



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

10/06/2020

MiTek USA, Inc.

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

Re: H3-89
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: I42970371 thru I42970400

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

Missouri COA: Engineering 001193

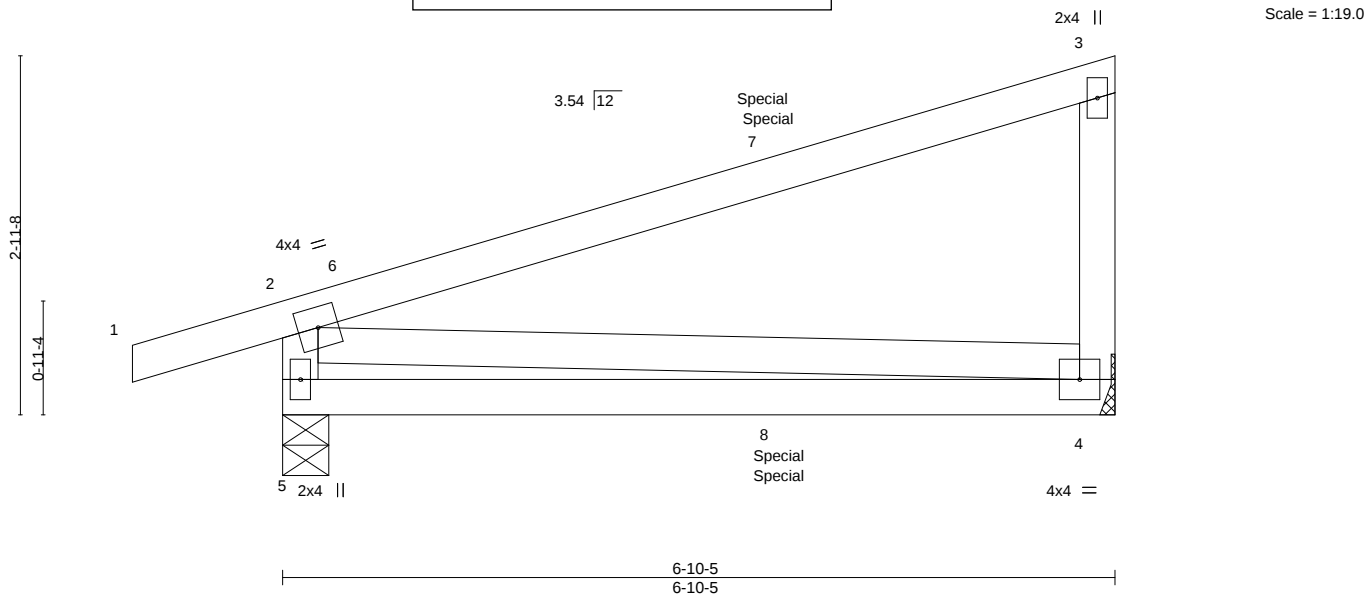


September 28, 2020

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.

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020					
Job	Truss	Truss Type	Girder	Ply	SUMMIT HOMES I42970371			
H3-89	CJ1	Diagonal Hip		1	Job Reference (optional)			
Mid America Truss,		Jefferson City, MO - 65101,		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:30:53 2020 Page 1 ID:Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-5RoSihgJTXH?XG?4p3u4FxUO7MDGqTuN0O?x9yya3KG				
		-1-2-14 1-2-14		6-10-5 6-10-5				



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.43	Vert(LL) 0.01 4-5 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.01	Vert(CT) -0.12 4-5 >650 240		
BCLL 0.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.00 4 n/a n/a		
BCDL 10.0	Code IRC2018/TP12014			Weight: 36 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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 100 lb uplift at joint(s) 5, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

- 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)



September 28, 2020

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: H3-89

Truss: G1

Truss Type: Common Girder

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/06/2020

Ply: 2

SUMMIT HOMES

Job Reference (optional)

I42970372

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:30:56 2020 Page 1

ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-W?UaKjiCmSfaOkjVBSntZ60vaGm1kGpiMDbmHya3KD

5-2-0

5-2-0

10-4-0

5-2-0

15-6-0

5-2-0

20-8-0

5-2-0

7x8 =

Scale = 1:40.5

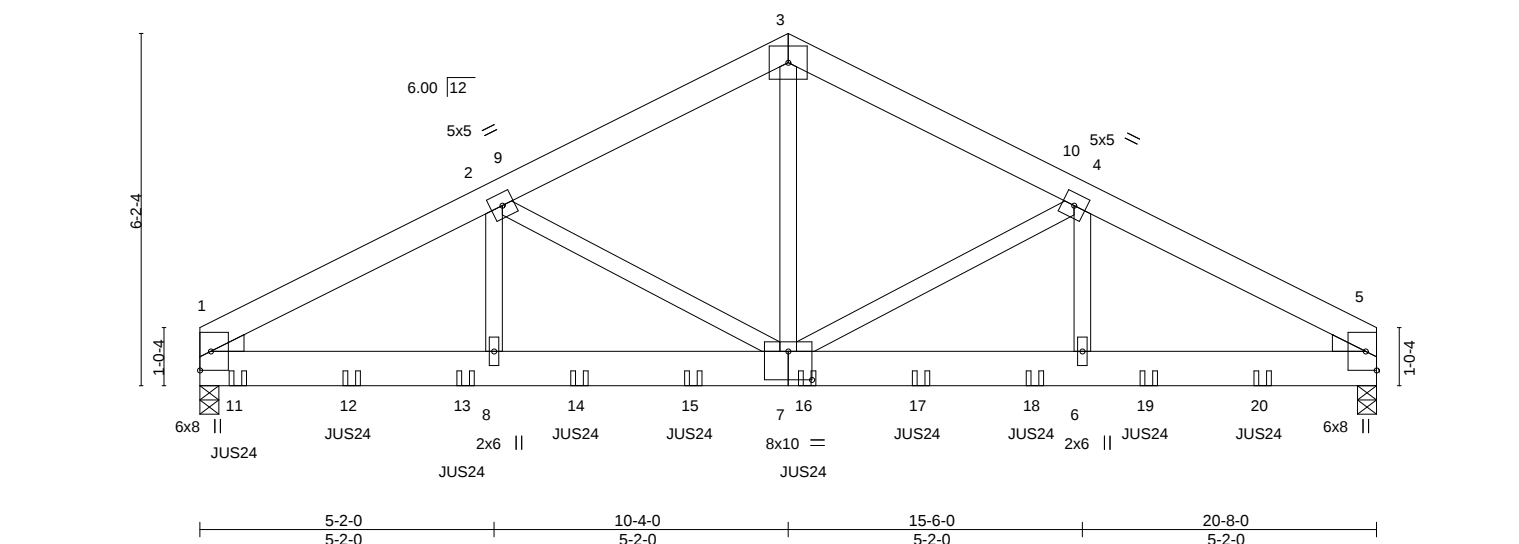


Plate Offsets (X,Y)-- [7:0-5-0,0-6-0]																				
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP		
TCLL (roof)	20.0	Plate Grip DOL		1.15		TC	0.43	Vert(LL)	-0.05	6-7	>999	360	MT20		244/190					
Snow (Pf/Pg)	15.4/20.0	Lumber DOL		1.15		BC	0.31	Vert(CT)	-0.08	6-7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

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	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		
WEDGE			
Left: 2x4 SP No.2 , Right: 2x4 SP No.2			

REACTIONS. (size) 1=0-4-0, 5=0-4-0

Max Horz 1=-64(LC 45)

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 100 lb uplift at joint(s) except (jt=lb) 1=400, 5=334.
 - 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



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			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020			
Job	Truss	Truss Type	Ply		SUMMIT HOMES	
H3-89	G1	Common Girder	2		I42970372	
Mid America Truss, Jefferson City, MO - 65101,			Job Reference (optional)			
LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15			8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:30:56 2020 Page 2 ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-W?UaKjiCmSfaOkjVBSntZ60vaGm1kGpiMDbmHya3KD			

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	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	SUMMIT HOMES
H3-89	G2	Roof Special	Girder		2	I42970373
Mid America Truss,		Jefferson City, MO - 65101,		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:30:58 2020 Page 1 ID: Z_Eg7_y5Dghi_ENvQbP05Vz4M0m-SocLIpKSI3wHd11ccUFy_BRMNyZVbY69giir9ya3KB		
3-4-0		6-8-0		10-0-0		13-4-0
3-4-0		3-4-0		3-4-0		3-4-0
6x6 =						

Scale = 1:27.7

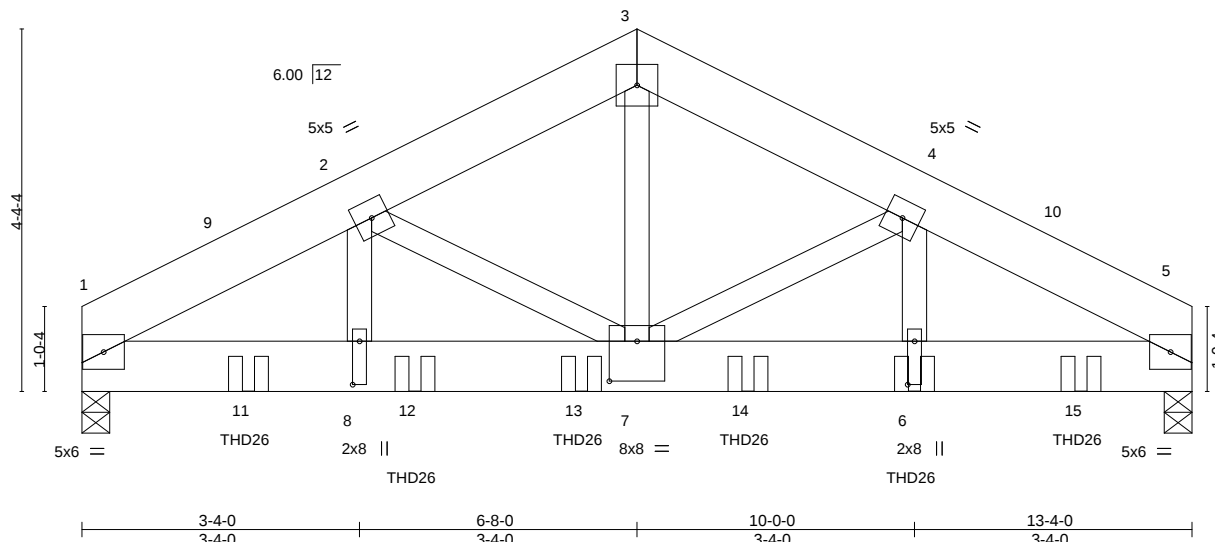


Plate Offsets (X,Y)-- [6:0-6-4,0-1-0], [7:0-4-0,0-5-12], [8:0-6-4,0-1-0]

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 0.11	Vert(LL)	-0.03	6-7	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.06	6-7	>999	240		
TCDL 10.0	Rep Stress Incr	NO	WB 0.56	Horz(CT)	0.02	5	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-P							
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=1.33
 - 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) 1, 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP 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
 Uniform Loads (plf)
 Vert: 1-3=-51, 3-5=-51, 1-5=-20



September 28, 2020

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MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6=-1386(B) 11=-1386(B) 12=-1386(B) 13=-1386(B) 14=-1386(B) 15=-1386(B)

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Job

H3-89

Truss

H1

Truss Type

Hip Girder

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/26/2020

Ply

2

SUMMIT HOMES

142970374

Mid America Truss,

Jefferson City, MO - 65101,

Job Reference (optional)

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:05 2020 Page 1

ID:Z_Eg7_y5Dghi_ENvQbPC5Vz4M0m-lkX_DopreDolz6vOWa6ukT_YUCNket_8mFvZaFya3K4

-0-10-8

0-10-8

4-11-4

4-11-4

7-0-12

2-1-8

12-0-0

4-11-4

12-10-8

0-10-8

Scale = 1:22.4

Plate Offsets (X,Y)--		[4:0-5-12,0-2-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.50	in (loc)	l/defl	L/d		MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.13	-0.02	10	>999	360		244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.07	-0.04	10	>999	240		
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		2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SP No.2	BOT CHORD	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 60)
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 100 lb uplift at joint(s) 2, 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.
- Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

