



RE: HR0009

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

**Site Information:**

Customer: K Hovnanain Homes Project Name: HR0009  
Lot/Block: Bldg. 9 Model: Type D 6 Unit Bldg.  
Address: 870-900 NE Trailside Run Subdivision: Hawk's Ridge  
City: Port St. Lucie State: FL

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

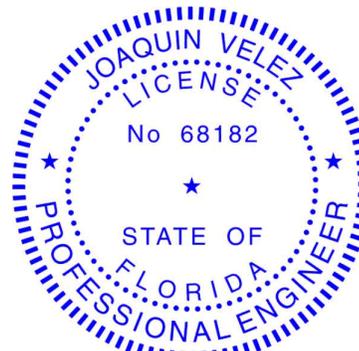
Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5  
Wind Code: ASCE 7-16 Wind Speed: 170 mph  
Roof Load: 55.0 psf Floor Load: 65.0 psf

This package includes 78 individual, dated 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	T29127018	C1	11/3/2022	21	T29127038	FG08	11/3/2022
2	T29127019	C3	11/3/2022	22	T29127039	FG09	11/3/2022
3	T29127020	C5	11/3/2022	23	T29127040	FL01	11/3/2022
4	T29127021	CJ01	11/3/2022	24	T29127041	FL02	11/3/2022
5	T29127022	CJ1	11/3/2022	25	T29127042	FL03	11/3/2022
6	T29127023	CJ3	11/3/2022	26	T29127043	FL04	11/3/2022
7	T29127024	CJ3A	11/3/2022	27	T29127044	FL05	11/3/2022
8	T29127025	E2	11/3/2022	28	T29127045	FL06	11/3/2022
9	T29127026	E7	11/3/2022	29	T29127046	FL07	11/3/2022
10	T29127027	EJ01	11/3/2022	30	T29127047	FL09	11/3/2022
11	T29127028	EJ02	11/3/2022	31	T29127048	FL10	11/3/2022
12	T29127029	EJ3	11/3/2022	32	T29127049	FL11	11/3/2022
13	T29127030	EJ04	11/3/2022	33	T29127050	FL12	11/3/2022
14	T29127031	FG01	11/3/2022	34	T29127051	FL13	11/3/2022
15	T29127032	FG02	11/3/2022	35	T29127052	FL14	11/3/2022
16	T29127033	FG03	11/3/2022	36	T29127053	FL15	11/3/2022
17	T29127034	FG04	11/3/2022	37	T29127054	FL16	11/3/2022
18	T29127035	FG05	11/3/2022	38	T29127055	FL16A	11/3/2022
19	T29127036	FG06	11/3/2022	39	T29127056	FL17	11/3/2022
20	T29127037	FG07	11/3/2022	40	T29127057	FL18	11/3/2022

This item has been electronically signed and sealed by Velez, Joaquin using a Digital Signature.  
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies  
The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc under my direct supervision  
based on the parameters provided by Builders FirstSource - Plant City.  
Truss Design Engineer's Name: Velez, Joaquin  
My license renewal date for the state of Florida is February 28, 2023.  
Florida COA: 6634

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



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

November 03, 2022



RE: HR0009 -

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

**Site Information:**

Project Customer: K Hovnanain Homes    Project Name: HR0009  
Lot/Block: Bldg. 9    Subdivision: Hawk's Ridge  
Address: 870-900 NE Trailside Run  
City, County: Port St. Lucie    State: FL

No.	Seal#	Truss Name	Date
41	T29127058	H7	11/3/2022
42	T29127059	HJ01	11/3/2022
43	T29127060	HJ2	11/3/2022
44	T29127061	HJ3	11/3/2022
45	T29127062	HJ04	11/3/2022
46	T29127063	T01	11/3/2022
47	T29127064	T02	11/3/2022
48	T29127065	T03	11/3/2022
49	T29127066	T04	11/3/2022
50	T29127067	T05	11/3/2022
51	T29127068	T06	11/3/2022
52	T29127069	T07	11/3/2022
53	T29127070	T08	11/3/2022
54	T29127071	T09	11/3/2022
55	T29127072	T10	11/3/2022
56	T29127073	T11	11/3/2022
57	T29127074	T12	11/3/2022
58	T29127075	T13	11/3/2022
59	T29127076	T14	11/3/2022
60	T29127077	T15	11/3/2022
61	T29127078	T16	11/3/2022
62	T29127079	T17	11/3/2022
63	T29127080	T18	11/3/2022
64	T29127081	T19	11/3/2022
65	T29127082	T20	11/3/2022
66	T29127083	T21	11/3/2022
67	T29127084	T22	11/3/2022
68	T29127085	V01	11/3/2022
69	T29127086	V02	11/3/2022
70	T29127087	V07	11/3/2022
71	T29127088	V08	11/3/2022
72	T29127089	V09	11/3/2022
73	T29127090	V10	11/3/2022
74	T29127091	V11	11/3/2022
75	T29127092	V12	11/3/2022
76	T29127093	V13	11/3/2022
77	T29127094	V14	11/3/2022
78	T29127095	V15	11/3/2022

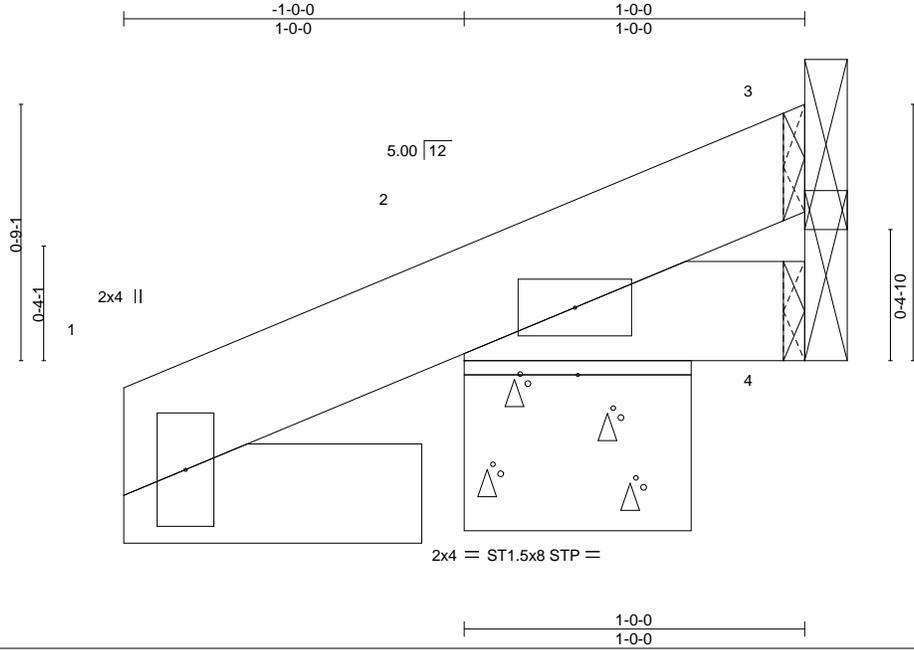
Job	Truss	Truss Type	Qty	Ply	T29127018
HR0009	C1	Corner Jack	8	1	

Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:39 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-sAN19AAKwxxGt?PDbpuRAJi3NOx\_mMyWI9q8OtyNBs\_



Scale = 1:6.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.17	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.01	Vert(CT)	-0.00	2	>999		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 6 lb	FT = 20%
	Code FBC2020/TPI2014							

**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=0-8-0, 4=Mechanical  
 Max Horz 2=72(LC 12)  
 Max Uplift 3=14(LC 1), 2=191(LC 12)  
 Max Grav 3=33(LC 12), 2=202(LC 1), 4=18(LC 3)

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

**NOTES-** (7)

- 1) Wind: ASCE 7-16; 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 Exterior(2E) 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 100 lb uplift at joint(s) 3 except (jt=lb) 2=191.
- 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 electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

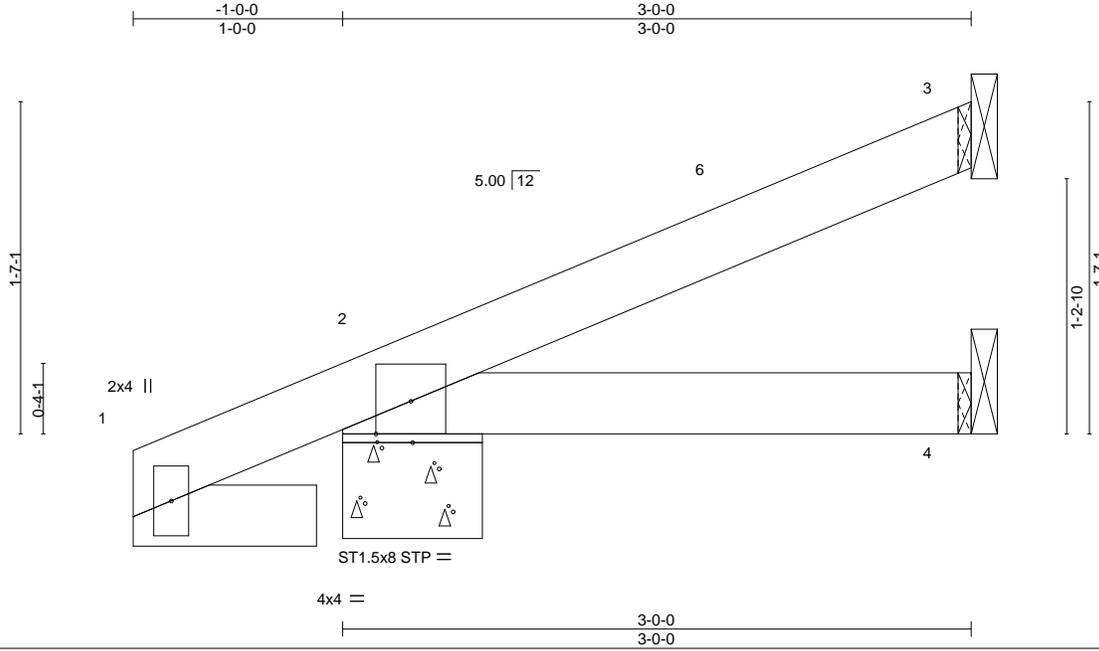
Job	Truss	Truss Type	Qty	Ply		T29127019
HR0009	C3	Corner Jack	8	1		

Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:40 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-KNxQMWBvYhF37U9\_Q9XPgjWFCroFRVpCf\_pZhvKyNBrz



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.25	Vert(LL)	-0.00	2-4	>999	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.13	Vert(CT)	-0.01	2-4	>999		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 12 lb	FT = 20%
	Code FBC2020/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	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=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 7-16; 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 Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 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 100 lb uplift at joint(s) 3 except (jt=lb) 2=217.
  - 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 electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3, 2022

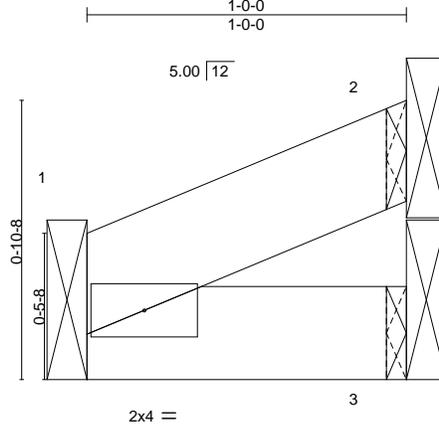


Job	Truss	Truss Type	Qty	Ply	T29127021
HR0009	CJ01	Corner Jack	16	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:41 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-pZVoasCaSZB\_6JZciEwvFknQnCdqEGSoDTJFRmyNBry



Scale = 1:7.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.04	Vert(LL) -0.00	1	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.02	Vert(CT) -0.00	1	>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 FBC2020/TPI2014	Matrix-P					Weight: 3 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	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=-39(LC 12), 2=-19(LC 12)  
 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 7-16; 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 Exterior(2E) 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 100 lb uplift at joint(s) 1, 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  
 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017

Date: November 3, 2022

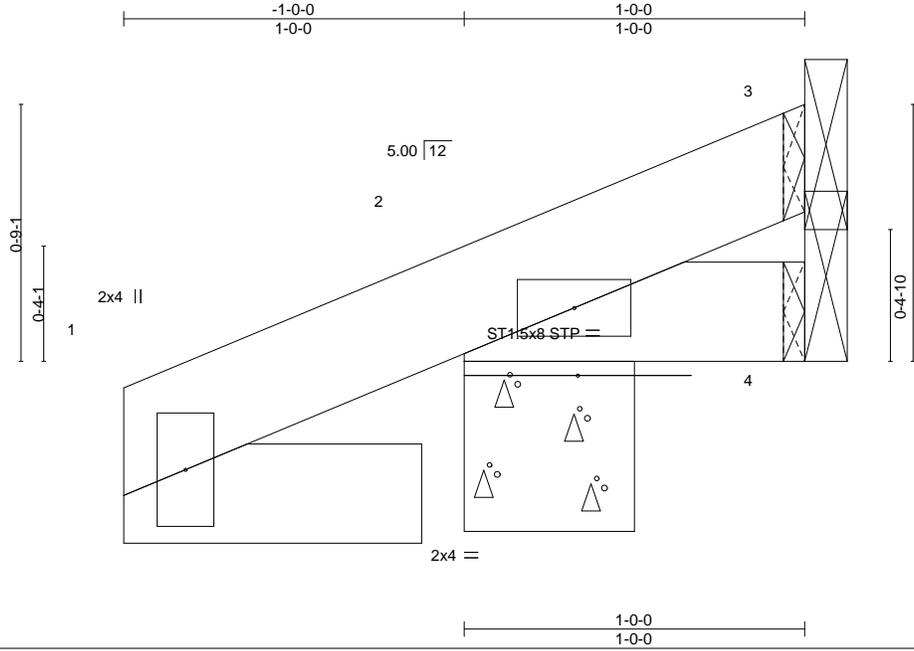
Job	Truss	Truss Type	Qty	Ply		T29127022
HR0009	CJ1	Corner Jack	4	1		

Builders FirstSource (Tampa, FL),

Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:42 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-HI3AnCDCCsJrkT8oGyS8oxKZibzhjyR72ozCyNBx



Scale = 1:6.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	<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 0.16	Vert(LL) -0.00	2	>999	240		MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.01	Vert(CT) -0.00	2	>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 FBC2020/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)

- 1) Wind: ASCE 7-16; 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 Exterior(2E) 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 100 lb uplift at joint(s) 3 except (jt=lb) 2=186.
- 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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 Date:

November 3,2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



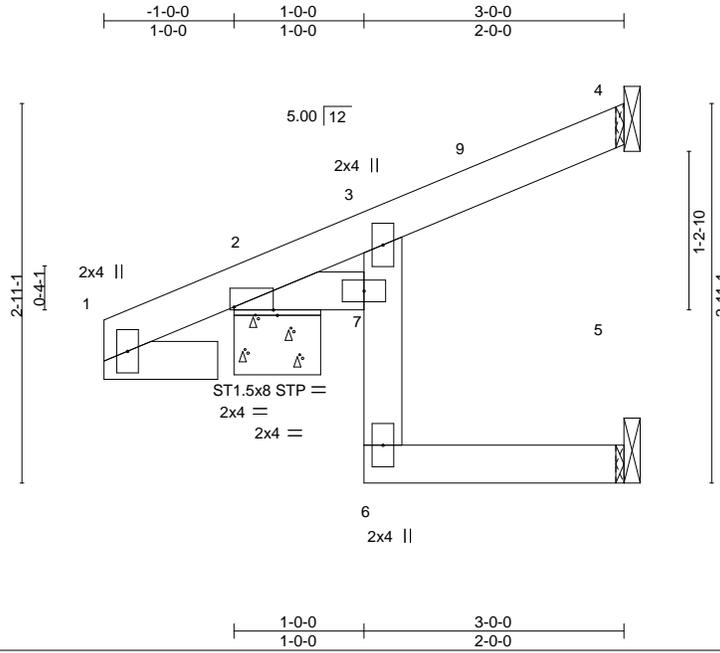
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127023
HR0009	CJ3	Corner Jack	2	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:43 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-lxdY?YDrzARiLdj\_qfzNL9tj5?HriAy5gnolWfyNBw



LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.25	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.15	Vert(LL) -0.01 7 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.01 6 >999 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-R	Horz(CT) -0.01 5 n/a n/a	Weight: 15 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD 2x4 SP No.2 *Except* 3-6: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS 2x4 SP No.3	

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

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

- NOTES-** (7)
- 1) Wind: ASCE 7-16; 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 Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 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 100 lb uplift at joint(s) 4 except (jt=lb) 2=217.
  - 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 electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

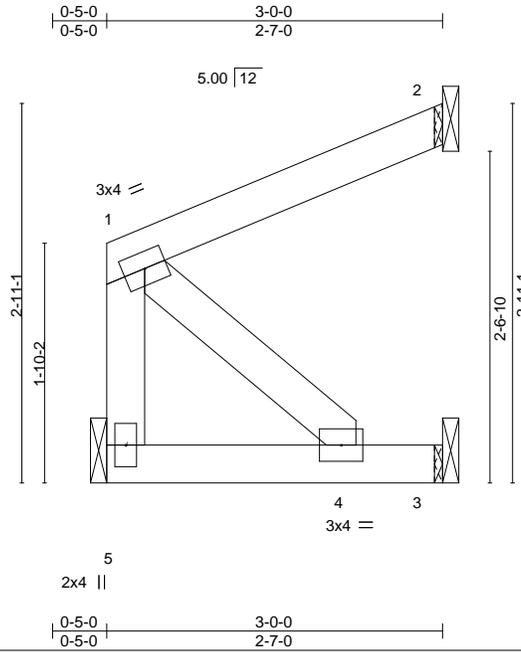
November 3,2022

Job	Truss	Truss Type	Qty	Ply	T29127024
HR0009	CJ3A	Corner Jack	2	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:43 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-lxdY?YDrzARiLdj\_qfzNL9tj?HZIA?5gnolWfyNBw



Scale = 1:17.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.21	Vert(LL)	-0.00	4	>999	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.17	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.06	Horz(CT)	-0.00	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 13 lb	FT = 20%
	Code FBC2020/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 3-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=Mechanical, 5=Mechanical, 3=Mechanical  
 Max Horz 5=69(LC 12)  
 Max Uplift 2=-88(LC 12), 5=-5(LC 12), 3=-40(LC 12)  
 Max Grav 2=107(LC 1), 5=131(LC 1), 3=48(LC 3)

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

**NOTES-** (7)

- 1) Wind: ASCE 7-16; 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 Exterior(2E) zone; end vertical 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 100 lb uplift at joint(s) 2, 5, 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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 Chesterfield, MO 63017

Date:

November 3,2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



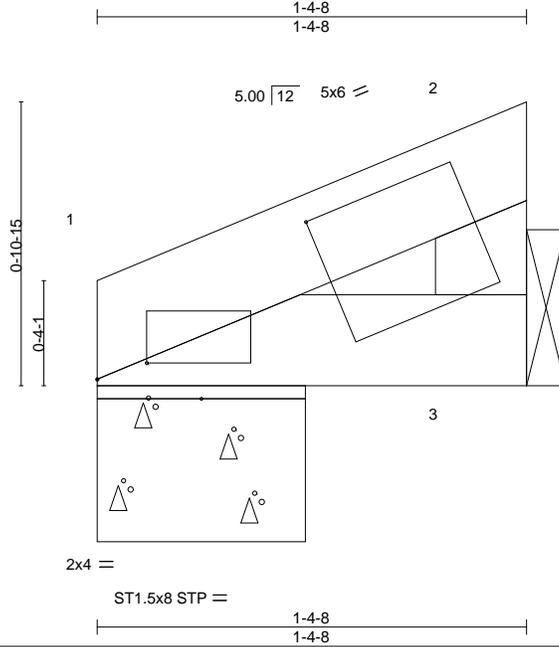
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127025
HR0009	E2	Monopitch	12	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:44 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-D8AwCuETkUZZznBOMUctMPx?PeARdBFvRxv25yNBv



Scale = 1:7.3

Plate Offsets (X,Y)-- [1:0-1-14,0-0-10], [2:0-9-12,0-2-8]

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 0.05	Vert(LL)	-0.00	1	>999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.01	Vert(CT)	-0.00	1	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-P					Weight: 5 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-4-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-8-0, 3=Mechanical  
 Max Horz 1=38(LC 12)  
 Max Uplift 1=-23(LC 12), 3=-41(LC 12)  
 Max Grav 1=64(LC 1), 3=64(LC 1)

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

**NOTES-** (7)

- 1) Wind: ASCE 7-16; 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 Exterior(2E) 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 100 lb uplift at joint(s) 1, 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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 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 Date:

November 3,2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

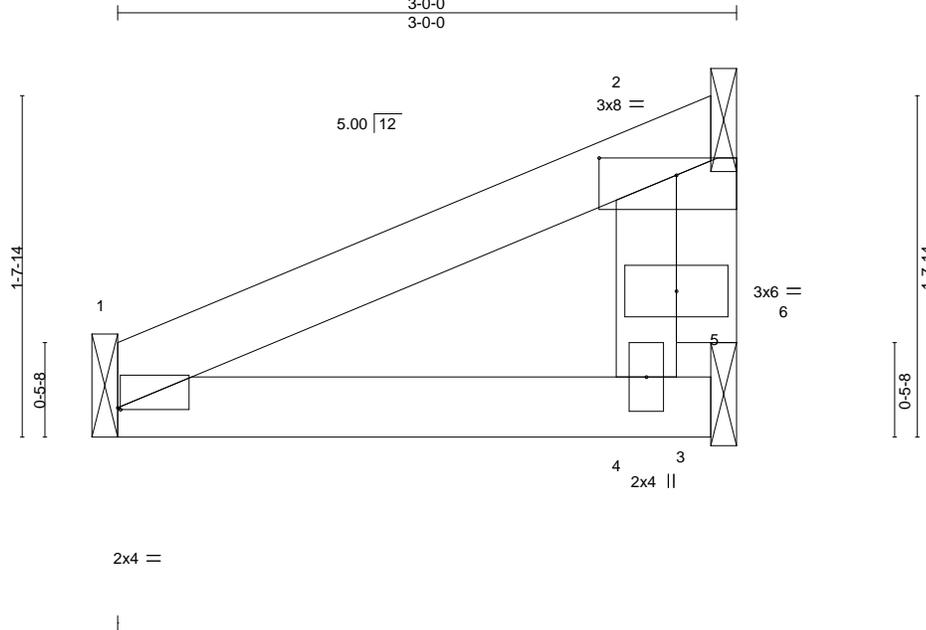


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply		T29127027
HR0009	EJ01	Monopitch	12	1		

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:46 2022 Page 1  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-9WlhdaGjG5qHC4SZVnW4ynUFWDJlvURYMI007zyNBrt



Scale = 1:11.1

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	2-0-0	TC 0.17	Vert(LL) -0.00	1-4	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33		BC 0.10	Vert(CT) -0.00	1-4	>999	180		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.14	Horz(CT) -0.00	1	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-R					Weight: 12 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 3-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 2=Mechanical, 6=0-1-8  
 Max Horz 6=71(LC 9)  
 Max Uplift 1=-62(LC 12), 2=-49(LC 12), 6=-38(LC 1)  
 Max Grav 1=131(LC 1), 2=188(LC 1)

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

**NOTES-** (10)

- 1) Wind: ASCE 7-16; 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 Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 at joint(s) 6.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2, 6.
- 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:

November 3,2022

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



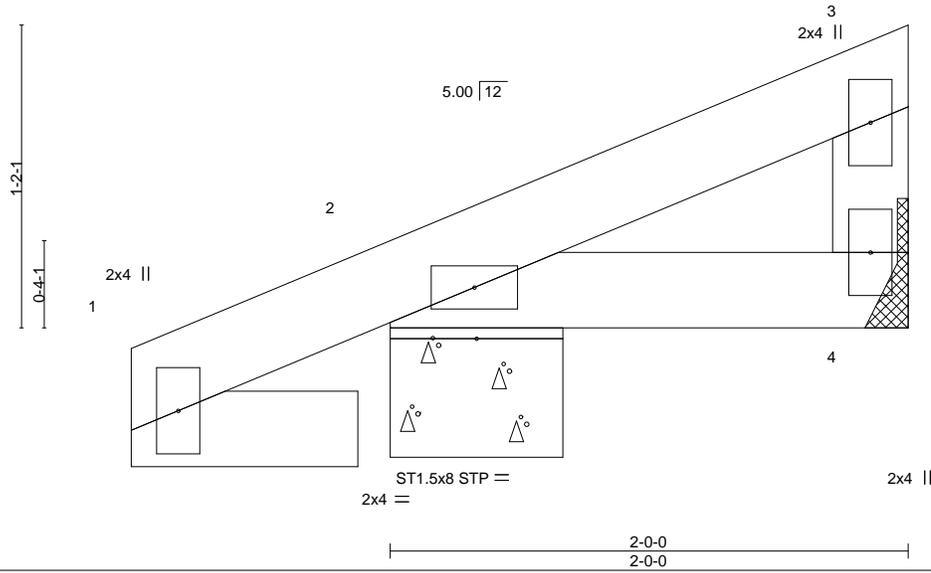
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127028
HR0009	EJ02	Monopitch Structural Gable	12	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:47 2022 Page 1  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-djs3qvGL1Py8qE1m3V1JV?1QOcgZezxbPmZiQyNBrs  
 2-0-0  
 2-0-0

Scale = 1:8.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.16	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.03	Vert(CT)	-0.00	2-4	>999		
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: 10 lb	FT = 20%
	Code FBC2020/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 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 7-16; 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 Exterior(2E) 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 100 lb uplift at joint(s) 4 except (jt=lb) 2=176.
- 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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 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 Date:

November 3, 2022

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
HR0009	EJ3	Jack-Open	2	1	T29127029

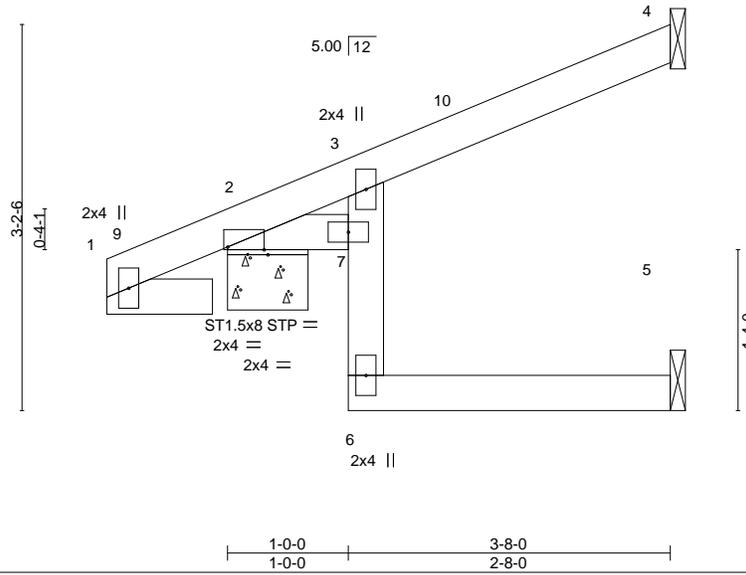
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:48 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-5vQR2FHzoI4?SObydCYY2CaZb0zpNQBq3V6BsyNBrr



Scale = 1:19.0



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.33	TC	0.26	Vert(LL)	0.02	6	>999	240	MT20	244/190	
TCDL	15.0	Lumber DOL	1.33	BC	0.22	Vert(CT)	-0.02	6	>999	180			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	5	n/a	n/a	Weight: 17 lb FT = 20%		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-R									

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	3-6: 2x4 SP No.3		
OTHERS	2x4 SP No.3		

**REACTIONS.** (size) 4=Mechanical, 2=0-8-0, 5=Mechanical  
 Max Horz 2=148(LC 12)  
 Max Uplift 4=87(LC 12), 2=224(LC 12), 5=1(LC 9)  
 Max Grav 4=119(LC 1), 2=324(LC 1), 5=55(LC 3)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-16; 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 Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-7-4 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 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=224.
  - 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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 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017

Date: November 3,2022

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--	--

Job	Truss	Truss Type	Qty	Ply		T29127030
HR0009	EJ04	Monopitch Structural Gable	6	1		

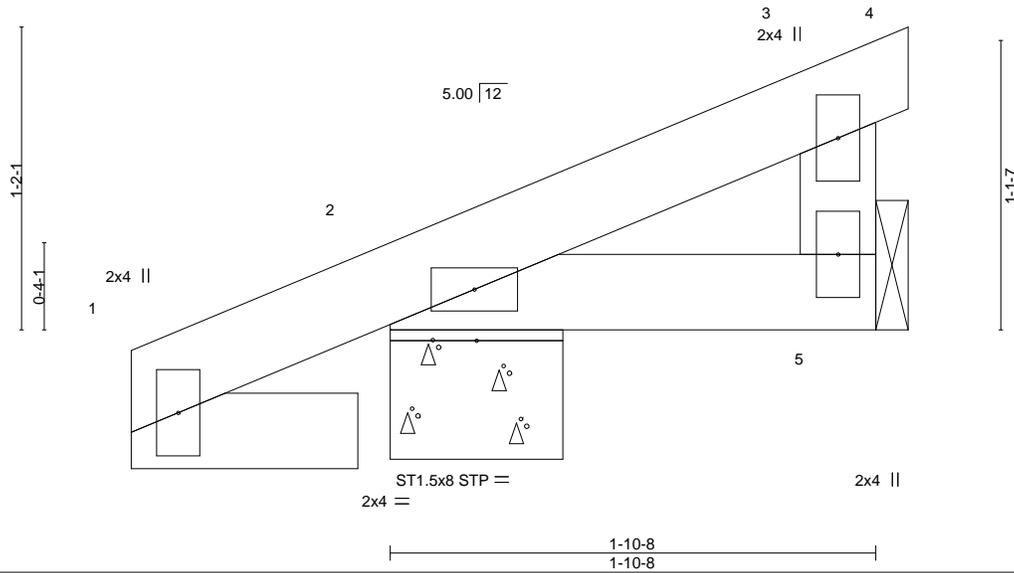
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:47 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-djs3qvGL1Py8qE1m3V1JV?1QOcgzezHhbPmZiQyNBrs



Scale = 1:8.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	<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 0.16	Vert(LL) -0.00	2	>999	240		MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.03	Vert(CT) -0.00	2	>999	180			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00		n/a	n/a			
BCDL 10.0	Code FBC2020/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.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-8-0, 5=Mechanical  
 Max Horz 2=100(LC 12)  
 Max Uplift 2=-172(LC 12), 5=-38(LC 12)  
 Max Grav 2=218(LC 1), 5=70(LC 17)

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

**NOTES-** (9)

- 1) Wind: ASCE 7-16; 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 Exterior(2E) 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 100 lb uplift at joint(s) 5 except (jt=lb) 2=172.
- 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."

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



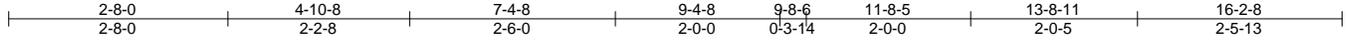
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job HR0009	Truss FG01	Truss Type FLOOR	Qty 2	Ply 3	T29127031
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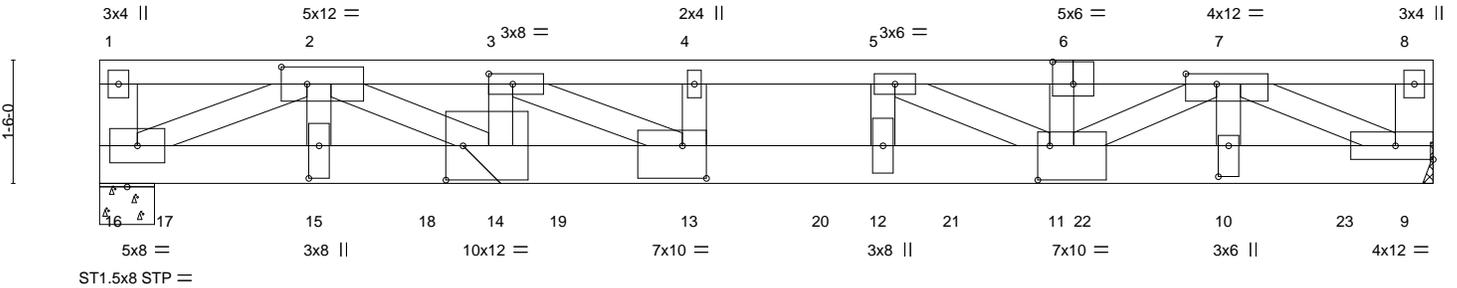
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:50 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-21YCTxJEKKKihilLkdb07dfloqWor6U7HN\_DGlyNBrp



Scale = 1:27.9



THIS TRUSS IS NOT SYMMETRIC.  
PROPER ORIENTATION IS ESSENTIAL.

