



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

RE: 3363898 - IC CONST. - LEECH RES.

MiTek USA, Inc.

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

**Site Information:**

Customer Info: IC CONSTRUCTION Project Name: Leech 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: State:  
City:

**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: 55.0 psf

This package includes 65 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	T29562123	EJ01	1/11/23	15	T29562137	T02	1/11/23
2	T29562124	PB01	1/11/23	16	T29562138	T03	1/11/23
3	T29562125	PB02	1/11/23	17	T29562139	T04	1/11/23
4	T29562126	PB02G	1/11/23	18	T29562140	T05	1/11/23
5	T29562127	PB03	1/11/23	19	T29562141	T06	1/11/23
6	T29562128	PB03G	1/11/23	20	T29562142	T06G	1/11/23
7	T29562129	PB04	1/11/23	21	T29562143	T07	1/11/23
8	T29562130	PB04G	1/11/23	22	T29562144	T08	1/11/23
9	T29562131	PB05G	1/11/23	23	T29562145	T09	1/11/23
10	T29562132	PB06	1/11/23	24	T29562146	T09G	1/11/23
11	T29562133	PB07	1/11/23	25	T29562147	T10	1/11/23
12	T29562134	PB07G	1/11/23	26	T29562148	T11	1/11/23
13	T29562135	T01	1/11/23	27	T29562149	T11G	1/11/23
14	T29562136	T01G	1/11/23	28	T29562150	T12	1/11/23



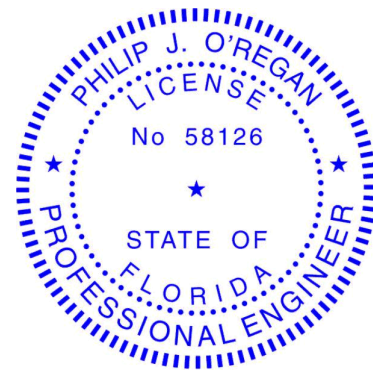
This item has been electronically signed and sealed by O'Regan, Philip, PE using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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, 2023.



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.

January 11, 2023

O'Regan, Philip

1 of 2



RE: 3363898 - IC CONST. - LEECH RES.

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

**Site Information:**

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

No.	Seal#	Truss Name	Date
29	T29562151	T13	1/11/23
30	T29562152	T13G	1/11/23
31	T29562153	T14	1/11/23
32	T29562154	T15	1/11/23
33	T29562155	T15G	1/11/23
34	T29562156	T16	1/11/23
35	T29562157	T17	1/11/23
36	T29562158	T17G	1/11/23
37	T29562159	T18	1/11/23
38	T29562160	T19	1/11/23
39	T29562161	T20	1/11/23
40	T29562162	T21	1/11/23
41	T29562163	T22	1/11/23
42	T29562164	T23	1/11/23
43	T29562165	T24G	1/11/23
44	T29562166	T25	1/11/23
45	T29562167	T25G	1/11/23
46	T29562168	T26	1/11/23
47	T29562169	T27	1/11/23
48	T29562170	T28	1/11/23
49	T29562171	T28G	1/11/23
50	T29562172	T29	1/11/23
51	T29562173	T30	1/11/23
52	T29562174	T30G	1/11/23
53	T29562175	T31	1/11/23
54	T29562176	T31G	1/11/23
55	T29562177	T32	1/11/23
56	T29562178	T33	1/11/23
57	T29562179	T34	1/11/23
58	T29562180	T35	1/11/23
59	T29562181	T36	1/11/23
60	T29562182	T36G	1/11/23
61	T29562183	TF01	1/11/23
62	T29562184	TF01G	1/11/23
63	T29562185	TG01	1/11/23
64	T29562186	TG02	1/11/23
65	T29562187	TG03	1/11/23

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	EJ01	Jack-Open	3	1	T29562123
Job Reference (optional)					

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

8.530 s Aug 11 2022
MiTek Industries, Inc.
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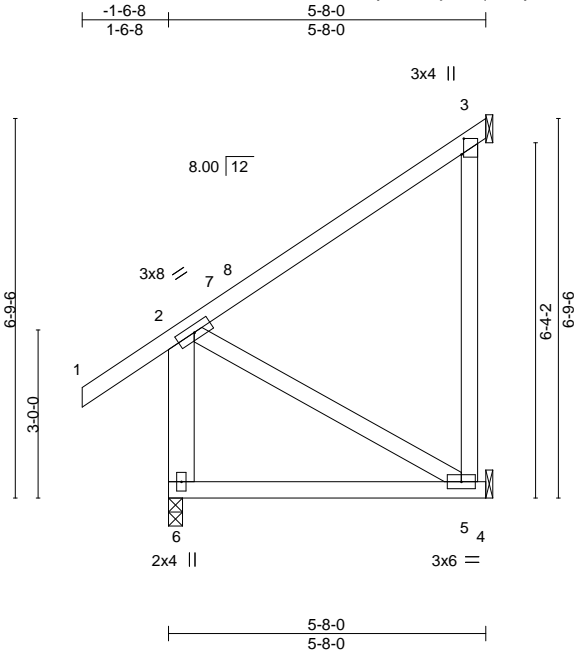


Plate Offsets (X,Y)--		[3:0-3-7,0-0-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.34	Vert(LL)	-0.04	5-6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.33	Vert(CT)	-0.08	5-6	>740	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014		Matrix-MP						Weight: 45 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
2-6: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-0, 3=Mechanical, 5=Mechanical  
Max Horz 6=136(LC 9)  
Max Uplift 3=-96(LC 12), 5=-58(LC 12)  
Max Grav 6=302(LC 1), 3=132(LC 19), 5=115(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-6=-251/64  
WEBS 2-5=-163/285

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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 5-4-8 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 3 and 58 lb uplift at joint 5.

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:

January 11,2023

**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

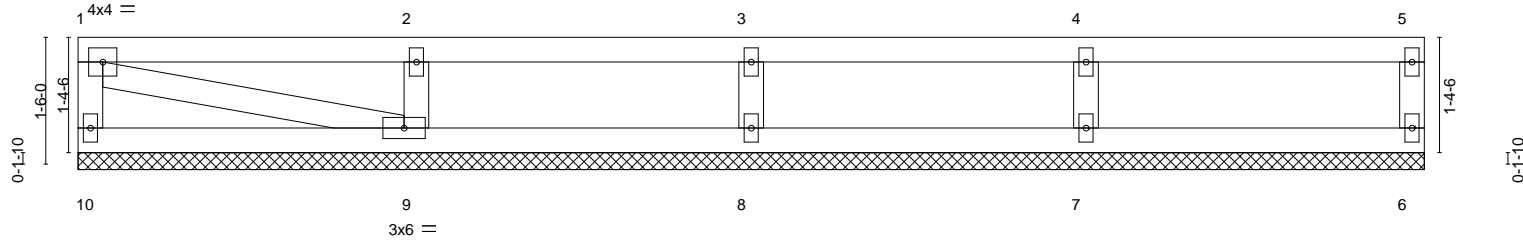
Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562124
3363898	PB01	GABLE	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:18:34 2023 Page 1  
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15-11-0  
15-11-0

Scale = 1:27.2



LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	n/a - n/a 999	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	n/a - n/a 999				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00 6 n/a n/a				
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S				Weight: 59 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 15-11-0.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) 10, 6, 8, 7, 9  
Max Grav All reactions 250 lb or less at joint(s) 10, 6 except 8=283(LC 1), 7=313(LC 1), 9=313(LC 1)

**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 Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 4-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6, 8, 7, 9.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

January 11,2023

**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. - LEECH RES.	T29562126
3363898	PB02G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
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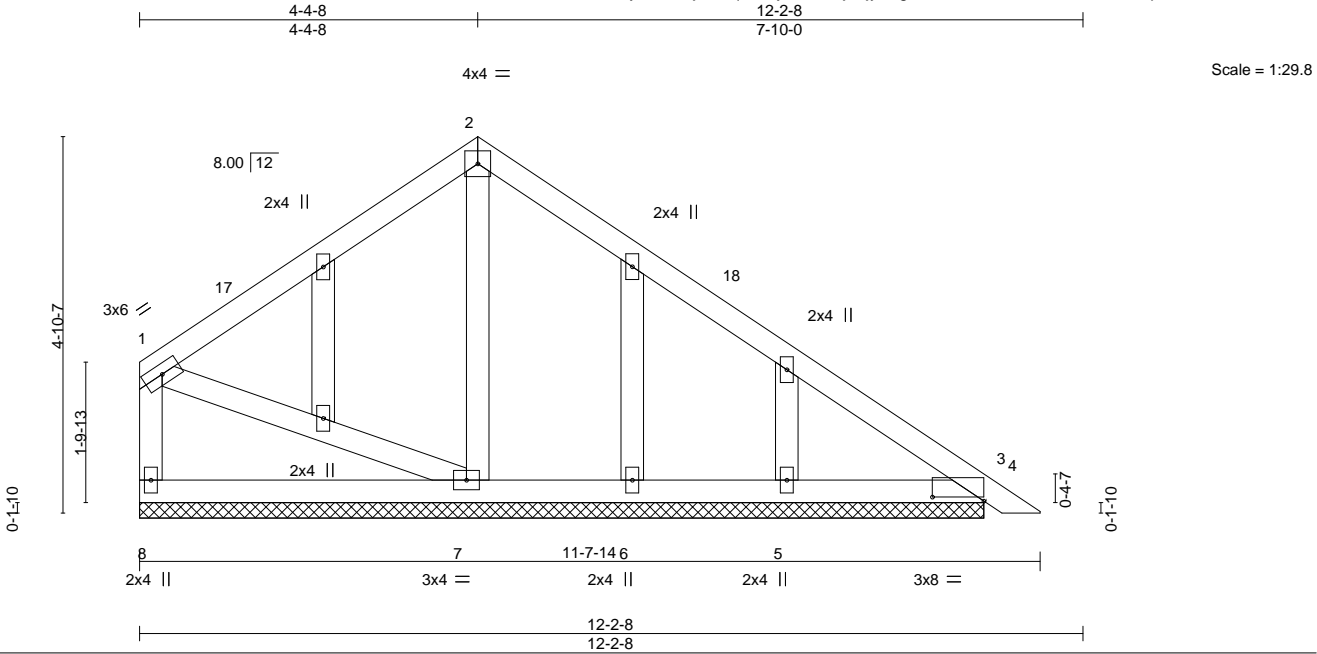


Plate Offsets (X,Y)--		[3:0-8-0,0-0-10]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	0.01	4	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	0.01	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 61 lb	FT = 20%

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

**REACTIONS.** All bearings 10-11-2.  
 (lb) - Max Horz 8=105(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 3, 6 except 5=111(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 7, 6, 5 except 8=348(LC 1), 3=272(LC 1), 3=272(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-310/160, 1-2=-307/158, 2-3=-349/145

- 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; BC DL=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 3-1-12, Interior(1) 3-1-12 to 4-4-8, Exterior(2R) 4-4-8 to 7-4-8, Interior(1) 7-4-8 to 11-4-14 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) 8, 3, 6, 3 except (jt=lb) 5=111.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

January 11,2023



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562127
3363898	PB03	GABLE	8	1		

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:18:38 2023 Page 1  
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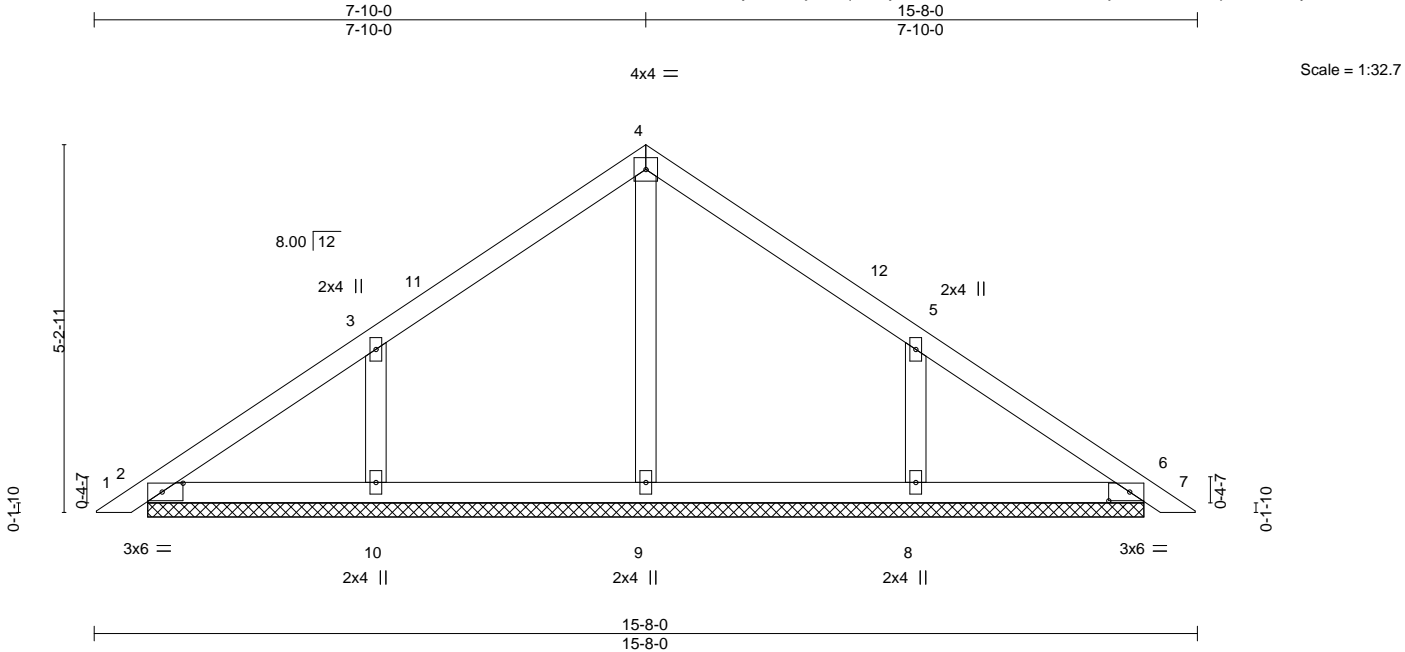


Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [6:0-3-9,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	0.00	7	n/r	120	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	0.00	7	n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S						Weight: 61 lb	FT = 20%

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

**REACTIONS.** All bearings 14-1-12.  
(lb) - Max Horz 2=111(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=151(LC 13), 10=151(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=319(LC 20), 10=320(LC 19)

**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) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 7-10-0, Exterior(2R) 7-10-0 to 10-10-0, Interior(1) 10-10-0 to 15-4-11 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 4-0-0 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, 6 except (jt=lb) 8=151, 10=151.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

January 11,2023

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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. - LEECH RES.	T29562128
3363898	PB03G	GABLE	1	1		
Job Reference (optional)						

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:18:40 2023
Page 1

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14-7-6
7-3-11

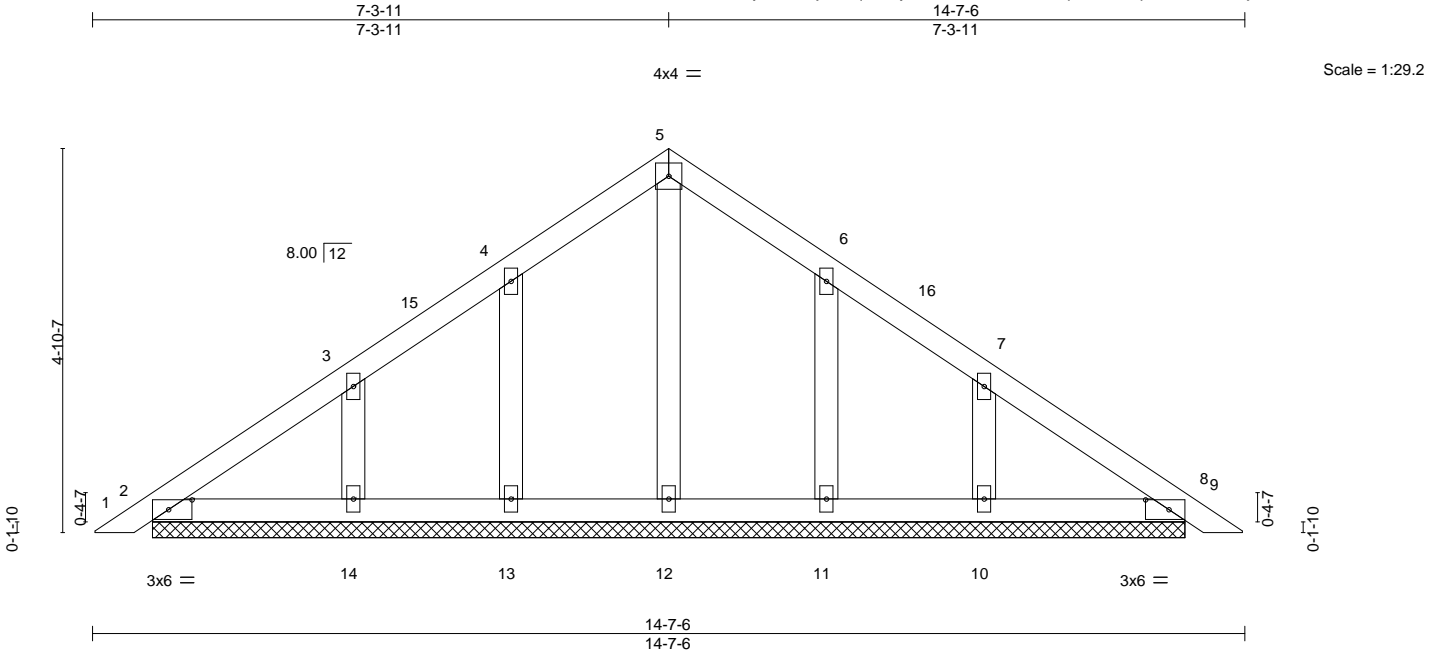


Plate Offsets (X,Y)--		[2:0-3-9,0-1-8], [8:0-3-9,0-1-8]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.06
TCDL 7.0	Lumber DOL	1.25	BC 0.05
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-S
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) 0.00 8 n/r 120
			Vert(CT) 0.00 9 n/r 120
			Horz(CT) 0.00 8 n/a n/a
			<b>PLATES</b>
			MT20
			<b>GRIP</b>
			244/190
			Weight: 65 lb FT = 20%

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

**REACTIONS.** All bearings 13-1-2.

(lb) - Max Horz 2=103(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10

Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**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) 0-3-5 to 3-3-11, Interior(1) 3-3-11 to 7-3-11, Exterior(2R) 7-3-11 to 10-3-11, Interior(1) 10-3-11 to 14-4-1 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, 8, 13, 14, 11, 10.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

January 11,2023



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



T29562129

Job Reference (optional)

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:18:42 2023 Page 1

ID:rBnyGlyPNoMaiBI2sqc2kZvcQXD-Fh CnqG2VAVYxqD8OYsZvrF?Tpk0Ec1f15zlwizwWDR

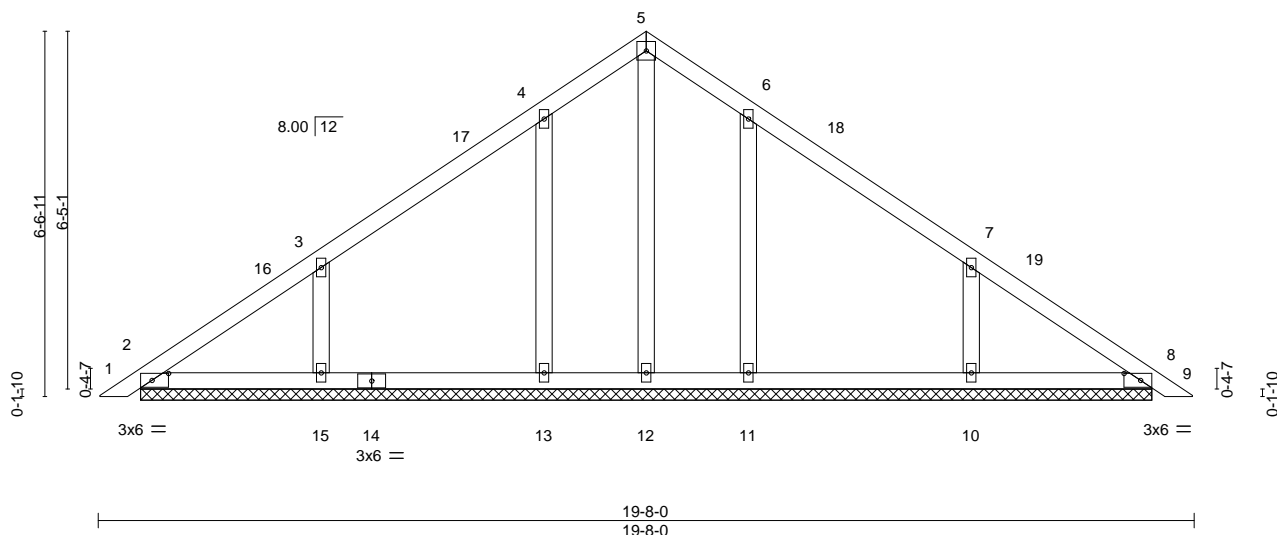
9-10-0

19-8-0

9-10-0

 $4 \times 4 =$ 

Scale = 1:41.3

Weight: 90 lb      FT = 20%

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

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.

All bearings 18-1-12.

(lb) - Max Horz 2=-140(LC 10)

Max Uplift All uplift 100.0

max split = All split 100 is chess at joint(s) 2, 12 except 10= 145(ES 10), 11= 114(ES 10), 15= 140(ES 12), 13=-115(LC 12)

Max Gray All reactions 25

Max Grav All reactions 250 lb or less at joint(s) 2, 12, & except 10-520(EO 20), 11-201(EO 20), 15-520(EO 15),  
13-262(I.C. 19)

15-202(LC 15)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCp=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 9-10-0, Exterior(2R) 9-10-0 to 12-10-0, Interior(1) 12-10-0 to 19-4-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4'-0" oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12 except (jt=lb) 10=148, 11=114, 15=148, 13=115.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11, 2023



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

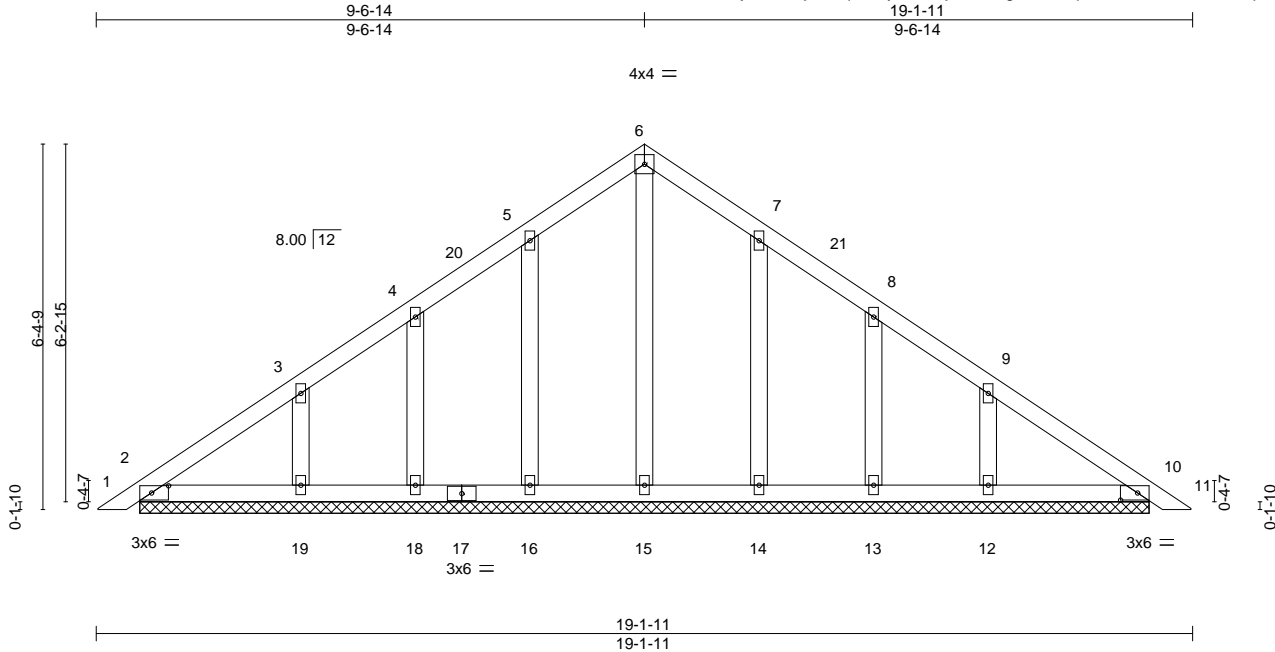


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562130
3363898	PB04G	GABLE	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:18:43 2023 Page 1  
ID:rBnvGlyPNoMajBI2sqc2kZycQXD-jtYa\_0HgGUdPZqoKxGNoV3oBTD45z3ZpFjlISAzWWDQ



Scale = 1:40.2

Plate Offsets (X,Y)--		[2:0-3-9,0-1-8], [10:0-3-9,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d			<b>PLATES</b> <b>GRIP</b>		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.07	Vert(LL)	0.00	11	n/r	120	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	0.00	11	n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	10	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 96 lb FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 17-7-7.  
(lb) - Max Horz 2=136(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 18, 14, 13 except 19=103(LC 12), 12=102(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 18, 19, 14, 13, 12, 10

**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) 0-3-5 to 3-6-14, Interior(1) 3-6-14 to 9-6-14, Exterior(2R) 9-6-14 to 12-6-14, Interior(1) 12-6-14 to 18-10-6 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, 18, 14, 13 except (jt=lb) 19=103, 12=102.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

