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

Re: MN52
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: I41706564 thru I41706585

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

Missouri COA: Engineering 001193

June 18,2020

Sevier, Scott ,Engineer

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/09/2020

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	CJ1	Diagonal Hip Girder	2	1	I41706564
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:11 2020 Page 1
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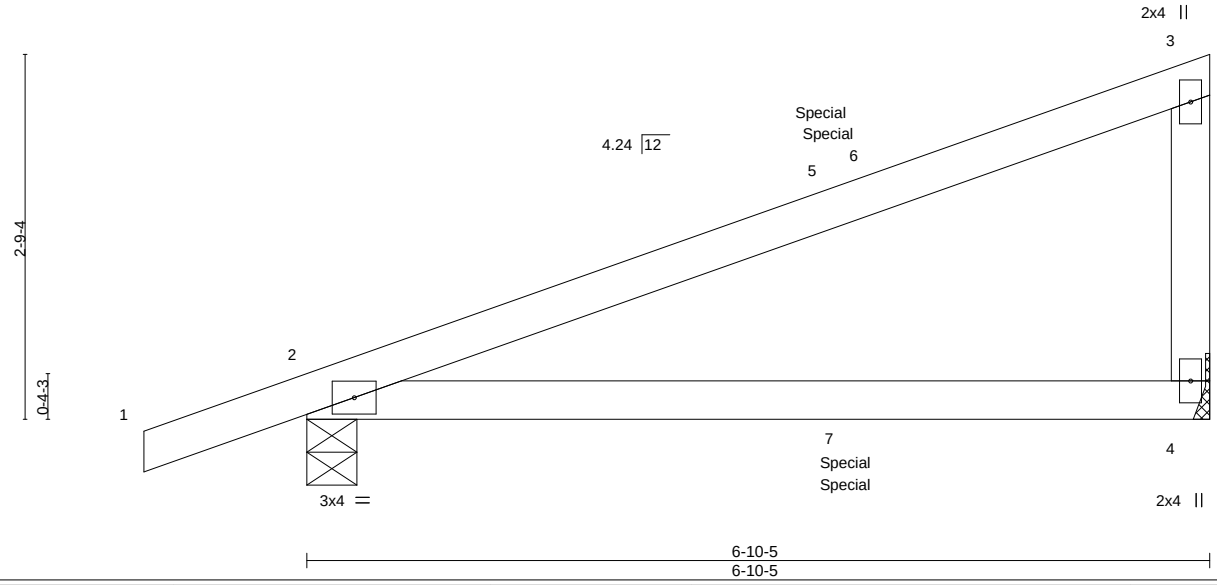

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.11	2-4	>721	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.61	Vert(TL)	-0.27	2-4	>289	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(TL)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 26 lb	FT = 3%
BCDL	10.0											

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-9
Max Horz 2=88(LC 9)
Max Uplift 4=-24(LC 12), 2=-61(LC 8)
Max Grav 4=283(LC 2), 2=404(LC 2)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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) 4, 2.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 25 lb down and 36 lb up at 4-1-7, and 25 lb down and 36 lb up at 4-1-7 on top chord, and 10 lb down at 4-1-7, and 10 lb down at 4-1-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 2-4=-20

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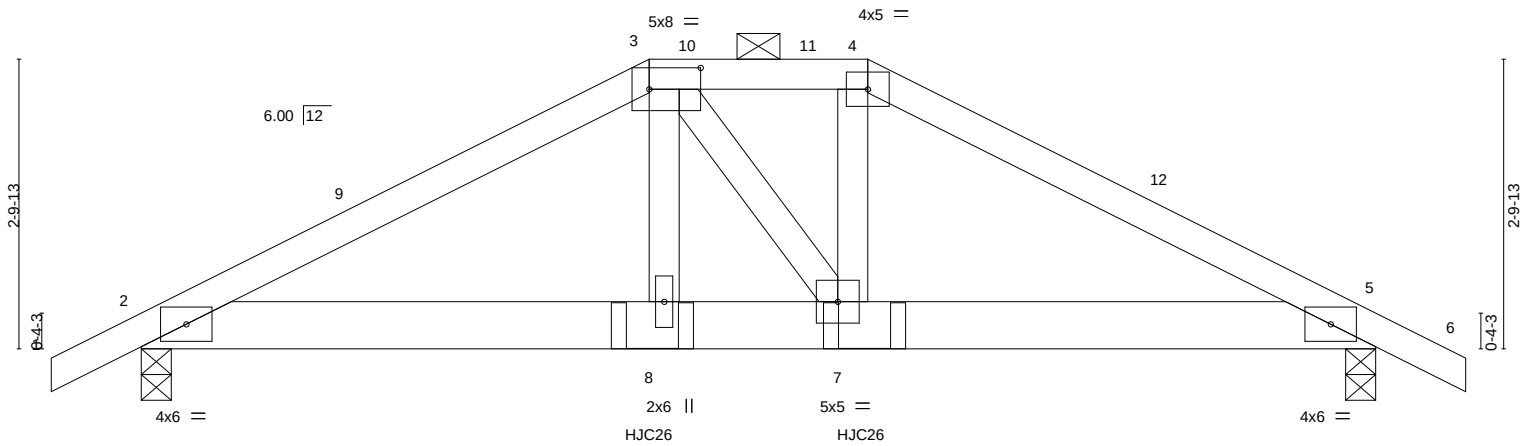
Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	H1	Hip Girder	1	2	I41706565
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:20 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-?nYQsFtqtJ?NGqlrmsaiKNxmYY?EpIVda3TgiEz562z

-0-10-8 | 4-11-4 | 7-0-12 | 12-0-0 | 12-10-8
0-10-8 | 4-11-4 | 2-1-8 | 4-11-4 | 0-10-8

Scale = 1:22.4



4-11-4 | 7-0-12 | 12-0-0
4-11-4 | 2-1-8 | 4-11-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.02	8	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	-0.03	8	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.07	Horz(TL)	0.01	5	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 122 lb	FT = 3%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=33(LC 11)
Max Uplift 2=-83(LC 12), 5=-83(LC 13)
Max Grav 2=1034(LC 2), 5=1034(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1673/134, 3-4=-1469/142, 4-5=-1678/133
BOT CHORD 2-8=-92/1435, 7-8=-93/1464, 5-7=-82/1439
WEBS 3-8=-24/494, 4-7=-38/546

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 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 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; 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) 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.
8) Provide adequate drainage to prevent water ponding.
9) Plates checked for a plus or minus 2 degree rotation about its center.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 2-0-12 oc max. starting at 4-11-10 from the left end to 7-0-6 to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

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LOAD CASE(S) Standard

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-51, 3-4=-61, 4-6=-51, 2-5=-20
   Concentrated Loads (lb)
   Vert: 8=-359(B) 7=-359(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	J1	Jack-Closed	2	1	I41706566
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:21 2020 Page 1
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-0-10-8 4-11-4
0-10-8 4-11-4

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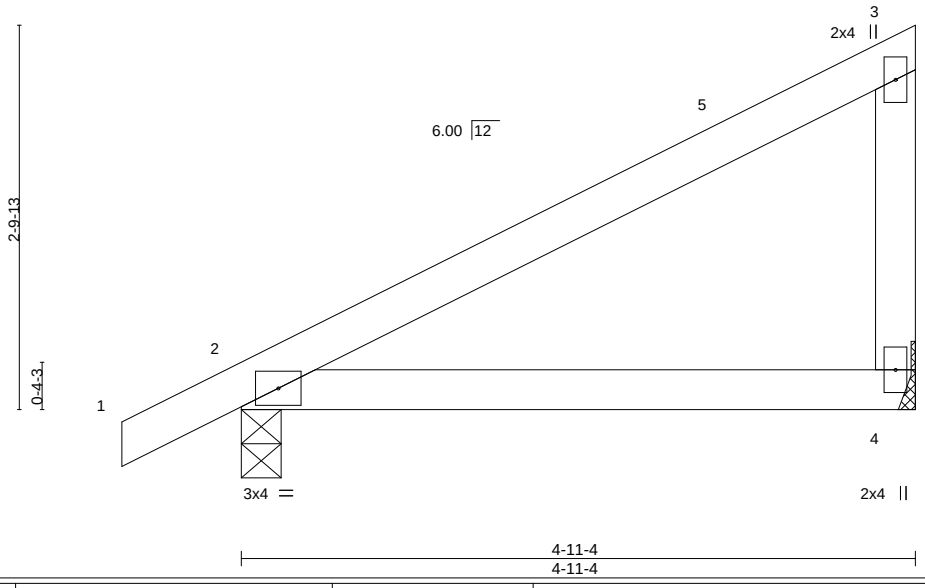

