



03/30/2021

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: H3-94
SUMMIT HOMES

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mid America MO.

Pages or sheets covered by this seal: I44987034 thru I44987086

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193



March 1, 2021

Sevier, Scott ,Engineer

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

Job

H3-94

Truss

C1

Truss Type

GABLE

Qty

20

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-P2E7jwRzZUzKIIAc?IWO1qCIK5lvKF0?V8AdK8zhDqr

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

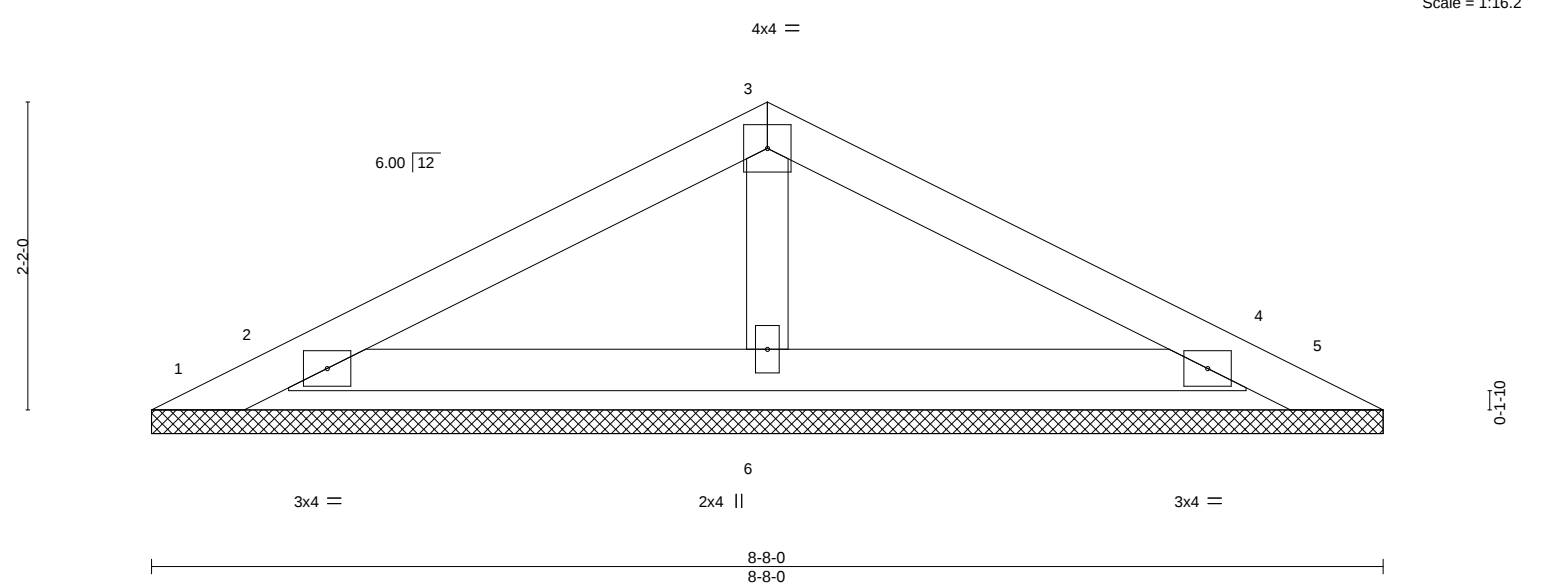
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

14987034

Scale = 1:16.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 27 lb		FT = 3%	

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

REACTIONS. All bearings 8-8-0.
 (lb) - Max Horz 1=23(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-114(LC 16), 5=-114(LC 17)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=363(LC 16), 4=363(LC 17)

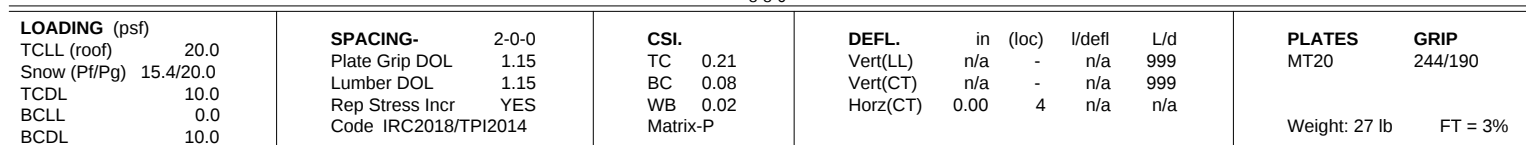
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2'-0" oc.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 1=114, 5=114.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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DEVELOPMENT SERVICES
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03/30/2021



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

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

REACTIONS. All bearings 8-8-0.
(lb) - Max Horz 1=23(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-114(LC 16), 5=-114(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=363(LC 16), 4=363(LC 17)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2'-0" oc.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 1=114, 5=114.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 1, 2021



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

H3-94

Truss

CJ1

Truss Type

Diagonal Hip Girder

Qty

2

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-LRMt8cSD55E2?bK?7AYs7FH2avM4o9olySfkO1zhDqp

03/30/2021

14987036

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

-1-2-14

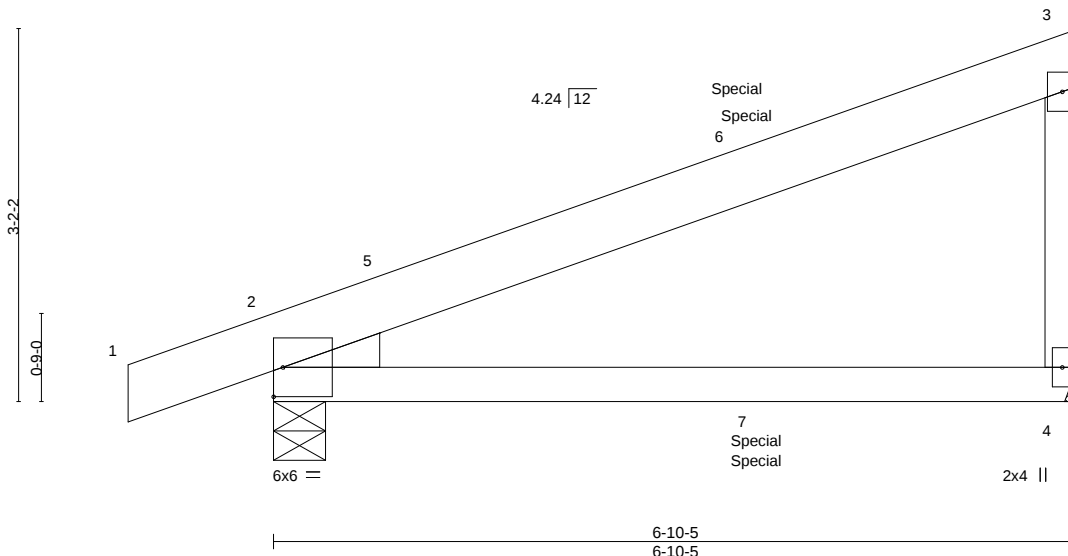
1-2-14

6-10-5

6-10-5

3x4

Scale = 1:19.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.01 2-4 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.12 2-4 >676 240				
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00 4 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 35 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		
WEDGE			
Left: 2x4 SP No.2			

REACTIONS.	
(size)	4=Mechanical, 2=0-5-5
Max Horz	2=94(LC 8)
Max Uplift	4=27(LC 8), 2=60(LC 7)
Max Grav	4=303(LC 16), 2=372(LC 16)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) Plates checked for a plus or minus 3 degree rotation about its center.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 38 lb up at 4-1-7, and 64 lb down and 38 lb up at 4-1-7 on top chord, and 12 lb down and 5 lb up at 4-1-7, and 12 lb down and 5 lb up at 4-1-7 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (plf)	
Vert: 1-3=-51, 2-4=-20	
Concentrated Loads (lb)	
Vert: 6=-35(F=-18, B=-18) 7=-7(F=-3, B=-3)	



Job

H3-94

Truss

CJ2

Truss Type

Diagonal Hip Girder

Qty

2

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

Id:Fpza38BVdcFyJDKwxgHN8dzTCb-pdvFMyTrsPMvdlvBgu35fSq3nldWXayRB6OHxTzhDqo

03/30/2021

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

Lee's Summit, Missouri

03/30/2021

Scale = 1:21.1

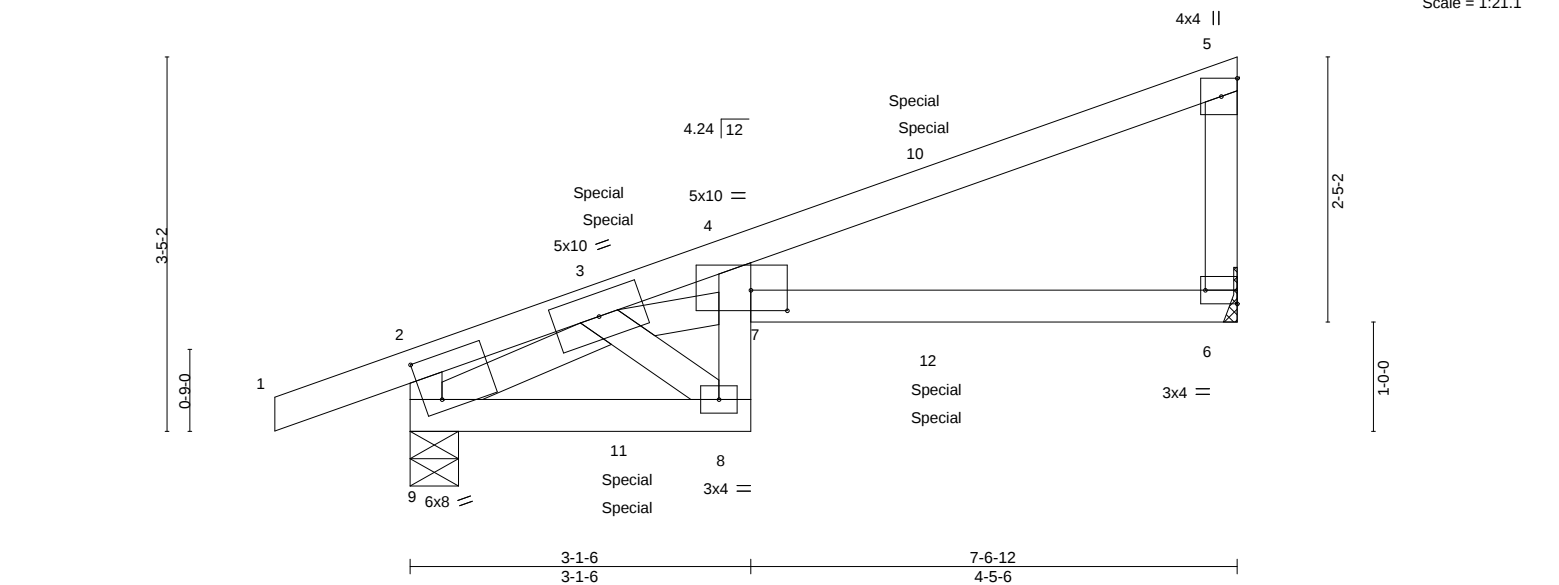


Plate Offsets (X,Y)--		[4:0-4-0,0-2-4], [6:Edge,0-1-8], [9:0-2-0,0-4-12]	
LOADING (psf)		SPACING-	
TCLL (roof)	20.0	2-0-0	
Snow (Pl/Pg)	15.4/20.0	Plate Grip DOL	1.15
TCDL	10.0	Lumber DOL	1.15
BCLL	0.0	Rep Stress Incr	NO
BCDL	10.0	Code	IRC2018/TPI2014
		CSI.	
		TC	0.96
		BC	0.73
		WB	0.13
		Matrix	SH
		DEFL.	
		in	(loc)
		Vert(LL)	-0.17 6-7 >512 360
		Vert(CT)	-0.28 6-7 >309 240
		Horz(CT)	0.10 6 n/a n/a
		PLATES	
		MT20	
		GRIP	
		244/190	
		Weight: 36 lb	
		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-10-14 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.		(size)	9=0-5-5, 6=Mechanical
		Max Horz	9=97(LC 30)
		Max Uplift	9=-68(LC 7), 6=-50(LC 11)
		Max Grav	9=408(LC 16), 6=373(LC 16)

FORCES.		(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	3-4=-785/94	
BOT CHORD	8-9=-76/383, 7-8=-39/252	
WEBS	3-8=-327/80, 3-9=-452/49, 3-7=-99/549	

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 17 lb up at 1-11-15, 49 lb down and 17 lb up at 1-11-15, and 68 lb down and 32 lb up at 4-9-14, and 68 lb down and 32 lb up at 4-9-14 on top chord, and 4 lb down and 9 lb up at 1-11-15, 4 lb down and 9 lb up at 1-11-15, and 27 lb down and 23 lb up at 4-9-14, and 27 lb down and 23 lb up at 4-9-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)		Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15		
Uniform Loads (plf)		
Vert: 1-2=-51, 2-5=-51, 8-9=-20, 6-7=-20		
Concentrated Loads (lb)		
Vert: 10=-32(F=-16, B=-16) 11=1(F=1, B=1) 12=-55(F=-27, B=-27)		



March 1,2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

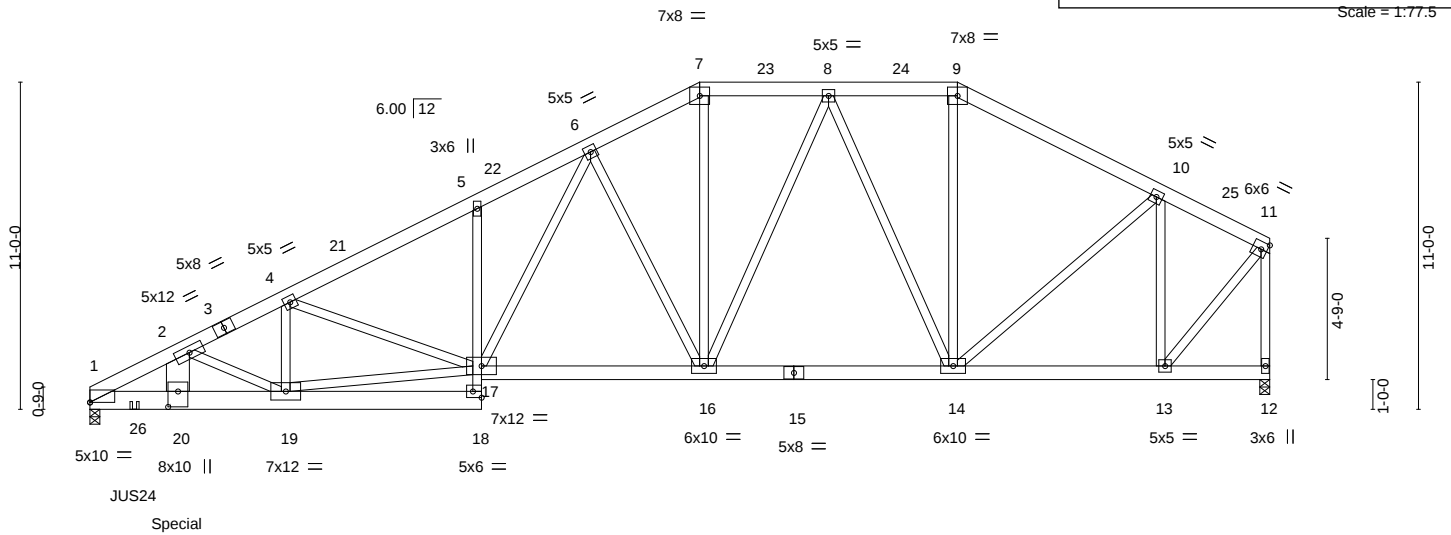
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	GR1	PIGGYBACK BASE GIRDE	1	2	Job Reference (op

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:51 2021 Page 1

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03/30/2021

~~Scale = 1:77.5~~

	2-11-8	6-7-0	13-2-0	20-6-0	29-2-0	36-0-0	39-8-0
	2-11-8	3-7-8	6-7-0	7-4-0	8-8-0	6-10-0	3-8-0
Plate Offsets (X,Y)--	[1:0-0-0,0-0-1], [18:Edge,0-2-8], [20:0-6-4,0-4-0]						

[illegible]

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1 *Except*
	1-18: 2x8 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except*
	2-20: 2x10 SP 2400F 2.0E

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals. Except: 10-0-0 oc bracing: 17-18
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-4-0 (req. 0-5-7), 12=0-4-0
 Max Horz 1=243(LC 78)
 Max Grav 1=9237(LC 33), 12=2322(LC 33)

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

TOP CHORD	1-2=-15465/0, 2-4=-8755/0, 4-5=-5798/0, 5-6=-5800/0, 6-7=-3234/0, 7-8=-2843/0, 8-9=-1961/0, 9-10=-2325/0, 10-11=-1470/0, 11-12=-454/142, 11-12=-2290/0
BOT CHORD	1-20=0/13176, 19-20=0/13176, 18-19=0/1067, 16-17=0/3767, 14-16=0/2408, 13-14=0/1283
WEBS	2-20=0/6626, 2-19=-5934/0, 4-19=0/2144, 17-19=0/6890, 4-17=-3059/0, 6-17=0/3036, 6-16=-2119/0, 7-16=0/1154, 8-16=0/1083, 8-14=-1210/0, 9-14=0/629, 10-14=0/958, 10-13=-1467/0, 11-13=0/2020

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-2-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x10 - 4 rows staggered at 0-2-0 oc, 2x4 - 1 row at 0-9-0 oc.
 - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - 3) Unbalanced roof live loads have been considered for this design.
 - 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 6) Unbalanced snow loads have been considered for this design.
 - 7) Provide adequate drainage to prevent water ponding.
 - 8) Plates checked for a plus or minus 3 degree rotation about its center.
 - 9) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
 - 11) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 1-6-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 2) Fill all nail holes where hanger is in contact with lumber.



