



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

03/31/2021

MiTek USA, Inc.

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

Re: H3-93
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: I45026742 thru I45026771

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

Missouri COA: Engineering 001193



March 3, 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

Truss

Truss Type

Qty

Ply

SUMMIT HOMES

H3-93

CJ1

Diagonal Hip Girder

2

1

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. File: M30153 MISSOURI

ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-xWKZ1q?3dwdErS1VBgf3eBkWs0l34ag0o17Gzew?S

03/31/2021

1-2-14

1-2-14

6-10-5

6-10-5

2x4 ||

3

3.54 | 12

Special Special 7

4x4 = 6

2

1

5

2x4 ||

8

Special Special

4

4x4 =

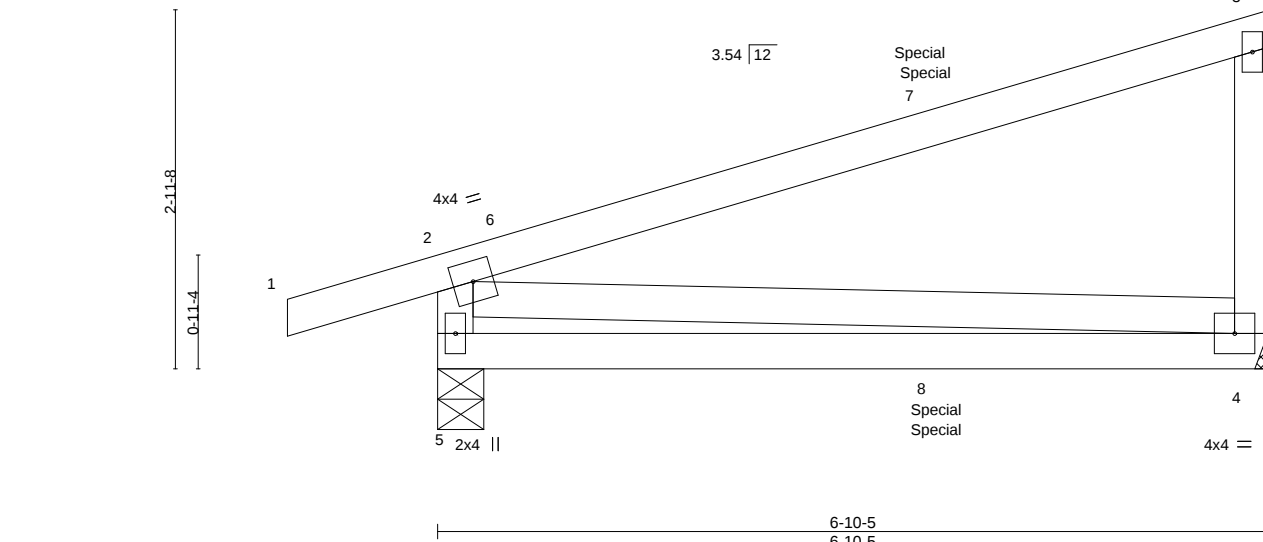
6-10-5

6-10-5

2-11-8

0-11-4

Scale = 1:19.0



LOADING (psf)		SPACING-		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	0.01	4-5	>999	360				MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.12	4-5	>650	240							
TCDL	10.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	-0.00	4	n/a	n/a							
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P													
BCDL	10.0																
														Weight: 36 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 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		

REACTIONS.	
(size)	5=0-4-9, 4=Mechanical
Max Horz	5=91(LC 8)
Max Uplift	5=-57(LC 7), 4=-22(LC 8)
Max Grav	5=374(LC 16), 4=301(LC 16)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-5=-306/96

- 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 2 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 57 lb uplift at joint 5 and 22 lb uplift at joint 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.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 36 lb up at 4-1-7, and 63 lb down and 36 lb up at 4-1-7 on top chord, and 13 lb down and 5 lb up at 4-1-7, and 13 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.
 - 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, 2-3=-51, 4-5=-20	
Concentrated Loads (lb)	
Vert: 7=-31(F=-16, B=-16) 8=-6(F=-3, B=-3)	



March 3, 2021

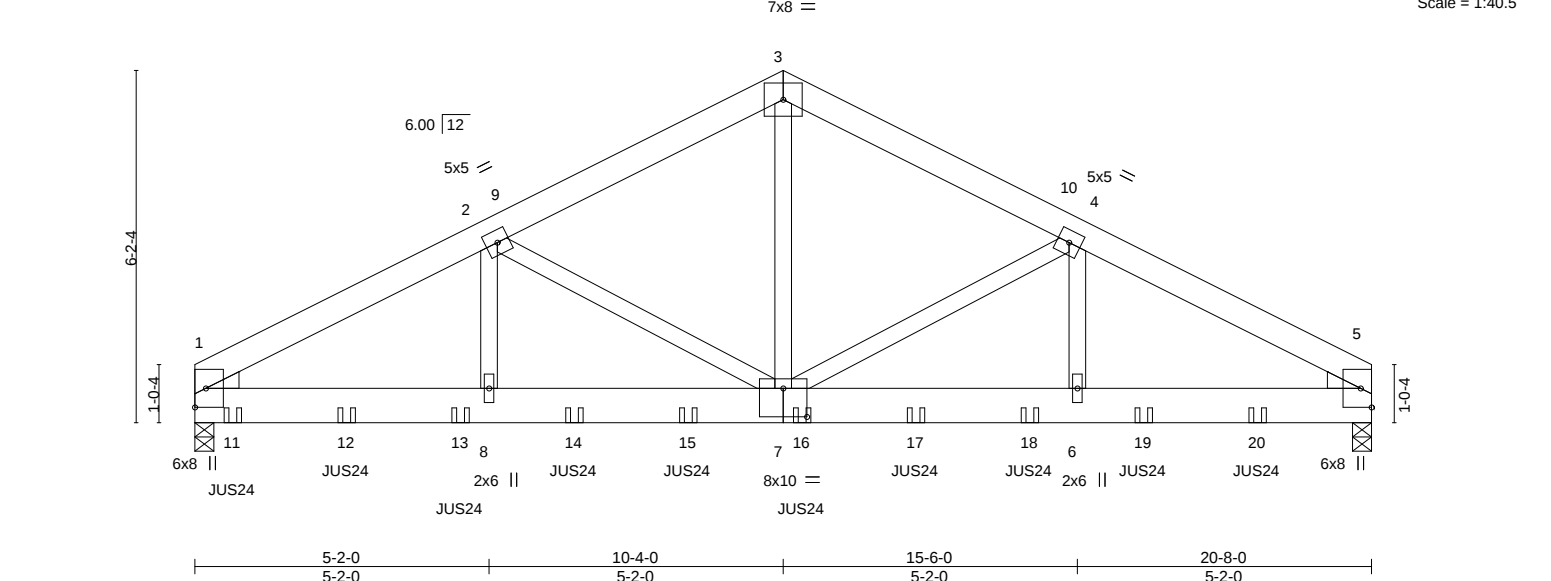


Plate Offsets (X,Y)-- [7:0-5-0,0-6-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC 0.43		in (loc) l/defl L/d		MT20	
Snow (Pl/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.31		Vert(LL) -0.05 6-7 >999 360		GRIP 244/190	
TCDL	10.0	Lumber DOL 1.15		WB 0.36		Vert(CT) -0.08 6-7 >999 240			
BCLL	0.0	Rep Stress Incr NO		Matrix-SH		Horz(CT) 0.02 5 n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014						Weight: 304 lb FT = 3%	

LUMBER-

TOP CHORD 2x6 SP No.1

BOT CHORD 2x8 SP 2400F 2.0E

WEBS 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS. (size) 1=0-4-0, 5=0-4-0
Max Horz 1=64(LC 10)
Max Uplift 1=400(LC 11), 5=334(LC 12)
Max Grav 1=3334(LC 2), 5=3331(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4959/573, 2-3=-3697/438, 3-4=-3697/438, 4-5=-5215/566
BOT CHORD 1-8=-494/4190, 7-8=-494/4190, 6-7=-428/4412, 5-6=-428/4412
WEBS 3-7=-319/2912, 4-7=-1383/215, 4-6=-121/1434, 2-7=-1125/223, 2-8=-178/1176

- 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 2 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 400 lb uplift at joint 1 and 334 lb uplift at joint 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 JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-0 from the left end to 18-8-0 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

Continued on page 2



March 3,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	G1	Common Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO Page 2

ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-tvSJSW1J9Yty5lBuJ5hXj4zemJaGmuDs8KH8C9zew?Q

RELEASE FOR
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/31/2021

145026743

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

Concentrated Loads (lb)

Vert: 11=-299(B) 12=-294(B) 13=-290(B) 14=-290(B) 15=-521(B) 16=-417(B) 17=-417(B) 18=-417(B) 19=-417(B) 20=-547(B)

 **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

H3-93

Truss

G2

Truss Type

Roof Special Girder

Qty

1

Ply

2

SUMMIT HOMES

Job Reference (optional)

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

8.430 s Feb 12 2021 MiTek Industries, Inc.

165026744

8.430 s Feb 12 2021 MiTek Industries, Inc.

165026744

Mid America Truss,

Jefferson City, MO - 65101,

ID: Z_Eg7_y5DGhi_ENVQbP05Vz4M0m-L5?ifs2xwr?pivm4spCmFHVVuUjvqVIF0Mz1ikbwz?P

13-4-0

3-4-0

3-4-0

3-4-0

6-8-0

3-4-0

10-0-0

3-4-0

13-4-0

3-4-0

6x6 =

5x5 =

5x5 =

5x6 =

5x6 =

4-4-4

1-0-4

1-0-4

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

THD26

THD26

THD26

THD26

THD26

3-4-0

3-4-0

6-8-0

3-4-0

10-0-0

3-4-0

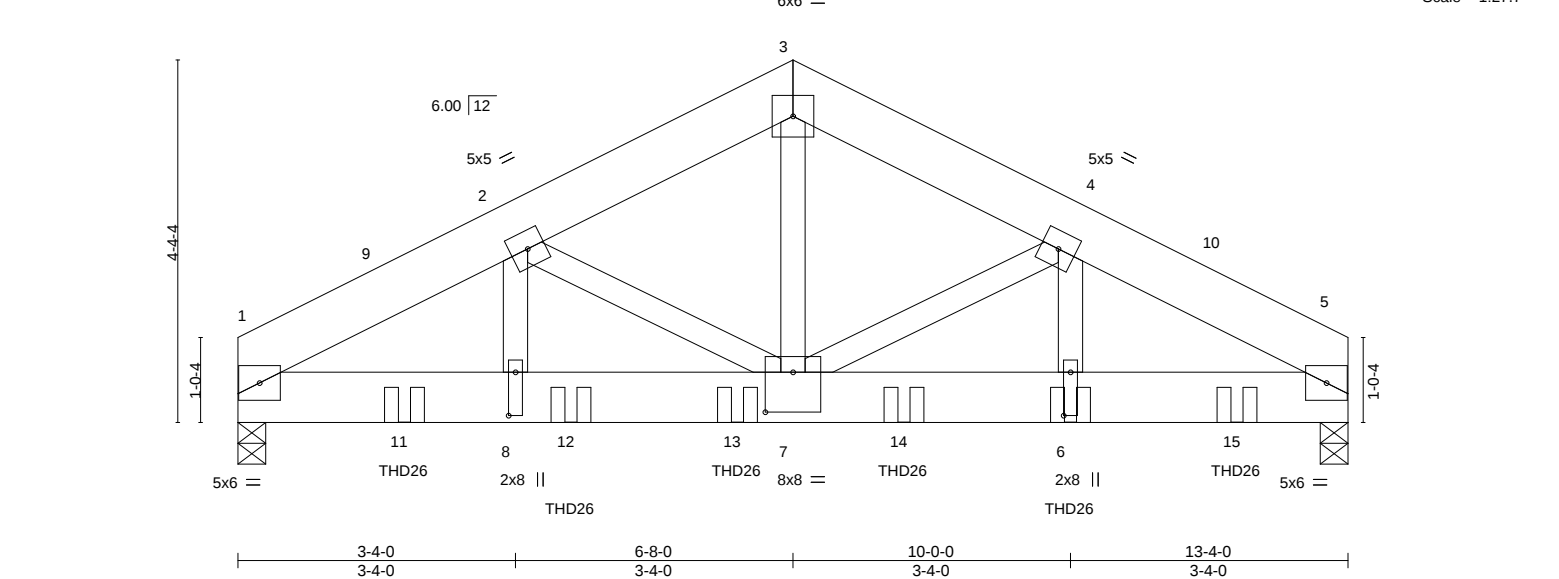
13-4-0

3-4-0

Plate Offsets (X,Y)--

[6:0-6-4,0-1-0], [7:0-4-0,0-5-12], [8:0-6-4,0-1-0]

Scale = 1:27.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pl/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(LL)	-0.03	6-7	>999	360	
TCDL	10.0	Rep Stress Incr	NO	WB	0.56	Vert(CT)	-0.06	6-7	>999	240	
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P		Horz(CT)	0.02	5	n/a	n/a	
BCDL	10.0										
								Weight: 216 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x8 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 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=-42(LC 7)
Max Uplift	1=-42(LC 11), 5=-46(LC 12)
Max Grav	1=4984(LC 2), 5=5466(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-7582/66, 2-3=-5745/75, 3-4=-5743/75, 4-5=-7685/69
BOT CHORD	1-8=-60/6242, 7-8=-60/6242, 6-7=-24/6327, 5-6=-24/6327
WEBS	3-7=-29/4595, 4-7=-1378/65, 4-6=0/2428, 2-7=-1279/62, 2-8=0/2313

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-6 2x4 - 1 row at 0-5-0 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=1.15
 - 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 2 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1 and 46 lb uplift at joint 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 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 2-0-0 from the left end to 12-0-0 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



March 3, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	G2	Roof Special Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64080 Page 2
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RELEASE FOR
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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/31/2021

J45026744

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-51, 3-5=-51, 1-5=-20

Concentrated Loads (lb)

