Truss Estimate #
3458582

Builders First Source - Lake City

2525 East Duval St, Lake City FL 32055

Phone: 386-755-6894

Date:	3/17/2023				
Customer:	Exceptions Reality And Custom Homes			**Phone #:**	
Job Name:	Spec Hse				
Jobsite Address:	352 SW Buttercup Lane			**/Blk:**	
	Lake City, FL			**County:**	Columbia
Pitch:	TC 8:12 / Flat Clg.	**Loading:**	Per Plans	**Quoted By:**	Kim Holloway
Top Chord:	2x4	**Bearing:**	4"	**Sales Rep:**	Kimber Holloway
Overhangs:	18"	**Spacing:**	24"	**MFG Sales Rep:**	Kim Holloway

Details

ROOF TRUSSES WITH
TRUSS TO TRUSS CONNECTORS

Includes hangers for truss to truss, truss to beam, & truss to ledger connections only.

Plan / Design changes made after the original engineering is supplied will be billed at $150 per hour for re-designs.

Bid does NOT include tie downs, nails, or truss clips.
Note: Hip & Valley blocking, Overhang Blocking, Truss Bracing (Temporary or Permanent) NOT Included.

Price Quoted is valid only if accepted within 7 days.
Price is subject to change at any time.

To place this order, please sign and fully complete all information below and then return this proposal to:
Email to your sales person

Price

Roof Trusses	$8,255.00
Pre-Tax Sub-Total	**$8,255.00**
Columbia County Tax 7.5%	$570.30
Total Including Tax	**$8,825.30**
No Additional Options	**Must be signed within 7 days**

It is the customer's responsibility to have access to the jobsite/delivery address by tractor-trailer.

Cash Customers: A non-refundable 20% Deposit required for truss layout, balance due 2 weeks prior to fabrication. Once order is received in truss office, a truss layout and truss profiles will be provided.

Customer is responsible to notify Builders FirstSource Truss within 24 hours of delivery of any mold, mildew, termites, damaged trusses or missing material.

A $100.00 fee will be assessed for replacement sealed engineering packages lost, misplaced, or damaged by customer

Please examine this quote, as we agree to furnish at the price herein specified only the articles named and described herein.
Order accepted by, or in production by BFS, its affiliates, subsidiaries, successors and/or assigns cannot be changed or cancelled except at the expense of purchaser.
Customers on Account: upon cancellation, a fee of 20% of the total purchase price will be charged for Placement Plan and/or Truss Profiles (does not apply to cash customers.)
BFS will not be liable for back charges unless approved by representative before the work creating any change is performed.
Price is not to be assumed as valid if plan is repeated at a later date; new quote must be requested for new project:

X
Customer Authorized Signature Above

Date

Customer Authorized Purchaser (Print Name Above)

Requested Delivery Date

Customer Contact for Delivery Scheduling (Print Name Above)

Phone #

Email Address

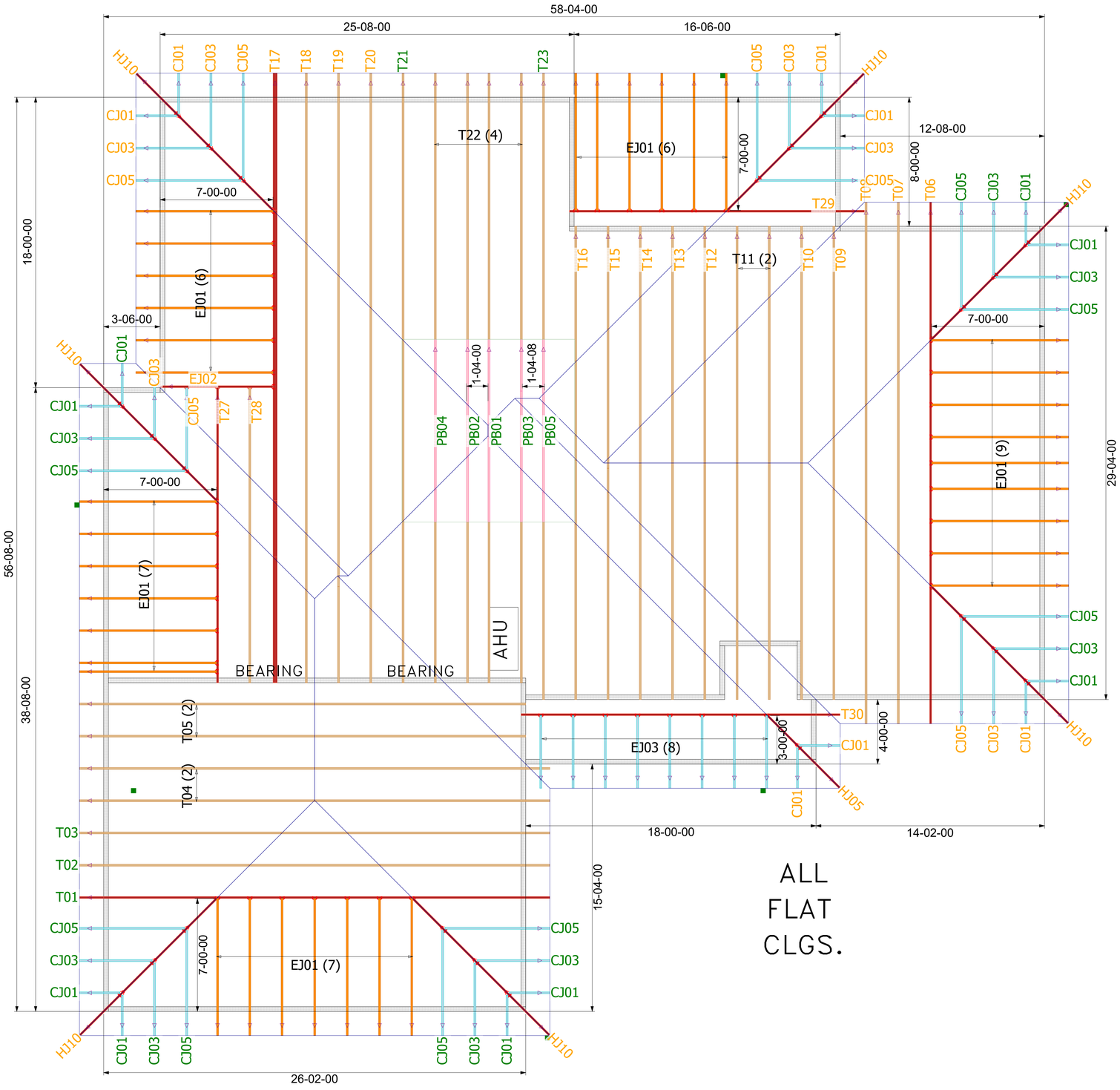
AGREED

BFS, subsidiaries and/or assigns agrees to furnish components as described above.

Kim Holloway
BFS Authorized by

3/17/2023
Date

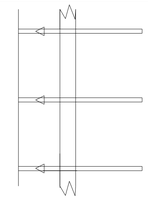
8/12 PITCH – 18" O/H



ALL FLAT CLGS.

MITEK PLATE APPROVAL #'S 2197.2–2197.4, BOISE EWP PRODUCT #'S LVL FL1644–R2, BCI JOISTS FL1392–R2

THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT) CORRESPONDS WITH THE LEFT SIDE OF THE INDIVIDUAL TRUSS DRAWING. USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE TRUSSES ON THE STRUCTURE.



General Notes:

- Per ANSI/TPI 1-2002 all " Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.
- Use Manufacturer's specifications for all hanger connections unless noted otherwise.
- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.N.O.- Use 10d x 1 1/2" Nails in hanger connections to single ply girder trusses.
- Trusses are not designed to support brick U.N.O.
- Dimensions are Feet-Inches- Sixteenths

Notes:

No back charges will be accepted by Builders FirstSource unless approved in writing first. 850-835-4541

ACQ lumber is corrisive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect..., so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be sealed by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements.

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.

Builders FIRSTSOURCE

Lake City
PHONE: 386-755-6894
FAX: 386-755-7973

Jacksonville
PHONE: 904-772-6100
FAX: 904-772-1973

Tallahassee
PHONE: 850-576-5177

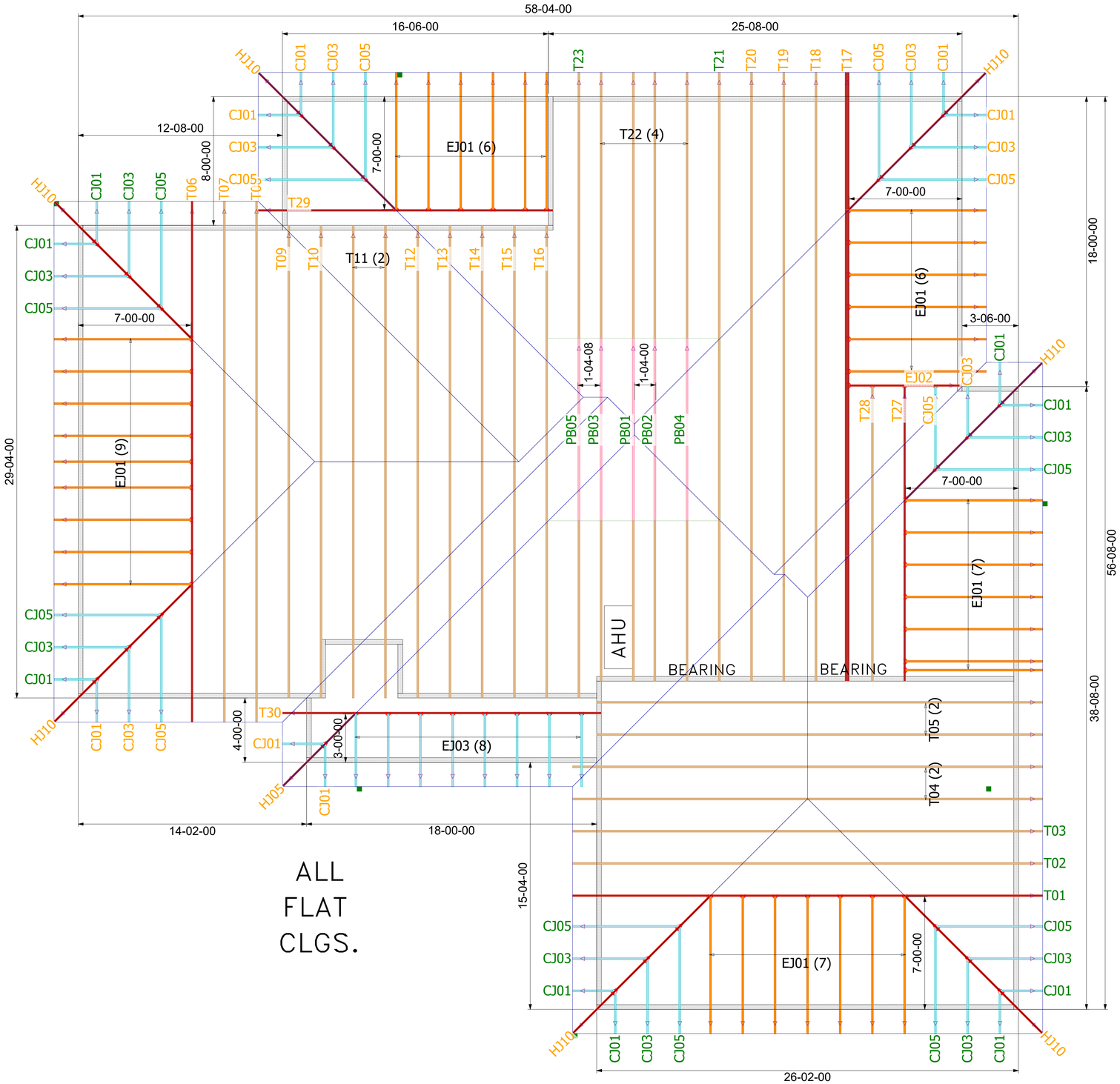
Builder:
EXCEPTIONS REALITY

Legal Address:
352 SW Buttercup Lane

Model:
1841

Date:	Drawn By:	Original Ref #:
3-17-23	KLH	3458582
Floor 1 Job#	Floor 2 Job#:	Roof Job #:
N/A	N/A	3458582

8/12 PITCH – 18" O/H



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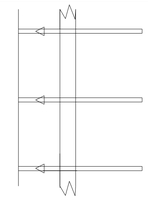

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Tallahassee
PHONE: 850-576-5177

Builder:
EXCEPTIONS REALITY

Legal Address:
352 SW Buttercup Lane

Model:
1841

Date:	Drawn By:	Original Ref #:
3-17-23	KLH	3458582
Floor 1 Job#	**Floor 2 Job#:**	**Roof Job #:**
N/A	N/A	3458582

RE: 3458582
EXCEPTIONS - 1841

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

Site Information:

Customer: EXCEPTIONS REALITY Project Name: 3458582
Lot/Block: N/A Model: 1841
Address: 352 SW Buttercup Lane Subdivision: N/A
City: Columbia Cty State: FL

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

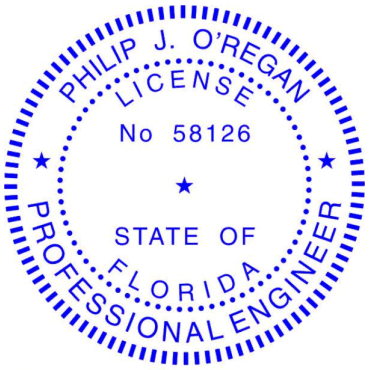
Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 40 individual, dated Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T30080927	CJ01	3/20/2023	21	T30080947	T08	3/20/2023
2	T30080928	CJ03	3/20/2023	22	T30080948	T09	3/20/2023
3	T30080929	CJ05	3/20/2023	23	T30080949	T10	3/20/2023
4	T30080930	EJ01	3/20/2023	24	T30080950	T11	3/20/2023
5	T30080931	EJ02	3/20/2023	25	T30080951	T12	3/20/2023
6	T30080932	EJ03	3/20/2023	26	T30080952	T13	3/20/2023
7	T30080933	HJ05	3/20/2023	27	T30080953	T14	3/20/2023
8	T30080934	HJ10	3/20/2023	28	T30080954	T15	3/20/2023
9	T30080935	PB01	3/20/2023	29	T30080955	T16	3/20/2023
10	T30080936	PB02	3/20/2023	30	T30080956	T17	3/20/2023
11	T30080937	PB03	3/20/2023	31	T30080957	T18	3/20/2023
12	T30080938	PB04	3/20/2023	32	T30080958	T19	3/20/2023
13	T30080939	PB05	3/20/2023	33	T30080959	T20	3/20/2023
14	T30080940	T01	3/20/2023	34	T30080960	T21	3/20/2023
15	T30080941	T02	3/20/2023	35	T30080961	T22	3/20/2023
16	T30080942	T03	3/20/2023	36	T30080962	T23	3/20/2023
17	T30080943	T04	3/20/2023	37	T30080963	T27	3/20/2023
18	T30080944	T05	3/20/2023	38	T30080964	T28	3/20/2023
19	T30080945	T06	3/20/2023	39	T30080965	T29	3/20/2023
20	T30080946	T07	3/20/2023	40	T30080966	T30	3/20/2023

This item has been electronically signed and sealed by ORegan, Philip 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: ORegan, Philip
My license renewal date for the state of Florida is February 28, 2025.
Florida COA: 6634

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



Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: March 20, 2023

ORegan, Philip

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	CJ01	Jack-Open	16	1	T30080927
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:31 2023 Page 1
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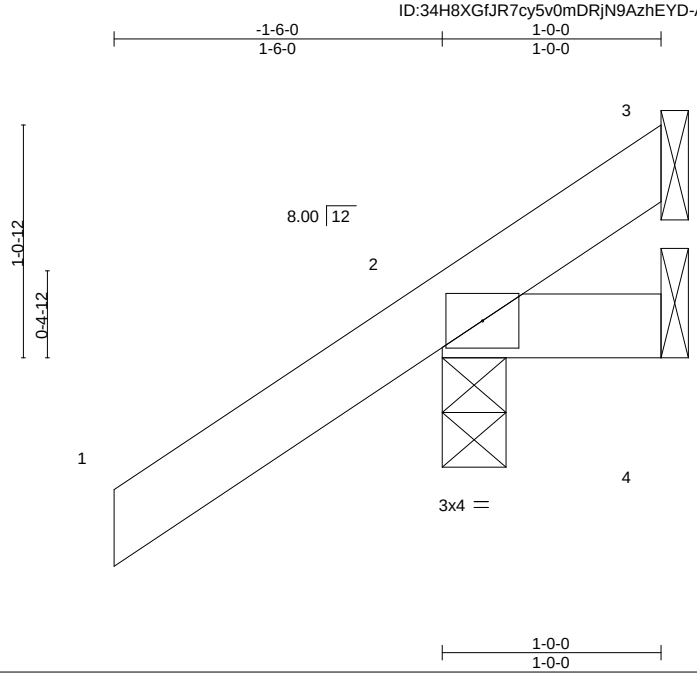

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=52(LC 12)
Max Uplift 3=-5(LC 1), 2=-69(LC 12), 4=-23(LC 19)
Max Grav 3=7(LC 16), 2=179(LC 1), 4=21(LC 16)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; 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 5 lb uplift at joint 3, 69 lb uplift at joint 2 and 23 lb uplift at joint 4.

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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	CJ03	Jack-Open	14	1	T30080928
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:33 2023 Page 1
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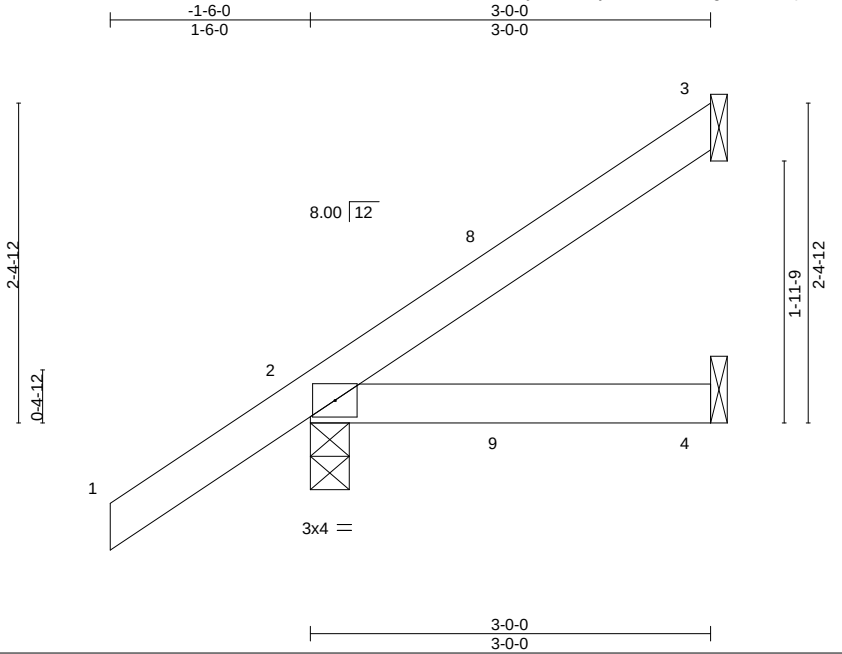

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=97(LC 12)
Max Uplift 3=-44(LC 12), 2=-49(LC 12), 4=-16(LC 9)
Max Grav 3=62(LC 19), 2=210(LC 1), 4=51(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-11-4 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
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 44 lb uplift at joint 3, 49 lb uplift at joint 2 and 16 lb uplift at joint 4.

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

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	CJ05	Jack-Open	14	1	T30080929
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:34 2023 Page 1
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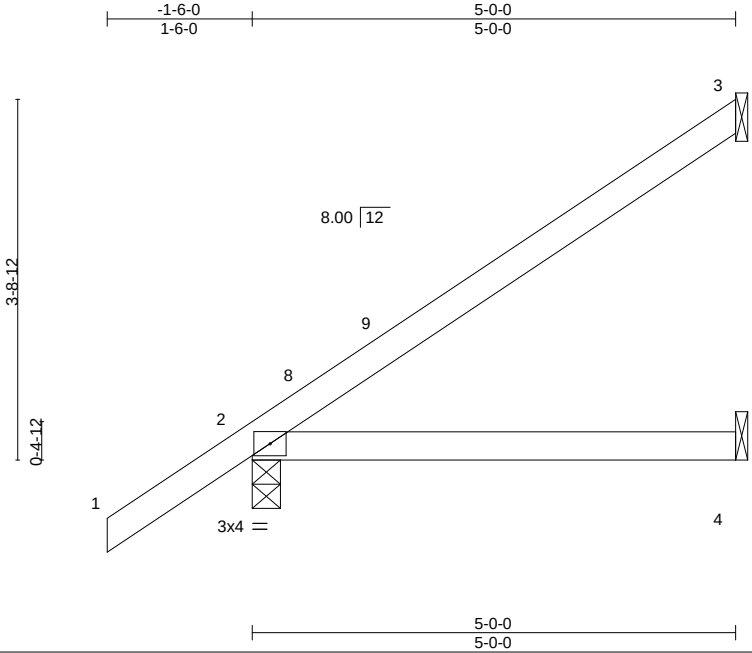

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TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.06	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 19 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=143(LC 12)
Max Uplift 3=-81(LC 12), 2=-49(LC 12), 4=-1(LC 12)
Max Grav 3=120(LC 19), 2=276(LC 1), 4=89(LC 3)

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

NOTES-
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6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 3, 49 lb uplift at joint 2 and 1 lb uplift at joint 4.