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.03	2-4	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	-0.07	2-4	>798	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 20 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 4-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=86(LC 11)
Max Uplift 4=-17(LC 12), 2=-14(LC 12)
Max Grav 4=201(LC 2), 2=288(LC 2)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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) 4, 2.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	J2	Jack-Open	4	1	I41706567
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:21 2020 Page 1
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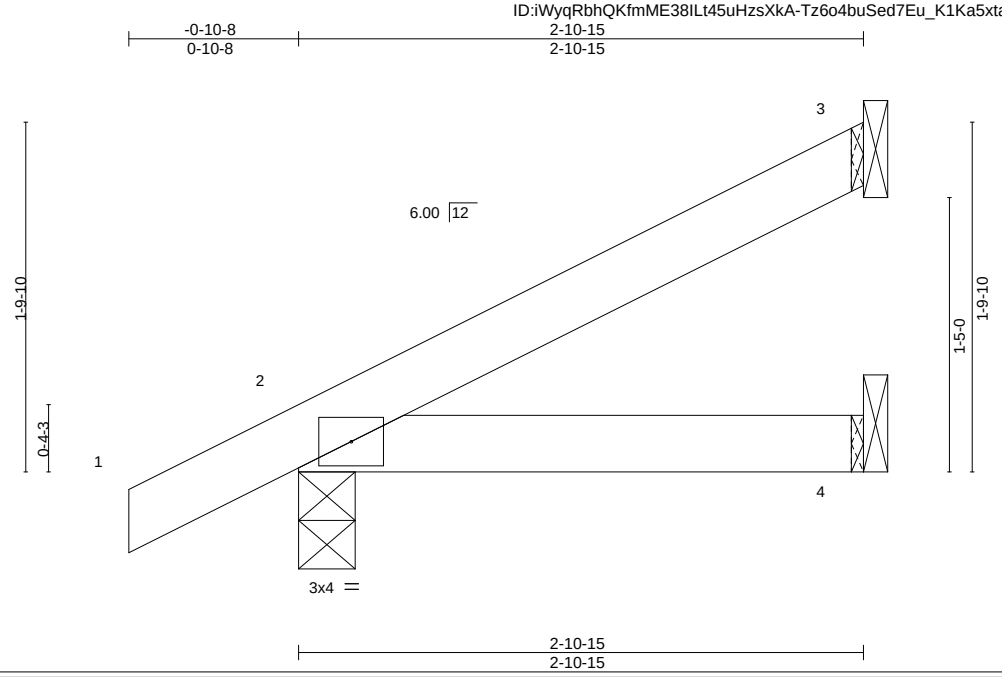

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	-0.01	2-4	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 11 lb	FT = 3%
BCDL	10.0											

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=51(LC 12)
Max Uplift 3=-31(LC 12), 2=-8(LC 12)
Max Grav 3=81(LC 2), 2=207(LC 2), 4=54(LC 7)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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) 3, 2.

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	M1	MONOPITCH	7	1	I41706568
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:22 2020 Page 1
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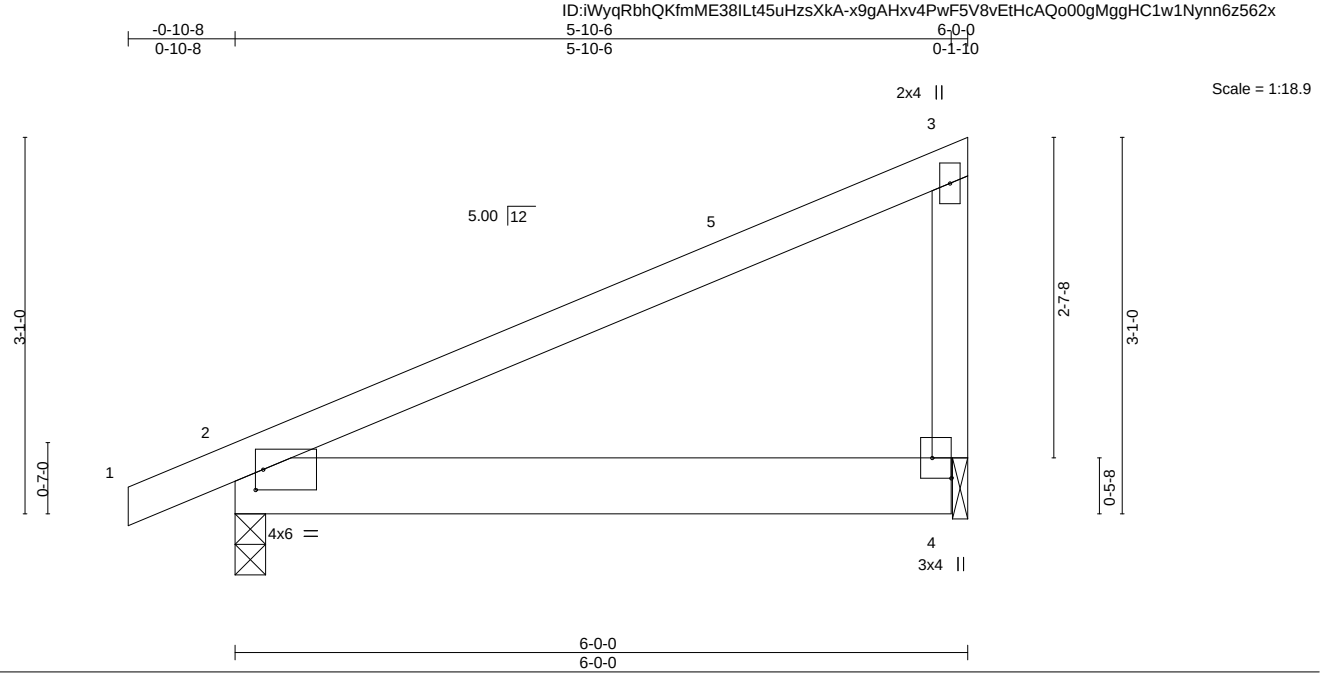

Plate Offsets (X,Y)-- [2:0-0-12,0-2-0], [4:Edge,0-1-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	-0.04	2-4	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 28 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1
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) 2=0-3-0, 4=0-1-8
Max Horz 2=91(LC 9)
Max Uplift 2=-16(LC 12), 4=-20(LC 12)
Max Grav 2=334(LC 2), 4=252(LC 2)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	M2	Monopitch	4	1	I41706569
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:23 2020 Page 1
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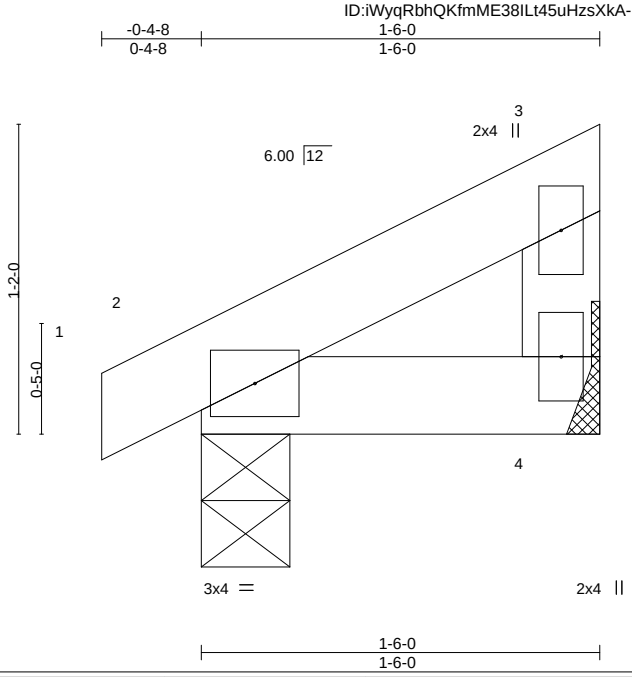


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	2	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	-0.00	2	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 6 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 1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-0
Max Horz 2=27(LC 9)
Max Uplift 4=-5(LC 12), 2=-5(LC 12)
Max Grav 4=55(LC 2), 2=92(LC 2)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
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) 4, 2.

June 18,2020

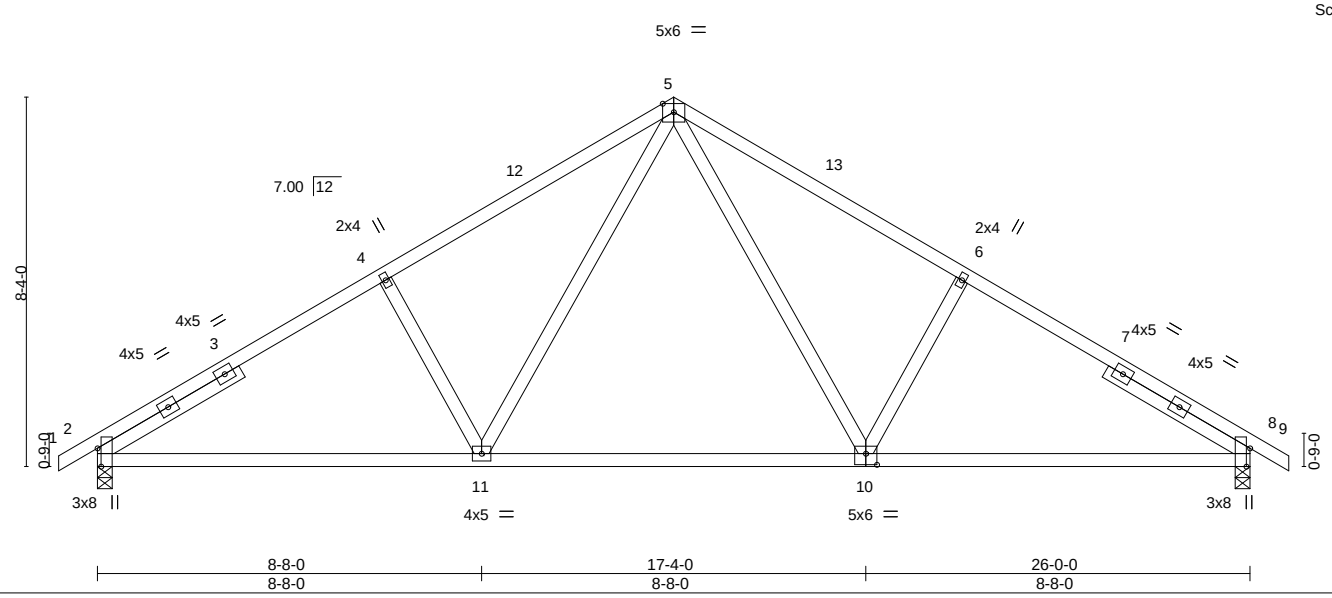
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T1	Roof Special	6	1	I41706570
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:24 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-tYnwidwKxYWplS3c?ifeVD6M69DEl45DVgRur?z562v

