RE: W2-52
SUMMIT HOMES

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

Site Information:

Customer: Project Name: W2-52
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: N/A Wind Speed: 115 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 53 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I44749900	C1	2/15/2021	21	I44749920	T3GE	2/15/2021
2	I44749901	C1GE	2/15/2021	22	I44749921	T4	2/15/2021
3	I44749902	CJ1	2/15/2021	23	I44749922	T4GE	2/15/2021
4	I44749903	CJ2	2/15/2021	24	I44749923	T5	2/15/2021
5	I44749904	GR1	2/15/2021	25	I44749924	T5A	2/15/2021
6	I44749905	H1	2/15/2021	26	I44749925	T5G	2/15/2021
7	I44749906	H2	2/15/2021	27	I44749926	T6	2/15/2021
8	I44749907	J1	2/15/2021	28	I44749927	T6A	2/15/2021
9	I44749908	J2	2/15/2021	29	I44749928	T7	2/15/2021
10	I44749909	J3	2/15/2021	30	I44749929	T8	2/15/2021
11	I44749910	J4	2/15/2021	31	I44749930	T9	2/15/2021
12	I44749911	J5	2/15/2021	32	I44749931	T10	2/15/2021
13	I44749912	T1	2/15/2021	33	I44749932	T10A	2/15/2021
14	I44749913	T1G	2/15/2021	34	I44749933	T10B	2/15/2021
15	I44749914	T1GE	2/15/2021	35	I44749934	T11	2/15/2021
16	I44749915	T2	2/15/2021	36	I44749935	T11GE	2/15/2021
17	I44749916	T2GE	2/15/2021	37	I44749936	V1	2/15/2021
18	I44749917	T3	2/15/2021	38	I44749937	V2	2/15/2021
19	I44749918	T3A	2/15/2021	39	I44749938	V3	2/15/2021
20	I44749919	T3B	2/15/2021	40	I44749939	V4	2/15/2021

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

Truss Design Engineer's Name: Sevier, Scott

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

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.

February 15, 2021

Sevier, Scott

RE: W2-52 - SUMMIT HOMES

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

Site Information:

Project Customer: Project Name: W2-52
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I44749940	V5	2/15/2021
42	I44749941	V6	2/15/2021
43	I44749942	V7	2/15/2021
44	I44749943	V8	2/15/2021
45	I44749944	V9	2/15/2021
46	I44749945	V10	2/15/2021
47	I44749946	V11	2/15/2021
48	I44749947	V12	2/15/2021
49	I44749948	V13	2/15/2021
50	I44749949	V14	2/15/2021
51	I44749950	V15	2/15/2021
52	I44749951	V16	2/15/2021
53	I44749952	V17	2/15/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	C1	GABLE	20	1	I44749900
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:16 2021 Page 1
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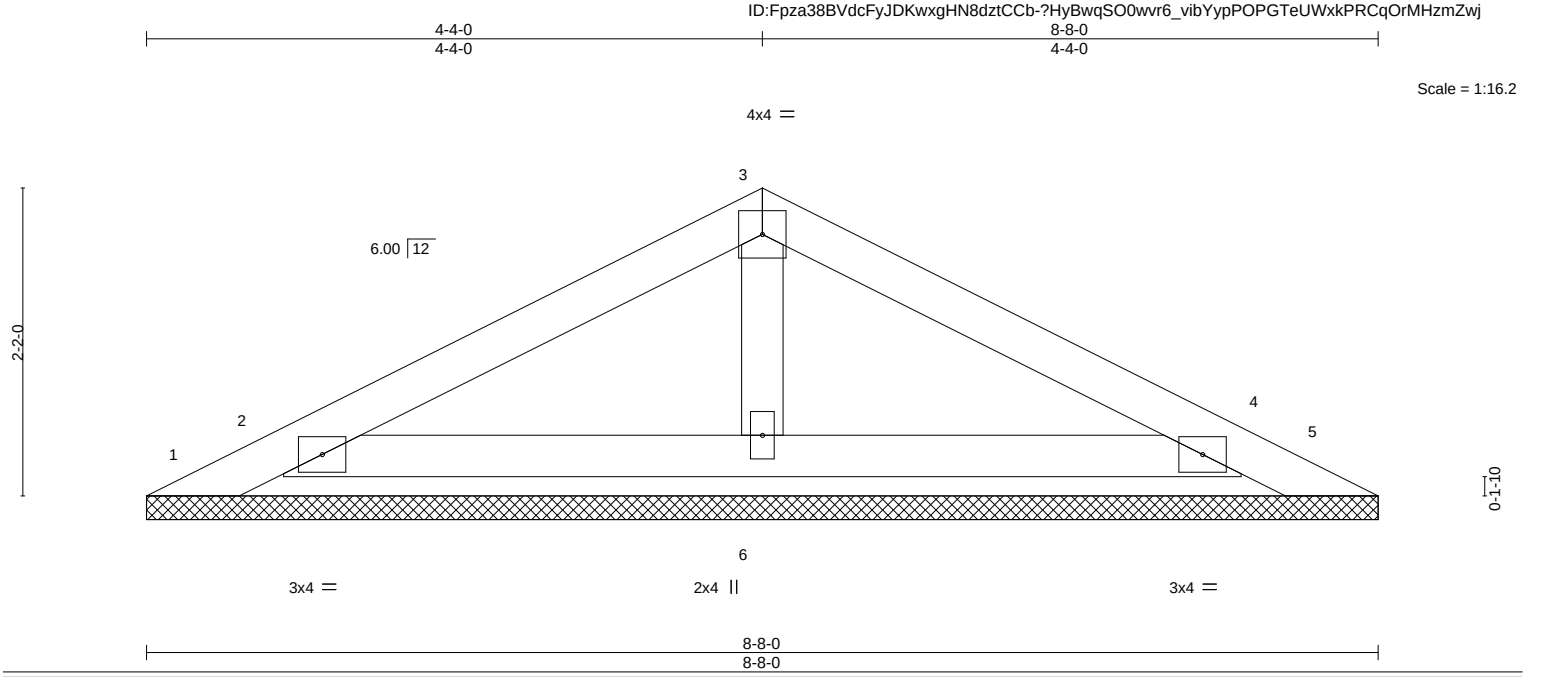

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 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 8-8-0.
(lb) - Max Horz 1=23(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-114(LC 16), 5=-114(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=363(LC 16), 4=363(LC 17)

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	C1GE	GABLE	2	1	I44749901
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:17 2021 Page 1
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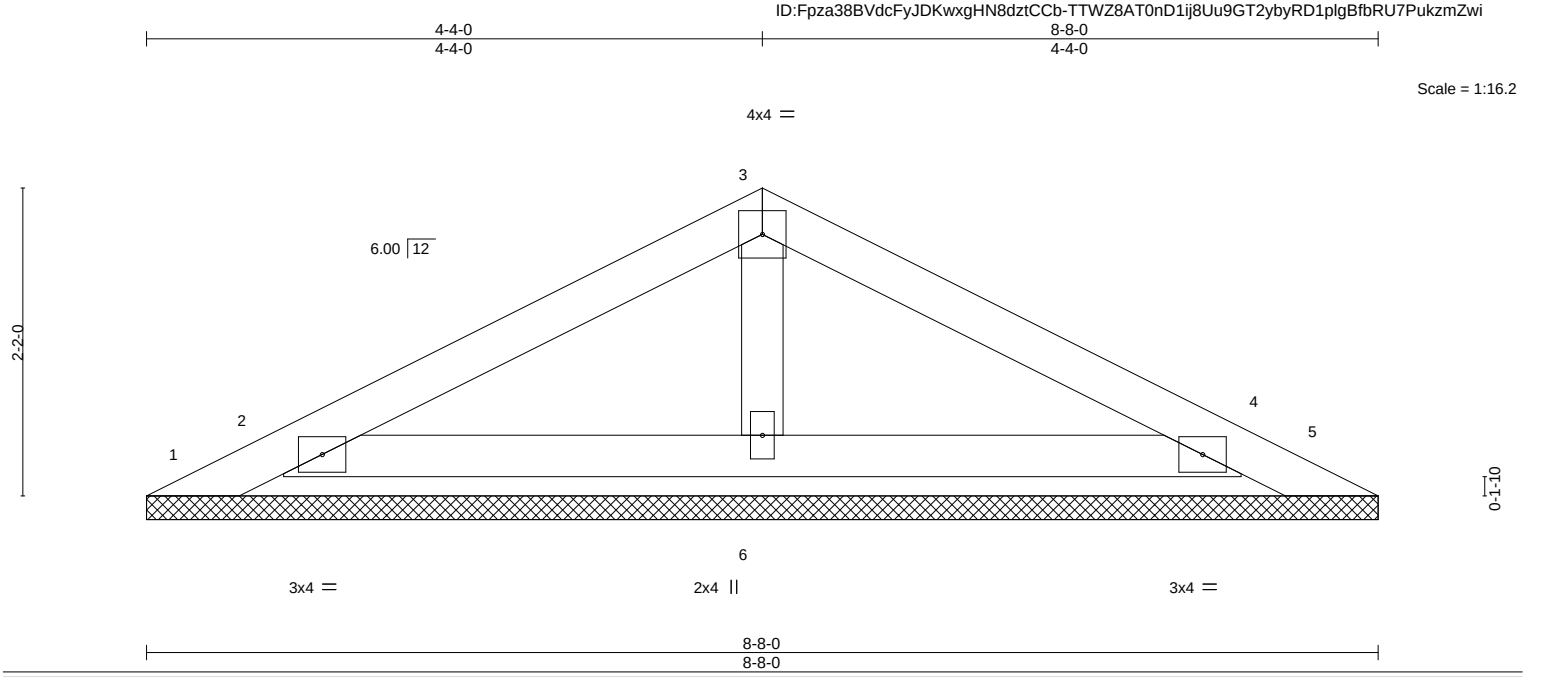

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 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 8-8-0.
(lb) - Max Horz 1=23(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-114(LC 16), 5=-114(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=363(LC 16), 4=363(LC 17)

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	CJ1	Diagonal Hip Girder	2	1	I44749902
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:18 2021 Page 1
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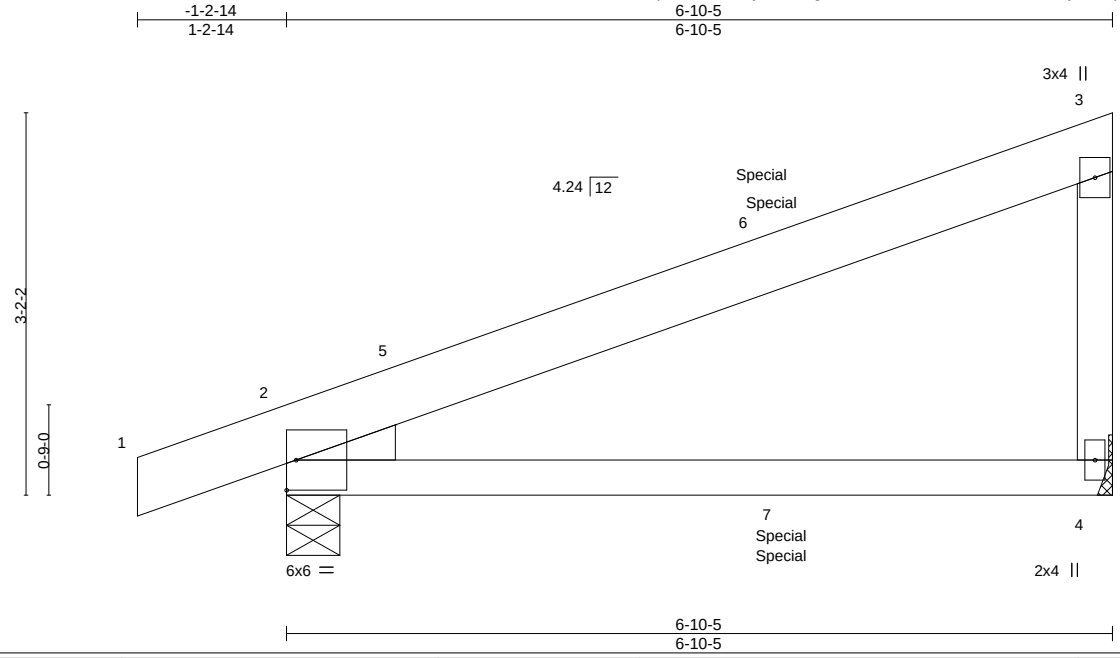

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.01	2-4	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.12	2-4	>676	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 35 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
WEDGE
Left: 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=0-5-5
Max Horz 2=94(LC 8)
Max Uplift 4=-27(LC 8), 2=-60(LC 7)
Max Grav 4=303(LC 16), 2=372(LC 16)

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

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

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 2-4=-20
Concentrated Loads (lb)
Vert: 6=-35(F=-18, B=-18) 7=-7(F=-3, B=-3)

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	CJ2	Diagonal Hip Girder	2	1	I44749903
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:19 2021 Page 1
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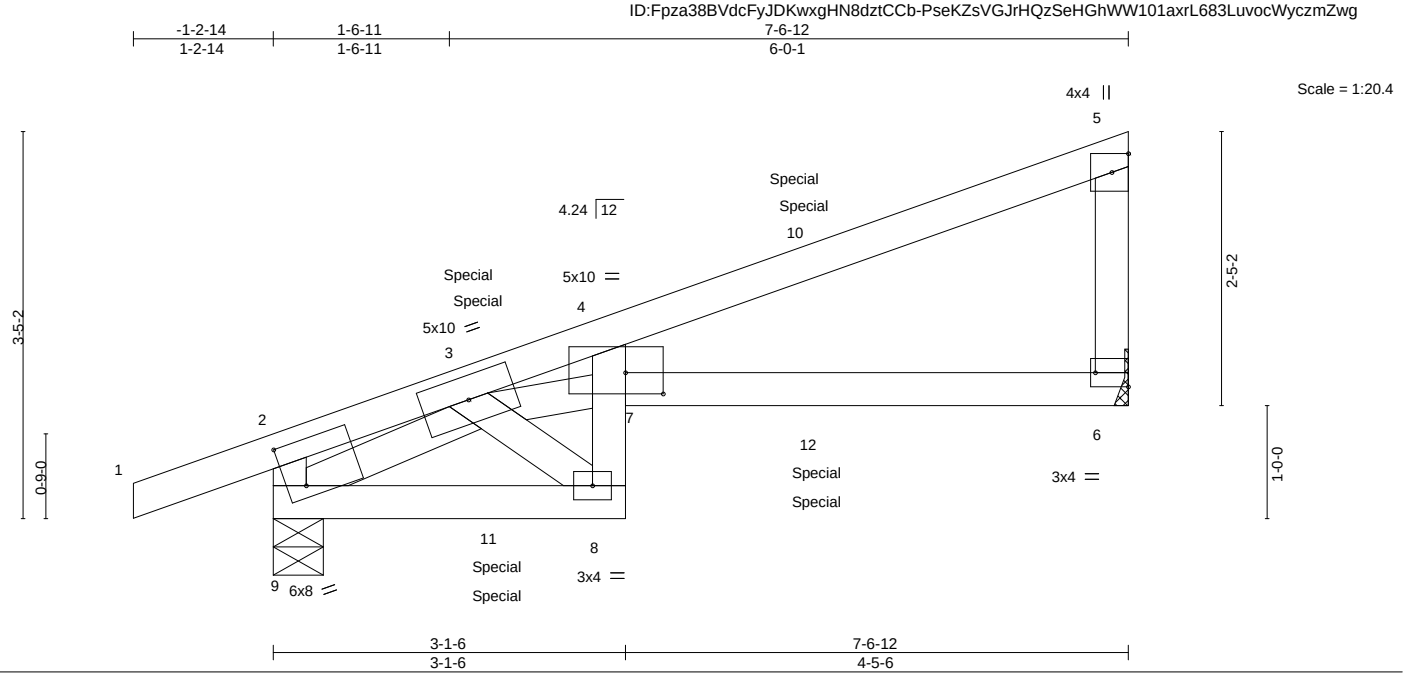

Plate Offsets (X,Y)-- [4:0-4-0,0-2-4], [6:Edge,0-1-8], [9:0-2-0,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.17	6-7	>512	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.28	6-7	>309	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.10	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 36 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 4-10-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-
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) 9, 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.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 17 lb up at 1-11-15, 49 lb down and 17 lb up at 1-11-15, and 68 lb down and 32 lb up at 4-9-14, and 68 lb down and 32 lb up at 4-9-14 on top chord, and 4 lb down and 9 lb up at 1-11-15, 4 lb down and 9 lb up at 1-11-15, and 27 lb down and 23 lb up at 4-9-14, and 27 lb down and 23 lb up at 4-9-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
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, 2-5=-51, 8-9=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 10=-32(F=-16, B=-16) 11=1(F=1, B=1) 12=-55(F=-27, B=-27)

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749904
W2-52	GR1	PIGGYBACK BASE GIRDE	1	2	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:01:25 2021 Page 1

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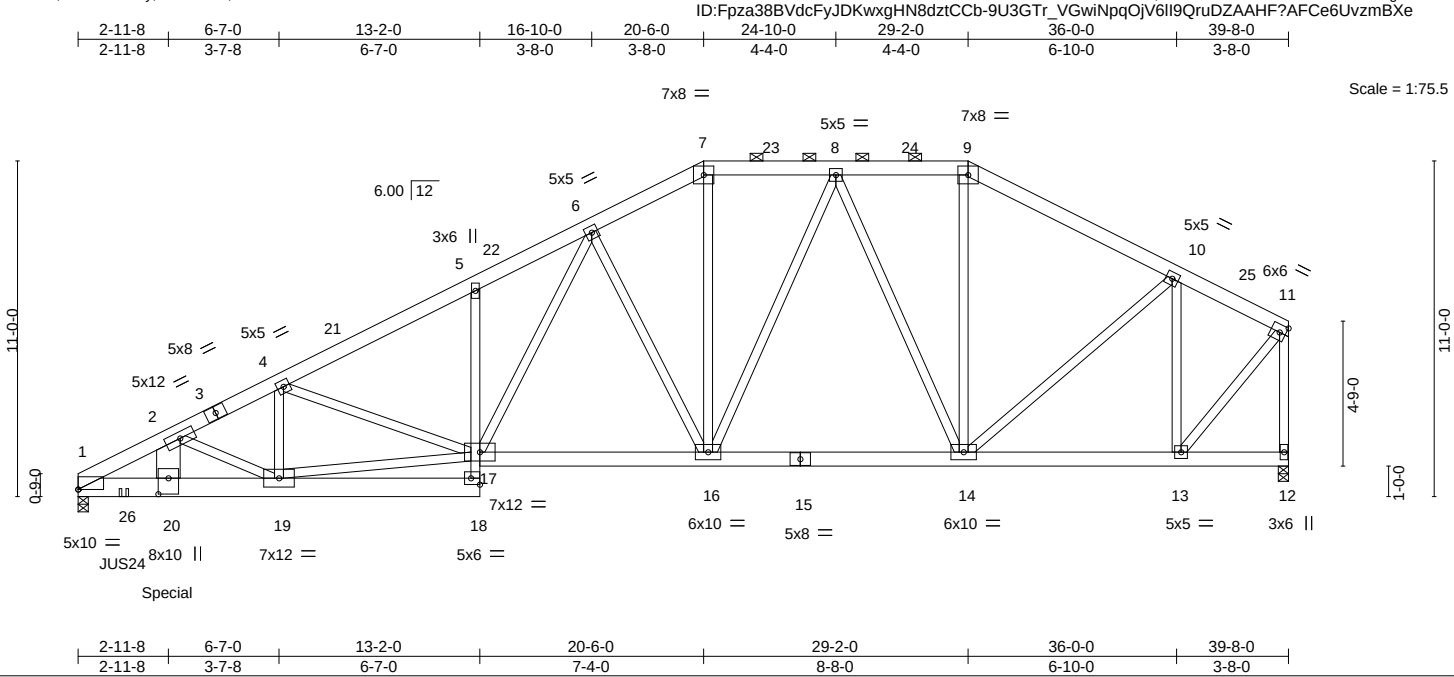