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Date:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	EJ01	Jack-Partial	35	1	T30080930
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:35 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-3Poo1iHrPigEjvSwcX1EShckXm35euvK68vZRfza4WE

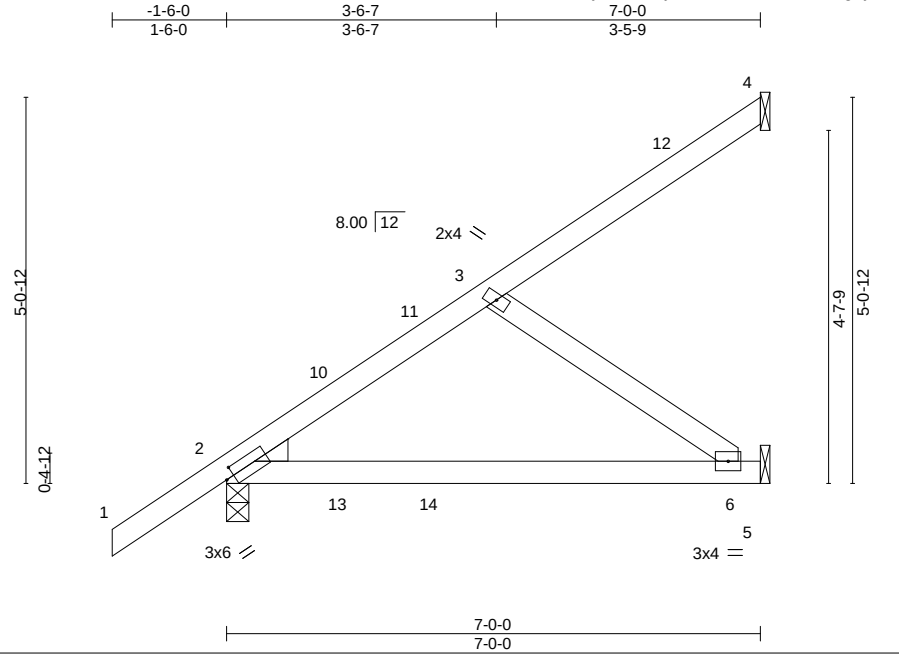

Plate Offsets (X,Y)-- [2:0-1-5,0-1-8]

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	0.35	Vert(LL)	0.17	6-9	>479	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.16	6-9	>529	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 32 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=182(LC 12)
Max Uplift 4=-48(LC 12), 2=-55(LC 12), 5=-79(LC 9)
Max Grav 4=80(LC 19), 2=346(LC 1), 5=176(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-218/282

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-11-4 zone; 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 48 lb uplift at joint 4, 55 lb uplift at joint 2 and 79 lb uplift at joint 5.

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Date:

March 20,2023

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Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	EJ02	MONO TRUSS	1	1	T30080931
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:37 2023 Page 1
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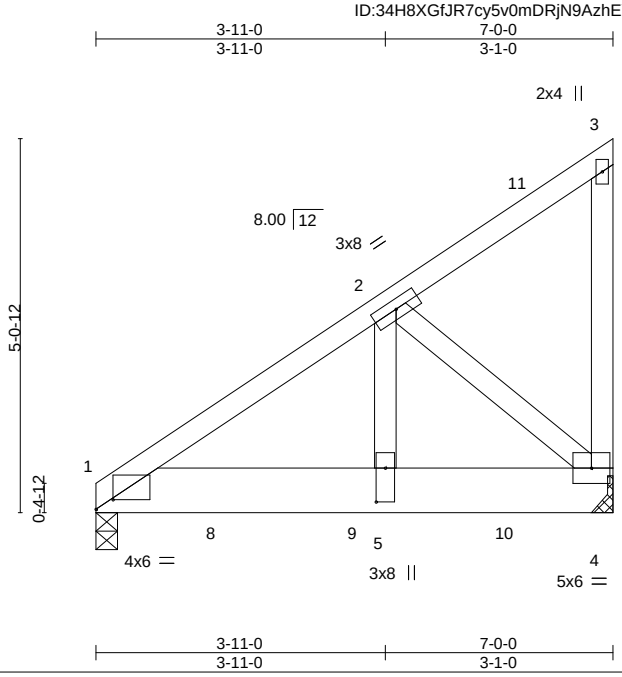

Plate Offsets (X,Y)-- [1:0-2-12,0-1-9], [5:0-5-8,0-1-8]

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	0.16	Vert(LL)	-0.02	5-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.17	Vert(CT)	-0.03	5-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 49 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 4-9-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 4=Mechanical
Max Horz 1=151(LC 23)
Max Uplift 1=-311(LC 8), 4=-472(LC 8)
Max Grav 1=1131(LC 1), 4=1447(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1459/410
BOT CHORD 1-5=-436/1191, 4-5=-436/1191
WEBS 2-5=-521/1618, 2-4=-1563/572

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) 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 311 lb uplift at joint 1 and 472 lb uplift at joint 4.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 256 lb down and 69 lb up at 1-7-13, and 1169 lb down and 484 lb up at 3-6-12, and 703 lb down and 144 lb up at 5-6-12 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: 1-4=-20, 1-3=-54
Concentrated Loads (lb)
Vert: 8=-256 9=-1169(B) 10=-646(B)

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 20,2023

MiTek
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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	EJ03	Jack-Open	8	1	T30080932
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:38 2023 Page 1
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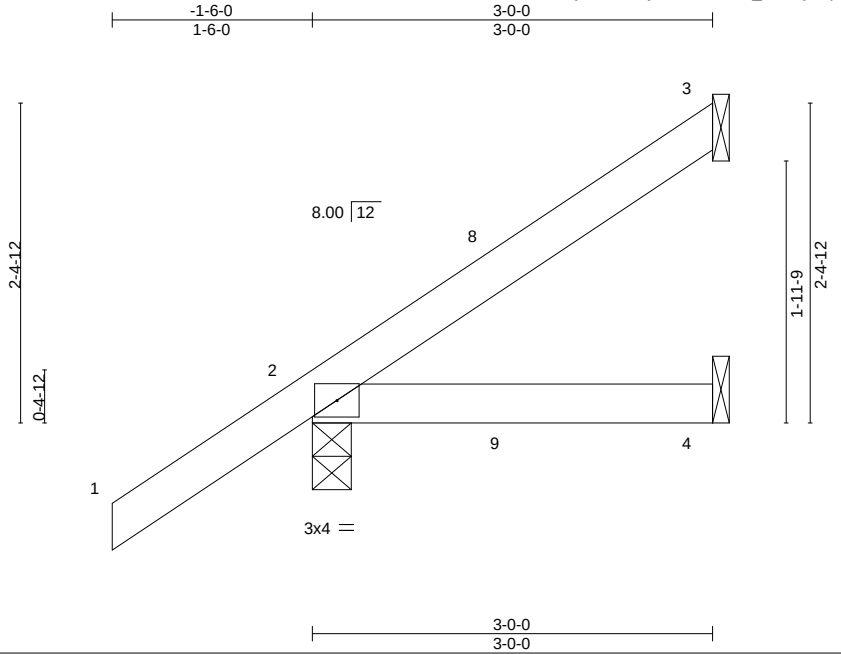

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=97(LC 12)
Max Uplift 3=-44(LC 12), 2=-49(LC 12), 4=-16(LC 9)
Max Grav 3=62(LC 19), 2=210(LC 1), 4=51(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-11-4 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
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 44 lb uplift at joint 3, 49 lb uplift at joint 2 and 16 lb uplift at joint 4.

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	HJ05	Diagonal Hip Girder	1	1	T30080933 Job Reference (optional)

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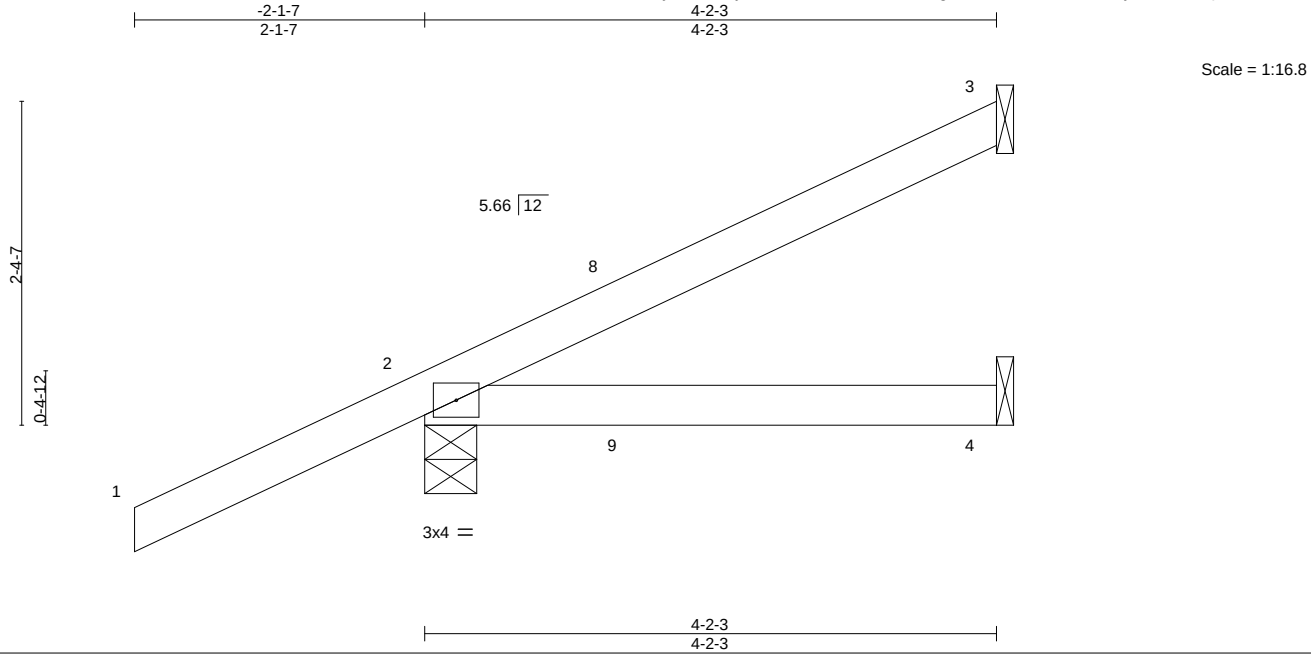

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.30	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.18	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=96(LC 26)
Max Uplift 3=-60(LC 8), 2=-125(LC 8), 4=-30(LC 5)
Max Grav 3=85(LC 1), 2=296(LC 1), 4=71(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 3, 125 lb uplift at joint 2 and 30 lb uplift at joint 4.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 73 lb up at 1-6-1, and 60 lb down and 73 lb up at 1-6-1 on top chord, and 44 lb down and 50 lb up at 1-6-1, and 44 lb down and 50 lb up at 1-6-1 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, 4-5=-20

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Date:

March 20,2023

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	HJ10	Diagonal Hip Girder	7	1	T30080934 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:41 2023 Page 1
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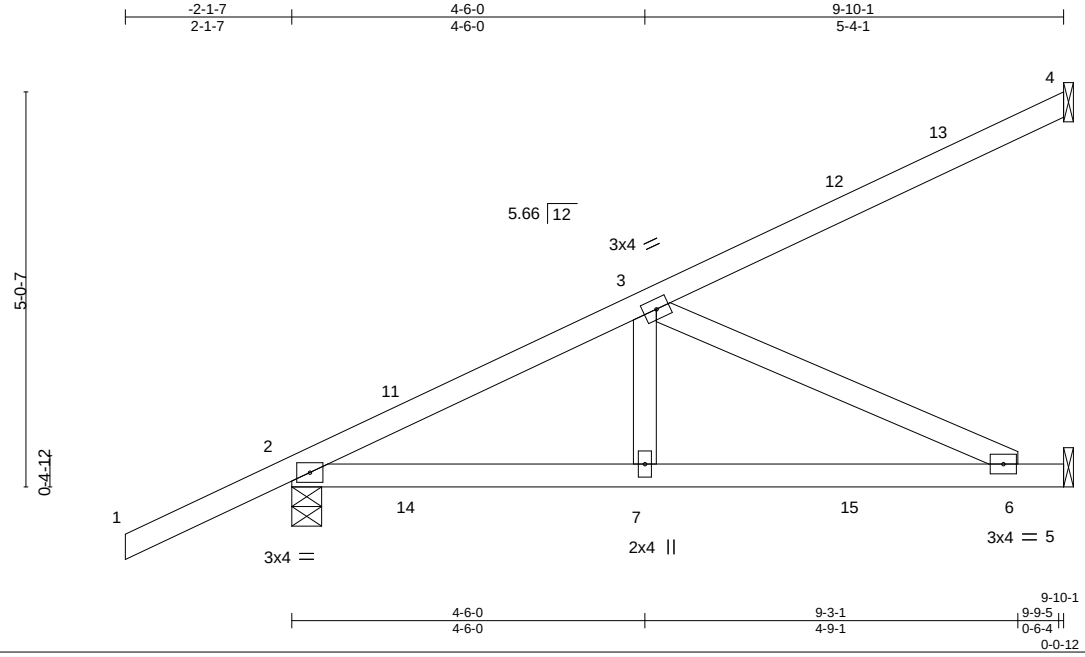

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	0.08	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.14	6-7	>836	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 45 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-7-4 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-9, 5=Mechanical
Max Horz 2=182(LC 8)
Max Uplift 4=-94(LC 8), 2=-228(LC 8), 5=-164(LC 5)
Max Grav 4=150(LC 1), 2=526(LC 1), 5=298(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-652/301
BOT CHORD 2-7=-351/556, 6-7=-351/556
WEBS 3-7=-81/302, 3-6=-613/387

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; 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) 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 94 lb uplift at joint 4, 228 lb uplift at joint 2 and 164 lb uplift at joint 5.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 73 lb up at 1-6-1, 60 lb down and 73 lb up at 1-6-1, 76 lb down and 46 lb up at 4-4-0, 76 lb down and 46 lb up at 4-4-0, and 109 lb down and 92 lb up at 7-1-15, and 109 lb down and 92 lb up at 7-1-15 on top chord, and 44 lb down and 50 lb up at 1-6-1, 44 lb down and 50 lb up at 1-6-1, 19 lb down and 24 lb up at 4-4-0, 19 lb down and 24 lb up at 4-4-0, and 70 lb down and 16 lb up at 7-1-15, and 70 lb down and 16 lb up at 7-1-15 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: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-4(F=-2, B=-2) 12=-73(F=-36, B=-36) 15=-59(F=-29, B=-29)

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Date:

March 20,2023

MiTek
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Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	PB01	Piggyback	1	1	T30080935 Job Reference (optional)

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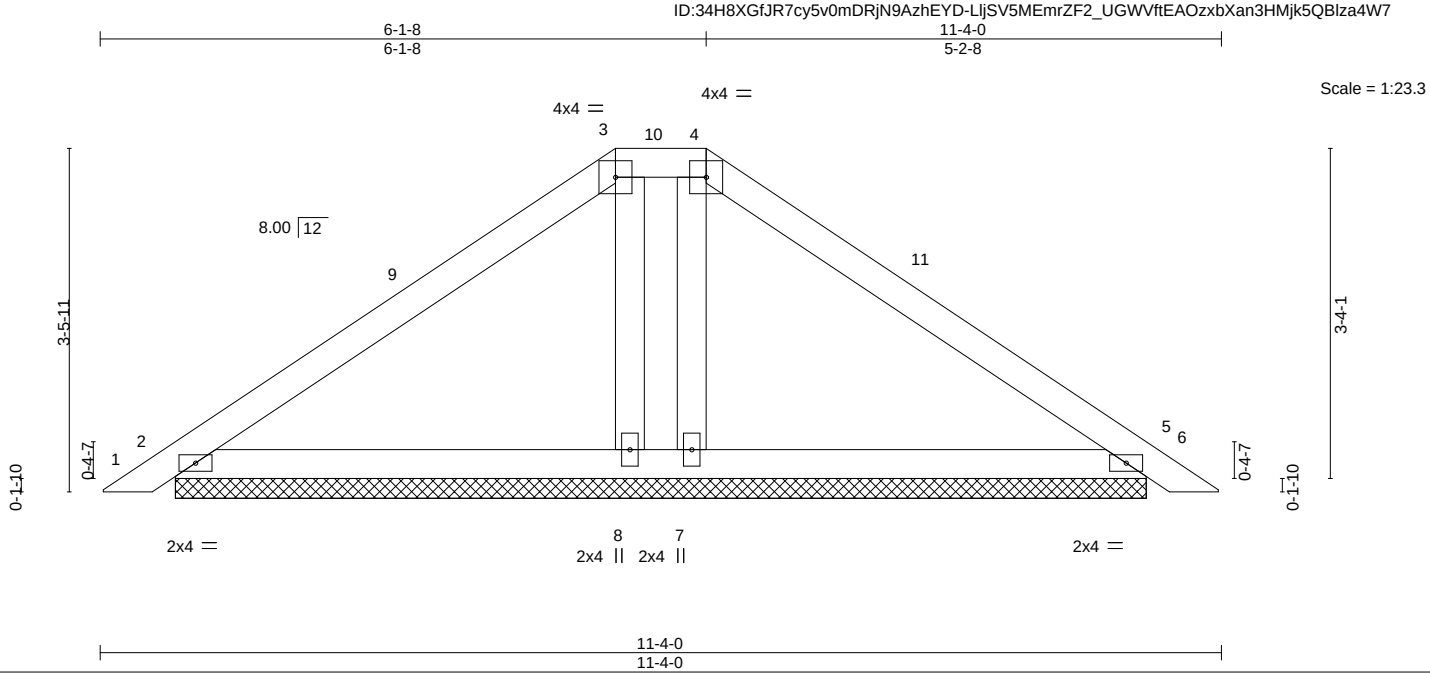

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	0.01	6	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.17	Vert(CT)	0.01	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 43 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 9-9-12.
(lb) - Max Horz 2=73(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 7=273(LC 24), 8=273(LC 23)

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; 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 5-2-8, Exterior(2E) 5-2-8 to 6-1-8, Exterior(2R) 6-1-8 to 10-6-14, Interior(1) 10-6-14 to 11-0-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
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 100 lb uplift at joint(s) 2, 5, 7, 8.
9) 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:

March 20,2023

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	PB02	Piggyback	1	1	T30080936 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:44 2023 Page 1
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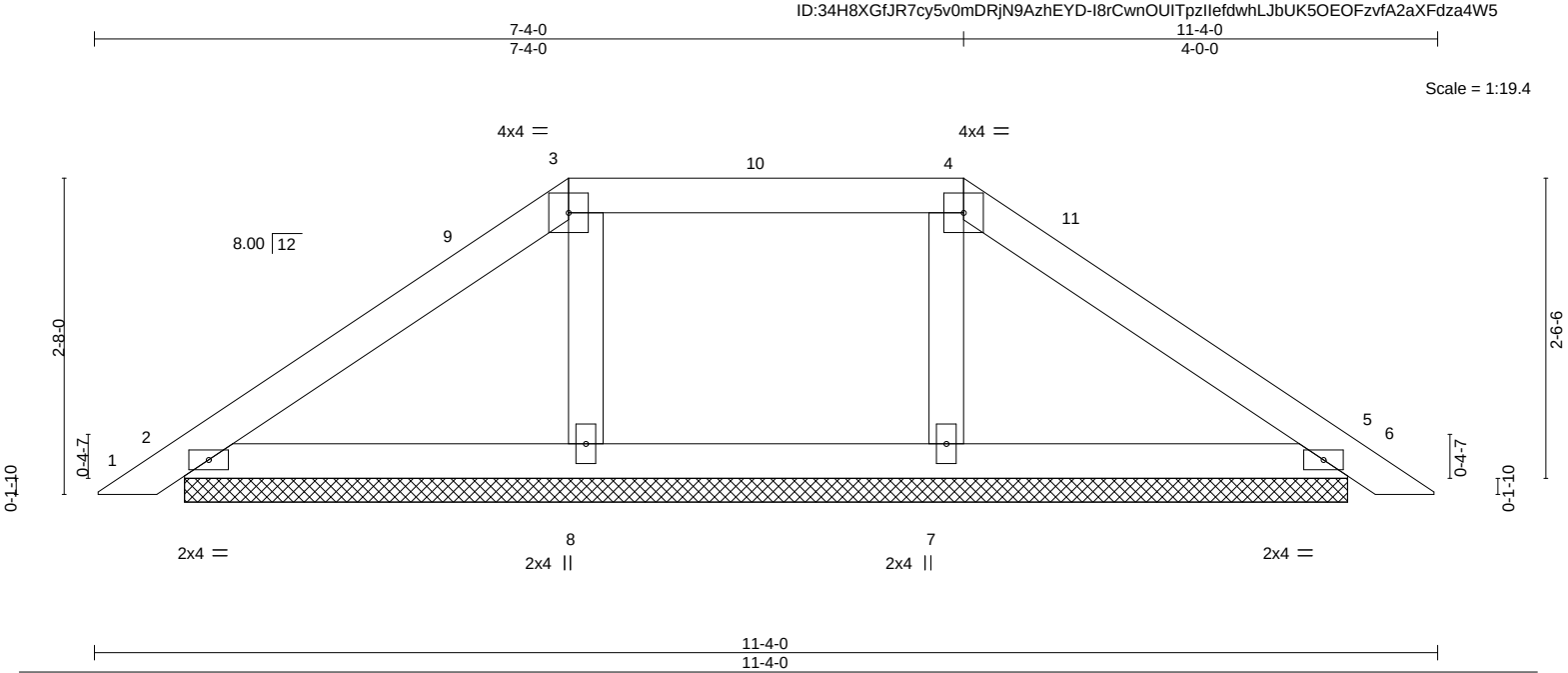

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.10	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 40 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 9-9-12.
(lb) - Max Horz 2=55(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 5, 7, 8

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; 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 4-0-0, Exterior(2E) 4-0-0 to 11-0-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
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 100 lb uplift at joint(s) 2, 5, 7, 8.
9) 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:

March 20,2023

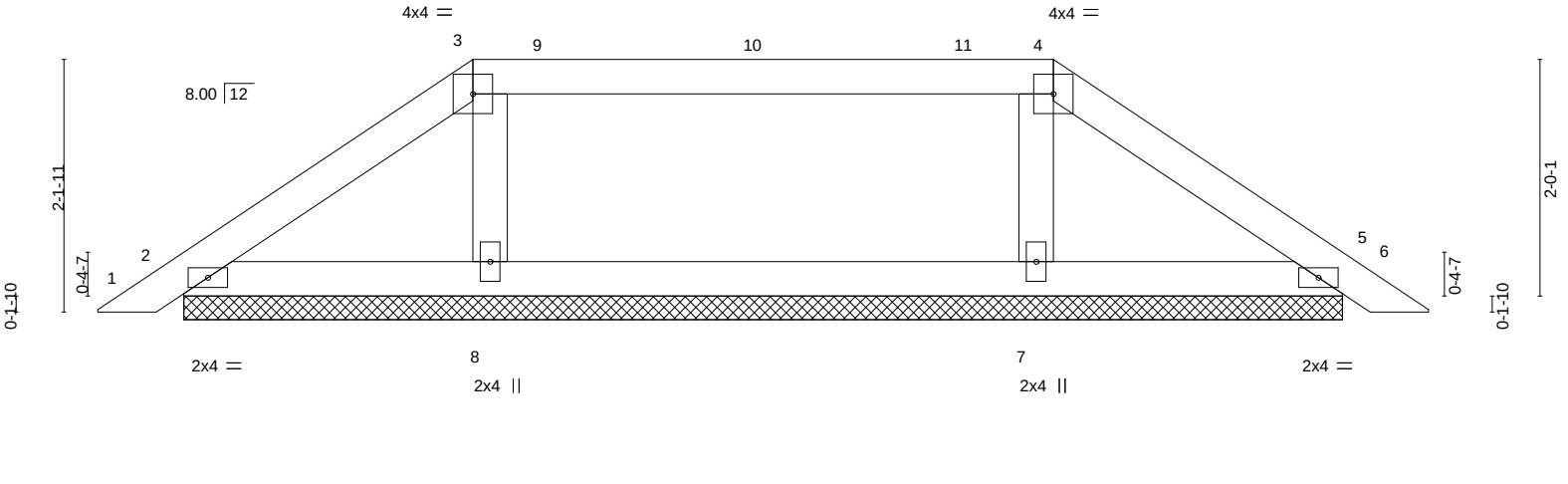
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	PB03	Piggyback	1	1	T30080937
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:45 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-mKPa77P63mxqvSDrBeDaso0SPoa__Q6oPhK4o4za4W4

8-1-8 | 11-4-0
8-1-8 | 3-2-8

Scale = 1:19.4



11-4-0
11-4-0

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	0.26	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 38 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 9-9-12.
(lb) - Max Horz 2=43(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 7=284(LC 24), 8=284(LC 23)

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; 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 3-2-8, Exterior(2R) 3-2-8 to 7-5-7, Interior(1) 7-5-7 to 8-1-8, Exterior(2E) 8-1-8 to 11-0-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
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 100 lb uplift at joint(s) 2, 5, 7, 8.
9) 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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	PB04	Piggyback	1	1	T30080938 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:47 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-ijWLYpQMbOBX9lMDJ3F2xD6qbcFwSKX5s?pBsyza4W2

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11-4-0

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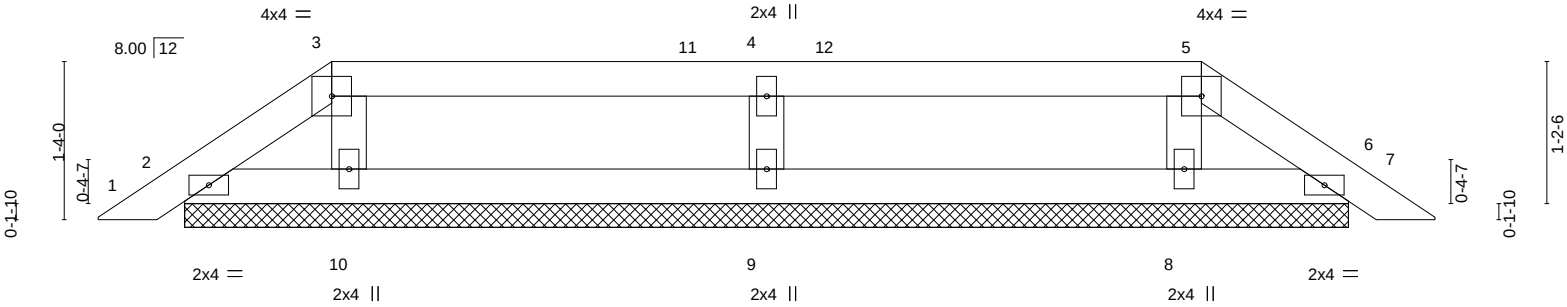

11-4-0
11-4-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	-0.00	6	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 35 lb	FT = 20%

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

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

REACTIONS. All bearings 9-9-12.
(lb) - Max Horz 2=26(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8, 9
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 10, 8 except 9=305(LC 23)

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; 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 2-0-0, Exterior(2R) 2-0-0 to 6-2-15, Interior(1) 6-2-15 to 9-4-0, Exterior(2E) 9-4-0 to 11-0-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
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 100 lb uplift at joint(s) 2, 6, 10, 8, 9.
9) 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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	PB05	Piggyback	1	1	T30080939 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:48 2023 Page 1
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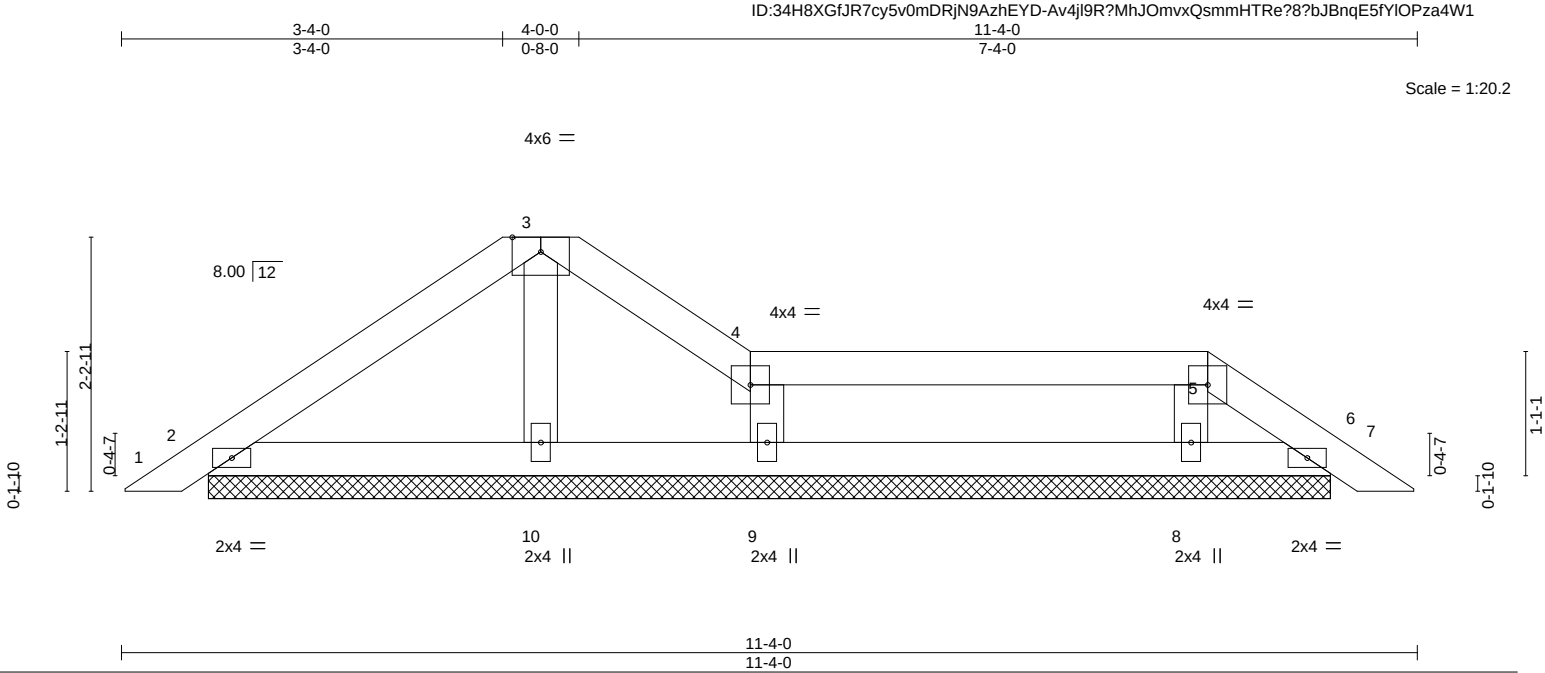

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	-0.00	6	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 37 lb	FT = 20%

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

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

REACTIONS. All bearings 9-9-12.
(lb) - Max Horz 2=-50(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 9, 8, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 8, 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; 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 3-8-0, Exterior(2E) 3-8-0 to 5-6-0, Interior(1) 5-6-0 to 9-6-0, Exterior(2E) 9-6-0 to 11-0-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
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 100 lb uplift at joint(s) 2, 6, 9, 8, 10.
9) 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:

March 20,2023

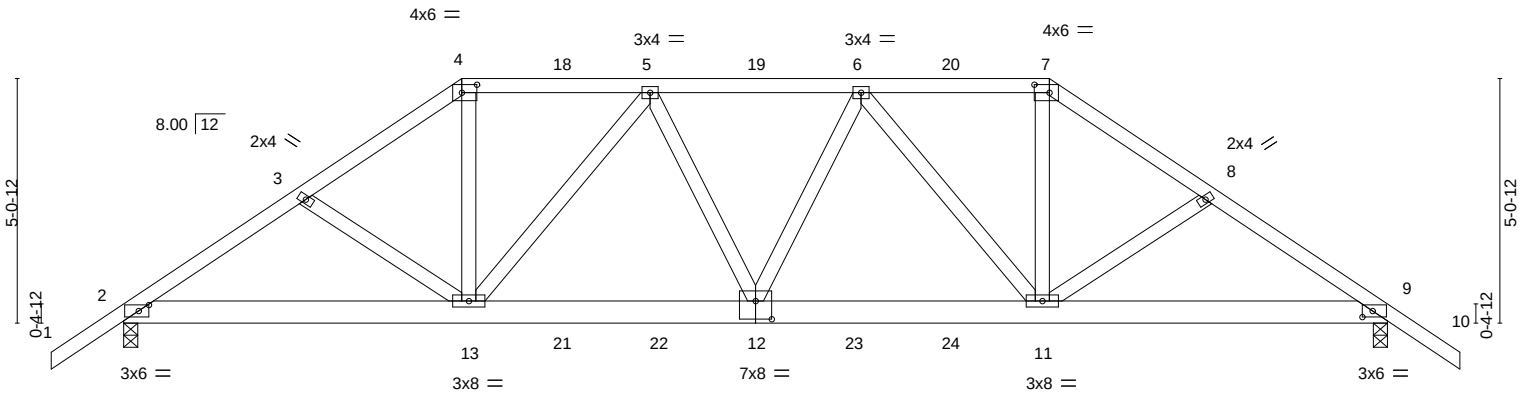
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T01	Hip Girder	1	1	T30080940
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:50 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-6ICTArSFtJZ60D5o_BolZsjI?p7WfZDXYz1rTHza4W?

-1-6-0	3-9-4	7-0-0	10-10-13	15-3-3	19-2-0	22-4-12	26-2-0	27-8-0
1-6-0	3-9-4	3-2-12	3-10-13	4-4-7	3-10-13	3-2-12	3-9-4	1-6-0

Scale: 1/4"=1'



7-0-0	13-1-0	19-2-0	26-2-0
7-0-0	6-1-0	6-1-0	7-0-0

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

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	0.33	Vert(LL)	0.16	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.24	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 166 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-4-2 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=125(LC 26)
Max Uplift 2=-826(LC 8), 9=-847(LC 9)
Max Grav 2=1947(LC 1), 9=1981(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3113/1384, 3-4=-2964/1357, 4-5=-2462/1178, 5-6=-3099/1447, 6-7=-2511/1208, 7-8=-3025/1394, 8-9=-3174/1422
BOT CHORD 2-13=-1149/2550, 12-13=-1322/2944, 11-12=-1318/2962, 9-11=-1095/2600
WEBS 4-13=-631/1412, 5-13=-815/427, 5-12=-193/400, 6-12=-153/357, 6-11=-756/376, 7-11=-595/1373

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; 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=826, 9=847.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 51 lb up at 7-0-0, 70 lb down and 49 lb up at 9-0-12, 70 lb down and 49 lb up at 11-0-12, 70 lb down and 41 lb up at 13-1-0, 70 lb down and 49 lb up at 15-1-4, and 70 lb down and 49 lb up at 17-1-4, and 177 lb down and 156 lb up at 19-2-0 on top chord, and 426 lb down and 291 lb up at 7-0-0, 156 lb down and 99 lb up at 9-0-12, 156 lb down and 99 lb up at 11-0-12, 156 lb down and 99 lb up at 13-1-0, 156 lb down and 99 lb up at 15-1-4, and 156 lb down and 99 lb up at 17-1-4, and 426 lb down and 291 lb up at 19-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 20,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-54, 4-7=-54, 7-10=-54, 2-9=-20

Concentrated Loads (lb)

Vert: 4=-18(B) 7=-91(B) 12=-156(B) 13=-426(B) 5=-18(B) 6=-18(B) 11=-426(B) 18=-18(B) 19=-18(B) 20=-18(B) 21=-156(B) 22=-156(B) 23=-156(B) 24=-156(B)

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T02	Hip	1	1	T30080941
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:52 2023 Page 1
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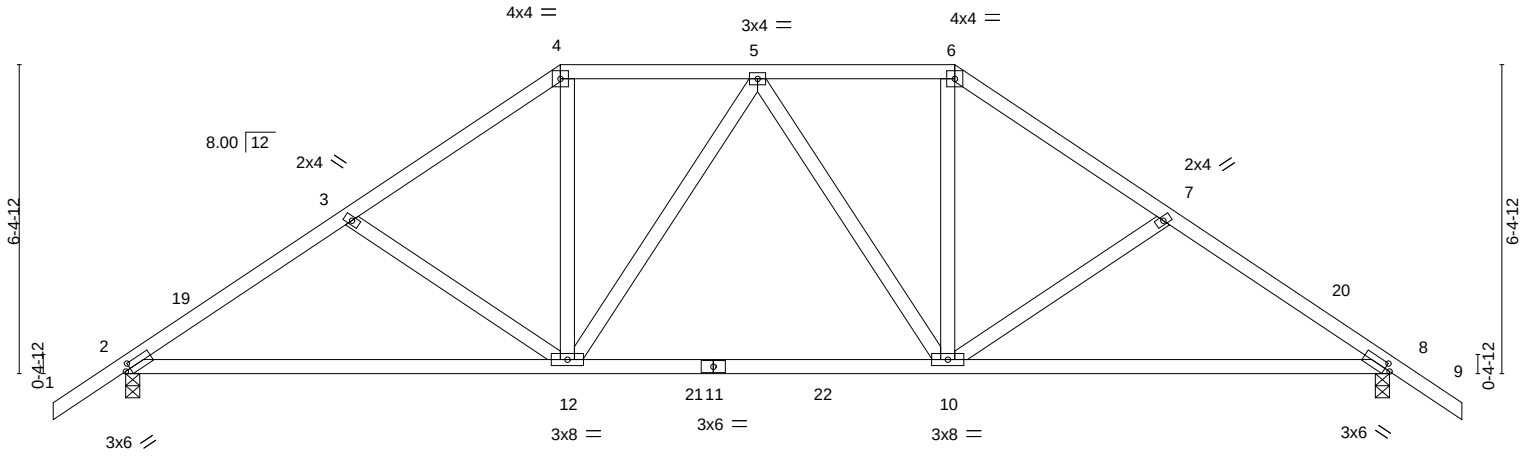
-1-6-0	4-8-3	9-0-0	13-1-0	17-2-0	21-5-13	26-2-0	27-8-0
1-6-0	4-8-3	4-3-13	4-1-0	4-1-0	4-3-13	4-8-3	1-6-0

Scale: 1/4"=1'



9-0-0	17-2-0	26-2-0
9-0-0	8-2-0	9-0-0

Plate Offsets (X,Y)-- [2:0-1-5,0-1-8], [8:0-1-5,0-1-8]

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	0.37	Vert(LL)	-0.14	10-18	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.29	10-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 143 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-155(LC 10)
Max Uplift 2=-235(LC 12), 8=-235(LC 13)
Max Grav 2=1120(LC 2), 8=1120(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1517/315, 3-4=-1339/271, 4-5=-1071/265, 5-6=-1071/265, 6-7=-1339/271, 7-8=-1517/315
BOT CHORD 2-12=-273/1279, 10-12=-149/1134, 8-10=-169/1248
WEBS 3-12=-293/171, 4-12=-77/548, 6-10=-76/548, 7-10=-294/171

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 9-0-0, Exterior(2R) 9-0-0 to 13-1-0, Interior(1) 13-1-0 to 17-2-0, Exterior(2R) 17-2-0 to 21-7-6, Interior(1) 21-7-6 to 27-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=235, 8=235.

