



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

RE: 3501826 - IC CONST - YOUNG RES.

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Site Information:

Customer Info: IC CONSTRUCTION Project Name: Young Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: TBD, TBD
City: Columbia Cty State: FL

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

Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 58 individual, Truss Design Drawings and 0 Additional Drawings.

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T30381961	CJ01	4/21/23	15	T30381975	T02	4/21/23
2	T30381962	CJ02	4/21/23	16	T30381976	T02G	4/21/23
3	T30381963	CJ04	4/21/23	17	T30381977	T03	4/21/23
4	T30381964	CJ05	4/21/23	18	T30381978	T04	4/21/23
5	T30381965	CJ07	4/21/23	19	T30381979	T05	4/21/23
6	T30381966	EJ01	4/21/23	20	T30381980	T06	4/21/23
7	T30381967	EJ02	4/21/23	21	T30381981	T07	4/21/23
8	T30381968	HJ09	4/21/23	22	T30381982	T07G	4/21/23
9	T30381969	PB01	4/21/23	23	T30381983	T08	4/21/23
10	T30381970	PB02	4/21/23	24	T30381984	T09	4/21/23
11	T30381971	PB03	4/21/23	25	T30381985	T10	4/21/23
12	T30381972	PB04	4/21/23	26	T30381986	T11	4/21/23
13	T30381973	T01	4/21/23	27	T30381987	T12	4/21/23
14	T30381974	T01G	4/21/23	28	T30381988	T13	4/21/23



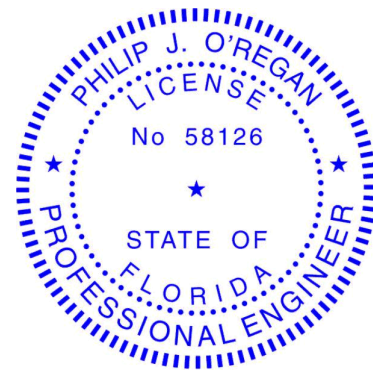
This item has been electronically signed and sealed by O'Regan, Philip, PE using a Digital Signature.

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The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision based on the parameters
provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: O'Regan, Philip

My license renewal date for the state of Florida is February 28, 2025.



Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

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

April 21, 2023

O'Regan, Philip

1 of 2



RE: 3501826 - IC CONST - YOUNG RES.

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

Site Information:

Customer Info: IC CONSTRUCTION Project Name: Young Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: TBD, TBD
City: Columbia Cty State: FL

No.	Seal#	Truss Name	Date
29	T30381989	T14	4/21/23
30	T30381990	T15	4/21/23
31	T30381991	T15G	4/21/23
32	T30381992	T16	4/21/23
33	T30381993	T17	4/21/23
34	T30381994	T17G	4/21/23
35	T30381995	T18	4/21/23
36	T30381996	T19	4/21/23
37	T30381997	T20	4/21/23
38	T30381998	T21	4/21/23
39	T30381999	T22	4/21/23
40	T30382000	T23	4/21/23
41	T30382001	T24	4/21/23
42	T30382002	T25	4/21/23
43	T30382003	T26	4/21/23
44	T30382004	T27	4/21/23
45	T30382005	T28	4/21/23
46	T30382006	T29	4/21/23
47	T30382007	V01	4/21/23
48	T30382008	V02	4/21/23
49	T30382009	V03	4/21/23
50	T30382010	V04	4/21/23
51	T30382011	V05	4/21/23
52	T30382012	V06	4/21/23
53	T30382013	V07	4/21/23
54	T30382014	V08	4/21/23
55	T30382015	V09	4/21/23
56	T30382016	V10	4/21/23
57	T30382017	V11	4/21/23
58	T30382018	V12	4/21/23

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381961
3501826	CJ01	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:47:10 2023
Page 1
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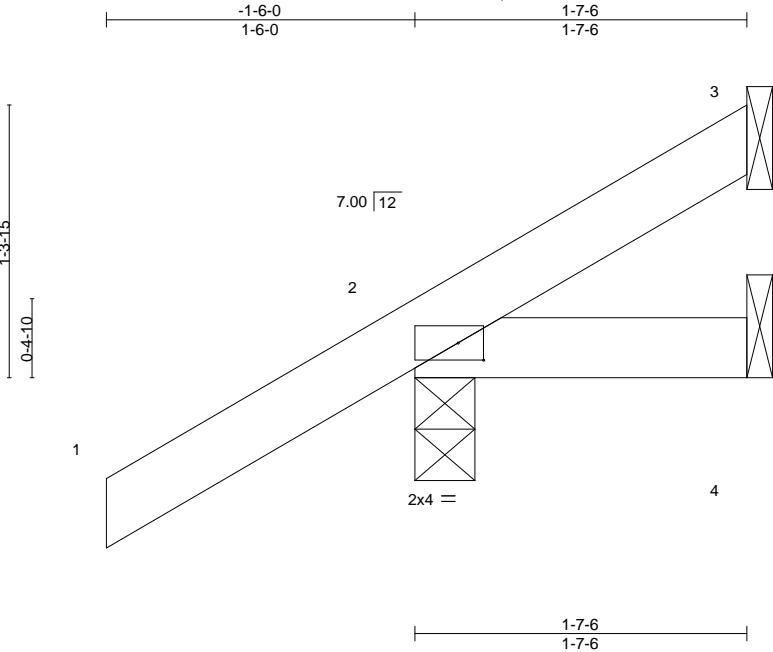


Plate Offsets (X,Y)--		[2:0-1-8,0-1-0]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.15	Vert(LL) 0.00 7 >999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.03	Vert(CT) -0.00 7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 2 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MP		Weight: 8 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 1-7-6 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=58(LC 12)
Max Uplift 3=14(LC 12), 2=58(LC 12)
Max Grav 3=22(LC 19), 2=178(LC 1), 4=23(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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, 2.

This item has been electronically signed and sealed by ORegan, Philip, 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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381962
3501826	CJ02	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:47:11 2023
Page 1

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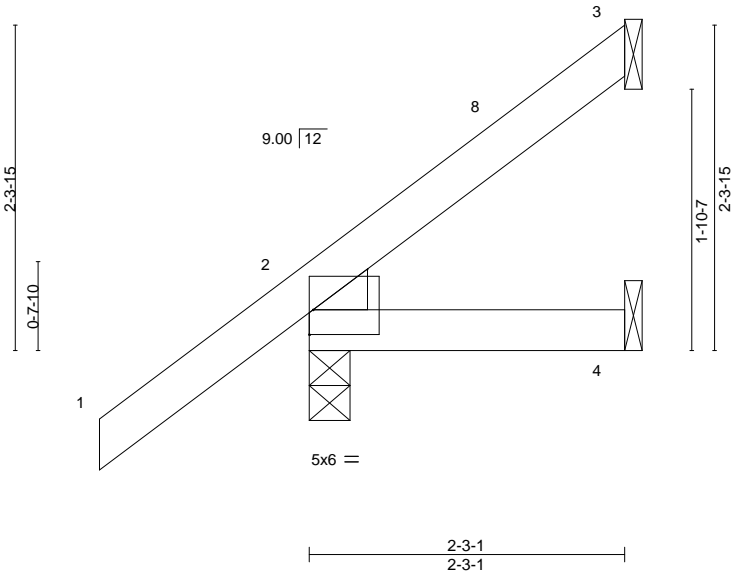


Plate Offsets (X,Y)--		[2:Edge,0-2-2]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.20	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-3-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=90(LC 12)
Max Uplift 3=-36(LC 12), 2=-39(LC 12), 4=-1(LC 12)
Max Grav 3=44(LC 19), 2=190(LC 1), 4=36(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-2-5 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, 2, 4.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381963
3501826	CJ04	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:47:13 2023
Page 1

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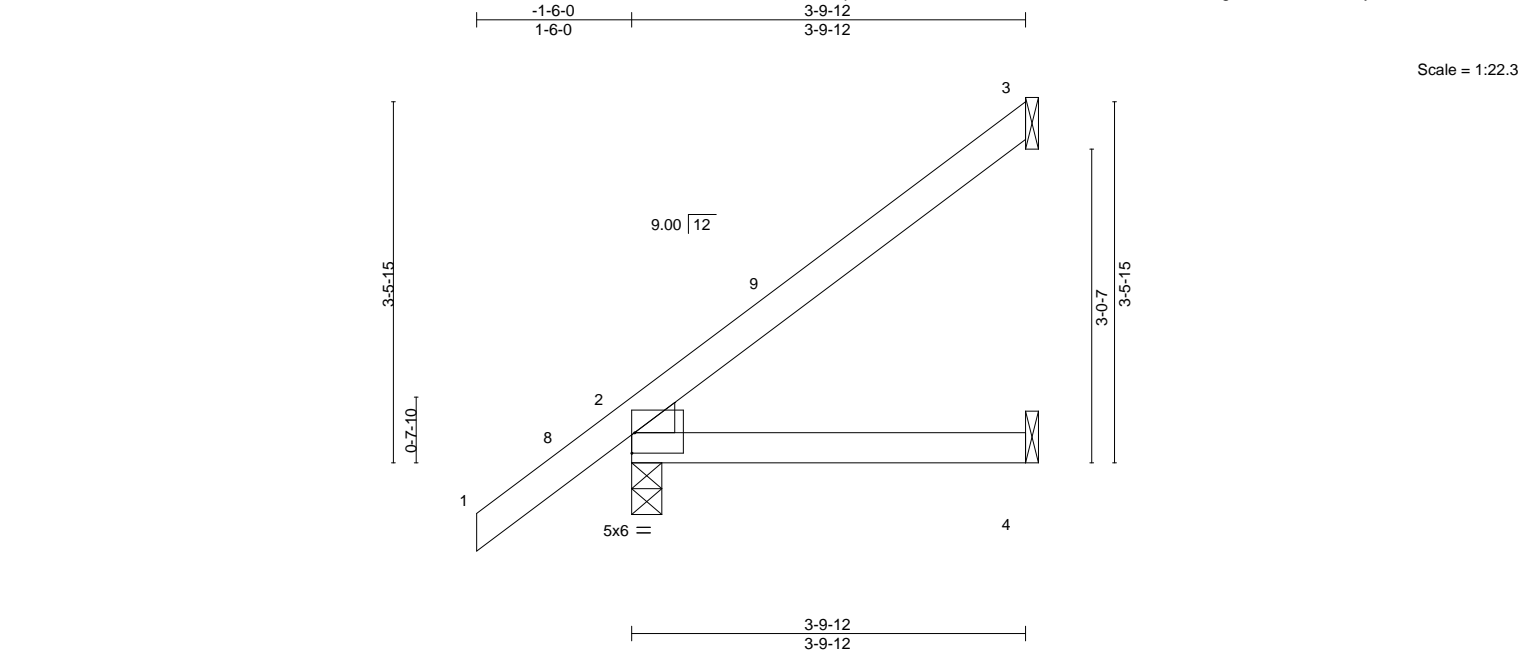


Plate Offsets (X,Y)--		[2:Edge,0-2-6]									
LOADING	(psf)	SPACING-		2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d
TCLL	20.0	Plate Grip DOL		1.25	TC	0.18	Vert(LL)	0.02	4-7	>999	240
TCDL	7.0	Lumber DOL		1.25	BC	0.17	Vert(CT)	-0.02	4-7	>999	180
BCLL	0.0 *	Rep Stress Incr		YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a
BCDL	10.0	Code		FBC2020/TPI2014	Matrix-MP						
										Weight: 16 lb	FT = 20%

LUMBER-				BRACING-			
TOP CHORD	2x4 SP No.2			TOP CHORD	Structural wood sheathing directly applied or 3-9-12 oc purlins.		
BOT CHORD	2x4 SP No.2			BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEDGE							
Left: 2x4 SP No.3							
REACTIONS.	(size)	3=Mechanical, 2=0-3-8, 4=Mechanical					
	Max Horz	2=130(LC 12)					
	Max Uplift	3=-68(LC 12), 2=-33(LC 12), 4=-5(LC 12)					
	Max Grav	3=90(LC 19), 2=236(LC 1), 4=67(LC 3)					

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 3-9-0 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.
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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381964
3501826	CJ05	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023 MiTek Industries, Inc.
Fri Apr 21 08:47:14 2023
Page 1

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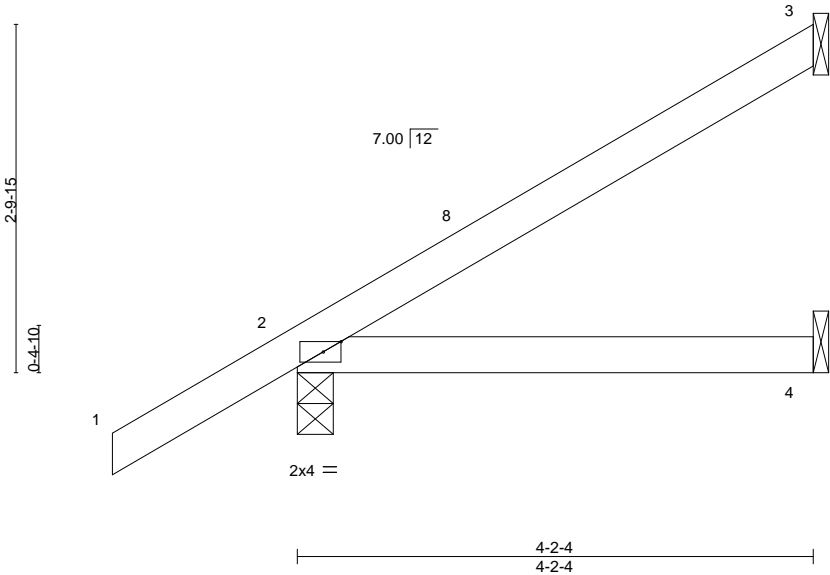


Plate Offsets (X,Y)--		[2:0-1-12,Edge]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.16	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP						Weight: 16 lb FT = 20%		

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-2-4 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=109(LC 12)
Max Uplift 3=-60(LC 12), 2=-55(LC 12)
Max Grav 3=96(LC 19), 2=248(LC 1), 4=73(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-1-8 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.
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 - 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.
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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023



Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381965
3501826	CJ07	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:15 2023 Page 1
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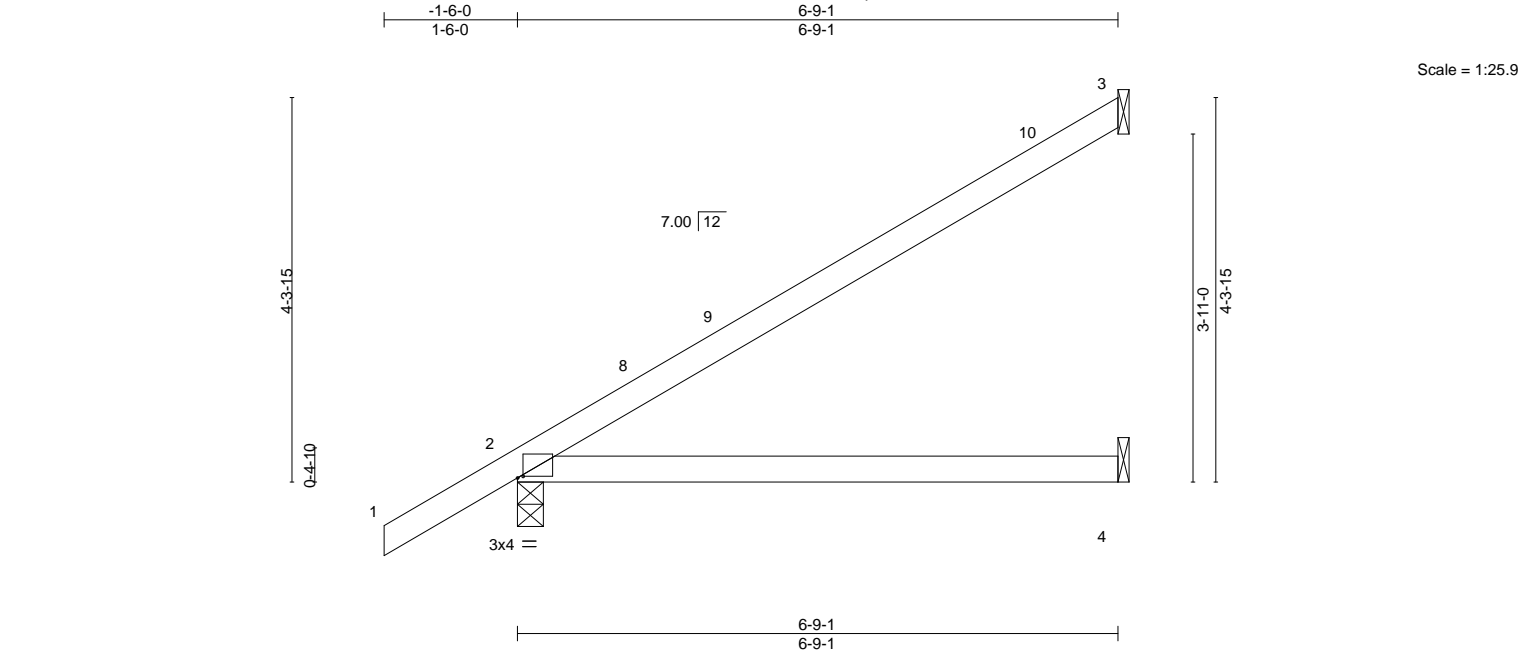


Plate Offsets (X,Y)--	[2:0-0-12,0-0-3]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.58	Vert(LL)	0.09 4-7	>863	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.19 4-7	>423	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01 2	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 25 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=156(LC 12)
Max Uplift 3=93(LC 12), 2=65(LC 12)
Max Grav 3=165(LC 19), 2=338(LC 1), 4=122(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-8-5 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, 2.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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	IC CONST - YOUNG RES.
3501826	EJ01	Jack-Partial	11	1	T30381966
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:47:17 2023
Page 1

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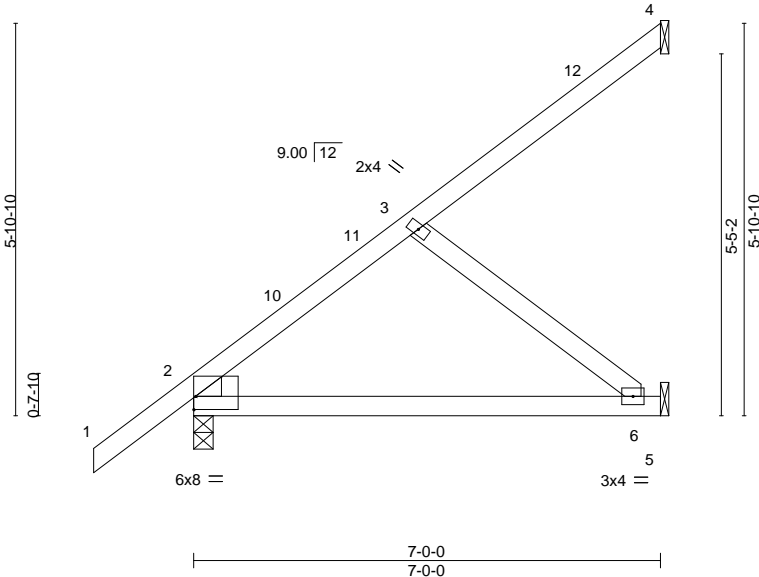


Plate Offsets (X,Y)--		[2:Edge,0-2-6]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.07	6-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.15	6-9	>561	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 33 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=205(LC 12)
Max Uplift 4=-55(LC 12), 2=-35(LC 12), 5=-70(LC 12)
Max Grav 4=84(LC 19), 2=346(LC 1), 5=183(LC 19)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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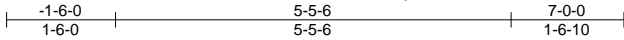


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381967
3501826	EJ02	Jack-Closed Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:47:18 2023
Page 1

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Scale: 3/8"=1'

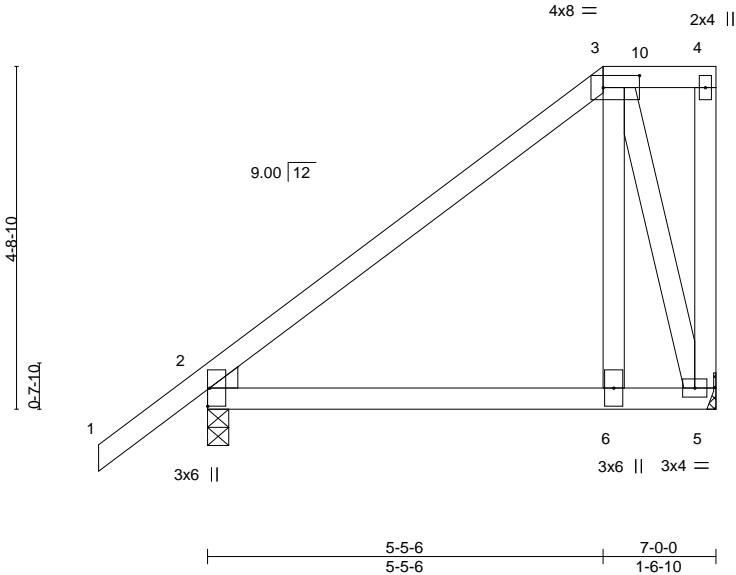


Plate Offsets (X,Y)--	[3:0-6-0,0-2-0]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.30	Vert(LL)	0.03 6-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.25	Vert(CT)	-0.05 6-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.26	Horz(CT)	-0.01 2	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 45 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 2=175(LC 8)
Max Uplift 2=95(LC 8), 5=262(LC 8)
Max Grav 2=417(LC 1), 5=556(LC 1)

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

TOP CHORD 2-3=305/63
WEBS 3-6=123/465, 3-5=620/326

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 5=262.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 127 lb down and 136 lb up at 5-5-6 on top chord, and 267 lb down and 128 lb up at 5-5-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-54, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-267(B) 3=-117(B)

