



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

03/30/2021

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: W2-63
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: I44987087 thru I44987160

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

Missouri COA: Engineering 001193



March 1, 2021

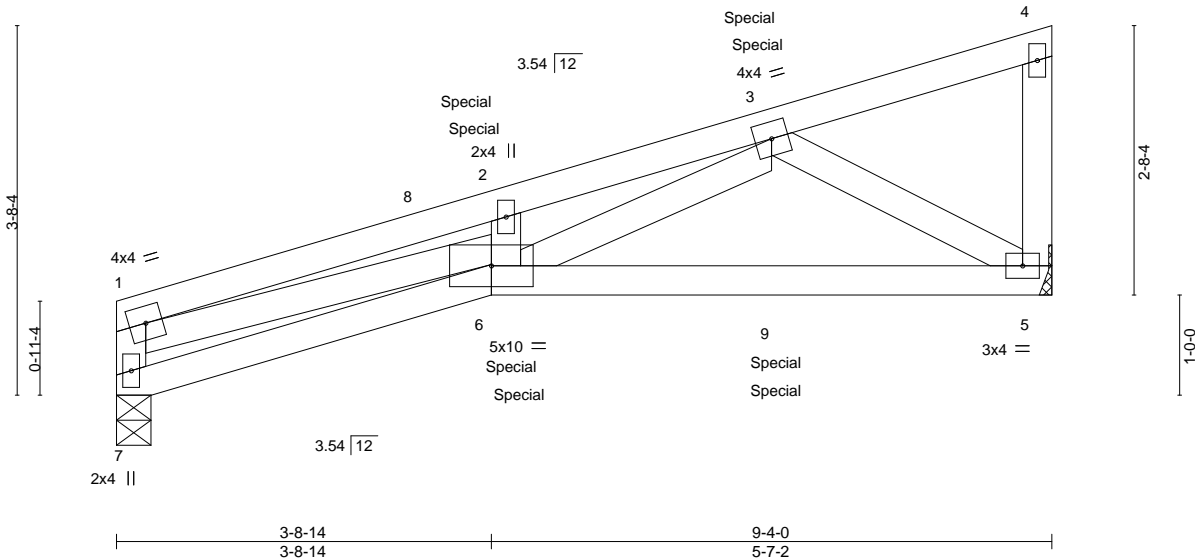
Sevier, Scott ,Engineer

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	CJ2	DIAGONAL HIP GIRDER	1	1	Job Reference (optional)	
Mid America Truss,		Jefferson City, MO - 65101,	8.430 s Feb 12 2021 MiTek Industries, Inc.			14987088
			ID:Fpza38BVdcFyJDKwxgHN8dztCCb-KhzJnwBPYk1LxylB9s45cC2hy3UWzNkdnNG1DAzhDm?			
			3-8-14	6-6-7	9-4-0	
			3-8-14	2-9-9	2-9-9	
			2x4			Scale = 1:23.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.34	Vert(LL) -0.05	6	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.39	Vert(CT) -0.11	5-6	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.34	Horz(CT) 0.03	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr NO	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 47 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 4-5-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-4-2, 5=Mechanical
Max Horz 7=97(LC 8)
Max Uplift 7=-25(LC 7), 5=-54(LC 8)
Max Grav 7=421(LC 15), 5=538(LC 15)

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

TOP CHORD 1-7=-385/55, 1-2=-1463/145, 2-3=-1491/187
BOT CHORD 5-6=-134/689
WEBS 1-6=-121/1387, 3-6=-85/833, 3-5=-802/139

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 62 lb down and 36 lb up at 3-9-3, 59 lb down and 33 lb up at 3-9-3, and 153 lb down and 60 lb up at 6-7-2, and 149 lb down and 60 lb up at 6-7-2 on top chord, and 12 lb down at 3-8-14, 10 lb down at 3-8-14, and 2 lb down at 6-7-2, and 2 lb down at 6-7-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 6-7=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 6=-6(F=-1, B=-5) 2=-18(F=-7, B=-12) 3=-241(F=-119, B=-122)



March 1, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

W2-63

Truss

CJ3

Truss Type

MONO TRUSS

Qty

2

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

03/30/2021

Scale = 1:14.6

1-2-14

1-2-14

4-10-4

4-10-4

3.54

12

2x4

2

4x4

2

1

2x4

5

6

Special

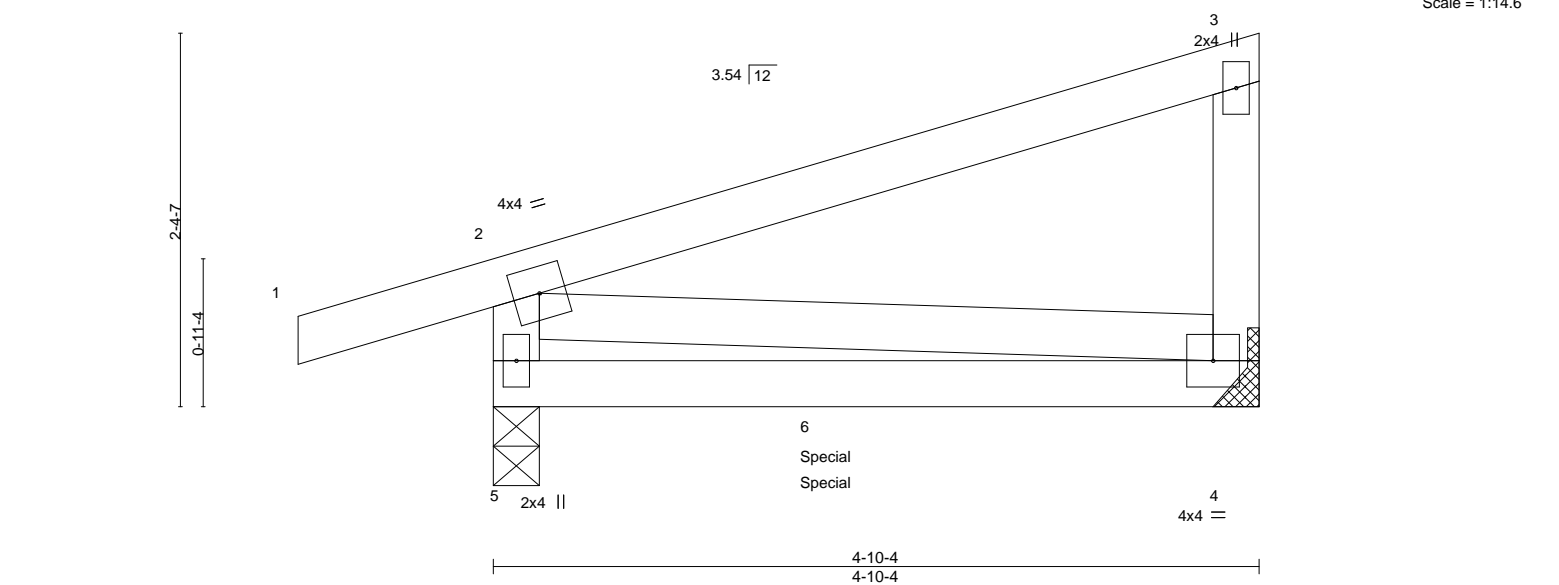
Special

4

4x4

4-10-4

4-10-4



LOADING (psf)	SPACING-	CS.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.46	Vert(LL) 0.03	4-5	>999	360		MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT) -0.04	4-5	>999	240			
TCDL 10.0	Lumber DOL 1.15	WB 0.01	Horz(CT) -0.00	4	n/a	n/a			
BCLL 0.0	Rep Stress Incr NO	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 26 lb	FT = 3%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-4 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) 4=Mechanical, 5=0-3-8
 Max Horz 5=71(LC 8)
 Max Uplift 4=42(LC 11), 5=-91(LC 7)
 Max Grav 4=209(LC 16), 5=345(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-283/81

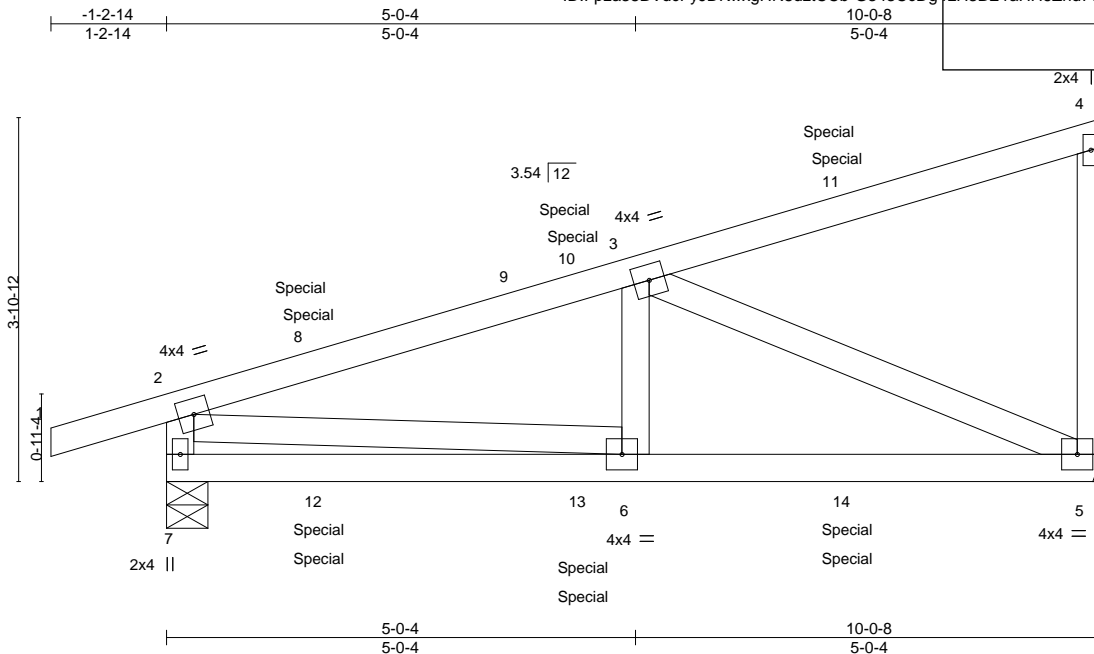
- NOTES-**
 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 3) Unbalanced snow loads have been considered for this design.
 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 5) Plates checked for a plus or minus 3 degree rotation about its center.
 6) Refer to girder(s) for truss to truss connections.
 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 33 lb up at 2-1-6, and 18 lb down and 33 lb up at 2-1-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-51, 2-3=-51, 4-5=-20
 Concentrated Loads (lb)
 Vert: 6=-29(F=-14, B=-14)



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	CJ4	Diagonal Hip Girder	4	1	Job Reference (optional)	
Mid America Truss,		Jefferson City, MO - 65101,	8.430 s Feb 12 2021 MiTek Industries, Inc. 14987090			
			ID:Fpza38BVdcFyJDKwxgHN8dz(CCb-G343CcDg4LH3BE1aHH6Zhd7v0s9MRGEwEhl8H3zhDlz			
			10-0-8 5-0-4			
			2x4			Scale = 1:24.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.02	5-6	>999	360	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.06	5-6	>999	240			
TCDL	10.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.01	5	n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							Weight: 55 lb	FT = 3%	
BCDL	10.0												

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-5-5, 5=Mechanical
Max Horz 7=122(LC 8)
Max Uplift 7=-83(LC 7), 5=-56(LC 8)
Max Grav 7=526(LC 1), 5=596(LC 16)

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

TOP CHORD 2-7=-493/95, 2-3=-822/65
BOT CHORD 5-6=-108/764
WEBS 2-6=-32/772, 3-5=-834/102

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; Pg=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 13 lb up at 1-7-11, 49 lb down and 13 lb up at 1-7-11, 69 lb down and 41 lb up at 4-5-10, 67 lb down and 39 lb up at 4-5-10, and 134 lb down and 67 lb up at 7-3-10, and 131 lb down and 67 lb up at 7-3-10 on top chord, and 5 lb down and 6 lb up at 1-7-11, 5 lb down and 6 lb up at 1-7-11, 17 lb down at 4-5-10, 15 lb down and 4 lb up at 4-5-10, and 38 lb down at 7-3-10, and 37 lb down at 7-3-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 10=-48(F=-23, B=-26) 11=-204(F=-101, B=-103) 12=2(F=1, B=1) 13=-13(F=-4, B=-9) 14=-72(F=-35, B=-37)



March 1, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

W2-63

Truss

CJ5

Truss Type

Diagonal Hip Girder

Qty

2

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-lGeSQyDrfPwpOcmr_doDqgEVGVaAog4TLUhpVzhDly

03/30/2021

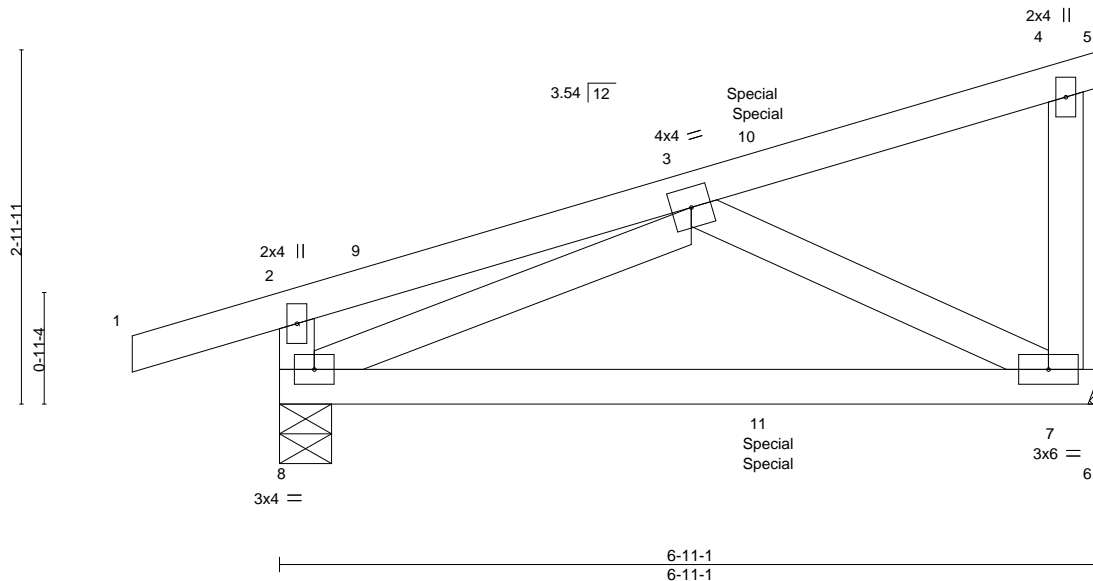
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Scale = 1:19.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.01 7-8 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.11 7-8 >685 240				
TCDL	10.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00 7 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 37 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) 8=0-5-4, 7=Mechanical
 Max Horz 8=93(LC 30)
 Max Uplift 8=-56(LC 7), 7=-27(LC 8)
 Max Grav 8=365(LC 16), 7=325(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 BOT CHORD 7-8=-92/256
 WEBS 3-8=-286/41, 3-7=-290/91

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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.
- 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, 2-4=-51, 4-5=-51, 6-8=-20
- Concentrated Loads (lb)
 - Vert: 10=-31(F=-16, B=-16) 11=-6(F=-3, B=-3)



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

W2-63

Truss

CJ6

Truss Type

Diagonal Hip Girder

Qty

2

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, Missouri

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-DSCqdlEwcyXnQYByOi81m2CP6gv2vFIDl?EELxzhDlx

03/30/2021

2x4 ||

Scale = 1:20.0

-1-2-14

1-2-14

3-7-4

3-7-4

7-2-9

3-7-4

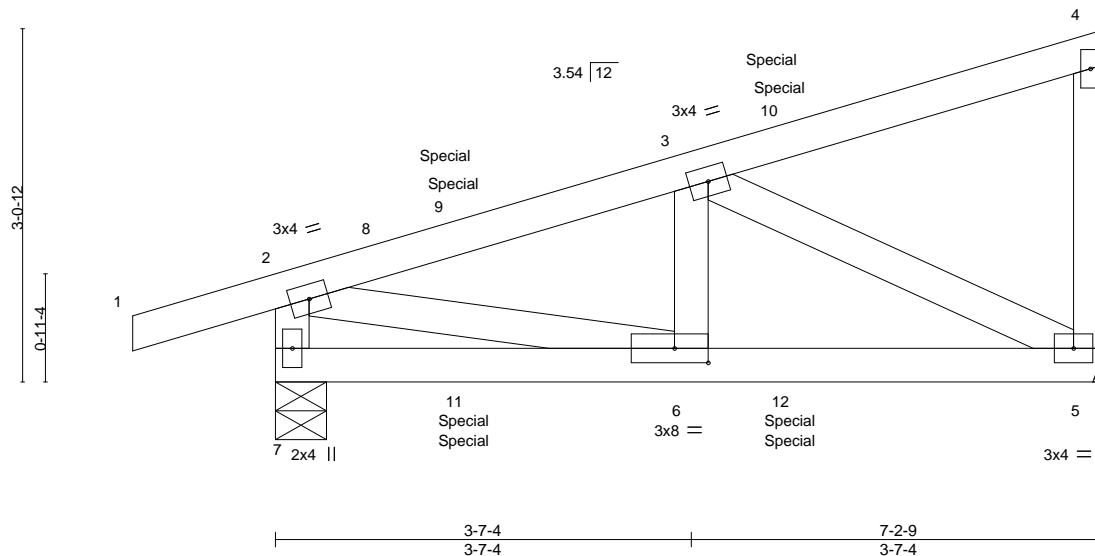


Plate Offsets (X,Y)--		[6:0-3-8,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	2-0-0		TC 0.21		in (loc)		l/defl		MT20	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.16		Vert(LL) -0.01 6 >999		360		GRIP	
TCDL	10.0	Lumber DOL 1.15		WB 0.11		Vert(CT) -0.01 5-6 >999		240		244/190	
BCLL	0.0	Rep Stress Incr NO		Matrix-P		Horz(CT) 0.00 5 n/a		n/a		Weight: 40 lb	
BCDL	10.0	Code IRC2018/TPI2014								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) 7=0-5-5, 5=Mechanical
 Max Horz 7=94(LC 8)
 Max Uplift 7=-70(LC 7), 5=-31(LC 11)
 Max Grav 7=385(LC 16), 5=322(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-358/79, 2-3=-428/36
 BOT CHORD 5-6=-62/383
 WEBS 2-6=-9/391, 3-5=-427/58

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 13 lb up at 1-7-11, 49 lb down and 13 lb up at 1-7-11, and 69 lb down and 41 lb up at 4-5-10, and 67 lb down and 39 lb up at 4-5-10 on top chord, and 5 lb down and 6 lb up at 1-7-11, 5 lb down and 6 lb up at 1-7-11, and 17 lb down at 4-5-10, and 15 lb down and 4 lb up at 4-5-10 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, 2-4=-51, 5-7=-20
- Concentrated Loads (lb)
Vert: 10=-48(F=-23, B=-26) 11=2(F=1, B=1) 12=-13(F=-4, B=-9)



March 1, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

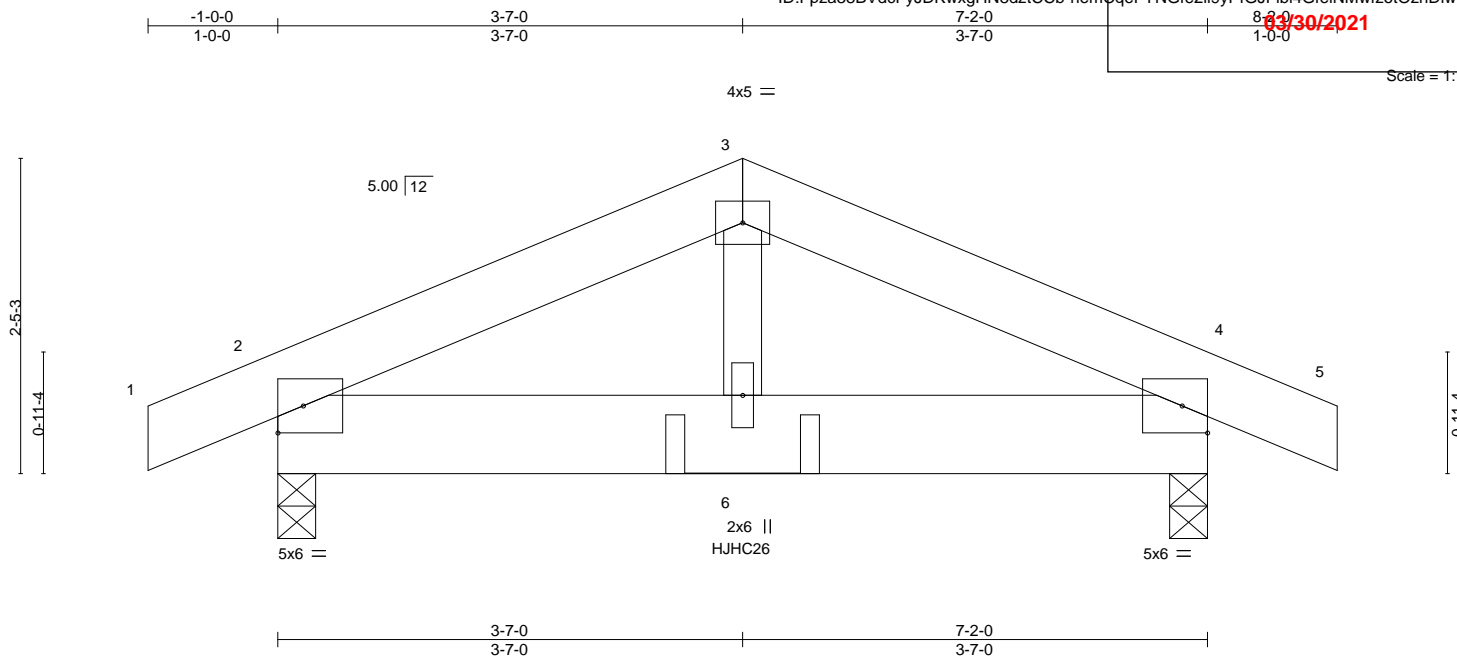
RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
144987003
DEVELOPMENT SERVICES
LEE'S SUMMIT SUBSQUIRE
CqCqFYNGfzEil9yPFGJFib4GfciNMwfzotOzhDlw
8-2-0
1-0-0
6/30/2021

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:04:59 UTC Page 1

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03/30/2021

Scale = 1:17.8



LUMBER-		BRACING-
TOP CHORD	2x6 SP No.1	TOP CHORD
BOT CHORD	2x8 SP 2400F 2.0E	BOT CHORD
WEBS	2x4 SP No.2	Structural wood sheathing directly applied or 6'-0" oc purlins. Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
 Max Horz 2=-20(LC 40)
 Max Uplift 2=-90(LC 7), 4=-90(LC 8)
 Max Grav 2=623(LC 16), 4=623(LC 17)

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

TOP CHORD 2-3=-756/138, 3-4=-756/137
BOT CHORD 2-6=-96/602, 4-6=-96/602
WEBS 3-6=-85/498

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
- 9) Use USP HJHC26 (With 20-16d nails into Girder & 10d nails into Truss) or equivalent at 3-7-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 2-4=-20, 1-3=-51, 3-5=-51
Concentrated Loads (lb)
Vert: 6=-483(F)



March 1, 2021



Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personnel injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

W2-63

Truss

H1

Truss Type

Hip Girder

Qty

1

Ply

2

SUMMIT HOMES

Job Reference (optional)

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

144987094

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-5DSLTHfRgB2Cv9UjdYDzwnNz?HBDr?0pddCSUjzhDit

20-4-0 4-8-9

Mid America Truss,

Jefferson City, MO - 65101,

4-8-9 4-8-9

9-5-2 4-8-9

10-10-14 1-5-13

15-7-7 4-8-9

20-4-0 4-8-9

7x8 =

7x8 =

5x5 =

5x5 =

5x8 =

5x8 =

3

4

2

13

12

14

15

6

1

4-10-6

0-11-4

4-10-6

0-11-4

16

17

11

18

10

19

20

9

8

21

22

23

7

24

25

5x8 =

JUS24

3x12 ||

6x10 MT20HS =

THD26-2

JUS26

5x5 =

6x10 =

JUS26

JUS24

2x6 ||

JUS24

5x8 =

JUS24

4-8-9 4-8-9

9-5-2 4-8-9

10-10-14 1-5-13

15-7-7 4-8-9

20-4-0 4-8-9

Plate Offsets (X,Y)--

[3:0-6-4,0-2-12], [4:0-4-0,0-1-13], [8:0-5-0,0-4-4]

LOADING (psf)

TCLL (roof) 20.0

Snow (Pf/Pg) 20.4/20.0

TCDL 10.0

BCLL 0.0

BCDL 10.0

SPACING-

2-0-0

Plate Grip DOL 1.15

Lumber DOL 1.15

Rep Stress Incr NO

Code IRC2018/TPI2014

CSI.

TC 0.72

BC 0.53

WB 0.32

Matrix-SH

DEFL.

in (loc) l/defl L/d

Vert(LL) -0.10 9-11 >999 360

Vert(CT) -0.17 9-11 >999 240

Horz(CT) 0.04 6 n/a n/a

PLATES

MT20 244/190

MT20HS 187/143

Weight: 303 lb

FT = 3%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except* 3-4: 2x4 SP No.2

BOT CHORD 2x8 SP 2400F 2.0E

WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-11 oc purlins.

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

REACTIONS.

(size) 1=0-4-0, 6=0-4-0

Max Horz 1=-46(LC 14)

Max Uplift 1=-142(LC 11), 6=-210(LC 12)

Max Grav 1=4922(LC 33), 6=4898(LC 33)

FORCES.

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

TOP CHORD 1-2=-9943/372, 2-3=-7011/265, 3-4=-6475/260, 4-5=-7006/264, 5-6=-8672/348

BOT CHORD 1-11=-330/8736, 9-11=-330/8736, 8-9=-186/6485, 7-8=-267/7646, 6-7=-267/7646

WEBS 2-11=-58/2609, 2-9=-2595/164, 3-9=-95/2558, 4-8=-86/2457, 5-8=-1393/147, 5-7=-34/1468

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33

5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.

6) Unbalanced snow loads have been considered for this design.

7) Provide adequate drainage to prevent water ponding.

8) All plates are MT20 plates unless otherwise indicated.

9) Plates checked for a plus or minus 3 degree rotation about its center.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=142, 6=210.

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

12) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 1-3-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.

13) Use USP THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 5-3-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.

STATE OF MISSOURI

SCOTT M. SEVIER

NUMBER

PE-2001018807

PROFESSIONAL ENGINEER

March 1,2021

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

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

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

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

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	<div>19877094</div> <div>CONSTRUCTION</div> <div>AS NOTED ON PLANS REVIEW</div> <div>DEVELOPMENT SERVICES</div> <div>LEE'S SUMMIT, MISSOURI</div> <div>03/30/2021</div>
W2-63	H1	Hip Girder	1	2	Job Reference (optional)	
Mid America Truss,		Jefferson City, MO - 65101,	8.430 s Feb 12 2021 MiTek Industries, Inc. L-EE-514-M5-02-MISSOURI			
ID:Fpza38BVdcFyJDKwxgHN8dzlCCb-5DSLTFHhRgB2Cv9UjdYDzwnZ?HBDrt0pddCSUjzhDit						

NOTES-

14) Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 7-3-0 from the left end to 11-3-0 to connect truss(es) to front face of bottom chord.