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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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T03	Hip	1	1	T30080942
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:54 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-?3R_0CWlxX4YVqPaD1thjiu?cQZvbQM7Tb?2b2za4Vx

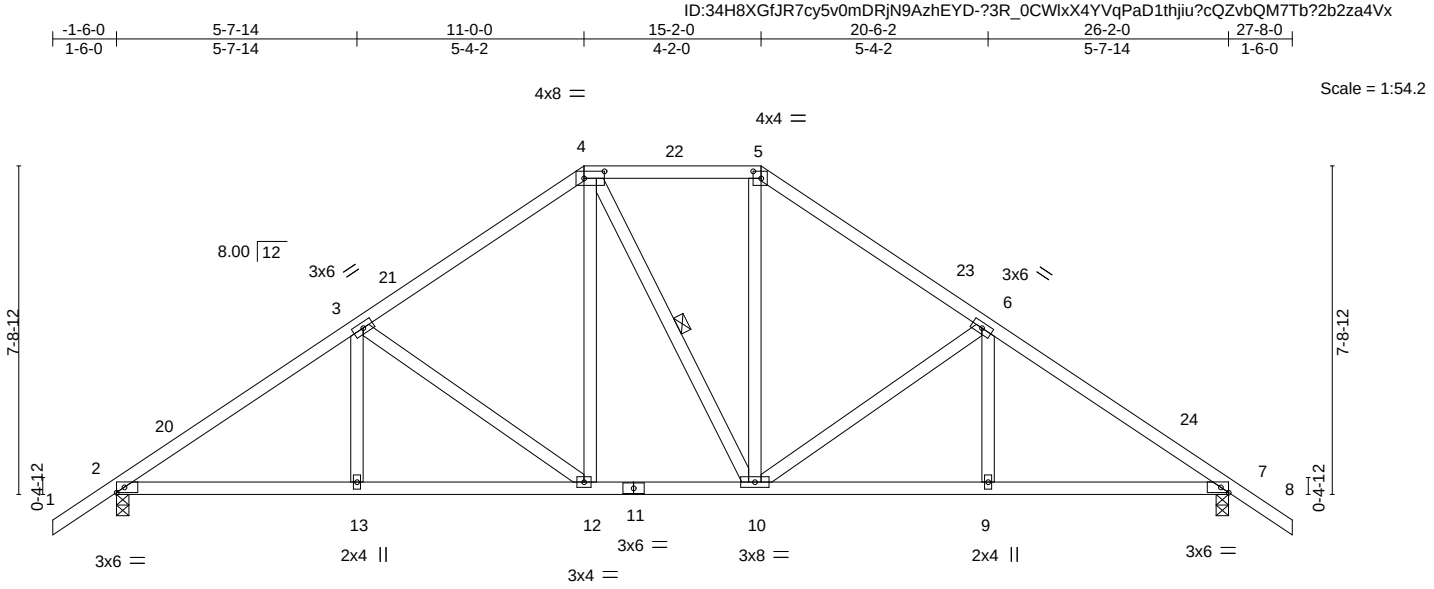

Plate Offsets (X,Y)-- [4:0-5-12,0-2-0], [5:0-2-4,0-2-0], [7:0-2-3,Edge]

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	0.29	Vert(LL)	-0.05	12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.10	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 153 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=184(LC 11)
Max Uplift 2=-230(LC 12), 7=-230(LC 13)
Max Grav 2=1049(LC 1), 7=1049(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1456/286, 3-4=-1088/254, 4-5=-836/256, 5-6=-1089/254, 6-7=-1455/286
BOT CHORD 2-13=-259/1151, 12-13=-259/1151, 10-12=-98/835, 9-10=-135/1151, 7-9=-135/1151
WEBS 3-12=-422/198, 4-12=-84/347, 5-10=-77/348, 6-10=-421/199

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 11-0-0, Exterior(2E) 11-0-0 to 15-2-0, Exterior(2R) 15-2-0 to 19-4-15, Interior(1) 19-4-15 to 27-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 7=230.

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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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T04	Common	2	1	T30080943
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:55 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-TF?MDYWOirCP6__mnkOwGvR59qq4KrXGiFlb7Vza4Vw

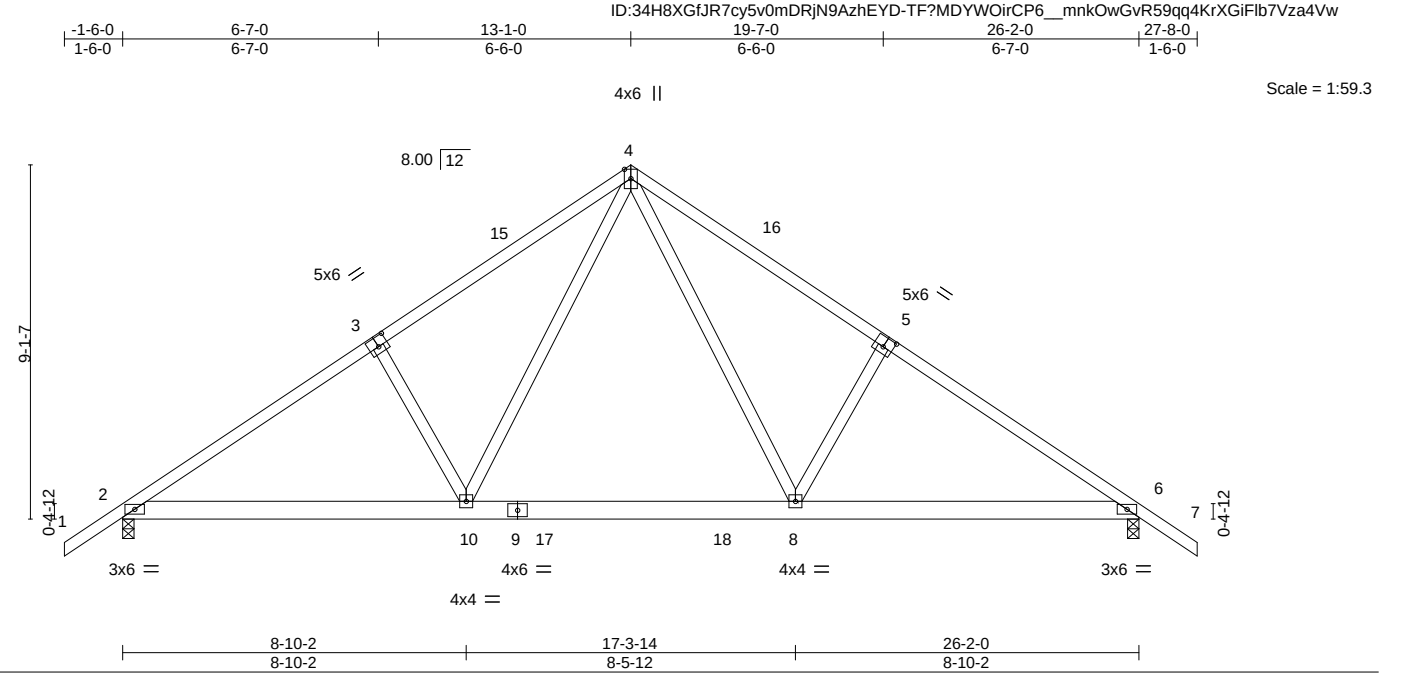

Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [5:0-3-0,0-3-0]

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	0.63	Vert(LL)	-0.15	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.27	8-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 155 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=214(LC 11)
Max Uplift 2=-293(LC 12), 6=-293(LC 13)
Max Grav 2=1439(LC 19), 6=1439(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2071/413, 3-4=-1958/466, 4-5=-1958/466, 5-6=-2071/413
BOT CHORD 2-10=-372/1808, 8-10=-139/1181, 6-8=-248/1670
WEBS 4-8=-273/1066, 5-8=-338/240, 4-10=-273/1066, 3-10=-338/240

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 13-1-0, Exterior(2R) 13-1-0 to 16-1-0, Interior(1) 16-1-0 to 27-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=293, 6=293.
7) 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: 1-4=-54, 4-7=-54, 2-10=-20, 8-10=-80(F=-60), 6-8=-20

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

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T05	Common	2	1	T30080944
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:57 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-Pe77eEYeESS7MI78u9QOLKWRceWNolpZ9ZEiCNza4Vu

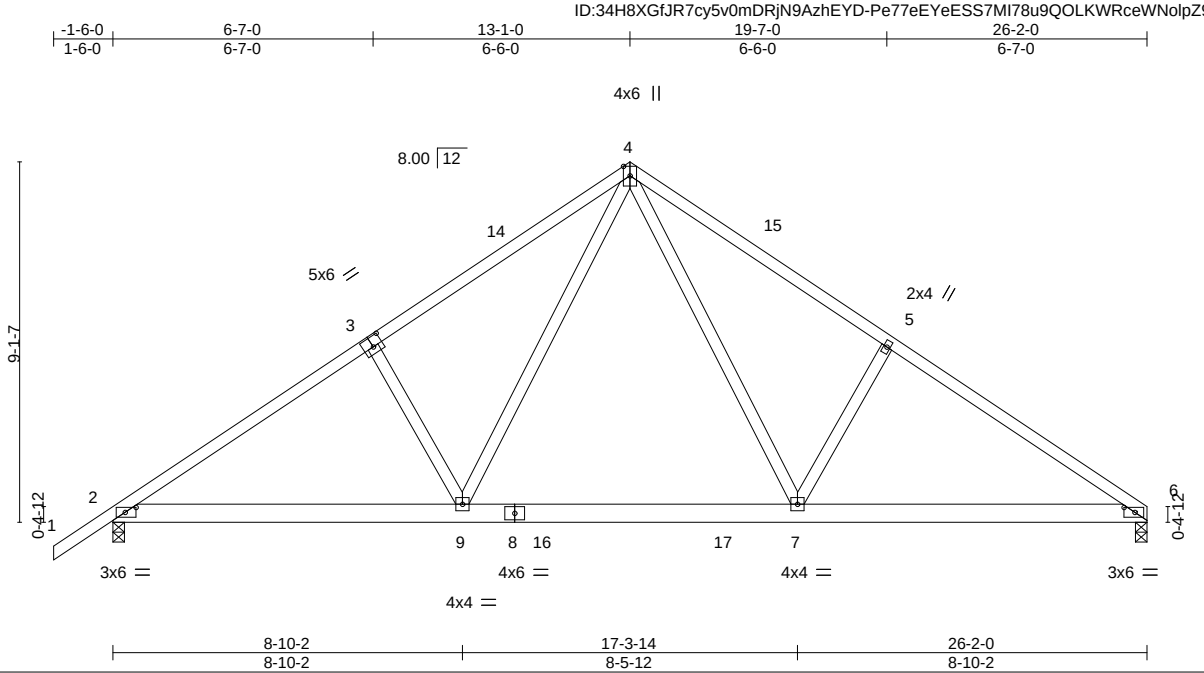

Plate Offsets (X,Y)-- [2:0-3-5,0-1-8], [3:0-3-0,0-3-0], [6:0-3-5,0-1-8]

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	0.63	Vert(LL)	-0.15	7-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.27	7-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 153 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=207(LC 11)
Max Uplift 6=-260(LC 13), 2=-294(LC 12)
Max Grav 6=1362(LC 20), 2=1440(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2073/414, 3-4=-1960/467, 4-5=-1970/474, 5-6=-2081/420
BOT CHORD 2-9=-388/1799, 7-9=-155/1172, 6-7=-269/1664
WEBS 4-7=-281/1078, 5-7=-341/241, 4-9=-273/1065, 3-9=-338/240

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 13-1-0, Exterior(2R) 13-1-0 to 16-1-0, Interior(1) 16-1-0 to 26-2-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=260, 2=294.
7) 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: 1-4=-54, 4-6=-54, 2-9=-20, 7-9=-80(F=-60), 6-7=-20

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

March 20,2023

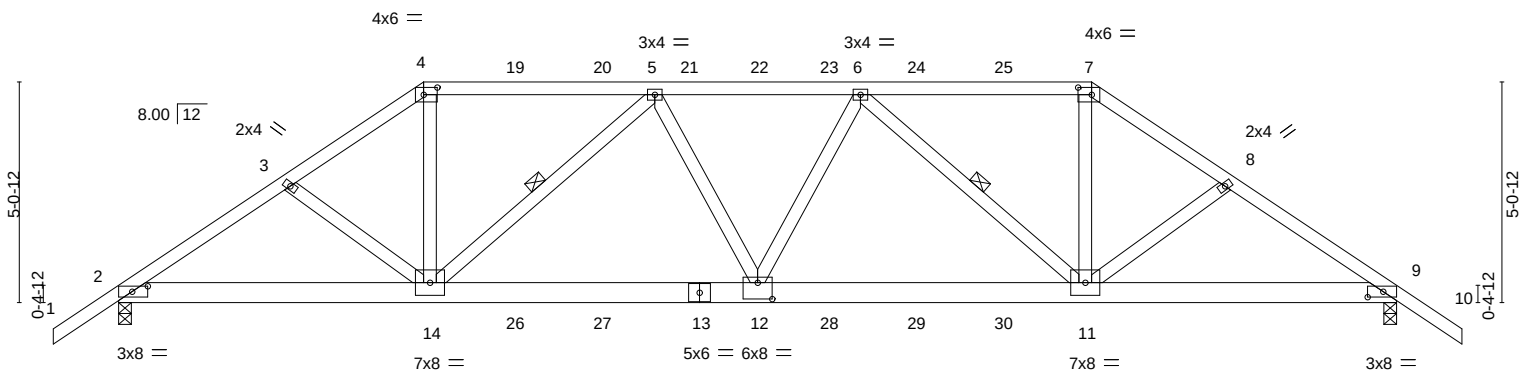
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T06	Hip Girder	1	1	T30080945
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:49:59 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-M0Ft3vZum4irbbHX0aTsQlbmYRHMGcEsdtjpGGza4Vs

-1-6-0	3-11-4	7-0-0	12-3-11	17-0-5	22-4-0	25-4-12	29-4-0	30-10-0
1-6-0	3-11-4	3-0-12	5-3-11	4-8-10	5-3-11	3-0-12	3-11-4	1-6-0

Scale = 1:52.9



7-0-0	14-8-0	22-4-0	29-4-0
7-0-0	7-8-0	7-8-0	7-0-0

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

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	0.60	Vert(LL)	0.21	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.37	Vert(CT)	-0.32	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 181 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-6-8 oc bracing.
WEBS 1 Row at midpt 5-14, 6-11

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-125(LC 6)
Max Uplift 2=-961(LC 8), 9=-988(LC 9)
Max Grav 2=2235(LC 1), 9=2276(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3636/1629, 3-4=-3485/1609, 4-5=-2918/1391, 5-6=-4013/1864, 6-7=-2980/1430, 7-8=-3561/1657, 8-9=-3711/1677
BOT CHORD 2-14=-1347/2976, 12-14=-1722/3784, 11-12=-1719/3803, 9-11=-1303/3039
WEBS 4-14=-748/1665, 5-14=-1213/619, 5-12=-253/540, 6-12=-215/508, 6-11=-1146/563, 7-11=-718/1635

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; 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=961, 9=988.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 51 lb up at 7-0-0, 70 lb down and 49 lb up at 9-0-12, 70 lb down and 49 lb up at 11-0-12, 70 lb down and 49 lb up at 13-0-12, 70 lb down and 41 lb up at 14-8-0, 70 lb down and 49 lb up at 16-3-4, 70 lb down and 49 lb up at 18-3-4, and 70 lb down and 49 lb up at 20-3-4, and 177 lb down and 156 lb up at 22-4-0 on top chord, and 426 lb down and 291 lb up at 7-0-0, 156 lb down and 99 lb up at 9-0-12 , 156 lb down and 99 lb up at 11-0-12, 156 lb down and 99 lb up at 13-0-12, 156 lb down and 99 lb up at 14-8-0, 156 lb down and 99 lb up at 16-3-4, 156 lb down and 99 lb up at 18-3-4, and 156 lb down and 99 lb up at 20-3-4, and 426 lb down and 291 lb up at 22-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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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:

March 20,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

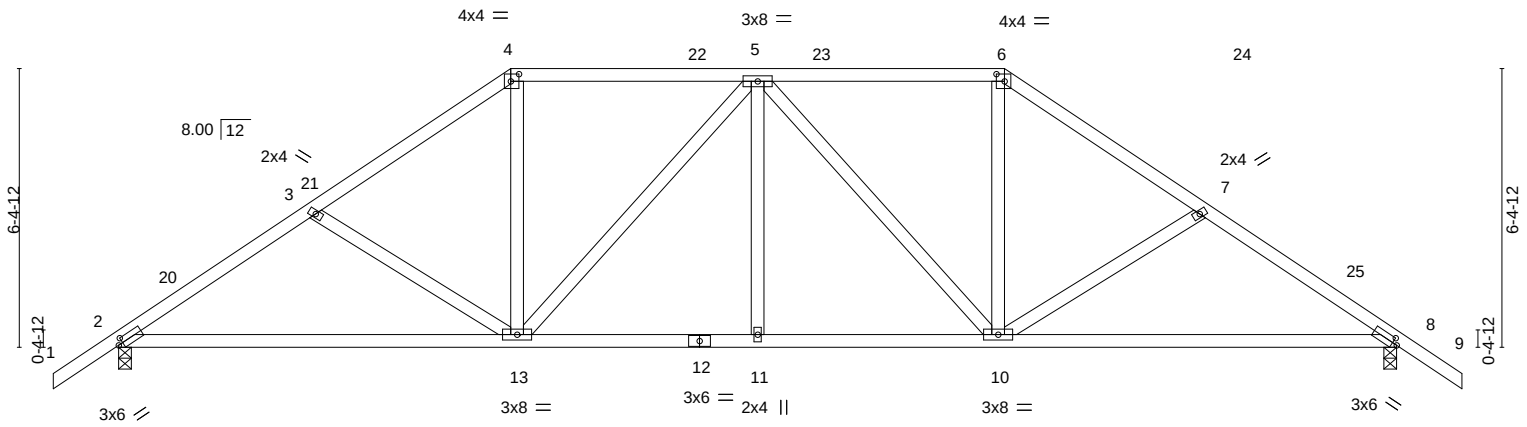
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-7=-54, 7-10=-54, 2-9=-20
   Concentrated Loads (lb)
   Vert: 4=-18(F) 7=-91(F) 13=-156(F) 14=-426(F) 12=-156(F) 11=-426(F) 19=-18(F) 20=-18(F) 21=-18(F) 22=-18(F) 23=-18(F) 24=-18(F) 25=-18(F) 26=-156(F) 27=-156(F) 28=-156(F) 29=-156(F) 30=-156(F)

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T07	Hip	1	1	T30080946
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:01 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-IPMdUbb8IhyYqvRw7?VKVAhAgFtXkYQ94BCwL8za4Vq

-1-6-0	4-6-4	9-0-0	14-8-0	20-4-0	24-9-12	29-4-0	30-10-0
1-6-0	4-6-4	4-5-12	5-8-0	5-8-0	4-5-12	4-6-4	1-6-0

Scale = 1:52.9



9-0-0	14-8-0	20-4-0	29-4-0
9-0-0	5-8-0	5-8-0	9-0-0

Plate Offsets (X,Y)-- [2:0-1-5,0-1-8], [4:0-2-4,0-2-0], [6:0-2-4,0-2-0], [8:0-1-5,0-1-8]

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	0.37	Vert(LL)	-0.15	10-19	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.31	10-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 164 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-155(LC 10)
Max Uplift 2=-262(LC 12), 8=-262(LC 13)
Max Grav 2=1166(LC 1), 8=1166(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1635/365, 3-4=-1426/318, 4-5=-1134/307, 5-6=-1134/307, 6-7=-1426/318, 7-8=-1635/365
BOT CHORD 2-13=-317/1332, 11-13=-226/1325, 10-11=-226/1325, 8-10=-212/1332
WEBS 3-13=-276/169, 4-13=-84/510, 5-13=-362/163, 5-10=-362/163, 6-10=-83/510, 7-10=-276/170

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 9-0-0, Exterior(2R) 9-0-0 to 13-2-15, Interior(1) 13-2-15 to 20-4-0, Exterior(2R) 20-4-0 to 24-6-15, Interior(1) 24-6-15 to 30-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=262, 8=262.