-0-10-8	6-6-0	13-0-0	19-6-0	26-0-0	26-10-8
0-10-8	6-6-0	6-6-0	6-6-0	6-6-0	0-10-8

Scale = 1:52.0



8-8-0	17-4-0	26-0-0
8-8-0	8-8-0	8-8-0

Plate Offsets (X,Y)-- [2:0-4-15,Edge], [8:0-4-15,Edge], [10:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.09	2-11	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.70	Vert(TL)	-0.26	10-11	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(TL)	0.06	8	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH								
BCDL	10.0										Weight: 138 lb	FT = 3%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 - 3-9-0, Right 2x4 SP No.2 -x 3-9-0

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

REACTIONS. (size) 2=0-4-0, 8=0-4-0
Max Horz 2=-169(LC 10)
Max Uplift 2=-20(LC 12), 8=-20(LC 13)
Max Grav 2=1231(LC 2), 8=1231(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1737/49, 4-5=-1535/94, 5-6=-1535/94, 6-8=-1737/49
BOT CHORD 2-11=-45/1391, 10-11=0/956, 8-10=0/1391
WEBS 5-10=-44/589, 6-10=-388/160, 5-11=-44/589, 4-11=-388/160

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Plates checked for a plus or minus 2 degree rotation about its center.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T1A	Common	10	1	I41706571
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:25 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-LkLJvyxyiregMbepZQAt1QeXqZZSUXJMkKAROREz562u

6-6-0	13-0-0	19-6-0	26-0-0	26-10-8
6-6-0	6-6-0	6-6-0	6-6-0	0-10-8

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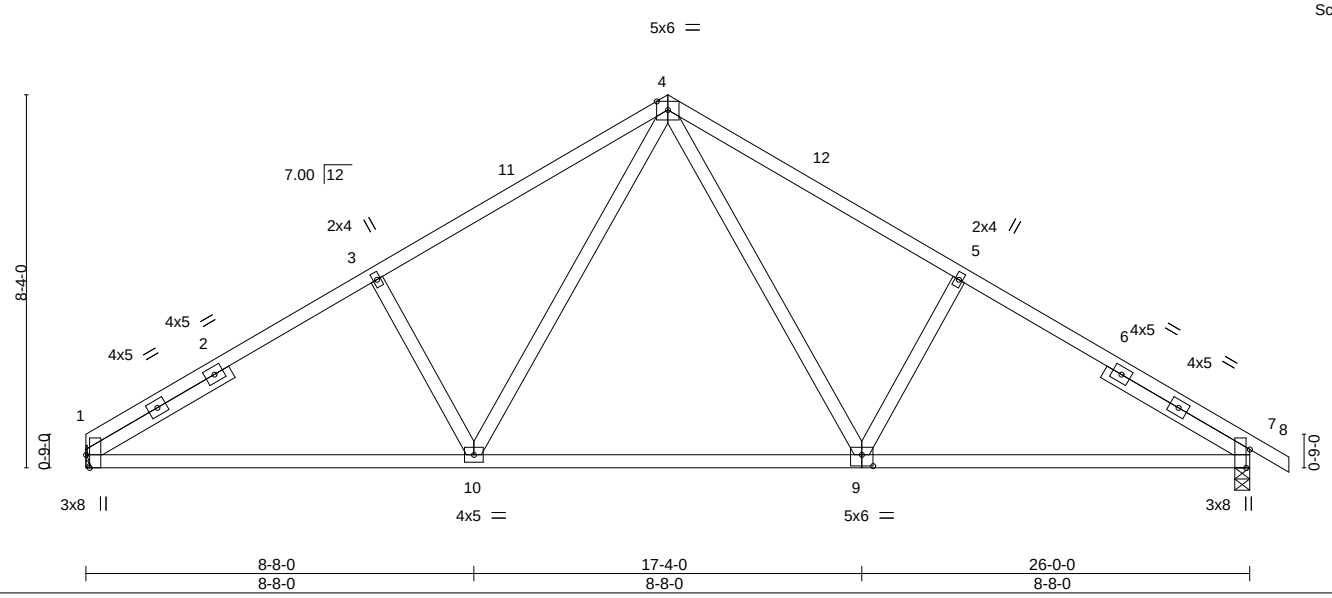

8-8-0	17-4-0	26-0-0
8-8-0	8-8-0	8-8-0

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [7:0-4-15,Edge], [9:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.09	7-9	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.70	Vert(TL)	-0.26	9-10	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(TL)	0.06	7	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 136 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -x 3-9-0, Right 2x4 SP No.2 -x 3-9-0

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

REACTIONS. (size) 1=Mechanical, 7=0-4-0
Max Horz 1=-169(LC 8)
Max Uplift 1=-10(LC 12), 7=-20(LC 13)
Max Grav 1=1169(LC 2), 7=1232(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1742/49, 3-4=-1540/95, 4-5=-1537/94, 5-7=-1739/49
BOT CHORD 1-10=-46/1397, 9-10=0/958, 7-9=0/1393
WEBS 4-9=-44/589, 5-9=-388/160, 4-10=-44/594, 3-10=-391/160

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Plates checked for a plus or minus 2 degree rotation about its center.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T1AGE	Common Supported Gable	1	1	I41706572
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:26 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-pwvh7IyaT9mX_ID?67h6aeBsEz2QD_wVy_w_wtz562t

13-0-0 26-0-0 26-10-8
13-0-0 13-0-0 0-10-8

Scale = 1:55.3

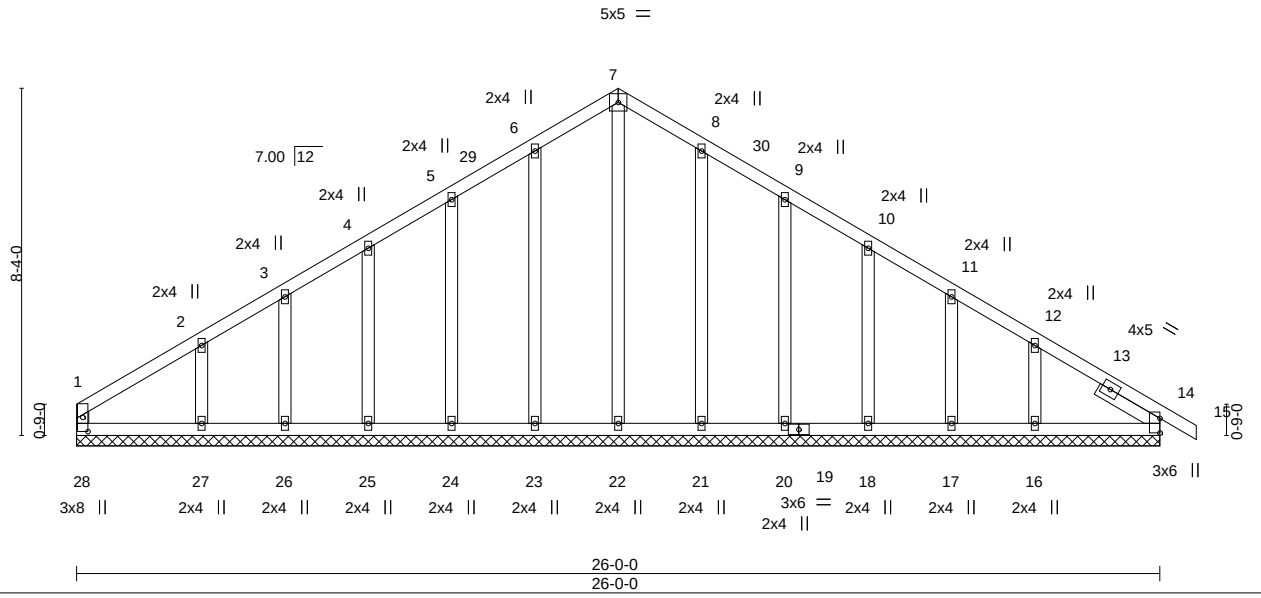

Plate Offsets (X,Y)-- [14:Edge,0-0-0], [28:0-4-2,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	14	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	0.00	15	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(TL)	0.01	14	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 164 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -x 1-8-9

BRACING-

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

REACTIONS. All bearings 26-0-0.
(lb) - Max Horz 28=-175(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 28, 23, 24, 25, 26, 27, 21, 20, 18, 17, 16, 14
Max Grav All reactions 250 lb or less at joint(s) 28, 22, 23, 24, 25, 26, 21, 20, 18, 17, 14 except 27=276(LC 24), 16=267(LC 25)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Plates checked for a plus or minus 2 degree rotation about its center.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 23, 24, 25, 26, 27, 21, 20, 18, 17, 16, 14.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T1GE	Roof Special Supported Gable	1	1	I41706573
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:28 2020 Page 1
ID:iWyqRbhQKfmME38lLt45uHzsXkA-mJ1RY__r?m0ED3MOEYjaf3GCemk9huSoQIP5_mz562r