LOAD CASE(S)

Standard

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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

STATE OF MISSOURI

SCOTT M. SEVIER

NUMBER

PE-2001018807

PROFESSIONAL ENGINEER

September 28, 2020

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		2 Job Reference (optional)
H3-89	H1	Hip Girder	8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:05 2020 Page 2		142970374 ID:Z_Eg7_y5DGhi_ENvQbPC05Vz4M0m-lkX_DopreDolz6vOWa6ukT_YUCNket_8mFvZaFya3K4
Mid America Truss, Jefferson City, MO - 65101,					

LOAD CASE(S)

Standard

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

Uniform Loads (plf)

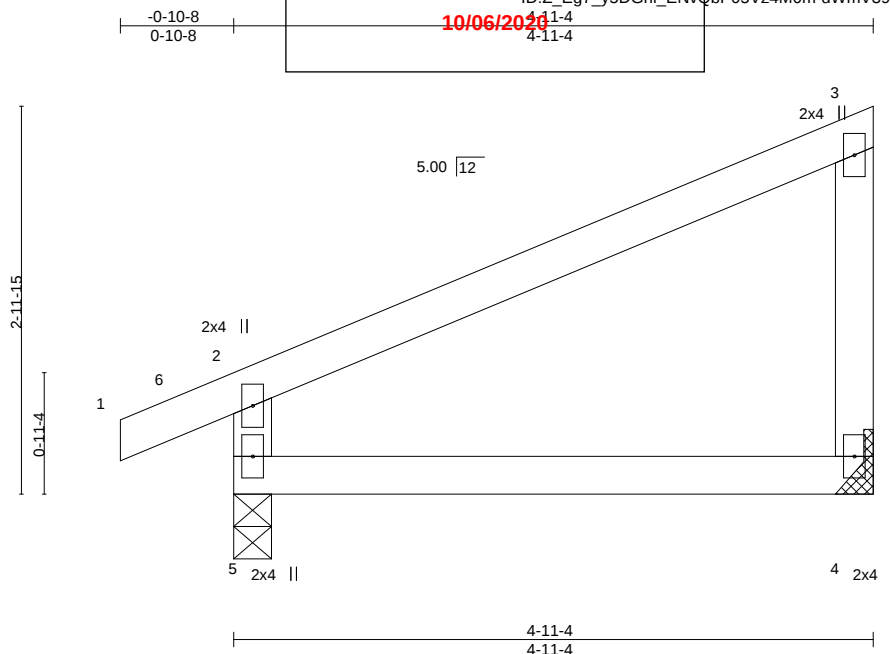
Vert: 1-4=-51, 4-5=-61, 5-8=-51, 2-7=-20

Concentrated Loads (lb)

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

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		SUMMIT HOMES Job Reference (optional) ID: Z_Eg7_y5DGhi_ENvObP05Vz4M0m-dWmV39tMiRljRkD9lQBquJ9F0pkVai3jhttnj0ya3K0
H3-89	J1	MONO TRUSS	1		142970375

Mid America Truss, Jefferson City, MO - 65101, 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:09 2020 Page 1



Scale = 1:17.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.34	Vert(LL)	-0.01	4-5	>999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.14	Vert(CT)	-0.02	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 21 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 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-

- 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 100 lb uplift at joint(s) 5, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 28, 2020

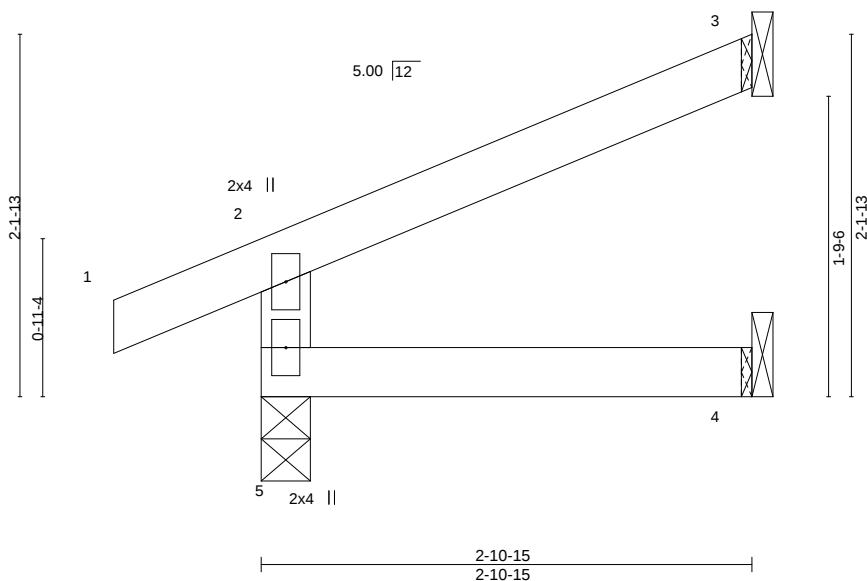
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020			SUMMIT HOMES	I42970376
H3-89	J2	Jack-Open				Job Reference (optional)	
Mid America Truss,		Jefferson City, MO - 65101,	ID:Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-wsh8XYyl3bBknoFVgOpThnxWpe9ZjsolIT3fS6ya3Jv 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:16 2020 Page 1				



Scale = 1:13.7

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0		2-0-0	TC	0.11	in	(loc)	I/defl	L/d				
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.05	Vert(LL)	0.00	4-5	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.00	4-5	>999	240			
BCLL	0.0	Rep Stress Incr	YES			Horz(CT)	-0.00	3	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 11 lb	FT = 3%	

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 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)

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

NOTES-

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



September 28, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	SUMMIT HOMES
H3-89	S1	ROOF SPECIAL			1	I42970377
Mid America Truss, Jefferson City, MO - 65101,		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:22 2020 Page 1 ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-I02Poc1WeRxtVjif0fwtw2BL130N7OZehPWzgmya3Jp				
-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		10/06/2020				
		Scale = 1:71.5				

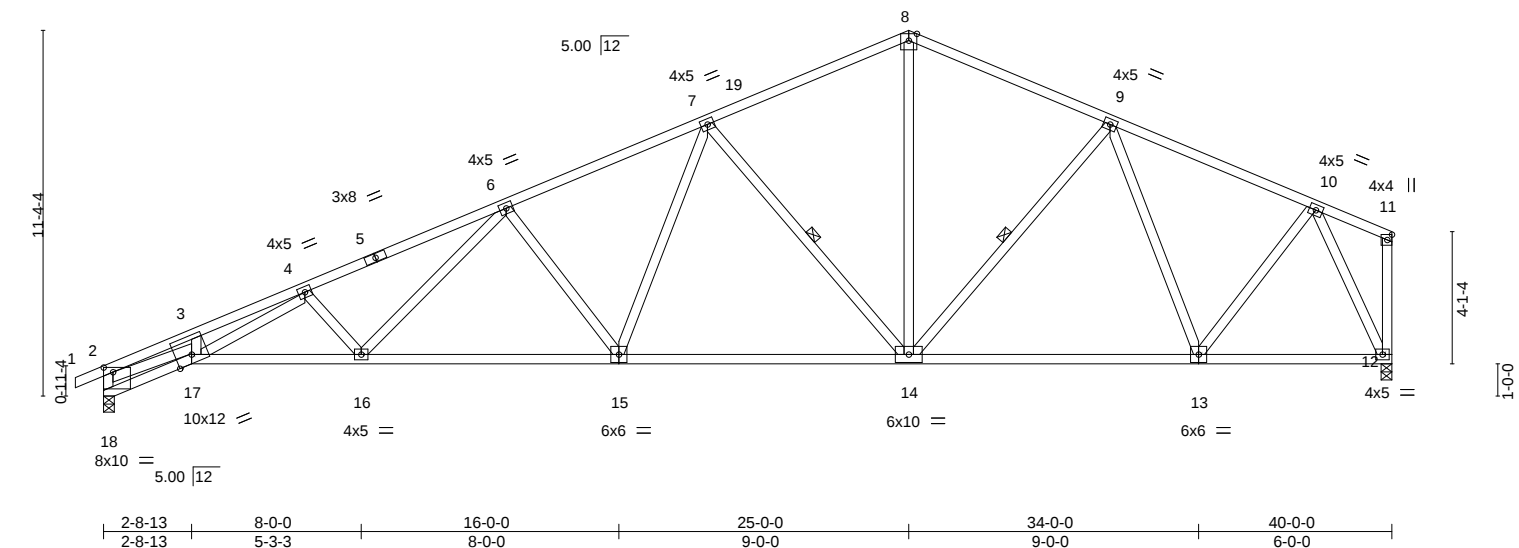


Plate Offsets (X,Y)-- [18:0-3-8,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.90	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.79	Vert(LL)	-0.25 15-16 >999		244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.81	Vert(CT)	-0.55 15-16 >872		
BCLL	0.0	Rep Stress Incr	YES	Matrix-SH		Horz(CT)	0.27 12 n/a		
BCDL	10.0	Code IRC2018/TPI2014						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-**
- 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 100 lb uplift at joint(s) 18, 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.



September 28, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	SUMMIT HOMES
H3-89	S1B	Roof Special			1	142970379
Mid America Truss, Jefferson City, MO - 65101,			Job Reference (optional) ID: Z_Eg7_y5DGhi_ENVQbP05Vz4M0m-k5phh89XC4c46vN22a_ny3yMhAxkStzlCxCxUlya3Jg			

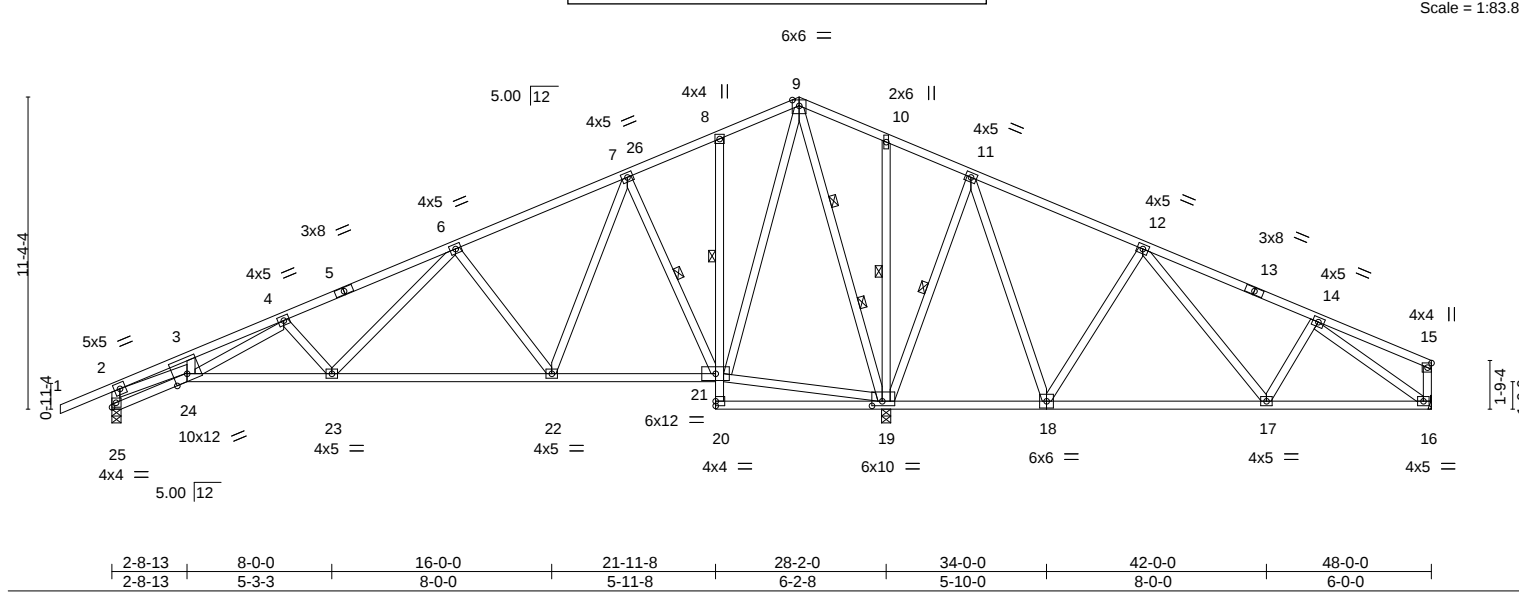


Plate Offsets (X,Y)-- [19:0-4-8,0-2-0]													
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.09	23-24	>999	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.23	22-23	>999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.09	19	n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH									
BCDL	10.0												