Plate Offsets (X,Y)-- [1:0-0-0,0-0-1], [18:Edge,0-2-8], [20:0-6-4,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.14	16-17	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.27	16-17	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.09	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 726 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9, 5-18. Except: 10-0-0 oc bracing: 17-18
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=9016/0-4-0 (req. 0-5-7), 12=2005/0-4-0
Max Horz 1=243(LC 8)
Max Grav 1=9237(LC 33), 12=2322(LC 33)

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

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

TOP CHORD	1-2=-15466/0, 2-3=-8756/0, 3-4=-8721/0, 4-21=-5798/0, 5-21=-5693/0, 5-22=-5801/0, 6-22=-5722/0, 6-7=-3234/0, 7-23=-2843/0, 8-23=-2843/0, 8-24=-1960/0, 9-24=-1961/0, 9-10=-2325/0, 10-25=-1346/0, 11-25=-1470/0, 5-17=-454/142, 11-12=-2290/0
BOT CHORD	1-26=0/13176, 20-26=0/13176, 19-20=0/13176, 18-19=0/1067, 16-17=0/3767, 15-16=0/2408, 14-15=0/2408, 13-14=0/1283
WEBS	2-20=0/6626, 2-19=-5934/0, 4-19=0/2144, 17-19=0/6890, 4-17=-3059/0, 6-17=0/3036, 6-16=-2119/0, 7-16=0/1154, 8-16=0/1083, 8-14=-1210/0, 9-14=0/629, 10-14=0/958, 10-13=-1467/0, 11-13=0/2020

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-2-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x10 - 4 rows staggered at 0-2-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) Plates checked for a plus or minus 3 degree rotation about its center.
9) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
10) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

13) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 1-6-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
14) Fill all nail holes where hanger is in contact with lumber.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7604 lb down at 2-11-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

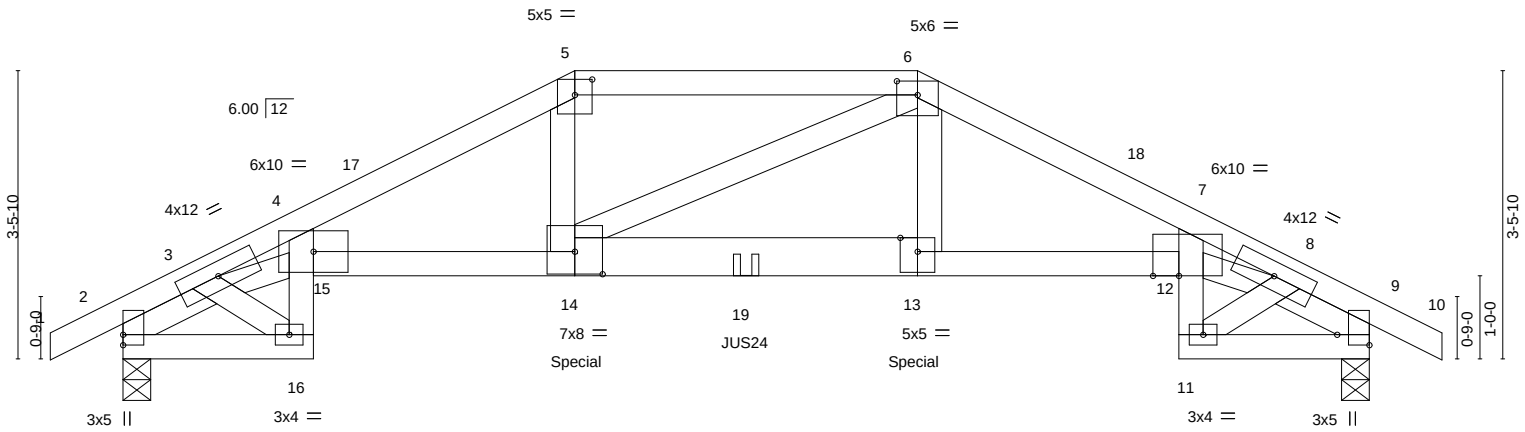
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-51, 5-7=-51, 7-9=-61, 9-11=-51, 1-18=-20, 12-17=-20
   Concentrated Loads (lb)
   Vert: 20=-7604(F) 26=-544(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	H1	Hip Girder	1	2	I44749905
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:26 2021 Page 1
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-iCZz1Faff_AQJWgdBf89pUqoogjCHApwWOpNiizmZwZ

-0-10-8	1-1-12	2-3-8	5-5-4	9-6-12	12-8-8	13-10-4	15-0-0	15-10-8
0-10-8	1-1-12	1-1-12	3-1-12	4-1-8	3-1-12	1-1-12	1-1-12	0-10-8

Scale = 1:27.7



2-3-8	5-5-4	9-6-12	12-8-8	15-0-0
2-3-8	3-1-12	4-1-8	3-1-12	2-3-8

Plate Offsets (X,Y)-- [5:0-2-8,0-2-4], [6:0-3-0,0-2-0], [7:0-3-12,0-0-0], [9:Edge,0-4-10], [14:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.14	14-15	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.23	14-15	>768	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.23	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 159 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 14-15,12-13: 2x4 SP No.1, 13-14: 2x6 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -t 1-2-2, Right 2x4 SP No.2 -t 1-2-2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-10-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-4-0, 9=0-4-0
Max Horz 2=36(LC 54)
Max Uplift 2=-128(LC 11), 9=-128(LC 12)
Max Grav 2=1453(LC 34), 9=1453(LC 34)

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

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

NOTES-

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: 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.
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) 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 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 (jt=lb) 2=128, 9=128.
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.

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STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 7-6-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
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) 576 lb down and 122 lb up at 5-5-4, and 576 lb down and 122 lb up at 9-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

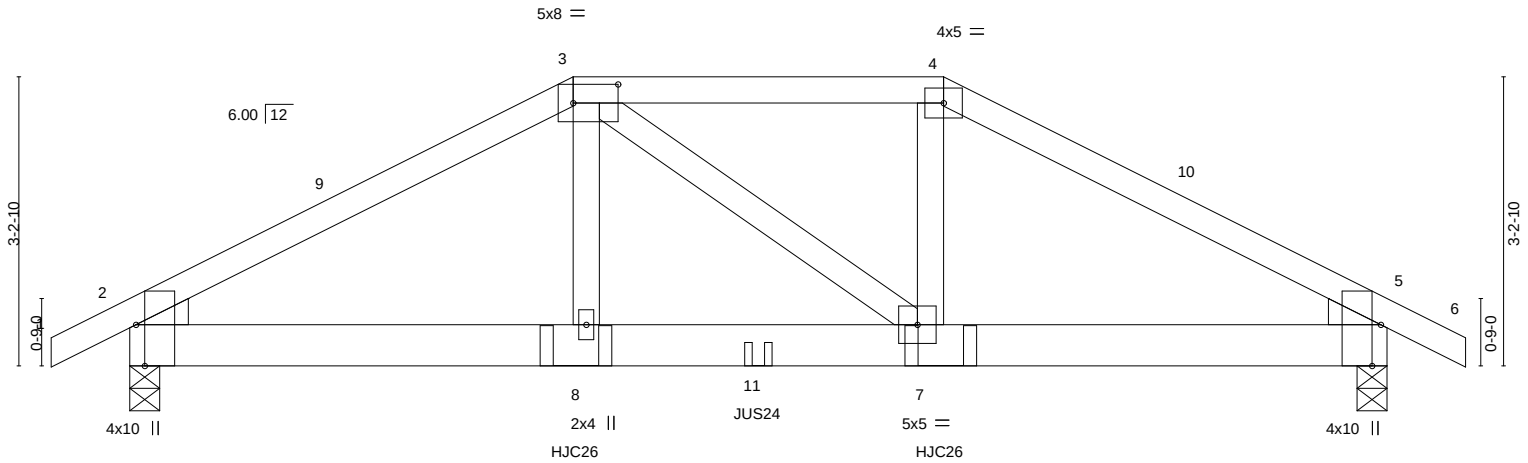
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-51, 5-6=-61, 6-10=-51, 2-16=-20, 12-15=-20, 9-11=-20
   Concentrated Loads (lb)
   Vert: 14=-576(F) 13=-576(F) 19=-231(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	H2	Hip Girder	1	2	I44749906
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:27 2021 Page 1
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-AO7LEbbHQIIHwgFpkMfOMiM5c3CQ0h23k2YxE9zmZwY

-0-10-8 | 4-11-4 | 9-0-12 | 14-0-0 | 14-10-8
0-10-8 | 4-11-4 | 4-1-8 | 4-11-4 | 0-10-8

Scale = 1:25.7



4-11-4 | 9-0-12 | 14-0-0
4-11-4 | 4-1-8 | 4-11-4

Plate Offsets (X,Y)-- [2:0-5-8,Edge], [3:0-6-0,0-2-8], [5:0-5-8,Edge]

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	0.40	Vert(LL)	-0.02	7-8	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	7-8	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 148 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 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) 2=0-4-0, 5=0-4-0
Max Horz 2=-33(LC 9)
Max Uplift 2=-101(LC 11), 5=-101(LC 12)
Max Grav 2=1288(LC 34), 5=1288(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1942/161, 3-4=-1623/167, 4-5=-1942/161
BOT CHORD 2-8=-130/1590, 7-8=-132/1625, 5-7=-111/1590
WEBS 3-8=-37/680, 4-7=-49/712

NOTES-
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 7-16; 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) 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 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 (jt=lb) 2=101, 5=101.
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 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.

Continued on page 2

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

LOAD CASE(S) Standard

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	J1	Jack-Closed	3	1	I44749907
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:28 2021 Page 1
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ebgjSwcwBcQ8Yqq0I4AduvvH1TZ4l9fCziIUnbzmZwX

-0-10-8 4-11-4
0-10-8 4-11-4

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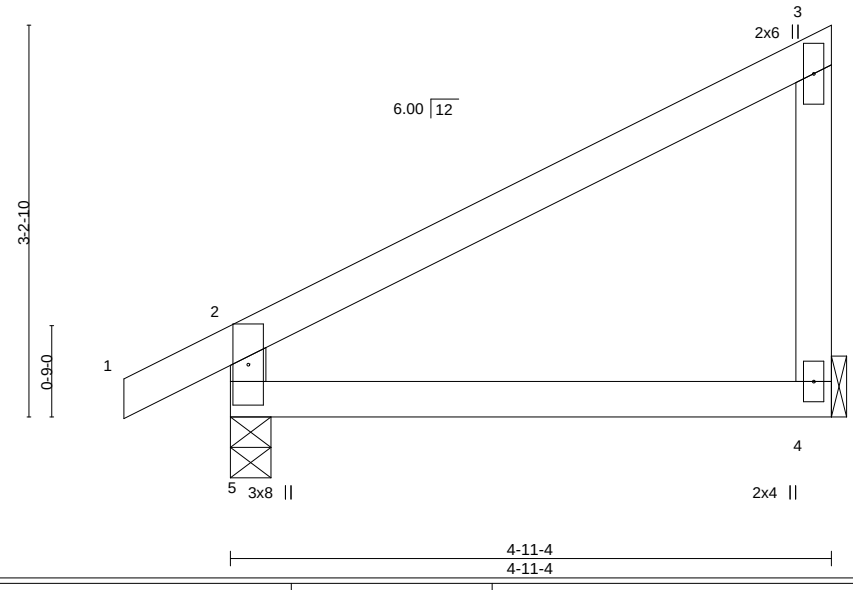

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.01	4-5	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	4-5	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 22 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) 5=0-4-0, 4=Mechanical
Max Horz 5=99(LC 10)
Max Uplift 5=-11(LC 11), 4=-20(LC 8)
Max Grav 5=289(LC 16), 4=226(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-258/45

NOTES-
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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	J2	Jack-Open	4	1	I44749908
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:29 2021 Page 1
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-6nE5fGcYyvY?A_OCsnhsR7SWdtx_UcvMCM11J1zmZwW

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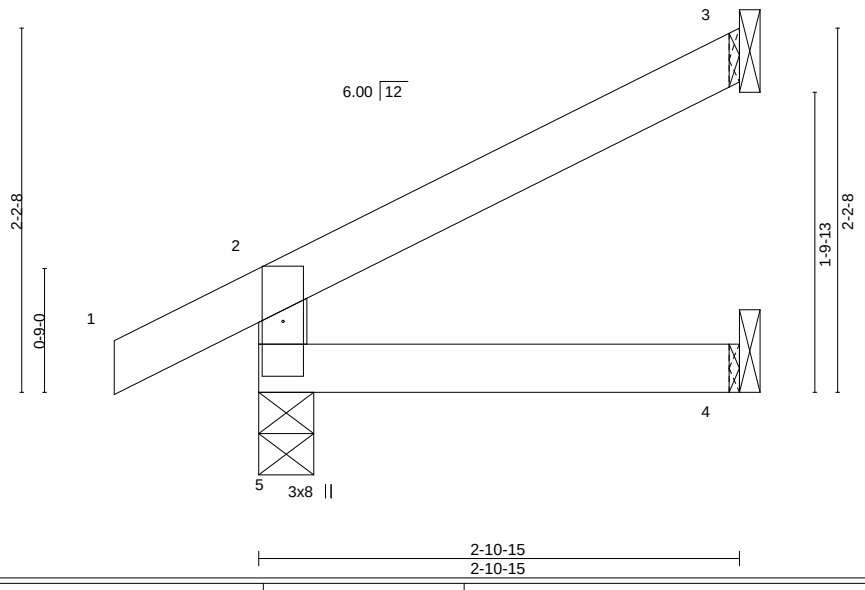

2-10-15
2-10-15

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	4-5	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>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							Weight: 11 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 2-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	J3	Jack-Closed	3	1	I44749909
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:29 2021 Page 1
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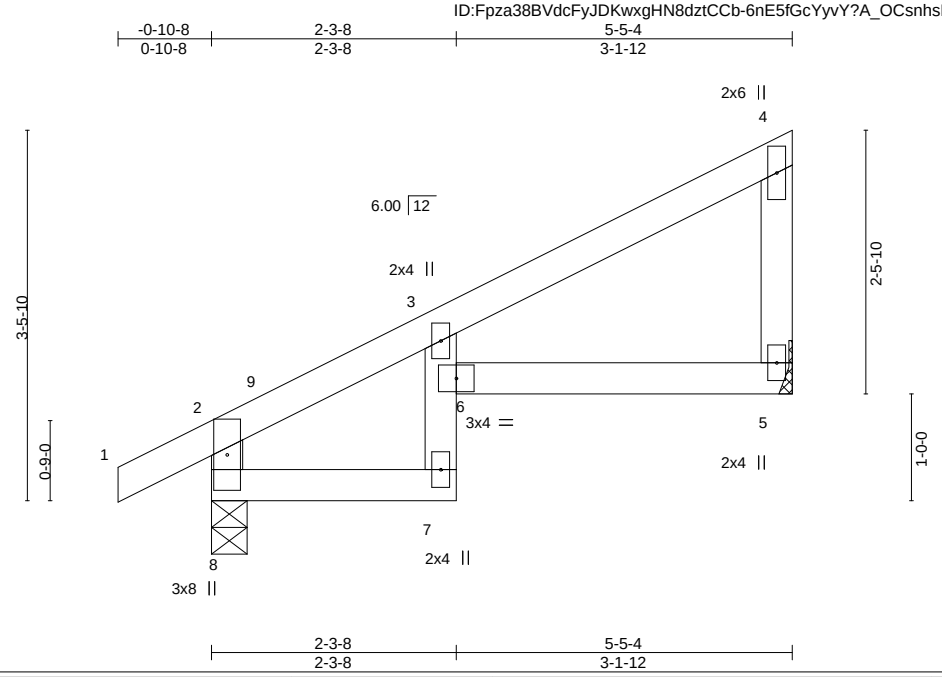

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.05	6	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.08	6	>787	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 24 lb	FT = 3%
BCDL	10.0											

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

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-278/28

NOTES-
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) 8, 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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	J4	Jack-Open	4	1	I44749910
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:30 2021 Page 1
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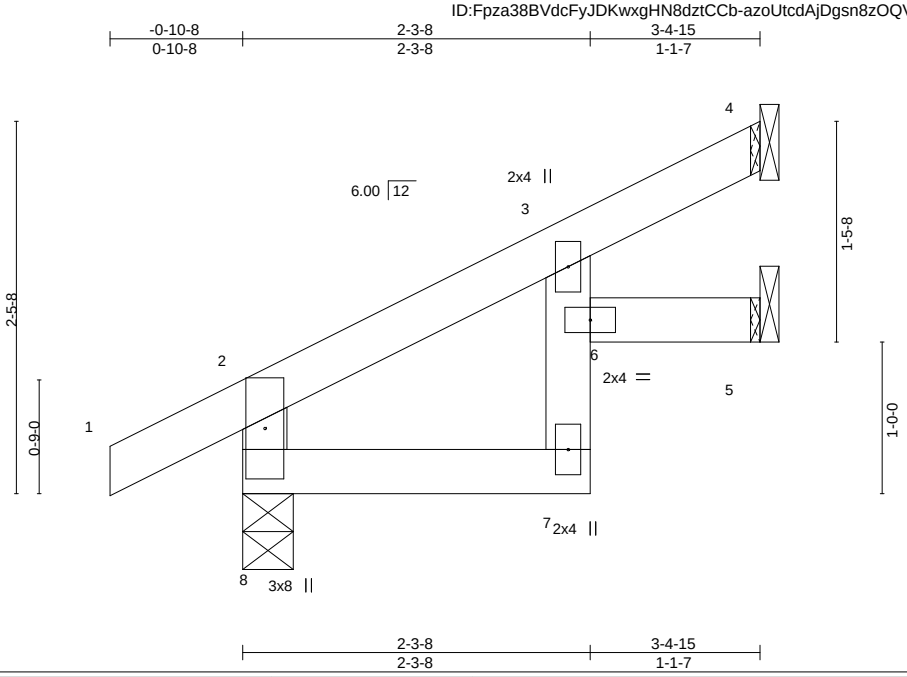