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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:

March 20,2023

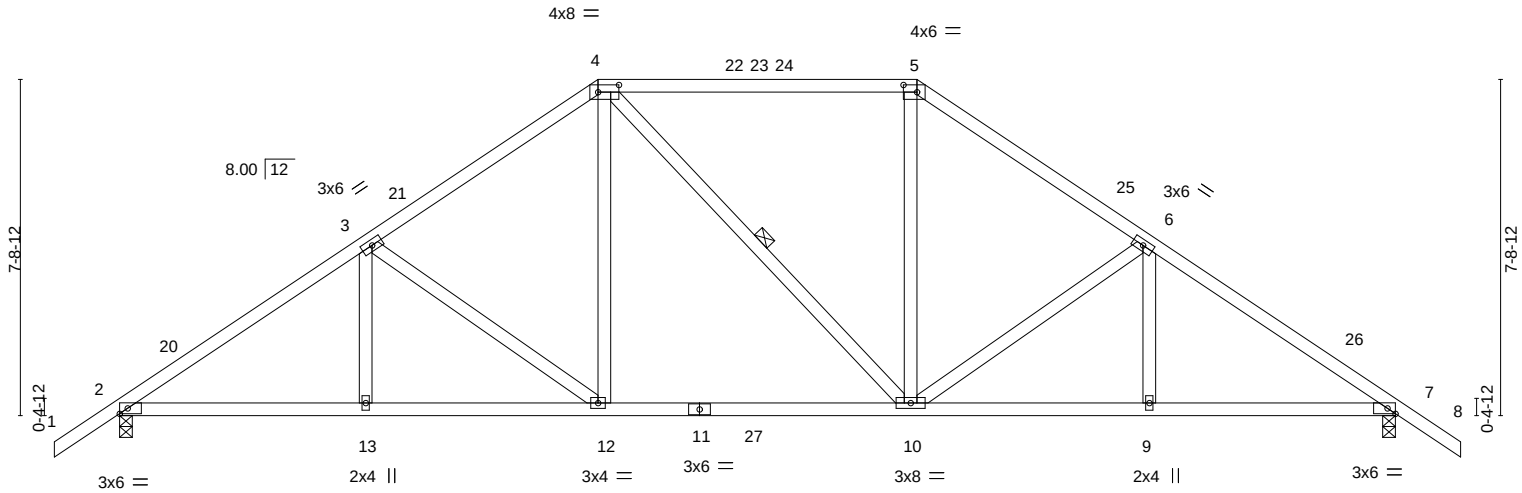
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T08	Hip	1	1	T30080947
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:02 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-mbw0hxcn3?4PS306hi0Z2NDE8fFdT0flJrxTtbza4Vp

-1-6-0 | 5-7-14 | 11-0-0 | 18-4-0 | 23-8-2 | 29-4-0 | 30-10-0
1-6-0 | 5-7-14 | 5-4-2 | 7-4-0 | 5-4-2 | 5-7-14 | 1-6-0

Scale = 1:53.0



5-7-14 | 11-0-0 | 18-4-0 | 23-8-2 | 29-4-0
5-7-14 | 5-4-2 | 7-4-0 | 5-4-2 | 5-7-14

Plate Offsets (X,Y)-- [4:0-5-12,0-2-0], [5:0-3-12,0-2-0], [7:0-2-3,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	0.77	Vert(LL)	-0.13	10-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.22	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 165 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-184(LC 10)
Max Uplift 2=-257(LC 12), 7=-257(LC 13)
Max Grav 2=1253(LC 2), 7=1247(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1800/334, 3-4=-1432/302, 4-5=-1133/297, 5-6=-1419/302, 6-7=-1789/335
BOT CHORD 2-13=-298/1517, 12-13=-298/1517, 10-12=-140/1143, 9-10=-174/1440, 7-9=-174/1440
WEBS 3-12=-472/195, 4-12=-71/544, 5-10=-60/500, 6-10=-474/195

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 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 18-4-0, Exterior(2R) 18-4-0 to 22-6-15, Interior(1) 22-6-15 to 30-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 7=257.

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

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T09	Hip	1	1	T30080948
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:04 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-i_2m6dd1acK7hNAVo7217oJfbSyBxtdbm9QayTza4Vn

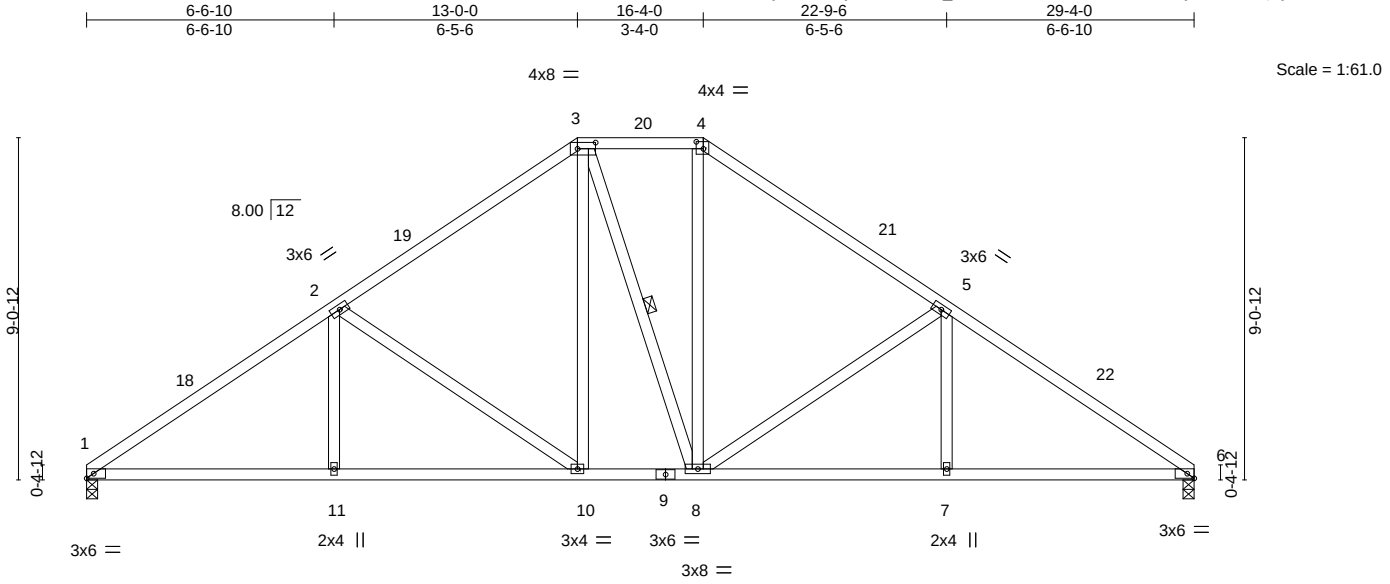

Plate Offsets (X,Y)-- [3:0-5-12,0-2-0], [4:0-2-4,0-2-4], [6:0-2-3,Edge]

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	0.45	Vert(LL)	-0.06	10-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.15	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 169 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-8

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=-192(LC 8)
Max Uplift 1=-220(LC 12), 6=-220(LC 13)
Max Grav 1=1085(LC 1), 6=1085(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1657/329, 2-3=-1197/280, 3-4=-910/286, 4-5=-1198/280, 5-6=-1657/329
BOT CHORD 1-11=-320/1314, 10-11=-320/1314, 8-10=-117/909, 7-8=-191/1313, 6-7=-191/1313
WEBS 2-11=0/287, 2-10=-525/248, 3-10=-105/380, 4-8=-102/381, 5-8=-523/248, 5-7=0/285

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 13-0-0, Exterior(2E) 13-0-0 to 16-4-0, Exterior(2R) 16-4-0 to 20-6-15, Interior(1) 20-6-15 to 29-4-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=220, 6=220.

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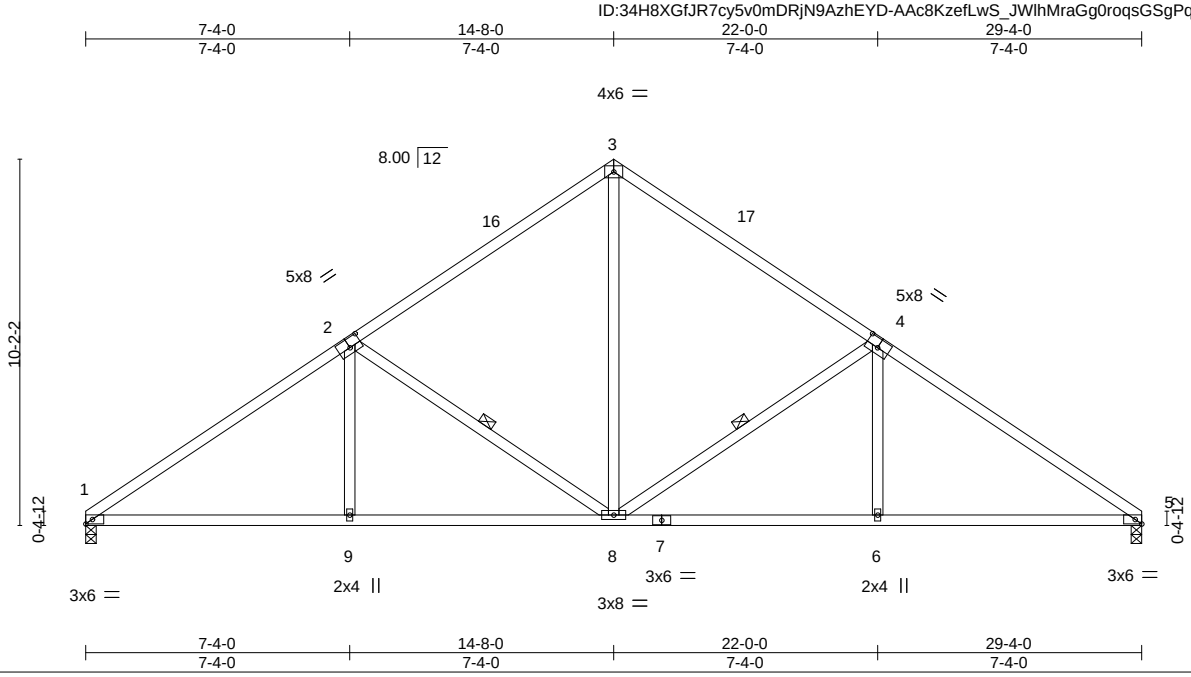
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T10	Common	1	1	T30080949
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:05 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-AAc8KzefLwS_JWlhMraGg0roqsGSgPql?pA7Uvza4Vm



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:0-4-0,0-3-0], [4:0-4-0,0-3-0], [5:0-2-3,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	0.61	Vert(LL)	0.08	9-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.58	Vert(CT)	-0.17	9-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 150 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-8, 2-8

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-215(LC 8)
Max Uplift 1=-214(LC 12), 5=-214(LC 13)
Max Grav 1=1085(LC 1), 5=1085(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1632/316, 2-3=-1119/293, 3-4=-1119/293, 4-5=-1632/316
BOT CHORD 1-9=-318/1291, 8-9=-317/1293, 6-8=-186/1289, 5-6=-187/1286
WEBS 3-8=-165/747, 4-8=-587/281, 4-6=0/309, 2-8=-586/281, 2-9=0/309

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-8-0, Exterior(2R) 14-8-0 to 17-8-0, Interior(1) 17-8-0 to 29-4-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=214, 5=214.

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

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T11	Common	2	1	T30080950
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:07 2023 Page 1
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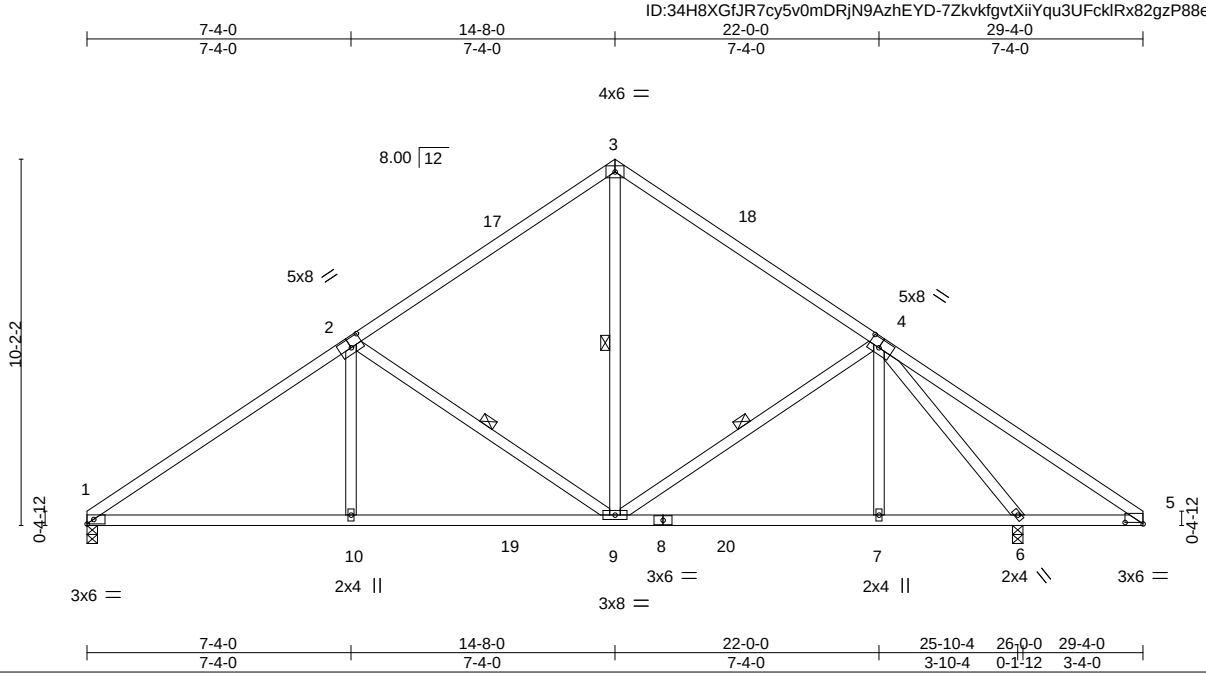

Plate Offsets (X,Y)-- [2:0-4-0,0-3-0], [4:0-3-8,0-3-0], [5:0-6-0,0-0-8]

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	0.63	Vert(LL)	0.15	10-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.55	Vert(CT)	-0.16	10-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 159 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-9, 3-9, 4-9

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=215(LC 9)
Max Uplift 1=-194(LC 12), 6=-242(LC 13)
Max Grav 1=945(LC 1), 6=1226(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1382/1040, 2-3=-870/716, 3-4=-869/714, 4-5=-140/348
BOT CHORD 1-10=-804/1115, 9-10=-809/1118, 7-9=-450/643, 6-7=-447/641
WEBS 2-10=-304/307, 2-9=-587/518, 3-9=-636/522, 4-6=-1340/984

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-8-0, Exterior(2R) 14-8-0 to 17-8-0, Interior(1) 17-8-0 to 29-4-0 zone; cantilever right exposed ; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=194, 6=242.

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

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T12	Roof Special	1	1	T30080951
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:08 2023 Page 1
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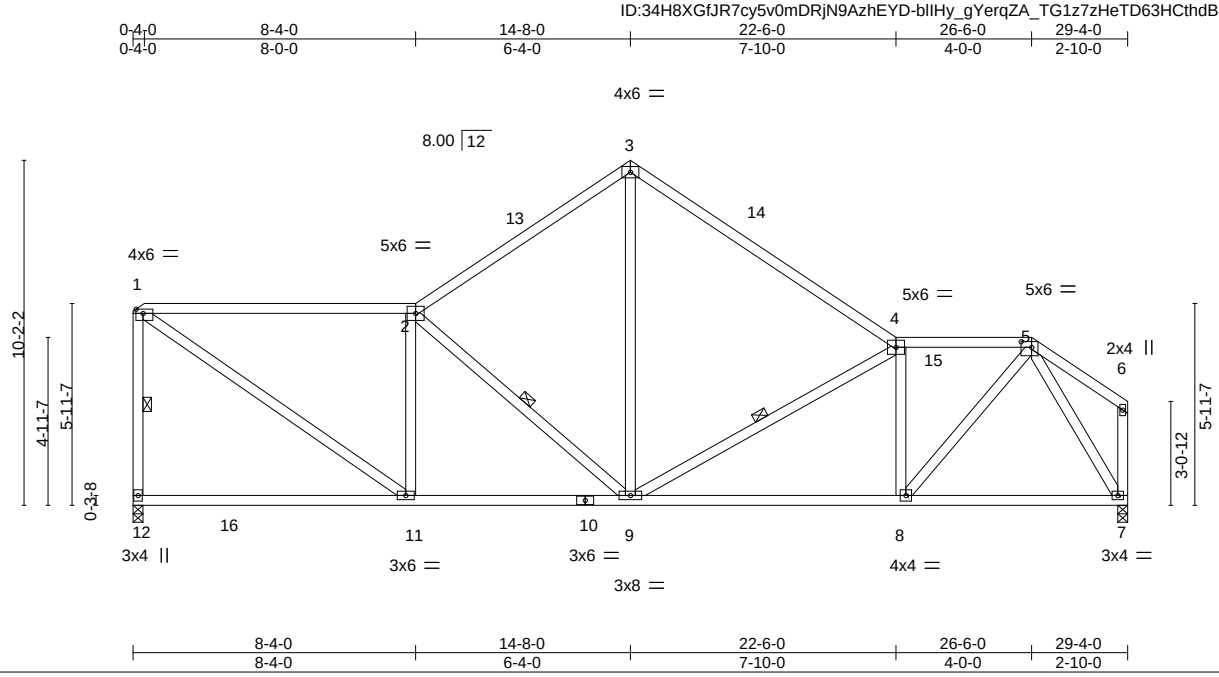

Plate Offsets (X,Y)-- [1:0-2-8,Edge], [5:0-3-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	1.00	Vert(LL)	-0.17	11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.31	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 189 lb	FT = 20%

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

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

REACTIONS. (size) 12=0-3-8, 7=0-3-8
Max Horz 12=-159(LC 13)
Max Uplift 12=-228(LC 12), 7=-206(LC 13)
Max Grav 12=1184(LC 2), 7=1149(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1235/222, 2-3=-1135/263, 3-4=-1144/253, 4-5=-1309/262, 1-12=-1023/248
BOT CHORD 9-11=-230/1249, 8-9=-213/1327, 7-8=-99/587
WEBS 1-11=-264/1467, 2-11=-630/202, 2-9=-517/169, 3-9=-114/845, 4-9=-548/225, 4-8=-640/182, 5-8=-171/1133, 5-7=-1127/195

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 3-1-12, Interior(1) 3-1-12 to 14-8-0, Exterior(2R) 14-8-0 to 17-8-0, Interior(1) 17-8-0 to 26-6-0, Exterior(2E) 26-6-0 to 29-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=228, 7=206.

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

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T13	Roof Special	1	1	T30080952
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:10 2023 Page 1
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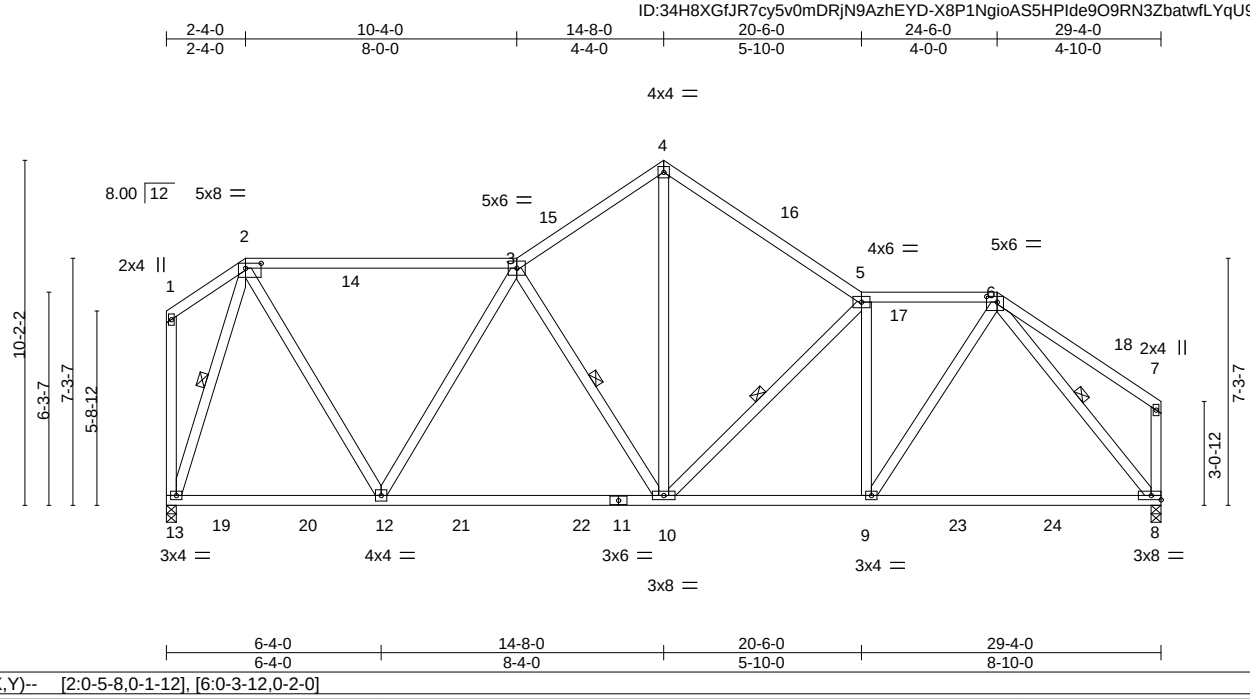

Plate Offsets (X,Y)-- [2:0-5-8,0-1-12], [6:0-3-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.87	Vert(LL)	-0.25	8-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.84	Vert(CT)	-0.42	8-9	>833	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 206 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-10, 5-10, 2-13, 6-8

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=-156(LC 13)
Max Uplift 13=-227(LC 12), 8=-206(LC 13)
Max Grav 13=1223(LC 2), 8=1205(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-848/172, 3-4=-1149/286, 4-5=-1163/272, 5-6=-1251/262
BOT CHORD 12-13=-105/407, 10-12=-203/1140, 9-10=-181/1262, 8-9=-119/765
WEBS 2-12=-122/983, 3-12=-607/180, 3-10=-446/193, 4-10=-184/989, 5-10=-513/203, 5-9=-485/138, 6-9=-107/898, 2-13=-1184/241, 6-8=-1139/187

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 2-4-0, Exterior(2R) 2-4-0 to 5-4-0, Interior(1) 5-4-0 to 14-8-0, Exterior(2R) 14-8-0 to 17-8-0, Interior(1) 17-8-0 to 24-6-0, Exterior(2R) 24-6-0 to 27-6-0, Interior(1) 27-6-0 to 29-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=227, 8=206.