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)

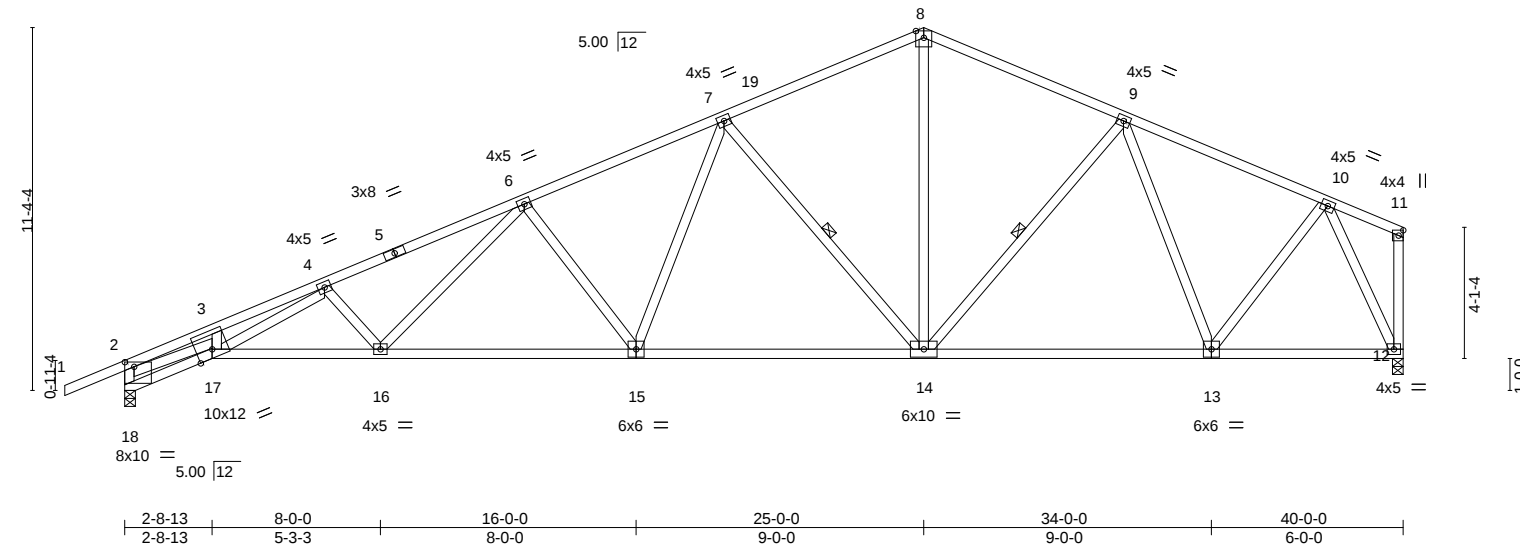
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-25=-842/95, 2-3=-2059/153, 3-4=-2003/192, 4-6=-1282/85, 6-7=-368/64, 7-8=0/467, 8-9=0/477, 9-10=0/1279, 10-11=0/1273, 11-12=-46/843, 12-14=-407/391
 BOT CHORD 23-24=-138/1395, 22-23=-44/658, 18-19=-895/138, 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-**
- 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.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 19 except (jt=lb) 16=125.
 - 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.



September 28, 2020

Job	Truss	Truss Type	Ply		SUMMIT HOMES
H3-89	S1C	Roof Special	1		I42970380
Mid America Truss, Jefferson City, MO - 65101,			Job Reference (optional)		
			ID:Z_Eg7_y5DGhi_EnvQbP05		
1-10-8	2-8-13	6-3-0	12-6-0	18-9-0	24-6-0
1-10-8	2-8-13	3-6-3	6-3-0	6-3-0	6-3-0
			6x6 =		

[illegible]

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=-127/783, 7-14=-987/147, 8-14=-11/902, 9-13=-584/59, 10-13=0/883,
10-12=-1690/38

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) TLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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 100 lb uplift at joint(s) 18, 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.



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

building design. Bracing indicated is to prevent buckling of individual truss web and chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	SUMMIT HOMES
H3-89	T1	Common			1	142970381
Mid America Truss, Jefferson City, MO - 65101,			Job Reference (optional) ID: Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-H50T94DYtMycQBxjy0CdaQr8fVY5tad?MuOpErya3JZ			

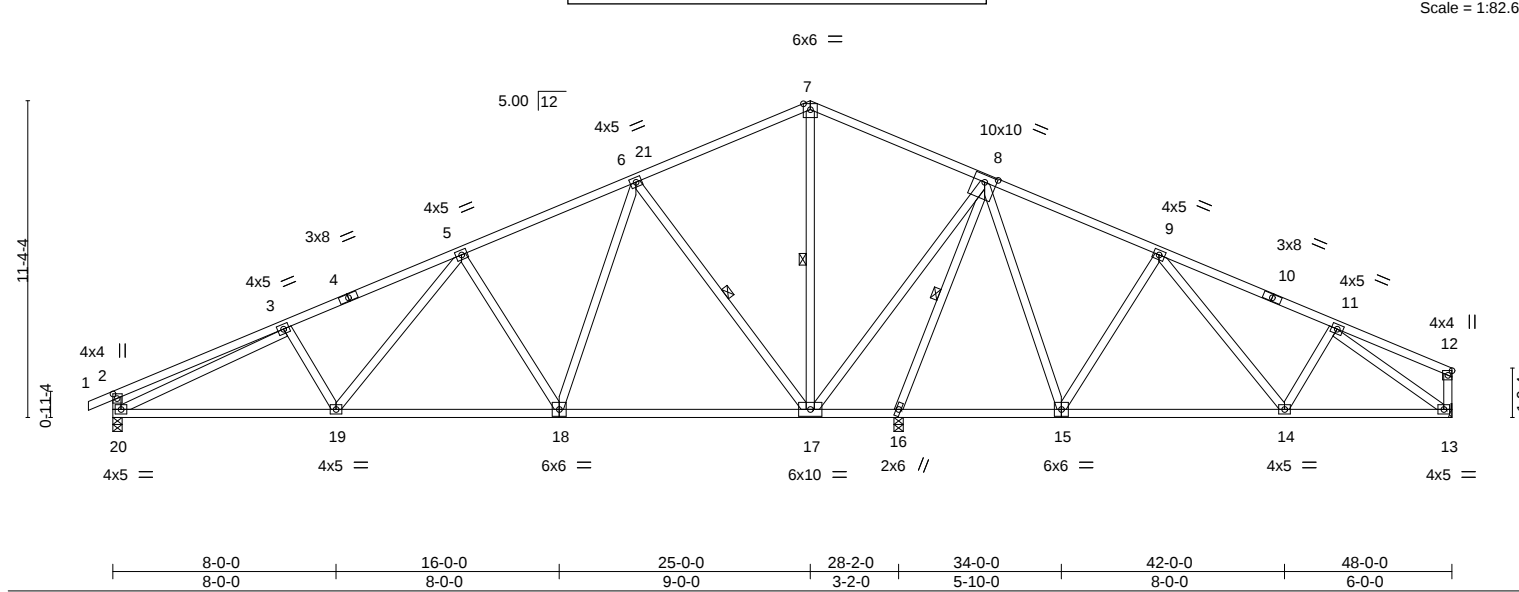


Plate Offsets (X,Y)--		[2:0-2-0,0-1-12], [8:0-5-0,0-3-0]											
8-0-0		16-0-0		25-0-0		28-2-0		34-0-0		42-0-0		48-0-0	
8-0-0		8-0-0		9-0-0		3-2-0		5-10-0		8-0-0		6-0-0	
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC 0.66		in (loc)		l/defl		L/d		MT20	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.54		-0.07 18-19		>999		360		244/190	
TCDL	10.0	Lumber DOL 1.15		WB 1.00		-0.25 17-18		>999		240			
BCLL	0.0	Rep Stress Incr YES		Matrix-SH		Horz(CT) 0.04 13		n/a		n/a			
BCDL	10.0	Code IRC2018/TPI2014										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 100 lb uplift at joint(s) 13, 20, 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.



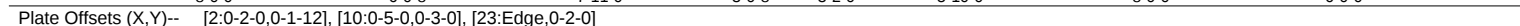
September 28,2020

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



LUMBER		BRACING	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

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=-427/172, 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 100 lb uplift at joint(s) 25, 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.



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		Ply	SUMMIT HOMES 142970383 Job Reference (optional)
H3-89	T1B	Roof Special			1	

Mid America Truss, Jefferson City, MO - 65101, 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:45 2020 Page 1
ID: Z_Eg7_y5Dghi_ENVQbP05Vz4M0m-aRx6dTlxEVrdmGz4s_qGMveKIKsa0IS1zUbh_xya3JS

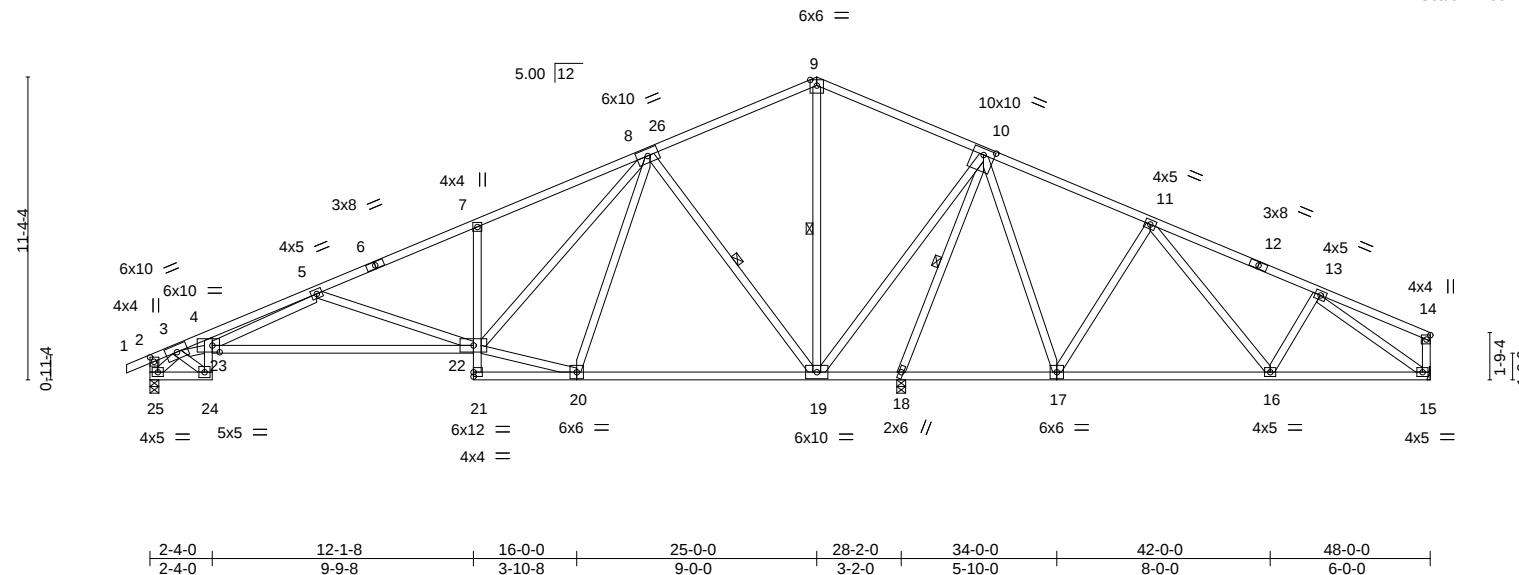


Plate Offsets (X, Y)-- [2:0-2-0,0-1-12], [4:0-3-4,0-3-0], [10:0-5-0,0-2-12]											
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.70	in (loc)	l/defl	L/d		MT20	GRIP
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.87	Vert(LL)	-0.13 22-23	>999	360		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Vert(CT)	-0.56 22-23	>594	240		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH		Horz(CT)	0.13 18	n/a	n/a		
BCDL	10.0									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; TCCL=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
 - TCCL: 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 100 lb uplift at joint(s) 15, 25, 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.