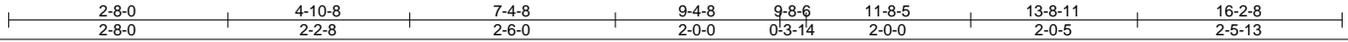


Plate Offsets (X,Y)-- [2:0-3-12,0-2-8], [3:0-3-8,0-1-8], [6:0-3-0,0-3-4], [7:0-4-8,0-1-8], [10:0-4-8,0-1-8], [11:0-1-12,0-5-0], [13:0-3-8,0-4-12], [14:0-2-8,0-5-0], [15:0-4-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.92	in (loc) l/defl L/d	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.83	Vert(LL) -0.32 12-13 >597 360		
BCLL 0.0	Rep Stress Incr NO	WB 0.91	Vert(CT) -0.51 12-13 >371 240		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.07 9 n/a n/a		
				Weight: 275 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP M 31 \*Except\*  
6-8: 2x4 SP No.1  
BOT CHORD 2x6 SP M 26  
WEBS 2x4 SP No.2 \*Except\*  
1-16,8-9: 2x6 SP No.2, 2-15,3-14,6-11,4-13,5-12,7-10: 2x4 SP No.3

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

**REACTIONS.** (size) 16=0-8-0, 9=Mechanical  
Max Grav 16=8146(LC 1), 9=8064(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-16=366/0, 1-2=1167/0, 2-3=-22812/0, 3-4=-26484/0, 4-5=-26484/0, 5-6=-21037/0,  
6-7=-21049/0, 7-8=-1070/0, 8-9=-315/0  
BOT CHORD 15-16=0/14208, 14-15=0/14208, 13-14=0/22812, 12-13=0/26484, 11-12=0/26484,  
10-11=0/13325, 9-10=0/13325  
WEBS 2-16=-14363/0, 2-15=0/1614, 3-14=-2077/0, 5-11=-6280/0, 7-11=0/8834, 5-12=0/2544,  
3-13=0/4300, 7-10=0/1688, 7-9=-13693/0, 2-14=0/9657

- NOTES-** (7)
- 3-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 0-4-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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 floor live loads have been considered for this design.
  - 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) 409 lb down at 0-10-4, 1008 lb down at 0-10-4, 409 lb down at 2-5-6, 1007 lb down at 2-5-6, 409 lb down at 4-0-8, 1007 lb down at 4-0-8, 409 lb down at 5-7-10, 1007 lb down at 5-7-10, 409 lb down at 7-2-12, 1007 lb down at 7-2-12, 409 lb down at 8-9-14, 1007 lb down at 8-9-14, 409 lb down at 10-5-0, 1007 lb down at 10-5-0, 409 lb down at 12-0-2, 1007 lb down at 12-0-2, 409 lb down at 13-7-4, 1007 lb down at 13-7-4, and 409 lb down at 15-2-6, and 1008 lb down at 15-2-6 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

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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:

November 3,2022

Continued on page 2

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127031
HR0009	FG01	FLOOR	2	3	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:50 2022 Page 2  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-2IYCTxJEKKKihilLkdb07dfloqWor6U7HN\_DGlyNBrp

**LOAD CASE(S)** Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-8=-120, 9-16=-10

Concentrated Loads (lb)

Vert: 15=-1416(F=-409, B=-1007) 13=-1416(F=-409, B=-1007) 10=-1416(F=-409, B=-1007) 17=-1418(F=-409, B=-1008) 18=-1416(F=-409, B=-1007)  
 19=-1416(F=-409, B=-1007) 20=-1416(F=-409, B=-1007) 21=-1416(F=-409, B=-1007) 22=-1416(F=-409, B=-1007) 23=-1416(F=-409, B=-1008)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127032
HR0009	FG02	FLOOR	2	2	Job Reference (optional)	

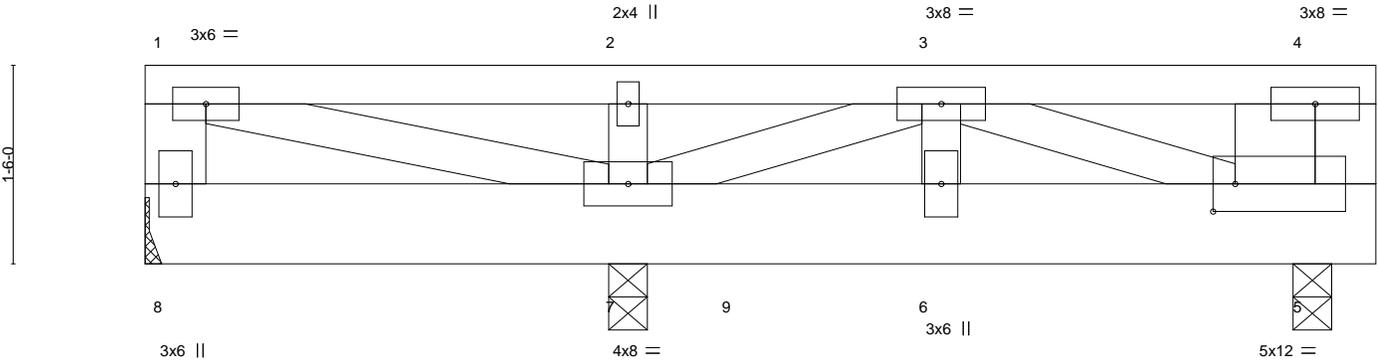
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:50 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-2ICYCTxJEKKKihlLkdb07dfxgqi0rKh7HN\_DGlyNBrp



Scale = 1:17.3



THIS TRUSS IS NOT SYMMETRIC.  
PROPER ORIENTATION IS ESSENTIAL.

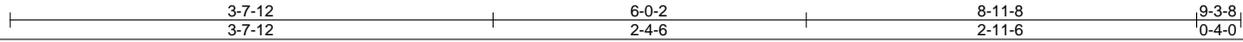


Plate Offsets (X,Y)-- [5:0-2-0,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.16	Vert(LL) -0.00	6	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.05	Vert(CT) -0.00	6	>999	240		
BCLL 0.0	Rep Stress Incr NO	WB 0.06	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 120 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x8 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 1-8,4-5: 2x6 SP No.2, 4-5: 2x8 SP 2400F 2.0E

**BRACING-**

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

**REACTIONS.**

(size) 8=Mechanical, 7=0-3-8, 5=0-3-8  
 Max Uplift 8=-21(LC 4)  
 Max Grav 8=131(LC 3), 7=1312(LC 1), 5=8426(LC 4)

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

BOT CHORD 6-7=0/455, 5-6=0/455  
 WEBS 2-7=-391/0, 3-7=-544/0, 3-5=-349/0

**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 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 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.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
- 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) 675 lb down at 4-6-4, and 8046 lb down at 8-10-0 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

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 1-4=-120, 5-8=-10  
 Concentrated Loads (lb)  
 Vert: 5=-8046(B) 9=-675(F)

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

Date:

November 3,2022

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T29127033
HR0009	FG03	FLOOR	4	2		

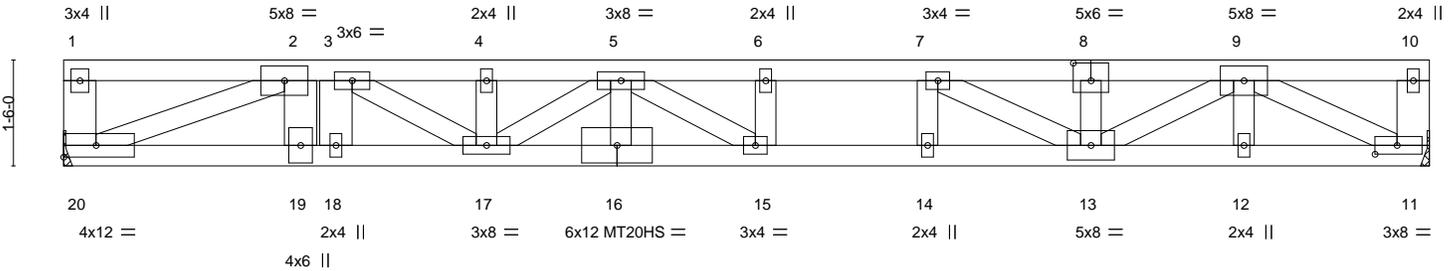
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:51 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-WU5agHKs5dSZJrKXIK6FfrCxKEq9ad3HW1knoByNBro



Scale = 1:32.5



THIS TRUSS IS NOT SYMMETRIC.  
PROPER ORIENTATION IS ESSENTIAL.

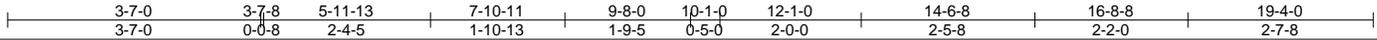


Plate Offsets (X,Y)-- [8:0-3-0,0-3-0], [11:0-3-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.87	Vert(LL) -0.32	15-16	>701	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.89	Vert(CT) -0.53	15-16	>430	240	MT20HS	187/143
BCLL 0.0	Rep Stress Incr NO	WB 0.70	Horz(CT) 0.08	11	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH						
							Weight: 194 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP M 31  
 WEBS 2x4 SP No.3 \*Except\*  
 1-20,10-11,3-18,2-19: 2x6 SP No.2, 2-20: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-10-13 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 20=Mechanical, 11=Mechanical  
 Max Grav 20=3802(LC 1), 11=1738(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-20=-276/0, 1-2=-338/0, 2-3=-9006/0, 3-4=-9432/0, 4-5=-9432/0, 5-6=-7866/0,  
 6-7=-7866/0, 7-8=-5218/0, 8-9=-5218/0  
 BOT CHORD 19-20=0/9006, 18-19=0/9006, 17-18=0/9389, 16-17=0/9372, 14-15=0/7866,  
 13-14=0/7866, 12-13=0/3124, 11-12=0/3124  
 WEBS 2-20=-9292/0, 7-14=0/736, 6-15=0/306, 9-11=-3362/0, 9-13=0/2398, 7-13=-3146/0,  
 4-17=-280/0, 5-16=0/425, 3-17=0/570, 5-15=-2078/0, 2-19=0/3038

**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 0-2-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, Except member 2-19 2x6 - 2 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) 3086 lb down at 3-7-8 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: 1-10=-120, 11-20=-10

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Joaquin Velez PE No.68182  
 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
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November 3,2022

Continued on page 2

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127033
HR0009	FG03	FLOOR	4	2	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:51 2022 Page 2  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-WU5agHks5dSZJrKXIK6FfrCxKEq9ad3HW1knoByNBro

**LOAD CASE(S)** Standard  
 Concentrated Loads (lb)  
 Vert: 19=-3086(F)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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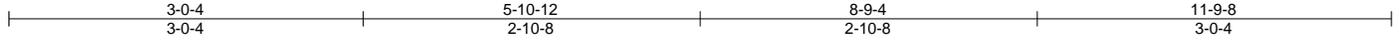
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127034
HR0009	FG04	FLOOR	2	2	

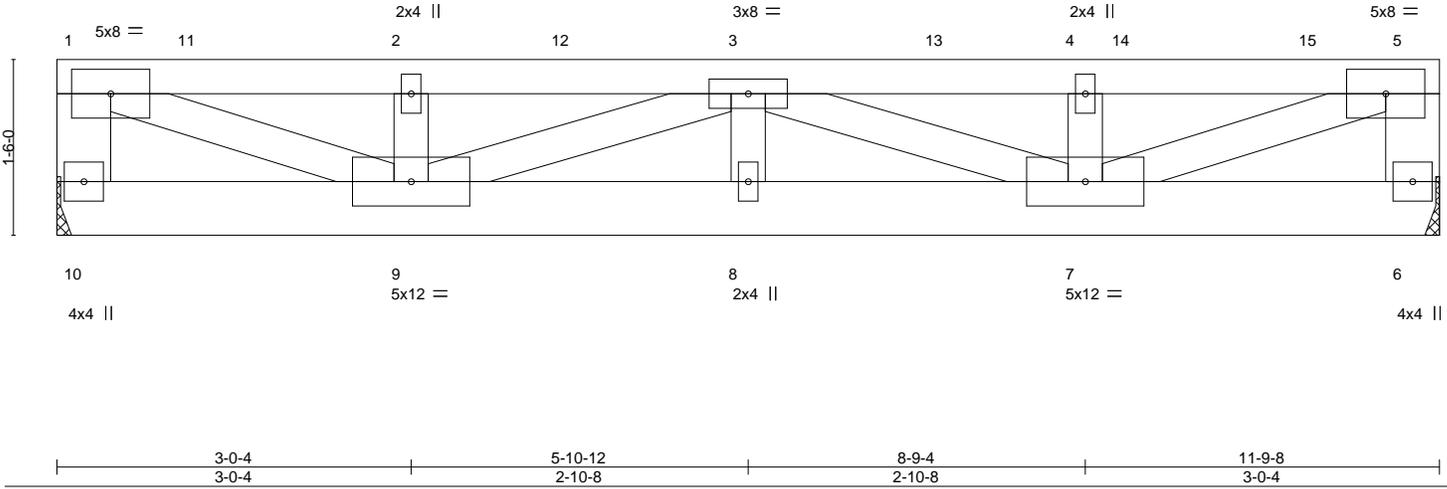
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:52 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-\_gfyudKUsxaQw?vjs2dUC2k7xdG7J3FQkhTKKdyNBn



Scale = 1:19.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0 Plate Grip DOL 1.00	TC 0.82	Vert(LL) -0.10	8	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.46	Vert(CT) -0.16	8	>829	240		
BCLL 0.0	Rep Stress Incr NO	WB 0.76	Horz(CT) 0.02	6	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 135 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP M 26  
 WEBS 2x4 SP No.3 \*Except\*  
 1-10,5-6: 2x6 SP No.2, 1-9,5-7: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-8-2 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 10=Mechanical, 6=Mechanical  
 Max Grav 10=3096(LC 1), 6=3184(LC 1)

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

TOP CHORD 1-10=-2667/0, 1-2=-5621/0, 2-3=-5621/0, 3-4=-5581/0, 4-5=-5581/0, 5-6=-2760/0  
 BOT CHORD 9-10=0/602, 8-9=0/8093, 7-8=0/8093, 6-7=0/631  
 WEBS 1-9=0/5412, 2-9=-1584/0, 3-9=-2654/0, 3-8=0/306, 3-7=-2697/0, 4-7=-1531/0, 5-7=0/5337

**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 0-5-0 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) 687 lb down at 1-2-6, 687 lb down at 2-9-8, 687 lb down at 4-4-10, 687 lb down at 5-11-12, 687 lb down at 7-6-14, and 687 lb down at 9-2-0, and 687 lb down at 10-9-2 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."

**LOAD CASE(S)** Standard

- 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: 2=-687(B) 3=-687(B) 11=-687(B) 12=-687(B) 13=-687(B) 14=-687(B) 15=-687(B)

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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:

November 3,2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

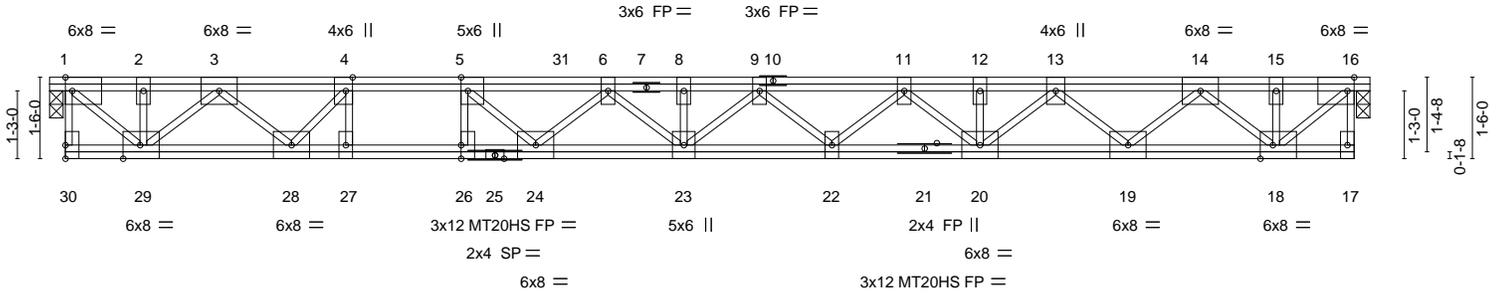


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127035
HR0009	FG05	Floor Girder	4	1		

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8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:54 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-w3niJmK0Yq8AJ36zTfyHTqTGRtrndjC?yRPWYNBrl



0-3-8	4-5-8	5-5-8	8-11-8	24-0-8	24-4-0
0-3-8	4-2-0	1-0-0	3-6-0	15-1-0	0-3-8

Plate Offsets (X,Y)-- [1:0-1-8,Edge], [4:0-3-0,Edge], [5:0-3-0,Edge], [16:0-1-8,Edge], [18:0-2-12,Edge], [26:0-3-0,0-0], [29:0-3-12,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.83	Vert(LL) -0.36	23	>782	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.82	Vert(CT) -0.59	23	>478	240	MT20HS	187/143
BCLL 0.0	Rep Stress Incr NO	WB 0.96	Horz(CT) -0.09	16	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH						
							Weight: 194 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 5-0-8 oc purlins, except end verticals.
BOT CHORD 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=1409(LC 1), 16=1435(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 1-2=-1496/0, 2-3=-1496/0, 3-4=-3917/0, 4-5=-5381/0, 5-6=-6474/0, 6-8=-6842/0, 8-9=-6842/0, 9-11=-6470/0, 11-12=-5473/0, 12-13=-5473/0, 13-14=-3827/0, 14-15=-1492/0, 15-16=-1492/0  
**BOT CHORD** 28-29=0/2718, 27-28=0/5381, 26-27=0/5381, 23-24=0/7046, 22-23=0/6798, 20-22=0/6108, 19-20=0/4761, 18-19=0/2867  
**WEBS** 1-29=0/2022, 16-18=0/2016, 3-29=-1639/0, 3-28=0/1643, 14-18=-1846/0, 14-19=0/1315, 13-19=-1281/0, 13-20=0/956, 11-20=-852/0, 11-22=0/497, 9-22=-449/0, 6-23=-417/0, 6-24=-842/0, 5-24=0/1609, 4-27=0/1168, 4-28=-2269/0, 5-26=-1013/0

- NOTES-** (9)
- 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.
  - The Fabrication Tolerance at joint 25 = 11%, joint 25 = 20%
  - 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 329 lb down at 9-5-4, and 169 lb down at 21-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 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  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 17-30=-8, 1-16=-96  
 Concentrated Loads (lb)  
 Vert: 14=-118(B) 31=-278(B)

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

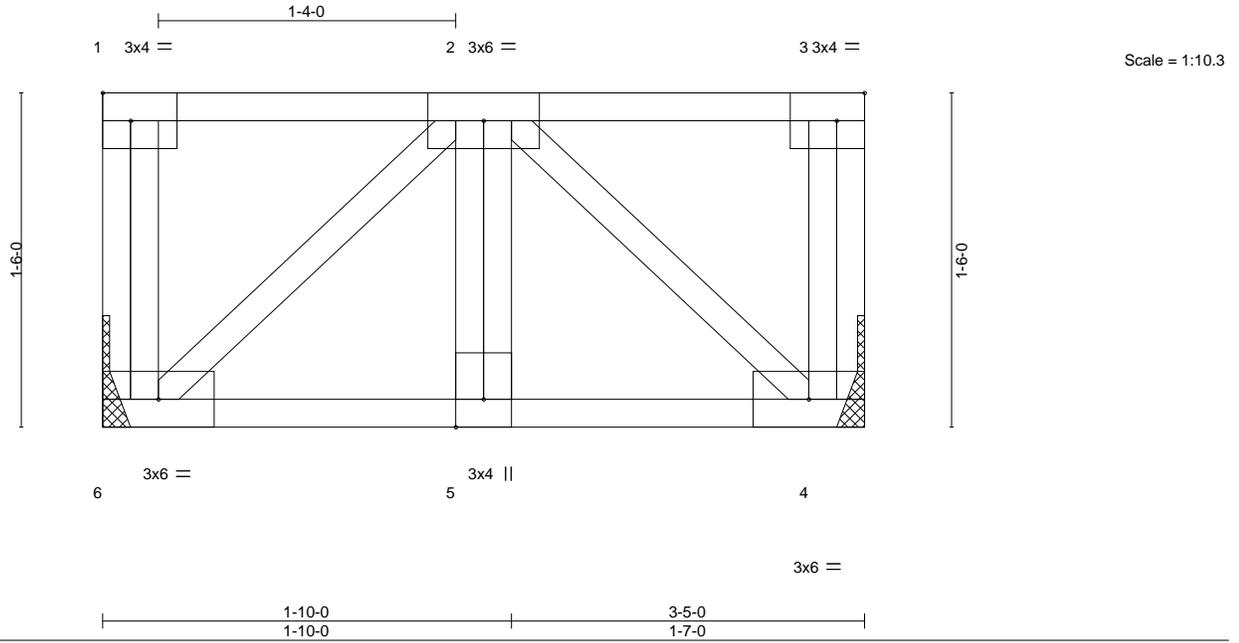
November 3,2022

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Job	Truss	Truss Type	Qty	Ply	T29127036
HR0009	FG06	Floor Girder	2	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:55 2022 Page 1  
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.00 5 >999 360	MT20		244/190	
TCDL	20.0	Lumber DOL	1.00	BC	0.11	Vert(CT)	-0.00 5 >999 240				
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00 4 n/a n/a				
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-P							Weight: 27 lb FT = 20%F, 11%E

LUMBER-		BRACING-	
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=354(LC 1), 4=354(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
BOT CHORD 5-6=0/332, 4-5=0/332  
WEBS 2-6=-440/0, 2-4=-440/0

- 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) 380 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=-380(F)

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

November 3,2022

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Job	Truss	Truss Type	Qty	Ply		T29127037
HR0009	FG07	Floor Girder	2	1		

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8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:56 2022 Page 1  
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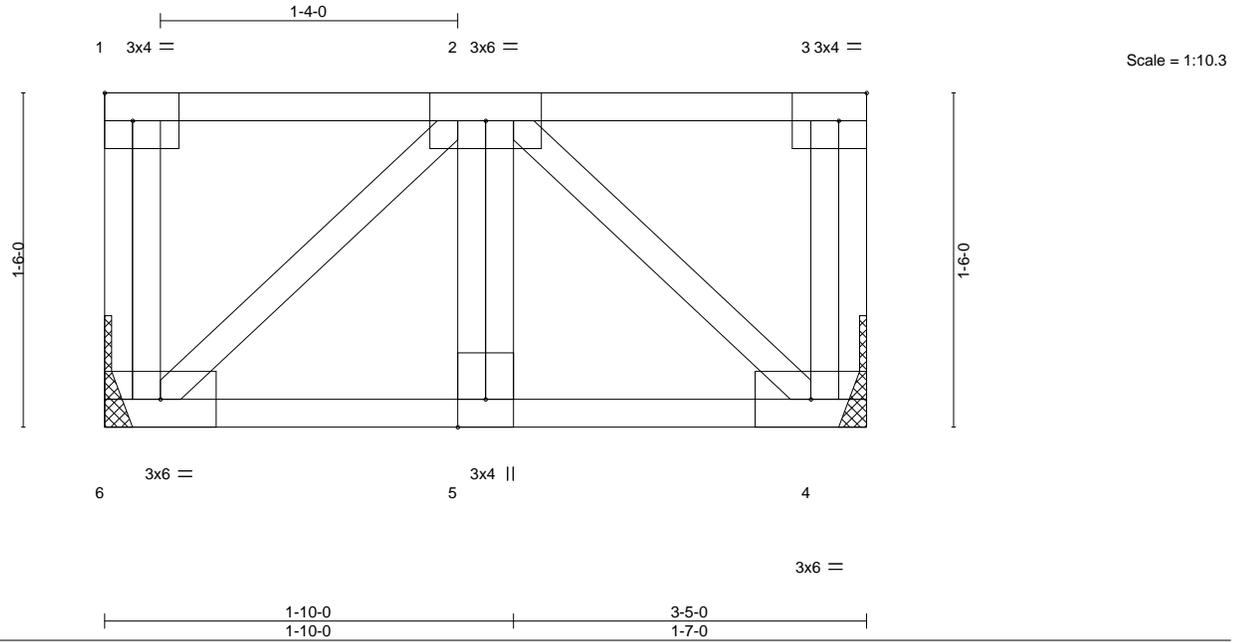


Plate Offsets (X,Y)-- [3:0-1-8,Edge]		CSI.		DEFL.		PLATES		GRIP	
LOADING (psf)	SPACING- 1-7-2	TC	0.17	in (loc)	l/defl	L/d	MT20	244/190	
TCLL 40.0	Plate Grip DOL 1.00	BC	0.06	Vert(LL) -0.00	5 >999	360			
TCDL 20.0	Lumber DOL 1.00	WB	0.05	Vert(CT) -0.00	5 >999	240			
BCLL 0.0	Rep Stress Incr NO	Matrix-P		Horz(CT) 0.00	4 n/a	n/a			
BCDL 5.0	Code FBC2020/TPI2014						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=194(LC 1), 4=194(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) 61 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=-61(B)

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 16023 Swingley Ridge Rd.  
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November 3,2022

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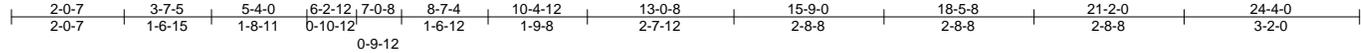
Job	Truss	Truss Type	Qty	Ply	T29127038
HR0009	FG08	FLAT GIRDER	2	3	

Job Reference (optional)

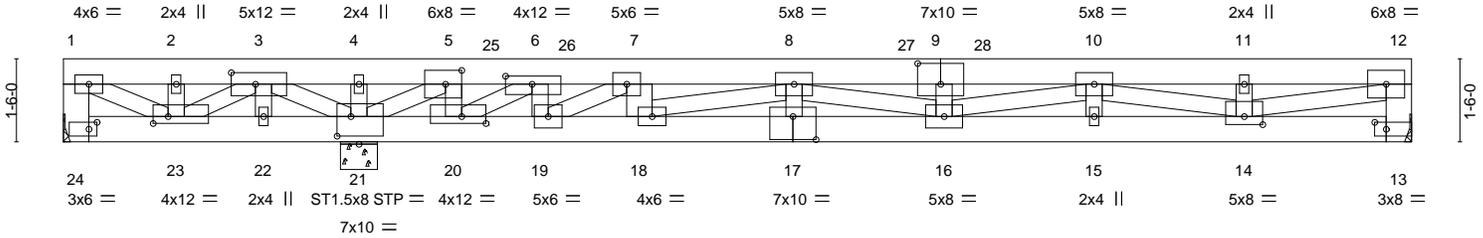
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:58 2022 Page 1

ID:bzeMQ6aYnVsSaPAR?PBKUKnzRR9V-pq1D8gPFRnKaewMtCJkuRJ\_5s2HKjCJ7dweYHyNBhr



Scale = 1:41.4



FASTEN TRUSS TO BEARING FOR THE GRAVITY UPLIFT REACTION SHOWN WHILE PERMITTING NO UPWARD MOVEMENT OF THE BEARING.

THIS TRUSS IS NOT SYMMETRIC. PROPER ORIENTATION IS ESSENTIAL.

2-0-7   3-7-5   5-4-0   7-0-8   8-7-4   10-4-12   13-0-8   15-9-0   18-5-8   21-2-0   24-4-0 2-0-7   1-6-15   1-8-11   1-8-8   1-6-12   1-9-8   2-7-12   2-8-8   2-8-8   2-8-8   3-2-0	Plate Offsets (X,Y)-- [3:0-5-4,0-2-8], [5:0-3-8,0-3-0], [6:0-5-12,0-1-12], [9:0-5-0,0-4-8], [13:0-2-8,0-1-8], [14:0-4-0,0-1-12], [17:0-5-0,0-5-0], [20:0-5-4,0-1-8], [21:0-3-0,0-4-4], [23:0-3-4,0-1-8], [24:0-1-12,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.98	Vert(LL) -0.21 17 >999 360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.60	Vert(CT) -0.35 17 >645 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.99	Horz(CT) 0.03 13 n/a n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH	Wind(LL) 0.16 17 >999 240	Weight: 472 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP M 26  
 BOT CHORD 2x6 SP M 26  
 WEBS 2x4 SP No.2 \*Except\*  
 1-24,12-13,7-18: 2x6 SP No.2  
 12-14,10-14,10-16,8-18,8-16: 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 6-0-0 oc bracing.

**REACTIONS.**

(size) 21=0-8-0, 24=Mechanical, 13=Mechanical  
 Max Uplift 21=-7201(LC 4), 24=-1657(LC 1), 13=-803(LC 5)  
 Max Grav 21=24330(LC 1), 24=709(LC 5), 13=2411(LC 1)

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

TOP CHORD 1-24=-648/1550, 1-2=-1799/5203, 2-3=-1799/5203, 3-4=-6961/22326, 4-5=-6961/22326, 5-6=-2551/7789, 6-7=-7022/2150, 7-8=-17446/5485, 8-9=-13892/4491, 9-10=-13874/4483, 10-11=-5504/1816, 11-12=-5504/1816, 12-13=-2165/732  
 BOT CHORD 23-24=-361/148, 22-23=-13982/4516, 21-22=-13982/4516, 20-21=-7789/2551, 19-20=-2150/7022, 18-19=-5485/17446, 17-18=-5387/16861, 16-17=-5386/16855, 15-16=-3329/10179, 14-15=-3329/10179, 13-14=-232/696  
 WEBS 4-21=-6061/1753, 2-23=-2753/783, 1-23=-5590/1906, 3-21=-9750/2862, 7-18=-810/527, 5-20=-2433/7722, 7-19=-12057/3962, 5-21=-17027/5165, 8-17=-73/319, 9-16=-295/129, 12-14=-1691/5132, 10-14=-5009/1621, 10-16=-1293/3959, 8-18=-259/654, 8-16=-3175/1116, 3-22=-1991/601, 3-23=-3257/10524, 6-19=-2169/6647, 6-20=-17801/5542

**NOTES-** (13)

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-7-0 oc, Except member 2-23 2x4 - 1 row at 0-9-0 oc, member 1-23 2x4 - 1 row at 0-9-0 oc, member 21-3 2x4 - 1 row at 0-9-0 oc, member 5-20 2x4 - 1 row at 0-9-0 oc, member 7-19 2x4 - 1 row at 0-9-0 oc, member 8-17 2x4 - 1 row at 0-9-0 oc, member 9-16 2x4 - 1 row at 0-9-0 oc, member 10-15 2x4 - 1 row at 0-9-0 oc, member 11-14 2x4 - 1 row at 0-9-0 oc, member 12-14 2x4 - 1 row at 0-9-0 oc, member 10-14 2x4 - 1 row at 0-9-0 oc, member 10-16 2x4 - 1 row at 0-9-0 oc, member 18-8 2x4 - 1 row at 0-9-0 oc, member 8-16 2x4 - 1 row at 0-9-0 oc, member 3-22 2x4 - 1 row at 0-9-0 oc, member 23-3 2x4 - 1 row at 0-9-0 oc, member 6-19 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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 7-16; 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.

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127038
HR0009	FG08	FLAT GIRDER	2	3	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:58 2022 Page 2  
ID:bzeMQ6aYnVsaPAR?PBKUKnzRR9V-pq1D8gPFRnKaewMTCJkuRJ\_5s2HKjCJ7dweYHyNBhr

**NOTES-** (13)

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* 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.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=7201, 24=1657, 13=803.
- 10) 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, 23, 24, 25, 26, 27, 28 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 11) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 6207 lb down and 2277 lb up at 10-4-12 on top chord, and 280 lb down at 10-4-0 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=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-7=-1609, 7-12=-120, 18-24=-45(F=-35), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-6207 18=-280(F)
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-7=-1377, 7-12=-100, 18-24=-40(F=-30), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-5252 18=-249(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-7=-893, 7-12=-40, 18-24=-49(F=-19), 13-18=-30  
Concentrated Loads (lb)  
Vert: 7=-3342 18=-171(F)
- 4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-25=450, 7-25=447, 7-27=51, 12-27=31, 18-24=7(F=13), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=2277 18=-105(F)
- 5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-26=427, 7-26=447, 7-28=51, 12-28=54, 18-24=7(F=13), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=2277 18=-105(F)
- 6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-102(F)
- 7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-102(F)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=432, 7-12=52, 18-24=6(F=12), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=2203 18=-105(F)
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=52, 7-12=19, 18-24=-2(F=4), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=643 18=-105(F)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-102(F)
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-102(F)
- 12) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-7=-680, 7-12=-40, 18-24=-23(F=-13), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2387 18=-157(F)
- 13) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127038
HR0009	FG08	FLAT GIRDER	2	3	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:58 2022 Page 3  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-pq1D8gPFRnKaewMTCJkuRJ\_5s2HKjCJ7dweYHyNBhr

**LOAD CASE(S)** Standard

- Uniform Loads (plf)  
Vert: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10
- Concentrated Loads (lb)  
Vert: 7=-5665 18=-102(F)
- 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: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-5665 18=-102(F)
- 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: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-5665 18=-102(F)
- 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: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-5665 18=-102(F)
- 17) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-25=450, 7-25=447, 7-27=51, 12-27=31, 18-24=7(F=13), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=2277 18=-172(F)
- 18) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-26=427, 7-26=447, 7-28=51, 12-28=54, 18-24=7(F=13), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=2277 18=-172(F)
- 19) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-169(F)
- 20) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-169(F)
- 21) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=432, 7-12=52, 18-24=6(F=12), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=2203 18=-172(F)
- 22) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=52, 7-12=19, 18-24=-2(F=4), 13-18=-6  
Concentrated Loads (lb)  
Vert: 7=643 18=-172(F)
- 23) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-169(F)
- 24) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-7=-804, 7-12=-42, 18-24=-27(F=-17), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-2938 18=-169(F)
- 25) Reversal: 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: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-5665 18=-235(F)
- 26) Reversal: 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: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-5665 18=-235(F)
- 27) Reversal: 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: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10  
Concentrated Loads (lb)  
Vert: 7=-5665 18=-235(F)

Continued on page 4

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127038
HR0009	FG08	FLAT GIRDER	2	3	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:58 2022 Page 4  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-pq1D8gPFRnKaewMtCJkuRJ\_5s2HKjCJ7dweYHyNBrd

**LOAD CASE(S)** Standard

28) Reversal: 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: 1-7=-1470, 7-12=-101, 18-24=-42(F=-32), 13-18=-10

Concentrated Loads (lb)

Vert: 7=-5665 18=-235(F)

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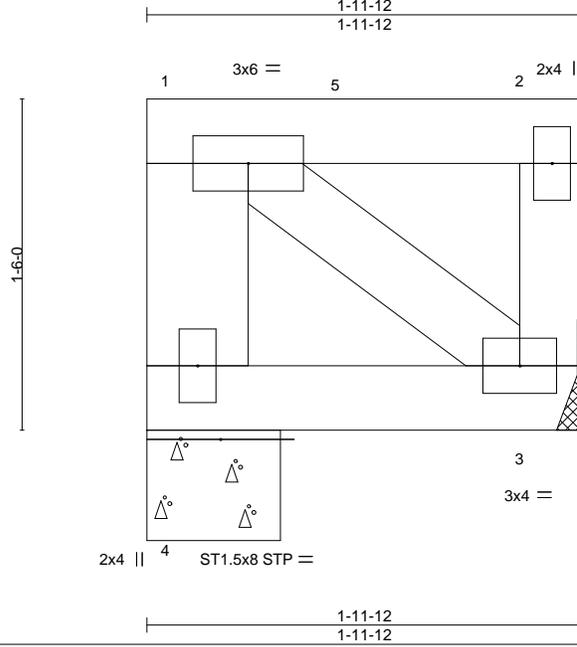
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127039
HR0009	FG09	FLAT GIRDER	2	2	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:59 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-H0abMQQtC5SRG4x3m0F7\_XXSWSmjSPvSLHgC4jyNBrg



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.22	Vert(LL)	-0.00	4	>999	MT20	244/190
TCDL 20.0	Plate Grip DOL 1.00	BC 0.01	Vert(CT)	-0.00	4	>999		
BCLL 0.0 *	Lumber DOL 1.00	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-P	Wind(LL)	0.00	4	****	Weight: 23 lb	FT = 20%
	Code FBC2020/TPI2014							

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

**REACTIONS.** (size) 4=0-7-4, 3=Mechanical  
 Max Uplift 4=-95(LC 8)  
 Max Grav 4=588(LC 1), 3=288(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-4=-580/694, 2-3=-280/227

- NOTES-** (12)
- 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 7-16; 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) and C-C Corner(3) 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 100 lb uplift at joint(s) 4.
  - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 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) 293 lb down and 456 lb up at 0-2-12, and 198 lb down and 308 lb up at 1-0-0 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."