-0-10-8 13-0-0 26-0-0 26-10-8
0-10-8 13-0-0 13-0-0 0-10-8

Scale = 1:55.9

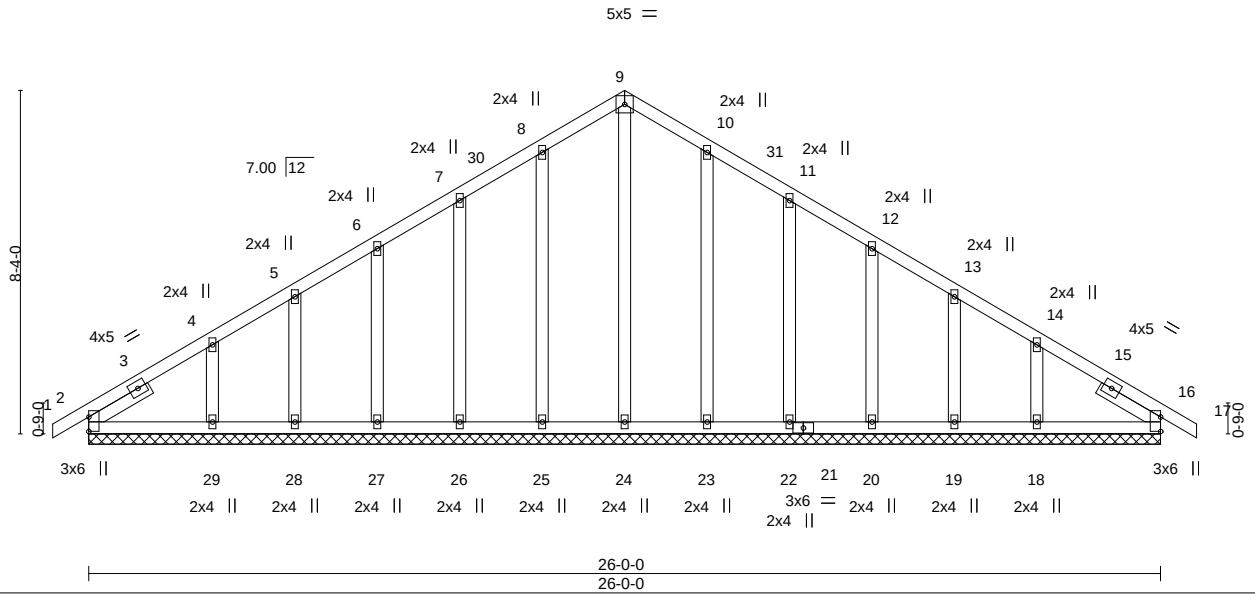

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [16:Edge,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	16	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	0.00	17	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(TL)	0.00	16	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 167 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -x 1-8-9, Right 2x4 SP No.2 -x 1-8-9

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

REACTIONS. All bearings 26-0-0.
(lb) - Max Horz 2=169(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 23, 22, 20, 19, 18
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 23, 22, 20, 19, 16 except 29=271(LC 24), 18=261(LC 25)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Exp C; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Plates checked for a plus or minus 2 degree rotation about its center.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 29, 23, 22, 20, 19, 18.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T2	Common	5	1	I41706574
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:29 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-EVbplK_Tm485rDxaoFEpCGpFYAxVQM?yey8fXCz562q

0-10-8	5-1-0	11-0-0	16-11-0	22-0-0	22-10-8
0-10-8	5-1-0	5-11-0	5-11-0	5-1-0	0-10-8

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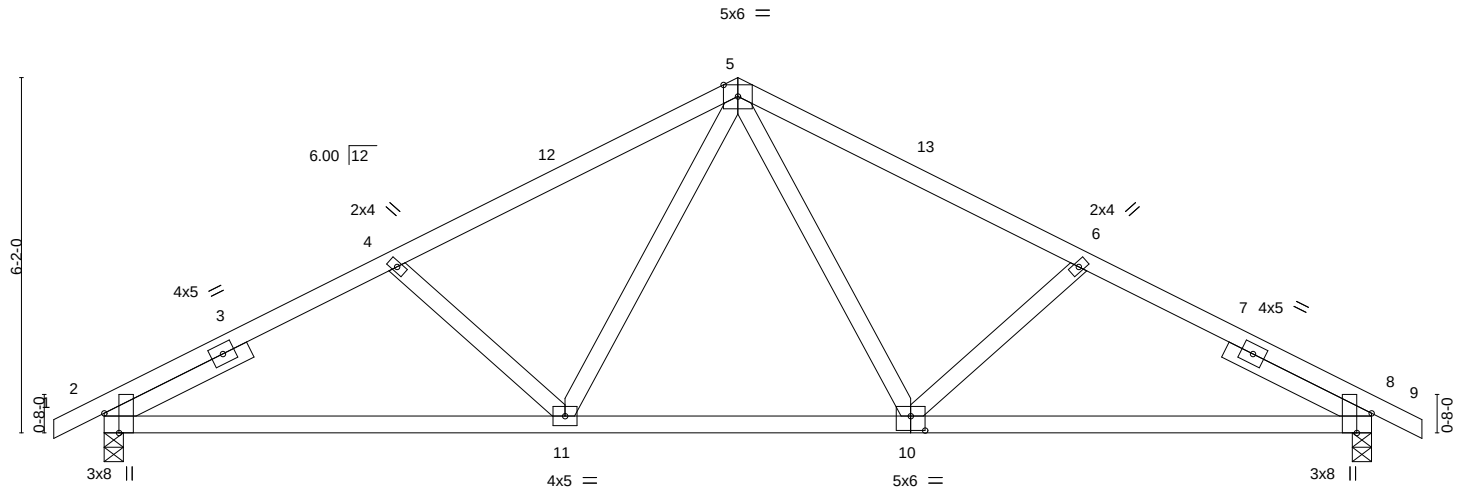

8-0-0	14-0-0	22-0-0
8-0-0	6-0-0	8-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.08	8-10	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.63	Vert(TL)	-0.22	8-10	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(TL)	0.05	8	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH								
BCDL	10.0										Weight: 111 lb	FT = 3%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -x 2-9-7, Right 2x4 SP No.2 -x 2-9-7

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-4-0, 8=0-4-0
Max Horz 2=67(LC 11)
Max Uplift 2=-21(LC 12), 8=-21(LC 13)
Max Grav 2=1051(LC 2), 8=1051(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1624/59, 4-5=-1355/47, 5-6=-1355/47, 6-8=-1624/59
BOT CHORD 2-11=-56/1363, 10-11=0/945, 8-10=0/1363
WEBS 5-10=-7/423, 6-10=-356/128, 5-11=-6/423, 4-11=-356/128

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Plates checked for a plus or minus 2 degree rotation about its center.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T2GE	Common Supported Gable	1	1	I41706575
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:31 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-AuiaA00jHhOp4X5yvgHHHhujI_mtuHIE6Gdlb5z562o

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0-10-8 11-0-0 11-0-0 0-10-8

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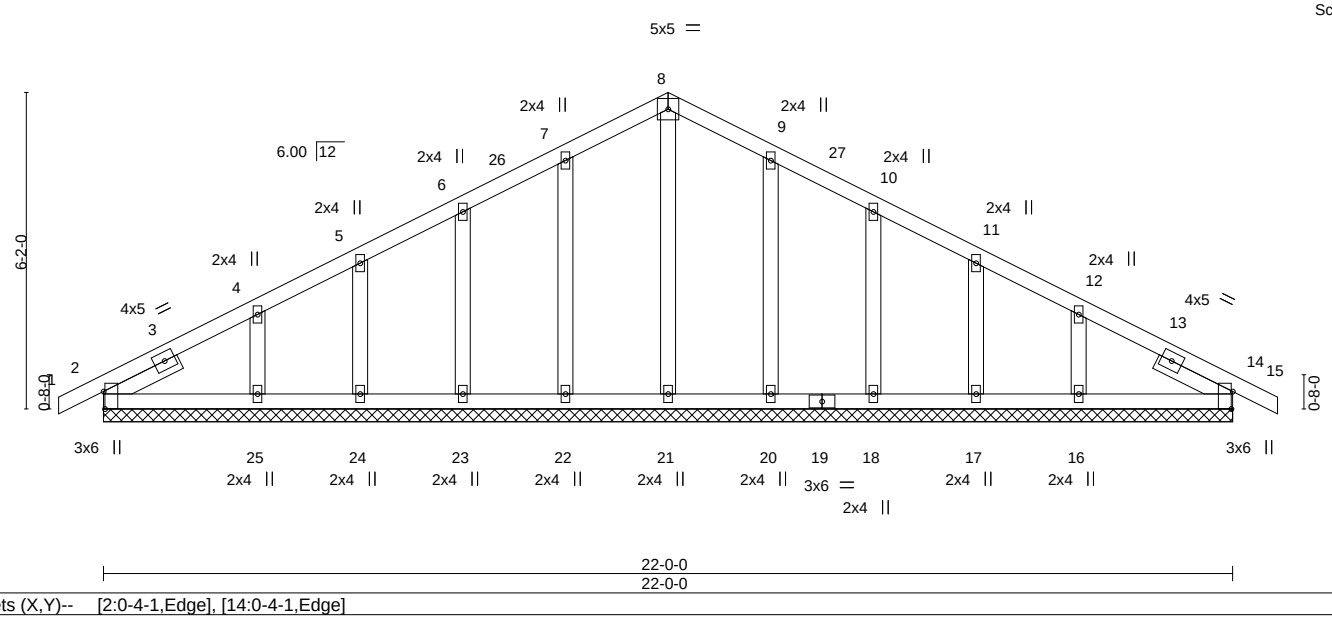


Plate Offsets (X,Y)-- [2:0-4-1,Edge], [14:0-4-1,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	14	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	0.00	15	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00	14	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 123 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -x 1-7-7, Right 2x4 SP No.2 -x 1-7-7

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

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 2=-67(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 20, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 20, 18, 17, 14 except 25=251(LC 28), 16=251(LC 29)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Plates checked for a plus or minus 2 degree rotation about its center.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 25, 20, 18, 17, 16.