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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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T14	Roof Special	1	1	T30080953
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:12 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-TWXnoMk2i3L_fbn1GpCvSUex_hcopWKmcOM?E?za4Vf

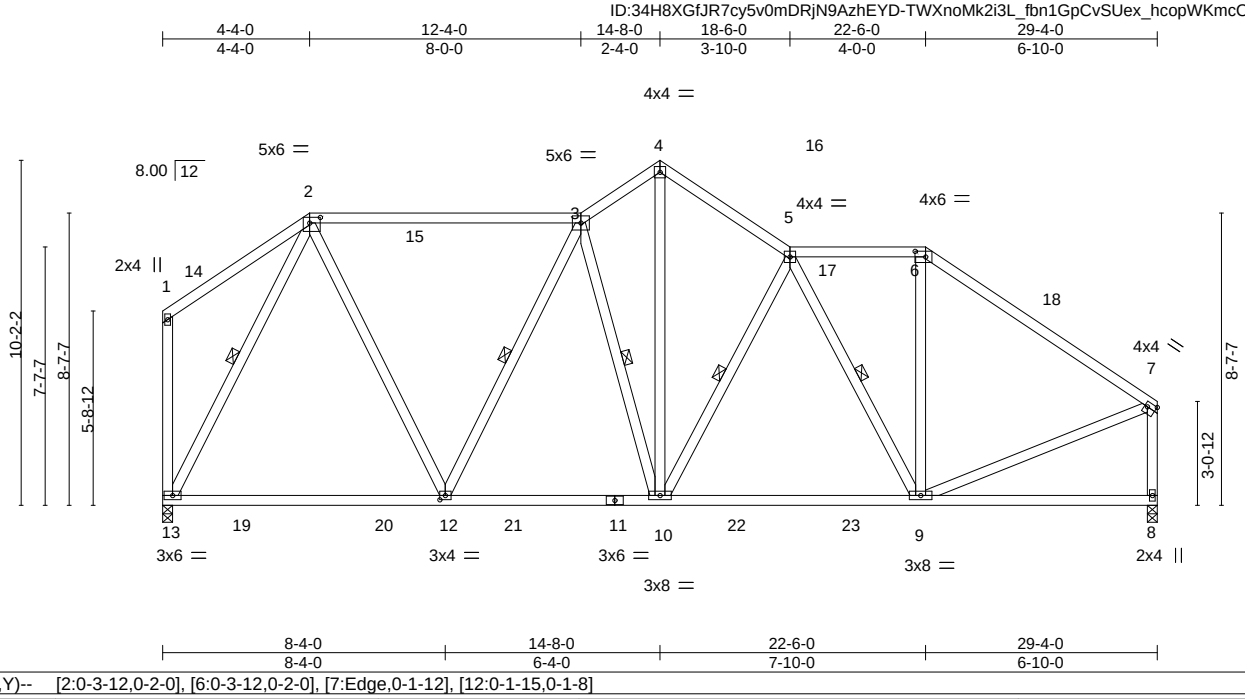

Plate Offsets (X,Y)-- [2:0-3-12,0-2-0], [6:0-3-12,0-2-0], [7:Edge,0-1-12], [12:0-1-15,0-1-8]

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	0.88	Vert(LL)	-0.24	12-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.38	12-13	>920	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 216 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 3-10, 5-10, 5-9, 2-13

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=-156(LC 13)
Max Uplift 13=-227(LC 12), 8=-206(LC 13)
Max Grav 13=1247(LC 2), 8=1207(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-879/210, 3-4=-1162/310, 4-5=-1162/287, 5-6=-912/241, 6-7=-1172/220, 7-8=-1110/222
BOT CHORD 12-13=-102/551, 10-12=-159/1068, 9-10=-151/1124
WEBS 2-12=-98/815, 3-12=-443/152, 3-10=-510/220, 4-10=-259/1119, 5-10=-414/211, 5-9=-454/112, 6-9=-19/380, 2-13=-1127/215, 7-9=-97/927

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 3-1-12, Interior(1) 3-1-12 to 4-4-0, Exterior(2R) 4-4-0 to 7-4-0, Interior(1) 7-4-0 to 14-8-0, Exterior(2R) 14-8-0 to 17-8-0, Interior(1) 17-8-0 to 22-6-0, Exterior(2R) 22-6-0 to 25-6-0, Interior(1) 25-6-0 to 29-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=227, 8=206.

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

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T15	Roof Special	1	1	T30080954
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:14 2023 Page 1
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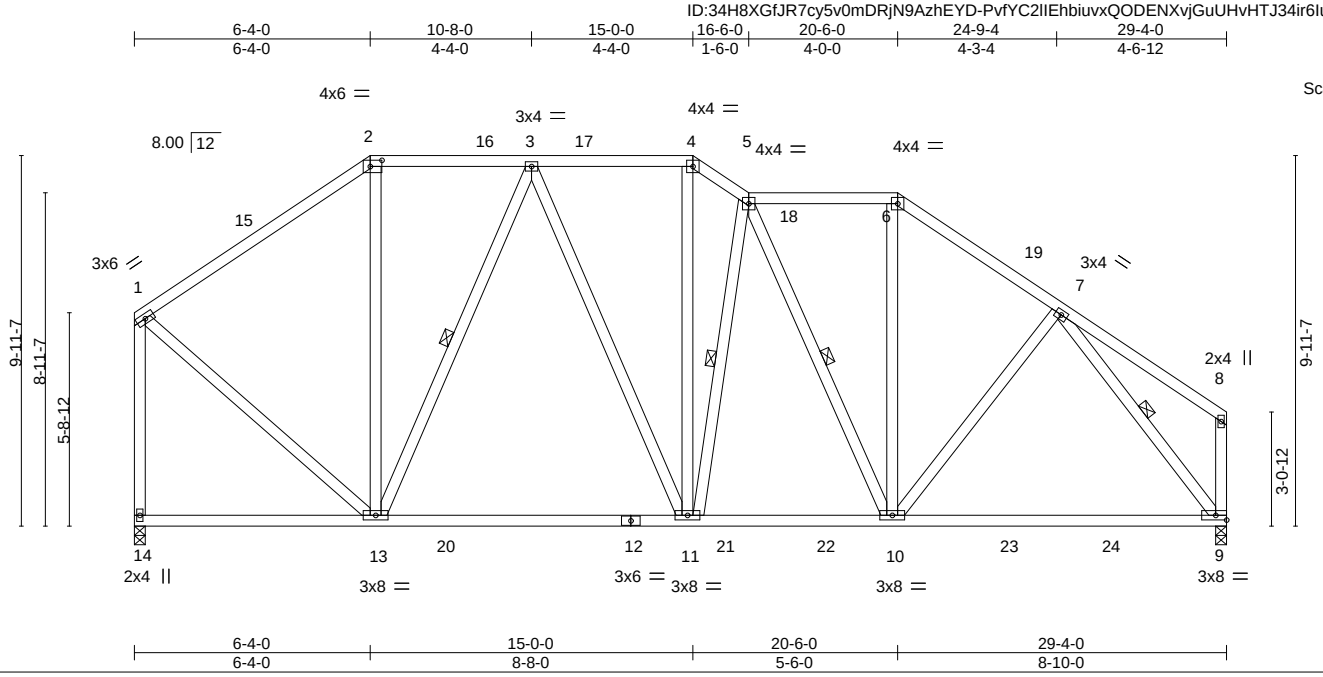

Plate Offsets (X,Y)-- [2:0-3-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.85	Vert(LL)	-0.27	9-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.88	Vert(CT)	-0.45	9-10	>772	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 234 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 5-11, 5-10, 7-9

REACTIONS. (size) 14=0-3-8, 9=0-3-8
Max Horz 14=-154(LC 13)
Max Uplift 14=-156(LC 13), 9=-205(LC 13)
Max Grav 14=1218(LC 2), 9=1233(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-873/193, 2-3=-667/214, 3-4=-961/269, 4-5=-1150/304, 5-6=-912/250, 6-7=-1147/262, 1-14=-1142/231
BOT CHORD 11-13=-164/856, 10-11=-133/1037, 9-10=-125/772
WEBS 2-13=-39/279, 3-13=-510/172, 3-11=-86/310, 4-11=-104/488, 5-11=-450/224, 5-10=-310/131, 6-10=-54/421, 7-10=-77/262, 1-13=-109/859, 7-9=-1178/208

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 3-1-12, Interior(1) 3-1-12 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 15-0-0, Exterior(2E) 15-0-0 to 16-6-0, Interior(1) 16-6-0 to 20-6-0, Exterior(2R) 20-6-0 to 23-6-0, Interior(1) 23-6-0 to 29-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=156, 9=205.

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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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T16	Roof Special	1	1	T30080955
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:15 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-u5DwQOmx?_jZW3Vcyxlc37GWfue10shDIMbfrKza4Vc

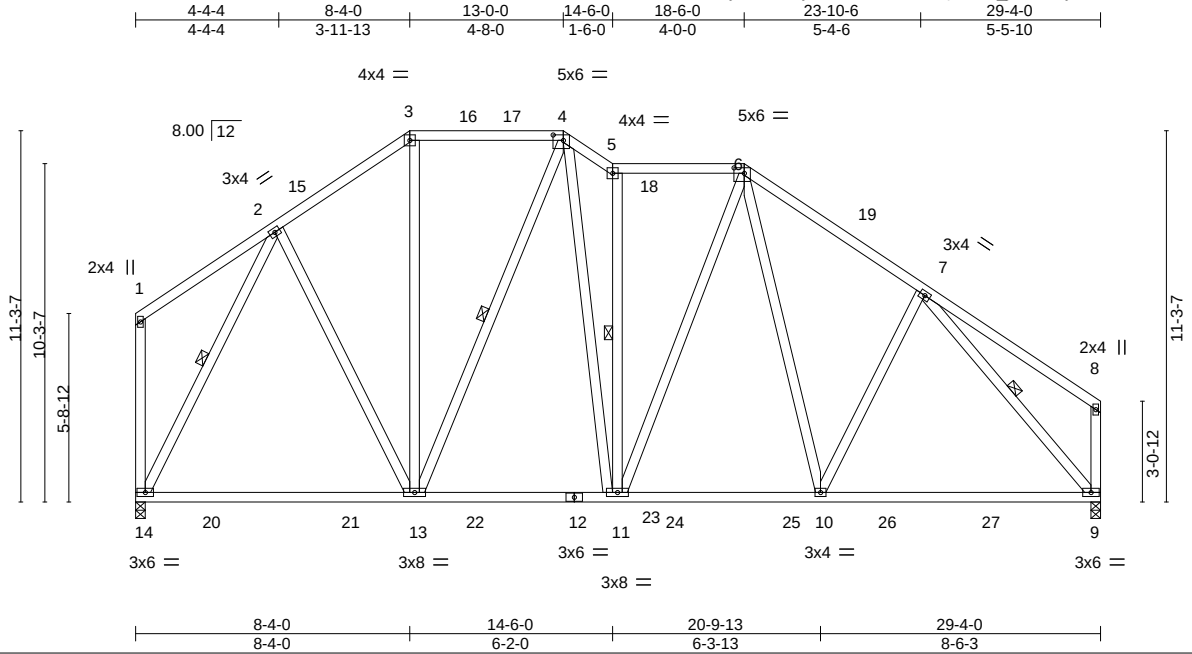

Plate Offsets (X,Y)-- [4:0-3-12,0-2-0], [6:0-3-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.24	13-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.38	13-14	>928	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 248 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-13, 5-11, 2-14, 7-9

REACTIONS. (size) 14=0-3-8, 9=0-3-8
Max Horz 14=-173(LC 13)
Max Uplift 14=-178(LC 13), 9=-212(LC 13)
Max Grav 14=1262(LC 2), 9=1250(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-905/254, 3-4=-710/244, 4-5=-1115/339, 5-6=-925/271, 6-7=-1175/303
BOT CHORD 13-14=-145/602, 11-13=-107/828, 10-11=-72/861, 9-10=-127/853
WEBS 2-13=-81/435, 3-13=-72/309, 4-13=-348/145, 4-11=-262/744, 5-11=-677/233, 6-10=-98/324, 2-14=-1125/213, 7-9=-1247/193

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 3-1-12, Interior(1) 3-1-12 to 8-4-0, Exterior(2R) 8-4-0 to 11-4-0, Interior(1) 11-4-0 to 13-0-0, Exterior(2E) 13-0-0 to 14-6-0, Interior(1) 14-6-0 to 18-6-0, Exterior(2R) 18-6-0 to 21-6-0, Interior(1) 21-6-0 to 29-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=178, 9=212.

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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:

March 20,2023

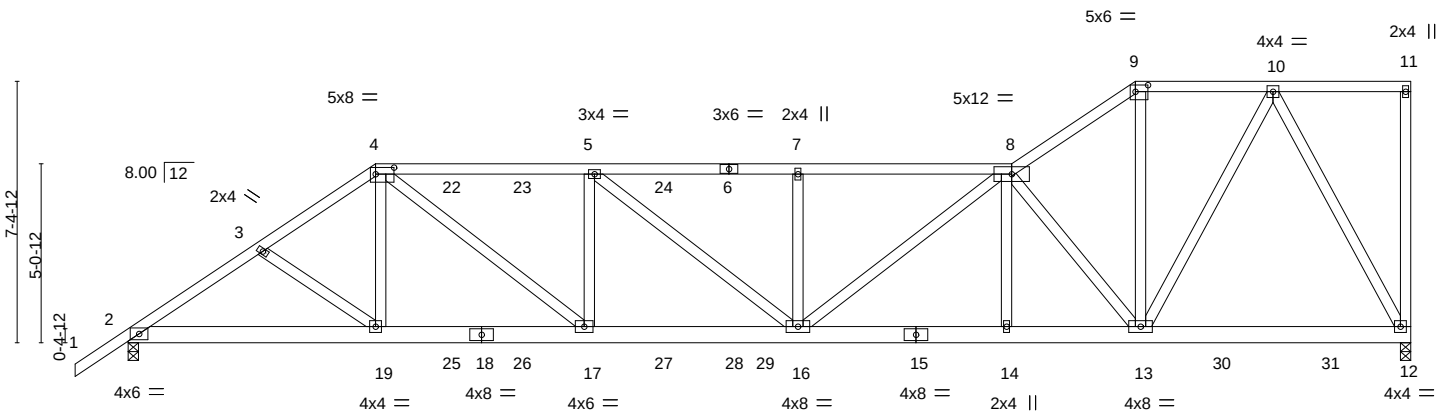
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T17	Roof Special Girder	1	2	T30080956
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:18 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-Igu32PopHv58NWEBd3IJhlu0E5k?DB5f_KpJRfza4VZ

-1-6-0	3-9-11	7-0-0	13-0-9	18-11-7	25-0-0	28-6-0	32-4-12	36-3-8
1-6-0	3-9-11	3-2-5	6-0-9	5-10-13	6-0-9	3-6-0	3-10-11	3-10-12

Scale = 1:65.2



7-0-0	13-0-9	18-11-7	25-0-0	28-6-0	36-3-8
7-0-0	6-0-9	5-10-13	6-0-9	3-6-0	7-9-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.63	Vert(LL)	0.22	16-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.39	16-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.07	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 517 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
15-18: 2x6 SP M 26
WEBS 2x4 SP No.3

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

REACTIONS. (size) 12=0-3-8, 2=0-3-8
Max Horz 2=271(LC 23)
Max Uplift 12=-768(LC 8), 2=-1165(LC 8)
Max Grav 12=2478(LC 2), 2=3050(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5080/1987, 3-4=-4928/1966, 4-5=-6265/2436, 5-7=-6767/2453, 7-8=-6767/2453, 8-9=-2823/909, 9-10=-2336/797
BOT CHORD 2-19=-1835/4180, 17-19=-1758/4089, 16-17=-2517/6265, 14-16=-1709/4812, 13-14=-1711/4814, 12-13=-410/1230
WEBS 4-19=-344/794, 4-17=-1005/2753, 5-17=-798/276, 5-16=-61/670, 7-16=-352/185, 8-16=-1044/2474, 8-13=-4091/1503, 9-13=-440/1383, 10-13=-821/2367, 10-12=-2596/869

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
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) 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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=768, 2=1165.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 51 lb up at 7-0-0, 70 lb down and 49 lb up at 9-0-12, 70 lb down and 49 lb up at 11-0-12, 70 lb down and 49 lb up at 13-0-12, and 70 lb down and 49 lb up at 15-0-12, and 70 lb down and 49 lb up at 17-0-12 on top chord, and 426 lb down and 291 lb up at 7-0-0, 156 lb down and 99 lb up at 9-0-12, 156 lb down and 99 lb up at 11-0-12, 156 lb down and 99 lb up at 13-0-12, 156 lb down and 99 lb up at 15-0-12, and 156 lb down and 99 lb up at 17-0-12, and 1427 lb down and 492 lb up at 17-11-4 on bottom chord. The

Continued on page 2

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

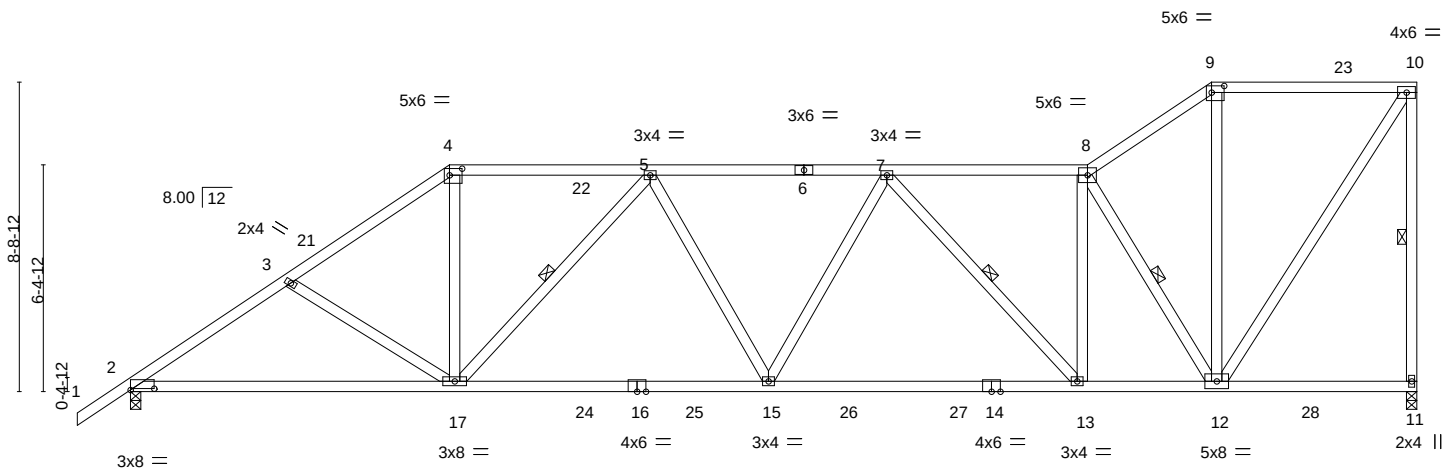
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-8=-54, 8-9=-54, 9-11=-54, 2-12=-20
   Concentrated Loads (lb)
   Vert: 4=-18(B) 6=-18(B) 19=-426(B) 17=-156(B) 5=-18(B) 22=-18(B) 23=-18(B) 24=-18(B) 25=-156(B) 26=-156(B) 27=-156(B) 28=-156(B) 29=-1427(B)

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T18	Roof Special	1	1	T30080957
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:20 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-E30pT5q3pXLscqOZkULnmAzMuvJKh5VySeIQWYza4VX

-1-6-0 | 4-6-4 | 9-0-0 | 14-7-15 | 21-4-1 | 27-0-0 | 30-6-0 | 36-3-8
1-6-0 | 4-6-4 | 4-5-12 | 5-7-15 | 6-8-2 | 5-7-15 | 3-6-0 | 5-9-8

Scale = 1:65.0



9-0-0 | 18-0-0 | 27-0-0 | 30-6-0 | 36-3-8
9-0-0 | 9-0-0 | 9-0-0 | 3-6-0 | 5-9-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.26	13-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.46	13-15	>948	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.10	11	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 232 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
14-16: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 10-11, 5-17, 7-13, 8-12

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=317(LC 12)
Max Uplift 11=-317(LC 12), 2=-354(LC 12)
Max Grav 11=1515(LC 2), 2=1544(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2271/526, 3-4=-2096/479, 4-5=-1711/443, 5-7=-2258/502, 7-8=-1721/333, 8-9=-1038/199, 9-10=-838/198, 10-11=-1391/332
BOT CHORD 2-17=-662/1871, 15-17=-618/2150, 13-15=-577/2156, 12-13=-410/1704
WEBS 3-17=-285/168, 4-17=-140/934, 5-17=-655/226, 5-15=0/260, 7-15=-11/255, 7-13=-649/244, 8-13=-141/733, 8-12=-1700/414, 9-12=-27/354, 10-12=-362/1517

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 2-1-9, Interior(1) 2-1-9 to 9-0-0, Exterior(2R) 9-0-0 to 12-7-9, Interior(1) 12-7-9 to 30-6-0, Exterior(2R) 30-6-0 to 34-1-9, Interior(1) 34-1-9 to 36-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=317, 2=354.