September 28,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-PbIntWNipLbmUBQDDFxbAuMD1qQbivLP2?Bbya3JM 10/06/2020			Ply	1	SUMMIT HOMES	I42970384
H3-89	T1GE	GABLE						Job Reference (optional)	
Mid America Truss,		Jefferson City, MO - 65101,		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:51 2020 Page 1 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					

Scale = 1:103.6

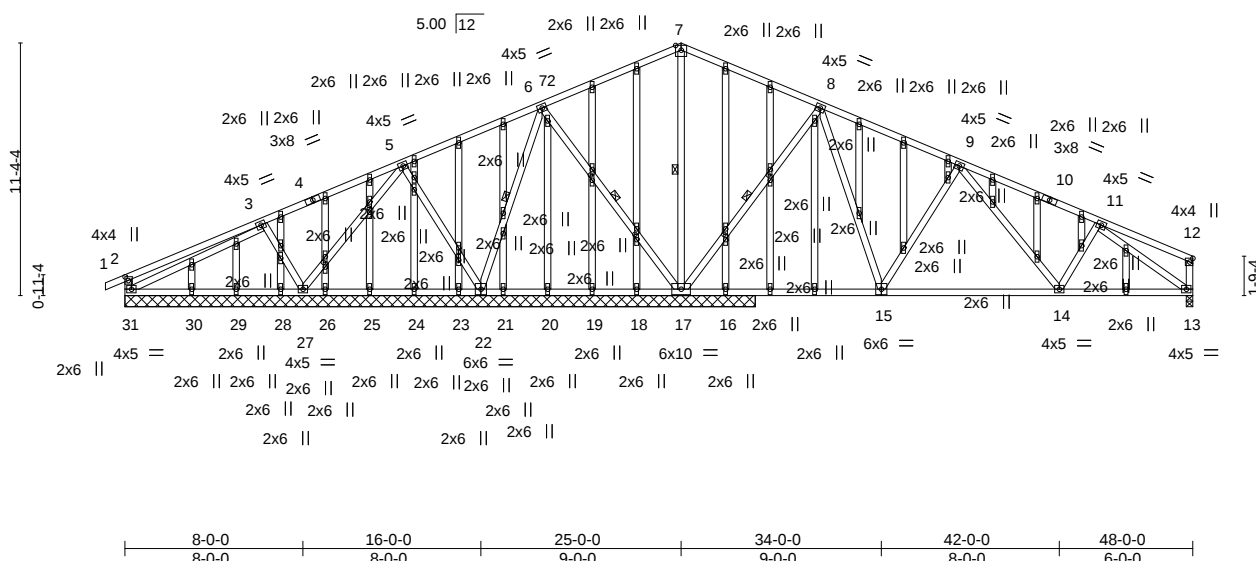


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [32:0-2-14,0-1-0], [34:0-2-14,0-1-0], [43:0-2-9,0-1-0], [45:0-2-9,0-1-0], [52:0-2-14,0-1-0], [55:0-2-14,0-1-0]																			
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL (roof) 20.0		Plate Grip DOL		1.15		TC 0.67		Vert(LL)		-0.03 14-15		>999		360		MT20		244/190	
Snow (Pf/Pg) 15.4/20.0		Lumber DOL		1.15		BC 0.37		Vert(CT)		-0.12 14-15		>999		240					
TCDL 10.0		Rep Stress Incr		YES		WB 0.43		Horz(CT)		0.01 13		n/a		n/a					
BCLL 0.0		Code IRC2018/TPI2014				Matrix-SH										Weight: 451 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 5-11-1 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 6-22, 6-17, 7-17, 8-17

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.



September 28, 2020

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/TPI 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: H3-89

Truss: T2

Truss Type: ROOF SPECIAL

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Ply: 1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101,

10/06/2020

142970385

ID: Z_Eg7_y5DGhi_EnvQbP0\$Vz4M0m-Dlge8aSTPBLwC6uNZV24rR8KTAzeqEfokLVJPEya3JG

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:31:57 2020 Page 1

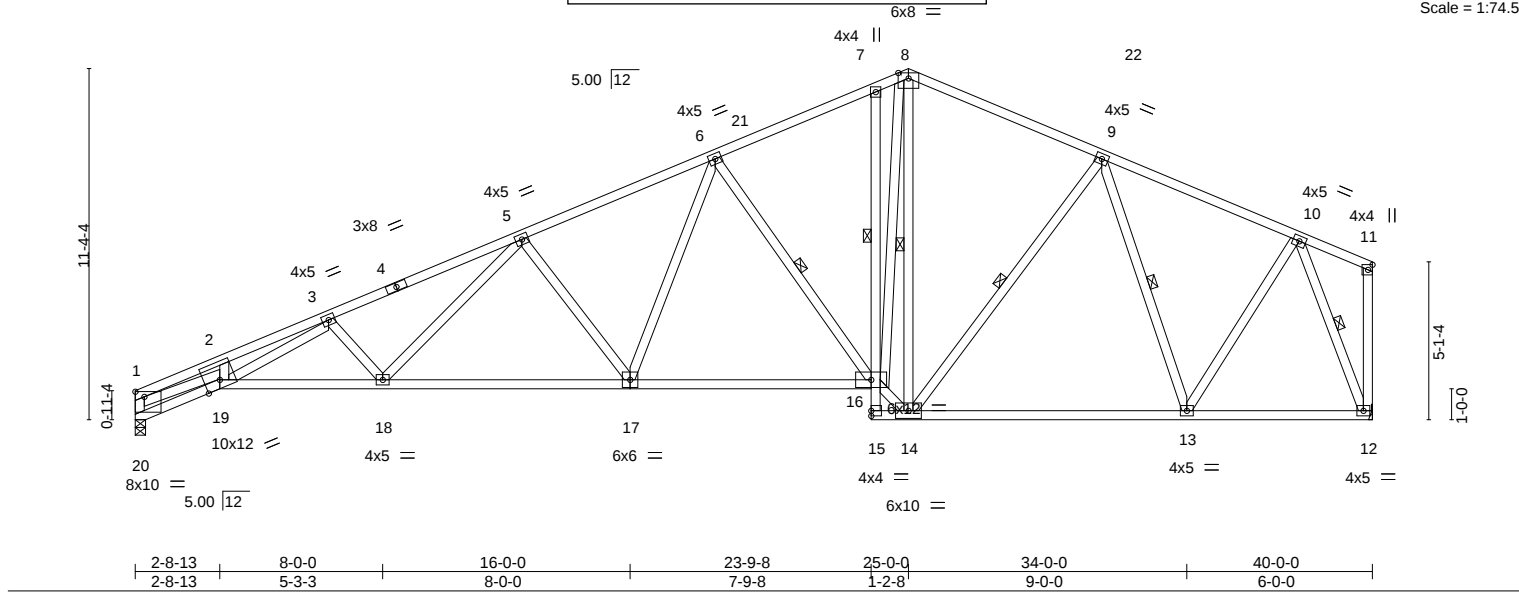


Plate Offsets (X,Y)-- [20:Edge,0-2-0]									
2-8-13		8-0-0		16-0-0		23-9-8		25-0-0	
2-8-13		5-3-3		8-0-0		7-9-8		1-2-8	
								9-0-0	
								40-0-0	
								6-0-0	

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	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										

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. 1 Row at midpt 7-16
WEBS	2x4 SP No.2 *Except* 1-19: 2x4 SP No.1	WEBS	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-**
- 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.
 - Refer to girder(s) for truss to truss connections.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 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.



September 28,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-eJLnmbULi6kU3ZcyFebnT3m1eN9h1lKEQJj_0Zya3JD 10/06/2020		Ply	SUMMIT HOMES	I42970386
H3-89	T2GE	COMMON SUPPORTED GABLE			1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO - 65101,

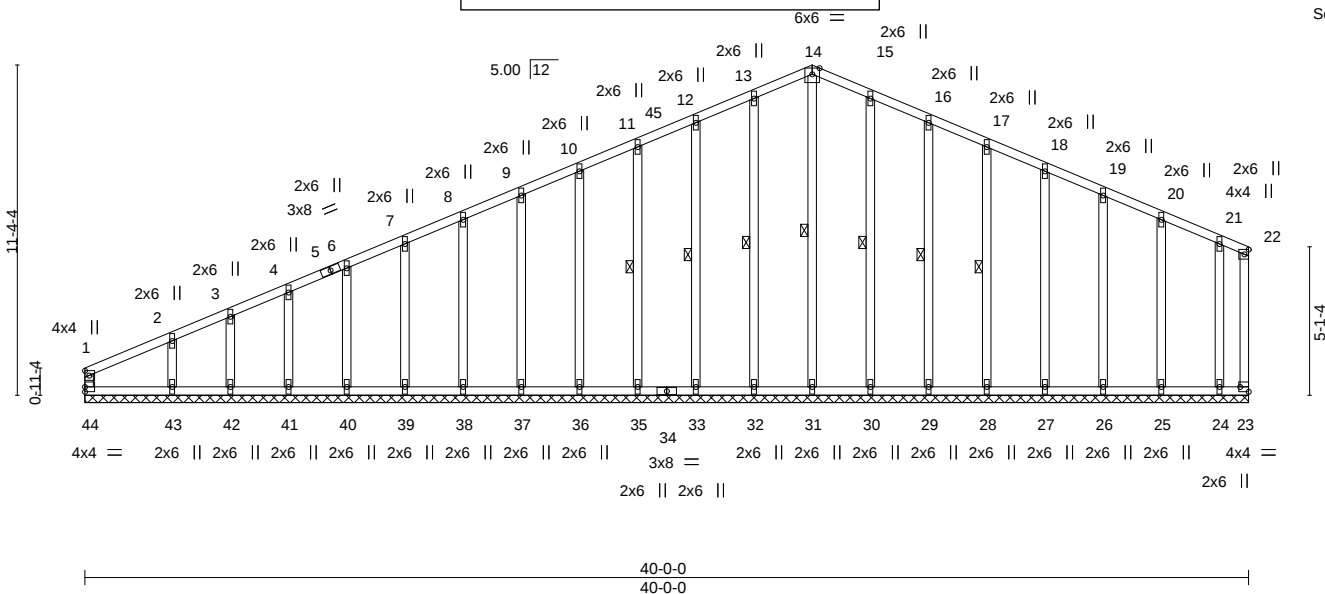


Plate Offsets (X,Y)-- [23:Edge,0-2-0]

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	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	23	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0									Weight: 321 lb	FT = 3%