**LOAD CASE(S)** Standard

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

Continued on page 2

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
HR0009	FG09	FLAT GIRDER	2	2	

T29127039

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:59 2022 Page 2  
ID:bzeMQ6aYnVsaPAR?PBKUKnzRR9V-H0abMQQtC5SRG4x3m0F7\_XXSWSmjSPvSLHgC4jyNBrg**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-2=-230, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-293 5=-198
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 1-2=-210, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-248 5=-168
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-2=-150, 3-4=-30  
Concentrated Loads (lb)  
Vert: 1=-158 5=-107
- 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=98, 3-4=-6  
Concentrated Loads (lb)  
Vert: 1=456 5=308
- 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=98, 3-4=-6  
Concentrated Loads (lb)  
Vert: 1=456 5=308
- 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=-181, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-182 5=-123
- 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=-181, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-182 5=-123
- 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=107 5=73
- 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=107 5=73
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-152, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-139 5=-94
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-152, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-139 5=-94
- 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=104 5=70
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-91, 3-4=-6  
Concentrated Loads (lb)  
Vert: 1=30 5=21
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-152, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-139 5=-94
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-152, 3-4=-10  
Concentrated Loads (lb)  
Vert: 1=-139 5=-94

Continued on page 3

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component****Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127039
HR0009	FG09	FLAT GIRDER	2	<b>2</b>	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:26:59 2022 Page 3  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-H0abMQQtC5SRG4x3m0F7\_XXSWSmjSPvSLHgC4jyNBrg

**LOAD CASE(S)** Standard

- 16) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
  - Uniform Loads (plf)
    - Vert: 1-2=-150, 3-4=-10
  - Concentrated Loads (lb)
    - Vert: 1=-113 5=-76
- 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=-211, 3-4=-10
  - Concentrated Loads (lb)
    - Vert: 1=-267 5=-181
- 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=-211, 3-4=-10
  - Concentrated Loads (lb)
    - Vert: 1=-267 5=-181
- 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=-211, 3-4=-10
  - Concentrated Loads (lb)
    - Vert: 1=-267 5=-181
- 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=-211, 3-4=-10
  - Concentrated Loads (lb)
    - Vert: 1=-267 5=-181

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

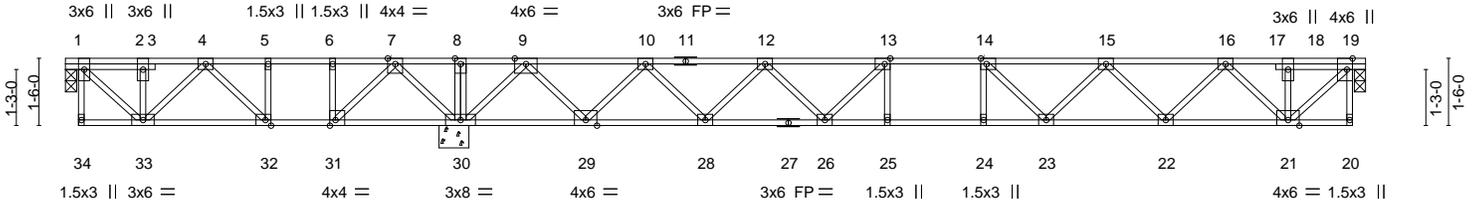


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127040
HR0009	FL01	Floor	4	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:01 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-DPiMmiR7kii8WO5SiRHb3yceLGFtWAHlp9l8cyNBre



0-3-8	8-8-0	8-9-12	28-8-8	29-0-0
0-3-8	8-4-8	0-1-12	19-10-12	0-3-8

Plate Offsets (X,Y)-- [13:0-1-8,Edge], [14:0-1-8,Edge], [19:0-3-0,Edge], [31:0-1-8,Edge], [32:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.84	Vert(LL) -0.18	24	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.89	Vert(CT) -0.29	24	>811	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.58	Horz(CT) -0.04	19	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 158 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-11: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat) *Except* 20-27: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 19=0-3-0, 30=0-8-0  
Max Uplift 1=100(LC 4)  
Max Grav 1=334(LC 3), 19=918(LC 7), 30=1849(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-285/118, 2-4=-290/121, 4-5=-280/703, 5-6=-280/703, 6-7=-280/703, 7-8=0/1718, 8-9=0/1718, 9-10=-416/0, 10-12=-1791/0, 12-13=-2622/0, 13-14=-2935/0, 14-15=-2762/0, 15-16=-2079/0, 16-18=-864/0, 18-19=-864/0  
BOT CHORD 32-33=-302/395, 31-32=-703/280, 30-31=-1220/0, 29-30=-576/0, 28-29=0/1232, 26-28=0/2329, 25-26=0/2935, 24-25=0/2935, 23-24=0/2935, 22-23=0/2559, 21-22=0/1580  
WEBS 1-33=-163/394, 19-21=0/1194, 4-33=-154/258, 4-32=-566/0, 5-32=0/271, 7-30=-906/0, 7-31=0/945, 6-31=-493/0, 16-21=-1005/0, 16-22=0/716, 15-22=-689/0, 15-23=0/355, 14-23=-413/10, 9-30=-1569/0, 9-29=0/1228, 10-29=-1189/0, 10-28=0/818, 12-28=-786/0, 12-26=0/465, 13-26=-582/0

- NOTES-** (7)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=100.
  - 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."

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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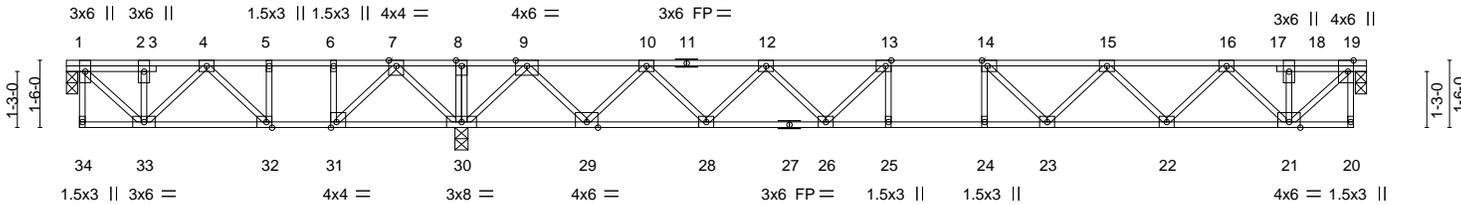


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127041
HR0009	FL02	Floor	10	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:03 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-9oq6BOTNGJzslhFq?sK38Ni\_r3wxO3m2GuePDUyNBrc



0-3-8 0-3-8	8-9-12 8-6-4	28-8-8 19-10-12	29-0-0 0-3-8
Plate Offsets (X,Y)-- [13:0-1-8,Edge], [14:0-1-8,Edge], [19:0-3-0,Edge], [31:0-1-8,Edge], [32:0-1-8,Edge]			

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.84	Vert(LL) -0.18	24	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.89	Vert(CT) -0.29	24	>811	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.58	Horz(CT) -0.04	19	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 158 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-11: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat) *Except* 20-27: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 19=0-3-0, 30=0-3-8  
Max Uplift 1=100(LC 4)  
Max Grav 1=334(LC 3), 19=918(LC 7), 30=1849(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-285/118, 2-4=-290/121, 4-5=-280/703, 5-6=-280/703, 6-7=-280/703, 7-8=0/1718, 8-9=0/1718, 9-10=-416/0, 10-12=-1791/0, 12-13=-2622/0, 13-14=-2935/0, 14-15=-2762/0, 15-16=-2079/0, 16-18=-864/0, 18-19=-864/0  
BOT CHORD 32-33=-302/395, 31-32=-703/280, 30-31=-1220/0, 29-30=-576/0, 28-29=0/1232, 26-28=0/2329, 25-26=0/2935, 24-25=0/2935, 23-24=0/2935, 22-23=0/2559, 21-22=0/1580  
WEBS 1-33=-163/394, 19-21=0/1194, 4-33=-154/258, 4-32=-566/0, 5-32=0/271, 7-30=-906/0, 7-31=0/945, 6-31=-493/0, 16-21=-1005/0, 16-22=0/716, 15-22=-689/0, 15-23=0/355, 14-23=-413/10, 9-30=-1569/0, 9-29=0/1228, 10-29=-1189/0, 10-28=0/818, 12-28=-786/0, 12-26=0/465, 13-26=-582/0

- NOTES-** (7)
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=100.
  - 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."

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3, 2022

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Job	Truss	Truss Type	Qty	Ply		T29127042
HR0009	FL03	Floor	14	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:04 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-d\_OUPJU01d5jNrq1ZZrlhaEAWTFm7W9BVYNzlxynBrb

0-3-8

1-4-0

2-0-4

1-3-0

Scale = 1:35.2

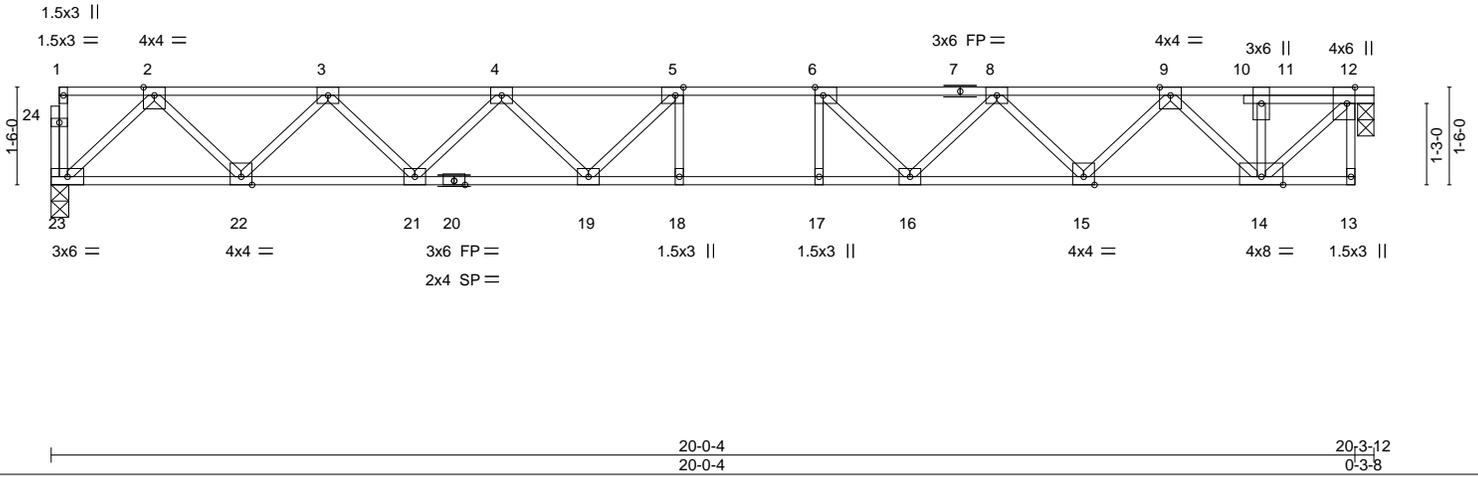


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge], [12:0-3-0,Edge]

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 0.78	Vert(LL)	-0.24 18-19	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.91	Vert(CT)	-0.38 18-19	>619	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.02 12	n/a	n/a		
BCDL 5.0	Code	FBC2020/TPI2014	Matrix-SH					Weight: 108 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat) \*Except\*  
13-20: 2x4 SP M 31(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-11-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-21.

**REACTIONS.**

(size) 12=0-3-0, 23=0-3-4  
Max Grav 12=1027(LC 1), 23=1021(LC 1)

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

TOP CHORD 2-3=-1766/0, 3-4=-2932/0, 4-5=-3549/0, 5-6=-3668/0, 6-8=-3299/0, 8-9=-2405/0, 9-11=-972/0, 11-12=-972/0  
BOT CHORD 22-23=0/1035, 21-22=0/2473, 19-21=0/3376, 18-19=0/3668, 17-18=0/3668, 16-17=0/3668, 15-16=0/2978, 14-15=0/1804  
WEBS 12-14=0/1344, 9-14=-1167/0, 9-15=0/863, 8-15=-824/0, 8-16=0/520, 6-16=-690/0, 6-17=-97/254, 2-23=-1421/0, 2-22=0/1050, 3-22=-1015/0, 3-21=0/660, 4-21=-637/0, 4-19=0/366, 5-19=-433/112

**NOTES-** (7)

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x4 MT20 unless otherwise indicated.
- The Fabrication Tolerance at joint 20 = 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.
- 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.\*

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



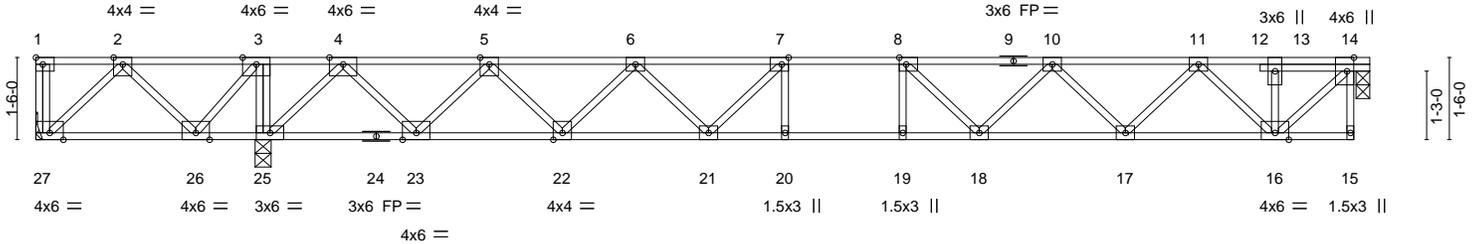
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127043
HR0009	FL04	Floor	4	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:05 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnRR9V-6Aysc3UeoxDa\_?PD6HMXEonK6tbXszLKC7WHNyBra

0-3-8



4-1-12	24-0-8	24-4-0
4-1-12	19-10-12	0-3-8

Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge], [14:0-3-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.85	Vert(LL) -0.18	18-19	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.94	Vert(CT) -0.29	18-19	>831	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.61	Horz(CT) -0.03	14	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 132 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) *Except* 15-24: 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 14=0-3-0, 27=Mechanical, 25=0-3-8  
Max Uplift 27=-735(LC 4)  
Max Grav 14=862(LC 4), 25=2221(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=0/1604, 3-4=0/2353, 4-5=0/409, 5-6=-1210/0, 6-7=-2149/0, 7-8=-2561/0,  
8-10=-2488/0, 10-11=-1913/0, 11-13=-809/0, 13-14=-809/0  
BOT CHORD 26-27=-802/0, 25-26=-2353/0, 23-25=-1189/0, 22-23=0/596, 21-22=0/1796,  
20-21=0/2561, 19-20=0/2561, 18-19=0/2561, 17-18=0/2345, 16-17=0/1466  
WEBS 14-16=0/1118, 3-25=-1092/0, 2-27=0/1103, 2-26=-1226/0, 3-26=0/1195, 11-16=-923/0,  
11-17=0/642, 10-17=-620/0, 10-18=0/278, 8-18=-291/78, 4-25=-1631/0, 4-23=0/1281,  
5-23=-1259/0, 5-22=0/883, 6-22=-842/0, 6-21=0/508, 7-21=-651/0

- NOTES-** (8)
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 27=735.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 7) CAUTION, Do not erect truss backwards.
  - 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:

November 3,2022

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job	Truss	Truss Type	Qty	Ply	T29127044
HR0009	FL05	Floor Girder	2	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:06 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-aNVFqPVGZELRc9\_Pg\_tmm?JZ4H6dbXFUzss3qpyNBz

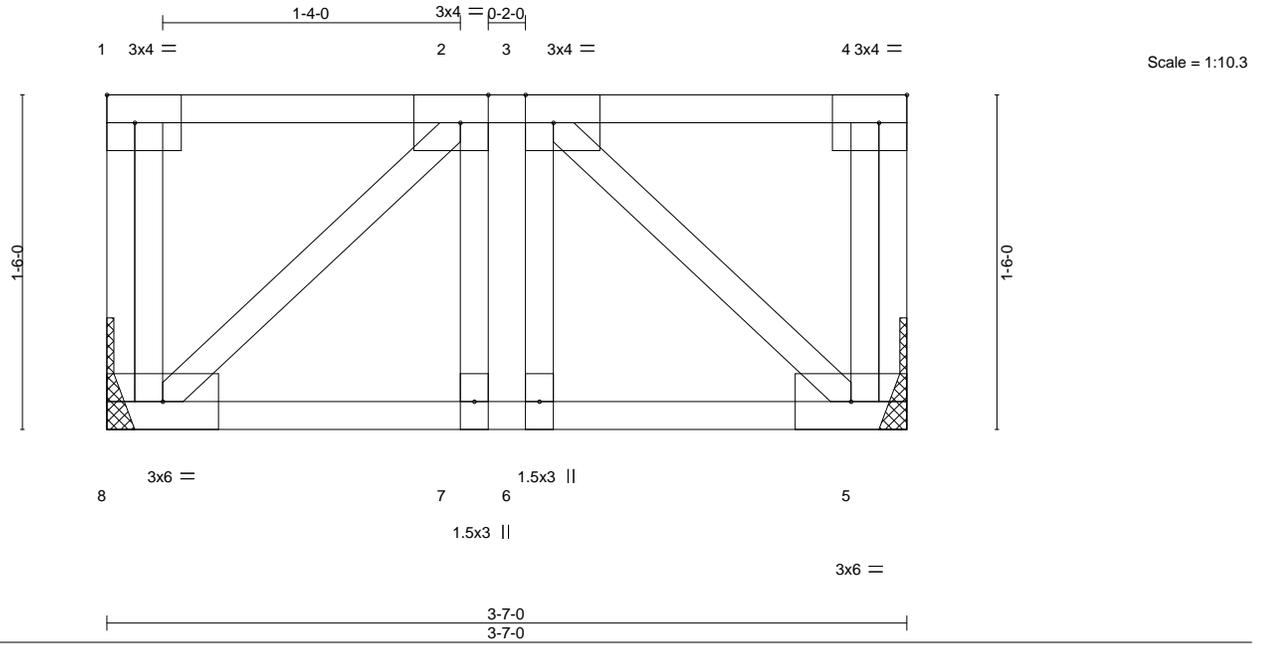


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [4:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.58	Vert(LL) -0.01	7-8	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.25	Vert(CT) -0.01	7-8	>999	240		
BCLL 0.0	Rep Stress Incr NO	WB 0.15	Horz(CT) 0.00	5	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					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 3-7-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=Mechanical, 5=Mechanical  
 Max Grav 8=683(LC 1), 5=683(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-261/0, 4-5=-261/0, 2-3=-472/0  
 BOT CHORD 7-8=0/472, 6-7=0/472, 5-6=0/472  
 WEBS 2-8=-637/0, 3-5=-637/0

- NOTES-** (5)
- Unbalanced floor live loads have been considered for this design.
  - 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.
  - 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  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 5-8=-8, 1-4=-402(F=-306)

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 Chesterfield, MO 63017  
 Date:

November 3,2022

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127045
HR0009	FL06	Floor Girder	2	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:07 2022 Page 1  
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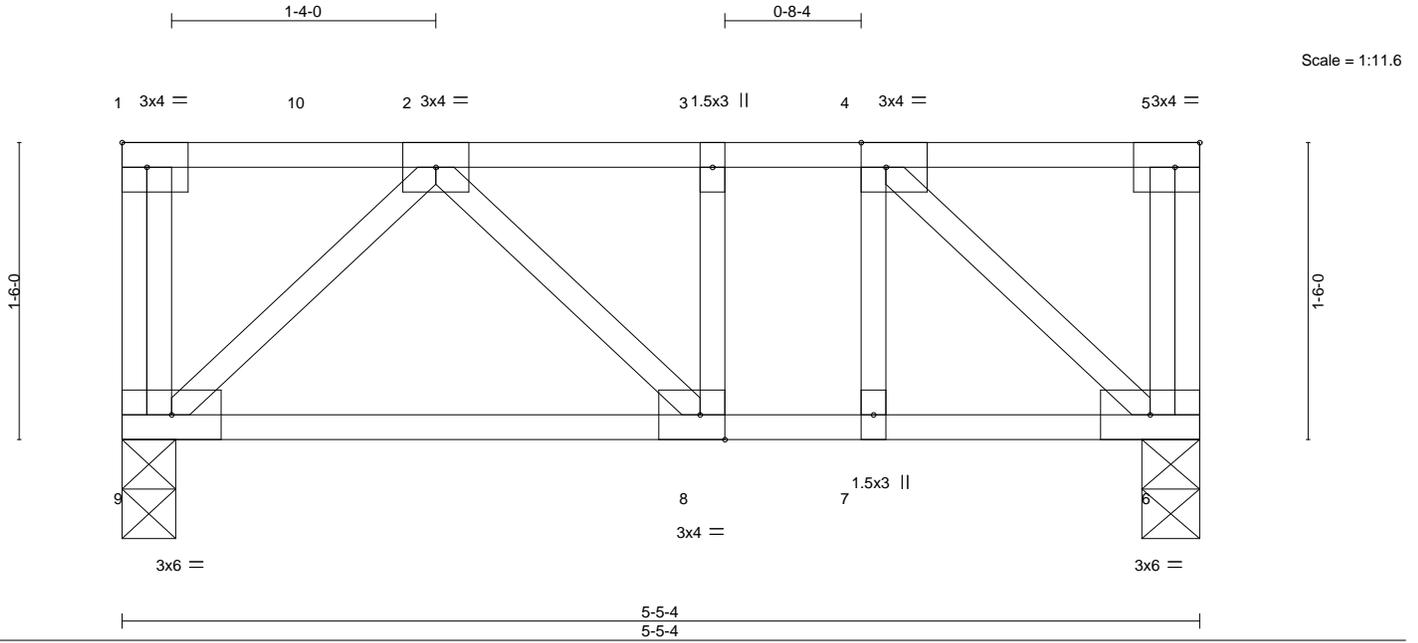


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [8:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.86	Vert(LL) -0.02	8-9	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.29	Vert(CT) -0.03	8-9	>999	240		
BCLL 0.0	Rep Stress Incr NO	WB 0.19	Horz(CT) 0.00	6	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH						
							Weight: 35 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 9=0-3-4, 6=0-3-8  
Max Grav 9=773(LC 1), 6=371(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-376/0, 3-4=-376/0  
BOT CHORD 8-9=0/559, 7-8=0/376, 6-7=0/376  
WEBS 2-9=-768/0, 2-8=-286/0, 4-6=-508/0

- NOTES-** (5)
- Unbalanced floor live loads have been considered for this design.
  - 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) 657 lb down at 1-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 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  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 6-9=-8, 1-5=-96  
Concentrated Loads (lb)  
Vert: 10=-606(B)

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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

November 3,2022

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127046
HR0009	FL07	FLOOR	20	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:08 2022 Page 1  
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1-4-0

1-1-8 2-0-0

1-3-0

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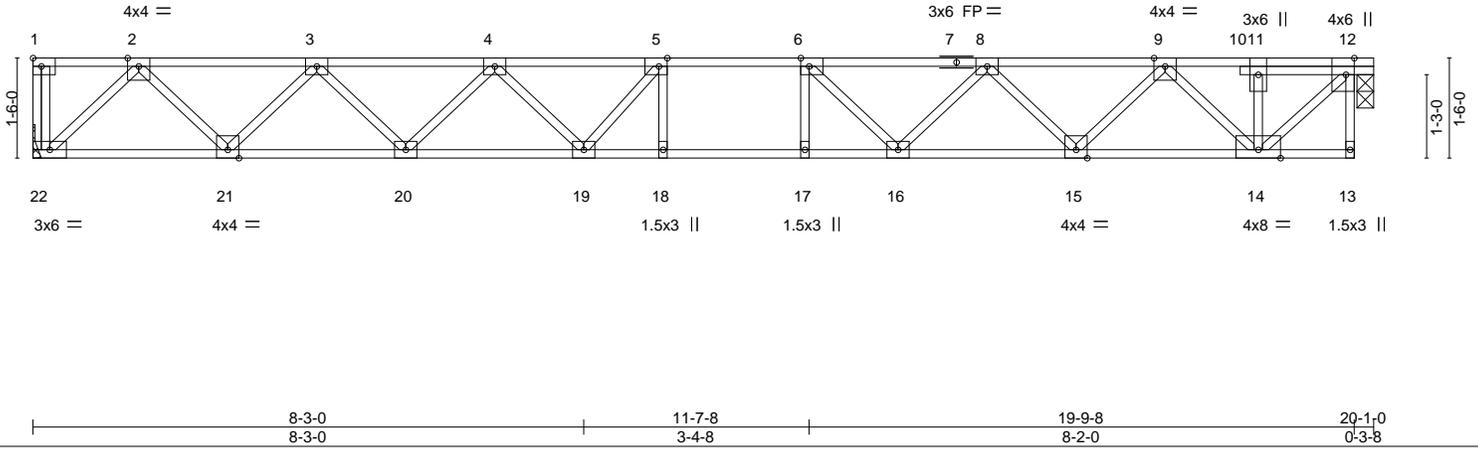


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge], [12:0-3-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.64	Vert(LL) -0.22	18	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.64	Vert(CT) -0.35	18	>670	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.63	Horz(CT) -0.01	12	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 108 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP M 31(flat)  
 WEBS 2x4 SP No.3(flat)

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 12=0-3-0, 22=Mechanical  
 Max Grav 12=1015(LC 1), 22=1015(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1743/0, 3-4=-2883/0, 4-5=-3483/0, 5-6=-3586/0, 6-8=-3241/0, 8-9=-2369/0, 9-11=-960/0, 11-12=-960/0  
 BOT CHORD 21-22=0/1023, 20-21=0/2439, 19-20=0/3312, 18-19=0/3586, 17-18=0/3586, 16-17=0/3586, 15-16=0/2933, 14-15=0/1779  
 WEBS 12-14=0/1327, 2-22=-1406/0, 2-21=0/1034, 3-21=-1000/0, 3-20=0/639, 4-20=-615/0, 4-19=0/369, 9-14=-1150/0, 9-15=0/847, 8-15=-810/0, 8-16=0/503, 6-16=-656/0, 5-19=-425/123

- NOTES-** (7)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 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.
  - 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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 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017

Date:

November 3,2022

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



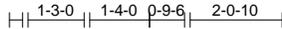
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127047
HR0009	FL09	Floor	8	1		

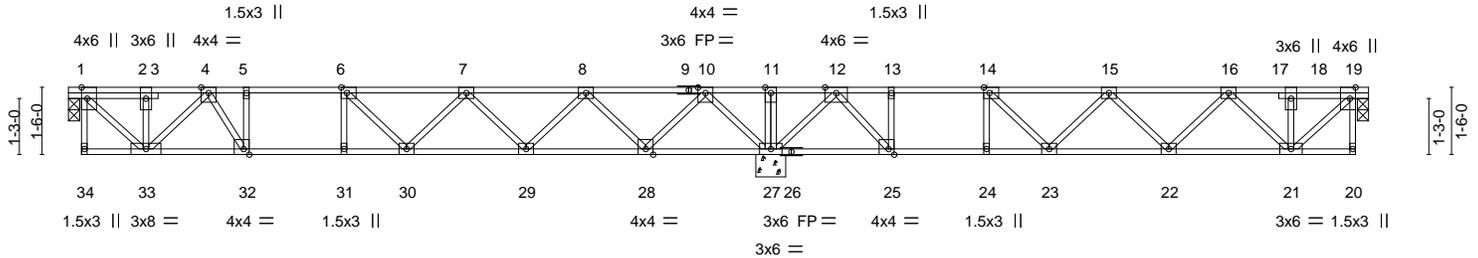
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:09 2022 Page 1  
ID:bzeMQ6aYnVsaPAR?PBKUKnzRR9V-\_yBNSRX6r9j0Tci\_L6RTOex3DU1yooRwfq5kR8yNbrW

0-3-8



Scale = 1:51.1



0-3-8	4-5-8	6-2-8	7-6-8	10-2-8	12-10-8	15-8-0	28-8-8	29-0-0
0-3-8	4-2-0	1-9-0	1-4-0	2-8-0	2-8-0	2-9-8	13-0-8	0-3-8

Plate Offsets (X,Y)-- [1:0-3-0,Edge], [6:0-1-8,Edge], [14:0-1-8,Edge], [19:0-3-0,Edge], [25:0-1-8,Edge], [32:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.65	Vert(LL) -0.18	23-24	>848	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.66	Vert(CT) -0.29	23-24	>529	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.57	Horz(CT) -0.02	19	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 157 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP M 31(flat) \*Except\*  
1-3,17-19: 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP M 31(flat)  
WEBS 2x4 SP No.3(flat)

**BRACING-**

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

**REACTIONS.**

(size) 1=0-3-0, 19=0-3-0, 27=0-8-0  
Max Grav 1=716(LC 10), 19=656(LC 4), 27=1649(LC 1)

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

TOP CHORD 1-2=-657/0, 2-4=-666/0, 4-5=-1604/0, 5-6=-1604/0, 6-7=-1758/0, 7-8=-1452/0, 8-10=-595/0, 10-11=0/1209, 11-12=0/1209, 12-13=-1179/319, 13-14=-1179/319, 14-15=-1464/7, 15-16=-1302/0, 16-18=-606/0, 18-19=-606/0  
BOT CHORD 32-33=0/1172, 31-32=0/1604, 30-31=0/1604, 29-30=0/1763, 28-29=0/1142, 27-28=-320/151, 25-27=-765/515, 24-25=-319/1179, 23-24=-319/1179, 22-23=0/1558, 21-22=0/1043  
WEBS 1-33=0/909, 19-21=0/838, 4-33=-723/0, 4-32=0/852, 16-21=-614/0, 16-22=-0/372, 15-22=-368/11, 15-23=-286/0, 14-23=0/626, 14-24=-385/0, 12-27=-1048/0, 12-25=0/1205, 13-25=-601/0, 10-27=-1223/0, 10-28=0/890, 8-28=-836/0, 8-29=0/491, 7-29=-485/0, 5-32=-505/0, 6-30=-6/261

**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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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127048
HR0009	FL10	FLOOR	20	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:10 2022 Page 1  
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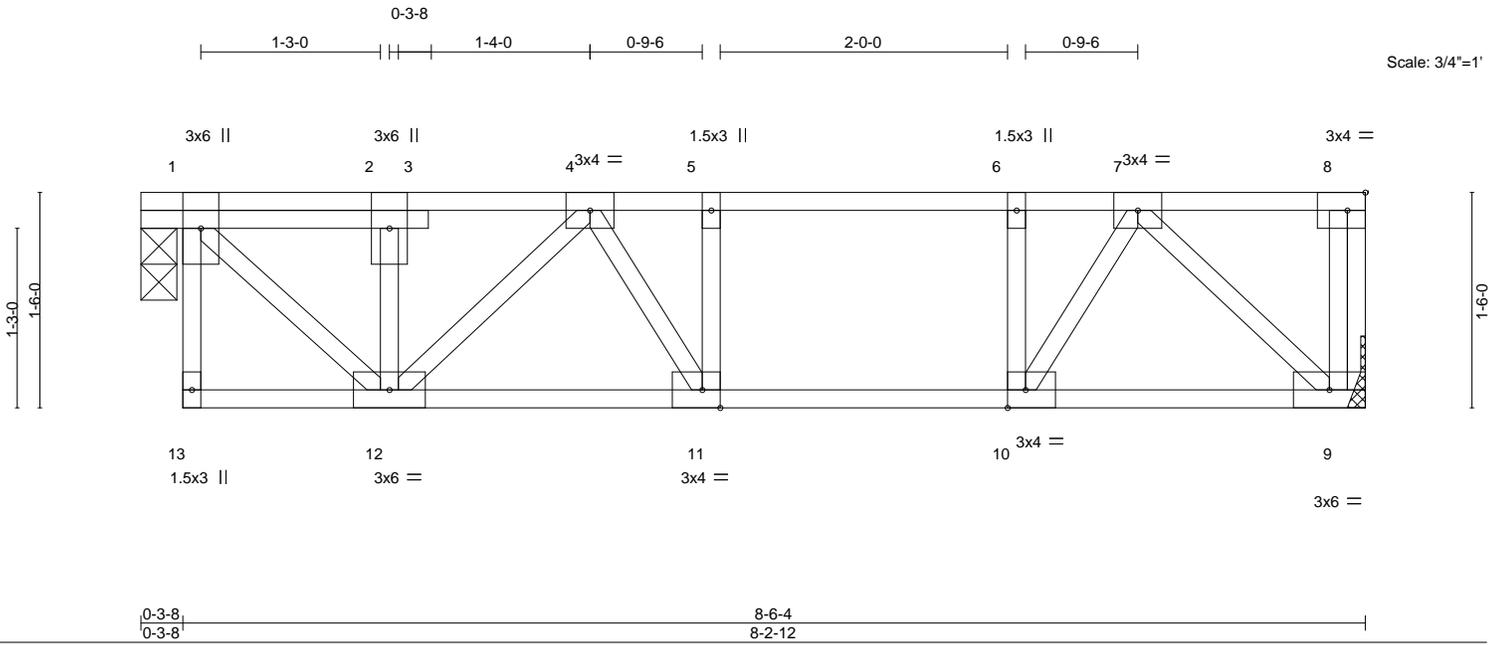


Plate Offsets (X,Y)--	[8:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-2	TC 0.47	in (loc) l/defl L/d	MT20	244/190
TCDL 20.0	Plate Grip DOL 1.00	BC 0.37	Vert(LL) -0.04 11-12 >999 360		
BCLL 0.0	Lumber DOL 1.00	WB 0.24	Vert(CT) -0.06 11-12 >999 240		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.02 9 n/a n/a		
	Code FBC2020/TPI2014			Weight: 51 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 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 9=Mechanical  
Max Grav 1=417(LC 1), 9=417(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=-377/0, 4-5=-571/0, 5-6=-571/0, 6-7=-571/0  
BOT CHORD 11-12=0/546, 10-11=0/571, 9-10=0/375  
WEBS 1-12=0/514, 7-9=-516/0, 7-10=0/411, 6-10=-283/0

- NOTES-** (6)
- Unbalanced floor live loads have been considered for this design.
  - 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.
  - 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:

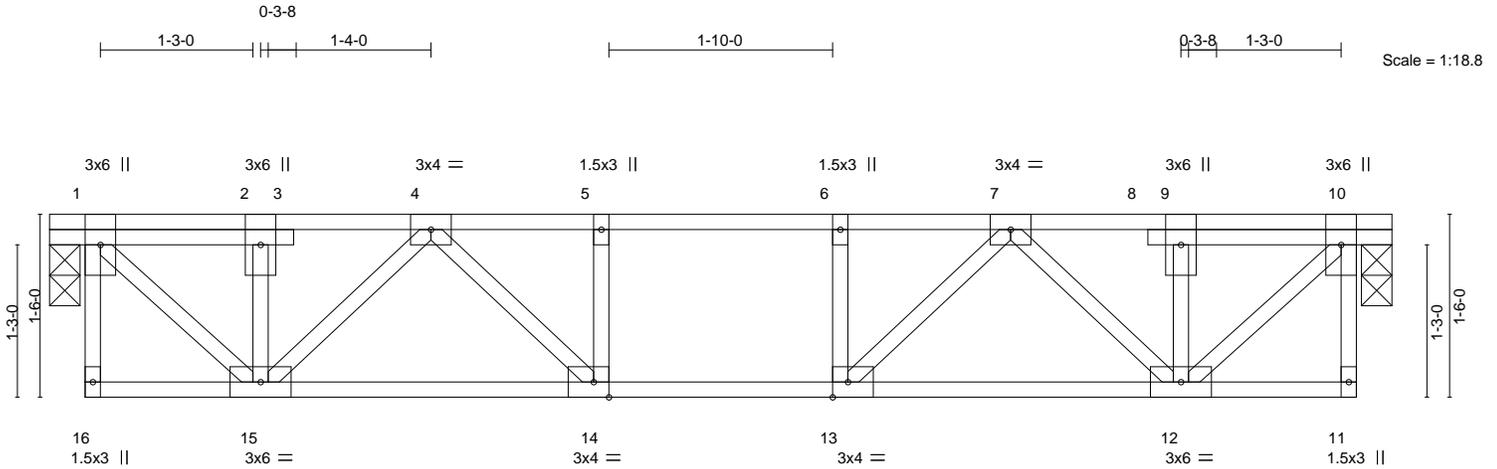
November 3,2022

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job	Truss	Truss Type	Qty	Ply		T29127049
HR0009	FL11	Floor	2	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:11 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-wKJ8tZPNzkiwsNTXT3T1tIn5GmuD68aqV1yNBrU