March 1, 2021



WARNING – verify design parameters and READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MHF433 (Rev. 3/25/2020) BEFORE USE.
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Safety Information available from Truss Plate Institute, 2602 Grain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	GR1	PIGGYBACK BASE GIRDE	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 14987038

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-Aaj8Pfx_gx_CjWn8TRfGMWX?TJNNCg4AKO62chzhDqj

RELEASE FOR
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

14987038

NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7604 lb down at 2-11-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-51, 5-7=-51, 7-9=-61, 9-11=-51, 1-18=-20, 12-17=-20

Concentrated Loads (lb)

Vert: 20=-7604(F) 26=-544(F)

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	H1	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Job Reference (optional)

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-6zqvqLZECYEvqXbshkRxcHe7?bghQToib9gZzhDqh

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021
 Scale = 1:27.7

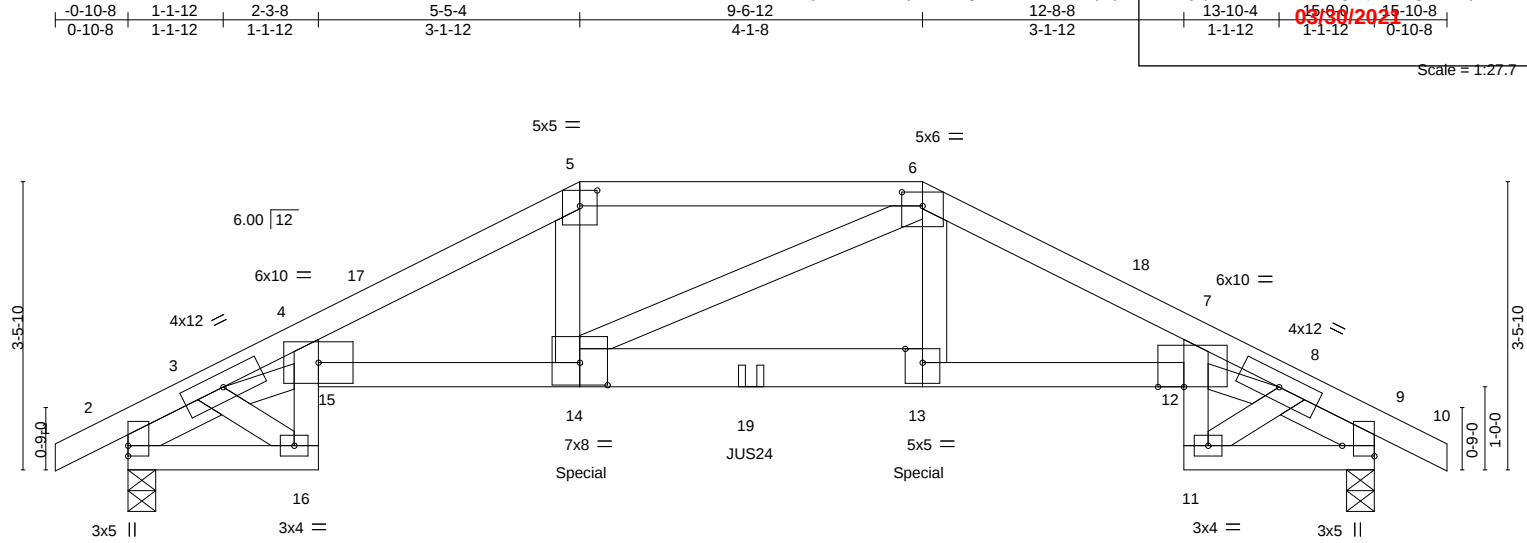


Plate Offsets (X,Y)--		[5:0-2-8,0-2-4], [6:0-3-0,0-2-0], [7:0-3-12,0-0-0], [9:Edge,0-4-10], [14:0-4-0,0-3-4]	
LOADING (psf)		SPACING	
TCLL (roof)	20.0	2-0-0	
Snow (Pl/Pg)	20.4/20.0	Plate Grip DOL	1.15
TCDL	10.0	Lumber DOL	1.15
BCLL	0.0	Rep Stress Incr	NO
BCDL	10.0	Code	IRC2018/TPI2014
		CSI	
		TC	0.92
		BC	0.82
		WB	0.34
		Matrix-SH	
		DEFL.	
		Vert(LL)	-0.14 14-15 >999 360
		Vert(CT)	-0.23 14-15 >768 240
		Horz(CT)	0.23 9 n/a n/a
		PLATES	
		MT20	244/190
		GRIP	
		Weight: 159 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-10-5 oc purlins.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	14-15,12-13: 2x4 SP No.1, 13-14: 2x6 SP No.1		
WEBS	2x4 SP No.2		
SLIDER	Left 2x4 SP No.2 -t 1-2-2, Right 2x4 SP No.2 -t 1-2-2		

REACTIONS.		(size) 2=0-4-0, 9=0-4-0
		Max Horz 2=36(LC 8)
		Max Uplift 2=-128(LC 11), 9=-128(LC 12)
		Max Grav 2=1453(LC 34), 9=1453(LC 34)

FORCES.		(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1940/181, 3-4=-3972/385, 4-5=-3289/341, 5-6=-2967/329, 6-7=-3294/322, 7-8=-3973/345, 8-9=-1939/180	
BOT CHORD	2-16=-140/1333, 15-16=-47/555, 4-15=-28/570, 14-15=-288/2971, 13-14=-242/2972, 12-13=-242/2976, 11-12=-30/554, 7-12=-10/567, 9-11=-106/1332	
WEBS	3-16=-863/93, 5-14=-101/1072, 6-13=-107/1075, 8-11=-863/65, 3-15=-268/2791, 8-12=-212/2792	

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 9=128.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and conform to standard ANSI/TPI 1.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	H1	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 14987039

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-a9OH1hZszsMma_Wj8ZCz_89SOXLqP8gd1MKiD?zhDqg

RELEASE FOR
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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

14987039

NOTES-

- Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 7-6-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 576 lb down and 122 lb up at 5-5-4, and 576 lb down and 122 lb up at 9-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-5=-51, 5-6=-61, 6-10=-51, 2-16=-20, 12-15=-20, 9-11=-20
 - Concentrated Loads (lb)
 - Vert: 14=-576(F) 13=-576(F) 19=-231(F)

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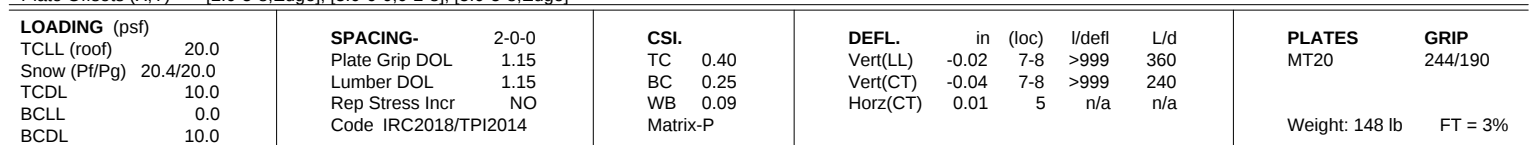
16023 Swingley Ridge Rd
Chesterfield, MO 63017

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 144987040

DEVELOPMENT SERVICES

LEE'S SUMMIT MBS SQUI

14-0-0 14-10-8
4-11-4 03/30/2024 0-10-8



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.

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

TOP CHORD	2-3=-1942/161, 3-4=-1623/167, 4-5=-1942/161
BOT CHORD	2-8=-130/1590, 7-8=-132/1625, 5-7=-111/1590
WEBS	3-8=-37/680, 4-7=-49/712

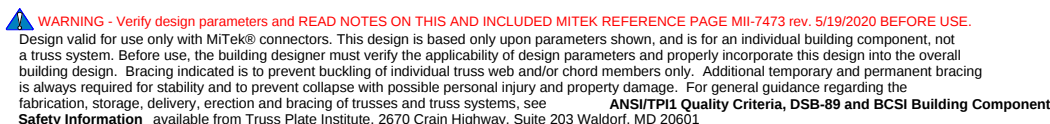
NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=101, 5=101.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 4-0-12 oc max. starting at 4-11-10 from the left end to 9-0-6 to connect truss(es) to back face of bottom chord.



March 1, 2021

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	H2	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. L-EE'S SUMMIT MISSOURI

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NOTES-

- 13) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 7-0-0 from the left end to connect truss(es) to back face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-51, 3-4=-61, 4-6=-51, 2-5=-20
- Concentrated Loads (lb)
 - Vert: 8=-480(B) 7=-480(B) 11=-206(B)

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT MISSOURI
03/30/2021

14987040

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	J1	Jack-Closed	3	1	

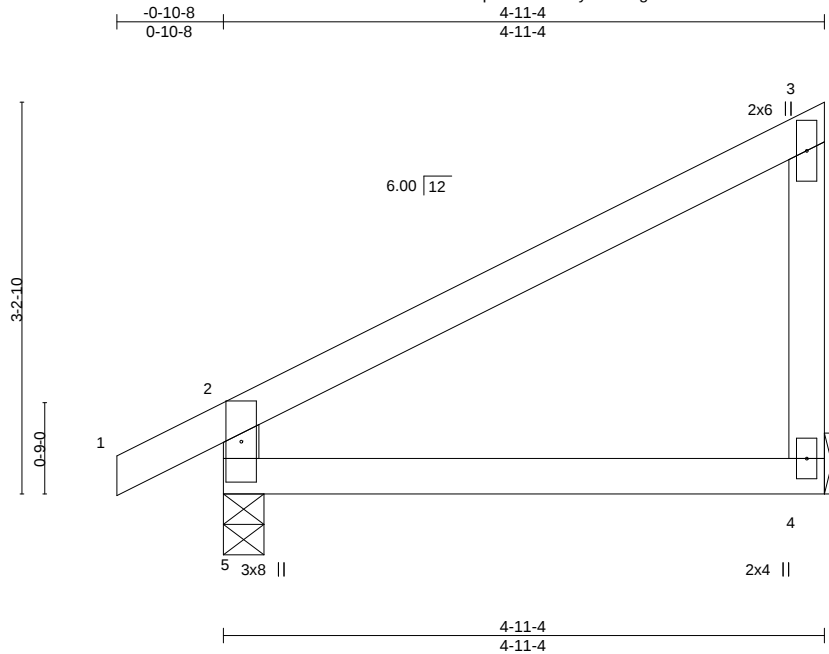
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64063

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RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

Scale = 1:18.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.36	Vert(LL)	-0.01 4-5	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	-0.03 4-5	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00 4	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 22 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-0, 4=Mechanical
 Max Horz 5=99(LC 10)
 Max Uplift 5=-11(LC 11), 4=-20(LC 8)
 Max Grav 5=289(LC 16), 4=226(LC 16)

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

TOP CHORD 2-5=-258/45

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	J2	Jack-Open	4	1	

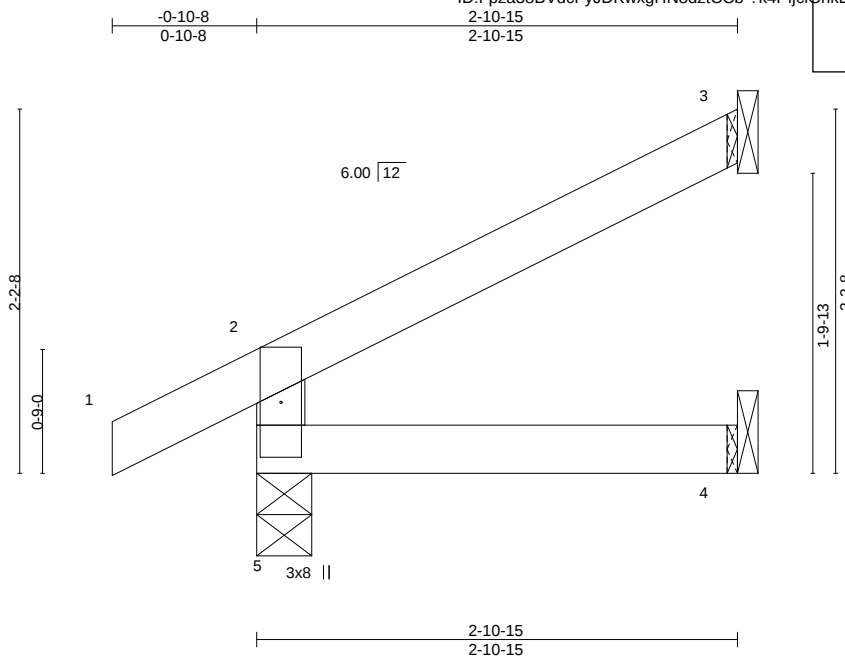
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, Missouri

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RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

Scale = 1:14.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL)	0.00	4-5	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 11 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 5=46(LC 11)
 Max Uplift 5=-1(LC 11), 3=-30(LC 11)
 Max Grav 5=221(LC 16), 3=86(LC 16), 4=29(LC 16)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	J3	Jack-Closed	3	1	

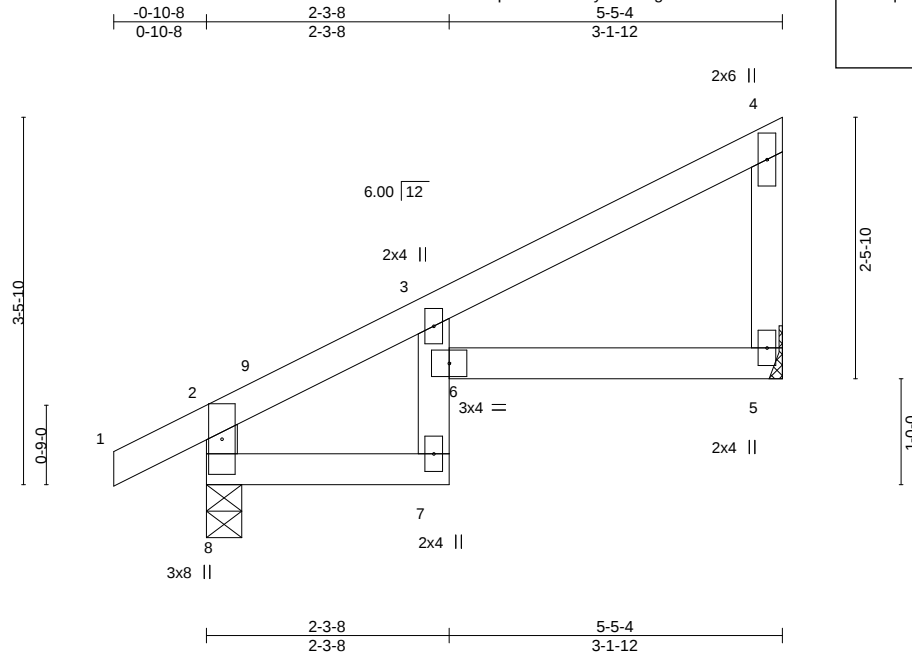
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64081

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**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES**
J44987043
LEE'S SUMMIT, MISSOURI
03/30/2021

Scale = 1:21.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.05 6 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.08 6 >787 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04 5 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										

Weight: 24 lb FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-4-0, 5=Mechanical
Max Horz 8=95(LC 8)
Max Uplift 8=-10(LC 11), 5=-23(LC 11)
Max Grav 8=300(LC 16), 5=251(LC 16)

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

TOP CHORD 2-8=-278/28

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

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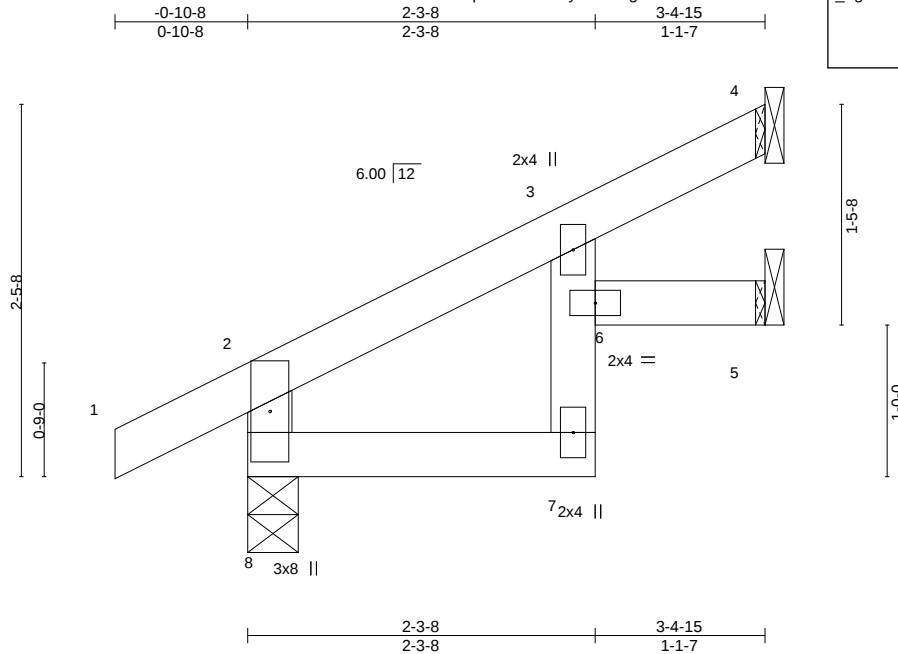
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	J4	Jack-Open	4	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 14987044

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.12	in (loc)	l/defl	L/d			
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.11	Vert(LL)	-0.01 6 >999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.01 7 >999	240			
BCLL	0.0	Rep Stress Incr	YES	Matrix-R		Horz(CT)	0.00 5 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 15 lb	FT = 3%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-4-0, 4=Mechanical, 5=Mechanical
 Max Horz 8=53(LC 11)
 Max Uplift 4=-19(LC 11), 5=-5(LC 11)
 Max Grav 8=247(LC 16), 4=88(LC 16), 5=56(LC 16)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

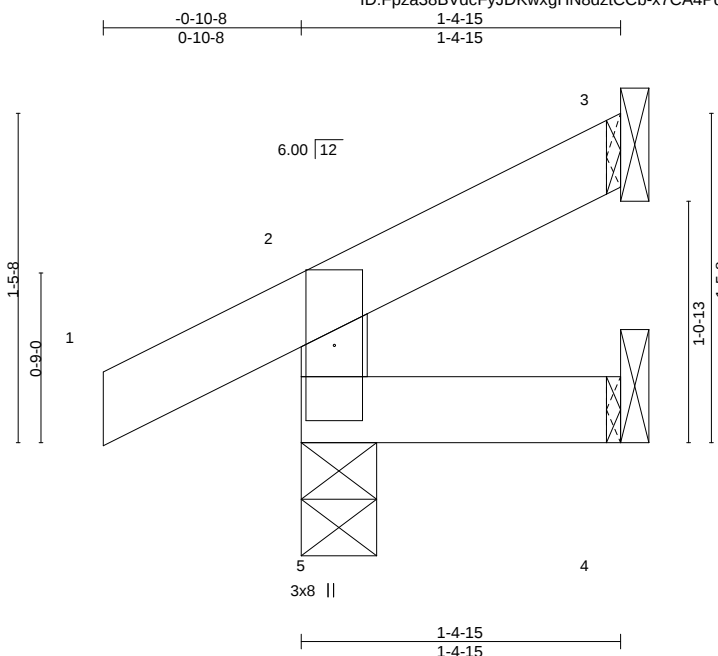
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	J5	Jack-Open	4	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64080

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

Scale = 1:10.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00 5 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00 5 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00 3 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-4-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=30(LC 8)
Max Uplift 5=-5(LC 11), 3=-14(LC 11)
Max Grav 5=157(LC 16), 3=22(LC 16), 4=12(LC 9)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
H3-94	T1	Common	4	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. 14987046	

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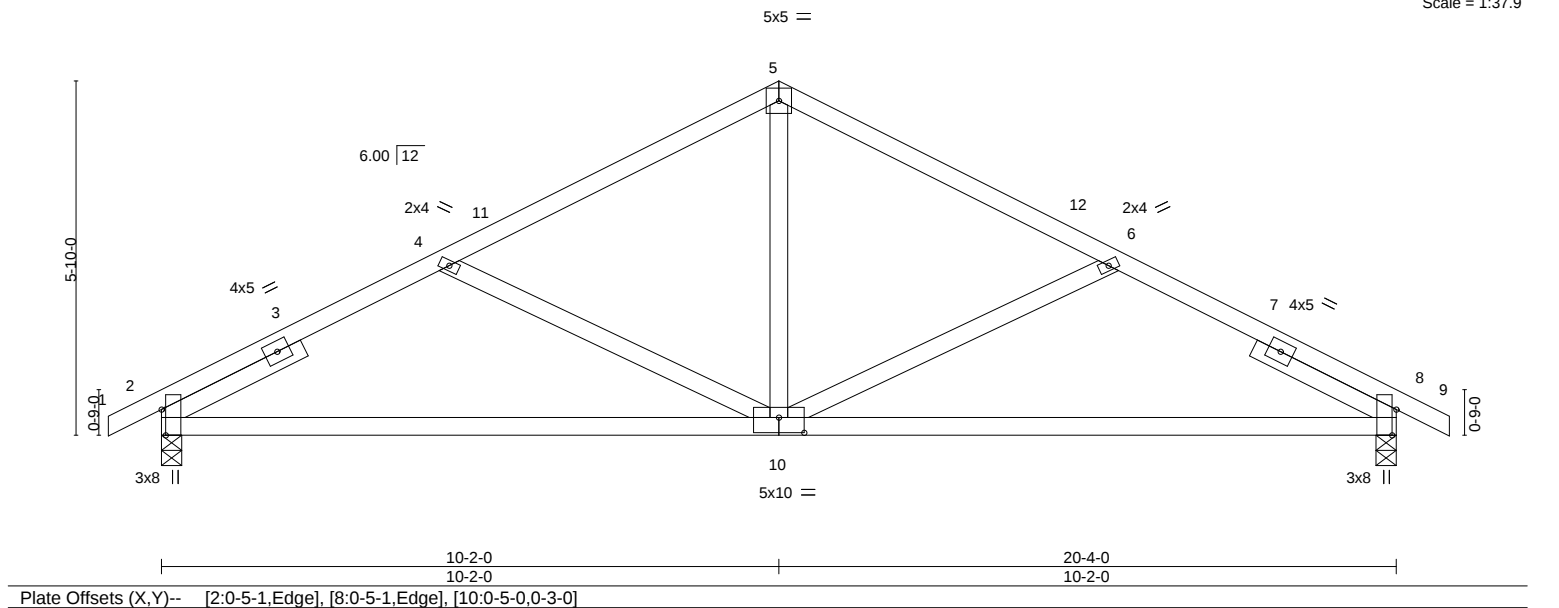


Plate Offsets (X,Y)--		[2:0-5-1,Edge], [8:0-5-1,Edge], [10:0-5-0,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.04	in (loc)	10	L/defl	L/d
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.18	2-10	>999	360	
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.04	8	n/a	240	
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0										
										Weight: 101 lb	
										FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-0-15 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		
SLIDER	Left 2x4 SP No.2 -t 2-7-6, Right 2x4 SP No.2 -t 2-7-6		