LUMBER-

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

BRACING-

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



September 28, 2020

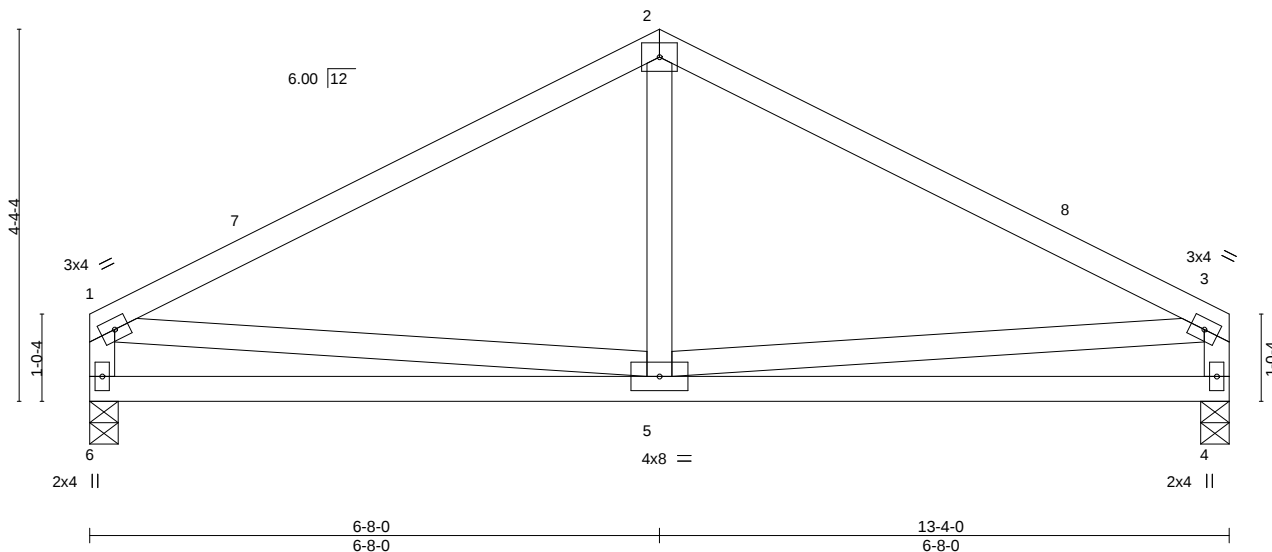
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		Ply	SUMMIT HOMES Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:05 2020 Page 1 ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-7H9gpJYUWfMn9KVw1BBYAG6TiGOQMi0CzZbRkhnya3J8
H3-89	T3	Common			1	I42970387
Mid America Truss,		Jefferson City, MO - 65101,				
		6-8-0 6-8-0		13-4-0 6-8-0		
		4x5 =		Scale = 1:27.0		



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.89	in	(loc)	I/defl	L/d	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.29	Vert(LL)	-0.01	5	>999				
TCDL	10.0	Lumber DOL	1.15	WB	0.11	Vert(CT)	-0.06	4-5	>999				
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		Horz(CT)	-0.00	4	n/a				
BCDL	10.0	Code IRC2018/TPI2014											
											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.



September 28, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/06/2020

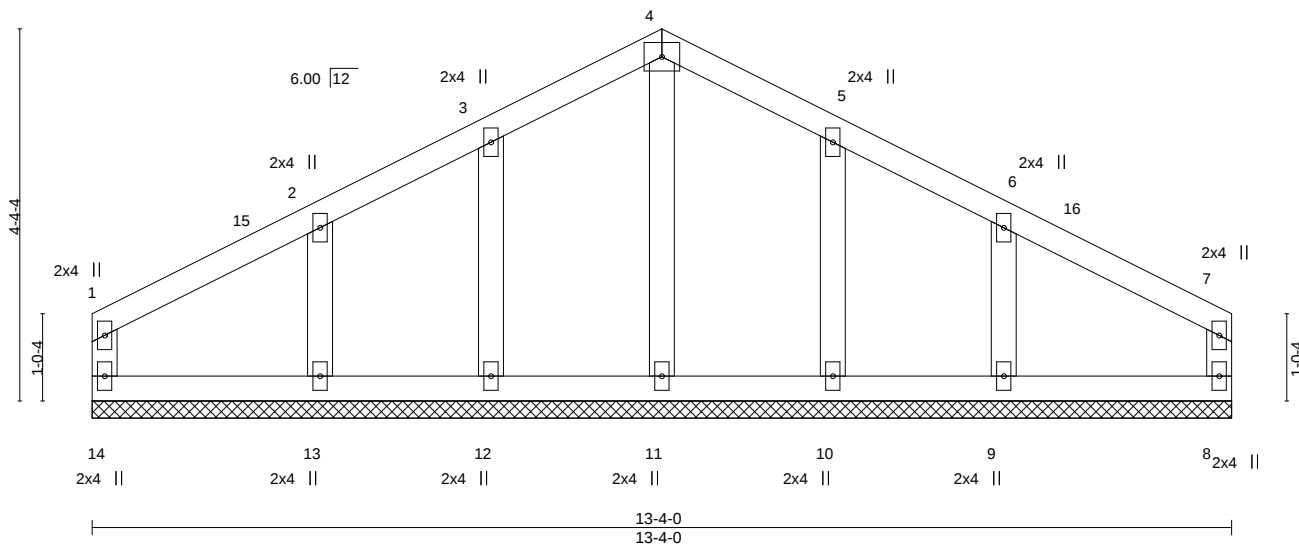
Job H3-89	Truss T3GE	Truss Type Common Supported Gable	Ply 1	SUMMIT HOMES Job Reference (optional)
Mid America Truss, Jefferson City, MO - 65101,		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:10 2020 Page 1 ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-LFyZs0ccLB_4G6Ntqkn7tAAloPbQNHijt8VM_ya3J3		

6-8-0
6-8-0

4x5 =

13-4-0
6-8-0

Scale = 1:27.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.07	in	(loc)	I/defl	L/d	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.04	n/a	-	n/a	999		
TCDL	10.0	Lumber DOL	1.15	WB	0.03	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-R		0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 63 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 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 2-0-0 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.



September 28,2020

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

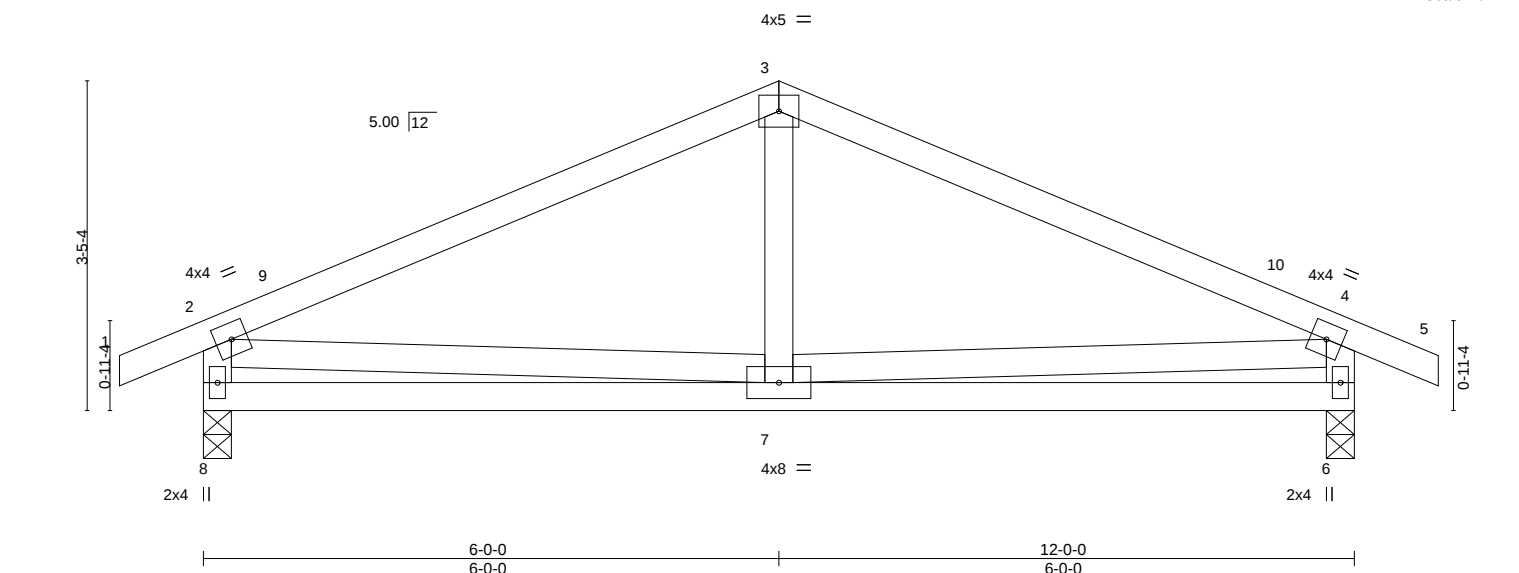
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		Ply	SUMMIT HOMES	142970389	
H3-89	T4	Common			1	Job Reference (optional)		
Mid America Truss, Jefferson City, MO - 65101,			8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:11 2020 Page 1 ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-pRWx4Mdf6V6wuFy3ORIMPnjlpuh6jhryWu3vQya3J2					
-0-10-8 0-10-8			6-0-0 6-0-0		12-0-0 6-0-0			12-10-8 0-10-8

Scale: 1/2"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.92	in (loc)	I/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.23	Vert(LL)	-0.01 7 >999	360			
TCDL	10.0	Lumber DOL	1.15	WB	0.11	Vert(CT)	-0.04 6-7 >999	240			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		Horz(CT)	-0.00 6 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								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-**
- 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) 8, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 28, 2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/06/2020

Job H3-89	Truss T4GE	Truss Type COMMON SUPPORTED GAB	Ply 1	SUMMIT HOMES Job Reference (optional) ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-mqehV2eVe6Me7Z6SVsKqUooGCcc1adn8PqNAzJya3J0
Mid America Truss, Jefferson City, MO - 65101,		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:13 2020 Page 1		

10-4-0

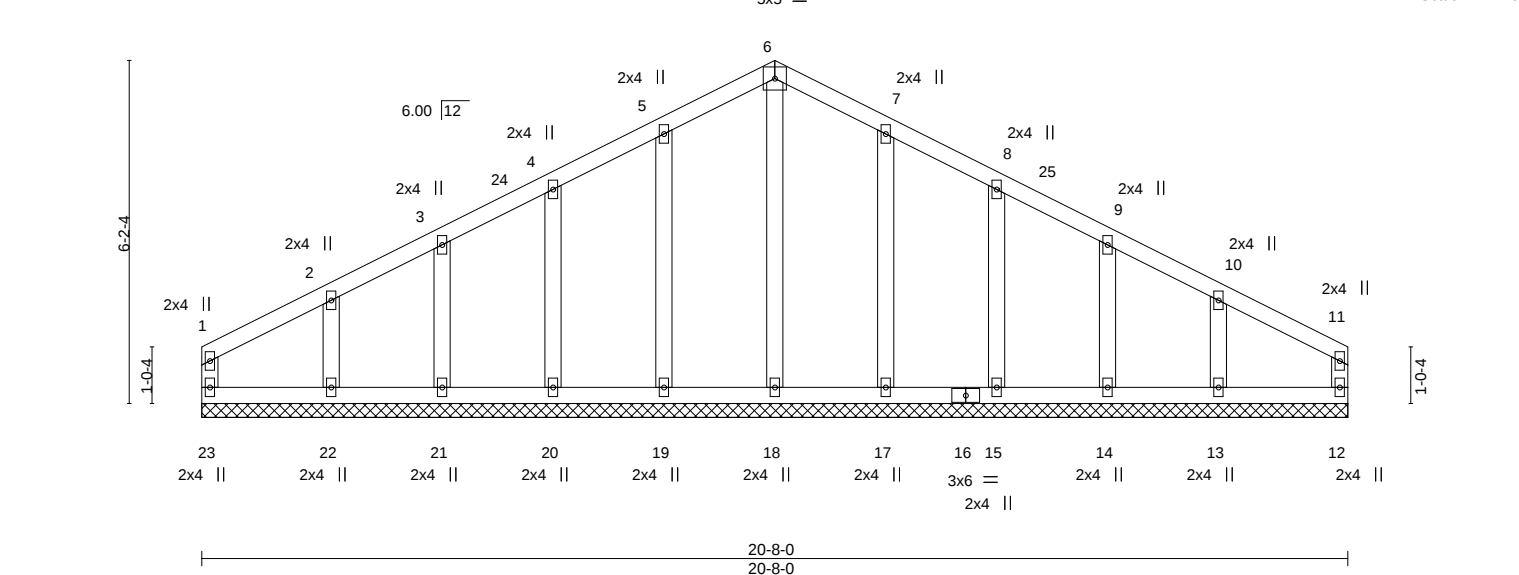
10-4-0

5x5 =

20-8-0

10-4-0

Scale = 1:41.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.06	in (loc)	l/defl	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.04	n/a	n/a				
TCDL	10.0	Lumber DOL	1.15	WB	0.07	n/a	n/a				
BCLL	0.0	Rep Stress Incr	YES	Matrix-R		0.00	12				
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 113 lb		FT = 3%	