Vert: 6=-1386(B) 11=-1386(B) 12=-1386(B) 13=-1386(B) 14=-1386(B) 15=-1386(B)



Job

H3-93

Truss

H1

Truss Type

Hip Girder

Qty

1

Ply

2

SUMMIT HOMES

Job Reference (optional)

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

145026745

FILED IN MISSOURI

03/31/2021

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc

ID:Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-HU7S4Y3CSTFXyDwT_EEELib8sXdqzJRJqHwopTzew?N

-0-10-8

4-11-4

7-0-12

12-0-0

0-10-8

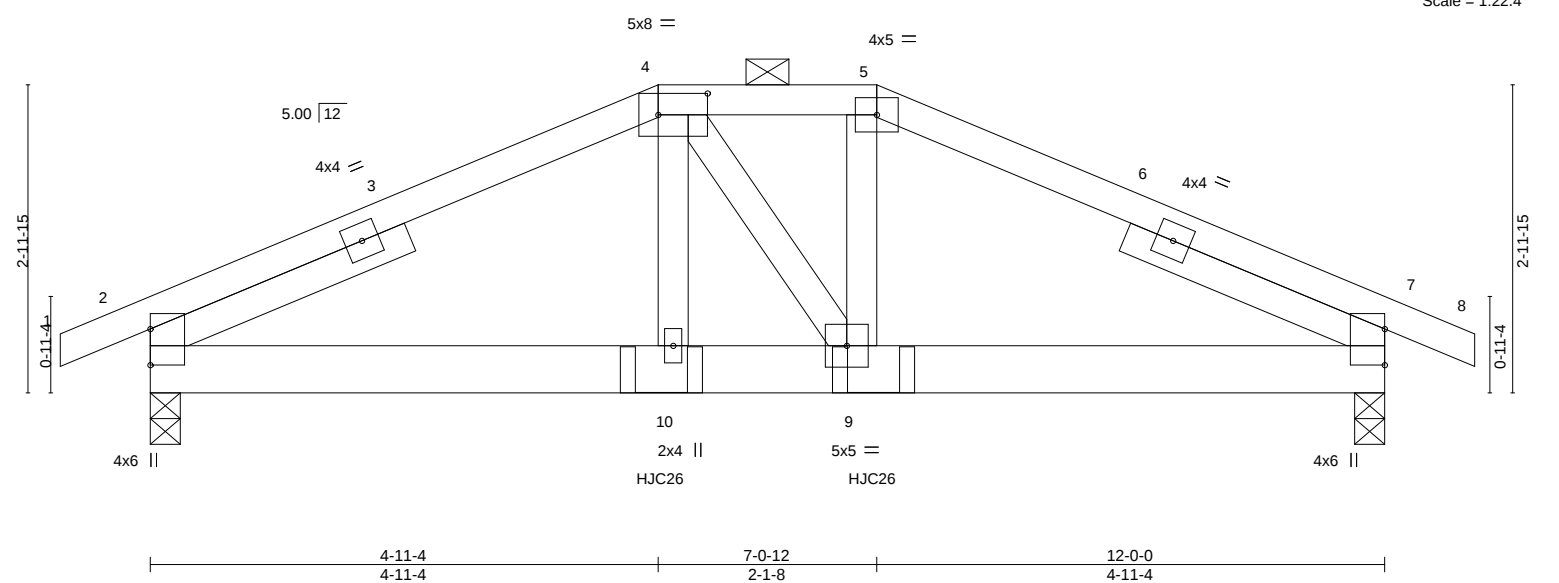
0-10-8

4-11-4

12-10-8

0-10-8

Scale = 1:22.4



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0		2-0-0	TC	0.50	in	(loc)	I/defl	L/d	MT20		244/190	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.13	Vert(LL)	-0.02	10	>999				
TCDL	10.0	Lumber DOL	1.15	WB	0.07	Vert(CT)	-0.04	10	>999				
BCLL	0.0	Rep Stress Incr	NO	Matrix-P		Horz(CT)	0.01	7	n/a				
BCDL	10.0	Code IRC2018/TPI2014											
Weight: 138 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
BOT CHORD	2x6 SP No.1	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SP No.2		Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER	Left 2x4 SP No.2 -t 2-8-14, Right 2x4 SP No.2 -t 2-8-14		

REACTIONS.	
(size)	2=0-3-8, 7=0-3-8
Max Horz	2=25(LC 57)
Max Uplift	2=-81(LC 11), 7=-81(LC 12)
Max Grav	2=1113(LC 34), 7=1113(LC 34)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-1744/145, 4-5=-1479/146, 5-7=-1750/145
BOT CHORD	2-10=-100/1444, 9-10=-102/1473, 7-9=-94/1449
WEBS	4-10=-30/540, 5-9=-36/571

- 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; 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 2 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 2 and 81 lb uplift at joint 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 2-0-12 oc max. starting at 4-11-10 from the left end to 7-0-6 to connect truss(es) to back face of bottom chord.
- Continued on page 2 where hanger is in contact with lumber.



March 3, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	H1	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO Page 2

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LEE'S SUMMIT, MISSOURI
03/31/2021

145026745

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-51, 4-5=-61, 5-8=-51, 2-7=-20

Concentrated Loads (lb)

Vert: 10=-472(B) 9=-472(B)

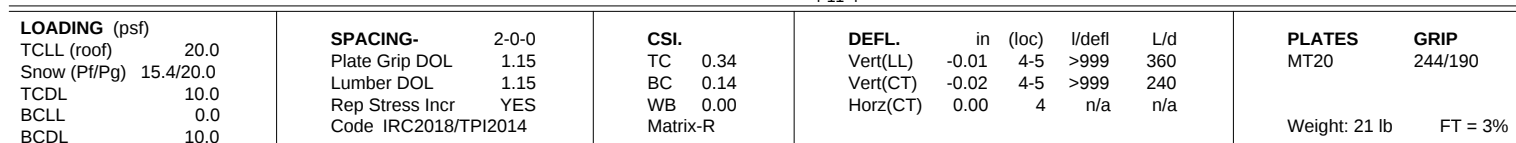


8.430 s Feb 12 2021 MiTek Industries, Inc. File Size: 215.4158213 Page 1

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03/31/2021

Scale = 1:17.8



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=0-3-8, 4=Mechanical
 Max Horz 5=92(LC 8)
 Max Uplift 5=-16(LC 7), 4=-18(LC 8)
 Max Grav 5=296(LC 16), 4=220(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-262/47

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 2 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 16 lb uplift at joint 5 and 18 lb uplift at joint 4.
- 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 3, 2021



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/29/2020) 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

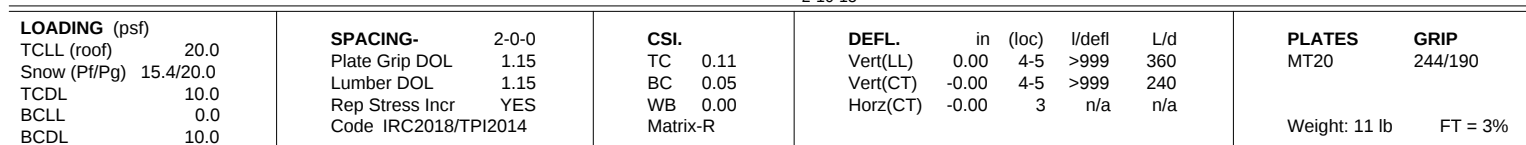


16023 Swingley Ridge Rd
Chesterfield, MO 63017

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW**
145026747

LET'S SUMMIT SUBSQUI

03/31/2021



REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=43(LC 8)
 Max Uplift 5=-10(LC 7), 3=-28(LC 11)
 Max Grav 5=216(LC 16), 3=84(LC 16), 4=29(LC 16)

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 2 degree rotation about its center.
- 6) Refer to girder(s) truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 5 and 28 lb uplift at joint 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.



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 Components**.

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



Job

H3-93

Truss

S1

Truss Type

ROOF SPECIAL

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

0-10-8

2-8-13

6-3-0

12-6-0

18-9-0

25-0-0

31-3-0

37-6-0

40-0-0

0-10-8

2-8-13

3-6-3

6-3-0

6-3-0

6-3-0

6-3-0

6-3-0

2-6-0

6x6 =

6x6 =

6x6 =

6x6 =

6x6 =

6x6 =

6x6 =

6x6 =

6x6 =

5.00

12

4x5 =

7

19

4x5 =

9

4x5 =

10

4x4

11

4x5 =

12

4x5 =

13

6x6 =

14

6x10 =

15

6x6 =

16

4x5 =

17

10x12 =

18

8x10 =

5.00

12

4x5 =

4

5

3x8 =

6

4x5 =

11-4-4

4-1-4

1-0-0

2-8-13

8-0-0

16-0-0

25-0-0

34-0-0

40-0-0

2-8-13

5-3-3

8-0-0

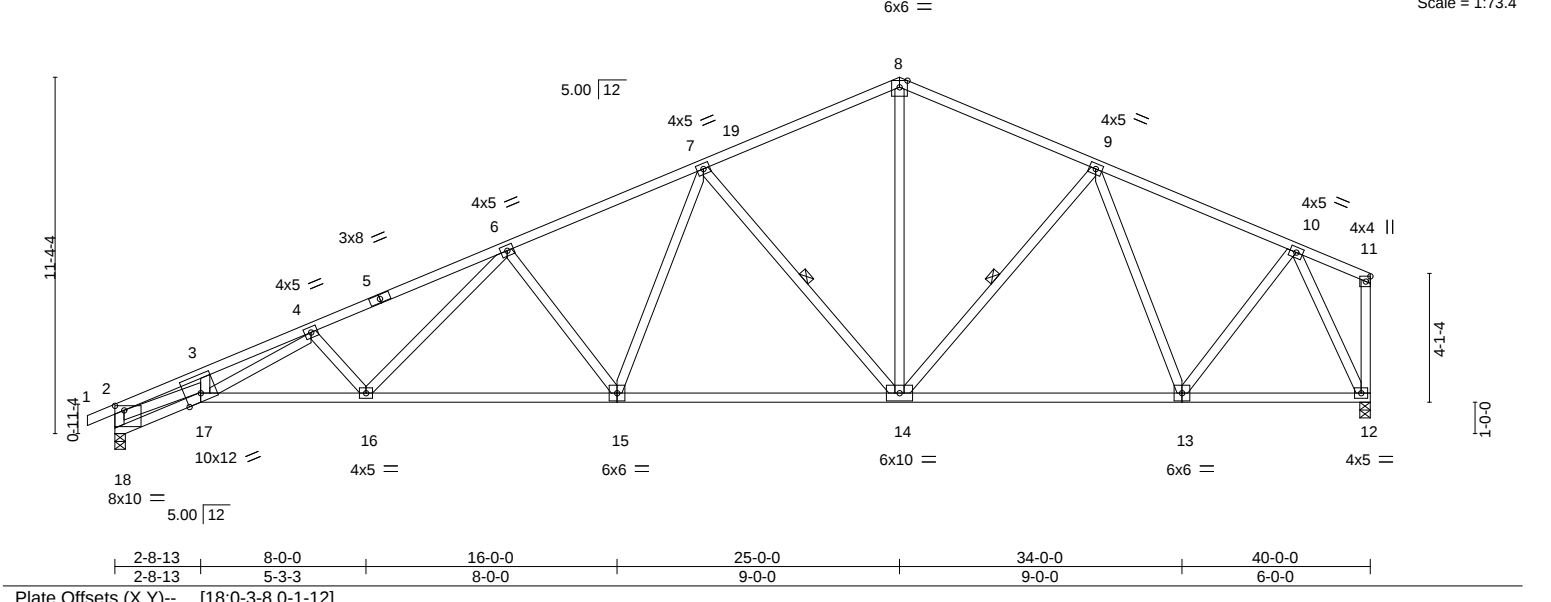
9-0-0

9-0-0

6-0-0

Plate Offsets (X,Y)--

[18:0-3-8,0-1-12]



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pl/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.79	Vert(LL)	-0.25 15-16	>999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Vert(CT)	-0.55 15-16	>872			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH		Horz(CT)	0.27 12	n/a			
BCDL	10.0										
								Weight: 246 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-7-12 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 15-17: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2 *Except* 2-17: 2x4 SP No.1	WEBS	1 Row at midpt 7-14, 9-14

REACTIONS. (size) 18=0-4-0, 12=0-4-0
Max Horz 18=158(LC 8)
Max Uplift 18=52(LC 11), 12=-1(LC 12)
Max Grav 18=1650(LC 2), 12=1588(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-1670/121, 2-3=-4992/277, 3-4=-4883/315, 4-6=-3722/165, 6-7=-2673/128, 7-8=-1696/104, 8-9=-1697/116, 9-10=-1429/50
BOT CHORD 17-18=-163/288, 16-17=-243/3721, 15-16=-130/2813, 14-15=-41/2129, 13-14=0/1460, 12-13=-27/727
WEBS 2-17=-213/4276, 4-17=-141/942, 4-16=-560/141, 6-16=-36/816, 6-15=-702/143, 7-15=-13/789, 7-14=-992/148, 8-14=-12/905, 9-13=-586/59, 10-13=0/884, 10-12=-1693/38

- 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 2 degree rotation about its center.
 - 7) Bearing at joint(s) 18 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 52 lb uplift at joint 18 and 1 lb uplift at joint 12.
 - 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 3,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	S1A	Roof Special	2	1	

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145026749

03/31/2021

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID: Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-AFNzwv6iWhlzQqDEd3JAVYInE8vpvxoulvU0yFzew?J