NOTES-

- 14) Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 7-3-0 from the left end to 11-3-0 to connect truss(es) to front face of bottom chord.
- 15) 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 13-3-0 from the left end to 19-3-0 to connect truss(es) to front face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-3=-51, 3-4=-61, 4-6=-51, 1-6=-20
- Concentrated Loads (lb)
- Vert: 16=-114(F) 17=-220 18=-2205(F) 19=-969(F) 20=-746(F) 21=-913(F) 22=-755(F) 23=-694(F) 24=-615(F) 25=-586(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H2	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

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

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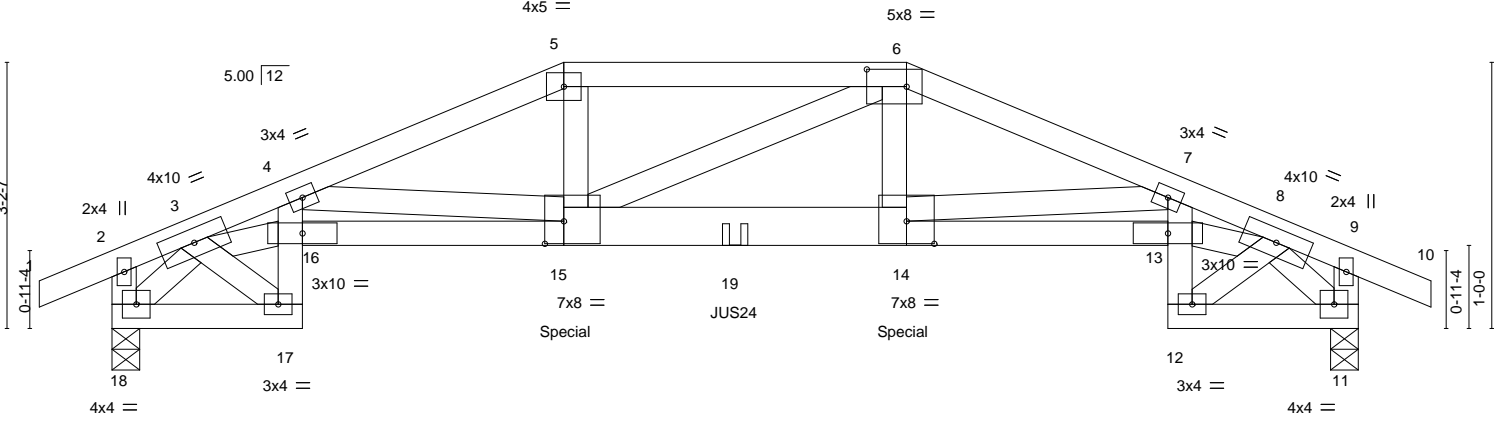
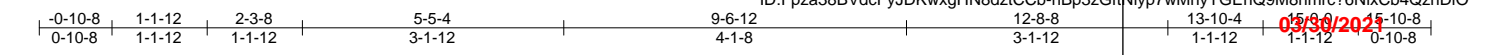


Plate Offsets (X,Y)--	[6:0-5-12,0-2-8], [14:0-4-0,0-3-4], [15:0-2-12,0-3-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.34	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) -0.09 14-15 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.42	Vert(CT) -0.15 14-15 >999 240		
BCLL 0.0	Rep Stress Incr NO	Matrix-P	Horz(CT) 0.15 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 173 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 *Except* 14-15: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

REACTIONS. (size) 18=0-4-0, 11=0-4-0
 Max Horz 18=22(LC 56)
 Max Uplift 18=134(LC 7), 11=133(LC 8)
 Max Grav 18=1448(LC 34), 11=1448(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-4=-4137/401, 4-5=-3430/370, 5-6=-3148/351, 6-7=-3437/368, 7-8=-4137/384
 BOT CHORD 17-18=-98/1001, 16-17=-51/657, 4-16=-7/376, 15-16=-421/4412, 14-15=-297/3155, 13-14=-390/4412, 12-13=-42/657, 7-13=0/372, 11-12=-86/1001
 WEBS 3-17=-921/91, 3-16=-329/3446, 4-15=-1287/155, 5-15=-92/1069, 6-14=-98/1075, 7-14=-1280/142, 8-13=-304/3446, 8-12=-921/78, 3-18=-1562/133, 8-11=-1562/133

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=134, 11=133.
 - 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 at 7-6-0 from the left end to connect truss(es) to back bearing plate.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	<div> <div>RELEASE FOR</div> <div>CONSTRUCTION</div> <div>AS NOTED ON PLANS REVIEW</div> <div>DEVELOPMENT SERVICES</div> <div>LEE'S SUMMIT, MISSOURI</div> <div>03/30/2021</div> </div>
W2-63	H2	Hip Girder	1	2	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,		8.430 s Feb 12 2021 MiTek Industries, Inc. LEE'S SUMMIT, MISSOURI				
		ID:Fpza38BVdcFyJDKwxgHN8dztCCb-hBp3zGftNiyp7wMhyYGEhQ9M8nmrc?6NlxCb4QzhDIO				

NOTES-

- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 584 lb down and 119 lb up at 5-5-4, and 584 lb down and 119 lb up at 9-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-51, 2-5=-51, 5-6=-61, 6-9=-51, 9-10=-51, 17-18=-20, 13-16=-20, 11-12=-20
- Concentrated Loads (lb)
- Vert: 15=-584(B) 14=-584(B) 19=-248(B)

Job

W2-63

Truss

H3

Truss Type

Hip Girder

Qty

1

Ply

2

SUMMIT HOMES

Job Reference (optional)

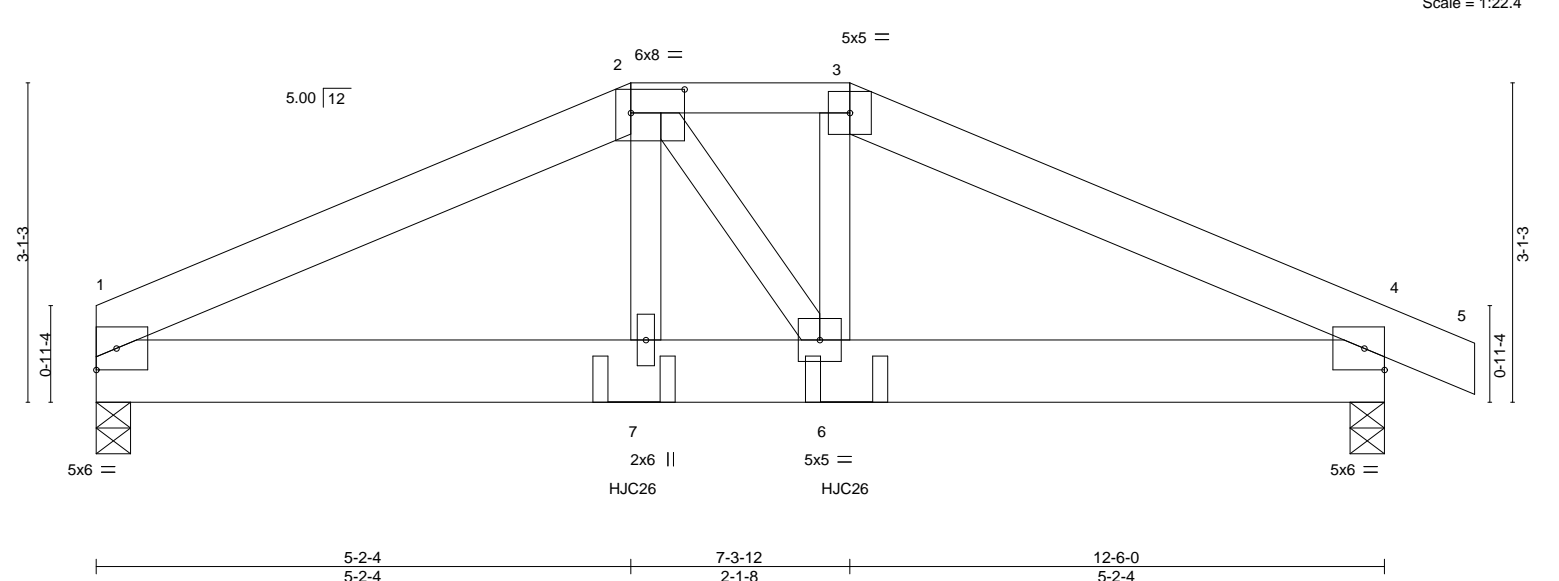
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Lee's Summit, MO 64086-4400

03/30/2021

Mid America Truss, Jefferson City, MO - 65101,

Scale = 1:22.4



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	7	>999	360	MT20	244/190	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.02	7	>999	240			
TCDL	10.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.01	4	n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P									
BCDL	10.0												
Weight: 163 lb												FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1 *Except* 2-3: 2x4 SP No.2	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, 4=0-4-0
Max Horz 1=27(LC 13)
Max Uplift 1=-81(LC 11), 4=-92(LC 12)
Max Grav 1=1078(LC 34), 4=1173(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1801/161, 2-3=-1568/161, 3-4=-1812/160
BOT CHORD 1-7=-111/1530, 6-7=-113/1560, 4-6=-105/1537
WEBS 2-7=-31/547, 3-6=-43/606

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 2-0-12 oc max. starting at 5-2-10 from the left end to 7-3-6 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)

Standard

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

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16023 Swingley Ridge Rd

Chesterfield, MO 63017

16023 Swingley Ridge Rd

Chesterfield, MO 63017

STATE OF MISSOURI

SCOTT M. SEVIER

PROFESSIONAL ENGINEER

March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H3	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. L-Ed-5514-Missouri Page 1

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

J41987096

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-61, 3-5=-51, 1-4=-20

Concentrated Loads (lb)

Vert: 7=-506(F) 6=-506(F)



Job

W2-63

Truss

H4

Truss Type

Half Hip

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086-4501

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14987097

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

-0-10-8

0-10-8

6-4-6

6-4-6

12-6-0

6-1-10

5x8

2x4

3

4

5.00

12

3x4

2

0-11-4

3-7-1

2x4

7

6

4x4

5

4x4

6-4-6

6-4-6

12-6-0

6-1-10

Plate Offsets (X,Y)--

[3:0-5-12,0-2-8]

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.01	6	>999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.06	6-7	>999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.00	5	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0									Weight: 68 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	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) 5=0-4-0, 7=0-4-0
 Max Horz 7=115(LC 10)
 Max Uplift 5=-30(LC 8), 7=-17(LC 11)
 Max Grav 5=548(LC 30), 7=645(LC 31)

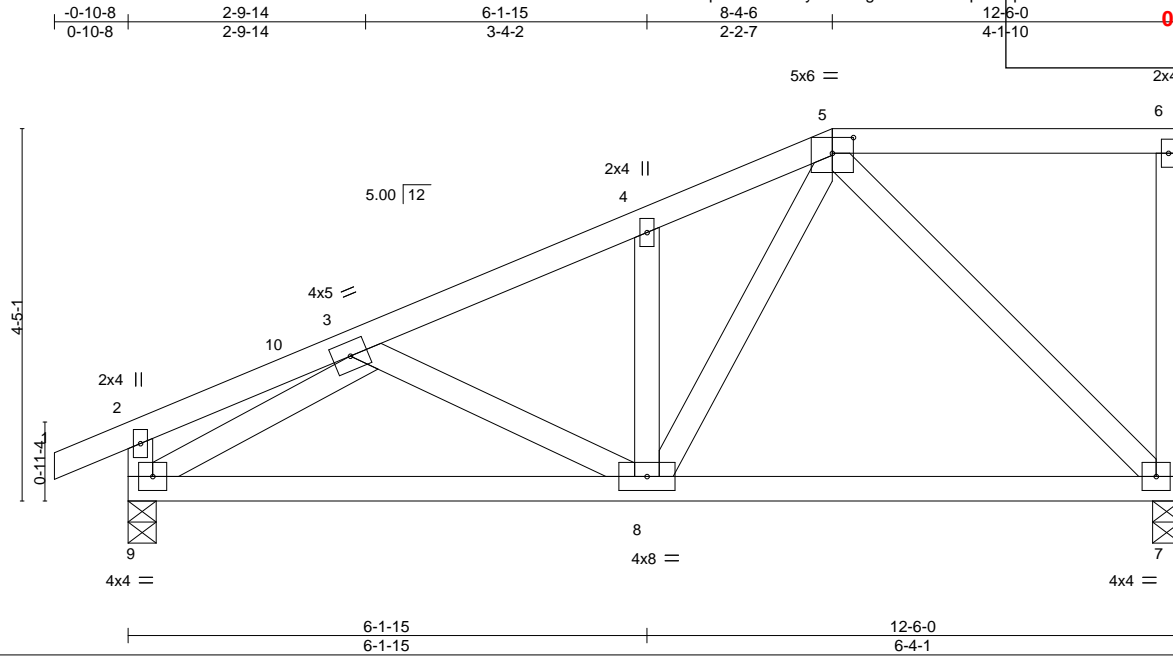
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-577/2, 4-5=-252/49, 2-7=-595/47
 BOT CHORD 5-6=-33/478
 WEBS 3-5=-545/14, 2-6=0/476

- 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=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 10:35:46 2021 Page 1

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~~Scale = 1:27.4~~[illegible]

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

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.

(size) 7=0-4-0, 9=0-4-0
 Max Horz 9=143(LC 8)
 Max Uplift 7=-30(LC 8), 9=-22(LC 11)
 Max Grav 7=486(LC 2), 9=690(LC 31)

TOP CHORD 3-4=-685/16, 4-5=-677/52
BOT CHORD 8-9=-96/661, 7-8=-50/332
WEBS 4-8=-277/70, 5-8=-14/529, 5-7=-477/36, 3-9=-805/23

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=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) TCDL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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) Provide adequate drainage to prevent water ponding.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



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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

Job

W2-63

Truss

H7

Truss Type

Hip Girder

Qty

1

Ply

2

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc

Lee's Summit, Missouri

3-7-2

7-2-4

13-9-12

17-4-14

21-0-0

3-7-2

3-7-2

6-7-8

3-7-2

3-7-2

Scale = 1:35.0

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

8/30/2021

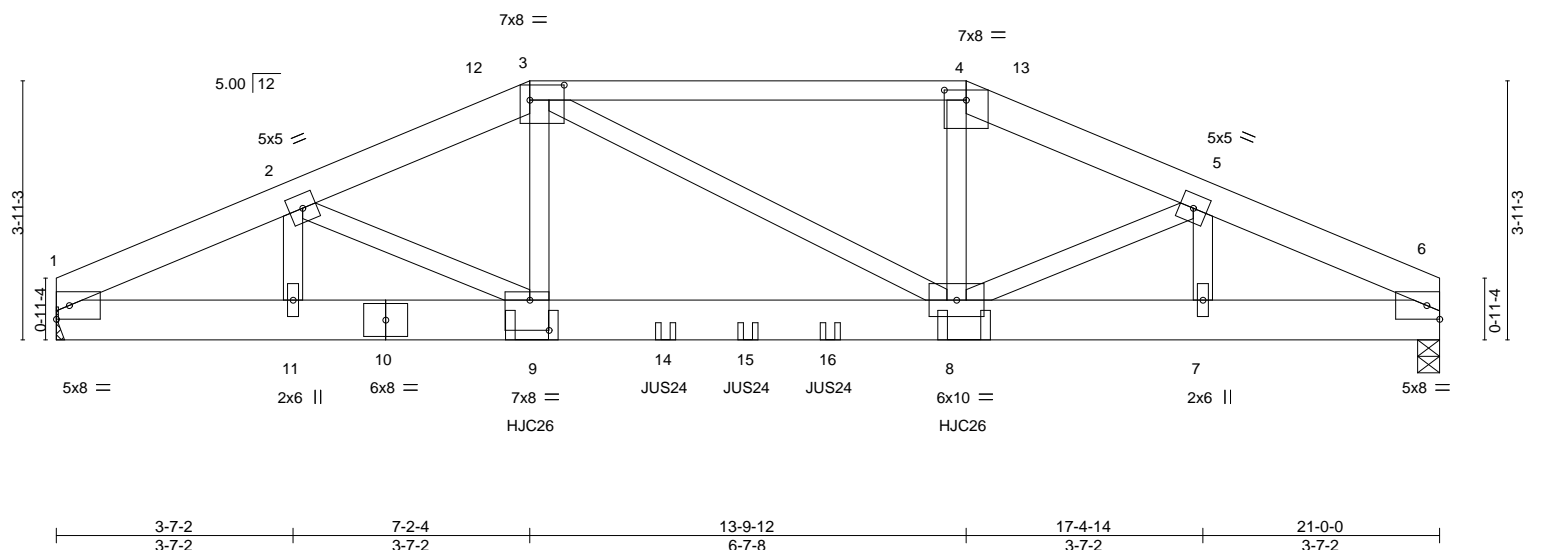


Plate Offsets (X,Y)-- [3:0-6-4,0-2-12], [4:0-4-0,0-1-13], [9:0-3-8,0-5-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.06	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.10		
TCDL	10.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.02		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH					
BCDL	10.0							Weight: 292 lb	FT = 3%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
3-4: 2x4 SP No.2

BOT CHORD 2x8 SP 2400F 2.0E

WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins.

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

REACTIONS. (size) 1=Mechanical, 6=0-4-0
Max Horz 1=36(LC 58)
Max Uplift 1=163(LC 11), 6=164(LC 12)
Max Grav 1=2225(LC 33), 6=2236(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4160/337, 2-3=-4388/431, 3-4=-4006/405, 4-5=-4325/424, 5-6=-4116/336
BOT CHORD 1-11=-285/3603, 9-11=-285/3603, 8-9=-340/4070, 7-8=-265/3541, 6-7=-265/3541
WEBS 2-11=-261/82, 2-9=-196/713, 3-9=-117/1484, 4-8=-104/1430, 5-8=-188/707

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 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.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=163, 6=164.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 6-6-12 oc max. starting at 7-2-10 from the left end to 13-9-6 to connect truss(es) to front face of bottom chord.
 - Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 1-3-0 oc max. starting at 9-3-0 from the left end to 11-9-0 to connect truss(es) to front face of bottom chord.
- Continued on page 2 where hanger is in contact with lumber.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H7	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. L-Ed 551468500055081
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RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

J44987100

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-51, 3-4=-61, 4-6=-51, 1-6=-20
 Concentrated Loads (lb)
 Vert: 9=-872(F) 8=-872(F) 14=-305(F) 15=-305(F) 16=-305(F)

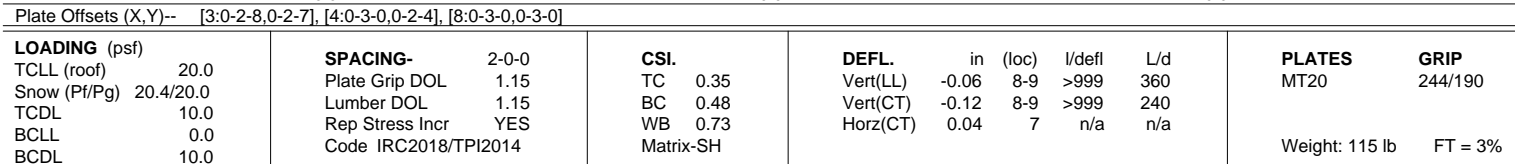
**RELEASE FOR
CONSTRUCTION**
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

8.430 s Feb 12 2021 MiTek Industries

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03/30/2021

Scale = 1:36.2



REACTIONS. (size) 10=Mechanical, 7=0-4-0
 Max Horz 10=23(LC 27)
 Max Uplift 10=-5(LC 11), 7=-5(LC 12)
 Max Grav 10=989(LC 33), 7=989(LC 33)

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

TOP CHORD	1-2=349/34, 2-3=1394/23, 3-4=1080/42, 4-5=1401/25, 5-6=348/35, 1-10=308/46, 6-7=307/46
BOT CHORD	9-10=15/1358, 8-9=0/1077, 7-8=0/1359
WEBS	3-9=0/367, 4-8=0/373, 2-10=1266/0, 5-7=1269/0

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) TCDL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) 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) 10, 7.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



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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

Job

W2-63

Truss

H9

Truss Type

Half Hip

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086

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03/30/2021

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

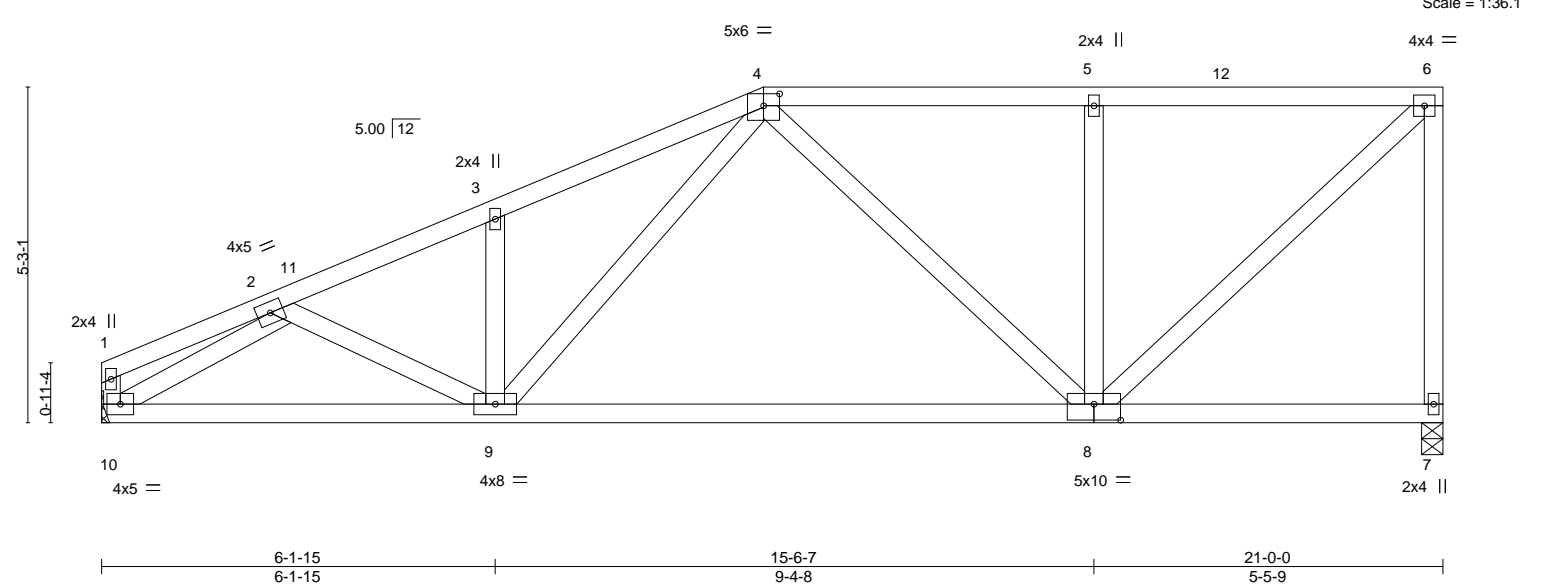


Plate Offsets (X,Y)--		[4:0-3-0,0-2-4], [8:0-5-0,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	in	(loc)	I/defl	L/d	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.51	Vert(LL)	-0.04 8-9	>999	360		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Vert(CT)	-0.22 8-9	>999	240		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH		Horz(CT)	0.02 7	n/a	n/a		
BCDL	10.0									Weight: 122 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-1 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) 7=0-4-0, 10=Mechanical
 Max Horz 10=164(LC 10)
 Max Uplift 7=-47(LC 8), 10=-10(LC 11)
 Max Grav 7=941(LC 29), 10=933(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1389/9, 3-4=-1417/64, 4-5=-786/56, 5-6=-785/56, 6-7=-907/63
 BOT CHORD 9-10=-123/1161, 8-9=-95/857
 WEBS 3-9=-368/93, 4-9=-25/653, 4-8=-307/62, 5-8=-515/103, 6-8=-42/1055, 2-10=-1295/27

- 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=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

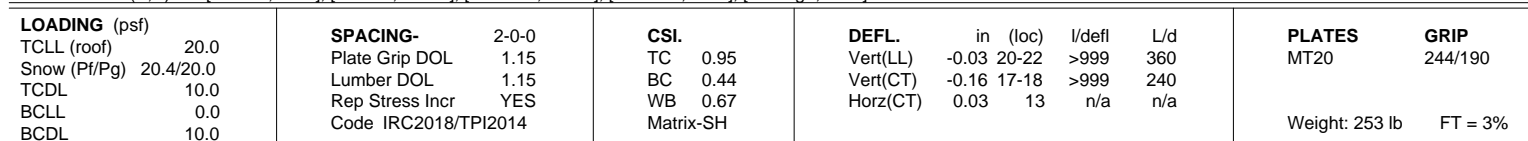
**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** J44987-103

DEVELOPMENT SERVICES

LEE'S SUMMIT MISSOURI

Industrial, Int'l. Res. & Dev. Ctr. & Office Bldg.
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37-2-3 00-10-8
3-4-1 2-9-13 0-10-8



REACTIONS. (size) 18=0-3-8, 23=Mechanical, 13=0-4-0
 Max Horz 23=-47(LC 12)
 Max Uplift 18=-23(LC 8), 23=-26(LC 11), 13=-41(LC 12)
 Max Grav 18=1962(LC 33), 23=775(LC 34), 13=818(LC 34)

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

TOP CHORD 2-3=-1060/61, 3-4=-512/56, 4-5=-397/71, 5-6=0/785, 6-7=0/775, 7-8=-564/92,
 8-9=-608/61, 9-10=-977/62

BOT CHORD 22-23=-74/901, 20-22=-42/963, 6-18=-551/107, 17-18=0/374, 8-17=-320/86,
 13-14=-41/849

WEBS 3-20=-724/86, 5-20=0/836, 5-18=-991/29, 7-18=-1257/0, 14-17=0/875, 9-17=-456/65,
 2-23=-947/67, 10-13=-901/72, 7-17=-20/825

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) Plates checked for a plus or minus 3 degree rotation about its center.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 23, 13.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H11	Hip	1	1	

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

144987104

8.430 s Feb 12 2021 MiTek Industries, Inc. Session: 144987104

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Scale = 1:70.9

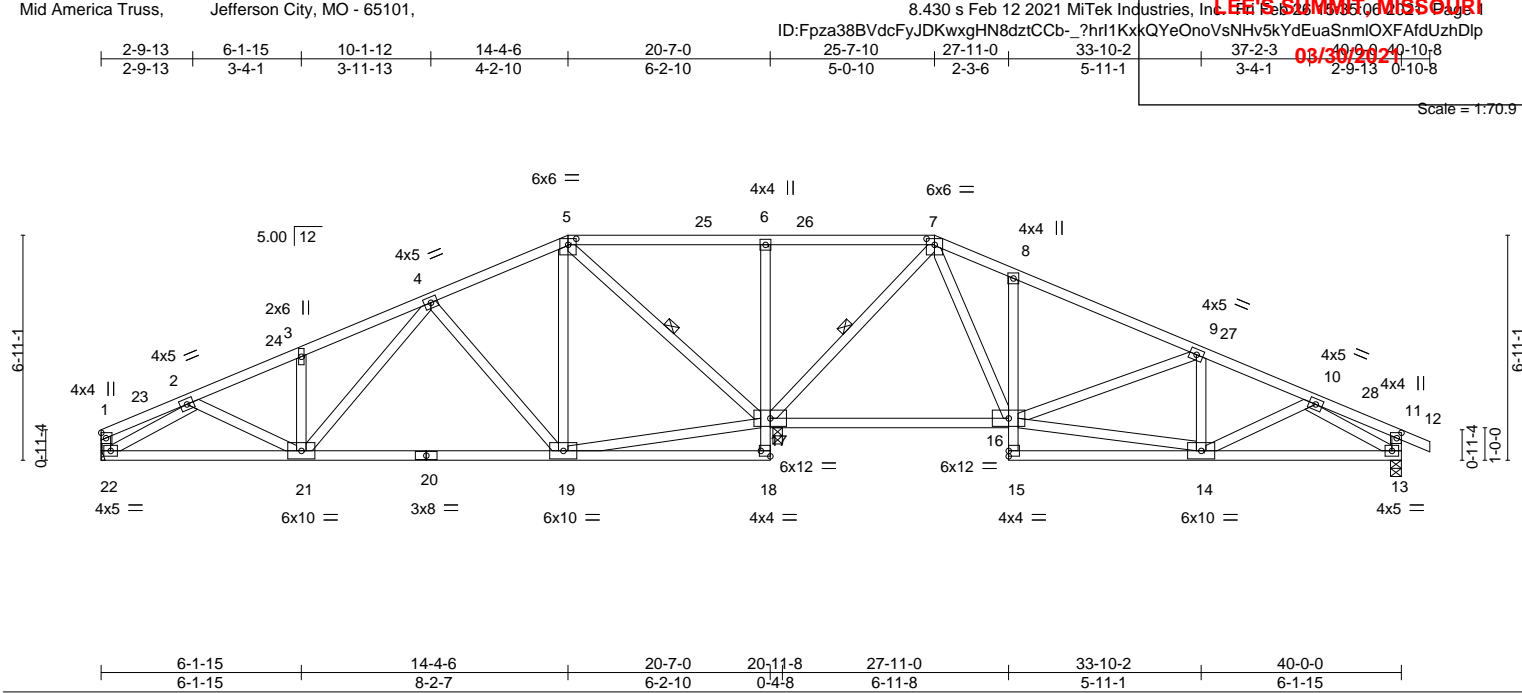


Plate Offsets (X, Y)-- [5:0-3-0,0-2-4], [7:0-3-0,0-2-4], [11:0-2-0,0-1-12], [18:Edge,0-2-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.04 19-21 >999 360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.13 19-21 >999 240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.02 13 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH					
BCDL	10.0							Weight: 256 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-7-7 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 5-17, 7-17

REACTIONS. (size) 17=0-3-8, 22=Mechanical, 13=0-4-0
Max Horz 22=-56(LC 14)
Max Uplift 17=-5(LC 8), 22=-29(LC 11), 13=-47(LC 12)
Max Grav 17=2047(LC 34), 22=714(LC 34), 13=722(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1007/52, 3-4=-1014/100, 4-5=-276/74, 5-6=0/872, 6-7=0/873, 7-8=-448/125, 8-9=-480/81, 9-10=-910/76
BOT CHORD 21-22=-92/894, 19-21=-25/540, 6-17=-562/107, 8-16=-401/100, 13-14=-48/791
WEBS 3-21=-315/79, 4-21=-18/607, 4-19=-665/102, 5-19=0/650, 5-17=-1262/23, 7-17=-1156/30, 7-16=-52/944, 14-16=-0/830, 9-16=-560/64, 2-22=-986/73, 10-13=-840/76

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 22, 13.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H12	Hip	1	1	

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

144982105

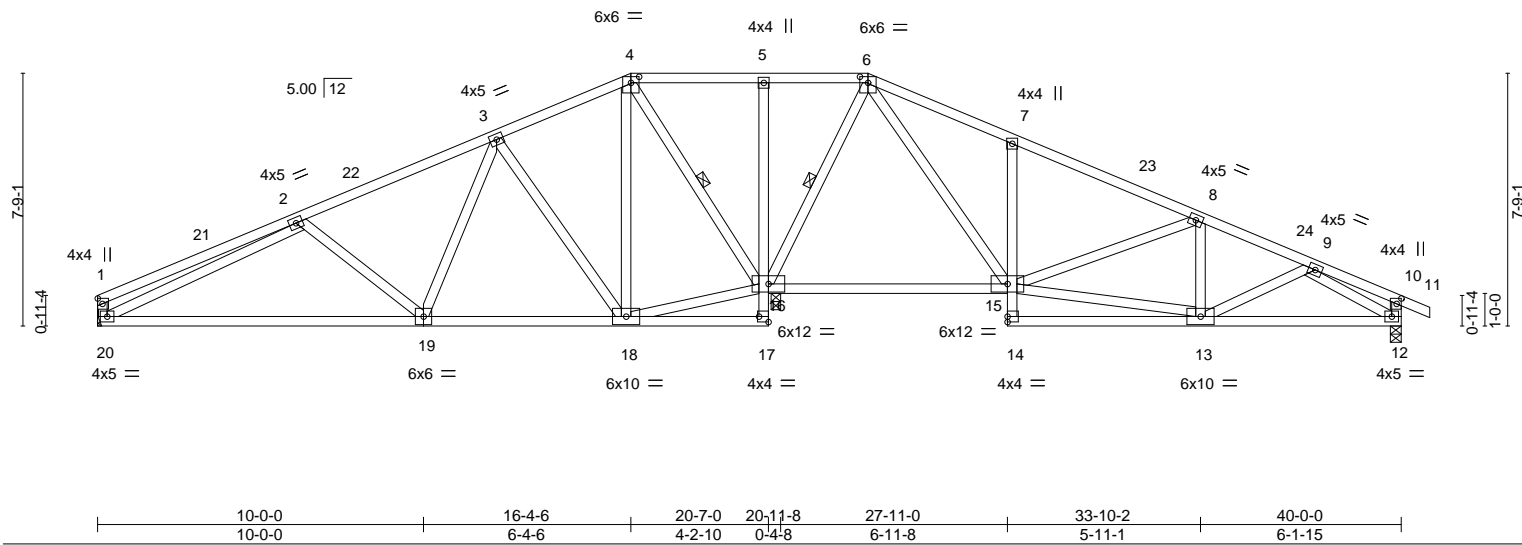
8.430 s Feb 12 2021 MiTek Industries, Inc. 5631468608

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03/30/2021

Mid America Truss, Jefferson City, MO - 65101,

Scale = 1:70.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.03 19 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.70	Vert(CT) -0.26 19-20 >952 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.02 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 260 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	WEBS 1 Row at midpt 4-16, 6-16

REACTIONS. (size) 16=0-3-8, 20=Mechanical, 12=0-4-0
Max Horz 20=-65(LC 14)
Max Uplift 20=-31(LC 11), 12=-50(LC 12)
Max Grav 16=2297(LC 34), 20=635(LC 34), 12=641(LC 50)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-352/12, 2-3=-615/69, 3-4=-40/287, 4-5=0/916, 5-6=0/918, 6-7=-420/152, 7-8=-407/89, 8-9=-814/81, 1-20=-272/42
BOT CHORD 19-20=-103/807, 18-19=-9/343, 5-16=-367/67, 15-16=-412/88, 7-15=-475/119, 12-13=-53/681
WEBS 2-19=-472/137, 3-19=0/520, 3-18=-827/89, 4-18=-37/807, 4-16=-1276/50, 6-16=-1138/57, 6-15=-79/1116, 13-15=-2/739, 8-15=-548/59, 2-20=-620/93, 9-12=-723/82

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.