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

REACTIONS. All bearings 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

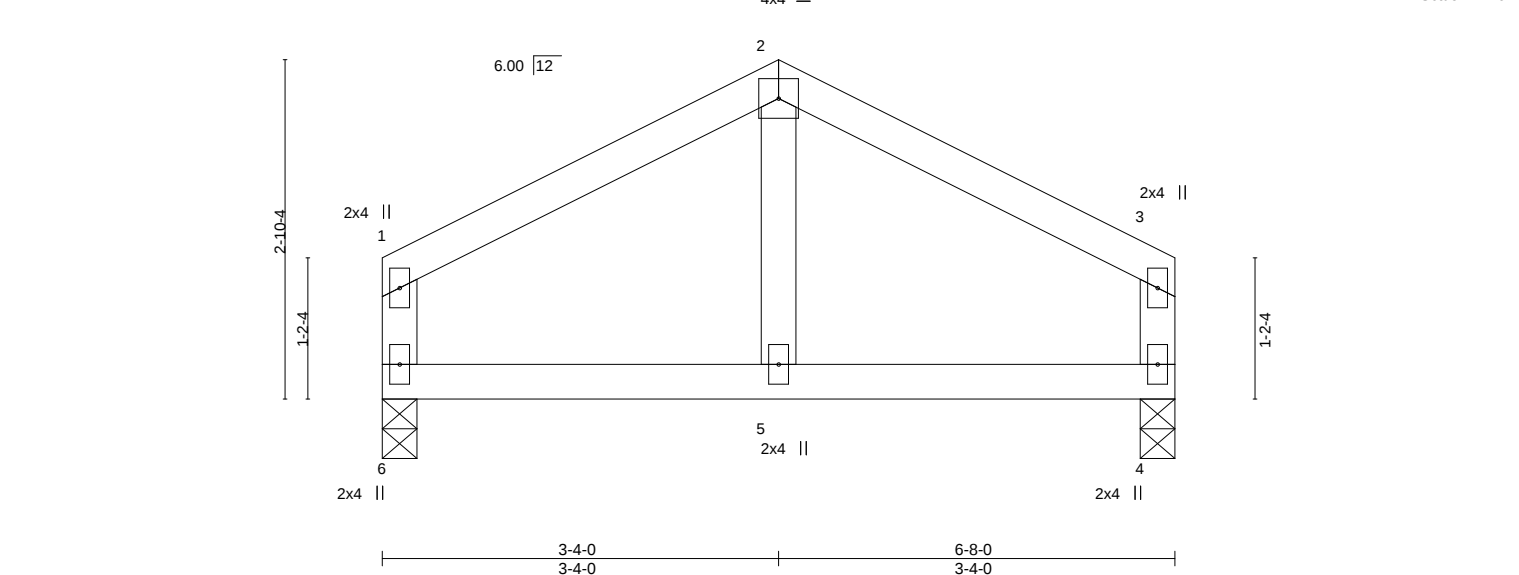
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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.



September 28,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	SUMMIT HOMES
H3-89	T5	KINGPOST			1	I42970391
Mid America Truss,		Jefferson City, MO - 65101,		Job Reference (optional)		
8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:14 2020 Page 1 ID: Z_Eg7_y5DGhi_ENVQbP05Vz4M0m-E0B4iOf7PQUVlJhe3ar310LPS0vuJ5?leU6jWly3J?						



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.16	in	(loc)	I/defl	L/d	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.19	Vert(LL)	-0.01	5	>999		
TCDL	10.0	Lumber DOL	1.15	WB	0.01	Vert(CT)	-0.03	5	>999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-R		Horz(CT)	0.00	4	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 27 lb	FT = 3%

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

REACTIONS. (size) 6=0-3-8, 4=0-3-8
 Max Horz 6=47(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-**
- 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.



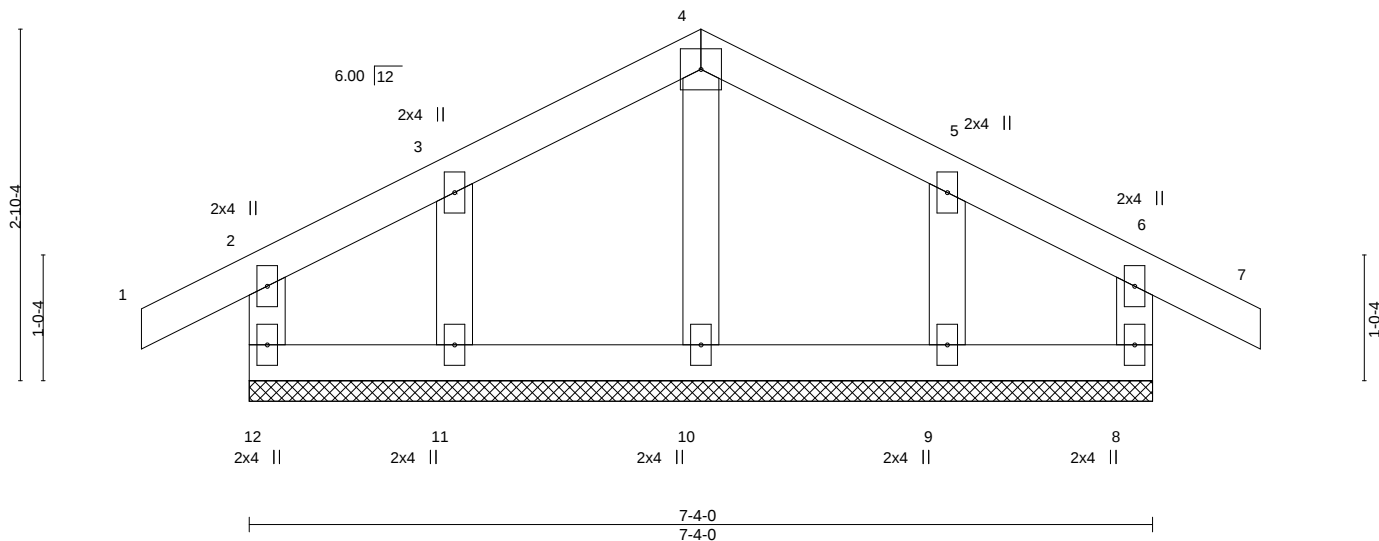
September 28,2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/06/2020

Job H3-89	Truss T5GE	Truss Type Common Supported Gable	Ply 1	SUMMIT HOMES Job Reference (optional)
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Mid America Truss, Jefferson City, MO - 65101, 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:16 2020 Page 1
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Scale = 1:18.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.10	in	(loc)	I/defl	L/d	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.02	Vert(LL)	-0.00	7	n/r		
TCDL	10.0	Lumber DOL	1.15	WB	0.02	Vert(CT)	-0.00	7	n/r		
BCLL	0.0	Rep Stress Incr	YES	Matrix-R		Horz(CT)	0.00	8	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 35 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 7-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 7-4-0.
(lb) - Max Horz 12=-50(LC 9)
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.



September 28, 2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI					
Job	Truss	Truss Type	On Ply	SUMMIT HOMES				
H3-89	T6	Common	4	1	I42970393			
Mid America Truss, Jefferson City, MO - 65101,			Job Reference (optional)					
			8,420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:18 2020 Page 1					
			ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-6nRaYlieSe?xDK?PIpw?BsV?ddDbEk3tZ64xeWya3lx					
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

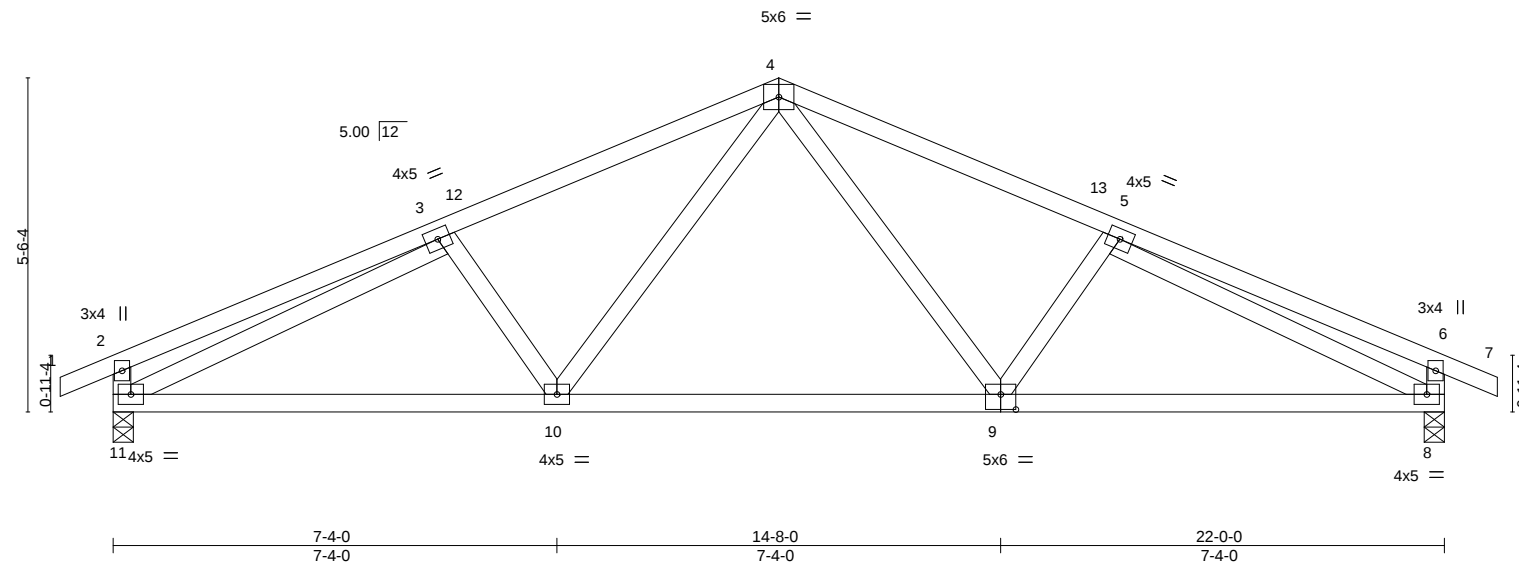


Plate Offsets (X,Y)-- [9:0-3-0,0-3-0]		7-4-0		14-8-0		22-0-0	
		7-4-0		7-4-0		7-4-0	
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc) l/defl L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.05 9-10 >999 360
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.13 9-10 >999 240
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04 8 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH			
BCDL	10.0						
						PLATES	GRIP
						MT20	244/190
						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=1.0; 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.