0-3-8 0-3-8	10-8-8 10-5-0	11-0-0 0-3-8
Plate Offsets (X,Y)-- [13:0-1-8,Edge], [14:0-1-8,Edge]		

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.32	Vert(LL) -0.04	14-15	>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 FBC2020/TPI2014	Matrix-SH					Weight: 64 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 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)
- Unbalanced floor live loads have been considered for this design.
  - 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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Joaquin Velez PE No.68182  
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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

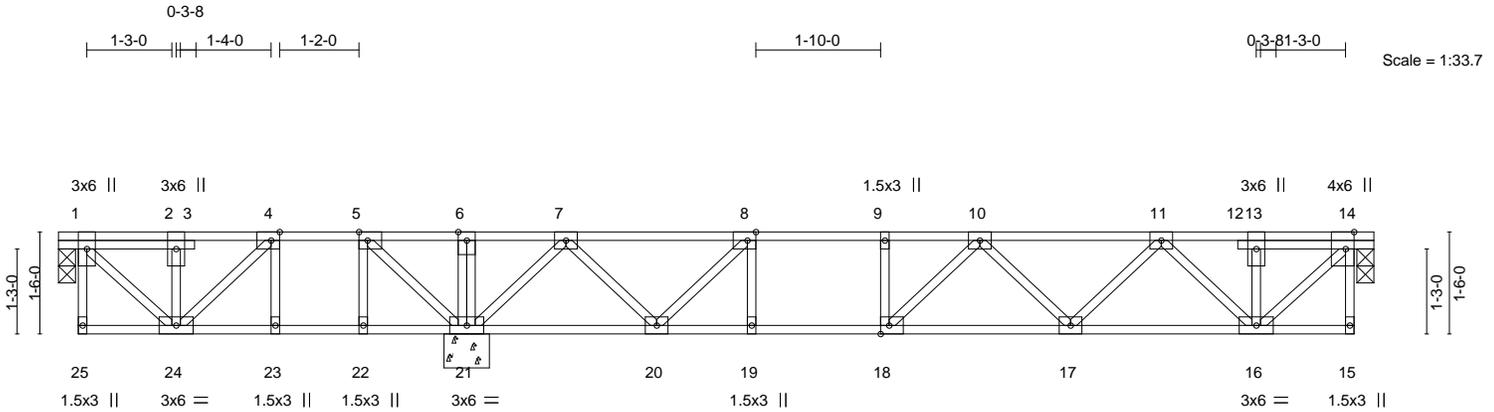
November 3,2022

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Job	Truss	Truss Type	Qty	Ply		T29127050
HR0009	FL12	Floor	4	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:12 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-OXtW4Ta1845bK4RZ1F\_A0GZaUh\_q?BvMLoJO1TyNBRt



0-3-8 0-3-8	6-0-0 5-8-8	10-1-8 4-1-8	19-0-8 8-11-0	19-4-0 0-3-8
Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [8:0-1-8,Edge], [14:0-3-0,Edge], [18:0-1-8,Edge]				

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-2	TC 0.59	in (loc) l/defl L/d	MT20	244/190
TCDL 20.0	Plate Grip DOL 1.00	BC 0.90	Vert(LL) -0.12 17-18 >999 360		
BCLL 0.0	Lumber DOL 1.00	WB 0.40	Vert(CT) -0.18 17-18 >843 240		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.02 14 n/a n/a		
	Code FBC2020/TPI2014			Weight: 110 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 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (size) 1=0-3-0, 14=0-3-0, 21=0-8-0  
Max Grav 1=320(LC 10), 14=667(LC 7), 21=994(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-277/0, 2-4=-291/0, 4-5=-346/0, 7-8=-1012/0, 8-9=-1478/0, 9-10=-1478/0, 10-11=-1342/0, 11-13=-605/0, 13-14=-605/0  
BOT CHORD 23-24=0/346, 22-23=0/346, 21-22=0/346, 20-21=0/606, 19-20=0/1478, 18-19=0/1478, 17-18=0/1549, 16-17=0/1084  
WEBS 1-24=0/382, 14-16=0/837, 5-21=-473/0, 11-16=-672/0, 11-17=0/371, 10-17=-296/0, 7-21=-891/0, 7-20=0/600, 8-20=-682/0

- NOTES-** (6)
- 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) 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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Date:

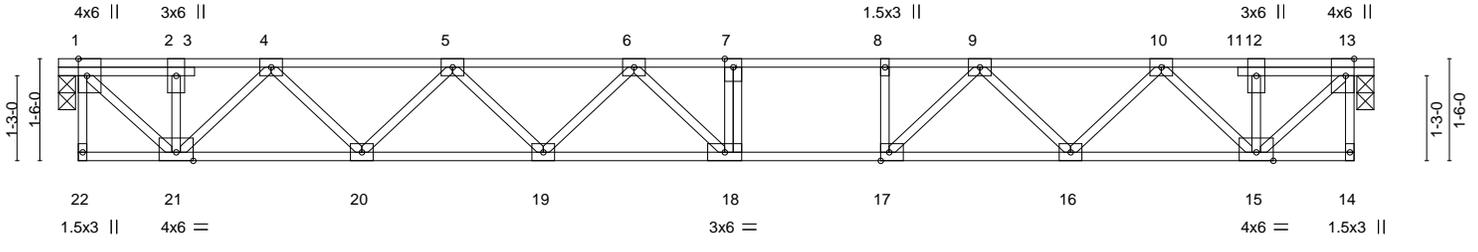
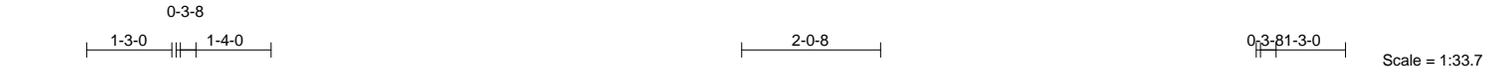
November 3,2022

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Job	Truss	Truss Type	Qty	Ply	T29127051
HR0009	FL13	Floor	40	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:14 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-Lv\_GV8bHgiLIZOby8g0e5hfrjVfsT2Ffo6oU6MyNBrR



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], [17:0-1-8,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b> 1-7-2
TCLL 40.0	Plate Grip DOL 1.00
TCDL 20.0	Lumber DOL 1.00
BCLL 0.0	Rep Stress Incr YES
BCDL 5.0	Code FBC2020/TPI2014
<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d
TC 0.92	Vert(LL) -0.25 18-19 >892 360
BC 0.99	Vert(CT) -0.40 18-19 >561 240
WB 0.60	Horz(CT) -0.05 13 n/a n/a
Matrix-SH	
<b>PLATES</b>	<b>GRIP</b>
MT20	244/190
Weight: 107 lb FT = 20%F, 11%E	

<b>LUMBER-</b>	<b>BRACING-</b>
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=-912/0, 2-4=-912/0, 4-5=-2213/0, 5-6=-3011/0, 6-7=-3165/0, 7-8=-3165/0,  
8-9=-3165/0, 9-10=-2196/0, 10-12=-910/0, 12-13=-910/0  
BOT CHORD 20-21=0/1675, 19-20=0/2741, 18-19=0/3224, 17-18=0/3165, 16-17=0/2727, 15-16=0/1681  
WEBS 1-21=0/1260, 13-15=0/1258, 10-15=-1083/0, 10-16=0/740, 9-16=-762/0, 9-17=0/786,  
8-17=-395/0, 4-21=-1072/0, 4-20=0/773, 5-20=-758/0, 5-19=0/389, 6-19=-315/0,  
6-18=-284/274

- NOTES-** (5)
- 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.
  - "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: November 3,2022

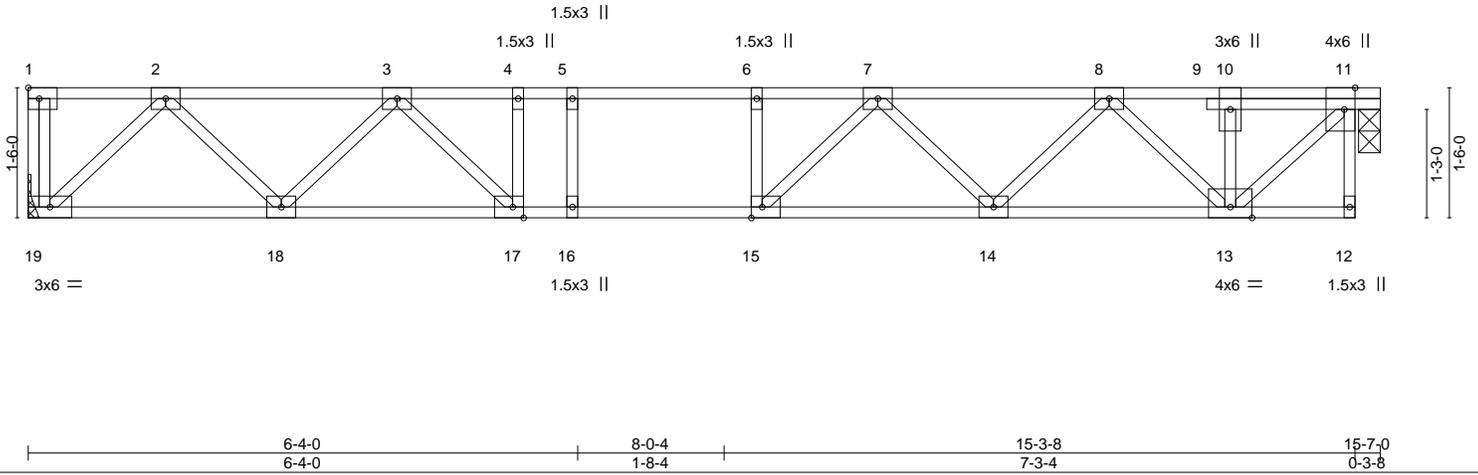
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Job	Truss	Truss Type	Qty	Ply		T29127052
HR0009	FL14	Floor	14	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:14 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-Lv\_GV8bHgiLZOby8g0e5hshVgUT4Cfo6oU6MyNBRR

0-3-8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-2	TC 0.86	in (loc) l/defl L/d	MT20	244/190
TCDL 20.0	Plate Grip DOL 1.00	BC 0.95	Vert(LL) -0.20 14-15 >909 360		
BCLL 0.0	Lumber DOL 1.00	WB 0.48	Vert(CT) -0.28 14-15 >641 240		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.03 11 n/a n/a		
	Code FBC2020/TPI2014			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) 11=0-3-0, 19=Mechanical  
Max Grav 11=782(LC 1), 19=782(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1255/0, 3-4=-2090/0, 4-5=-2090/0, 5-6=-2090/0, 6-7=-2090/0, 7-8=-1679/0, 8-10=-722/0, 10-11=-722/0  
BOT CHORD 18-19=0/778, 17-18=0/1737, 16-17=0/2090, 15-16=0/2090, 14-15=0/2002, 13-14=0/1315  
WEBS 11-13=0/998, 8-13=-832/0, 8-14=0/522, 7-14=-465/0, 2-19=-1069/0, 2-18=0/686, 3-18=-693/0, 3-17=0/642, 4-17=-282/0

- NOTES-** (7)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 3x4 MT20 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.
  - 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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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

November 3,2022

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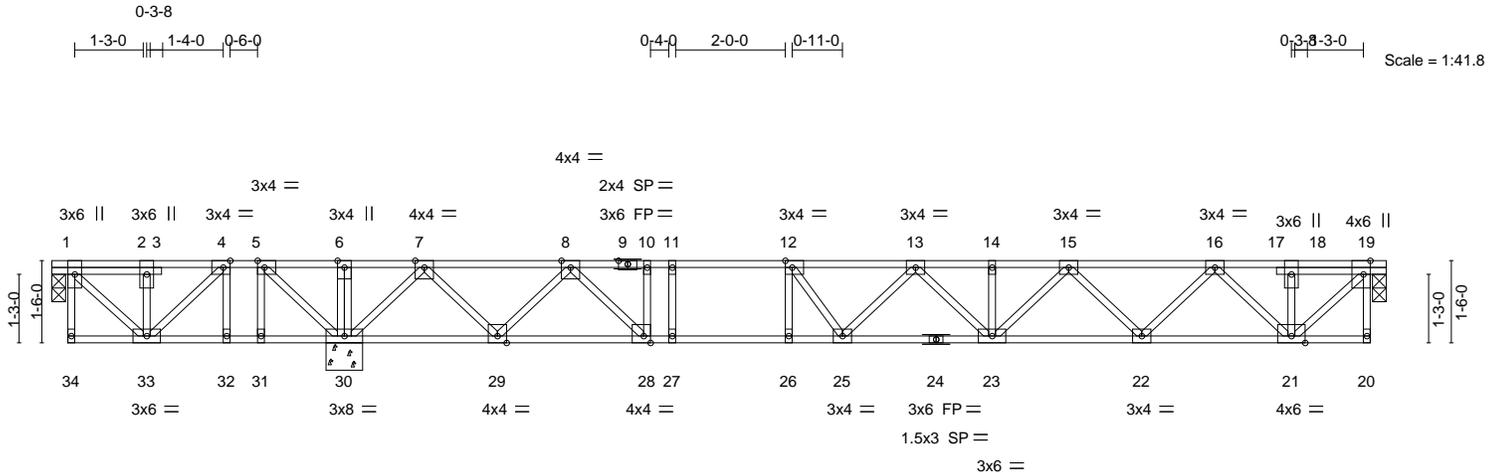


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127053
HR0009	FL15	Floor	14	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:16 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-HI61wqdXCJb0phkKG536A6kDLJLUzCyGQHbAEyNBrP



0-3-8	5-4-0	10-9-8	13-6-0	14-5-0	24-0-8	24-4-0
0-3-8	5-0-8	5-5-8	2-8-8	0-11-0	9-7-8	0-3-8

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [12:0-1-8,Edge], [19:0-3-0,Edge], [28:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.79	Vert(LL) -0.30 25-26 >735 360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.92	Vert(CT) -0.49 25-26 >457 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.57	Horz(CT) -0.04 19 n/a n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH			
				Weight: 139 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-9: 2x4 SP No.1(flat), 9-19: 2x4 SP M 31(flat)	TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD 2x4 SP M 31(flat) *Except* 20-24: 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, 19=0-3-0, 30=0-8-0  
Max Uplift 1=-72(LC 4)  
Max Grav 1=208(LC 9), 19=922(LC 7), 30=1440(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 4-5=-104/309, 5-6=0/618, 6-7=0/618, 7-8=-1088/0, 8-10=-2609/0, 10-11=-2609/0, 11-12=-2609/0, 12-13=-2910/0, 13-14=-2804/0, 14-15=-2804/0, 15-16=-2087/0, 16-18=-866/0, 18-19=-866/0  
BOT CHORD 32-33=-309/104, 31-32=-309/104, 30-31=-309/104, 29-30=0/493, 28-29=0/1827, 27-28=0/2609, 26-27=0/2609, 25-26=0/2609, 23-25=0/3027, 22-23=0/2556, 21-22=0/1593  
WEBS 19-21=0/1198, 16-21=-1020/0, 16-22=0/710, 15-22=-674/0, 15-23=0/348, 13-23=-312/0, 7-30=-1386/0, 7-29=0/959, 8-29=-1069/0, 8-28=0/1133, 4-33=0/338, 5-30=-574/0, 12-26=-472/0, 12-25=0/599, 10-28=-585/0

- NOTES-** (8)
- Unbalanced floor live loads have been considered for this design.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - The Fabrication Tolerance at joint 24 = 11%, joint 9 = 11%
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
  - 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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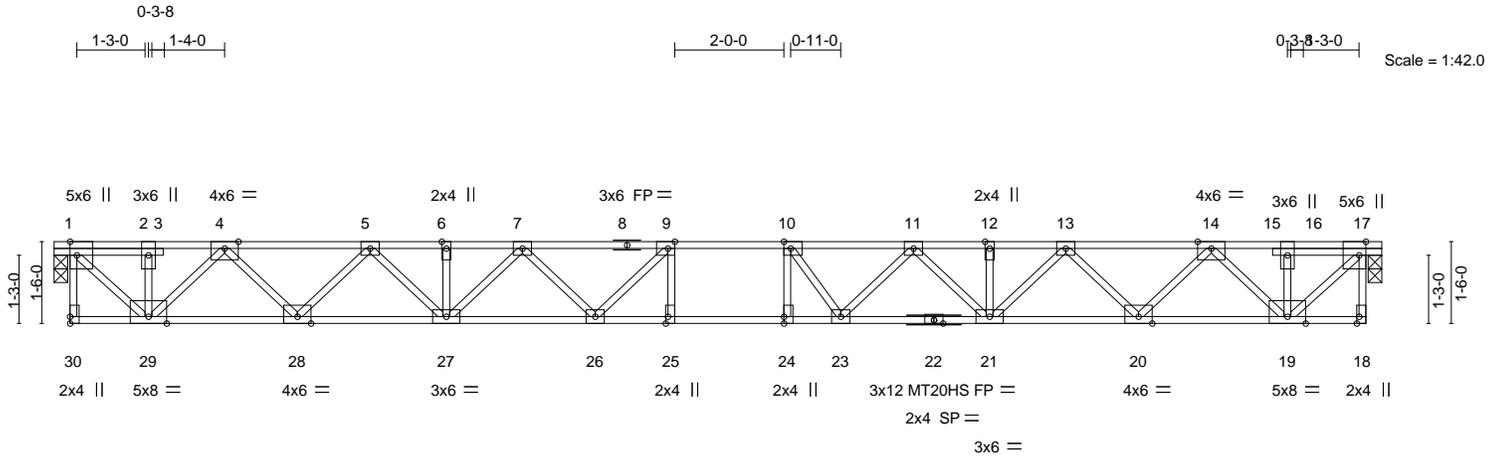
Date: November 3, 2022

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Job	Truss	Truss Type	Qty	Ply	T29127054
HR0009	FL16	Floor	40	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:17 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKNzRR9V-IUgP7Ae9zdtQrJXpoaLjKHL6ih5gMJ6U419jgyNBRO



0-3-8	14-5-0	24-0-8	24-4-0
0-3-8	14-1-8	9-7-8	0-3-8

Plate Offsets (X,Y)-- [1:0-3-0,Edge], [9:0-1-8,Edge], [10:0-1-8,Edge], [17:0-3-0,Edge], [18:0-1-8,Edge], [24:0-1-8,0-0-0], [25:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.98	Vert(LL) -0.41 25 >691 360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.90	Vert(CT) -0.67 25 >425 240	MT20HS	187/143
BCLL 0.0	Rep Stress Incr YES	WB 0.77	Horz(CT) -0.12 17 n/a n/a		
BCDL 5.0	Code FBC2020/TPI2014	Matrix-SH			
				Weight: 134 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-8: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP M 31(flat) *Except* 18-22: 2x4 SP No.1(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=1224(LC 1), 17=1224(LC 1)

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

TOP CHORD 1-2=-1171/0, 2-4=-1171/0, 4-5=-2985/0, 5-6=-4310/0, 6-7=-4310/0, 7-9=-5025/0, 9-10=-5231/0, 10-11=-5036/0, 11-12=-4315/0, 12-13=-4315/0, 13-14=-2985/0, 14-16=-1171/0, 16-17=-1171/0

BOT CHORD 28-29=0/2199, 27-28=0/3749, 26-27=0/4797, 25-26=0/5231, 24-25=0/5231, 23-24=0/5231, 21-23=0/4780, 20-21=0/3749, 19-20=0/2200

WEBS 1-29=0/1619, 17-19=0/1618, 4-29=-1443/0, 4-28=0/1129, 5-28=-1098/0, 5-27=0/787, 7-27=-683/0, 7-26=0/469, 9-26=-588/89, 14-19=-1445/0, 14-20=0/1128, 13-20=-1098/0, 13-21=0/795, 11-21=-653/0, 11-23=0/517, 10-23=-641/85, 10-24=-211/292

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

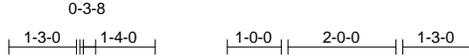
November 3,2022

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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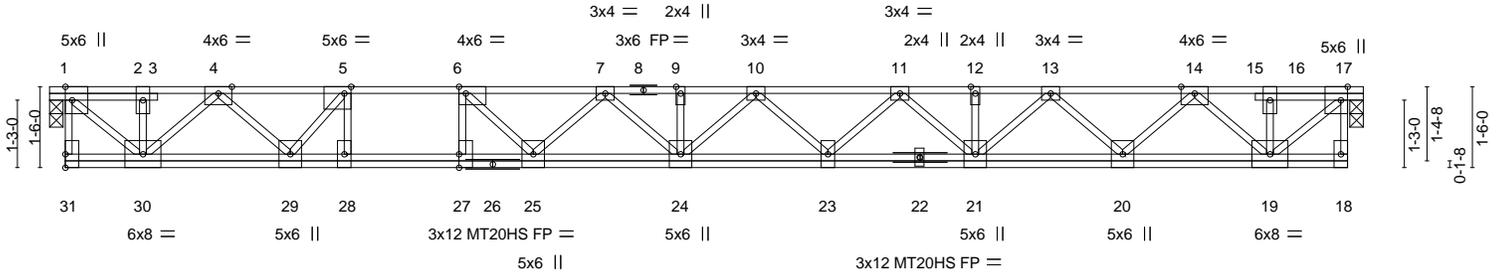
Job	Truss	Truss Type	Qty	Ply	T29127055
HR0009	FL16A	Floor	4	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:19 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-hto9YsfQVE\_bg9TvxDcpolMhgWRI8GH0yOWFnZyNBRM



0-3-8-3-0  
Scale = 1:42.5



0-3-8	4-5-8	5-5-8	8-11-8	24-0-8	24-4-0
0-3-8	4-2-0	1-0-0	3-6-0	15-1-0	0-3-8

Plate Offsets (X,Y)-- [1:0-3-0,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [17:0-3-0,Edge], [27:0-3-0,0-0-0]

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 0.97	Vert(LL)	-0.40	24	>706	MT20	244/190
TCDL 20.0	Lumber DOL	1.00	BC 0.69	Vert(CT)	-0.65	24	>434	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	YES	WB 0.81	Horz(CT)	-0.12	17	n/a		
BCDL 5.0	Code	FBC2020/TPI2014	Matrix-SH						
								Weight: 166 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat) *Except* 1-8: 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 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=1224(LC 1), 17=1224(LC 1)

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

TOP CHORD 1-2=-1251/0, 2-4=-1251/0, 4-5=-3086/0, 5-6=-4249/0, 6-7=-5073/0, 7-9=-5433/0, 9-10=-5433/0, 10-11=-5245/0, 11-12=-4487/0, 12-13=-4487/0, 13-14=-3111/0, 14-16=-1219/0, 16-17=-1219/0

BOT CHORD 29-30=0/2249, 28-29=0/4249, 27-28=0/4249, 25-27=0/4249, 24-25=0/5399, 23-24=0/5461, 21-23=0/4996, 20-21=0/3908, 19-20=0/2292

WEBS 1-30=0/1691, 17-19=0/1648, 4-30=-1370/0, 4-29=0/1175, 14-19=-1473/0, 14-20=0/1149, 13-20=-1118/0, 13-21=0/796, 11-21=-698/0, 11-23=0/350, 10-23=-303/0, 7-25=-504/0, 6-25=0/1271, 5-28=0/1200, 5-29=-1862/0, 6-27=-1032/0

- NOTES-** (6)
- 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) "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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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

November 3,2022

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Job	Truss	Truss Type	Qty	Ply	T29127056
HR0009	FL17	Floor	2	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:20 2022 Page 1  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-93MXmCg2GY6SHJ26Vw72LyvwqwiksBYB2FpJ?yNBrL

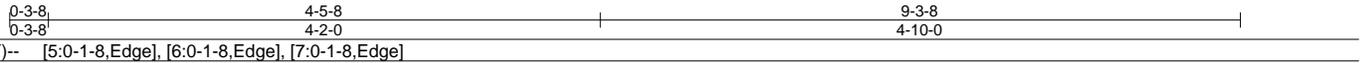
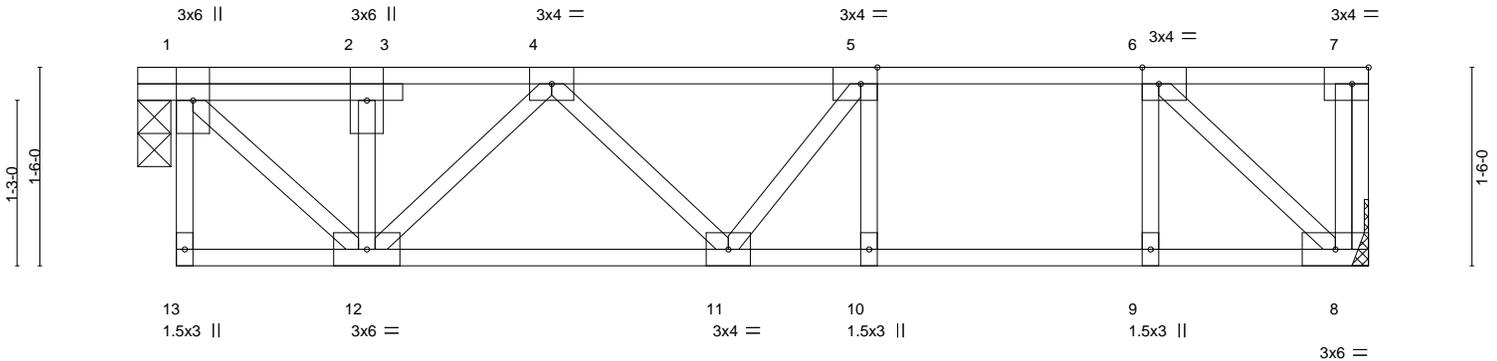
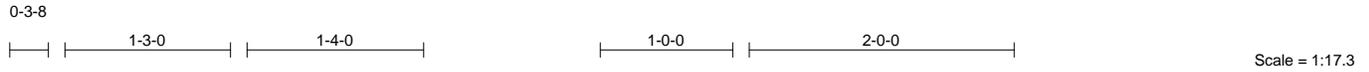


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-2	TC 0.75	in (loc) l/defl L/d	MT20	244/190
TCDL 20.0	Plate Grip DOL 1.00	BC 0.99	Vert(LL) -0.11 10-11 >990 360		
BCLL 0.0	Lumber DOL 1.00	WB 0.25	Vert(CT) -0.17 10-11 >632 240		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.04 8 n/a n/a		
	Code FBC2020/TPI2014			Weight: 54 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=456(LC 1), 8=456(LC 1)

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

TOP CHORD 1-2=-382/0, 2-4=-382/0, 4-5=-696/0, 5-6=-588/0  
BOT CHORD 11-12=0/678, 10-11=0/588, 9-10=0/588, 8-9=0/588  
WEBS 1-12=0/528, 4-12=-416/0, 6-8=-793/0

- NOTES-** (6)
- Unbalanced floor live loads have been considered for this design.
  - 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.
  - 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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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

November 3,2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



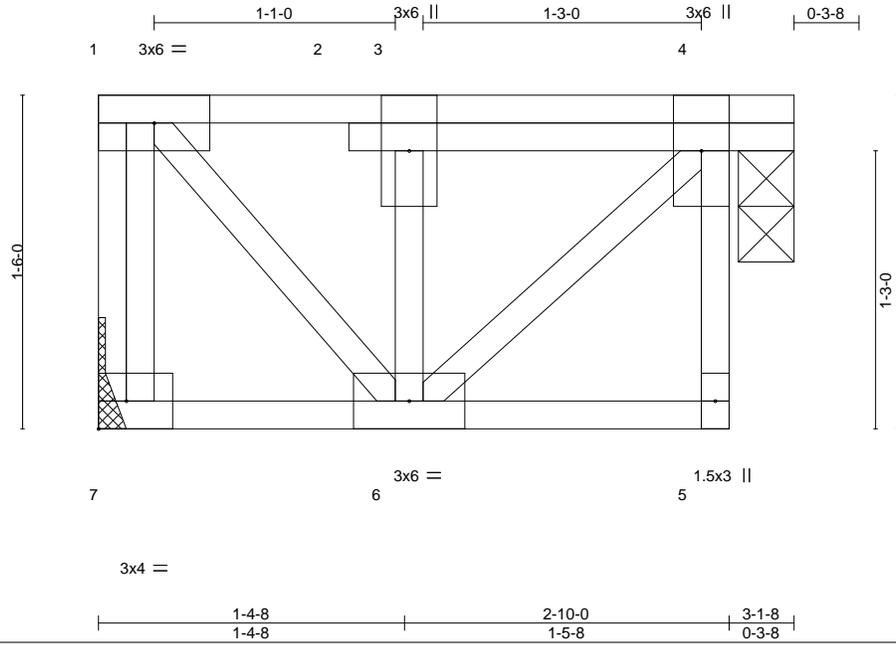
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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127057
HR0009	FL18	Floor	2	1	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:20 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-93MXmCg2Gy6SHJ26Vw72Lyv5uwxtvCYB2FpJ?yNBRl



Scale = 1:10.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.05	Vert(LL) -0.00	6	>999	360	MT20	244/190
TCDL 20.0	Lumber DOL 1.00	BC 0.01	Vert(CT) -0.00	6	>999	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.00	4	n/a	n/a		
BCDL 5.0	Code FBC2020/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 3-1-8 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=137(LC 1), 4=137(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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 Chesterfield, MO 63017

Date:

November 3,2022

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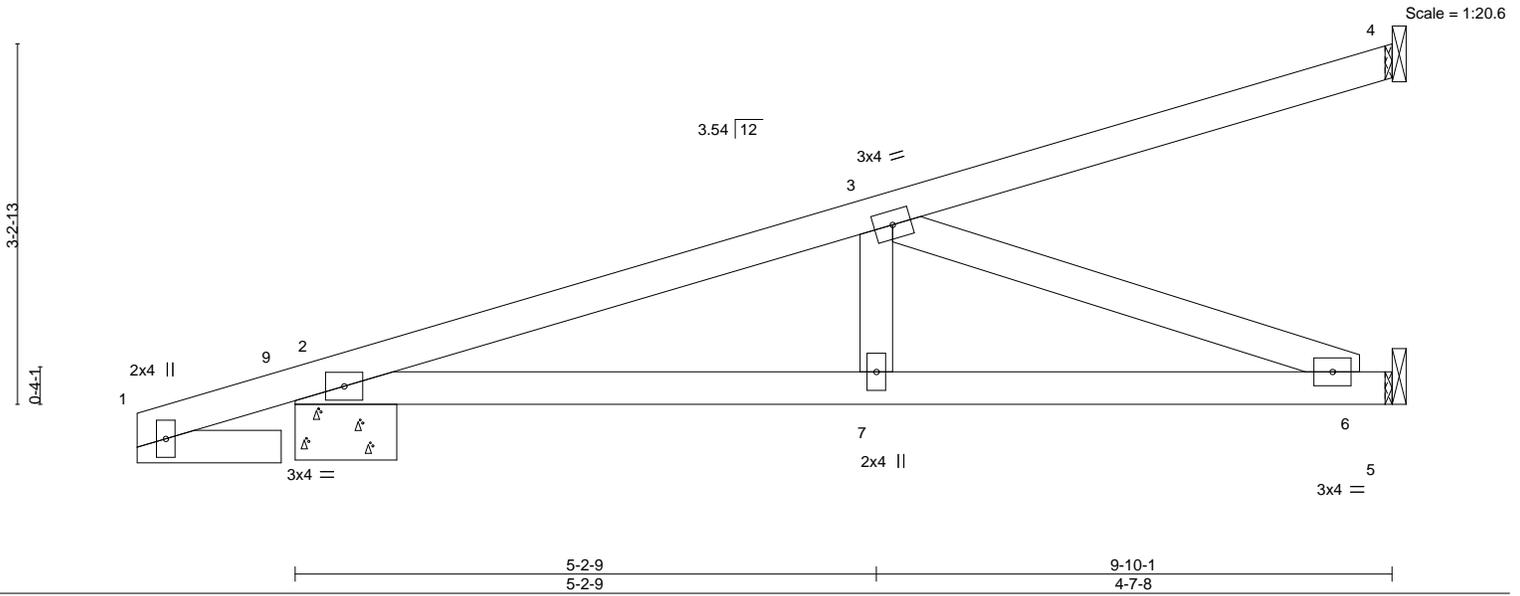
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Job	Truss	Truss Type	Qty	Ply		T29127058
HR0009	H7	Diagonal Hip Girder	4	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:22 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-6STIBtlo9MAXcCUcL9WQN\_EwjTyLgFrMkwOuyNBjR



LOADING (psf)	SPACING-	CSI.	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	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.60	Vert(CT)	-0.10	6-7	>999		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.53	Horz(CT)	0.02	5	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH					Weight: 43 lb	FT = 20%
	Code FBC2020/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=-640/1146, 6-7=-640/1146  
 WEBS 3-6=-1219/681, 3-7=0/266

**NOTES-** (8)

- 1) Wind: ASCE 7-16; 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 100 lb uplift at joint(s) except (jt=lb) 4=293, 2=338, 5=202.
- 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: 1-9=-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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 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 Date:

November 3, 2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

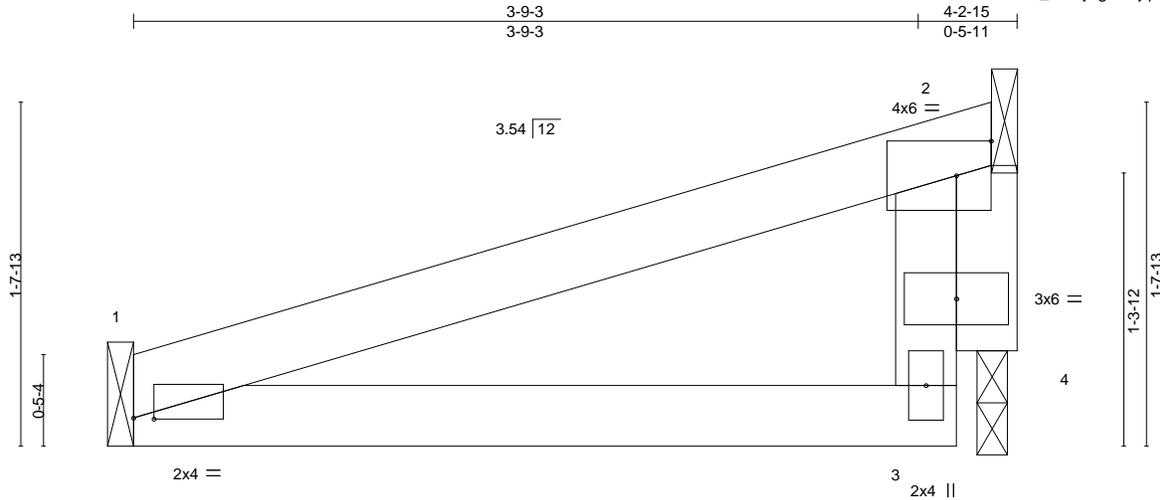
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job HR0009	Truss HJ01	Truss Type Roof Special Girder	Qty 8	Ply 1	Job Reference (optional) 8.530 s May 26 2022 MiTek Industries, Inc. Thu Nov 3 10:11:24 2022 Page 1 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-BTYc7DmelfDPs_ZIE9jSgX0AjLqHil24x4hEnyN5wX	T29127059
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Builders FirstSource, Tampa, Plant City, Florida 33566