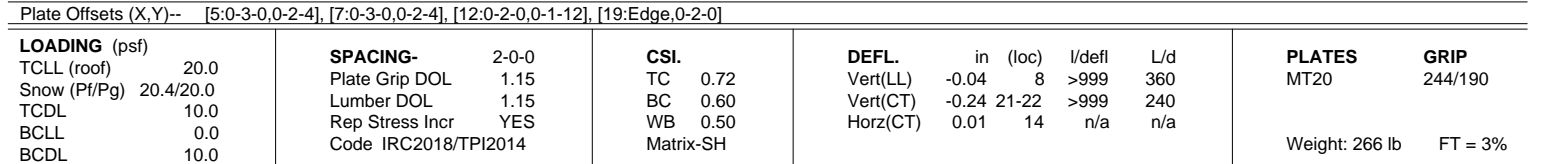


**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** J44987-106

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Industries, Inc. File # 2006-11053-1, 1053-2, 1053-3, 1053-4, 1053-5, 1053-6, 1053-7, 1053-8, 1053-9, 1053-10, 1053-11, 1053-12, 1053-13, 1053-14, 1053-15, 1053-16, 1053-17, 1053-18, 1053-19, 1053-20, 1053-21, 1053-22, 1053-23, 1053-24, 1053-25, 1053-26, 1053-27, 1053-28, 1053-29, 1053-30, 1053-31, 1053-32, 1053-33, 1053-34, 1053-35, 1053-36, 1053-37, 1053-38, 1053-39, 1053-40, 1053-41, 1053-42, 1053-43, 1053-44, 1053-45, 1053-46, 1053-47, 1053-48, 1053-49, 1053-50, 1053-51, 1053-52, 1053-53, 1053-54, 1053-55, 1053-56, 1053-57, 1053-58, 1053-59, 1053-60, 1053-61, 1053-62, 1053-63, 1053-64, 1053-65, 1053-66, 1053-67, 1053-68, 1053-69, 1053-70, 1053-71, 1053-72, 1053-73, 1053-74, 1053-75, 1053-76, 1053-77, 1053-78, 1053-79, 1053-80, 1053-81, 1053-82, 1053-83, 1053-84, 1053-85, 1053-86, 1053-87, 1053-88, 1053-89, 1053-90, 1053-91, 1053-92, 1053-93, 1053-94, 1053-95, 1053-96, 1053-97, 1053-98, 1053-99, 1053-100, 1053-101, 1053-102, 1053-103, 1053-104, 1053-105, 1053-106, 1053-107, 1053-108, 1053-109, 1053-110, 1053-111, 1053-112, 1053-113, 1053-114, 1053-115, 1053-116, 1053-117, 1053-118, 1053-119, 1053-120, 1053-121, 1053-122, 1053-123, 1053-124, 1053-125, 1053-126, 1053-127, 1053-128, 1053-129, 1053-130, 1053-131, 1053-132, 1053-133, 1053-134, 1053-135, 1053-136, 1053-137, 1053-138, 1053-139, 1053-140, 1053-141, 1053-142, 1053-143, 1053-144, 1053-145, 1053-146, 1053-147, 1053-148, 1053-149, 1053-150, 1053-151, 1053-152, 1053-153, 1053-154, 1053-155, 1053-156, 1053-157, 1053-158, 1053-159, 1053-160, 1053-161, 1053-162, 1053-163, 1053-164, 1053-165, 1053-166, 1053-167, 1053-168, 1053-169, 1053-170, 1053-171, 1053-172, 1053-173, 1053-174, 1053-175, 1053-176, 1053-177, 1053-178, 1053-179, 1053-180, 1053-181, 1053-182, 1053-183, 1053-184, 1053-185, 1053-186, 1053-187, 1053-188, 1053-189, 1053-190, 1053-191, 1053-192, 1053-193, 1053-194, 1053-195, 1053-196, 1053-197, 1053-198, 1053-199, 1053-200, 1053-201, 1053-202, 1053-203, 1053-204, 1053-205, 1053-206, 1053-207, 1053-208, 1053-209, 1053-210, 1053-211, 1053-212, 1053-213, 1053-214, 1053-215, 1053-216, 1053-217, 1053-218, 1053-219, 1053-220, 1053-221, 1053-222, 1053-223, 1053-224, 1053-225, 1053-226, 1053-227, 1053-228, 1053-229, 1053-230, 1053-231, 1053-232, 1053-233, 1053-234, 1053-235, 1053-236, 1053-237, 1053-238, 1053-239, 1053-240, 1053-241, 1053-242, 1053-243, 1053-244, 1053-245, 1053-246, 1053-247, 1053-248, 1053-249, 1053-250, 1053-251, 1053-252, 1053-253, 1053-254, 1053-255, 1053-256, 1053-257, 1053-258, 1053-259, 1053-260, 1053-261, 1053-262, 1053-263, 1053-264, 1053-265, 1053-266, 1053-267, 1053-268, 1053-269, 1053-270, 1053-271, 1053-272, 1053-273, 1053-274, 1053-275, 1053-276, 1053-277, 1053-278, 1053-279, 1053-280, 1053-281, 1053-282, 1053-283, 1053-284, 1053-285, 1053-286, 1053-287, 1053-288, 1053-289, 1053-290, 1053-291, 1053-292, 1053-293, 1053-294, 1053-295, 1053-296, 1053-297, 1053-298, 1053-299, 1053-300, 1053-301, 1053-302, 1053-303, 1053-304, 1053-305, 1053-306, 1053-307, 1053-308, 1053-309, 1053-310, 1053-311, 1053-312, 1053-313, 1053-314, 1053-315, 1053-316, 1053-317, 1053-318, 1053-319, 1053-320, 1053-321, 1053-322, 1053-323, 1053-324, 1053-325, 1053-326, 1053-327, 1053-328, 1053-329, 1053-330, 1053-331, 1053-332, 1053-333, 1053-334, 1053-335, 1053-336, 1053-337, 1053-338, 1053-339, 1053-340, 1053-341, 1053-342, 1053-343, 1053-344, 1053-345, 1053-346, 1053-347, 1053-348, 1053-349, 1053-350, 1053-351, 1053-352, 1053-353, 1053-354, 1053-355, 1053-356, 1053-357, 1053-358, 1053-359, 1053-360, 1053-361, 1053-362, 1053-363, 1053-364, 1053-365, 1053-366, 1053-367, 1053-368, 1053-369, 1053-370, 1053-371, 1053-372, 1053-373, 1053-374, 1053-375, 1053-376, 1053-377, 1053-378, 1053-379, 1053-380, 1053-381, 1053-382, 1053-383, 1053-384, 1053-385, 1053-386, 1053-387, 1053-388, 1053-389, 1053-390, 1053-391, 1053-392, 1053-393, 1053-394, 1053-395, 1053-396, 1053-397, 1053-398, 1053-399, 1053-400, 1053-401, 1053-402, 1053-403, 1053-404, 1053-405, 1053-406, 1053-407, 1053-408, 1053-409, 1053-410, 1053-411, 1053-412, 10



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

TOP CHORD	1-2=-354/19, 2-4=-642/73, 4-5=0/510, 5-6=0/793, 6-7=0/795, 7-8=-448/181, 8-10=-412/97, 10-11=-776/84, 1-22=-275/45
BOT CHORD	21-22=-113/783, 20-21=-27/369, 17-18=-600/108, 8-17=-579/144, 14-15=-57/660
WEBS	2-21=-391/131, 4-21=0/481, 4-20=-950/108, 5-20=-38/915, 18-20=-317/179, 5-18=-1409/79, 7-18=-1202/106, 15-17=0/679, 10-17=-470/53, 2-22=-608/88, 11-14=-701/87, 7-17=-117/1313

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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/TPH Quality Criteria, DSB-89 and BCSI Building Components**.

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



Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H14	HIP GIRDER	1	3	

Mid America Truss, Jefferson City, MO - 65101,

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021
 Scale = 1:70.3

1-0-0 2-8-13 6-8-4 11-4-7 16-0-10 20-8-13 25-5-0 27-11-8 30-6-0 33-3-12 37-3-3 40-0-0
 1-0-0 2-8-13 3-11-7 4-8-3 4-8-3 4-8-3 4-8-3 2-6-8 2-6-8 2-9-12 3-11-7 2-8-13 0-10-8

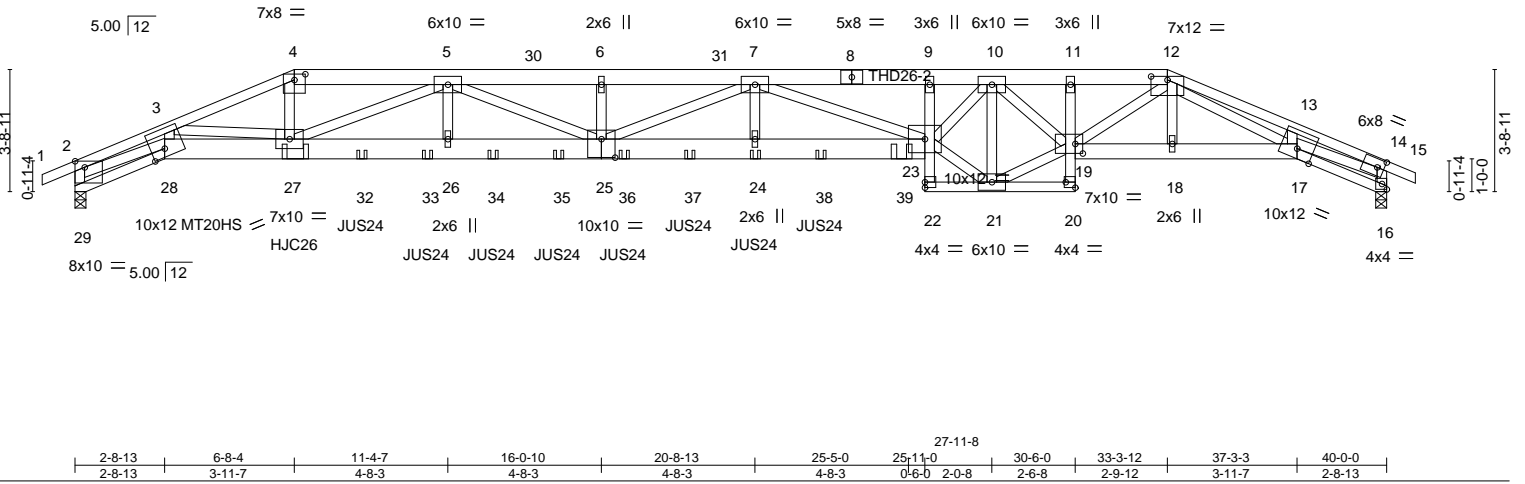


Plate Offsets (X, Y)-- [4:0-4-0,0-2-2], [12:0-6-0,0-1-5], [14:0-2-9,0-3-0], [19:0-2-12,0-3-8], [20:Edge,0-2-0], [25:0-5-0,0-6-12], [28:0-5-0,0-3-0], [29:0-3-8,0-2-4]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.65	24	>737
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-1.10	24	>433
TCDL	10.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.47	16	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH					
BCDL	10.0								
								Weight: 858 lb FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 4-8,8-12: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-9-10 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 25-28,23-25: 2x8 SP 2400F 2.0E, 17-19: 2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.	(size) 29=0-4-0, 16=0-4-0 Max Horz 29=25(LC 56) Max Uplift 29=-364(LC 7), 16=-247(LC 8) Max Grav 29=4149(LC 33), 16=3429(LC 33)
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FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-29=-4140/370, 2-3=-13943/1195, 3-4=-12474/1108, 4-5=-11302/1015, 5-6=-19757/1703, 6-7=-19757/1703, 7-9=-18160/1452, 9-10=-17894/1431, 10-11=-12553/965, 11-12=-12644/971, 12-13=-10789/771, 13-14=-11044/747, 14-16=-3405/258
BOT CHORD	28-29=-74/753, 27-28=-1069/12630, 26-27=-1447/17064, 25-26=-1447/17064, 24-25=-1690/20888, 23-24=-1690/20888, 21-22=-78/990, 20-21=-68/912, 18-19=-625/9237, 17-18=-626/9280, 16-17=-41/695
WEBS	2-28=-1010/12054, 3-28=-57/1139, 3-27=-1313/130, 4-27=-356/4361, 5-27=-6330/544, 5-26=-45/889, 5-25=-219/2974, 6-25=-296/89, 7-25=-1249/56, 7-24=-51/1146, 7-23=-2950/322, 21-23=-851/11508, 10-23=-866/10819, 10-21=-10571/818, 19-21=-809/10869, 10-19=-138/2389, 12-19=-362/4321, 12-18=0/720, 12-17=-96/1179, 13-17=-94/435, 14-17=-624/9402

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc; 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-6-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Confirm adequate drainage to prevent water ponding.



March 1,2021

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

MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H14	HIP GIRDER	1	3	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Session 17055081 Page 1

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

J44987107

- NOTES-**
- 9) All plates are MT20 plates unless otherwise indicated.
 - 10) Plates checked for a plus or minus 3 degree rotation about its center.
 - 11) Bearing at joint(s) 29, 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 29=364, 16=247.
 - 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.
 - 14) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent at 6-8-10 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
 - 15) 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 8-9-0 from the left end to 22-9-0 to connect truss(es) to back face of bottom chord.
 - 16) Use USP THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 25-2-8 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
 - 17) 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: 1-2=-51, 2-4=-51, 4-12=-61, 12-14=-51, 14-15=-51, 28-29=-20, 23-28=-20, 20-22=-20, 17-19=-20, 16-17=-20
 - Concentrated Loads (lb)
 - Vert: 27=-783(B) 24=-283(B) 32=-283(B) 33=-283(B) 34=-283(B) 35=-271(B) 36=-271(B) 37=-271(B) 38=-283(B) 39=-1119(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H15	Hip	1	1	

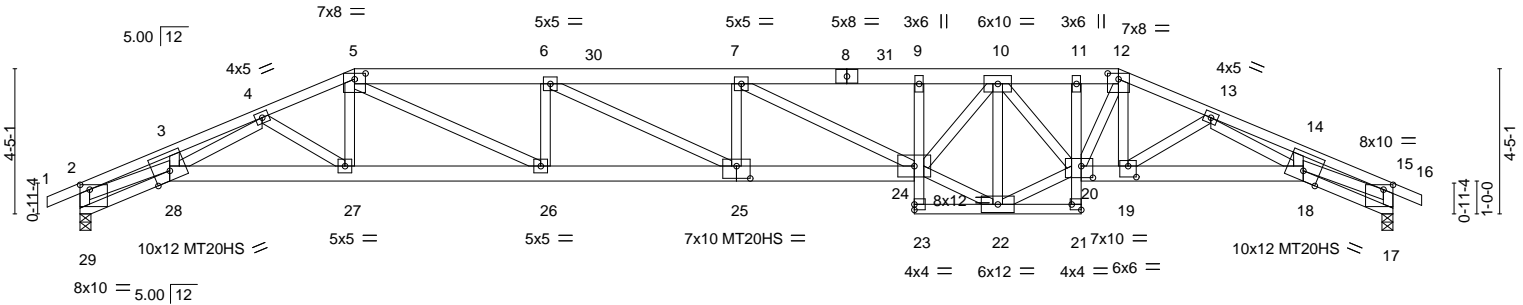
Mid America Truss, Jefferson City, MO - 65101,

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

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1-0-0 2-8-13 5-6-9 8-4-6 14-2-3 20-0-0 25-5-0 27-11-8 30-6-0 31-7-10 34-5-7 37-3-3 40-0-0
1-0-0 2-8-13 2-9-12 2-9-12 5-9-13 5-9-13 5-5-0 2-6-8 2-6-8 1-1-10 2-9-12 2-9-12 2-8-13 0-10-8

Scale = 1:70.2



	2-8-13	8-4-6	14-2-3	20-0-0	25-5-0	27-11-8	30-6-0	31-7-10	37-3-3	40-0-0		
	2-8-13	5-7-9	5-9-13	5-9-13	5-5-0	2-6-8	2-6-8	1-1-10	5-7-9	2-8-13		
Plate Offsets (X,Y)-- [5:0-4-0,0-2-2], [12:0-4-0,0-2-2], [15:0-3-8,0-1-12], [19:0-3-0,0-4-0], [20:0-4-4,0-4-4], [21:Edge,0-2-0], [25:0-5-0,0-4-8], [29:0-3-8,0-1-12]												
LOADING (psf)												
TCLL (roof)	20.0	SPACING- 2-0-0			CSL			DEFL. in (loc) l/defl L/d		PLATES	GRIP	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.59	25	>813	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-1.05	24-25	>455	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.54	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH							Weight: 278 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 5-8,8-12: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 1-7-10 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 25-28,18-20,24-25: 2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2 *Except* 2-28,15-18: 2x4 SP No.1		

REACTIONS. (size) 29=0-4-0, 17=0-4-0
Max Horz 29=25(LC 10)
Max Uplift 29=51(LC 7), 17=48(LC 8)
Max Grav 29=1657(LC 2), 17=1649(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-29=1648/55, 2-3=5218/105, 3-4=5087/134, 4-5=4257/131, 5-6=5749/218,
6-7=6343/237, 7-9=5734/215, 9-10=5669/214, 10-11=4258/150, 11-12=4269/151,
12-13=4243/126, 13-14=5088/111, 14-15=5223/81, 15-17=1644/59
BOT CHORD 28-29=24/308, 27-28=83/4198, 26-27=56/3911, 25-26=142/5747, 24-25=162/6343,
9-24=286/69, 22-23=15/276, 21-22=6/335, 19-20=49/3883, 18-19=75/4201,
17-18=3/313
WEBS 2-28=60/4470, 4-28=27/822, 4-27=565/73, 5-27=0/527, 5-26=101/2066,
6-26=857/117, 6-25=26/669, 7-24=691/25, 22-24=74/3886, 10-24=91/2944,
10-22=3160/100, 20-22=84/3822, 10-20=0/714, 12-20=67/984, 12-19=0/632,
13-19=575/68, 13-18=7/837, 15-18=52/4469

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Bearing at joint(s) 29, 17 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) 29, 17.

Continued on page 2



March 1,2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H15	Hip	1	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. L-Ed 5514658620055018 Page 1

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

NOTES-

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

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

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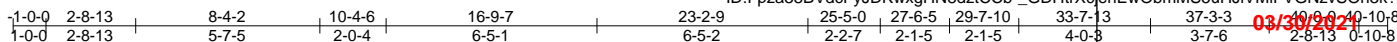
LET'S SUMMER MISSOURI

ustries, Inc. 1000 S. 22nd St. St. Louis, MO 63104
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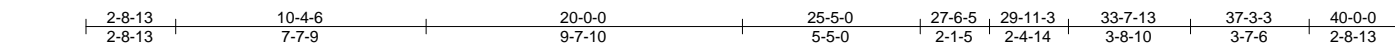
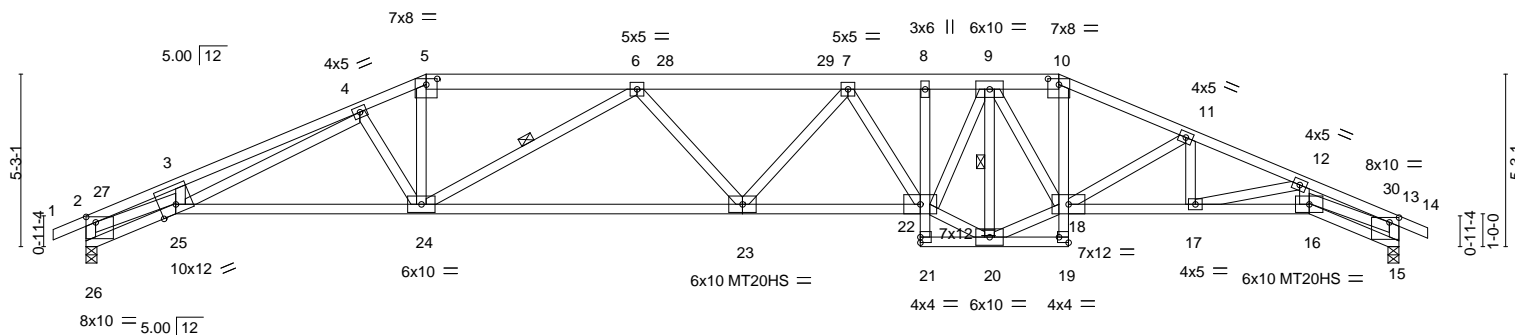
Scale = 1/20' 2

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Scale = 1:70.2

FLAT TOP CHORD MUST BE BRACED WITH SHEATHING

[illegible]

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 1-5: 2x4 SP No.1, 5-10: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 23-25,16-18,22-23: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 23-24.
WEBS	2x4 SP No.2 *Except* 2-25,13-16: 2x4 SP No.1	WEBS	1 Row at midpt 6-24, 9-20

REACTIONS. (size) 26=0-4-0, 15=0-4-0
 Max Horz 26=33(LC 11)
 Max Uplift 26=-36(LC 7), 15=-33(LC 8)
 Max Grav 26=1657(LC 2), 15=1649(LC 2)

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

TOP CHORD	2-26=-1669/34, 2-3=-5079/61, 3-4=-5044/120, 4-5=-3624/96, 5-6=-3306/91, 6-7=-4521/133, 7-8=-4095/140, 8-9=-4059/140, 9-10=-3211/106, 10-11=-3565/106, 11-12=-4020/71, 12-13=-5055/39, 13-15=-1654/45
BOT CHORD	25-26=-27/259, 24-25=-26/3481, 23-24=-94/4459, 22-23=-76/4440, 10-18=-5/1256, 17-18=-13/3715, 16-17=-16/4499, 15-16=-1/257
WEBS	2-25=-30/4403, 4-25=-107/1623, 4-24=-612/110, 5-24=-0/1118, 6-24=-1341/115, 7-22=-665/52, 20-22=-27/3198, 9-22=-44/2285, 9-20=-2669/53, 18-20=-26/3150, 9-18=-0/589, 11-18=-836/49, 11-17=-0/340, 12-17=-91/935, 12-16=-0/576, 13-16=-16/4374

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) Plates checked for a plus or minus 3 degree rotation about its center.
- 9) Bearing at joint(s) 26, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 15.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



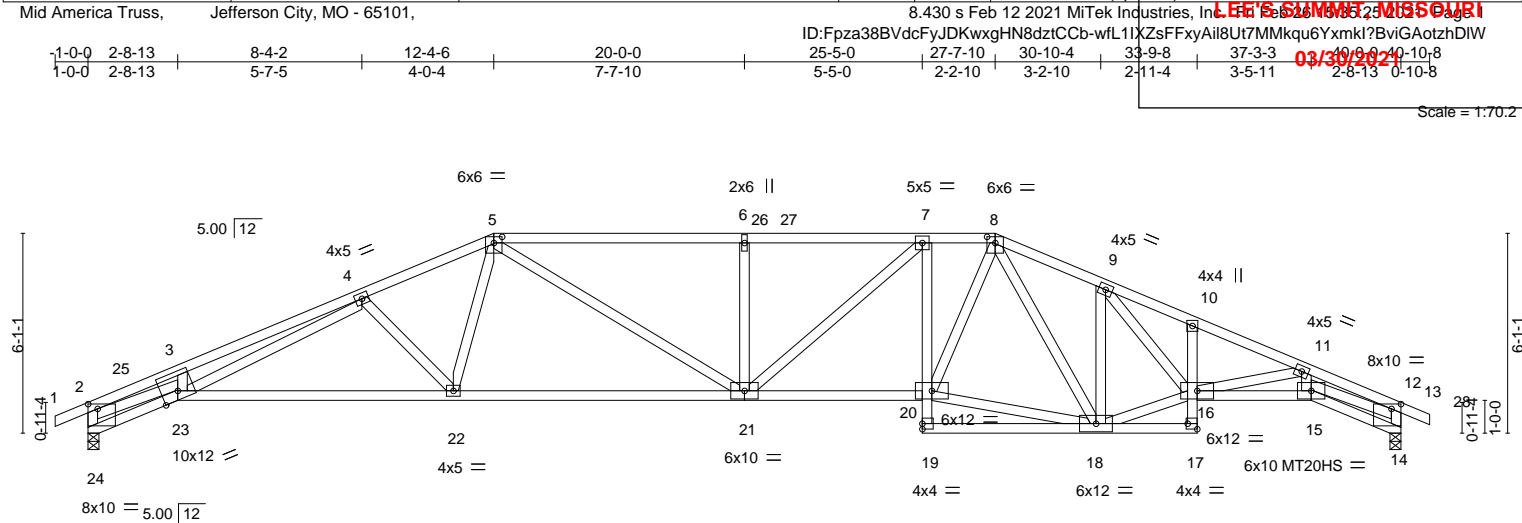
WARNING – Velly design parameters are listed below and included within key reference 1. See MH-1413 (Rev. 3/19/2020) for more details.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for the building component, not a truss system. Before use, 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	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H17	Hip	1	1	

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT MISSOURI
 14987110
 03/30/2021
 Scale = 1:70.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.34 20-21 >999	MT20	244/190		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.71 21-22 >673	MT20HS	187/143		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.46 14 n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP 2400F 2.0E *Except* 8-13: 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 *Except* 21-23,15-16: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2 *Except* 2-23,12-15: 2x4 SP No.1		