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

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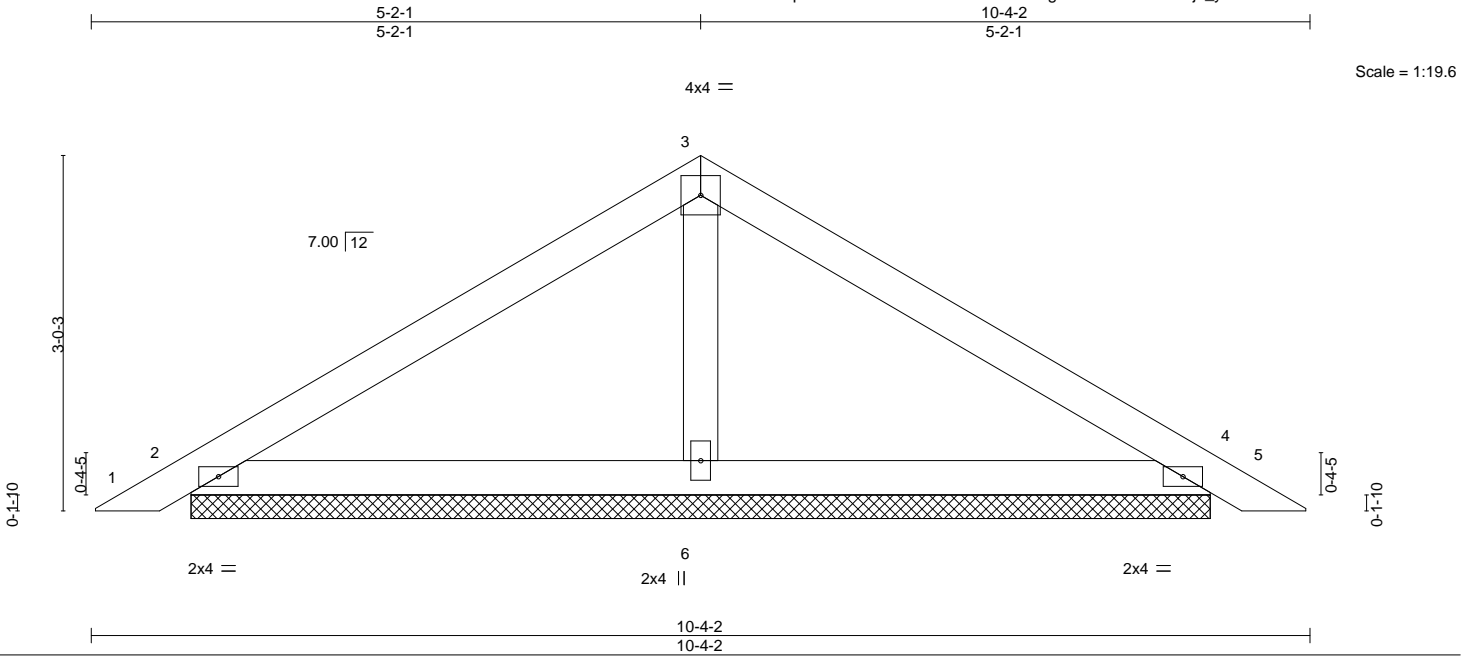
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381969
3501826	PB01	Piggyback	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:21 2023 Page 1
ID:7NVDGqIbCtvYSOv1NEucG6zi0DO-XvEI5grDlx22UNdTQ8KFjv_yYWGXYr?x003FuoZ0YGK



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.21	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.18	Vert(CT)	0.01	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						Weight: 34 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.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. (size) 2=8-7-13, 4=8-7-13, 6=8-7-13
Max Horz 2=62(LC 11)
Max Uplift 2=-54(LC 12), 4=-62(LC 13), 6=-46(LC 12)
Max Grav 2=181(LC 1), 4=181(LC 1), 6=335(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 5-2-1, Exterior(2R) 5-2-1 to 8-2-1, Interior(1) 8-2-1 to 10-0-7 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) 2, 4, 6.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

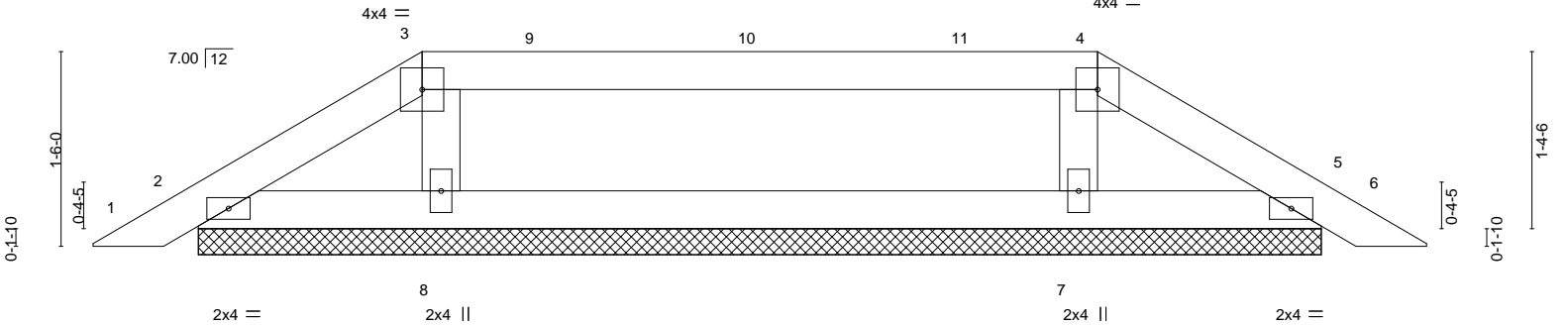
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381970
3501826	PB02	Piggyback	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:47:23 2023
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10-4-2												
10-4-2												
LOADING (psf)		SPACING-2-0-0		CSI.		DEFL. in (loc) I/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.00	5	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 32 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 8-7-13.
(lb) - Max Horz 2=-29(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 7=286(LC 24), 8=286(LC 23)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 2-6-13, Exterior(2R) 2-6-13 to 6-9-12, Interior(1) 6-9-12 to 7-9-4, Exterior(2E) 7-9-4 to 10-0-7 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.
 - 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) 2, 5, 7, 8.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

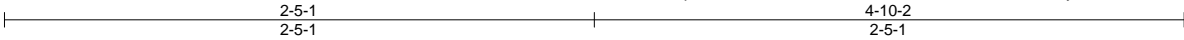
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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381971
3501826	PB03	Piggyback	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
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Fri Apr 21 08:47:24 2023
Page 1
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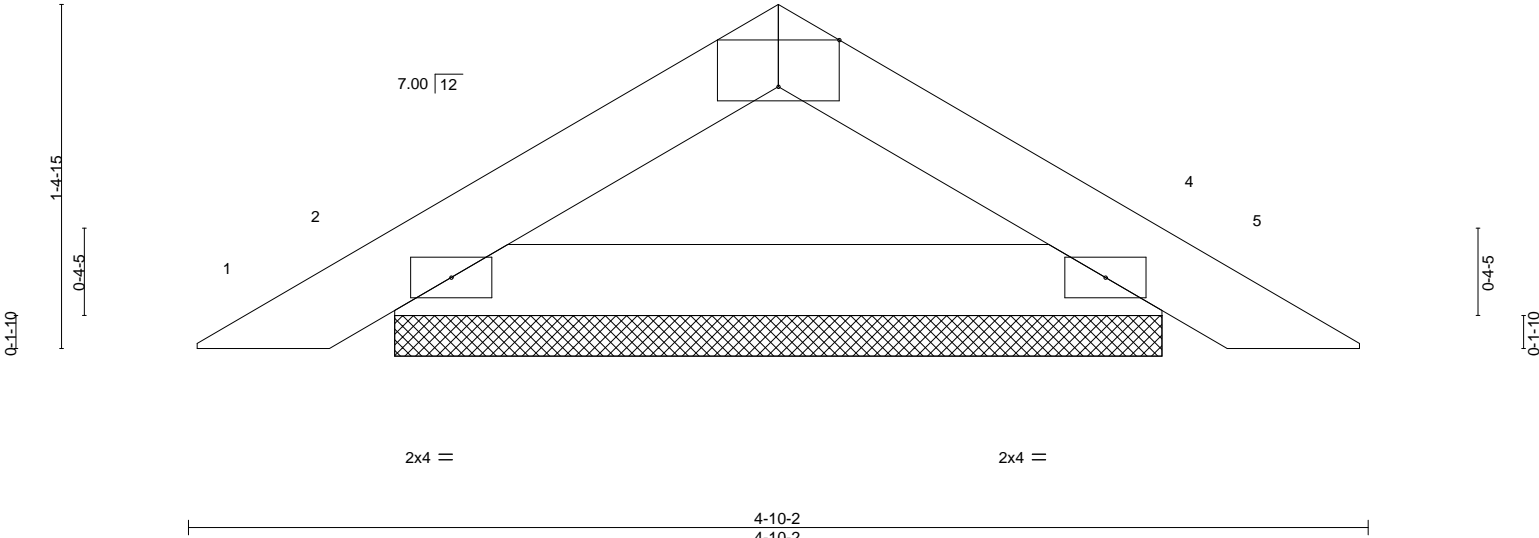


Plate Offsets (X,Y)--		[3:0-3:0,Edge]									
LOADING (psf)		SPACING-		2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	
TCLL	20.0	Plate Grip DOL		1.25	TC	0.04	Vert(LL)	0.00	4	n/r	120
TCDL	7.0	Lumber DOL		1.25	BC	0.12	Vert(CT)	0.00	4	n/r	120
BCLL	0.0 *	Rep Stress Incr		YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a
BCDL	10.0	Code		FBC2020/TPI2014	Matrix-P						
											Weight: 13 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-10-2 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-1-13, 4=3-1-13
Max Horz 2=27(LC 11)
Max Uplift 2=-36(LC 12), 4=-36(LC 13)
Max Grav 2=146(LC 1), 4=146(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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) 2, 4.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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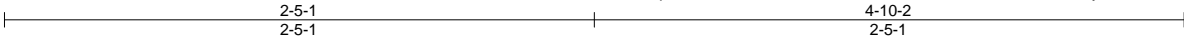


Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381972
3501826	PB04	Piggyback	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:26 2023 Page 1

ID:?NVDGqIbCtvYSOv1NEucG6zi0DO-ts2e8OuMaUhKb8VQDhwQQyhsCX?bD6vhAlm0a?zOYGF



Scale = 1:9.5

Plate Offsets (X,Y)--		[3:0-3-0,Edge]		4-10-2		4-10-2	
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL	20.0	Plate Grip DOL	2-0-0	TC	0.02	in (loc)	l/defl L/d
TCDL	7.0	Lumber DOL	1.25	BC	0.06	0.00 4	n/r 120
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	0.00 4	n/r 120
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-P		0.00 4	n/a n/a
						PLATES	
						GRIP	
						MT20	
						244/190	
						Weight: 26 lb	
						FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-10-2 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-1-13, 4=3-1-13
Max Horz 2=27(LC 11)
Max Uplift 2=-36(LC 12), 4=-36(LC 13)
Max Grav 2=146(LC 1), 4=146(LC 1)

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

NOTES-

- 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails 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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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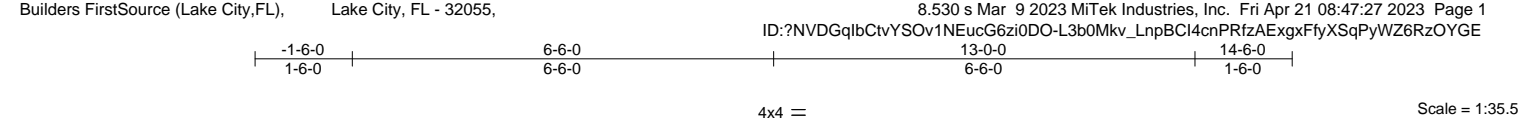
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381973
3501826	T01	Common	1	1	Job Reference (optional)	



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.42	Vert(LL)	0.06 6-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.39	Vert(CT)	-0.08 6-12	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.02 2	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014		Matrix-MS					Weight: 58 lb	FT = 20%

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=132(LC 11)
Max Uplift 2=-124(LC 12), 4=-124(LC 13)
Max Grav 2=562(LC 1), 4=562(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-518/160, 3-4=-518/160
BOT CHORD 2-6=-22/348, 4-6=-22/348
WEBS 3-6=-7/286

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 14-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) except (jt=lb) 2=124, 4=124.

This item has been electronically signed and sealed by O'Regan, Philip, 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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381974
3501826	T01G	Common Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023 MiTek Industries, Inc.
Fri Apr 21 08:47:29 2023
Page 1
ID:~NVDGqIbCtYsOV1NEucG6zi0DO-IRjmnQxEsP3vScE?uqT72bJLT1YQS?7sG?gBKzOYGC

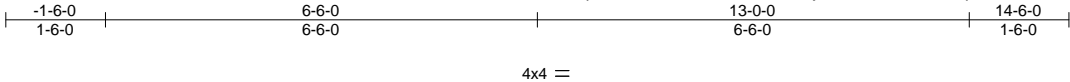


Plate Offsets (X,Y)--		[3:0-0-11,0-1-4], [9:0-0-11,0-1-4]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.14	Vert(LL) -0.01 11 n/r 120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.04	Vert(CT) -0.01 11 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 10 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S		Weight: 79 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.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 13-0-0.
 (lb) - Max Horz 2=124(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 6-6-0, Corner(3R) 6-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 14-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Gable requires continuous bottom chord bearing.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 13, 12.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 10.

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Philip J. O'Regan PE No.58126
 MiTek Inc. DBA MiTek USA FL Cert 6634
 16023 Swingley Ridge Rd. Chesterfield, MO 63017
 Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381975
3501826	T02	Common	1	1	Job Reference (optional)	

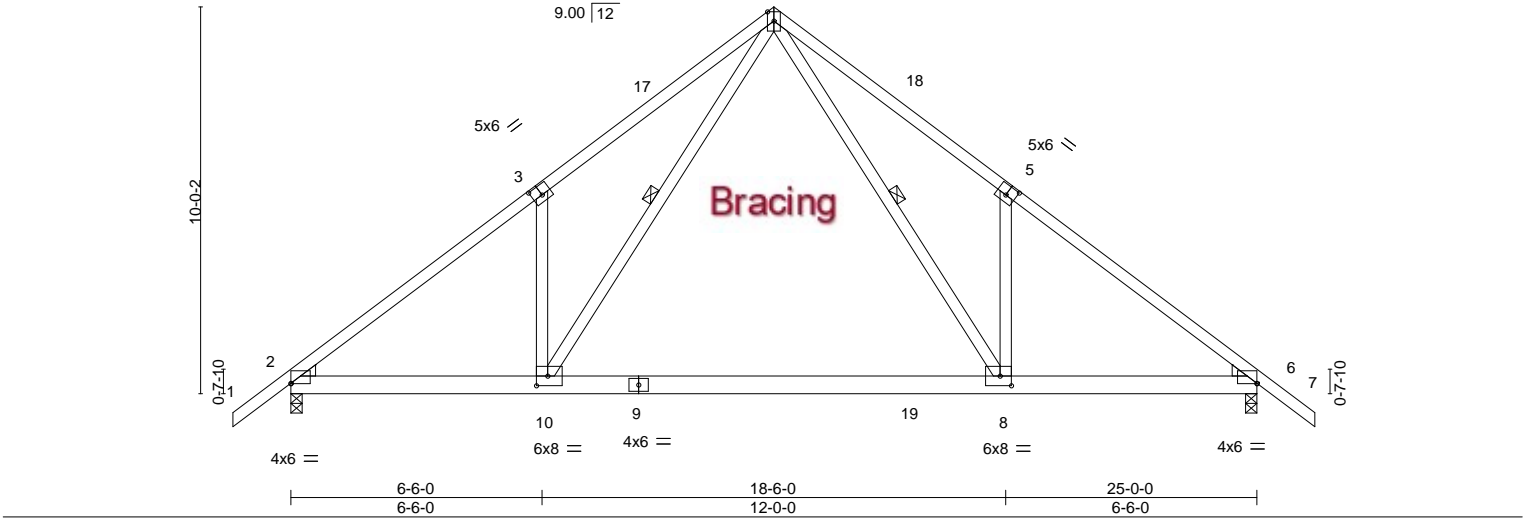
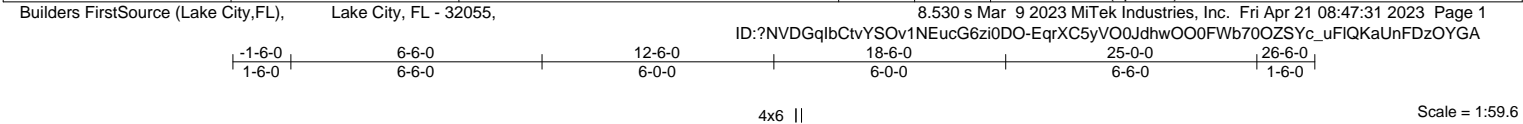


Plate Offsets (X,Y)--		[2:0-0-0,0-0-2], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:Edge,0-0-2], [8:0-3-8,0-3-0], [10:0-3-8,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	-0.33	8-10	>920	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.61	8-10	>492	180	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.03	6	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 159 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-2-5 oc purlins.
BOT CHORD 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-8, 4-10
WEDGE	
Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

REACTIONS.	(size) 2=0-3-8, 6=0-3-8
	Max Horz 2=231(LC 11)
	Max Uplift 2=-306(LC 12), 6=-306(LC 13)
	Max Grav 2=1506(LC 19), 6=1506(LC 20)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2166/407, 3-4=-2209/610, 4-5=-2209/610, 5-6=-2166/407
BOT CHORD	2-10=-352/1805, 8-10=-121/1047, 6-8=-242/1682
WEBS	4-8=-426/1419, 5-8=-351/295, 4-10=-426/1420, 3-10=-351/295

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 26-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=306, 6=306.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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	IC CONST - YOUNG RES.	T30381976
3501826	T02G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:34 2023 Page 1
ID:?NVDGqIbCtVYSov1NEucG6zi0DO-ePWfq7?NhXhCYN7yhN3lle0CMmkz5hks0YiRsXzOYG7

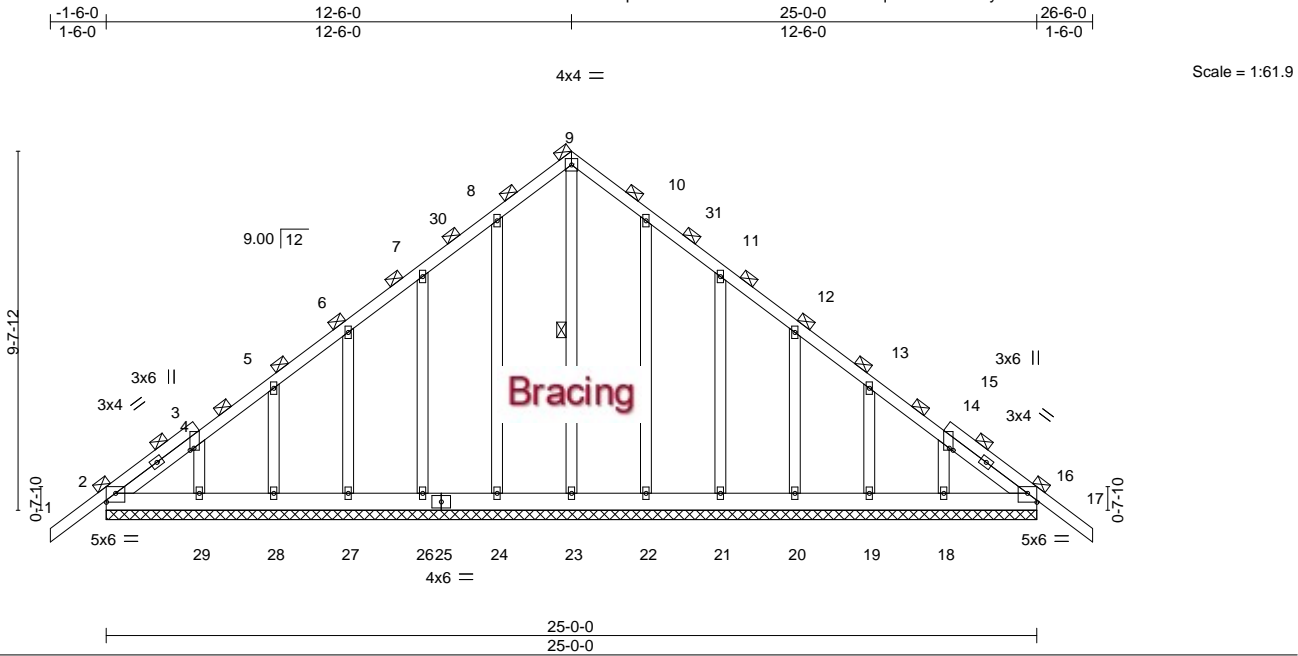


Plate Offsets (X,Y)--	[2:Edge,0-2-14], [3:0-0-11,0-1-4], [15:0-0-11,0-1-4], [16:Edge,0-2-14]				
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	PLATES GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.14	in (loc) l/defl L/d	MT20 244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(LL) -0.01 17 n/r 120	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Vert(CT) -0.01 17 n/r 120	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S	Horz(CT) 0.01 16 n/a n/a	
				Weight: 198 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 9-23

REACTIONS. All bearings 25-0-0.
(lb) - Max Horz 2=223(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 23, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18

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

- NOTES-
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 26-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

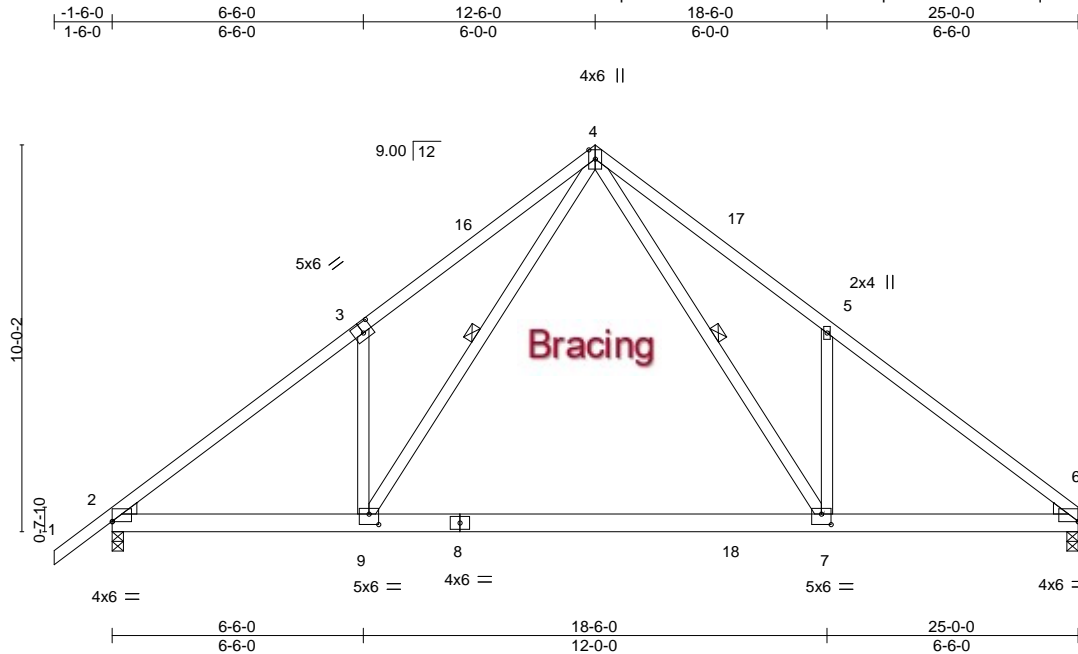
April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381977
3501826	T03	Common	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:36 2023 Page 1

ID:7NVDGqIbCivYSOv1NEucG6zi0DO-boeQFp0dDYxvnhGLoo6mq36Q9ZJAZWu9TrBXwQzOYG5



Scale = 1:59.6

Plate Offsets (X,Y)--		[2:Edge,0-0-2], [3:0-3-0,0-3-0], [6:0-0-0,0-0-2], [7:0-3-0,0-3-4], [9:0-3-0,0-3-4]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	-0.32	7-9	>925	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.61	7-9	>494	180			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.03	6	n/a	n/a			
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 156 lb	FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP M 26
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-3 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-7, 4-9

REACTIONS.