January 11,2023

**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  
**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. - LEECH RES.	T29562131
3363898	PB05G	GABLE	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:18:45 2023
Page 1
ID:rBnvGlyPNoMajBI2sqc2kZycQXD-gGgKPhlwo5t7o8yj3hQGaUtYB0mhR\_C5j3CPW2zwWDO

6-4-8
6-4-8

16-2-8
9-10-0

4x4 =

Scale = 1:38.1

Plate Offsets (X,Y)--		[8:0-3-9,0-1-8]									
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 0.06		Vert(LL)	0.00 8	n/r	120	MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.05		Vert(CT)	0.00 9	n/r	120		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.06		Horz(CT)	0.00 8	n/a	n/a		
BCDL 10.0		Code	FBC2020/TPI2014	Matrix-S						Weight: 87 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	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 14-11-2.  
 (lb) - Max Horz 16=127(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 16, 8, 14, 12, 11, 10 except 15=129(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 16, 8, 13, 14, 15, 12, 11, 10

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

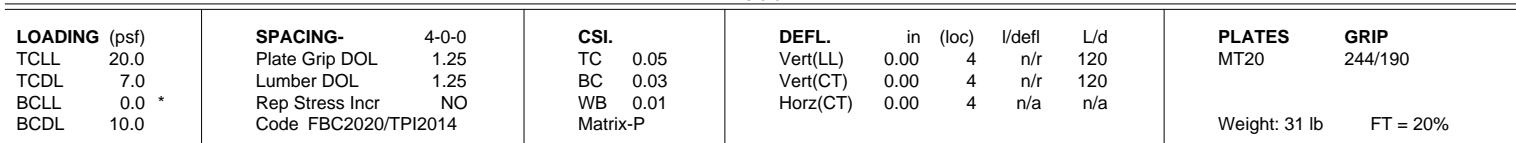
- NOTES-**  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; TCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-4-8, Exterior(2R) 6-4-8 to 9-4-8, Interior(1) 9-4-8 to 15-4-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.  
 5) All plates are 2x4 MT20 unless otherwise indicated.  
 6) Gable requires continuous bottom chord bearing.  
 7) Gable studs spaced at 2-0-0 oc.  
 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.  
 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 8, 14, 12, 11, 10 except (jt=lb) 15=129.  
 11) 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:

January 11,2023

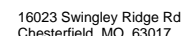
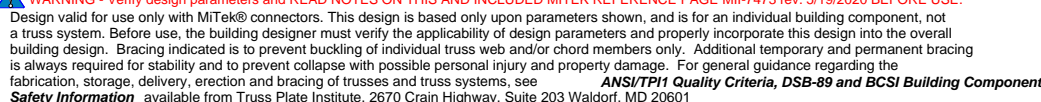
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ID:rBnvGlyPN0MajBI2sqc2kZycQXD-8SEic1JYZP? QHWvdOxV7hQj5Q68ARDFxjy3UzwWDN



**REACTIONS.** (size) 2=3-5-12, 4=3-5-12, 6=3-5-12  
 Max Horz 2=-65(LC 10)  
 Max Uplift 2=-66(LC 12), 4=-74(LC 13), 6=-13(LC 12)  
 Max Grav 2=196(LC 1), 4=196(LC 1), 6=227(LC 1)

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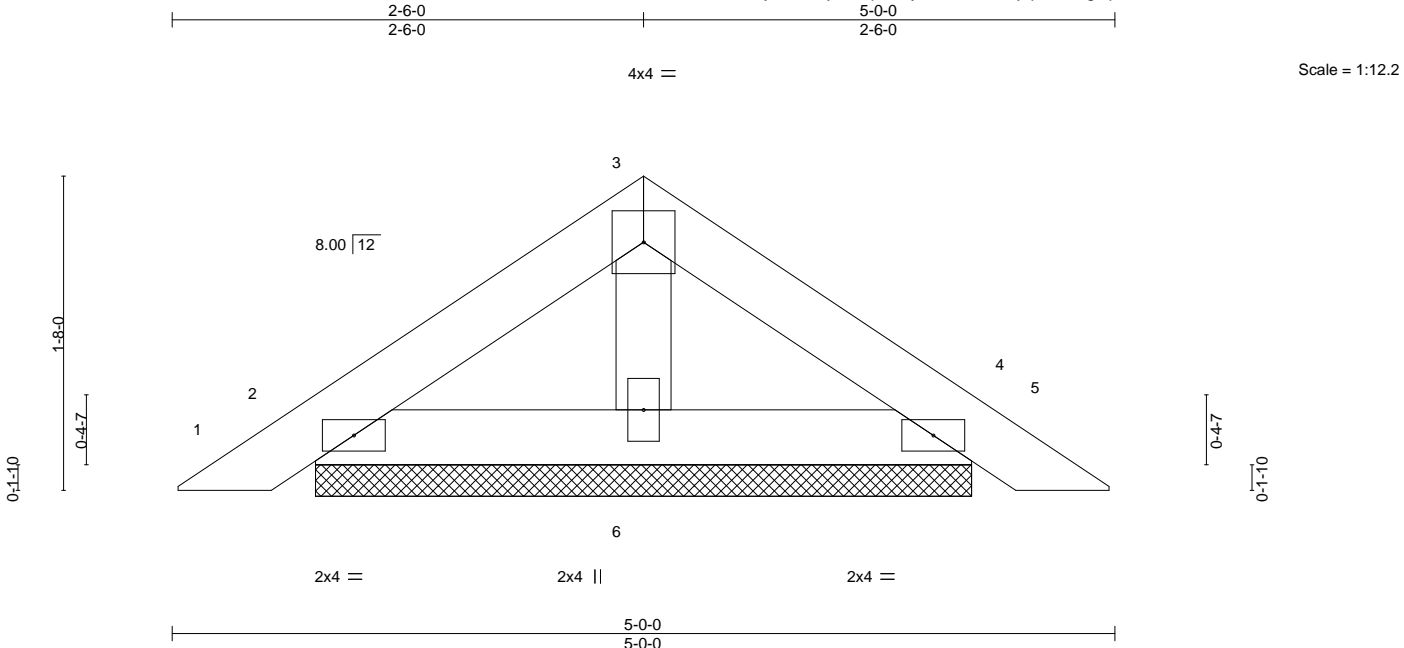
January 11, 2023



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562133
3363898	PB07	Piggyback	9	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:18:48 2023 Page 1  
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-4rMT1jLp40FifbgkppzC6V3cEofeLiYP1Q37NzwWDL



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 0.04	Vert(LL)	0.00	4	n/r	120	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.03	Vert(CT)	0.00	4	n/r	120	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code FBC2020/TP12014		Matrix-P						
								Weight: 15 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 2=3-5-12, 4=3-5-12, 6=3-5-12  
Max Horz 2=33(LC 10)  
Max Uplift 2=33(LC 12), 4=37(LC 13), 6=6(LC 12)  
Max Grav 2=98(LC 1), 4=98(LC 1), 6=114(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, 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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

January 11,2023

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

**ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

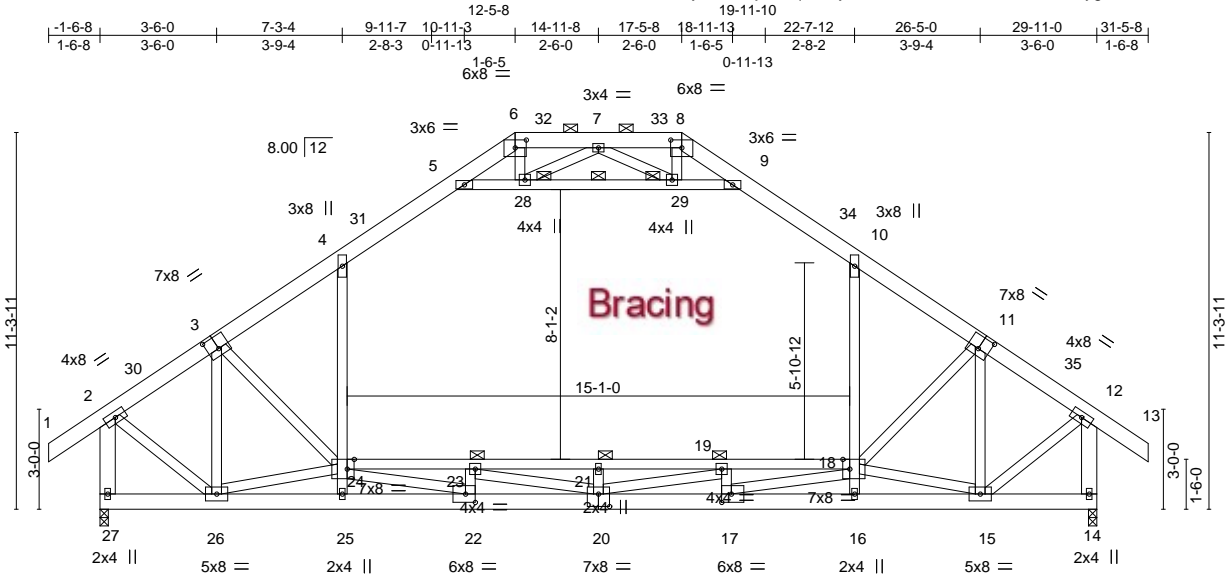


Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562135
3363898	T01	ATTIC	9	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:18:52 2023 Page 1

ID:rBnvGlyPNoMajBI2sqc2kZycQXD-zcb\_t5OJ8FI78C\_3zf2vMygc?r\_Ea\_m7KeOGG8zwWDH



<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>									
Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [6:0-4-0,0-2-13], [8:0-4-0,0-2-13], [11:0-4-0,0-4-8], [17:0-3-8,0-3-0], [18:0-2-8,Edge], [20:0-4-0,0-4-8], [22:0-3-8,0-3-0], [24:0-2-8,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 0.53		Vert(LL) -0.25 19-21 >999	240	MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.76		Vert(CT) -0.47 19-21 >756	180		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.71		Horz(CT) 0.03 14 n/a	n/a		
BCDL 10.0		Code FBC2020/TPI2014		Matrix-MS		Attic -0.13 18-24 1411	360	Weight: 312 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2 \*Except\*  
3-6,8-11: 2x6 SP M 26  
BOT CHORD 2x6 SP M 26 \*Except\*  
18-24: 2x4 SP M 31  
WEBS 2x4 SP No.3 \*Except\*  
2-27,12-14: 2x6 SP No.2, 22-24,20-23,19-20,17-18: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 6-8.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 28-29  
JOINTS 1 Brace at Jt(s): 21, 23, 19, 28, 29

**REACTIONS.** (size) 27=0-3-0, 14=0-3-0  
Max Horz 27=292(LC 10)  
Max Uplift 27=8(LC 12), 14=8(LC 13)  
Max Grav 27=1915(LC 20), 14=1915(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1434/0, 3-4=-1990/0, 4-5=-1459/66, 5-6=-74/570, 6-7=0/761, 7-8=0/761, 8-9=-74/570, 9-10=-1459/68, 10-11=-1993/0, 11-12=-1434/0, 2-27=-1860/23, 12-14=-1860/23  
BOT CHORD 26-27=-266/263, 25-26=-335/1579, 22-25=-353/1557, 20-22=0/3478, 17-20=0/3335, 16-17=-263/1393, 15-16=-247/1416, 23-24=-2033/0, 21-23=-2893/0, 19-21=-2893/0, 18-19=-2033/0  
WEBS 3-24=-90/443, 4-24=0/1013, 5-28=-2124/0, 28-29=-1859/0, 9-29=-2138/0, 10-18=0/1013, 2-26=0/1518, 11-18=-102/447, 20-21=-430/0, 22-23=-756/0, 17-19=-756/0, 22-24=0/2526, 20-23=-102/968, 19-20=-111/974, 17-18=0/2526, 6-28=-16/263, 8-29=-16/263, 7-28=-341/84, 7-29=-341/86, 12-15=0/1518, 3-26=-1049/0, 24-26=-372/320, 11-15=-1064/0, 15-18=-438/364

- 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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-5-8, Exterior(2R) 12-5-8 to 16-8-7, Interior(1) 16-8-7 to 17-5-8, Exterior(2R) 17-5-8 to 21-8-7, Interior(1) 21-8-7 to 31-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-28, 28-29, 9-29; Wall dead load (5.0psf) on member(s).4-24, 10-18
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 23-24, 21-23, 19-21, 18-19
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 14.
  - On a graphic 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:

January 11,2023

**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  
**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. - LEECH RES.	T29562135
3363898	T01	ATTIC	9	1	Job Reference (optional)	

**NOTES-**  
11) Attic room checked for L/360 deflection.

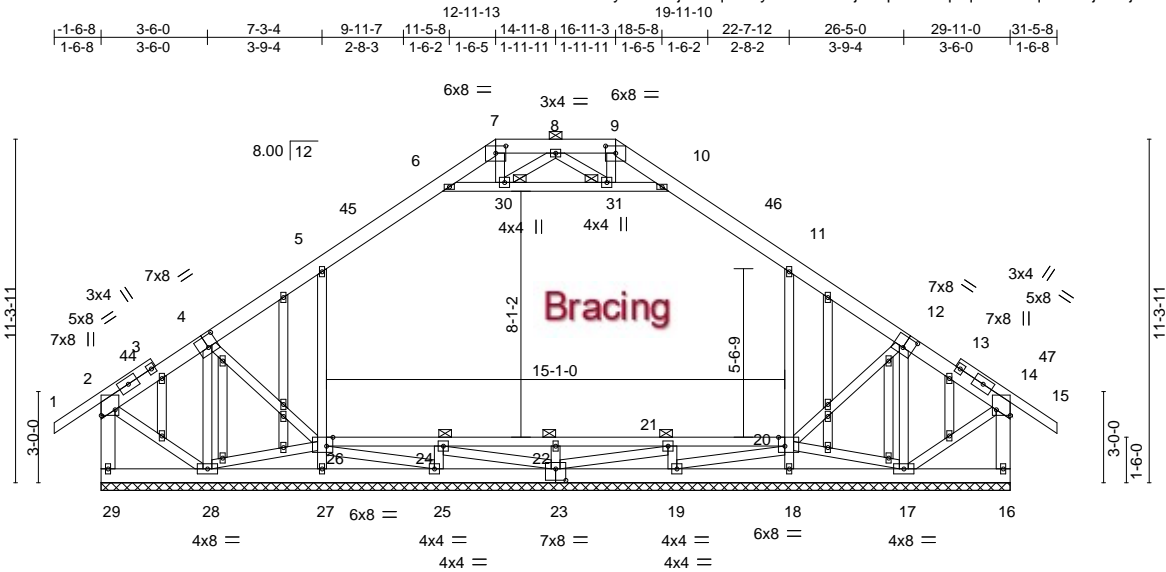


Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562136
3363898	T01G	GABLE	1	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:18:56 2023
Page 1

ID:rBnvGlyPNoMajBl2sqc2kZycQXD-rNrUjSRqCTFZdqHqCV6rXoqOWSVjWx6jFGMUPvzwWDD

Job Reference (optional)



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Plate Offsets (X,Y)-- [2:Edge,0-5-8], [4:0-4-0,0-4-8], [7:0-4-0,0-2-13], [9:0-4-0,0-2-13], [12:0-4-0,0-4-8], [14:Edge,0-5-8], [20:0-2-8,Edge], [23:0-4-0,0-4-8], [26:0-2-8,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 15 n/r 120		MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.08		Vert(CT) -0.01 14-15 n/r 120			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.18		Horz(CT) 0.00 16 n/a n/a			
BCDL 10.0		Code FBC2020/TPI2014		Matrix-S				Weight: 339 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2 *Except* 1-3,13-15: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD 2x6 SP M 26 *Except* 20-26: 2x4 SP M 31	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 2-29,14-16: 2x6 SP No.2	JOINTS 1 Brace at Jt(s): 22, 24, 21, 30, 31
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 29-11-0.

(lb) - Max Horz 29=286(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 29, 28, 16, 17 except 27=136(LC 12), 18=131(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 29=650(LC 1), 27=542(LC 20), 18=525(LC 21), 28=339(LC 20), 16=650(LC 1), 23=438(LC 18), 25=493(LC 18), 19=493(LC 18), 17=333(LC 21)

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

TOP CHORD 2-4=410/69, 4-5=655/98, 5-6=690/148, 6-7=384/94, 7-8=327/103, 8-9=327/96, 9-10=384/83, 10-11=690/160, 11-12=655/100, 12-14=410/61, 2-29=617/119, 14-16=617/122

BOT CHORD 28-29=266/257, 25-27=92/283, 23-25=71/309, 19-23=57/309, 18-19=23/252

WEBS 4-26=12/268, 26-27=382/161, 5-26=391/185, 18-20=365/155, 11-20=391/185, 2-28=83/378, 12-20=33/268, 24-25=261/0, 19-21=261/0, 14-17=63/378, 4-28=470/47, 12-17=470/59

- 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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-11-13, Exterior(2E) 12-11-13 to 16-11-3, Exterior(2R) 16-11-3 to 21-2-2, Interior(1) 21-2-2 to 31-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 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.

Continued on page 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:

January 11,2023

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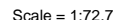
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562136
3363898	T01G	GABLE	1	1	Job Reference (optional)	

- NOTES-**
- 10) \* 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.
- 11) Ceiling dead load (5.0 psf) on member(s). 5-6, 10-11, 6-30, 30-31, 10-31; Wall dead load (5.0psf) on member(s).5-26, 11-20
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 28, 16, 17 except (jt=lb) 27=136, 18=131.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Attic room checked for L/360 deflection.

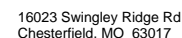
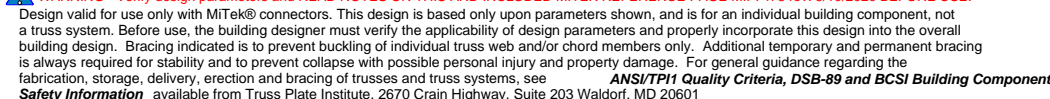
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:01 2023 Page 1

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

January 11, 2023



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562137
3363898	T02	ATTIC	2	3	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
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Wed Jan 11 06:19:01 2023
Page 2
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NOTES-

- 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) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-28, 28-29, 9-29; Wall dead load (5.0psf) on member(s).4-24, 10-18
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 23-24, 21-23, 19-21, 18-19
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 27=299, 14=361.
- 12) Girder carries tie-in span(s): 7-0-0 from 14-11-8 to 24-1-8
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2494 lb down and 352 lb up at 14-11-8 on top chord, and 332 lb down at 0-2-12, 324 lb down at 2-5-4, 324 lb down at 4-5-4, 324 lb down at 6-5-4, 324 lb down at 8-5-4, 324 lb down at 10-5-4, 324 lb down at 12-5-4, 324 lb down at 14-5-4, 324 lb down at 16-5-4, 324 lb down at 18-5-4, 324 lb down at 20-5-4, and 324 lb down at 22-6-0, and 370 lb down and 283 lb up at 24-1-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) Attic room checked for L/360 deflection.

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=-64, 5-6=-54, 6-7=-54, 7-8=-171(F=-118), 8-9=-172(F=-117), 9-10=-181(F=-117), 10-30=-171(F=-118), 12-30=-54, 12-13=-54, 14-27=-20, 18-24=-40, 5-9=-10
    - Drag: 4-24=-10, 10-18=-10
  - Concentrated Loads (lb)
    - Vert: 27=-82(F) 16=-74(F) 7=-1300 31=-74(F) 32=-74(F) 33=-74(F) 34=-74(F) 35=-74(F) 36=-74(F) 37=-74(F) 38=-74(F) 39=-74(F) 40=-74(F) 41=-370(F)

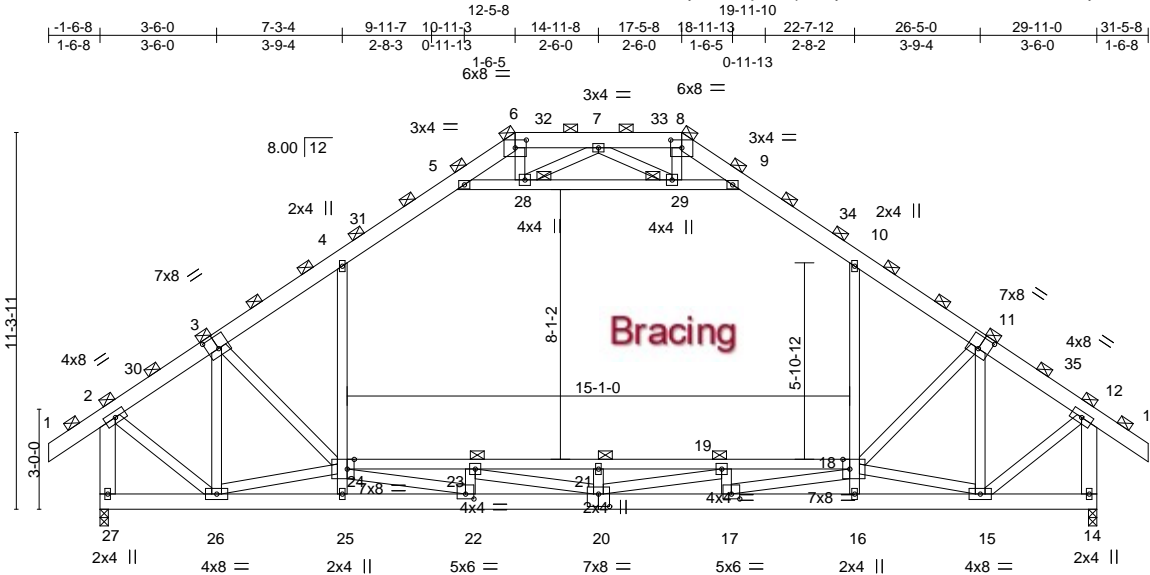


Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562138
3363898	T03	ATTIC	1	2	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:05 2023 Page 1

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Scale = 1:69.1

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Plate Offsets (X,Y)-- [3:0-4-0,0-4-8], [6:0-4-0,0-2-13], [8:0-4-0,0-2-13], [11:0-4-0,0-4-8], [17:0-3-0,0-1-12], [18:0-2-8,Edge], [20:0-4-0,0-4-8], [22:0-3-0,0-1-12], [24:0-2-8,Edge]											
LOADING (psf)		SPACING- 3-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.46	Vert(LL)	-0.19	21	>999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.29	Vert(CT)	-0.35	21	>997	180	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.02	14	n/a	n/a	
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.10	18-24	1840	360	Weight: 625 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 \*Except\*  
3-6,8-11: 2x6 SP M 26  
BOT CHORD 2x6 SP M 26 \*Except\*  
18-24: 2x4 SP M 31  
WEBS 2x4 SP No.3 \*Except\*  
2-27,12-14: 2x6 SP No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
(Switched from sheathed: Spacing > 2-8-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 6, 8, 2, 12, 21, 23, 19, 28, 29

REACTIONS.

(size) 27=0-3-0, 14=0-3-0  
Max Horz 27=-438(LC 10)  
Max Uplift 27=-13(LC 12), 14=-13(LC 13)  
Max Grav 27=2873(LC 20), 14=2873(LC 21)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2151/0, 3-4=-2985/0, 4-5=-2189/99, 5-6=-111/856, 6-7=0/1142, 7-8=0/1142, 8-9=-111/856, 9-10=-2189/102, 10-11=-2990/0, 11-12=-2150/0, 2-27=-2789/35, 12-14=-2788/34  
BOT CHORD 26-27=-399/395, 25-26=-499/2378, 22-25=-525/2343, 20-22=0/5206, 17-20=0/4991, 16-17=-392/2097, 15-16=-367/2133, 23-24=-3037/0, 21-23=-4330/0, 19-21=-4330/0, 18-19=-3037/0  
WEBS 3-24=-135/666, 24-25=0/373, 4-24=0/1519, 5-28=-3187/0, 28-29=-2790/0, 9-29=-3208/0, 16-18=0/373, 10-18=0/1519, 2-26=0/2276, 11-18=-153/672, 20-21=-645/0, 22-23=-1135/0, 17-19=-1135/0, 22-24=0/3764, 20-23=-152/1453, 19-20=-165/1463, 17-18=0/3764, 6-28=-24/395, 8-29=-24/395, 7-28=-512/126, 7-29=-512/129, 12-15=0/2276, 3-26=-1575/0, 24-26=-562/472, 11-15=-1598/0, 15-18=-661/541

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-5-8, Exterior(2R) 12-5-8 to 16-8-7, Interior(1) 16-8-7 to 17-5-8, Exterior(2R) 17-5-8 to 21-8-7, Interior(1) 21-8-7 to 31-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.