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	6	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	7	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 15 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 3-4-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	J5	Jack-Open	4	1	I44749911
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:31 2021 Page 1
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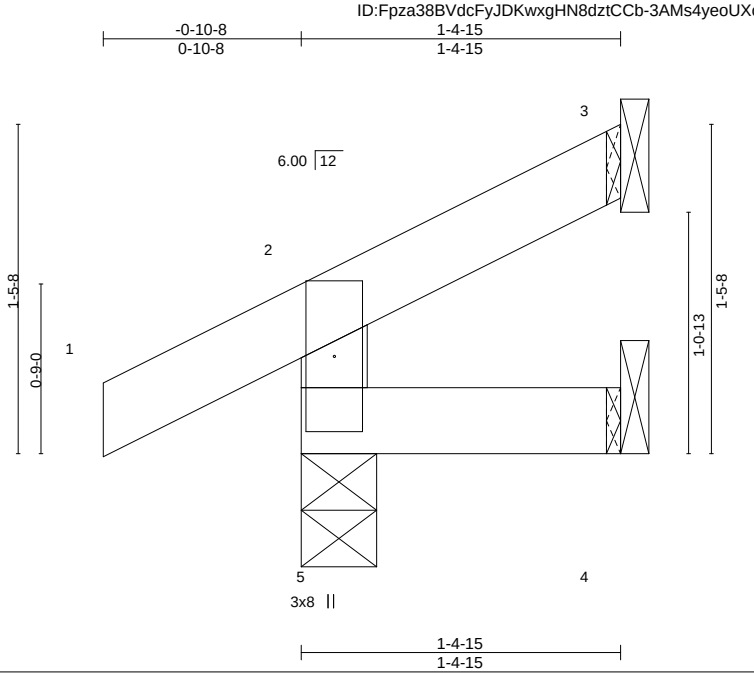

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	5	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	5	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 7 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 1-4-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T1	Common	4	1	I44749912
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:31 2021 Page 1
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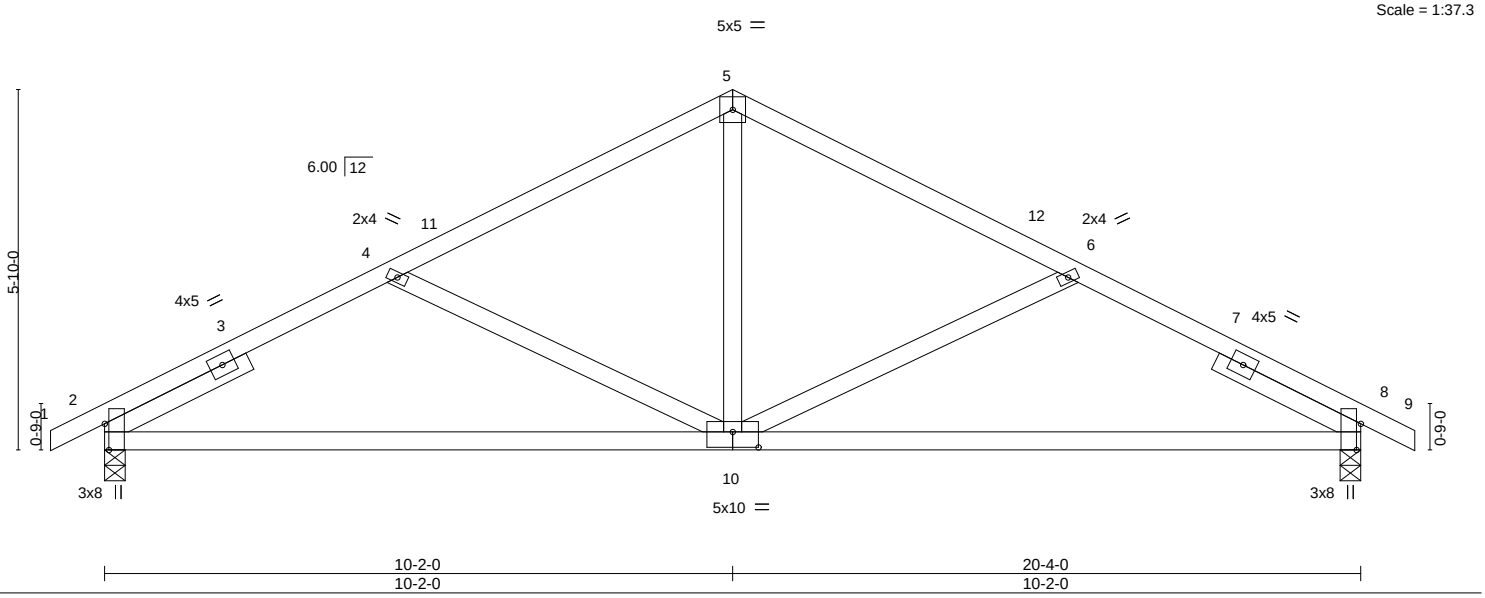
0-10-8 4-8-14 10-2-0 15-7-2 20-4-0 21-2-8
0-10-8 4-8-14 5-5-2 5-5-2 4-8-14 0-10-8

Scale = 1:37.3



10-2-0 20-4-0
10-2-0 10-2-0

Plate Offsets (X,Y)-- [2:0-5-1,Edge], [8:0-5-1,Edge], [10:0-5-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.04	10	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.18	2-10	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 101 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 -t 2-7-6, Right 2x4 SP No.2 -t 2-7-6

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-15 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=63(LC 8)
Max Uplift 2=-20(LC 11), 8=-20(LC 12)
Max Grav 2=866(LC 2), 8=866(LC 2)

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

TOP CHORD	2-4=-1272/66, 4-5=-962/32, 5-6=-962/32, 6-8=-1272/66
BOT CHORD	2-10=-56/1055, 8-10=0/1055
WEBS	5-10=0/458, 6-10=-328/127, 4-10=-328/127

NOTES-

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T1G	Roof Special Girder	1	2	I44749913
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:43 2021 Page 1
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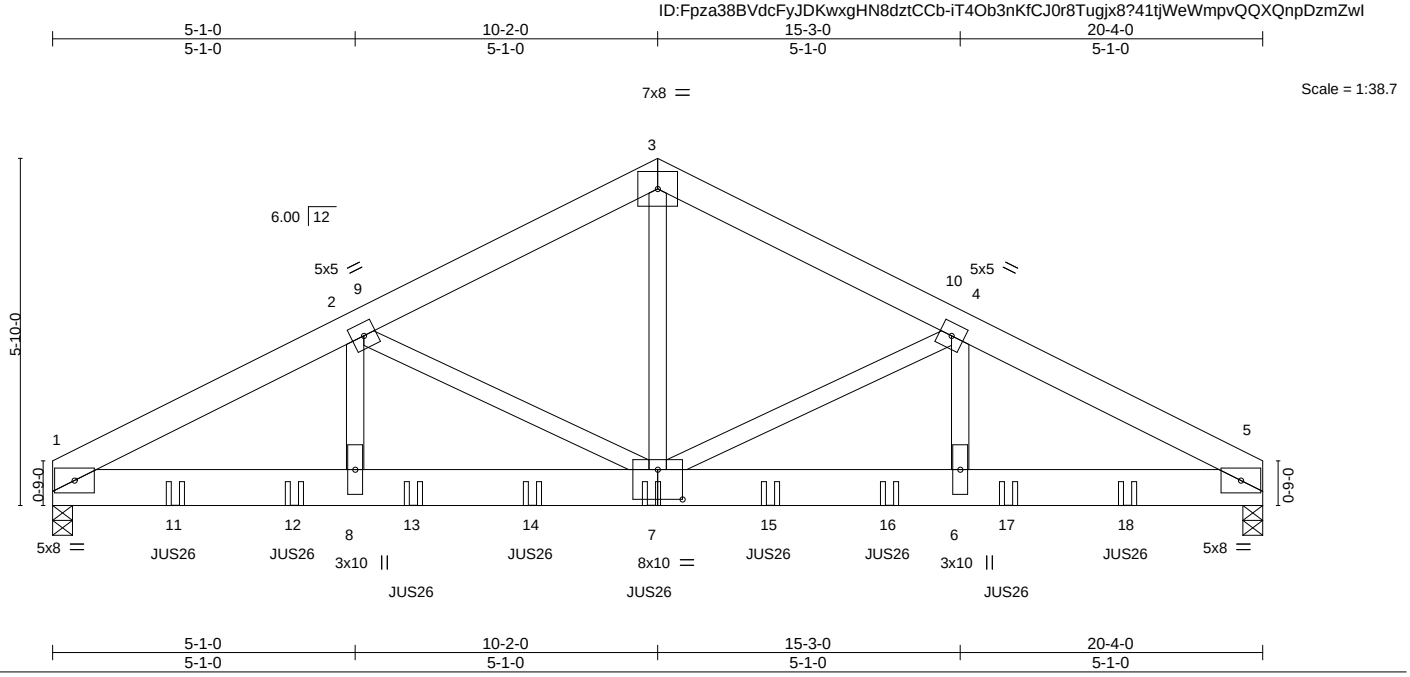

Plate Offsets (X,Y)-- [7:0-5-0,0-6-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.06	6-7	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.13	6-7	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 292 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 5-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-
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 0-9-0 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 7-16; 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=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
6) Unbalanced snow loads have been considered for this design.
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) 1, 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.
10) Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 18-0-12 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

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

February 11,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 7=-738(B) 11=-738(B) 12=-738(B) 13=-738(B) 14=-738(B) 15=-738(B) 16=-738(B) 17=-738(B) 18=-738(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T1GE	Common Supported Gable	1	1	I44749914
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:44 2021 Page 1
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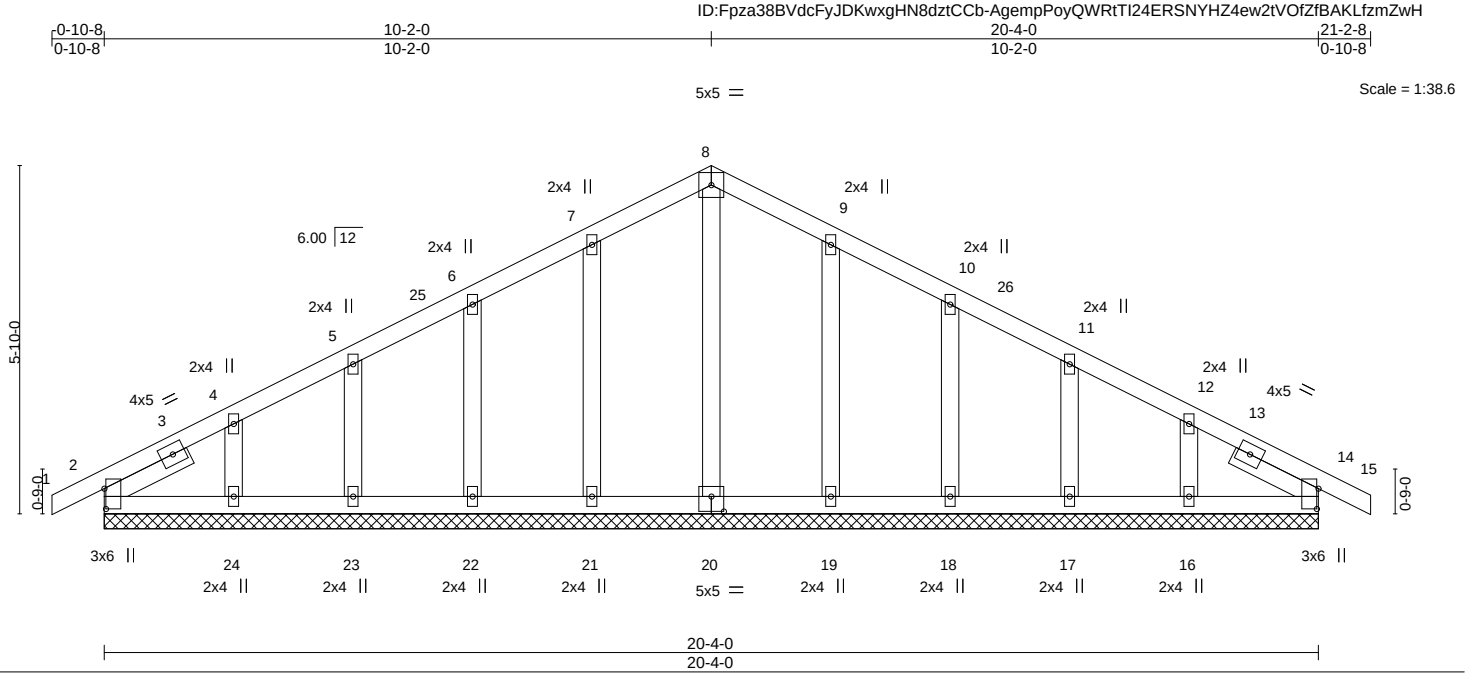

Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [14:0-4-1,0-0-5], [20:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	14	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 113 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 -t 1-7-3, Right 2x4 SP No.2 -t 1-7-3

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

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

NOTES-

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T2	Roof Special	10	1	I44749915
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:45 2021 Page 1
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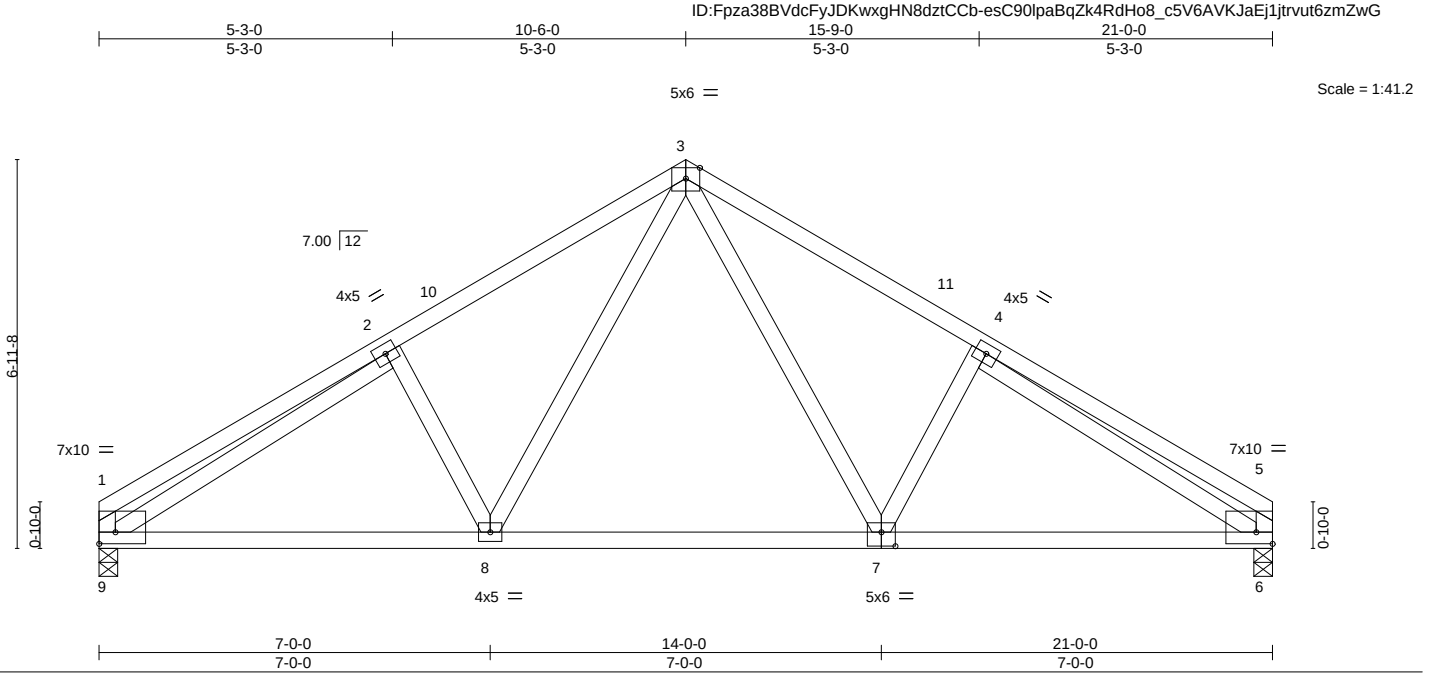

Plate Offsets (X,Y)-- [1:Edge,0-2-8], [5:Edge,0-2-8], [7:0-3-0,0-3-0]

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T2GE	Roof Special Supported Gable	1	1	I44749916
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:46 2021 Page 1
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10-6-0 10-6-0 0-10-8

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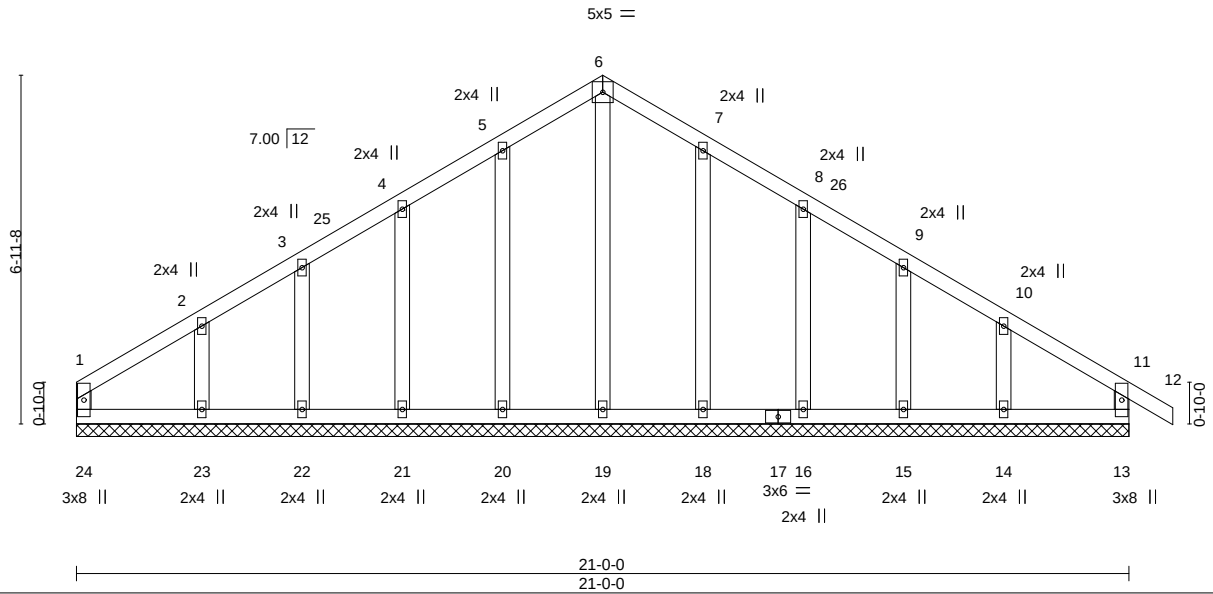

21-0-0
21-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	12	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	12	n/r	90		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 122 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 21-0-0.
(lb) - Max Horz 24=-153(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 24, 13, 20, 21, 22, 23, 18, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 24, 13, 19, 20, 21, 22, 23, 18, 16, 15, 14

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

NOTES-

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749917
W2-52	T3	PIGGYBACK BASE	3	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek — 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:02:17 2021 Page 1