(size) 6=0-3-8, 2=0-3-8
 Max Horz 2=223(LC 9)
 Max Uplift 6=273(LC 13), 2=307(LC 12)
 Max Grav 6=1429(LC 20), 2=1507(LC 19)

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

TOP CHORD 2-3=-2168/407, 3-4=-2211/611, 4-5=-2226/623, 5-6=-2177/414
 BOT CHORD 2-9=-369/1794, 7-9=-138/1036, 6-7=-259/1675
 WEBS 4-7=-440/1439, 5-7=-356/299, 4-9=-426/1419, 3-9=-351/295

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 25-0-0 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.
- 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) 6=273, 2=307.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-4=-54, 4-6=-54, 9-13=-20, 7-9=-80(F=-60), 7-10=-20

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Philip J. O'Regan PE No.58126
 MiTek Inc. DBA MiTek USA FL Cert 6634
 16023 Swingley Ridge Rd. Chesterfield, MO 63017
 Date:

April 21,2023

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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

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



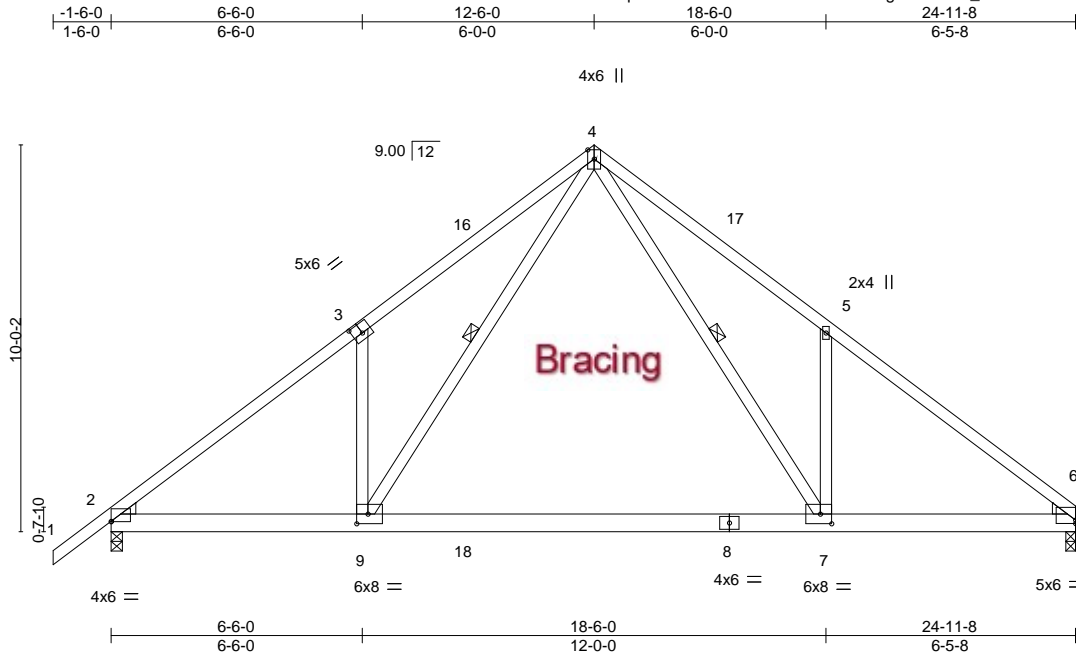
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381978
3501826	T04	Common	7	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:38 2023 Page 1

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Scale = 1:59.6

Plate Offsets (X,Y)--		[2:0-0-0,0-0-2], [3:0-3-0,0-3-0], [6:0-0-0,0-1-1], [7:0-3-8,0-3-0], [9:0-3-8,0-3-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	-0.33	7-9	>919	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.61	7-9	>491	180			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.03	6	n/a	n/a			
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 156 lb	FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP M 26
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-5 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-9, 4-7

REACTIONS.

(size) 6=0-3-0, 2=0-3-8
 Max Horz 2=223(LC 9)
 Max Uplift 6=273(LC 13), 2=306(LC 12)
 Max Grav 6=1428(LC 20), 2=1505(LC 19)

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

TOP CHORD 2-3=-2165/407, 3-4=-2208/610, 4-5=-2212/620, 5-6=-2165/411
 BOT CHORD 2-9=-369/1791, 7-9=-138/1033, 6-7=-258/1664
 WEBS 3-9=-351/295, 4-9=-426/1420, 4-7=-437/1426, 5-7=-354/299

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 24-11-8 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) 6=273, 2=306.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-4=-54, 4-6=-54, 9-13=-20, 7-9=-80(F=-60), 7-10=-20

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Philip J. O'Regan PE No.58126
 MiTek Inc. DBA MiTek USA FL Cert 6634
 16023 Swingley Ridge Rd. Chesterfield, MO 63017
 Date:

April 21,2023

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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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	IC CONST - YOUNG RES.	T30381979
3501826	T05	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:40 2023 Page 1

ID:7NVDGqIbCtvYSOv1NEucG6zi0DO-TZux4A38HnSLGla61dAi_vGA1Be3VEjkOT9I3BzOYG1



4x4 =

Scale = 1:59.6

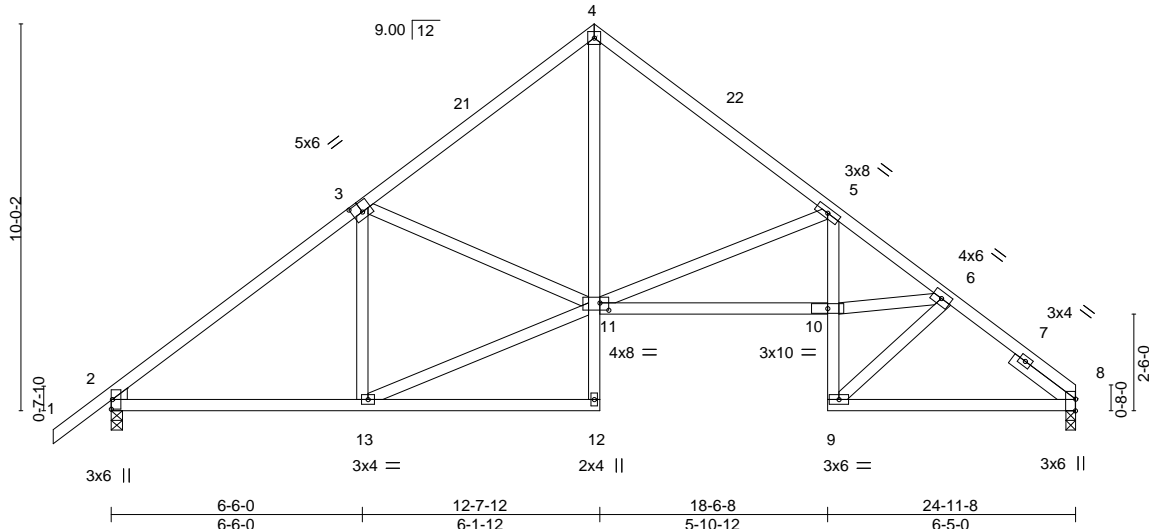


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [8:0-3-10,Edge], [11:0-2-12,0-2-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	-0.09 10-11 >999 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.22 10-11 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.13 8 n/a n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS				Weight: 156 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except*
 4-12,5-9: 2x4 SP No.3
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3
 SLIDER Right 2x4 SP No.3 1-11-8

BRACING-

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

REACTIONS.

(size) 8=0-3-0, 2=0-3-8
 Max Horz 2=223(LC 9)
 Max Uplift 8=175(LC 13), 2=209(LC 12)
 Max Grav 8=921(LC 1), 2=1007(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1215/237, 3-4=-1122/248, 4-5=-1127/275, 5-6=-2150/387, 6-8=-1196/248
 BOT CHORD 2-13=-229/925, 4-11=-193/912, 10-11=-235/1764, 9-10=-115/856, 5-10=-76/759,
 8-9=-148/915
 WEBS 3-13=-251/122, 11-13=-246/992, 5-11=-1023/318, 6-10=-220/1679, 6-9=-1191/191

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 24-11-8 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=175, 2=209.

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Philip J. O'Regan PE No.58126
 MiTek Inc. DBA MiTek USA FL Cert 6634
 16023 Swingley Ridge Rd. Chesterfield, MO 63017
 Date:

April 21,2023

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381980
3501826	T06	Common	8	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:47:42 2023
Page 1

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Scale = 1:59.6

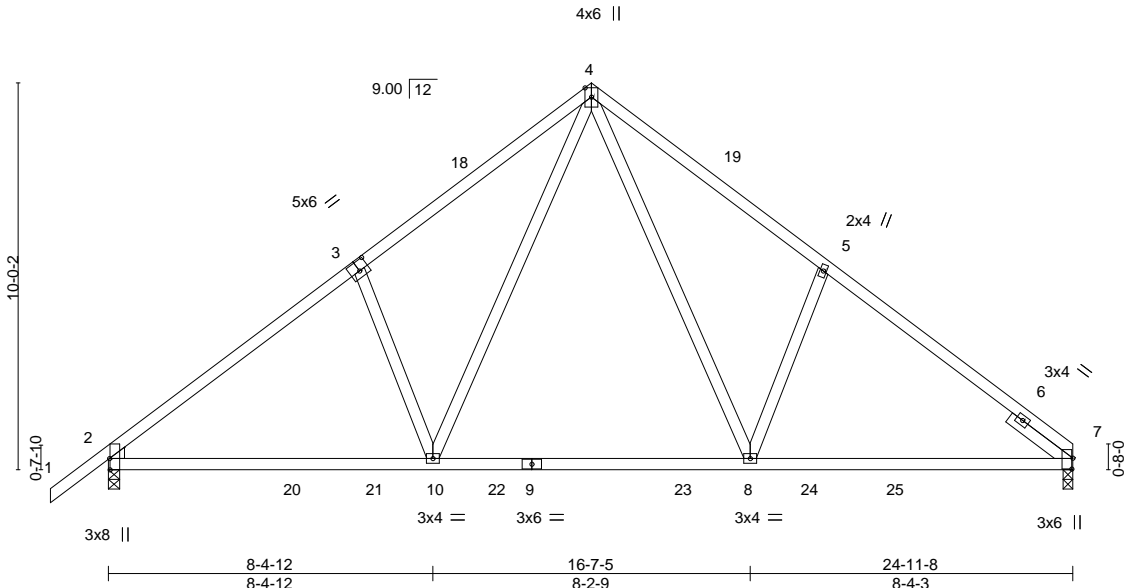


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [3:0-3-0,0-3-0], [7:0-3-6,0-0-5]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	-0.15	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	-0.23	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 136 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.3 1-11-8

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-0, 2=0-3-8
Max Horz 2=223(LC 9)
Max Uplift 7=175(LC 13), 2=209(LC 12)
Max Grav 7=1087(LC 20), 2=1165(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1364/242, 3-4=-1294/330, 4-5=-1298/336, 5-7=-1280/249
BOT CHORD 2-10=-231/1167, 8-10=-55/768, 7-8=-122/1042
WEBS 3-10=-328/256, 4-10=-213/721, 4-8=-221/726, 5-8=-327/258

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind= ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 24-11-8 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) 7=175, 2=209.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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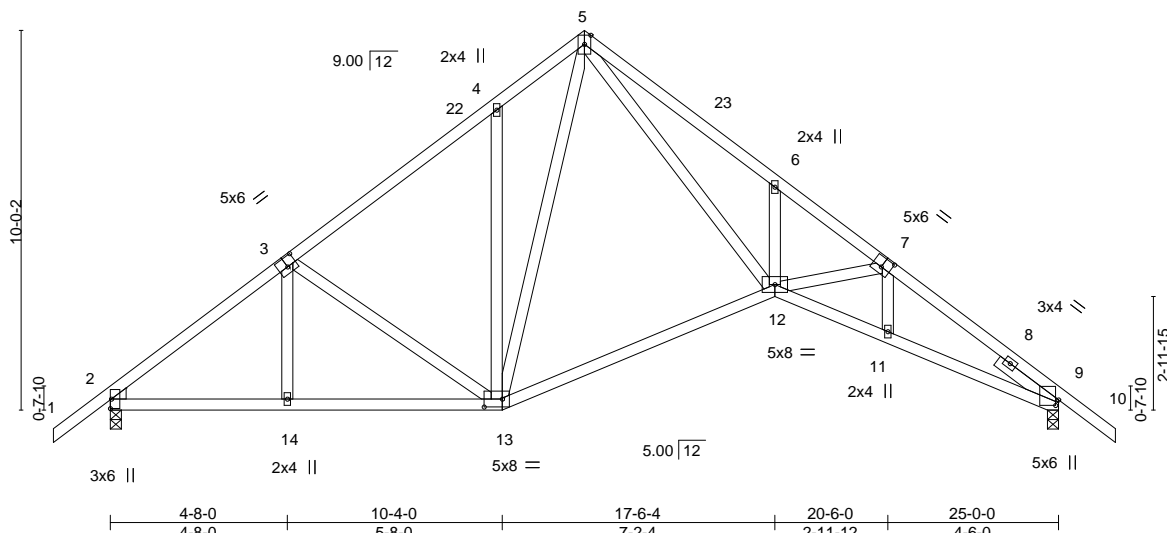


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Chesterfield, MO 63017

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:43 2023 Page 1

-1-6-0	4-8-0	10-4-0	12-6-0	17-6-4	20-6-0	25-0-0	26-6-0
1-6-0	4-8-0	5-8-0	2-2-0	5-0-4	2-11-12	4-6-0	1-6-0

Scale = 1:60.7



TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.3 1-11-8

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

(size) 2=0-3-8, 9=0-3-8
 Max Horz 2=-231(LC 10)
 Max Uplift 2=-208(LC 12), 9=-208(LC 13)
 Max Grav 2=1006(LC 1), 9=1006(LC 1)

TOP CHORD 2-3=-1242/234, 3-4=-979/247, 4-5=-936/351, 5-6=-2192/439, 6-7=-2113/344,
7-9=-2178/334

BOT CHORD 2-14=-545/986, 13-14=-244/987, 12-13=-49/747, 11-12=-216/1832, 9-11=-213/1785

WEBS 3-13=-202/177, 4-13=-265/202, 5-13=-251/355, 5-12=-254/1721, 6-12=-287/205

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 26-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=208, 9=208.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21, 2023



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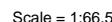
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Chesterfield, MO 63017

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:46 2023 Page 1

Job Reference (optional)



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

TOP CHORD 2-4=-102/349, 4-5=-54/618, 5-6=0/547, 6-7=-239/141, 8-10=-627/84

BOT CHORD 2-18=-260/164, 17-18=-260/164, 16-17=-260/164, 15-16=-260/164, 14-15=-260/164, 13-14=-322/272, 12-13=0/487, 10-12=0/489

WEBS 4-14=-275/112, 5-14=-273/204, 6-14=-852/18, 6-13=-102/614, 7-13=-269/205, 8-13=-293/158

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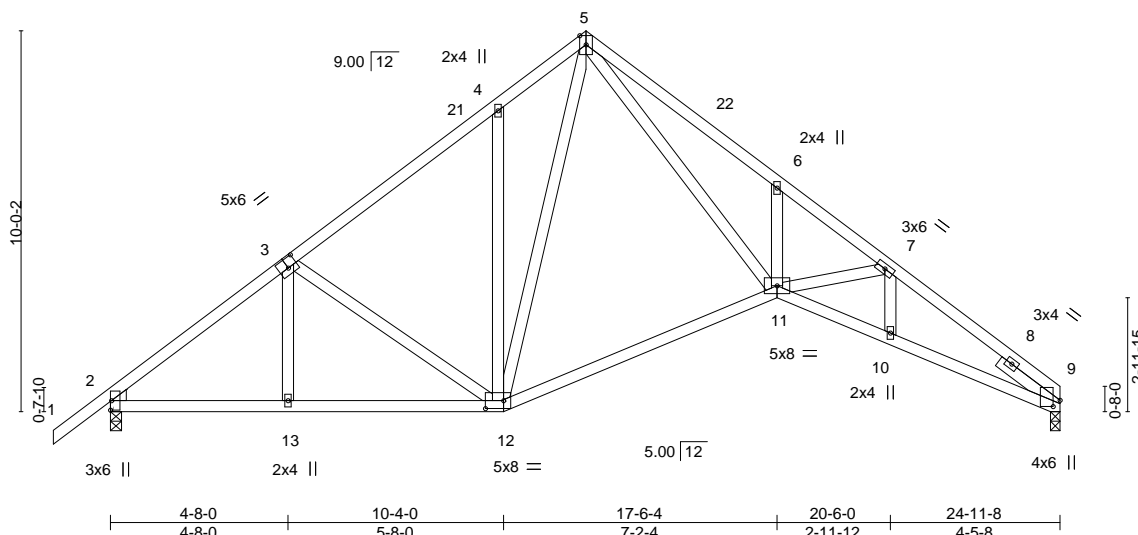
April 21, 2023



8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:48 2023 Page 1

-1-6-0	4-8-0	10-4-0	12-6-0	17-6-4	20-6-0	24-11-8
1-6-0	4-8-0	5-8-0	2-2-0	5-0-4	2-11-12	4-5-8

Scale = 1:60.6



TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.3 1-11-8

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

(size) 9=0-3-0, 2=0-3-8
Max Horz 2=223(LC 9)
Max Uplift 9=-175(LC 13), 2=-209(LC 12)
Max Grav 9=921(LC 1), 2=1007(LC 1)

TOP CHORD 2-3=-1243/234, 3-4=-981/248, 4-5=-937/351, 5-6=-2199/492, 6-7=-2122/373,
7-9=-2192/393

BOT CHORD 2-13=-262/973, 12-13=-261/975, 11-12=-70/734, 10-11=-272/1842, 9-10=-274/1800

WEBS 3-12=-302/176, 4-12=-265/202, 5-12=-243/356, 5-11=-313/1728, 6-11=-288/207

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 24-11-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb 9=175, 2=209).

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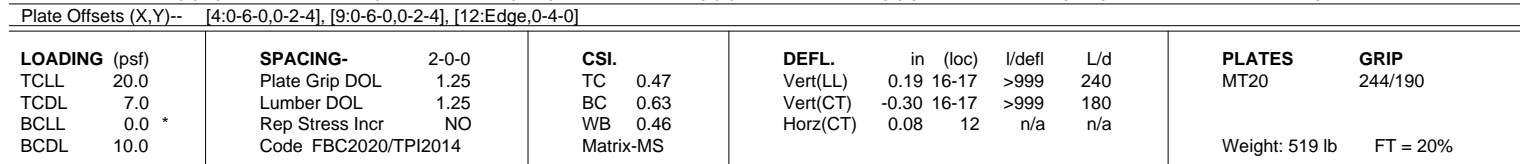
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Components

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Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:53 2023 Page 1
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 -1-6-0 5-0-13 9-5-3 14-10-2 20-1-5 25-4-8 30-9-7 34-2-15 38-0-0
 1-6-0 5-0-13 4-4-6 5-4-15 5-3-3 5-3-3 5-4-15 3-5-9 3-9-1
 Scale = 1:66



REACTIONS. (size) 2=0-3-8, 12=Mechanical
Max Horz 2=135(LC 27)
Max Uplift 2=-1196(LC 8), 12=-1493(LC 9)
Max Grav 2=2920(LC 1), 12=3304(LC 1)

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

TOP CHORD	2-3=-5351/2242, 3-4=-4833/2105, 4-5=-5176/2300, 5-6=-5176/2300, 6-8=-4796/2145, 8-9=-4796/2145, 9-10=-3981/1799, 10-11=-351/194, 11-12=-264/145
BOT CHORD	2-20=-1980/4571, 19-20=-1980/4571, 17-19=-1781/4144, 16-17=-2332/5409, 15-16=-2332/5409, 13-15=-1445/3412, 12-13=-1237/2842
WEBS	3-20=-85/343, 3-19=-544/251, 4-19=-446/1073, 4-17=-740/1535, 5-17=-375/234, 6-17=-391/221, 6-16=-195/591, 6-15=-923/421, 8-15=-375/235, 9-15=-894/2013, 9-13=-198/386, 10-13=-422/841, 10-12=-3616/1553

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCp=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
2=1196 12=1493

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Date:

April 21, 2023

Continued on page 2



WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-7473 Rev. 3/19/2020 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, 2067 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381984
3501826	T09	Hip Girder	1	2	Job Reference (optional)	

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 59 lb up at 9-5-3, 71 lb down and 57 lb up at 11-5-15, 71 lb down and 57 lb up at 13-5-15, 71 lb down and 57 lb up at 15-5-15, 71 lb down and 57 lb up at 17-5-15, 71 lb down and 54 lb up at 19-5-15, 71 lb down and 57 lb up at 21-5-15, 71 lb down and 57 lb up at 23-5-15, 71 lb down and 57 lb up at 25-5-15, and 71 lb down and 57 lb up at 27-5-15, and 71 lb down and 57 lb up at 29-5-15 on top chord, and 536 lb down and 282 lb up at 7-5-15, 153 lb down and 90 lb up at 9-5-15, 153 lb down and 90 lb up at 11-5-15, 153 lb down and 90 lb up at 13-5-15, 153 lb down and 90 lb up at 15-5-15, 153 lb down and 90 lb up at 17-5-15, 153 lb down and 90 lb up at 19-5-15, 153 lb down and 90 lb up at 21-5-15, 153 lb down and 90 lb up at 23-5-15, 153 lb down and 90 lb up at 25-5-15, 153 lb down and 90 lb up at 27-5-15, 153 lb down and 90 lb up at 29-5-15, 222 lb down and 156 lb up at 31-5-15, 222 lb down and 156 lb up at 33-5-15, and 222 lb down and 156 lb up at 35-5-15, and 228 lb down and 150 lb up at 37-5-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-54, 4-9=-54, 9-11=-54, 2-12=-20

Concentrated Loads (lb)

Vert: 4=-24(F) 7=-24(F) 19=-150(F) 8=-24(F) 15=-150(F) 23=-24(F) 24=-24(F) 25=-24(F) 26=-24(F) 27=-24(F) 28=-24(F) 29=-24(F) 30=-24(F) 31=-536(F) 32=-150(F) 33=-150(F) 34=-150(F) 35=-150(F) 36=-150(F) 37=-150(F) 38=-150(F) 39=-150(F) 40=-150(F) 41=-222(F) 42=-222(F) 43=-222(F) 44=-228(F)

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381985
3501826	T10	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:55 2023 Page 1
ID:~NVDGqIbCtVYSOv1NEucG6zi0DO-XSibEIFYIOLDZcD?QHxD53OhMEgsW5RyrJI24pzOYFo
-1-6-0 5-10-2 12-0-0 17-4-14 22-9-12 28-2-9 33-2-7 38-0-0
1-6-0 5-10-2 6-1-14 5-4-14 5-4-14 5-4-14 4-11-14 4-9-9
Scale = 1:66.5