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

January 11,2023

Continued on page 2

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562138
3363898	T03	ATTIC	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
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Page 2
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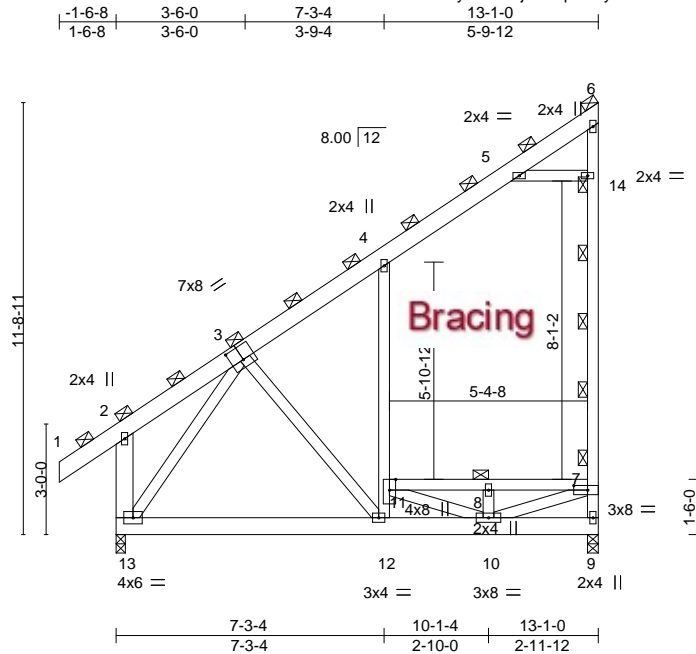
- NOTES-**
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-28, 28-29, 9-29; Wall dead load (5.0psf) on member(s).4-24, 10-18
  - 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 23-24, 21-23, 19-21, 18-19
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 14.
  - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 13) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	T04	ROOF TRUSS	1	<b>2</b>	T29562139

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:06 2023 Page 1

ID:rBnvGlyPNoMajBl2sqc2kZycQXD-YIRGptZ5rYW8qM2loblBxvF?BUoasK5BYqn0mKzwWD3



Scale = 1:62.5

Plate Offsets (X,Y)--		[3:0-4-0,0-4-8], [7:0-4-8,0-1-8]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	3-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.61	Vert(LL)	0.18 12-13	>832	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.63	Vert(CT)	-0.34 12-13	>449	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.66	Horz(CT)	0.00 9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS	Attic	-0.07 7-11	920	360	Weight: 280 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2 \*Except\*  
 7-11: 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 6-9: 2x4 SP M 31, 4-12: 2x4 SP No.2, 2-13: 2x6 SP No.2

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
 (Switched from sheeted: Spacing > 2-8-0).  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 6, 2, 8

#### REACTIONS.

(size) 9=0-3-8, 13=0-3-0  
 Max Horz 13=443(LC 12)  
 Max Uplift 9=217(LC 12)  
 Max Grav 9=1541(LC 20), 13=1016(LC 20)

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

TOP CHORD 3-4=-569/36, 4-5=-343/254, 5-6=-239/745, 7-9=-1554/491, 7-14=-546/265,  
 6-14=-514/277, 2-13=-276/211  
 BOT CHORD 12-13=-599/746, 10-12=-407/760, 9-10=-695/434, 8-11=-1117/14, 7-8=-1117/14  
 WEBS 4-11=0/458, 3-12=-556/520, 5-14=-754/174, 8-10=-513/0, 10-11=0/761, 7-10=-601/2008,  
 3-13=-646/112

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-11-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 5-14; Wall dead load (5.0psf) on member(s).4-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-11, 7-8
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=217.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.

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:

January 11,2023

**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

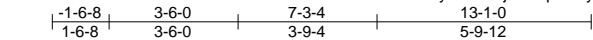


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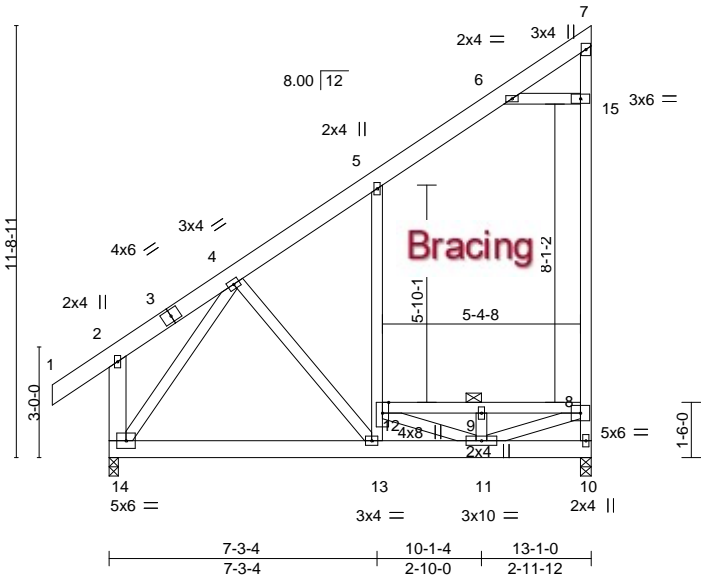
Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	T05	ROOF TRUSS	2	1	T29562140
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
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Scale = 1:62.5



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 0.71	Vert(LL)	0.24 13-14	>625	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.76	Vert(CT)	-0.45 13-14	>337	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.00 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014		Matrix-MS	Attic	0.10 8-12	690	360	Weight: 140 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\*  
8-12: 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
7-10: 2x4 SP M 31, 5-13: 2x4 SP No.2, 2-14: 2x6 SP No.2

**REACTIONS.** (size) 10=0-3-8, 14=0-3-0  
Max Horz 14=295(LC 12)  
Max Uplift 10=-145(LC 12)  
Max Grav 10=1027(LC 20), 14=678(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 4-5=-379/23, 6-7=-160/496, 8-10=-1036/328, 8-15=-365/177, 7-15=-343/185  
BOT CHORD 13-14=-398/496, 11-13=-271/506, 10-11=-464/289, 9-12=-744/9, 8-9=-744/9  
WEBS 5-12=0/307, 4-13=-371/346, 6-15=-502/116, 9-11=-342/0, 11-12=0/507, 8-11=-401/1338,  
4-14=-430/77

#### 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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-11-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 5-6, 6-15; Wall dead load (5.0psf) on member(s).5-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-12, 8-9
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=145.
- Attic room checked for L/360 deflection.

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:

January 11,2023

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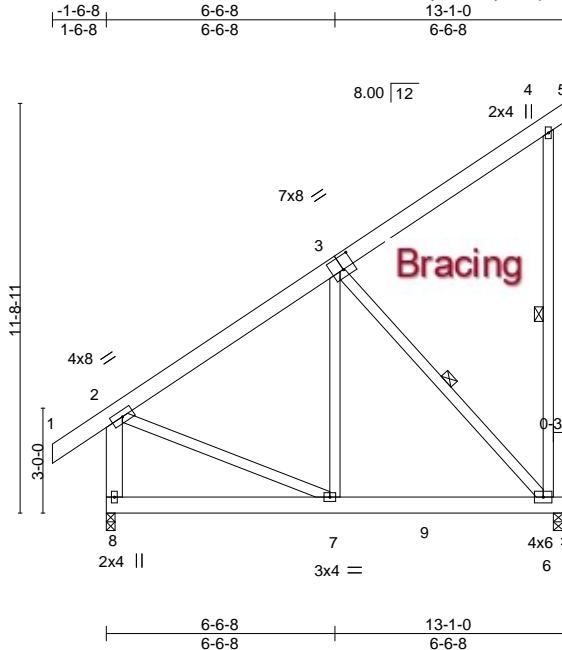
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562141
3363898	T06	Monopitch	2	1	Job Reference (optional)	

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

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Scale = 1:65.9

Plate Offsets (X,Y)--	[3:0-4-0,0-4-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.18	Vert(LL)	-0.02 6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.20	Vert(CT)	-0.03 6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	-0.00 6	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 125 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-6, 3-6

#### REACTIONS.

(size) 8=0-3-0, 6=0-3-8  
Max Horz 8=297(LC 12)  
Max Uplift 6=297(LC 12)  
Max Grav 8=607(LC 19), 6=638(LC 19)

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

TOP CHORD 2-3=-414/0, 2-8=-514/45  
BOT CHORD 7-8=-373/269, 6-7=-179/337  
WEBS 3-7=-37/266, 3-6=-511/272, 2-7=-11/316

#### 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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 13-1-0 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=297.

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  
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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11,2023

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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. - LEECH RES.	T29562142
3363898	T06G	GABLE	1	1	Job Reference (optional)	

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Lake City, FL - 32055,
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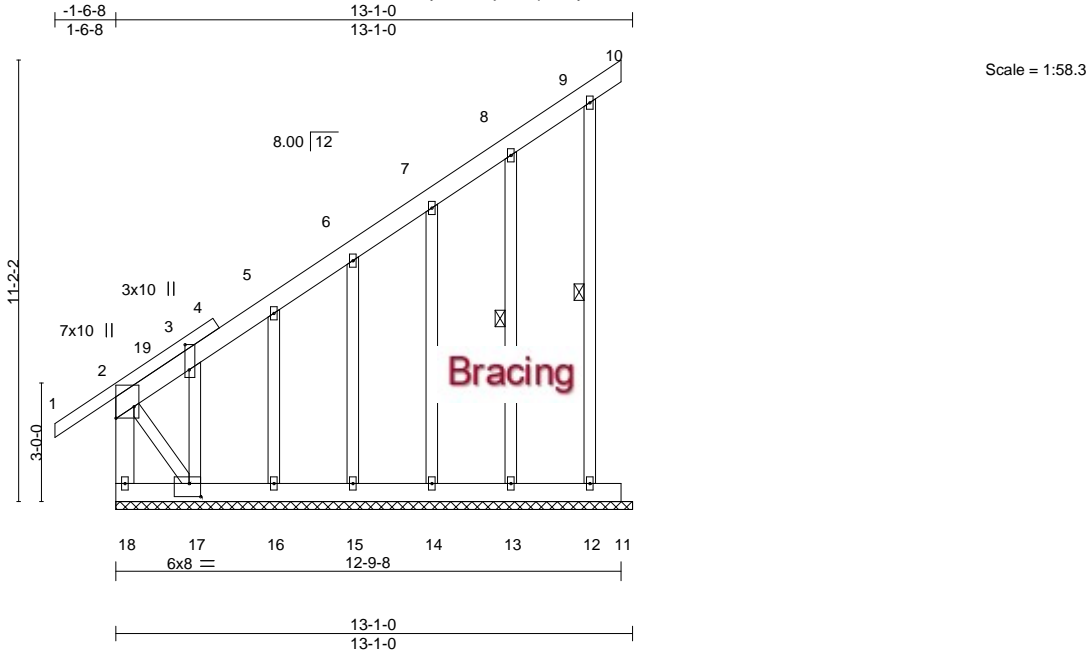


Plate Offsets (X,Y)-- [2:Edge,0-5-8], [3:0-7-11,0-1-4], [17:0-3-8,0-4-0]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d			<b>PLATES</b>	<b>GRIP</b>		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.01	10	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 139 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.2 *Except* 1-4: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x6 SP No.2 *Except* 2-17: 2x4 SP No.3	6-0-0 oc bracing: 17-18.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 8-13, 9-12

**REACTIONS.** All bearings 13-1-0.  
 (lb) - Max Horz 18=278(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 10, 16, 15, 14, 13, 12 except 18=-164(LC 10), 17=-459(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 10, 11, 16, 15, 14, 13, 12 except 18=500(LC 12), 17=282(LC 10)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-18=-727/300, 2-3=-399/203, 3-5=-361/174, 5-6=-303/143  
 BOT CHORD 17-18=-441/218  
 WEBS 2-17=-377/763

- 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(3E) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 12-9-8 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 16, 15, 14, 13, 12 except (jt=lb) 18=164, 17=459.

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 Date:

January 11,2023

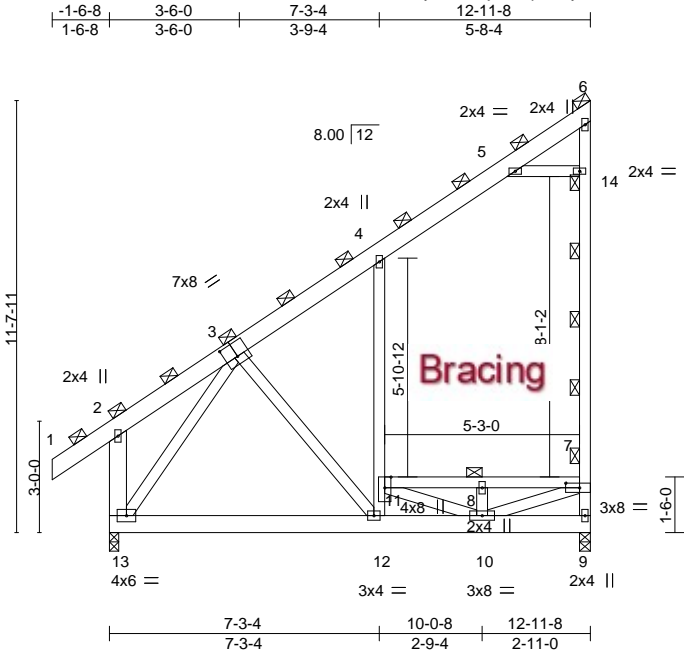




Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	T07	ROOF TRUSS	1	2	T29562143

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Scale = 1:62.1

Plate Offsets (X,Y)--		[3:0-4-0,0-4-8], [7:0-4-8,0-1-8]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	3-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.60	Vert(LL)	0.18 12-13	>857	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.61	Vert(CT)	-0.33 12-13	>464	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.64	Horz(CT)	0.00 9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS	Attic	0.07 7-11	943	360	Weight: 278 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2

BOT CHORD 2x6 SP No.2 \*Except\*

7-11: 2x4 SP No.2

WEBS 2x4 SP No.3 \*Except\*

6-9: 2x4 SP M 31, 4-12: 2x4 SP No.2, 2-13: 2x6 SP No.2

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

JOINTS 1 Brace at Jt(s): 6, 2, 8

**REACTIONS.** (size) 9=0-3-8, 13=0-3-0

Max Horz 13=438(LC 12)

Max Uplift 9=-216(LC 12)

Max Grav 9=1520(LC 20), 13=1002(LC 20)

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

TOP CHORD 3-4=-557/40, 4-5=-340/256, 5-6=-235/756, 7-9=-1535/494, 7-14=-541/263, 6-14=-509/275, 2-13=-276/212

BOT CHORD 12-13=-598/738, 10-12=-401/743, 9-10=-680/427, 8-11=-1075/17, 7-8=-1075/17

WEBS 4-11=0/450, 3-12=-554/521, 5-14=-764/177, 8-10=-500/0, 10-11=0/729, 7-10=-597/1944, 3-13=-635/115

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-16; Vult=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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-9-12 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). 4-5, 5-14; Wall dead load (5.0psf) on member(s).4-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-11, 7-8
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=216.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.

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:

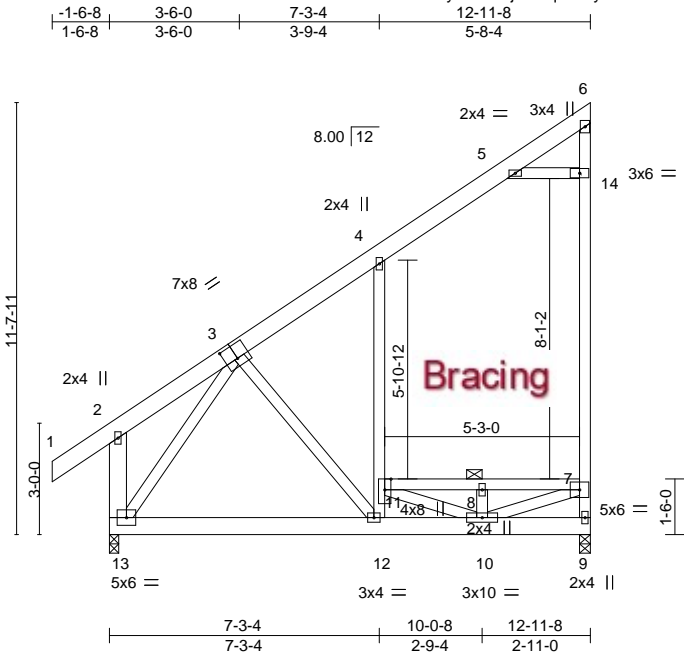
January 11,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	T08	ROOF TRUSS	1	1	T29562144
Job Reference (optional)					

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

8.530 s Aug 11 2022
MiTek Industries, Inc.
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Page 1

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Scale = 1:62.1

Plate Offsets (X,Y)--		[3:0-4-0,0-4-8]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.69	Vert(LL)	0.23 12-13	>643	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.74	Vert(CT)	-0.43 12-13	>348	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.85	Horz(CT)	0.00 9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS	Attic	-0.09 7-11	707	360	Weight: 139 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2

BOT CHORD 2x6 SP No.2 \*Except\*

7-11: 2x4 SP No.2

WEBS 2x4 SP No.3 \*Except\*

6-9: 2x4 SP M 31, 4-12: 2x4 SP No.2, 2-13: 2x6 SP No.2

**BRACING-**

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

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

JOINTS 1 Brace at Jt(s): 8

**REACTIONS.** (size) 9=0-3-8, 13=0-3-0

Max Horz 13=292(LC 12)

Max Uplift 9=-144(LC 12)

Max Grav 9=1014(LC 20), 13=668(LC 20)

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

TOP CHORD 3-4=-372/27, 5-6=-157/504, 7-9=-1023/329, 7-14=-361/175, 6-14=-339/183

BOT CHORD 12-13=-398/492, 10-12=-268/495, 9-10=-453/285, 8-11=-716/11, 7-8=-716/11

WEBS 4-11=0/300, 3-12=-369/347, 5-14=-510/118, 8-10=-333/0, 10-11=0/486, 7-10=-398/1296, 3-13=-423/77

- NOTES-**
- 1) 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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 12-9-12 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Ceiling dead load (5.0 psf) on member(s). 4-5, 5-14; Wall dead load (5.0psf) on member(s).4-11
  - 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-11, 7-8
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=144.
  - 8) Attic room checked for L/360 deflection.

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:

January 11,2023



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562145
3363898	T09	Common	8	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:19:15 2023
Page 1

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1-6-8

1-6-8

4-1-8

4-1-8

7-11-8

3-10-0

11-9-8

3-10-0

15-11-0

4-1-8

4x4 =

Scale = 1:76.7

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 0.23	Vert(LL)	-0.11 9-10	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.68	Vert(CT)	-0.19 9-10	>997	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.01 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 140 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD 2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, 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* 2-10,7-8: 2x6 SP No.2			

<b>REACTIONS.</b>	(size) 10=0-3-0, 8=0-3-0
	Max Horz 10=343(LC 9)
	Max Uplift 10=-145(LC 13), 8=-137(LC 12)
	Max Grav 10=789(LC 20), 8=721(LC 19)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-284/244, 4-5=-509/264, 5-6=-511/266, 2-10=-352/254
BOT CHORD	9-10=-187/409, 8-9=-57/319
WEBS	5-9=-322/551, 6-9=-229/262, 4-9=-222/261, 4-10=-553/102, 6-8=-516/111

**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) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-11-8, Exterior(2R) 7-11-8 to 10-11-8, Interior(1) 10-11-8 to 15-8-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) 10=145, 8=137.

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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:

January 11,2023

**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. - LEECH RES.
3363898	T09G	Common Supported Gable	2	1	T29562146
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:17 2023 Page 1  
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-kQcQ7eh?Fwvae2OtxP\_mtECzwwhyxQap41y5eBzwWCu

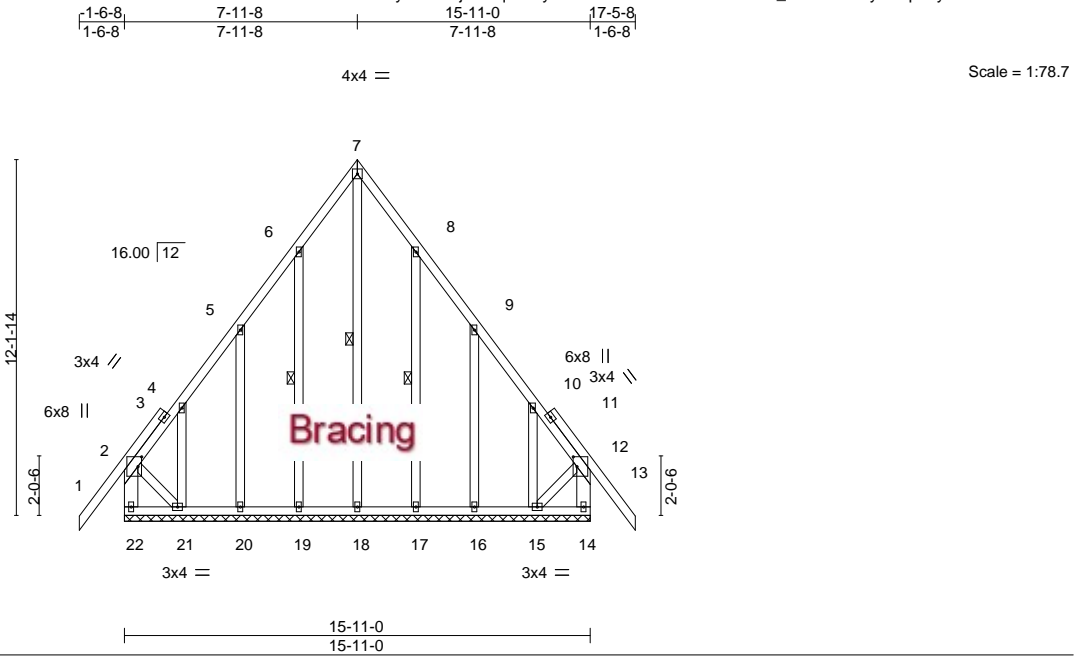


Plate Offsets (X,Y)--	[2:0-4-0,0-1-8], [12:0-4-0,0-1-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.20	Vert(LL)	-0.02	13	n/r	MT20 244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	-0.02	13	n/r	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.01	14	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S					Weight: 164 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x6 SP No.2 \*Except\*  
2-21,12-15: 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, Except:  
6-0-0 oc bracing: 21-22,14-15.  
WEBS 1 Row at midpt 7-18, 6-19, 8-17

REACTIONS.

All bearings 15-11-0.  
(lb) - Max Horz 22=346(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) except 22=226(LC 10), 14=175(LC 11), 19=159(LC 12), 20=172(LC 12), 21=346(LC 12), 17=158(LC 13), 16=173(LC 13), 15=338(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 18, 19, 20, 17, 16 except 22=414(LC 12), 14=394(LC 13), 21=274(LC 10), 15=253(LC 11)

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

TOP CHORD 2-22=403/260, 2-4=298/226, 10-12=283/248, 12-14=384/286  
BOT CHORD 21-22=319/305, 20-21=247/312, 19-20=247/312, 18-19=247/312, 17-18=247/312, 16-17=247/312, 15-16=247/312  
WEBS 2-21=289/363, 12-15=276/356

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) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 7-11-8, Corner(3R) 7-11-8 to 10-11-8, Exterior(2N) 10-11-8 to 17-5-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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 226 lb uplift at joint 22, 175 lb uplift at joint 14, 159 lb uplift at joint 19, 20-21=247/312, 17-18=247/312, 15-16=247/312, 14-15=276/356

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

January 11,2023

**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. - LEECH RES.	T29562147
3363898	T10	Common	10	1	Job Reference (optional)	

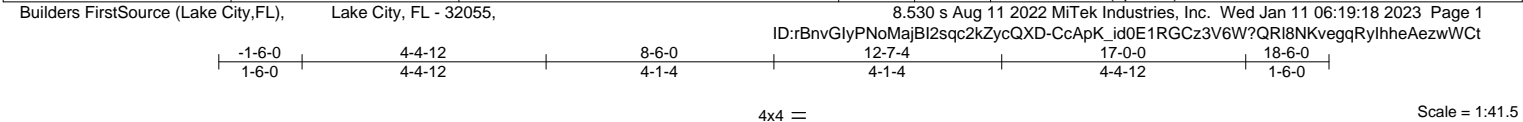


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [8:0-7-8,Edge], [10:0-4-0,0-3-0]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL 20.0		Plate Grip DOL	1.25	TC 0.22		Vert(LL)	0.11 10-17	>999	240
TCDL 7.0		Lumber DOL	1.25	BC 0.55		Vert(CT)	-0.13 10-13	>999	180
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.38		Horz(CT)	0.02 8	n/a	n/a
BCDL 10.0		Code FBC2020/TPI2014		Matrix-MS					
						Weight: 95 lb		FT = 20%	

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 8-10-8 oc bracing.
WEBS	2x4 SP No.3		
SLIDER	Left 2x6 SP No.2 1-11-8, Right 2x6 SP No.2 1-11-8		

<b>REACTIONS.</b>	(size) 2=0-3-8, 8=0-3-8
	Max Horz 2=147(LC 10)
	Max Uplift 2=154(LC 12), 8=154(LC 13)
	Max Grav 2=710(LC 1), 8=710(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-719/550, 4-5=-586/536, 5-6=-586/536, 6-8=-719/550
BOT CHORD	2-10=-376/554, 8-10=-389/554
WEBS	5-10=-497/405

- 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 1-6-0, Interior(1) 1-6-0 to 8-6-0, Exterior(2R) 8-6-0 to 11-6-0, Interior(1) 11-6-0 to 18-6-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 2 and 154 lb uplift at joint 8.