Scale = 1:11.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.23	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.14	Vert(LL) -0.01 1-3 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.04	Vert(CT) -0.02 1-3 >999 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-P	Horz(CT) -0.00 2 n/a n/a	Weight: 15 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 4-2-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 4=0-1-12, 2=Mechanical  
 Max Horz 4=59(LC 7)  
 Max Uplift 1=-71(LC 7), 2=-136(LC 8)  
 Max Grav 1=74(LC 1), 4=76(LC 7), 2=124(LC 1)

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

**NOTES-** (11)

- 1) Wind: ASCE 7-16; 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); cantilever 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 71 lb uplift at joint 1 and 136 lb uplift at joint 2.
- 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=-95(F=-3, B=-3), 1=0(F=10, B=10)-to-3=-19(F=1, B=1)

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

November 3, 2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
HR0009	HJ2	Diagonal Hip Girder	4	1	T29127060

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:24 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-2qb2bZjYJmcumwMtkmC\_Vo3myXlIpiB85gD0SmyNBRH

1-10-9  
1-10-9

Scale = 1:7.2

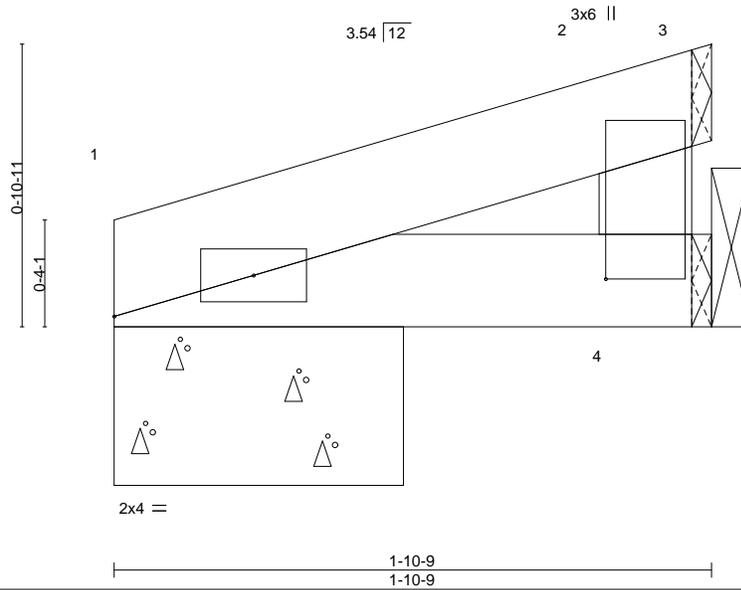


Plate Offsets (X,Y)--	[2:0-1-7,1-6-9]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.33	TC 0.11	Vert(LL)	-0.00	1	>999	MT20	244/190
TCDL 15.0	Lumber DOL	1.33	BC 0.03	Vert(CT)	-0.00	1	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00		n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-P					Weight: 6 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 1-10-9 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	

**REACTIONS.** (size) 1=0-10-15, 4=Mechanical  
 Max Horz 1=41(LC 12)  
 Max Uplift 1=-36(LC 12), 4=-62(LC 12)  
 Max Grav 1=87(LC 1), 4=94(LC 1)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-16; 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 Corner(3) 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 100 lb uplift at joint(s) 1, 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  
 Date:

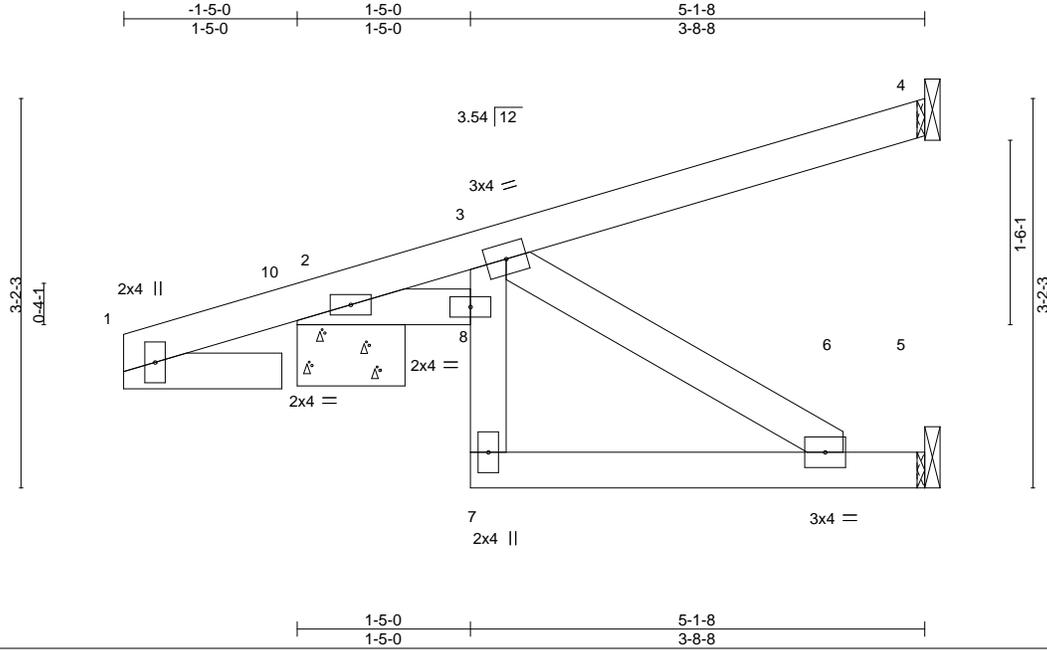
November 3,2022

Job	Truss	Truss Type	Qty	Ply		T29127061
HR0009	HJ3	Jack-Open Girder	2	1		

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Scale = 1:18.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.28	Vert(LL)	-0.01	6-7	>999	240	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.21	Vert(CT)	-0.02	6-7	>999	180		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.01	Horz(CT)	-0.01	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P						Weight: 27 lb	FT = 20%
	Code FBC2020/TPI2014								

**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 5-1-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-10-9, 5=Mechanical  
 Max Horz 2=100(LC 8)  
 Max Uplift 4=105(LC 8), 2=223(LC 8)  
 Max Grav 4=144(LC 1), 2=283(LC 1), 5=89(LC 3)

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

**NOTES-** (8)

- 1) Wind: ASCE 7-16; 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 100 lb uplift at joint(s) except (jt=lb) 4=105, 2=223.
- 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=-115(F=-13, B=-13), 2=-2(F=9, B=9)-to-8=-8(F=6, B=6), 7=-8(F=6, B=6)-to-5=-26(F=-3, B=-3)

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 Chesterfield, MO 63017  
 Date:

November 3, 2022

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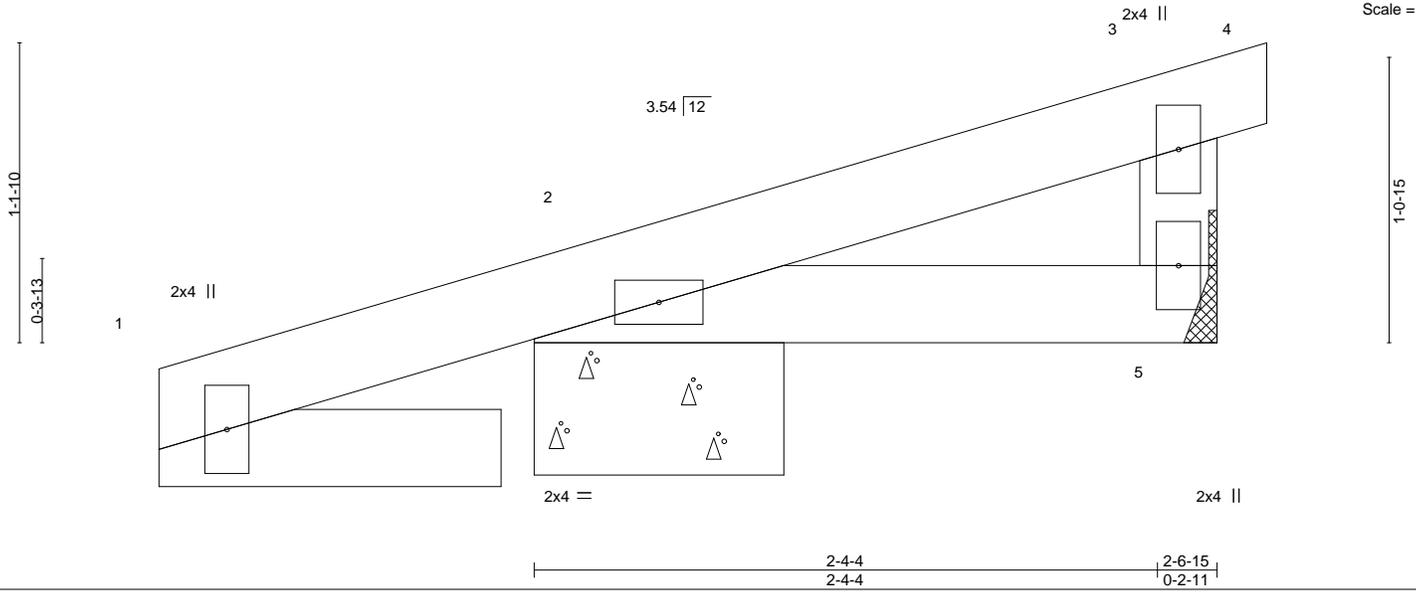
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127062
HR0009	HJ04	Roof Special Girder	4	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:23 2022 Page 1

ID:bzeMQ6aYnVsaPAR?PBKUKnzRR9V-ae1gODiwYTU18mngA3hlybXY47yh4Fa\_t0UTwKyNBrl



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0 Plate Grip DOL 1.33	TC 0.31	Vert(LL) -0.00	2-5	>999	240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.05	Vert(CT) -0.00	2-5	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Horz(CT) 0.00		n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-P					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 2-9-3 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-11-5, 5=Mechanical  
 Max Horz 2=104(LC 8)  
 Max Uplift 2=-288(LC 8), 5=-51(LC 5)  
 Max Grav 2=336(LC 1), 5=82(LC 1)

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

**NOTES-** (9)

- Wind: ASCE 7-16; 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.
- 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 100 lb uplift at joint(s) 5 except (jt=lb) 2=288.
- "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:

November 3, 2022

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	T29127063
HR0009	T01	HIP GIRDER	2	4	Job Reference (optional)

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8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:27 2022 Page 2  
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**NOTES-** (13)

- 11) Girder carries hip end with 7-0-0 end setback.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1006 lb down and 432 lb up at 41-8-0, and 1006 lb down and 432 lb up at 7-0-0 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: 1-3=-90, 3-11=-188(F=-97), 11-13=-90, 2-23=-20, 14-23=-42(F=-22), 12-14=-20  
Concentrated Loads (lb)  
Vert: 23=-706(F) 14=-706(F)

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T29127064
HR0009	T02	HIP	2	2		

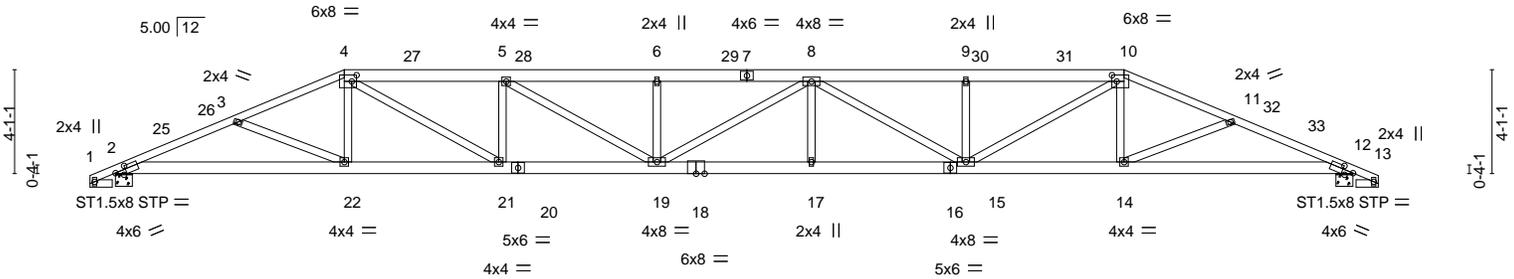
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

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ID:bzeMQ6aYnVnSaPAR?PBKUKnzRR9V-wcrZRxm3N?6JFxfzcGwfeEMK8WNIPBj0HBecYyNBrD

-1-0-0	4-9-14	9-0-0	15-2-10	21-3-9	27-4-7	33-5-6	39-8-0	43-10-2	48-8-0	49-8-0
1-0-0	4-9-14	4-2-2	6-2-10	6-0-14	6-0-14	6-0-14	6-2-10	4-2-2	4-9-14	1-0-0

Scale = 1:90.2



THIS TRUSS IS DESIGNED TO SUPPORT ONLY 2'-0" OF UNIFORM LOAD AS SHOWN.

9-0-0	15-2-10	21-3-9	27-4-7	33-5-6	39-8-0	48-8-0
9-0-0	6-2-10	6-0-14	6-0-14	6-0-14	6-2-10	9-0-0

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.40	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.66	Vert(LL) 0.50 17-19 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	Vert(CT) -0.78 17-19 >735 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.16 12 n/a n/a		
				Weight: 623 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 \*Except\*  
4-7,7-10: 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-8-6 oc bracing.

**REACTIONS.**

(size) 2=0-8-0, 12=0-8-0  
Max Horz 2=-175(LC 10)  
Max Uplift 2=-1467(LC 12), 12=-1467(LC 12)  
Max Grav 2=2760(LC 1), 12=2760(LC 1)

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

TOP CHORD 2-3=-5963/3303, 3-4=-5613/3074, 4-5=-7498/4203, 5-6=-8599/4717, 6-8=-8599/4717, 8-9=-7493/4196, 9-10=-7495/4198, 10-11=-5614/3075, 11-12=-5963/3304  
BOT CHORD 2-22=-2899/5387, 21-22=-2581/5142, 19-21=-3879/7496, 17-19=-4386/8605, 15-17=-4386/8605, 14-15=-2573/5142, 12-14=-2919/5387  
WEBS 3-22=-320/380, 4-22=-101/362, 4-21=-1507/2832, 5-21=-1333/794, 5-19=-664/1370, 6-19=-536/367, 8-15=-1381/679, 9-15=-626/480, 10-15=-1500/2828, 10-14=-103/363, 11-14=-321/380

**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 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 9-0-0, Exterior(2R) 9-0-0 to 15-10-9, Interior(1) 15-10-9 to 39-8-0, Exterior(2R) 39-8-0 to 46-6-9, Interior(1) 46-6-9 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 100 lb uplift at joint(s) except (jt=lb) 2=1467, 12=1467.

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Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	T29127064
HR0009	T02	HIP	2	<b>2</b>	Job Reference (optional)

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

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ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-PoOxfHnh8JEathEqWJo9CsmX4YrcUsQtFxxn8\_yNBrC

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. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127065
HR0009	T03	Hip	2	1	

Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:30 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-L\_yJscJvcM1Urp141JOK3JdlyF5DFF0UbgLgQyNBrB

-1-0-0 5-9-14 11-0-0 17-8-0 24-4-0 31-0-0 37-8-0 42-10-2 48-8-0 49-8-0  
 1-0-0 5-9-14 5-2-2 6-8-0 6-8-0 6-8-0 6-8-0 5-2-2 5-9-14 1-0-0

Scale = 1:89.7

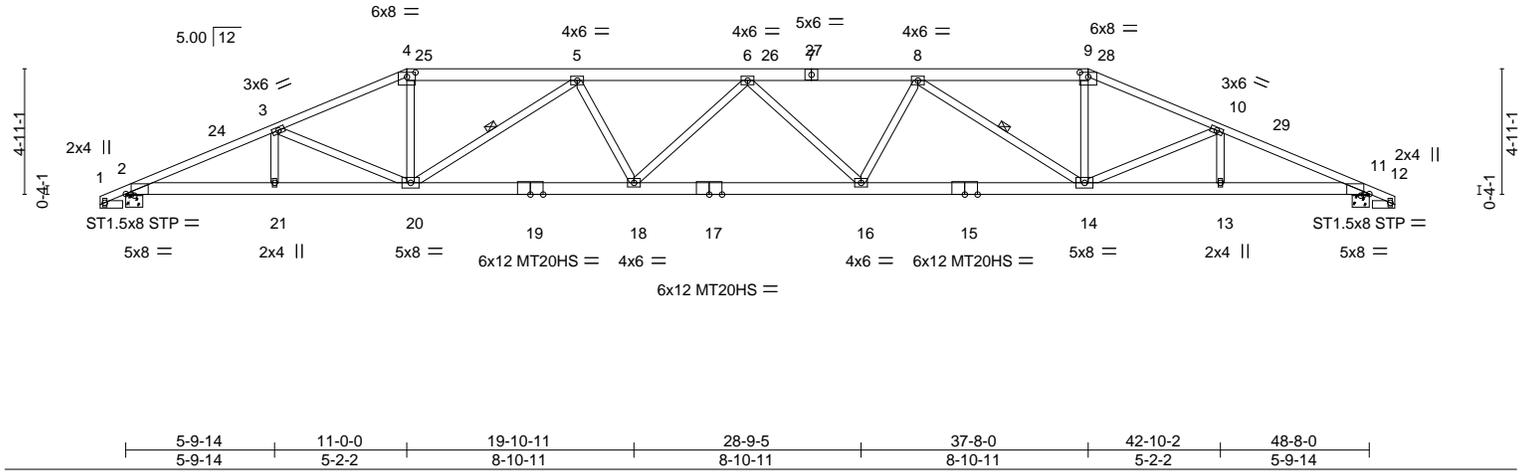


Plate Offsets (X,Y)-- [2:0-2-9,Edge], [4:0-4-0,0-2-2], [9:0-4-0,0-2-2], [11:0-2-9,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.73	Vert(LL) 0.63 16-18 >919 240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.39	Vert(CT) -1.00 16-18 >575 180	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.73	Horz(CT) 0.21 11 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH		Weight: 306 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 *Except* 4-7,7-9: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 5-3-3 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-20, 8-14
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-8-0, 11=0-8-0  
 Max Horz 2=-210(LC 10)  
 Max Uplift 2=-1467(LC 12), 11=-1467(LC 12)  
 Max Grav 2=2760(LC 1), 11=2760(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5934/3248, 3-4=-5382/2982, 4-5=-4947/2856, 5-6=-6814/3824, 6-8=-6814/3827,  
 8-9=-4947/2853, 9-10=-5382/2986, 10-11=-5934/3241  
 BOT CHORD 2-21=-2843/5356, 20-21=-2843/5356, 18-20=-3384/6584, 16-18=-3626/7107,  
 14-16=-3365/6584, 13-14=-2857/5356, 11-13=-2857/5356  
 WEBS 3-20=-552/454, 4-20=-770/1535, 5-20=-2123/1114, 5-18=-170/593, 6-18=-509/296,  
 6-16=-509/296, 8-16=-170/593, 8-14=-2123/1115, 9-14=-768/1535, 10-14=-554/450

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 11-0-0, Exterior(2R) 11-0-0 to 17-8-0, Interior(1) 17-8-0 to 37-8-0, Exterior(2R) 37-8-0 to 44-6-9, Interior(1) 44-6-9 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.
  - 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 100 lb uplift at joint(s) except (jt=lb) 2=-1467, 11=1467.
  - \*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 electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

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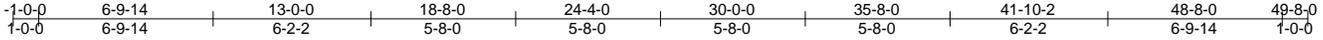
Job	Truss	Truss Type	Qty	Ply	T29127066
HR0009	T04	Hip	2	1	

Job Reference (optional)

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

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ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-pN44HlpaREck9zPCSLsqUO1nloah9dJxv9RJyNBr9



Scale = 1:89.7

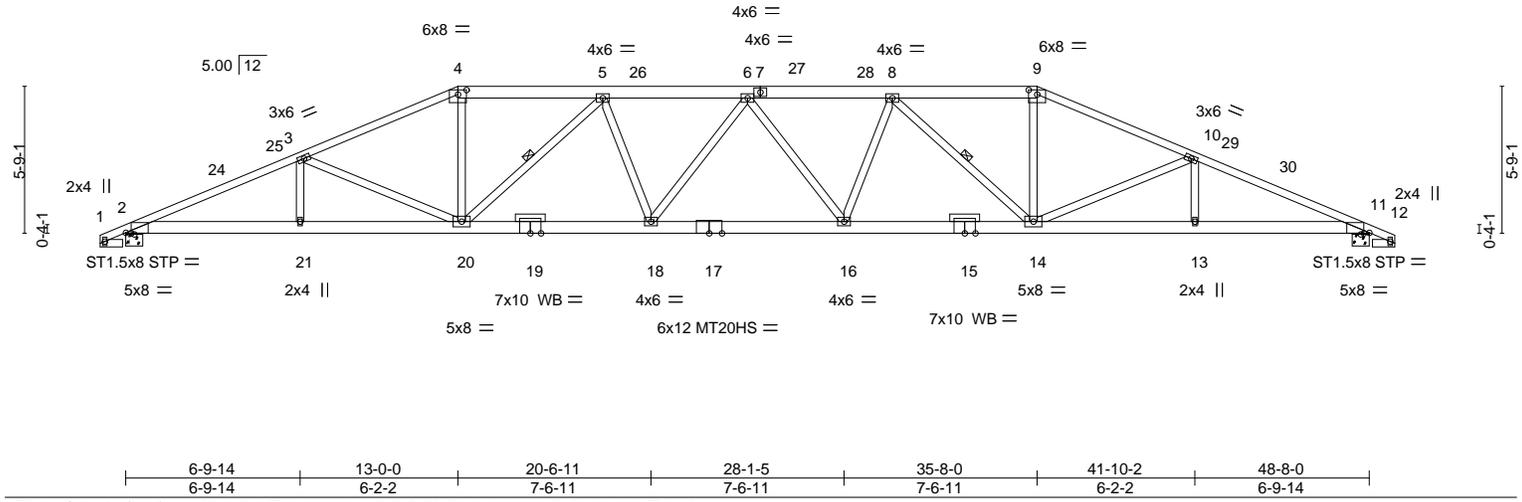


Plate Offsets (X,Y)-- [2:0-2-9,Edge], [4:0-4-0,0-2-2], [9:0-4-0,0-2-2], [11:0-2-9,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.50	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.96	Vert(LL) 0.57 16-18 >999 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.73	Vert(CT) -0.91 16-18 >633 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.28 11 n/a n/a		
				Weight: 314 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP M 31 *Except* 4-7,7-9: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-8 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-20, 8-14
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 11=0-8-0  
 Max Horz 2=-246(LC 10)  
 Max Uplift 2=-1467(LC 12), 11=-1467(LC 12)  
 Max Grav 2=2760(LC 1), 11=2760(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5941/3251, 3-4=-5128/2877, 4-5=-4679/2770, 5-6=-5802/3355, 6-8=-5802/3355,  
 8-9=-4679/2770, 9-10=-5128/2877, 10-11=-5941/3251  
 BOT CHORD 2-21=-2837/5354, 20-21=-2837/5354, 18-20=-2879/5660, 16-18=-3031/5984,  
 14-16=-2858/5660, 13-14=-2857/5354, 11-13=-2857/5354  
 WEBS 3-20=-823/597, 4-20=-729/1430, 5-20=-1526/786, 5-18=-144/523, 6-18=-429/228,  
 6-16=-429/228, 8-16=-144/523, 8-14=-1526/786, 9-14=-729/1430, 10-14=-825/597

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 13-0-0, Exterior(2R) 13-0-0 to 19-10-9, Interior(1) 19-10-9 to 35-8-0, Exterior(2R) 35-8-0 to 42-6-9, Interior(1) 42-6-9 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.
  - 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 100 lb uplift at joint(s) except (jt=lb) 2=-1467, 11=1467.
  - "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:

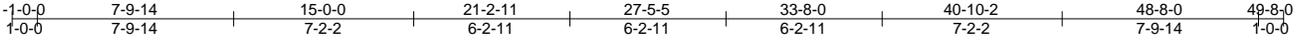
November 3,2022

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Job	Truss	Truss Type	Qty	Ply	T29127067
HR0009	T05	Hip	2	1	

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:33 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-HZeSUEqCCXkcLJYbl9s5MixAE98mQgiSAZv?HlyNBr8



Scale = 1:91.4

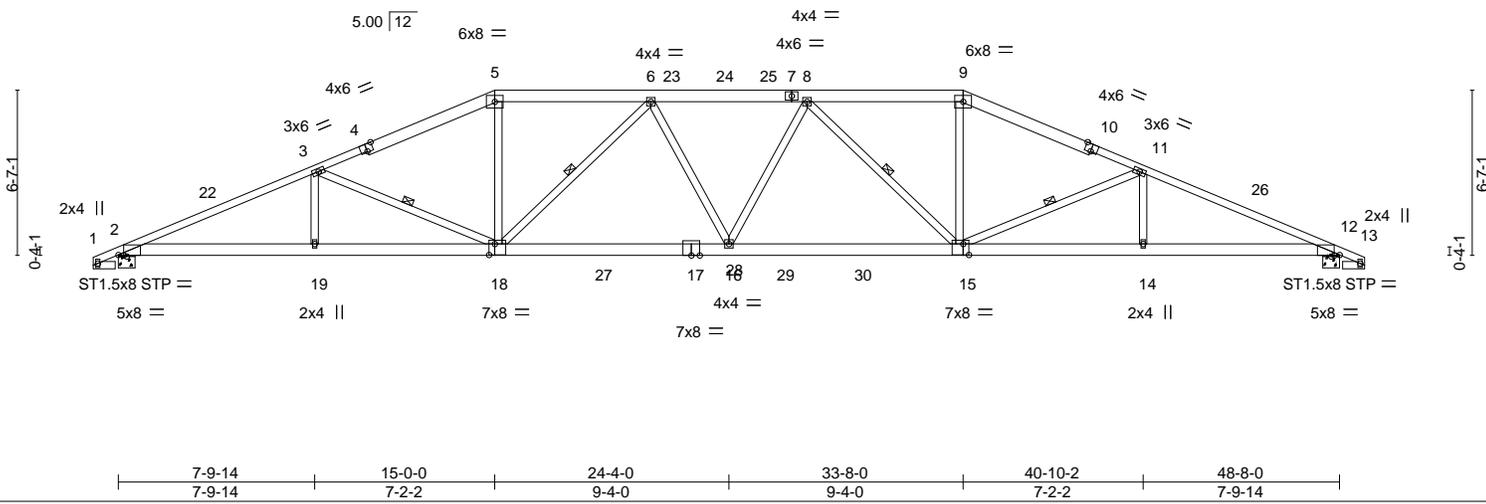


Plate Offsets (X,Y)-- [2:0-2-9,Edge], [4:0-3-0,Edge], [10:0-3-0,Edge], [12:0-2-9,Edge], [15:0-2-12,0-5-4], [18:0-2-12,0-5-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.96	Vert(LL) 0.45 16 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.49	Vert(CT) -0.77 16-18 >751 180		
BCDL 10.0	Code FBC2020/TP12014	Matrix-SH	Horz(CT) 0.22 12 n/a n/a		
				Weight: 313 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-4,10-13: 2x4 SP M 31	TOP CHORD Structural wood sheathing directly applied or 2-8-2 oc purlins.
BOT CHORD 2x6 SP No.2 *Except* 2-18,12-15: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-18, 6-18, 8-15, 11-15
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 12=0-8-0  
 Max Horz 2=-279(LC 10)  
 Max Uplift 2=-1467(LC 12), 12=-1467(LC 12)  
 Max Grav 2=2930(LC 17), 12=2930(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6202/3215, 3-5=-5147/2786, 5-6=-4686/2686, 6-8=-5406/3040, 8-9=-4686/2686,  
 9-11=-5147/2786, 11-12=-6204/3216  
 BOT CHORD 2-19=-2786/5783, 18-19=-2786/5783, 16-18=-2568/5402, 15-16=-2551/5321,  
 14-15=-2807/5575, 12-14=-2807/5575  
 WEBS 3-19=0/295, 3-18=-1070/676, 5-18=-607/1379, 6-18=-1151/572, 6-16=-42/329,  
 8-16=-42/329, 8-15=-1151/571, 9-15=-606/1379, 11-15=-1072/676, 11-14=0/295

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 15-0-0, Exterior(2R) 15-0-0 to 21-10-9, Interior(1) 21-10-9 to 33-8-0, Exterior(2R) 33-8-0 to 40-10-2, Interior(1) 40-10-2 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1467, 12=1467.
  - \*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:

November 3,2022

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127068
HR0009	T06	Hip	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:35 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-DymCvKsSk9?Kbch\_tauZR70RkzrvuT4IdtO6LeyNBr6



Scale = 1:91.4

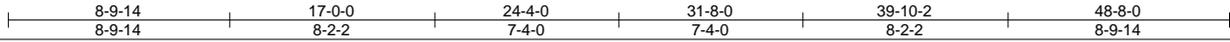
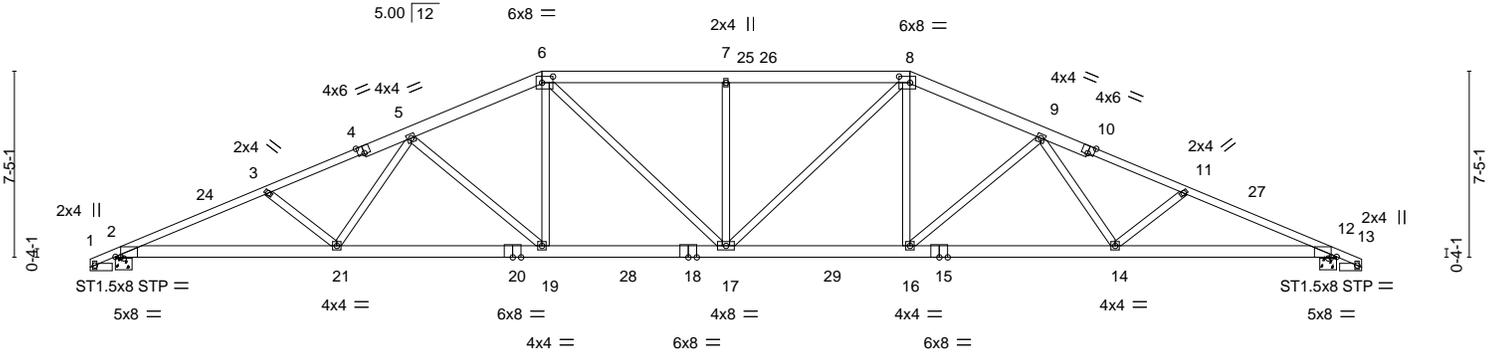


Plate Offsets (X,Y)-- [2:0-2-9,Edge], [4:0-3-0,Edge], [6:0-5-4,0-3-0], [8:0-5-4,0-3-0], [10:0-3-0,Edge], [12:0-2-9,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.90	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.86	Vert(LL) 0.45 17 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.94	Vert(CT) -0.72 17-19 >795 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.19 12 n/a n/a		
				Weight: 325 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2 \*Except\*  
1-4,10-13: 2x4 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\*  
2-20,12-15: 2x6 SP M 26  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-8-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 4-8-11 oc bracing.