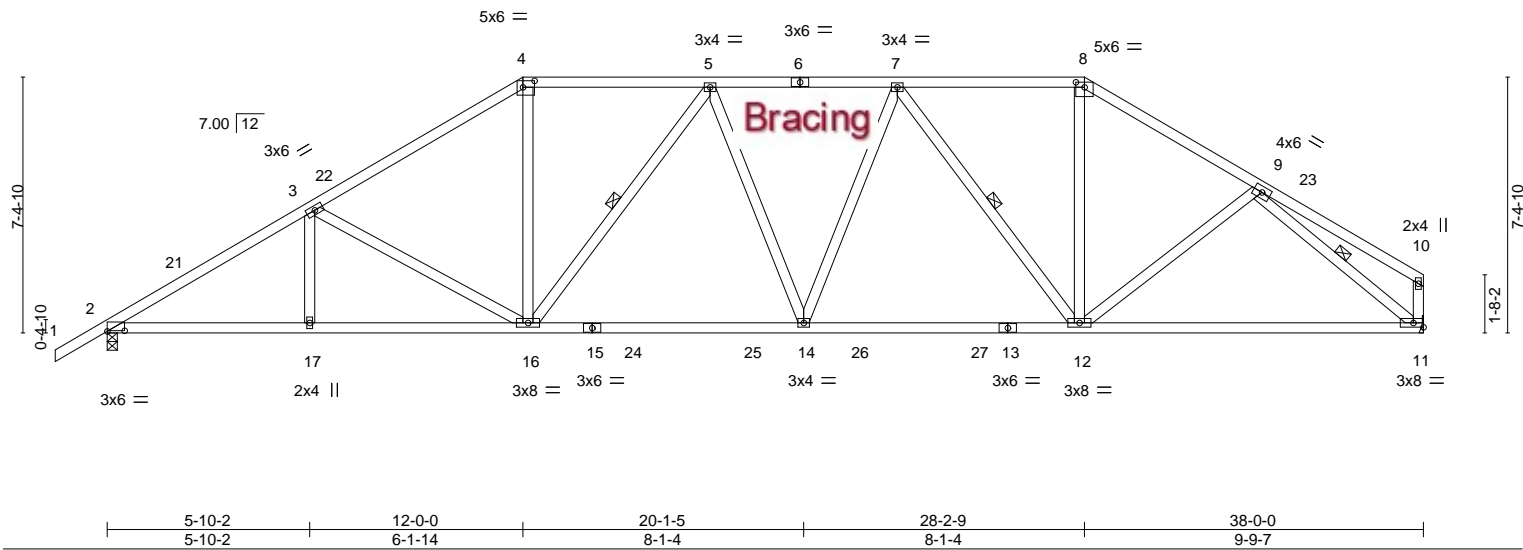


Plate Offsets (X,Y)--		[2:0-6-0,0-0-3], [4:0-4-0,0-2-4], [8:0-3-0,0-1-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL 1.25		TC 0.56		Vert(LL)	-0.24 11-12	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.99		Vert(CT)	-0.50 11-12	>904	180		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.55		Horz(CT)	0.12 11	n/a	n/a		
BCDL 10.0		Code FBC2020/TPI2014		Matrix-MS						Weight: 223 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-5-5 oc purlins, except end verticals.
BOT CHORD 2x4 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 5-16, 7-12, 9-11

REACTIONS.	(size) 2=0-3-8, 11=Mechanical
	Max Horz 2=164(LC 9)
	Max Uplift 2=338(LC 12), 11=291(LC 13)
	Max Grav 2=1611(LC 2), 11=1549(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2658/520, 3-4=-2200/451, 4-5=-1852/437, 5-7=-2121/409, 7-8=-1650/381, 8-9=-1956/396
BOT CHORD	2-17=-513/2250, 16-17=-513/2250, 14-16=-367/2091, 12-14=-326/2024, 11-12=-274/1488
WEBS	3-16=-569/216, 4-16=-98/838, 5-16=-480/214, 7-14=-74/319, 7-12=-678/231, 8-12=-96/743, 9-12=-104/282, 9-11=-1814/365

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-3-10, Interior(1) 2-3-10 to 12-0-0, Exterior(2R) 12-0-0 to 17-4-14, Interior(1) 17-4-14 to 28-2-9, Exterior(2R) 28-2-9 to 33-3-13, Interior(1) 33-3-13 to 37-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 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) except (jt=lb) 2=338, 11=291.

This item has been electronically signed and sealed by O'Regan, Philip, 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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381986
3501826	T11	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),		Lake City, FL - 32055,		8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:57 2023 Page 1			
ID:?NVDGqlbCtvYSov1NEucG6zi0DO-TqPMf_GoG?bxpvNNXi_hBUT021Oc__1FIdn99izOYFm							
-1-6-0	7-10-5	14-6-14	20-1-5	25-7-11	32-4-4	38-0-0	
1-6-0	7-10-5	6-8-9	5-6-7	5-6-7	6-8-8	5-7-12	

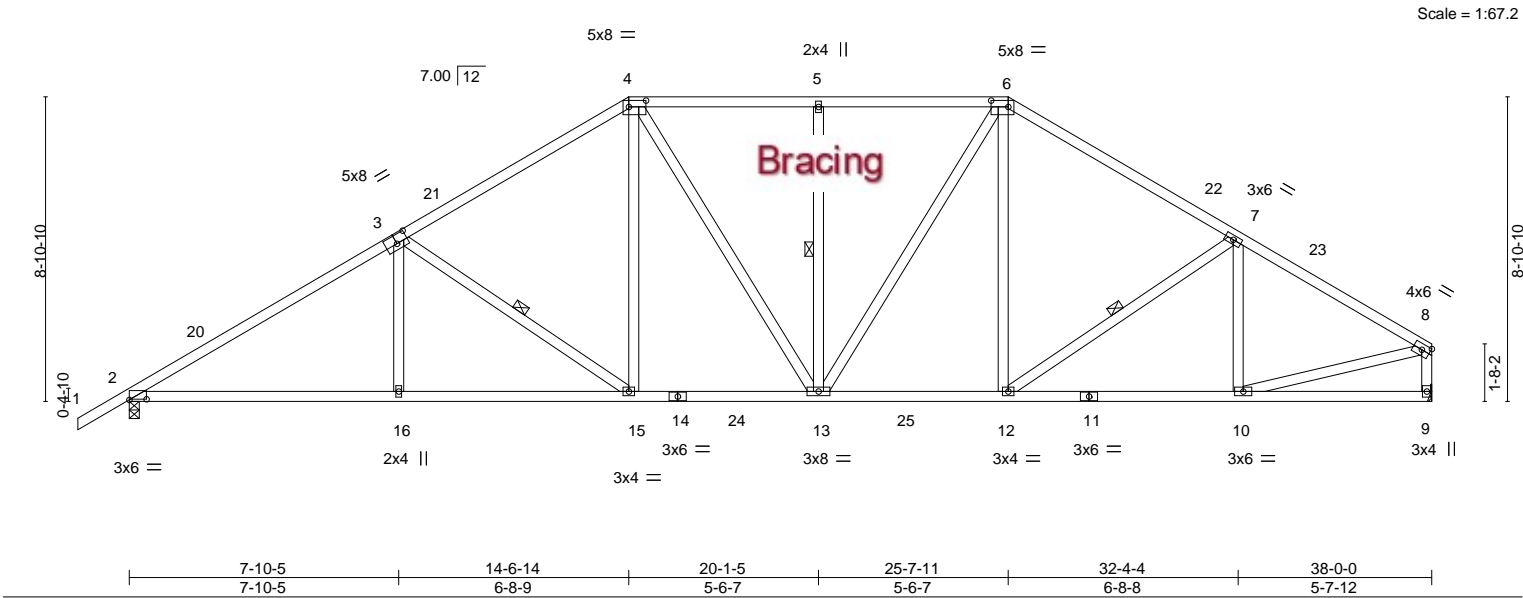


Plate Offsets (X,Y)--		[2:0-6-0,0-0-3], [3:0-4-0,0-3-0], [4:0-6-0,0-2-4], [6:0-6-0,0-2-4]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.25
TCDL 7.0	Lumber DOL	1.25
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code	FBC2020/TPI2014
	CSI.	
	TC	0.62
	BC	0.84
	WB	0.61
	Matrix-MS	
	DEFL.	in (loc) l/defl L/d
	Vert(LL)	-0.15 16-19 >999 240
	Vert(CT)	-0.28 16-19 >999 180
	Horz(CT)	0.10 9 n/a n/a
	PLATES	GRIP
	MT20	244/190
	Weight: 235 lb FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-14 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-2-7 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-15, 5-13, 7-12

REACTIONS.	(size) 2=0-3-8, 9=Mechanical
	Max Horz 2=197(LC 9)
	Max Uplift 2=334(LC 12), 9=286(LC 13)
	Max Grav 2=1604(LC 2), 9=1541(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2562/494, 3-4=-1988/422, 4-5=-1738/386, 5-6=-1738/386, 6-7=-1849/383, 7-8=-1929/367, 8-9=-1456/297
BOT CHORD	2-16=-490/2192, 15-16=-490/2200, 13-15=-274/1649, 12-13=-169/1530, 10-12=-262/1623
WEBS	3-16=0/314, 3-15=-733/260, 4-15=-102/640, 4-13=-170/291, 5-13=-333/170, 6-13=-177/464, 6-12=-50/385, 8-10=-248/1607

NOTES-	
1) Unbalanced roof live loads have been considered for this design.	
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-3-10, Interior(1) 2-3-10 to 14-6-14, Exterior(2R) 14-6-14 to 20-1-5, Interior(1) 20-1-5 to 25-7-11, Exterior(2R) 25-7-11 to 31-0-3, Interior(1) 31-0-3 to 37-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60	
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.	
4) Provide adequate drainage to prevent water ponding.	
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.	
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) except (jt=lb) 2=334, 9=286.	

This item has been electronically signed and sealed by O'Regan, Philip, 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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381987
3501826	T12	Hip	1	1		
Job Reference (optional)						

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:47:59 2023 Page 1

ID: ?NVDGqIbCtvYSOV1NEucG6zi0DO-QDX64gl3odrf2DXmf709GvZPGr2jSvGXmwGFDbzOYFk

1-6-0	5-11-0	11-1-8	16-9-15	22-0-0	27-2-1	32-10-8	38-1-0	44-0-0	45-0-0
1-6-0	5-11-0	5-2-8	5-8-7	5-2-1	5-2-1	5-8-7	5-2-8	5-11-0	1-0-0

Scale = 1:77.0

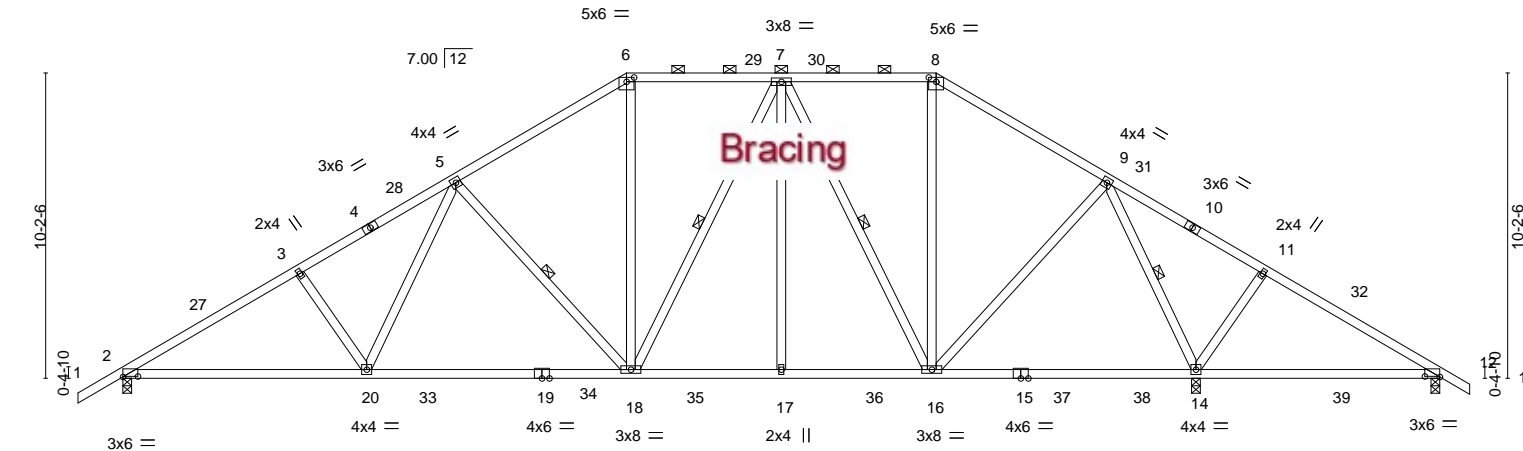


Plate Offsets (X,Y)--	8-1-12	16-9-15	22-0-0	27-2-1	35-10-4	44-0-0
	8-1-12	8-8-3	5-2-1	5-2-1	8-8-3	8-1-12

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.44	Vert(LL)	0.18 14-26	>551	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.93	Vert(CT)	-0.42 18-20	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.56	Horz(CT)	0.07 14	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 276 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-5-9 oc purlins, except
BOT CHORD 2x4 SP No.2	2-0-0 oc purlins (5-0-7 max.): 6-8.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
	WEBS 1 Row at midpt 5-18, 7-18, 7-16, 9-14

REACTIONS.	(size) 2=0-3-8, 14=0-3-8, 12=0-3-8
	Max Horz 2=234(LC 11)
	Max Uplift 2=317(LC 12), 14=361(LC 13), 12=110(LC 8)
	Max Grav 2=1512(LC 19), 14=2246(LC 2), 12=167(LC 24)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2380/475, 3-5=-2248/487, 5-6=-1545/373, 6-7=-1281/365, 7-8=-858/282, 8-9=-1058/278, 9-11=-87/642, 11-12=-105/513
BOT CHORD	2-20=-477/2151, 18-20=-336/1736, 17-18=-186/1173, 16-17=-186/1173, 14-16=-14/290, 12-14=-394/124
WEBS	3-20=-273/174, 5-20=-106/637, 5-18=-672/259, 6-18=-87/527, 7-18=-110/356, 7-16=-733/202, 8-16=-62/313, 9-16=-129/868, 9-14=-1828/316, 11-14=-296/183

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-10-13, Interior(1) 2-10-13 to 16-9-15, Exterior(2R) 16-9-15 to 23-0-10, Interior(1) 23-0-10 to 27-2-1, Exterior(2R) 27-2-1 to 33-4-12, Interior(1) 33-4-12 to 45-0-0 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=317, 14=361, 12=110.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been electronically signed and sealed by O'Regan, Philip, 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.

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

April 21,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381988
3501826	T13	Piggyback Base	4	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:01 2023
Page 1

1-6-0	5-11-0	11-1-8	16-9-15	22-0-0	27-2-1	32-10-8	38-1-0	44-0-0	45-0-0
1-6-0	5-11-0	5-2-8	5-8-7	5-2-1	5-2-1	5-8-7	5-2-8	5-11-0	1-0-0

TOP CHORD UNDER PIGGYBACKS TO BE Laterally Braced
BY PURLINS AT 2-0-0 OC. MAX. (TYPICAL)

Scale = 1:77.0

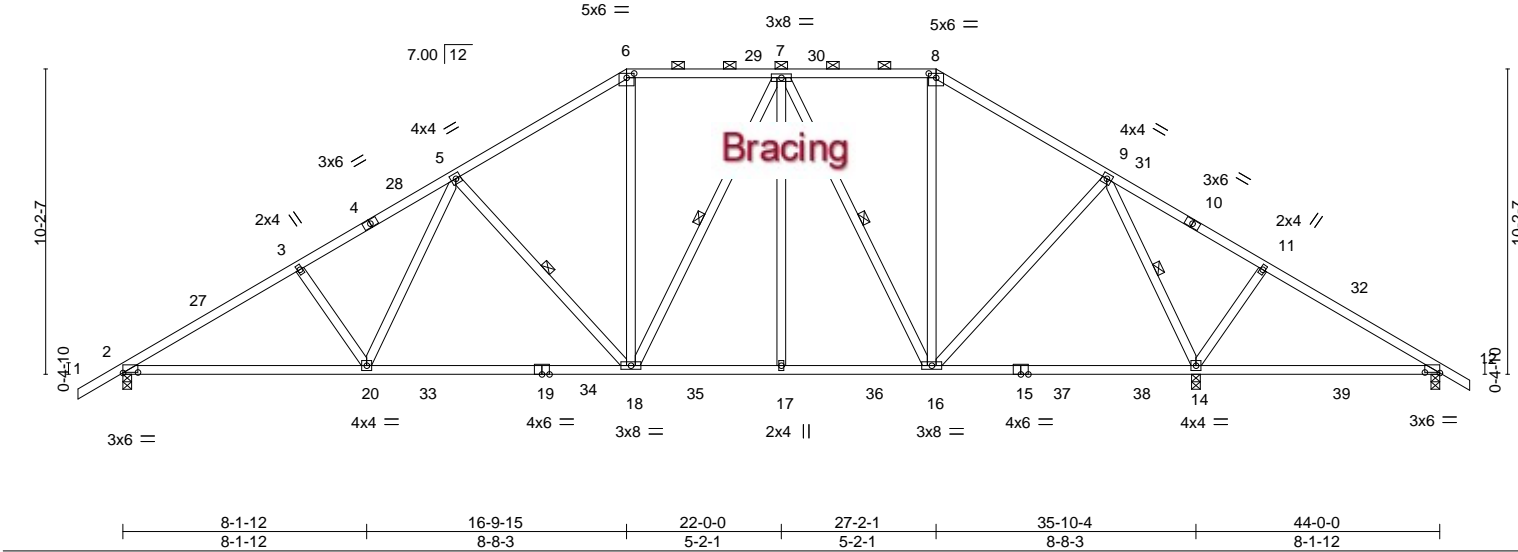


Plate Offsets (X,Y)--		[2:0-6-0,0-0-3], [6:0-3-0,0-1-12], [8:0-3-0,0-1-12], [12:0-6-0,0-0-3]											
LOADING (psf)		SPACING--		2-0-0		CSI.		DEFL.		in (loc)		l/defl	
TCLL 20.0		Plate Grip DOL		1.25		TC 0.44		Vert(LL)		0.18 14-26		>551 240	
TCDL 7.0		Lumber DOL		1.25		BC 0.93		Vert(CT)		-0.42 18-20		>999 180	
BCLL 0.0 *		Rep Stress Incr		YES		WB 0.56		Horz(CT)		0.07 14		n/a n/a	
BCDL 10.0		Code FBC2020/TPI2014				Matrix-MS						Weight: 276 lb	
												FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-5-9 oc purlins, except 2-0-0 oc purlins (5-0-8 max.): 6-8.
BOT CHORD	2x4 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 5-18, 7-18, 7-16, 9-14

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 12=0-3-8
Max Horz 2=234(LC 11)
Max Uplift 2=317(LC 12), 14=361(LC 13), 12=110(LC 8)
Max Grav 2=1512(LC 19), 14=2246(LC 2), 12=167(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2380/475, 3-5=-2248/487, 5-6=-1545/373, 6-7=-1281/365, 7-8=-859/282, 8-9=-1058/278, 9-11=-87/642, 11-12=-105/513
BOT CHORD 2-20=-477/2151, 18-20=-336/1736, 17-18=-186/1173, 16-17=-186/1173, 14-16=-14/291, 12-14=-394/124
WEBS 3-20=-273/174, 5-20=-106/637, 5-18=-672/259, 6-18=-87/527, 7-18=-110/356, 7-16=-733/202, 8-16=-62/313, 9-16=-129/868, 9-14=-1828/316, 11-14=-297/183

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-10-13, Interior(1) 2-10-13 to 16-9-15, Exterior(2R) 16-9-15 to 23-0-10, Interior(1) 23-0-10 to 27-2-1, Exterior(2R) 27-2-1 to 33-4-12, Interior(1) 33-4-12 to 45-0-0 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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=317, 14=361, 12=110.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

April 21,2023

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381989
3501826	T14	Piggyback Base Girder	1	2	Job Reference (optional)	

NOTES-
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 891 lb down and 216 lb up at 1-9-4, 891 lb down and 222 lb up at 3-9-4, 891 lb down and 230 lb up at 5-9-4, 891 lb down and 240 lb up at 7-9-4, 891 lb down and 235 lb up at 9-9-4, 891 lb down and 231 lb up at 10-10-12, 891 lb down and 276 lb up at 12-10-12, and 891 lb down and 267 lb up at 14-10-12, and 891 lb down and 267 lb up at 16-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-54, 4-5=-54, 5-6=-54, 6-10=-54, 9-20=-20
Concentrated Loads (lb)
Vert: 16=-891(F) 23=-891(F) 24=-891(F) 25=-891(F) 26=-891(F) 27=-891(F) 28=-891(F) 29=-891(F) 30=-891(F)

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381990
3501826	T15	Common Girder	1	2	Job Reference (optional)	

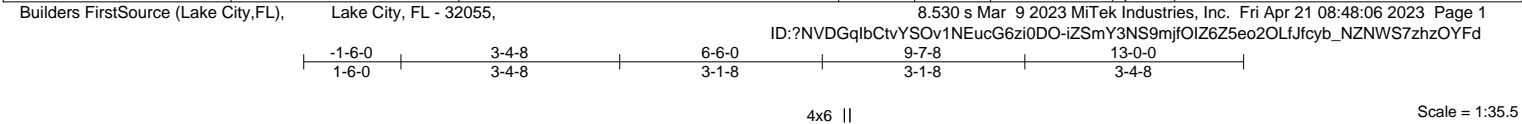


Plate Offsets (X,Y)--		[6:0-2-11,Edge], [7:0-5-12,0-1-8], [8:0-5-0,0-5-8], [9:0-5-12,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.20
TCDL 7.0	Lumber DOL	1.25	BC 0.25
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.86
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS
		<div> <div>DEFL.</div> <div>in (loc)</div> <div>l/defl</div> <div>L/d</div> </div>	
		<div> <div>Vert(LL)</div> <div>Vert(CT)</div> <div>Horz(CT)</div> </div>	
		<div> <div>MT20</div> <div>244/190</div> </div>	
		<div>Weight: 184 lb FT = 20%</div>	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-1-9 oc purlins.
BOT CHORD	2x8 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=124(LC 24)
Max Uplift 6=1368(LC 9), 2=936(LC 8)
Max Grav 6=4412(LC 1), 2=2673(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3665/1296, 3-4=-3973/1492, 4-5=-3970/1489, 5-6=-5865/1924
BOT CHORD 2-9=-1046/2880, 8-9=-1046/2880, 7-8=-1494/4642, 6-7=-1494/4642
WEBS 4-8=-1703/4515, 5-8=-2061/570, 5-7=-574/2426, 3-8=-325/456, 3-9=-557/278

- NOTES-
- 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: 2x8 - 2 rows staggered at 0-3-0 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=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1368 lb uplift at joint 6 and 936 lb uplift at joint 2.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3284 lb down and 1513 lb up at 7-1-9, and 1529 lb down and 311 lb up at 9-0-12, and 1521 lb down and 306 lb up at 11-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-6=-54, 10-13=-20

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381990
3501826	T15	Common Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:06 2023 Page 2
ID:?NVDGqlbCtvYSOv1NEucG6zi0DO-iZSmY3NS9mjfOlZ6Z5eo2OLfJfcyb_NZNWS7zhzOYFd

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 16=-3284(B) 17=-1379(B) 18=-1379(B)

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381991
3501826	T15G	Common Supported Gable	1	1	Job Reference (optional)	

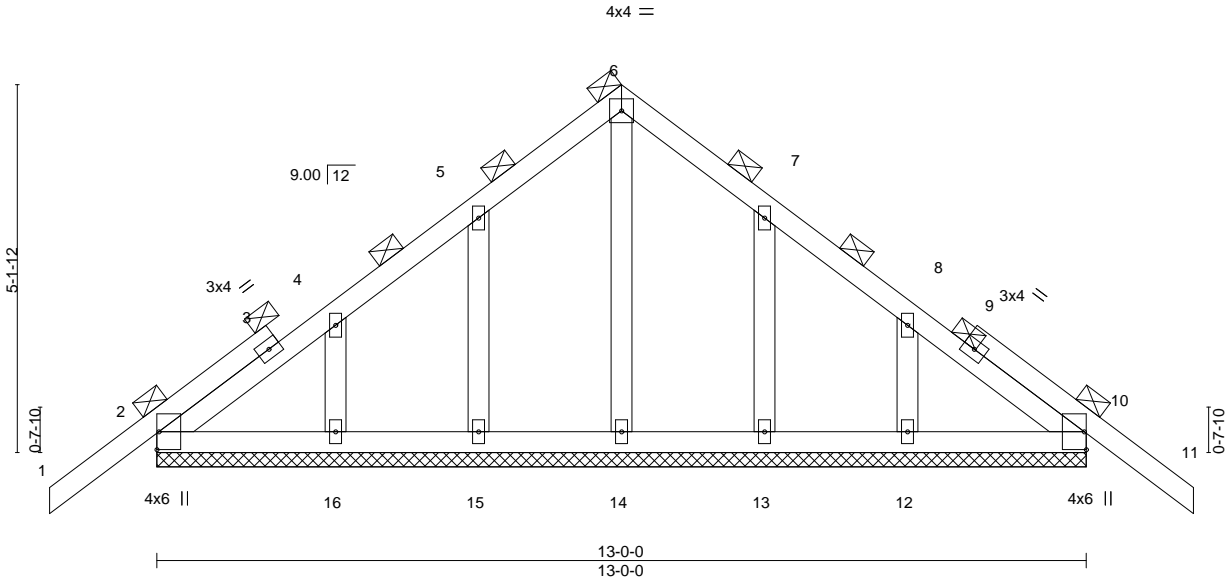
Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:08 2023
Page 1
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-1-6-0
1-6-0
6-6-0
6-6-0
13-0-0
6-6-0
14-6-0
1-6-0

4x4 =

Scale: 3/8"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15	Vert(LL)	-0.01 11	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.04	Vert(CT)	-0.01 11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S					Weight: 76 lb	FT = 20%

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

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-0-0.
(lb) - Max Horz 2=-124(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 6-6-0, Corner(3R) 6-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 14-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 13, 12.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 10.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

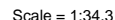
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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:09 2023 Page 1

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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.