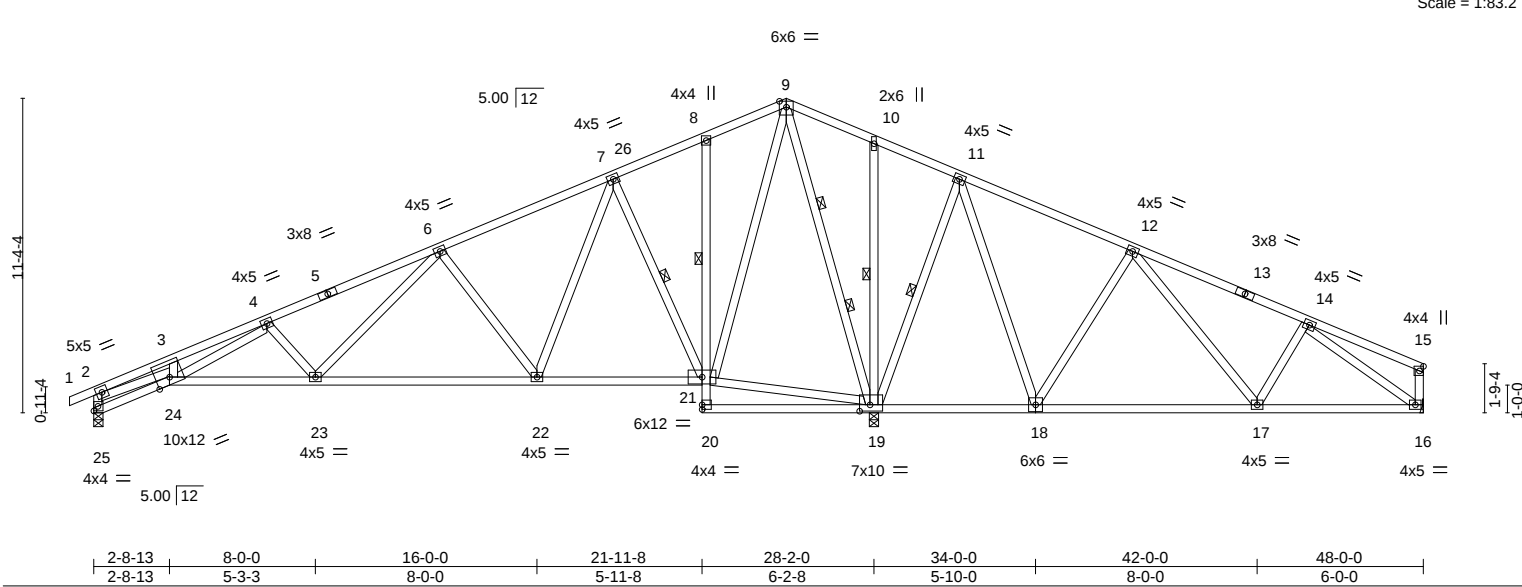


Plate Offsets (X,Y)-- [19'-0"-4'-8", 0'-2"-12"]															
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP			
TCLL (roof)	20.0	2'-0'-0"		TC 0.61		in (loc)		l/defl		MT20		244/190			
Snow (Pl/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.51		Vert(LL) -0.10 23-24		>999							
TCDL	10.0	Lumber DOL 1.15		WB 0.82		Vert(CT) -0.24 22-23		>999							
BCLL	0.0	Rep Stress Incr YES		Matrix-SH		Horz(CT) 0.09 19		n/a							
BCDL	10.0	Code IRC2018/TPI2014								Weight: 336 lb		FT = 3%			

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-9-4 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 8-21
			1 Row at midpt 7-21, 10-19, 11-19
			2 Rows at 1/3 pts 9-19

REACTIONS. (size) 25=0-4-0, 19=0-4-0, 16=Mechanical
 Max Horz 25=104(LC 11)
 Max Uplift 25=-29(LC 11), 19=-40(LC 11), 16=-134(LC 29)
 Max Grav 25=802(LC 29), 19=2903(LC 2), 16=440(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-25=-805/88, 2-3=-2147/167, 3-4=-2099/208, 4-6=-1290/86, 6-7=-359/62, 7-8=0/480, 8-9=0/490, 9-10=0/1296, 10-11=0/1291, 11-12=-49/860, 12-14=-403/404
 BOT CHORD 23-24=-141/1411, 22-23=-43/654, 18-19=-911/141, 17-18=-602/135, 16-17=-252/397
 WEBS 2-24=-117/1797, 4-24=-116/622, 4-23=-452/132, 6-23=-22/694, 6-22=-671/144, 7-22=-25/744, 7-21=-834/120, 19-21=-687/114, 9-21=-87/969, 9-19=-1794/71, 10-19=-264/52, 11-19=-807/114, 11-18=-18/711, 12-18=-628/119, 12-17=0/505, 14-17=-282/83, 14-16=-469/336

- 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 2 degree rotation about its center.
 7) Refer to girder(s) for truss to truss connections.
 8) Bearing at joint(s) 25 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 29 lb uplift at joint 25, 40 lb uplift at joint 19 and 134 lb uplift at joint 16.
 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 3,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	S1B	Roof Special	2	1	

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

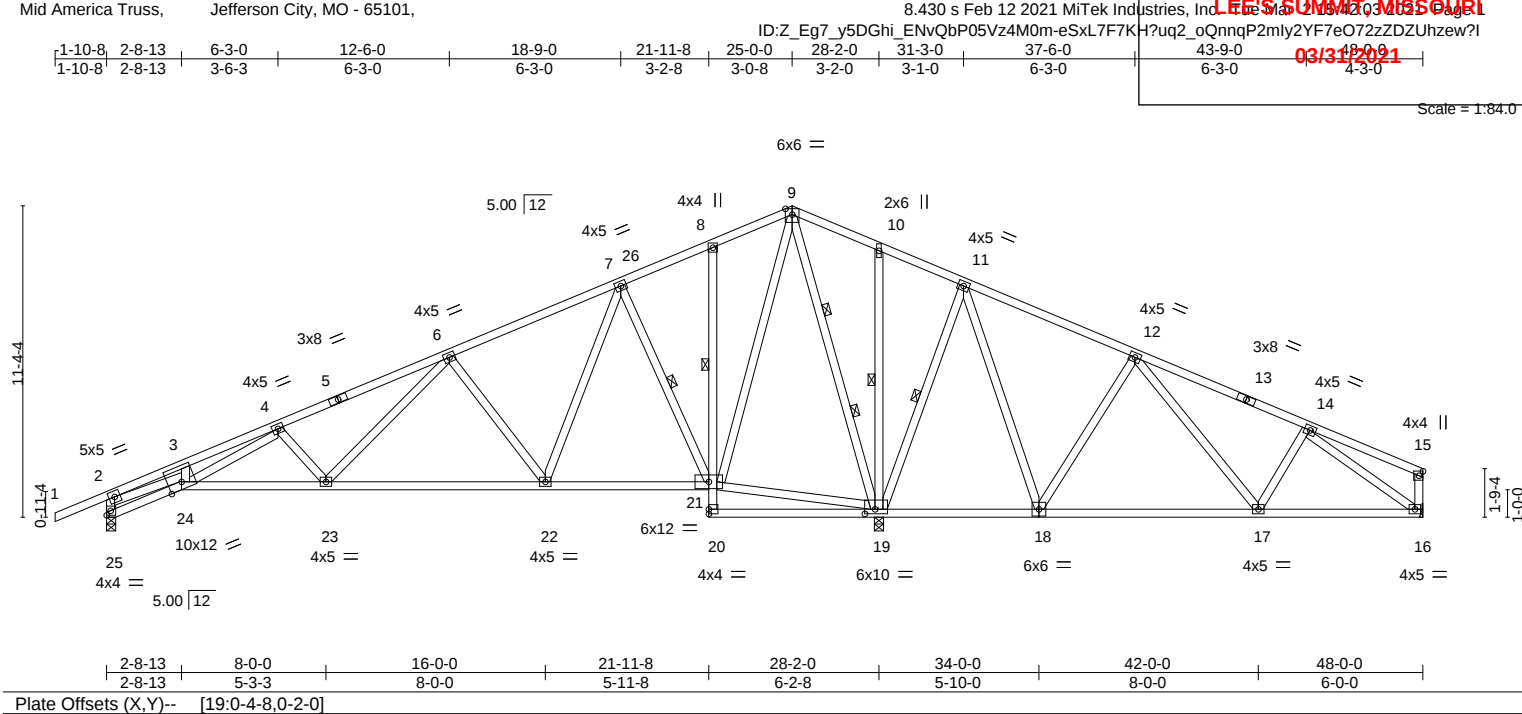
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8.430 s Feb 12 2021 MiTek Industries, Inc

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Job Reference (optional)

Scale = 1:84.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.60	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.51	Vert(LL) -0.09 23-24 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.81	Vert(CT) -0.23 22-23 >999 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.09 19 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 337 lb	FT = 3%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-7 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 8-21
	1 Row at midpt 7-21, 10-19, 11-19
	2 Rows at 1/3 pts 9-19

REACTIONS.	(size)
25=0-4-0, 19=0-4-0, 16=Mechanical	
Max Horz 25=113(LC 11)	
Max Uplift 25=-41(LC 11), 19=-37(LC 11), 16=-125(LC 29)	
Max Grav 25=871(LC 29), 19=2886(LC 2), 16=443(LC 30)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-25=-842/95, 2-3=-2059/153, 3-4=-2003/192, 4-6=-1282/85, 6-7=-368/64, 7-8=0/467, 8-9=0/477, 9-10=0/1279, 10-11=0/1273, 11-12=-46/843, 12-14=-407/391
BOT CHORD	23-24=-138/1395, 22-23=-44/658, 18-19=-895/138, 17-18=-588/132, 16-17=-242/400
WEBS	2-24=-114/1796, 4-24=-102/537, 4-23=-438/130, 6-23=-19/678, 6-22=-664/143, 7-22=-24/738, 7-21=-830/120, 19-21=-675/112, 9-21=-87/967, 9-19=-1780/68, 10-19=-267/52, 11-19=-806/114, 11-18=-18/709, 12-18=-626/119, 12-17=0/501, 14-17=-279/83, 14-16=-474/323

- 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 2 degree rotation about its center.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Bearing at joint(s) 25 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 41 lb uplift at joint 25, 37 lb uplift at joint 19 and 125 lb uplift at joint 16.
 - 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 3,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	S1C	Roof Special	1	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**

Job Reference (optional)

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03/31/2021

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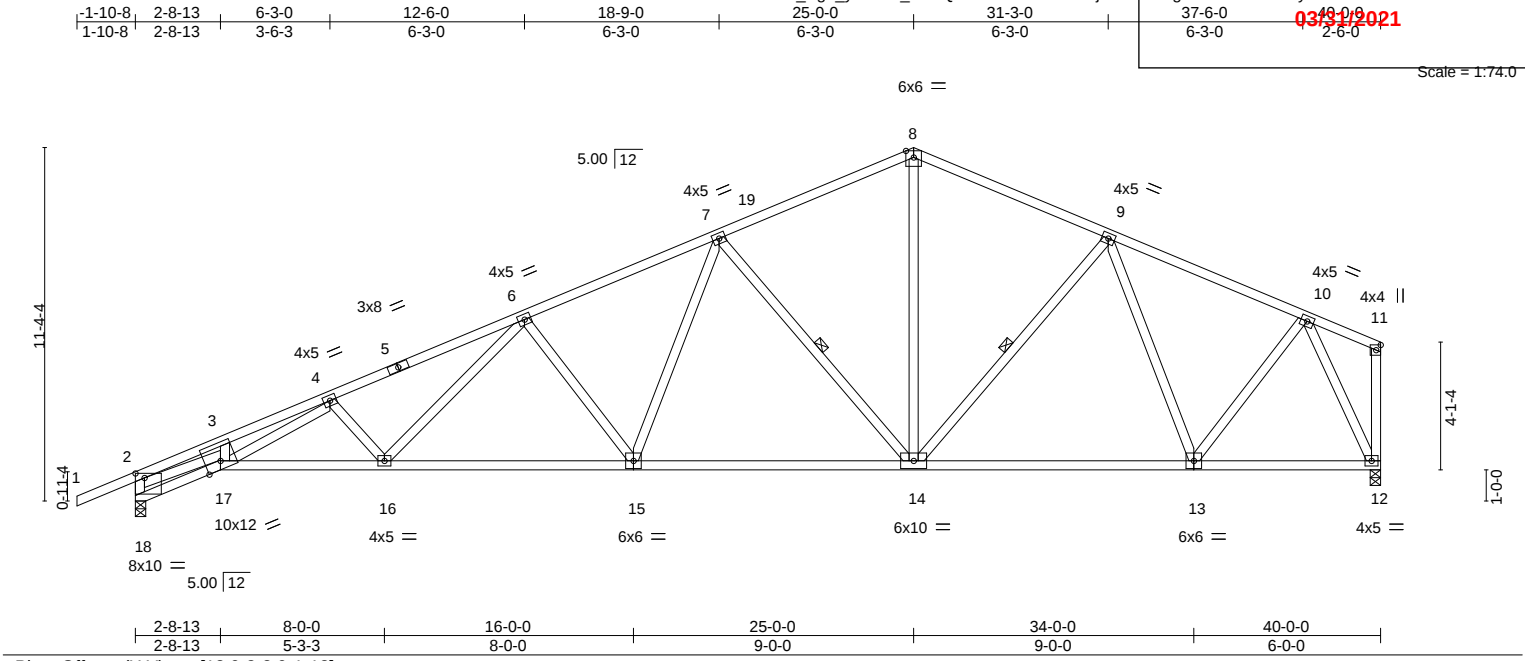


Plate Offsets (X,Y)-- [18:0-3-8,0-1-12]		2-8-13 2-8-13		8-0-0 5-3-3		16-0-0 8-0-0		25-0-0 9-0-0		34-0-0 9-0-0		40-0-0 6-0-0	
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP			
TCLL (roof)	20.0	2-0-0		TC 0.88		in (loc) l/defl L/d		MT20		244/190			
Snow (Pl/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.79		Vert(LL) -0.24 15-16 >999 360							
TCDL	10.0	Lumber DOL 1.15		WB 0.81		Vert(CT) -0.54 15-16 >880 240							
BCLL	0.0	Rep Stress Incr YES		Matrix-SH		Horz(CT) 0.26 12 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014											

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-8-12 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 15-17: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18.
WEBS	2x4 SP No.2 *Except* 2-17: 2x4 SP No.1	WEBS	1 Row at midpt 7-14, 9-14

REACTIONS.	
(size)	18=0-4-0, 12=0-4-0
Max Horz	18=165(LC 8)
Max Uplift	18=-63(LC 11), 12=-1(LC 12)
Max Grav	18=1713(LC 2), 12=1585(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-18=-1700/128, 2-3=-4882/259, 3-4=-4766/295, 4-6=-3695/161, 6-7=-2664/126, 7-8=-1692/103, 8-9=-1693/115, 9-10=-1427/50
BOT CHORD	16-17=-237/3686, 15-16=-127/2800, 14-15=-40/2122, 13-14=0/1457, 12-13=-27/726
WEBS	2-17=-207/4255, 4-17=-127/855, 4-16=-544/138, 6-16=-34/799, 6-15=-695/142, 7-15=-12/783, 7-14=-987/147, 8-14=-11/902, 9-13=-584/59, 10-13=0/883, 10-12=-1690/38

- 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 2 degree rotation about its center.
 - Bearing at joint(s) 18 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 63 lb uplift at joint 18 and 1 lb uplift at joint 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 3, 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

H3-93

Truss

T1

Truss Type

Common

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

8.430 s Feb 12 2021 MiTek Industries, Inc.