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:

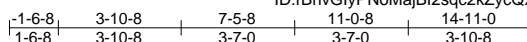
January 11,2023

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

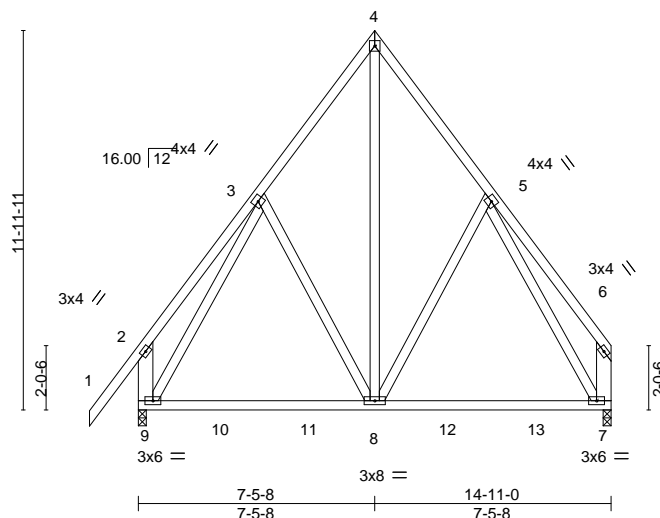
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

 $4 \times 4 =$ 

Scale = 1:72.7

[illegible]

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		
WEBS	2x4 SP No.3 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	2-9,6-7: 2x6 SP No.2		

**REACTIONS.** (size) 9=0-3-0, 7=0-3-0  
 Max Horz 9=327(LC 9)  
 Max Uplift 9=-137(LC 13), 7=-129(LC 12)  
 Max Grav 9=742(LC 20), 7=674(LC 19)

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

TOP CHORD 2-3=-264/232, 3-4=-470/251, 4-5=-472/253, 2-9=-333/243

BOT CHORD  $8-9=-178/378$ ,  $7-8=-55/293$ 

WEBS 4-8=-306/515, 3-9=-525/95, 5-7=-485/106

**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., GCp=-0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-8 to 1-5-8, Interior(1) 1-5-8 to 7-5-8, Exterior(2R) 7-5-8 to 10-5-8, Interior(1) 10-5-8 to 14-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 137 lb uplift at joint 9 and 129 lb uplift at joint 7.

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.

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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



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562150
3363898	T12	Common Girder	1	2	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:24 2023 Page 2  
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-1mX4b1mOc4nb\_7QDrNcPfi?89l2q3Uqrhd8zOHzwWCn

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-5=-54, 6-11=-20

Concentrated Loads (lb)

Vert: 8=-1532(B) 12=-1536(B) 13=-1532(B) 14=-1532(B) 15=-1532(B) 16=-1532(B) 17=-1532(B)



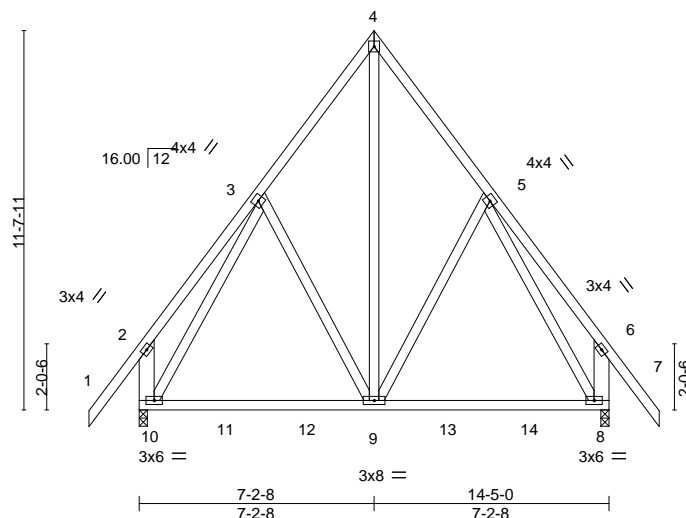
Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:26 2023 Page 1  
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8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:26 2023 Page 1

ID:rBnyGlvPNoMaiBl2sqc2kZvcQXD-z9fq0ioe8h1JDRabzofk74VNYecXM488xd4SAzwWCl



Scale = 1:70.7



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

**REACTIONS.** (size) 10=0-3-0, 8=0-3-0  
 Max Horz 10=-341(LC 10)  
 Max Uplift 10=-135(LC 13), 8=-135(LC 12)  
 Max Grav 10=712(LC 20), 8=712(LC 19)

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

**TOP CHORD** 2-3=-255/226, 3-4=-445/246, 4-5=-445/246, 5-6=-255/226, 2-10=-324/238,  
6-8=-324/238

**BOT CHORD** 9-10=-158/384, 8-9=-40/296

**WEBS** 4-9=-298/492, 3-10=-505/94, 5-8=-505/93

**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., GCp=-0.18; MWFRS (envelope) gable end zone and C-C Exterior(2/E) -1.6-8 to 1-5-8, Interior(1) 1-5-8 to 7-2-8, Exterior(2/R) 7-2-8 to 10-2-8, Interior(1) 10-2-8 to 15-11-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) 10=135. 8=135.

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:

January 11, 2023



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 C**

**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. - LEECH RES.
3363898	T13G	Common Supported Gable	1	1	T29562152
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:28 2023 Page 1  
ID:rBnvGlyPNoMajBI2sqc2kZycQXD-vXmbQOqufJH0Tlk\_4DhLqY9r?MQR?OGRbF6AX3zwWCj

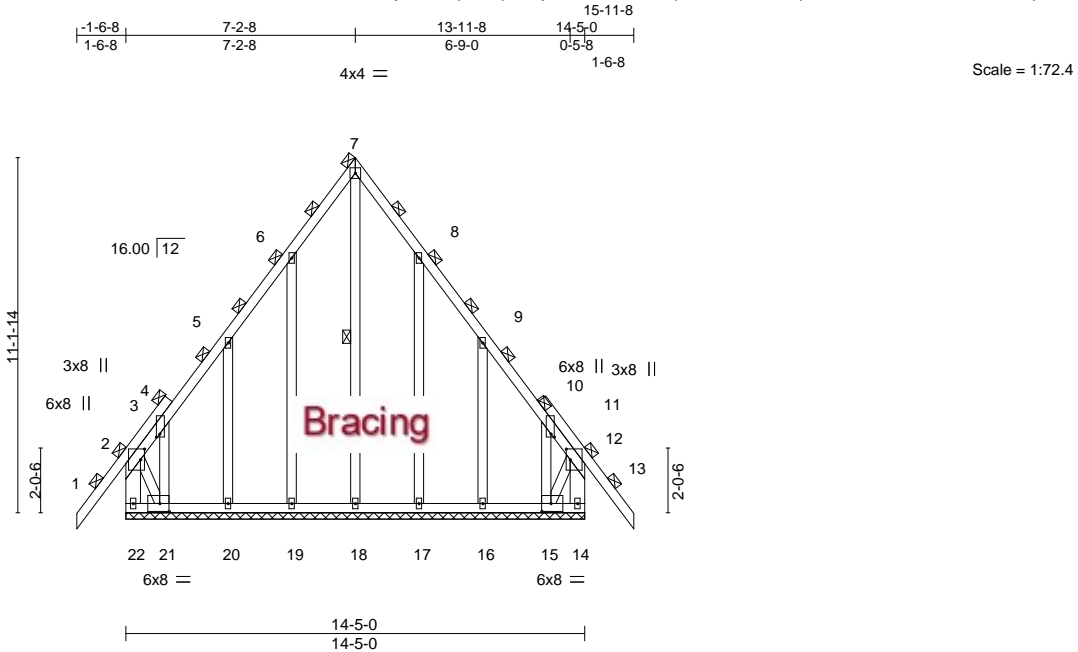


Plate Offsets (X,Y)--		[2:0-4-0,0-1-8], [3:0-1-3,0-1-4], [11:0-1-3,0-1-4], [12:0-4-0,0-1-8], [15:0-3-8,0-3-0], [21:0-3-8,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL 1.25		TC 0.21		Vert(LL)	-0.01	13	n/r	120	MT20 244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.07		Vert(CT)	-0.02	13	n/r	120	
BCLL 0.0 *		Rep Stress Incr YES		WB 0.23		Horz(CT)	0.00	14	n/a	n/a	
BCDL 10.0		Code FBC2020/TPI2014		Matrix-S							Weight: 147 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x6 SP No.2 *Except*	6-0-0 oc bracing: 21-22,14-15.
2-21,12-15: 2x4 SP No.3	WEBS 1 Row at midpt 7-18
OTHERS 2x4 SP No.3	

REACTIONS.	All bearings 14-5-0.
(lb) - Max Horz	22=322(LC 10)
Max Uplift	All uplift 100 lb or less at joint(s) except 22=331(LC 10), 14=268(LC 11), 19=163(LC 12), 20=157(LC 12), 21=445(LC 12), 17=162(LC 13), 16=158(LC 13), 15=433(LC 13)
Max Grav	All reactions 250 lb or less at joint(s) 18, 19, 20, 17, 16 except 22=512(LC 12), 14=489(LC 13), 21=349(LC 10), 15=314(LC 11)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-22=488/318, 11-12=-235/252, 12-14=467/346
BOT CHORD	21-22=-294/277, 20-21=-222/281, 19-20=-222/281, 18-19=-222/281, 17-18=-222/281, 16-17=-222/281, 15-16=-222/281
WEBS	7-18=-251/168, 2-21=-346/436, 12-15=-327/427

- 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 Corner(3E) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 7-2-8, Corner(3R) 7-2-8 to 10-2-8, Exterior(2N) 10-2-8 to 15-11-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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.
  - 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* 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.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 331 lb uplift at joint 22, 268 lb uplift at joint 14, 163 lb uplift at joint 19, 157 lb uplift at joint 20, 445 lb uplift at joint 21, 162 lb uplift at joint 17, 158 lb uplift at joint 16 and 433 lb uplift at joint 15.
  - 12) 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.

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

January 11,2023

**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



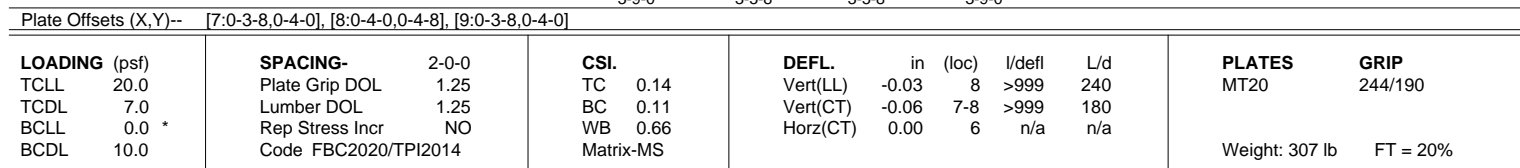
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:31 2023 Page 1

ID:rBnvGlyPNoMajBI2sqc2kZycQXD-K6Sj3QsnyEgbKCTZILE2RBNfNZSSCeGtIDLq8NzwWCg

3-9-0 7-2-8 10-8-0 14-5-0  
3-9-0 3-5-8 3-5-8 3-9-0

4x6 || Scale = 1:70.7



**REACTIONS.** (size) 10=0-3-0, 6=0-3-0  
 Max Horz 10=-280(LC 4)  
 Max Uplift 10=-637(LC 9), 6=-767(LC 8)  
 Max Grav 10=3884(LC 2), 6=4744(LC 2)

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

TOP CHORD 1-2=-2984/537, 2-3=-2322/536, 3-4=-2322/536, 4-5=-2916/531, 1-10=-3222/549,  
5-6=-3160/545

BOT CHORD 9-10=-2913/350, 8-9=-394/1750, 7-8=-282/1709

WEBS 3-8=-747/3457, 4-8=-766/325, 4-7=-187/1009, 2-8=-837/332, 2-9=-197/1140,  
1-9=-286/1775, 5-7=-288/1759

**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, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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., GCpi=0.18; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 637 lb uplift at joint 10 and 767 lb uplift at joint 6.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1119 lb down and 180 lb up at 2-0-4, 1119 lb down and 180 lb up at 4-0-4, 1119 lb down and 180 lb up at 6-0-4, 1083 lb down and 180 lb up at 8-0-4, 1083 lb down and 180 lb up at 10-0-4, and 1083 lb down and 180 lb up at 12-0-4, and 1127 lb down and 171 lb up at 14-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
Continued on page 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:

January 11, 2023



**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f, 701f, 702f, 703f, 704f, 705f, 706f, 707f,**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562153
3363898	T14	Common Girder	1	2	Job Reference (optional)	

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-5=-54, 6-10=-20

Concentrated Loads (lb)

Vert: 6=-1010(B) 9=-1002(B) 11=-1002(B) 12=-1002(B) 13=-1002(B) 14=-1002(B) 15=-1002(B)





Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562154
3363898	T15	Common	1	1	Job Reference (optional)	

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

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ID:rBnvGlyPNoMajBI2sqc2kZycQXD-GVaUU6t1UrwJZWcxtmHWXctfPN6kgcvAlXqxCgzWCE

1-0-0
5-8-0
11-4-0
12-4-0
1-0-0

1-0-0
5-8-0
5-8-0
1-0-0

4x4 =

Scale = 1:58.3

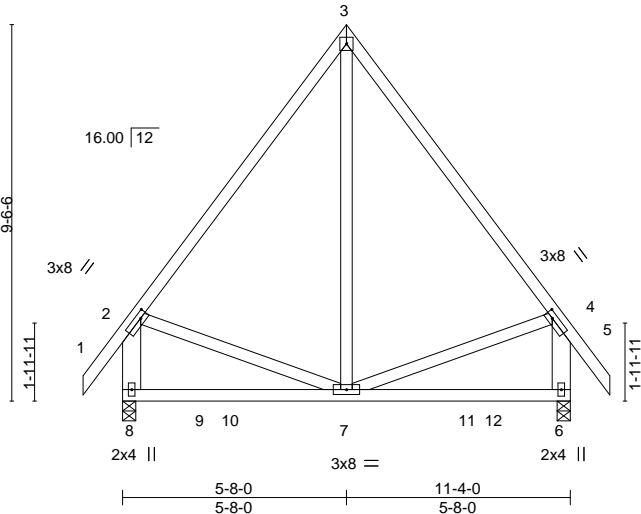


Plate Offsets (X,Y)--		[2:0-2-4,0-1-8], [4:0-2-4,0-1-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.42	Vert(LL)	-0.02	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.04	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 88 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
2-8,4-6: 2x6 SP No.2

BRACING-

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

REACTIONS.

(size) 8=0-4-0, 6=0-4-0  
Max Horz 8=273(LC 11)  
Max Uplift 8=-110(LC 8), 6=-110(LC 9)  
Max Grav 8=469(LC 1), 6=469(LC 1)

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

TOP CHORD 2-3=-345/245, 3-4=-345/245, 2-8=-420/238, 4-6=-420/238  
BOT CHORD 7-8=-299/326  
WEBS 2-7=-196/255, 4-7=-198/256

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) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-8-0, Exterior(2R) 5-8-0 to 8-8-0, Interior(1) 8-8-0 to 12-4-0 zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 110 lb uplift at joint 8 and 110 lb uplift at joint 6.

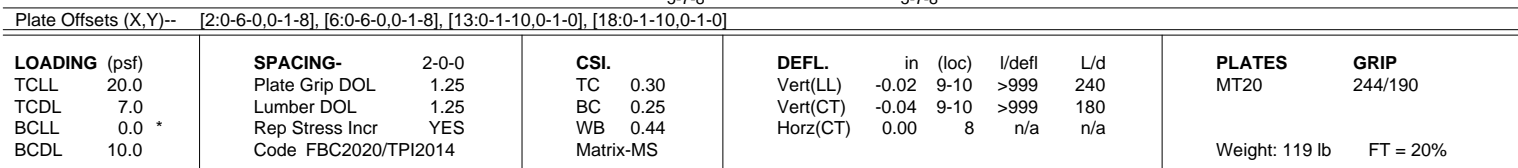
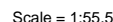
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Philip J. O'Regan PE No.58126  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11,2023



Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:35 2023 Page 1  
ID:rBnvGlyPNomajBI2sqc2kZycQXD-CuhEuovH0SA1opmK\_BJ\_c1y1IAne8VdSDrJ2H9zwWCc



**REACTIONS.** (size) 10=0-3-8, 8=0-3-8  
 Max Horz 10=-271(LC 10)  
 Max Uplift 10=-104(LC 13), 8=-104(LC 12)  
 Max Gray 10=495(LC 1), 8=495(LC 1)

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

TOP CHORD	2-4=-344/288, 4-6=-344/288, 2-10=-446/285, 6-8=-446/285
BOT CHORD	9-10=-312/353, 8-9=-197/275
WEBS	4-9=-313/214, 2-9=-252/307, 6-9=-255/309

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDF=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) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 5-7-8, Corner(3R) 5-7-8 to 8-7-8, Exterior(2N) 8-7-8 to 12-9-8 zone; end vertical left and right exposed; 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) 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.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 10 and 104 lb uplift at joint 8.
- 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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MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11, 2023



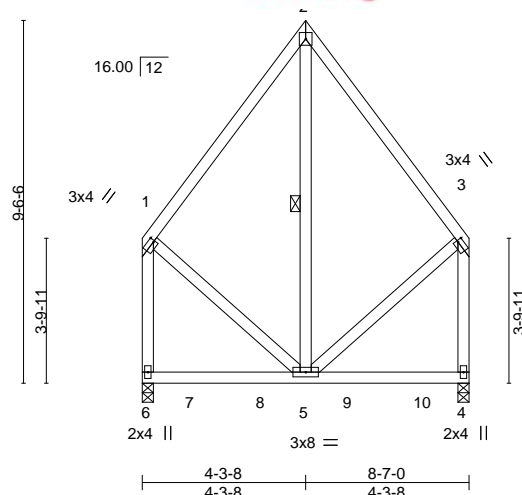
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-747.5 (REV. 3/19/2020) BEFORE USE. Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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 C**

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:36 2023 Page 1  
 ID:rBnvGlyPNoMajBl2sqc2kZycQXD-g4Fc68wvnmUqZLWYUqD8EUC4a8?t2qcRV2bpbzwWCb  
 4-3-8 8-7-0  
 4-3-8 4-3-8  
 4x4 = Scale = 1:60.5



<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	
WEBS	2x4 SP No.3	WEBS	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS.</b>	(size) 6=0-3-8, 4=0-3-8		1 Row at midpt 2-5
	Max Horz 6=132(LC 9)		
	Max Uplift 6=115(LC 8), 4=115(LC 9)		
	Max Grav 6=307(LC 1), 4=307(LC 1)		

**NOTES-**

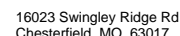
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-3-8, Exterior(2R) 4-3-8 to 7-3-8, Interior(1) 7-3-8 to 8-5-4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 6 and 115 lb uplift at joint 4.

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

 **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





Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562158
3363898	T17G	GABLE	1	1	Job Reference (optional)	

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

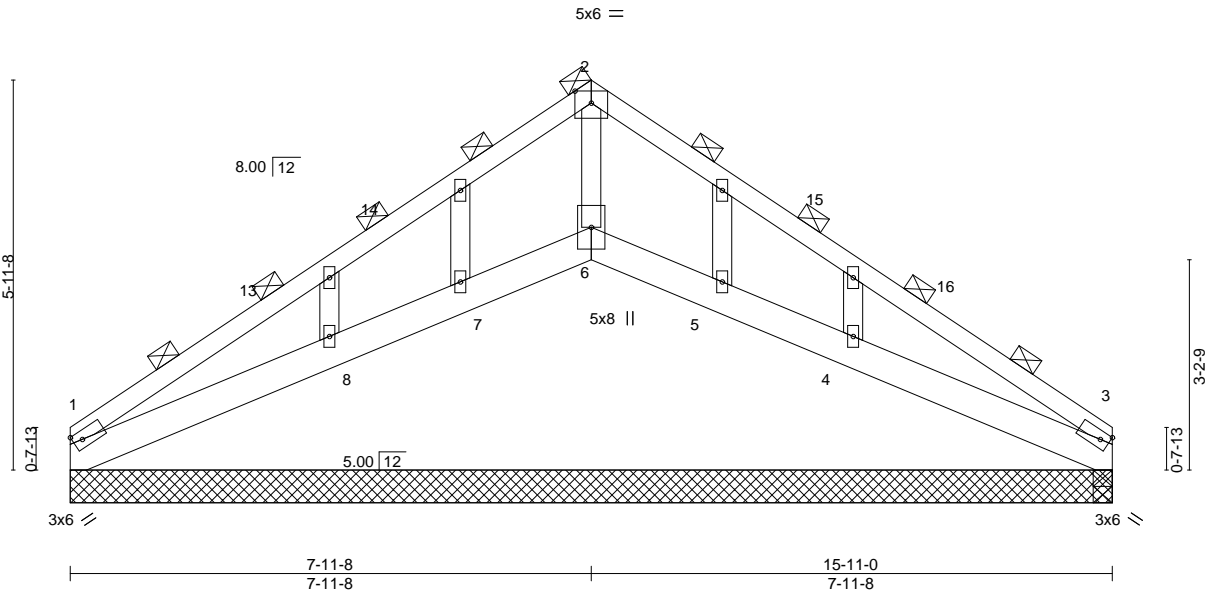
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:19:40 2023
Page 1
ID:rBnvGlyPN0MajBI2sqc2kZycQXD-ZrV7yVzQr?oJvbfInkv9J4fmBBUGprZCM60pyMzwWCX

7-11-8

7-11-8

15-11-0

7-11-8



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 0.77	Vert(LL)	-0.01	3-4	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.19	Vert(CT)	-0.01	3-4	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	3	n/a	n/a	
BCDL 10.0	Code FBC2020/TP12014		Matrix-S						
								Weight: 80 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
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 6-0-0 oc bracing.
WEBS	2x4 SP No.3		
OTHERS	2x4 SP No.3		

**REACTIONS.** All bearings 15-11-0.  
 (lb) - Max Horz 1=124(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 3, 7, 8, 5, 4 except 6=109(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 3, 3, 7, 8, 5, 4 except 6=477(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-6=388/130

- 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-11-8, Exterior(2R) 7-11-8 to 10-11-8, Interior(1) 10-11-8 to 15-11-0 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 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) 1, 3, 7, 8, 5, 4 except (jt=lb) 6=109.
  - 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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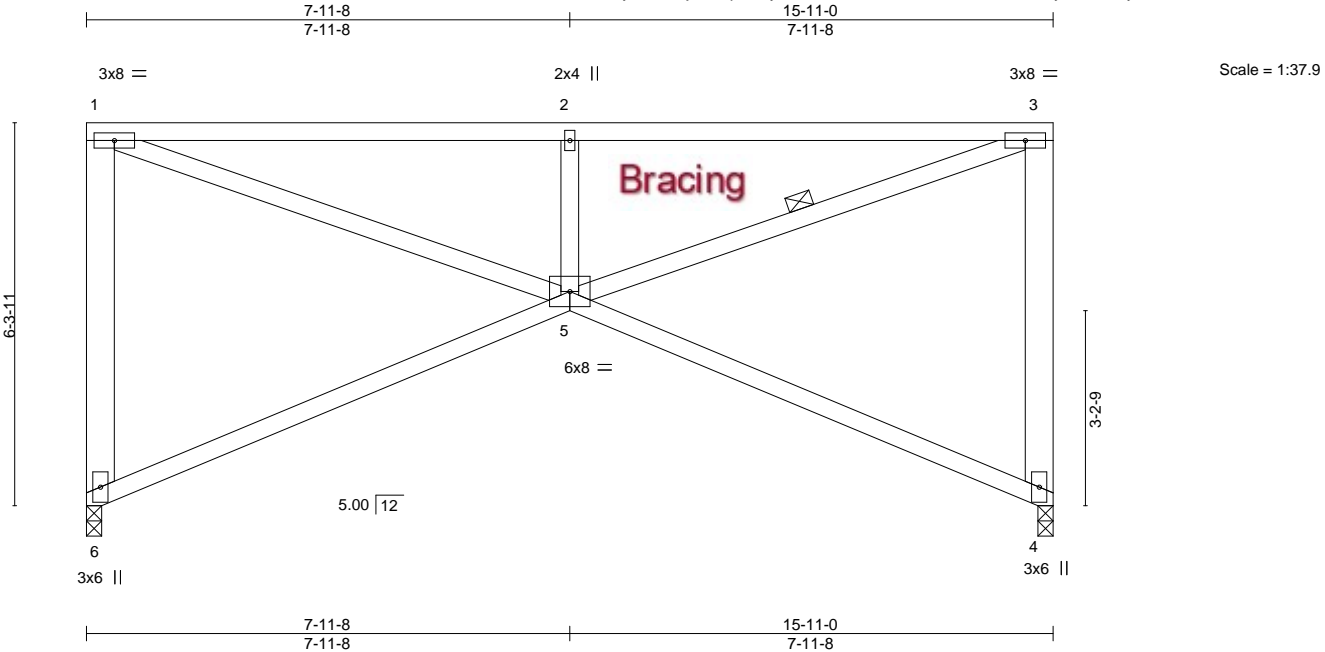
Philip J. O'Regan PE No.58126  
 MiTek Inc. DBA MiTek USA FL Cert 6634  
 16023 Swingley Ridge Rd. Chesterfield, MO 63017  
 Date:

January 11,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562159
3363898	T18	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:19:41 2023
Page 1

ID:rBnvGlyPNoMajBl2sqc2kZycQXD-113V9r\_2clwAWkEULRQOrlCyVbm0Y4yLbmmMUozwWCW
15-11-0
7-11-8



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 0.67	Vert(LL)	-0.13	5-6	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.26	5-6	>712	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.96	Horz(CT)	0.06	4	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 103 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-6,3-4: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 3-5

REACTIONS.

(size) 6=0-3-0, 4=0-3-0  
Max Horz 6=-194(LC 8)  
Max Uplift 6=-192(LC 8), 4=-192(LC 9)  
Max Grav 6=572(LC 1), 4=572(LC 1)

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

TOP CHORD 1-6=-506/455, 1-2=-930/835, 2-3=-930/835, 3-4=-506/506  
BOT CHORD 5-6=-259/278  
WEBS 1-5=-769/956, 2-5=-471/507, 3-5=-925/956

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; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=192, 4=192.