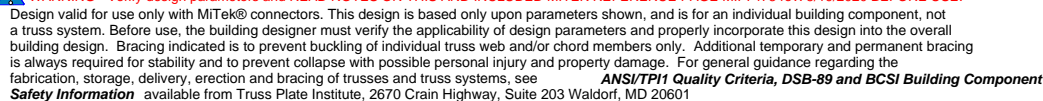
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpI=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-9-4 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) 2 except (jt=lb) 4=136.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21, 2023

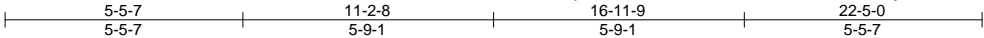


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381993
3501826	T17	SCISSORS	4	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:11 2023
Page 1

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Scale = 1:52.9

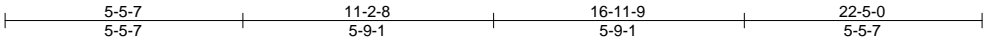
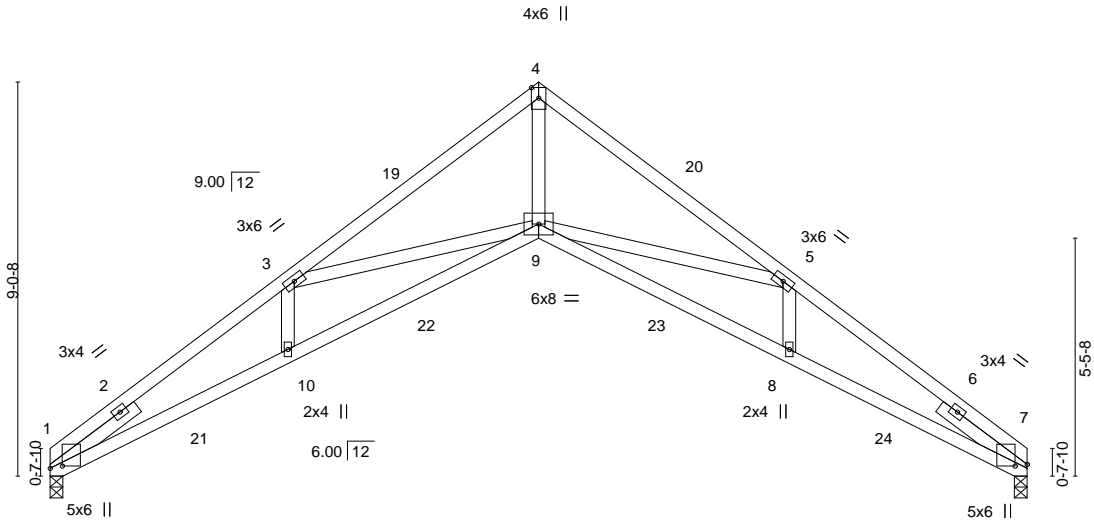


Plate Offsets (X,Y)-- [1:0-0-10,0-3-5], [7:0-0-7,0-3-5]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.67	Vert(LL)	-0.22 8-9 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.44 8-9 >615	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.47 7 n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS					Weight: 113 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

SLIDER Left 2x4 SP No.3 2-5-8, Right 2x4 SP No.3 2-5-8

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-1 oc purlins.

BOT CHORD Rigid ceiling directly applied or 5-8-13 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8

Max Horz 1=-185(LC 8)

Max Uplift 1=-157(LC 12), 7=-157(LC 13)

Max Grav 1=829(LC 1), 7=829(LC 1)

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

TOP CHORD 1-3=-2444/1275, 3-4=-1923/765, 4-5=-1923/776, 5-7=-2444/1261

BOT CHORD 1-10=-1021/2104, 9-10=-953/2143, 8-9=-919/2143, 7-8=-985/2104

WEBS 4-9=-783/1889, 3-9=-502/516, 5-9=-502/523

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-2-8, Exterior(2R) 11-2-8 to 14-2-8, Interior(1) 14-2-8 to 22-5-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=157, 7=157.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381994
3501826	T17G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:13 2023 Page 1

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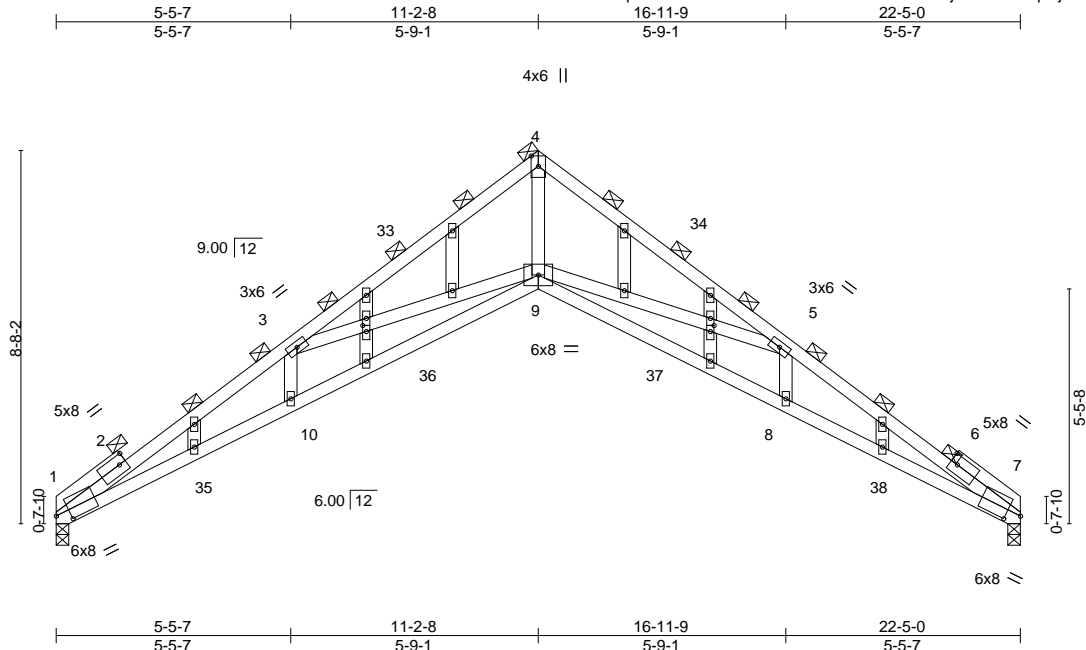


Plate Offsets (X,Y)--	[1:0-3-14,0-2-12], [7:0-3-14,0-2-12], [13:0-1-11,0-1-0], [22:0-1-11,0-1-0]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.77	in (loc) l/defl L/d
TCDL 7.0	Lumber DOL	1.25	BC 0.82	Vert(LL) -0.34 9-10 >789 240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Vert(CT) -0.66 9-10 >409 180
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS	Horz(CT) 0.68 7 n/a n/a
				PLATES MT20 GRIP 244/190
				Weight: 121 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
1-2,6-7: 2x4 SP 2850F 2.0E or 2x4 SP M 31
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD 2-0-0 oc purlins (2-10-0 max.).
BOT CHORD Rigid ceiling directly applied or 4-11-4 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-177(LC 8)
Max Uplift 1=-159(LC 12), 7=-159(LC 13)
Max Grav 1=829(LC 1), 7=829(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-3000/1577, 3-4=-2179/859, 4-5=-2179/870, 5-7=-3000/1557
BOT CHORD 1-10=-1335/2683, 9-10=-1265/2718, 8-9=-1224/2718, 7-8=-1293/2683
WEBS 4-9=-903/2192, 5-9=-812/729, 3-9=-812/725

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-2-8, Exterior(2R) 11-2-8 to 14-2-8, Interior(1) 14-2-8 to 22-5-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=159, 7=159.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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	IC CONST - YOUNG RES.	T30381995
3501826	T18	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

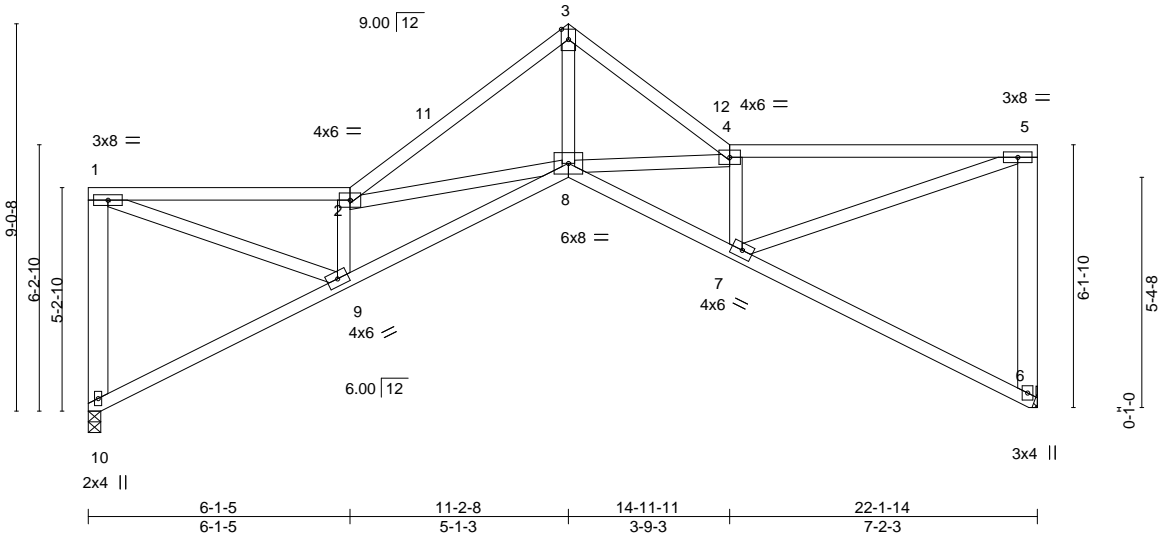
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:14 2023
Page 1

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6-1-5
6-1-5
11-2-8
5-1-3
14-11-11
3-9-3
22-1-14
7-2-3

4x6 ||

Scale = 1:53.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.98	Vert(LL)	-0.17	8-9	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.70	Vert(CT)	-0.33	8-9	>801	180	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.79	Horz(CT)	0.34	6	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 140 lb	FT = 20%

- LUMBER-**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
1-10,5-6: 2x6 SP No.2
- BRACING-**
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-6-2 oc bracing.

- REACTIONS.** (size) 10=0-3-8, 6=Mechanical
Max Horz 10=81(LC 9)
Max Uplift 10=-185(LC 12), 6=-196(LC 13)
Max Grav 10=911(LC 1), 6=911(LC 1)

- FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-842/232, 1-2=-1908/446, 2-3=-2011/429, 3-4=-1989/467, 4-5=-1824/371,
5-6=-828/210
BOT CHORD 8-9=-622/2275, 7-8=-443/2153
WEBS 1-9=-466/1996, 2-9=-1497/418, 2-8=-524/209, 3-8=-430/2065, 4-8=-416/152,
4-7=-1392/347, 5-7=-385/1895

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 11-2-8, Exterior(2R) 11-2-8 to 14-2-8, Interior(1) 14-2-8 to 21-11-2 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.
 - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=185, 6=196.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-54, 3-4=-54, 4-5=-54, 8-10=-30(F=-10), 6-8=-30(F=-10)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381996
3501826	T19	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

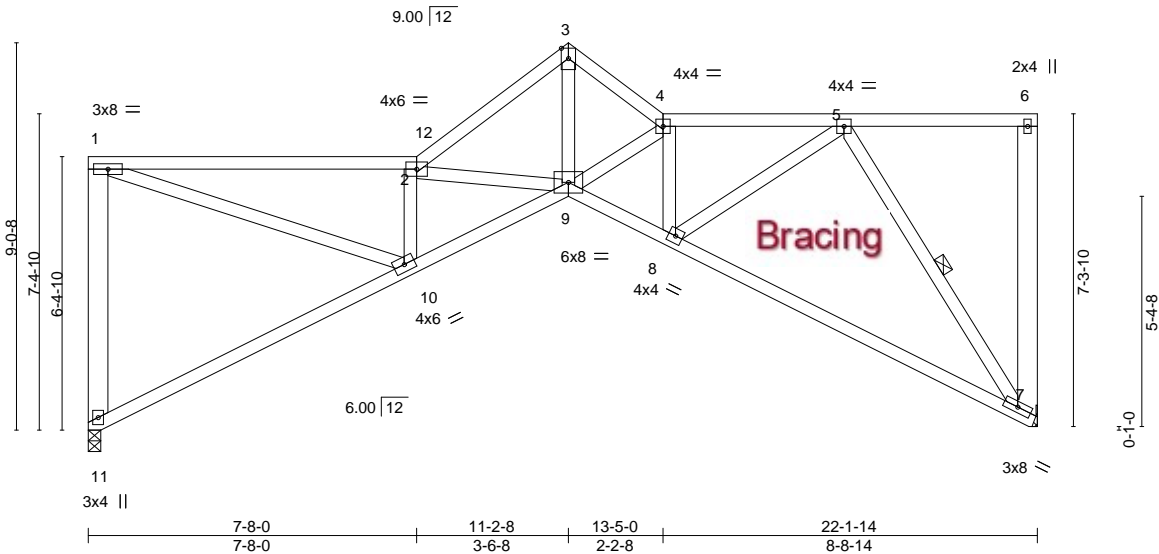
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:16 2023
Page 1

ID:?NVDGqIbCtvYSOv1NEucG6zi0DO-QU3YeUVjor_EaqK18Bp8SVmCMhroxXp2g4tfK6zOYFT

7-8-0
7-8-0
11-2-8
3-6-8
13-5-0
2-2-8
17-7-11
4-2-11
22-1-14
4-6-3

4x6 ||

Scale = 1:53.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.86	Vert(LL)	-0.18 7-8	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.99	Vert(CT)	-0.40 7-8	>647	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.80	Horz(CT)	0.29 7	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 152 lb	FT = 20%

LUMBER-			BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 1-2: 2x4 SP No.1		TOP CHORD	Structural wood sheathing directly applied or 2-11-12 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2		BOT CHORD	Rigid ceiling directly applied or 7-11-11 oc bracing.
WEBS	2x4 SP No.3 *Except* 1-11,6-7: 2x6 SP No.2		WEBS	1 Row at midpt 5-7

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Horz 11=59(LC 12)
Max Uplift 11=-188(LC 12), 7=-202(LC 13)
Max Grav 11=911(LC 1), 7=911(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-824/232, 1-2=-1860/407, 2-3=-1962/429, 3-4=-1911/443, 4-5=-1731/350
BOT CHORD 9-10=-550/2173, 8-9=-415/1976, 7-8=-172/777
WEBS 1-10=-418/1922, 2-10=-1363/370, 2-9=-459/149, 3-9=-449/2100, 4-9=-359/87, 4-8=-1067/283, 5-8=-252/1321, 5-7=-1190/283

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 11-2-8, Exterior(2E) 11-2-8 to 13-5-0, Interior(1) 13-5-0 to 21-11-2 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.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=188, 7=202.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-54, 3-4=-54, 4-6=-54, 9-11=-30(F=-10), 7-9=-30(F=-10)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

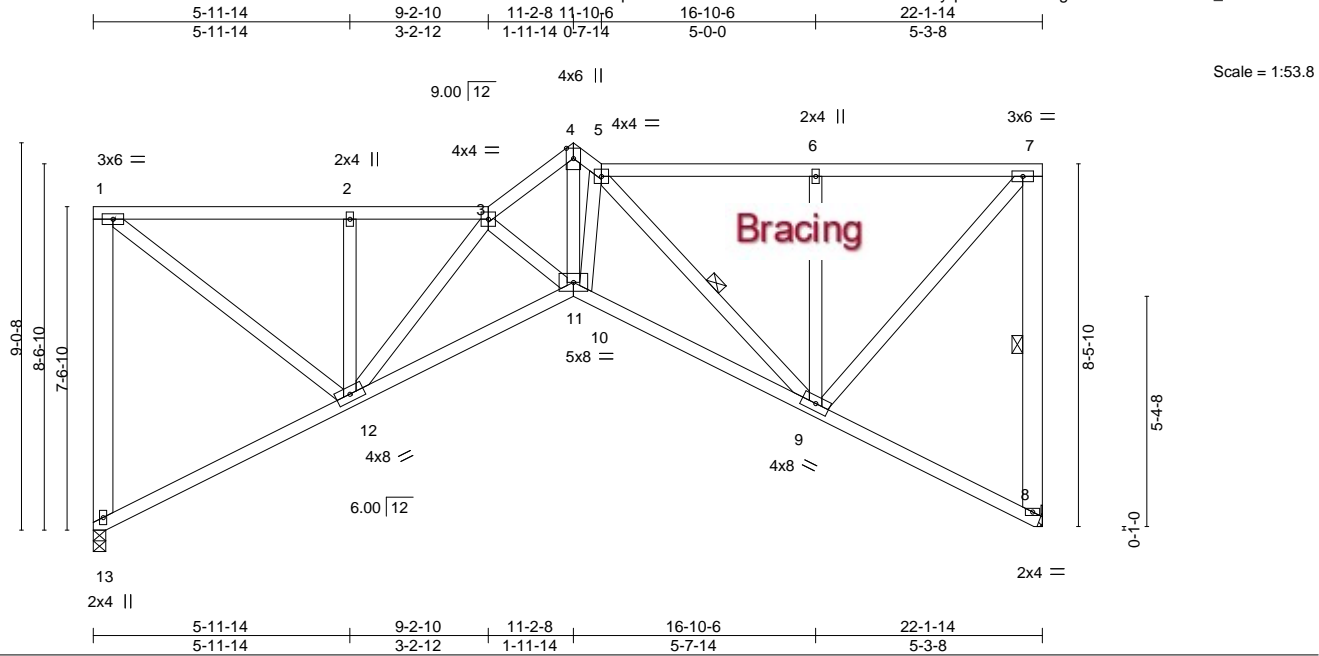
April 21,2023



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381997
3501826	T20	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:18 2023 Page 1
ID: ?NVDGqIbCtvYSOv1NEucG6zi0DO-MtBI3AXzKSEyq8UQGcscXwrgZVc3PS8K7OMmO_zOYFR



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.37	Vert(LL)	-0.11 9-10	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.62	Vert(CT)	-0.22 9-10	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.75	Horz(CT)	0.25 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 172 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-5 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-10-5 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 7-8, 5-9
1-13,7-8: 2x6 SP No.2	

REACTIONS.	(size) 13=0-3-8, 8=Mechanical
Max Horz	13=41(LC 12)
Max Uplift	13=192(LC 12), 8=210(LC 13)
Max Grav	13=911(LC 1), 8=911(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-13=-840/223, 1-2=-931/206, 2-3=-931/206, 3-4=-1931/398, 4-5=-1829/404, 5-6=-676/149, 6-7=-676/149, 7-8=-853/218
BOT CHORD	11-12=-449/1929, 10-11=-384/1804, 9-10=-382/1773
WEBS	1-12=-254/1151, 2-12=-312/147, 4-11=-410/1956, 5-9=-1340/323, 6-9=-330/154, 7-9=-219/997, 3-12=-1296/276

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 11-2-8, Exterior(2E) 11-2-8 to 11-10-6, Interior(1) 11-10-6 to 21-11-2 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.
 - Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=192, 8=210.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25	
Uniform Loads (plf)	
Vert: 1-3=-54, 3-4=-54, 4-5=-54, 5-7=-54, 11-13=-30(F=-10), 8-11=-30(F=-10)	