16023 Swingley Ridge Rd Chesterfield, MO 63017

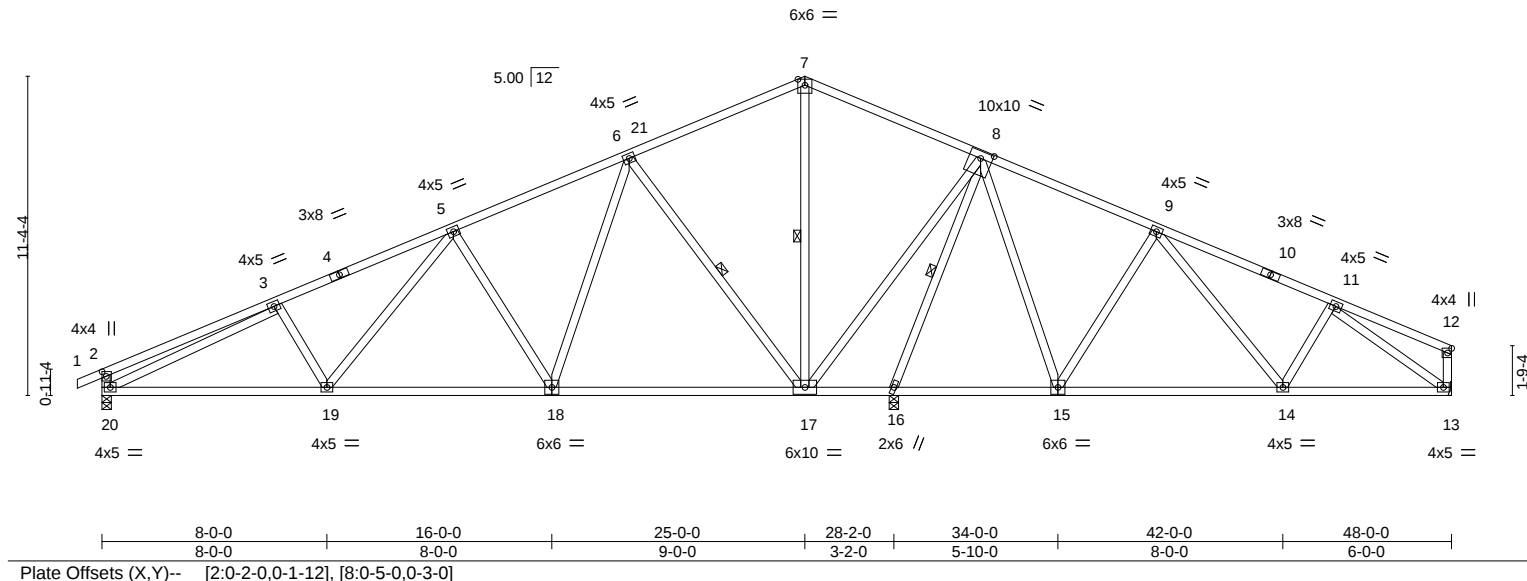
145026752

Mid America Truss,

Jefferson City, MO - 65101,

ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-20cUmH9DZwGOvSX?SvN6fOwSLIGLriuUfXSD50zew?F

Scale = 1:81.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.07 18-19 >999	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.25 17-18 >999				
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.04 13 n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0										
								Weight: 305 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-5-14 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 5-7-11 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 6-17, 7-17, 8-16

REACTIONS. (size) 13=Mechanical, 20=0-4-0, 16=0-4-0
Max Horz 20=104(LC 11)
Max Uplift 13=-39(LC 12), 20=-45(LC 11), 16=-2(LC 11)
Max Grav 13=650(LC 30), 20=1036(LC 29), 16=2285(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-431/77, 3-5=-1488/103, 5-6=-876/102, 8-9=-269/174, 9-11=-740/99, 2-20=-383/81
BOT CHORD 19-20=-134/1418, 18-19=-64/1037, 17-18=0/537, 16-17=-1002/106, 14-15=-13/439, 13-14=-52/663
WEBS 5-19=-13/444, 5-18=-574/129, 6-18=-7/709, 6-17=-937/142, 7-17=-387/0, 8-17=-28/1569, 8-15=-11/609, 9-15=-516/119, 9-14=0/333, 11-13=-805/63, 3-20=-1229/12, 8-16=-2355/31

- 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 2 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 39 lb uplift at joint 13, 45 lb uplift at joint 20 and 2 lb uplift at joint 16.
 - 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 3, 2021

Job

H3-93

Truss

T1A

Truss Type

Roof Special

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.

LEESUMMIT MISSOURI

0-10-8

6-3-0

12-6-0

14-0-8

18-9-0

21-11-8

25-0-0

31-3-0

37-6-0

43-9-0

49-0-0

0-10-8

6-3-0

6-3-0

1-6-8

4-8-8

3-2-8

3-0-8

6-3-0

6-3-0

6-3-0

6-3-0

4-3-0

145026753

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/31/2021

Scale = 1:83.4

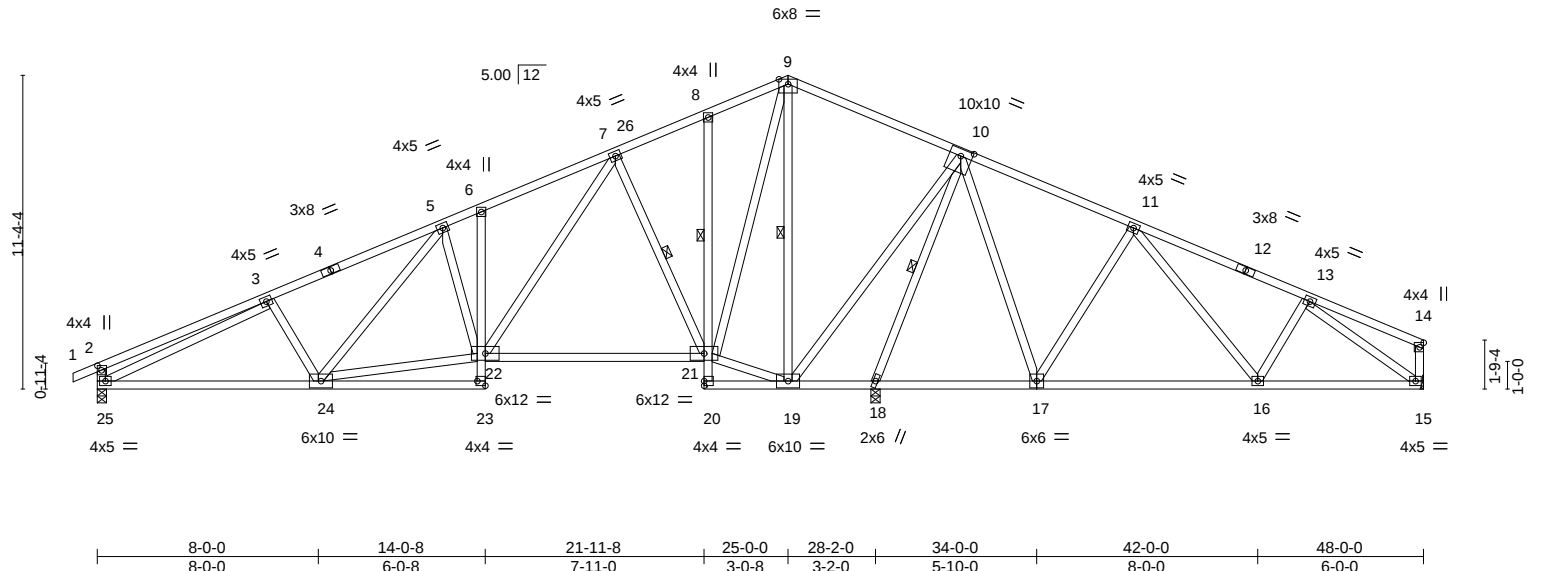


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [10:0-5-0,0-3-0], [23:Edge,0-2-0]																			
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL		1.15		TC 0.64		Vert(LL)		-0.08 21-22		>999		360		MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL		1.15		BC 0.53		Vert(CT)		-0.30 21-22		>999		240					
TCDL	10.0	Rep Stress Incr		YES		WB 0.96		Horz(CT)		0.05 15		n/a		n/a					
BCLL	0.0	Code IRC2018/TPI2014				Matrix-SH										Weight: 350 lb		FT = 3%	
BCDL	10.0																		

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 5-4-12 oc bracing. Except:
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 8-21
			1 Row at midpt 7-21, 9-19, 10-18

REACTIONS. (size) 25=0-4-0, 15=Mechanical, 18=0-4-0
Max Horz 25=104(LC 11)
Max Uplift 25=-45(LC 11), 15=-46(LC 12)
Max Grav 25=1010(LC 29), 15=629(LC 30), 18=2350(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-427/72, 3-5=-1421/103, 5-6=-1147/114, 6-7=-1168/153, 7-8=-286/96,
8-9=-273/133, 10-11=-225/252, 11-13=-707/111, 2-25=-379/79
BOT CHORD 24-25=-138/1367, 21-22=0/514, 18-19=-1085/112, 17-18=-320/93, 16-17=-81/402,
15-16=-62/637
WEBS 22-24=-35/1120, 5-22=-396/98, 7-22=-83/954, 7-21=-798/137, 9-21=-80/1030,
9-19=-1218/33, 10-19=-48/1587, 10-17=-12/611, 11-17=-524/117, 11-16=0/354,
3-25=-1175/22, 13-15=-773/75, 10-18=-2380/54

- 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 2 degree rotation about its center.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 25 and 46 lb uplift at joint 15.
 - 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 3,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/31/2021
H3-93	T1B	Roof Special	4	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, Missouri

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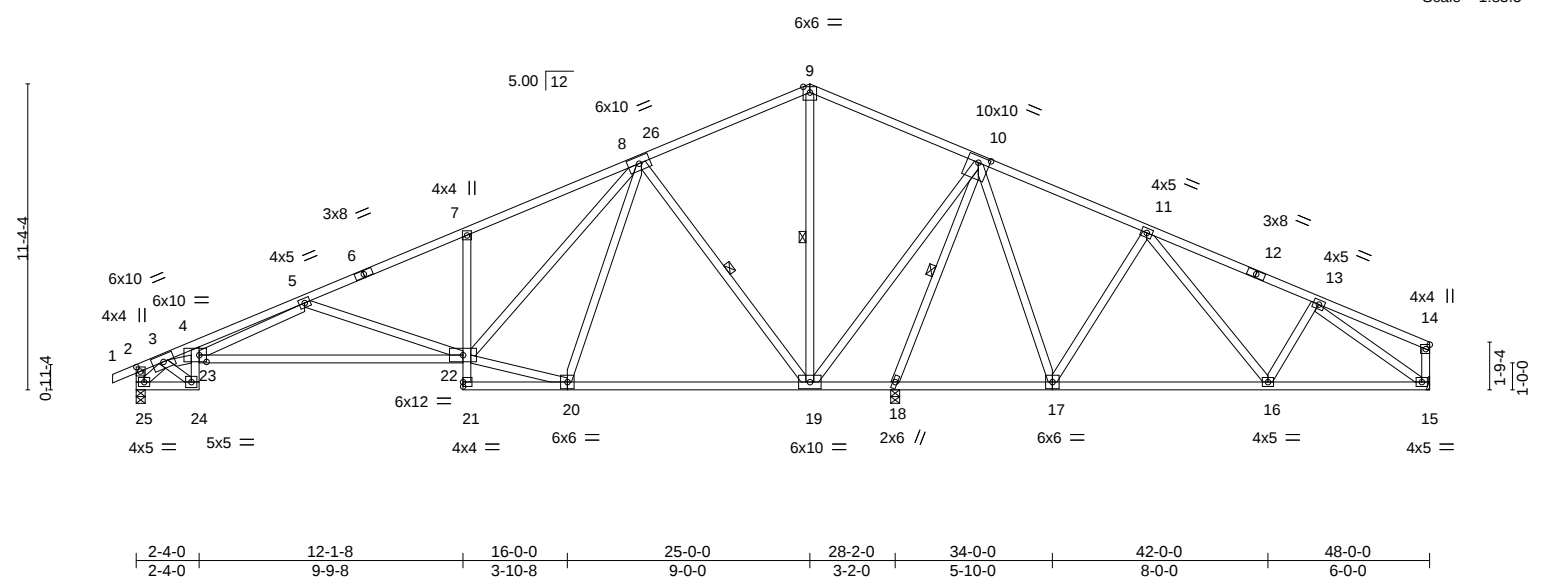