REACTIONS.	
(size)	2=0-4-0, 8=0-4-0
Max Horz	2=63(LC 8)
Max Uplift	2=-20(LC 11), 8=-20(LC 12)
Max Grav	2=866(LC 2), 8=866(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-1272/66, 4-5=-962/32, 5-6=-962/32, 6-8=-1272/66
BOT CHORD	2-10=-56/1055, 8-10=0/1055
WEBS	5-10=0/458, 6-10=-328/127, 4-10=-328/127

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 6) Plates checked for a plus or minus 3 degree rotation about its center.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
H3-94	T1G	Roof Special Girder	1	2	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc.	
					14987047	

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 15-3-0 5-1-0 20-4-0 5-1-0
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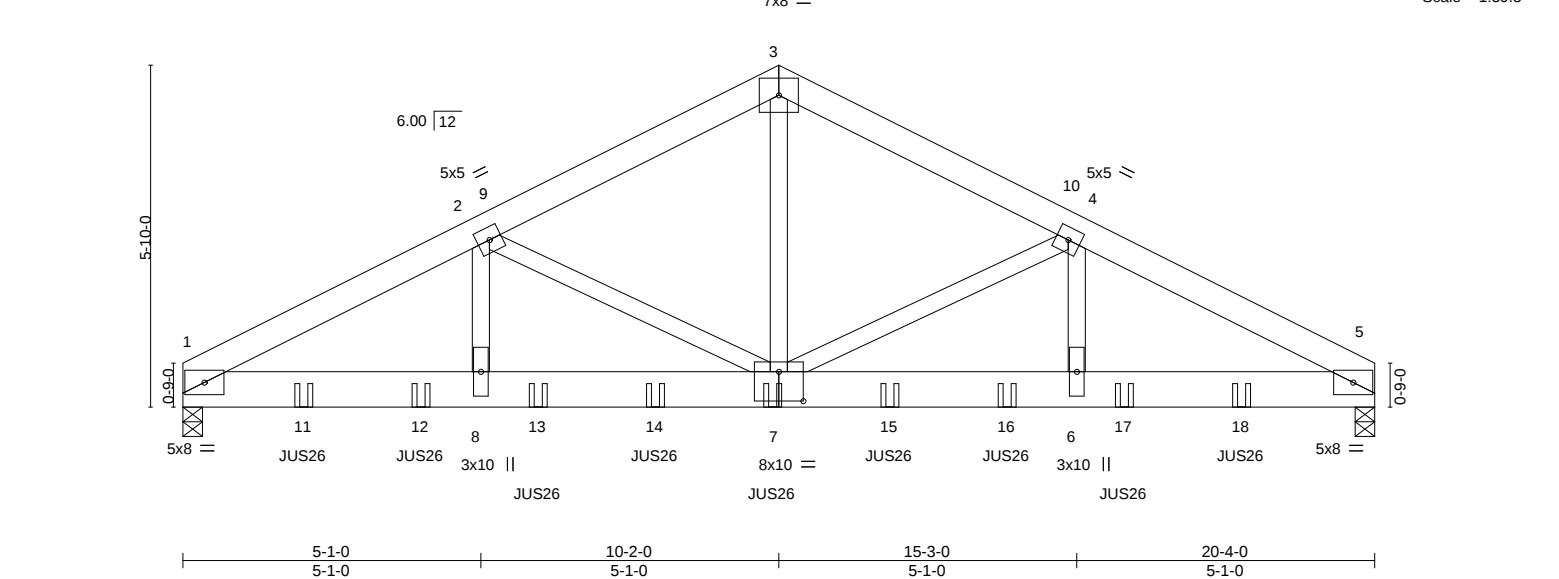


Plate Offsets (X, Y)-- [7:0-5-0,0-6-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC 0.20		in (loc) l/defl L/d		MT20	
Snow (Pl/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.29		Vert(LL) -0.06 6-7 >999 360		GRIP	
TCDL	10.0	Lumber DOL 1.15		WB 0.54		Vert(CT) -0.13 6-7 >999 240		244/190	
BCLL	0.0	Rep Stress Incr NO		Matrix-SH		Horz(CT) 0.04 5 n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014						Weight: 292 lb FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-11-8 oc purlins.
BOT CHORD	2x8 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.	
(size)	1=0-4-0, 5=0-4-0
Max Horz	1=60(LC 33)
Max Uplift	1=-100(LC 11), 5=-98(LC 12)
Max Grav	1=4471(LC 2), 5=4404(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-7614/179, 2-3=-5408/155, 3-4=-5408/155, 4-5=-7616/180
BOT CHORD	1-8=-162/6612, 7-8=-162/6612, 6-7=-108/6612, 5-6=-108/6612
WEBS	3-7=-70/4421, 4-7=-2083/123, 4-6=0/1978, 2-7=-2083/122, 2-8=0/1973

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 18-0-12 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard	
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (plf)	
Vert: 1-3=-51, 3-5=-51, 1-5=-20	

Continued on page 2

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T1G	Roof Special Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. L-EE-581458015015 Page 2

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RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

J44987047

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=-738(B) 11=-738(B) 12=-738(B) 13=-738(B) 14=-738(B) 15=-738(B) 16=-738(B) 17=-738(B) 18=-738(B)

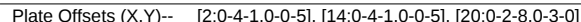
RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT SUBSQUIP
03/30/2021 2-8
0-10-8

8.430 s Feb 12 2021 MiTek Industries, Inc. Feb 26 15:30:16 2021 Page 1

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03/30/2021 21-2-8

Scale = 1:38.6

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LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD	2x4 SP No.2	BOT CHORD	
OTHERS	2x4 SP No.2		
SLIDER	Left 2x4 SP No.2 -t 1-7-3, Right 2x4 SP No.2 -t 1-7-3		

REACTIONS. All bearings 20-4-0.
(lb) - Max Horz 2--63(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 21, 22, 23, 24, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 20, 21, 22, 23, 24, 19, 18, 17, 16, 14

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=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2'-0" oc.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 22, 23, 24, 19, 18, 17, 16.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
H3-94	T2	Roof Special	10	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. 14987049						

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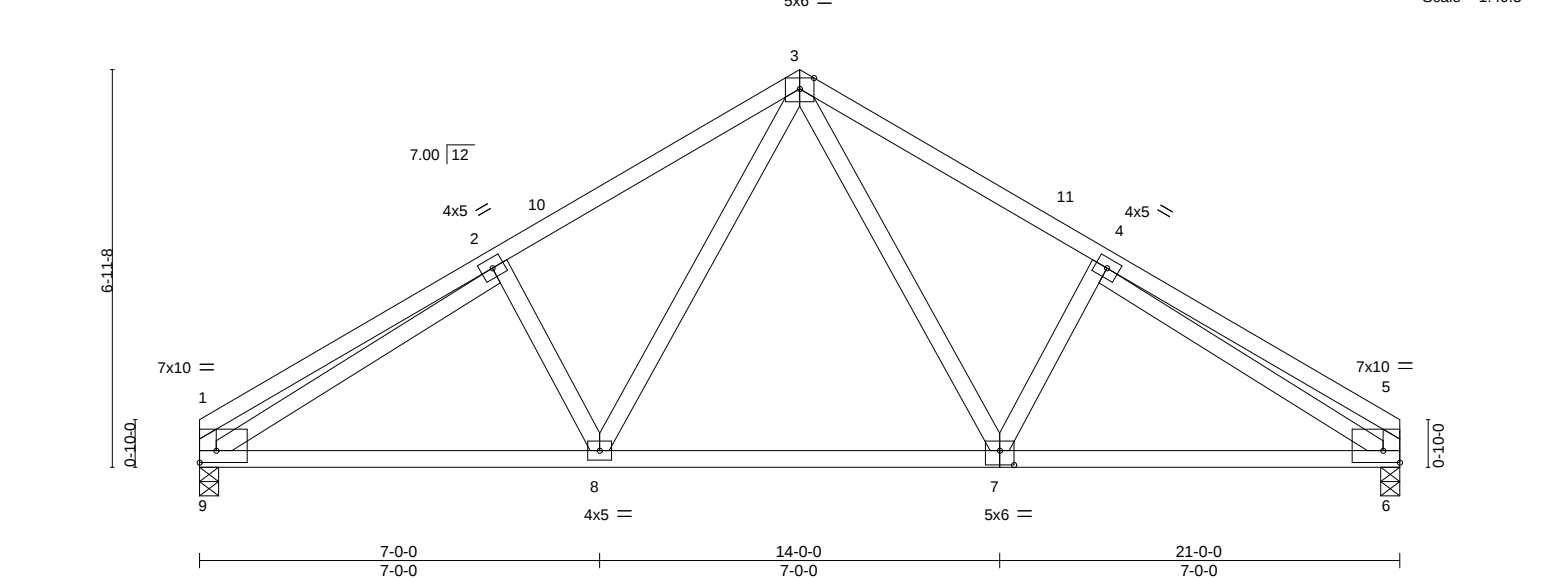


Plate Offsets (X,Y)--		[1:Edge,0-2-8], [5:Edge,0-2-8], [7:0-3-0,0-3-0]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	20.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI.	
		TC	0.44
		BC	0.38
		WB	0.57
		Matrix-SH	
		DEFL.	
		Vert(LL)	-0.03 7-8 >999 360
		Vert(CT)	-0.09 7-8 >999 240
		Horz(CT)	0.03 6 n/a n/a
		PLATES	GRIP
		MT20	244/190
		Weight: 119 lb FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-3-11 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.	(size) 9=0-4-0, 6=0-4-0
	Max Horz 9=145(LC 8)
	Max Uplift 9=-8(LC 11), 6=-8(LC 12)
	Max Grav 9=828(LC 2), 6=828(LC 2)

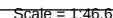
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-317/51, 2-3=-1047/79, 3-4=-1047/79, 4-5=-317/51, 1-9=-264/51, 5-6=-264/51
BOT CHORD	8-9=-38/933, 7-8=0/651, 6-7=0/929
WEBS	3-7=-37/411, 3-8=-37/410, 2-9=-874/0, 4-6=-874/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.00; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LIFE'S SUMMIT, MISSOURI
1980/2021



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

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 13, 20, 21, 22, 23, 18, 16, 15, 14.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

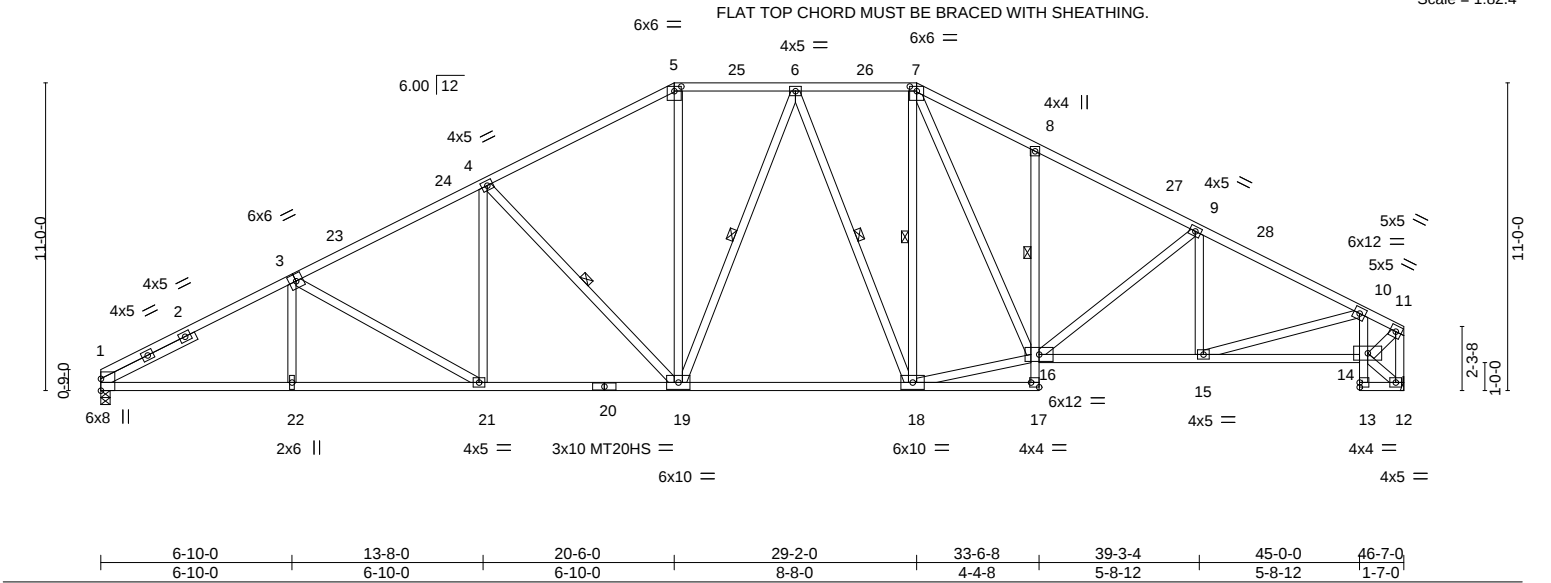


Plate Offsets (X,Y)-- [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [17:Edge,0-2-0]															
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL		1.15		TC 0.79		Vert(LL)		-0.21 19		>999 360		MT20 244/190	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL		1.15		BC 0.84		Vert(CT)		-0.46 18-19		>999 240		MT20HS 187/143	
TCDL	10.0	Rep Stress Incr		YES		WB 0.49		Horz(CT)		0.22 12		n/a n/a			
BCLL	0.0	Code IRC2018/TPI2014				Matrix-SH									
BCDL	10.0													Weight: 327 lb FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 3-5: 2x4 SP No.1, 1-3: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 1-20: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 8-16
SLIDER	Left 2x4 SP No.2 -t 3-9-9		1 Row at midpt 4-19, 6-19, 6-18, 7-18

REACTIONS. (size) 1=0-4-0, 12=Mechanical
Max Horz 1=166(LC 8)
Max Uplift 1=13(LC 11)
Max Grav 1=1958(LC 33), 12=2005(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-3583/33, 3-4=-3173/53, 4-5=-2543/67, 5-6=-2145/87, 6-7=-2030/70,
7-8=-2936/109, 8-9=-2964/30, 9-10=-3143/9, 10-11=-1655/4, 11-12=-1945/0
BOT CHORD 1-22=-71/3060, 21-22=-72/3057, 19-21=0/2779, 18-19=0/2105, 8-16=-473/126,
15-16=0/2755, 14-15=-29/1564, 10-14=-1183/58
WEBS 3-21=-385/94, 4-21=0/330, 4-19=-930/130, 5-19=0/727, 6-18=-429/95, 16-18=0/2002,
7-16=-105/1263, 9-16=-263/85, 10-15=0/1240, 11-14=-19/1896

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) Plates checked for a plus or minus 3 degree rotation about its center.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job

H3-94

Truss

T3A

Truss Type

Piggyback Base

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-EkfE7cw28m0fZREIL9EnfGsrDDDSiD_uhNskkqzhDqD

Lee's Summit, Missouri

03/30/2021

6-10-0

13-8-0

20-6-0

24-10-0

29-2-0

33-0-0

36-10-0

39-3-4

45-0-0

46-7-0

6-10-0

6-10-0

6-10-0

4-4-0

4-4-0

3-10-0

3-10-0

2-5-4

5-8-12

1-7-0

FLAT TOP CHORD MUST BE BRACED WITH SHEATHING.

Scale = 1:82.4

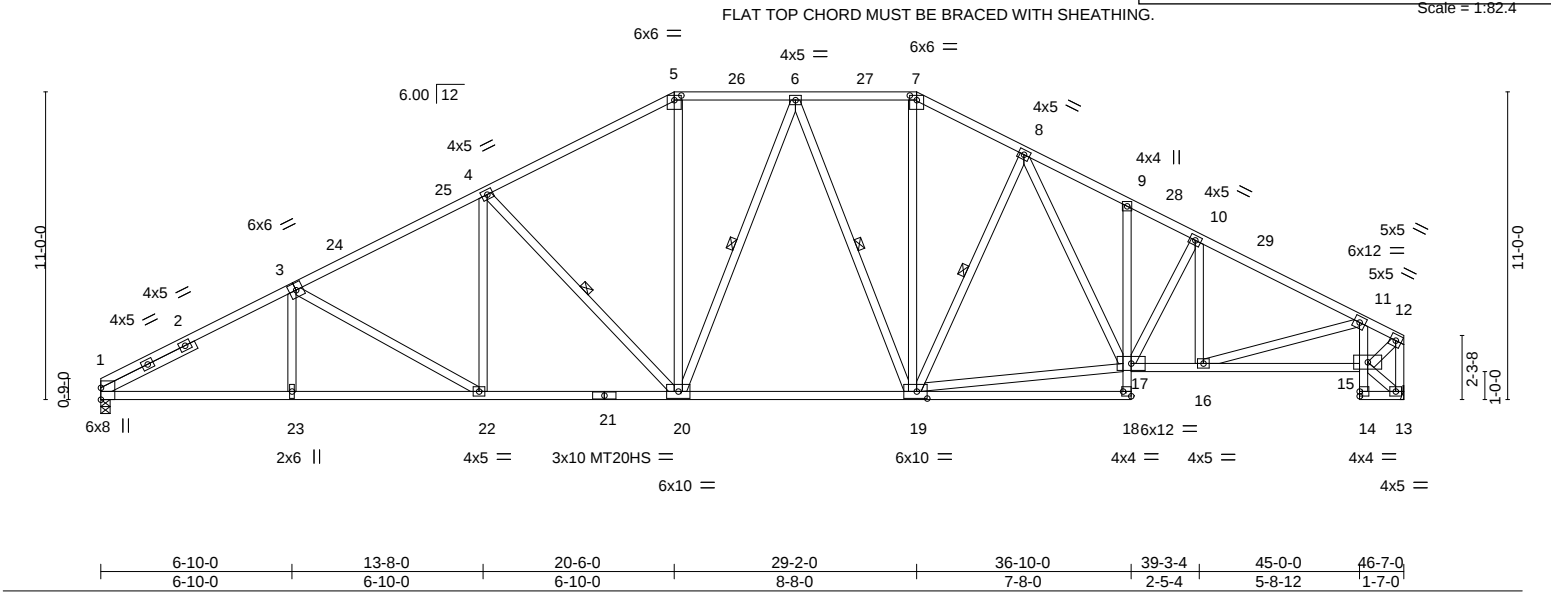


Plate Offsets (X,Y)--		[5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [18:Edge,0-2-0], [19:0-4-8,0-3-0]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	20.0	Plate Grip DOL	1.15
Snow (Pl/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI.	
		TC	0.78
		BC	0.84
		WB	0.53
		Matrix-SH	
		DEFL.	
		Vert(LL)	-0.21 20 >999 360
		Vert(CT)	-0.45 19-20 >999 240
		Horz(CT)	0.21 13 n/a n/a
		PLATES	
		MT20	244/190
		MT20HS	187/143
		GRIP	
		Weight: 337 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 3-5: 2x4 SP No.1, 1-3: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 1-21: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 4-20, 6-20, 6-19, 8-19
SLIDER	Left 2x4 SP No.2 -t 3-9-9		

REACTIONS. (size) 1=0-4-0, 13=Mechanical
Max Horz 1=166(LC 10)
Max Uplift 1=13(LC 11)
Max Grav 1=1958(LC 33), 13=2005(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-3583/33, 3-4=-3173/53, 4-5=-2542/67, 5-6=-2145/88, 6-7=-2031/69, 7-8=-2350/60,
8-9=-3028/82, 9-10=-3046/40, 10-11=-3127/9, 11-12=-1657/4, 12-13=-1942/0
BOT CHORD 1-23=-71/3059, 22-23=-73/3057, 20-22=0/2779, 19-20=0/2105, 16-17=0/2733,
15-16=-32/1590, 11-15=-1196/64
WEBS 3-22=-385/94, 4-22=0/332, 4-20=-931/129, 5-20=0/725, 6-19=-425/98, 7-19=0/791,
8-19=-784/130, 17-19=0/2146, 8-17=-62/723, 11-16=0/1190, 12-15=-22/1917

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) Plates checked for a plus or minus 3 degree rotation about its center.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
H3-94	T3B	Piggyback Base	2	1		14987053

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64080

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ixCdKyxgv48WAbpUvslOCTPc0dZdRhW1w1bIHGzhDqC