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:

January 11,2023

**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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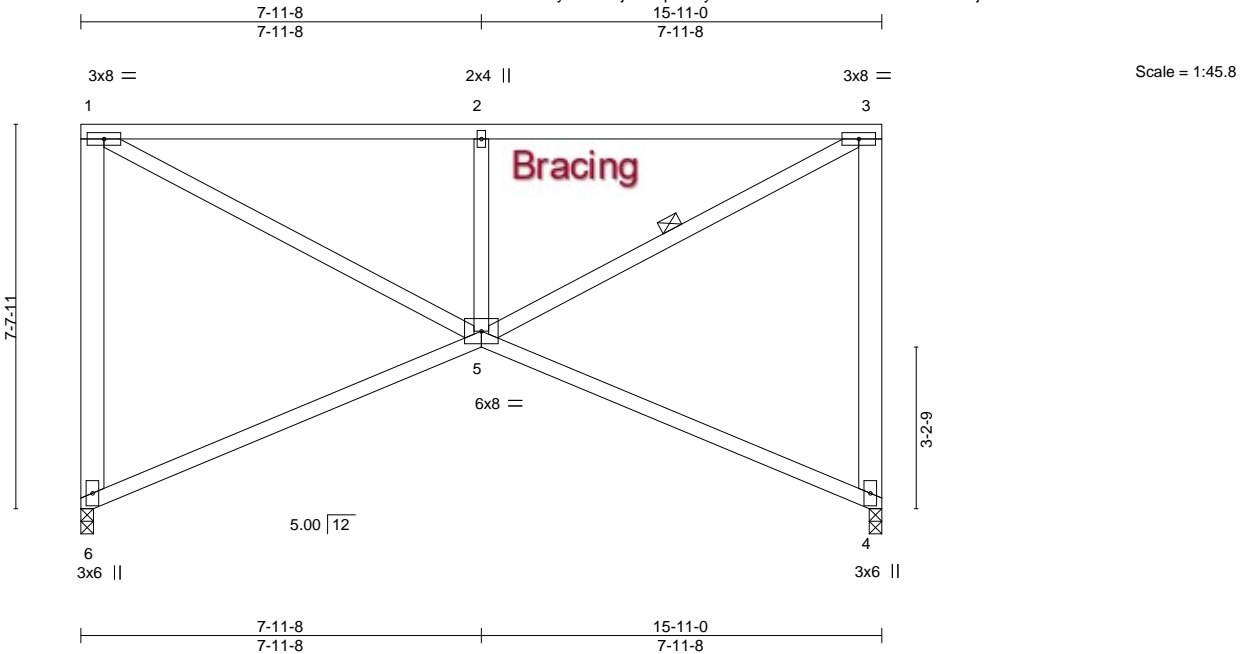


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562160
3363898	T19	Roof Special	1	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:43 2023 Page 1

ID:rBnvGlyPNoMajBI2sqc2kZycQXD-zQAFaX?J7wAum2NsSsSsxjHIEPSU02ae24FTzhzwWCU



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 0.65	Vert(LL)	-0.12	5-6	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.25	5-6	>746	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(CT)	0.04	4	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 \*Except\*  
1-6,3-4: 2x6 SP No.2

**REACTIONS.** (size) 6=0-3-0, 4=0-3-0  
Max Horz 6=-237(LC 8)  
Max Uplift 6=-211(LC 8), 4=-211(LC 9)  
Max Grav 6=572(LC 1), 4=572(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-505/446, 1-2=-633/600, 2-3=-633/600, 3-4=-505/537  
BOT CHORD 5-6=-319/325  
WEBS 1-5=-536/691, 2-5=-476/509, 3-5=-739/691

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; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=211, 4=211.

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:

January 11,2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**  
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

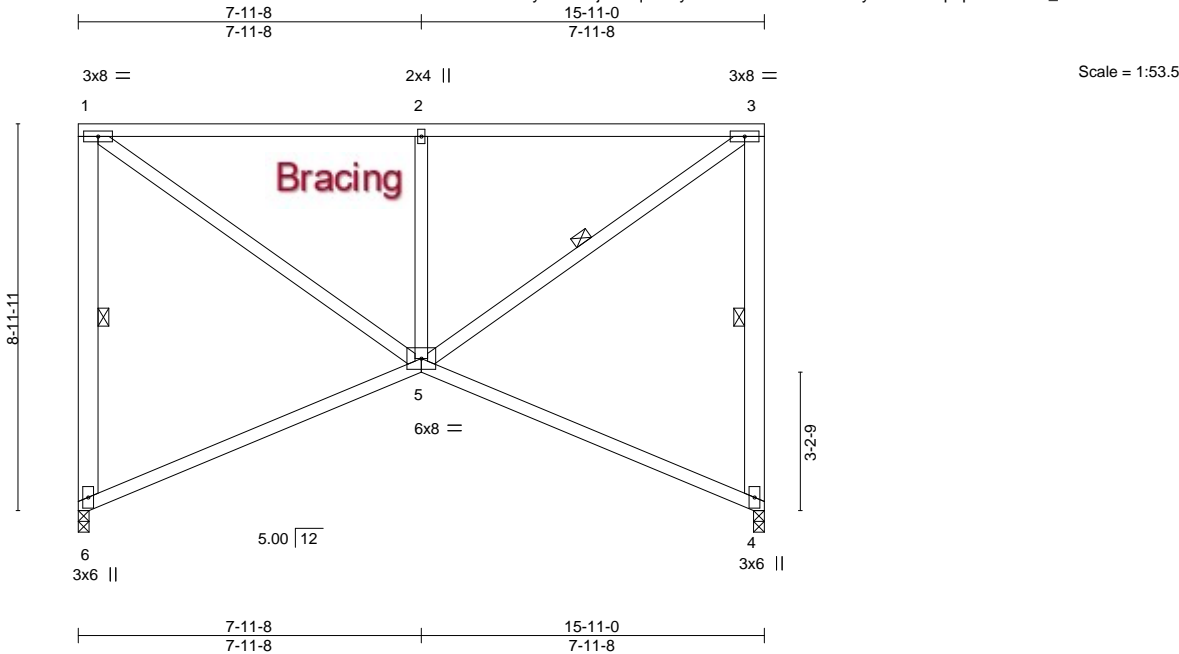


16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562161
3363898	T20	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:19:44 2023
Page 1
ID:rBnvGlyPNoMajBI2sqc2kZycQXD-Rckent0xuDIINCY30az5TwqTtpohIW2nHk\_157zwWCT



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 0.66	Vert(LL)	-0.12	5-6	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.25	5-6	>754	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.03	4	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 124 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-6,3-4: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-1-5 oc bracing.  
WEBS 1 Row at midpt 1-6, 3-4, 3-5

**REACTIONS.** (size) 6=0-3-0, 4=0-3-0  
Max Horz 6=-280(LC 8)  
Max Uplift 6=-233(LC 8), 4=-233(LC 9)  
Max Grav 6=572(LC 1), 4=572(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-503/431, 1-2=-480/481, 2-3=-480/481, 3-4=-503/574  
BOT CHORD 5-6=-378/373  
WEBS 1-5=-411/564, 2-5=-478/511, 3-5=-671/604

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 Corner(3) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 6, 4 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) 6=233, 4=233.

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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:

January 11,2023

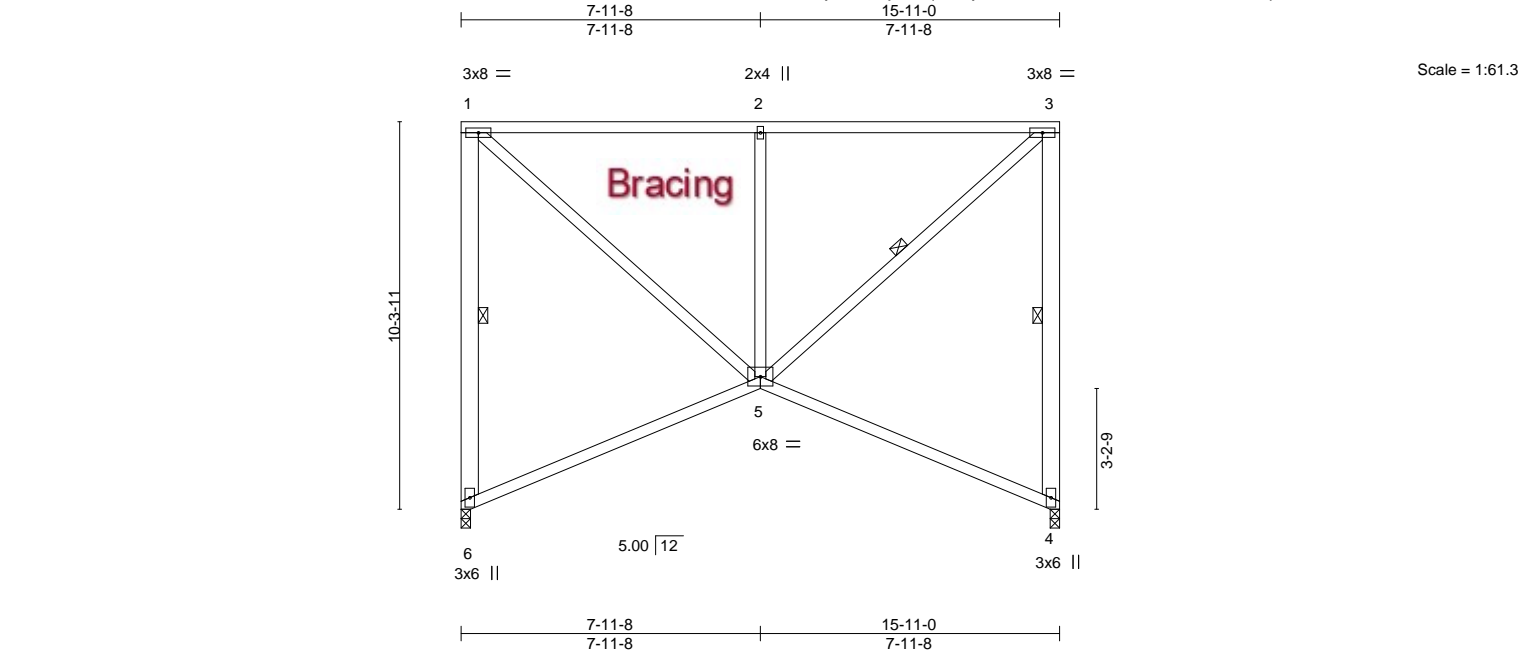


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	T21	Roof Special	1	1	T29562162
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
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Page 1

ID:rBnvGlyPNoMajBl2sqc2kZycQXD-N?sOCY2BQrZTdW6R8?0ZYLvpIcU7DQW4k2T790zwWCR



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.66	Vert(LL)	-0.12	5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.49	Vert(CT)	-0.25	5-6	>754	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	-0.02	4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 134 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-6,3-4: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 8-7-3 oc bracing.  
WEBS 1 Row at midpt 1-6, 3-4, 3-5

REACTIONS.

(size) 6=0-3-0, 4=0-3-0  
Max Horz 6=-323(LC 8)  
Max Uplift 6=-259(LC 8), 4=-259(LC 9)  
Max Grav 6=572(LC 1), 4=572(LC 1)

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

TOP CHORD 1-6=-502/413, 1-2=-386/410, 2-3=-386/410, 3-4=-502/616  
BOT CHORD 5-6=-436/432  
WEBS 1-5=-346/492, 2-5=-480/511, 3-5=-653/596

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; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=259, 4=259.

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Date:

January 11,2023

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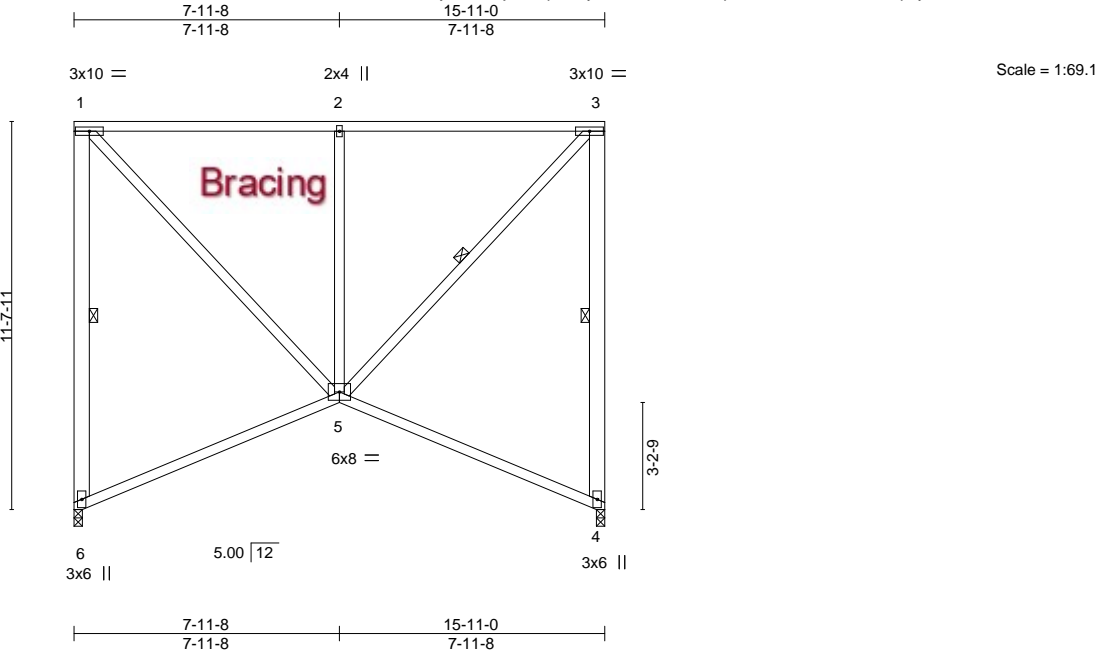


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	T22	Roof Special	1	1	T29562163
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:47 2023 Page 1

ID:rBnvGlyPNoMajBl2sqc2kZycQXD-sBQmQu2pB8hKEfhehiXo5ZS\_\_0pJyreEziDhiSzwWCQ



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)	-0.12 5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.49	Vert(CT)	-0.25 5-6	>751	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	-0.02 4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 145 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
1-6,3-4: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 8-1-14 oc bracing.  
WEBS 1 Row at midpt 1-6, 3-4, 3-5

**REACTIONS.** (size) 6=0-3-0, 4=0-3-0  
Max Horz 6=-365(LC 8)  
Max Uplift 6=-289(LC 8), 4=-289(LC 9)  
Max Grav 6=572(LC 1), 4=572(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-502/434, 1-2=-323/364, 2-3=-323/364, 3-4=-520/664  
BOT CHORD 5-6=-493/491  
WEBS 1-5=-346/448, 2-5=-481/510, 3-5=-664/613

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 Corner(3) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 6, 4 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) 6=289, 4=289.

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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:

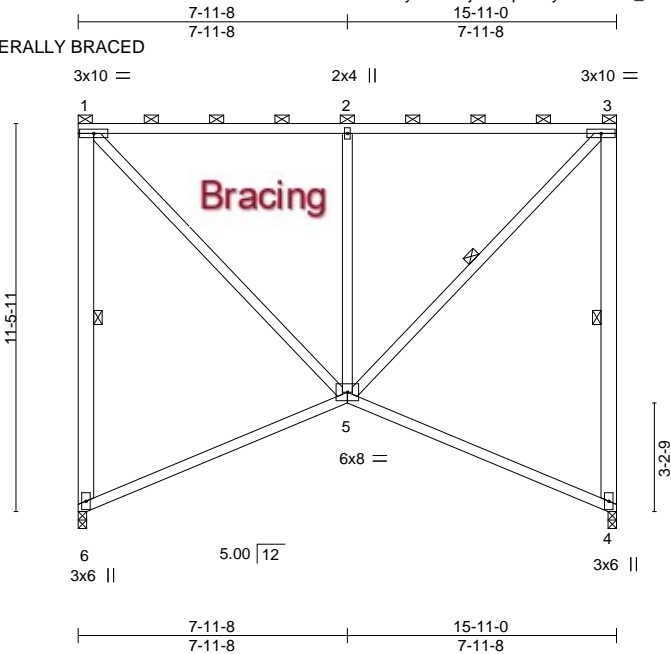
January 11,2023

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	T23	Piggyback Base	1	1	T29562164
Job Reference (optional)					

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:19:48 2023
Page 1

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



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 0.70	Vert(LL)	-0.12 5-6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.49	Vert(CT)	-0.25 5-6	>751	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.80	Horz(CT)	-0.02 4	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 144 lb	FT = 20%

LUMBER-

TOP CHORD
2x4 SP No.2

BOT CHORD
2x4 SP No.2

WEBS
2x4 SP No.3 \*Except\*
1-6,3-4: 2x6 SP No.2

BRACING-

TOP CHORD
2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.

BOT CHORD
Rigid ceiling directly applied or 8-2-7 oc bracing.

WEBS
1 Row at midpt
1-6, 3-4, 3-5

REACTIONS.

(size)
6=0-3-0, 4=0-3-0

Max Horz
6=-360(LC 8)

Max Uplift
6=-285(LC 8), 4=-285(LC 9)

Max Grav
6=572(LC 1), 4=572(LC 1)

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

TOP CHORD
1-6=-502/431, 1-2=-330/368, 2-3=-330/368, 3-4=-514/658

BOT CHORD
5-6=-486/484

WEBS
1-5=-346/453, 2-5=-481/511, 3-5=-661/610

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; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=285, 4=285.
- 8) 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:

January 11,2023

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

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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562165
3363898	T24G	Roof Special Supported Gable	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:51 2023 Page 1  
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-kzfHFG5KFNBjH\_PwYbkFPcoldH1uqtPuKBurDzwWCM

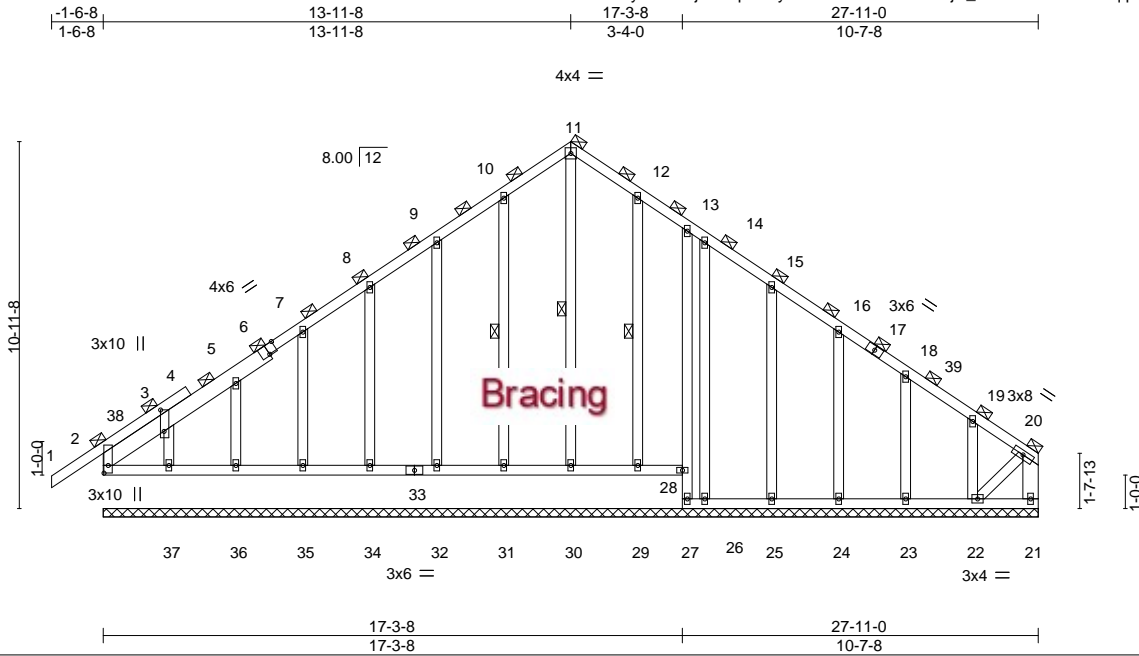


Plate Offsets (X,Y)--		[2:0-2-12,0-1-8], [3:0-7-11,0-1-4], [6:0-3-0,Edge]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.00 1 n/r	120	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	-0.00 1 n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01 22 n/a	n/a	
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S					Weight: 228 lb FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2 \*Except\*  
2-6: 2x6 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
13-27: 2x4 SP No.3  
WEBS 2x6 SP No.2 \*Except\*  
20-22: 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 11-30, 10-31, 12-29

**REACTIONS.**

All bearings 27-11-0.  
(lb) - Max Horz 2=216(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 21, 27, 30, 31, 32, 34, 35, 36, 37,  
29, 25, 24, 23, 28 except 2=106(LC 8), 26=135(LC 13), 22=149(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 21, 2, 27, 30, 31, 32, 34, 35, 36,  
37, 29, 26, 25, 24, 23, 22, 28

**FORCES.**

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

TOP CHORD 10-11=148/252

**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 Corner(3E) -1-6-8 to 1-5-8, Exterior(2N) 1-5-8 to 13-11-8, Corner(3R) 13-11-8 to 16-11-8, Exterior(2N) 16-11-8 to 27-8-4 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.
- Bearing at joint(s) 28 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) 21, 27, 30, 31, 32, 34, 35, 36, 37, 29, 25, 24, 23, 28 except (jt=lb) 2=106, 26=135, 22=149.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 30, 31, 32, 34, 35, 36, 37, 29.
- 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:

January 11,2023

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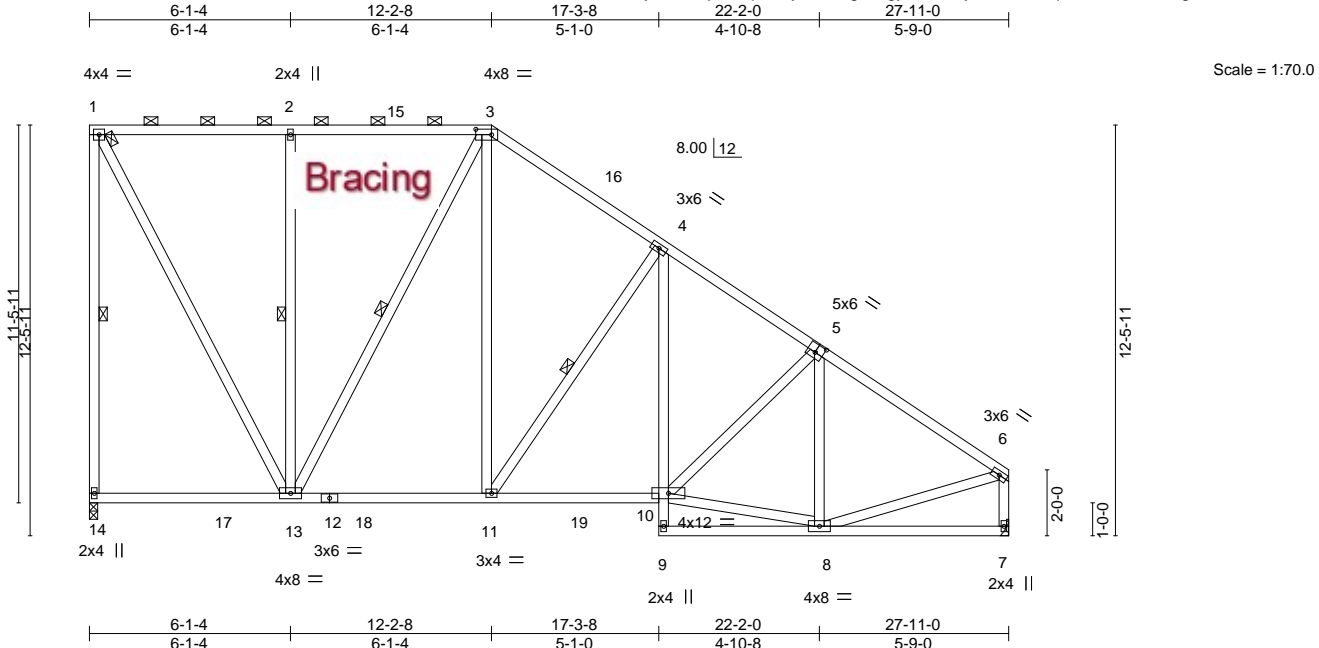
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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562166
3363898	T25	Piggyback Base	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:53 2023 Page 1  
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-gLn1gy7an\_RTya8n2zeCKqizWRsoMaC6Leg?v6zwWCK



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)	-0.08 10-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.13 10-11	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.03 7	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 233 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD 2x4 SP No.2 *Except* 4-9: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 1-13,3-13: 2x4 SP No.2	WEBS 1 Row at midpt 1-14, 2-13, 3-13, 4-11

<b>REACTIONS.</b>	(size) 14=0-3-0, 7=Mechanical
	Max Horz 14=-358(LC 13)
	Max Uplift 14=-255(LC 8), 7=-160(LC 13)
	Max Grav 14=1198(LC 2), 7=1174(LC 20)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-14=-1075/269, 1-2=-521/116, 2-3=-521/116, 3-4=-942/183, 4-5=-1268/209, 5-6=-1238/175, 6-7=-1088/172
BOT CHORD	13-14=-192/358, 11-13=-13/766, 10-11=0/1004, 4-10=-84/401
WEBS	1-13=-245/1096, 2-13=-378/190, 3-13=-520/191, 3-11=-169/734, 4-11=-583/248, 8-10=-69/957, 5-8=-323/68, 6-8=-50/947

- 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 27-9-4 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) 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, with BCDL = 10.0psf.
  - 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) except (jt=lb) 14=255, 7=160.
  - 8) 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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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
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**MiTek**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562167
3363898	T25G	GABLE	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:19:55 2023 Page 1

