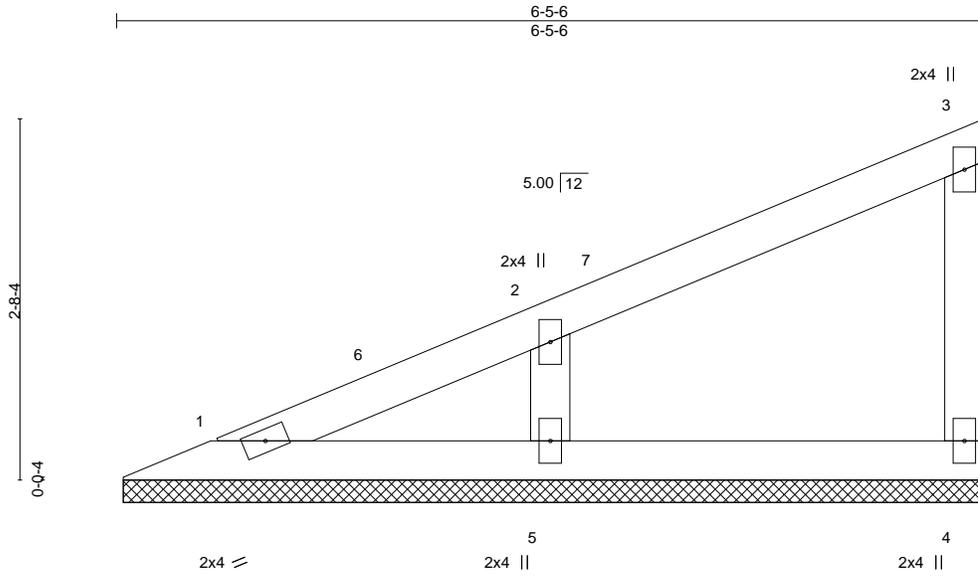
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	V09	Valley	2	1	

T32729145

Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:34 2024 Page 1  
ID:9GJ?tLrRdGLJ2VbHLXnt4OzLxQi-Qa1IsCCBMYd6x8lcp084zEcbMI0dIZPM92SIRLzsCgF



Scale = 1:17.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.16	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code FBC2023/TPI2014						Weight: 23 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

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

**REACTIONS.** (size) 1=6-4-13, 4=6-4-13, 5=6-4-13  
 Max Horz 1=163(LC 12)  
 Max Uplift 4=83(LC 12), 5=238(LC 12)  
 Max Grav 1=92(LC 1), 4=134(LC 1), 5=385(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-306/145  
 WEBS 2-5=-347/549

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 0-9-1 to 3-9-1, Zone1 3-9-1 to 6-3-10 zone;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) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 4 and 238 lb uplift at joint 5.
  - 7) "This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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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:

January 24, 2024

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**MiTek®**

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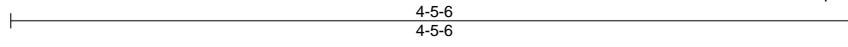
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0014	V10	Valley	2	1	

T32729146

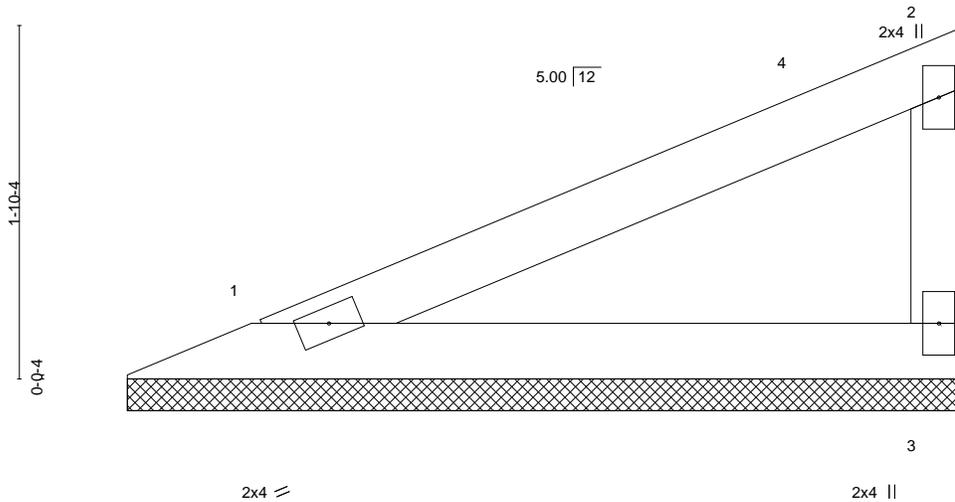
Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:35 2024 Page 1  
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Scale: 1"=1'