September 28, 2020

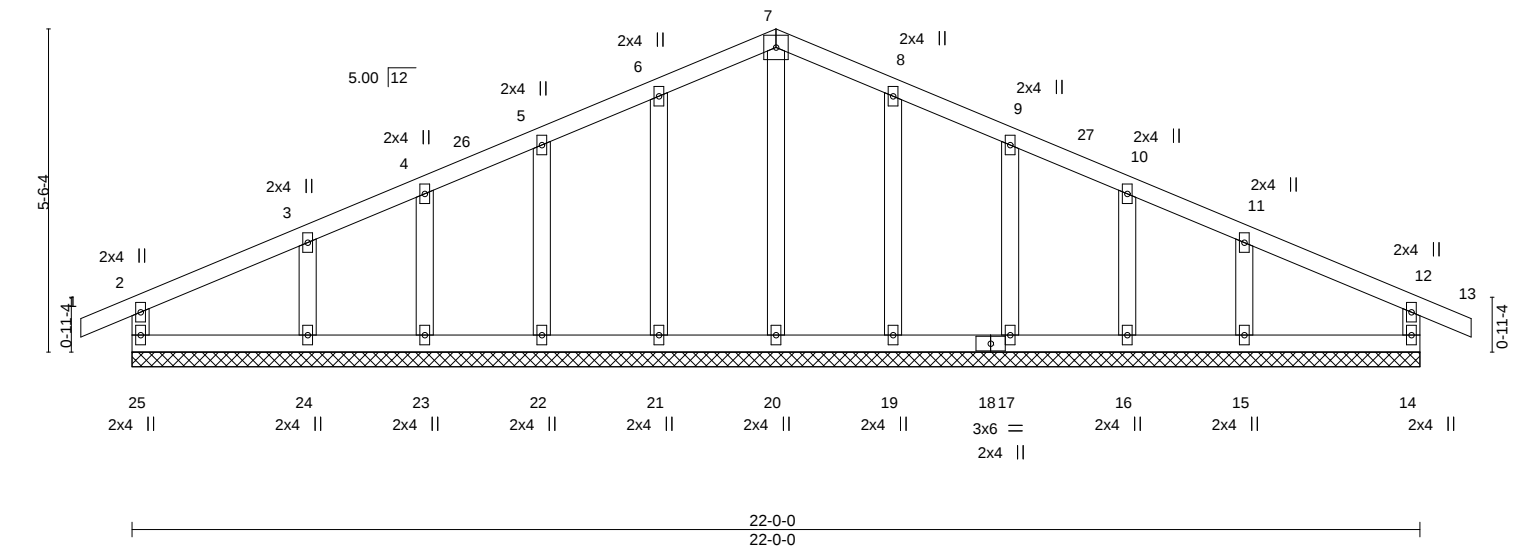
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		Ply	SUMMIT HOMES	I42970394
H3-89	T6GE	Common Supported Gable			1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,		8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:20 2020 Page 1 ID: Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-2AZLzRku_GFfTe8oQqyTHHbSwR?iipmAOQZ1iPy3lv					
-0-10-8 0-10-8		11-0-0 11-0-0		22-0-0 11-0-0		22-10-8 0-10-8	
		5x5 =				Scale = 1:39.4	



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.10	in (loc)	I/defl	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.04	Vert(LL)	-0.00 12 n/r 120				
TCDL	10.0	Lumber DOL	1.15	WB	0.06	Vert(CT)	-0.00 12 n/r 90				
BCLL	0.0	Rep Stress Incr	YES	Matrix-R		Horz(CT)	0.00 14 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 114 lb		FT = 3%	

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

REACTIONS. All bearings 22-0-0.
 (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; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 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) 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.



September 28, 2020

Job: H3-89

Truss: V1

Truss Type: Valley

Mid America Truss, Jefferson City, MO - 65101,

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/06/2020

Ply: 1

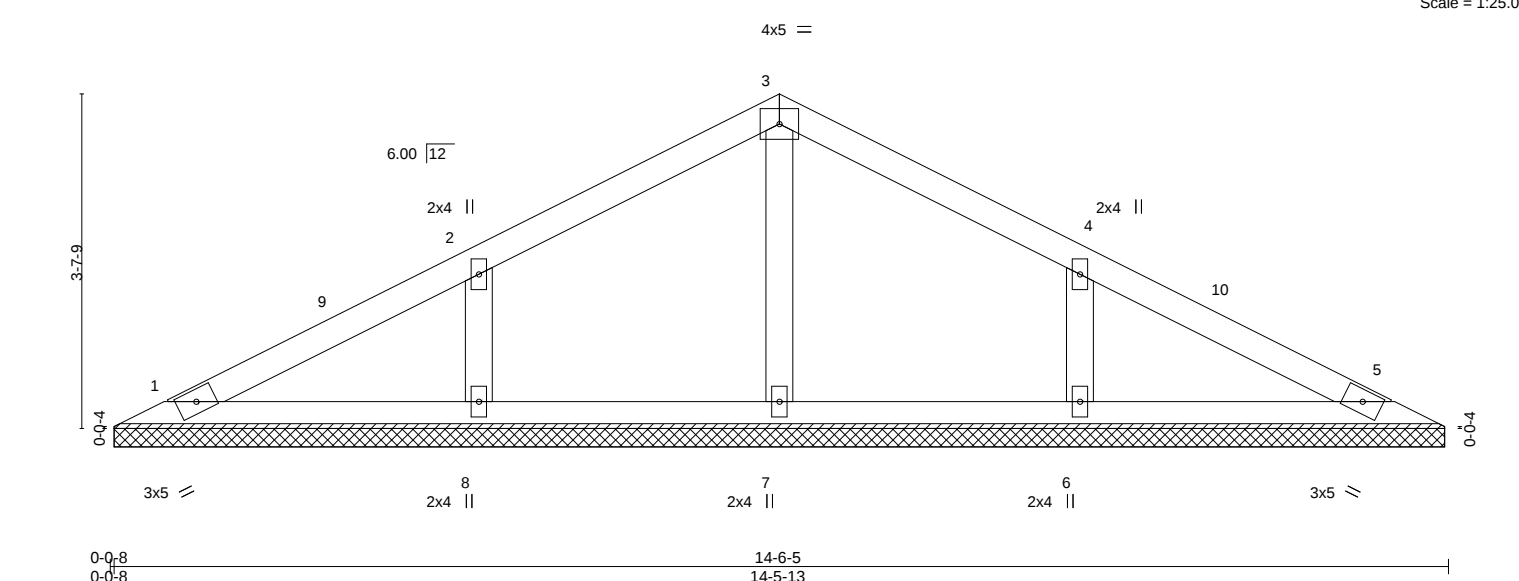
SUMMIT HOMES

Job Reference (optional)

142970395

8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:21 2020 Page 1

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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 6-0-0 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. 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

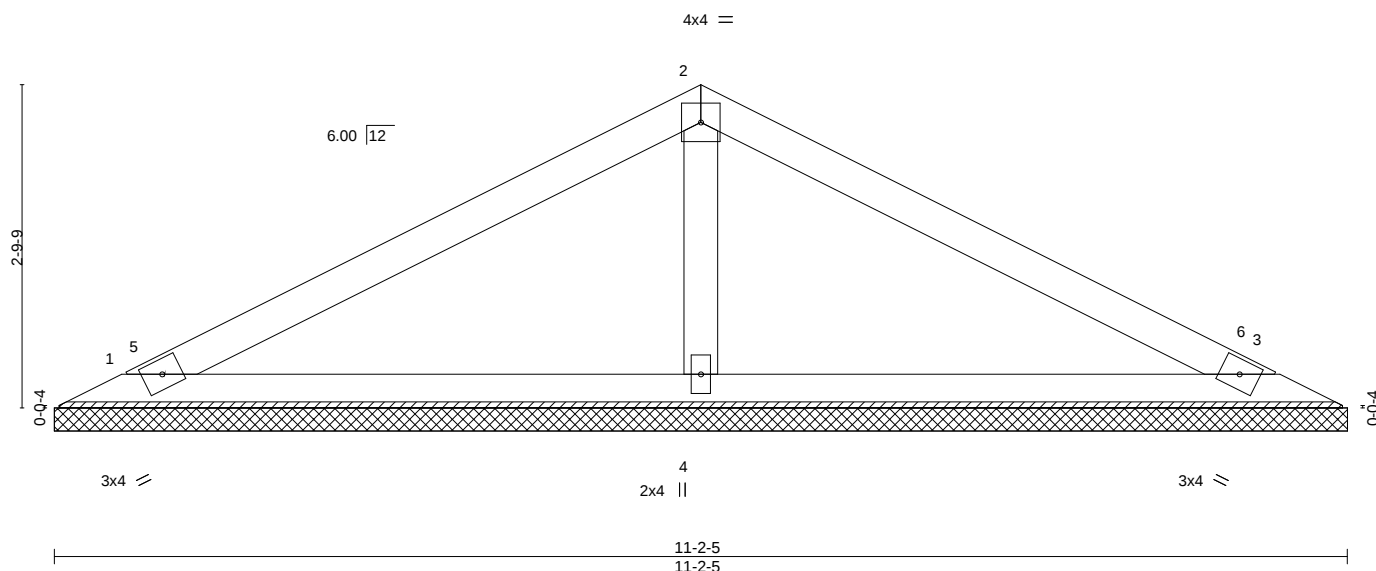
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 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.



September 28,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		Ply	SUMMIT HOMES Job Reference (optional) 11-2-5 5-7-2
H3-89	V2	GABLE			1	142970396 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:24 2020 Page 1 ID: Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-xxosopnO2UI4xFSZfg1PR7I?K2LZed0mx2XFrAya3lr
Mid America Truss,		Jefferson City, MO - 65101,				

Scale = 1:19.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.64	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.17	n/a	-	n/a			
TCDL	10.0	Lumber DOL	1.15	WB	0.04	n/a	-	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00	3	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 36 lb		FT = 3%	

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.



September 28, 2020

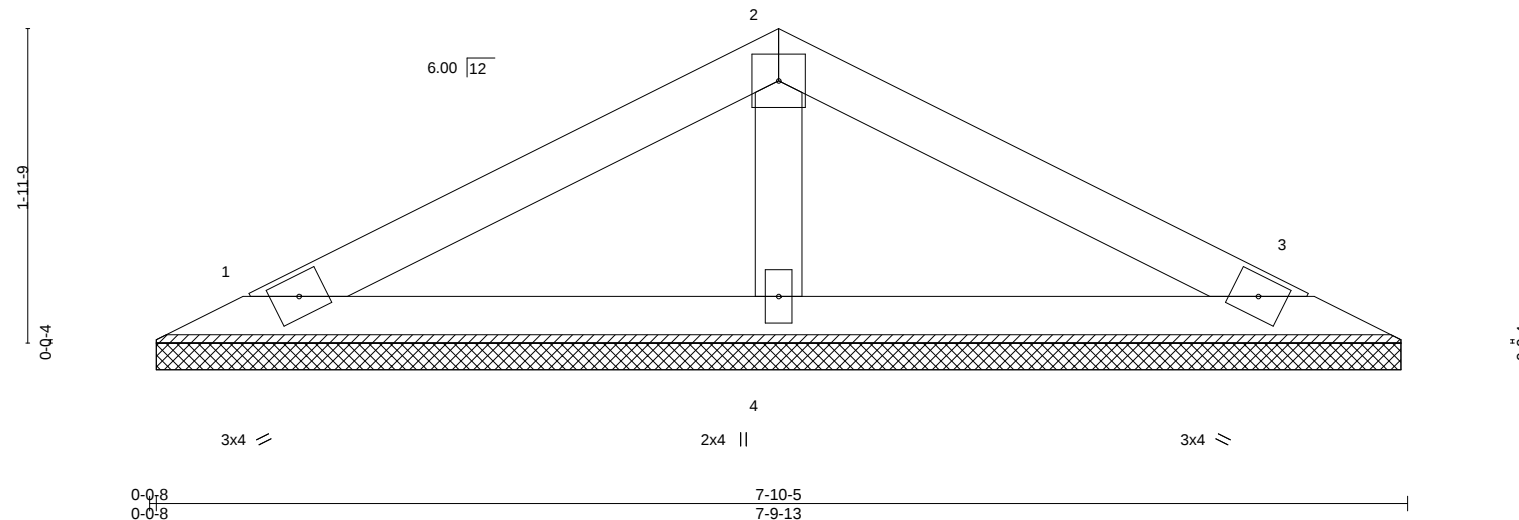
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Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		Ply	SUMMIT HOMES Job Reference (optional)
H3-89	V3	Valley			1	142970397 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:28 2020 Page 1 ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-pi2MeAqv6jFWQtIKuW5LbzwnWfj?aqHMsgVS_xya3ln
Mid America Truss, Jefferson City, MO - 65101,						3-11-2 3-11-2 7-10-5 3-11-2
						4x4 = Scale = 1:14.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.25	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.08	n/a	-	n/a			
TCDL	10.0	Lumber DOL	1.15	WB	0.02	n/a	-	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00	3	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 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.