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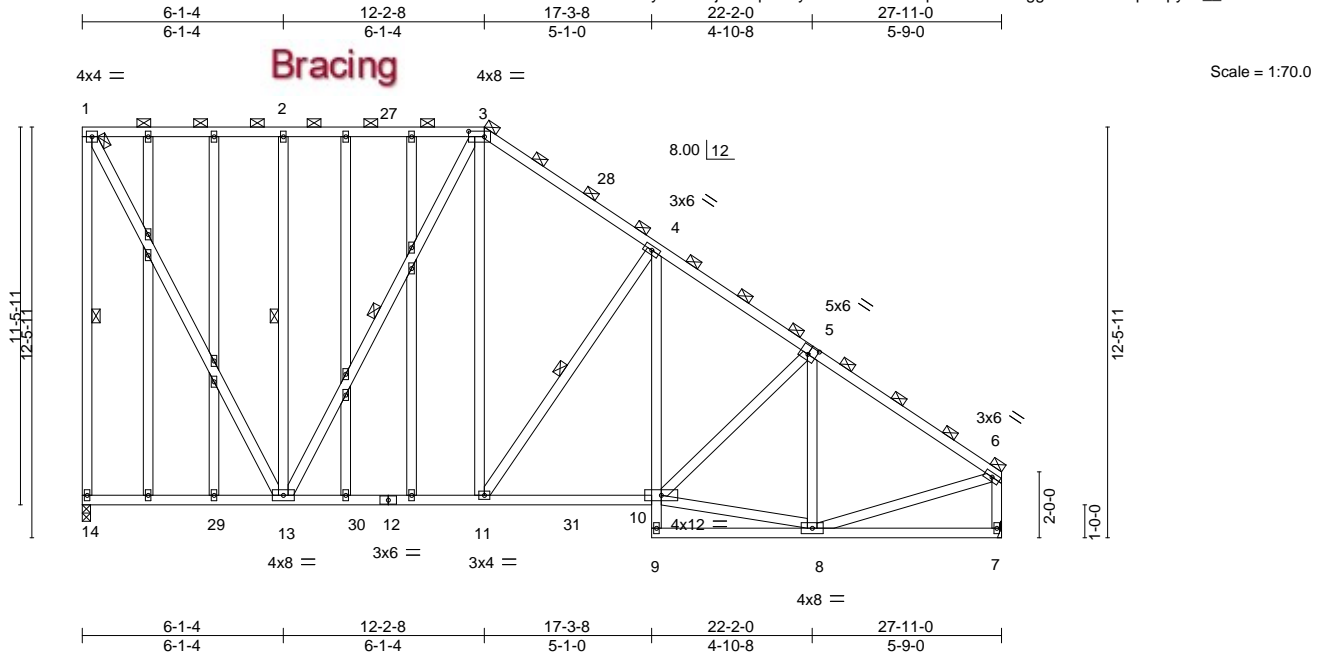


Plate Offsets (X,Y)--	[3:0-5-12,0-2-0], [5:0-3-0,0-3-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.86	Vert(LL)	-0.08 10-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.48	Vert(CT)	-0.13 10-11	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.03 7	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 298 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (4-10-15 max.), except end verticals.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
4-9: 2x4 SP No.3	WEBS 1 Row at midpt 1-14, 2-13, 3-13, 4-11
WEBS 2x4 SP No.3 *Except*	
1-13,3-13: 2x4 SP No.2	
OTHERS 2x4 SP No.3	

<b>REACTIONS.</b>	(size) 14=0-3-0, 7=Mechanical
	Max Horz 14=358(LC 13)
	Max Uplift 14=255(LC 8), 7=160(LC 13)
	Max Grav 14=1198(LC 2), 7=1174(LC 20)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-14=1075/269, 1-2=521/116, 2-3=521/116, 3-4=942/183, 4-5=1268/209, 5-6=1238/175, 6-7=1088/172
BOT CHORD	13-14=192/358, 11-13=13/766, 10-11=0/1004, 4-10=84/401
WEBS	1-13=245/1096, 2-13=378/190, 3-13=520/191, 3-11=169/734, 4-11=583/248, 8-10=69/957, 5-8=323/68, 6-8=50/947

#### 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 27-9-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) 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) 14=255, 7=160.
- 11) 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.

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

January 11,2023

**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. - LEECH RES.	T29562168
3363898	T26	Piggyback Base	1	1		
Job Reference (optional)						

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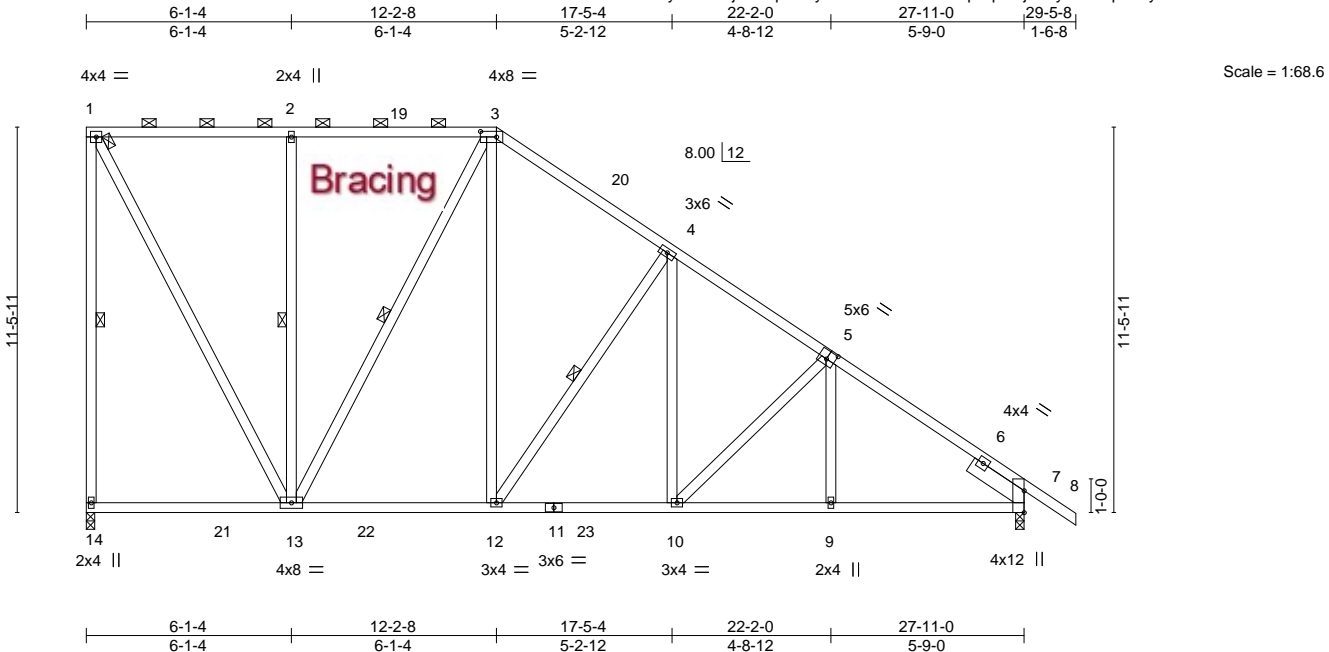


Plate Offsets (X,Y)--	[3:0-5-12,0-2-0], [5:0-3-0,0-3-0]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.86	Vert(LL)	-0.09 9-10	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.83	Vert(CT)	-0.16 9-10	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.07 7	n/a	n/a
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS				
				<b>PLATES</b>	<b>GRIP</b>		
				MT20	244/190		
				Weight: 220 lb		FT = 20%	

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
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 1-14, 2-13, 3-13, 4-12
1-13,3-13: 2x4 SP No.2	
SLIDER Right 2x6 SP No.2 1-11-8	

**REACTIONS.** (size) 14=0-3-0, 7=0-3-0  
Max Horz 14=-392(LC 13)  
Max Uplift 14=-256(LC 8), 7=-195(LC 13)  
Max Grav 14=1202(LC 2), 7=1259(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-14=-1080/269, 1-2=-524/116, 2-3=-524/116, 3-4=-948/183, 4-5=-1266/207, 5-7=-1499/209  
BOT CHORD 13-14=-207/391, 12-13=-3/793, 10-12=0/1022, 9-10=-61/1150, 7-9=-61/1151  
WEBS 1-13=-245/1102, 2-13=-379/190, 3-13=-520/192, 3-12=-170/741, 4-12=-610/247, 4-10=-77/395

- 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 3-1-12, Interior(1) 3-1-12 to 12-2-8, Exterior(2R) 12-2-8 to 15-2-8, Interior(1) 15-2-8 to 29-5-8 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.
  - 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) 14=256, 7=195.
  - 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 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:

January 11,2023





Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562171
3363898	T28G	GABLE COMMON	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
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3-8-11

11-4-13

26-0-3

35-3-8

42-3-0

3-8-11

7-8-2

14-7-6

9-3-5

6-11-8

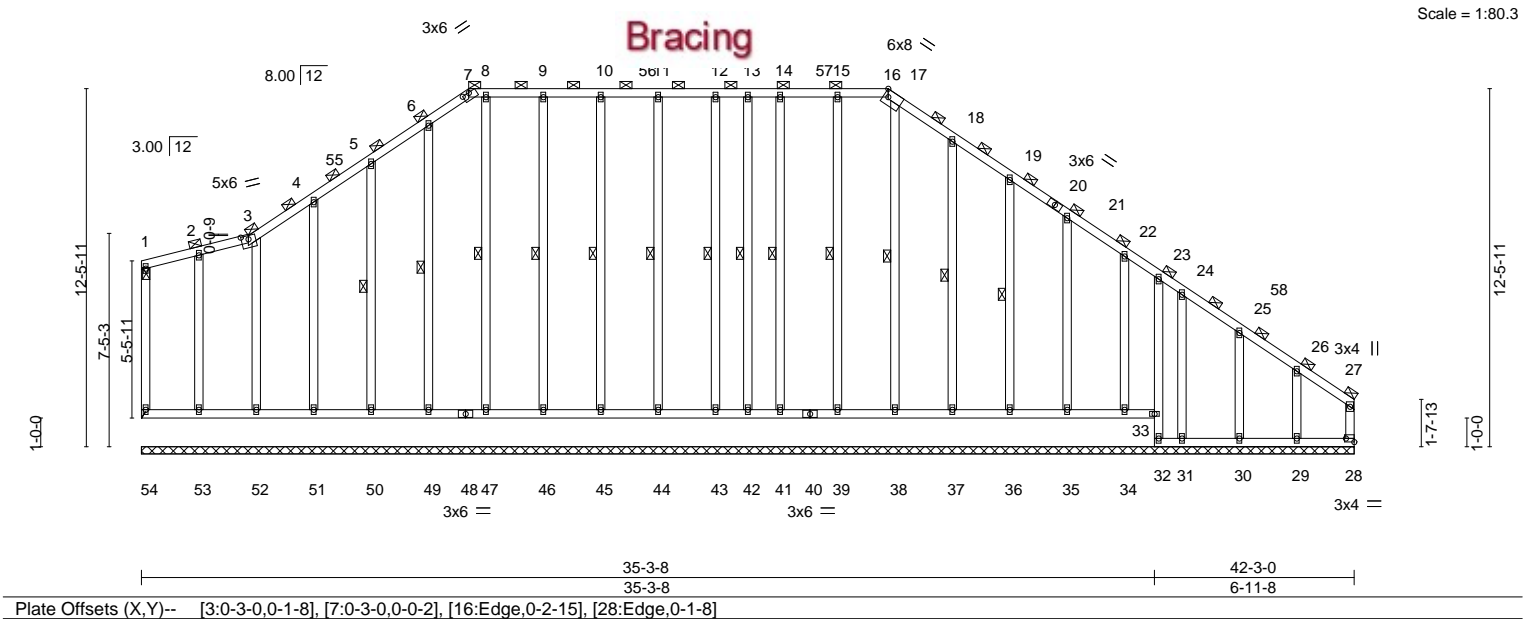


Plate Offsets (X,Y)--		[3:0-3-0,0-1-8], [7:0-3-0,0-0-2], [16:Edge,0-2-15], [28:Edge,0-1-8]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>2-0-0</b>	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.44
TCDL 7.0	Lumber DOL	1.25	BC 0.36
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-R
		<div> <div>35-3-8</div> <div>35-3-8</div> <div>42-3-0</div> <div>6-11-8</div> </div>	
		<div> <div>DEFL.</div> <div>in (loc)</div> <div>l/defl</div> <div>L/d</div> </div>	<div> <div>PLATES</div> <div>GRIP</div> </div>
		<div> <div>Vert(LL)</div> <div>n/a</div> <div>-</div> <div>n/a</div> <div>999</div> </div>	<div> <div>MT20</div> <div>244/190</div> </div>
		<div> <div>Vert(CT)</div> <div>n/a</div> <div>-</div> <div>n/a</div> <div>999</div> </div>	
		<div> <div>Horz(CT)</div> <div>0.03</div> <div>28</div> <div>n/a</div> <div>n/a</div> </div>	<div> <div>Weight: 413 lb</div> <div>FT = 20%</div> </div>

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 23-32: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 53-54,52-53,32-33.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 13-42, 19-36, 18-37, 17-38, 15-39, 14-41, 5-50, 6-49, 8-47, 9-46, 10-45, 11-44, 12-43
OTHERS 2x4 SP No.3	

<b>REACTIONS.</b>	All bearings 42-3-0.
(lb) - Max Horz	54=254(LC 13)
Max Uplift	All uplift 100 lb or less at joint(s) 54, 32, 42, 30, 34, 35, 36, 37, 38, 39, 41, 53, 52, 51, 50, 49, 47, 46, 45, 44, 43, 33 except 28=222(LC 11), 29=329(LC 13), 31=147(LC 13)
Max Grav	All reactions 250 lb or less at joint(s) 54, 32, 42, 30, 31, 34, 35, 36, 37, 38, 39, 41, 53, 52, 51, 50, 49, 47, 46, 45, 44, 43, 33 except 28=321(LC 13), 29=310(LC 20)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	26-27=292/233

- 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) 0-1-12 to 3-8-11, Interior(1) 3-8-11 to 11-4-13, Exterior(2R) 11-4-13 to 15-7-8, Interior(1) 15-7-8 to 26-0-3, Exterior(2R) 26-0-3 to 30-3-0, Interior(1) 30-3-0 to 42-1-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 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) 33 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) 54, 32, 42, 30, 34, 35, 36, 37, 38, 39, 41, 53, 52, 51, 50, 49, 47, 46, 45, 44, 43, 33 except (jt=lb) 28=222, 29=329, 31=147.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 54, 42, 34, 35, 36, 37, 38, 39, 41, 53, 52, 51, 50, 49, 47, 46, 45, 44, 43.
  - 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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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11,2023

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Chesterfield, MO 63017

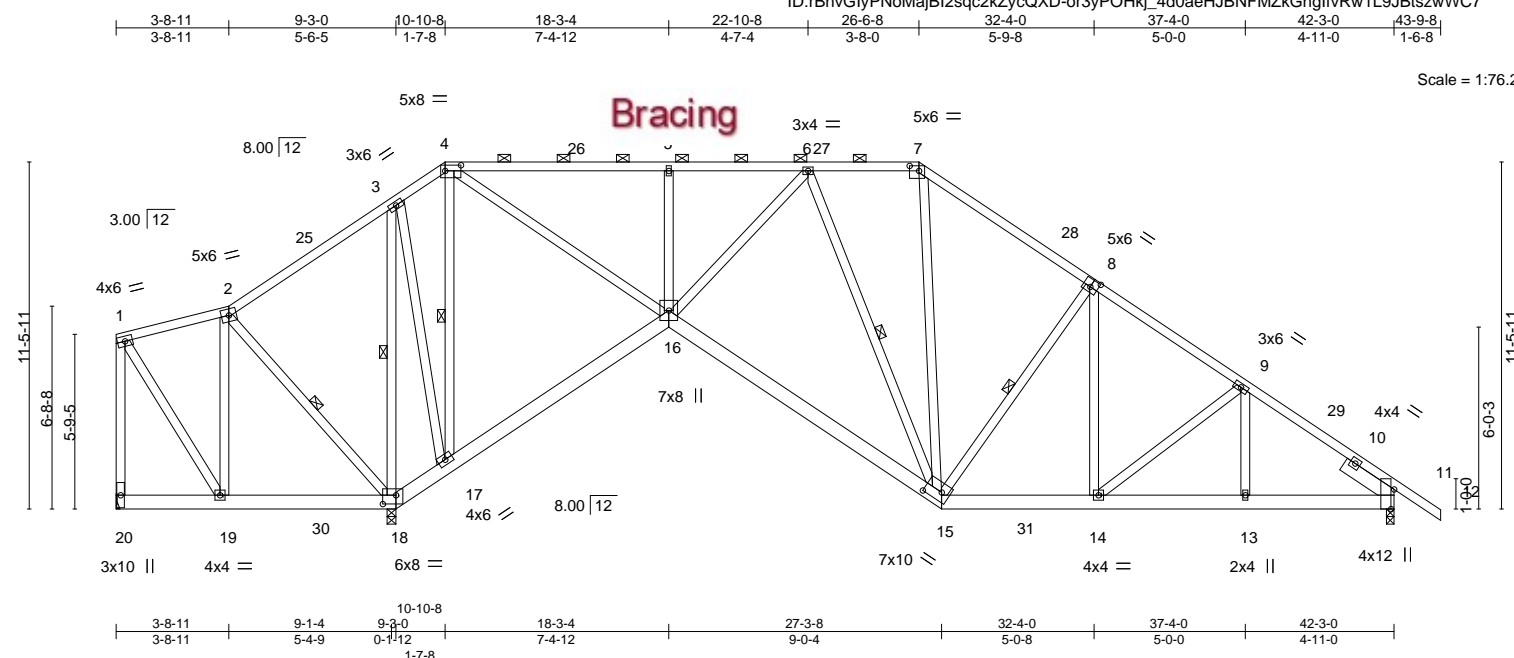


Plate Offsets (X,Y)-- [4:0-6-4,0-2-4], [7:0-3-12,0-2-0], [8:0-3-0,0-3-0], [11:0-7-13,Edge], [15:0-6-11,0-3-8], [18:0-5-4,0-3-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES GRIP</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	-0.13 15-16 >999 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.25 15-16 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.11 11 n/a n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS				Weight: 363 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-6 max.): 4-7.
BOT CHORD	2x6 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 2-18, 3-18, 4-17, 6-15, 8-15
SLIDER	Right 2x6 SP No.2 1-11-8		

**REACTIONS.** (size) 20=Mechanical, 18=0-3-8, 11=0-3-0  
 Max Horz 20=-281(LC 13)  
 Max Uplift 20=-610(LC 26), 18=-442(LC 9), 11=-275(LC 13)  
 Max Grav 20=56(LC 9), 18=-2763(LC 2), 11=1221(LC 20)

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

**TOP CHORD** 1-2=-44/384, 2-3=-141/976, 3-4=-43/646, 4-5=-678/171, 5-6=-678/171, 6-7=-710/385,  
7-8=-938/402, 8-9=-1269/398, 9-11=-1454/380, 1-20=-68/649

**BOT CHORD** 19-20=-195/280, 18-19=-421/241, 17-18=-982/440, 16-17=-715/403, 15-16=-107/990,  
14-15=-136/991, 13-14=-214/1139, 11-13=-214/1139

**WEBS** 2-19=-153/744, 2-18=-618/296, 3-18=-1559/230, 3-17=-143/1251, 4-17=-1314/225,  
4-16=-186/1438, 5-16=-389/189, 6-16=-210/272, 7-15=-89/283, 8-15=-594/249,  
8-14=-48/355, 1-19=-682/91

**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) 0-1-12 to 3-8-11, Interior(1) 3-8-11 to 10-10-8, Exterior(2R) 10-10-8 to 15-1-3, Interior(1) 15-1-3 to 26-6-8, Exterior(2R) 26-6-8 to 30-9-3, Interior(1) 30-9-3 to 43-9-8 zone; porch left 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 all 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) 20=610, 18=442, 11=275.
- 9) 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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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562173
3363898	T30	Piggyback Base	3	1		

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
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ID:rBnvGlyPNoMajBI2sqc2kZycQXD-kEBiq4J\_FbKLGuogQcPjR\_pbKU?MNLJJoTolxkzwWC5

1-6-0  
1-6-0

7-6-0  
7-6-0

14-1-8  
6-7-8

15-9-0  
1-7-8

23-1-12  
7-4-12

27-9-0  
4-7-4

32-2-0  
4-5-0

35-5-0  
3-3-0

41-6-0  
6-1-0

48-1-8  
6-7-8

49-8-0  
1-6-8

Scale = 1:86.5

Plate Offsets (X,Y)--		[4:0-3-0,0-3-4], [6:0-6-4,0-2-4], [8:0-3-0,0-3-0], [10:0-4-4,0-2-4], [11:0-3-0,0-3-0], [17:0-5-0,0-3-8], [20:0-5-4,0-3-8]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	-0.13 17-18	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.42	Vert(CT)	-0.25 17-18	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.12 14	n/a	n/a
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS				
						Weight: 408 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-0 max.): 6-10.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 4-20, 5-20, 6-19, 8-17, 9-17, 9-16, 11-16
SLIDER Left 2x6 SP No.2 1-11-8	

**REACTIONS.** (size) 2=0-3-8, 20=0-3-8, 14=0-3-0  
Max Horz 2=294(LC 11)  
Max Uplift 2=-167(LC 24), 20=-553(LC 9), 14=-315(LC 13)  
Max Grav 2=219(LC 23), 20=2579(LC 2), 14=1264(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-335/494, 4-5=-192/841, 5-6=-68/515, 6-7=-861/236, 7-8=-861/236, 8-9=-760/349, 9-10=-751/353, 10-11=-983/365, 11-12=-1124/301, 12-14=-1163/328  
BOT CHORD 2-21=-382/258, 20-21=-382/258, 19-20=-839/325, 18-19=-584/281, 17-18=-247/1097, 16-17=-120/762, 15-16=-165/870  
WEBS 4-21=-292/394, 4-20=-608/415, 5-20=-1575/323, 5-19=-225/1270, 6-19=-1313/315, 6-18=-323/1540, 7-18=-380/183, 8-17=-282/196, 10-16=-84/331, 11-16=-285/155, 12-15=-130/889

- 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) -1-6-0 to 3-3-12, Interior(1) 3-3-12 to 15-9-0, Exterior(2R) 15-9-0 to 22-6-11, Interior(1) 22-6-11 to 35-5-0, Exterior(2R) 35-5-0 to 42-2-11, Interior(1) 42-2-11 to 49-8-0 zone; end vertical right exposed; porch left 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=167, 20=553, 14=315.
  - 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.

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

January 11,2023



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:20:10 2023 Page 1  
ID:rBnvGlyPNoMajBI2sqc2kZycQXD-gcJTfMkEmDa3VCx3Y1RBXPvsRHfHrGScGnHP0dzwWC3

Diagram illustrating a structural truss system, likely for a roof or bridge, showing various members and bracing. The diagram includes dimensions and member labels.

Key dimensions and labels:

- Top horizontal dimension: 6-1-4, 12-2-8, 15-8-3, 22-2-0, 28-11-0, 30-5-8, 1-6-8.
- Bottom horizontal dimension: 6-1-4, 12-2-8, 15-8-3, 22-2-0, 27-11-8, 28-11-0.
- Vertical dimension on the left: 11-5-11.
- Vertical dimension on the right: 11-5-11, 3-0-0.
- Member labels: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 35, 36, 37, 38, 39, 40.
- Bracing labels: 4x4 =, 4x4 =, 3x6 =, 3x6 =, 3x4 =, 3x4 =, 5x8 =.
- Scale: Scale = 1:67.4.