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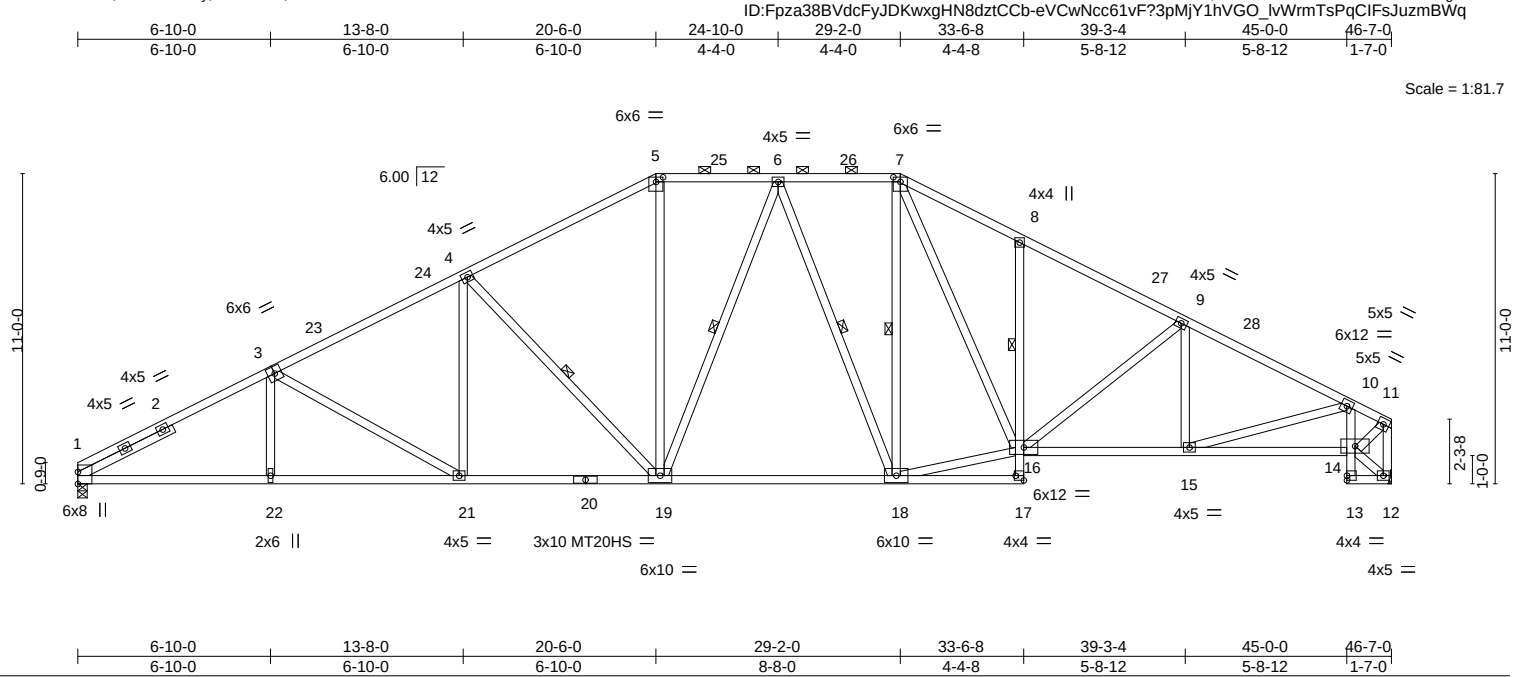

Plate Offsets (X,Y)-- [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [17:Edge,0-2-0]

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

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 3-5: 2x4 SP No.1, 1-3: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 1-20: 2x4 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -< 3-9-9

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-9-4 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 8-16
WEBS	1 Row at midpt 4-19, 6-19, 6-18, 7-18

REACTIONS. (lb/size) 1=1684/0-4-0, 12=1690/Mechanical
Max Horz 1=166(LC 10)
Max Uplift 1=-13(LC 11)
Max Grav 1=1958(LC 33), 12=2005(LC 33)

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

TOP CHORD	1-2=-3583/13, 2-3=-3497/33, 3-23=-3173/21, 23-24=-3107/35, 4-24=-2980/53, 4-5=-2543/67, 5-25=-2145/87, 6-25=-2145/87, 6-26=-2030/70, 7-26=-2030/70, 7-8=-2936/109, 8-27=-2850/30, 9-27=-2964/2, 9-28=-3005/9, 10-28=-3143/0, 10-11=-1655/4, 11-12=-1945/0
BOT CHORD	1-22=-71/3060, 21-22=-72/3057, 20-21=0/2779, 19-20=0/2779, 18-19=0/2105, 8-16=-473/126, 15-16=0/2755, 14-15=-29/1564, 10-14=-1183/58
WEBS	3-21=-385/94, 4-21=0/330, 4-19=-930/130, 5-19=0/727, 6-18=-429/95, 16-18=0/2002, 7-16=-105/1263, 9-16=-263/85, 10-15=0/1240, 11-14=-19/1896

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749918
W2-52	T3A	PIGGYBACK BASE	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:02:42 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-PIDNdAvo8aPSZfmXWndMnfX0cbNmq82WyhoghyzmBWR

6-10-0	13-8-0	20-6-0	24-10-0	29-2-0	33-0-0	36-10-0	39-3-4	45-0-0	46-7-0
6-10-0	6-10-0	6-10-0	4-4-0	4-4-0	3-10-0	3-10-0	2-5-4	5-8-12	1-7-0

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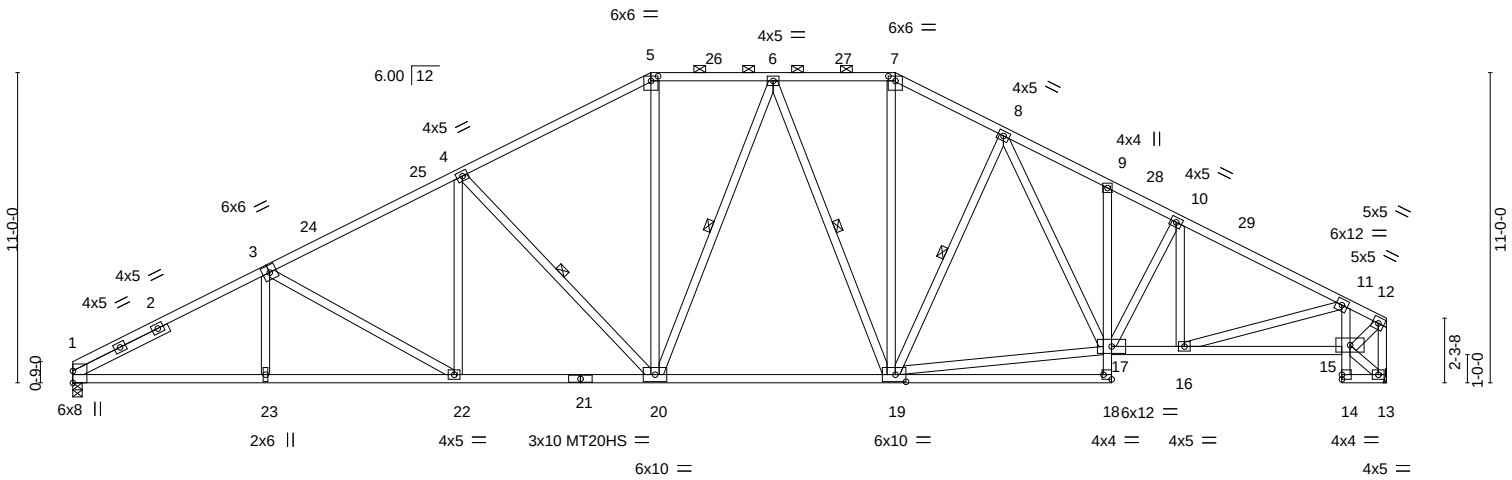

6-10-0	13-8-0	20-6-0	29-2-0	36-10-0	39-3-4	45-0-0	46-7-0
6-10-0	6-10-0	6-10-0	8-8-0	7-8-0	2-5-4	5-8-12	1-7-0

Plate Offsets (X,Y)-- [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [18:Edge,0-2-0], [19:0-4-8,0-3-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.21	20	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.45	19-20	>999	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.21	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 337 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 3-5: 2x4 SP No.1, 1-3: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 1-21: 2x4 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -< 3-9-9

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-9-4 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-20, 6-20, 6-19, 8-19

REACTIONS. (lb/size) 1=1684/0-4-0, 13=1690/Mechanical
Max Horz 1=166(LC 10)
Max Uplift 1=-13(LC 11)
Max Grav 1=1958(LC 33), 13=2005(LC 33)

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

TOP CHORD	1-2=-3583/13, 2-3=-3497/33, 3-24=-3173/21, 24-25=-3107/35, 4-25=-2980/53, 4-5=-2542/67, 5-26=-2145/87, 6-26=-2144/88, 6-27=-2031/69, 7-27=-2031/69, 7-8=-2350/60, 8-9=-3028/82, 9-28=-2955/40, 10-28=-3046/27, 10-29=-3032/9, 11-29=-3127/0, 11-12=-1657/4, 12-13=-1942/0
BOT CHORD	1-23=-71/3059, 22-23=-73/3057, 21-22=0/2779, 20-21=0/2779, 19-20=0/2105, 16-17=0/2733, 15-16=-32/1590, 11-15=-1196/64
WEBS	3-22=-385/94, 4-22=0/332, 4-20=-931/129, 5-20=0/725, 6-19=-425/98, 7-19=0/791, 8-19=-784/130, 17-19=0/2146, 8-17=-62/723, 11-16=0/1190, 12-15=-22/1917

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749919
W2-52	T3B	PIGGYBACK BASE	2	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:03:01 2021 Page 1

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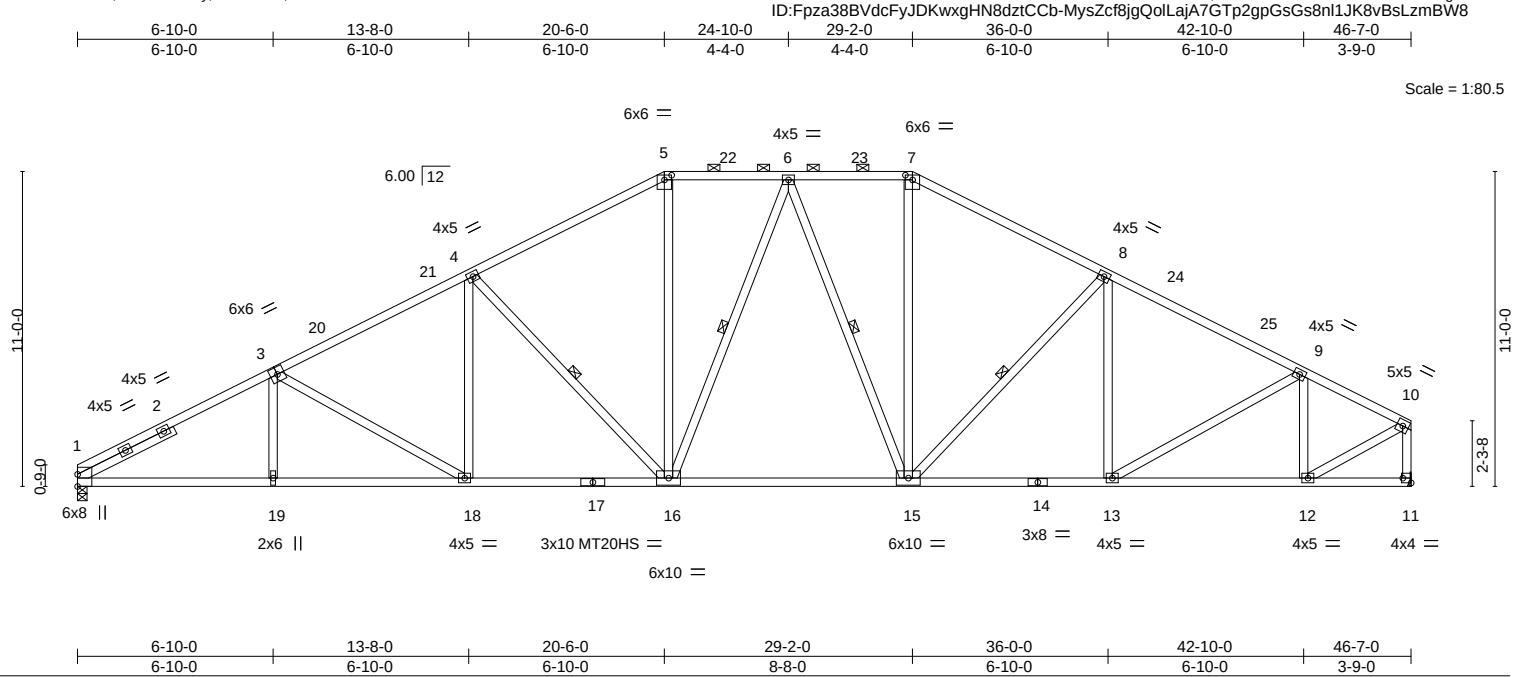

Plate Offsets (X,Y)-- [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [11:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.19	18	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.42	15-16	>999	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.16	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 307 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.1 *Except* 5-7: 2x4 SP No.2, 1-3: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 1-17: 2x4 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -< 3-9-9

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-9-4 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-16, 6-16, 6-15, 8-15

REACTIONS. (lb/size) 1=1684/0-4-0, 11=1690/Mechanical
Max Horz 1=166(LC 8)
Max Uplift 1=-13(LC 11)
Max Grav 1=1958(LC 33), 11=2005(LC 33)

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

TOP CHORD	1-2=-3583/13, 2-3=-3497/33, 3-20=-3173/21, 20-21=-3107/35, 4-21=-2980/53, 4-5=-2543/67, 5-22=-2145/87, 6-22=-2145/87, 6-23=-2038/72, 7-23=-2038/72, 7-8=-2421/50, 8-24=-2511/31, 24-25=-2629/11, 9-25=-2721/4, 9-10=-2048/7, 10-11=-1978/6
BOT CHORD	1-19=-71/3060, 18-19=-72/3057, 17-18=0/2779, 16-17=0/2779, 15-16=0/2103, 14-15=0/2351, 13-14=0/2351, 12-13=0/1814
WEBS	3-18=-385/94, 4-18=0/331, 4-16=-930/130, 5-16=0/721, 6-15=-423/97, 7-15=0/662, 8-15=-466/126, 9-13=0/617, 9-12=-917/64, 10-12=0/2074

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749920
W2-52	T3GE	GABLE	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:03:30 2021 Page 1

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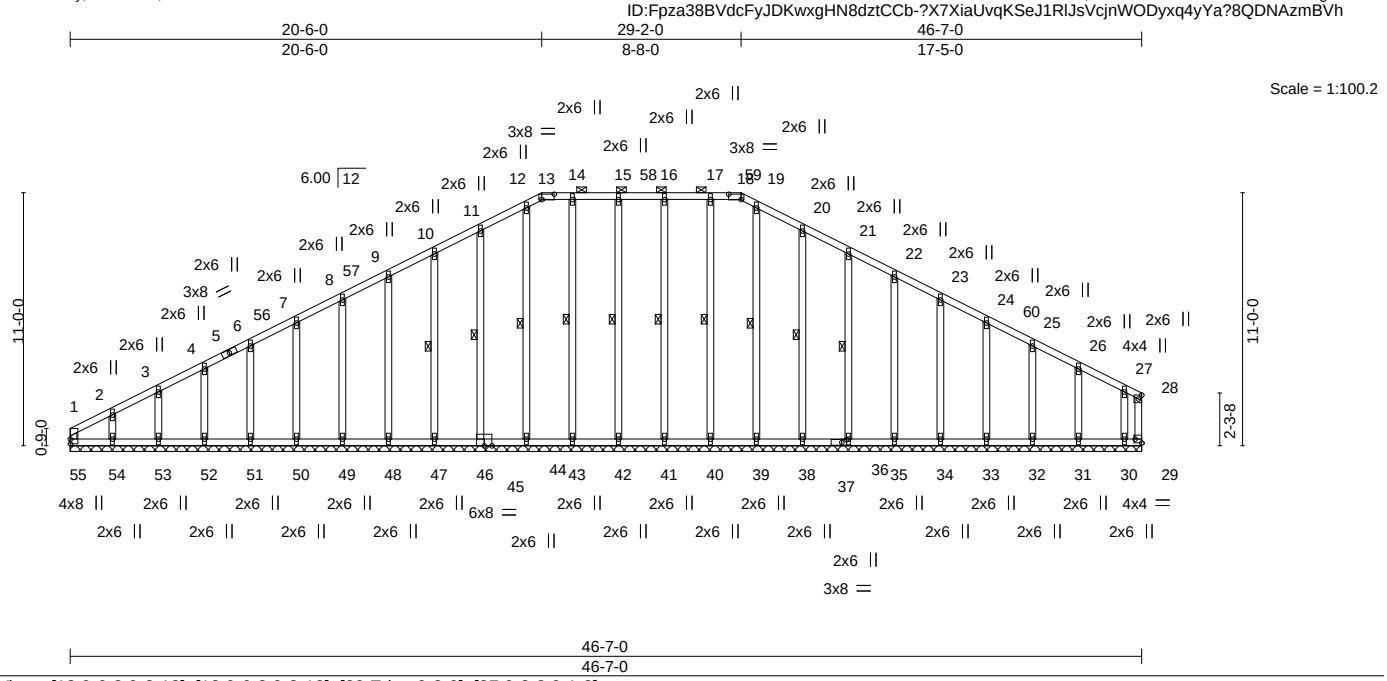

Plate Offsets (X,Y)-- [13:0-6-8,0-2-12], [18:0-6-8,0-2-12], [29:Edge,0-2-0], [37:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	29	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 376 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-18.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 10-47, 11-46, 12-44, 14-43, 15-42, 16-41, 17-40, 19-39, 20-38, 21-36

REACTIONS. All bearings 46-7-0.