REACTIONS.	
(size)	24=0-4-0, 14=0-4-0
Max Horz	24=42(LC 11)
Max Uplift	24=-21(LC 7), 14=-18(LC 8)
Max Grav	24=1731(LC 34), 14=1724(LC 34)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-24=-1764/15, 2-3=-5251/0, 3-4=-5237/62, 4-5=-3293/66, 5-6=-3528/118, 6-7=-3527/118, 7-8=-3092/100, 8-9=-2728/92, 9-10=-3872/57, 10-11=-3975/29, 11-12=-5192/0, 12-14=-1734/28
BOT CHORD	23-24=-40/276, 22-23=0/3355, 21-22=0/2836, 20-21=0/3116, 7-20=-615/72, 10-16=-272/65, 15-16=0/4610, 14-15=-2/271
WEBS	2-23=0/4534, 4-23=-94/1733, 4-22=-726/121, 5-22=0/768, 5-21=-38/816, 6-21=-647/126, 7-21=-23/543, 18-20=0/2479, 8-20=-19/1325, 8-18=-396/54, 9-18=-1137/67, 16-18=0/2442, 9-16=-2/1710, 11-16=-1000/43, 11-15=0/608, 12-15=0/4478

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Bearing at joint(s) 24, 14 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) 24, 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H18	Hip	1	1	

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT MISSOURI

8430 s Feb 12 2021 MiTek Industries, Inc. Session 280108

14987111

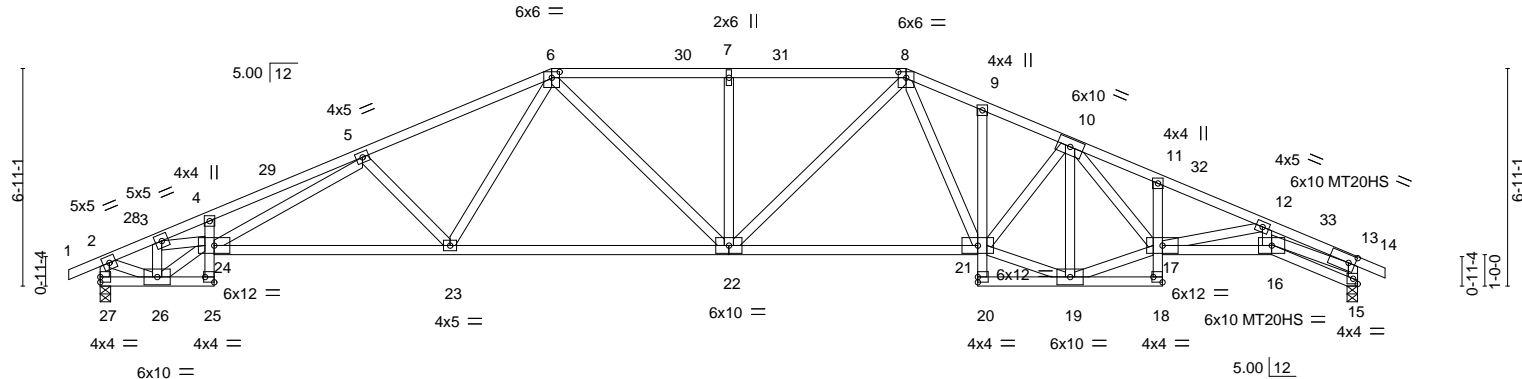
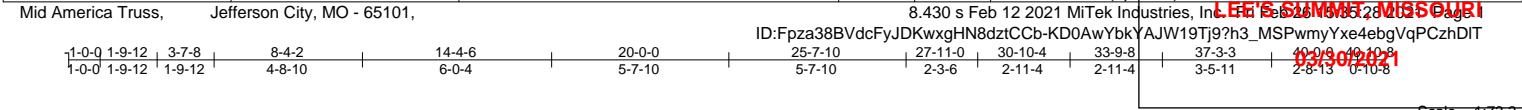
03/30/2021

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Session 280108

14987111

03/30/2021



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.96	Vert(LL) -0.35 21-22 >999 360	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.79	Vert(CT) -0.76 21-22 >629 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.43 15 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 250 lb	FT = 3%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 1-6: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 22-24,16-17: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 16-17.
WEBS 2x4 SP No.2 *Except* 13-16: 2x4 SP No.1	

REACTIONS.	FORCES.
(size) 15=0-4-0, 27=0-4-0 Max Horz 27=52(LC 13) Max Uplift 15=-7(LC 12), 27=-8(LC 11) Max Grav 15=1767(LC 34), 27=1774(LC 34)	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2114/0, 3-4=-4941/10, 4-5=-5170/51, 5-6=-3388/35, 6-7=-2850/73, 7-8=-2850/73, 8-9=-3209/56, 9-10=-3208/37, 10-11=-4157/16, 11-12=-4268/0, 12-13=-5520/0, 13-15=-1777/21, 2-27=-1702/17 BOT CHORD 25-26=-17/271, 23-24=0/3573, 22-23=0/2577, 21-22=0/2570, 11-17=-270/68, 16-17=0/4917, 15-16=-4/279 WEBS 3-26=-1808/23, 24-26=-12/1916, 3-24=0/2679, 5-24=-45/1387, 5-23=-815/141, 6-23=0/908, 6-22=0/540, 7-22=-539/105, 8-22=0/541, 8-21=-37/931, 19-21=0/2709, 10-21=0/587, 10-19=-1725/0, 17-19=0/2525, 10-17=-11/1877, 12-17=-1019/46, 12-16=0/643, 13-16=0/4784, 2-26=0/1926

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) Plates checked for a plus or minus 3 degree rotation about its center.
9) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 27.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI

SCOTT M. SEVIER

NUMBER

PE-2001018807

PROFESSIONAL ENGINEER

March 1,2021

Job

W2-63

Truss

H19

Truss Type

HIP

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dzTCb-Hc8wLEd?4oZEGTd6GQjX3nXj4ZgLPa6x3_xT5zhDIR

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

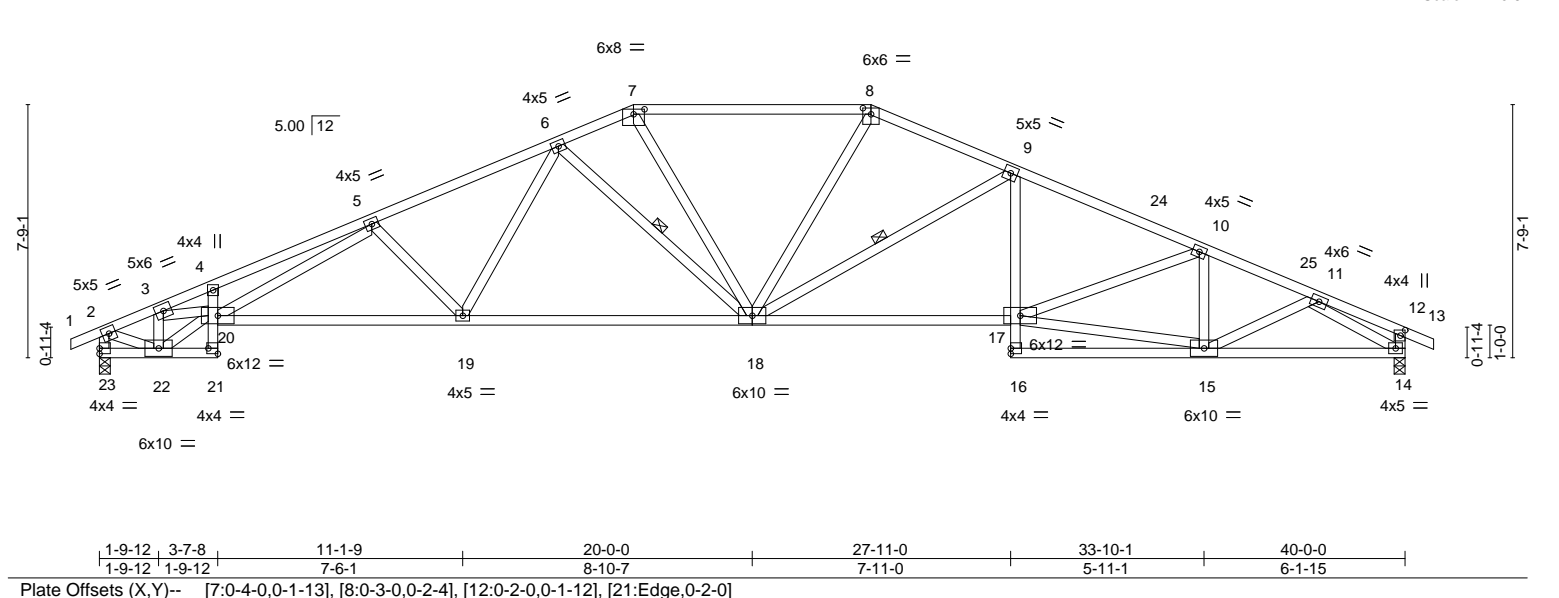
14987112

03/30/2021

Mid America Truss,

Jefferson City, MO - 65101,

Scale = 1:70.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.30 19 >999	360	MT20	244/190	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.61 17-18 >777	240			
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.31 14 n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0										
								Weight: 247 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 7-8: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 18-20,17-18: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 6-18, 9-18

REACTIONS.	
(size)	23=0-4-0, 14=0-4-0
Max Horz	23=-59(LC 14)
Max Uplift	23=-18(LC 11), 14=-18(LC 12)
Max Grav	23=1810(LC 34), 14=1810(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-2169/11, 3-4=-5123/56, 4-5=-5399/104, 5-6=-3654/19, 6-7=-2408/53, 7-8=-2593/24, 8-9=-2490/54, 9-10=-3564/0, 10-11=-3188/17, 11-12=-273/8, 2-23=-1735/27, 12-14=-273/32
BOT CHORD	21-22=-21/300, 19-20=-18/3800, 18-19=0/2878, 17-18=0/3220, 9-17=0/520, 14-15=-8/2343
WEBS	3-22=-1850/40, 20-22=-35/1943, 3-20=-26/2807, 5-20=-67/1364, 5-19=-771/133, 6-19=0/853, 6-18=-959/94, 7-18=0/855, 8-18=0/755, 9-18=-1148/77, 15-17=0/2829, 10-17=0/348, 10-15=-669/48, 11-15=0/652, 2-22=0/1979, 11-14=-2601/31

- 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=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H20	HIP	1	1	

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

LEE'S SUMMIT, MISSOURI

03/30/2021

J44987113

Mid America Truss, Jefferson City, MO - 65101,

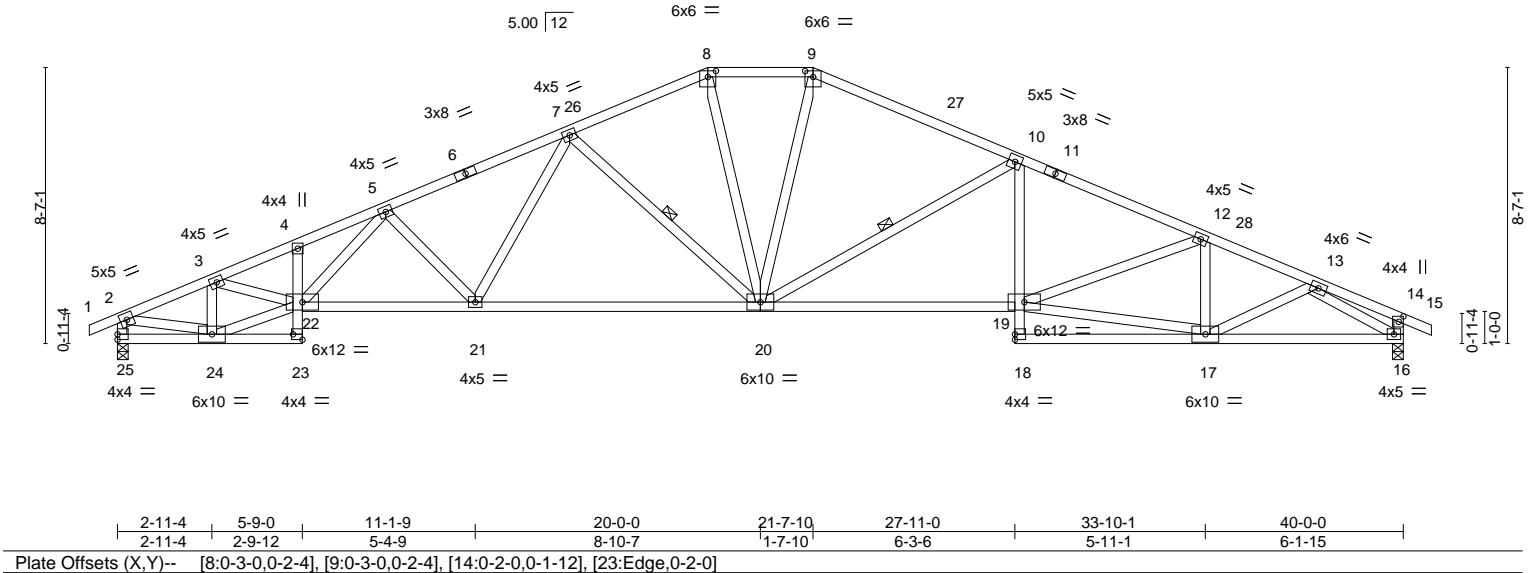
8.430 s Feb 12 2021 MiTek Industries, Inc. 8.430 s Feb 12 2021 MiTek Industries, Inc.

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-5mVBbimfdKO_O5Gdhqxl2njA_jSpHkpRvRfHlzhDIL

0-10-8 2-11-4 5-9-0 8-4-2 14-0-12 18-4-6 21-7-10 27-11-0 33-10-1 37-2-2 40-0-0 40-10-8
0-10-8 2-11-4 2-9-12 2-7-2 5-8-10 4-3-10 3-3-5 6-3-6 5-11-1 3-4-1 2-9-14 0-10-8

FLAT TOP CHORD MUST BE BRACED WITH SHEATHING.

Scale = 1:71.7



LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.93	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.77	Vert(LL) -0.31 19-20 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.71	Vert(CT) -0.61 20-21 >781 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.27 16 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 251 lb	FT = 3%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
20-22,19-20: 2x4 SP No.1	WEBS 1 Row at midpt 7-20, 10-20
WEBS 2x4 SP No.2	

REACTIONS. (size) 25=0-4-0, 16=0-4-0
Max Horz 25=-68(LC 14)
Max Uplift 25=-29(LC 11), 16=-29(LC 12)
Max Grav 25=1850(LC 34), 16=1853(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2763/33, 3-4=-4710/70, 4-5=-4754/93, 5-7=-3863/52, 7-8=-2636/28, 8-9=-2538/32,
9-10=-2700/30, 10-12=-3805/33, 12-13=-3290/36, 13-14=-286/8, 2-25=-1785/43,
14-16=-274/31
BOT CHORD 21-22=-48/3964, 20-21=0/3110, 19-20=0/3469, 10-19=0/484, 16-17=-23/2398
WEBS 3-24=-1457/64, 22-24=-71/2448, 3-22=-1/1900, 5-22=-32/638, 5-21=-721/118,
7-21=0/792, 7-20=-1030/117, 8-20=0/841, 9-20=0/704, 17-19=0/2901, 12-19=0/432,
12-17=-707/50, 13-17=0/705, 2-24=-3/2401, 13-16=-2656/50, 10-20=-1251/109

NOTES-

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



March 1, 2021

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

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



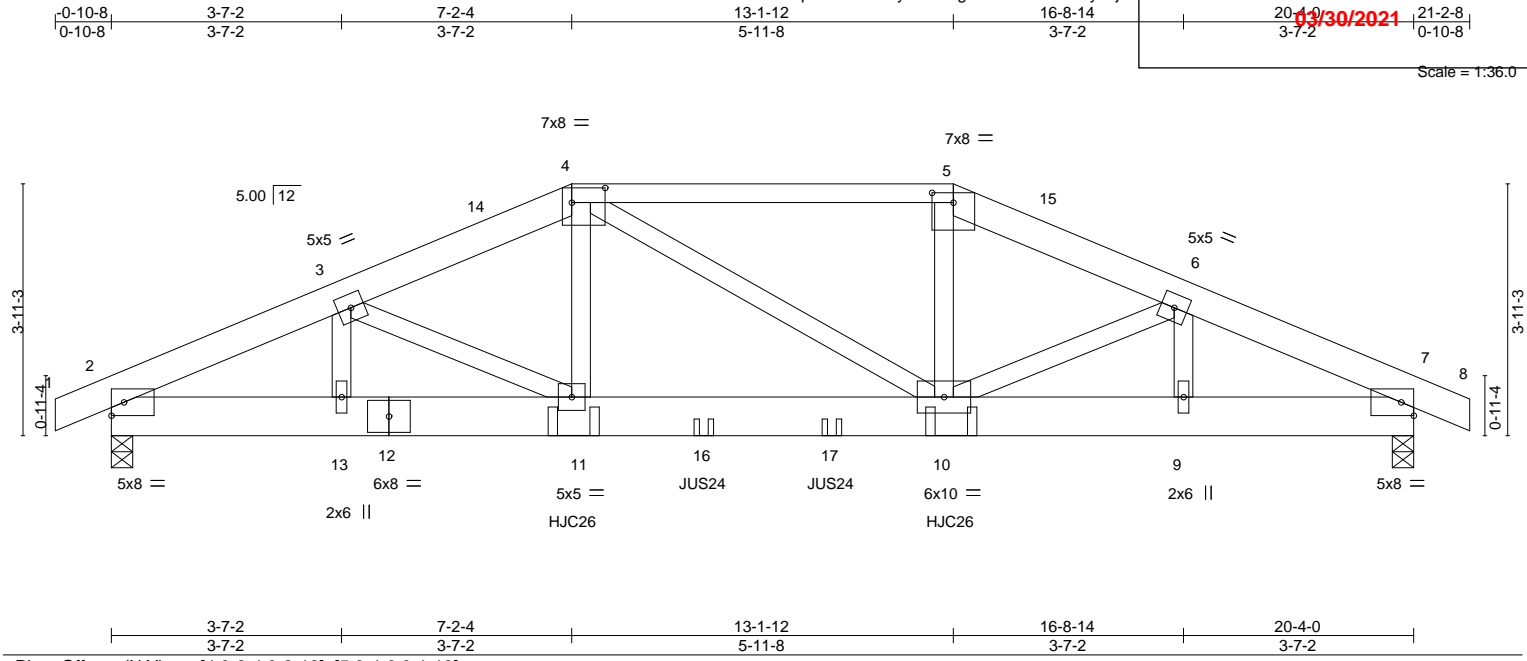
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H21	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/30/2021
 Scale = 1:36.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.05 10-11 >999 360	MT20		244/190	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.08 10-11 >999 240				
TCDL	10.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.02 7 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1 *Except* 4-5: 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-10-8 oc purlins.
BOT CHORD	2x8 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.	
(size)	2=0-4-0, 7=0-4-0
Max Horz	2=36(LC 13)
Max Uplift	2=163(LC 7), 7=163(LC 8)
Max Grav	2=2141(LC 34), 7=2146(LC 34)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-3739/294, 3-4=-3875/372, 4-5=-3556/353, 5-6=-3856/369, 6-7=-3760/297
BOT CHORD	2-13=-247/3210, 11-13=-247/3210, 10-11=-286/3577, 9-10=-230/3228, 7-9=-230/3228
WEBS	3-11=-170/590, 4-11=-98/1274, 5-10=-89/1258, 6-10=-180/547

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=163, 7=163.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 5-10-12 oc max. starting at 7-2-10 from the left end to 13-1-6 to connect truss(es) to back face of bottom chord.
 - 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 9-3-0 from the left end to 12-3-0 to connect truss(es) to back face of bottom chord.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	H22	Hip	1	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. 14987115	

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-XliRfGjsqpt?O1sWutTuyY9bAKI70PMXPtqWzhDIH

0-10-8 4-5-3 8-10-6 11-5-10 15-10-13 20-4-0 21-2-8
0-10-8 4-5-3 4-5-3 2-7-5 4-5-3 4-5-3 0-10-8

Scale = 1:36.0

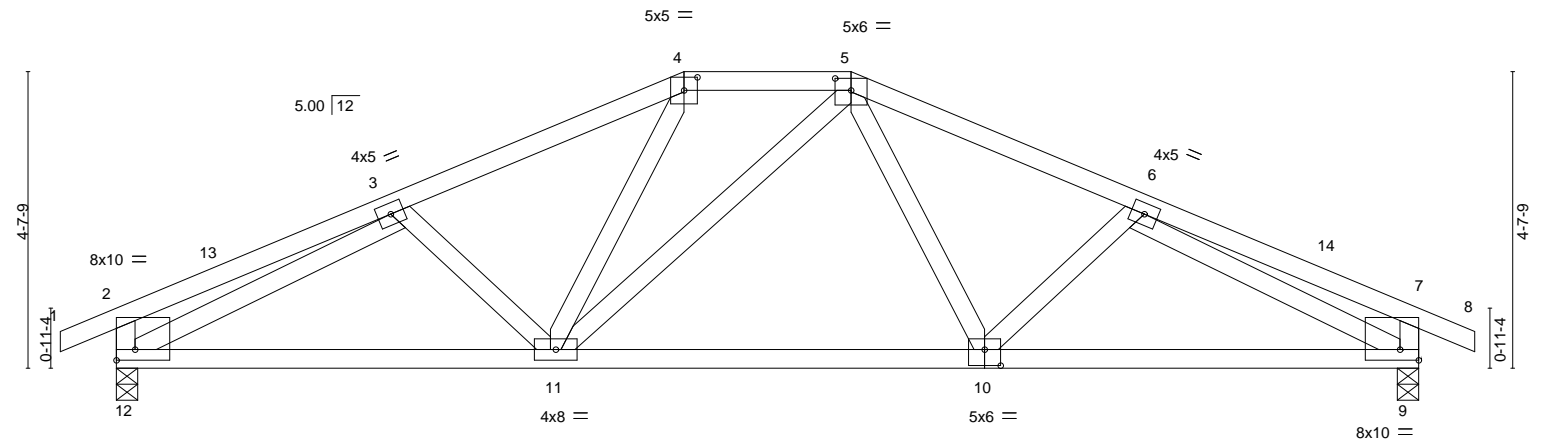


Plate Offsets (X,Y)--		[2:Edge,0-2-0], [4:0-2-8,0-2-7], [5:0-3-0,0-2-4], [9:Edge,0-2-0], [10:0-3-0,0-3-0]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC 0.36		in (loc) l/defl L/d		MT20	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		BC 0.45		Vert(LL) -0.06 10-11 >999 360		GRIP	
TCDL	10.0	Lumber DOL 1.15		WB 0.54		Vert(CT) -0.11 10-11 >999 240		244/190	
BCLL	0.0	Rep Stress Incr YES		Matrix-SH		Horz(CT) 0.04 9 n/a n/a		Weight: 113 lb	
BCDL	10.0	Code IRC2018/TPI2014						FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-6-1 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)	12=0-4-0, 9=0-4-0
Max Horz	12=-27(LC 14)
Max Uplift	12=-17(LC 11), 9=-17(LC 12)
Max Grav	12=1059(LC 34), 9=1059(LC 34)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-291/27, 3-4=-1347/18, 4-5=-1041/50, 5-6=-1352/20, 6-7=-290/28, 2-12=-347/47, 7-9=-347/47
BOT CHORD	11-12=-26/1316, 10-11=0/1039, 9-10=0/1317
WEBS	4-11=0/304, 5-10=0/308, 3-12=-1285/13, 6-9=-1287/11

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



March 1,2021

Job

W2-63

Truss

H23

Truss Type

Hip Girder

Qty

1

Ply

2

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 8.430 s Feb 12 2021 MiTek Industries, Inc. 8.430 s Feb 12 2021 MiTek Industries, Inc.

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144982116

03/30/2021

0-10-8

4-11-4

9-0-12

14-0-0

0-10-8

0-10-8

4-11-4

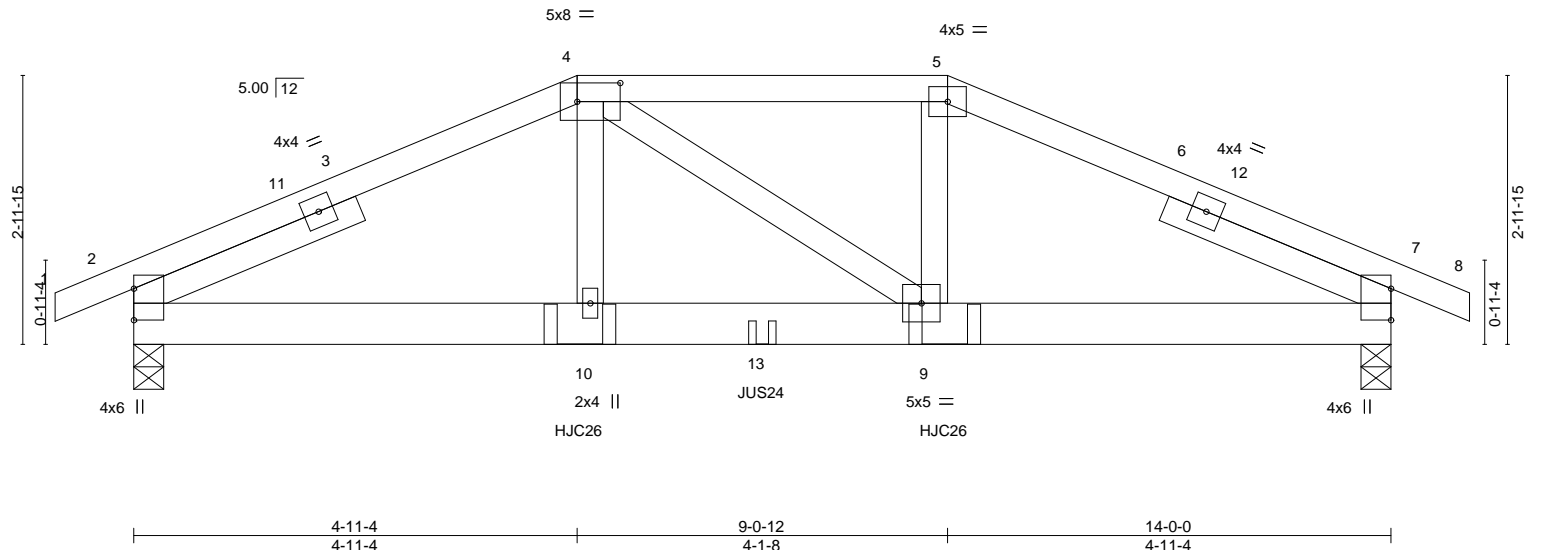
4-1-8

4-11-4

14-10-8

0-10-8

Scale = 1:25.7



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.04	9-10	>999	360	MT20	244/190	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.07	9-10	>999	240			
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.01	7	n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P									
BCDL	10.0												
											Weight: 158 lb	FT = 3%	

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2

SLIDER Left 2x4 SP No.2 -t 2-8-14, Right 2x4 SP No.2 -t 2-8-14

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) 2=0-4-0, 7=0-4-0
Max Horz 2=25(LC 13)
Max Uplift 2=103(LC 7), 7=103(LC 8)
Max Grav 2=1286(LC 34), 7=1286(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2112/200, 4-5=-1840/193, 5-7=-2109/199
BOT CHORD 2-10=-144/1806, 9-10=-146/1844, 7-9=-142/1804
WEBS 4-10=-36/693, 5-9=-43/717

- 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 3 degree rotation about its center.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=103, 7=103.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 4-0-12 oc max. starting at 4-11-10 from the left end to 9-0-6 to connect truss(es) to back face of bottom chord.
 - Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 7-0-0 from the left end to connect truss(es) to back face of bottom chord.