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	2-0-0 oc purlins (5-3-5 max.), 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                      1-17, 2-16, 3-16, 5-13
	1-16,3-16: 2x4 SP No.2, 8-10: 2x6 SP No.2		
OTHERS	2x4 SP No.3		
<b>REACTIONS.</b>	All bearings 0-3-8 except (jt=length) 10=1-3-0.		
(lb) - Max Horz	17=-292(LC 13)		
Max Uplift	All uplift 100 lb or less at joint(s) except 17=-286(LC 8), 10=-222(LC 13)		
Max Grav	All reactions 250 lb or less at joint(s) 11, 11 except 17=1239(LC 2), 10=1075(LC 20)		
<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	1-17=-1118/299, 1-2=-543/127, 2-3=-543/127, 3-4=-780/215, 4-5=-1024/200, 5-8=-1164/176, 8-10=-1167/214		
BOT CHORD	16-17=-238/337, 15-16=-109/776, 13-15=-109/776, 12-13=-65/914		
WEBS	1-16=-267/1143, 2-16=-366/176, 3-16=-497/160, 4-13=-25/322, 5-13=-304/210, 8-12=-27/916		

**NOTES-**

- 1) 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-8-3, Exterior(2R) 15-8-3 to 18-8-3; Interior(1) 18-8-3 to 30-5-8 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2'-0" oc.
- 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" tall by 2'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 286 lb uplift at joint 17 and 222 lb uplift at joint 10.
- 10) 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 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:

January 11, 2023



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 personnel 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 C**

**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. - LEECH RES.	T29562175
3363898	T31	Piggyback Base	3	1		

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

8.530 s Aug 11 2022
MiTek Industries, Inc.
Wed Jan 11 06:20:13 2023
Page 1

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4-5-6
8-7-3
14-1-8
15-9-0
23-1-12
27-9-0
32-2-0
35-5-0
41-6-0
48-1-8
49-8-0

4-5-6
4-1-14
5-6-5
1-7-8
7-4-12
4-7-4
4-5-0
3-3-0
6-1-0
6-7-8
1-6-8

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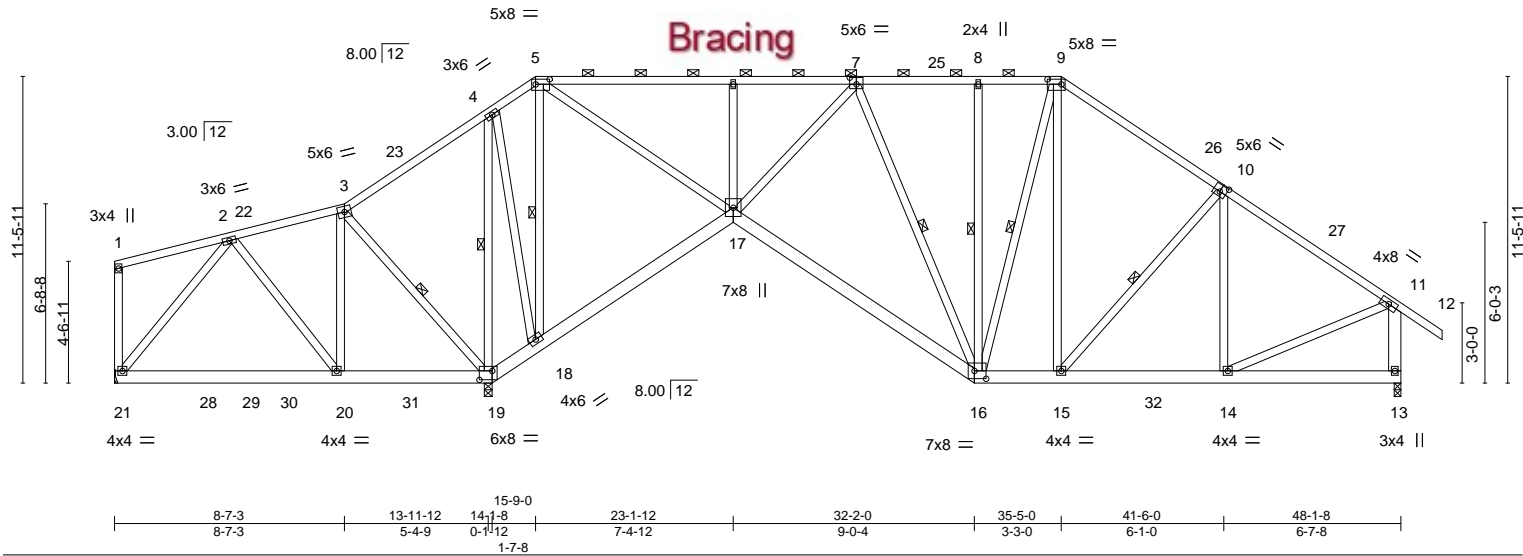


Plate Offsets (X,Y)--		[5:0-6-4,0-2-4], [7:0-3-0,0-3-0], [9:0-6-4,0-2-4], [10:0-3-0,0-3-0], [16:0-5-4,0-3-8], [19:0-5-12,0-4-0]																	
<b>LOADING</b> (psf)		<b>SPACING-</b>		2-0-0		<b>CSI.</b>		<b>DEFL.</b>		in (loc)		l/defl		L/d		<b>PLATES</b>		<b>GRIP</b>	
TCLL 20.0		Plate Grip DOL		1.25		TC 0.59		Vert(LL)		-0.12 16-17		>999		240		MT20		244/190	
TCDL 7.0		Lumber DOL		1.25		BC 0.40		Vert(CT)		-0.24 16-17		>999		180					
BCLL 0.0 *		Rep Stress Incr		YES		WB 0.81		Horz(CT)		0.10 13		n/a		n/a					
BCDL 10.0		Code		FBC2020/TPI2014		Matrix-MS										Weight: 424 lb		FT = 20%	

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-4-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-7 max.): 5-9.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 11-13: 2x6 SP No.2	WEBS 1 Row at midpt 3-19, 4-19, 5-18, 7-16, 8-16, 9-16, 10-15

<b>REACTIONS.</b>	(size) 19=0-3-8, 13=0-3-0, 21=Mechanical
	Max Horz 21=250(LC 11)
	Max Uplift 19=613(LC 9), 13=251(LC 13), 21=272(LC 24)
	Max Grav 19=2712(LC 2), 13=1237(LC 20), 21=44(LC 11)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-127/550, 3-4=-261/1004, 4-5=-140/647, 5-6=-693/169, 6-7=-693/169, 7-8=-712/386, 8-9=-714/387, 9-10=-936/398, 10-11=-1095/338, 11-13=-1137/378
BOT CHORD	20-21=-290/121, 19-20=-537/147, 18-19=-1004/449, 17-18=-717/416, 16-17=-192/995, 15-16=-62/712, 14-15=-138/839
WEBS	2-20=-430/147, 3-20=-425/619, 3-19=-533/554, 4-19=-1606/335, 4-18=-236/1292, 5-18=-1341/334, 5-17=-286/1471, 6-17=-381/187, 7-17=-192/262, 9-15=-110/357, 10-15=-296/177, 2-21=-110/475, 11-14=-122/856

- 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) 0-1-12 to 4-11-8, Interior(1) 4-11-8 to 15-9-0, Exterior(2R) 15-9-0 to 20-6-12, Interior(1) 20-6-12 to 35-5-0, Exterior(2R) 35-5-0 to 40-2-12, Interior(1) 40-2-12 to 49-8-0 zone; end vertical right exposed; porch left 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.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 613 lb uplift at joint 19, 251 lb uplift at joint 13 and 272 lb uplift at joint 21.
  - 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 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:

January 11,2023

**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



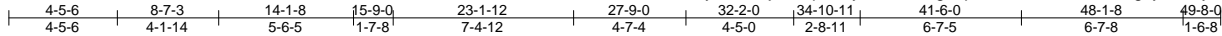
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562176
3363898	T31G	GABLE	1	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:20:16 2023 Page 1

ID:rBnvGlyPNoMajBl2sqc2kZycQXD-VmgkVpP?M3KCD7PCuIYbmg8yxikZFy6VejkjCHzwWBz



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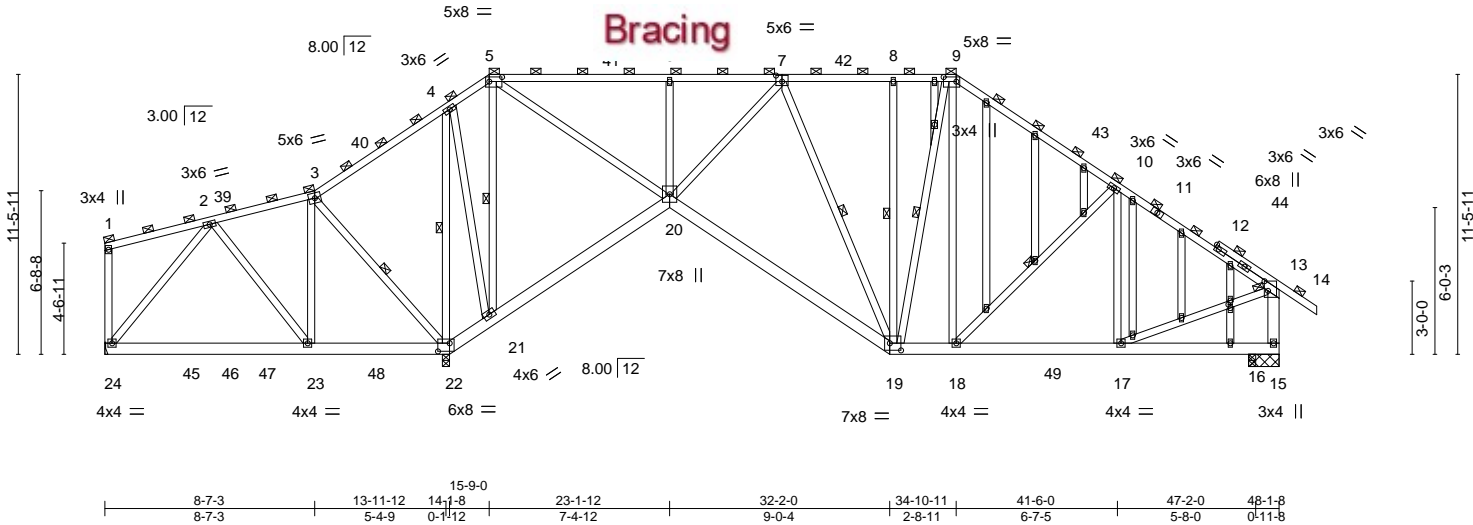


Plate Offsets (X,Y)--		[5:0-6-4,0-2-4], [7:0-3-0,0-3-0], [9:0-6-4,0-2-4], [13:0-4-12,0-1-12], [19:0-5-8,0-3-8], [22:0-5-12,0-4-0], [29:0-1-12,0-1-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	-0.12 19-20	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.23 19-20	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.10 15	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 473 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (5-6-3 max.), except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 3-22, 4-22, 5-21, 7-19, 8-19, 9-19, 10-18
13-15: 2x6 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 0-3-8 except (jt=length) 15=1-3-0, 24=Mechanical.  
(lb) - Max Horz 24=247(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) except 22=600(LC 9), 15=270(LC 13), 24=272(LC 24)  
Max Grav All reactions 250 lb or less at joint(s) 24 except 22=2701(LC 2), 15=915(LC 20), 16=358(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-121/549, 3-4=-253/1001, 4-5=-134/644, 5-6=-681/165, 6-7=-681/165,  
7-8=-698/383, 8-9=-700/384, 9-10=-934/389, 10-13=-1095/340, 13-15=-1114/374  
BOT CHORD 23-24=-290/126, 22-23=-537/146, 21-22=-1001/451, 20-21=-716/417, 19-20=-183/979,  
18-19=-56/704, 17-18=-153/844  
WEBS 2-23=-430/143, 3-23=-427/618, 3-22=-533/554, 4-22=-1597/327, 4-21=-228/1284,  
5-21=-1332/325, 5-20=-276/1454, 6-20=-380/187, 7-20=-195/262, 9-18=-105/364,  
10-18=-300/187, 2-24=-104/474, 13-17=-128/853

- 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) 0-1-12 to 4-11-8, Interior(1) 4-11-8 to 15-9-0, Exterior(2R) 15-9-0 to 20-6-12, Interior(1) 20-6-12 to 34-10-11, Exterior(2R) 34-10-11 to 39-8-7, Interior(1) 39-8-7 to 49-8-0 zone; end vertical right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 5) Provide adequate drainage to prevent water ponding.
  - 6) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 10) Refer to girder(s) for truss to truss connections.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 600 lb uplift at joint 22, 270 lb uplift at joint 15 and 272 lb uplift at joint 24.
  - 12) 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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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11,2023

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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. - LEECH RES.	T29562177
3363898	T32	Piggyback Base	2	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:20:18 2023 Page 1

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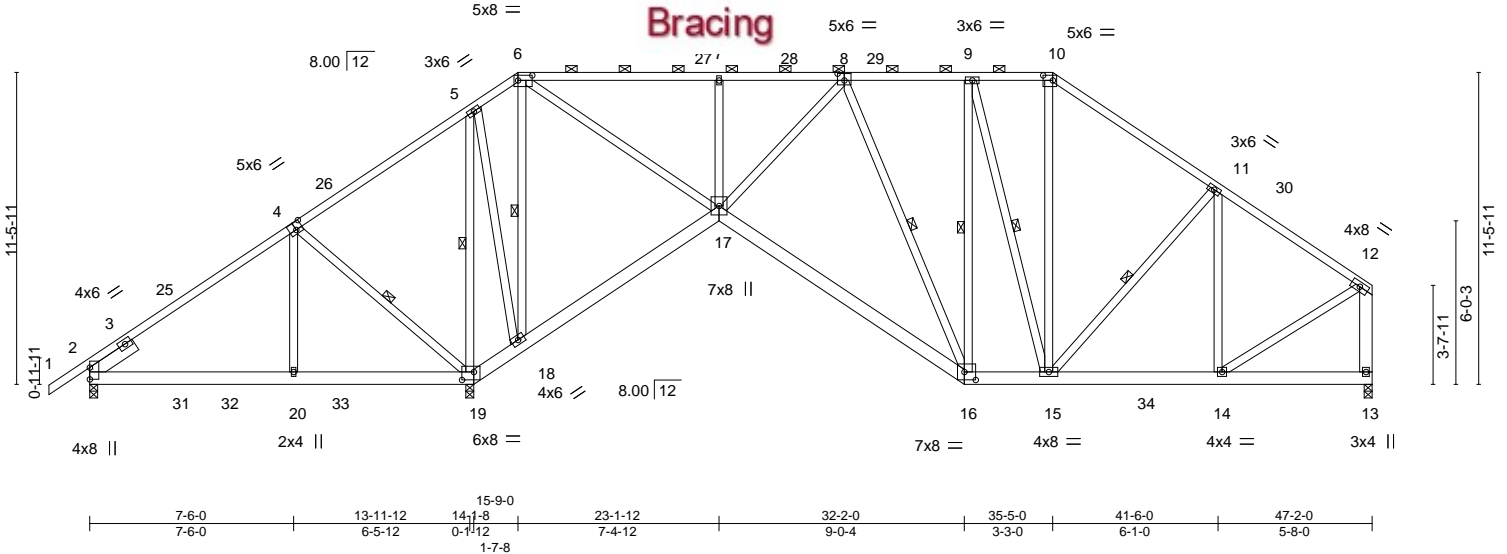


Plate Offsets (X,Y)--		[4:0-3-0,0-3-4], [6:0-6-4,0-2-4], [8:0-3-0,0-3-0], [10:0-4-4,0-2-4], [16:0-5-0,0-3-8], [19:0-5-4,0-3-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63
TCDL 7.0	Lumber DOL	1.25	BC 0.41
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS
			DEFL.
			in (loc)
			l/defl
			L/d
			VERT(LL)
			VERT(CT)
			HORZ(CT)
			PLATES
			GRIP
			MT20
			244/190
			Weight: 402 lb
			FT = 20%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
BOT CHORD	BOT CHORD
WEBS	WEBS
SLIDER	

REACTIONS. (size) 2=0-3-8, 19=0-3-8, 13=0-3-8  
Max Horz 2=293(LC 11)  
Max Uplift 2=-144(LC 24), 19=-563(LC 9), 13=-261(LC 13)  
Max Grav 2=236(LC 23), 19=2511(LC 2), 13=1138(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-339/471, 4-5=-204/798, 5-6=-77/476, 6-7=-857/240, 7-8=-857/240, 8-9=-724/317,  
9-10=-704/321, 10-11=-927/324, 11-12=-967/239, 12-13=-1058/270  
BOT CHORD 2-20=-351/246, 19-20=-352/246, 18-19=-794/312, 17-18=-550/266, 16-17=-268/1065,  
15-16=-134/725, 14-15=-175/755  
WEBS 4-20=-294/392, 4-19=-604/416, 5-19=-1537/338, 5-18=-238/1235, 6-18=-1271/330,  
6-17=-341/1500, 7-17=-380/183, 8-16=-299/205, 10-15=-61/306, 11-14=-285/132,  
12-14=-167/858

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 3-2-10, Interior(1) 3-2-10 to 15-9-0, Exterior(2R) 15-9-0 to 22-5-1, Interior(1) 22-5-1 to 35-5-0, Exterior(2R) 35-5-0 to 42-1-1, Interior(1) 42-1-1 to 46-11-4 zone; end vertical right exposed; porch left 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 144 lb uplift at joint 2, 563 lb uplift at joint 19 and 261 lb uplift at joint 13.
- 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.

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

January 11,2023

**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 the 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

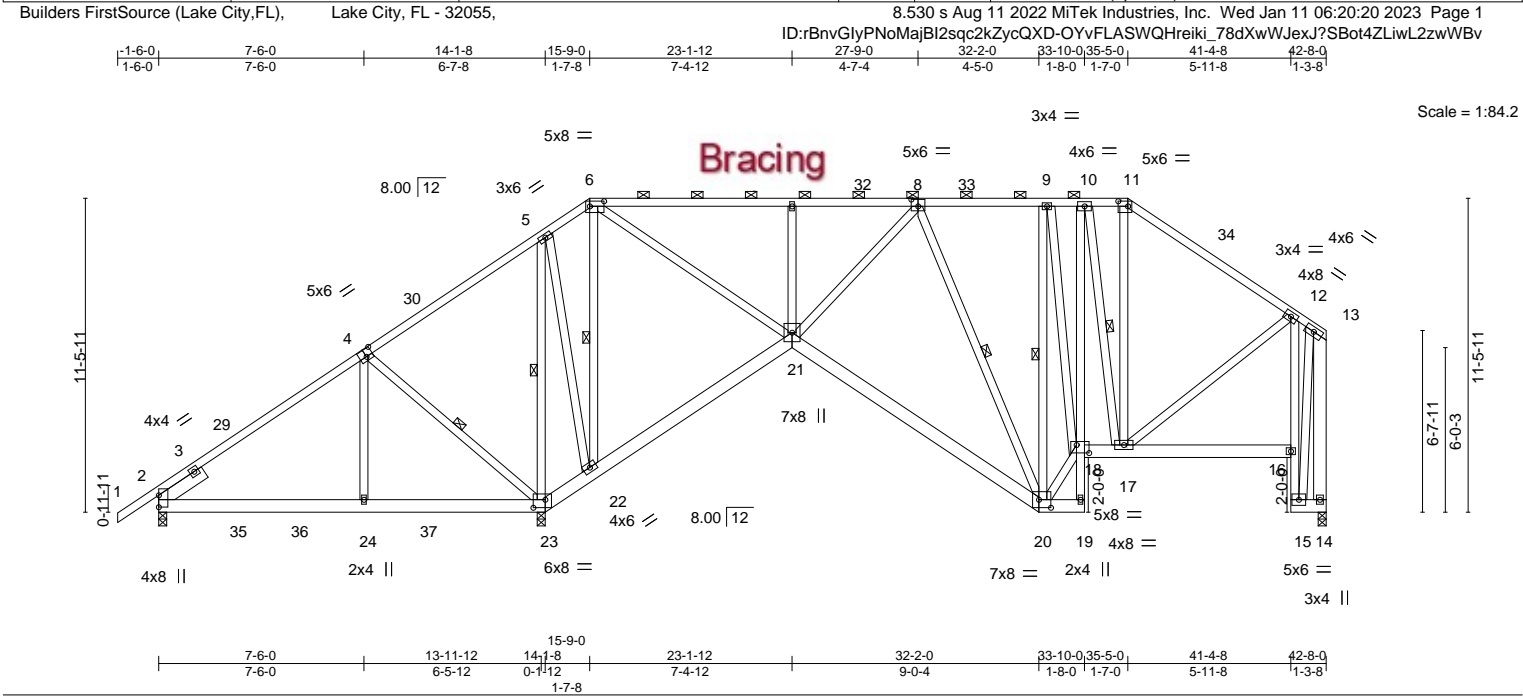
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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. - LEECH RES.	T29562178
3363898	T33	Piggyback Base	4	1	Job Reference (optional)	



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562179
3363898	T34	JACK-CLOSED	8	1		

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

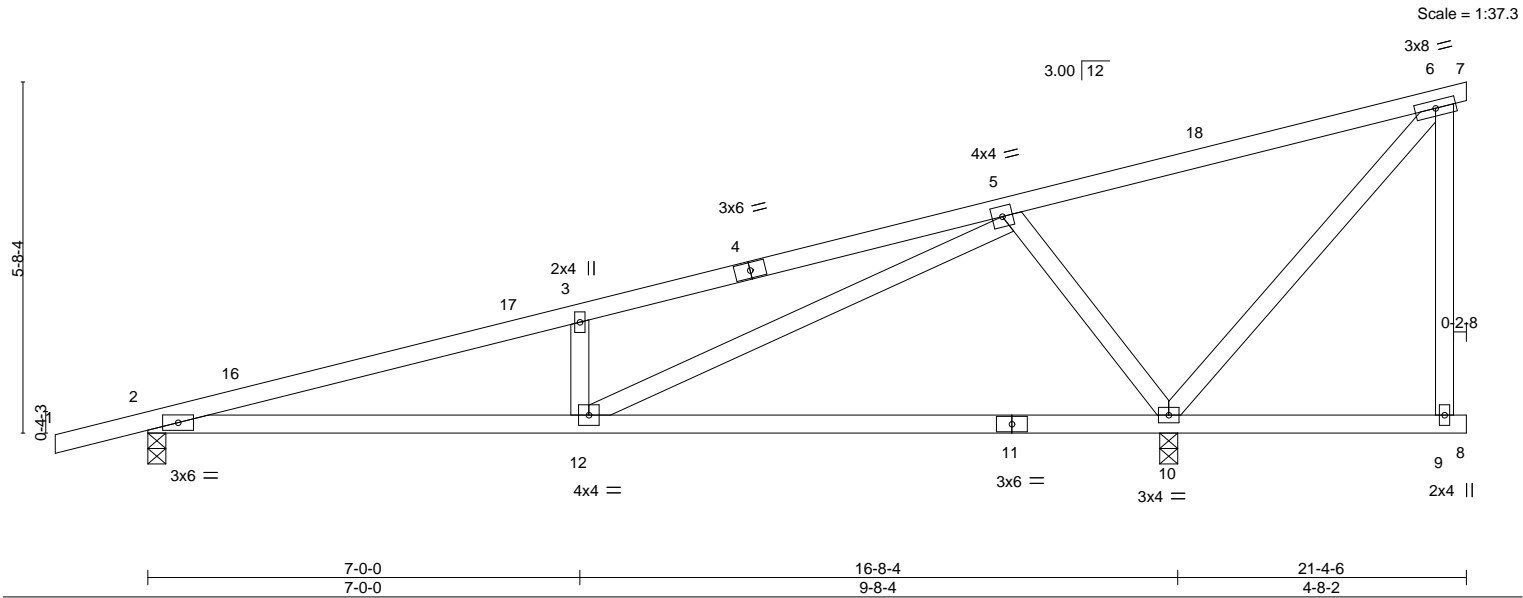
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:20:21 2023
Page 1
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-skTdYWT8BbzVJuHAhr8mTksqEjMdwleEn?SUuUzwWBu

-1-6-0
1-6-0

7-0-0
7-0-0

14-0-0
7-0-0

21-4-6
7-4-6





Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562180
3363898	T35	JACK-CLOSED	1	1	Job Reference (optional)	

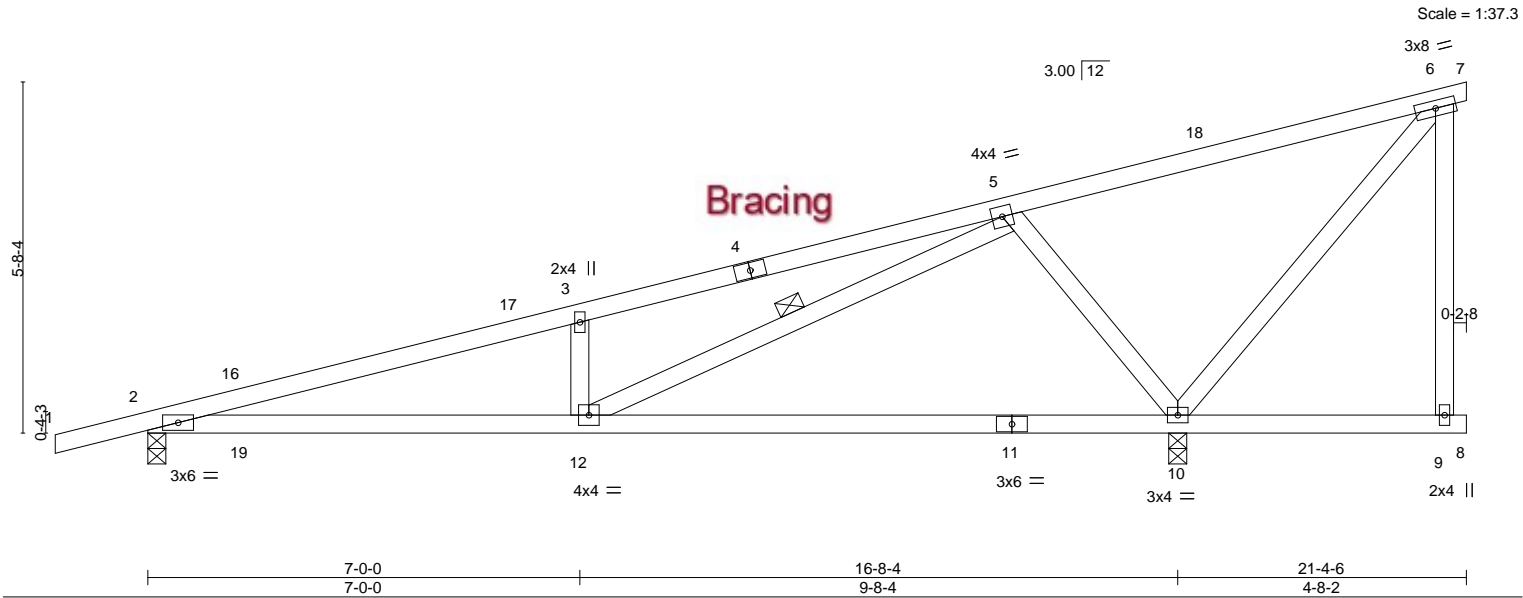
Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:20:22 2023
Page 1
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-Kw1?msTmyv5Mx2sMFZf00xO?07iZfItN0fB1QwzwWBt

-1-6-0  
1-6-0

7-0-0  
7-0-0

14-0-0  
7-0-0

21-4-6  
7-4-6



7-0-0 7-0-0		16-8-4 9-8-4		21-4-6 4-8-2	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.55	in (loc) l/defl L/d	<b>GRIP</b>
BCDL 7.0	Lumber DOL	1.25	BC 0.74	Vert(LL) 0.42 10-12 >478 240	MT20 244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.47	Vert(CT) -0.40 10-12 >506 180	
BCDL 10.0	Code FBC2020/TP12014		Matrix-MS	Horz(CT) 0.02 10 n/a n/a	
					Weight: 104 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-4-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 4-1-11 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-12

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=201(LC 8)  
Max Uplift 2=-190(LC 9), 10=-299(LC 8)  
Max Grav 2=654(LC 1), 10=1008(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1436/1472, 3-5=-1445/1529  
BOT CHORD 2-12=-1569/1361, 10-12=-336/267  
WEBS 3-12=-362/187, 5-12=-1390/1228, 5-10=-742/575, 6-10=-328/144

- NOTES-**
- 1) 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 21-4-6 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 2 and 299 lb uplift at joint 10.