June 18,2020

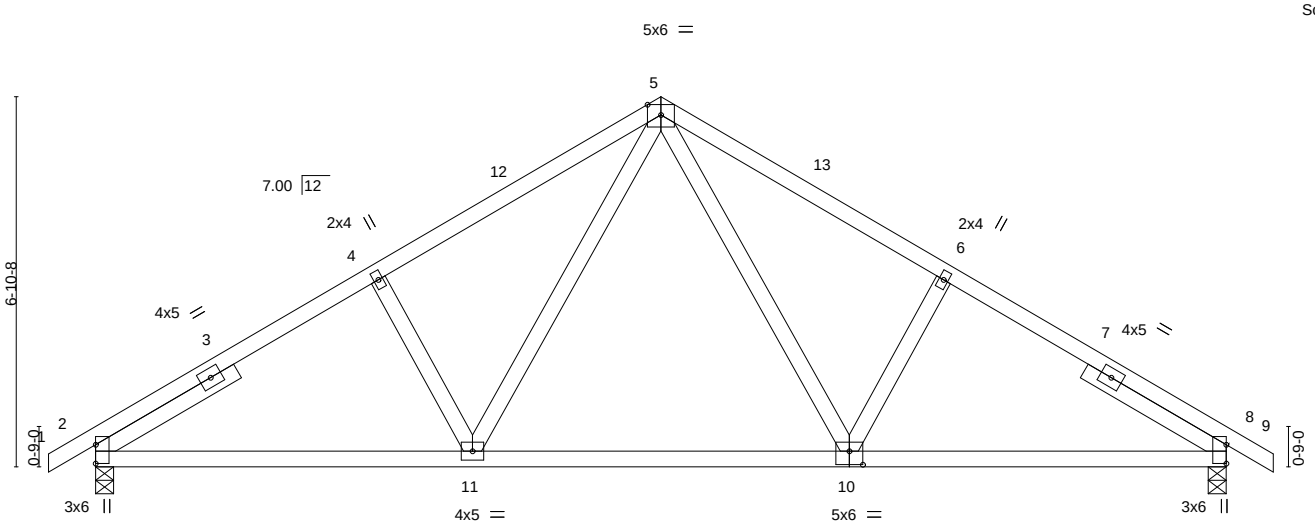
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T3	Common	2	1	I41706576
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:32 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-e4GyNM1L2?Wgigg9TOoWquRpaO?kdjlOLwNJ7Xz562n

0-10-8	5-3-0	10-6-0	15-9-0	21-0-0	21-10-8
0-10-8	5-3-0	5-3-0	5-3-0	5-3-0	0-10-8

Scale = 1:42.8



7-0-0	14-0-0	21-0-0
7-0-0	7-0-0	7-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.04	10-11	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.47	Vert(TL)	-0.14	10-11	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(TL)	0.04	8	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH								
BCDL	10.0										Weight: 112 lb	FT = 3%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -x 3-0-5, Right 2x4 SP No.2 -x 3-0-5

BRACING-

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

REACTIONS. (size) 2=0-4-0, 8=0-4-0
Max Horz 2=139(LC 11)
Max Uplift 2=-17(LC 12), 8=-17(LC 13)
Max Grav 2=1006(LC 2), 8=1006(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1375/39, 4-5=-1210/77, 5-6=-1210/77, 6-8=-1374/39
BOT CHORD 2-11=-35/1089, 10-11=0/761, 8-10=0/1089
WEBS 5-10=-36/457, 6-10=-297/129, 5-11=-36/457, 4-11=-297/129

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Plates checked for a plus or minus 2 degree rotation about its center.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T3A	Roof Special	5	1	I41706577
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:33 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-6HqKbh1zpJeXKqFL15JlM6zzTnKVM4ZXZa6sgzz562m

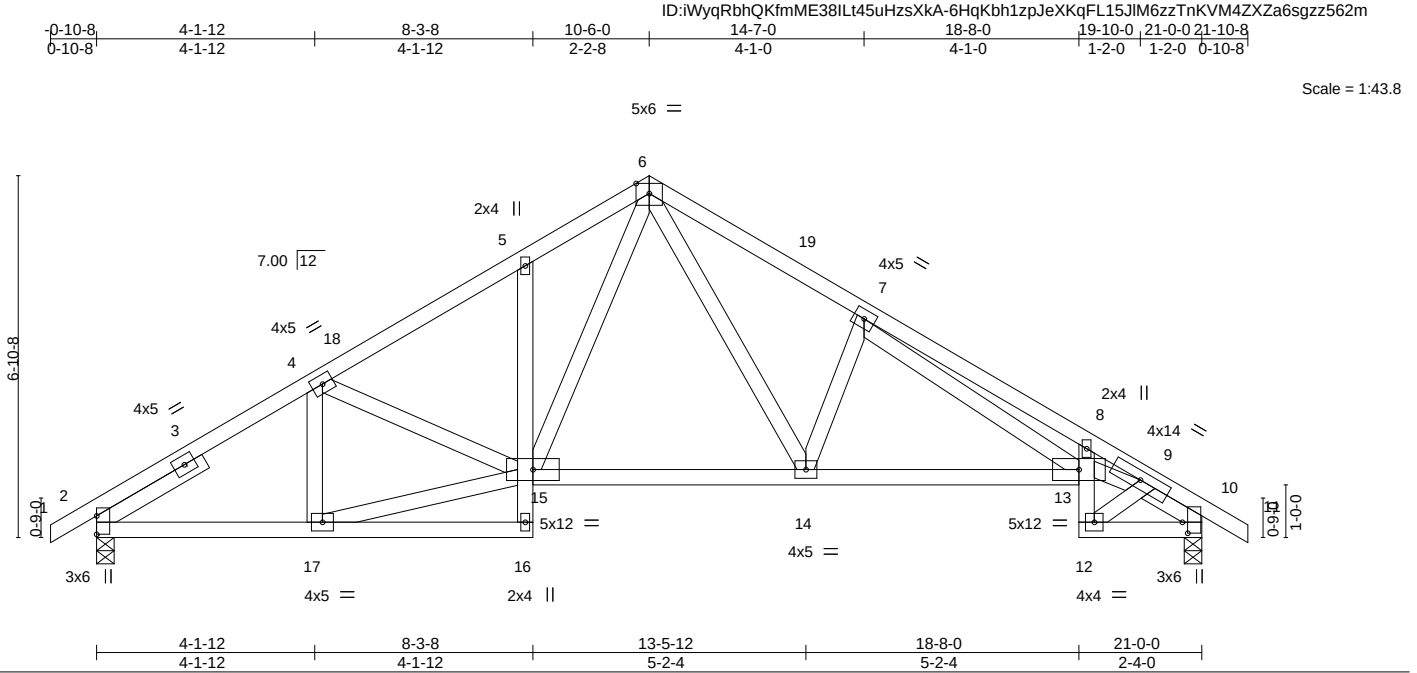


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [10:0-2-8,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.10	13-14	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.56	Vert(TL)	-0.25	13-14	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(TL)	0.15	10	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 134 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -x 2-4-8, Right 2x4 SP No.2 -x 1-2-11

BRACING-

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

REACTIONS. (size) 2=0-4-0, 10=0-4-0
Max Horz 2=139(LC 11)
Max Uplift 2=-17(LC 12), 10=-17(LC 13)
Max Grav 2=1006(LC 2), 10=1006(LC 2)

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

TOP CHORD	2-4=-1416/24, 4-5=-1376/41, 5-6=-1359/95, 6-7=-1485/58, 7-8=-2766/59, 8-9=-2510/0, 9-10=-1237/17
BOT CHORD	2-17=-33/1104, 5-15=-253/82, 14-15=0/888, 13-14=0/1378, 12-13=0/456, 10-12=0/796
WEBS	15-17=-32/1085, 6-15=-73/639, 6-14=-36/675, 7-14=-477/111, 7-13=-44/1235, 9-13=0/1876, 9-12=-685/0

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Plates checked for a plus or minus 2 degree rotation about its center.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T3GE	GABLE	1	1	I41706578
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:34 2020 Page 1
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-0-10-8 5-3-0 10-6-0 15-9-0 21-0-0 21-10-8
0-10-8 5-3-0 5-3-0 5-3-0 5-3-0 0-10-8