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381998
3501826	T21	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:20 2023 Page 1
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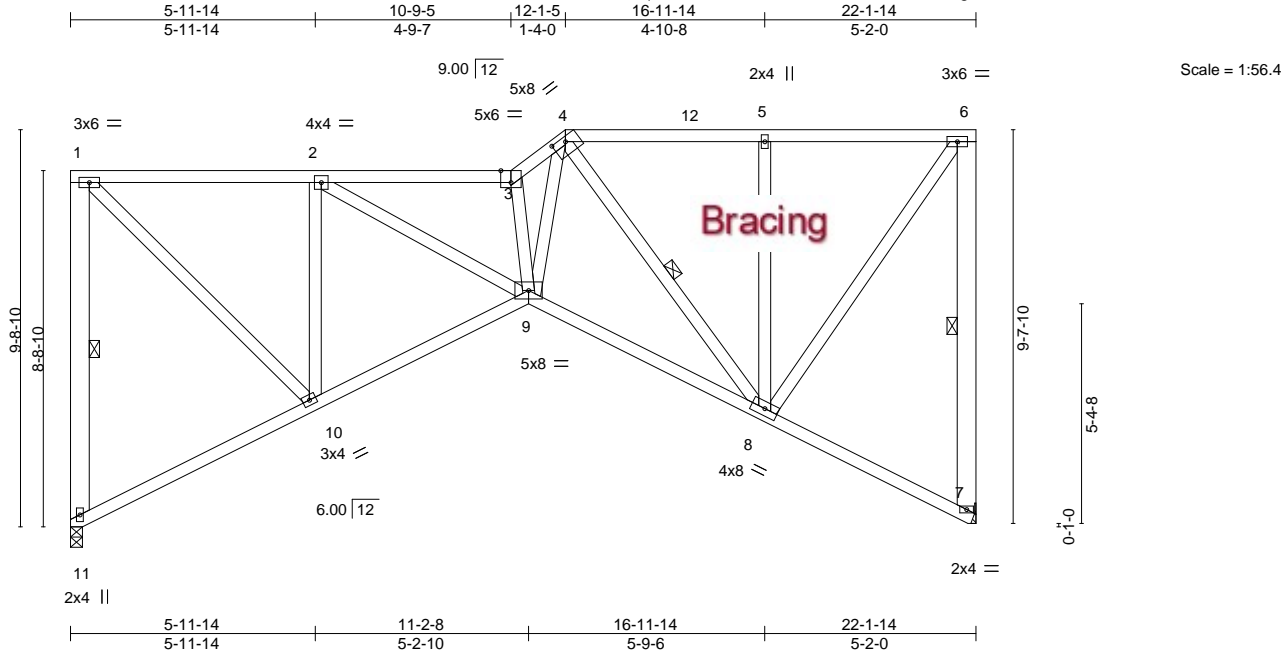


Plate Offsets (X,Y)-- [3:0-3-0,Edge], [4:0-4-0,0-1-6]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	-0.09 9 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.19 8-9 >999	180	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.19 7 n/a	n/a	
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 182 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-2-13 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* 1-11,6-7: 2x6 SP No.2	WEBS 1 Row at midpt 1-11, 6-7, 4-8

REACTIONS.	(size) 11=0-3-8, 7=Mechanical
	Max Horz 11=34(LC 12)
	Max Uplift 11=224(LC 8), 7=220(LC 8)
	Max Grav 11=911(LC 1), 7=911(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-11=840/232, 1-2=742/176, 2-3=1693/370, 3-4=1889/408, 4-5=543/127, 5-6=543/127, 6-7=856/227
BOT CHORD	9-10=232/858, 8-9=280/1280
WEBS	1-10=239/1014, 2-10=880/273, 2-9=224/1093, 3-9=1233/306, 4-9=419/1793, 4-8=988/258, 5-8=303/148, 6-8=213/915

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 12-1-5, Exterior(2R) 12-1-5 to 15-1-5, Interior(1) 15-1-5 to 21-11-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=224, 7=220.
 - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=54, 3-4=54, 4-6=54, 9-11=30(F=10), 7-9=30(F=-10)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30381999
3501826	T22	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023 MiTek Industries, Inc.
Fri Apr 21 08:48:21 2023
Page 1
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0-11-8
5-11-14
12-4-0
13-8-0
17-9-3
22-1-14
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5-0-6
6-4-2
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4-1-3
4-4-11

Scale = 1:64.7

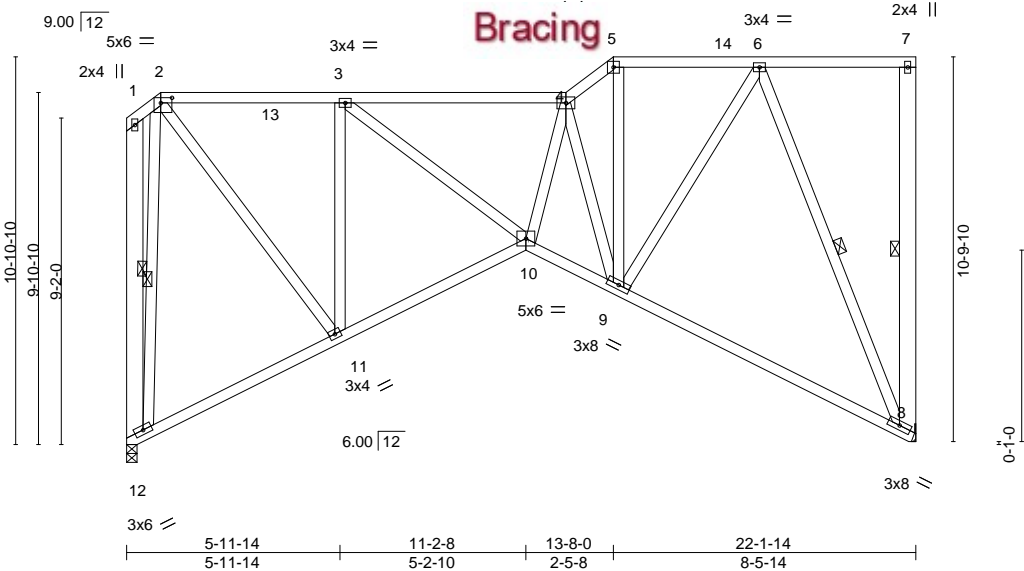


Plate Offsets (X,Y)--	[2:0-3-12,0-1-12]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.47	Vert(LL)	-0.15 8-9	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.82	Vert(CT)	-0.32 8-9	>805	180
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.71	Horz(CT)	0.13 8	n/a	n/a
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS				
						Weight: 211 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
7-8,1-12: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-8, 6-8, 1-12, 2-12

REACTIONS.

(size) 8=Mechanical, 12=0-3-8
Max Horz 12=54(LC 12)
Max Uplift 8=-215(LC 8), 12=-202(LC 8)
Max Grav 8=911(LC 1), 12=911(LC 1)

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

TOP CHORD 2-3=-618/169, 3-4=-1181/279, 4-5=-956/209, 5-6=-750/175
BOT CHORD 10-11=-232/710, 9-10=-310/1178, 8-9=-107/462
WEBS 2-11=-219/914, 3-11=-810/263, 3-10=-142/717, 4-10=-151/445, 4-9=-1228/384,
5-9=-98/436, 6-9=-179/743, 6-8=-946/244, 2-12=-797/225

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 0-11-8, Exterior(2R) 0-11-8 to 3-11-8, Interior(1) 3-11-8 to 13-8-0, Exterior(2R) 13-8-0 to 16-8-0, Interior(1) 16-8-0 to 21-11-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=215, 12=202.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-54, 4-5=-54, 5-7=-54, 10-12=-30(F=-10), 8-10=-30(F=-10)

This item has been electronically signed and sealed by ORegan, Philip, 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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382000
3501826	T23	Roof Special	1	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

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MiTek Industries, Inc.
Fri Apr 21 08:48:23 2023
Page 1

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1-10-0
1-10-0

5-11-14
4-1-14

11-2-8
5-2-10

13-2-8
2-0-0

14-6-8
1-4-0

22-1-14
7-7-6

2x4 ||

6x8 =

3x8 =

9.00 | 12

5x6 =

3x4 =

2x4 ||

2

3

14

11

5x8 = 10

4x4 =

12

3x4 =

6.00 | 12

13

3x6 =

5-11-14
5-11-14

11-2-8
5-2-10

13-2-8
2-0-0

17-4-9
4-2-1

22-1-14
4-9-5

11-6-8
10-6-8
9-2-0

11-5-8
5-4-8
0-1-0

Scale = 1:68.4

Plate Offsets (X,Y)--		[2:0-3-12,0-1-12], [6:0-5-12,0-1-12]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	-0.07 11 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.13 11-12 >999	180	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.14 8 n/a	n/a	
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 225 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-1 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* 7-8,1-13: 2x6 SP No.2	WEBS 1 Row at midpt 7-8, 6-9, 1-13, 2-13

REACTIONS. (size) 8=Mechanical, 13=0-3-8
Max Horz 13=77(LC 12)
Max Uplift 8=-211(LC 8), 13=-192(LC 12)
Max Grav 8=911(LC 1), 13=911(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-551/174, 3-4=-1056/288, 4-5=-1056/288, 5-6=-957/249, 6-7=-353/84, 7-8=-856/218
BOT CHORD 11-12=-237/637, 10-11=-256/922, 9-10=-189/711
WEBS 2-12=-196/839, 3-12=-744/240, 3-11=-154/683, 4-11=-267/123, 5-11=-243/621, 5-10=-1041/359, 6-10=-326/1051, 6-9=-855/270, 7-9=-178/743, 2-13=-860/223

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 1-10-0, Exterior(2R) 1-10-0 to 4-10-0, Interior(1) 4-10-0 to 14-6-8, Exterior(2R) 14-6-8 to 17-6-8, Interior(1) 17-6-8 to 21-11-2 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.
 - Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=211, 13=192.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).


LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25


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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Continued on page 2


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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382000
3501826	T23	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:23 2023 Page 2
ID:?NVDGqlbCtvYSOv1NEucG6zi0DO-jq_B6tb68?sFwvMN39RnEzYRzWM84ho3Hf4X4CzOYFM

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-54, 2-5=-54, 5-6=-54, 6-7=-54, 11-13=-30(F=-10), 8-11=-30(F=-10)

 **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	IC CONST - YOUNG RES.	T30382001
3501826	T24	Half Hip	1	1	Job Reference (optional)	

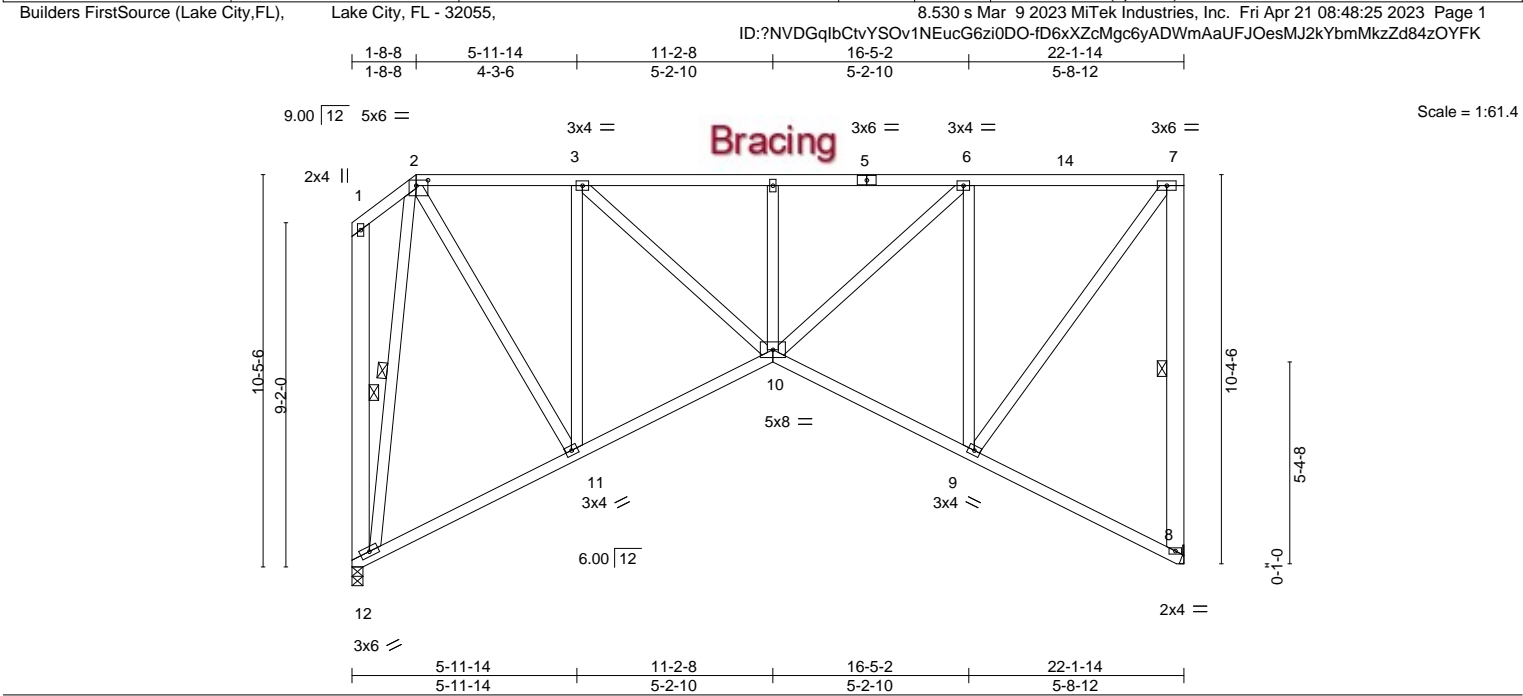


Plate Offsets (X,Y)--		[2:0-3-12,0-1-12]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.34	Vert(LL)	-0.05	10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.10	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 202 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-5 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*	WEBS 1 Row at midpt 7-8, 1-12, 2-12
7-8,1-12: 2x6 SP No.2	

REACTIONS.	(size) 8=Mechanical, 12=0-3-8
	Max Horz 12=39(LC 12)
	Max Uplift 8=-256(LC 9), 12=-215(LC 9)
	Max Grav 8=911(LC 1), 12=911(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-558/169, 3-4=-1084/317, 4-6=-1084/317, 6-7=-546/154, 7-8=-843/264
BOT CHORD	10-11=-194/652, 9-10=-177/640
WEBS	2-11=-221/843, 3-11=-753/267, 3-10=-198/706, 4-10=-272/131, 6-10=-218/722, 6-9=-796/298, 7-9=-252/891, 2-12=-857/241

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 1-8-8, Exterior(2R) 1-8-8 to 5-11-14, Interior(1) 5-11-14 to 21-11-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=256, 12=215.
 - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced):	Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)	
	Vert: 1-2=-54, 2-7=-54, 10-12=-30(F=-10), 8-10=-30(F=-10)

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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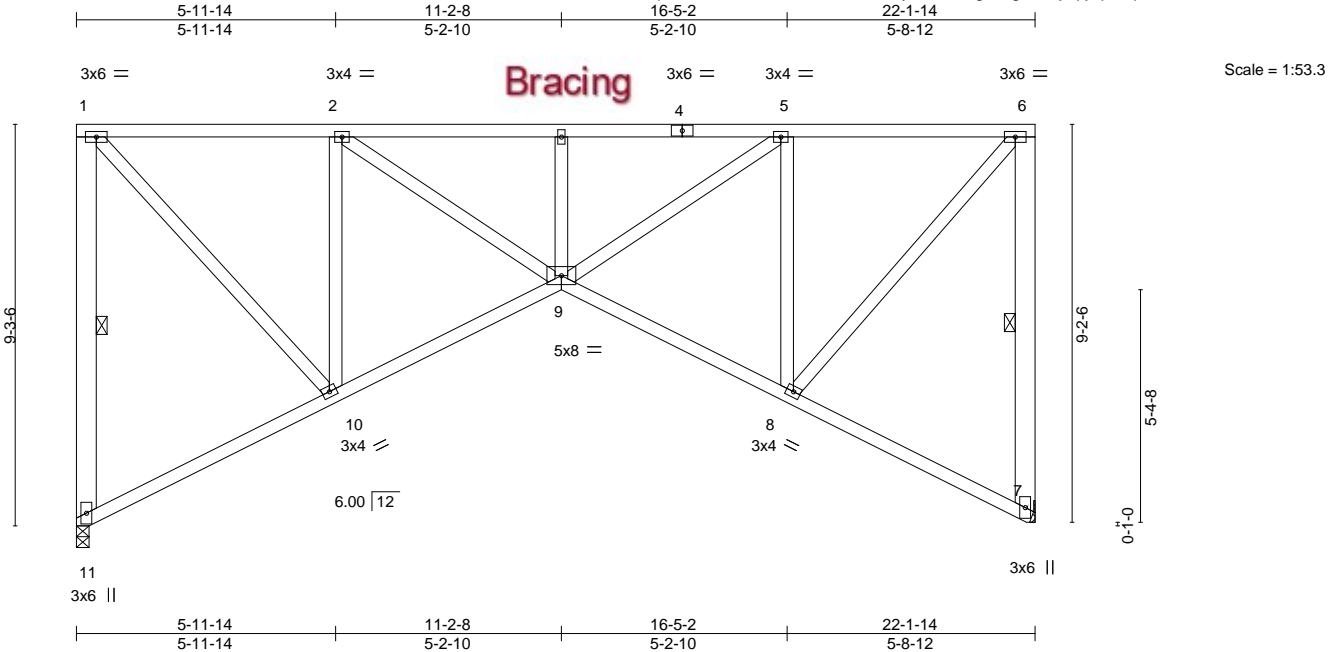


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382002
3501826	T25	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:27 2023
Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.40	Vert(LL)	-0.07 9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.44	Vert(CT)	-0.13 8-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.74	Horz(CT)	0.13 7	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 174 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
1-11,6-7: 2x6 SP No.2

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Uplift 11=247(LC 8), 7=247(LC 8)
Max Grav 11=911(LC 1), 7=911(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-840/535, 1-2=-672/392, 2-3=-1437/844, 3-5=-1437/844, 5-6=-651/380,
6-7=-844/535
BOT CHORD 9-10=-438/779, 8-9=-424/756
WEBS 1-10=-562/963, 2-10=-843/603, 2-9=-545/923, 3-9=-256/234, 5-9=-560/948,
5-8=-848/604, 6-8=-559/958

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=247, 7=247.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-6=-54, 9-11=-30(F=-10), 7-9=-30(F=-10)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-9 oc bracing.
WEBS 1 Row at midpt 1-11, 6-7

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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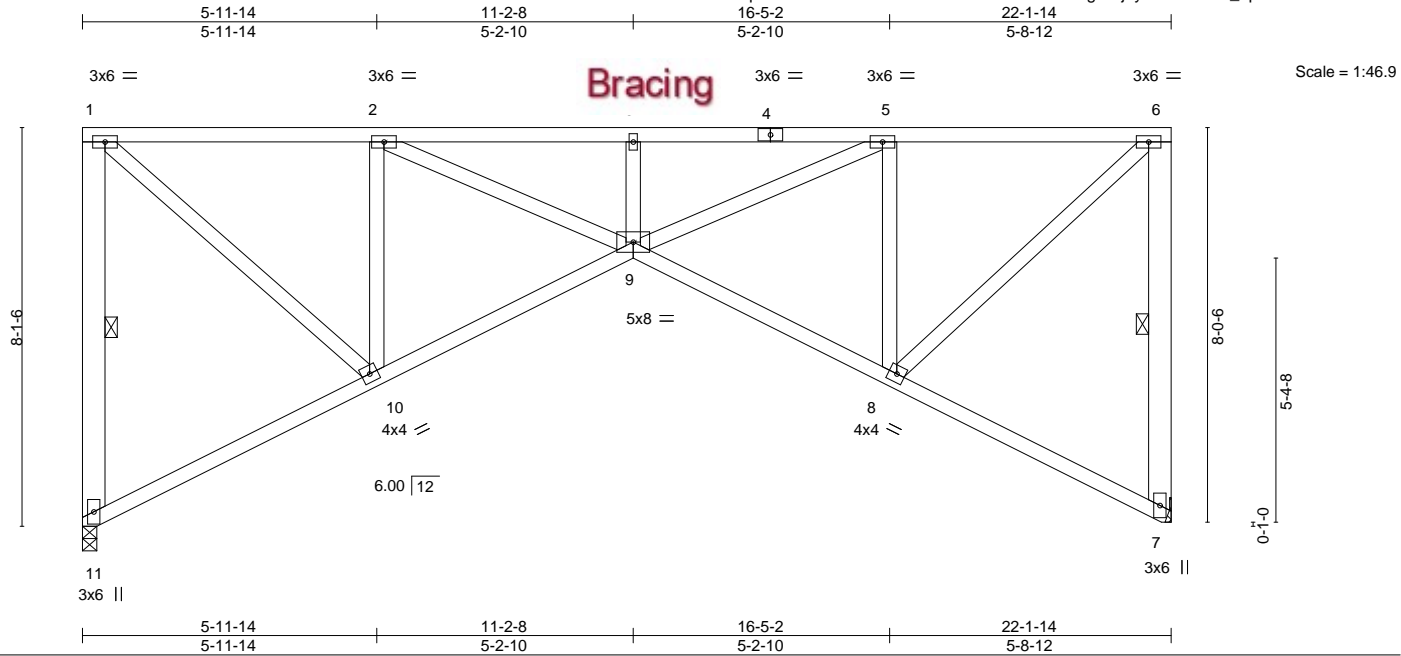
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382003
3501826	T26	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:28 2023 Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.48	Vert(LL)	0.12 9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.20 8-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.67	Horz(CT)	0.22 7	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 159 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-10 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-0-10 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 1-11, 6-7
1-11,6-7: 2x6 SP No.2	

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Uplift 11=247(LC 8), 7=247(LC 8)
Max Grav 11=911(LC 1), 7=911(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-841/536, 1-2=-831/485, 2-3=-2138/1256, 3-5=-2138/1256, 5-6=-805/470, 6-7=-845/536
BOT CHORD 9-10=-541/949, 8-9=-524/921
WEBS 1-10=-629/1078, 2-10=-920/648, 2-9=-846/1434, 5-9=-863/1462, 5-8=-924/648, 6-8=-622/1067

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=247, 7=247.
 - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-6=-54, 9-11=-30(F=-10), 7-9=-30(F=-10)

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Date:

April 21,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382004
3501826	T27	Flat Girder	1	1	Job Reference (optional)	