Plate Offsets (X,Y)--		[2:0-2-0,0-1-12], [4:0-3-4,0-3-0], [10:0-5-0,0-2-12]															
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP					
TCLL (roof)	20.0	2-0-0		TC 0.70		in (loc)		l/defl		MT20		244/190					
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.87		Vert(LL) -0.13 22-23		>999									
TCDL	10.0	Lumber DOL 1.15		WB 0.99		Vert(CT) -0.56 22-23		>594									
BCLL	0.0	Rep Stress Incr YES		Matrix-SH		Horz(CT) 0.13 18		n/a									
BCDL	10.0	Code IRC2018/TPI2014								Weight: 320 lb		FT = 3%					

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-11-13 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 4-6-4 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 8-19, 9-19, 10-18

REACTIONS. (size) 15=Mechanical, 25=0-4-0, 18=0-4-0
Max Horz 25=104(LC 13)
Max Uplift 15=-63(LC 12), 25=-31(LC 11), 18=-34(LC 11)
Max Grav 15=547(LC 30), 25=889(LC 29), 18=2635(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-2346/172, 4-5=-2822/166, 5-7=-1078/52, 7-8=-1057/132, 8-9=0/481, 9-10=0/480, 10-11=-57/602, 11-13=-576/204
BOT CHORD 24-25=-112/637, 23-24=-53/443, 22-23=-180/1586, 7-22=-348/130, 19-20=0/265, 18-19=-1538/155, 17-18=-656/133, 16-17=-382/257, 15-16=-94/535
WEBS 3-24=-596/89, 3-23=-193/1906, 5-23=-24/1155, 5-22=-699/162, 20-22=0/369, 8-22=-122/1022, 8-19=-960/144, 9-19=-665/27, 10-19=-60/1916, 10-17=-6/651, 11-17=-566/113, 11-16=0/436, 13-15=-644/137, 3-25=-942/23, 10-18=-2724/64

- 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 2 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 63 lb uplift at joint 15, 31 lb uplift at joint 25 and 34 lb uplift at joint 18.
 - 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 3,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	T1GE	GABLE	1	1	

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

145026755
LEE'S SUMMIT, MISSOURI

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. File: MaTruss13.MSSOURI

0-10-8 6-3-0 12-6-0 18-9-0 25-0-0 31-3-0 37-6-0 43-9-0 48-0-0
0-10-8 6-3-0 6-3-0 6-3-0 6-3-0 6-3-0 6-3-0 6-3-0 4-3-0

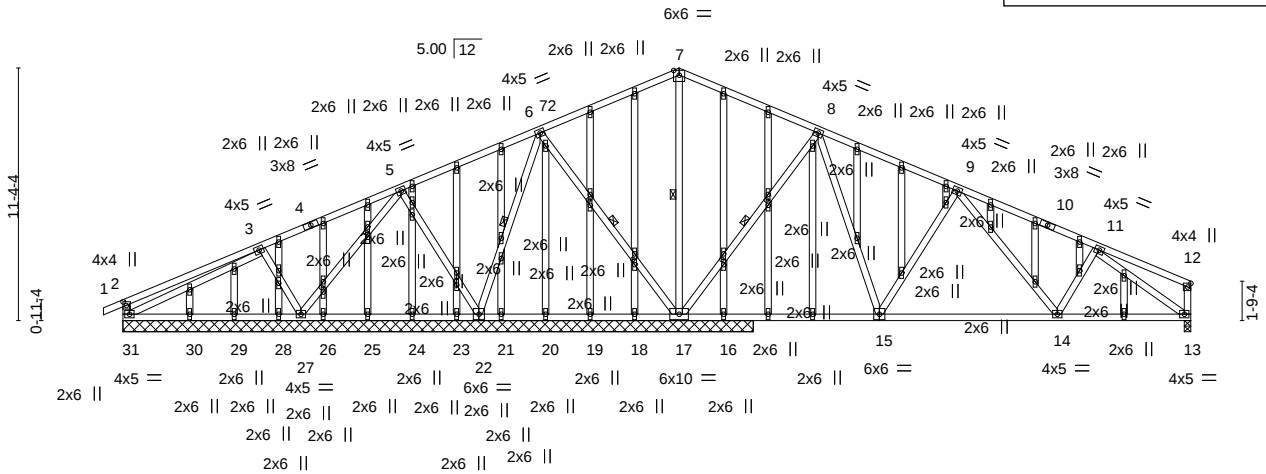


Plate Offsets (X,Y)--	[2:0-2-0,0-1-12], [32:0-2-14,0-1-0], [34:0-2-14,0-1-0], [43:0-2-9,0-1-0], [45:0-2-9,0-1-0], [52:0-2-14,0-1-0], [55:0-2-14,0-1-0]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	244/190
Snow (Pl/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.03 14-15 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.12 14-15 >999 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 13 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 451 lb	FT = 3%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-11-1 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	WEBS 1 Row at midpt 6-22, 6-17, 7-17, 8-17
OTHERS 2x4 SP No.2	

REACTIONS. All bearings 28-4-0 except (jt=length) 13=0-3-8.
(lb) - Max Horz 31=104(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 31, 13 except 22=-157(LC 11), 27=-133(LC 11), 17=-174(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 18, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 16 except 22=410(LC 29), 27=440(LC 29), 17=1593(LC 2), 31=306(LC 29), 13=723(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=0/274, 6-7=0/469, 7-8=0/469, 8-9=-422/98, 9-11=-855/83, 2-31=-301/91
BOT CHORD 14-15=0/571, 13-14=-39/753
WEBS 3-27=-362/137, 5-22=-306/110, 6-17=-342/81, 7-17=-649/4, 8-17=-851/145, 8-15=-12/599, 9-15=-483/123, 9-14=0/252, 11-13=-917/47

- 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 2 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) 31, 13 except (jt=lb) 22=157, 27=133, 17=174.
 - 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 3, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	T2	ROOF SPECIAL	6	1	

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

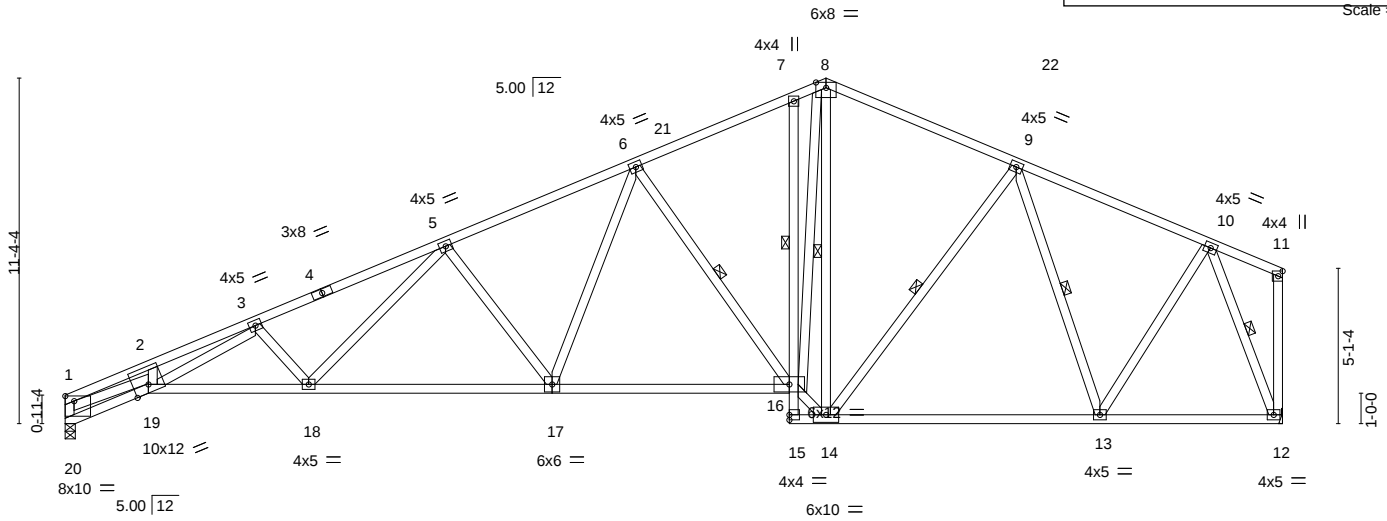
145026756

03/31/2021

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Le Ma NGYSrSpkR7Cv_zew?6

2-8-13 6-3-0 12-6-0 18-9-0 23-9-8 25-0-0 31-3-0 37-6-0 40-0-0
2-8-13 3-6-3 6-3-0 6-3-0 5-0-8 1-2-8 6-3-0 6-3-0 2-6-0



2-8-13	8-0-0	16-0-0	23-9-8	25-0-0	34-0-0	40-0-0
2-8-13	5-3-3	8-0-0	7-9-8	1-2-8	9-0-0	6-0-0

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.26 17 >999	360	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.59 16-17 >806	240			
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.33 12 n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0								Weight: 284 lb	FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-8-14 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 17-19: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16.
WEBS	2x4 SP No.2 *Except* 1-19: 2x4 SP No.1	WEBS	1 Row at midpt 7-16 1 Row at midpt 6-16, 8-14, 9-14, 9-13, 10-12

REACTIONS.	
(size)	20=0-4-0, 12=Mechanical
Max Horz	20=164(LC 8)
Max Uplift	20=-42(LC 11), 12=-1(LC 12)
Max Grav	20=1588(LC 2), 12=1588(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-20=-1590/100, 1-2=-5032/258, 2-3=-4943/299, 3-5=-3729/159, 5-6=-2678/126, 6-7=-1784/112, 7-8=-1660/143, 8-9=-1557/122, 9-10=-1241/61
BOT CHORD	18-19=-220/3730, 17-18=-112/2821, 16-17=-22/2126, 13-14=0/1289, 12-13=-29/604
WEBS	1-19=-206/4368, 3-19=-132/994, 3-18=-563/137, 5-18=-32/816, 5-17=-709/145, 6-17=-14/805, 6-16=-955/130, 14-16=0/1751, 8-16=-108/1921, 8-14=-1014/36, 9-14=-50/260, 9-13=-663/56, 10-13=0/915, 10-12=-1641/38

- 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 2 degree rotation about its center.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Bearing at joint(s) 20 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) 20, 12.
 - 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 3, 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	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	T2GE	COMMON SUPPORTED GAB	1	1	

Mid America Truss, Jefferson City, MO - 65101,

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

ID:Z_Eg7_y5DGhi_ENVQbP05Vz4M0m-E8ne3216_lerk8t6bj4hcitT6B7MwvH6BlcJ_tzew?4

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

LEE'S SUMMIT, MISSOURI

03/31/2021

Scale = 1:81.0

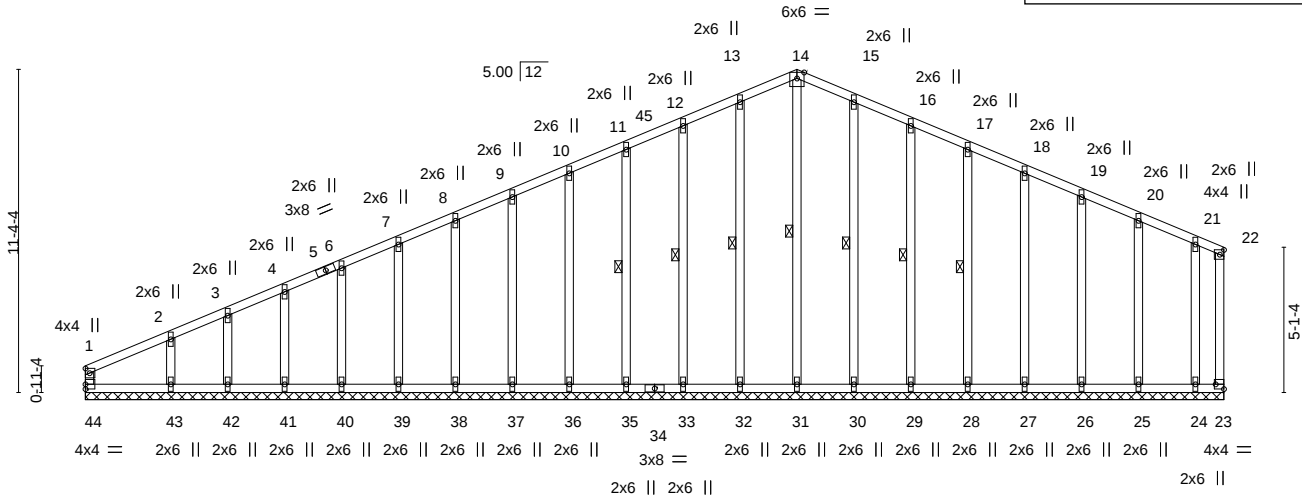


Plate Offsets (X,Y)-- [23:Edge,0-2-0]

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pl/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	23	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							Weight: 321 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.
WEBS 1 Row at midpt 14-31, 13-32, 12-33, 11-35, 15-30, 16-29, 17-28

REACTIONS.

All bearings 40-0-0.
(lb) - Max Horz 44=163(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 23, 32, 33, 35, 36, 37, 38, 39, 40, 41, 43, 30, 29, 28, 27, 26, 25, 24
Max Grav All reactions 250 lb or less at joint(s) 44, 23, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 30, 29, 28, 27, 26, 25, 24

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 2 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) 23, 32, 33, 35, 36, 37, 38, 39, 40, 41, 43, 30, 29, 28, 27, 26, 25, 24.
- 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 3, 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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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

H3-93

Truss

T3

Truss Type

Common

Qty

4

Ply

1

SUMMIT HOMES

Job Reference (optional)

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

8430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64086

Mid America Truss, Jefferson City, MO - 65101,

8430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64086

ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-iKL0HOJlcrnhLISJ9Qbw8wQSkbQ6fMmFQPMsWJzew?3

145026758

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

6-8-0

6-8-0

13-4-0

6-8-0

4x5 =

2

6.00 12

7

8

3x4 =

3

1-0-4

1-0-4

2x4 ||

4x8 =

4

2x4 ||

6-8-0

6-8-0

13-4-0

6-8-0

Scale = 1:27.3

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.01	5	>999	360	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.06	4-5	>999	240			
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00	4	n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P									
BCDL	10.0										Weight: 68 lb	FT = 3%	

LUMBER-

TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

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

REACTIONS.