(lb) - Max Horz 55=164(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 42, 41, 38, 36, 35, 34, 33, 32, 31 except 30=-109(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 44, 43, 42, 41, 40, 39, 38, 36, 35, 34, 33, 32, 31, 30

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 42, 41, 38, 36, 35, 34, 33, 32, 31 except (jt=lb) 30=109.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T4	Common	2	1	I44749921
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:56 2021 Page 1
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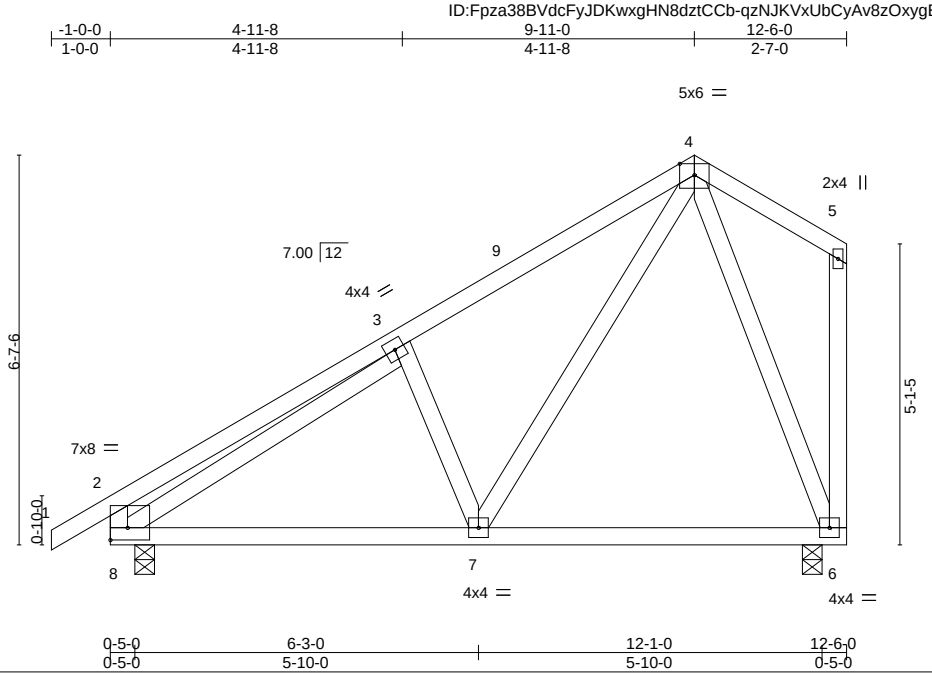

Plate Offsets (X,Y)-- [2:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.01	7	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	7-8	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 83 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) 6=0-4-0, 8=0-4-0
Max Horz 8=196(LC 8)
Max Uplift 6=-23(LC 11), 8=-18(LC 11)
Max Grav 6=485(LC 2), 8=560(LC 2)

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

NOTES-
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) 6, 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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T4GE	Common Structural Gable	1	1	I44749922
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:57 2021 Page 1
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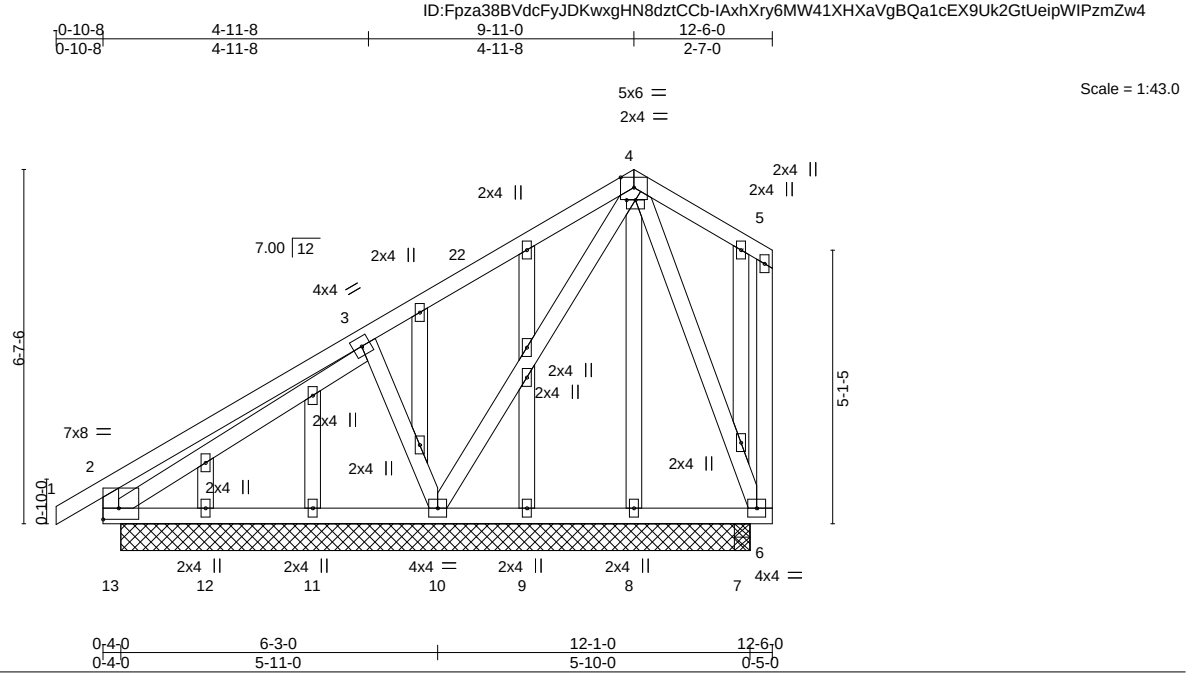

Plate Offsets (X,Y)-- [2:Edge,0-2-8], [4:0-2-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.00	8	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	11	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 113 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

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

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

NOTES-

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T5	Roof Special	2	1	I44749923
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:16:58 2021 Page 1
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-mMU3lBzk7pCu8R6n3Njf6E8PKZk1nfrdtMZ4rszmZw3

-0-10-8	1-1-12	2-3-8	4-10-12	7-6-0	10-1-4	12-8-8	13-10-4	15-0-0	15-10-8
0-10-8	1-1-12	1-1-12	2-7-4	2-7-4	2-7-4	2-7-4	1-1-12	1-1-12	0-10-8

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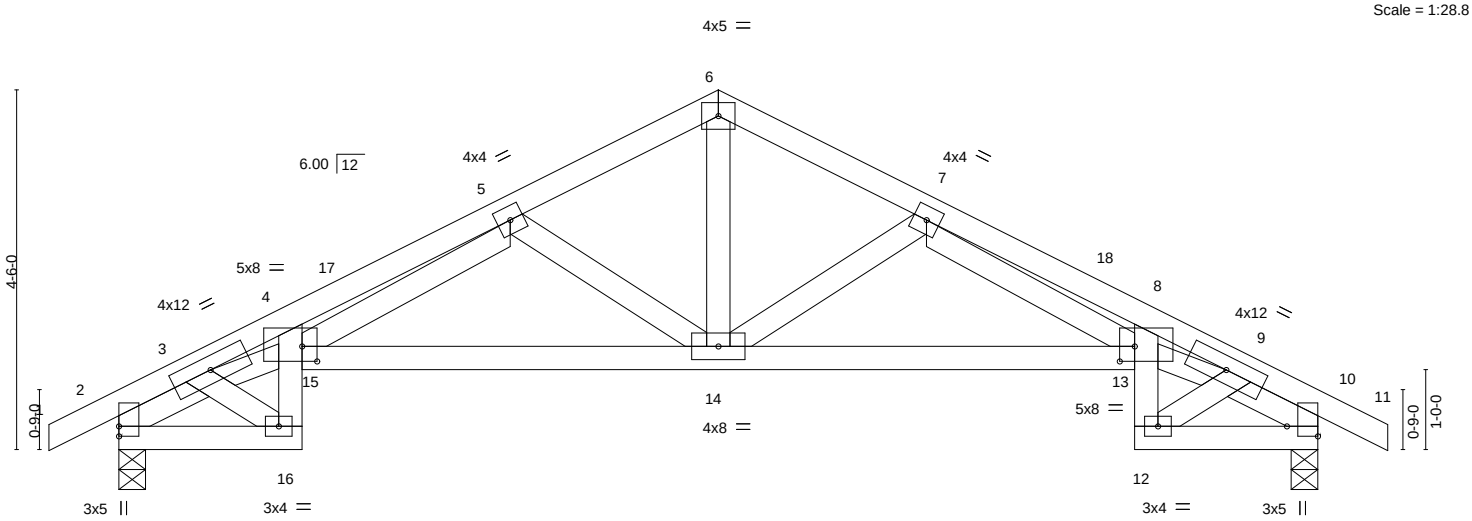

2-3-8	7-6-0	12-8-8	15-0-0
2-3-8	5-2-8	5-2-8	2-3-8

Plate Offsets (X,Y)-- [4:0-2-4,0-2-4], [10:Edge,0-4-10], [13:0-2-4,0-2-4]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.07	14	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.15	14-15	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.14	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 86 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 -t 1-2-2, Right 2x4 SP No.2 -t 1-2-2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-7-13 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=48(LC 8)
Max Uplift 2=-17(LC 11), 10=-17(LC 12)
Max Grav 2=653(LC 2), 10=652(LC 2)

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

TOP CHORD	2-3=-790/20, 3-4=-1773/60, 4-5=-2064/106, 5-6=-852/9, 6-7=-852/15, 7-8=-2064/28, 8-9=-1773/0, 9-10=-790/20
BOT CHORD	2-16=-41/538, 15-16=-10/269, 14-15=-17/1066, 13-14=0/1066, 12-13=0/269, 10-12=0/538
WEBS	6-14=0/618, 7-14=-482/77, 7-13=-10/948, 9-12=-447/0, 5-14=-482/90, 5-15=-67/948, 3-16=-447/42, 3-15=-54/1366, 9-13=0/1366

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, 10.
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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T5A	Roof Special	1	1	I44749924
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:00 2021 Page 1
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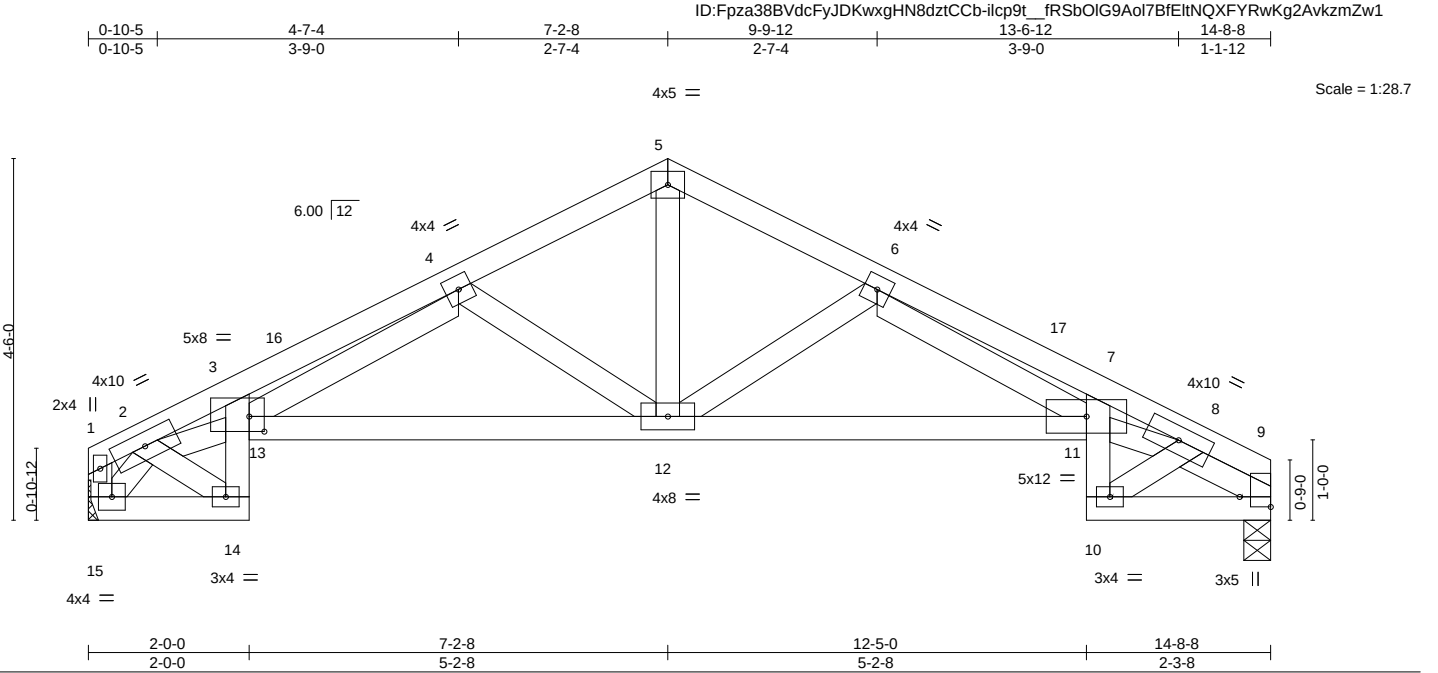

Plate Offsets (X,Y)-- [3:0-2-4,0-2-4], [9:Edge,0-4-10]

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

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -t 1-2-2

BRACING-

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

REACTIONS. (size) 9=0-4-0, 15=Mechanical
Max Horz 15=-62(LC 7)
Max Uplift 9=-8(LC 12), 15=-6(LC 11)
Max Grav 9=582(LC 2), 15=582(LC 2)

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

TOP CHORD	2-3=-1489/52, 3-4=-1701/95, 4-5=-813/8, 5-6=-814/13, 6-7=-2035/36, 7-8=-1748/4, 8-9=-781/24
BOT CHORD	14-15=-29/338, 12-13=-15/978, 11-12=0/1033, 10-11=0/277, 9-10=-3/548
WEBS	2-14=-288/32, 4-13=-59/659, 4-12=-417/88, 6-12=-484/78, 6-11=-16/956, 8-10=-462/6, 5-12=0/581, 2-15=-644/13, 8-11=0/1345, 2-13=-49/1167

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) 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) 9, 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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T5G	Roof Special Girder	1	2	I44749925
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:01 2021 Page 1
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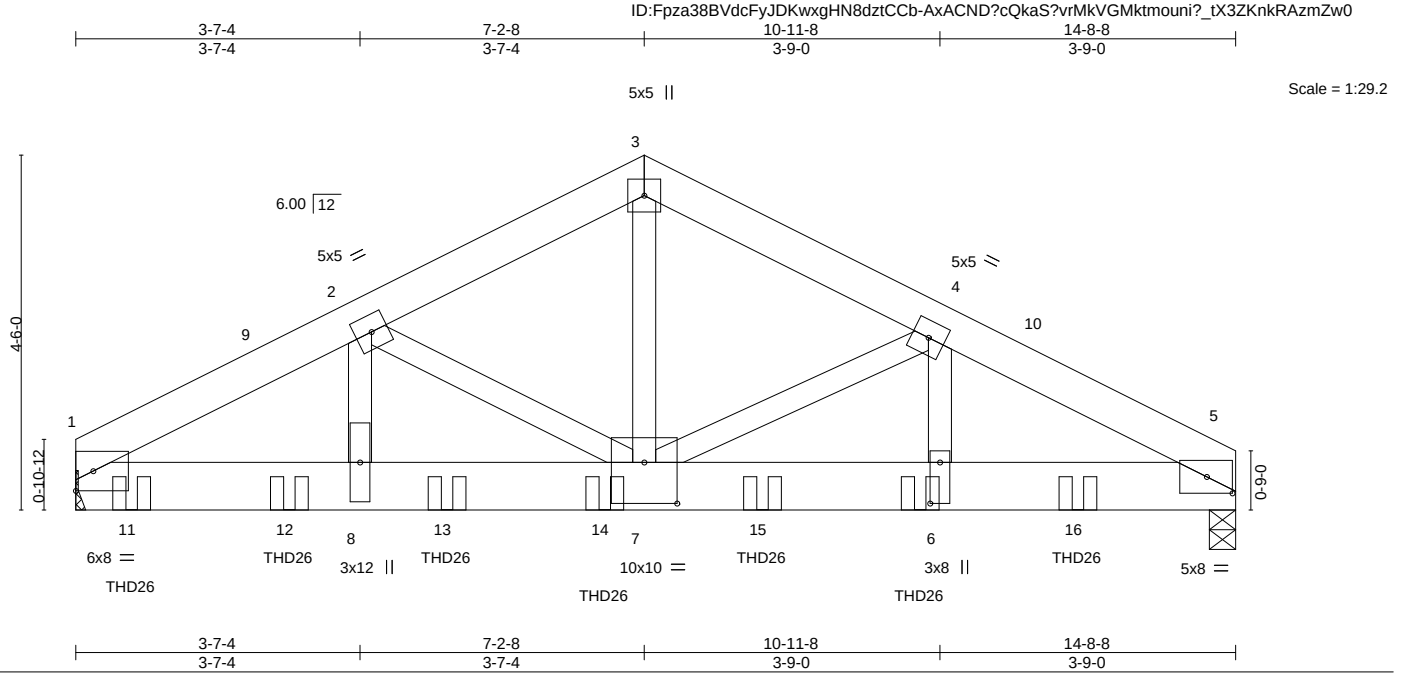

Plate Offsets (X,Y)-- [5:0-3-14,0-2-8], [6:0-6-4,0-1-8], [7:0-5-0,0-6-4]

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	0.86	Vert(LL)	-0.07	6-7	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.13	6-7	>999	240		
TCDL	10.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 212 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 4-8-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

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

NOTES-
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 0-4-0 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=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
6) Unbalanced snow loads have been considered for this design.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) WARNING: Required bearing size at joint(s) 5 greater than input bearing size.
9) Refer to girder(s) for truss to truss connections.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-8 from the left end to 12-8-8 to connect truss(es) to back face of bottom chord.
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
Uniform Loads (plf)
Vert: 1-3=-51, 3-5=-51, 1-5=-20

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T6	Common	1	1	I44749926
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:02 2021 Page 1
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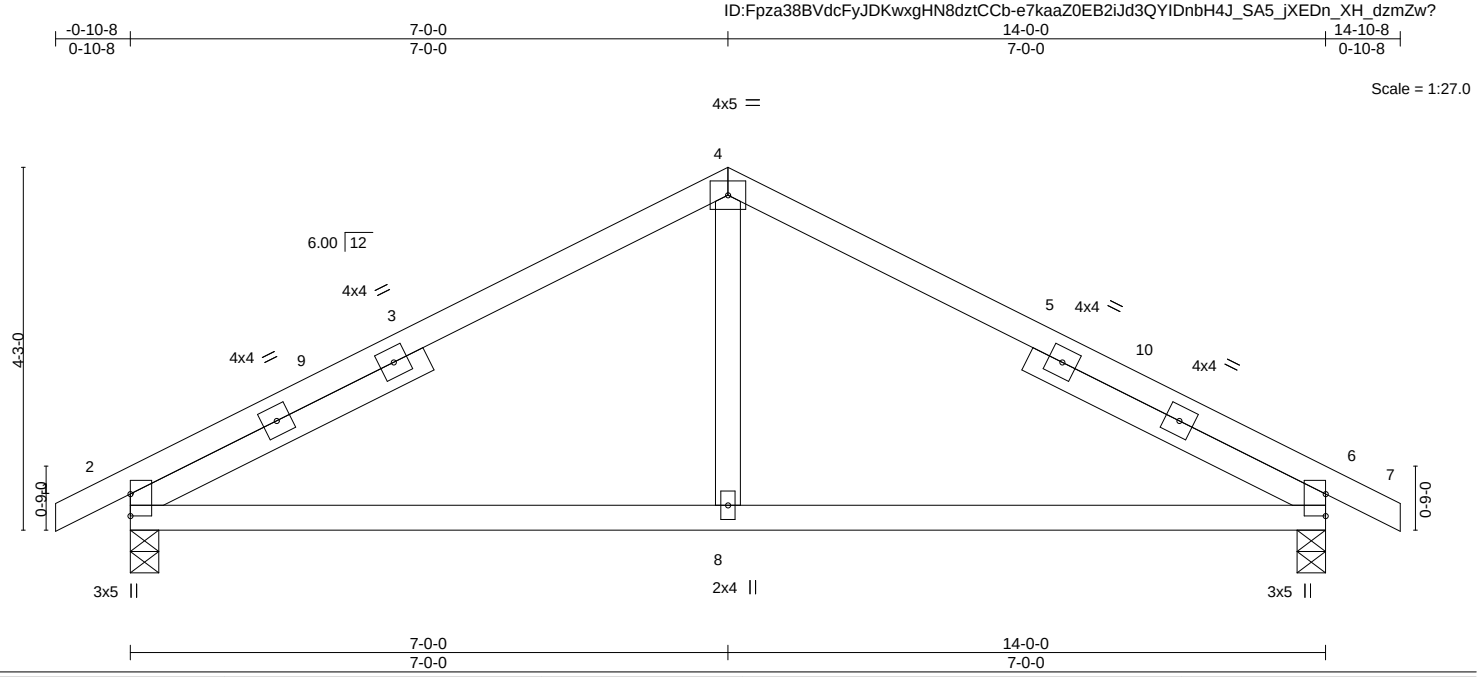

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	0.02	8	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.07	6-8	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 64 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -t 3-10-11, Right 2x4 SP No.2 -t 3-10-11