03/30/2021

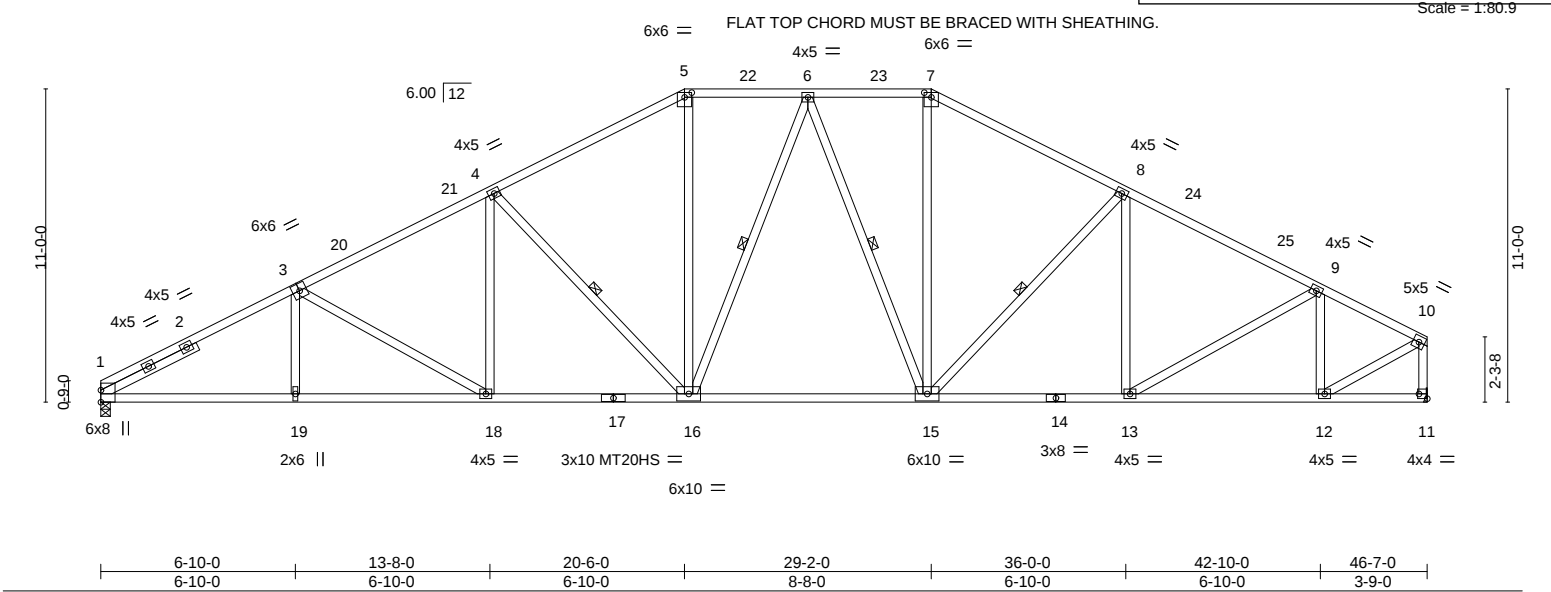


Plate Offsets (X,Y)-- [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [11:Edge,0-2-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	in (loc)	l/defl	L/d	GRIP
Snow (Pl/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.84	Vert(LL)	-0.19 18	>999	360
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Vert(CT)	-0.42 15-16	>999	240
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH		Horz(CT)	0.16 11	n/a	n/a
BCDL	10.0								
								Weight: 307 lb FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1 *Except* 5-7: 2x4 SP No.2, 1-3: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 1-17: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 4-16, 6-16, 6-15, 8-15
SLIDER	Left 2x4 SP No.2 -t 3-9-9		

REACTIONS. (size) 1=0-4-0, 11=Mechanical
Max Horz 1=166(LC 10)
Max Uplift 1=-13(LC 11)
Max Grav 1=1958(LC 33), 11=2005(LC 33)

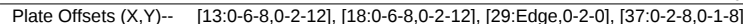
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-3583/33, 3-4=-3173/53, 4-5=-2543/67, 5-6=-2145/87, 6-7=-2038/72, 7-8=-2421/50,
8-9=-2721/31, 9-10=-2048/7, 10-11=-1978/6
BOT CHORD 1-19=-71/3060, 18-19=-72/3057, 16-18=0/2779, 15-16=0/2103, 13-15=0/2351,
12-13=0/1814
WEBS 3-18=-385/94, 4-18=0/331, 4-16=-930/130, 5-16=0/721, 6-15=-423/97, 7-15=0/662,
8-15=-466/126, 9-13=0/617, 9-12=-917/64, 10-12=0/2074

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 14987054
DEVELOPMENT SERVICES
LEASING SUMMARY 14987054
B_zJeyfC6G8ipyMJZTJE6SNardirezVQ1zhDq8
03/30/2021
Scale = 1"=94.6'



LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10		MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.08			
TCDL	10.0	Rep Stress Incr	YES	WB	0.17			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R			Weight: 376 lb	FT = 3%
BCDL	10.0							

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 10-47, 11-46, 12-44, 14-43, 15-42, 16-41, 17-40, 19-39, 20-38, 21-36
OTHERS	2x4 SP No.2		

REACTIONS. All bearings 46-7-0.
(lb) - Max Horz 55=164(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 42, 41, 38, 36, 35, 34, 33, 32, 31 except 30=109(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 36, 35, 34, 33, 32, 31, 30

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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 42, 41, 38, 36, 35, 34, 33, 32, 31 except (jt=lb) 30=109.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
H3-94	T4	Common	2	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. 14987055

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-X5aub??RUwufuWGeF7sQRklv1lFrQswly2cUwzhDq6

Scale = 1:38.3

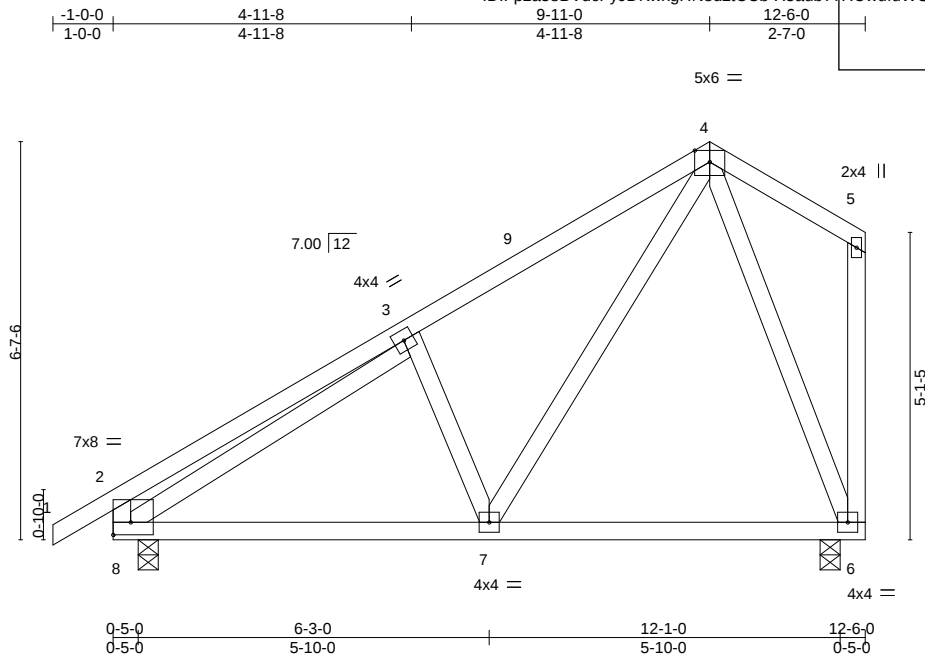


Plate Offsets (X,Y)-- [2:Edge,0-2-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.37	in (loc)	l/defl	MT20	GRIP
Snow (Pl/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.31	Vert(LL)	>999		244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.33	Vert(CT)	7-8 >999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		Horz(CT)	0.01 6 n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 83 lb	FT = 3%

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

REACTIONS.	
(size)	6=0-4-0, 8=0-4-0
Max Horz	8=196(LC 8)
Max Uplift	6=-23(LC 11), 8=-18(LC 11)
Max Grav	6=485(LC 2), 8=560(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	3-4=-517/76
BOT CHORD	7-8=-73/499
WEBS	3-7=-277/139, 4-7=-44/472, 4-6=-409/38, 3-8=-566/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T4GE	Common Structural Gable	1	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64086

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

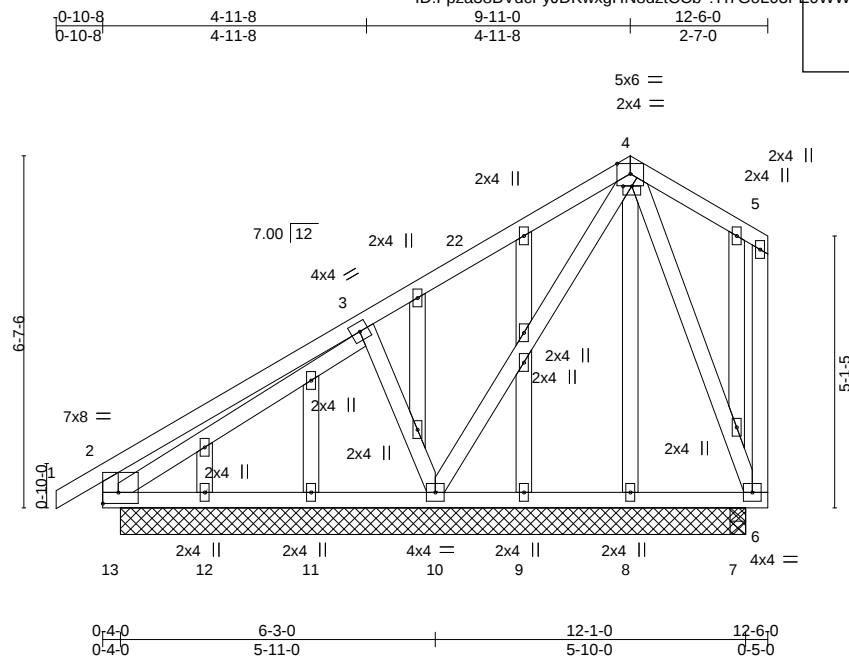


Plate Offsets (X,Y)-- [2:Edge,0-2-8], [4:0-2-0,0-0-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.00 8	>999	360
Snow (Pl/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00 11	>999	240
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00 6	n/a	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P					
BCDL	10.0								
								Weight: 113 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-9-0 except (jt=length) 7=0-3-8.
 (lb) - Max Horz 13=195(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 10, 13, 6
 Max Grav All reactions 250 lb or less at joint(s) 13, 6, 8, 9, 11, 12, 7 except 10=438(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-10=-324/142

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Gable studs spaced at 2-0-0 oc.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 13, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



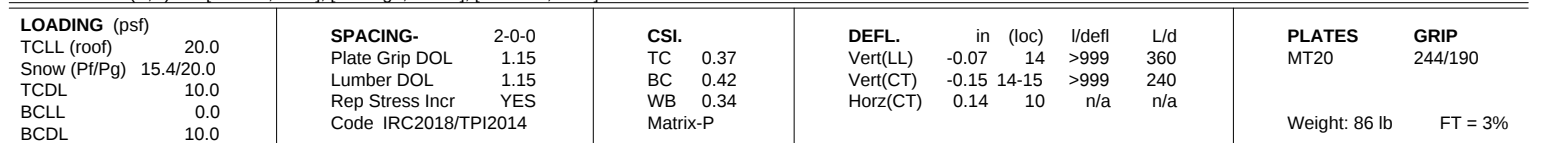
March 1,2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017



REACTIONS. (size) 2=0-4-0, 10=0-4-0
 Max Horz 2=48(LC 8)
 Max Uplift 2=-17(LC 11), 10=-17(LC 12)
 Max Grav 2=653(LC 2), 10=652(LC 2)

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;

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

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


 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job: H3-94

Truss: T5A

Truss Type: Roof Special

Qty: 1

Ply: 1

SUMMIT HOMES

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-QspPQM2yY9P5N7aPUzwMcapQzf4ZnEnWda0QdzhDq2

0-10-5
0-10-5

4-7-4
3-9-0

7-2-8
2-7-4

9-9-12
2-7-4

13-6-12
3-9-0

11-9-8
1-1-12

Scale = 1:28.7

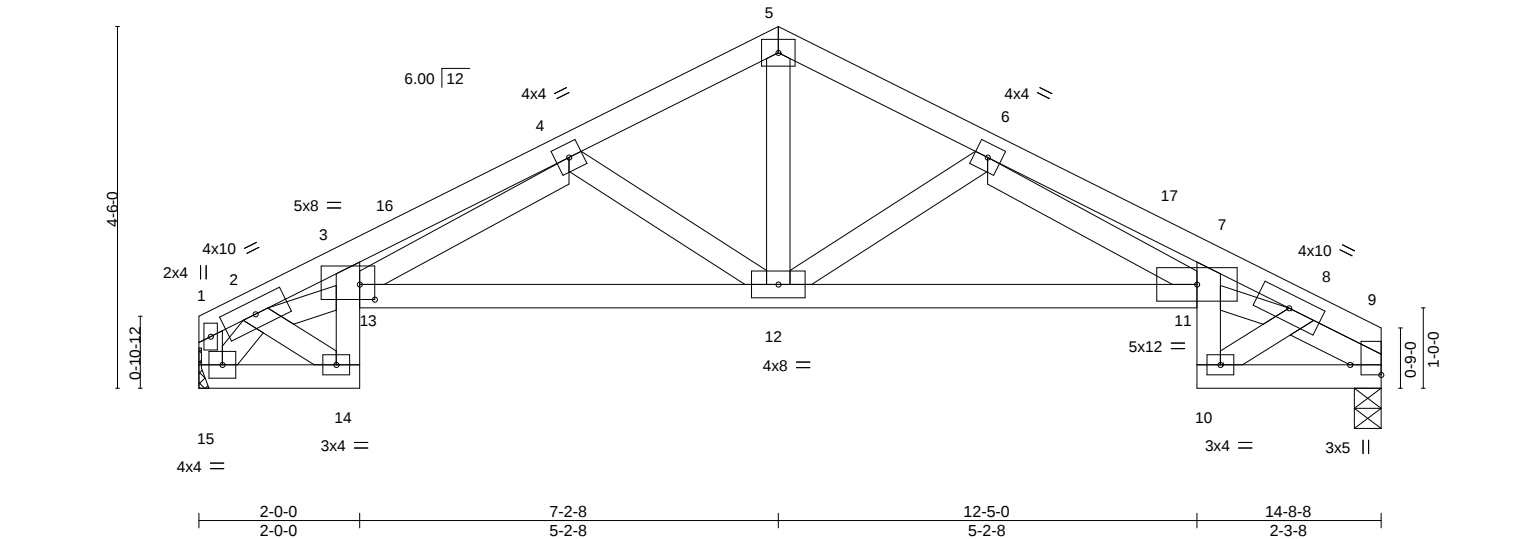


Plate Offsets (X,Y)-- [3:0-2-4,0-2-4], [9:Edge,0-4-10]																	
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl	L/d	PLATES		GRIP	
TCLL (roof)	20.0		Plate Grip DOL	1.15		TC	0.37	Vert(LL)	-0.06	11	>999	360		MT20	244/190		
Snow (Pf/Pg)	15.4/20.0		Lumber DOL	1.15		BC	0.42	Vert(CT)	-0.13	11-12	>999	240					
TCDL	10.0		Rep Stress Incr	YES		WB	0.33	Horz(CT)	0.12	9	n/a	n/a					
BCLL	0.0		Code IRC2018/TPI2014			Matrix-P								Weight: 82 lb	FT = 3%		
BCDL	10.0																

Job

H3-94

Truss

T5G

Truss Type

Roof Special Girder

Qty

1

Ply

2

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 14987059

Lee's Summit, Missouri

3-7-4

7-2-8

10-11-8

14-8-8

3-7-4

3-7-4

3-9-0

3-9-0

5x5 ||

3

2

4

10

5

11

12

8

13

14

7

15

16

6

6x8 =

THD26

3x12 ||

THD26

10x10 =

THD26

3x8 ||

THD26

5x8 =

0-10-12

4-6-0

0-9-0

3-7-4

7-2-8

10-11-8

14-8-8

3-7-4

3-7-4

3-9-0

3-9-0

Plate Offsets (X,Y)--

[5:0-3-14,0-2-8], [6:0-6-4,0-1-8], [7:0-5-0,0-6-4]

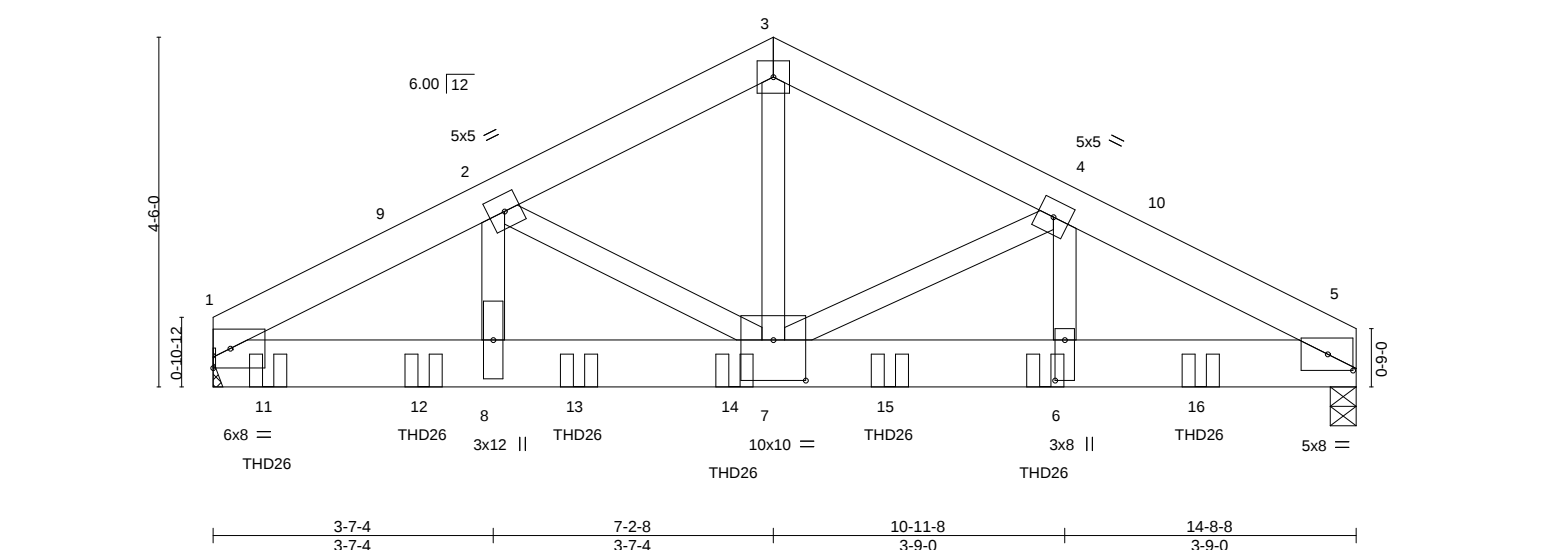
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/30/2021

Scale = 1:29.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.07	MT20	244/190		
Snow (Pl/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.13				
TCDL	10.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.04				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 212 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-8-13 oc purlins.
BOT CHORD	2x8 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS. (size) 1=Mechanical, 5=0-4-0 (req. 0-4-2)
Max Horz 1=45(LC 35)
Max Grav 1=7624(LC 15), 5=6956(LC 16)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11057/0, 2-3=-8201/0, 3-4=-8206/0, 4-5=-11405/0
BOT CHORD 1-8=0/9392, 7-8=0/9392, 6-7=0/9807, 5-6=0/9807
WEBS 2-8=0/3167, 2-7=-2405/0, 3-7=0/6940, 4-7=-2832/0, 4-6=0/3291

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - WARNING: Required bearing size at joint(s) 5 greater than input bearing size.
 - Refer to girder(s) for truss to truss connections.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-8 from the left end to 12-8-8 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 3-5=-51, 1-5=-20

Continued on page 2



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T5G	Roof Special Girder	1	2	Job Reference (op

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 144987059
DEVELOPMENT SERVICES
LEE'S SUMMIT WASTE
Res, Inc. 14498705901360123 Page 2
H9c2gRb8oMT_2M1WzfSEmN97zhDq1
03/30/2021

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Feb 26 18:30:36 2021 Page 2

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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 6=-1985(B) 11=-1543(B) 12=-1985(B) 13=-1985(B) 14=-1985(B) 15=-1985(B) 16=-1985(B)



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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-7473 (REV. 3/19/2020) BEFORE USE.