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	H23	Hip Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. L-Ed 1650842015018 Page 2

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

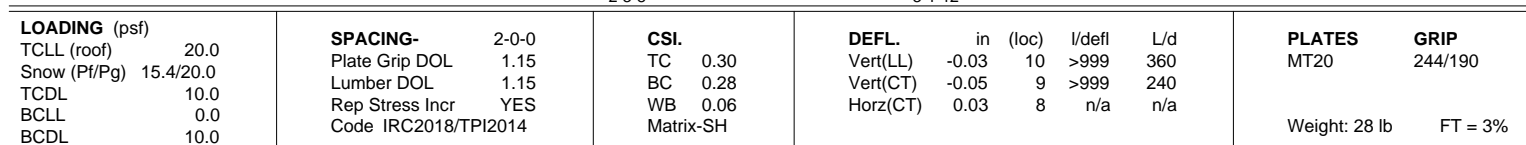
J44987116

NOTES-
14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 4-5=-61, 5-8=-51, 2-7=-20
Concentrated Loads (lb)
Vert: 10=-497(B) 9=-497(B) 13=-200(B)



**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW**
144987117
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
1cA6vQfsTzTxuX7ldwVe_nnr1f18iJL33fnFzhDI4
03/30/2011



REACTIONS. (size) 11=0-4-0, 8=Mechanical
 Max Horz 11=89(LC 8)
 Max Uplift 11=-12(LC 7), 8=-24(LC 8)
 Max Grav 11=298(LC 16), 8=268(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=373/25

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

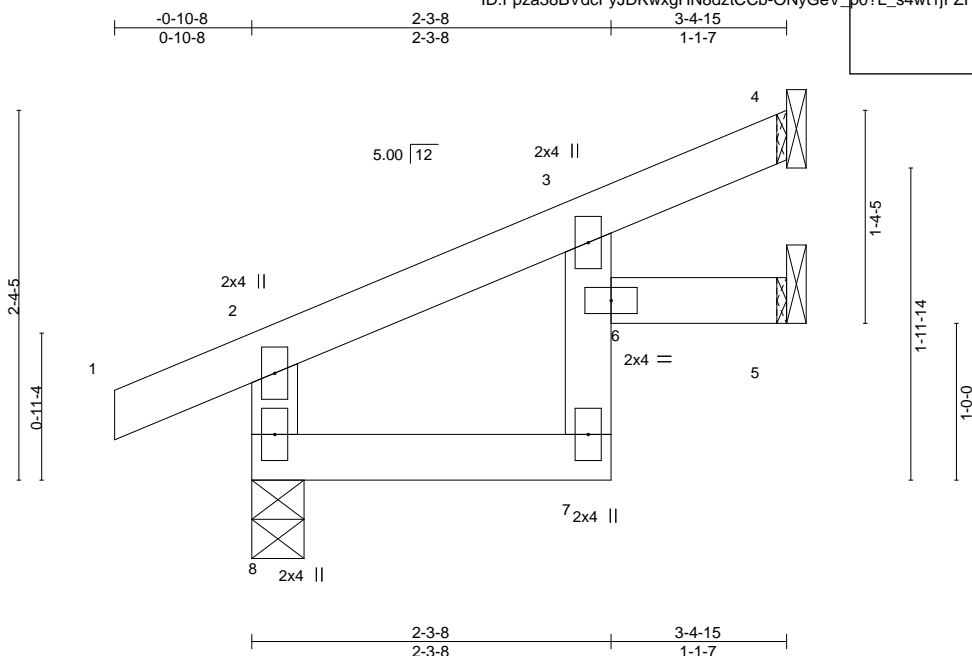
**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES**

8.430 s Feb 12 2021 MiTek Industries, Inc. Feb 26 15:36:00 2021 Page

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03/30/2021

Scale = 1:14.7

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LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-4-0, 4=Mechanical, 5=Mechanical
 Max Horz 8=47(LC 8)
 Max Uplift 8=8(LC 7), 4=-18(LC 11), 5=-5(LC 11)
 Max Grav 8=241(LC 16), 4=87(LC 16), 5=53(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; TCFLD=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) 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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021



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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J3	Jack-Open	4	1	

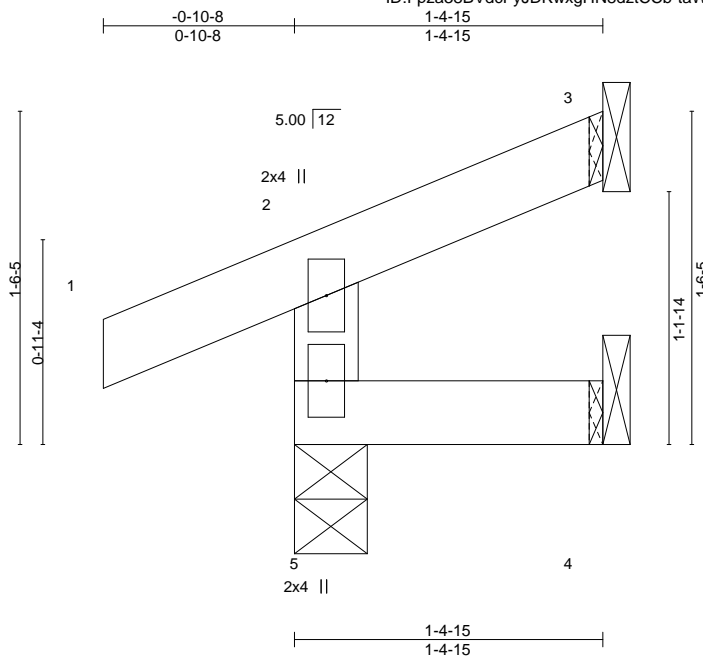
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Lee's Summit, MO 64080-1150 Page 1

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

Scale = 1:10.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00 5 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00 5 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00 3 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										
								Weight: 7 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 1-4-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=30(LC 8)
Max Uplift 5=-18(LC 7), 3=-14(LC 11)
Max Grav 5=154(LC 16), 3=21(LC 16), 4=11(LC 9)

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

NOTES-

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



March 1, 2021

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

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



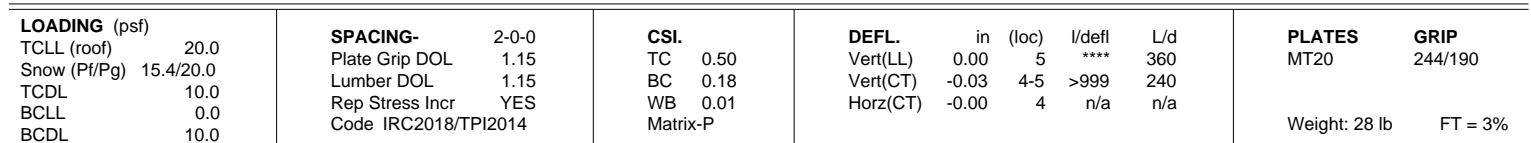
16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:36:02 2021 Page 1

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03/30/2021

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



March 1, 2021



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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J5	Jack-Closed Girder	1	2	

Mid America Truss, Jefferson City, MO - 65101,

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

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-pydOGW0hJwjZkXfSrpGvIPVjtwrefWnecUA7gzhDkw

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

Scale = 1:23.7

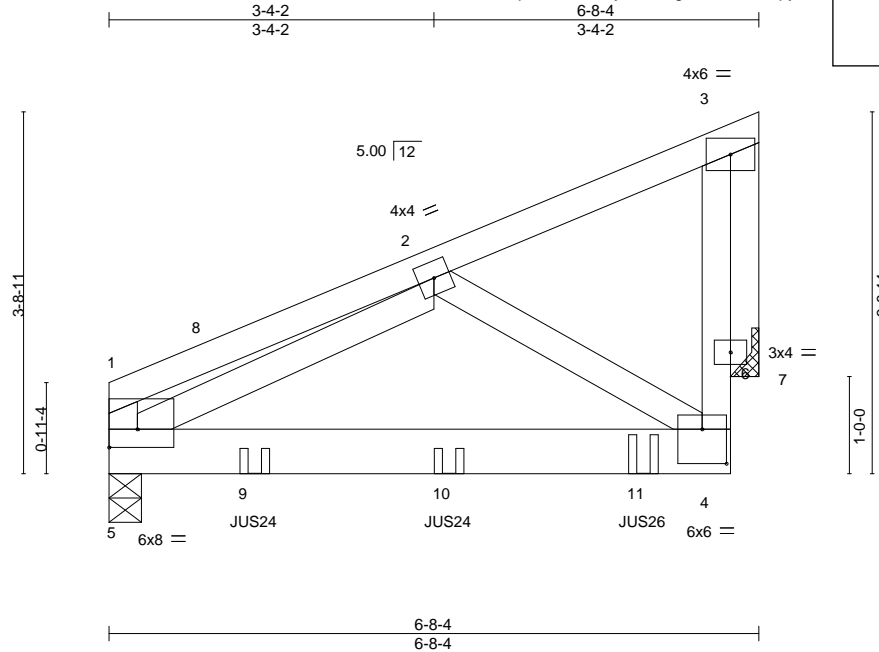


Plate Offsets (X,Y)-- [4:0-3-0,0-4-4], [5:Edge,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.27	Vert(LL)	-0.07	4-5	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.89	Vert(CT)	-0.15	4-5	>525	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.01	7	n/a	n/a		
BCLL 0.0	Rep Stress Incr NO	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 88 lb	FT = 3%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 5=0-4-0, 7=Mechanical
Max Horz 5=74(LC 8)
Max Uplift 5=-25(LC 11), 7=-73(LC 11)
Max Grav 5=1062(LC 16), 7=1139(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-6=-50/1093, 3-6=-50/1093
BOT CHORD 4-5=-68/310
WEBS 2-5=-363/12, 3-7=-1149/73

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.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Plates checked for a plus or minus 3 degree rotation about its center.
- 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, 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.
- Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 1-6-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 3-6-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent at 5-6-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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

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

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



March 1, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

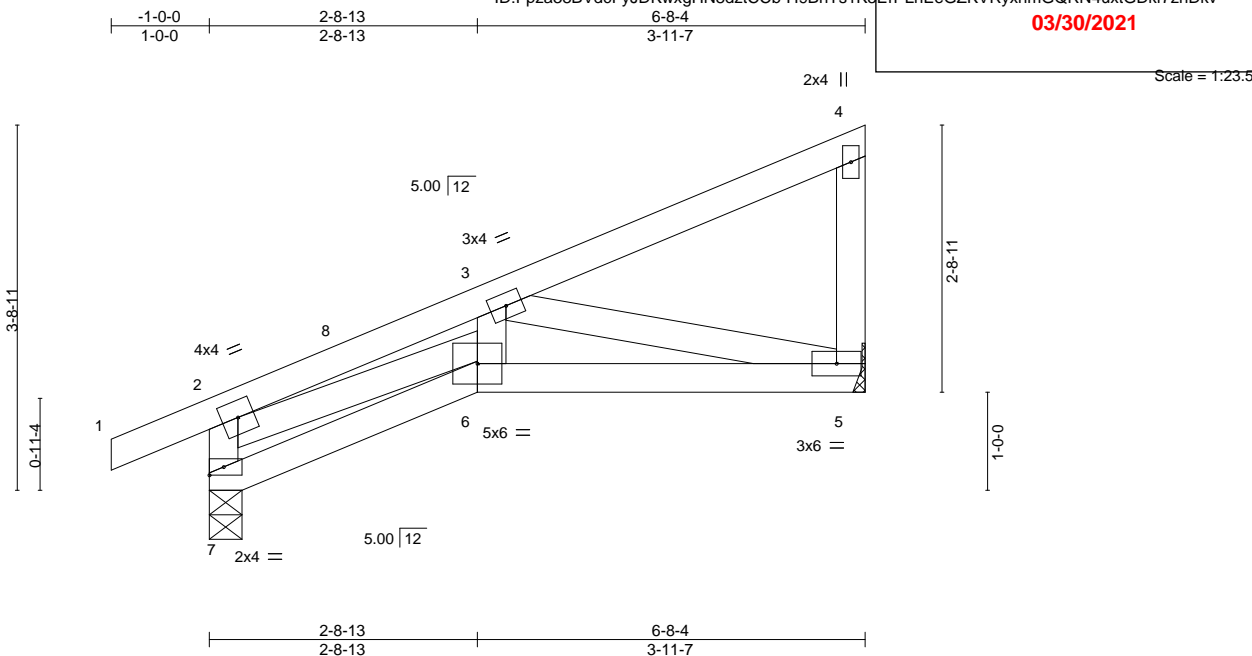
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J6	Jack-Closed	2	1	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Session: 1603040155081

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



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.25	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.23	Vert(LL)	-0.02	6	>999		
TCDL	10.0	Lumber DOL	1.15	WB	0.16	Vert(CT)	-0.03	5-6	>999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		Horz(CT)	0.01	5	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 37 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-4-0, 5=Mechanical
 Max Horz 7=106(LC 8)
 Max Uplift 7=-15(LC 11), 5=-26(LC 11)
 Max Grav 7=343(LC 16), 5=302(LC 16)

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

TOP CHORD 2-7=-317/50, 2-3=-718/68
 BOT CHORD 5-6=-93/614
 WEBS 2-6=-34/643, 3-5=-630/105

NOTES-

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



March 1, 2021

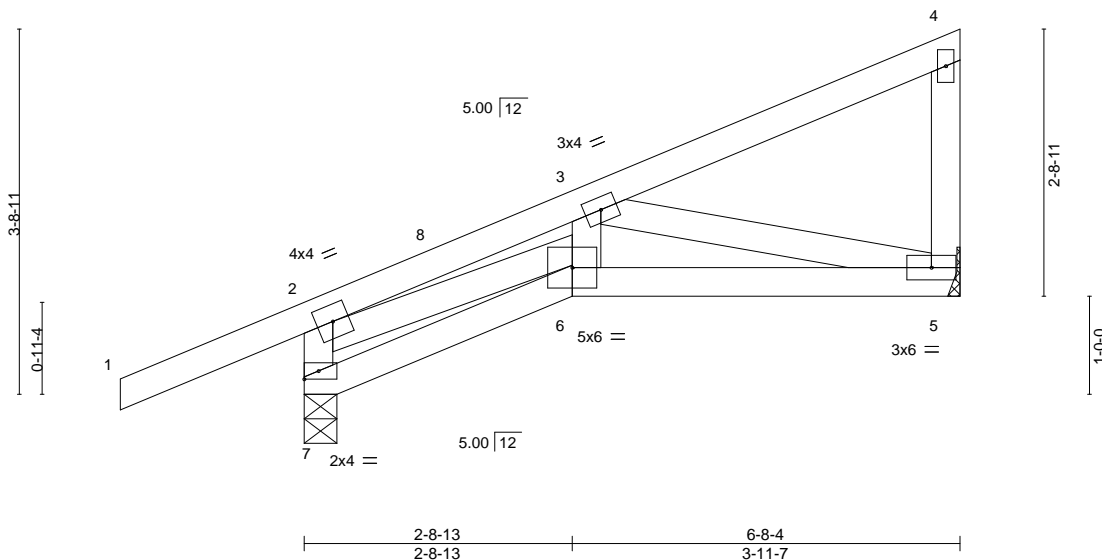
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	J6A	Jack-Closed	3	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,		8.430 s Feb 12 2021 MiTek Industries, Inc. 14987123				
		ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ILl9hC2yqY_GzroqqGrk_AUpJgmu6XO46wzHCZzhDku				
		-1-10-8 2-8-13 6-8-4 3-11-7				
		1-10-8 2-8-13 3-11-7				
		2x4				Scale = 1:23.5



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.22	Vert(LL) -0.01 6 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.14	Vert(CT) -0.03 5-6 >999 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 38 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-4-0, 5=Mechanical
Max Horz 7=112(LC 8)
Max Uplift 7=-38(LC 7), 5=-23(LC 11)
Max Grav 7=399(LC 16), 5=291(LC 16)

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

TOP CHORD 2-7=-373/68, 2-3=-660/56
BOT CHORD 5-6=-88/551
WEBS 2-6=-13/578, 3-5=-565/91

NOTES-

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



March 1, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J6B	Jack-Closed	4	1	

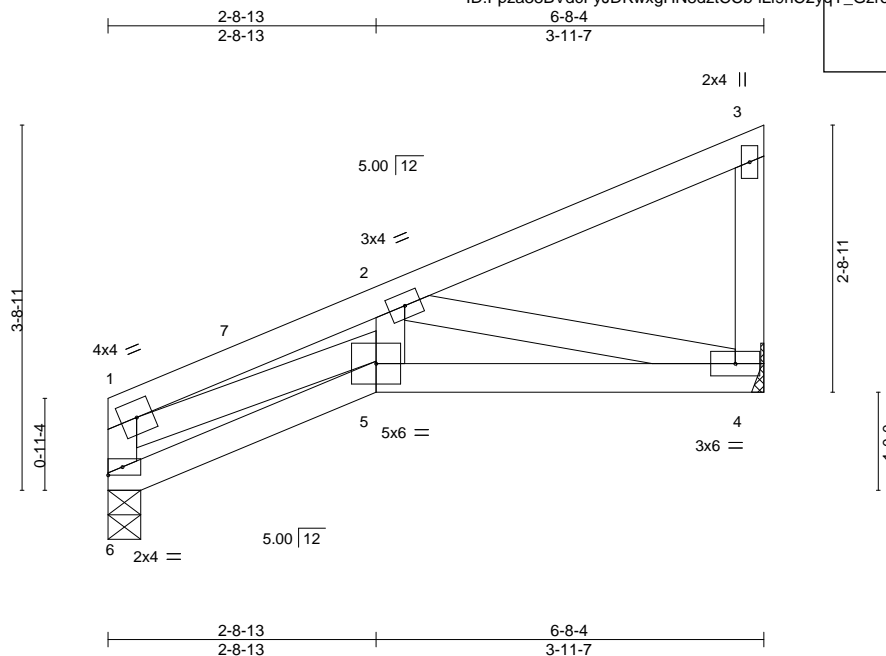
Mid America Truss, Jefferson City, MO - 65101,

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

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ILl9hC2yqY_GzroqqGrk_AUscgmZ6X046wzHCZzhDku

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

Scale = 1:23.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.24	Vert(LL) -0.02	5	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.24	Vert(CT) -0.03	4-5	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.17	Horz(CT) 0.02	4	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
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

BRACING-

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

REACTIONS.

(size) 6=0-4-0, 4=Mechanical
 Max Horz 6=99(LC 8)
 Max Uplift 6=2(LC 11), 4=26(LC 11)
 Max Grav 6=280(LC 15), 4=307(LC 15)

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

TOP CHORD 1-6=-254/33, 1-2=-740/69
 BOT CHORD 4-5=-92/644
 WEBS 1-5=-48/673, 2-4=-660/108

NOTES-

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



March 1, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J7	Jack-Open	1	1	

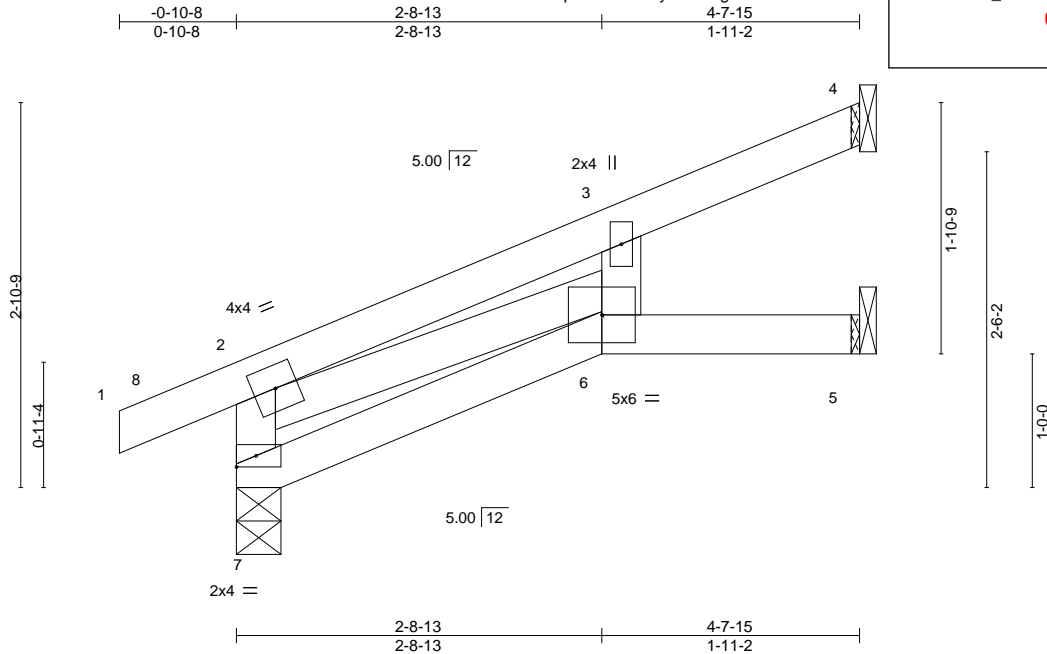
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Session: 11/16/2021 Page 1

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

Scale = 1:17.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.06 6 >897 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.10 6 >555 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.04 5 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

Weight: 22 lb FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-4-0, 4=Mechanical, 5=Mechanical
 Max Horz 7=59(LC 8)
 Max Uplift 7=-3(LC 7), 4=-40(LC 11)
 Max Grav 7=292(LC 16), 4=191(LC 16), 5=19(LC 1)

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

TOP CHORD 2-7=-266/41

NOTES-

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



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J7A	Jack-Open	1	1	

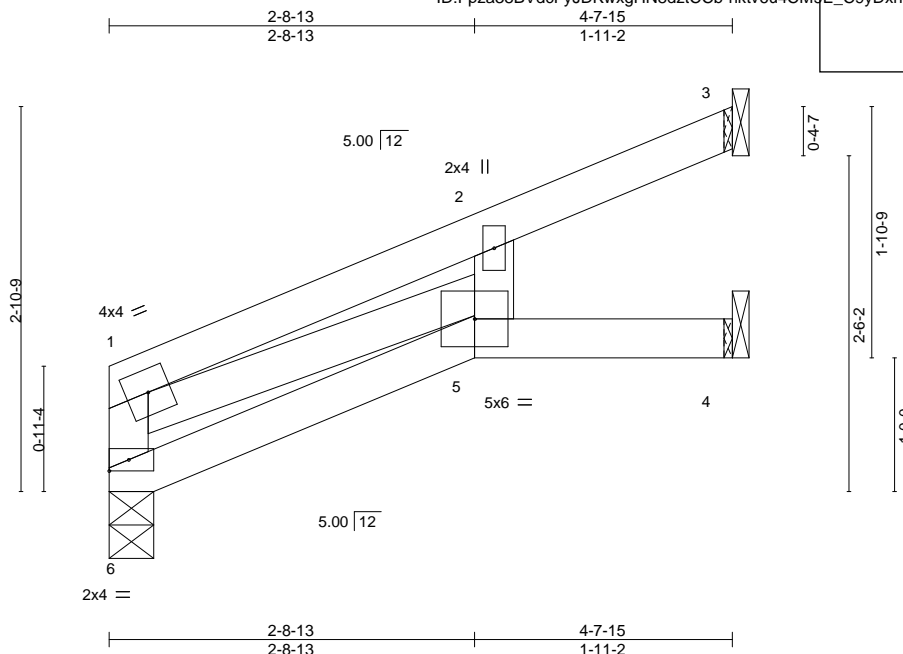
Mid America Truss, Jefferson City, MO - 65101,

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

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

Scale = 1:17.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) -0.06 5 >845 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.01	Vert(CT) -0.10 5 >521 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.04 4 n/a n/a		
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 4-7-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 6=53(LC 8)
 Max Uplift 3=40(LC 11)
 Max Grav 6=213(LC 15), 3=194(LC 15), 4=19(LC 1)

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

NOTES-

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



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J8	Jack-Open	1	1	

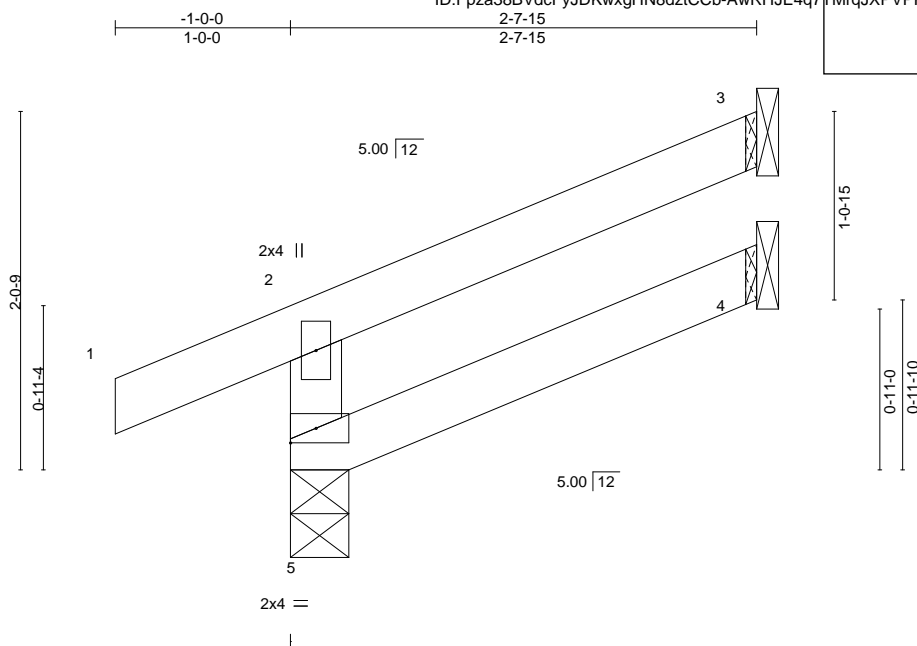
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 14987127

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

Scale = 1:13.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL)	0.00	4-5	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 11 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 5=43(LC 8)
 Max Uplift 5=14(LC 7), 3=26(LC 11)
 Max Grav 5=218(LC 16), 3=71(LC 16), 4=23(LC 16)

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

NOTES-

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



March 1, 2021

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



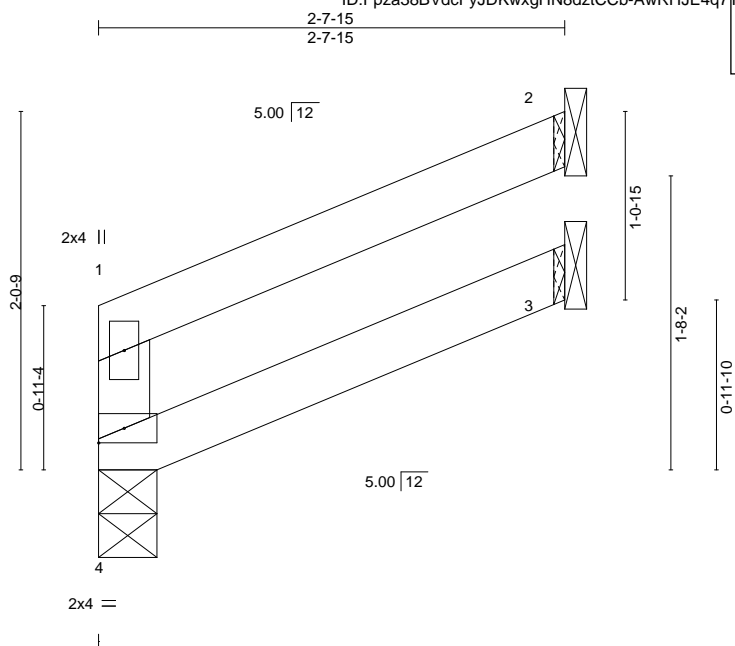
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J8A	Jack-Open	1	1	

Mid America Truss, Jefferson City, MO - 65101,

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

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



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)	-0.00 3-4	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00 3-4	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01 2	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R						Weight: 10 lb	FT = 3%
BCDL	10.0										

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-4-0, 2=Mechanical, 3=Mechanical
 Max Horz 4=35(LC 8)
 Max Uplift 2=27(LC 11)
 Max Grav 4=109(LC 15), 2=80(LC 15), 3=30(LC 15)

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

NOTES-

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



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J9	Jack-Open	4	1	

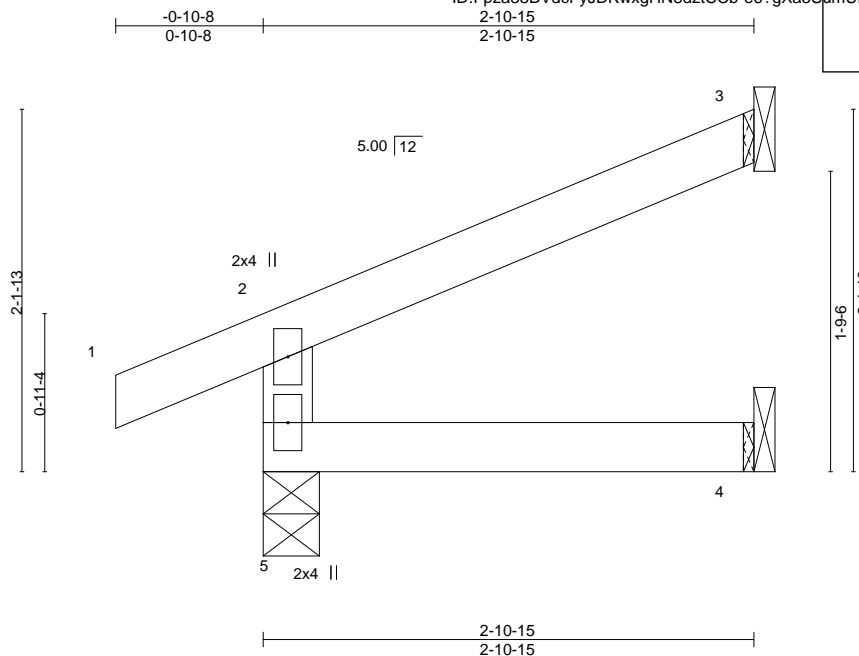
Mid America Truss, Jefferson City, MO - 65101,

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

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

Scale = 1:13.7



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

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=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 3 degree rotation about its center.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