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-
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, 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.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T6A	Common	1	1	I44749927
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:03 2021 Page 1
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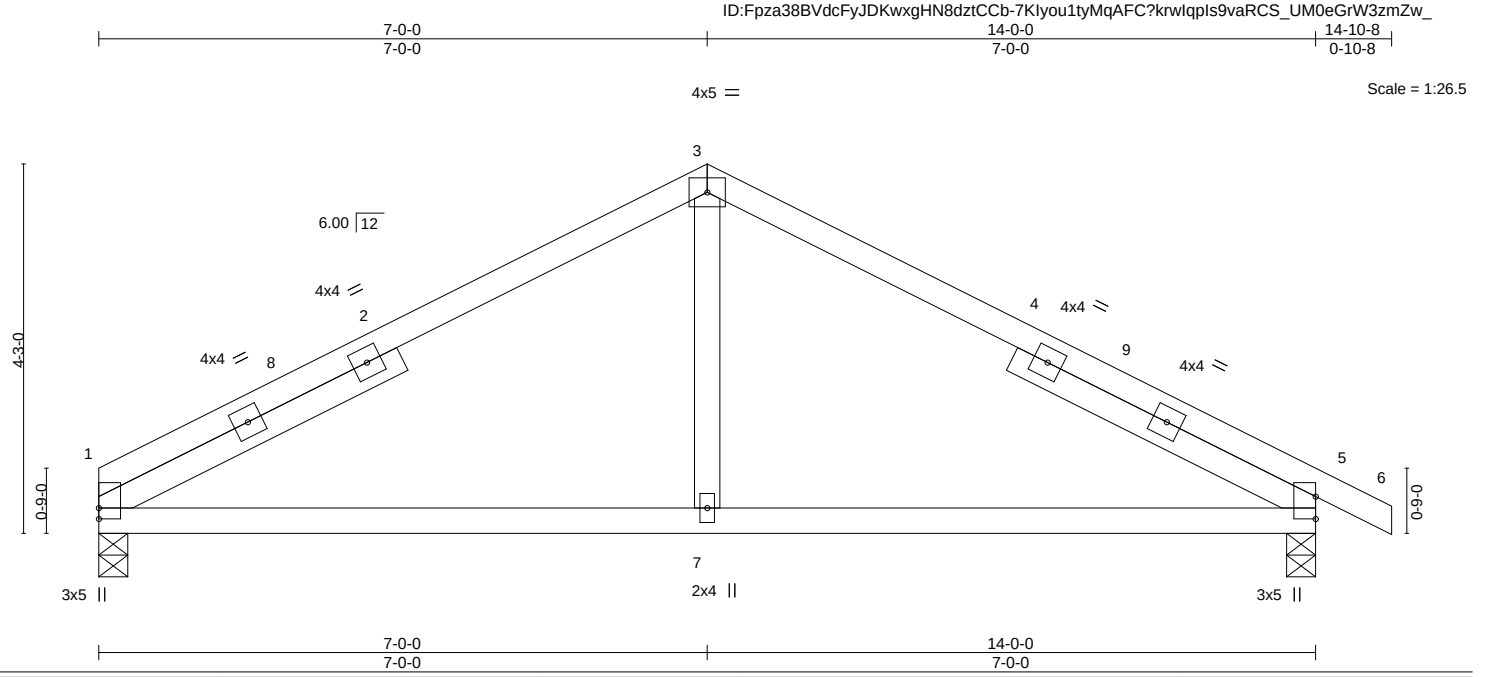

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	0.02	7	>999	360	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.07	5-7	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 63 lb	FT = 3%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -t 3-10-11, Right 2x4 SP No.2 -t 3-10-11

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

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

NOTES-
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) 1, 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.

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Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	
W2-52	T7	PIGGYBACK BASE	1	1	Job Reference (optional)	I44749928

Mid America Truss, Jefferson City, MO 65101, Mitek

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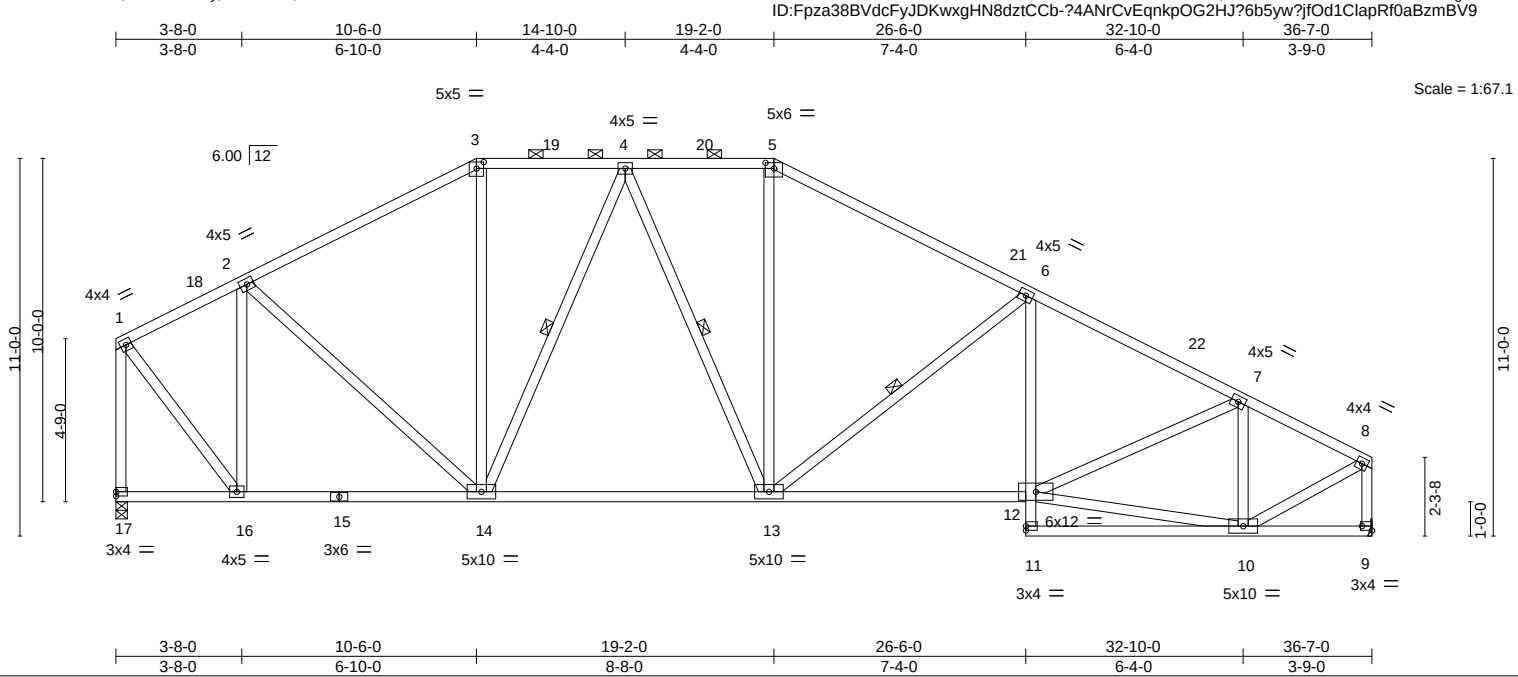

Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [5:0-3-0,0-2-0], [9:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.09	12-13	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.23	12-13	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.08	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 265 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SP No.2 *Except* 5-8: 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-6-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17.
WEBS 1 Row at midpt 4-14, 4-13, 6-13

REACTIONS. (lb/size) 17=1336/0-4-0, 9=1320/Mechanical
Max Horz 17=-223(LC 7)
Max Uplift 9=-14(LC 12)
Max Grav 17=1634(LC 33), 9=1559(LC 33)

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

TOP CHORD 1-18=-987/15, 2-18=-877/21, 2-3=-1465/49, 3-19=-1182/57, 4-19=-1182/57, 4-20=-1452/89, 5-20=-1452/88, 5-21=-1618/66, 6-21=-1783/29, 6-22=-2128/56, 7-22=-2315/33, 7-8=-1572/24, 1-17=-1610/0, 8-9=-1531/25
BOT CHORD 15-16=-36/871, 14-15=-36/871, 13-14=0/1327, 12-13=0/2026
WEBS 2-16=-1005/59, 2-14=-17/509, 3-14=0/297, 4-14=-518/78, 4-13=-34/318, 5-13=0/348, 6-13=-735/131, 10-12=0/1304, 7-12=0/684, 7-10=-886/71, 1-16=0/1413, 8-10=0/1573

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) Plates checked for a plus or minus 3 degree rotation about its center.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
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) 9.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	T8	PIGGYBACK BASE	2	1	I44749929
					Job Reference (optional)

Mid America Truss, Jefferson City, MO 65101, Mitek

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3-8-0	10-6-0	14-10-0	19-2-0	26-0-0	32-10-0	36-4-0	39-8-0	40-6-8
3-8-0	6-10-0	4-4-0	4-4-0	6-10-0	6-10-0	3-6-0	3-4-0	0-10-8

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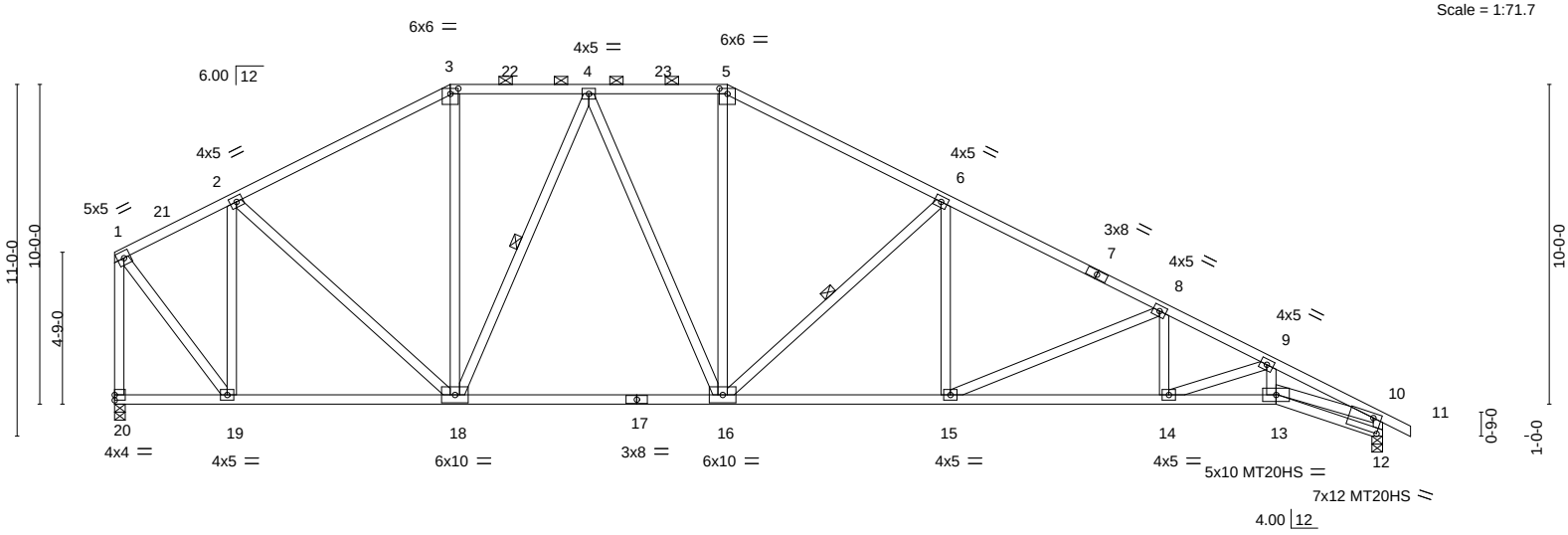

3-8-0	10-6-0	19-2-0	26-0-0	32-10-0	36-4-0	39-8-0
3-8-0	6-10-0	8-8-0	6-10-0	6-10-0	3-6-0	3-4-0

Plate Offsets (X,Y)-- [3:0-3-0,0-2-0], [5:0-3-0,0-2-0], [12:0-3-0,0-5-4]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.22	14-15	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.46	14-15	>999	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.21	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 269 lb	FT = 3%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 13-17: 2x4 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-2-14 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-18, 6-16

REACTIONS. (lb/size) 20=1448/0-4-0, 12=1479/0-4-0
Max Horz 20=-235(LC 7)
Max Uplift 12=-37(LC 12)
Max Grav 20=1762(LC 34), 12=1693(LC 34)

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

TOP CHORD	1-21=-1067/12, 2-21=-957/22, 2-3=-1619/51, 3-22=-1322/58, 4-22=-1321/58, 4-23=-1697/92, 5-23=-1697/92, 5-6=-2041/73, 6-7=-2692/60, 7-8=-2898/35, 8-9=-3751/55, 9-10=-4750/52, 1-20=-1737/0, 10-12=-1754/61
BOT CHORD	18-19=0/942, 17-18=0/1521, 16-17=0/1521, 15-16=0/2511, 14-15=0/3360, 13-14=-9/4090, 12-13=-22/468
WEBS	2-19=-1099/53, 2-18=-12/587, 3-18=0/361, 4-18=-644/74, 4-16=-35/444, 5-16=0/490, 6-16=-1105/126, 6-15=0/491, 8-15=-920/85, 8-14=0/403, 9-14=-803/43, 9-13=0/695, 1-19=0/1528, 10-13=0/3766

NOTES-

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) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
10) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749930
W2-52	T9	PIGGYBACK BASE	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

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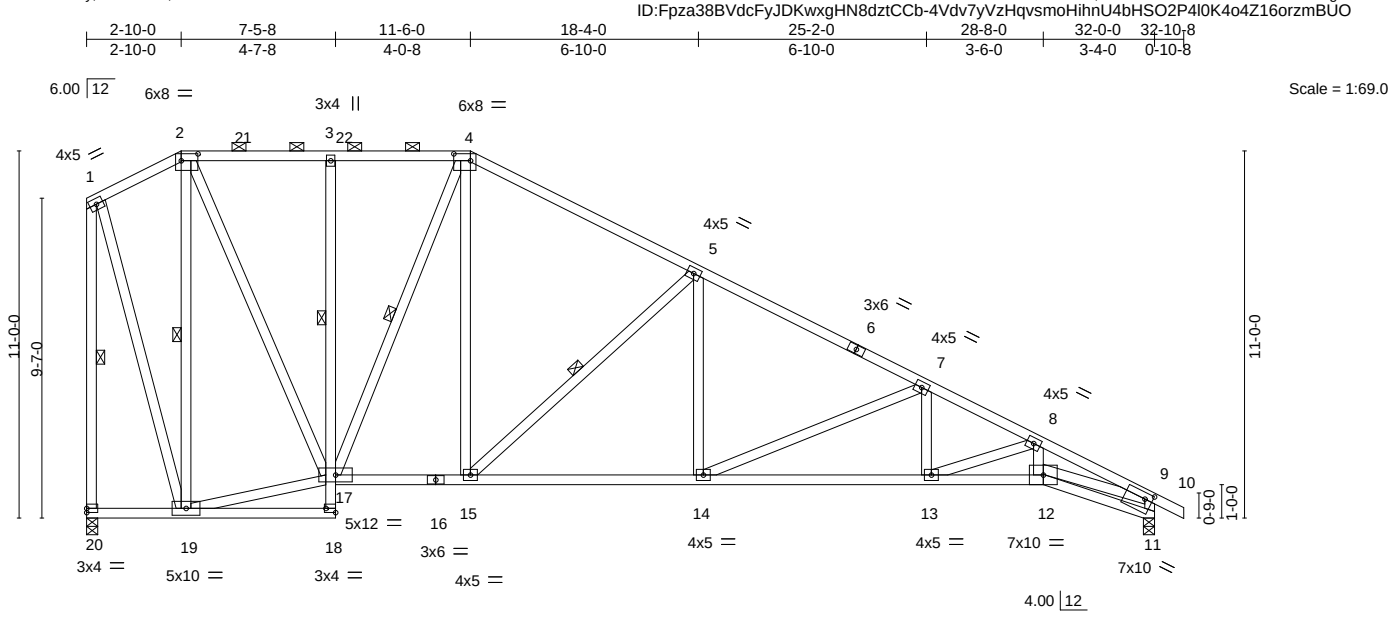

Plate Offsets (X,Y)-- [2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [11:0-2-12,0-2-4], [18:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.17	13-14	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.35	13-14	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.18	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 259 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 3-17
WEBS	1 Row at midpt 2-19, 4-17, 5-15, 1-20

REACTIONS. (lb/size) 20=1189/0-4-0, 11=1194/0-4-0
Max Horz 20=-330(LC 7)
Max Uplift 20=-19(LC 7), 11=-37(LC 12)
Max Grav 20=1267(LC 2), 11=1367(LC 34)

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

TOP CHORD	1-2=-386/97, 2-21=-733/77, 3-21=-733/77, 3-22=-734/76, 4-22=-734/76, 4-5=-1270/77, 5-6=-1909/60, 6-7=-2115/35, 7-8=-2900/57, 8-9=-3741/53, 1-20=-1242/31, 9-11=-1413/62
BOT CHORD	19-20=-78/272, 3-17=-430/86, 16-17=0/1012, 15-16=0/1012, 14-15=0/1811, 13-14=0/2595, 12-13=-11/3211, 11-12=-22/386
WEBS	2-19=-999/72, 17-19=0/348, 2-17=-1/1044, 4-17=-755/51, 4-15=-7/851, 5-15=-1091/121, 5-14=0/476, 7-14=-850/87, 7-13=0/356, 8-13=-689/43, 8-12=0/562, 1-19=-55/1059, 9-12=0/2943

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749931
W2-52	T10	PIGGYBACK BASE	2	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

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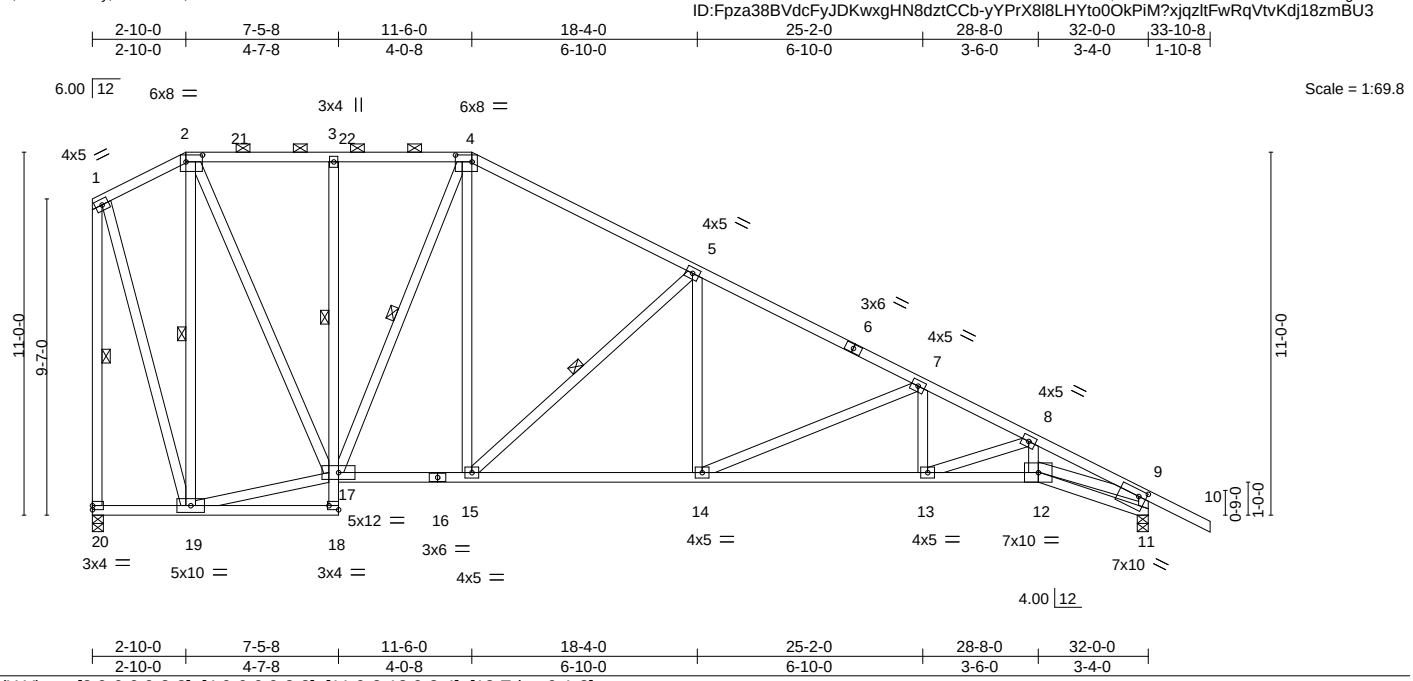