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

Max Horz 6=61(LC 8)

Max Uplift 6=-6(LC 11), 4=-6(LC 12)

Max Grav 6=522(LC 2), 4=522(LC 2)

FORCES.

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

TOP CHORD 1-2=-568/10, 2-3=-568/0, 1-6=-472/35, 3-4=-472/35

WEBS 1-5=0/449, 3-5=0/449

- 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 2 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, 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 3,2021

Job

H3-93

Truss

T3GE

Truss Type

Common Supported 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.

File Name: H3-93-1905026759.dwg

ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-AXuOUjKNVwYzR1Vj869h7ypG_qEOqGPf25Q2mzew?2

RELEASE FOR CONSTRUCTION

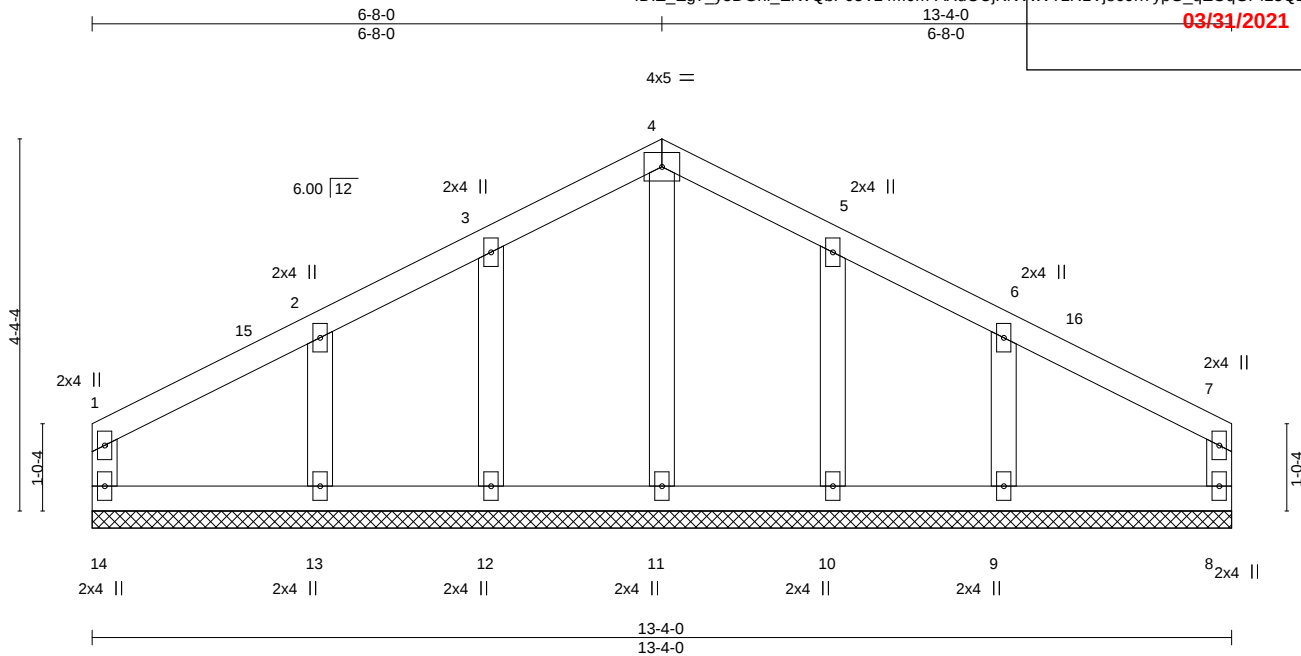
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

Scale = 1:27.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	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-R							
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.	
All bearings	13-4-0.
(lb) - Max Horz	14=61(LC 8)
Max Uplift	All uplift 100 lb or less at joint(s) 14, 8, 12, 13, 10, 9
Max Grav	All reactions 250 lb or less at joint(s) 14, 8, 11, 12, 13, 10, 9

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 2 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" oc.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8, 12, 13, 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 3, 2021

Job

H3-93

Truss

T4

Truss Type

Common

Qty

3

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 64086

ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-ejSmi3K?GD1PbbchGreOELVnnO7V7FFYuirzbCzew?1

145026760

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

0-10-8

0-10-8

6-0-0

6-0-0

12-0-0

6-0-0

0-10-8

0-10-8

4x5 =

4x4 = 9

2

3

10

4x4 = 4

5

0-11-4

0-11-4

3-5-4

5.00 12

8

2x4 ||

4x8 =

6

2x4 ||

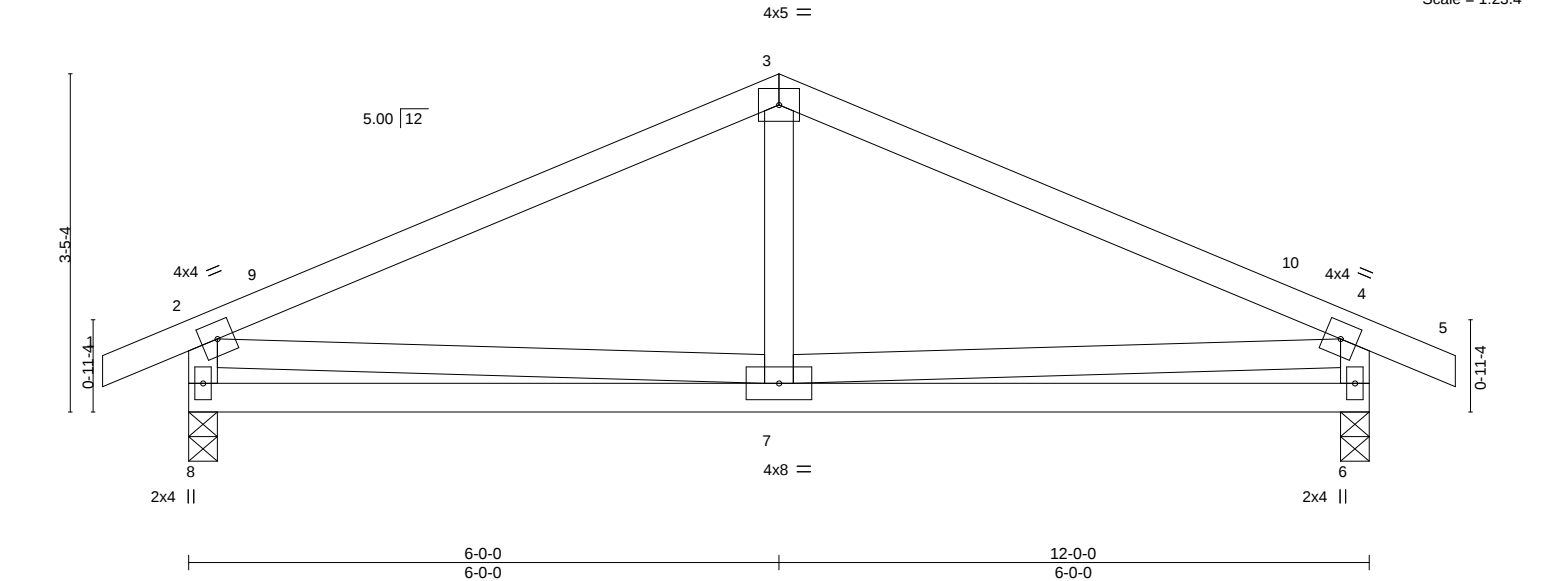
6-0-0

6-0-0

12-0-0

6-0-0

Scale = 1:23.4



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0		2-0-0	TC	0.92	Vert(LL)	-0.01	7	>999	360	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0			BC	0.23	Vert(CT)	-0.04	6-7	>999	240			
TCDL	10.0			WB	0.11	Horz(CT)	-0.00	6	n/a	n/a			
BCLL	0.0			Matrix-P									
BCDL	10.0												
										Weight: 62 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.
WEBS	2x4 SP No.2		

REACTIONS. (size) 8=0-3-8, 6=0-3-8
 Max Horz 8=22(LC 10)
 Max Uplift 8=-18(LC 11), 6=-18(LC 12)
 Max Grav 8=532(LC 16), 6=532(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-546/3, 3-4=-546/0, 2-8=-487/44, 4-6=-487/44
 WEBS 2-7=0/456, 4-7=0/456

- 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 2 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) 8, 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 3, 2021

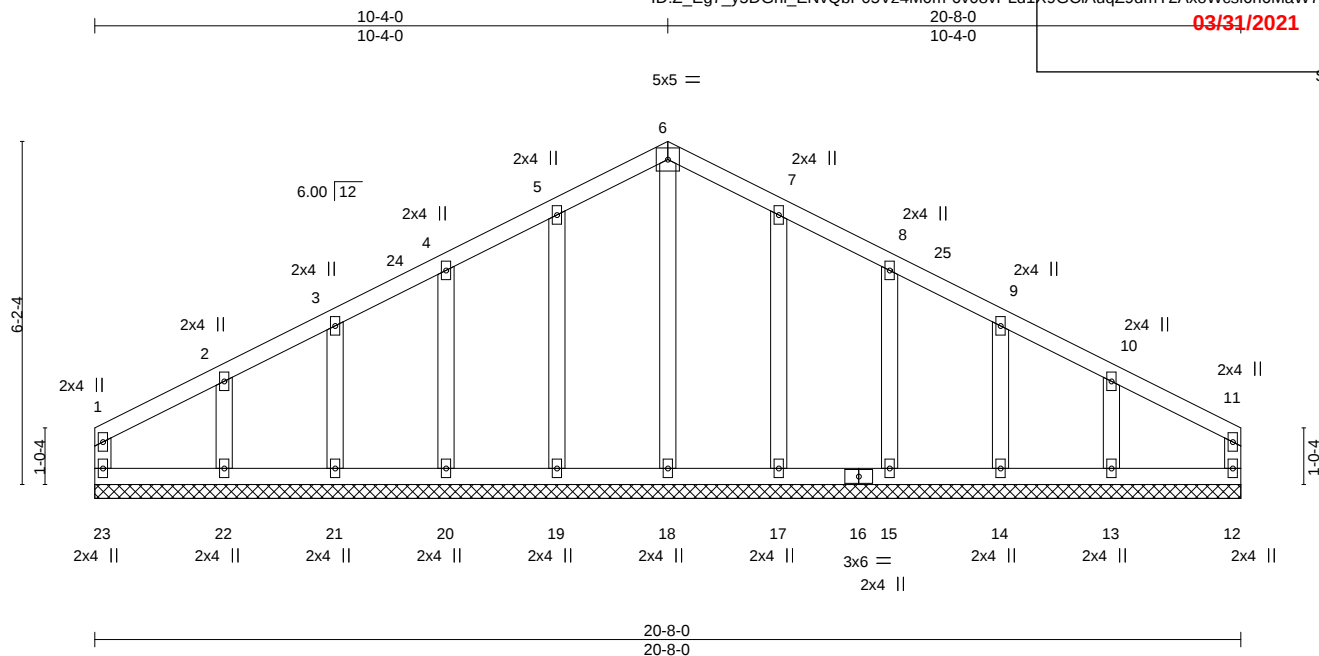
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	T4GE	COMMON SUPPORTED GAB	1	1	

Mid America Truss, Jefferson City, MO - 65101,

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

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/31/2021**

Scale = 1:41.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00				
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
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 20-8-0.
(lb) - Max Horz 23=-82(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 23, 12, 19, 20, 21, 22, 17, 15, 14, 13
Max Grav All reactions 250 lb or less at joint(s) 23, 12, 18, 19, 20, 21, 22, 17, 15, 14, 13

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 2 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) 23, 12, 19, 20, 21, 22, 17, 15, 14, 13.
- 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 3, 2021

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

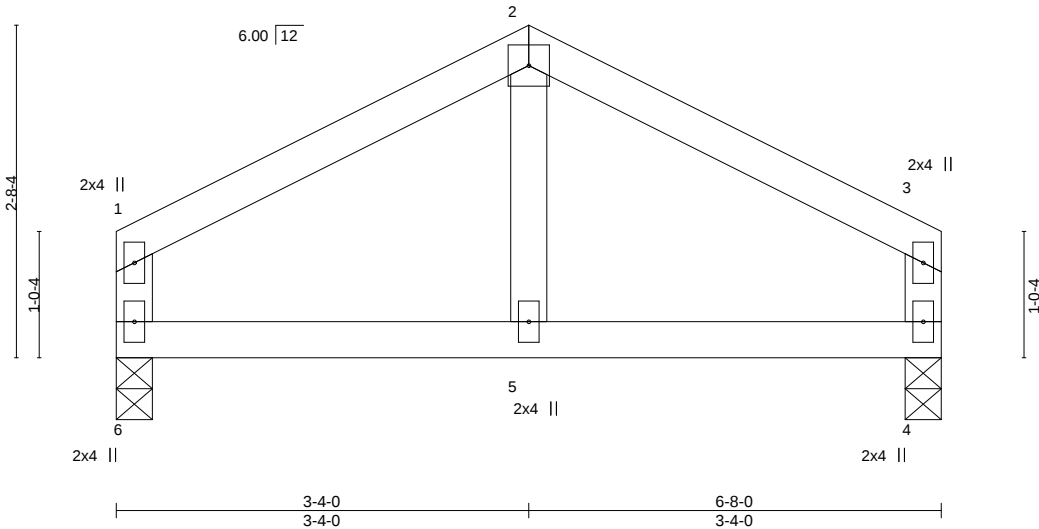


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/31/2021
H3-93	T5	KINGPOST	5	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO Page 1	

ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-a5aX7IMForH7qvl4OGgsJmaJLCpzbAirlL0K4f4zew??