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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:

March 20,2023

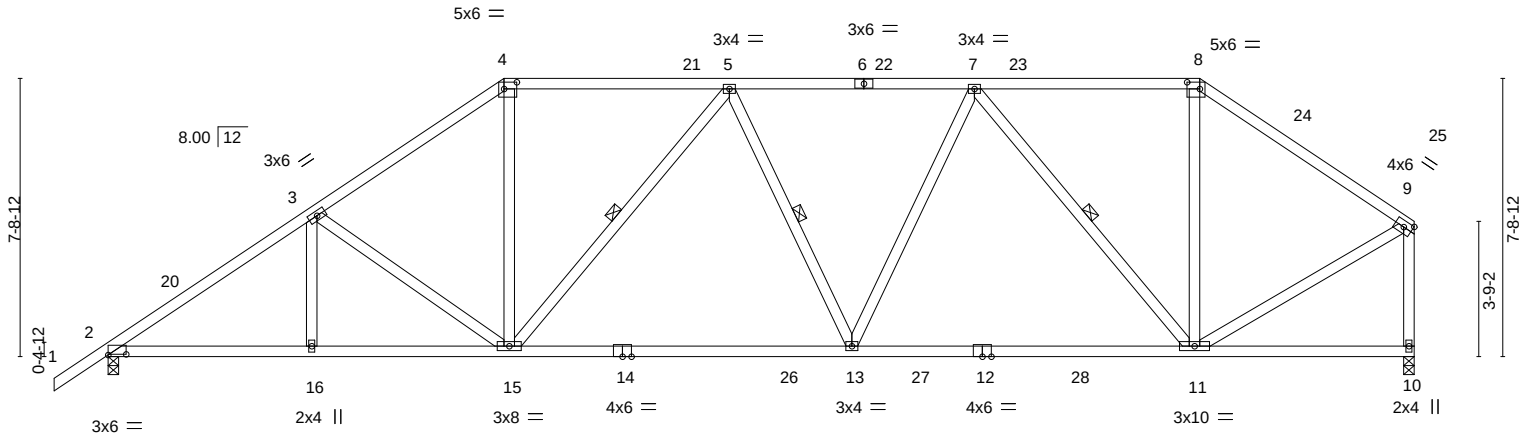
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T19	Hip	1	1	T30080958
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:22 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-BS8ZunrKL8bas8YysvNFsb2kpj?Y92NFvynXaQza4VV

-1-6-0	5-7-14	11-0-0	17-3-2	24-0-14	30-4-0	36-3-8
1-6-0	5-7-14	5-4-2	6-3-2	6-9-11	6-3-2	5-11-8

Scale: 3/16"=1'



5-7-14	11-0-0	20-8-0	30-4-0	36-3-8
5-7-14	5-4-2	9-8-0	9-8-0	5-11-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.47	Vert(LL)	-0.27	13-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.46	13-15	>947	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 218 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
12-14: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-5-1 oc bracing.
WEBS 1 Row at midpt 5-15, 5-13, 7-11

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=207(LC 12)
Max Uplift 2=-330(LC 12), 10=-268(LC 13)
Max Grav 2=1553(LC 2), 10=1503(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2322/463, 3-4=-1976/430, 4-5=-1599/404, 5-7=-1860/366, 7-8=-1056/269, 8-9=-1330/255, 9-10=-1434/279
BOT CHORD 2-16=-487/1882, 15-16=-487/1882, 13-15=-394/1856, 11-13=-340/1661
WEBS 3-15=-452/197, 4-15=-97/832, 5-15=-474/221, 7-13=-87/500, 7-11=-979/280, 8-11=-67/497, 9-11=-196/1191

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-1-9, Interior(1) 2-1-9 to 11-0-0, Exterior(2R) 11-0-0 to 16-1-9, Interior(1) 16-1-9 to 30-4-0, Exterior(2R) 30-4-0 to 35-5-9, Interior(1) 35-5-9 to 36-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=330, 10=268.

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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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T20	Hip	1	1	T30080959
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:23 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-feiy57sy6SjRTH78QcuUOpbqm6OCuRzO8cX47tza4VU

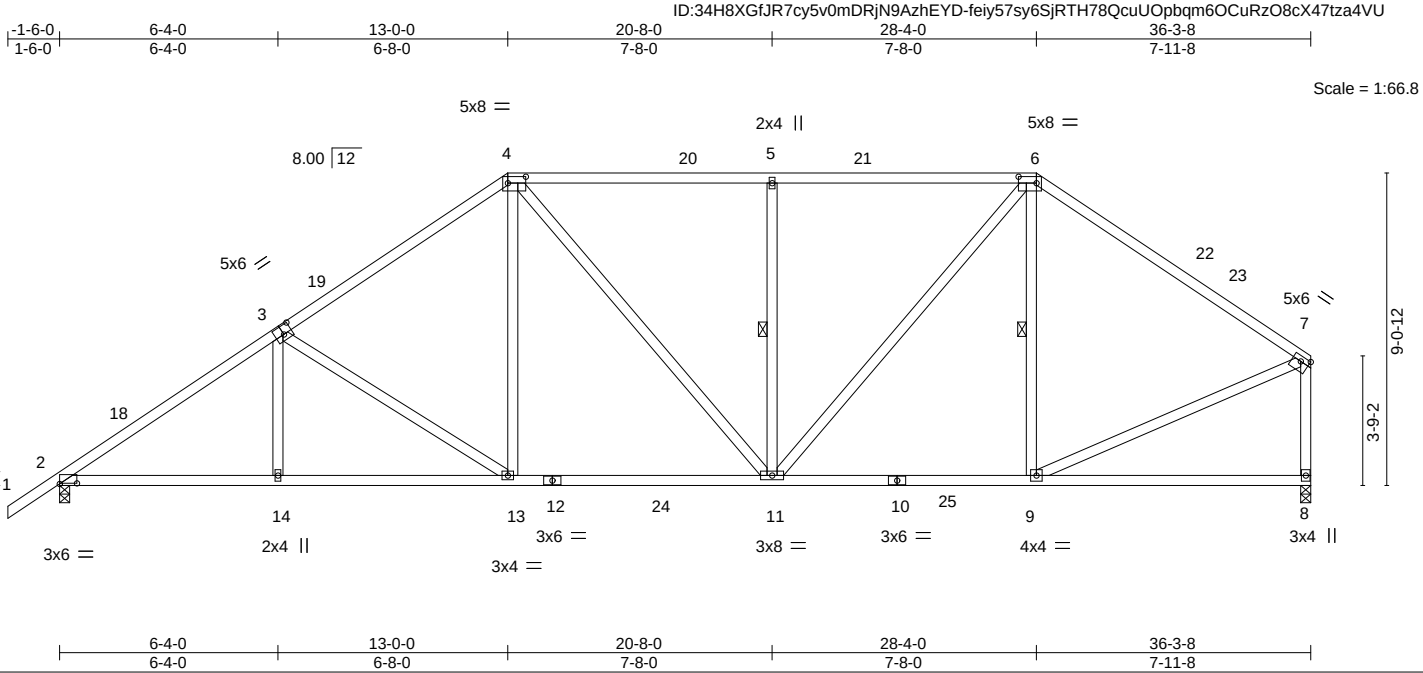

Plate Offsets (X,Y)-- [2:0-6-0,0-0-4], [3:0-3-0,0-3-0], [4:0-6-4,0-2-4], [6:0-6-4,0-2-4], [7:Edge,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.78	Vert(LL)	-0.16	11-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.28	11-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 223 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-4-3 oc bracing.
WEBS	1 Row at midpt 5-11, 6-9

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=226(LC 12)
Max Uplift 2=-326(LC 12), 8=-264(LC 13)
Max Grav 2=1549(LC 2), 8=1498(LC 2)

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

TOP CHORD	2-3=-2306/451, 3-4=-1841/406, 4-5=-1578/361, 5-6=-1578/361, 6-7=-1426/272, 7-8=-1378/283
BOT CHORD	2-14=-489/1870, 13-14=-490/1866, 11-13=-293/1466, 9-11=-142/1104
WEBS	3-14=0/262, 3-13=-581/236, 4-13=-83/620, 4-11=-182/286, 5-11=-475/238, 6-11=-227/766, 7-9=-173/1150

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-1-9, Interior(1) 2-1-9 to 13-0-0, Exterior(2R) 13-0-0 to 18-1-9, Interior(1) 18-1-9 to 28-4-0, Exterior(2R) 28-4-0 to 33-5-9, Interior(1) 33-5-9 to 36-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=326, 8=264.

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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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841 T30080960
3458582	T21	Hip	1	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:25 2023 Page 1
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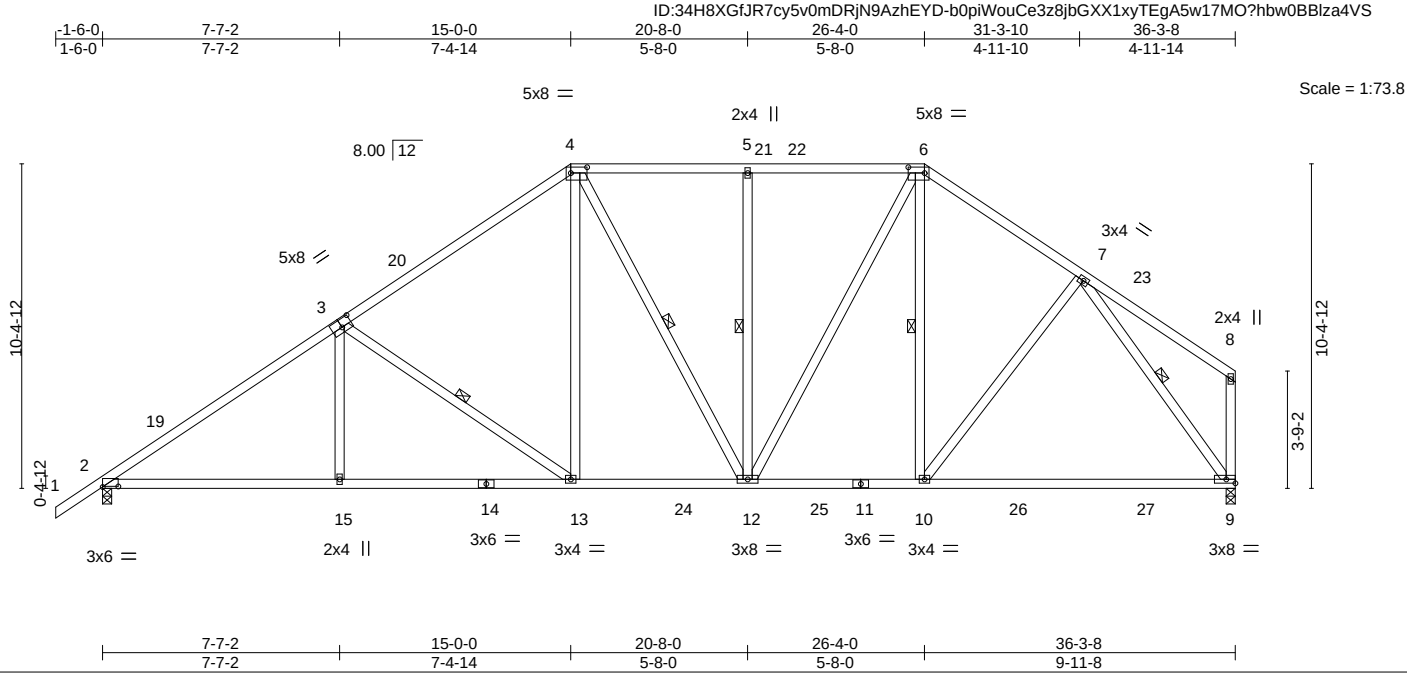

Plate Offsets (X,Y)-- [2:0-6-0,0-0-4], [3:0-4-0,0-3-0], [4:0-6-4,0-2-4], [6:0-6-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.79	Vert(LL)	-0.39	9-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.84	Vert(CT)	-0.64	9-10	>673	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 245 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
2-14: 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-8 oc bracing.
WEBS 1 Row at midpt 3-13, 4-12, 5-12, 6-10, 7-9

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=246(LC 12)
Max Uplift 2=-321(LC 12), 9=-259(LC 13)
Max Grav 2=1546(LC 2), 9=1537(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2259/434, 3-4=-1704/382, 4-5=-1351/343, 5-6=-1351/343, 6-7=-1424/318
BOT CHORD 2-15=-481/1884, 13-15=-481/1884, 12-13=-252/1339, 10-12=-129/1129, 9-10=-146/921
WEBS 3-15=0/320, 3-13=-700/278, 4-13=-110/672, 5-12=-349/177, 6-12=-187/513, 7-10=-100/396, 7-9=-1491/250

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-1-9, Interior(1) 2-1-9 to 15-0-0, Exterior(2R) 15-0-0 to 20-1-9, Interior(1) 20-1-9 to 26-4-0, Exterior(2R) 26-4-0 to 31-4-11, Interior(1) 31-4-11 to 36-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=321, 9=259.

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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T22	Piggyback Base	4	1	T30080961 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:27 2023 Page 1
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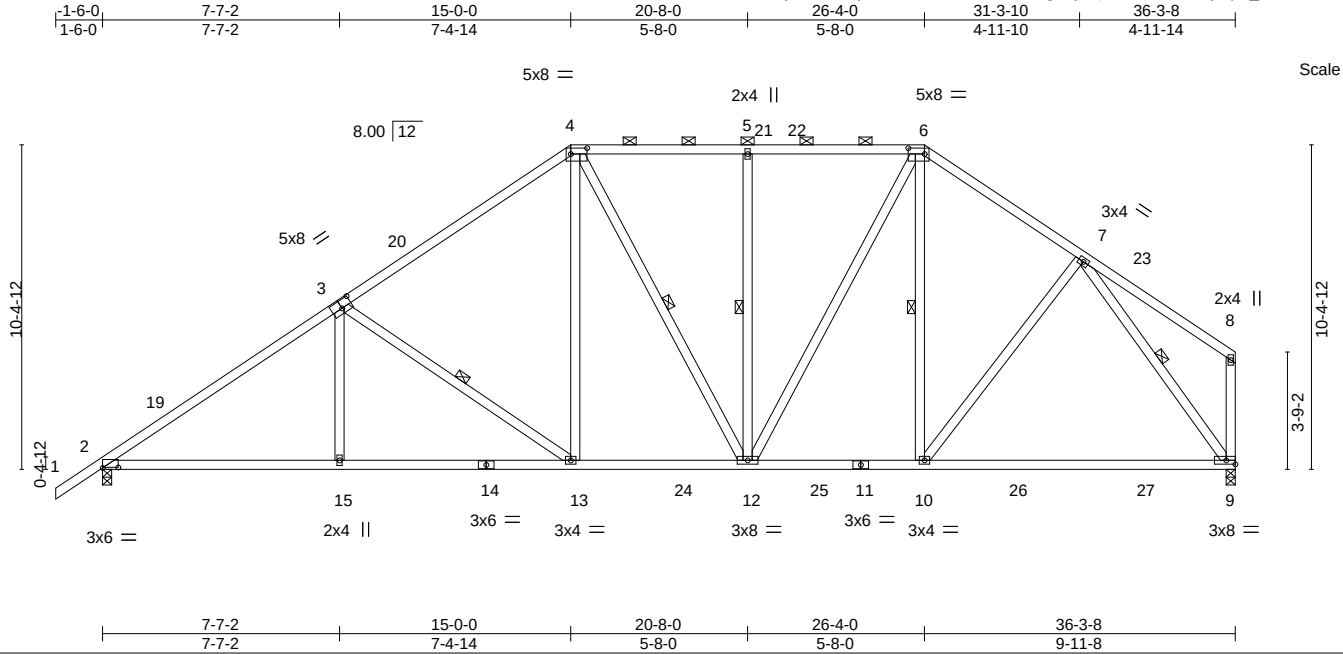

Plate Offsets (X,Y)-- [2:0-6-0,0-0-4], [3:0-4-0,0-3-0], [4:0-6-4,0-2-4], [6:0-6-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.79	Vert(LL)	-0.39	9-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.84	Vert(CT)	-0.64	9-10	>673	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 245 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
2-14: 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-13 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 8-3-8 oc bracing.
WEBS 1 Row at midpt 3-13, 4-12, 5-12, 6-10, 7-9

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=246(LC 12)
Max Uplift 2=-321(LC 12), 9=-259(LC 13)
Max Grav 2=1546(LC 2), 9=1537(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2259/434, 3-4=-1704/382, 4-5=-1351/343, 5-6=-1351/343, 6-7=-1424/318
BOT CHORD 2-15=-481/1884, 13-15=-481/1884, 12-13=-252/1339, 10-12=-129/1129, 9-10=-146/921
WEBS 3-15=0/320, 3-13=-700/278, 4-13=-110/672, 5-12=-349/177, 6-12=-187/513, 7-10=-100/396, 7-9=-1491/250

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-1-9, Interior(1) 2-1-9 to 15-0-0, Exterior(2R) 15-0-0 to 20-1-9, Interior(1) 20-1-9 to 26-4-0, Exterior(2R) 26-4-0 to 31-4-11, Interior(1) 31-4-11 to 36-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=321, 9=259.
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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T23	Piggyback Base	1	1	T30080962
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:29 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-To3DMAxjiIUaBCaImt?ue4rtIXREIDxHWY_OKWza4VO

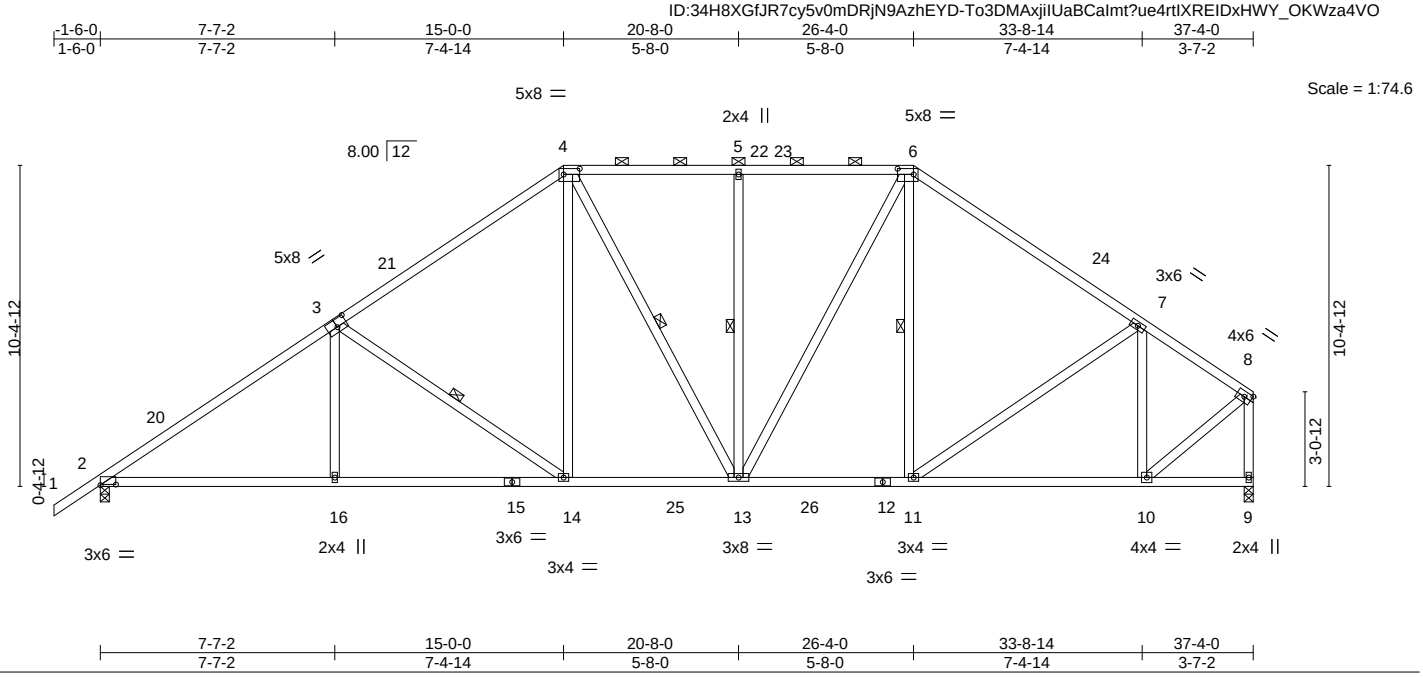

Plate Offsets (X,Y)-- [2:0-6-0,0-0-4], [3:0-4-0,0-3-0], [4:0-6-4,0-2-4], [6:0-6-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	-0.12	14-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.24	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 250 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-12 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-14, 4-13, 5-13, 6-11