Plate Offsets (X,Y)-- [2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [11:0-2-12,0-2-4], [18:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.17	13-14	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.35	13-14	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.18	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 261 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12. 1 Row at midpt 3-17
WEBS	1 Row at midpt 2-19, 4-17, 5-15, 1-20

REACTIONS. (lb/size) 20=1187/0-4-0, 11=1248/0-4-0
Max Horz 20=-337(LC 7)
Max Uplift 20=-18(LC 7), 11=-48(LC 12)
Max Grav 20=1264(LC 2), 11=1420(LC 34)

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

TOP CHORD	1-2=-385/97, 2-21=-731/75, 3-21=-730/75, 3-22=-732/75, 4-22=-732/75, 4-5=-1267/75, 5-6=-1901/56, 6-7=-2107/31, 7-8=-2876/46, 8-9=-3672/26, 1-20=-1239/31, 9-11=-1435/62
BOT CHORD	19-20=-77/279, 3-17=-430/86, 16-17=0/1009, 15-16=0/1009, 14-15=0/1804, 13-14=0/2574, 12-13=0/3149, 11-12=-36/283
WEBS	2-19=-996/70, 17-19=0/353, 2-17=0/1040, 4-17=-752/50, 4-15=-6/847, 5-15=-1086/119, 5-14=0/470, 7-14=-835/81, 7-13=0/339, 8-13=-638/27, 8-12=0/535, 1-19=-55/1057, 9-12=0/2976

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749932
W2-52	T10A	PIGGYBACK BASE	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek — 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:05:35 2021 Page 1

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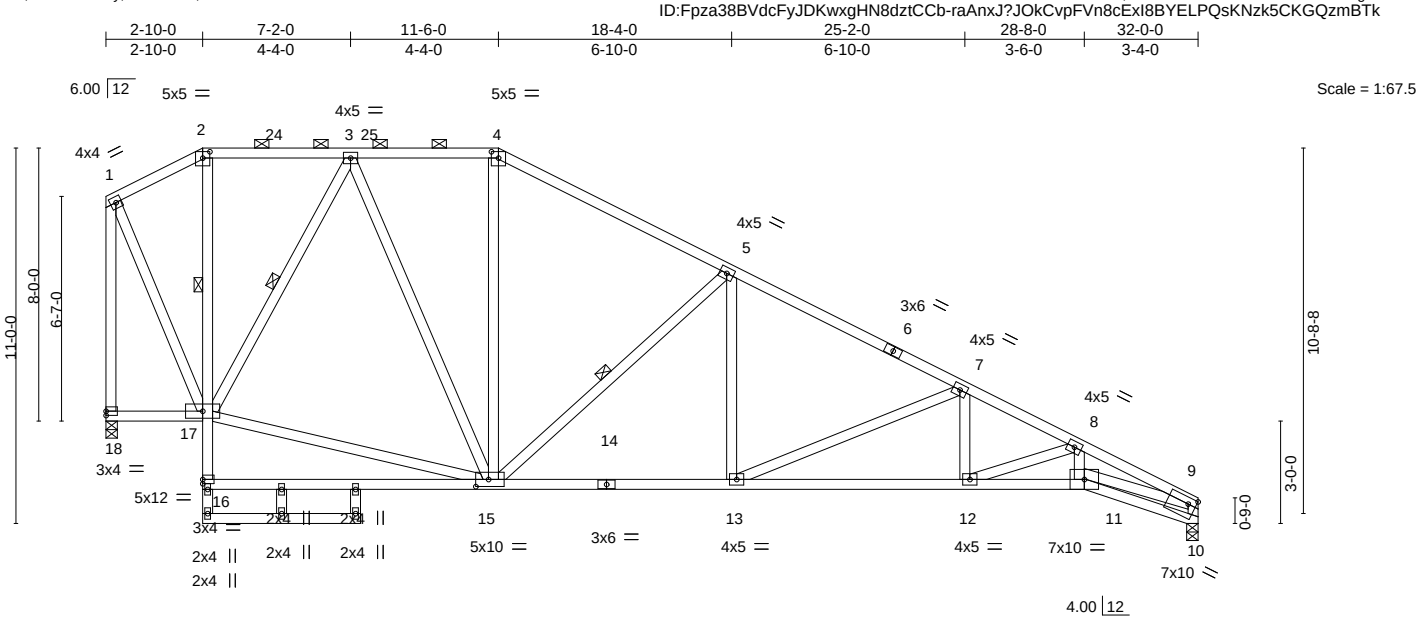

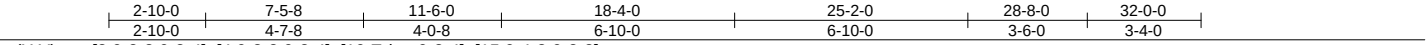

Plate Offsets (X,Y)-- [2:0-2-8,0-2-4], [4:0-2-8,0-2-4], [10:Edge,0-2-4], [15:0-4-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.16	12-13	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.34	12-13	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.13	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 245 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, except end verticals, and 2-0-0 oc purlins (5-7-5 max.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 2-17
WEBS	1 Row at midpt 3-17, 5-15

REACTIONS. (lb/size) 18=1190/0-4-0, 10=1142/0-4-0
Max Horz 18=-285(LC 7)
Max Uplift 10=-39(LC 12)
Max Grav 18=1268(LC 2), 10=1314(LC 33)

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

TOP CHORD	1-2=-509/64, 2-24=-425/60, 3-24=-425/61, 3-25=-989/120, 4-25=-989/120, 4-5=-1251/105, 5-6=-1910/95, 6-7=-2116/70, 7-8=-2910/96, 8-9=-3764/108, 1-18=-1226/11, 9-10=-1339/64
BOT CHORD	14-15=0/1812, 13-14=0/1812, 12-13=-17/2603, 11-12=-71/3242, 10-11=-24/320
WEBS	15-17=0/774, 3-17=-778/98, 3-15=-55/599, 5-15=-1096/128, 5-13=0/470, 7-13=-857/91, 7-12=0/369, 8-12=-717/57, 8-11=0/553, 1-17=-27/1030, 9-11=-52/3037

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) Plates checked for a plus or minus 3 degree rotation about its center.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
8) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749933
W2-52	T10B	PIGGYBACK BASE	5	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:05:57 2021 Page 1

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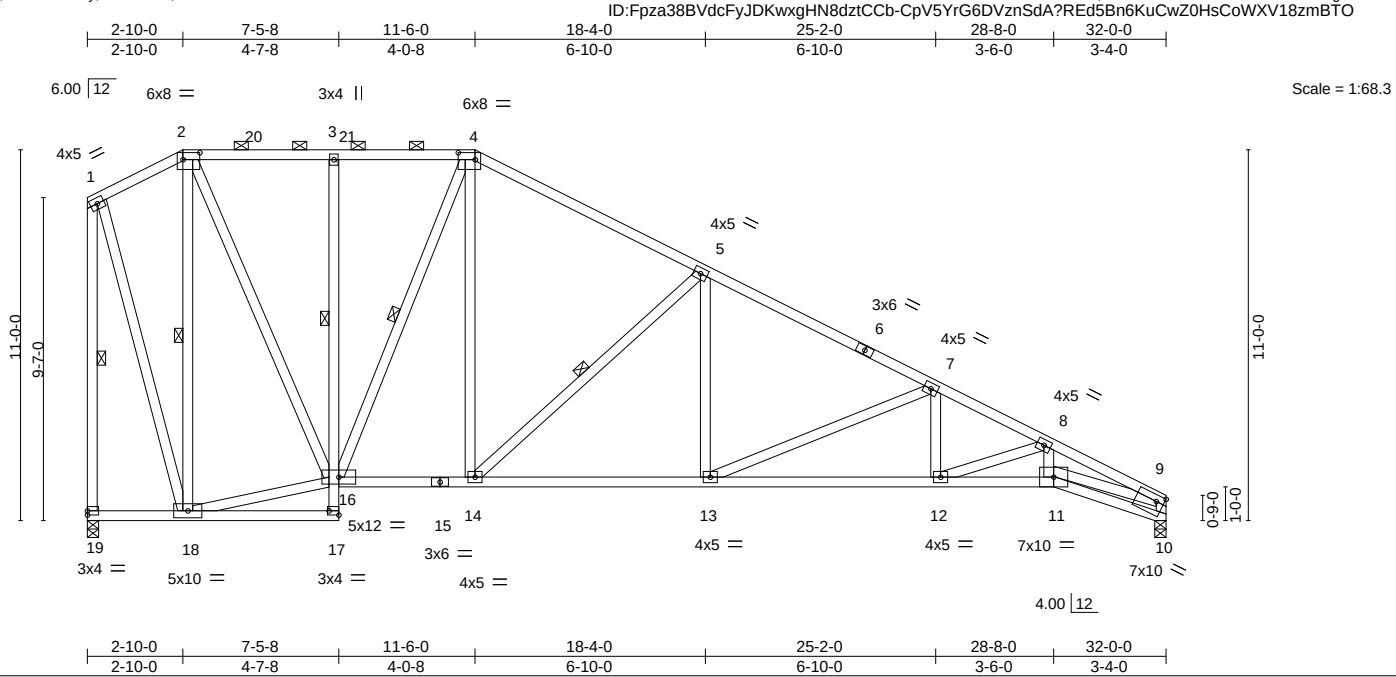

Plate Offsets (X,Y)-- [2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [10:Edge,0-2-4], [17:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.17	12-13	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.36	12-13	>999	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.18	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 258 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 3-16
WEBS	1 Row at midpt 2-18, 4-16, 5-14, 1-19

REACTIONS. (lb/size) 19=1190/0-4-0, 10=1142/0-4-0
Max Horz 19=-322(LC 7)
Max Uplift 19=-19(LC 7), 10=-26(LC 12)
Max Grav 19=1268(LC 2), 10=1314(LC 33)

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

TOP CHORD	1-2=-386/97, 2-20=-734/78, 3-20=-733/78, 3-21=-735/78, 4-21=-735/77, 4-5=-1271/78, 5-6=-1911/63, 6-7=-2117/37, 7-8=-2909/62, 8-9=-3765/66, 1-19=-1243/31, 9-10=-1339/50
BOT CHORD	18-19=-80/264, 3-16=-430/86, 15-16=0/1013, 14-15=0/1013, 13-14=0/1813, 12-13=0/2602, 11-12=-35/3242, 10-11=-21/320
WEBS	2-18=-1000/73, 16-18=-2/343, 2-16=-3/1045, 4-16=-756/51, 4-14=-8/852, 5-14=-1094/122, 5-13=0/477, 7-13=-855/90, 7-12=0/367, 8-12=-718/51, 8-11=0/555, 1-18=-55/1060, 9-11=-18/3037

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) Plates checked for a plus or minus 3 degree rotation about its center.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
8) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749934
W2-52	T11	PIGGYBACK BASE	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:06:20 2021 Page 1

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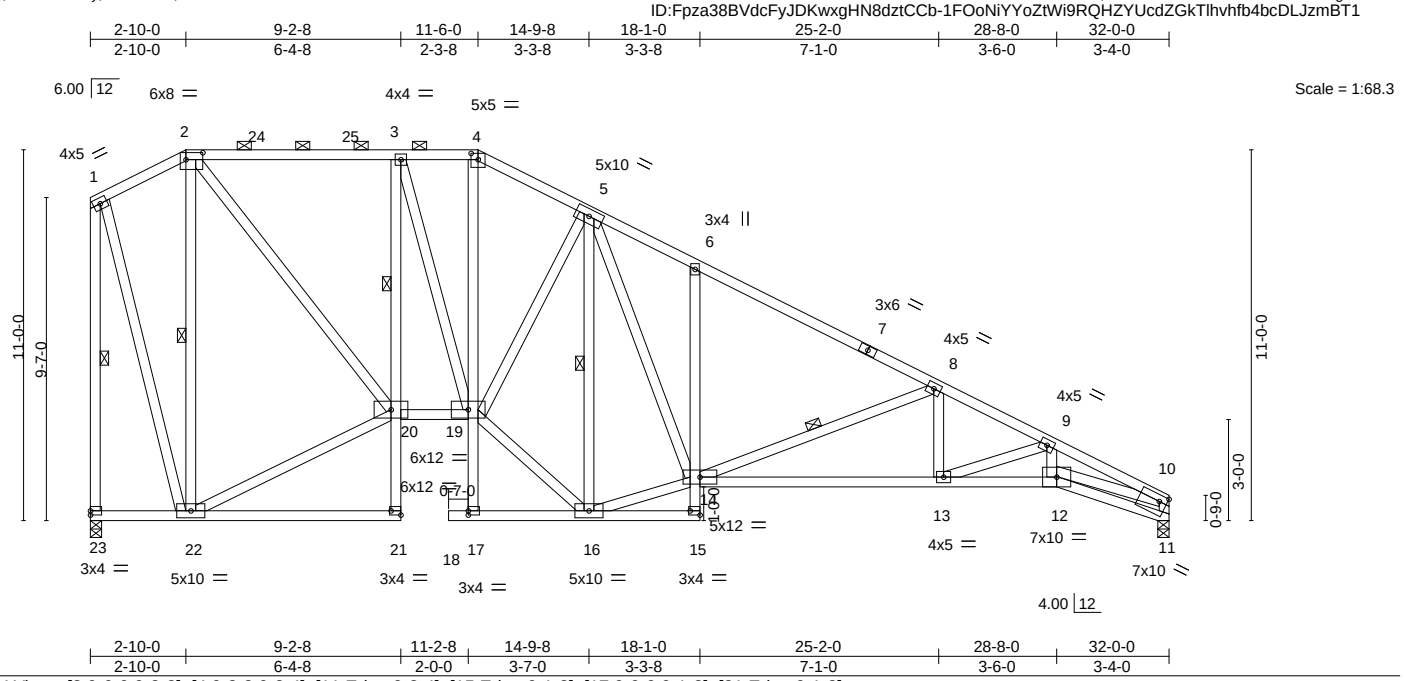

Plate Offsets (X,Y)-- [2:0-6-0,0-2-8], [4:0-2-8,0-2-4], [11:Edge,0-2-4], [15:Edge,0-1-8], [17:0-0-0,0-1-8], [21:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.19	13-14	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.42	13-14	>900	240		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.24	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 294 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 2-5-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-4 max.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 3-20 10-0-0 oc bracing: 17-19
WEBS	1 Row at midpt 2-22, 5-16, 8-14, 1-23

REACTIONS. (lb/size) 23=1200/0-4-0, 11=1147/0-4-0
Max Horz 23=-322(LC 7)
Max Uplift 23=-13(LC 7), 11=-23(LC 12)
Max Grav 23=1278(LC 2), 11=1319(LC 33)

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

TOP CHORD	1-2=-391/93, 2-24=-1097/28, 24-25=-1097/28, 3-25=-1096/28, 3-4=-1253/41, 4-5=-1460/31, 5-6=-2021/134, 6-7=-1963/57, 7-8=-2072/30, 8-9=-2950/53, 9-10=-3761/55, 1-23=-1263/18, 10-11=-1346/49
BOT CHORD	22-23=-80/264, 3-20=-711/101, 19-20=0/1096, 4-19=0/495, 6-14=-492/140, 13-14=0/2650, 12-13=-24/3238, 11-12=-22/329
WEBS	2-22=-1087/16, 20-22=0/402, 2-20=0/1255, 3-19=-50/585, 16-19=0/1596, 5-19=-27/300, 5-16=-1335/0, 14-16=0/1210, 5-14=-73/1398, 8-14=-961/96, 8-13=0/377, 9-13=-677/45, 9-12=0/545, 1-22=-48/1093, 10-12=-6/3022

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) Plates checked for a plus or minus 3 degree rotation about its center.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 11.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	I44749935
W2-52	T11GE	GABLE	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO 65101, Mitek

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 11 14:06:43 2021 Page 1

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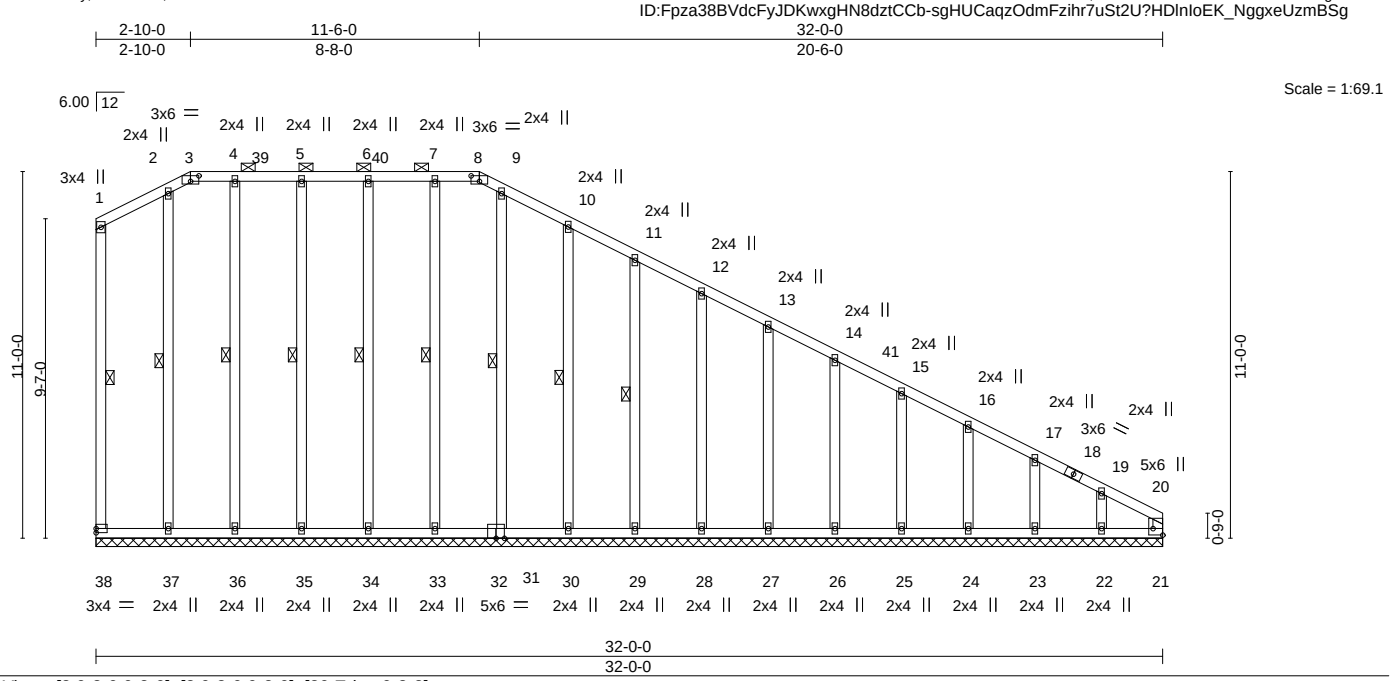

Plate Offsets (X,Y)-- [3:0-3-0,0-2-0], [8:0-3-0,0-2-0], [20:Edge,0-3-8]

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

LUMBER-

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, and 2-0-0 oc purlins (6-0-0 max.): 3-8.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt	1-38, 2-37, 4-36, 5-35, 6-34, 7-33, 9-31, 10-30, 11-29

REACTIONS. All bearings 32-0-0.