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



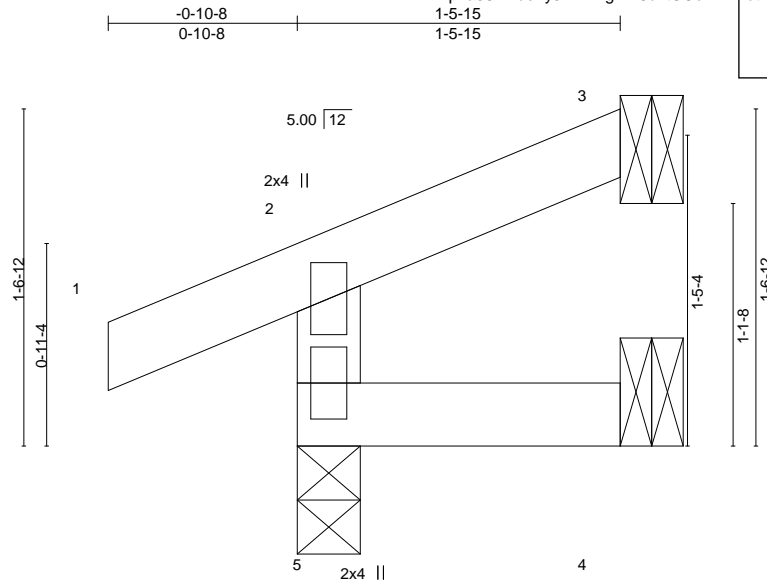
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J12	JACK	4	1	

Mid America Truss, Jefferson City, MO 65101, Mitek

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-XmbbtNOSZVXs2sMrspT_pjIKSiRzllPvBeipuEzLsH

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES**
03/30/2021
Scale = 1:10.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.10	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) 0.00 5 >999 360		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.00 5 >999 240		
BCLL 0.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 7 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 1-5-15 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=31(LC 8)
Max Uplift 5=-18(LC 7), 3=-14(LC 11)
Max Grav 5=156(LC 16), 3=24(LC 16), 4=12(LC 9)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Bearings are assumed to be: Joint 5 SYP No.2 crushing capacity of 565 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 5 and 14 lb uplift at joint 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J13	Jack-Closed	1	1	

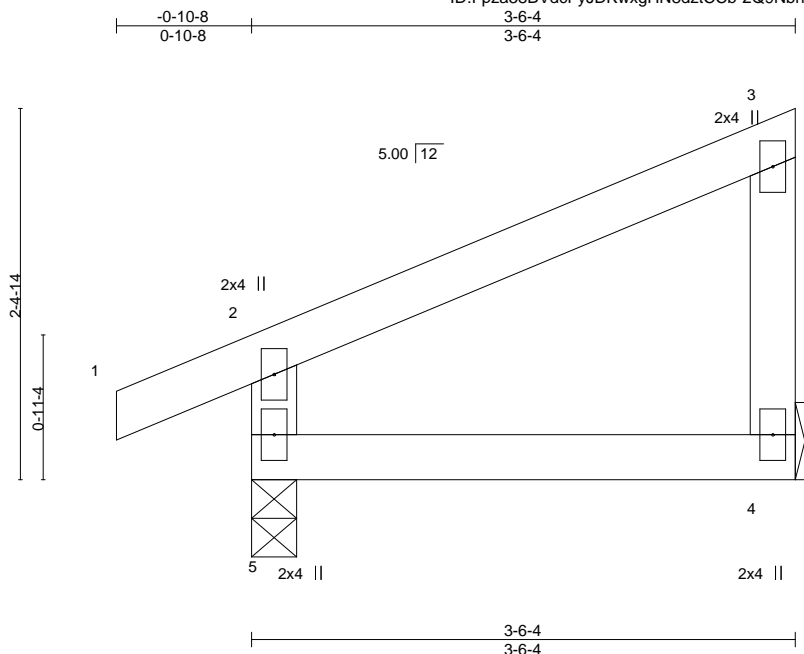
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Session: 116550 Page 1

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

Scale = 1:14.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.14	Vert(LL) 0.00	5	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT) -0.00	4-5	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.00	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 16 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-4 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 4=73(LC 8)
Max Uplift 5=20(LC 7), 4=17(LC 8)
Max Grav 5=242(LC 16), 4=141(LC 16)

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

NOTES-

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



March 1, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	J14	Jack-Closed	9	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. LEE'S SUMMIT, MISSOURI	

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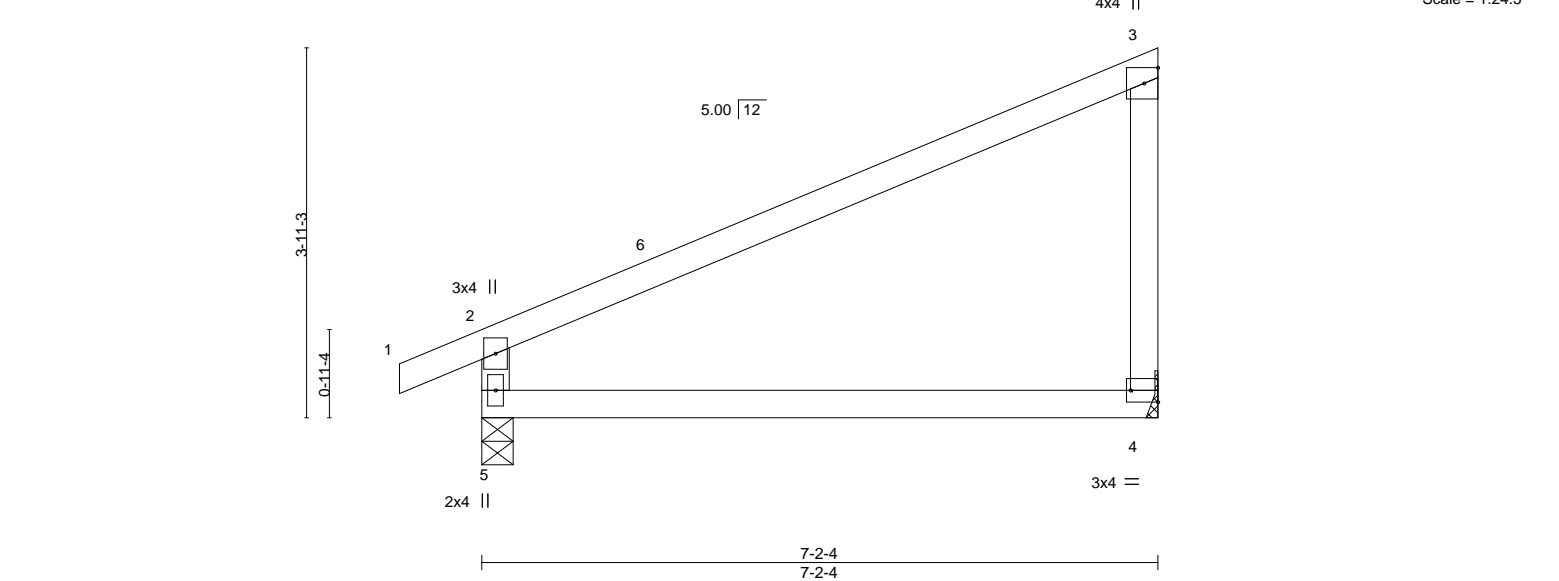


Plate Offsets (X,Y)--		[4:Edge,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	2-0-0		TC 0.80		in (loc) l/defl L/d				MT20	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL 1.15		BC 0.35		Vert(LL) -0.03 4-5 >999 360				244/190	
TCDL	10.0	Lumber DOL 1.15		WB 0.00		Vert(CT) -0.12 4-5 >686 240					
BCLL	0.0	Rep Stress Incr YES		Matrix-R		Horz(CT) 0.00 4 n/a n/a					
BCDL	10.0	Code IRC2018/TPI2014								Weight: 29 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) 5=0-4-0, 4=Mechanical
Max Horz 5=124(LC 10)
Max Uplift 5=-15(LC 11), 4=-26(LC 11)
Max Grav 5=349(LC 16), 4=325(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-302/65

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



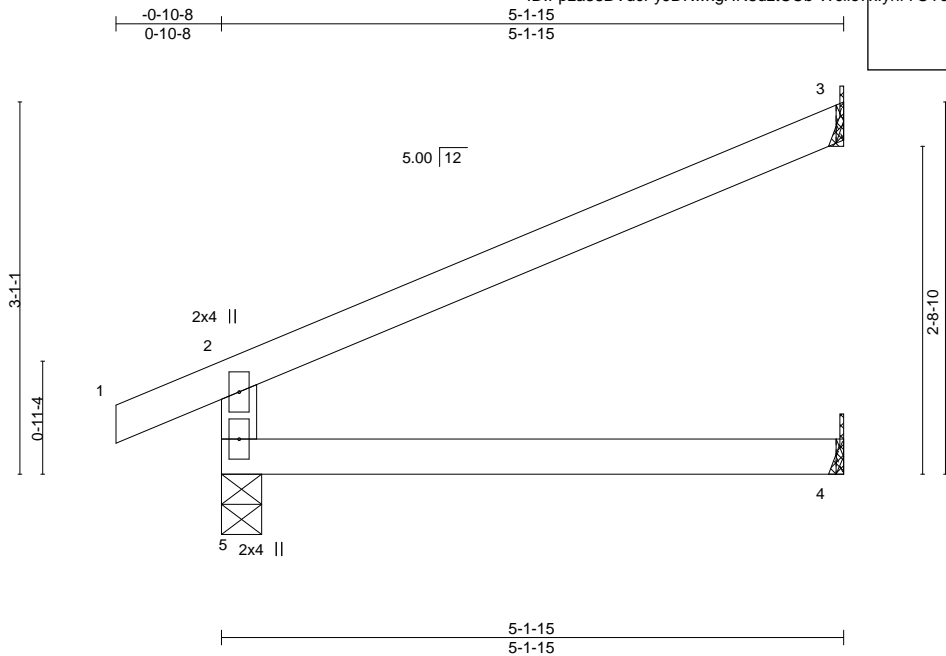
March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J15	Jack-Open	6	1	

Mid America Truss, Jefferson City, MO - 65101,

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

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



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.02 4-5 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06 4-5 >994 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04 3 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 5=63(LC 11)
 Max Uplift 5=2(LC 11), 3=48(LC 11)
 Max Grav 5=298(LC 16), 3=172(LC 16), 4=63(LC 16)

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

TOP CHORD 2-5=-262/44

NOTES-

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



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J16	Jack-Open	9	1	

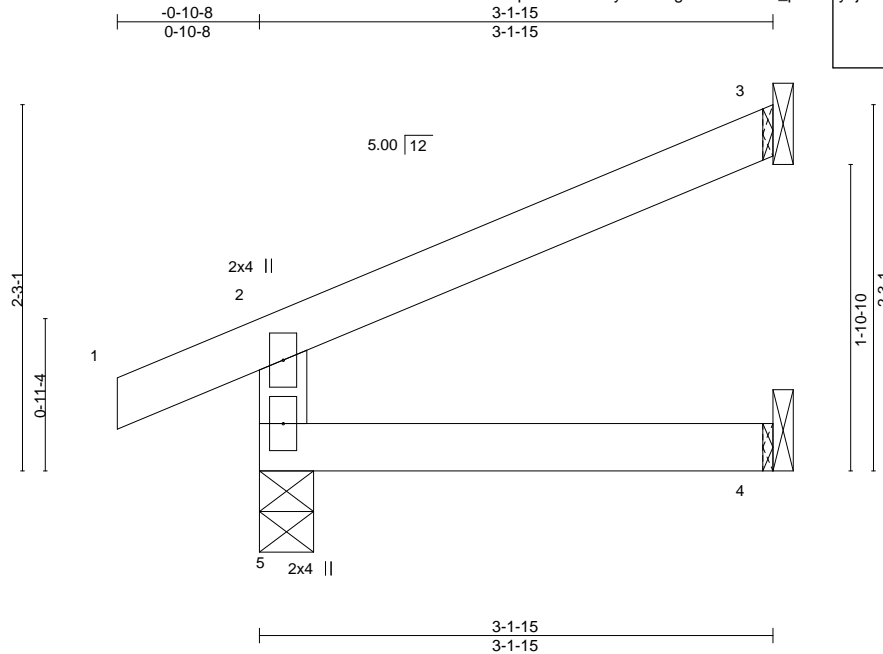
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 14987134

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

Scale = 1:14.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.14	in (loc)	l/defl	L/d			
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.07	0.00	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	WB	0.00	-0.01	4-5	>999	240		
BCLL	0.0	Rep Stress Incr	YES	Matrix-R		0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 12 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 8)
Max Uplift 5=9(LC 7), 3=-30(LC 11)
Max Grav 5=228(LC 16), 3=94(LC 16), 4=32(LC 16)

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

NOTES-

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



March 1, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J16A	Jack-Open	3	1	

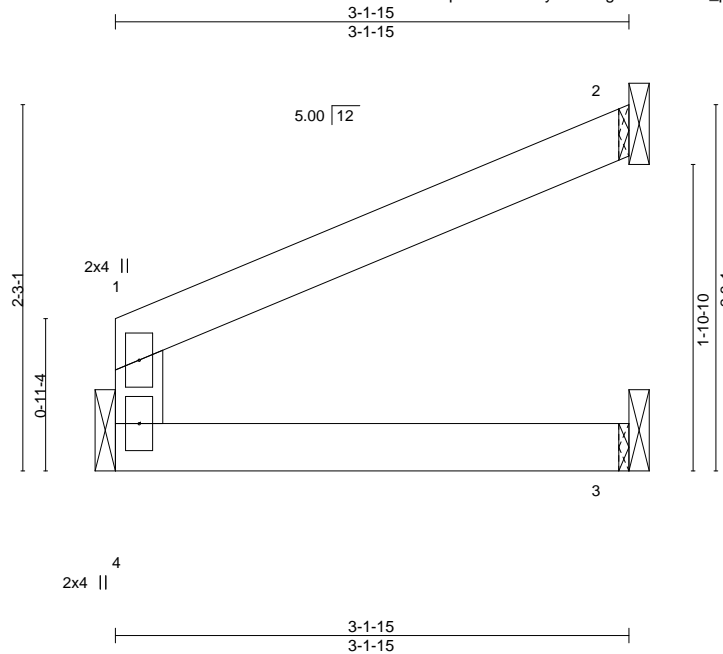
Mid America Truss, Jefferson City, MO - 65101,

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

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

Scale = 1:14.2



LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	Vert(LL) -0.00	3-4	>999	360	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT) -0.01	3-4	>999	240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT) 0.01	2	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 11 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical
 Max Horz 4=38(LC 8)
 Max Uplift 2=31(LC 11)
 Max Grav 4=134(LC 15), 2=97(LC 15), 3=37(LC 15)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 6) 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.



March 1, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J17	Jack-Open	12	1	

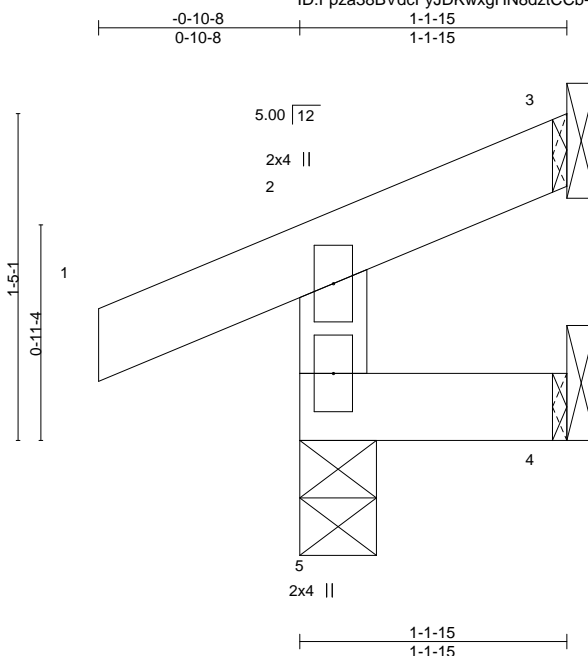
Mid America Truss, Jefferson City, MO - 65101,

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

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

J44987136

Scale = 1:10.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00 5 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00 5 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00 3 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-1-15 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=28(LC 8)
Max Uplift 5=21(LC 7), 3=21(LC 15), 4=2(LC 8)
Max Grav 5=148(LC 16), 3=7(LC 16), 4=9(LC 9)

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

NOTES-

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



March 1, 2021

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J18	Jack-Open	2	1	

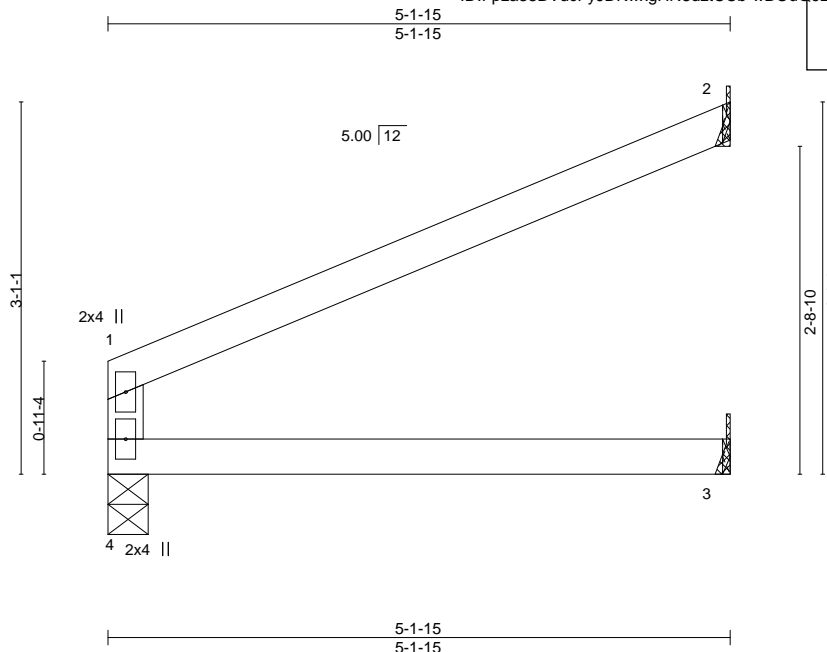
Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. 14987137

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-wBouQ9zBFID7FwLhT0kKvElnFiOr8Cj_Wz?vzhDI_

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

Scale = 1:19.1



LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.52	Vert(LL)	-0.03	3-4	>999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.29	Vert(CT)	-0.06	3-4	>932		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.04	2	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 17 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=0-4-0, 2=Mechanical, 3=Mechanical
 Max Horz 4=56(LC 8)
 Max Uplift 2=48(LC 11)
 Max Grav 4=240(LC 15), 2=175(LC 15), 3=65(LC 15)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 6) 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.



March 1, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

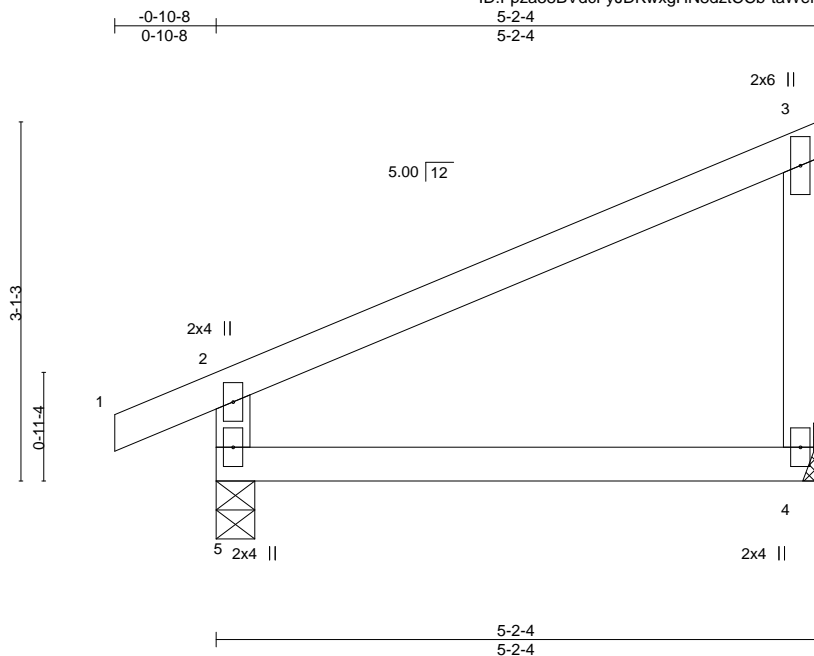
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	J20	Jack-Closed	2	1	

Mid America Truss, Jefferson City, MO - 65101,

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

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-taWerr?RnJTrUEV3bRnopKJ7P3PoAldVBI?43ozhDky

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



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	Vert(LL)	-0.01	4-5	>999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	-0.03	4-5	>999		
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: 22 lb	FT = 3%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-0, 4=Mechanical
 Max Horz 5=96(LC 10)
 Max Uplift 5=-15(LC 7), 4=-19(LC 11)
 Max Grav 5=295(LC 16), 4=233(LC 16)

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

TOP CHORD 2-5=-261/49

NOTES-

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



March 1, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

W2-63

Truss

T1

Truss Type

Roof Special

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086-1105

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

144987139

Mid America Truss,

Jefferson City, MO - 65101,

0-10-8

1-1-12

2-3-8

7-6-0

12-8-8

13-10-4

15-10-8

0-10-8

0-10-8

1-1-12

1-1-12

0-10-8

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Scale = 1:27.8

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.07 15 >999 360	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.15 13-14 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.18 10 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 83 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-0-13 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)	16=0-4-0, 10=0-4-0
Max Horz	16=23(LC 10)
Max Uplift	16=-20(LC 11), 10=-20(LC 12)
Max Grav	16=650(LC 2), 10=650(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	3-4=-1889/115, 4-5=-932/0, 5-6=-932/0, 6-7=-1889/86
BOT CHORD	15-16=-11/375, 13-14=-141/2073, 12-13=-86/2073, 10-11=0/375
WEBS	3-15=-317/3, 3-14=-116/1639, 7-11=-317/0, 7-12=-72/1639, 5-13=0/368, 4-13=-1353/204, 6-13=-1353/177, 3-16=-586/0, 7-10=-586/0

NOTES-

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

March 1, 2021

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

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job

W2-63

Truss

T2

Truss Type

Roof Special

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086

ID:Fpza38BVdcFyJDKwxgHN8dzTCCb-xSwJ?zArFwMinX8yz4YKwURdT6QBBNgie87M4QzhDkj

03/30/2021

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

0-10-8

1-1-12

2-3-8

7-6-0

12-8-8

13-10-4

15-10-8

0-10-8

0-10-8

1-1-12

1-1-12

0-10-8

4x5 =

5

5.00 | 12

3x4 =

4

4x10 =

3

2x4 ||

2

0-11-4

4x4 =

16

3x10 =

14

3x4 =

4

4x10 =

6

3x4 =

7

4x10 =

8

2x4 ||

9

0-11-4

1-0-0

3x10 =

12

3x4 =

11

3x4 =

10

4x4 =

13

4x8 =

2-3-8

7-6-0

12-8-8

15-0-0

2-3-8

2-3-8

5-2-8

5-2-8

2-3-8

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.07 15 >999 360	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.15 13-14 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.18 10 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
								Weight: 83 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-0-13 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)	16=0-4-0, 10=0-4-0
Max Horz	16=22(LC 10)
Max Uplift	16=-20(LC 11), 10=-20(LC 12)
Max Grav	16=650(LC 2), 10=650(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	3-4=-1889/115, 4-5=-932/0, 5-6=-932/0, 6-7=-1889/86
BOT CHORD	15-16=-11/375, 13-14=-141/2073, 12-13=-86/2073, 10-11=0/375
WEBS	3-15=-317/3, 3-14=-116/1639, 5-13=0/368, 4-13=-1353/204, 6-13=-1353/177, 7-11=-317/0, 7-12=-72/1639, 3-16=-586/0, 7-10=-586/0

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

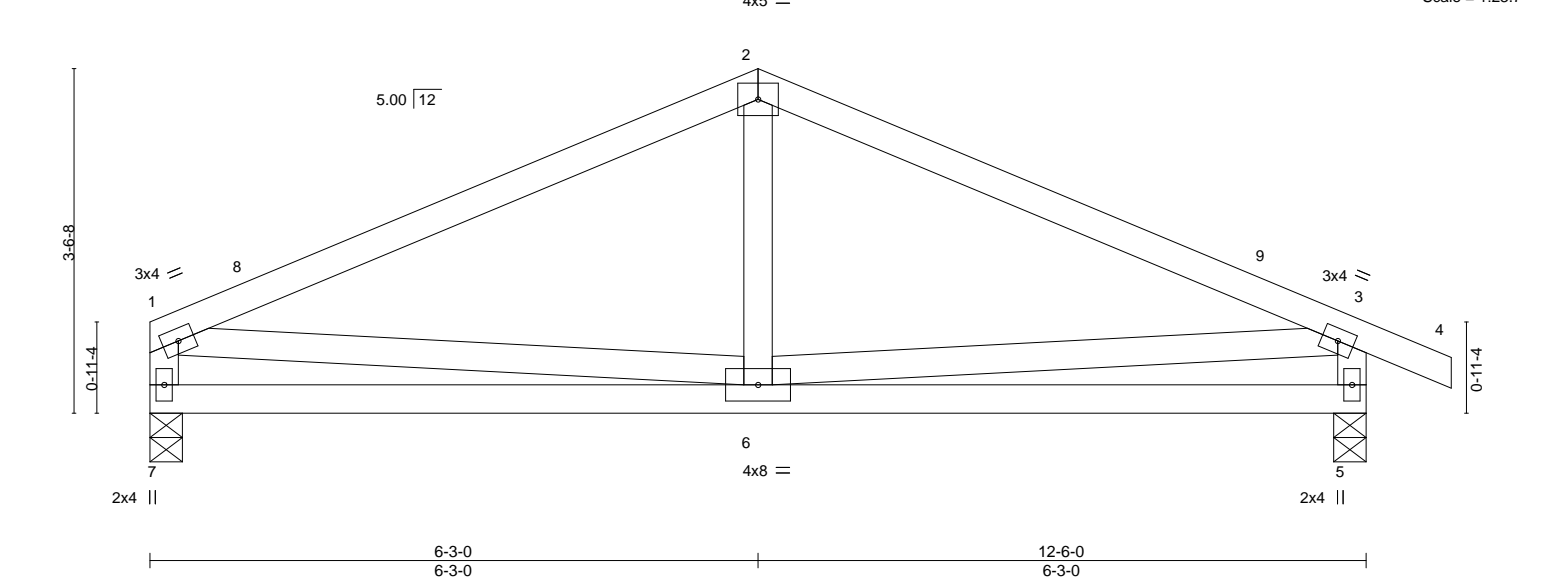


March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	T3	Common	1	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. 14987141	

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-PfUhcJBT0EUZPhj8Xo3ZT1_nOWsDwzksotwdszhDki

Scale = 1:23.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.01 6 >999 360	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.05 5-6 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00 5 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-10-5 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)	7=0-4-0, 5=0-4-0
Max Horz	7=-29(LC 9)
Max Uplift	7=-7(LC 11), 5=-18(LC 12)
Max Grav	7=493(LC 16), 5=552(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-579/2, 2-3=-581/0, 1-7=-446/35, 3-5=-505/45
WEBS	1-6=0/485, 3-6=0/485

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



March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021 Scale = 1:35.6
W2-63	T4	Roof Special	1	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017	

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-L1bSd?DkXrkHe?1XeC51Y73C1JV0Okx8K5M1hlzhDkg