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

H3-94

Truss

T6

Truss Type

Common

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID:Fpza38BVdcFyJDKwxgHN8dzlCCb-MFx9r24C4mfpcRkocOzqh?ufYSm0FDaohuVwiazhDq0

14987060

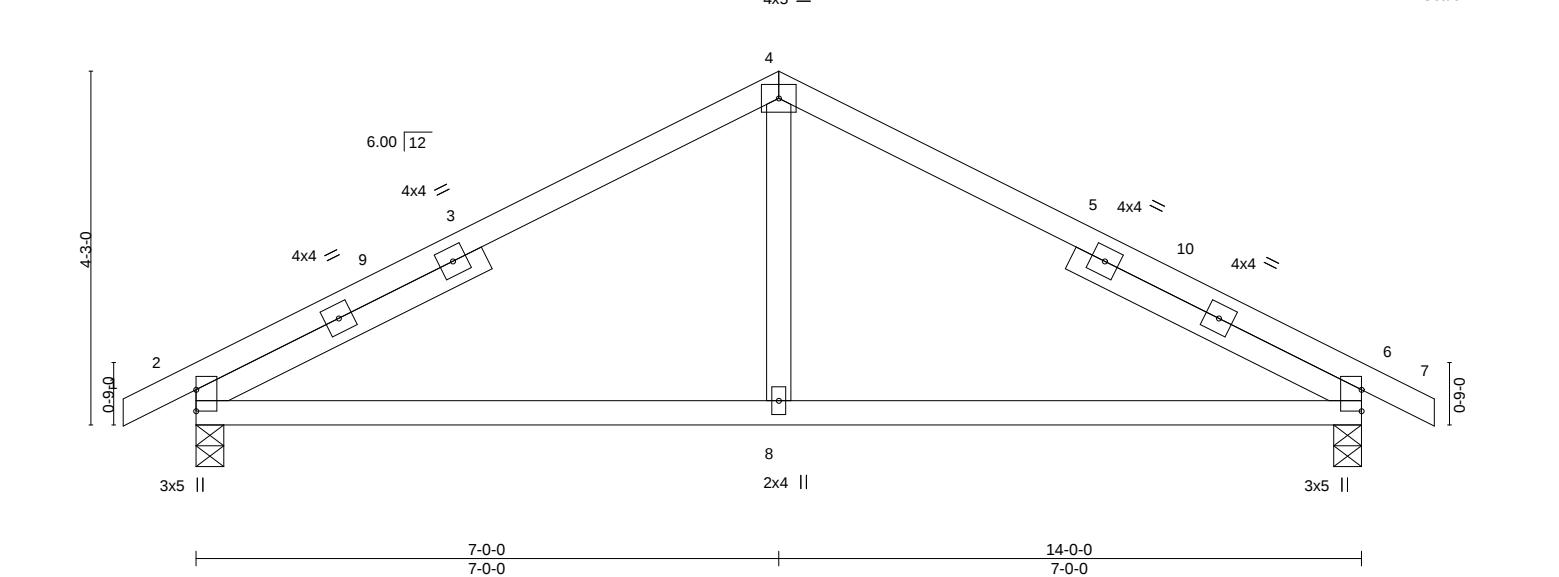
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/30/2021

Scale = 1:27.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	0.02	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.07				
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 64 lb		FT = 3%	

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

REACTIONS.	
(size)	2=0-4-0, 6=0-4-0
Max Horz	2=45(LC 8)
Max Uplift	2=-16(LC 11), 6=-16(LC 12)
Max Grav	2=612(LC 2), 6=612(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-693/4, 4-6=-692/0
BOT CHORD	2-8=0/524, 6-8=0/524

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job

H3-94

Truss

T6A

Truss Type

Common

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dzTCCh-qRVX3O5cr4ngEbl_A5U3EDRq?s6E_gqyvYFUE0zhDq?

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

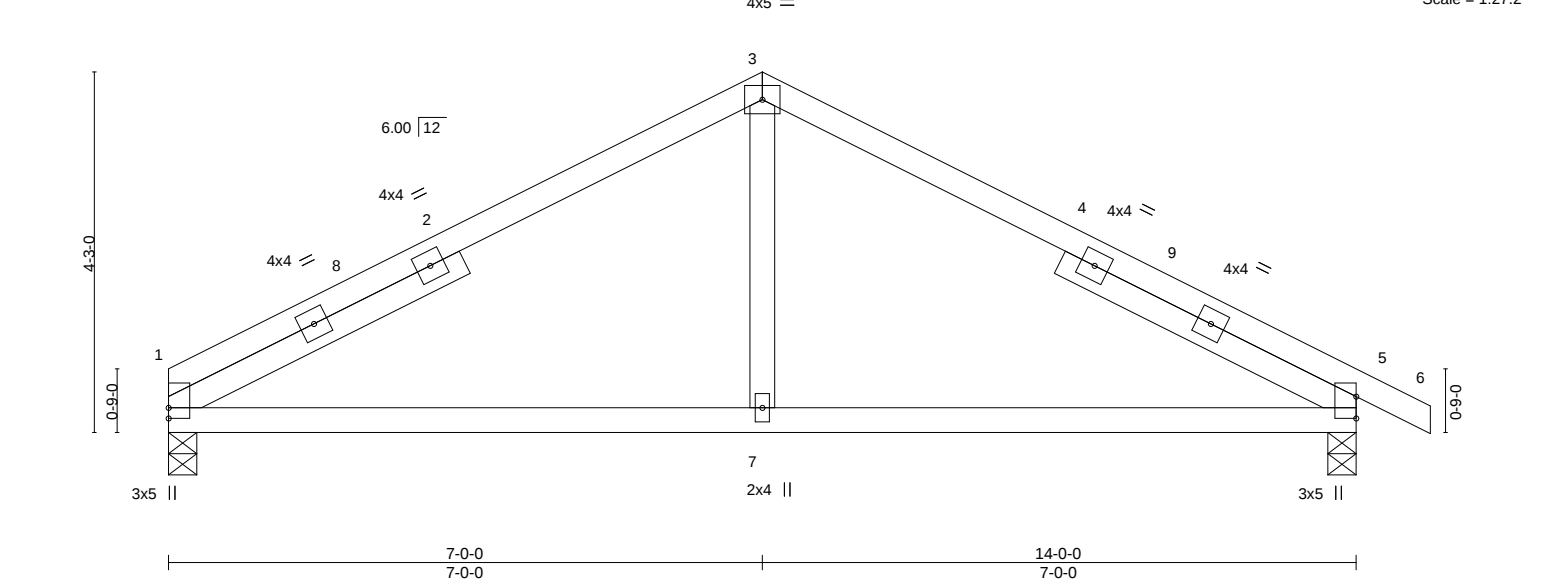
LEE'S SUMMIT, MISSOURI

03/30/2021

14987061

0-10-8

Scale = 1:27.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.83	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.42	0.02	7	>999			
TCDL	10.0	Lumber DOL	1.15	WB	0.05	-0.07	5-7	>999			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.01	5	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 63 lb		FT = 3%	

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

REACTIONS.	
(size)	1=0-4-0, 5=0-4-0
Max Horz	1=45(LC 8)
Max Uplift	1=-7(LC 11), 5=-16(LC 12)
Max Grav	1=558(LC 2), 5=614(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-694/4, 3-5=-696/0
BOT CHORD	1-7=0/527, 5-7=0/527

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job

H3-94

Truss

T7

Truss Type

Piggyback Base

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64080

14987062

AS NOTED ON PLANS REVIEW

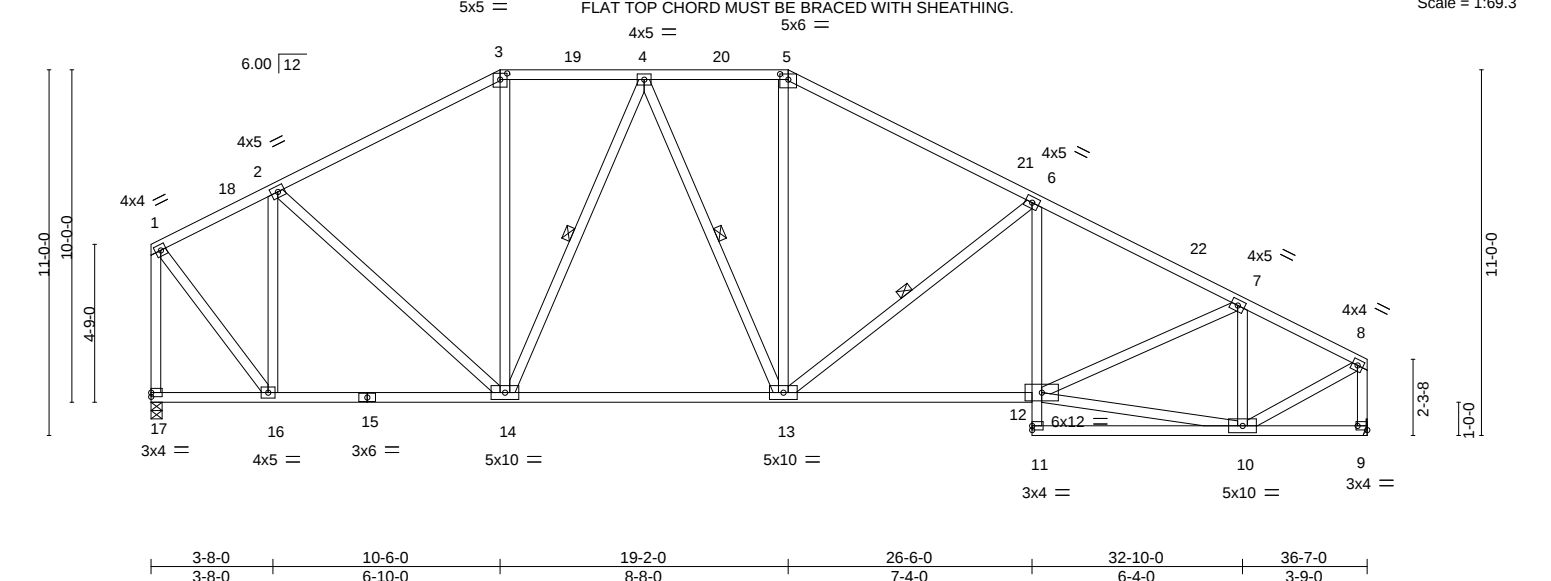
DEVELOPMENT SERVICES

03/30/2021

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-mpclT465NhLOTvSNHWWXJewW8zgisSQLFNskbHvzhDpz

36-7-0

3-9-0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.09 12-13 >999	L/d	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.23 12-13 >999		240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.08 9 n/a		n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 265 lb	FT = 3%
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 5-8: 2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.2	WEBS	6-0-0 oc bracing: 16-17. 1 Row at midpt 4-14, 4-13, 6-13

REACTIONS. (size) 17=0-4-0, 9=Mechanical
Max Horz 17=-223(LC 7)
Max Uplift 9=-14(LC 12)
Max Grav 17=1634(LC 33), 9=1559(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-987/21, 2-3=-1465/49, 3-4=-1182/57, 4-5=-1452/89, 5-6=-1783/66, 6-7=-2315/56,
7-8=-1572/24, 1-17=-1610/0, 8-9=-1531/25
BOT CHORD 14-16=-36/871, 13-14=0/1327, 12-13=0/2026
WEBS 2-16=-1005/59, 2-14=-17/509, 3-14=0/297, 4-14=-518/78, 4-13=-34/318, 5-13=0/348,
6-13=-735/131, 10-12=0/1304, 7-12=0/684, 7-10=-886/71, 1-16=0/1413, 8-10=0/1573

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T8	Piggyback Base	2	1	

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

144987063

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-iCk2um8LvIH5jCclPxY?O3cTitNbwGDxQADhMnzDpx

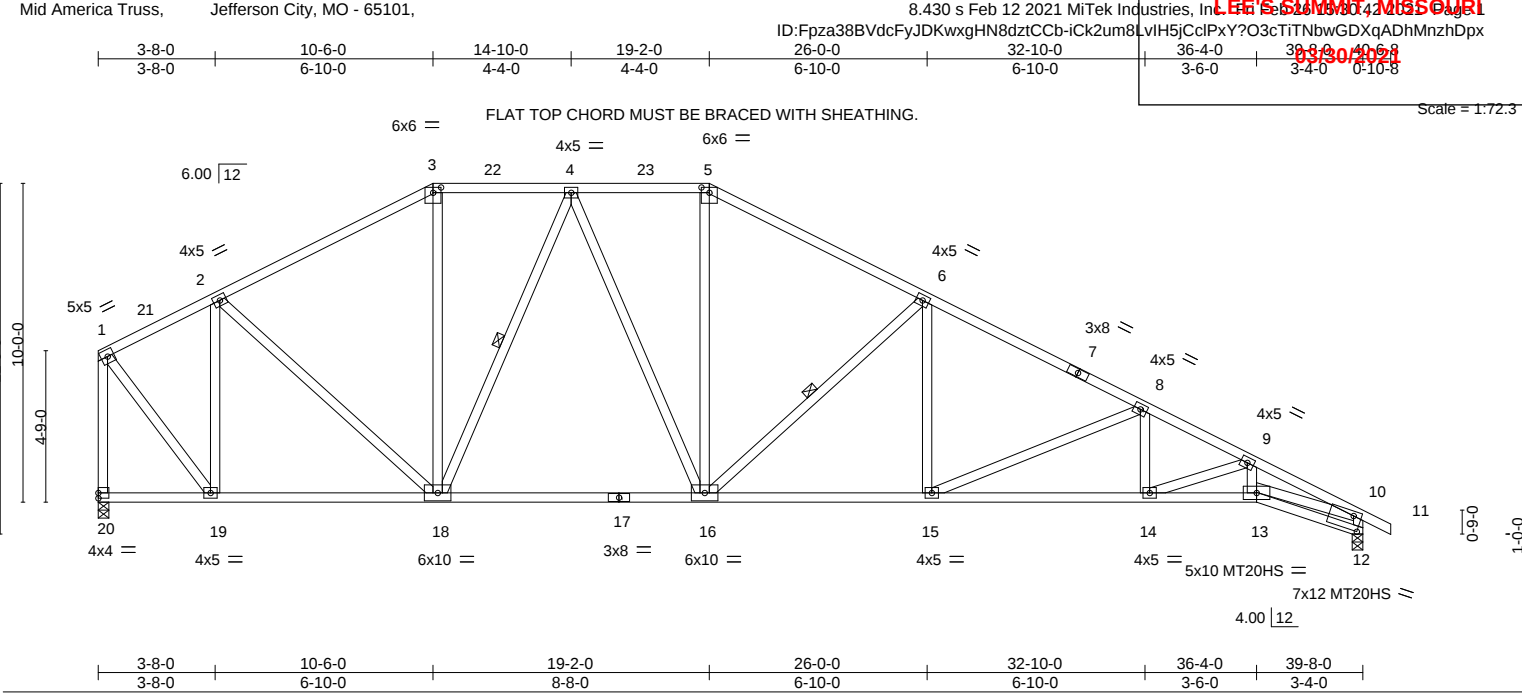


Plate Offsets (X, Y)-- [3:0-3-0,0-2-0], [5:0-3-0,0-2-0], [12:0-3-0,0-5-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.97	in (loc)	l/defl	MT20	GRIP
Snow (Pl/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.78	Vert(LL)	-0.22 14-15 >999	360	244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.92	Vert(CT)	-0.46 14-15 >999	240	187/143
BCLL	0.0	Rep Stress Incr	YES	Matrix-SH		Horz(CT)	0.21 12 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 269 lb FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	13-17: 2x4 SP No.1	WEBS	1 Row at midpt 4-18, 6-16
WEBS	2x4 SP No.2		
REACTIONS.			
	(size) 20=0-4-0, 12=0-4-0		
	Max Horz 20=-235(LC 7)		
	Max Uplift 12=-37(LC 12)		
	Max Grav 20=1762(LC 34), 12=1693(LC 34)		

FORCES.	
	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1067/22, 2-3=-1619/51, 3-4=-1322/58, 4-5=-1697/92, 5-6=-2041/73, 6-8=-2898/60, 8-9=-3751/55, 9-10=-4750/52, 1-20=-1737/0, 10-12=-1754/61
BOT CHORD	18-19=0/942, 16-18=0/1521, 15-16=0/2511, 14-15=0/3360, 13-14=-9/4090, 12-13=-22/468
WEBS	2-19=-1099/53, 2-18=-12/587, 3-18=0/361, 4-18=-644/74, 4-16=-35/444, 5-16=0/490, 6-16=-1105/126, 6-15=0/491, 8-15=-920/85, 8-14=0/403, 9-14=-803/43, 9-13=0/695, 1-19=0/1528, 10-13=0/3766

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI

SCOTT M. SEVIER

NUMBER

PE-2001018807

PROFESSIONAL ENGINEER

March 1,2021

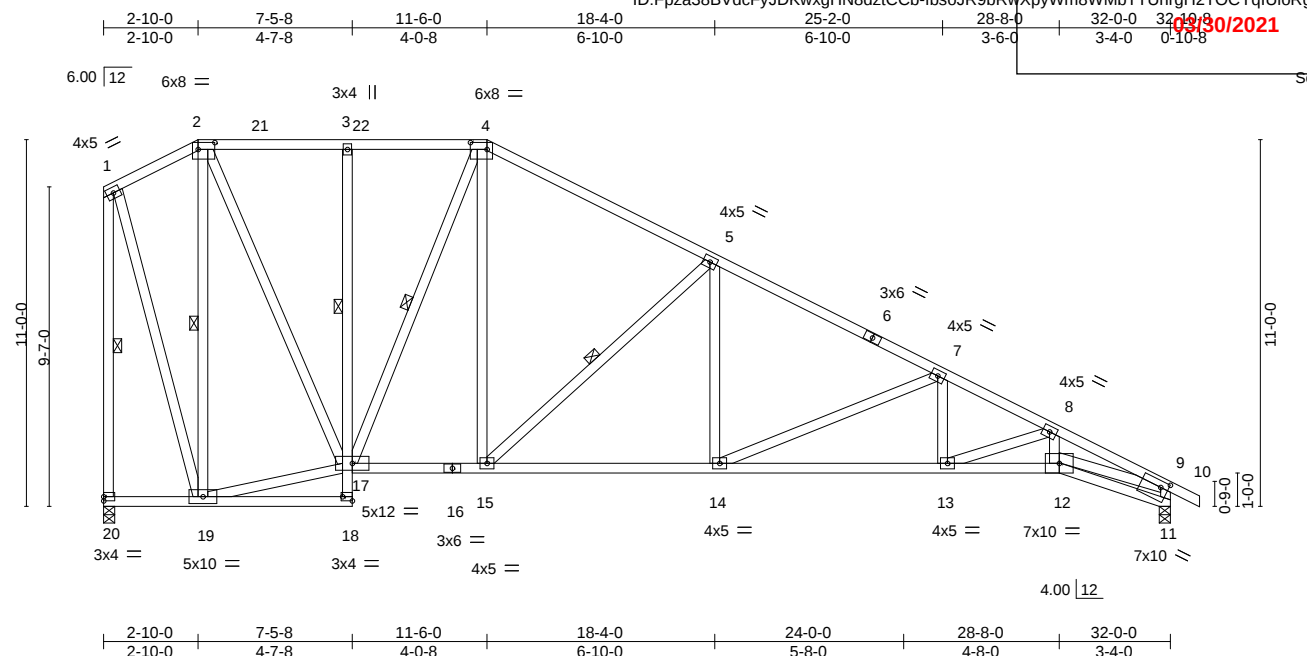


Plate Offsets (X,Y)--		[2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [11:0-2-12,0-2-4], [18:Edge,0-1-8]	
LOADING (psf)		SPACING-	
TCLL (roof)	20.0	2-0-0	CSL
Snow (Pl/Pg)	20.4/20.0	Plate Grip DOL 1.15	TC 0.88
TCDL	10.0	Lumber DOL 1.15	BC 0.88
BCLL	0.0	Rep Stress Incr YES	WB 0.81
BCDL	10.0	Code IRC2018/TPI2014	Matrix-SH
		DEFL.	
		in (loc)	l/defl L/d
		Vert(LL)	-0.17 13-14 >999 360
		Vert(CT)	-0.35 13-14 >999 240
		Horz(CT)	0.18 11 n/a n/a
		PLATES	GRIP
		MT20	244/190
		Weight: 259 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 3-17
			1 Row at midpt 2-19, 4-17, 5-15, 1-20