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=233(LC 12)
Max Uplift 2=-328(LC 12), 9=-270(LC 13)
Max Grav 2=1581(LC 2), 9=1523(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2321/447, 3-4=-1764/395, 4-5=-1425/356, 5-6=-1425/356, 6-7=-1544/330, 7-8=-1195/230, 8-9=-1498/272
BOT CHORD 2-16=-477/1934, 14-16=-477/1934, 13-14=-249/1389, 11-13=-138/1203, 10-11=-171/991
WEBS 3-16=0/322, 3-14=-702/278, 4-14=-112/660, 5-13=-337/174, 6-13=-185/521, 7-11=-127/315, 7-10=-610/184, 8-10=-225/1284

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-2-13, Interior(1) 2-2-13 to 15-0-0, Exterior(2R) 15-0-0 to 20-3-6, Interior(1) 20-3-6 to 26-4-0, Exterior(2R) 26-4-0 to 31-7-6, Interior(1) 31-7-6 to 37-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=328, 9=270.
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:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T27	Roof Special Girder	1	1	T30080963
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:31 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-QAAznsyzDvkIRWkhuI1MjVwGML9Qm4qZ_rTVPPza4VM

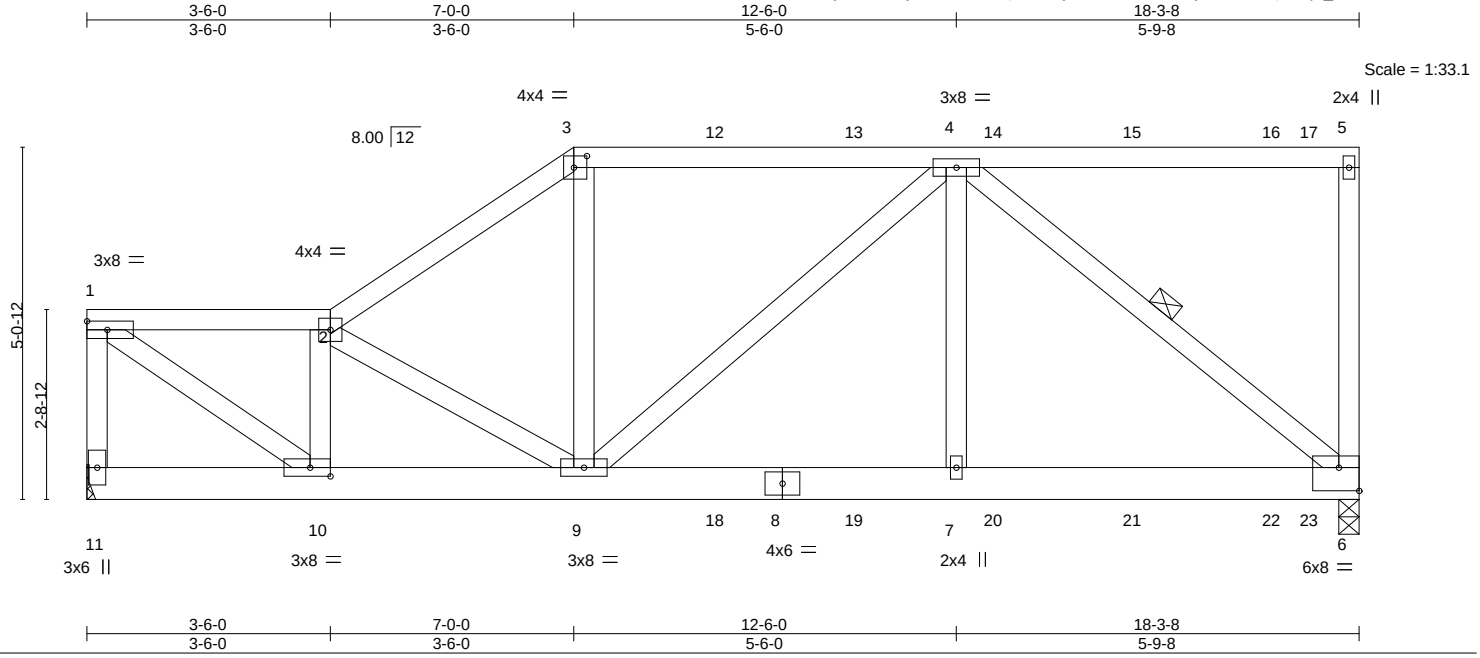

Plate Offsets (X,Y)-- [3:0-2-4,0-2-0], [6:Edge,0-4-0], [10:0-3-8,0-1-8]

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	0.48	Vert(LL)	0.06	7-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.09	7-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 128 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-5 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS. (size) 11=Mechanical, 6=0-3-8
Max Horz 11=80(LC 8)
Max Uplift 11=-464(LC 8), 6=-772(LC 5)
Max Grav 11=1189(LC 1), 6=1648(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-1116/453, 1-2=-1418/569, 2-3=-1724/739, 3-4=-1418/659
BOT CHORD 9-10=-679/1482, 7-9=-617/1349, 6-7=-617/1349
WEBS 1-10=-692/1721, 2-10=-1044/474, 3-9=-287/669, 4-7=-241/696, 4-6=-1718/784

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; 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.
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) 11=464, 6=772.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 51 lb up at 7-0-0, 70 lb down and 49 lb up at 9-0-12, 70 lb down and 49 lb up at 11-0-12, 70 lb down and 49 lb up at 13-0-12, 70 lb down and 49 lb up at 15-0-12, and 70 lb down and 49 lb up at 17-0-12, and 64 lb down and 51 lb up at 17-7-4 on top chord, and 426 lb down and 291 lb up at 7-0-0, 156 lb down and 99 lb up at 9-0-12, 156 lb down and 99 lb up at 11-0-12, 156 lb down and 99 lb up at 13-0-12, 156 lb down and 99 lb up at 15-0-12, and 156 lb down and 99 lb up at 17-0-12, and 160 lb down and 94 lb up at 17-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-54, 3-5=-54, 6-11=-20

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 20,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

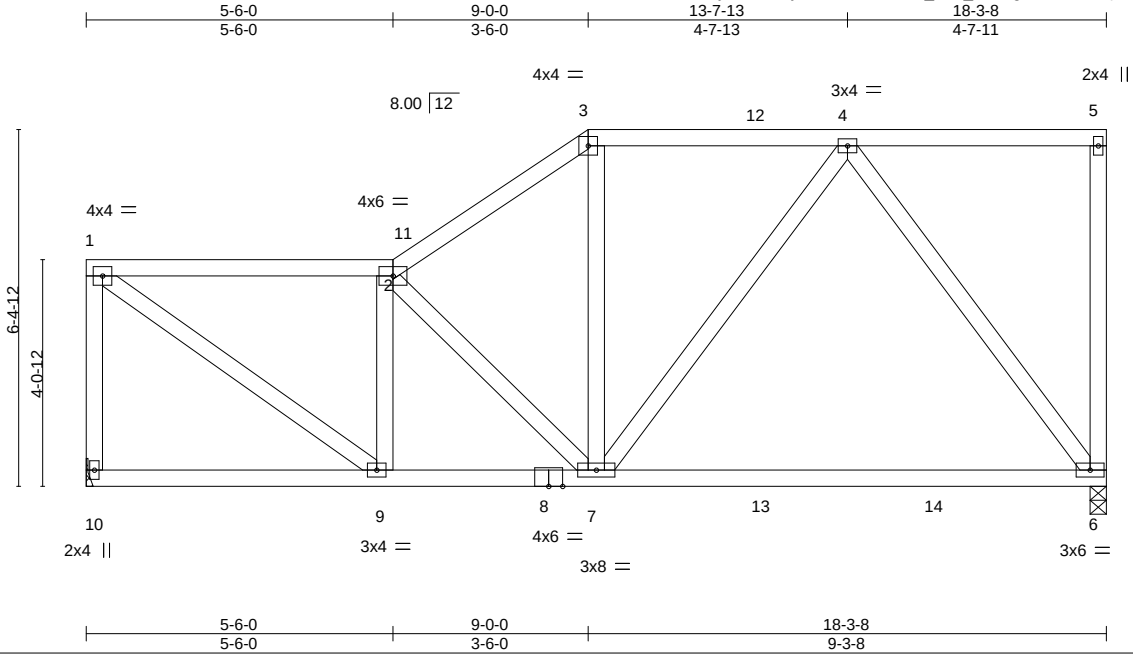
LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-18(B) 9=-426(B) 12=-18(B) 13=-18(B) 14=-18(B) 15=-18(B) 16=-18(B) 17=-31(B) 18=-156(B) 19=-156(B) 20=-156(B) 21=-156(B) 22=-156(B) 23=-160(B)

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T28	Roof Special	1	1	T30080964
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:32 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-uNkL_Czb_Ds92gJtR?ZbGiTQnkQBVXbjCVC3xrza4VL



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	0.57	Vert(LL)	-0.29	6-7	>733	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.88	Vert(CT)	-0.49	6-7	>443	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 121 lb	FT = 20%

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

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

REACTIONS. (size) 10=Mechanical, 6=0-3-8
Max Horz 10=80(LC 12)
Max Uplift 10=-124(LC 12), 6=-160(LC 9)
Max Grav 10=723(LC 2), 6=746(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-625/138, 1-2=-726/104, 2-3=-748/110, 3-4=-590/119
BOT CHORD 7-9=-188/742, 6-7=-100/390
WEBS 1-9=-121/864, 2-9=-426/91, 4-7=-59/354, 4-6=-621/171

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 3-1-12, Interior(1) 3-1-12 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior(1) 12-0-0 to 18-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=124, 6=160.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 20,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T29	Half Hip Girder	1	1	T30080965 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:34 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-qls6Pt?rWq6tI_SGZQb3L7YlIY6lzMc0gph90kza4VJ

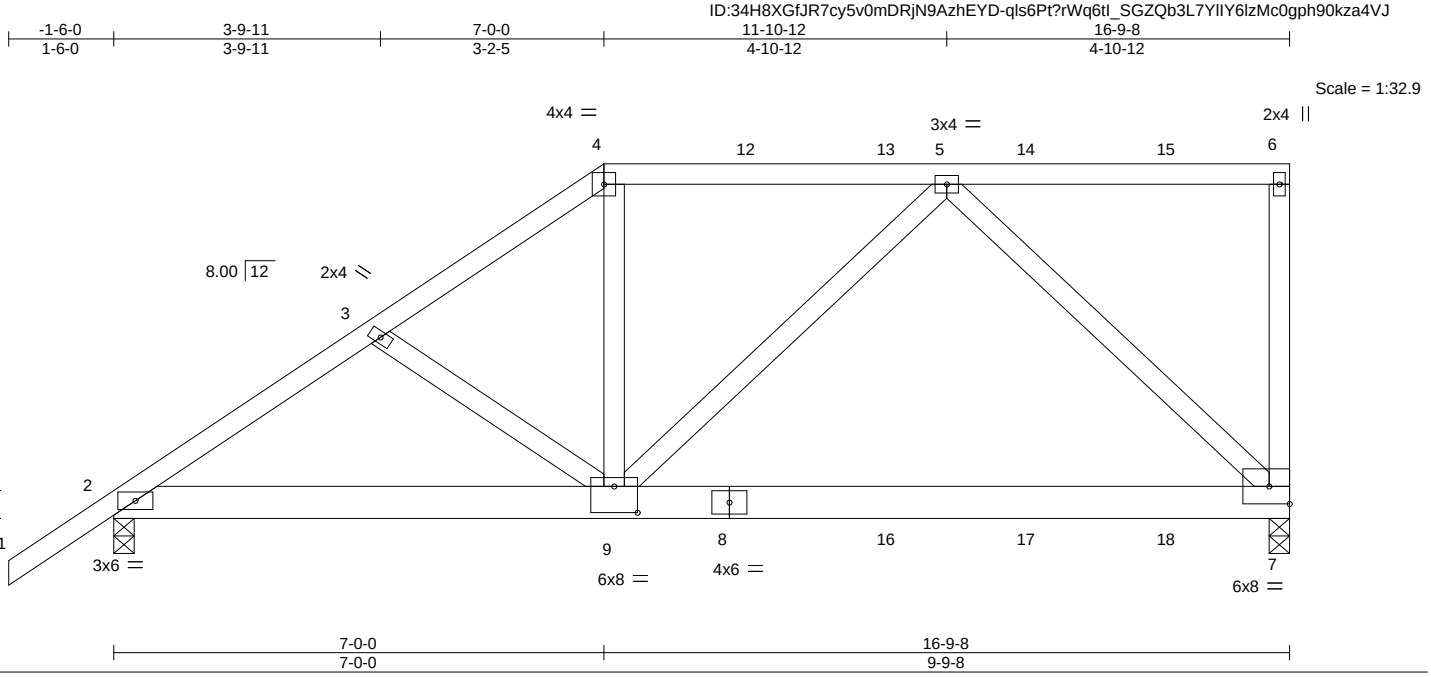

Plate Offsets (X,Y)-- [9:0-4-0,0-4-8]

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	0.63	Vert(LL)	0.20	7-9	>990	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.31	7-9	>645	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 107 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
7-8: 2x6 SP M 26
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-4-14 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=191(LC 27)
Max Uplift 2=-460(LC 5), 7=-764(LC 5)
Max Grav 2=1148(LC 1), 7=1506(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1757/767, 3-4=-1618/768, 4-5=-1324/664
BOT CHORD 2-9=-717/1412, 7-9=-445/857
WEBS 4-9=-307/651, 5-9=-309/684, 5-7=-1149/599

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; porch left and right exposed; 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=460, 7=764.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 51 lb up at 7-0-0, 70 lb down and 49 lb up at 9-0-12, 70 lb down and 47 lb up at 11-0-12, 70 lb down and 49 lb up at 13-0-12, and 70 lb down and 49 lb up at 15-0-12, and 60 lb down and 51 lb up at 16-7-12 on top chord, and 426 lb down and 291 lb up at 7-0-0, 156 lb down and 99 lb up at 9-0-12, 156 lb down and 99 lb up at 11-0-12, 156 lb down and 99 lb up at 13-0-12, and 156 lb down and 99 lb up at 15-0-12, and 163 lb down and 92 lb up at 16-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-6=-54, 2-7=-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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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

March 20,2023

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

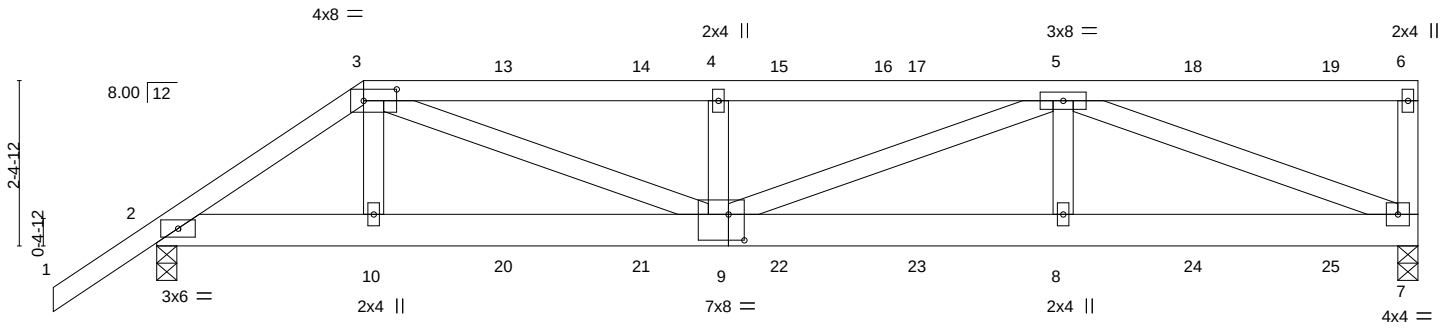
Vert: 4=-18(B) 6=-38(B) 8=-156(B) 9=-426(B) 7=-163(B) 12=-18(B) 13=-18(B) 14=-18(B) 15=-18(B) 16=-156(B) 17=-156(B) 18=-156(B)

Job	Truss	Truss Type	Qty	Ply	EXCEPTIONS - 1841
3458582	T30	Half Hip Girder	1	1	T30080966
					Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.530 s Mar 9 2023 MiTek Industries, Inc. Fri Mar 17 08:50:36 2023 Page 1
ID:34H8XGfJR7cy5v0mDRjN9AzhEYD-m8_sqZ062RMbXHcegrdXQYd9pMxsRI1J77AG4cza4VH

-1-6-0 | 3-0-0 | 8-1-12 | 13-1-12 | 18-3-8
1-6-0 | 3-0-0 | 5-1-12 | 5-0-0 | 5-1-12

Scale = 1:33.4



3-0-0 | 8-1-12 | 13-1-12 | 18-3-8
3-0-0 | 5-1-12 | 5-0-0 | 5-1-12

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

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	0.37	Vert(LL)	0.10	8-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.32	Vert(CT)	-0.12	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 106 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-1-10 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=99(LC 8)
Max Uplift 7=-435(LC 5), 2=-394(LC 5)
Max Grav 7=732(LC 1), 2=814(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1160/659, 3-4=-1676/1000, 4-5=-1655/986
BOT CHORD 2-10=-562/937, 9-10=-568/948, 8-9=-818/1372, 7-8=-818/1372
WEBS 3-9=-484/796, 4-9=-303/185, 5-9=-190/306, 5-7=-1427/850

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; porch left and right exposed; 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=435, 2=394.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 46 lb up at 3-0-0, 65 lb down and 44 lb up at 5-0-12, 65 lb down and 44 lb up at 7-0-12, 65 lb down and 44 lb up at 9-0-12, 65 lb down and 40 lb up at 11-0-12, 65 lb down and 44 lb up at 13-0-12, and 65 lb down and 44 lb up at 15-0-12, and 65 lb down and 44 lb up at 17-0-12 on top chord, and 94 lb down and 56 lb up at 3-0-0, 22 lb down and 24 lb up at 5-0-12, 22 lb down and 24 lb up at 7-0-12, 22 lb down and 24 lb up at 9-0-12, 22 lb down and 24 lb up at 11-0-12, 22 lb down and 24 lb up at 13-0-12, and 22 lb down and 24 lb up at 15-0-12, and 22 lb down and 24 lb up at 17-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-6=-54, 2-7=-20

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Philip J. O'Regan PE No.58126
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March 20,2023

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-6(F) 10=-18(F) 8=-8(F) 5=-6(F) 13=-6(F) 14=-6(F) 15=-6(F) 17=-6(F) 18=-6(F) 19=-6(F) 20=-8(F) 21=-8(F) 22=-8(F) 23=-8(F) 24=-8(F) 25=-8(F)

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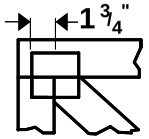
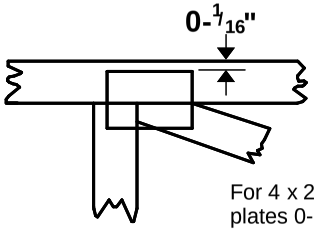
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

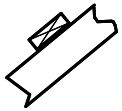
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

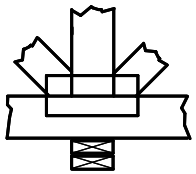
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

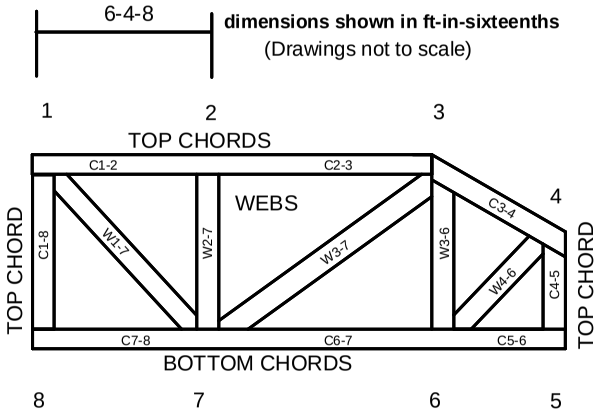


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21.The design does not take into account any dynamic or other loads other than those expressly stated.