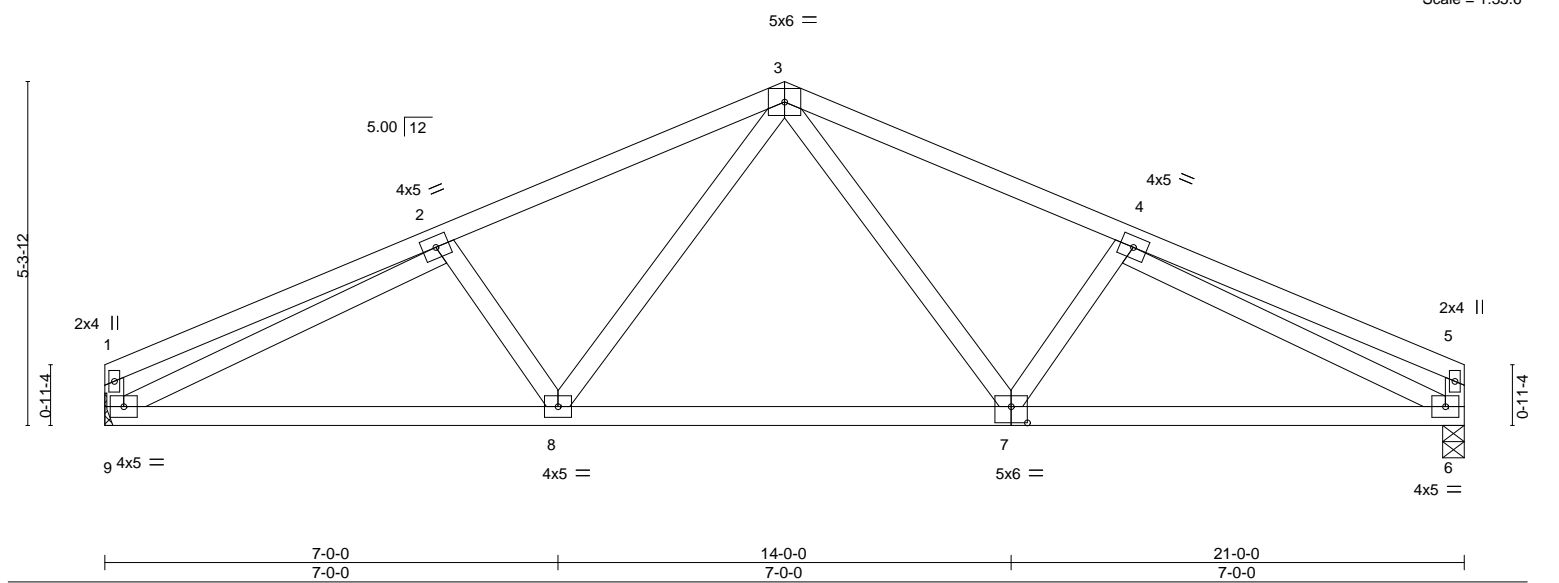


Plate Offsets (X,Y)--		[7:0-3-0,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	in	(loc)	I/defl	L/d	MT20	GRIP
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.43	Vert(LL)	-0.05	7-8	>999		244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Vert(CT)	-0.11	7-8	>999		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH		Horz(CT)	0.04	6	n/a		
BCDL	10.0									Weight: 110 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-10 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.	
(size)	9=Mechanical, 6=0-4-0
Max Horz	9=29(LC 11)
Max Uplift	9=-13(LC 11), 6=-13(LC 12)
Max Grav	9=828(LC 2), 6=828(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-259/30, 2-3=-1228/50, 3-4=-1228/50, 4-5=-259/30
BOT CHORD	8-9=-40/1176, 7-8=0/863, 6-7=-11/1176
WEBS	3-7=-13/404, 3-8=-13/404, 2-9=-1126/17, 4-6=-1126/17

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



March 1,2021

Job

W2-63

Truss

T5

Truss Type

Roof Special

Qty

4

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086

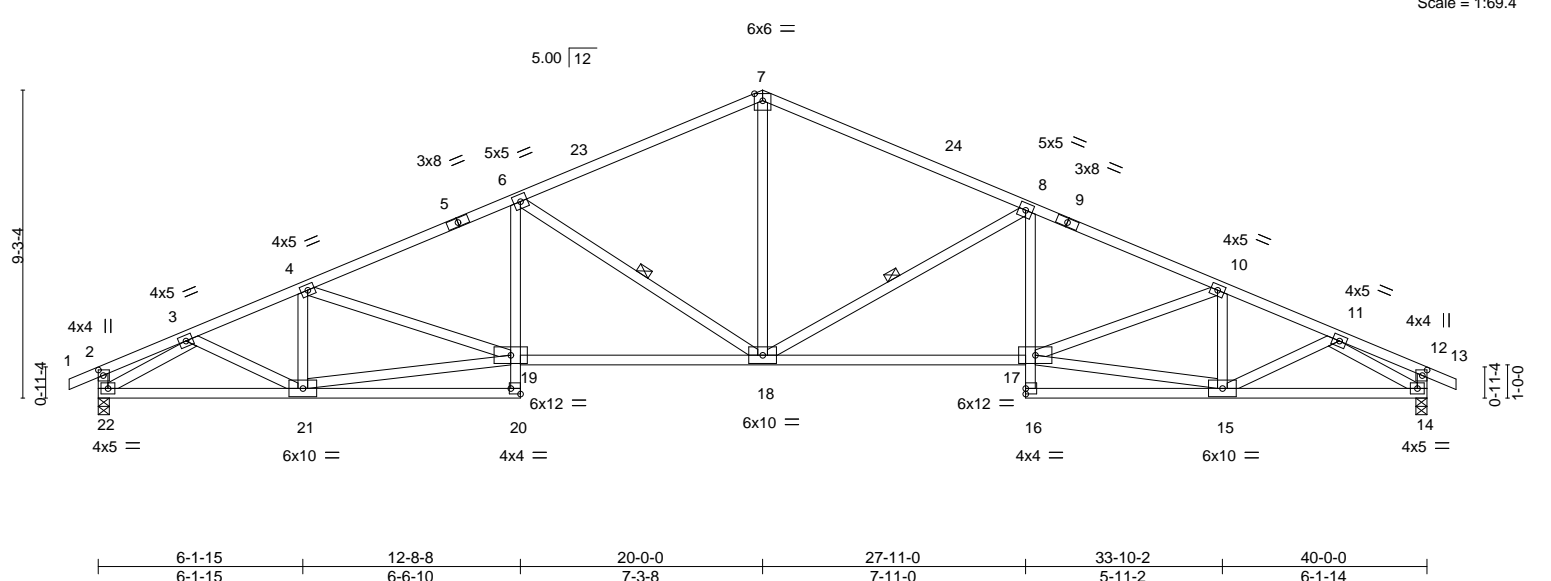
0-10-8 2-9-13 6-1-15 12-8-8 20-0-0 27-11-0 33-10-2 37-2-3 40-10-8

0-10-8 2-9-13 3-4-1 6-6-10 7-3-8 7-11-0 5-11-2 3-4-1 2-9-13 0-10-8

0-11-4 9-3-4 0-11-4 1-0-0

0-11-4 1-0-0

Scale = 1:69.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.21 18-19 >999	360	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.50 17-18 >951	240			
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.21 14 n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH							
BCDL	10.0										
										Weight: 246 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 5-7: 2x4 SP No.1, 7-9: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.2	WEBS	2-2-0 oc bracing: 18-19,17-18. 1 Row at midpt 6-18, 8-18

REACTIONS. (size) 22=0-4-0, 14=0-4-0
Max Horz 22=-75(LC 12)
Max Uplift 22=-36(LC 11), 14=-36(LC 12)
Max Grav 22=1650(LC 2), 14=1650(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-254/12, 3-4=-2810/51, 4-6=-3121/72, 6-7=-2275/54, 7-8=-2283/63, 8-10=-3196/56, 10-11=-2799/49, 2-22=-271/34, 12-14=-264/30
BOT CHORD 21-22=-107/2084, 6-19=0/430, 18-19=-20/2847, 17-18=0/2936, 8-17=0/432, 14-15=-35/2090
WEBS 3-21=0/553, 4-21=-507/73, 19-21=-56/2450, 4-19=0/260, 6-18=-995/135, 7-18=0/1249, 8-18=-1061/134, 15-17=0/2454, 10-17=0/357, 10-15=-547/51, 11-15=0/529, 3-22=-2310/55, 11-14=-2320/65

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 6) Plates checked for a plus or minus 3 degree rotation about its center.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 14.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

Job

W2-63

Truss

T6

Truss Type

Common

Qty

2

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-HQjC2gE_3S??ul1vmd8VdY8PG7C6smSRnPr7mezhdke

14987144

RELEASE FOR CONSTRUCTION

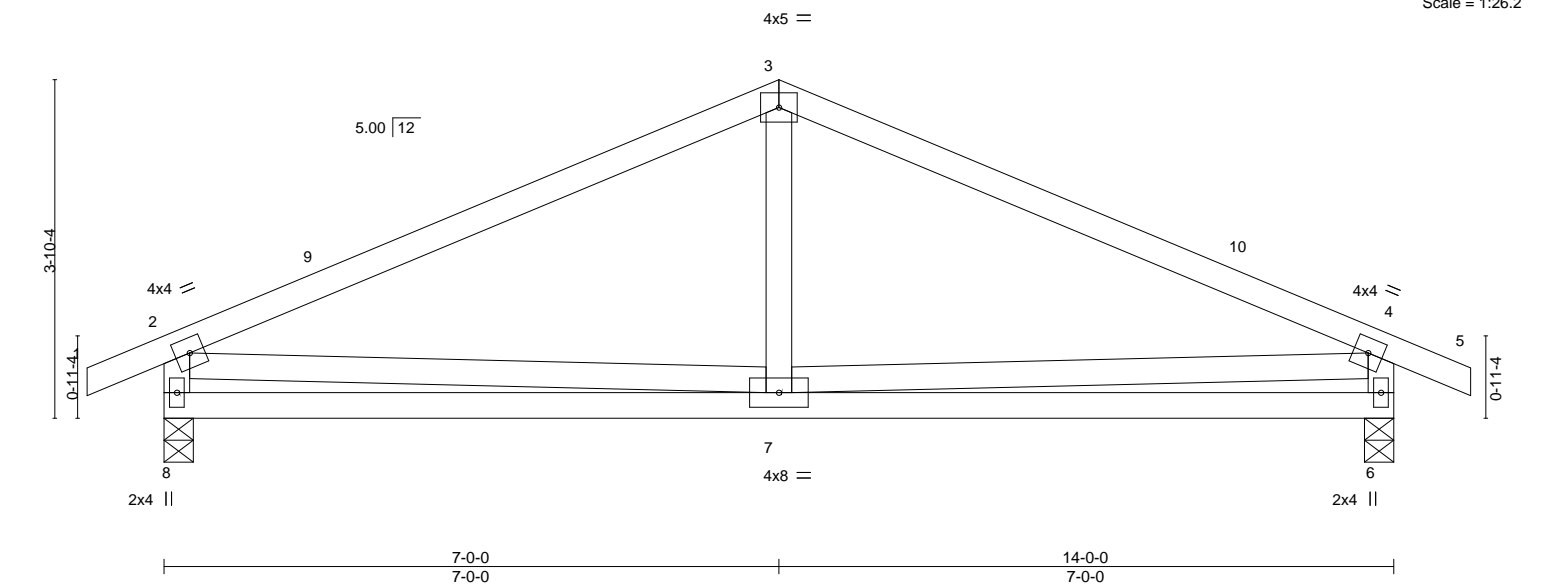
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

Scale = 1:26.2



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0		2-0-0	TC	0.97	Vert(LL)	-0.01	7	>999	360	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0			BC	0.31	Vert(CT)	-0.07	6-7	>999	240			
TCDL	10.0			WB	0.14	Horz(CT)	-0.00	6	n/a	n/a			
BCLL	0.0			Matrix-P									
BCDL	10.0												
												Weight: 72 lb	FT = 3%

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

REACTIONS. (size) 8=0-4-0, 6=0-4-0
 Max Horz 8=22(LC 10)
 Max Uplift 8=-19(LC 11), 6=-19(LC 12)
 Max Grav 8=610(LC 2), 6=610(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-662/1, 3-4=-662/0, 2-8=-557/50, 4-6=-557/50
 WEBS 2-7=0/554, 4-7=0/554

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



March 1, 2021

Job

W2-63

Truss

T8

Truss Type

ROOF SPECIAL

Qty

2

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-DpryTMGEb4Fj7cAlt2AzizEmAxjPKTqkFjKEqWzhDkc

03/30/2021

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

0-10-8 1-6-8 3-1-0 8-4-2 5-3-1 14-0-12 5-8-10 20-0-0 5-11-4 27-11-0 7-11-0 33-10-2 5-11-1 37-2-3 3-4-1 40-0-0 2-9-13 40-10-8 0-10-8

Scale = 1:69.5

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.26	20-21	>999	360	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.60	20-21	>799	240			
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.32	15	n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-SH									
BCDL	10.0												
											Weight: 237 lb	FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 8-10: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 19-21: 2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SP No.2	WEBS	2-2-0 oc bracing: 18-19. 1 Row at midpt 9-19

REACTIONS. (size) 24=0-4-0, 15=0-4-0
Max Horz 24=-75(LC 12)
Max Uplift 24=-36(LC 11), 15=-36(LC 12)
Max Grav 24=1650(LC 2), 15=1650(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1774/29, 3-4=-4716/141, 4-5=-5054/206, 5-7=-3279/72, 7-8=-2247/55,
8-9=-2280/62, 9-11=-3197/56, 11-12=-2799/49, 2-24=-1572/42, 13-15=-263/30
BOT CHORD 22-23=-32/311, 20-21=-85/3357, 19-20=0/2630, 18-19=0/2938, 9-18=0/433,
15-16=-35/2090
WEBS 3-23=-1769/67, 21-23=-65/1585, 3-21=-96/2764, 5-21=-116/1478, 5-20=-583/134,
7-20=0/707, 7-19=-849/129, 8-19=0/1281, 9-19=-1069/135, 16-18=0/2455, 11-18=0/359,
11-16=-547/51, 12-16=0/528, 2-23=-12/1657, 12-15=-2321/65

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 15.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 1,2021

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

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

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

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

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

W2-63

Truss

T9

Truss Type

Roof Special

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. File: S:\Missouri\Jefferson City\W2-63\T9\T9.dwg

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RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT MISSOURI

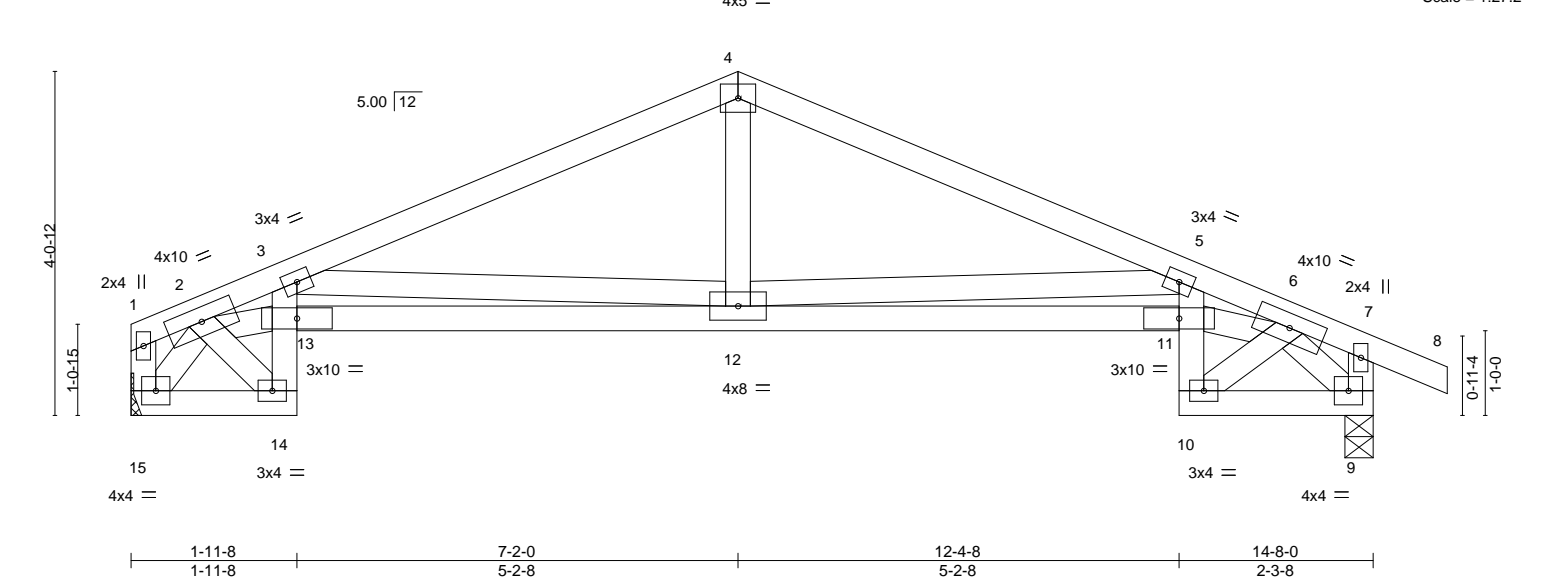
03/30/2021

14987146

03/30/2021

Mid America Truss, Jefferson City, MO - 65101,

Scale = 1:27.2



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.65	in	(loc)	l/defl	L/d	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.61	Vert(LL)	-0.07	10	>999				
TCDL	10.0	Lumber DOL	1.15	WB	0.68	Vert(CT)	-0.14	11-12	>999				
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		Horz(CT)	0.16	9	n/a				
BCDL	10.0	Code IRC2018/TPI2014											
										Weight: 80 lb		FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-1-3 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) 15=Mechanical, 9=0-4-0
Max Horz 15=33(LC 9)
Max Uplift 15=8(LC 11), 9=20(LC 12)
Max Grav 15=573(LC 2), 9=638(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1680/108, 3-4=-901/0, 4-5=-900/0, 5-6=-1859/86
BOT CHORD 14-15=-5/287, 12-13=-134/1841, 11-12=-87/2042, 9-10=0/366
WEBS 2-14=-262/0, 2-13=-115/1505, 3-12=-1150/198, 4-12=0/347, 5-12=-1346/177, 6-11=-73/1614, 6-10=-309/0, 2-15=-542/0, 6-9=-572/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - 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, 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

Job

W2-63

Truss

T10

Truss Type

Roof Special

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086

Lee's Summit, MO 64086

14987147

03/30/2021

Mid America Truss,

Jefferson City, MO - 65101,

0-10-8

0-10-8

7-6-0

7-6-0

11-10-10

4-4-10

14-8-0

2-9-6

4x5 =

3

5.00

12

9

2

3x4 =

8

2x4 ||

2x4 ||

4x8 =

7

5x6 =

4

2x4 ||

5

10

6

4x4 =

6

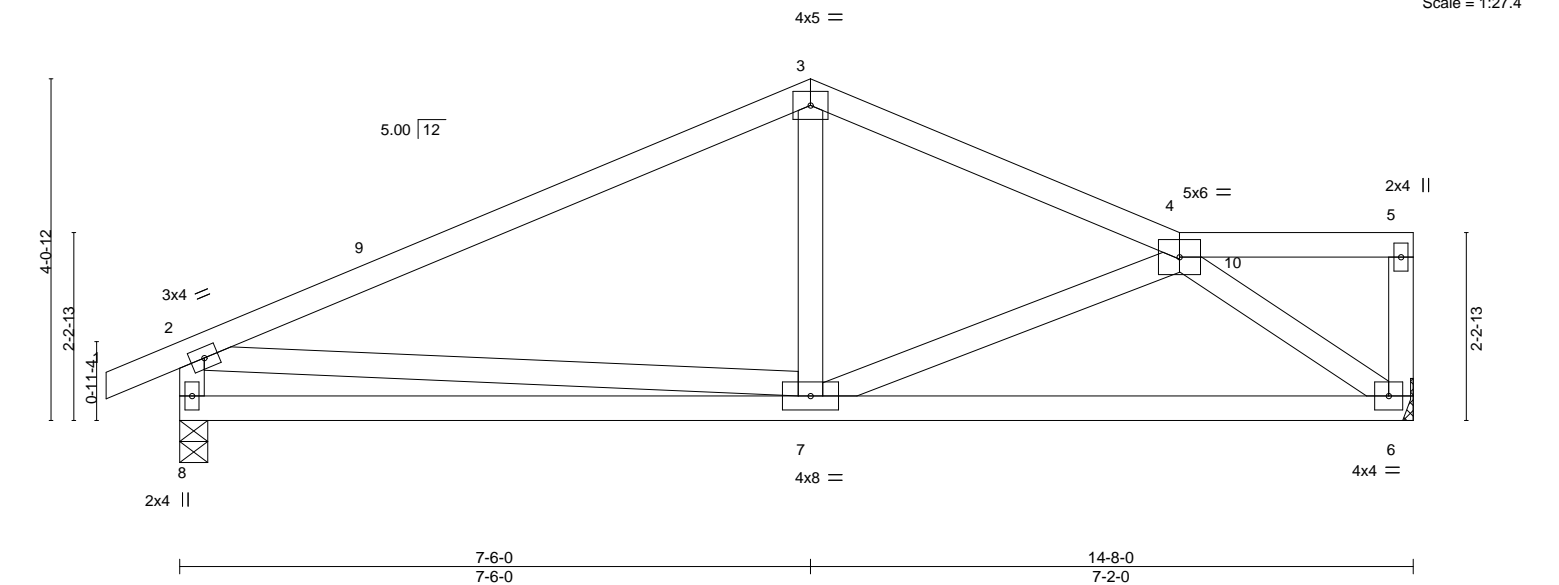
7-6-0

7-6-0

14-8-0

7-2-0

Scale = 1:27.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.01	MT20	244/190		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.09				
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 1-3: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 5-8-12 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=Mechanical, 8=0-4-0
Max Horz	8=70(LC 10)
Max Uplift	6=-12(LC 12), 8=-20(LC 11)
Max Grav	6=573(LC 2), 8=638(LC 2)

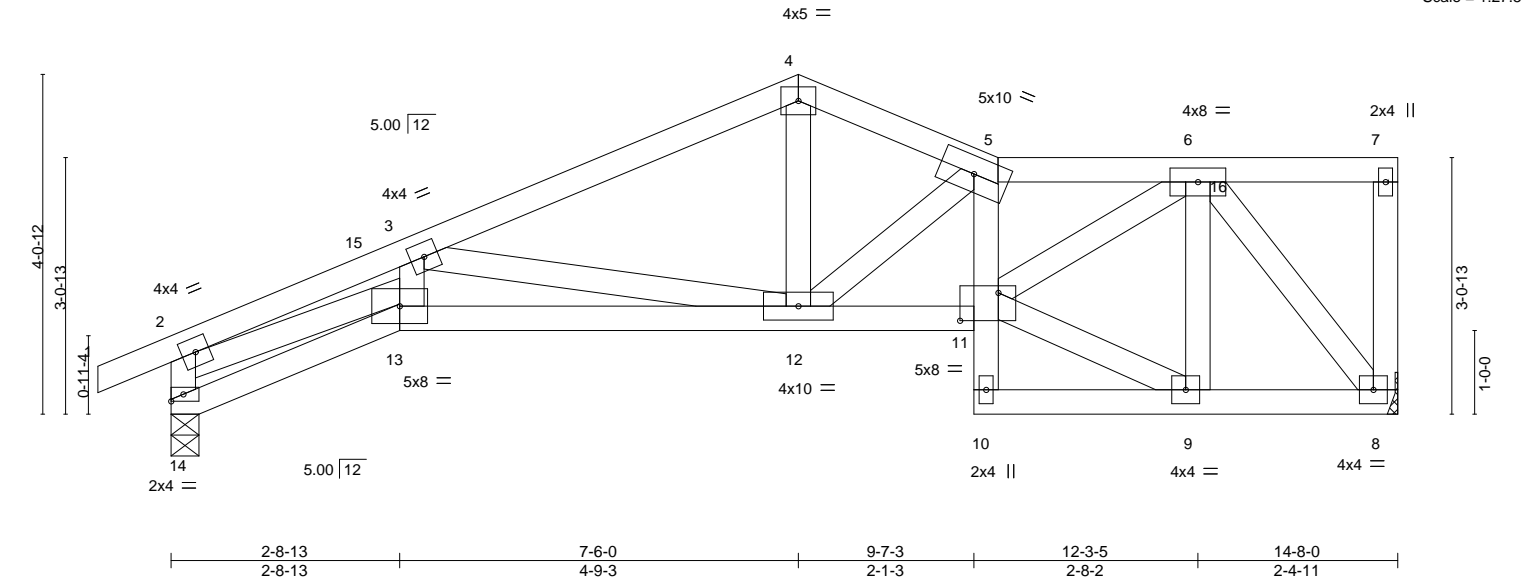
FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-696/0, 3-4=-666/8, 2-8=-582/53
BOT CHORD	6-7=-36/600
WEBS	4-6=-744/36, 2-7=0/581

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



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	<div>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES</div> <div>LEE'S SUMMIT, MISSOURI</div> <div>03/30/2021</div>
W2-63	T11	Roof Special	1	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,		8.430 s Feb 12 2021 MiTek Industries, Inc. Session: 1313550481				
<div>-0-10-8</div> <div>0-10-8</div>		<div>2-8-13</div> <div>2-8-13</div>	<div>7-6-0</div> <div>4-9-3</div>	<div>9-10-10</div> <div>2-4-10</div>	<div>12-3-5</div> <div>2-4-11</div>	<div>14-8-0</div> <div>2-4-11</div>
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-WuEAMx8zy?_8w4QNily_dlsP9_vQ3_5LGyAviU5zhDkm						Scale = 1:27.5



LOADING (psf)		SPACING-		CSI.	DEFL.				PLATES	GRIP
						in	(loc)	l/defl		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.05	13	>999	360
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.11	12-13	>999	240
TCDL	10.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.08	8	n/a	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P						
BCDL	10.0									
								Weight: 90 lb		FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-4-4 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)	14=0-4-0, 8=Mechanical
Max Horz	14=99(LC 8)
Max Uplift	14=-19(LC 11), 8=-17(LC 12)
Max Grav	14=638(LC 2), 8=573(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-14=-613/49, 2-3=-1776/87, 3-4=-878/7, 4-5=-842/15, 5-6=-1152/18
BOT CHORD	12-13=-131/1576, 11-12=-52/1167, 8-9=-27/408
WEBS	2-13=-56/1632, 3-13=-4/260, 3-12=-902/136, 4-12=0/430, 5-12=-550/38, 9-11=-29/418, 6-11=-26/874, 6-8=-649/17

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 14 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) 14, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



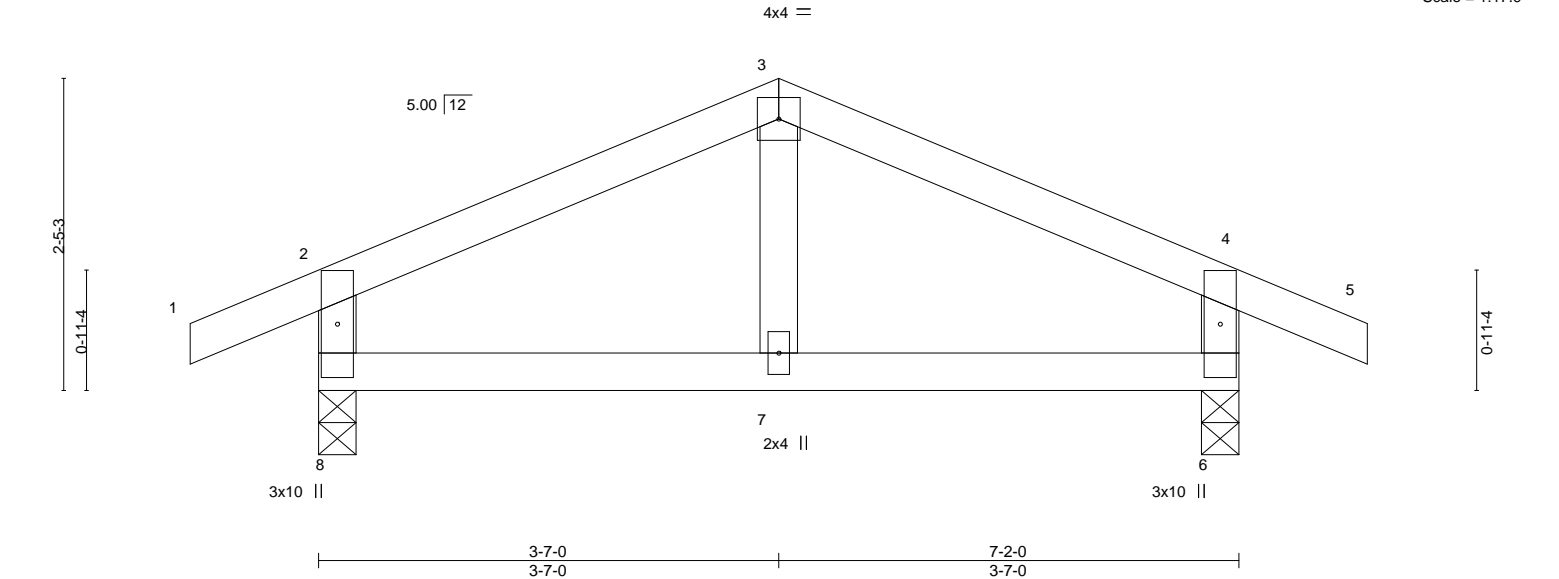
March 1,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	T14	KINGPOST	4	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. 144987149	

ID:Fpza38BVdcFyJDKwxgHN8dzlCCb-_4oZaH9bjJ6?YE_ZrfVsr3MNxIrvjccPAqeG0YzhDkl

1-0-0 3-7-0 7-2-0 8-2-8 1-0-0

Scale = 1:17.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.01 7 >999 360	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02 7 >999 240				
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00 6 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										

Weight: 30 lb FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, 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 9)
Max Uplift 8=-17(LC 7), 6=-17(LC 8)
Max Grav 8=381(LC 16), 6=381(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-264/18, 3-4=-264/18, 2-8=-329/40, 4-6=-329/40

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



March 1, 2021

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

W2-63

Truss

V1

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ABZju2HV7hVRMwKg?TCRoOJFpkdPocu1i1pLvPzhDka

17-8-4

17-8-4

8-10-2

03/30/2021

Scale = 1:28.4

RELEASE FOR

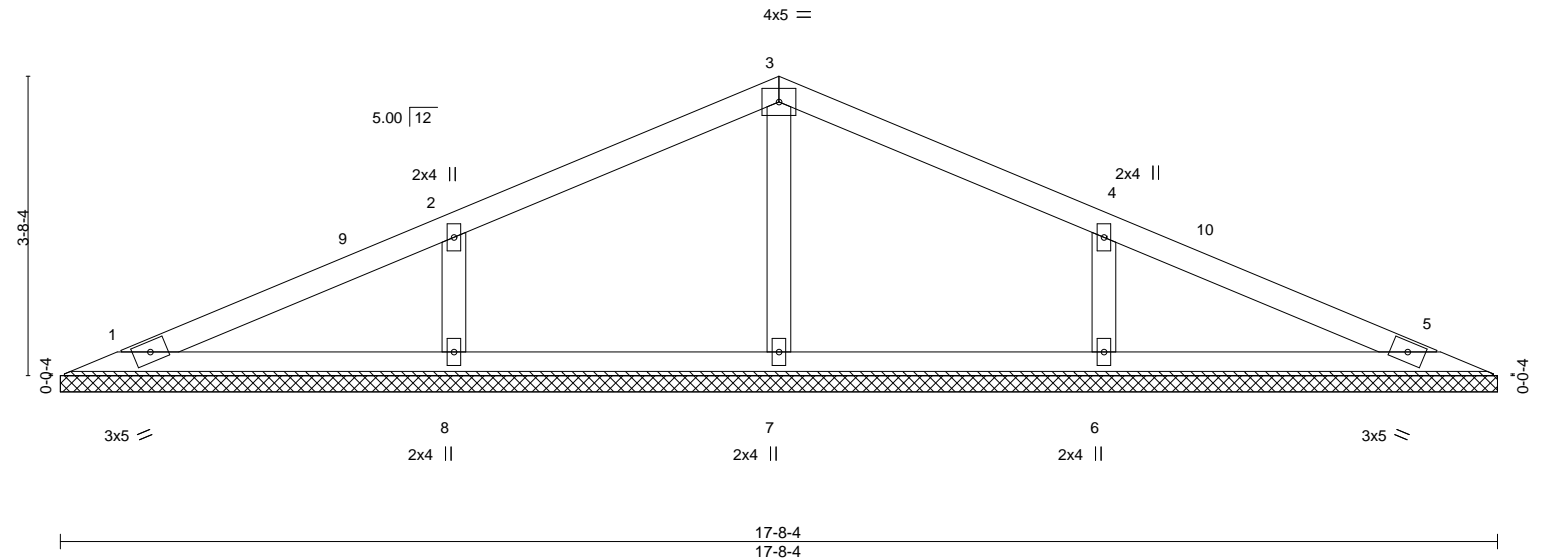
CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT MISSOURI

14987151



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	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 17-8-4.
 (lb) - Max Horz 1=35(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=443(LC 15), 6=443(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-350/108, 4-6=-350/108

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



March 1, 2021

Job

W2-63

Truss

V2

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-6a4TKJlfll9cDU36uEvpORzYFNGWGWJALISzHzhDkY

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT MISSOURI

03/30/2021

14987152

8430 s Feb 12 2021 MiTek Industries, Inc.