REACTIONS. (size) 20=0-4-0, 11=0-4-0
Max Horz 20=-330(LC 7)
Max Uplift 20=-19(LC 7), 11=-37(LC 12)
Max Grav 20=1267(LC 2), 11=1367(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-386/97, 2-3=-733/77, 3-4=-734/76, 4-5=-1270/77, 5-7=-2115/60, 7-8=-2900/57, 8-9=-3741/53, 1-20=-1242/31, 9-11=-1413/62
BOT CHORD 19-20=-78/272, 3-17=-430/86, 15-17=0/1012, 14-15=0/1811, 13-14=0/2595, 12-13=-11/3211, 11-12=-22/386
WEBS 2-19=-999/72, 17-19=0/348, 2-17=-1/1044, 4-17=-755/51, 4-15=-7/851, 5-15=-1091/121, 5-14=0/476, 7-14=-850/87, 7-13=0/356, 8-13=-689/43, 8-12=0/562, 1-19=-55/1059, 9-12=0/2943

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) Plates checked for a plus or minus 3 degree rotation about its center.
 - 8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



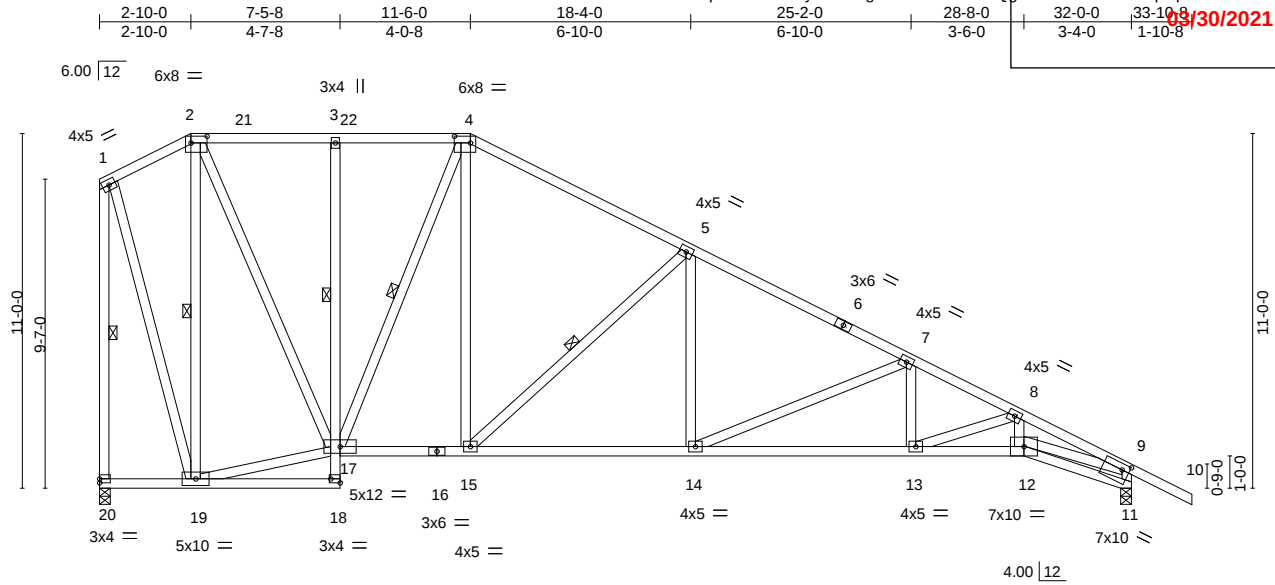
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T10	Piggyback Base	2	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Job Reference (optional)

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-LitlQgt4JNeXD7GcFLrJqUq0l27HfcoscG7VYzhDqY

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES**
LEE'S SUMMIT MISSOURI
J44982065
03/30/2021



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LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 3-17
	1 Row at midpt 2-19, 4-17, 5-15, 1-20

REACTIONS. (size) 20=0-4-0, 11=0-4-0
Max Horz 20=-337(LC 7)
Max Uplift 20=-18(LC 7), 11=-48(LC 12)
Max Grav 20=1264(LC 2), 11=1420(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-385/97, 2-3=-731/75, 3-4=-732/75, 4-5=-1267/75, 5-7=-2107/56, 7-8=-2876/46, 8-9=-3672/26, 1-20=-1239/31, 9-11=-1435/62
BOT CHORD 19-20=-77/279, 3-17=-430/86, 15-17=0/1009, 14-15=0/1804, 13-14=0/2574, 12-13=0/3149, 11-12=-36/283
WEBS 2-19=-996/70, 17-19=0/353, 2-17=0/1040, 4-17=-752/50, 4-15=-6/847, 5-15=-1086/119, 5-14=0/470, 7-14=-835/81, 7-13=0/339, 8-13=-638/27, 8-12=0/535, 1-19=-55/1057, 9-12=0/2976

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) Plates checked for a plus or minus 3 degree rotation about its center.
 - 8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

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



Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T10A	Piggyback Base	1	1	

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

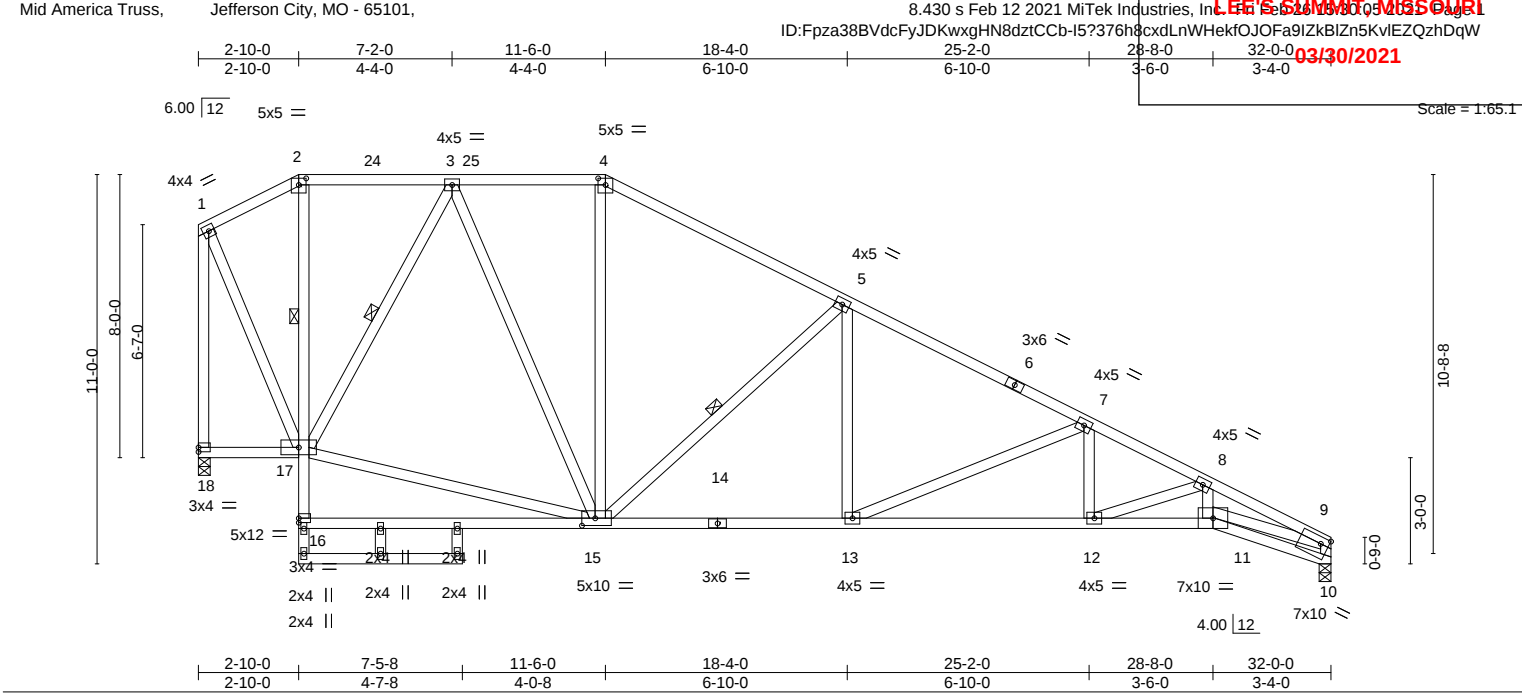
03/30/2021

14987066

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-I5?376h8cxdLnWHeKfOJOFa9lZkBlZn5KvIEZQzhDqW

Job Reference (optional)



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.16 12-13 >999	MT20	244/190		
Snow (Pl/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.34 12-13 >999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.13 10 n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0										
								Weight: 245 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 2-17 1 Row at midpt 3-17, 5-15

REACTIONS. (size) 18=0-4-0, 10=0-4-0
 Max Horz 18=-285(LC 7)
 Max Uplift 10=-39(LC 12)
 Max Grav 18=1268(LC 2), 10=1314(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-509/64, 2-3=-425/61, 3-4=-989/120, 4-5=-1251/105, 5-7=-2116/95, 7-8=-2910/96, 8-9=-3764/108, 1-18=-1226/11, 9-10=-1339/64
 BOT CHORD 13-15=0/1812, 12-13=-17/2603, 11-12=-71/3242, 10-11=-24/320
 WEBS 15-17=0/774, 3-17=-778/98, 3-15=-55/599, 5-15=-1096/128, 5-13=0/470, 7-13=-857/91, 7-12=0/369, 8-12=-717/57, 8-11=0/553, 1-17=-27/1030, 9-11=-52/3037

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T10B	PIGGYBACK BASE	5	1	

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

144987067

Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwXgHN8dzCCb-ET7pYojO8Yt30qR1r4QoTgW_MQfDTJOnDELeJzhDqU

25-2-0 6-10-0 28-8-0 3-6-0 32-0-0 3-4-0

Scale = 1:68.4

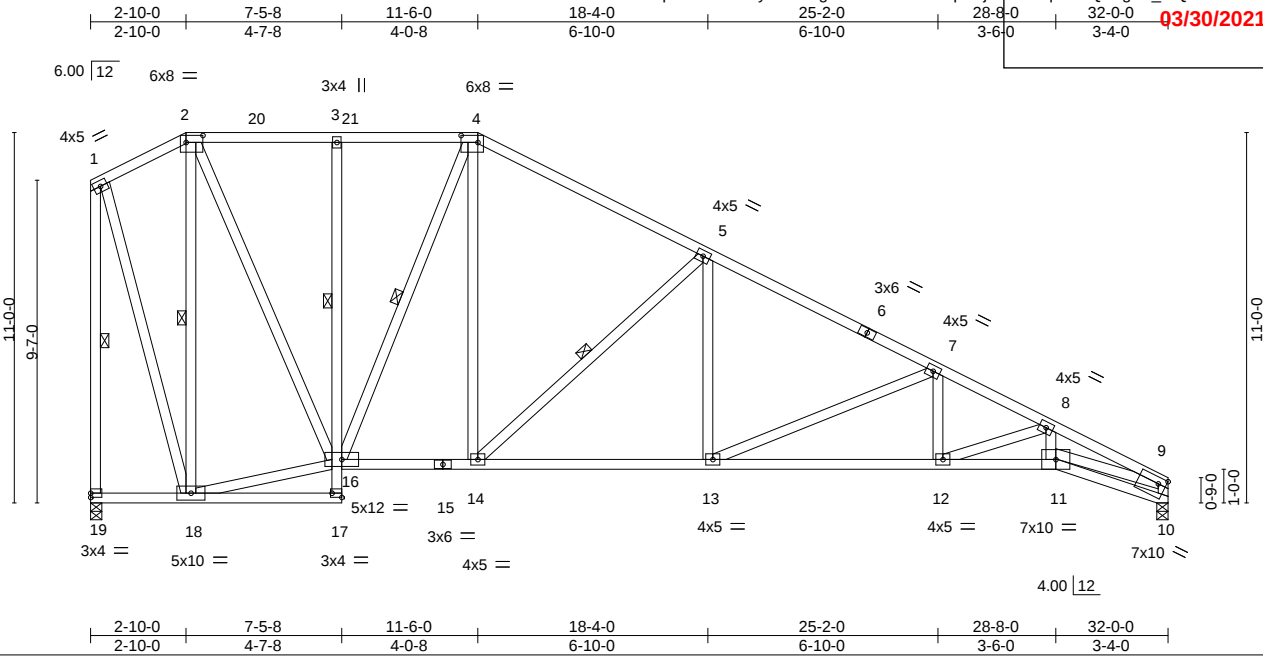


Plate Offsets (X,Y)--		[2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [10:Edge,0-2-4], [17:Edge,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.17 12-13	>999	360	MT20	244/190
Snow (Pl/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.36 12-13	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.18 10	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0									Weight: 258 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 3-16 1 Row at midpt 2-18, 4-16, 5-14, 1-19

REACTIONS. (size) 19=0-4-0, 10=0-4-0
Max Horz 19=-322(LC 7)
Max Uplift 19=-19(LC 7), 10=-26(LC 12)
Max Grav 19=1268(LC 2), 10=1314(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-386/97, 2-3=-734/78, 3-4=-735/78, 4-5=-1271/78, 5-7=-2117/63, 7-8=-2909/62, 8-9=-3765/66, 1-19=-1243/31, 9-10=-1339/50
BOT CHORD 18-19=-80/264, 3-16=-430/86, 14-16=0/1013, 13-14=0/1813, 12-13=0/2602, 11-12=-35/3242, 10-11=-21/320
WEBS 2-18=-1000/73, 16-18=-2/343, 2-16=-3/1045, 4-16=-756/51, 4-14=-8/852, 5-14=-1094/122, 5-13=0/477, 7-13=-855/90, 7-12=0/367, 8-12=-718/51, 8-11=0/555, 1-18=-55/1060, 9-11=-18/3037

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) Plates checked for a plus or minus 3 degree rotation about its center.
 - 7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 10.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

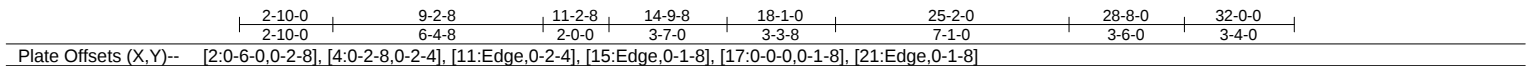


March 1,2021

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:10 2021 Page 1

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LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-5-1 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x4 SP No.2		1 Row at midpt 3-20
			10-0-0 oc bracing: 17-19
		WEBS	1 Row at midpt 2-22, 5-16, 8-14, 1-23

REACTIONS. (size) 23=0-4-0, 11=0-4-0
 Max Horz 23=-322(LC 7)
 Max Uplift 23=-13(LC 7), 11=-23(LC 12)
 Max Grav 23=1278(LC 2), 11=1319(LC 33)

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

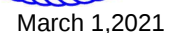
TOP CHORD 1-2=-391/93, 2-3=-1097/28, 3-4=-1253/41, 4-5=-1460/31, 5-6=-2021/134, 6-8=-2072/57,
8-9=-2950/53, 9-10=-3761/55, 1-23=-1263/18, 10-11=-1346/49

BOT CHORD 2-23=-80264, 3-20=-711/101, 19-20=0/1096, 4-19=0/495, 6-14=-492/140,
13-14=0/2650, 12-13=-243238, 11-12=-22/329

WEBS 2-22=-1087/16, 20-22=0/402, 2-20=0/1255, 3-19=-50/585, 16-19=0/1596, 5-19=-27/300,
5-16=-1335/0, 14-16=0/1210, 5-14=-73/1398, 8-14=-961/96, 8-13=0/377, 9-13=-677/45,
9-12=0/545, 1-22=-48/1093, 10-12=-6/3022

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) TLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 11.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WARNING – verify design parameters and READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MHF433 (Rev. 3/25/2020) BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**
Safety Information available from Truss Plate Institute, 2602 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	T11GE	GABLE	1	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Job Reference (optional)

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-bRwibVnXz4VM6bJ_ee0zAkMTfNHoute7xVy6JWzhDqP

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT MISSOURI
03/30/2021

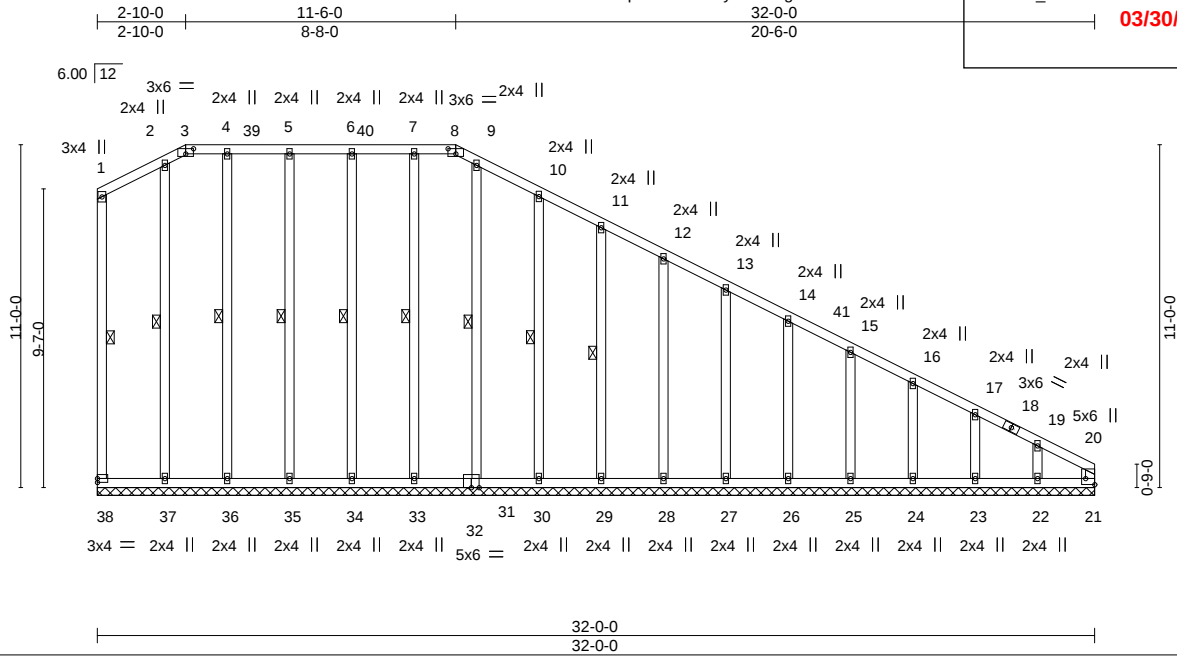


Plate Offsets (X, Y)-- [3:0-3-0,0-2-0], [8:0-3-0,0-2-0], [20:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pl/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	21	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							Weight: 274 lb	FT = 3%
BCDL	10.0											

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt
OTHERS	2x4 SP No.2		1-38, 2-37, 4-36, 5-35, 6-34, 7-33, 9-31, 10-30, 11-29

REACTIONS. All bearings 32-0-0.
 (lb) - Max Horz 38=-321(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23 except 22=-121(LC 7)
 Max Grav All reactions 250 lb or less at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 17-19=-254/79, 19-20=-300/89
 BOT CHORD 37-38=-80/263, 36-37=-80/263, 35-36=-80/263, 34-35=-80/263, 33-34=-80/263, 31-33=-80/263, 30-31=-80/263, 29-30=-80/263, 28-29=-80/263, 27-28=-80/263, 26-27=-80/263, 25-26=-80/263, 24-25=-80/263, 23-24=-80/263, 22-23=-80/263, 21-22=-80/263

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23 except (it=lb) 22=121.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

MiTek®
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

H3-94

Truss

V1

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-7nQBxNA DBDfgagLK436i0hE2ZhYJ7ri_W8SLz6zhDpu

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

Scale = 1:20.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.74	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 39 lb	FT = 3%

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

REACTIONS. (size) 1=11-10-11, 3=11-10-11, 4=11-10-11
Max Horz 1=30(LC 8)
Max Uplift 1=-22(LC 11), 3=-27(LC 12)
Max Grav 1=247(LC 15), 3=247(LC 16), 4=422(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-289/47

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Plates checked for a plus or minus 3 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 1,2021

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

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

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

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job

H3-94

Truss

V2

Truss Type

Valley

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021

MiTek Industries, Inc.