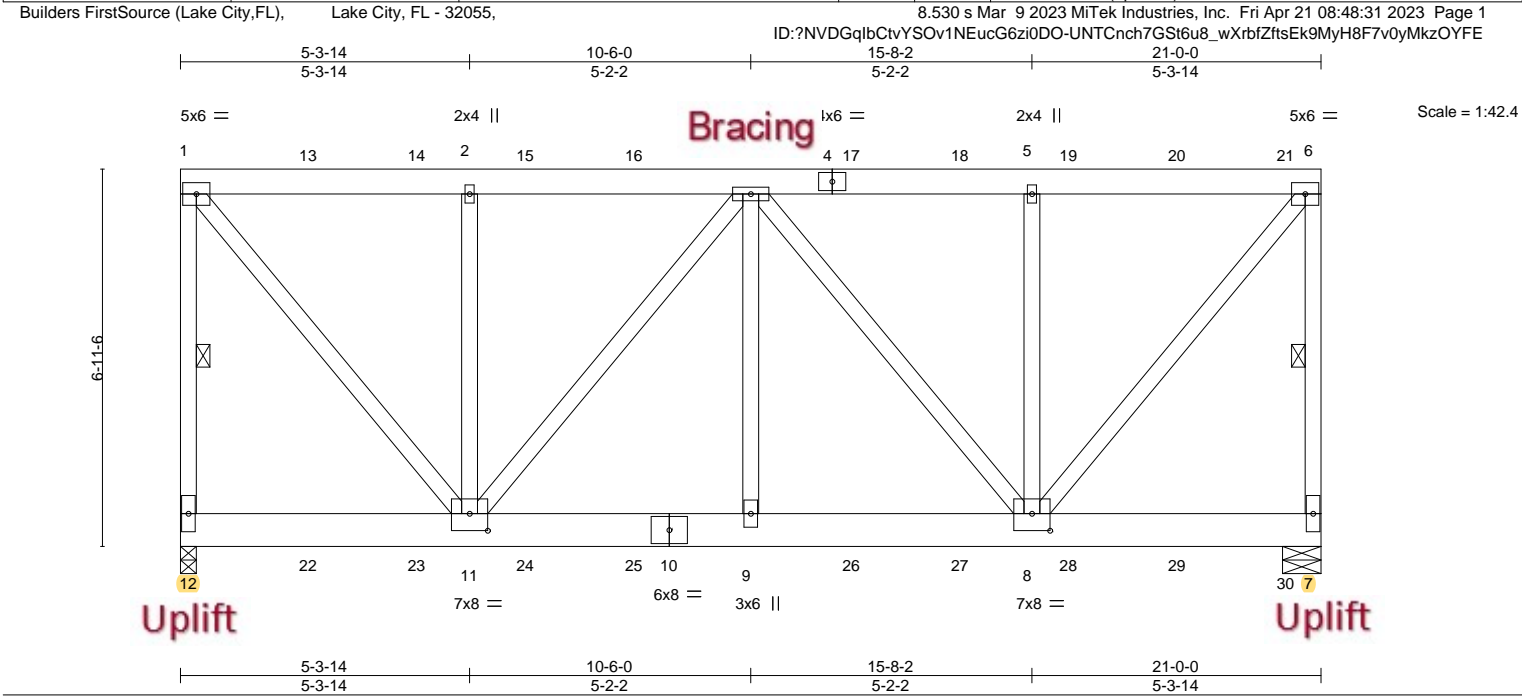


Plate Offsets (X,Y)-- [8:0-4-0,0-3-12], [11:0-4-0,0-3-12]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.06	9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.11	9-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 203 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 1-12, 6-7
REACTIONS.	
(size) 12=0-3-8, 7=0-8-8	
Max Uplift 12=806(LC 4), 7=812(LC 4)	
Max Grav 12=2478(LC 1), 7=2207(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-12=-2018/688, 1-2=-1442/475, 2-3=-1442/475, 3-5=-1367/491, 5-6=-1367/491, 6-7=-1904/708
BOT CHORD	9-11=-637/1856, 8-9=-637/1856
WEBS	1-11=-751/2280, 2-11=-471/209, 3-11=-661/258, 3-9=-183/682, 3-8=-779/233, 5-8=-488/234, 6-8=-776/2162

- NOTES-**
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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) 12=806, 7=812.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 41 lb up at 0-1-12, 92 lb down and 39 lb up at 2-4-4, 92 lb down and 39 lb up at 4-4-4, 92 lb down and 39 lb up at 6-4-4, 92 lb down and 39 lb up at 8-4-4, 92 lb down and 39 lb up at 10-4-4, 94 lb down and 46 lb up at 12-4-4, 94 lb down and 46 lb up at 14-4-4, 94 lb down and 46 lb up at 16-4-4, and 94 lb down and 46 lb up at 18-4-4, and 89 lb down and 49 lb up at 20-4-4 on top chord, and 260 lb down and 87 lb up at 0-1-12, 252 lb down and 95 lb up at 2-4-4, 252 lb down and 95 lb up at 4-4-4, 252 lb down and 95 lb up at 6-4-4, 252 lb down and 95 lb up at 8-4-4, 252 lb down and 95 lb up at 10-4-4, 176 lb down and 96 lb up at 12-4-4, 176 lb down and 96 lb up at 14-4-4, 176 lb down and 96 lb up at 16-4-4, and 176 lb down and 96 lb up at 18-4-4, and 181 lb down and 91 lb up at 20-4-4 on bottom 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).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Continued on page 2	<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</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 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</p>	<p>MiTek</p> <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382004
3501826	T27	Flat Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:31 2023 Page 2
ID:?NVDGqIbCtvYSOv1NEucG6zi0DO-UNTCnch7GSt6u8_wXrbfZftsEk9MyH8F7v0yMkzOYFE

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-6=-54, 7-12=-20

Concentrated Loads (lb)

Vert: 12=-260(F) 1=-85(F) 9=-252(F) 3=-64(F) 13=-64(F) 14=-64(F) 15=-64(F) 16=-64(F) 17=-66(F) 18=-66(F) 19=-66(F) 20=-66(F) 21=-79(F) 22=-252(F) 23=-252(F) 24=-252(F) 25=-252(F) 26=-176(F) 27=-176(F) 28=-176(F) 29=-176(F) 30=-181(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382005
3501826	T28	Jack-Closed	6	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:33 2023
Page 1

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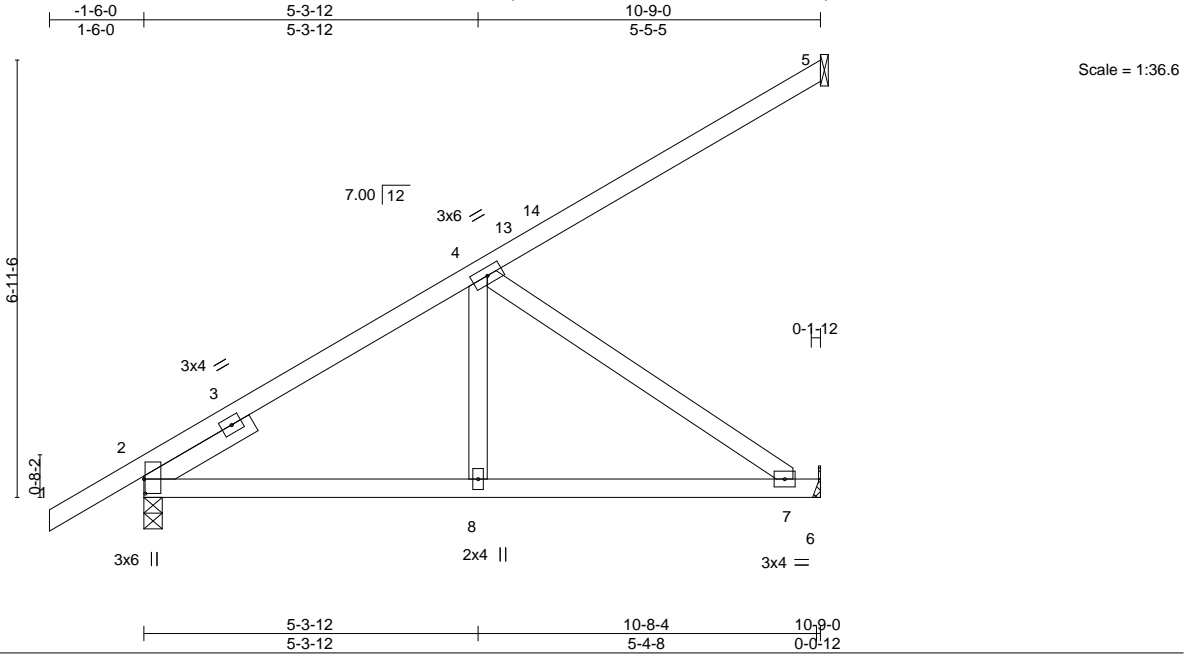


Plate Offsets (X,Y)--		[2:0-2-12,0-0-4]																	
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL 20.0		Plate Grip DOL		1.25		TC 0.32		Vert(LL)		-0.04		7-8		>999		240		MT20 244/190	
TCDL 7.0		Lumber DOL		1.25		BC 0.38		Vert(CT)		-0.09		7-8		>999		180			
BCLL 0.0 *		Rep Stress Incr		YES		WB 0.33		Horz(CT)		0.01		6		n/a		n/a			
BCDL 10.0		Code FBC2020/TPI2014				Matrix-MS													
																		Weight: 54 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.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 1-11-8	

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=212(LC 12)
Max Uplift 5=-50(LC 14), 2=-74(LC 12), 6=-75(LC 12)
Max Grav 5=122(LC 19), 2=482(LC 1), 6=283(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-361/21
BOT CHORD 2-8=-157/380, 7-8=-157/380
WEBS 4-8=0/261, 4-7=-462/191

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 10-8-4 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) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.

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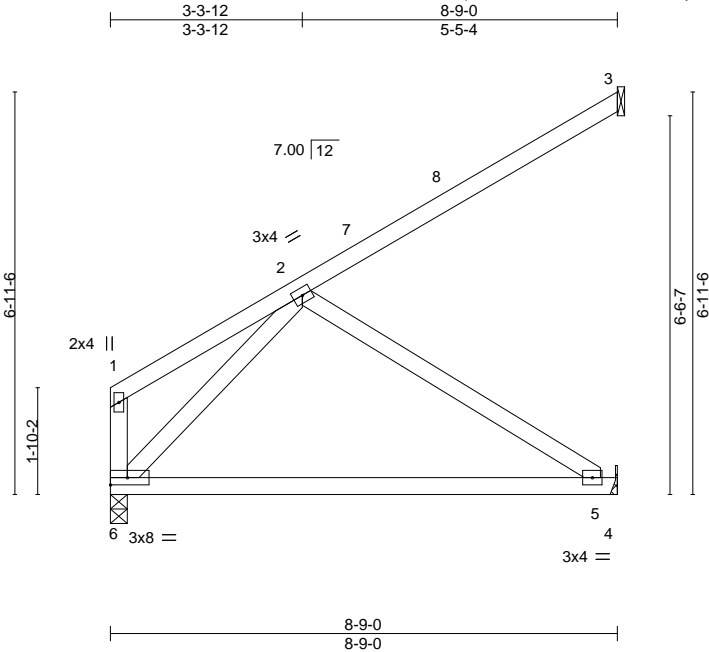
Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.
3501826	T29	Jack-Partial	5	1	T30382006
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023 MiTek Industries, Inc.
Fri Apr 21 08:48:34 2023
Page 1

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LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.61	Vert(LL)	-0.23	5-6	>442	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.80	Vert(CT)	-0.47	5-6	>218	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014		Matrix-MS						Weight: 46 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 6=0-3-8
Max Horz 6=155(LC 12)
Max Uplift 3=-57(LC 12), 4=-76(LC 12), 6=-10(LC 12)
Max Grav 3=125(LC 19), 4=210(LC 19), 6=316(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-3-12, Interior(1) 3-3-12 to 8-8-4 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.
- 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.
- 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) 3, 4, 6.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

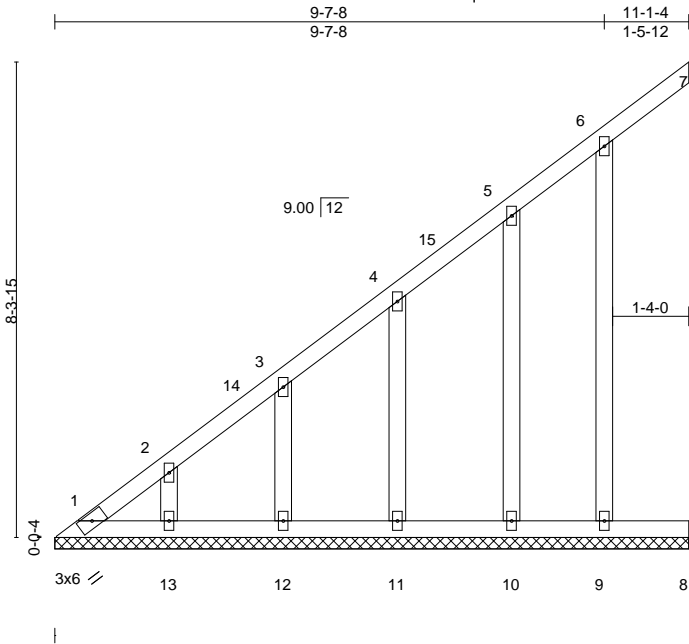
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382007
3501826	V01	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:36 2023
Page 1
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Scale = 1:40.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	-0.00	7	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						
								Weight: 65 lb	FT = 20%

LUMBER-

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

REACTIONS.

All bearings 11-1-4.
(lb) - Max Horz 1=235(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 12, 11, 10, 9
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 13, 12, 11, 10, 9

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

TOP CHORD 1-2=-342/168, 2-3=-286/138

NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 11-1-4 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.
- 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.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 13, 12, 11, 10, 9.

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.

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.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.
3501826	V02	Valley	1	1	T30382008
Job Reference (optional)					

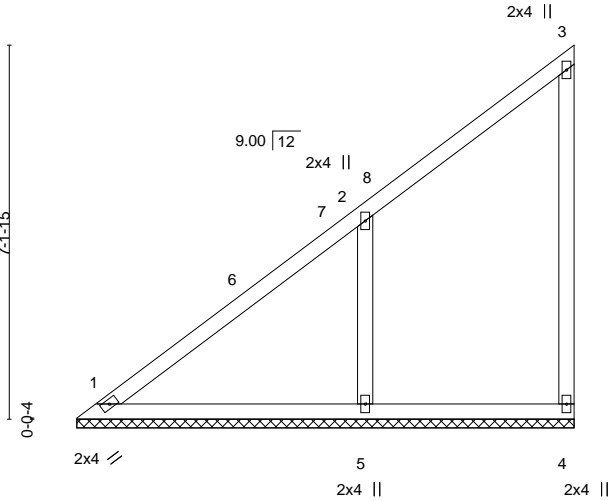
Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:37 2023
Page 1

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Scale = 1:44.1



LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.29		Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.23		Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09		Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 46 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=9-6-4, 4=9-6-4, 5=9-6-4
Max Horz 1=205(LC 12)
Max Uplift 4=-30(LC 14), 5=-194(LC 12)
Max Grav 1=179(LC 21), 4=146(LC 19), 5=559(LC 19)

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

TOP CHORD 1-2=-265/140
WEBS 2-5=-322/283

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 9-4-13 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=194.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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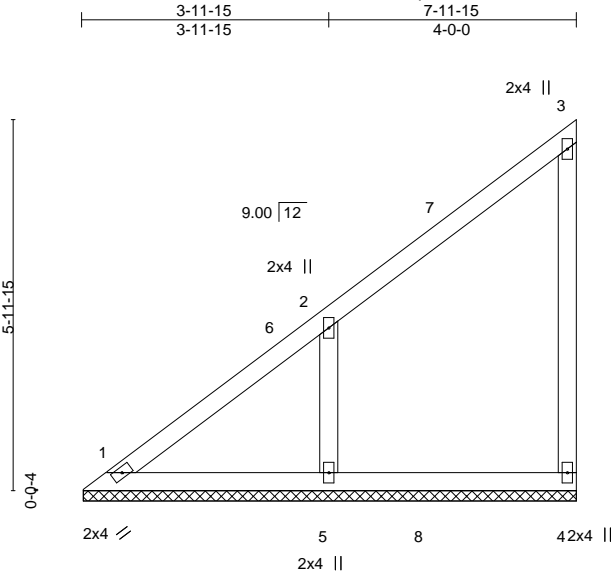
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.
3501826	V03	Valley	1	1	T30382009
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,

8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:39 2023
Page 1

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Scale = 1:37.2

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.18		Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.15		Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08		Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 38 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=7-11-9, 4=7-11-9, 5=7-11-9
Max Horz 1=177(LC 12)
Max Uplift 4=-39(LC 12), 5=-168(LC 12)
Max Grav 1=134(LC 21), 4=167(LC 19), 5=435(LC 19)

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

TOP CHORD 1-2=-255/125
WEBS 2-5=-260/263

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 7-10-3 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=168.

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Philip J. O'Regan PE No.58126
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

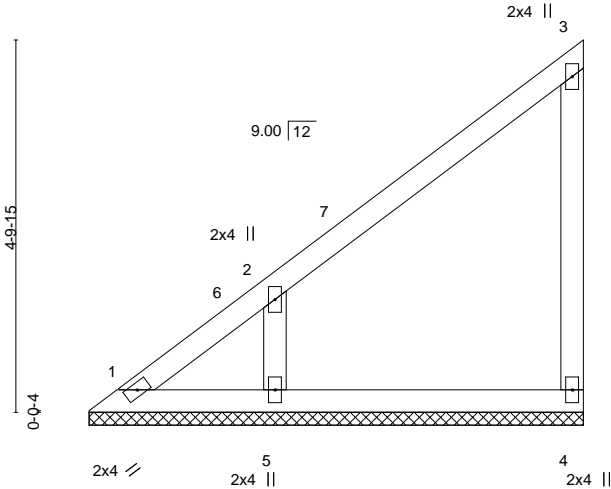
Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.
3501826	V04	Valley	1	1	T30382010
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:41 2023
Page 1

ID:~NVDGqIbCtvYSOv1NEucG6zi0DO-BI4_u1pPvX7h4gr6xm?zmle?mbDI?EjQTRUi9zOYF4



Scale = 1:29.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00		n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-P						
									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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=6-4-15, 4=6-4-15, 5=6-4-15
Max Horz 1=151(LC 12)
Max Uplift 1=-24(LC 10), 4=-62(LC 12), 5=-156(LC 12)
Max Grav 1=101(LC 12), 4=123(LC 19), 5=312(LC 19)

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

TOP CHORD 1-2=-260/127
WEBS 2-5=-233/272

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 6-3-8 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, 4 except (jt=lb) 5=156.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

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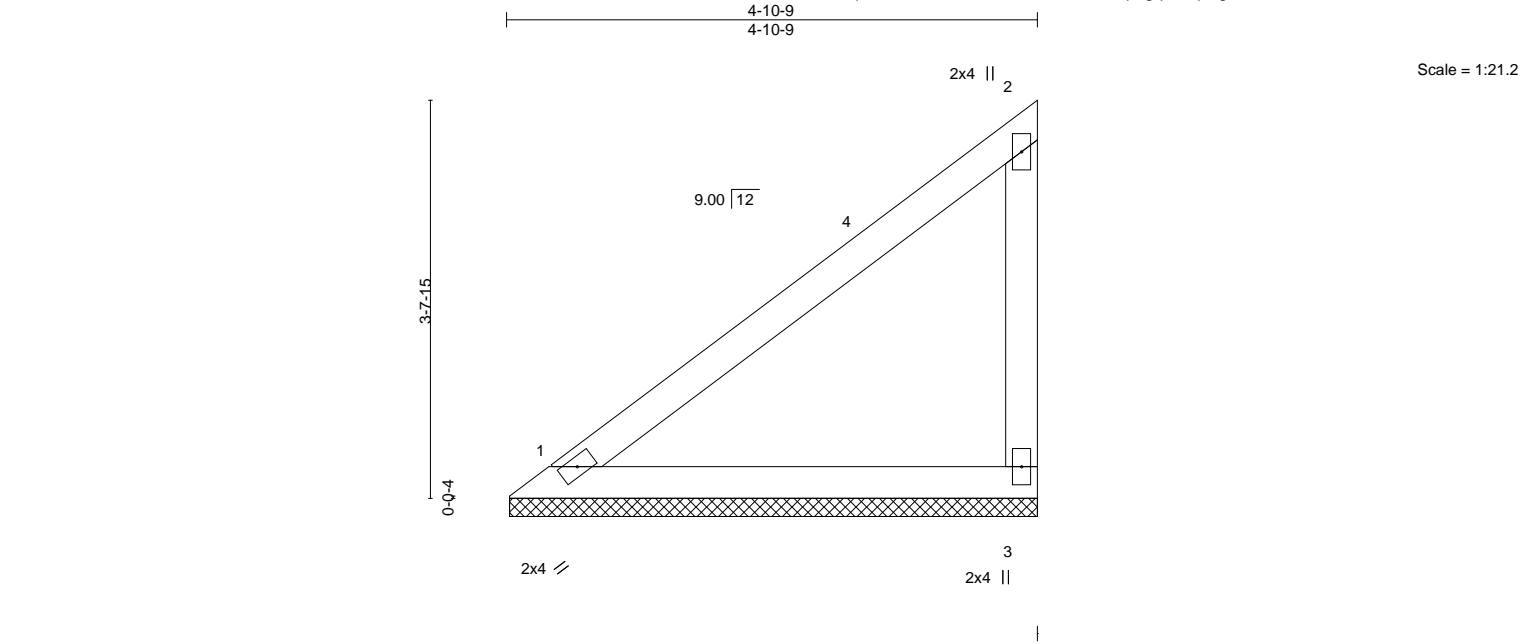


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.
3501826	V05	Valley	1	1	T30382011
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:42 2023
Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.34	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.22	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a	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 4-10-9 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		

REACTIONS. (size) 1=4-10-4, 3=4-10-4
Max Horz 1=111(LC 12)
Max Uplift 1=-1(LC 12), 3=-85(LC 12)
Max Grav 1=159(LC 1), 3=169(LC 19)

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

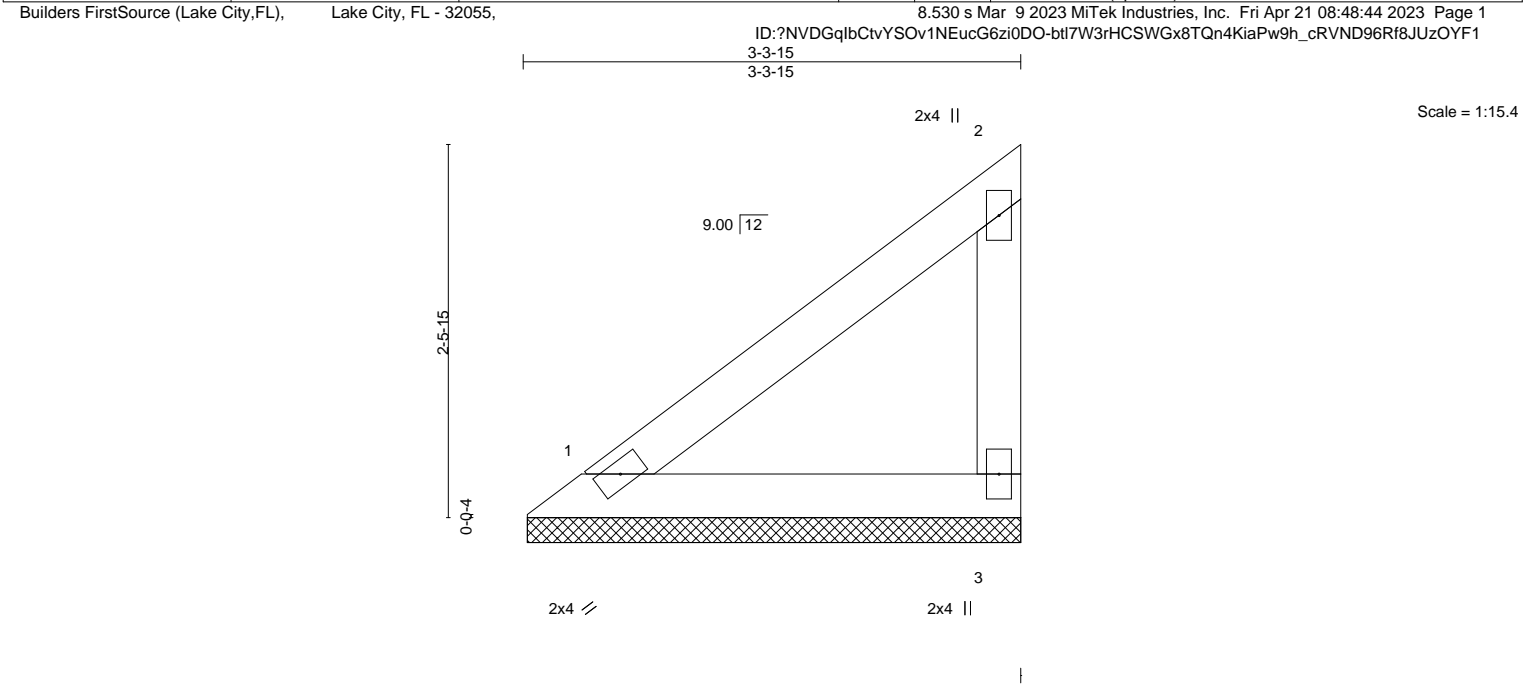
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 4-8-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber 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.