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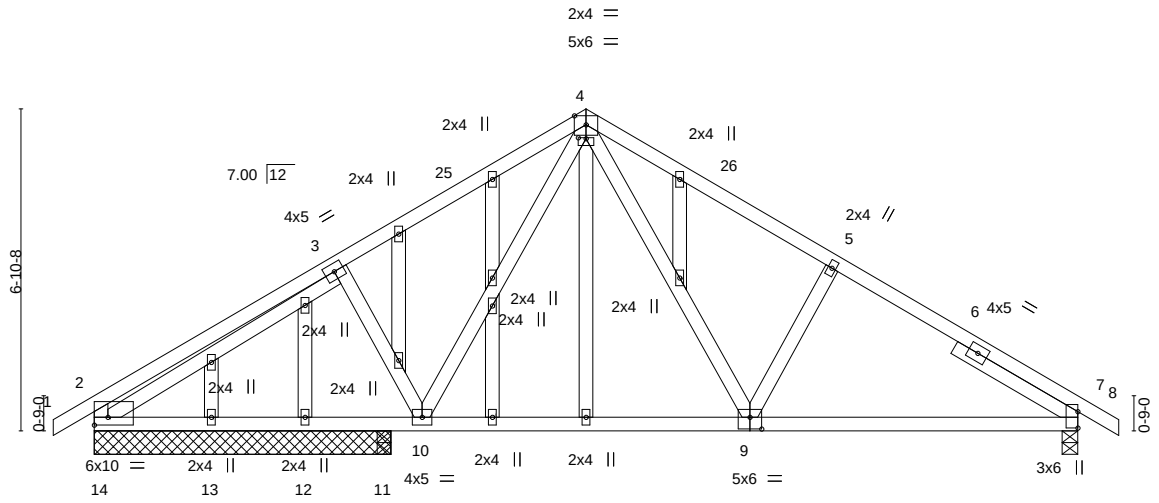

6-0-8 7-0-0 14-0-0 21-0-0
6-0-8 0-11-8 7-0-0 7-0-0

Plate Offsets (X,Y)-- [4:0-2-0,0-0-4], [7:Edge,0-0-0], [9:0-3-0,0-3-0], [14:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.06	9-10	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.75	Vert(TL)	-0.18	9-10	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(TL)	0.03	7	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 147 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -x 3-0-5

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-2-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 6-4-0 except (jt=length) 7=0-4-0, 11=0-3-8.
(lb) - Max Horz 14=-148(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 7, 14, 11 except 12=-199(LC 2)
Max Grav All reactions 250 lb or less at joint(s) 12, 13 except 7=862(LC 2), 14=674(LC 2), 11=579(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-321/101, 3-4=-682/64, 4-5=-964/82, 5-7=-1128/44, 2-14=-360/89
BOT CHORD 13-14=-25/646, 12-13=-25/646, 11-12=-25/646, 10-11=-25/646, 9-10=0/524, 7-9=0/883
WEBS 4-9=-33/489, 5-9=-308/130, 3-10=-310/137, 3-14=-527/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Plates checked for a plus or minus 2 degree rotation about its center.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 14, 11 except (jt=lb) 12=199.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T3GR	Roof Special Girder	1	2	I41706579
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:36 2020 Page 1
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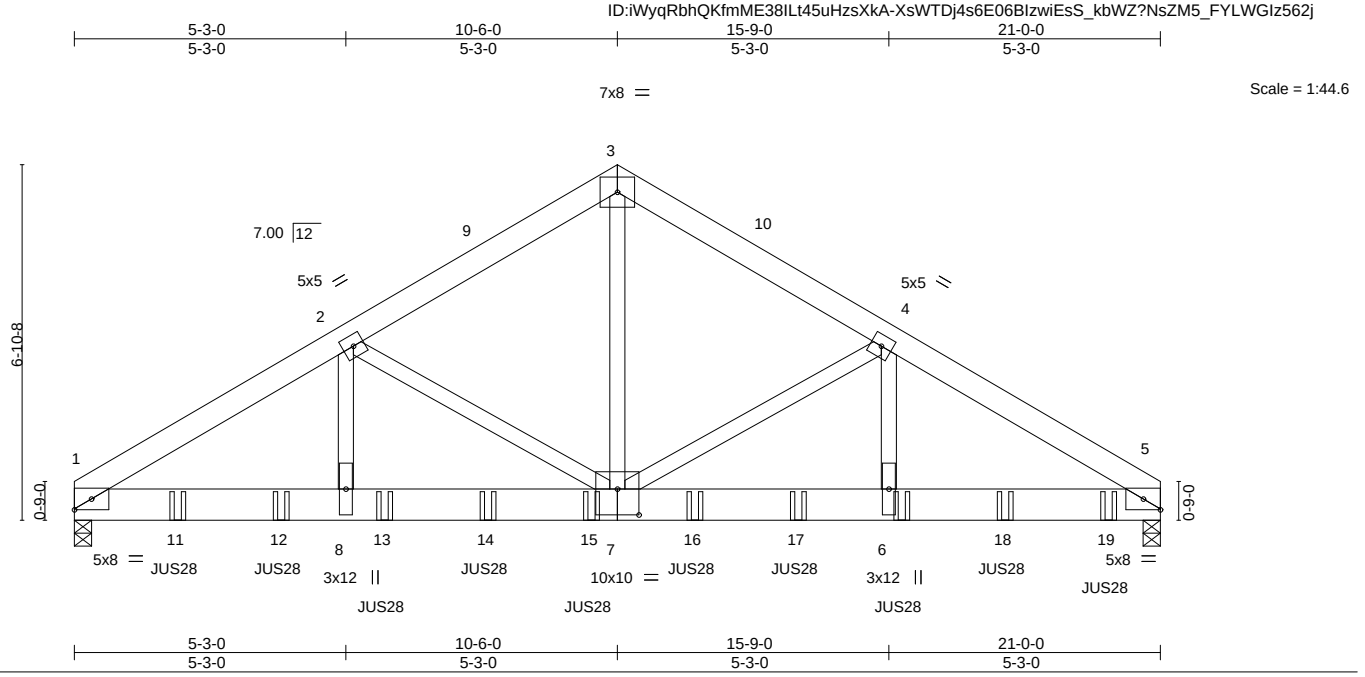

Plate Offsets (X,Y)-- [7:0-5-0,0-6-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.09	6-7	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.39	Vert(TL)	-0.20	6-7	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.79	Horz(TL)	0.06	5	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-SH							Weight: 313 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-4-0, 5=0-4-0 (req. 0-4-2)
Max Horz 1=-132(LC 31)
Max Uplift 1=-115(LC 12), 5=-124(LC 13)
Max Grav 1=6411(LC 2), 5=6941(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9928/191, 2-3=-6914/175, 3-4=-6915/175, 4-5=-9981/192
BOT CHORD 1-8=-169/8321, 7-8=-169/8321, 6-7=-104/8368, 5-6=-104/8368
WEBS 3-7=-101/6465, 4-7=-2898/140, 4-6=-2/3034, 2-7=-2842/138, 2-8=0/2982

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.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
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 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) Plates checked for a plus or minus 2 degree rotation about its center.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) WARNING: Required bearing size at joint(s) 5 greater than input bearing size.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=115, 5=124.
11) Use USP JUS28 (With 6-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-0 from the left end to 20-0-0 to connect truss(es) to back face of bottom chord.
12) 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

June 18,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 6=-900(B) 11=-900(B) 12=-900(B) 13=-900(B) 14=-900(B) 15=-900(B) 16=-900(B) 17=-900(B) 18=-900(B) 19=-901(B)

MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T4GE	Common Supported Gable	1	1	I41706580
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:37 2020 Page 1
ID:iWyqRbhQKfmME38ILt45uHzsXkA-?24rR35UtX8zpSY6GxOhXy8kBPpII?87UC44plz562i

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0-10-8 7-6-0 7-6-0 0-10-8

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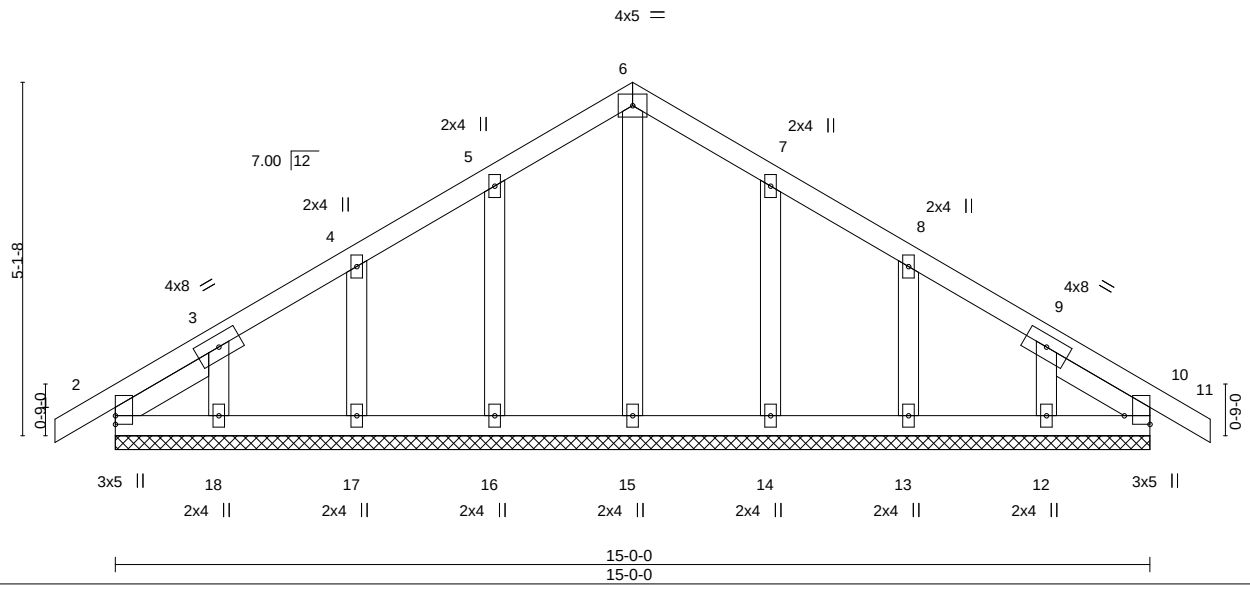