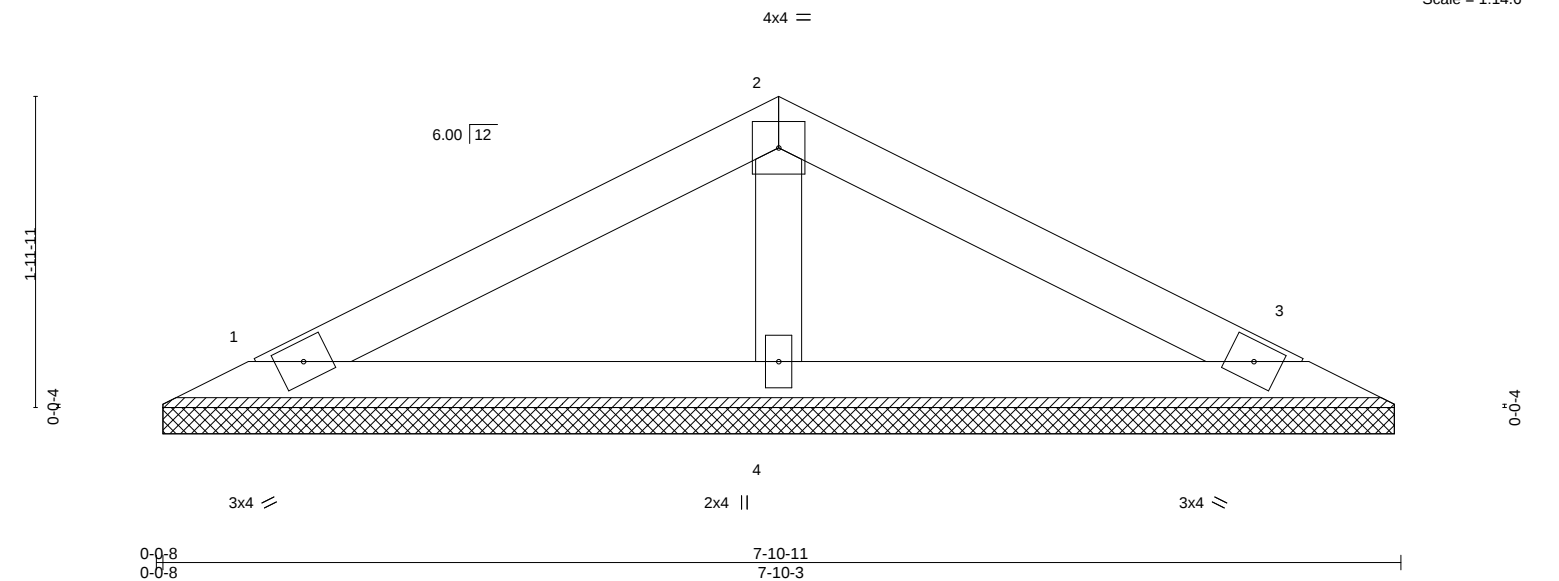
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LEE'S SUMMIT, MISSOURI

03/30/2021

Scale = 1:14.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

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

REACTIONS. (size) 1=7-9-11, 3=7-9-11, 4=7-9-11
Max Horz 1=19(LC 8)
Max Uplift 1=14(LC 11), 3=17(LC 12)
Max Grav 1=156(LC 15), 3=156(LC 16), 4=263(LC 2)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Gable requires continuous bottom chord bearing.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES**

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 12 19:30:53 2021 Page 1

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$$\frac{3-10-11}{3-10-3}$$
[illegible]

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 3-10-11 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-9-11, 3=3-9-11
 Max Horz 1=-8(LC 7)
 Max Uplift 1=-1(LC 11), 3=-1(LC 12)
 Max Grav 1=105(LC 2), 3=105(LC 2)

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=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



WARNING – verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE (M1-7473 REV. 3/19/2020) BEFORE USE. Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

H3-94

Truss

V4

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-MWTaQSHt4_oP92X36Smpta6hnnJe0kvfJb17Kn5zhDpl

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

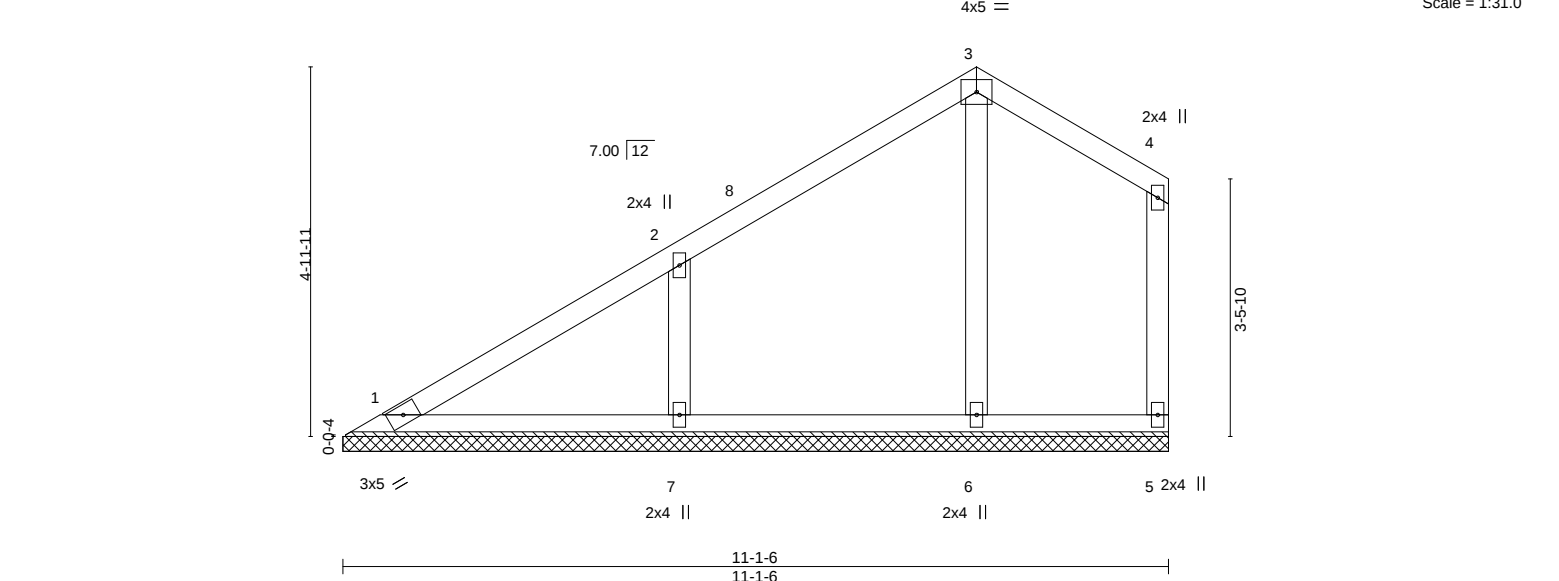
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

14987073

Scale = 1:31.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00				
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							
BCDL	10.0										

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

REACTIONS.	
(lb) - Max Horz	1=134(LC 8)
Max Uplift	All uplift 100 lb or less at joint(s) 5, 7
Max Grav	All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=406(LC 22)

FORCES.	
(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
WEBS	2-7=-313/130

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Plates checked for a plus or minus 3 degree rotation about its center.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job

H3-94

Truss

V5

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dzTCCb-qioydcIVrWFnC6FIAH2Qoettj_ITMESqhtJXzhDpk

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

144987074

Page 1

Mid America Truss,

Jefferson City, MO - 65101,

6-9-13

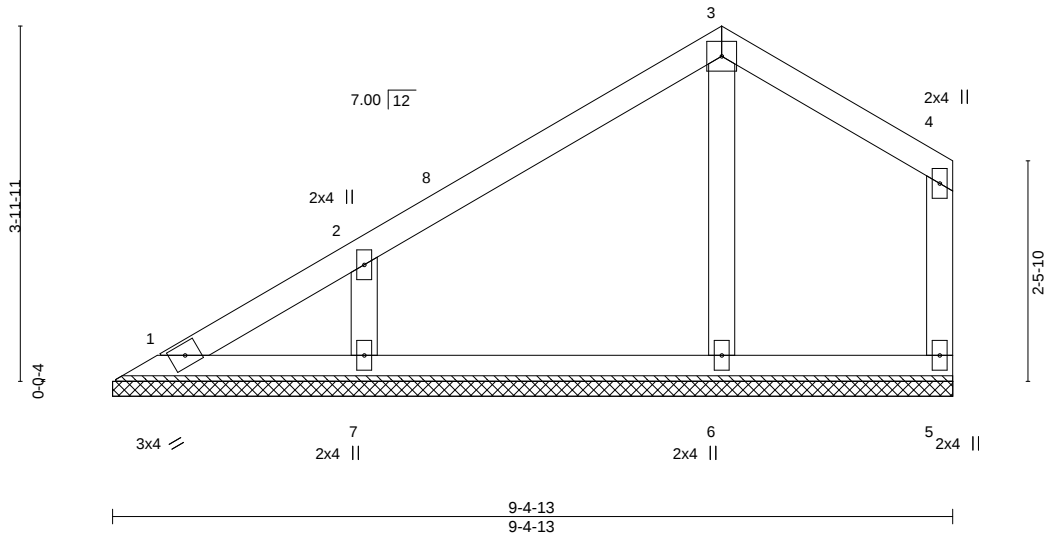
6-9-13

9-4-13

2-7-0

4x4 =

Scale = 1:25.8



LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	l/defl	n/a	L/d	999	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	n/a	999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	5	n/a	n/a					
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								Weight: 39 lb		FT = 3%	
BCDL	10.0														

LUMBER-

TOP CHORD

2x4 SP No.2

BOT CHORD

2x4 SP No.2

WEBS

2x4 SP No.2

OTHERS

2x4 SP No.2

BRACING-

TOP CHORD

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

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 9-4-13.

(lb) - Max Horz 1=102(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=335(LC 22)

FORCES.

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

WEBS 2-7=-262/109

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Gable requires continuous bottom chord bearing.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

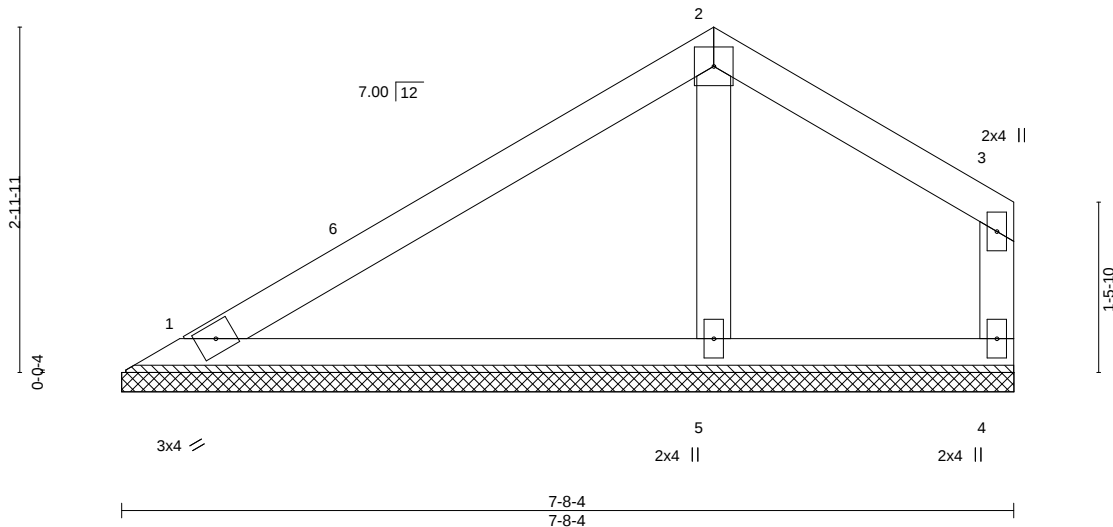
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
H3-94	V6	GABLE	1	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. 14987075	

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-luaLqYJ7cc26OMhSDtoHy?B_E6K9Cpdb2LcRszzhDpj

5-1-3 5-1-3 7-8-4 2-7-0

4x4 =

Scale = 1:19.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

Weight: 29 lb FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-8-4, 4=7-8-4, 5=7-8-4
 Max Horz 1=70(LC 8)
 Max Uplift 1=-14(LC 11), 4=-24(LC 12)
 Max Grav 1=174(LC 15), 4=107(LC 16), 5=305(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

H3-94

Truss

V7

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-m58j2uJINvAzOWFenaJWVDjEMWbOxG6IH?M_OPzhDpi

03/30/2021

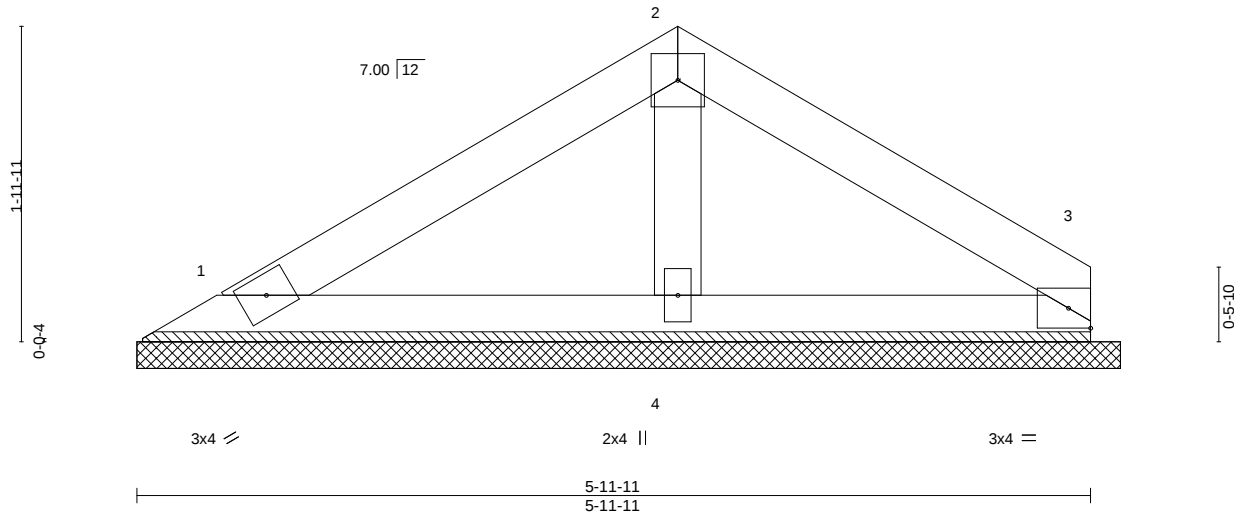
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/30/2021

Scale = 1:14.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.18	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.05	n/a	-	n/a			
TCDL	10.0	Lumber DOL	1.15	WB	0.02	n/a	-	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00	3	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 20 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-11-11 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.2		

REACTIONS. (size) 1=6-1-15, 3=6-1-15, 4=6-1-15
 Max Horz 1=-35(LC 7)
 Max Uplift 1=-12(LC 11), 3=-15(LC 12)
 Max Grav 1=136(LC 15), 3=125(LC 16), 4=207(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

Job

H3-94

Truss

V8

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

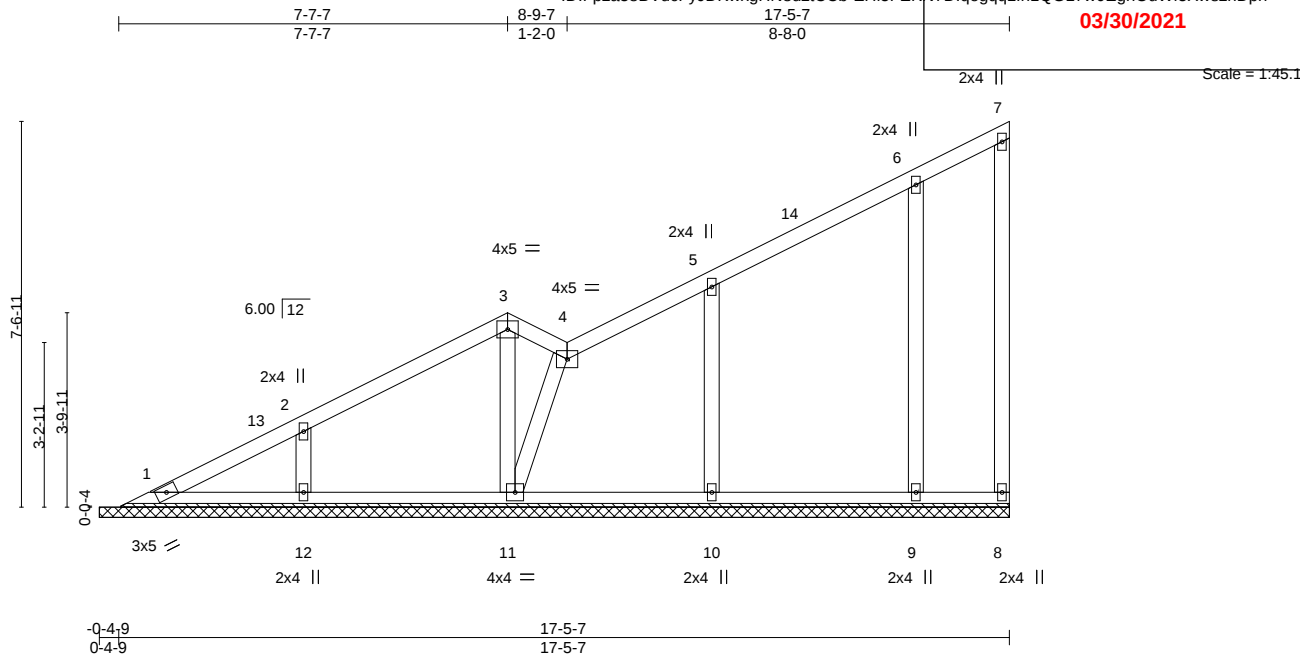
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8.430 s Feb 12 2021 MiTek Industries, Inc

ID:Fpza38BVdcFyJDKwxgHN8dzTCb-EHi5FEKN7DlqegqQLr11QGL7w0EghOuWf5XwszhDph

Mid America Truss,

Jefferson City, MO - 65101,



LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.				PLATES		GRIP		
TCLL (roof)	20.0		Plate Grip DOL	1.15		TC	0.43	Vert(LL)	n/a	(loc)	-	l/defl	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0		Lumber DOL	1.15		BC	0.08	Vert(CT)	n/a		-	n/a	999			
TCDL	10.0		Rep Stress Incr	YES		WB	0.14	Horz(CT)	-0.00		8	n/a	n/a			
BCLL	0.0		Code IRC2018/TPI2014			Matrix-P									Weight: 91 lb	FT = 3%
BCDL	10.0															

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

REACTIONS. All bearings 17-10-0.
 (lb) - Max Horz 1=236(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 12, 11, 10, 9
 Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 12=398(LC 33), 11=319(LC 2), 10=378(LC 35), 9=270(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-12=-320/105, 5-10=-296/93

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) Plates checked for a plus or minus 3 degree rotation about its center.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 12, 11, 10, 9.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job