Scale = 1:18.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01 5 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02 5 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00 4 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										

Weight: 26 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 4=0-3-8
Max Horz 6=42(LC 8)
Max Uplift 6=3(LC 11), 4=3(LC 12)
Max Grav 6=263(LC 15), 4=263(LC 16)

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 2 degree rotation about its center.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
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 3, 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

H3-93

Truss

T5GE

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

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

145026763

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

Mid America Truss,

Jefferson City, MO - 65101,

ID:Z_Eg7_y5DGhi_ENVQbP05Vz4M0m-2l8vK5NtZ8P_S3KGy_B5rz7VvcBQKdR_ag3dBXzew?

6-8-0

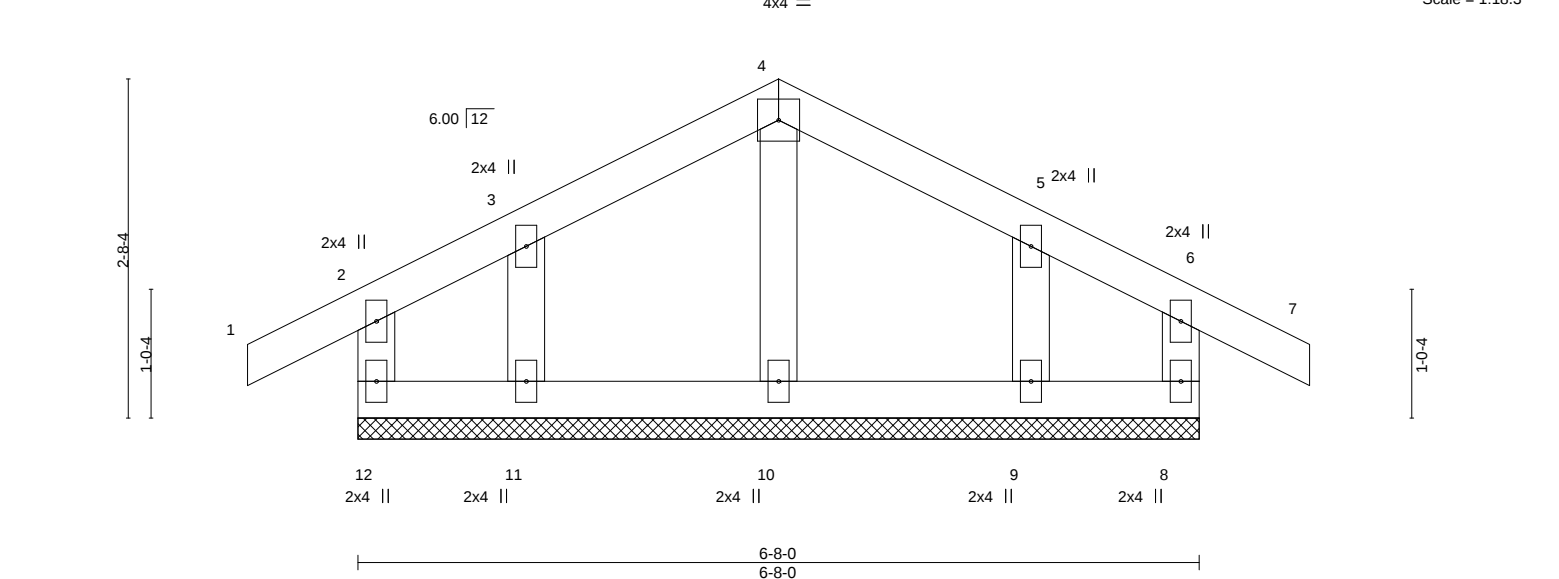
3-4-0

7-6-8

0-10-8

4x4 =

Scale = 1:18.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00				
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										
								Weight: 32 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-8-0 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 6-8-0.
 (lb) - Max Horz 12=48(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9
 Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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.
 - 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 2 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) 12, 8, 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.



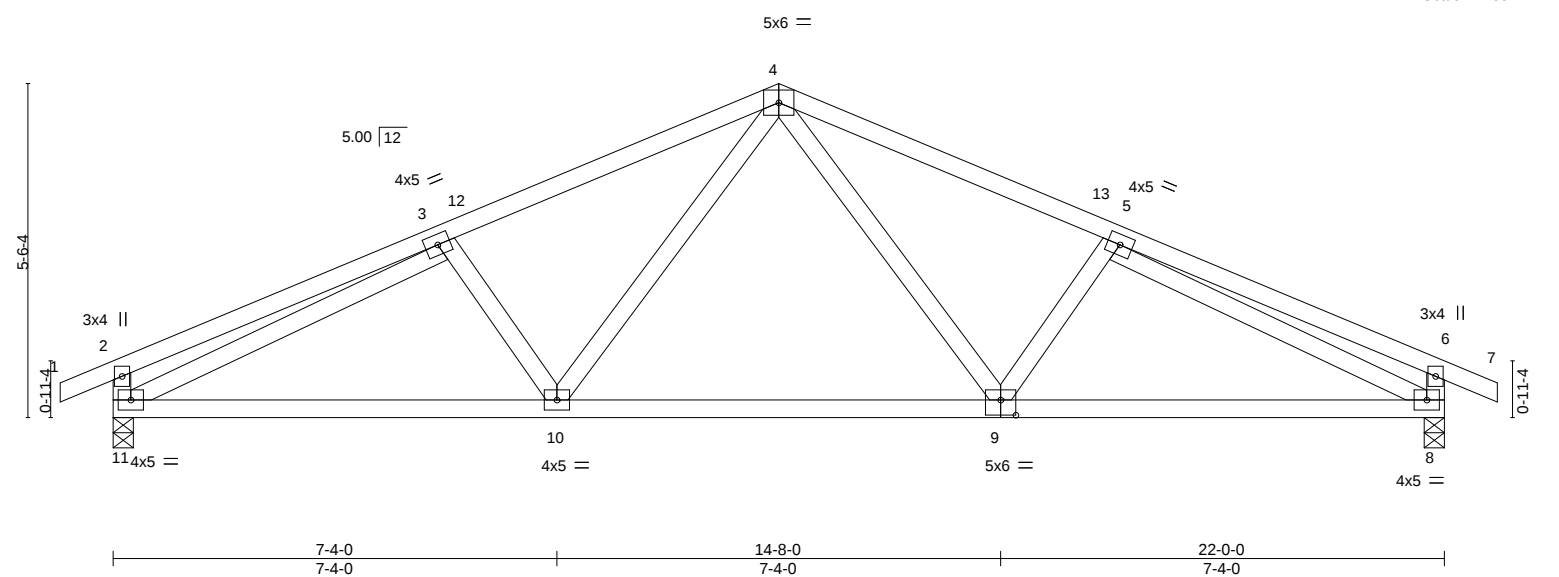
March 3, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/31/2021
H3-93	T6	Common	4	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO	

ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-XUiHXRNVKSr3DvSVhiKOBgZs?Qi3vu8oKpAjzzew_z

0-10-8 5-6-0 11-0-0 16-6-0 22-0-0 22-10-8
0-10-8 5-6-0 5-6-0 5-6-0 5-6-0 0-10-8

Scale = 1:38.1



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	in	(loc)	l/defl	L/d	MT20	244/190		
Snow (Pl/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.47	Vert(LL)	-0.05	9-10	>999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Vert(CT)	-0.13	9-10	>999				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH		Horz(CT)	0.04	8	n/a				
BCDL	10.0												
										Weight: 118 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.	
(size)	11=0-4-0, 8=0-4-0
Max Horz	11=36(LC 11)
Max Uplift	11=-24(LC 11), 8=-24(LC 12)
Max Grav	11=930(LC 2), 8=930(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-329/52, 3-4=-1286/51, 4-5=-1286/51, 5-6=-329/52, 2-11=-322/64, 6-8=-322/64
BOT CHORD	10-11=-36/1231, 9-10=0/905, 8-9=-0/1231
WEBS	4-9=-12/413, 4-10=-12/413, 3-11=-1121/0, 5-8=-1121/0

- 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 2 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 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.



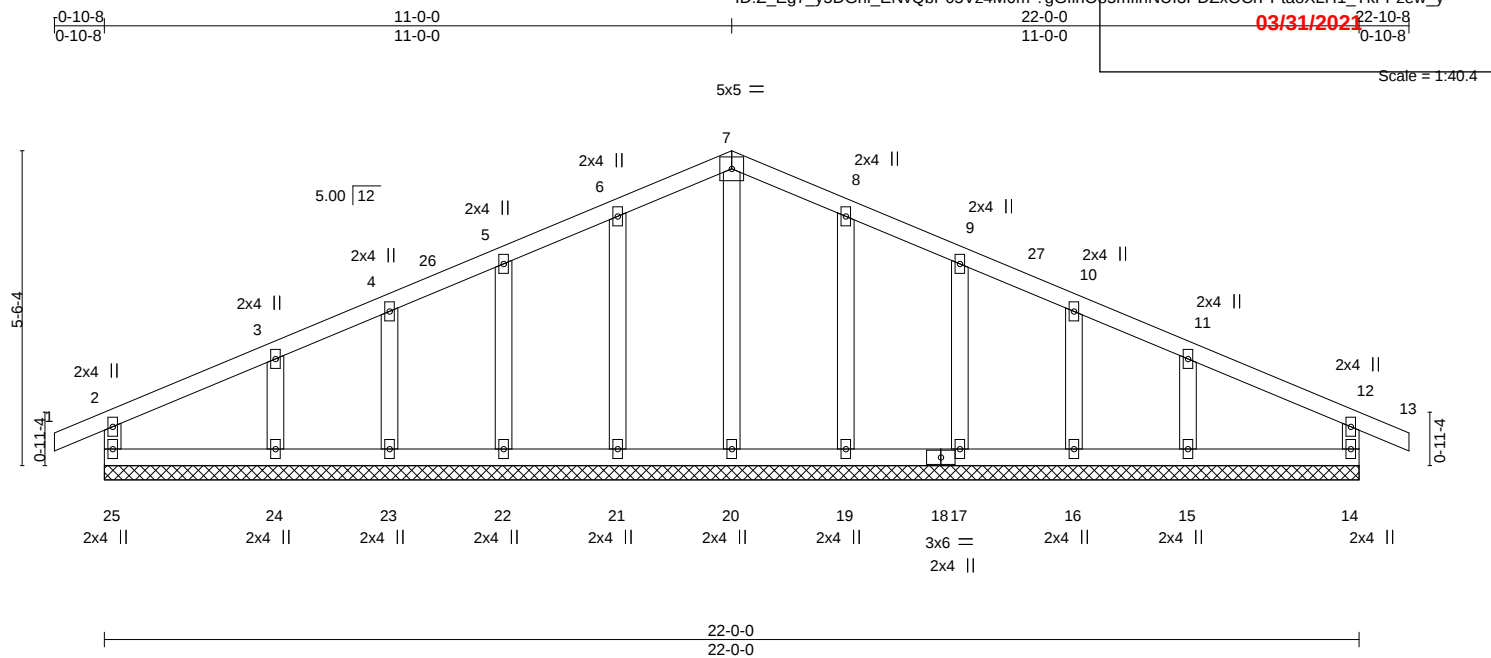
March 3, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
H3-93	T6GE	Common Supported Gable	1	1	

Mid America Truss, Jefferson City, MO - 65101,

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

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES**
J45026765
03/31/2021



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL (roof)	20.0	2'-0"		TC	0.10	Vert(LL)	-0.00	12	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0			BC	0.04	Vert(CT)	-0.00	12	n/r	90		
TCDL	10.0			WB	0.06	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0			Matrix-R							Weight: 114 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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6'-0" oc bracing.

REACTIONS.

All bearings 22'-0".
(lb) - Max Horz 25=36(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 17, 16, 15

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.
- 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 2 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" oc.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15.
- 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 3, 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

H3-93

Truss

V1

Truss Type

Valley

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

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

ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-Ttp1y7Pms3nZJW3rd6koTcl_KpCOX_uQGelHnszew_x

14-6-5

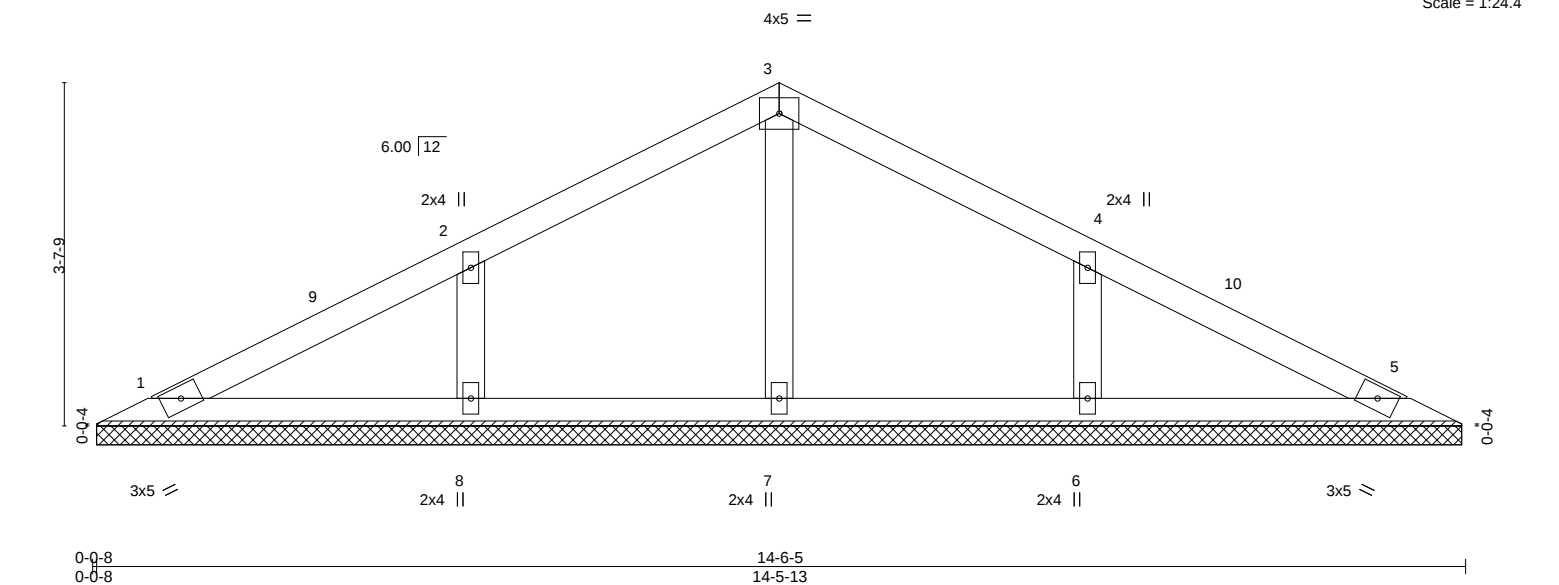
7-3-2

03/31/2021

Scale = 1:24.4

Mid America Truss,

Jefferson City, MO - 65101,



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	0.07	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	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" 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 14-5-5.
 (lb) - Max Horz 1=-38(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 6, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=382(LC 16), 8=382(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-6=-306/97, 2-8=-306/97