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 30.0	Plate Grip DOL	1.33	TC 0.49	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.25	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-P						Weight: 14 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.3  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-5-6 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-4-13, 3=4-4-13  
Max Horz 1=104(LC 12)  
Max Uplift 1=77(LC 12), 3=121(LC 12)  
Max Grav 1=195(LC 1), 3=195(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-184/310

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 0-9-1 to 3-9-1, Zone1 3-9-1 to 4-3-10 zone;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) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 1 and 121 lb uplift at joint 3.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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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:

January 24,2024

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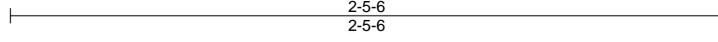
Job HR0014	Truss V11	Truss Type Valley	Qty 2	Ply 1	Job Reference (optional) T32729147
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Builders FirstSource (Tampa, FL),

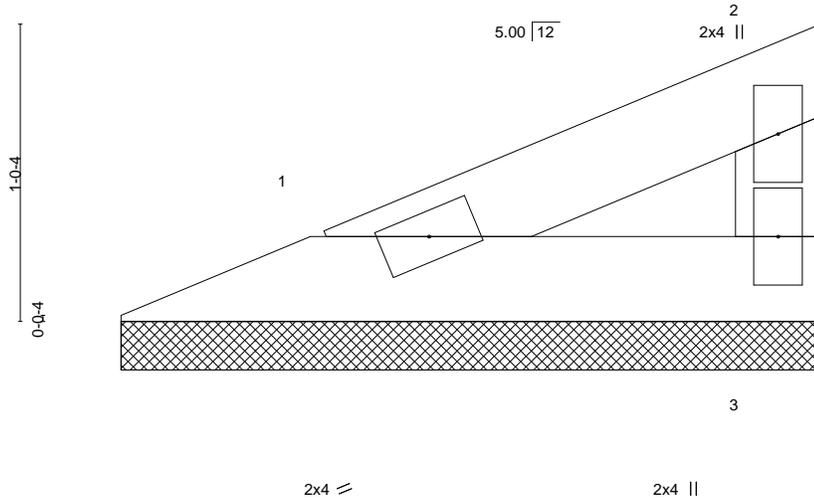
Tampa, FL - 33564,

8.730 s Jan 4 2024 MiTek Industries, Inc. Wed Jan 24 07:49:36 2024 Page 1

ID:9GJ?1LrRdGLJ2VbHLXnt4OzLxQi-Mz9VHuERu9tpARu\_xRAY3fhy95kYmVRfcMxrVDzsCgD



Scale = 1:7.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 30.0	Plate Grip DOL	1.33	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Strz Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P						Weight: 7 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-5-6 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-4-13, 3=2-4-13  
 Max Horz 1=46(LC 12)  
 Max Uplift 1=33(LC 12), 3=53(LC 12)  
 Max Grav 1=85(LC 1), 3=85(LC 1)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-22; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; 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) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 1 and 53 lb uplift at joint 3.
  - 7) \*This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code."

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:

January 24, 2024

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

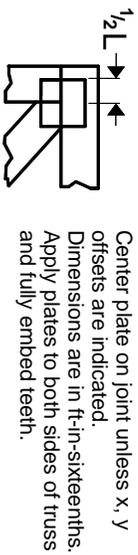
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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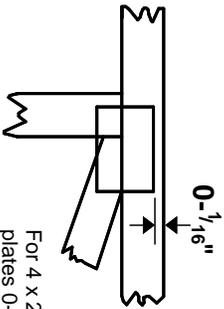
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

# 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

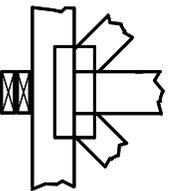
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

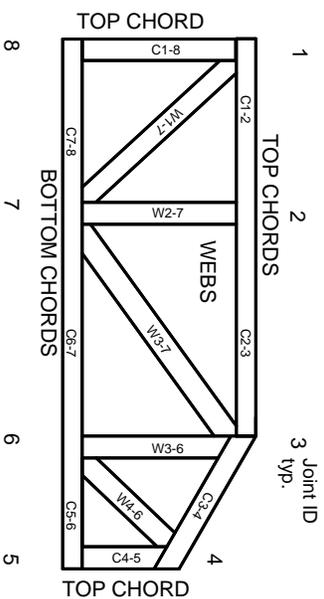


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## 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-2-362, ESR-2-685, ESR-3-282  
ESR-4-722, ESL-1-388

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