H3-94

Truss

V9

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

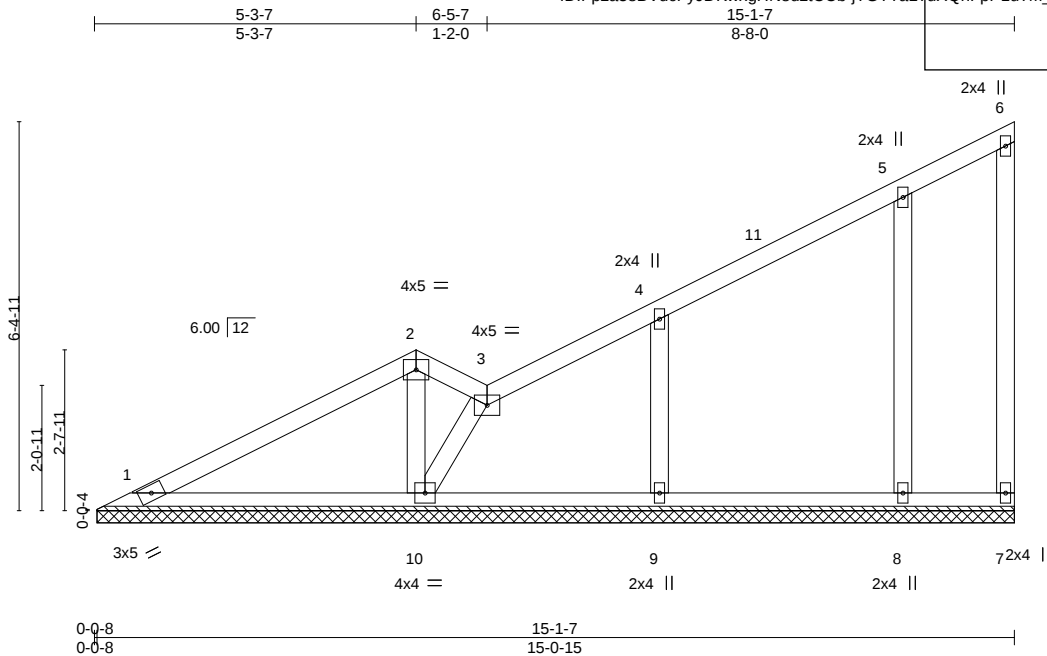
03/30/2021

Mid America Truss,

Jefferson City, MO - 65101,

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Scale = 1:37.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

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

REACTIONS.	
(lb) - Max Horz	1=198(LC 8)
Max Uplift	All uplift 100 lb or less at joint(s) 7, 10, 9, 8
Max Grav	All reactions 250 lb or less at joint(s) 1, 7 except 10=391(LC 2), 9=372(LC 35), 8=272(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
WEBS	4-9=-296/93

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Gable requires continuous bottom chord bearing.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10, 9, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job

H3-94

Truss

V10

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-bz_Zk7BryXnXCqwXendxYvmMx4xgsll7loBvVYzhDpt

03/30/2021

2-11-7

2-11-7

4-1-7

1-2-0

12-9-7

8-8-0

2x4 ||

6

2x4 ||

5

2x4 ||

4

4x5 =

2

4x5 ||

3

10

1

6.00 | 12

11

3x5

2x4 ||

3x5

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2x4 ||

8

7 2x4 ||

12-9-7

12-8-15

0-0-8

0-0-8

5-2-11

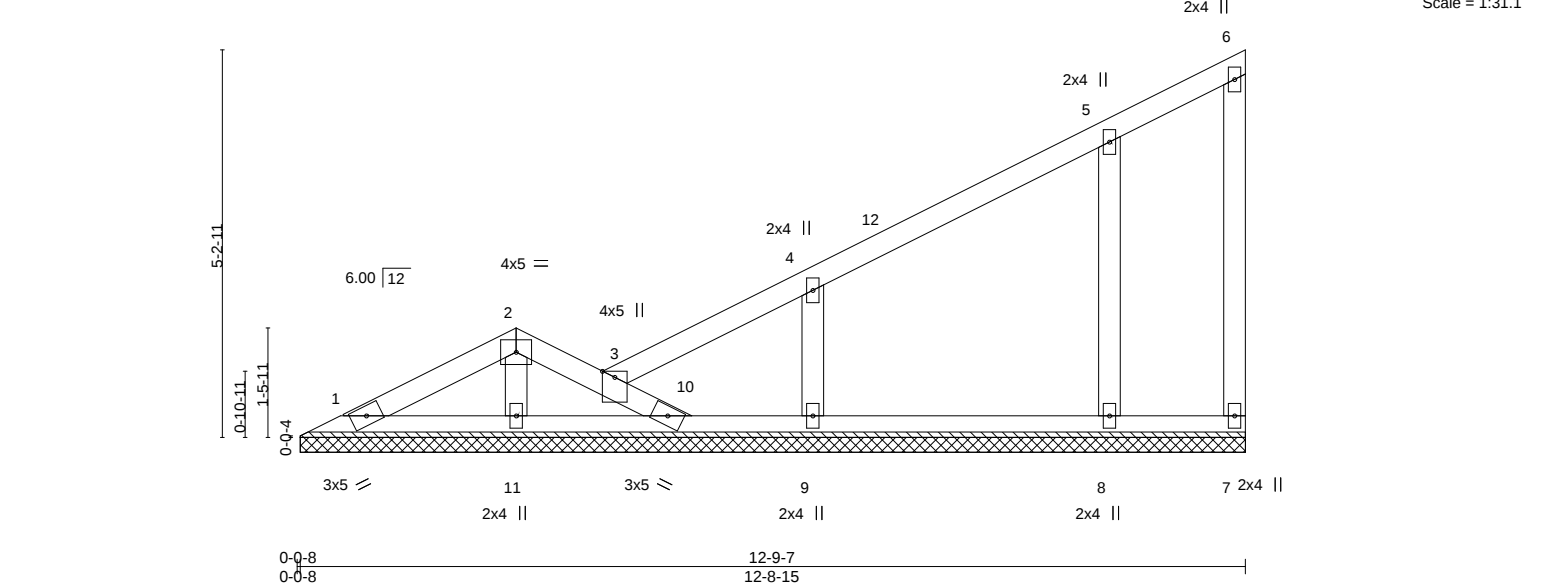
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1-5-11

0-0-4

0-0-4

Scale = 1:31.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 58 lb		FT = 3%	

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

REACTIONS. All bearings 12-8-15.
 (lb) - Max Horz 1=159(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 11, 9, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 10, 7, 11 except 9=337(LC 35), 8=271(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-9=-268/91

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) Plates checked for a plus or minus 3 degree rotation about its center.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 11, 9, 8.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 1,2021

Job

H3-94

Truss

V11

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/30/2021

14987080

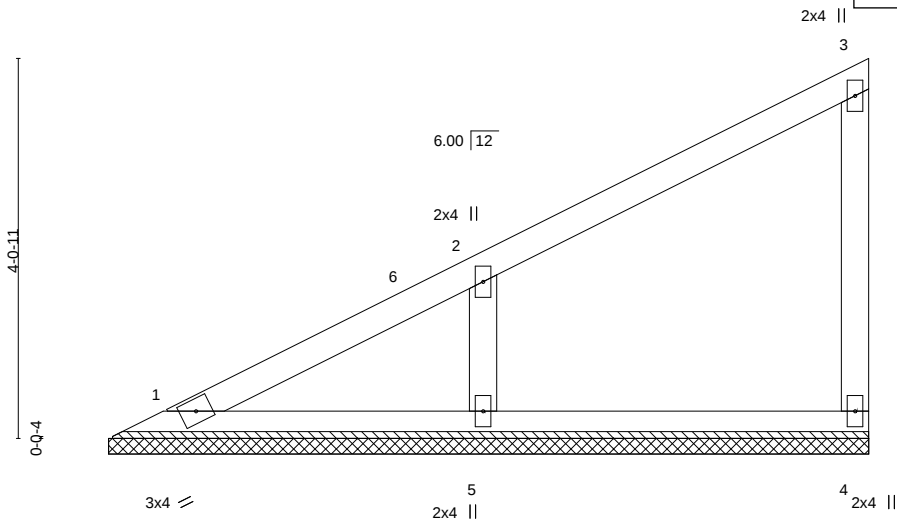
Lee's Summit, Missouri

Mid America Truss,

Jefferson City, MO - 65101,

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-3AXxxTCUjrvOpzvVjBU8A56JVXUGObIGH_SxS17zhDps

Scale = 1:24.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.26	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.10	n/a	-	n/a	999		
TCDL	10.0	Lumber DOL	1.15	WB	0.04	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 32 lb	FT = 3%

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

REACTIONS.	
(size)	1=8-1-7, 4=8-1-7, 5=8-1-7
Max Horz	1=121(LC 8)
Max Uplift	4=-14(LC 8), 5=-53(LC 11)
Max Grav	1=102(LC 23), 4=159(LC 15), 5=420(LC 15)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
WEBS	2-5=-327/108

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Gable requires continuous bottom chord bearing.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	V12	Valley	1	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. LEE'S SUMMIT, MISSOURI

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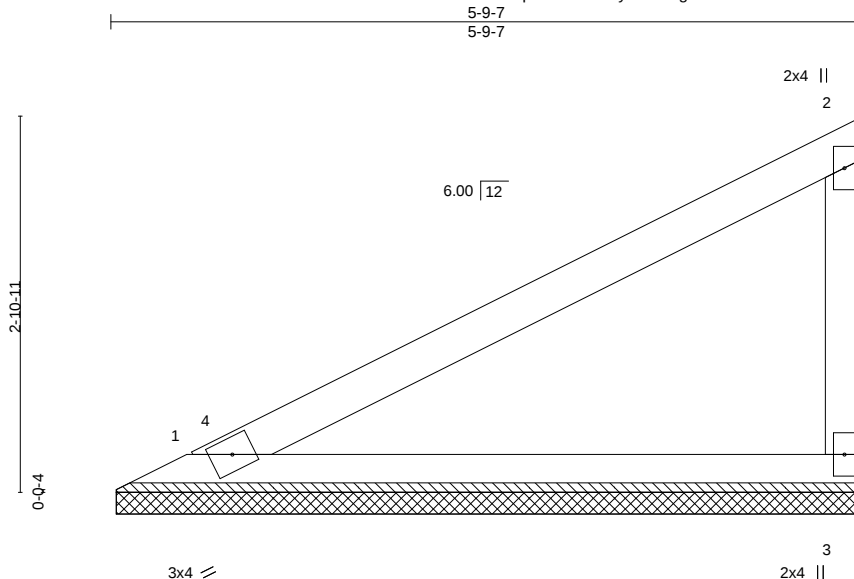
**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES**

J44987081

LEE'S SUMMIT, MISSOURI

03/30/2021

Scale = 1:17.7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-8-15, 3=5-8-15
Max Horz 1=83(LC 8)
Max Uplift 1=-3(LC 11), 3=-19(LC 11)
Max Grav 1=239(LC 15), 3=249(LC 15)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

H3-94

Truss

V13

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

RELEASE FOR

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AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/30/2021

14987082

Lee's Summit, Missouri

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-XM5J9pC6U81FR73vBfPdKshJub3KBaQD6g0aRzhDpr

Scale = 1:21.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 27 lb	FT = 3%

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

REACTIONS.	(size)
1=6-11-7, 4=6-11-7, 5=6-11-7	
Max Horz 1=102(LC 8)	
Max Uplift 4=-11(LC 8), 5=-45(LC 11)	
Max Grav 1=106(LC 23), 4=100(LC 15), 5=372(LC 15)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS	2-5=-294/91

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 1,2021

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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

H3-94

Truss

V14

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

8.430 s Feb 12 2021 MiTek Industries, Inc.

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LEE'S SUMMIT, MISSOURI

03/30/2021

14987083

8.430 s Feb 12 2021 MiTek Industries, Inc.

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	BC	0.08	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	WB	0.07	Horz(CT)	-0.00	5	n/a	n/a			
BCLL	0.0	Matrix-P									
BCDL	10.0										
										Weight: 43 lb	FT = 3%

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

REACTIONS. All bearings 9-7-7.
 (lb) - Max Horz 1=146(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 5, 7, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=340(LC 2), 6=335(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-255/100, 3-6=-269/76

NOTES-
 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 3) Unbalanced snow loads have been considered for this design.
 4) Plates checked for a plus or minus 3 degree rotation about its center.
 5) Gable requires continuous bottom chord bearing.
 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7, 6.
 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 1, 2021

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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	V15	GABLE	1	1	

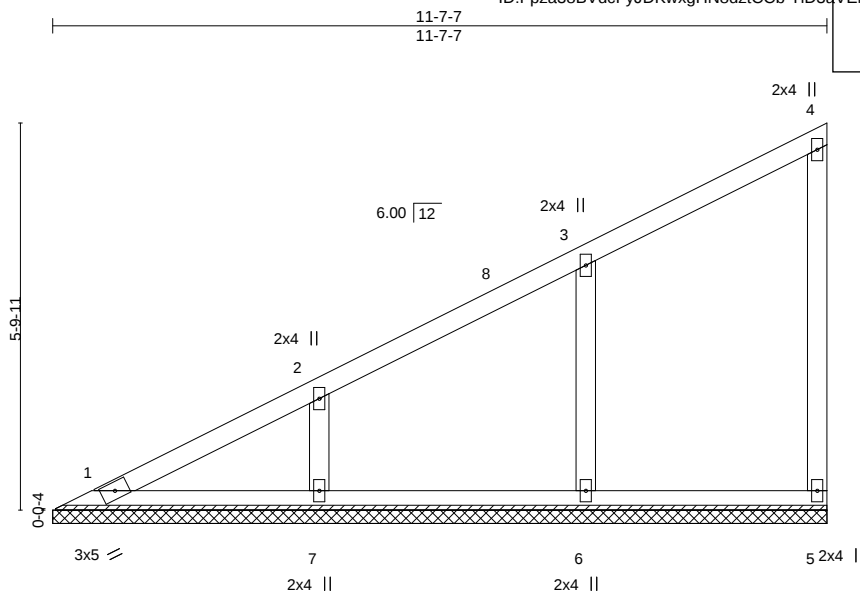
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64080-1501 Page 1

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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

Scale = 1:34.6



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	5	n/a	n/a			
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 51 lb	FT = 3%	
BCDL	10.0												

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-7-7.
 (lb) - Max Horz 1=178(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 5, 7, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=326(LC 2), 6=389(LC 15)

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

WEBS 3-6=-306/97

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

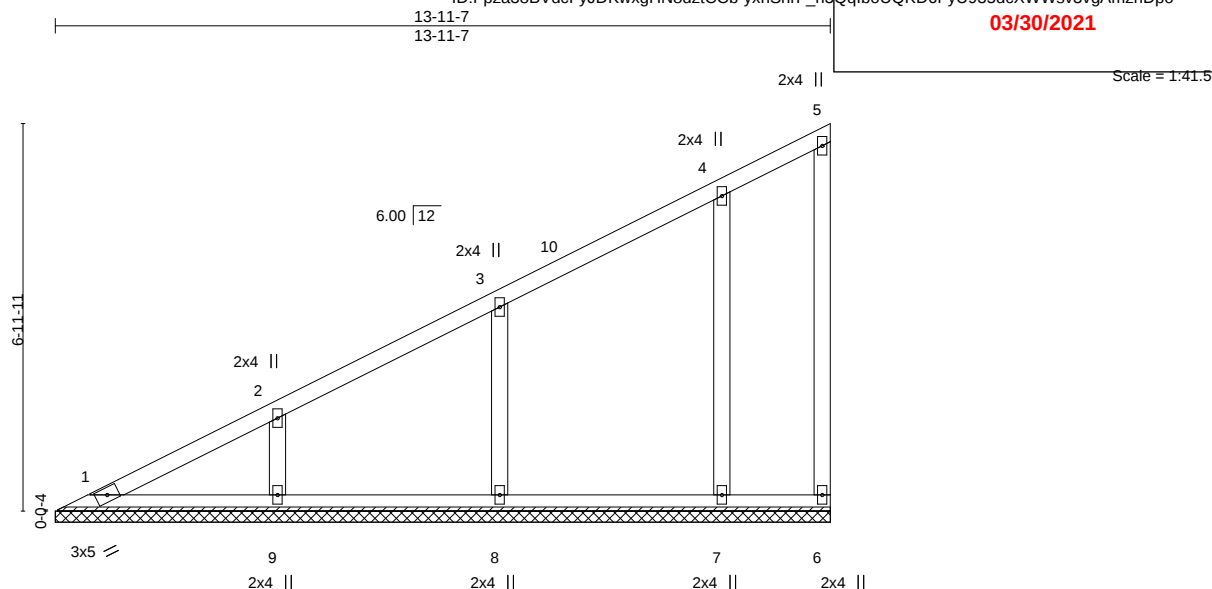
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	V16	GABLE	1	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64085 Page 1

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.15	Horz(CT)	-0.00	6	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						Weight: 68 lb	FT = 3%
BCDL 10.0	Code IRC2018/TPI2014								

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-11-7.
 (lb) - Max Horz 1=217(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 6, 9, 8, 7
 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 9=326(LC 2), 8=330(LC 2), 7=337(LC 15)

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

WEBS 4-7=-269/78

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9, 8, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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 Chesterfield, MO 63017

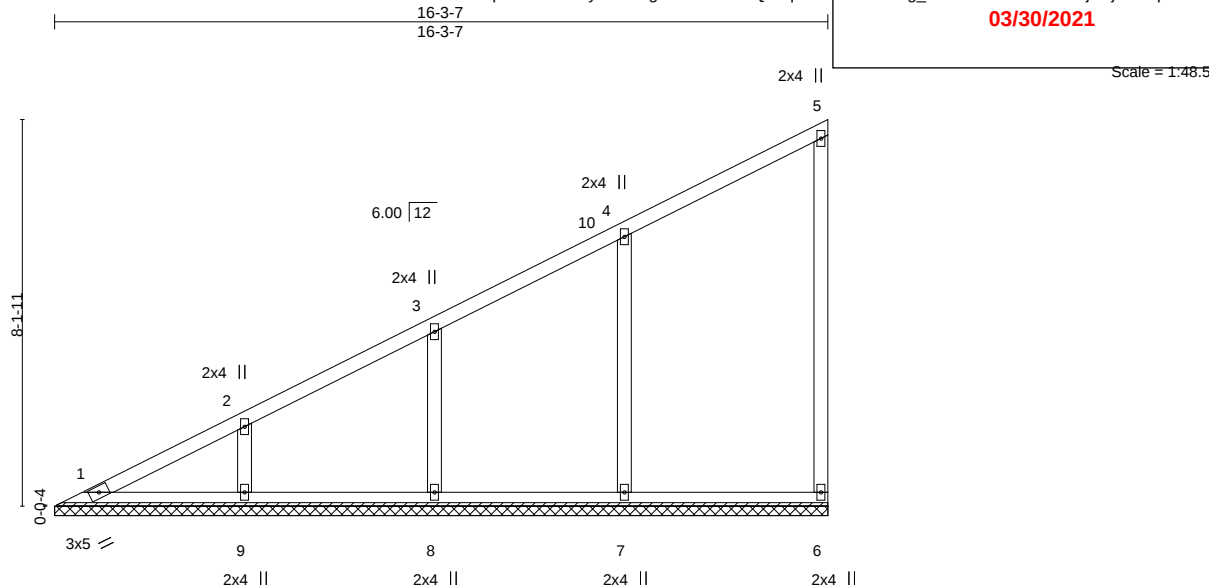
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-94	V17	GABLE	1	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. LEE'S SUMMIT, MISSOURI

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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.52	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.19	Horz(CT)	-0.00	6	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P					Weight: 77 lb	FT = 3%
BCDL 10.0	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 16-3-7.
 (lb) - Max Horz 1=255(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 6, 9, 8, 7
 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 9=332(LC 2), 8=305(LC 2), 7=421(LC 15)

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

WEBS 4-7=-328/109

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9, 8, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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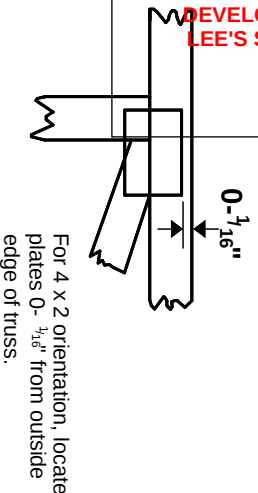
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Symbols

RELEASE FOR
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021

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.



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

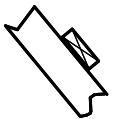
* Plate location details available in **MiTek 20120** software or upon request.

PLATE SIZE

4 X 4

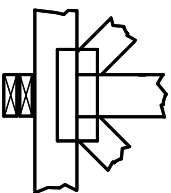
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

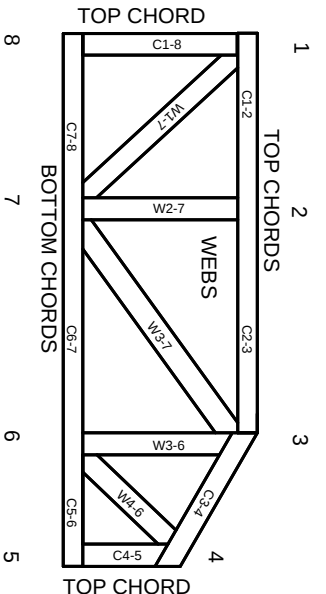


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:
ANSI/TP1.1: 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

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.