Plate Offsets (X,Y)-- [10:Edge,0-4-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	10	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	-0.00	11	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	10	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 83 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -x 1-7-9, Right 2x4 SP No.2 -x 1-7-9

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

REACTIONS. All bearings 15-0-0.
(lb) - Max Horz 2=-102(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 18, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Plates checked for a plus or minus 2 degree rotation about its center.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 17, 18, 14, 13, 12.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	T6	Common	3	1	I41706581
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:38 2020 Page 1
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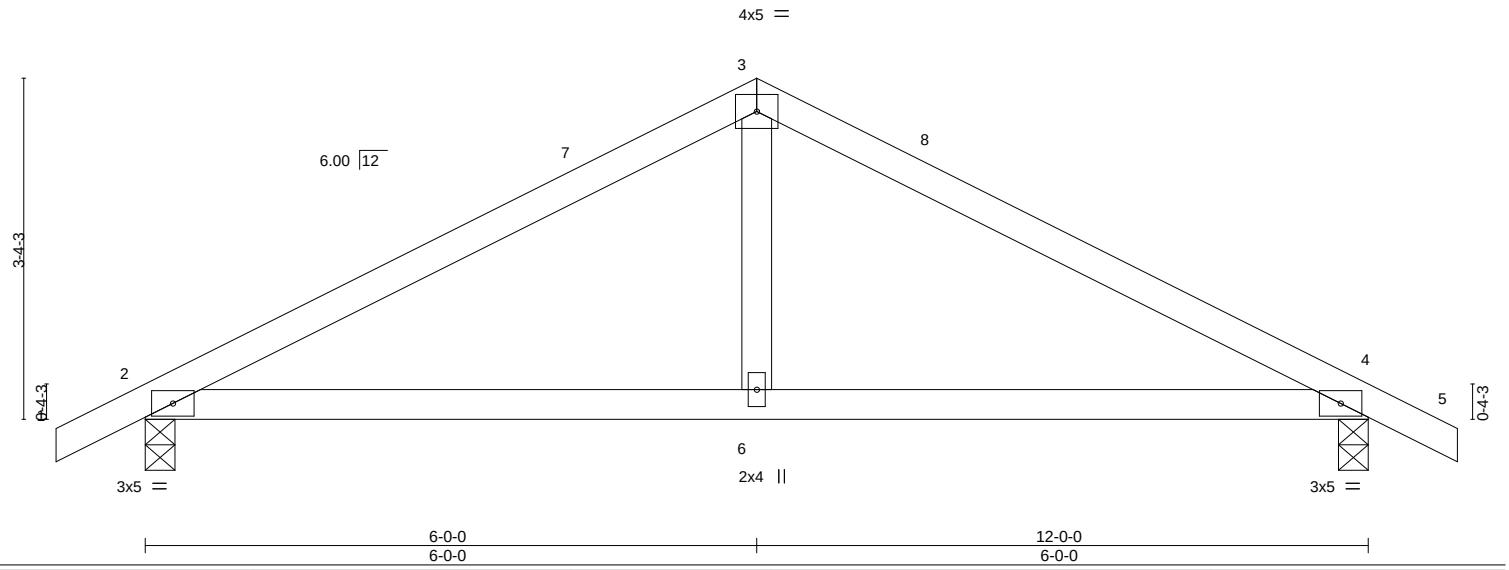
0-10-8 6-0-0 6-0-0 0-10-8

Scale = 1:22.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.03	2-6	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.41	Vert(TL)	-0.09	2-6	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(TL)	0.01	4	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 45 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 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-39(LC 10)
Max Uplift 2=-18(LC 12), 4=-18(LC 13)
Max Grav 2=598(LC 2), 4=598(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-665/0, 3-4=-665/0
BOT CHORD 2-6=0/521, 4-6=0/521
WEBS 3-6=0/290

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Plates checked for a plus or minus 2 degree rotation about its center.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	V1	GABLE	1	1	I41706582
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:39 2020 Page 1
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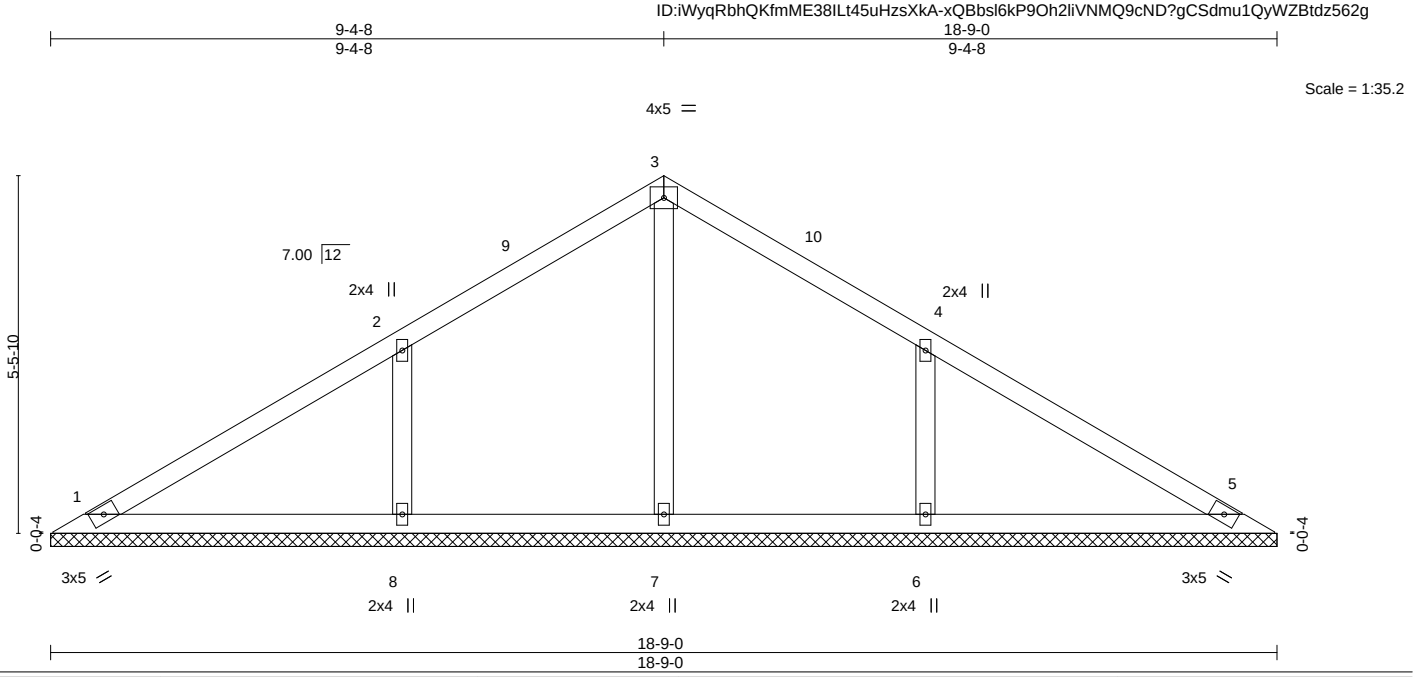

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(TL)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 73 lb	FT = 3%
BCDL	10.0											

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

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

REACTIONS. All bearings 18-9-0.
(lb) - Max Horz 1=-108(LC 8)
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=496(LC 23), 6=496(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-391/145, 4-6=-391/145

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	V2	Valley	1	1	I41706583
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:40 2020 Page 1
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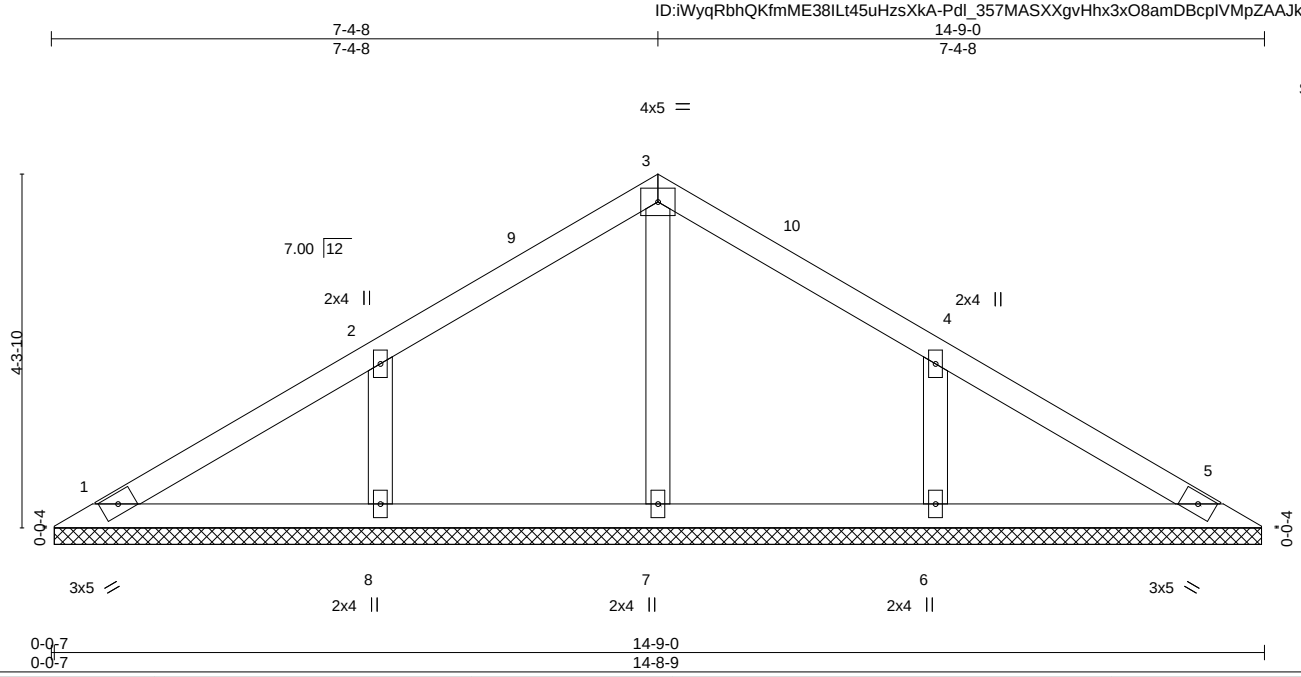