**REACTIONS.**

(size) 2=0-8-0, 12=0-8-0  
Max Horz 2=-315(LC 10)  
Max Uplift 2=-1467(LC 12), 12=-1467(LC 12)  
Max Grav 2=2932(LC 17), 12=2932(LC 18)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-6235/3256, 3-5=-5904/3128, 5-6=-4786/2702, 6-7=-4802/2830, 7-8=-4802/2830,  
8-9=-4786/2702, 9-11=-5905/3128, 11-12=-6236/3256  
BOT CHORD 2-21=-2843/5858, 19-21=-2496/5243, 17-19=-2009/4524, 16-17=-2029/4343,  
14-16=-2516/5007, 12-14=-2864/5623  
WEBS 3-21=-375/349, 5-21=-188/639, 5-19=-990/663, 6-19=-413/988, 6-17=-375/874,  
7-17=-730/546, 8-17=-375/874, 8-16=-413/989, 9-16=-990/663, 9-14=-188/640,  
11-14=-375/349

**NOTES-** (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 17-0-0, Exterior(2R) 17-0-0 to 23-10-9, Interior(1) 23-10-9 to 31-8-0, Exterior(2R) 31-8-0 to 38-6-9, Interior(1) 38-6-9 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1467, 12=1467.
- "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:

November 3,2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

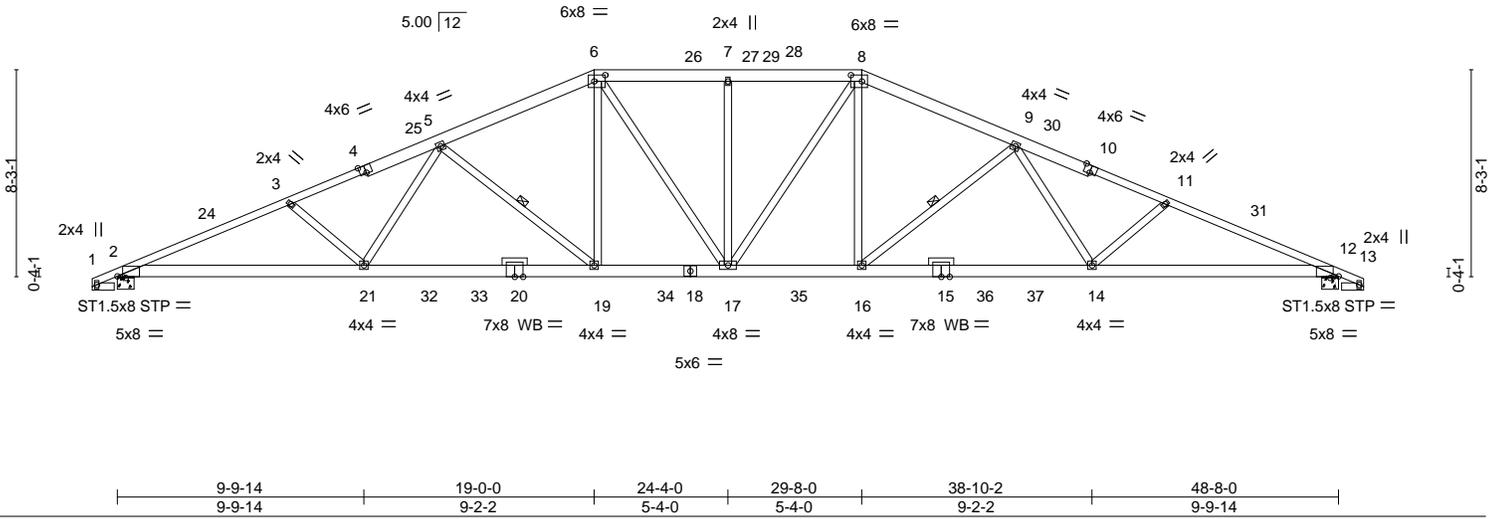
Job	Truss	Truss Type	Qty	Ply	
HR0009	T07	Hip	2	1	T29127069

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:36 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-h8Jb7gs4VS7BCmGARHqo\_KZc5MB0d0LvsX7fu4yNBr5

-1-0-0	6-10-15	12-10-10	19-0-0	24-4-0	29-8-0	35-9-6	41-9-1	48-8-0	49-8-0
1-0-0	6-10-15	5-11-11	6-1-6	5-4-0	5-4-0	6-1-6	5-11-11	6-10-15	1-0-0

Scale = 1:91.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.93	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.87	Vert(LL) 0.40 17 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.56	Vert(CT) -0.67 14-16 >858 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.19 12 n/a n/a	Weight: 336 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 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* 2-20,12-15: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 4-9-8 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-19, 9-16
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 12=0-8-0  
 Max Horz 2=-350(LC 10)  
 Max Uplift 2=-1467(LC 12), 12=-1467(LC 12)  
 Max Grav 2=2951(LC 17), 12=2951(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6236/3222, 3-5=-5870/3090, 5-6=-4514/2576, 6-7=-4286/2584, 7-8=-4286/2584,  
 8-9=-4514/2576, 9-11=-5871/3090, 11-12=-6237/3222  
 BOT CHORD 2-21=-2800/5877, 19-21=-2418/5169, 17-19=-1846/4264, 16-17=-1867/4097,  
 14-16=-2439/4907, 12-14=-2821/5616  
 WEBS 3-21=-431/385, 5-21=-234/788, 5-19=-1205/756, 6-19=-447/1093, 6-17=-241/608,  
 7-17=-496/379, 8-17=-241/608, 8-16=-447/1093, 9-16=-1206/755, 9-14=-234/789,  
 11-14=-431/385

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 19-0-0, Exterior(2R) 19-0-0 to 25-10-9, Interior(1) 25-10-9 to 29-8-0, Exterior(2R) 29-8-0 to 36-6-9, Interior(1) 36-6-9 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1467, 12=1467.
  - "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 electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3, 2022

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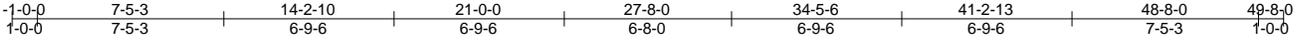


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127070
HR0009	T08	Hip	2	1	

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:38 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-eXRLXLuL04NvS4QZYiSG3le2pAuq5p0BjrcmyzyNBr3



Scale = 1:91.4

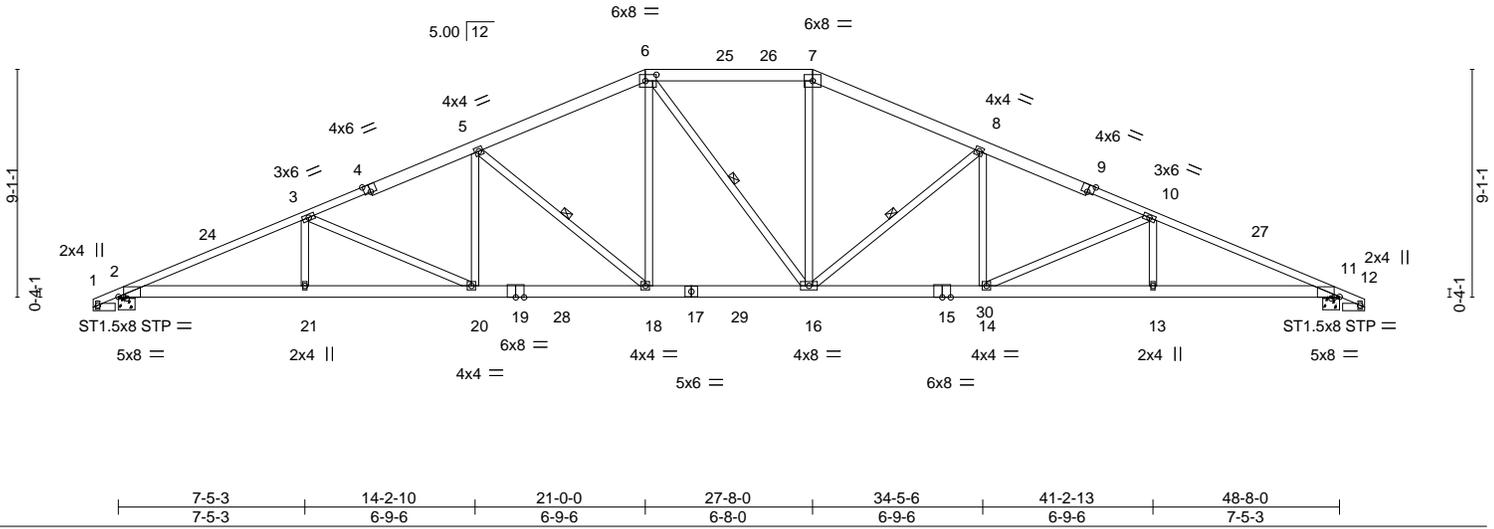


Plate Offsets (X,Y)-- [2:0-2-9,Edge], [4:0-3-0,Edge], [6:0-5-4,0-3-0], [9:0-3-0,Edge], [11:0-2-9,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.53	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.78	Vert(LL) 0.37 18 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Vert(CT) -0.62 18-20 >924 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.20 11 n/a n/a	Weight: 333 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-4,9-12: 2x4 SP M 31	TOP CHORD Structural wood sheathing directly applied or 2-8-14 oc purlins.
BOT CHORD 2x6 SP No.2 *Except* 2-19,11-15: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 4-10-12 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-18, 6-16, 8-16
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 11=0-8-0  
 Max Horz 2=385(LC 11)  
 Max Uplift 2=-1467(LC 12), 11=-1467(LC 12)  
 Max Grav 2=2938(LC 17), 11=2935(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6250/3194, 3-5=-5282/2879, 5-6=-4213/2457, 6-7=-3811/2380, 7-8=-4208/2458,  
 8-10=-5272/2879, 10-11=-6244/3194  
 BOT CHORD 2-21=-2767/5908, 20-21=-2767/5908, 18-20=-2306/5033, 16-18=-1688/3953,  
 14-16=-2327/4748, 13-14=-2788/5615, 11-13=-2788/5615  
 WEBS 3-21=0/291, 3-20=-960/521, 5-20=-173/669, 5-18=-1434/816, 6-18=-485/1195,  
 6-16=-341/351, 7-16=-490/1080, 8-16=-1427/813, 8-14=-171/665, 10-14=-964/522,  
 10-13=0/292

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 21-0-0, Exterior(2E) 21-0-0 to 27-8-0, Exterior(2R) 27-8-0 to 34-5-6, Interior(1) 34-5-6 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1467, 11=1467.
  - "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:

November 3, 2022

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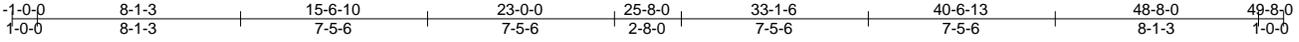


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127071
HR0009	T09	Hip	2	1		

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:39 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-6j?jlhvznNV13E?i6QzVczBCraE8qHELYVMJUPyNBr2



Scale = 1:91.4

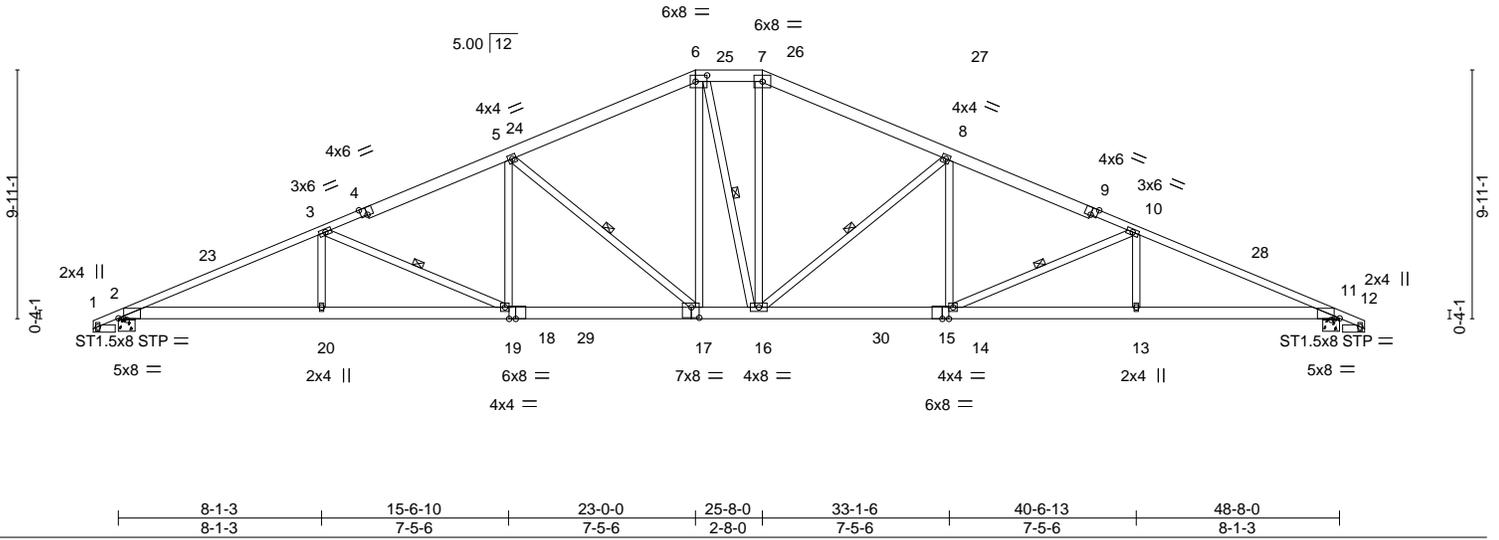


Plate Offsets (X,Y)-- [2:0-2-9,Edge], [4:0-3-0,Edge], [6:0-5-8,0-3-0], [9:0-3-0,Edge], [11:0-2-9,Edge], [15:0-3-3,0-0-0], [17:0-3-12,0-5-0], [18:0-3-3,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.77	Vert(LL) 0.38 17-19 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Vert(CT) -0.65 17-19 >887 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.20 11 n/a n/a		
				Weight: 343 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2 \*Except\*  
 1-4,9-12: 2x4 SP M 31  
 BOT CHORD 2x6 SP No.2 \*Except\*  
 2-18,11-15: 2x6 SP M 26  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-7-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 5-0-12 oc bracing.  
 WEBS 1 Row at midpt 3-19, 5-17, 6-16, 8-16, 10-14

**REACTIONS.**

(size) 2=0-8-0, 11=0-8-0  
 Max Horz 2=421(LC 11)  
 Max Uplift 2=-1467(LC 12), 11=-1467(LC 12)  
 Max Grav 2=2909(LC 17), 11=2909(LC 18)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6129/3093, 3-5=-5028/2723, 5-6=-3869/2258, 6-7=-3495/2202, 7-8=-3883/2265,  
 8-10=-5022/2720, 10-11=-6133/3094  
 BOT CHORD 2-20=-2665/5817, 19-20=-2665/5817, 17-19=-2134/4809, 16-17=-1449/3585,  
 14-16=-2151/4543, 13-14=-2686/5505, 11-13=-2686/5505  
 WEBS 3-20=0/325, 3-19=-1103/598, 5-19=-196/765, 5-17=-1618/908, 6-17=-534/1163,  
 6-16=-312/404, 7-16=-560/1105, 8-16=-1589/893, 8-14=-188/749, 10-14=-1113/602,  
 10-13=0/329

**NOTES-** (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 23-0-0, Exterior(2E) 23-0-0 to 25-8-0, Exterior(2R) 25-8-0 to 32-6-9, Interior(1) 32-6-9 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1467, 11=1467.
- "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:

November 3, 2022

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

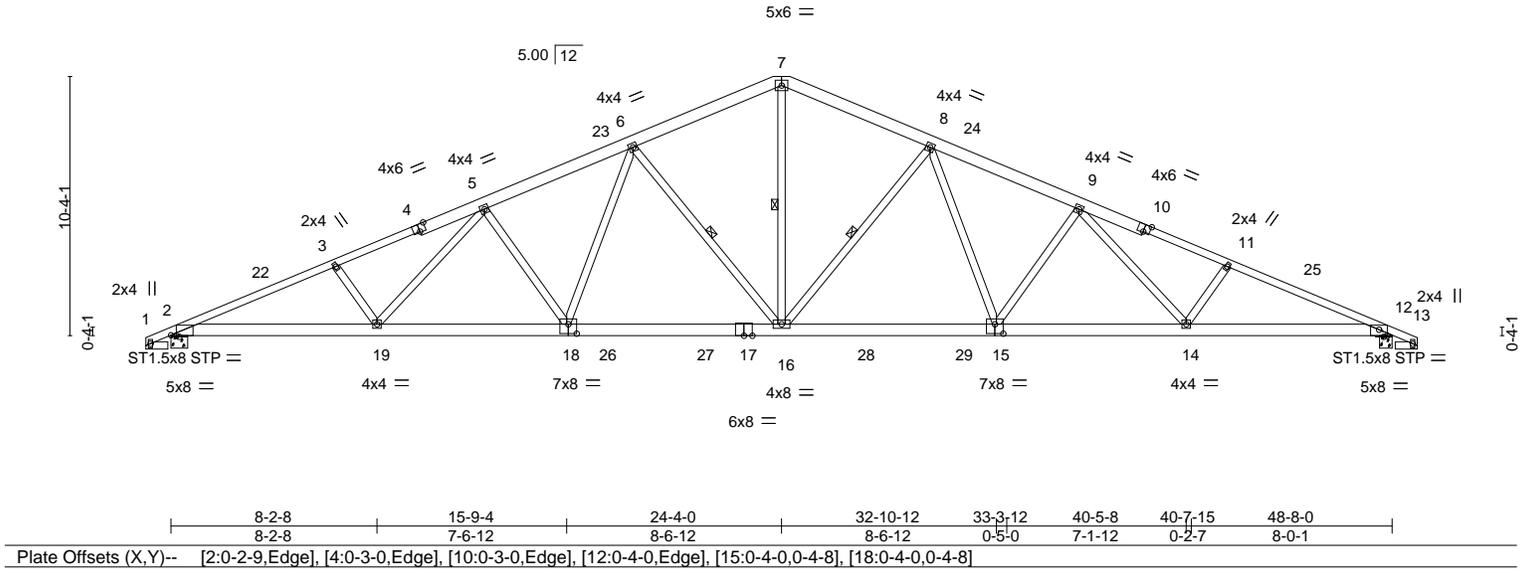


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127072
HR0009	T10	Common	2	1	

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:41 2022 Page 1  
 ID:bzeMQ6aYnVsSaPAR?PBKUKnzRR9V-267TANwDJ?ITJX98Dr?zhOGUINw4IBCe0prQZHyNB0  
 -1-0-0 6-6-14 12-5-14 18-4-15 24-4-0 30-3-1 36-2-3 42-1-2 48-8-0 49-8-0  
 1-0-0 6-6-14 5-11-1 5-11-1 5-11-1 5-11-1 5-11-2 5-10-15 6-6-14 1-0-0

Scale = 1:91.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.83	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.81	Vert(LL) 0.42 16 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.84	Vert(CT) -0.72 15-16 >798 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.19 12 n/a n/a		
				Weight: 332 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-4,10-13: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 1-11-10 oc purlins.
BOT CHORD 2x6 SP No.2 *Except* 2-18,12-15: 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 5-5-10 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-16, 7-16, 8-16
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 12=0-6-0  
 Max Horz 2=-444(LC 10)  
 Max Uplift 2=-1469(LC 12), 12=-1461(LC 12)  
 Max Grav 2=2925(LC 17), 12=2919(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6209/3097, 3-5=-5963/3057, 5-6=-4960/2688, 6-7=-3747/2174, 7-8=-3747/2175,  
 8-9=-4974/2696, 9-11=-6021/3088, 11-12=-6274/3133  
 BOT CHORD 2-19=-2685/5925, 18-19=-2303/5239, 16-18=-1833/4357, 15-16=-1858/4162,  
 14-15=-2335/4953, 12-14=-2740/5664  
 WEBS 3-19=-385/344, 5-19=-312/756, 5-18=-914/584, 6-18=-476/1162, 6-16=-1454/872,  
 7-16=-1274/2376, 8-16=-1468/879, 8-15=-484/1177, 9-15=-933/594, 9-14=-336/798,  
 11-14=-412/362

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl.. GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 24-4-0, Exterior(2R) 24-4-0 to 31-2-9, Interior(1) 31-2-9 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 100 lb uplift at joint(s) except (jt=lb) 2=1469, 12=1461.
  - \*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:

November 3, 2022

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127073
HR0009	T11	Common	20	1	

Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:43 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-UFEB3yTrc?BYrJWLF2RmpMqkBbfm5lwT7KXdAyNBR\_

1-0-0 6-6-14 12-5-14 18-4-15 24-4-0 30-3-1 36-2-3 42-1-2 48-8-0 49-8-0  
 1-0-0 6-6-14 5-11-1 5-11-1 5-11-1 5-11-1 5-11-2 5-10-15 6-6-14 1-0-0

Scale = 1:88.1

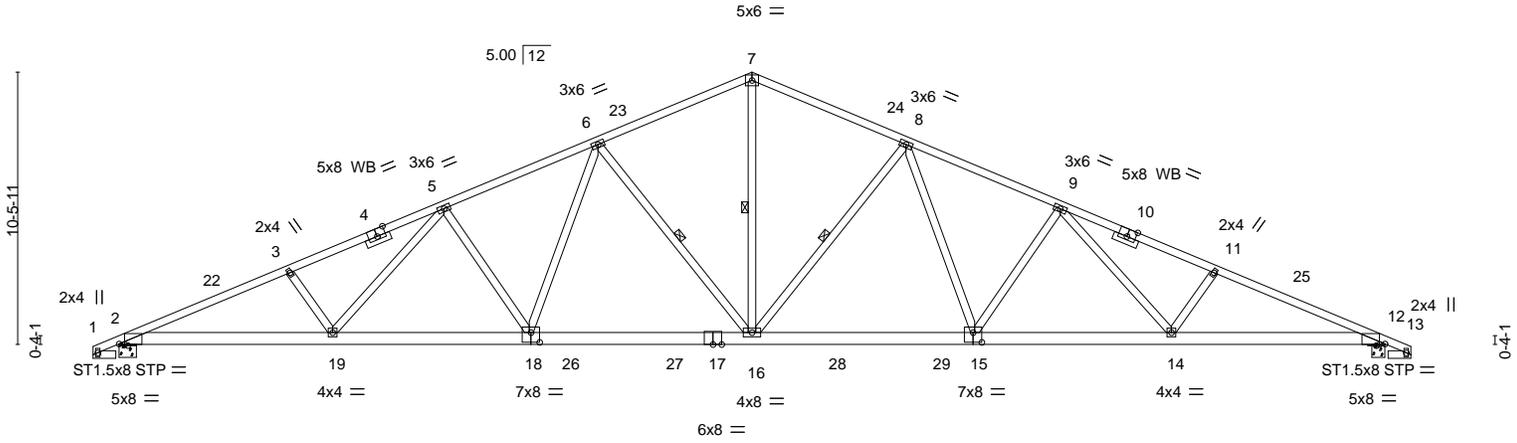


Plate Offsets (X,Y)--	[2:0-2-9,Edge], [4:0-4-0,Edge], [10:0-4-0,Edge], [12:0-2-9,Edge], [15:0-4-0,0-4-8], [18:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.77	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.80	Vert(LL) 0.44 16 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.84	Vert(CT) -0.75 15-16 >774 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.19 12 n/a n/a		
				Weight: 311 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP M 31 *Except* 1-4,10-13: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-1-2 oc purlins.
BOT CHORD 2x6 SP M 26 *Except* 15-17,17-18: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 5-5-6 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-16, 7-16, 8-16
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 12=0-6-0  
 Max Horz 2=447(LC 11)  
 Max Uplift 2=-1469(LC 12), 12=-1461(LC 12)  
 Max Grav 2=2926(LC 17), 12=2920(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6232/3169, 3-5=-5971/3120, 5-6=-4915/2728, 6-7=-3717/2223, 7-8=-3717/2224,  
 8-9=-4929/2736, 9-11=-6029/3152, 11-12=-6297/3205  
 BOT CHORD 2-19=-2756/5955, 18-19=-2319/5180, 16-18=-1867/4316, 15-16=-1875/4118,  
 14-15=-2335/4894, 12-14=-2794/5691  
 WEBS 3-19=-453/390, 5-19=-355/831, 5-18=-903/577, 6-18=-474/1158, 6-16=-1442/872,  
 7-16=-1272/2366, 8-16=-1455/878, 8-15=-482/1174, 9-15=-922/587, 9-14=-377/874,  
 11-14=-481/409

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-6, Interior(1) 3-10-6 to 24-4-0, Exterior(2R) 24-4-0 to 29-2-6, Interior(1) 29-2-6 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 100 lb uplift at joint(s) except (jt=lb) 2=-1469, 12=1461.
  - \*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:

November 3,2022



Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T29127075
HR0009	T13	Roof Special	10	1		

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

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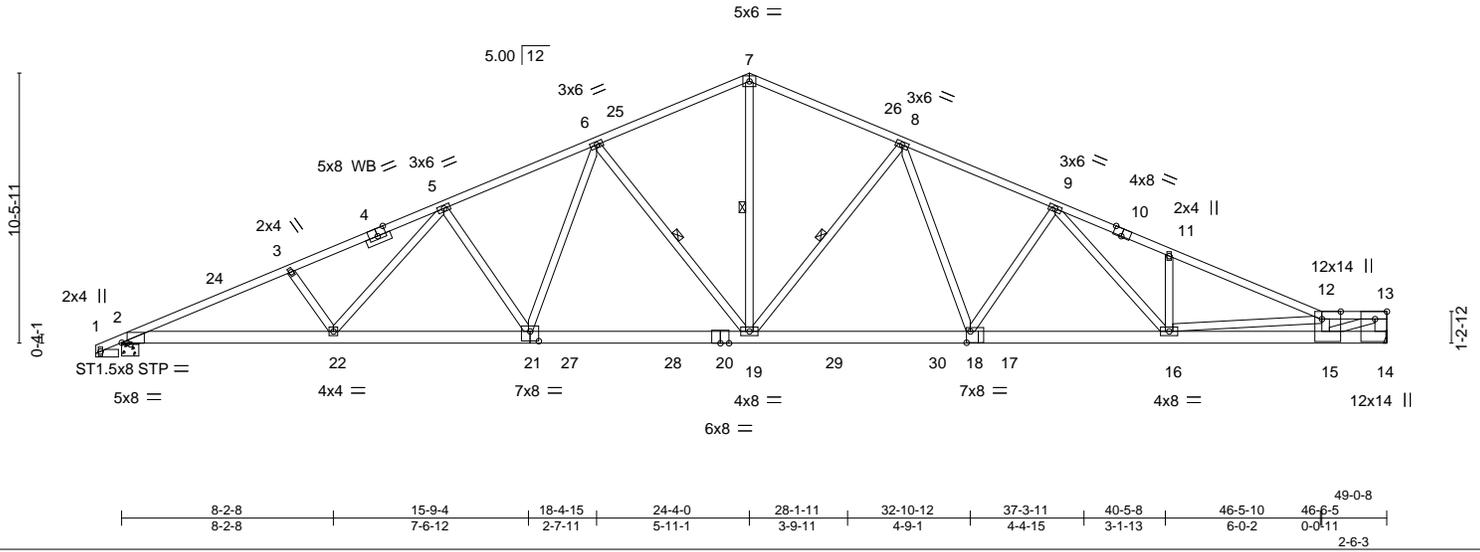


Plate Offsets (X,Y)-- [2:0-2-9,Edge], [4:0-4-0,Edge], [10:0-4-0,Edge], [12:0-3-8,Edge], [14:0-3-8,Edge], [18:0-1-12,0-5-4], [21:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.79	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.83	Vert(LL) 0.48 18-19 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.85	Vert(CT) -0.80 18-19 >727 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.19 14 n/a n/a		
				Weight: 321 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP M 31 \*Except\*  
12-13: 2x4 SP No.2, 1-4: 2x4 SP No.1  
BOT CHORD 2x6 SP No.2 \*Except\*  
2-21,14-17: 2x6 SP M 26  
WEBS 2x4 SP No.3 \*Except\*  
13-14: 2x6 SP No.2, 13-15: 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-1-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 4-8-11 oc bracing.  
WEBS 1 Row at midpt 7-19, 6-19, 8-19

**REACTIONS.**

(size) 14=Mechanical, 2=0-8-0  
Max Horz 2=430(LC 11)  
Max Uplift 14=-1349(LC 12), 2=-1482(LC 12)  
Max Grav 14=2818(LC 18), 2=2950(LC 17)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-6291/3201, 3-5=-6030/3152, 5-6=-4975/2759, 6-7=-3779/2255, 7-8=-3780/2257, 8-9=-5043/2791, 9-11=-6498/3460, 11-12=-6448/3285, 12-13=-5921/2989, 13-14=-2217/1144  
BOT CHORD 2-22=-2933/5982, 21-22=-2498/5207, 19-21=-2046/4343, 18-19=-2022/4209, 16-18=-2525/5048, 15-16=-3241/6381, 14-15=-329/632  
WEBS 3-22=-453/390, 5-22=-354/831, 5-21=-903/577, 13-15=-2864/5694, 7-19=-1300/2416, 6-19=-1442/872, 6-21=-473/1157, 8-19=-1517/911, 8-18=-502/1227, 9-18=-1006/631, 9-16=-650/1297, 11-16=-528/424, 12-16=-499/296, 12-15=-2718/1488

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCCL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-10-14, Interior(1) 3-10-14 to 24-4-0, Exterior(2R) 24-4-0 to 29-2-14, Interior(1) 29-2-14 to 48-9-12 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, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=1349, 2=1482.
- \*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:

November 3,2022

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	T29127076
HR0009	T14	Roof Special Girder	2	3	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:48 2022 Page 2  
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**NOTES-** (11)

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3567 lb down and 1761 lb up at 46-10-8, and 113 lb down and 22 lb up at 47-6-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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: 1-7=-90, 7-12=-90, 12-14=-90, 2-15=-20  
Concentrated Loads (lb)  
Vert: 16=-3567(B) 30=-113(B)

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127077
HR0009	T15	Common	4	1	

Job Reference (optional)

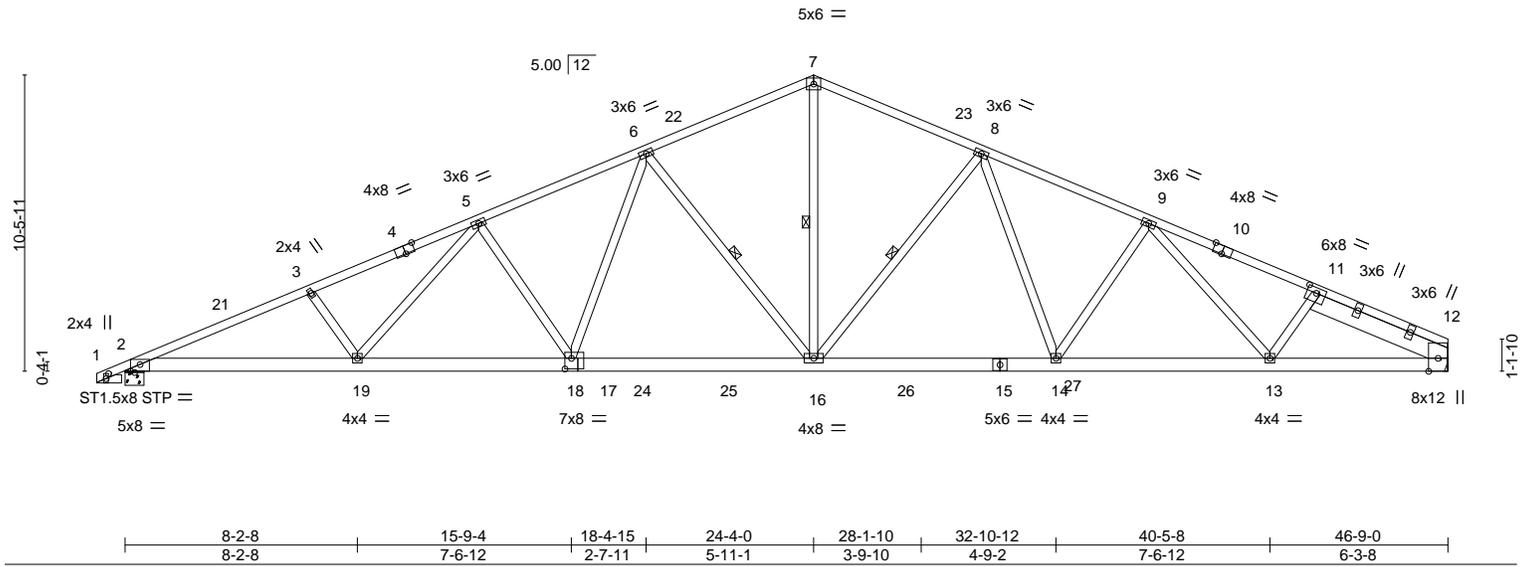
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:50 2022 Page 1

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Scale = 1:81.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.97	Vert(LL) 0.42 16-18 >999 240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.77	Vert(CT) -0.70 16-18 >792 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.77	Horz(CT) 0.18 12 n/a n/a		
BCDL 10.0	Code FBC2020/TP12014	Matrix-SH		Weight: 313 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 5-1-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 7-16, 6-16, 8-16
OTHERS 2x4 SP No.3	
SLIDER Right 2x8 SP 2400F 2.0E 5-2-1	

**REACTIONS.** (size) 2=0-8-0, 12=Mechanical  
 Max Horz 2=440(LC 11)  
 Max Uplift 2=-1425(LC 12), 12=-1291(LC 12)  
 Max Grav 2=2833(LC 17), 12=2704(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5996/3036, 3-5=-5735/2987, 5-6=-4676/2597, 6-7=-3475/2093, 7-8=-3475/2103, 8-9=-4421/2490, 9-11=-4776/2583, 11-12=-4916/2573  
 BOT CHORD 2-19=-2693/5723, 18-19=-2255/4949, 16-18=-1804/4090, 14-16=-1707/3746, 13-14=-2038/4237, 12-13=-2122/4205  
 WEBS 3-19=-456/391, 5-19=-355/827, 5-18=-895/574, 8-14=-338/858, 7-16=-1182/2183, 6-16=-1442/869, 6-18=-473/1156, 8-16=-1211/754, 9-14=-569/433, 11-13=0/283

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=47ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 3-8-2, Interior(1) 3-8-2 to 24-4-0, Exterior(2R) 24-4-0 to 29-0-2, Interior(1) 29-0-2 to 46-9-0 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1425, 12=1291.
  - "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:

November 3,2022

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T29127078
HR0009	T16	Common Girder	2	2		

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

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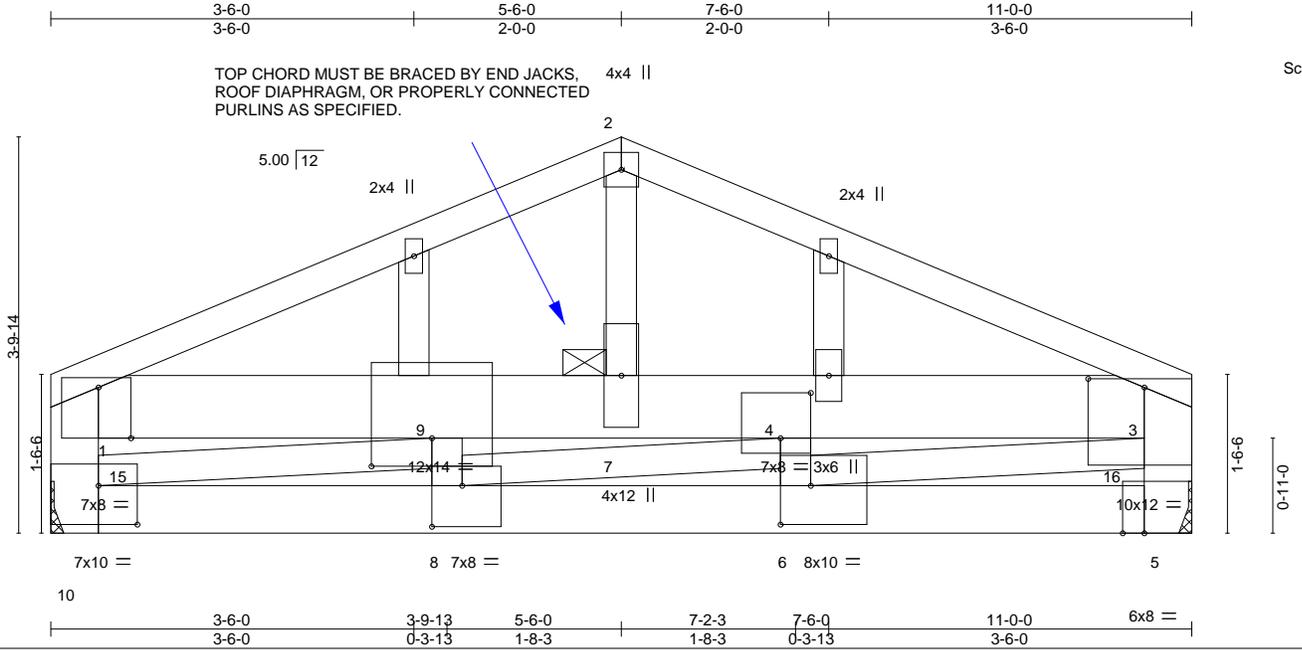


Plate Offsets (X,Y)-- [1:0-3-12,Edge], [3:0-6-8,0-1-0], [4:0-3-8,0-5-4], [5:0-2-8,0-0-0], [6:0-3-8,0-4-8], [8:0-3-8,0-4-12], [9:0-7-0,0-3-4], [10:0-4-8,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.37	Vert(LL) 0.07 6-8 >999 240		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.86	Vert(CT) -0.11 6-8 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.02 5 n/a n/a		
	Code FBC2020/TPI2014			Weight: 203 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP M 26 \*Except\*  
 WEBS 2x4 SP No.3 \*Except\*  
 1-10,3-5: 2x6 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-5-3 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 7

**REACTIONS.**

(size) 10=Mechanical, 5=Mechanical  
 Max Horz 10=74(LC 7)  
 Max Uplift 10=-3945(LC 8), 5=-3946(LC 8)  
 Max Grav 10=7958(LC 1), 5=7960(LC 1)

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

TOP CHORD 1-2=-6837/3374, 2-3=-6836/3374, 1-10=-4308/2144, 3-5=-5540/2749  
 BOT CHORD 8-10=-3236/6539, 6-8=-3189/6443, 5-6=-974/1930, 1-9=-1980/4153, 7-9=-362/214, 4-7=-362/214  
 WEBS 2-7=-2299/4790, 8-9=-2306/4694, 4-6=-1565/3185, 3-6=-2343/4775, 9-10=-4545/2232

**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 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc, 2x8 - 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 7-16; 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., GCp=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 metal plate or equivalent at bearing(s) 10, 5 to support reaction shown.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=3945, 5=3946.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . 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."