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Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.
3501826	V06	Valley	1	1	T30382012
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,					8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:44 2023 Page 1
ID: ?NVDGqIbCivYSOv1NEucG6zi0DO-btl7W3rHCSWGx8TQn4KiaPw9h_cRVND96Rf8JUzOYF1					Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.14	Vert(LL)	n/a -	n/a	999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.08	Vert(CT)	n/a -	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-P					Weight: 13 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD 2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 3-3-15 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			

REACTIONS. (size) 1=3-3-9, 3=3-3-9
 Max Horz 1=71(LC 12)
 Max Uplift 1=-1(LC 12), 3=-54(LC 12)
 Max Grav 1=102(LC 1), 3=108(LC 19)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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.

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 16023 Swingley Ridge Rd. Chesterfield, MO 63017
 Date:

April 21,2023



Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382013
3501826	V07	GABLE	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:45 2023 Page 1

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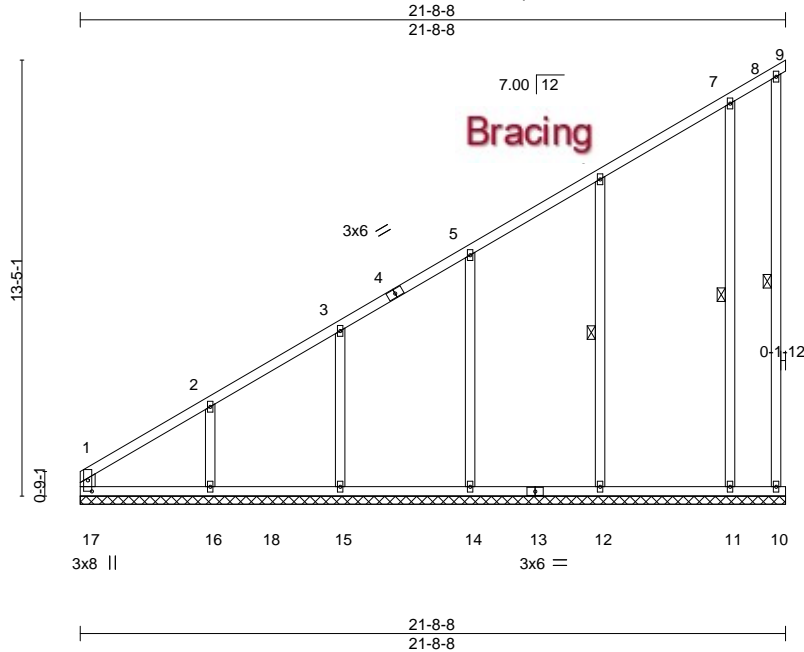


Plate Offsets (X,Y)-- [17:0-4-1,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP			
TCLL	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.27	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	-0.05	9	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014		Matrix-R						Weight: 143 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x6 SP No.2 *Except*
 8-10: 2x4 SP No.2
 OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 8-10, 6-12, 7-11

REACTIONS.

All bearings 21-8-8.
 (lb) - Max Horz 17=431(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 17, 9, 10, 15, 11 except 16=242(LC 12), 14=133(LC 12), 12=131(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 9, 10 except 17=287(LC 12), 16=434(LC 19), 15=409(LC 19), 14=426(LC 19), 12=441(LC 19), 11=336(LC 19)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-486/278, 2-3=-368/209, 3-5=-281/163
 WEBS 2-16=-256/207

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 21-8-8 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 9, 10, 15, 11 except (jt=lb) 16=242, 14=133, 12=131.

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Philip J. O'Regan PE No.58126
 MiTek Inc. DBA MiTek USA FL Cert 6634
 16023 Swingley Ridge Rd. Chesterfield, MO 63017
 Date:

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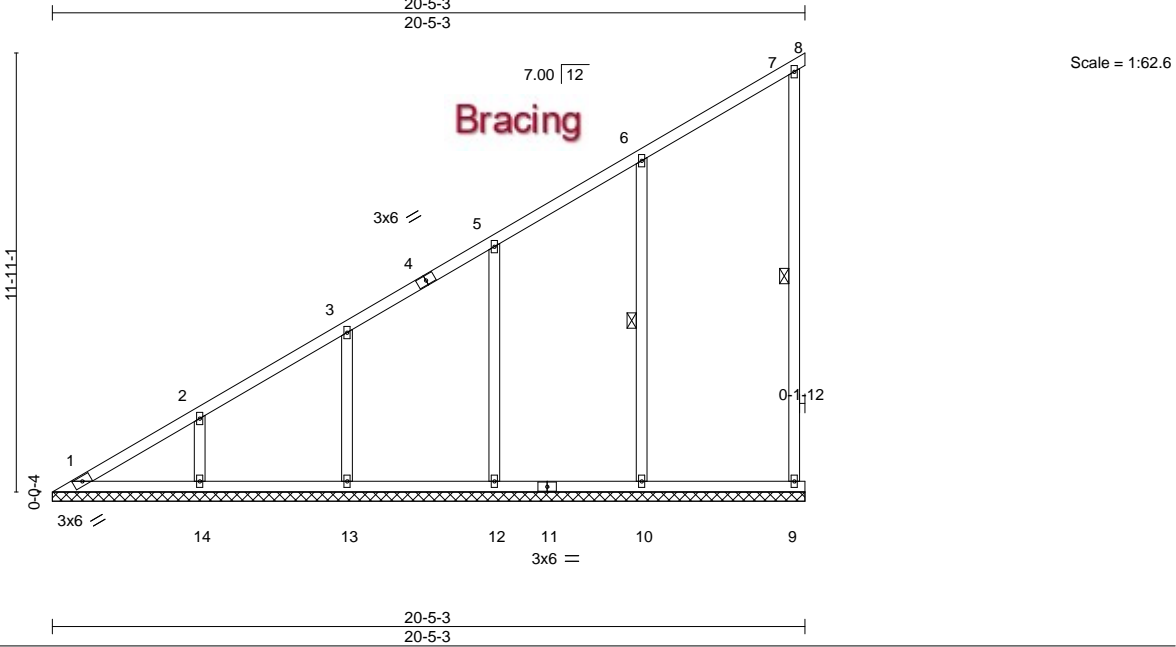
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.
3501826	V08	GABLE	2	1	T30382014
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,					8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Apr 21 08:48:47 2023 Page 1
ID: ?NVDGqIbCtvYSov1NEucG6zi0DO-0SRG84tAVNurobC_TCtPC1YgKBcGii2coOuowpzOYF_					Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	-0.01	8	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S					Weight: 113 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 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	WEBS 1 Row at midpt 7-9, 6-10
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 20-5-3.
(lb) - Max Horz 1=399(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 8, 1 except 9=125(LC 12), 14=132(LC 12), 13=127(LC 12), 12=125(LC 12), 10=137(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 8, 1 except 9=284(LC 19), 14=376(LC 19), 13=396(LC 19), 12=417(LC 19), 10=473(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=434/247, 2-3=343/195

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 20-5-3 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 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, with BCDL = 10.0psf.
 - 7) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 1 except (jt=lb) 9=125, 14=132, 13=127, 12=125, 10=137.

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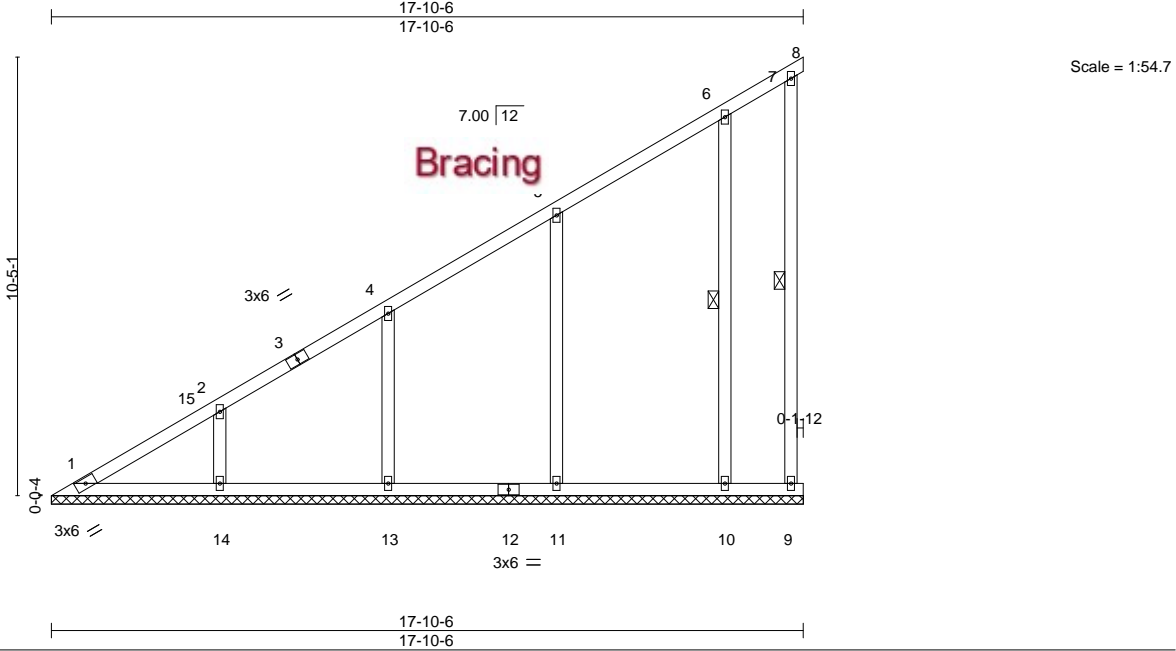


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382015
3501826	V09	GABLE	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:48 2023
Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.18	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	-0.01	8	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						
								Weight: 102 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt
OTHERS	2x4 SP No.3		7-9, 6-10

REACTIONS. All bearings 17-10-6.

(lb) - Max Horz 1=348(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 1 except 14=133(LC 12), 13=125(LC 12), 11=132(LC 12), 10=103(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 8, 9, 1 except 14=378(LC 19), 13=389(LC 19), 11=446(LC 19), 10=337(LC 19)

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

TOP CHORD 1-2=375/216, 2-4=284/164

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 17-10-6 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) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 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, with BCDL = 10.0psf.
 - 7) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 1 except (jt=lb) 14=133, 13=125, 11=132, 10=103.

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Date:

April 21,2023

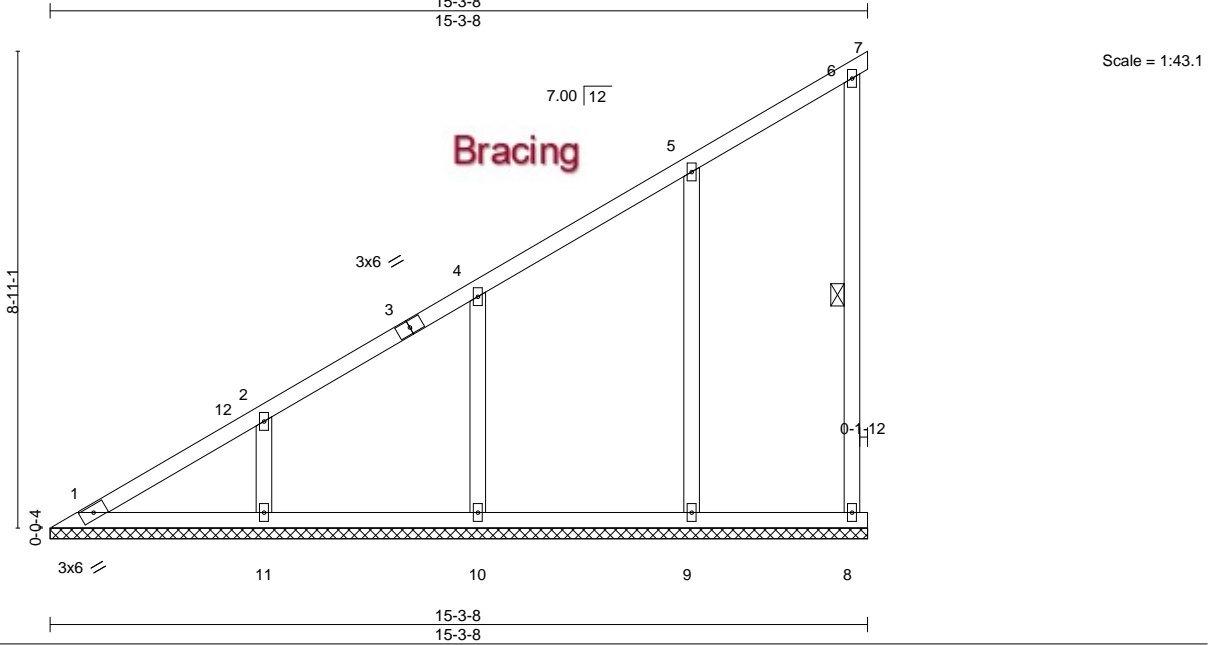


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382016
3501826	V10	GABLE	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:50 2023
Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.15	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	-0.01	7	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						
								Weight: 79 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS.

All bearings 15-3-8.
(lb) - Max Horz 1=296(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8 except 11=132(LC 12), 10=128(LC 12), 9=119(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7, 8, 1 except 11=375(LC 19), 10=399(LC 19), 9=409(LC 19)

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

TOP CHORD 1-2=-315/194

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 15-3-8 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8 except (jt=lb) 11=132, 10=128, 9=119.

This item has been electronically signed and sealed by O'Regan, Philip, 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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023

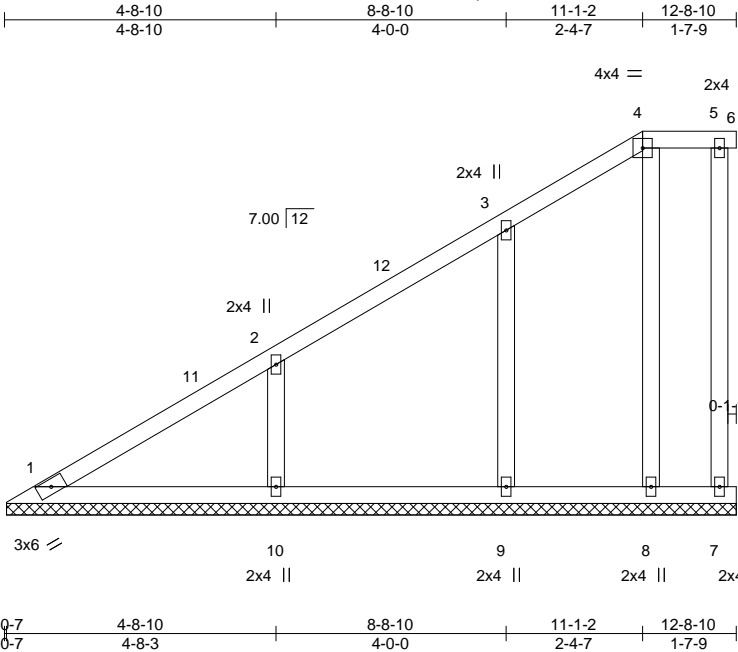
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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	IC CONST - YOUNG RES.	T30382017
3501826	V11	Valley	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:52 2023
Page 1
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.14	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	-0.00	6	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						
								Weight: 67 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 12-8-3.
(lb) - Max Horz 1=212(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8 except 9=-104(LC 12), 10=-152(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 7, 8 except 9=317(LC 19), 10=436(LC 19)

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

WEBS 2-10=-265/173

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 11-1-2, Exterior(2E) 11-1-2 to 12-8-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 8 except (jt=lb) 9=104, 10=152.

This item has been electronically signed and sealed by ORegan, Philip, 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.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 21,2023



Job	Truss	Truss Type	Qty	Ply	IC CONST - YOUNG RES.	T30382018
3501826	V12	Valley	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Mar 9 2023
MiTek Industries, Inc.
Fri Apr 21 08:48:53 2023
Page 1

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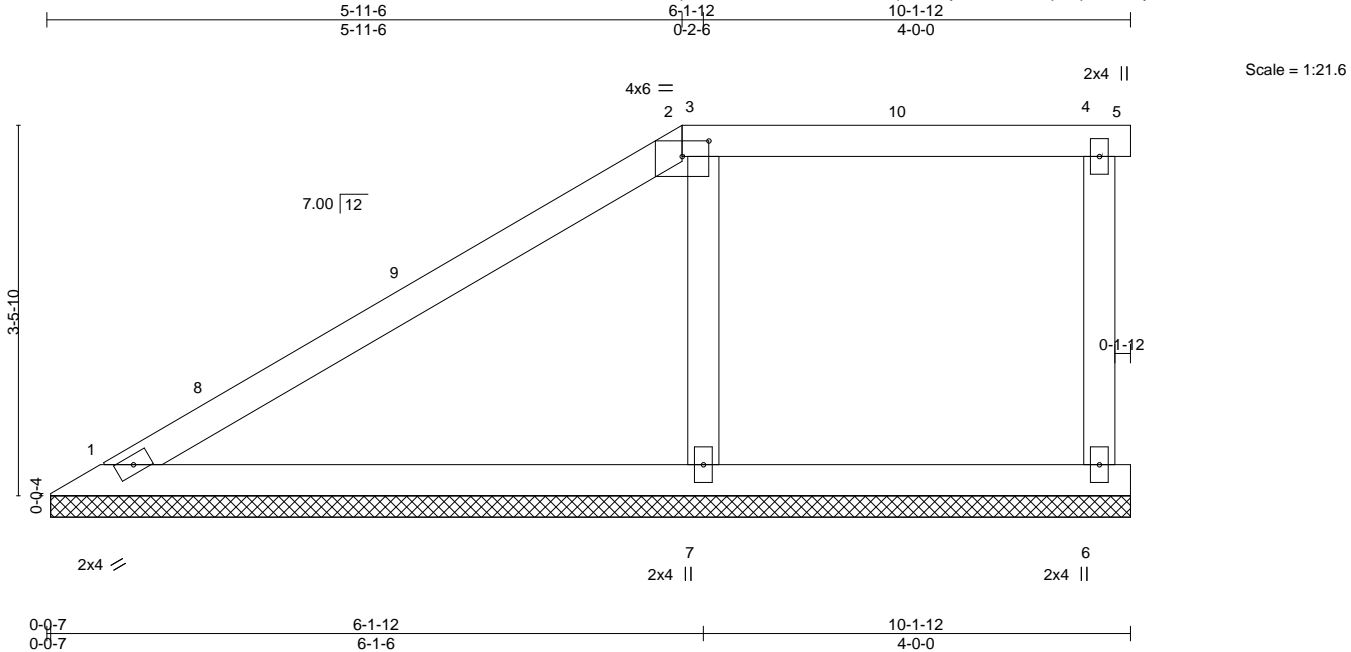


Plate Offsets (X,Y)--		[2:0-3-0,0-1-12]					
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.34	in (loc)	l/defl L/d
TCDL	7.0	Lumber DOL	1.25	BC	0.25	n/a -	n/a 999
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	n/a -	n/a 999
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S		-0.00 5	n/a n/a
						Weight: 39 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 10-1-6.
(lb) - Max Horz 1=109(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 5=-123(LC 24), 6=-161(LC 8), 7=-148(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=263(LC 24), 7=419(LC 1)

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

WEBS 3-7=-288/180

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-11-6, Exterior(2E) 5-11-6 to 10-1-12 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.
- 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 except (jt=lb) 5=123, 6=161, 7=148.

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Date:

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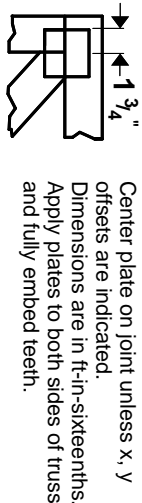
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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

Symbols

PLATE LOCATION AND ORIENTATION



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

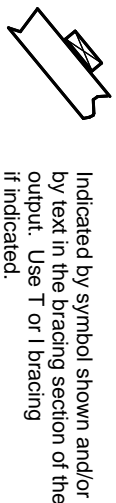
This symbol indicates the required direction of slots in connector plates.

PLATE SIZE

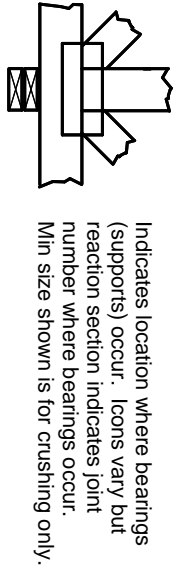
4 X 4

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

LATERAL BRACING LOCATION

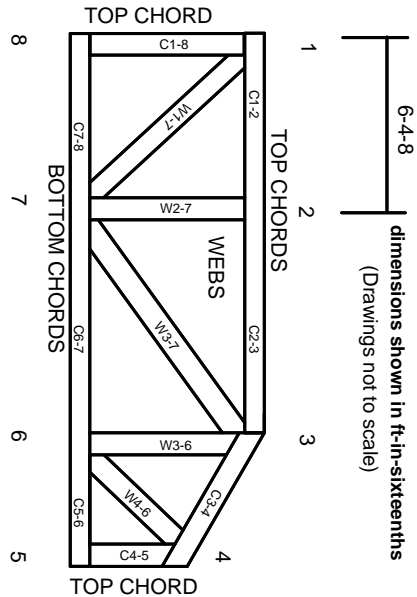


BEARING



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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:
ESR-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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Mitek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.