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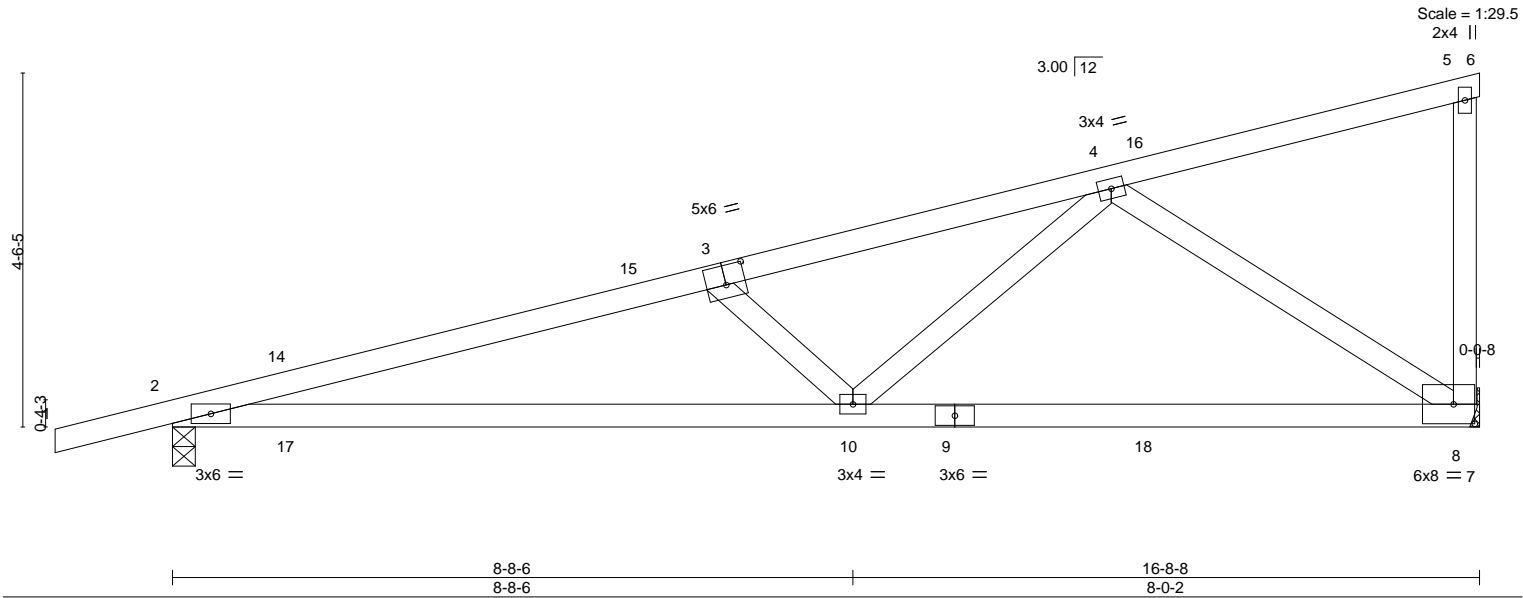
Philip J. O'Regan PE No.58126  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11,2023



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562181
3363898	T36	Jack-Closed	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:20:24 2023
Page 1
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12-0-0
16-8-8
5-0-0
4-8-8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	0.26 10-13 >763 240	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.25 10-13 >806 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03 8 n/a n/a				
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							
								Weight: 76 lb		FT = 20%	

<b>LUMBER-</b>				<b>BRACING-</b>			
TOP CHORD	2x4 SP No.2			TOP CHORD	Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.		
BOT CHORD	2x4 SP No.2			BOT CHORD	Rigid ceiling directly applied or 4-2-3 oc bracing.		
WEBS	2x4 SP No.3						

**REACTIONS.** (size) 2=0-3-8, 8=Mechanical  
Max Horz 2=161(LC 8)  
Max Uplift 2=-341(LC 8), 8=-319(LC 8)  
Max Grav 2=696(LC 1), 8=614(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1513/1440, 3-4=-1257/1342  
BOT CHORD 2-10=-1522/1444, 8-10=-689/666  
WEBS 3-10=-386/232, 4-10=-925/705, 4-8=-776/773

- 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 16-8-8 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
  - 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 341 lb uplift at joint 2 and 319 lb uplift at joint 8.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11,2023



Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562183
3363898	TF01	FLOOR	12	1	Job Reference (optional)	

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

8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:20:26 2023
Page 1

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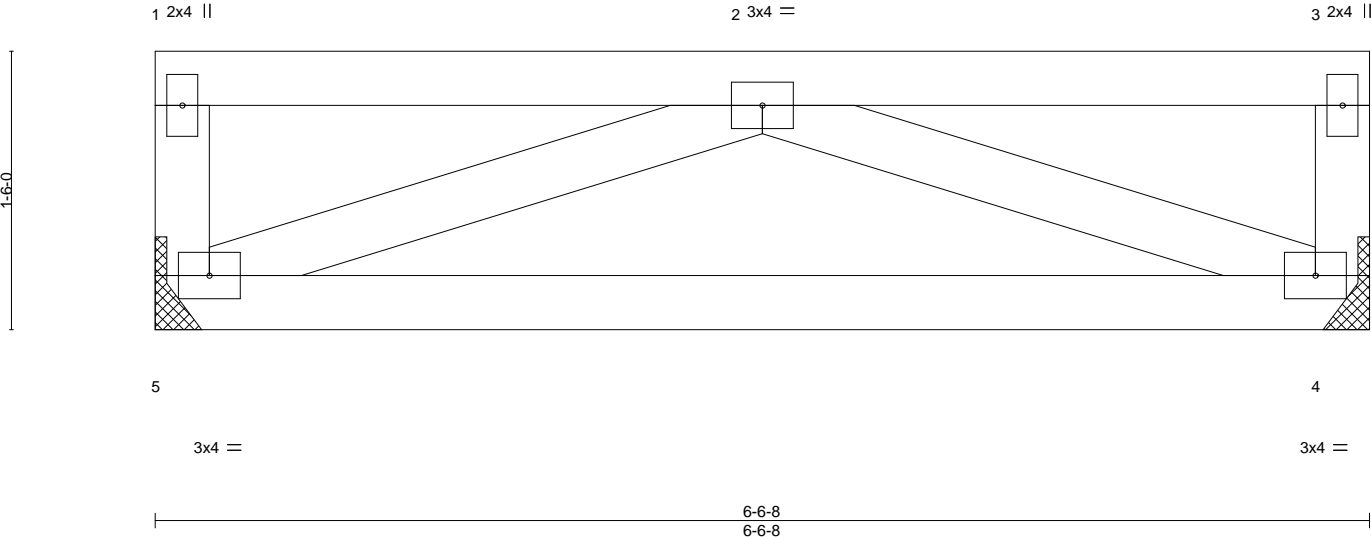
3-3-4

3-3-4

6-6-8

3-3-4

Scale = 1:12.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.24	Vert(LL)	0.00 5	****	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.28	Vert(CT)	-0.05 4-5	>999	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.00 4	n/a	n/a		
BCDL 5.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 31 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-6-8 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) 5=Mechanical, 4=Mechanical  
Max Grav 5=344(LC 1), 4=344(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
BOT CHORD 4-5=-0/489  
WEBS 2-5=-524/0, 2-4=-524/0

**NOTES-**  
1) Refer to girder(s) for truss to truss connections.  
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

January 11,2023



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

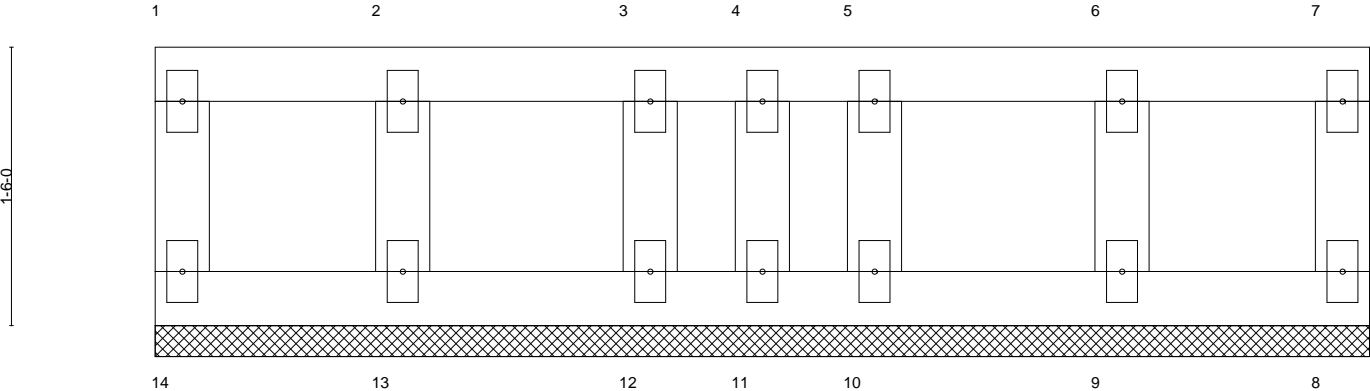
Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562184
3363898	TF01G	FLOOR	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:20:27 2023 Page 1
ID:rBnvGlyPNoMajBl2sqc2kZycQXD-huqupaXvmRjf2pIk16FBj?6zk8aEK7v6Awvo58zwWBo

6-6-8

6-6-8

Scale = 1:12.4



				6-6-8					6-6-8			
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.00	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-R							Weight: 29 lb	FT = 20%

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

**REACTIONS.** All bearings 6-6-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 11, 9, 10, 13, 12

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

**NOTES-**  
1) All plates are 2x4 MT20 unless otherwise indicated.  
2) Gable requires continuous bottom chord bearing.  
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.

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

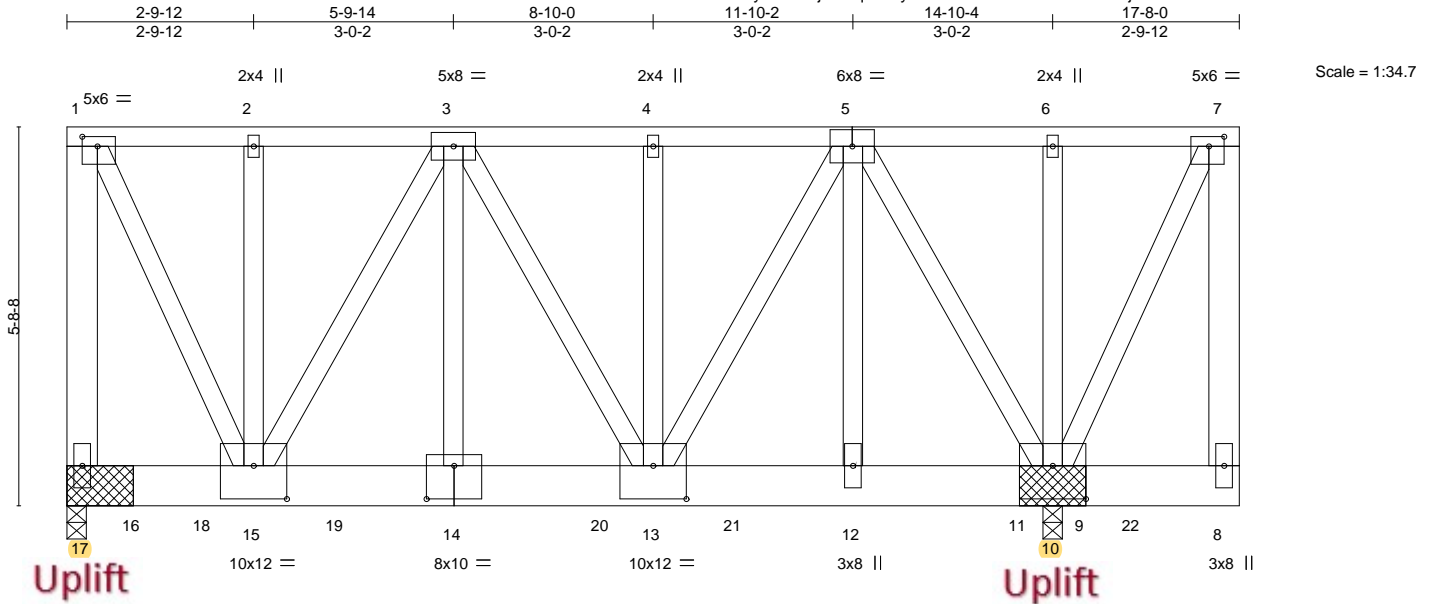
January 11,2023

Job 3363898	Truss TG01	Truss Type Flat Girder	Qty 1	Ply 2	IC CONST. - LEECH RES.	T29562185
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:20:30 2023 Page 1

ID:rBnvGlyPNoMajBI2sqc2kZycQXD-5TW1Rban3M5DvGTvjEouKdkPLLJXFrZsu8SiTzwWBI



	2-9-12	5-9-14	8-10-0	11-10-2	14-10-4	15-0-0	17-8-0
	2-9-12	3-0-2	3-0-2	3-0-2	3-0-2	0-1-12	2-8-0
Plate Offsets (X,Y)--	[1:0-2-12,0-1-12], [7:0-2-12,0-1-12], [10:0-6-0,0-6-0], [13:0-6-0,0-6-0], [14:0-5-0,0-6-0], [15:0-6-0,0-6-0]						
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0		<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES GRIP</b>		
TCLL 20.0	Plate Grip DOL 1.25	TC 0.33	Vert(LL) -0.06 14 >999 240	MT20 244/190			
TCDL 7.0	Lumber DOL 1.25	BC 0.24	Vert(CT) -0.10 14 >999 180				
BCLL 0.0 *	Rep Stress Incr NO	WB 0.92	Horz(CT) 0.01 10 n/a n/a				
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 400 lb FT = 20%			

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
1-17,7-8: 2x6 SP No.2, 1-15,7-10: 2x4 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 8-10.

#### REACTIONS.

(size) 17=(0-3-8 + bearing block) (req. 0-3-11), 10=(0-3-8 + bearing block) (req. 0-4-2)  
Max Uplift 17=-979(LC 5), 10=-1466(LC 5)  
Max Grav 17=6248(LC 2), 10=7024(LC 2)

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

TOP CHORD 1-17=-5746/897, 1-2=-2834/433, 2-3=-2834/433, 3-4=-4773/707, 4-5=-4773/707, 5-6=-256/0, 6-7=-256/0, 7-8=-557/0  
BOT CHORD 14-15=-690/4539, 13-14=-690/4543, 12-13=-427/3088, 10-12=-428/3091  
WEBS 1-15=-958/6288, 3-15=-3433/517, 3-14=-334/2414, 3-13=-34/461, 5-13=-564/3402, 5-12=-213/1868, 5-10=-5695/899, 7-10=0/595

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 2x8 SP 2400F 2.0E bearing block 12" long at jt. 10 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16  
Total fasteners per block. Bearing is assumed to be SP No.2.
- 2x8 SP 2400F 2.0E bearing block 12" long at jt. 17 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16  
Total fasteners per block. Bearing is assumed to be SP No.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; cantilever right exposed; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 979 lb uplift at joint 17 and 1466 lb uplift at joint 10.

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

January 11,2023

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562185
3363898	TG01	Flat Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.530 s Aug 11 2022 MiTek Industries, Inc.
Wed Jan 11 06:20:30 2023
Page 2
ID:rBnvGlyPNoMajBI2sqc2kZycQXD-5TW1Rban3M5DvGTvjEouKdkPLLJXFrZsu8SiTzwWBI

**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1771 lb down and 257 lb up at 2-0-12, 1771 lb down and 257 lb up at 4-0-12, 1771 lb down and 257 lb up at 6-0-12, 1771 lb down and 257 lb up at 8-0-12, 1771 lb down and 257 lb up at 10-0-12, 1771 lb down and 257 lb up at 12-0-12, and 1771 lb down and 257 lb up at 14-0-12, and 66 lb down and 630 lb up at 16-0-12 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: 1-7=-54, 8-17=-20

Concentrated Loads (lb)

Vert: 14=-1532(B) 12=-1532(B) 11=-1532(B) 18=-1532(B) 19=-1532(B) 20=-1532(B) 21=-1532(B) 22=227(B)



Job 3363898	Truss TG02	Truss Type Flat Girder	Qty 1	Ply 1	IC CONST. - LEECH RES. T29562186
Job Reference (optional)					

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Jan 11 06:20:32 2023 Page 1  
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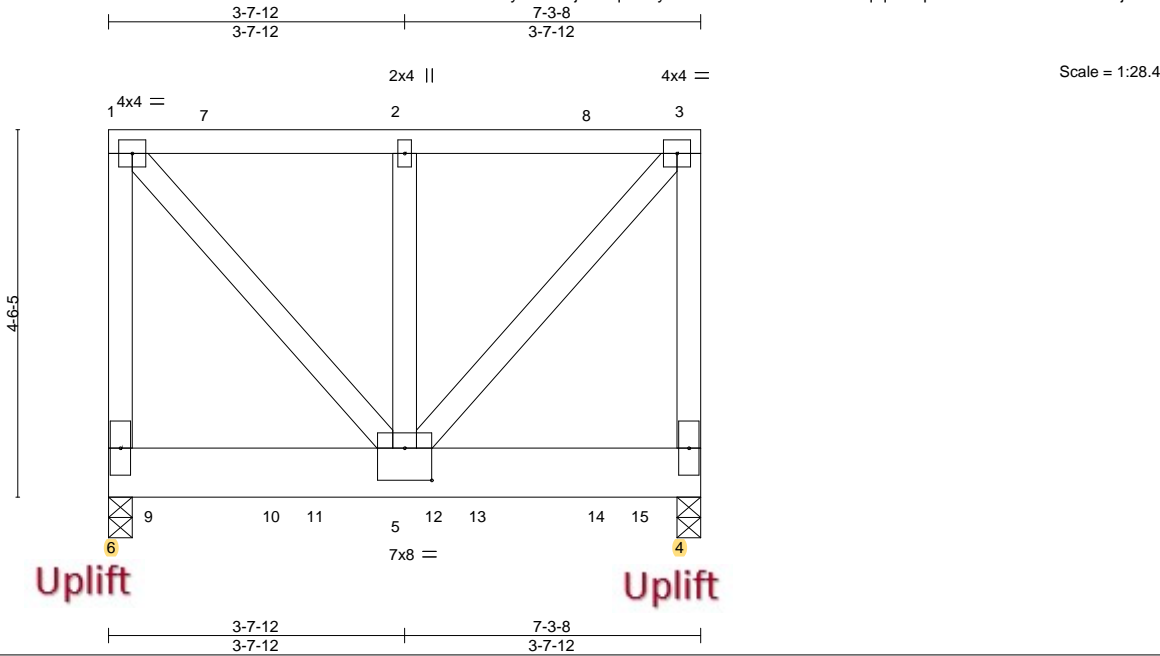


Plate Offsets (X,Y)--	[5:0-4-0,0-4-12]						
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.28	Vert(LL)	0.02 5	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	-0.02 5	>999	180
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.37	Horz(CT)	-0.00 4	n/a	n/a
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS				
				<b>PLATES</b>	<b>GRIP</b>		
				MT20	244/190		
				Weight: 64 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
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) 6=0-3-8, 4=0-3-8  
Max Horz 6=-98(LC 6)  
Max Uplift 6=-891(LC 4), 4=-997(LC 5)  
Max Grav 6=1079(LC 1), 4=1295(LC 1)

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

TOP CHORD 1-6=-804/579, 1-2=-629/476, 2-3=-629/476, 3-4=-803/589  
WEBS 1-5=-710/948, 3-5=-718/946

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; end vertical left exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 891 lb uplift at joint 6 and 997 lb uplift at joint 4.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 53 lb down and 287 lb up at 0-7-4, 594 lb down and 341 lb up at 2-0-12, 56 lb down and 292 lb up at 2-7-4, 594 lb down and 341 lb up at 4-0-12, 56 lb down and 292 lb up at 4-7-4, and 594 lb down and 341 lb up at 6-0-12, and 47 lb down and 287 lb up at 6-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) 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, 4-6=-20  
Concentrated Loads (lb)  
Vert: 9=-20(F) 10=-594(B) 11=-15(F) 12=-594(B) 13=-15(F) 14=-594(B) 15=-25(F)

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:

January 11,2023

**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

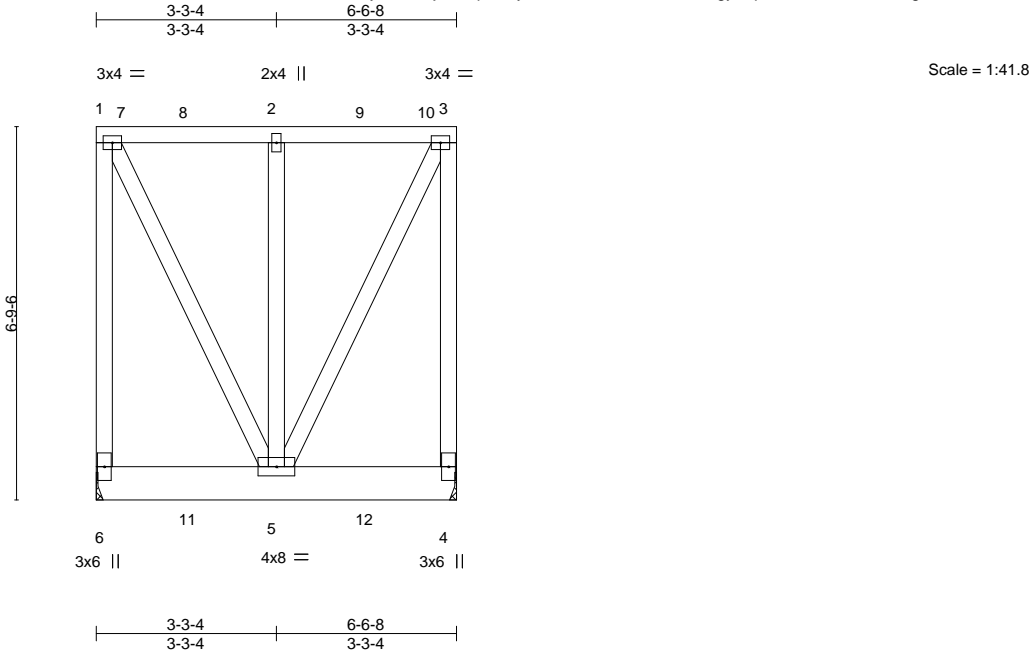


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.
3363898	TG03	Flat Girder	1	2	T29562187

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Lake City, FL - 32055,
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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 0.10	Vert(LL)	0.00	5	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.01	Vert(CT)	-0.00	5	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.06	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP						
								Weight: 151 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
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) 6=Mechanical, 4=Mechanical  
Max Uplift 6=-263(LC 4), 4=-263(LC 4)  
Max Grav 6=397(LC 32), 4=397(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-315/221, 3-4=-315/221  
WEBS 1-5=-184/270, 2-5=-365/261, 3-5=-184/270

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 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BC DL=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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 263 lb uplift at joint 6 and 263 lb uplift at joint 4.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 108 lb down and 85 lb up at 1-8-0, and 108 lb down and 85 lb up at 3-3-4, and 108 lb down and 85 lb up at 4-10-8 on top chord, and 98 lb down and 75 lb up at 1-8-0, and 98 lb down and 75 lb up at 3-3-4, and 98 lb down and 75 lb up at 4-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 4-6=-20

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.

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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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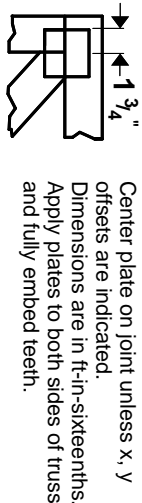
Job	Truss	Truss Type	Qty	Ply	IC CONST. - LEECH RES.	T29562187
3363898	TG03	Flat Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL),
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LOAD CASE(S)
Standard
Concentrated Loads (lb)
Vert: 5=-37(F) 2=-68(F) 8=-68(F) 9=-68(F) 11=-37(F) 12=-37(F)

# Symbols

## PLATE LOCATION AND ORIENTATION



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

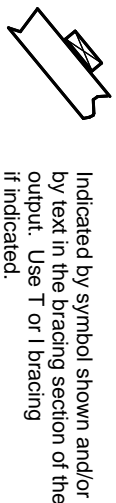
For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

## PLATE SIZE

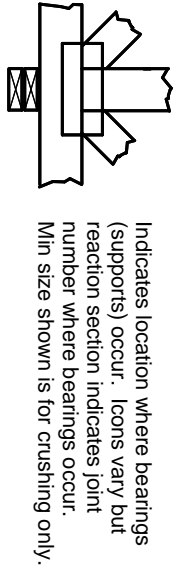
4 X 4

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

## LATERAL BRACING LOCATION



## BEARING



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

**Industry Standards:**  
ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: 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/TP1 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.