- 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 2 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) 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 3, 2021

Job

H3-93

Truss

V2

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. File Path: \\summit\277055\01\1

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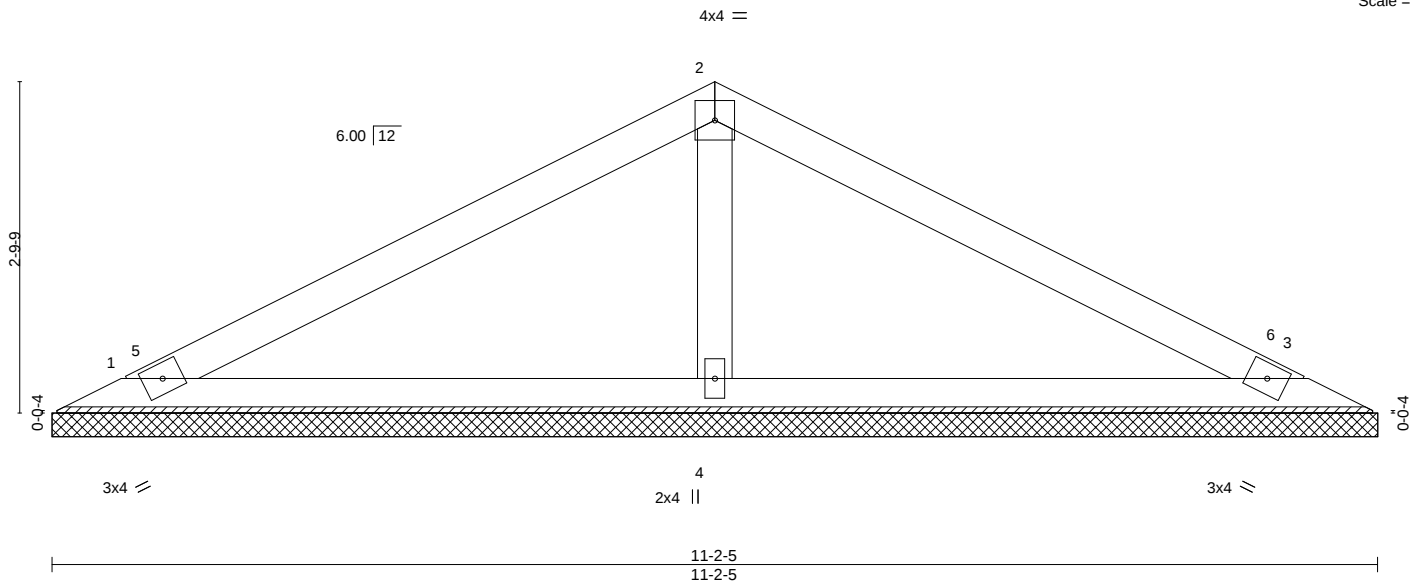
11-2-5 5-7-2

03/31/2021

Scale = 1:19.5

Mid America Truss,

Jefferson City, MO - 65101,



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	n/a -	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a -	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 3	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P						Weight: 36 lb	FT = 3%
BCDL	10.0										

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

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

REACTIONS. (size) 1=11-2-5, 3=11-2-5, 4=11-2-5
Max Horz 1=28(LC 8)
Max Uplift 1=-21(LC 11), 3=-26(LC 12)
Max Grav 1=238(LC 15), 3=238(LC 16), 4=394(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-270/44

- 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 2 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.



Job

H3-93

Truss

V3

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.

145026768

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

03/31/2021

145026768

LEE'S SUMMIT, MISSOURI

3-11-2

3-11-2

7-10-5

3-11-2

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Scale = 1:14.6

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0	Plate Grip DOL	1.15	TC	0.25	in (loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	1.15	Lumber DOL	1.15	BC	0.08	n/a	n/a	999		
TCDL	10.0	YES	Rep Stress Incr	YES	WB	0.02	n/a	n/a	999		
BCLL	0.0	Code IRC2018/TPI2014	Matrix-P		Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0									Weight: 25 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=7-9-5, 3=7-9-5, 4=7-9-5
Max Horz 1=19(LC 8)
Max Uplift 1=14(LC 11), 3=17(LC 12)
Max Grav 1=155(LC 15), 3=155(LC 16), 4=262(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 2 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 3, 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

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Mar 2 15:42:29 2021 Page 1

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~~Scale = 1:8.4~~

 $3 \times 4 =$
$$\begin{array}{r} 4-6-5 \\ \hline 4-5-13 \end{array}$$

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0		Lumber DOL	BC 0.10	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: 12 lb	FT = 3%
BCDL	10.0									

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-6-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-5-5, 3=4-5-5
 Max Horz 1=-9(LC 7)
 Max Uplift 1=-2(LC 11), 3=-2(LC 12)
 Max Grav 1=131(LC 2), 3=131(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) TLLS: 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 2 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 3, 2021



WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH/473 (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

H3-93

Truss

V5

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.

Le3YoUSGwIH_n8McsypkeSvd9QZTTTo20BGVwdzew_t

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9-10-4

4-11-2

RELEASE FOR CONSTRUCTION

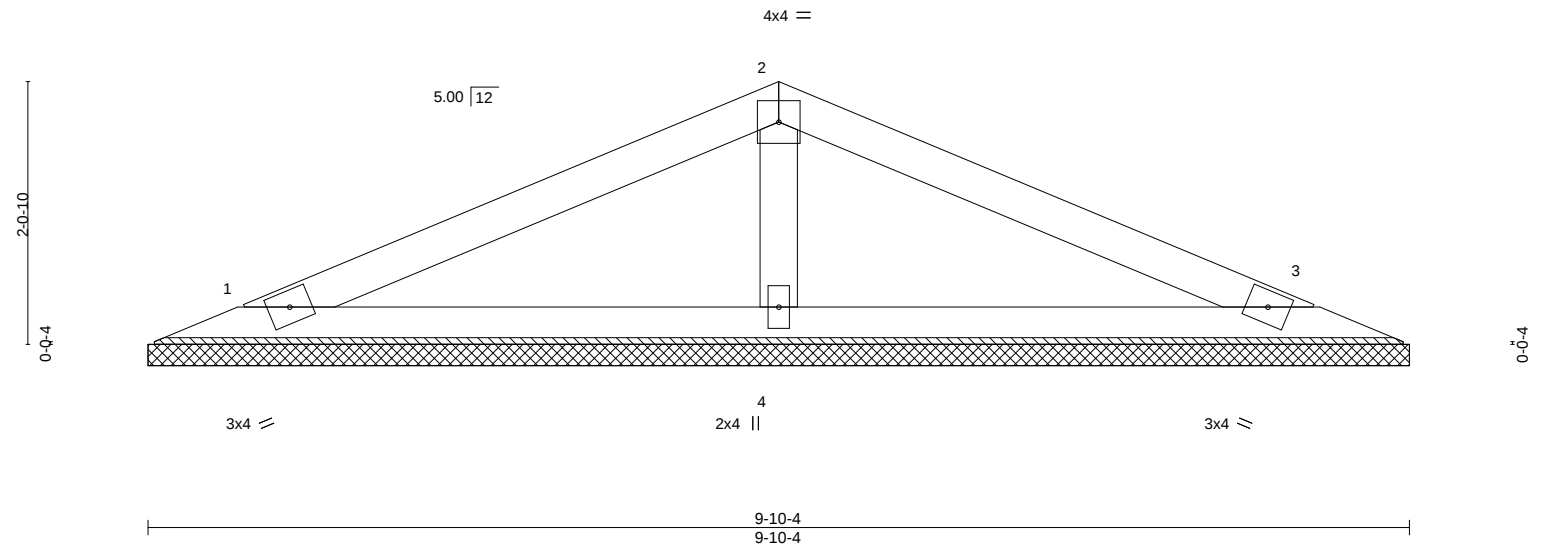
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEES SUMMIT, MISSOURI

03/31/2021

Scale = 1:18.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	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: 30 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=9-10-4, 3=9-10-4, 4=9-10-4
Max Horz	1=18(LC 11)
Max Uplift	1=-17(LC 11), 3=-20(LC 12)
Max Grav	1=194(LC 15), 3=194(LC 16), 4=339(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 2 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 3, 2021

Job

H3-93

Truss

V6

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.

File Name: M31105001

ID: Z_Eg7_y5Dghi_EnvQbP05Vz4M0m-pqdw?qtuhcPrPlxpQfKzAfStyqw5CFUAPw02S3zew_s

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

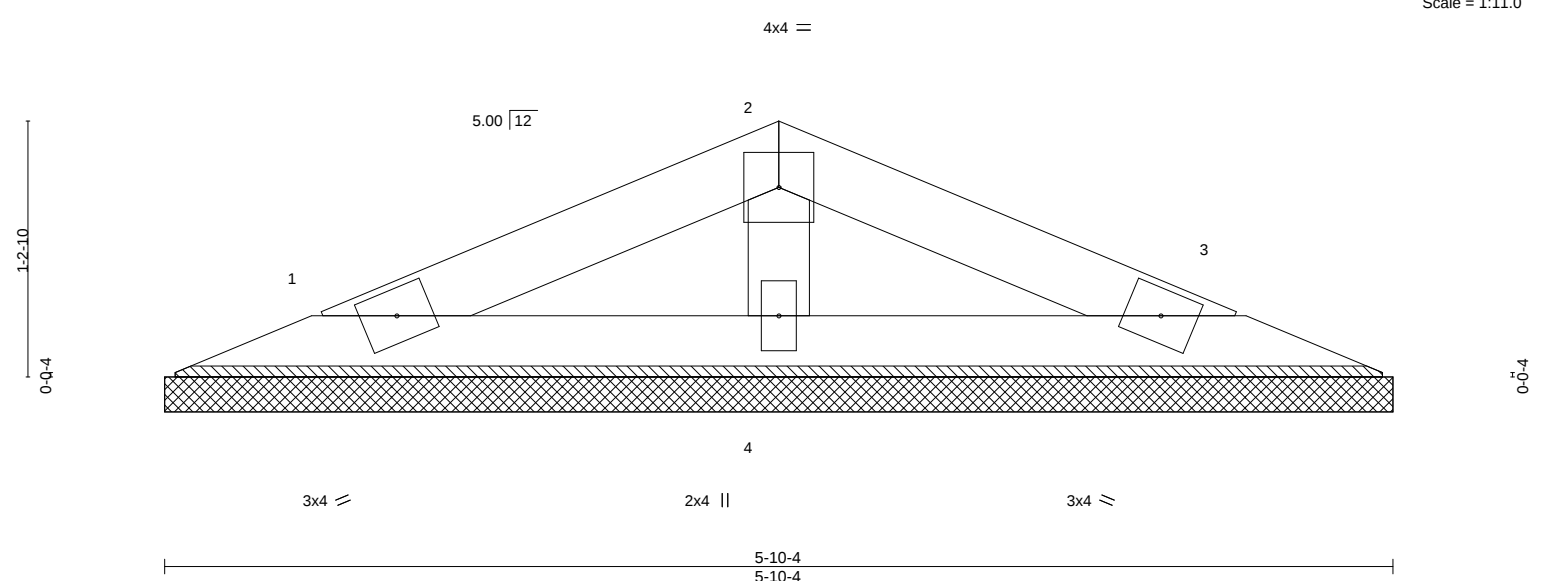
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/31/2021

145026771

Scale = 1:11.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00				
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							
BCDL	10.0										
								Weight: 16 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-10-4 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=5-10-4, 3=5-10-4, 4=5-10-4
 Max Horz 1=10(LC 11)
 Max Uplift 1=9(LC 11), 3=10(LC 12)
 Max Grav 1=94(LC 15), 3=94(LC 16), 4=177(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 2 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.



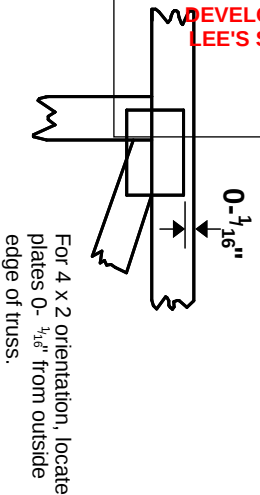
March 3, 2021

Symbols

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/01/2021

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

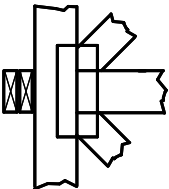
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



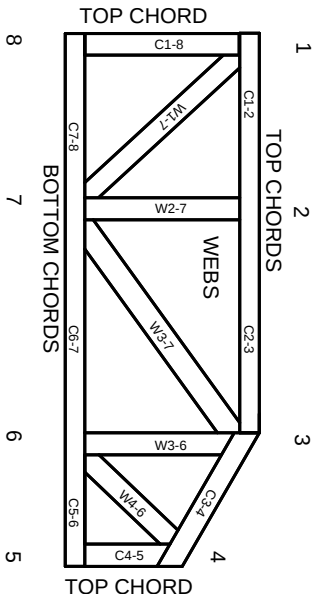
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 T or I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.