Mid America Truss,

Jefferson City, MO - 65101,

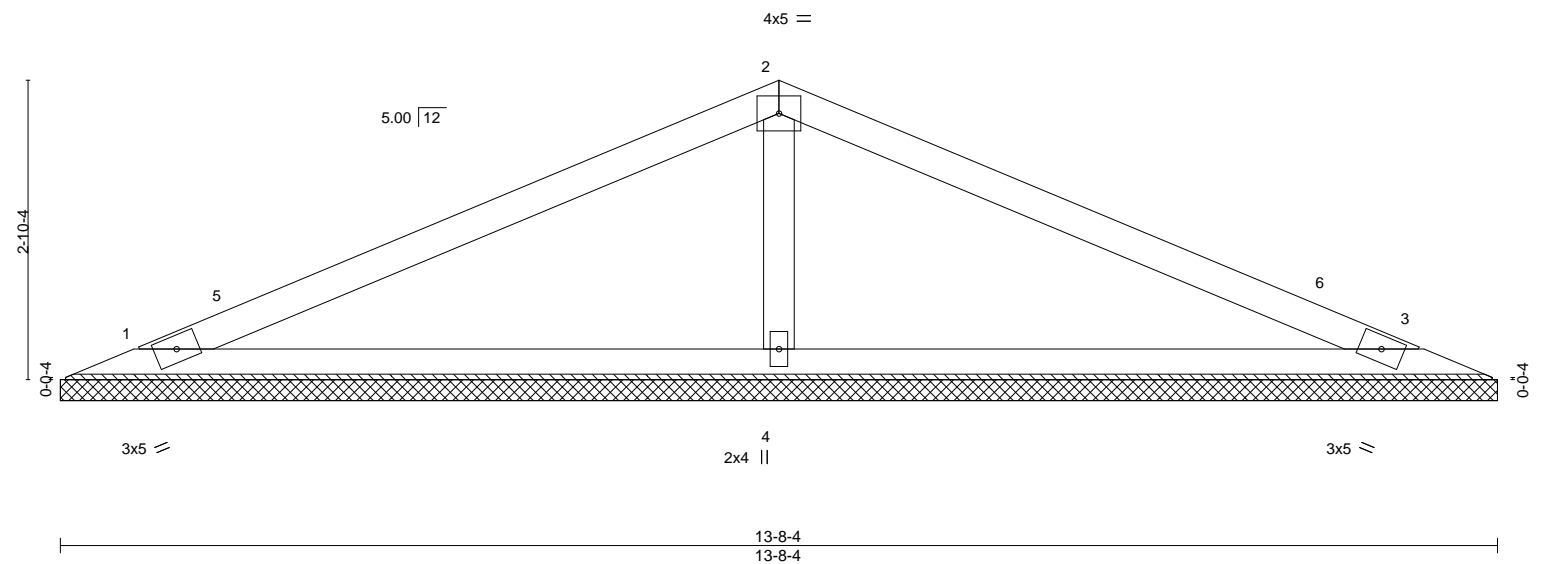
6-10-2

6-10-2

13-8-4

6-10-2

Scale = 1:21.9



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a	
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										
										Weight: 43 lb	FT = 3%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
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=13-8-4, 3=13-8-4, 4=13-8-4
Max Horz	1=-27(LC 12)
Max Uplift	1=-25(LC 11), 3=-29(LC 12)
Max Grav	1=266(LC 15), 3=266(LC 16), 4=496(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
WEBS	2-4=-343/58

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



March 1,2021

Job

W2-63

Truss

V3

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-6a4TKJlflI9cDU36uvtP0ZgYIbGWdJALISzHzhDkY

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT MISSOURI

03/30/2021

Scale = 1:17.7

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

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=9-8-4, 3=9-8-4, 4=9-8-4
Max Horz	1=-18(LC 12)
Max Uplift	1=-17(LC 11), 3=-20(LC 12)
Max Grav	1=190(LC 15), 3=190(LC 16), 4=333(LC 2)

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

NOTES-

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

March 1, 2021

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

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

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

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

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job

W2-63

Truss

V4

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086-2801

ID:Fpza38BVdcFyJDKwxgHN8dzCCb-amerW3KNQct0DN3Fgbr8P0xplyIA?z6TO?1?WkzhDkX

03/30/2021

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

2-10-2

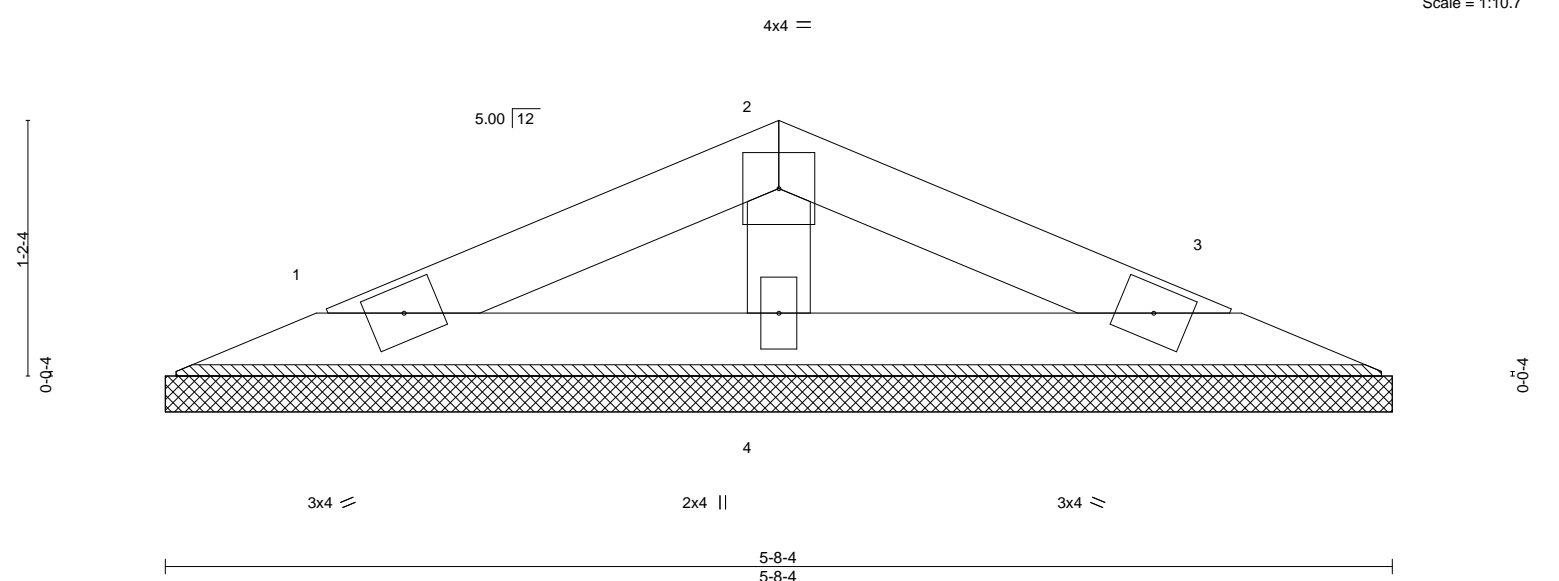
2-10-2

5-8-4

2-10-2

4x4 =

Scale = 1:10.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.08	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.03	n/a -	n/a	999			
TCDL	10.0	Lumber DOL	1.15	WB	0.01	n/a -	n/a	999			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00 3	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 16 lb	FT = 3%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-8-4 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.2		

REACTIONS. (size) 1=5-8-4, 3=5-8-4, 4=5-8-4
 Max Horz 1=9(LC 11)
 Max Uplift 1=8(LC 11), 3=10(LC 12)
 Max Grav 1=90(LC 15), 3=90(LC 16), 4=170(LC 2)

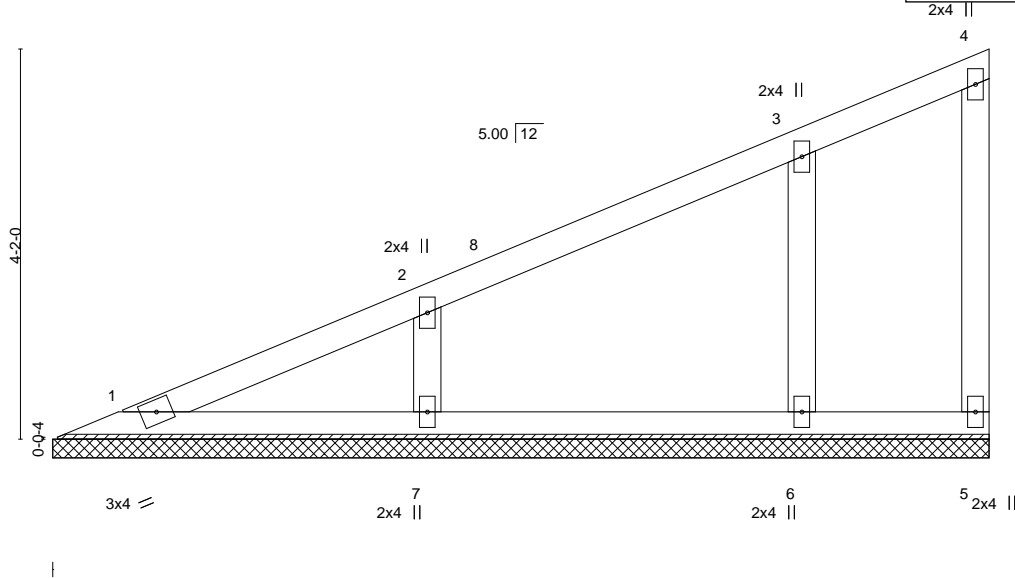
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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



March 1, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	V5	GABLE	1	1	Job Reference (optional)	8.430 s Feb 12 2021 MiTek Industries, Inc. ID:Fpza38BVdcFyJDKwxgHN8dztCCb-2zCDjPL?Bw?srXeSEJHNyEUyJL_gkQpcdfnZ2AzhDkW
Mid America Truss,	Jefferson City, MO - 65101,					Scale = 1:24.6 10-0-0 10-0-0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	MT20		244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P			5				
BCDL	10.0										
								Weight: 41 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 10-0-0.
 (lb) - Max Horz 1=127(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 5, 7, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=333(LC 2), 6=333(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-266/72

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



March 1, 2021

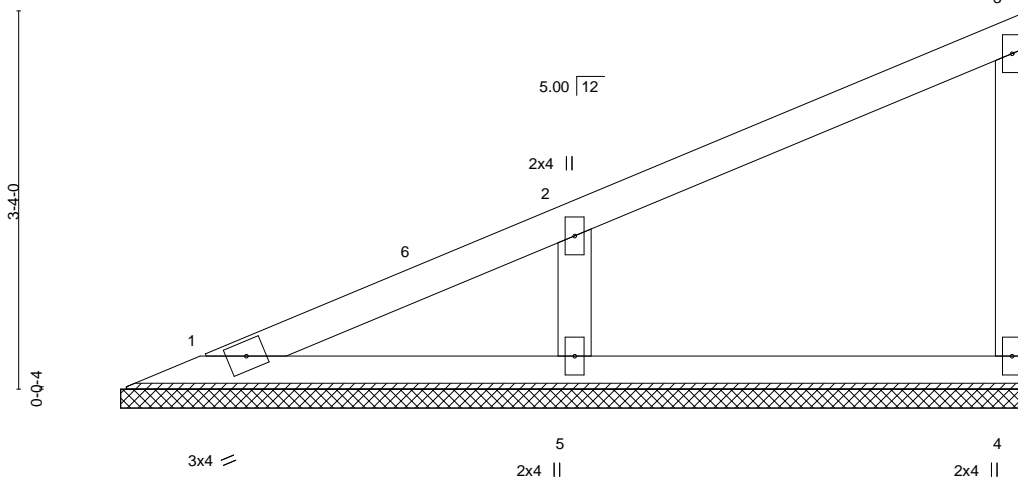
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	V6	GABLE	1	1	Job Reference (optional)	
Mid America Truss, Jefferson City, MO - 65101,					8.430 s Feb 12 2021 MiTek Industries, Inc. 14987156	

ID: Fpza38BVdcFyJDKwxgHN8dztCCb-W9mcxLLdyD7JThDen0ocVR07DIKkTtDmsJW6aczhdKv

Scale = 1:20.3



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	0.09	n/a	-	n/a	999		
TCDL	10.0	Lumber DOL	1.15	WB	0.04	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 29 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-0-0, 4=8-0-0, 5=8-0-0
 Max Horz 1=100(LC 8)
 Max Uplift 4=9(LC 8), 5=42(LC 11)
 Max Grav 1=90(LC 2), 4=149(LC 15), 5=412(LC 15)

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

WEBS 2-5=-322/95

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=1.0; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1, 2021

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

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

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

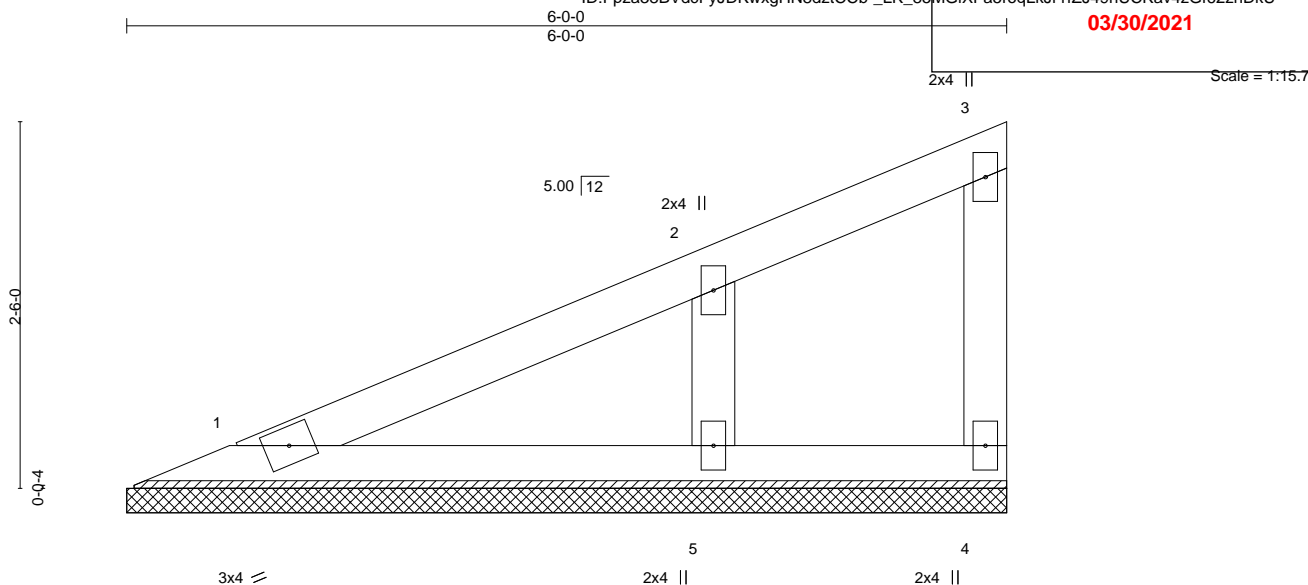


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 03/30/2021
W2-63	V7	GABLE	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. ID: Fpza38BVdcFyJDKwxgHN8dzrCCb-_LK_85MGiXFa5roqLk Jr1fZJ49hUCkav4zGf62zhDkU



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 22 lb	FT = 3%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-0-0, 4=6-0-0, 5=6-0-0
Max Horz 1=72(LC 10)
Max Uplift 4=-6(LC 8), 5=-32(LC 11)
Max Grav 1=128(LC 15), 4=39(LC 15), 5=329(LC 15)

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

WEBS 2-5=-261/72

NOTES-

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



March 1, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job: W2-63

Truss: V8

Truss Type: GABLE

Qty: 1

Ply: 1

SUMMIT HOMES

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

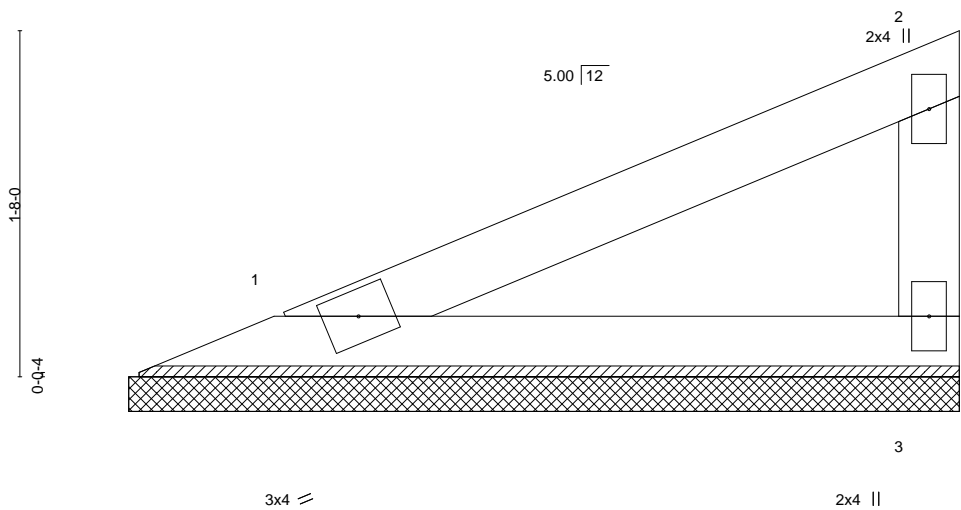
LEE'S SUMMIT, MISSOURI

03/30/2021

Mid America Truss, Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. ID: Fpza38BVdcFyJDKwxgHN8dztCCb-_LK_85MGiXFa5roqLkjr1fZlbgACK3v4zGf62zhDkU

Scale = 1:11.1



LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	l/defl	n/a	L/d	999	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	n/a	999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a					
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P									Weight: 13 lb	FT = 3%	
BCDL	10.0														

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-0-0 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)	1=4-0-0, 3=4-0-0
Max Horz	1=44(LC 10)
Max Uplift	1=3(LC 11), 3=10(LC 11)
Max Grav	1=142(LC 15), 3=142(LC 15)

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

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



March 1,2021

Job

W2-63

Truss

V9

Truss Type

GABLE

Qty

1

Ply

1

SUMMIT HOMES

Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc.

Lee's Summit, MO 64086-3200

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

03/30/2021

14987159

Mid America Truss,

Jefferson City, MO - 65101,

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-TXuMMRNuTrNRi?N1vRq4as5MxZ_gxnh3Jd?DfVzhDkT

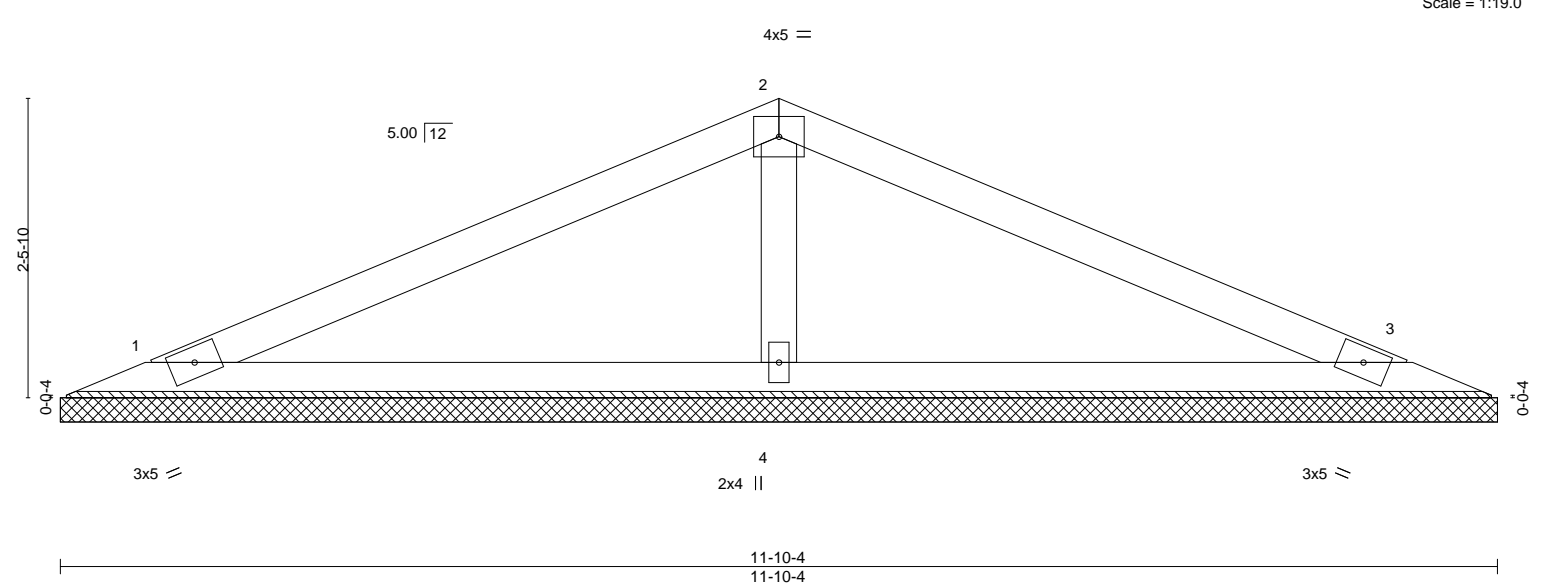
5-11-2

5-11-2

11-10-4

5-11-2

Scale = 1:19.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0		TC	0.68	in (loc)	l/defl	L/d	MT20	244/190	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.19	n/a -	n/a	999			
TCDL	10.0	Lumber DOL	1.15	WB	0.04	n/a -	n/a	999			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00 3	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 37 lb		FT = 3%	

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

REACTIONS. (size) 1=11-10-4, 3=11-10-4, 4=11-10-4
 Max Horz 1=23(LC 13)
 Max Uplift 1=-21(LC 11), 3=-25(LC 12)
 Max Grav 1=247(LC 15), 3=247(LC 16), 4=421(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-292/50

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



March 1,2021

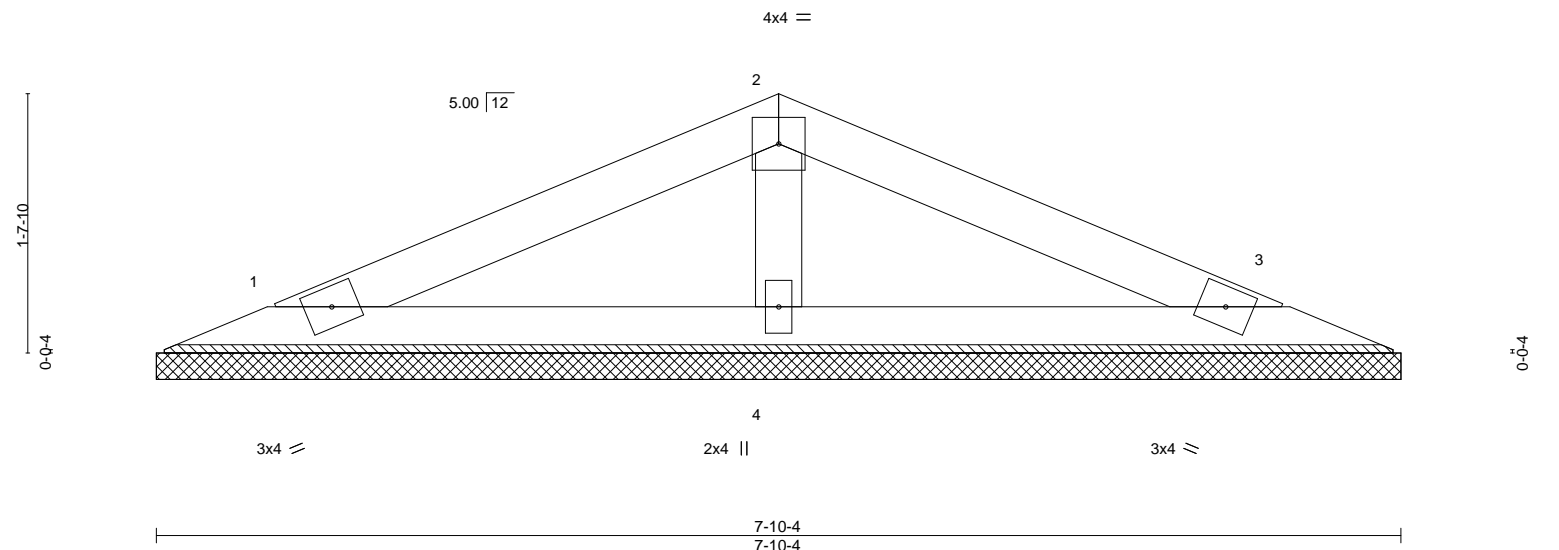
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-63	V10	GABLE	1	1	

Mid America Truss, Jefferson City, MO - 65101,

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

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

ID: Fpza38BVdcFyJDKwxgHN8dzCCb-eOW55OI7u?dl_4vtYBjgKbsRh8y5X3UAxhYuRrzhDkZ



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a - n/a	MT20	244/190		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a - n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00 3 n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL	10.0										

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

REACTIONS. (size) 1=7-10-4, 3=7-10-4, 4=7-10-4
 Max Horz 1=14(LC 14)
 Max Uplift 1=13(LC 11), 3=15(LC 12)
 Max Grav 1=143(LC 15), 3=143(LC 16), 4=258(LC 2)

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

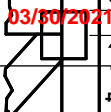
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33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



March 1, 2021

Symbols

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



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

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

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

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

PLATE SIZE

4 X 4

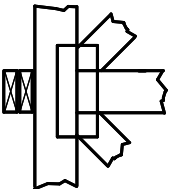
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



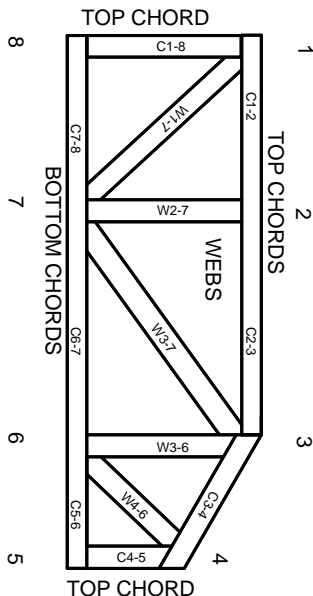
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: 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/TPI 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.