September 28, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		Ply	SUMMIT HOMES Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:28 2020 Page 1 ID:Z_Eg7_y5DGhi_ENvQbP05Vz4M0m-pi2MeAqv6jFWQtIKuW5LbwqdfijaQdMsgVS_xya3ln
H3-89	V4	Valley			1	I42970398
Mid America Truss,		Jefferson City, MO - 65101,				

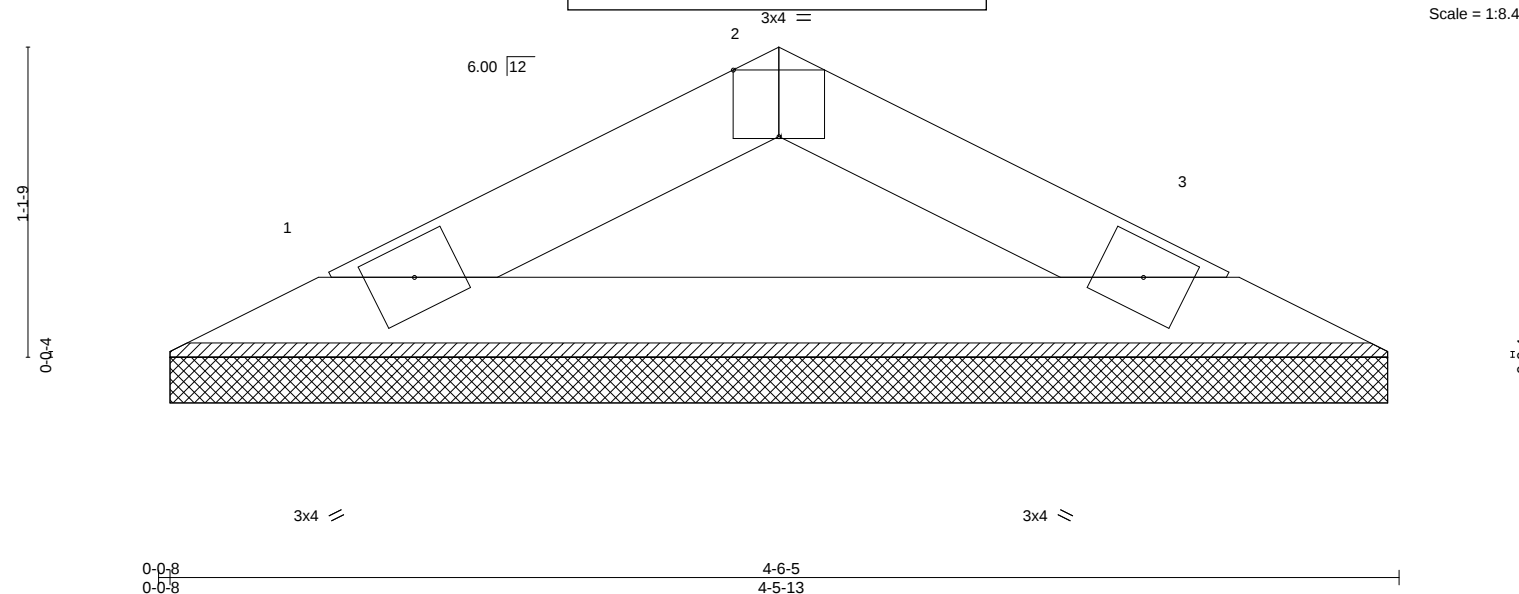


Plate Offsets (X,Y)--		[2:0-2-0,Edge]			
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	2-0-0		TC 0.05	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.10	
TCDL	10.0	Lumber DOL 1.15		WB 0.00	
BCLL	0.0	Rep Stress Incr YES		Matrix-P	
BCDL	10.0	Code IRC2018/TPI2014			
				DEFL.	
				in (loc) l/defl L/d	
				Vert(LL) n/a - n/a 999	
				Vert(CT) n/a - n/a 999	
				Horz(CT) 0.00 3 n/a n/a	
				PLATES GRIP	
				MT20 244/190	
				Weight: 12 lb FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-6-5 oc purlins.
BOT CHORD	2x4 SP No.2	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-

- 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.



September 28,2020

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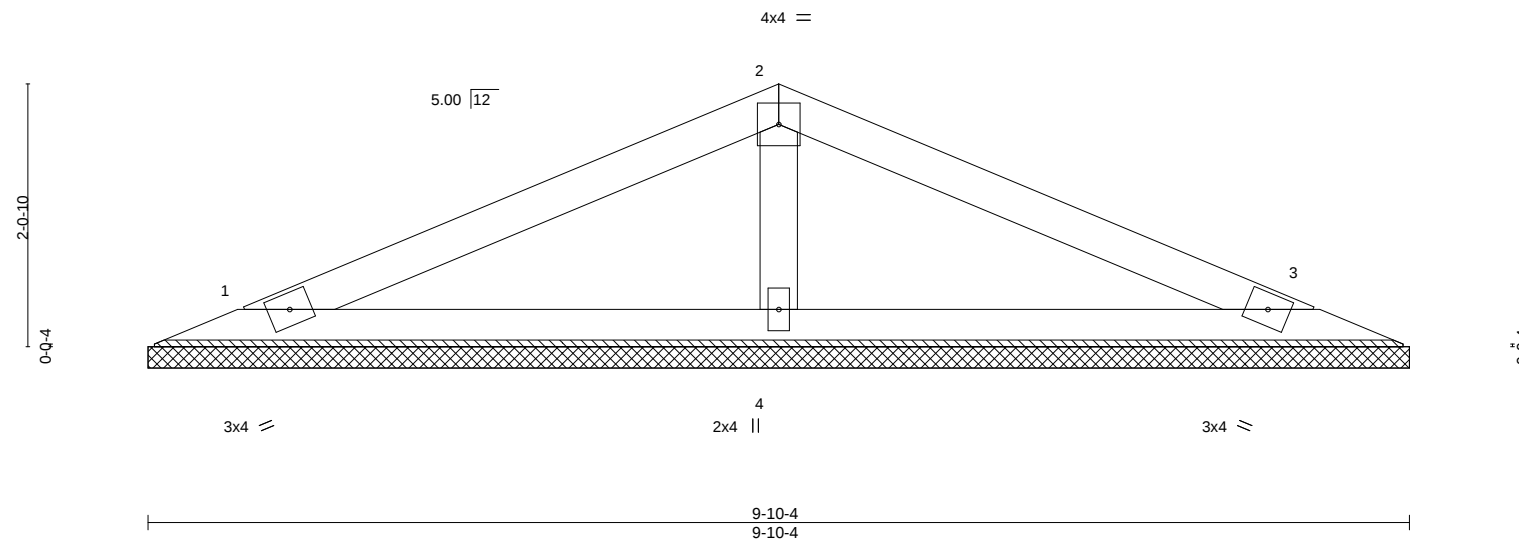
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 10/06/2020		SUMMIT HOMES Job Reference (optional) 8.420 s Aug 25 2020 MiTek Industries, Inc. Fri Sep 25 14:32:29 2020 Page 1 ID: Z_Eg7_y5DGhi_EnvQbP05Vz4M0m-lvblsWqXs1NN20KXRDda8ATvf33XJtQV5KF0W0Ya3lm 9-10-4 4-11-2
H3-89	V5	GABLE	1		142970399
Mid America Truss, Jefferson City, MO - 65101,					

Scale = 1:18.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.42	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.12	n/a	n/a	999			
TCDL	10.0	Lumber DOL	1.15	WB	0.03	n/a	n/a	999			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00	3	n/a			
BCDL	10.0	Code IRC2018/TPI2014							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.



September 28, 2020

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

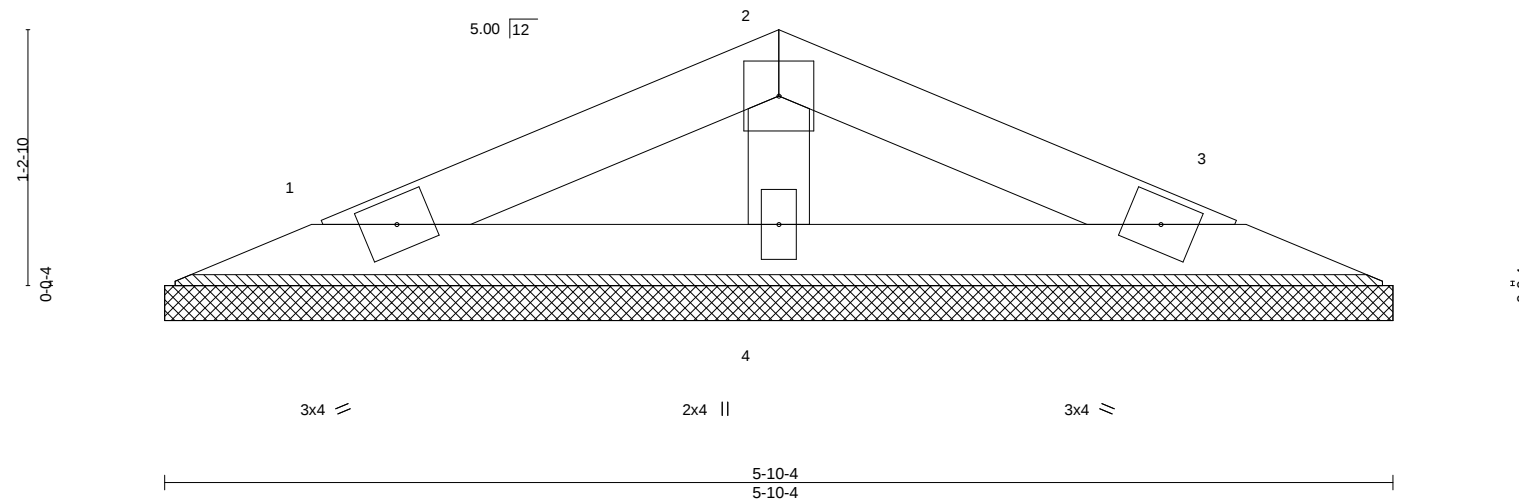
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



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H3-89	V6	GABLE			1	142970400
Mid America Truss,		Jefferson City, MO - 65101,				
		2-11-2 2-11-2				5-10-4 2-11-2

Scale = 1:11.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.09	in (loc)	l/defl	L/d			
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.03	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.01	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		Horz(CT)	0.00	3	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 16 lb	FT = 3%

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 5-10-4 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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-

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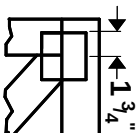
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



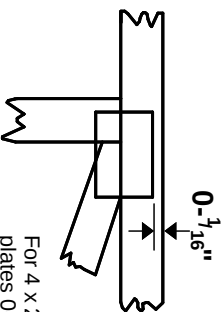
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Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

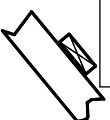
This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

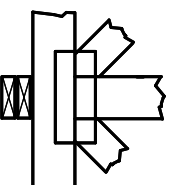
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



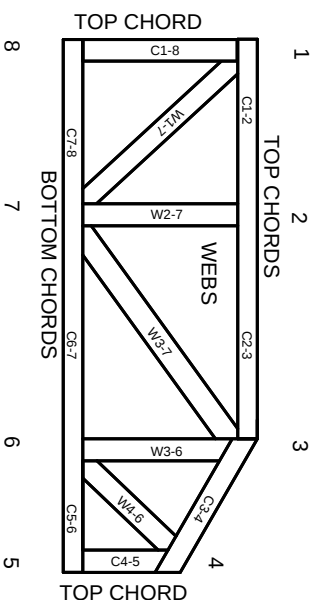
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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