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 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017

Date: November 3,2022

Continued on page 2

**LOAD CASE(S)** Standard

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127078
HR0009	T16	Common Girder	2	<b>2</b>	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:51 2022 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, 2-3=-90, 5-10=-1353(B=-1333), 1-15=-20, 15-16=-52(F=-32), 3-16=-20
- Concentrated Loads (lb)
  - Vert: 15=-94(F) 16=-94(F)

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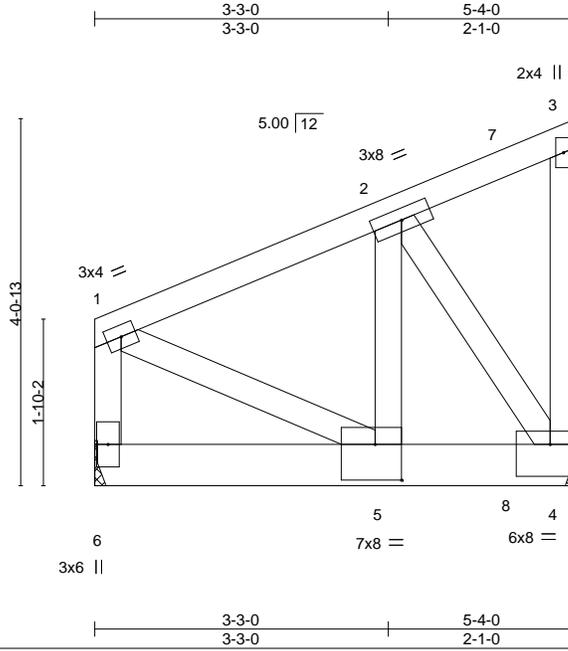
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127079
HR0009	T17	Jack-Open Girder	2	2	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:52 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-EDHeU837JN8v7DVFNeiYeiDX4pkKNFLFX0?VR9yNBqr



Scale = 1:25.4

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	2-0-0	TC 0.16	Vert(LL) 0.03	5-6	>999	240		MT20	244/190
TCDL 15.0	Lumber DOL 1.33		BC 0.57	Vert(CT) -0.04	5-6	>999	180			
BCLL 0.0 *	Rep Stress Incr NO		WB 0.56	Horz(CT) 0.00	4	n/a	n/a			
BCDL 10.0	Code FBC2020/TPI2014		Matrix-P						Weight: 81 lb	FT = 20%

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

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

**REACTIONS.** (size) 6=Mechanical, 4=Mechanical  
Max Horz 6=147(LC 8)  
Max Uplift 6=-1741(LC 8), 4=-1978(LC 8)  
Max Grav 6=3587(LC 1), 4=3757(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-1848/881, 1-2=-2098/984  
BOT CHORD 4-5=-1011/1902  
WEBS 1-5=-962/2118, 2-5=-1572/3111, 2-4=-3354/1783

**NOTES-** (11)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 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 7-16; 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 100 lb uplift at joint(s) except (it=lb) 6=1741, 4=1978.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 144 lb down and 73 lb up at 3-3-0, and 119 lb down and 60 lb up at 4-8-1 on top chord, and 57 lb down and 29 lb up at 3-3-0, and 36 lb down and 18 lb up at 4-8-1 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 electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127079
HR0009	T17	Jack-Open Girder	2	<b>2</b>	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:52 2022 Page 2  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-EDHeU837jN8v7DVFNeiDX4pkKNFLFX0?VR9yNBqr

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.33, Plate Increase=1.33
- Uniform Loads (plf)
  - Vert: 1-3=-90, 4-6=-1296(B=-1276)
- Concentrated Loads (lb)
  - Vert: 5=-57(F) 2=-144(F) 7=-119(F) 8=-36(F)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job HR0009	Truss T18	Truss Type ROOF SPECIAL GIRDER	Qty 2	Ply 2	Job Reference (optional)	T29127080
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Builders FirstSource, Tampa, Plant City, Florida 33566

8.530 s May 26 2022 MiTek Industries, Inc. Thu Nov 3 10:15:01 2022 Page 1  
ID:bzeMQ6aYnVaSaPAR?PBKUKnzRR9V-KD9egQOmeKZcOkeSSE6KyHVAolG2df2\_\_B8gMiyN5t8

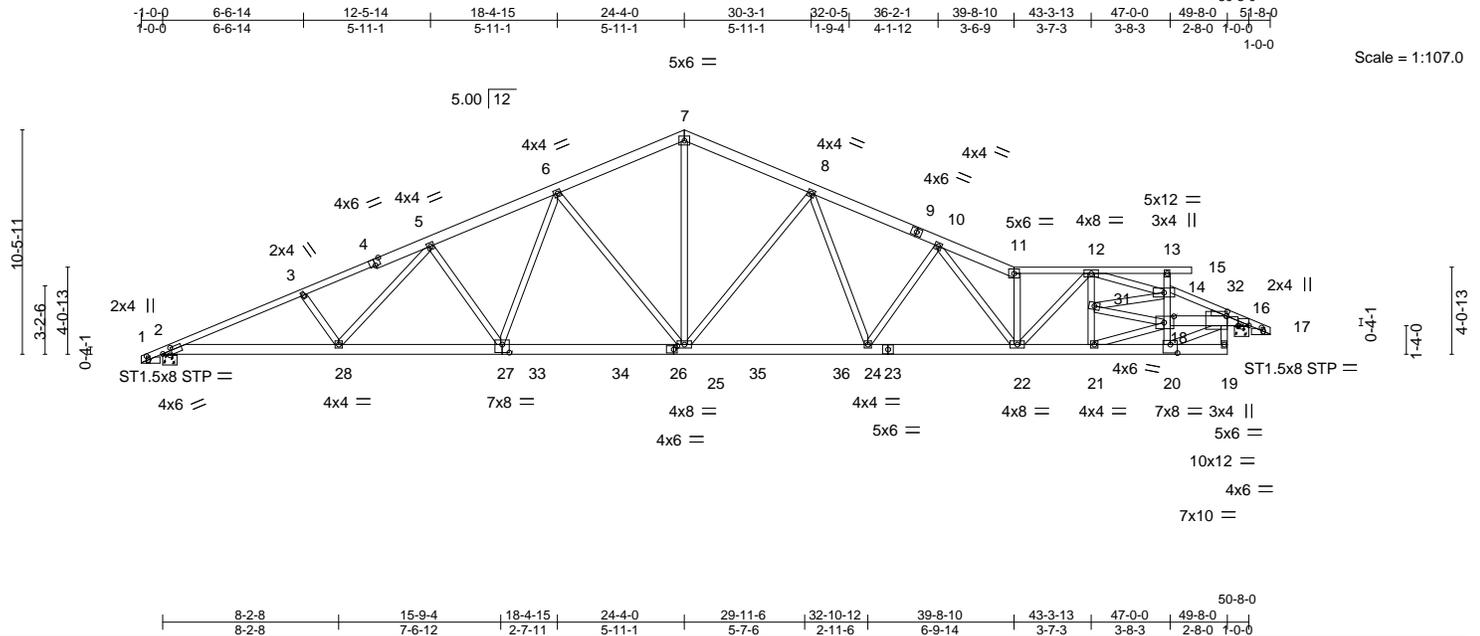


Plate Offsets (X,Y)--	[1:0-2-2,0-1-0], [2:0-5-1,0-1-10], [4:0-3-0,Edge], [16:0-0-9,0-2-8], [16:0-6-0,Edge], [16:0-6-11,Edge], [17:0-2-2,0-1-0], [18:0-5-8,0-3-8], [20:0-4-0,0-4-12], [26:0-2-0,0-2-0], [27:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.56	Vert(LL) 0.35 22-24 >999 240	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.74	Vert(CT) -0.54 24-25 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.81	Horz(CT) 0.07 16 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH		Weight: 782 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 11-14,15-17,1-4: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals. Except:
BOT CHORD 2x6 SP No.2 *Except* 16-19: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 8-3-10 oc bracing.
WEBS 2x4 SP No.3 *Except* 16-20: 2x4 SP No.2	
OTHERS 2x4 SP No.3	
WEDGE Right: 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 16=0-8-0  
 Max Horz 2=-382(LC 6)  
 Max Uplift 2=-1639(LC 8), 16=-3495(LC 8)  
 Max Grav 2=3252(LC 29), 16=6456(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-7031/3386, 3-5=-6788/3349, 5-6=-5788/3000, 6-7=-4542/2487, 7-8=-4540/2487,  
 8-10=-6667/3501, 10-11=-9546/4954, 11-12=-8687/4480, 12-13=-401/153,  
 18-20=-1865/1661, 15-18=-952/963, 13-15=-292/237, 15-16=-8771/4652  
 BOT CHORD 2-28=-3217/6633, 27-28=-2853/5963, 25-27=-2381/5081, 24-25=-2652/5392,  
 22-24=-3657/7160, 21-22=-3727/7257, 20-21=-3498/6679, 16-19=-171/355,  
 16-18=-968/1893  
 WEBS 3-28=-368/343, 5-28=-316/773, 5-27=-922/587, 11-22=-3877/2058, 16-20=-3600/6883,  
 7-25=-1556/2975, 6-25=-1459/807, 6-27=-476/1162, 8-25=-2210/1242, 8-24=-1048/2171,  
 10-24=-2101/1211, 10-22=-1466/2853, 21-31=-562/535, 12-31=-1090/1045,  
 18-21=-1467/2208, 18-31=-1391/1329, 15-31=-1328/1360, 12-15=-7170/3783,  
 12-22=-1449/2717

- NOTES-** (11)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-3-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3, 2022

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job HR0009	Truss T18	Truss Type ROOF SPECIAL GIRDER	Qty 2	Ply <b>2</b>	Job Reference (optional) T29127080
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Builders FirstSource, Tampa, Plant City, Florida 33566

8.530 s May 26 2022 MiTek Industries, Inc. Thu Nov 3 10:15:02 2022 Page 2  
ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-oQj1tmPOPdhT0UDe0yeZVV2LYicHM6H8CrtEu9yN5t7

**NOTES-** (11)

- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1639 lb uplift at joint 2 and 3495 lb uplift at joint 16.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3737 lb down and 1998 lb up at 46-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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: 1-7=-90, 7-11=-90, 11-13=-90, 13-14=-90, 15-32=-30, 16-32=-90, 16-17=-90, 2-19=-20, 16-18=-20  
Concentrated Loads (lb)  
Vert: 20=-3737(F)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T29127081
HR0009	T19	Roof Special	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:57 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-aB5XXr7FYvmCD?ND9CijLmxCNqLX1QL\_hljG6MyNBqm



Scale = 1:101.9

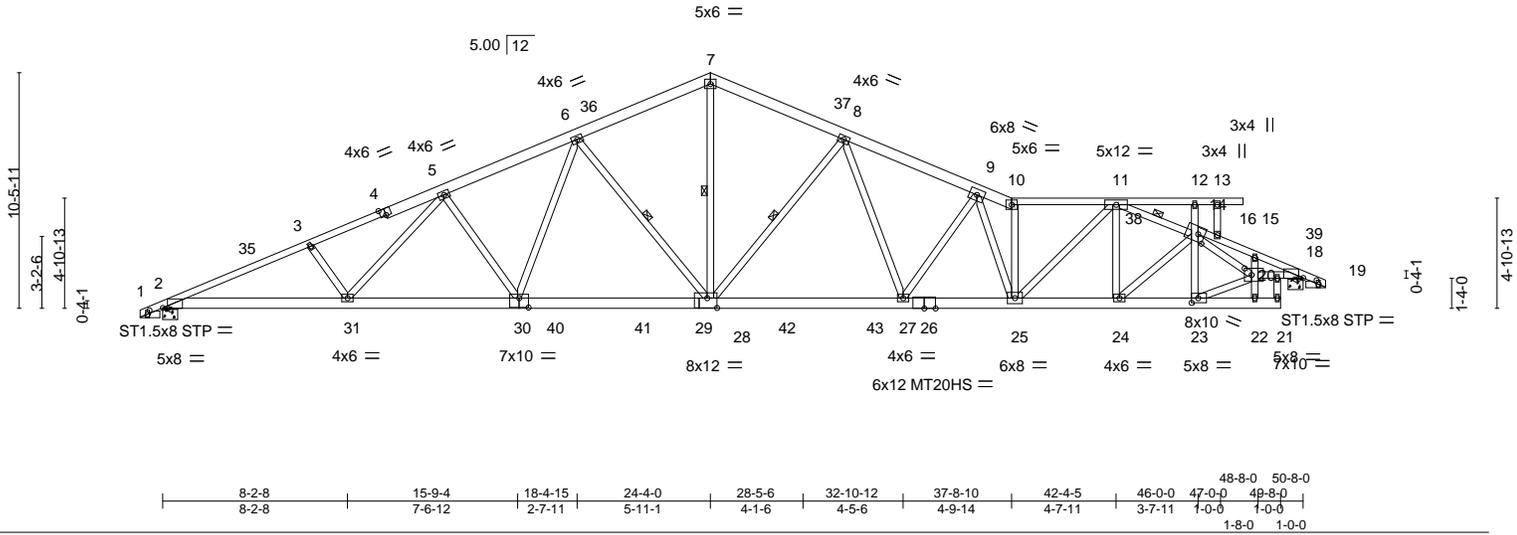


Plate Offsets (X,Y)-- [1:0-2-2,0-1-0], [2:0-2-9,Edge], [4:0-3-0,Edge], [14:0-3-8,0-4-0], [18:0-2-5,Edge], [19:0-2-2,0-1-0], [20:0-3-12,0-3-8], [23:0-3-8,0-2-8], [28:0-5-4,0-5-4], [30:0-5-0,0-5-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.95	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.96	Vert(LL) 0.51 27-28 >999 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.96	Vert(CT) -0.84 27-28 >711 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.15 18 n/a n/a		
				Weight: 389 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 10-16,14-19: 2x4 SP No.2, 1-4: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 1-9-4 oc purlins, except end verticals. Except: 2-2-0 oc bracing: 15-17
BOT CHORD 2x6 SP No.2 *Except* 2-30,21-26: 2x6 SP M 26, 21-32,18-20: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 17-22,20-23: 2x4 SP No.2	WEBS 1 Row at midpt 7-28, 6-28, 8-28, 11-14
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 18=0-8-0  
 Max Horz 2=495(LC 11)  
 Max Uplift 2=-1527(LC 12), 18=-1623(LC 12)  
 Max Grav 2=3063(LC 17), 18=3018(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6548/3312, 3-5=-6303/3272, 5-6=-5301/2914, 6-7=-4029/2396, 7-8=-4027/2420,  
 8-9=-5583/3145, 9-10=-6386/3592, 10-11=-5921/3327, 13-15=-108/316,  
 14-15=-4843/3152, 15-17=-4893/3248, 17-18=-5471/3476  
 BOT CHORD 2-31=-3179/6206, 30-31=-2804/5531, 28-30=-2342/4648, 27-28=-2401/4626,  
 25-27=-3094/5775, 24-25=-2342/4297, 23-24=-2094/3523, 22-23=-168/259,  
 18-20=-2984/4810  
 WEBS 3-31=-380/339, 5-31=-305/746, 5-30=-916/584, 10-25=-2421/1390, 17-20=-190/592,  
 20-23=-2156/3645, 14-20=-830/1200, 11-24=-509/305, 11-25=-1217/2352,  
 7-28=-1409/2583, 6-28=-1456/880, 6-30=-477/1163, 8-28=-1715/1035, 8-27=-722/1536,  
 9-27=-1327/837, 9-25=-473/856, 14-23=-1348/875, 14-24=-467/1035, 11-14=-4430/2660

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCCL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 4-0-13, Interior(1) 4-0-13 to 24-4-0, Exterior(2R) 24-4-0 to 29-4-13, Interior(1) 29-4-13 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.
  - All plates are 2x4 MT20 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.

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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: November 3, 2022

Continued on page 2

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127081
HR0009	T19	Roof Special	2	1	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:57 2022 Page 2  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-aB5XXr7FYvmCD?ND9CijLmxCNqLX1QL\_hljG6MyNBqm

**NOTES-** (11)

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1527, 18=1623.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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."

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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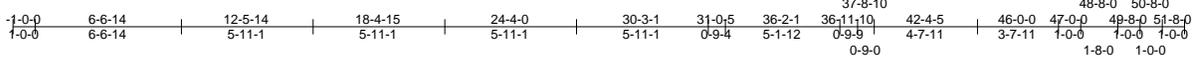


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T29127082
HR0009	T20	Roof Special	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:58 2022 Page 1  
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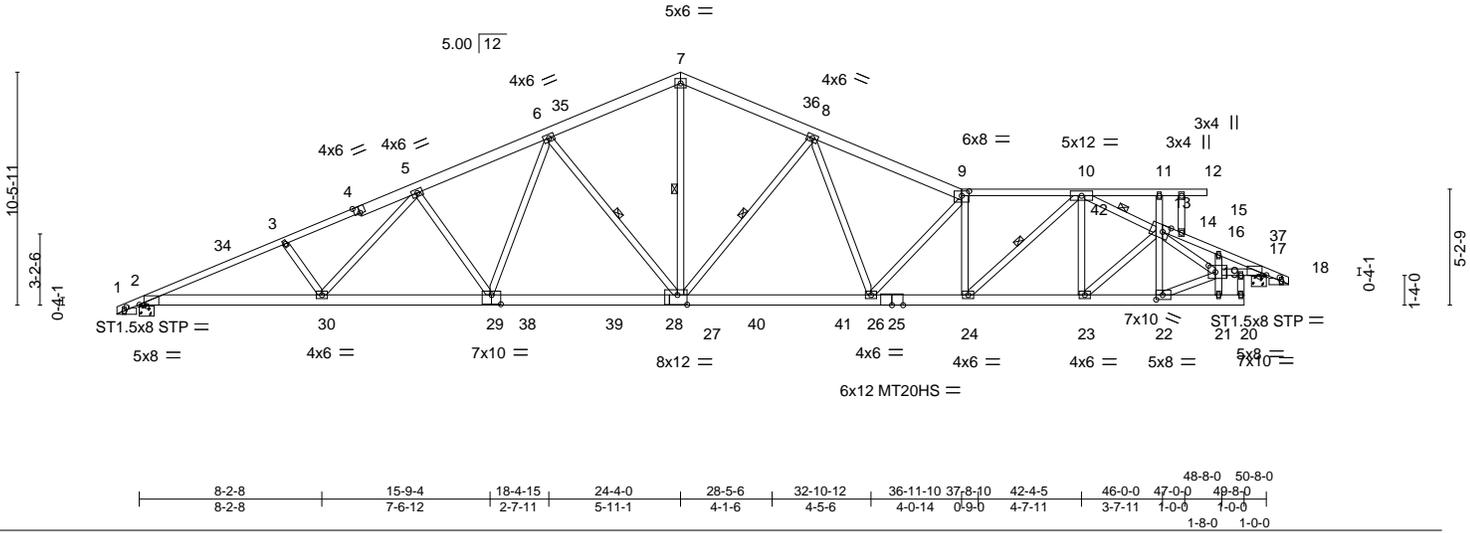


Plate Offsets (X,Y)-- [1:0-2-2,0-1-0], [2:0-2-9,Edge], [4:0-3-0,Edge], [9:0-4-0,0-2-8], [13:0-3-8,Edge], [17:0-2-5,Edge], [18:0-2-2,0-1-0], [19:0-3-12,0-3-8], [22:0-3-8,0-2-8], [27:0-5-4,0-5-4], [29:0-5-0,0-5-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.95	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.94	Vert(LL) 0.50 26-27 >999 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.97	Vert(CT) -0.83 26-27 >723 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.15 17 n/a n/a		
				Weight: 385 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 13-18: 2x4 SP No.2, 1-4,9-15: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 1-10-14 oc purlins, except end verticals. Except: 2-2-0 oc bracing: 14-16
BOT CHORD 2x6 SP No.2 *Except* 2-29,20-25: 2x6 SP M 26, 20-31,17-19: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 16-21,19-22: 2x4 SP No.2	WEBS 1 Row at midpt 10-24, 7-27, 6-27, 8-27, 10-13
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-8-0, 17=0-8-0  
Max Horz 2=508(LC 11)  
Max Uplift 2=-1527(LC 12), 17=-1623(LC 12)  
Max Grav 2=3067(LC 17), 17=3010(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-6557/3312, 3-5=-6313/3272, 5-6=-5311/2909, 6-7=-4028/2396, 7-8=-4031/2417, 8-9=-5523/3075, 12-14=-112/320, 13-14=-4846/3140, 14-16=-4891/3251, 16-17=-5471/3481, 9-10=-5782/3244  
BOT CHORD 2-30=-3205/6214, 29-30=-2830/5538, 27-29=-2368/4656, 26-27=-2431/4639, 24-26=-3156/5873, 23-24=-2190/4031, 22-23=-2100/3523, 21-22=-168/259, 17-19=-2988/4809  
WEBS 3-30=-380/340, 5-30=-306/746, 5-29=-916/583, 16-19=-190/598, 19-22=-2161/3642, 13-19=-830/1201, 10-23=-283/185, 10-24=-1276/2441, 7-27=-1420/2601, 6-27=-1457/882, 6-29=-476/1161, 8-27=-1730/1049, 8-26=-616/1388, 9-26=-1318/803, 9-24=-1600/922, 13-22=-1365/881, 13-23=-266/684, 10-13=-4307/2575

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 4-0-13, Interior(1) 4-0-13 to 24-4-0, Exterior(2R) 24-4-0 to 29-4-13, Interior(1) 29-4-13 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.
  - All plates are 2x4 MT20 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.

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3,2022

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127082
HR0009	T20	Roof Special	2	1	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:27:59 2022 Page 2  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-WZCHyX8W4X0wTIXbHcKBQB0Xse1GVIfH9cCNBFyNBqk

**NOTES-** (11)

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1527, 17=1623.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 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."

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127083
HR0009	T21	Roof Special	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:01 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-TyK1MDAmc8Geich\_01MfVc5s3RiazDwacwhUF7yNBqi

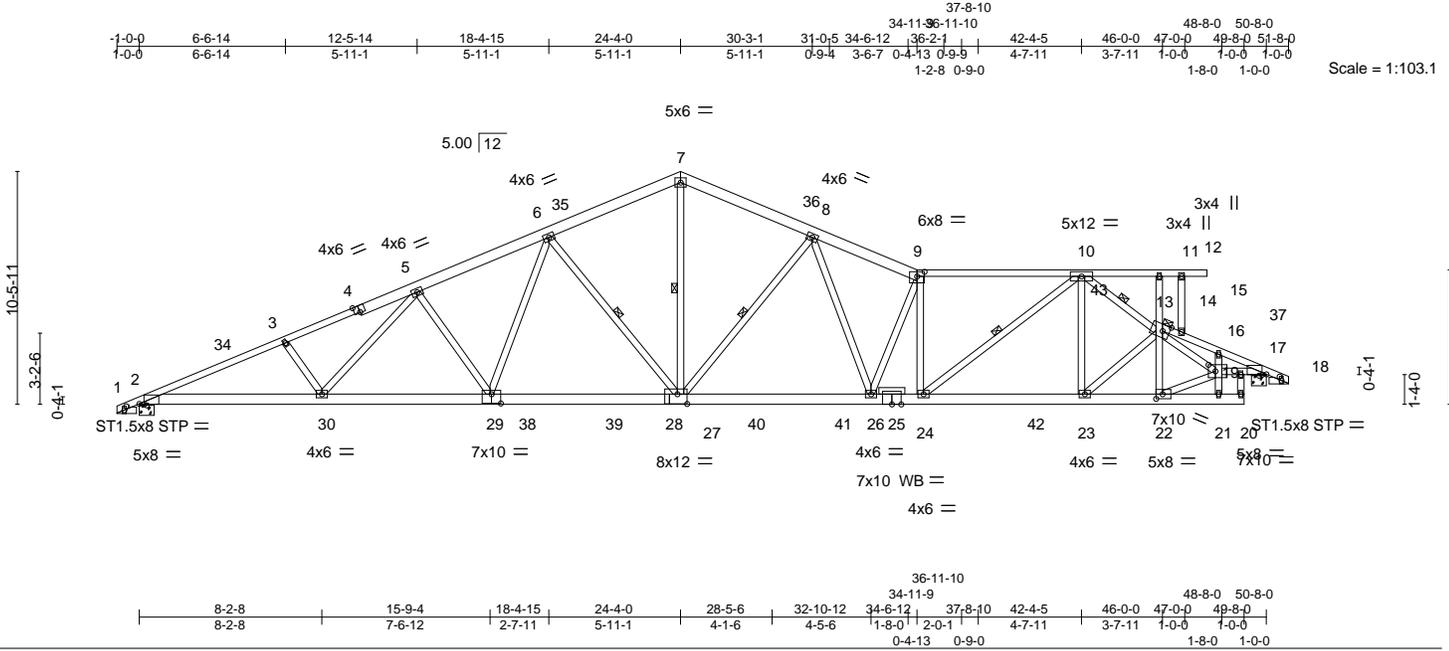


Plate Offsets (X,Y)-- [1:0-2-2,0-1-0], [2:0-2-9,Edge], [4:0-3-0,Edge], [9:0-4-0,0-2-8], [13:0-3-12,Edge], [17:0-2-5,Edge], [18:0-2-2,0-1-0], [19:0-3-12,0-3-8], [22:0-3-8,0-2-8], [27:0-5-4,0-5-4], [29:0-5-0,0-5-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.97	Vert(LL)	0.48	26-27	>999	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.95	Vert(CT)	-0.82	26-27	>736		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.92	Horz(CT)	0.15	17	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH						
							Weight: 393 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 13-18: 2x4 SP No.2, 1-4: 2x4 SP No.1, 9-15: 2x4 SP M 31	TOP CHORD Structural wood sheathing directly applied or 1-10-13 oc purlins, except end verticals. Except: 2-2-0 oc bracing: 14-16
BOT CHORD 2x6 SP No.2 *Except* 2-29,20-25: 2x6 SP M 26, 20-31,17-19: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 4-3-11 oc bracing.
WEBS 2x4 SP No.3 *Except* 16-21,19-22: 2x4 SP No.2	WEBS 1 Row at midpt 7-27, 6-27, 8-27, 10-24, 10-13
OTHERS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 13

**REACTIONS.** (size) 2=0-8-0, 17=0-8-0  
 Max Horz 2=543(LC 11)  
 Max Uplift 2=-1525(LC 12), 17=-1624(LC 12)  
 Max Grav 2=3085(LC 17), 17=3028(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6601/3312, 3-5=-6357/3272, 5-6=-5356/2909, 6-7=-4040/2397, 7-8=-4050/2386,  
 8-9=-5536/3073, 12-14=-170/363, 13-14=-4880/3120, 14-16=-4955/3279,  
 16-17=-5536/3504, 9-10=-5426/3002  
 BOT CHORD 2-30=-3273/6249, 29-30=-2897/5575, 27-29=-2435/4693, 26-27=-2467/4658,  
 24-26=-2938/5525, 23-24=-1890/3534, 22-23=-2101/3539, 21-22=-170/263,  
 17-19=-3011/4869  
 WEBS 3-30=-380/339, 5-30=-306/745, 5-29=-916/584, 16-19=-169/594, 19-22=-2159/3655,  
 13-19=-858/1247, 10-23=-170/364, 7-27=-1385/2598, 6-27=-1453/878, 6-29=-476/1161,  
 8-27=-1698/1022, 8-26=-680/1504, 9-26=-1220/712, 10-24=-1302/2480, 13-22=-1428/890,  
 13-23=-123/282, 10-13=-4184/2461, 9-24=-1456/853

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 4-0-13, Interior(1) 4-0-13 to 24-4-0, Exterior(2R) 24-4-0 to 29-4-13, Interior(1) 29-4-13 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 2x4 MT20 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 100 lb uplift at joint(s) except (jt=lb)

This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3, 2022

Continued on page 2.

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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Job	Truss	Truss Type	Qty	Ply	T29127083
HR0009	T21	Roof Special	2	1	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:01 2022 Page 2  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-TyK1MDAmc8Geich\_O1MfVc5s3RiazDwacwhUF7yNBqi

**NOTES-** (10)

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

Job	Truss	Truss Type	Qty	Ply		T29127084
HR0009	T22	Roof Special	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:03 2022 Page 1

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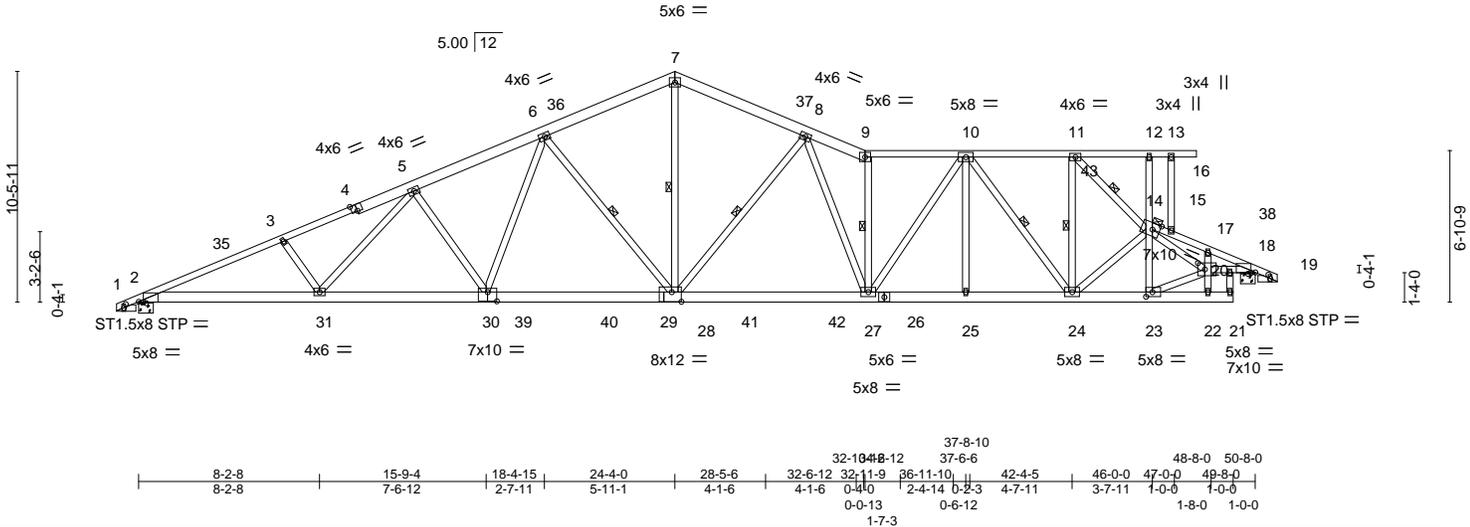


Plate Offsets (X,Y)-- [1:0-2-2,0-1-0], [2:0-2-9,Edge], [4:0-3-0,Edge], [14:0-4-0,Edge], [18:0-2-5,Edge], [19:0-2-2,0-1-0], [20:0-3-12,0-3-8], [23:0-3-8,0-2-8], [28:0-5-4,0-5-4], [30:0-5-0,0-5-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.94	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.94	Vert(LL) 0.49 27-28 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.92	Vert(CT) -0.83 27-28 >722 180		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH	Horz(CT) 0.15 18 n/a n/a		
				Weight: 405 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 14-19,9-16: 2x4 SP No.2, 1-4: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals. Except: 2-2-0 oc bracing: 15-17
BOT CHORD 2x6 SP No.2 *Except* 2-30,21-26: 2x6 SP M 26, 21-32,18-20: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 4-7-15 oc bracing.
WEBS 2x4 SP No.3 *Except* 17-22,20-23: 2x4 SP No.2	WEBS 1 Row at midpt 11-24, 7-28, 6-28, 8-28, 10-24, 11-14, 9-27
OTHERS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 14

**REACTIONS.** (size) 2=0-8-0, 18=0-8-0  
 Max Horz 2=578(LC 11)  
 Max Uplift 2=-1524(LC 12), 18=-1626(LC 12)  
 Max Grav 2=3092(LC 17), 18=3002(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-6619/3312, 3-5=-6375/3272, 5-6=-5374/2909, 6-7=-4040/2397, 7-8=-4074/2364,  
 8-9=-5459/3075, 13-15=-135/347, 14-15=-4812/3116, 15-17=-4905/3295,  
 17-18=-5483/3524, 9-10=-5021/2822, 10-11=-2998/1756  
 BOT CHORD 2-31=-3337/6261, 30-31=-2960/5587, 28-30=-2498/4705, 27-28=-2514/4666,  
 25-27=-2296/4275, 24-25=-2296/4275, 23-24=-2114/3513, 22-23=-170/260,  
 18-20=-3027/4821  
 WEBS 3-31=-380/339, 5-31=-306/745, 5-30=-916/584, 17-20=-177/603, 20-23=-2173/3630,  
 14-20=-860/1220, 11-24=-1312/2308, 7-28=-1393/2626, 6-28=-1452/878, 6-30=-475/1157,  
 8-28=-1670/1028, 8-27=-682/1453, 10-27=-748/1471, 10-24=-2118/1133,  
 14-23=-1366/891, 14-24=-776/658, 11-14=-3940/2348, 9-27=-2239/1296

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=170mph (3-second gust) Vasd=132mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; B=45ft; L=51ft; eave=6ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 4-0-13, Interior(1) 4-0-13 to 24-4-0, Exterior(2R) 24-4-0 to 29-4-13, Interior(1) 29-4-13 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 2x4 MT20 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 100 lb uplift at joint(s) except (jt=lb)

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 Chesterfield, MO 63017  
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November 3, 2022

Continued on Page 2

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127084
HR0009	T22	Roof Special	2	1	Job Reference (optional)

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:03 2022 Page 2  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-PKSONvB08IWLywqMWSP7a0BD9FOCR7Qt3EAaK0yNBqg

**NOTES-** (10)

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

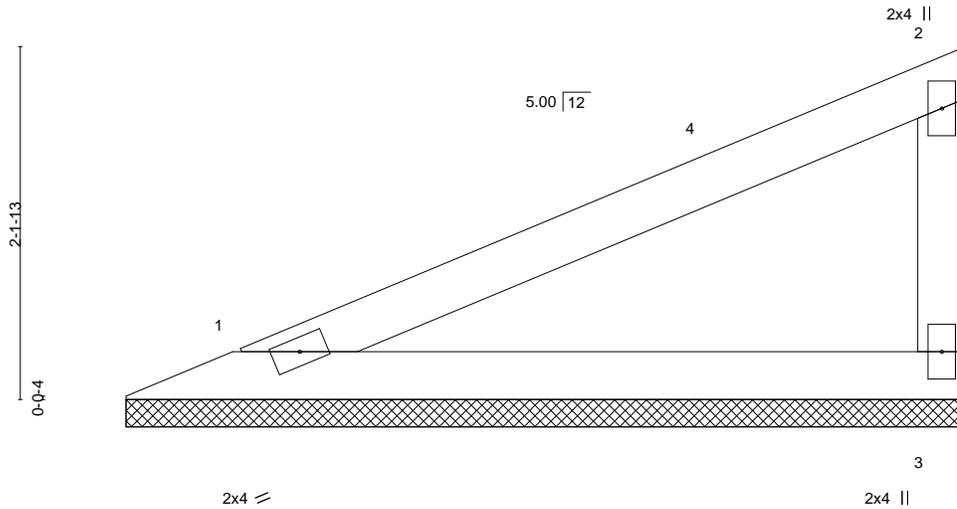
Job	Truss	Truss Type	Qty	Ply		T29127085
HR0009	V01	Valley	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:03 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-PKSONvB08IWLYwqMWSP7a0BGOFX2RLt3EAaK0yNBqg

5-1-15  
5-1-15



Scale = 1:14.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.73	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.37	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 FBC2020/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 5-1-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=5-1-6, 3=5-1-6  
Max Horz 1=125(LC 12)  
Max Uplift 1=-92(LC 12), 3=-145(LC 12)  
Max Grav 1=234(LC 1), 3=234(LC 1)

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

TOP CHORD 2-3=-221/370

**NOTES-** (7)

- 1) Wind: ASCE 7-16; 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., GC<sub>pi</sub>=0.18; MWFRS (directional) and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-0-3 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 100 lb uplift at joint(s) 1 except (jt=lb) 3=145.
- 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:

November 3,2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

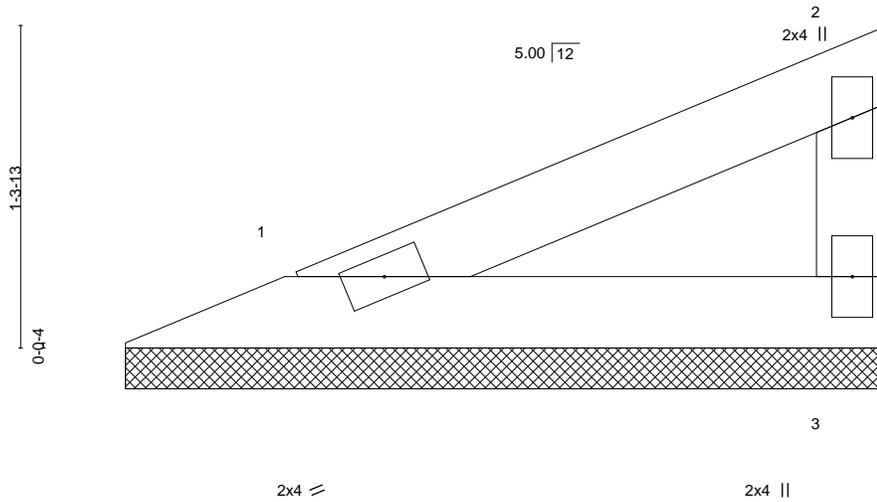
Job	Truss	Truss Type	Qty	Ply		T29127086
HR0009	V02	Valley	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:04 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-tX0A?ECev3eCZ3PZ4AwM7EjaefxdAo?0Iuv8sSyNBqf  
3-1-15  
3-1-15

Scale = 1:9.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0 Plate Grip DOL 1.33	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-P					Weight: 10 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 3-1-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=3-1-6, 3=3-1-6  
Max Horz 1=67(LC 12)  
Max Uplift 1=49(LC 12), 3=-77(LC 12)  
Max Grav 1=124(LC 1), 3=124(LC 1)

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

**NOTES-** (7)

- 1) Wind: ASCE 7-16; 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 Exterior(2E) 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 100 lb uplift at joint(s) 1, 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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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

November 3, 2022

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127087
HR0009	V07	Valley	2	1		

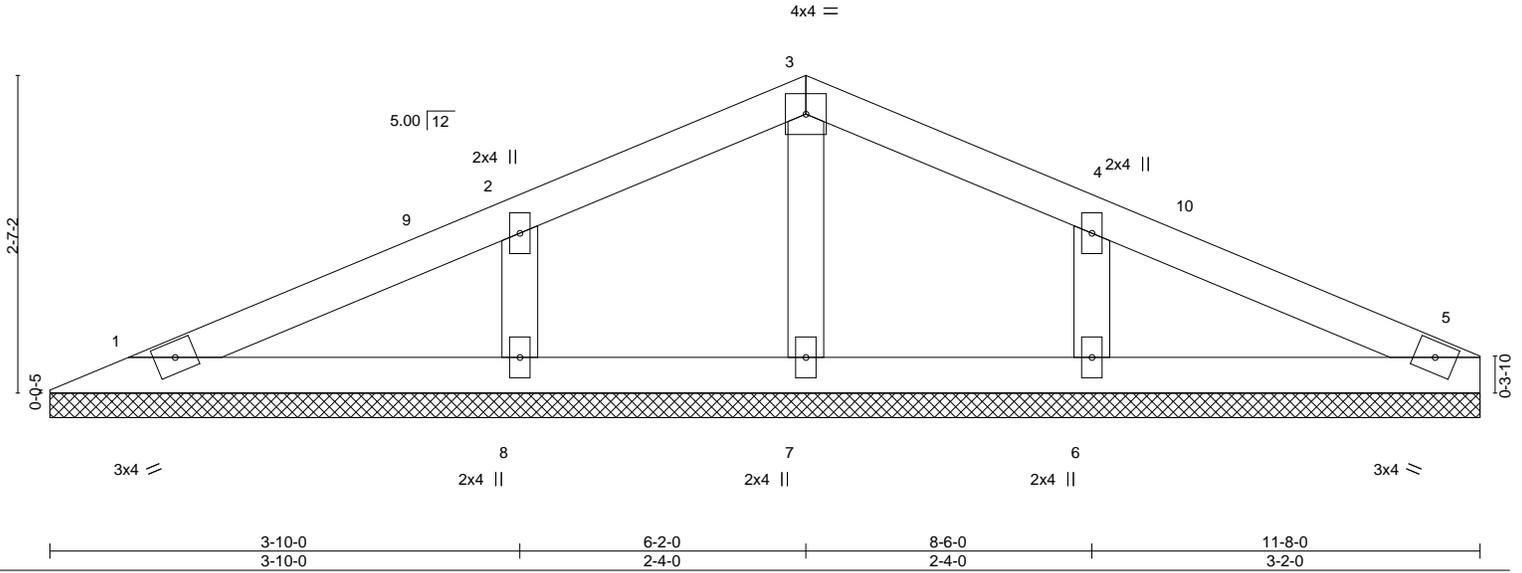
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:05 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-LjaYCaDGfNn3BD\_idtRbfRGL3FvxDCAXYfhOuyNBqe



Scale = 1:18.7



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.13	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH						Weight: 41 lb	FT = 20%
	Code FBC2020/TPI2014								

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

**REACTIONS.** All bearings 11-8-0.  
 (lb) - Max Horz 1=-77(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=-233(LC 12), 6=-227(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=378(LC 21), 6=366(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-292/440, 4-6=-283/432

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 Exterior(2E) 0-8-1 to 3-10-0, Interior(1) 3-10-0 to 6-2-0, Exterior(2R) 6-2-0 to 9-2-0, Interior(1) 9-2-0 to 11-6-4 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.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 8=233, 6=227.
  - "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

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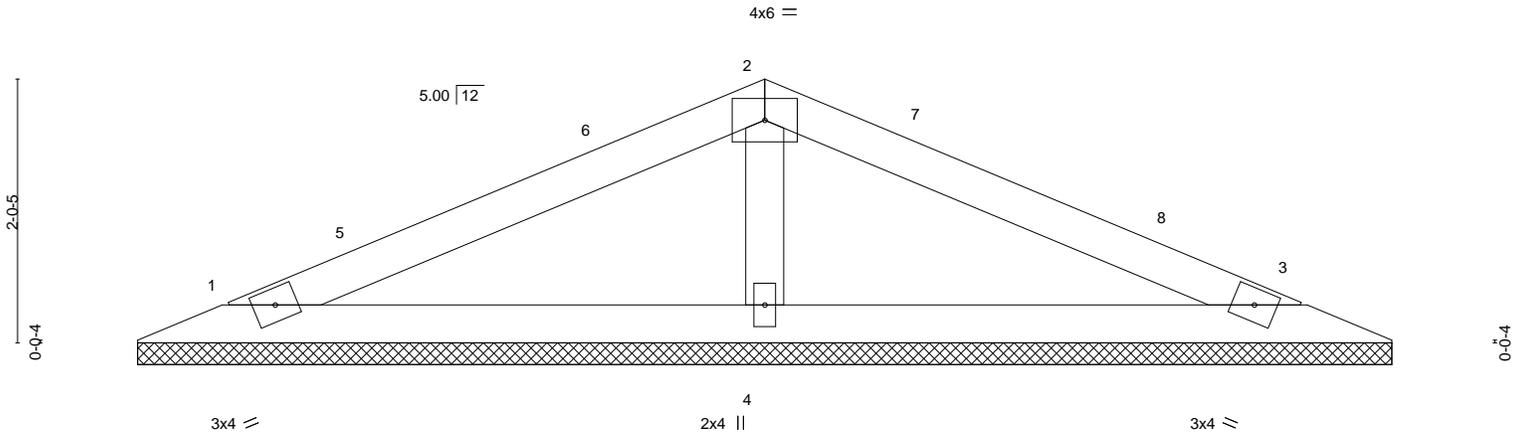
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply		T29127088
HR0009	V08	Valley	2	1		

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:06 2022 Page 1  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-pv7wQwEvQgvwpNZxBbyqCfpt7SXdegPJmCOFwLyNBqd



Scale = 1:17.6



0-0-10 0-0-10	9-8-13 9-8-3							
<b>LOADING</b> (psf)	<b>SPACING-</b>	<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 0.38	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.51	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 30 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 1=9-7-10, 3=9-7-10, 4=9-7-10  
 Max Horz 1=58(LC 10)  
 Max Uplift 1=111(LC 12), 3=111(LC 12), 4=237(LC 12)  
 Max Grav 1=204(LC 21), 3=204(LC 22), 4=509(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-4=-353/451

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-10-6, Exterior(2R) 4-10-6 to 7-10-6, Interior(1) 7-10-6 to 8-11-12 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.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=111, 3=111, 4=237.
  - "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:

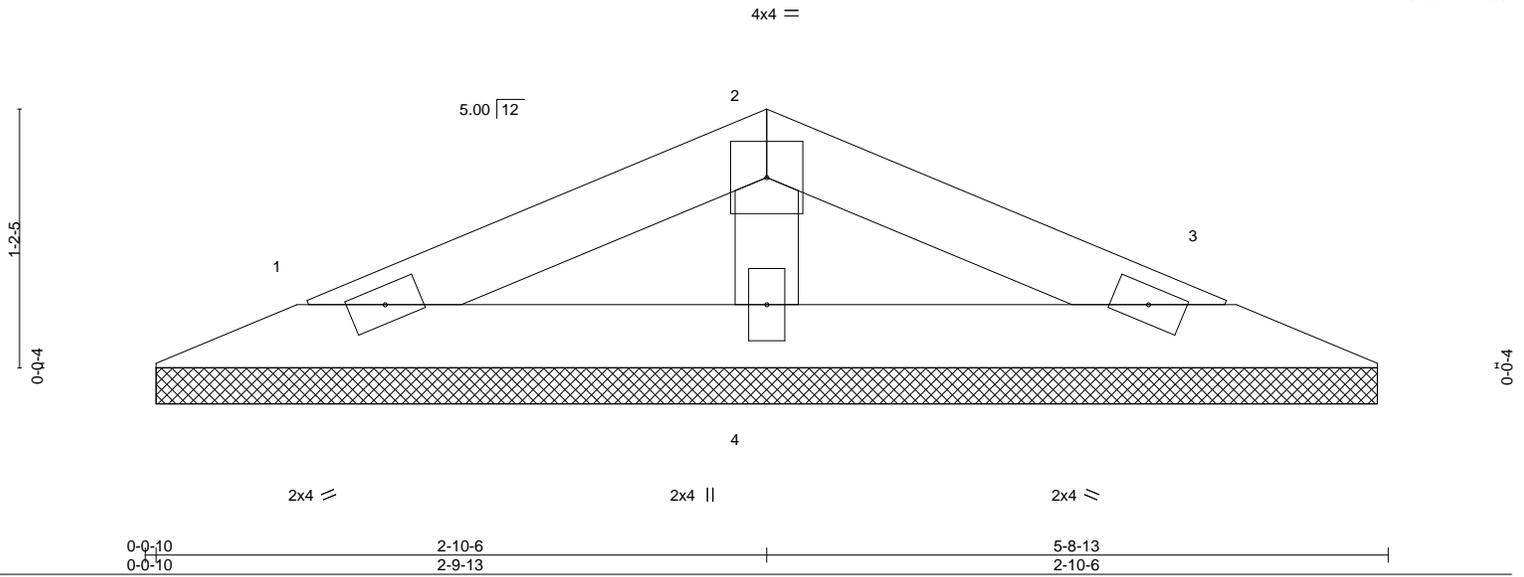
November 3,2022

Job	Truss	Truss Type	Qty	Ply		T29127089
HR0009	V09	Valley	2	1		

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:07 2022 Page 1  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-H6hJdGEXB\_1nQX88IIT3ksL4dsybN8MT\_s8oTnyNBqc



Scale = 1:10.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-P					Weight: 16 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 5-8-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=5-7-10, 3=5-7-10, 4=5-7-10  
 Max Horz 1=-30(LC 10)  
 Max Uplift 1=-70(LC 12), 3=-70(LC 12), 4=-95(LC 12)  
 Max Grav 1=117(LC 1), 3=117(LC 1), 4=231(LC 1)

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

WEBS 2-4=-178/297

**NOTES-** (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; 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 Exterior(2E) 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.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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

Job	Truss	Truss Type	Qty	Ply		T29127090
HR0009	V10	GABLE	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:08 2022 Page 1

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Scale = 1:36.5

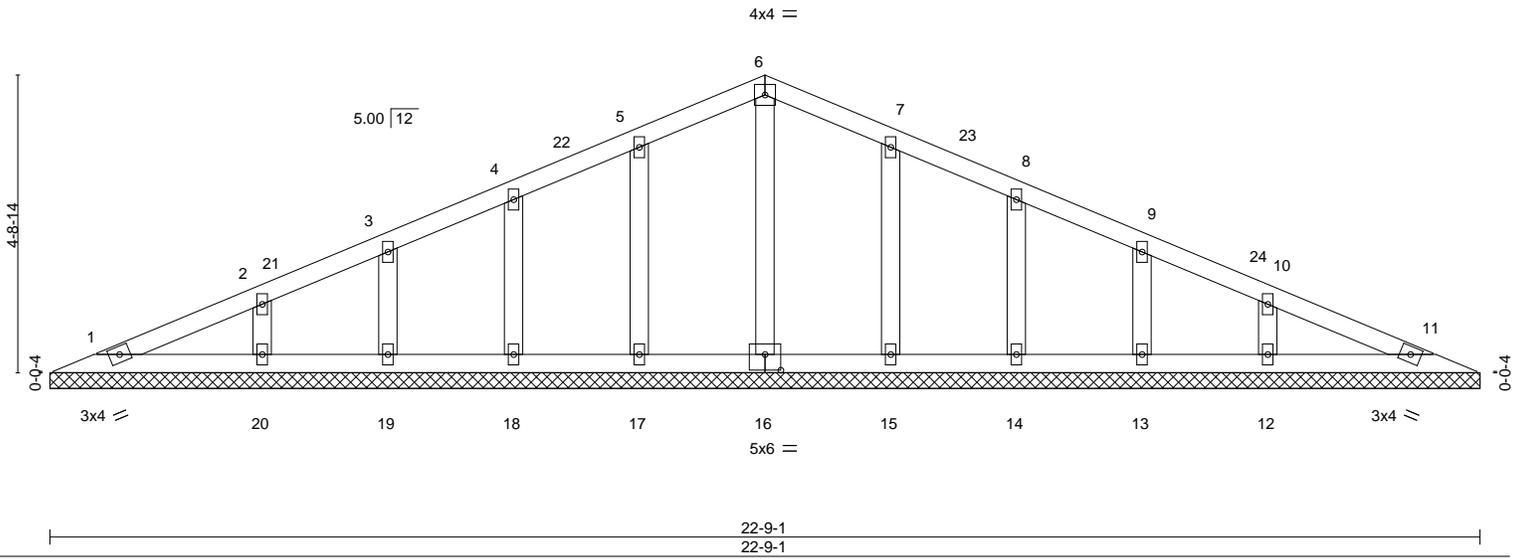


Plate Offsets (X,Y)-- [16:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.08	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.07	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 11 n/a n/a		
	Code FBC2020/TPI2014			Weight: 99 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 22-9-1.  
(lb) - Max Horz 1=-149(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 11 except 17=-138(LC 12), 18=-140(LC 12), 19=-119(LC 12), 20=-187(LC 12), 15=-138(LC 12), 14=-140(LC 12), 13=-119(LC 12), 12=-187(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 17, 18, 19, 15, 14, 13 except 20=303(LC 1), 12=303(LC 1)

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.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 5-6=-120/259, 6-7=-120/253

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 11-4-8, Exterior(2R) 11-4-8 to 14-4-8, Interior(1) 14-4-8 to 22-0-0 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11 except (jt=lb) 17=138, 18=140, 19=119, 20=187, 15=138, 14=140, 13=119, 12=187.
  - \*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

Job	Truss	Truss Type	Qty	Ply		T29127091
HR0009	V11	Valley	2	1		

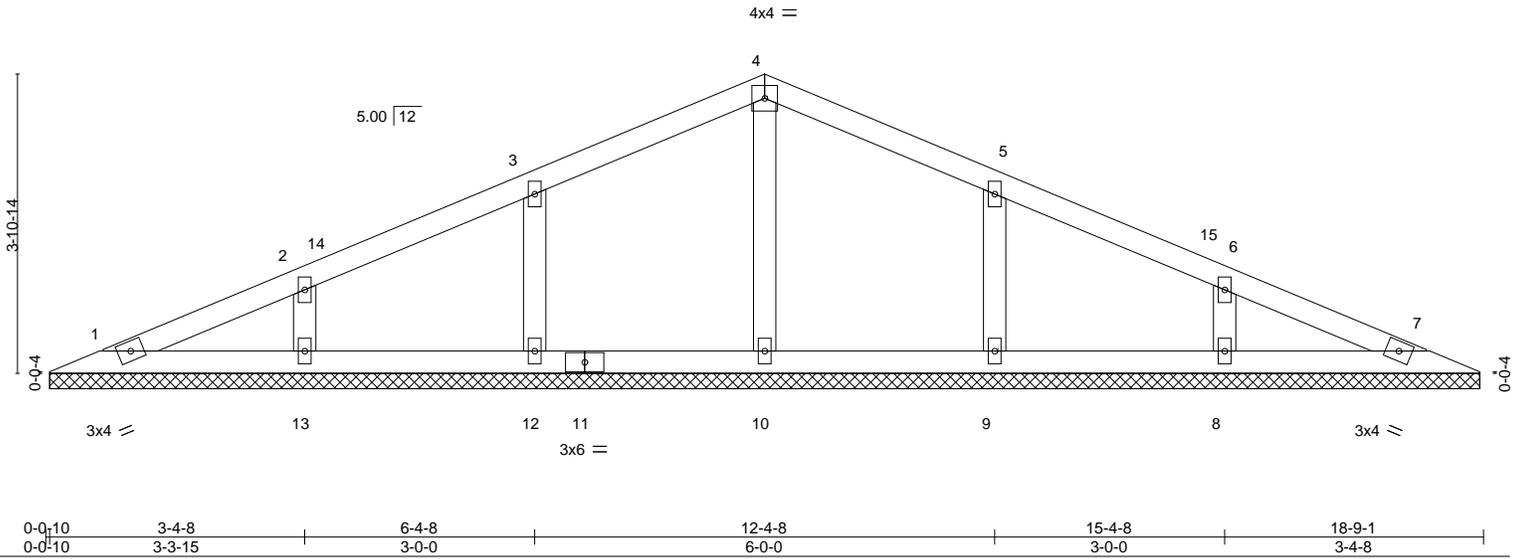
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:10 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-ihNRFIHPvPMH\_tjQQ1mMVzcO4\_gaVvvgqMS46yNBqZ



Scale = 1:29.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Plate Grip DOL 1.33	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.33	WB 0.10	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-SH					Weight: 69 lb	FT = 20%
	Code FBC2020/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 18-7-14.  
 (lb) - Max Horz 1=121(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10 except 13=211(LC 12), 12=214(LC 12), 9=214(LC 12), 8=211(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=290(LC 1), 13=341(LC 1), 12=349(LC 21), 9=349(LC 22), 8=341(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-13=-267/298, 3-12=-293/341, 5-9=-293/341, 6-8=-267/298

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 9-4-8, Exterior(2R) 9-4-8 to 12-4-8, Interior(1) 12-4-8 to 18-0-0 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 10 except (jt=lb) 13=211, 12=214, 9=214, 8=211.
  - "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 electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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:

November 3, 2022

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          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, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply		T29127092
HR0009	V12	Valley	2	1		

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

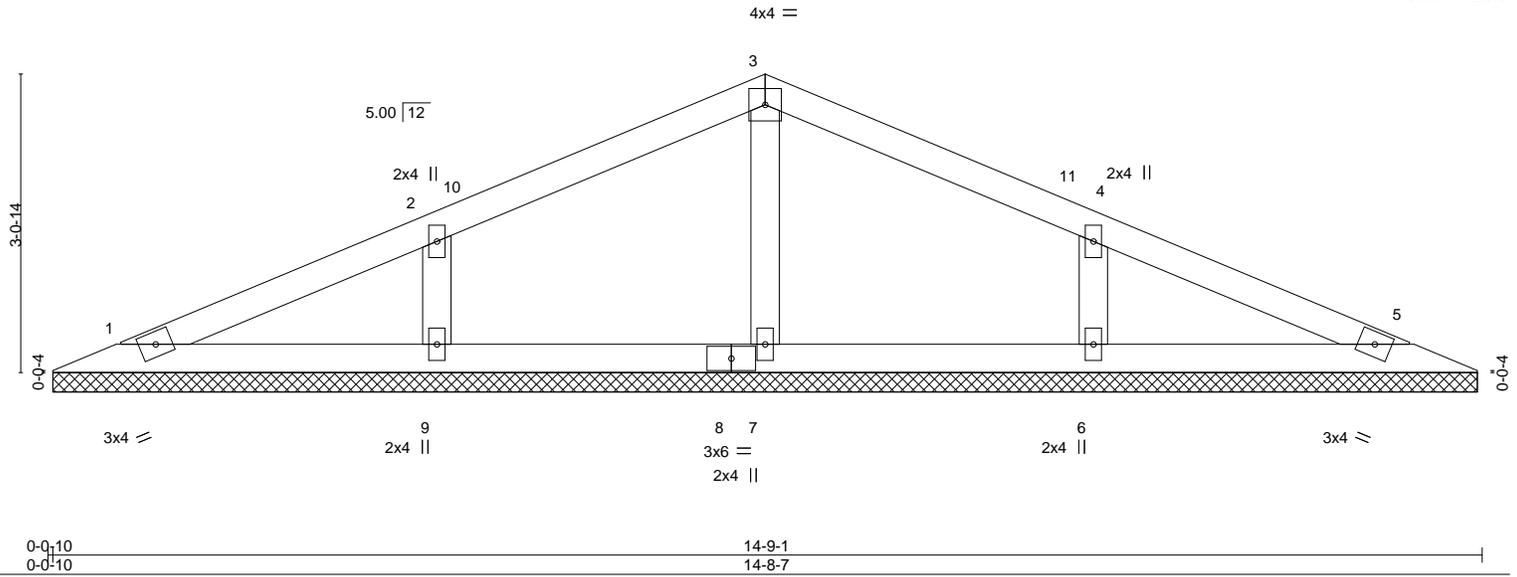
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:11 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-AtxpTel1FCXDv8Sv\_8Y?viWm5TJqJxg2Uv60cYyNBqY

7-4-8  
7-4-8

14-9-1  
7-4-8

Scale = 1:23.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 50 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 14-7-14.  
 (lb) - Max Horz 1=-93(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 6=-269(LC 12), 9=-269(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=307(LC 1), 6=436(LC 22), 9=436(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-6=-347/444, 2-9=-347/444

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 Exterior(2E) 0-9-1 to 4-0-0, Interior(1) 4-0-0 to 7-4-8, Exterior(2R) 7-4-8 to 10-4-8, Interior(1) 10-4-8 to 14-0-0 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.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 6=269, 9=269.
  - "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: November 3,2022

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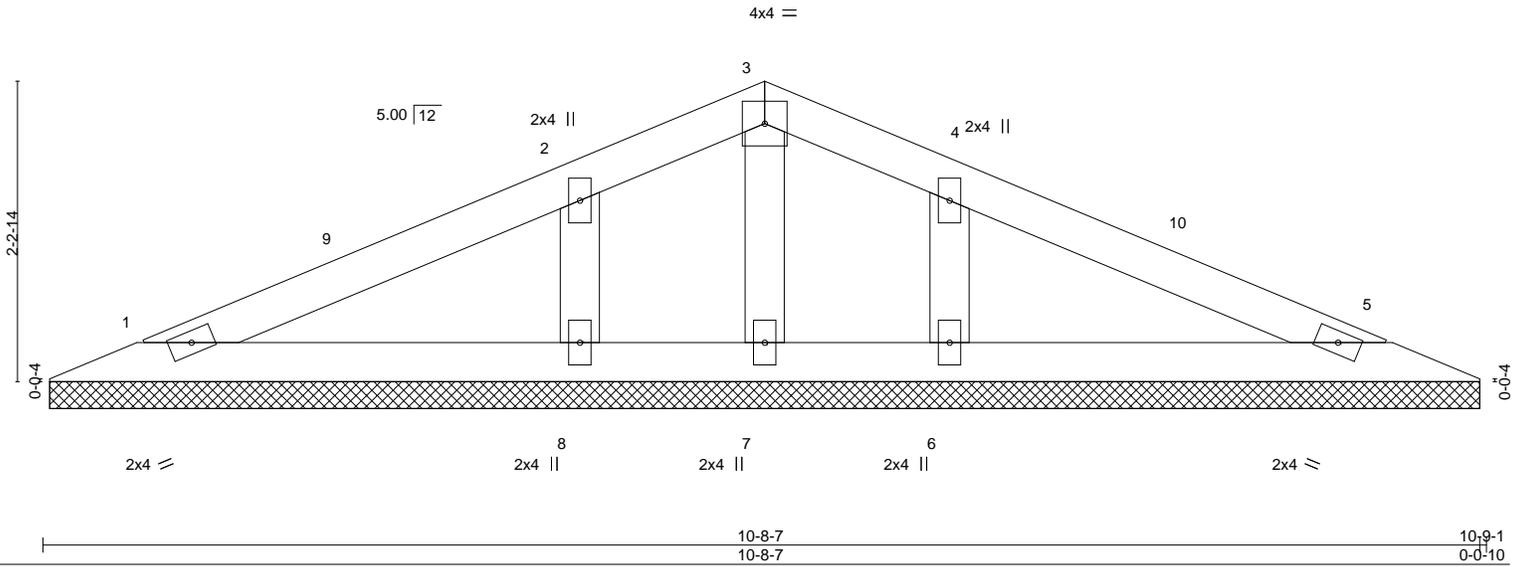
Job	Truss	Truss Type	Qty	Ply		T29127093
HR0009	V13	Valley	2	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:12 2022 Page 1  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-e3VCg\_lf0Wf4XI05Yr3ERw2xMte42OrC87rZ8\_yNBqX



Scale = 1:17.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.25	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 37 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 10-7-14.  
 (lb) - Max Horz 1=65(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 6=233(LC 12), 8=233(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=383(LC 1), 8=383(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-6=-281/461, 2-8=-281/461

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 Exterior(2E) 0-9-1 to 4-0-0, Interior(1) 4-0-0 to 5-4-8, Exterior(2R) 5-4-8 to 8-4-8, Interior(1) 8-4-8 to 10-0-0 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.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 6=233, 8=233.
  - "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: November 3,2022

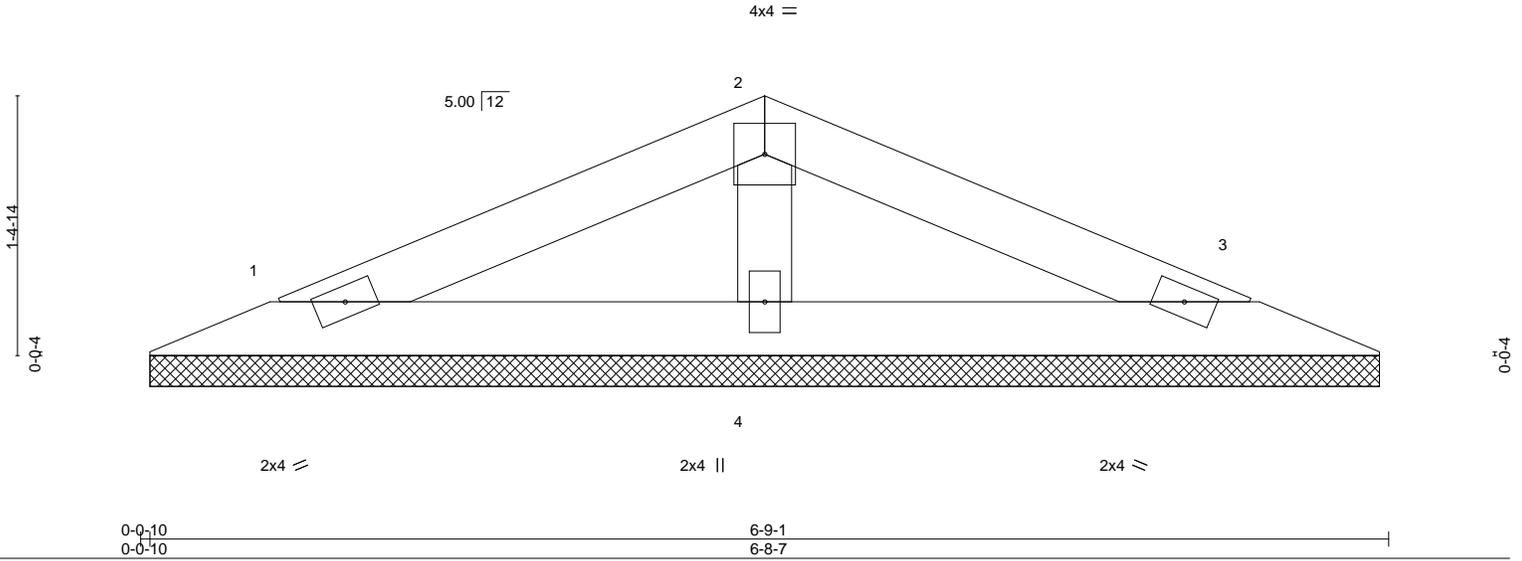
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply		T29127094
HR0009	V14	Valley	2	1		

Builders FirstSource (Tampa, FL), Tampa, FL - 33564, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:13 2022 Page 1  
 ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-6G3auJJInqnx8SbH5ZaT\_7b5XH?LnscL Nnb6gRyNBqW



Scale = 1:12.4



LOADING (psf)	SPACING-	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	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-P					Weight: 20 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 1=6-7-14, 3=6-7-14, 4=6-7-14  
 Max Horz 1=-37(LC 10)  
 Max Uplift 1=-87(LC 12), 3=-87(LC 12), 4=-118(LC 12)  
 Max Grav 1=145(LC 1), 3=145(LC 1), 4=287(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-4=-221/351

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 Exterior(2E) 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.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3 except (jt=1) 4=118.
  - "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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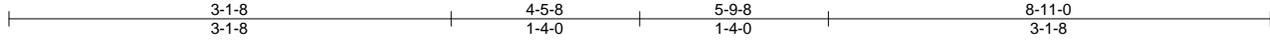
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	T29127095
HR0009	V15	Valley	2	1	

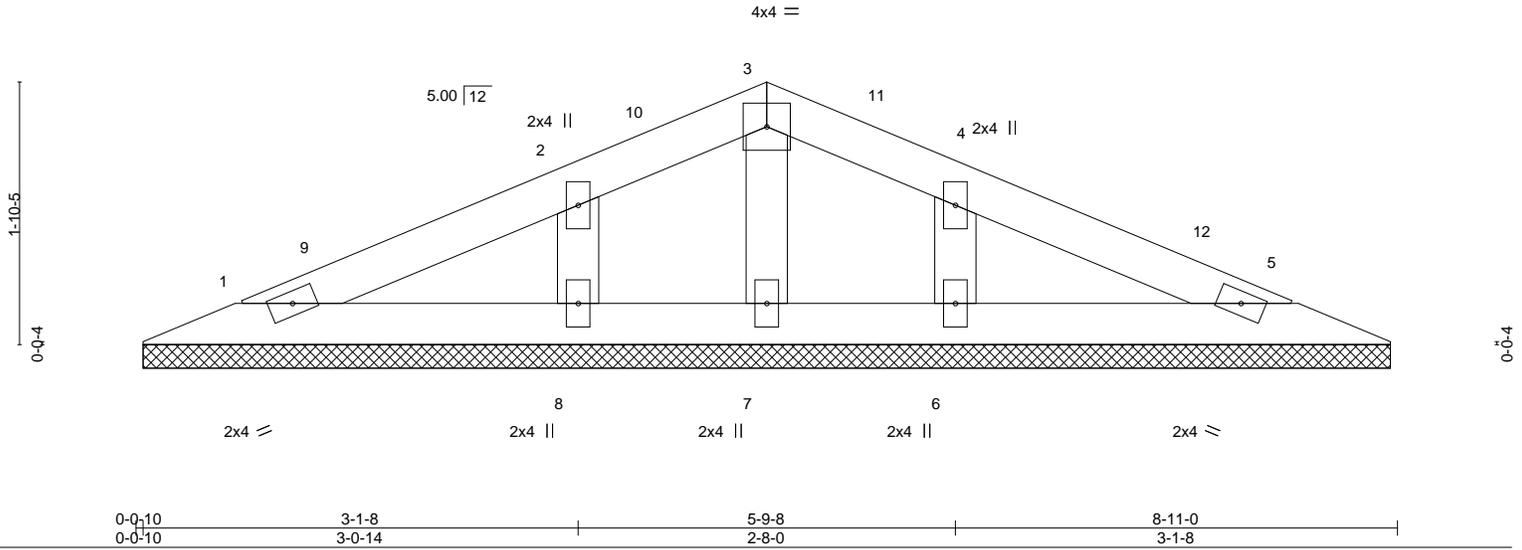
Builders FirstSource (Tampa, FL), Tampa, FL - 33564,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Nov 2 15:28:14 2022 Page 1

ID:bzeMQ6aYNvSaPAR?PBKUKnzRR9V-aScy5fKwY7vomcAUfG5iXL8LzhLzWJhVbRKgDtyNBqV



Scale = 1:16.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL 1.33	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 15.0	Lumber DOL 1.33	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-SH					Weight: 29 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 8-9-13.  
 (lb) - Max Horz 1=52(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=168(LC 12), 6=168(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=274(LC 1), 6=274(LC 1)

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

WEBS 2-8=-205/385, 4-6=-205/384

**NOTES-** (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; 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 Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-5-8, Exterior(2R) 4-5-8 to 7-5-8, Interior(1) 7-5-8 to 8-1-15 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.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=168, 6=168.
- "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:

November 3, 2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

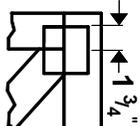
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



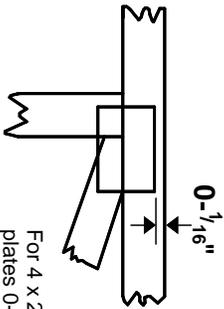
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



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

\* Plate location details available in **MITek 20/20 software** or upon request.

## PLATE SIZE

4 X 4

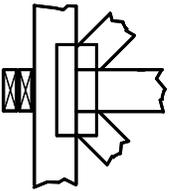
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



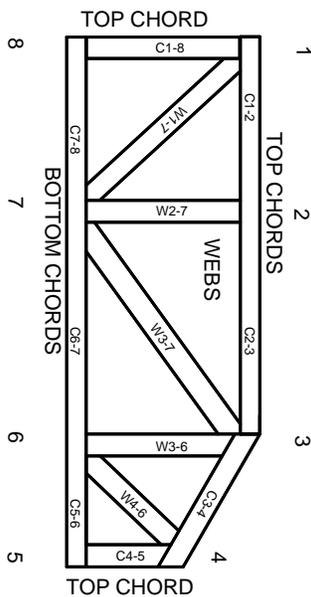
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



**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-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

Lumber design values are in accordance with ANSI/TPI 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 T or 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 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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