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 56 lb	FT = 3%
BCDL	10.0											

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

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

REACTIONS. All bearings 14-8-2.
(lb) - Max Horz 1=-83(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 6, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=378(LC 24), 8=378(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-6=-300/111, 2-8=-300/111

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	V3	GABLE	1	1	I41706584
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:41 2020 Page 1
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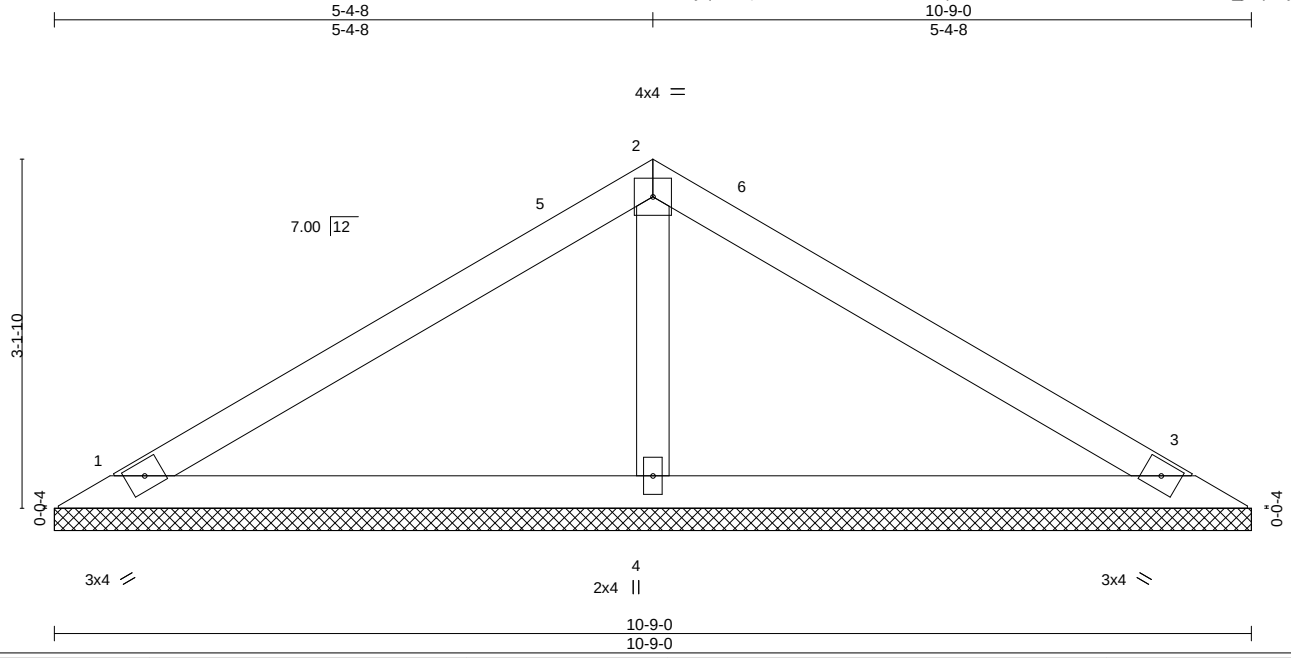

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 36 lb	FT = 3%
BCDL	10.0											

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

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

REACTIONS. (size) 1=10-9-0, 3=10-9-0, 4=10-9-0
Max Horz 1=-59(LC 8)
Max Uplift 1=-21(LC 12), 3=-27(LC 13)
Max Grav 1=228(LC 2), 3=228(LC 2), 4=414(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-293/40

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=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 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

June 18,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
MN52	V4	Valley	1	1	I41706585
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.410 s May 22 2020 MiTek Industries, Inc. Thu Jun 18 08:25:42 2020 Page 1
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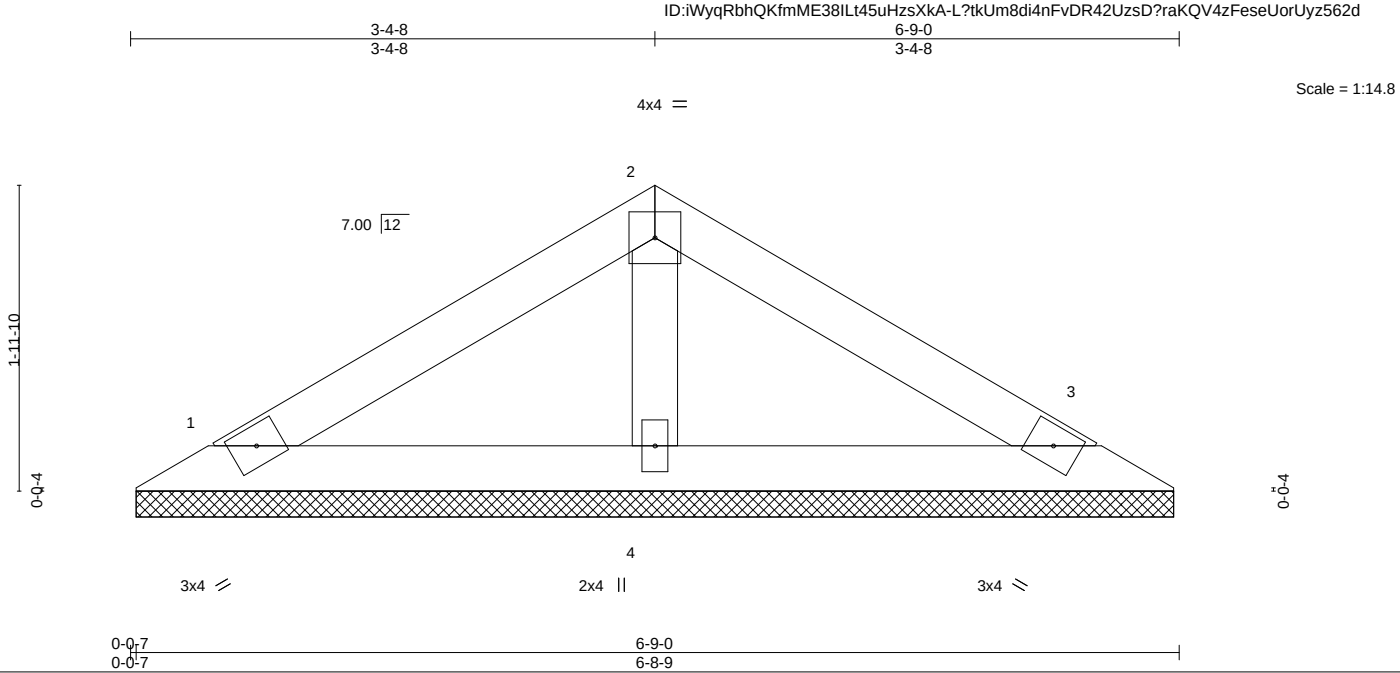


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(TL)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2012/TPI2007	Matrix-P							Weight: 22 lb	FT = 3%
BCDL	10.0											

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

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

REACTIONS. (size) 1=6-8-2, 3=6-8-2, 4=6-8-2
Max Horz 1=-35(LC 8)
Max Uplift 1=-12(LC 12), 3=-16(LC 13)
Max Grav 1=134(LC 2), 3=134(LC 2), 4=242(LC 2)

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

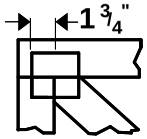
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-10; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Plates checked for a plus or minus 2 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

June 18,2020

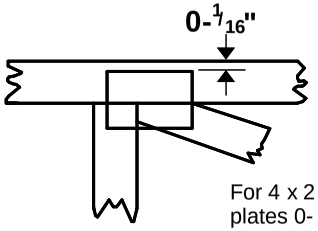
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

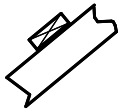
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

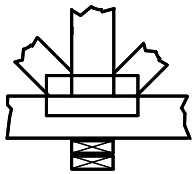
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

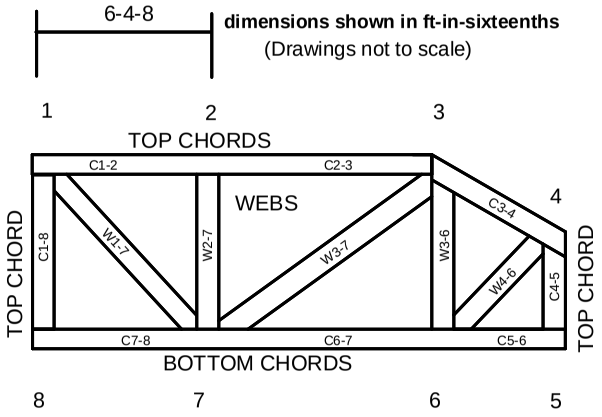


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

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.