(lb) - Max Horz 38=-321(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23 except 22=-121(LC 7)

Max Grav All reactions 250 lb or less at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22

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

TOP CHORD 18-19=-254/63, 19-20=-300/89

BOT CHORD 37-38=-80/263, 36-37=-80/263, 35-36=-80/263, 34-35=-80/263, 33-34=-80/263, 32-33=-80/263, 31-32=-80/263, 30-31=-80/263, 29-30=-80/263, 28-29=-80/263, 27-28=-80/263, 26-27=-80/263, 25-26=-80/263, 24-25=-80/263, 23-24=-80/263, 22-23=-80/263, 21-22=-80/263

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) Plates checked for a plus or minus 3 degree rotation about its center.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) All bearings are assumed to be SYP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23 except (jt=lb) 22=121.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V1	GABLE	1	1	I44749936
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:08 2021 Page 1
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5-11-6 11-10-11
5-11-6 5-11-6

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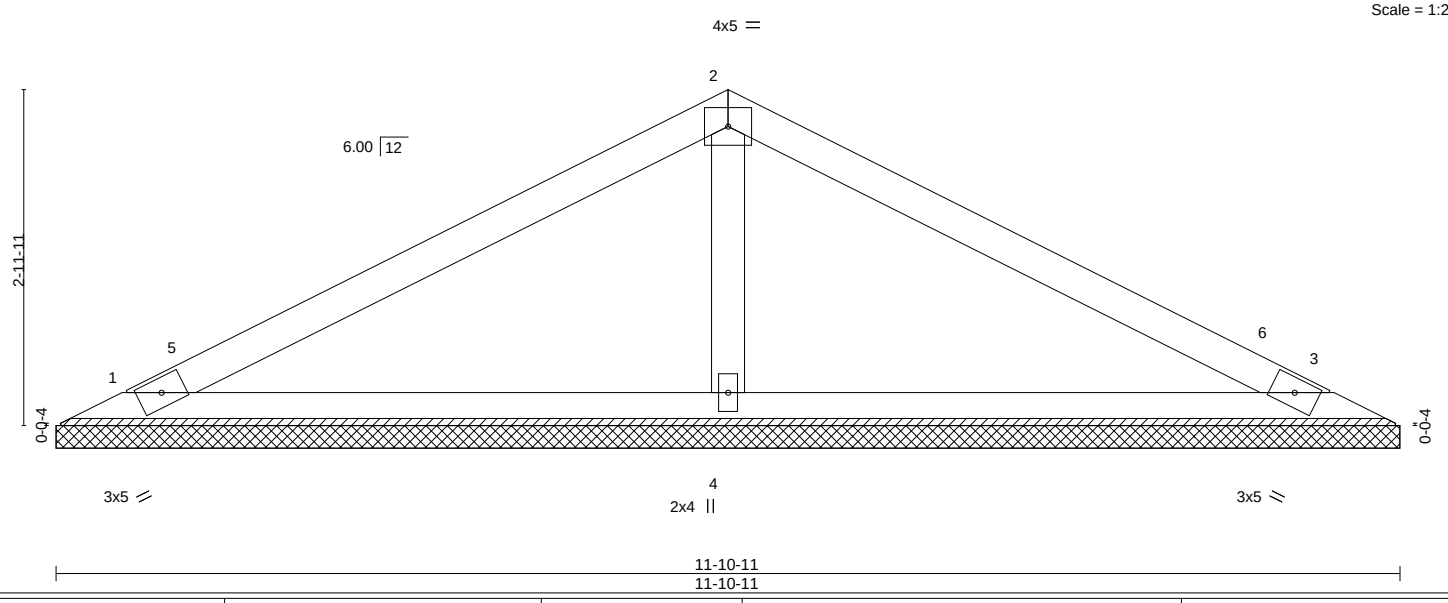

11-10-11
11-10-11

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	0.74	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.20	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							Weight: 39 lb	FT = 3%
BCDL	10.0											

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

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

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

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V2	Valley	1	1	I44749937
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:15 2021 Page 1
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3-11-6 7-10-11
3-11-6 3-11-6

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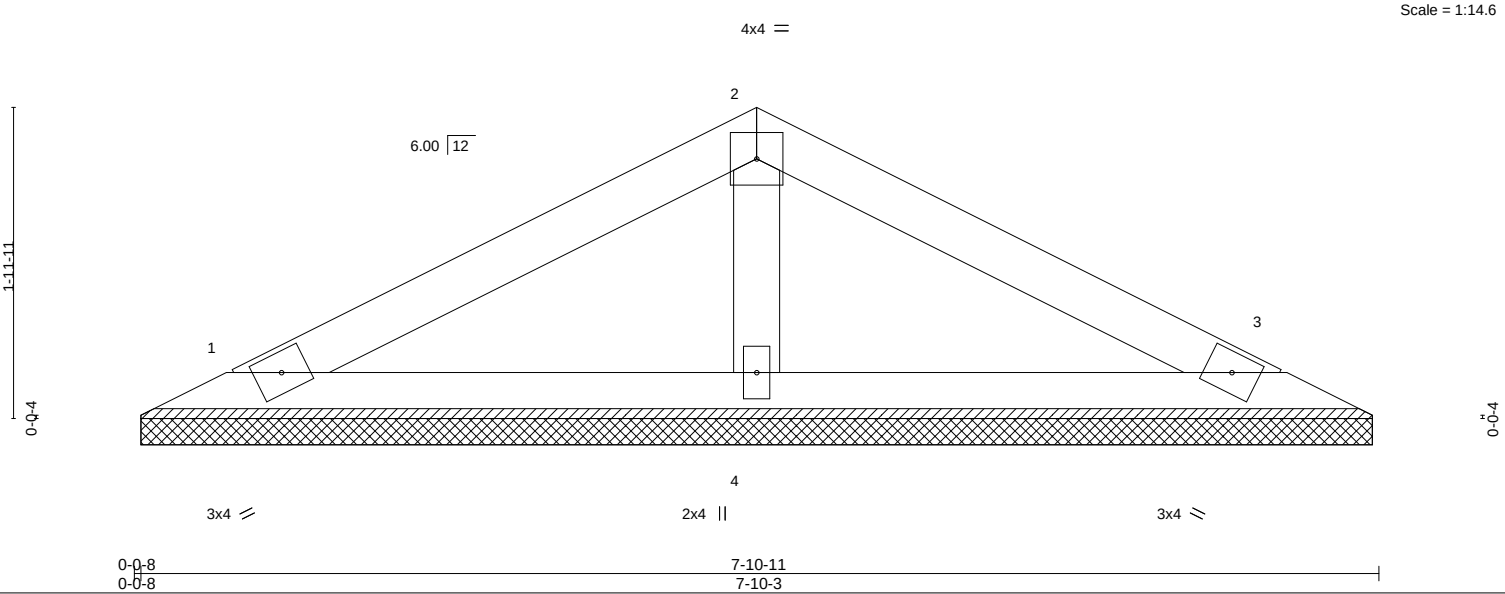

0-0-8 7-10-11
0-0-8 7-10-3

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	0.25	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(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 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=7-9-11, 3=7-9-11, 4=7-9-11
Max Horz 1=19(LC 8)
Max Uplift 1=-14(LC 11), 3=-17(LC 12)
Max Grav 1=156(LC 15), 3=156(LC 16), 4=263(LC 2)

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

NOTES-
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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V3	Valley	1	1	I44749938
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:16 2021 Page 1
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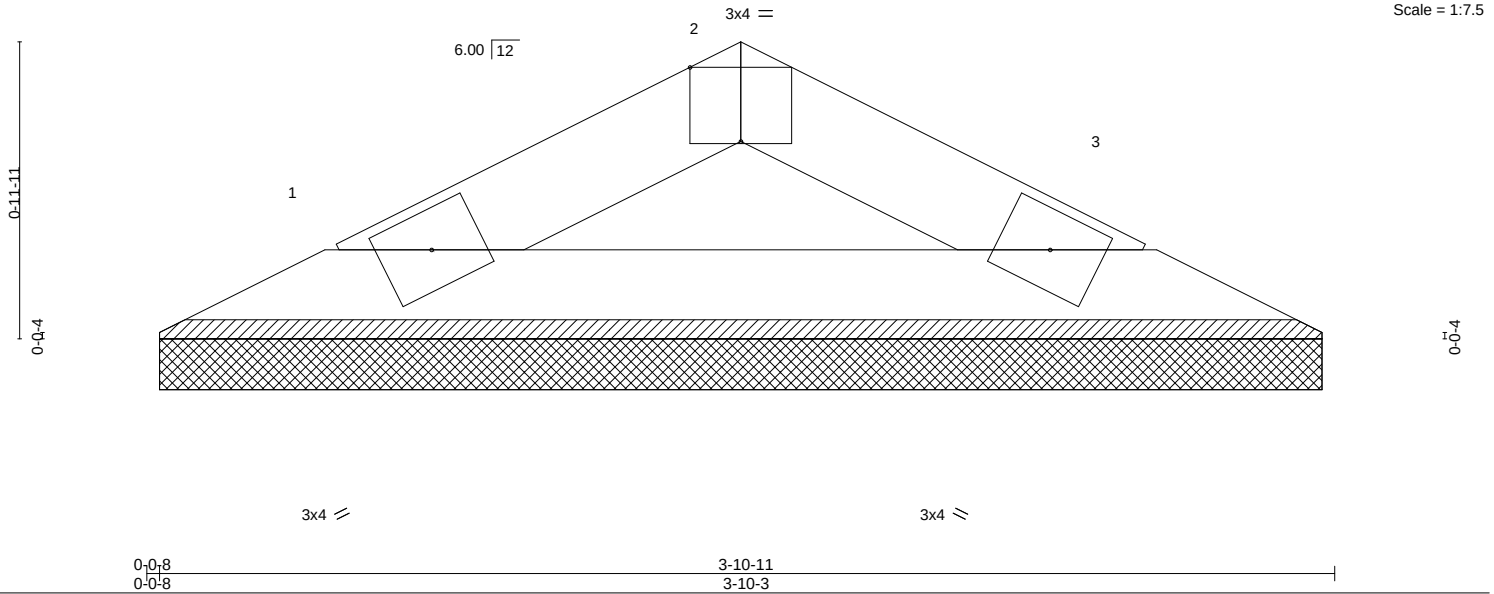

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 10 lb	FT = 3%

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

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

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

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V4	GABLE	1	1	I44749939
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:16 2021 Page 1
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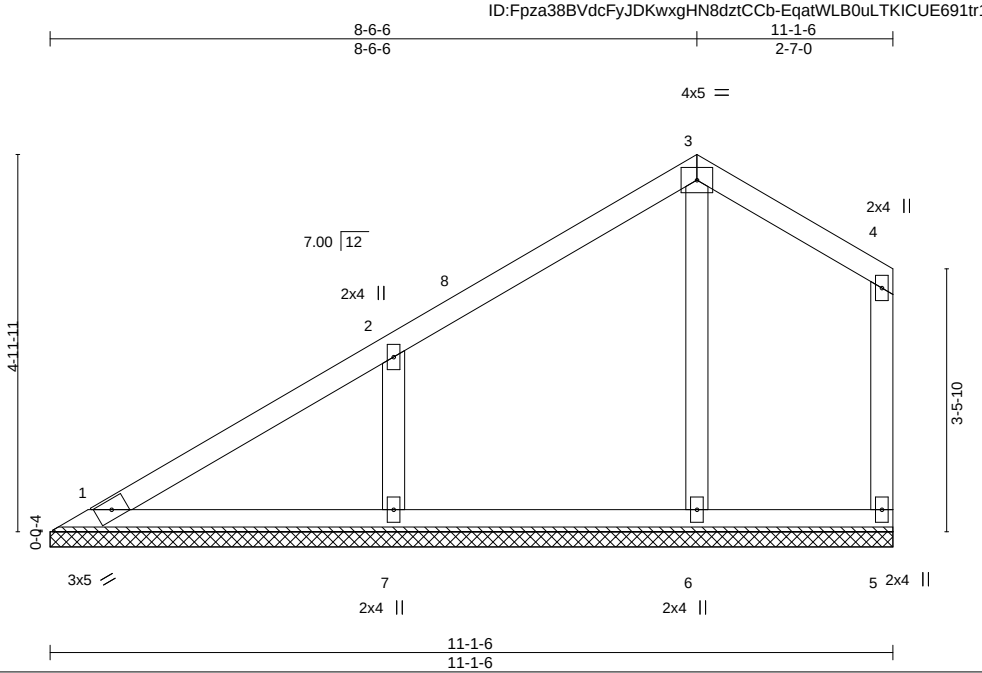

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 49 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 11-1-6.
(lb) - Max Horz 1=134(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 5, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=406(LC 22)

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V5	GABLE	1	1	I44749940
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:17 2021 Page 1
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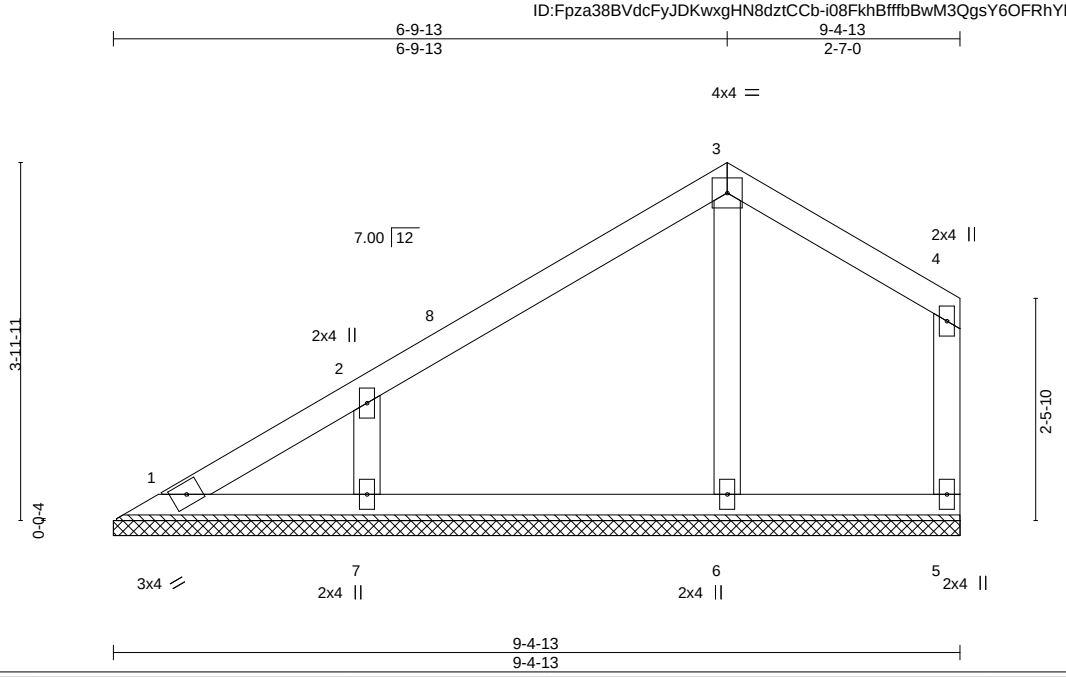

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0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

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 9-4-13.
(lb) - Max Horz 1=102(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=335(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-262/109

NOTES-
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, 5, 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V6	GABLE	1	1	I44749941
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:18 2021 Page 1
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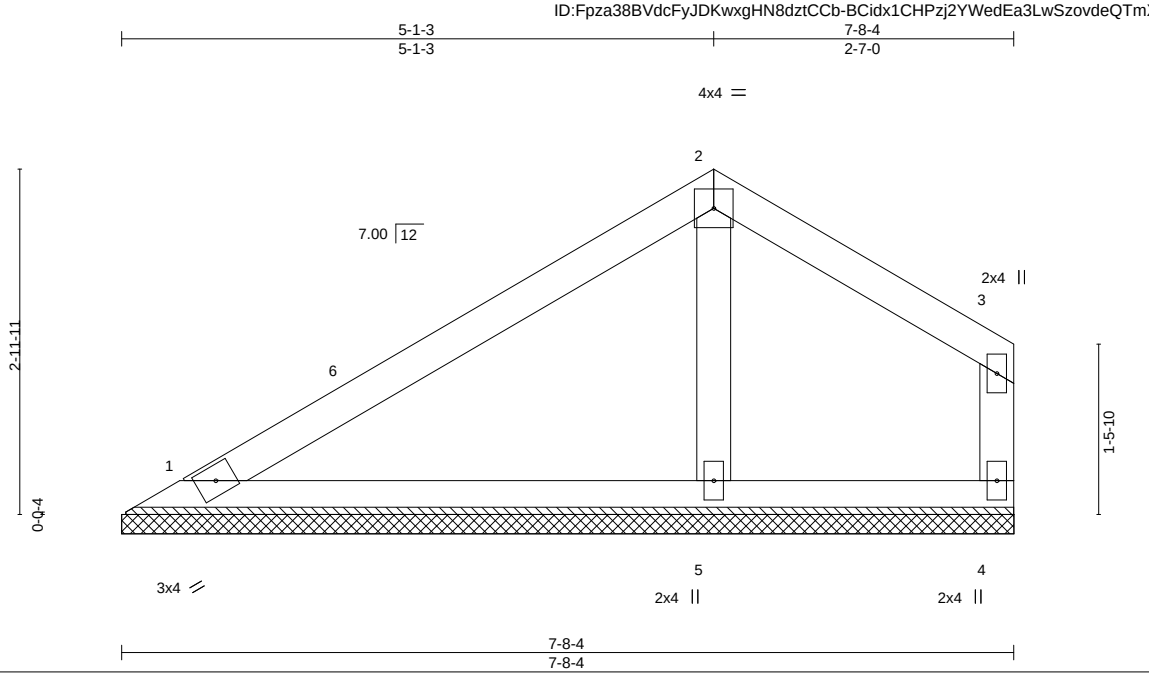

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

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

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

NOTES-

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, 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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V7	GABLE	1	1	I44749942
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:19 2021 Page 1
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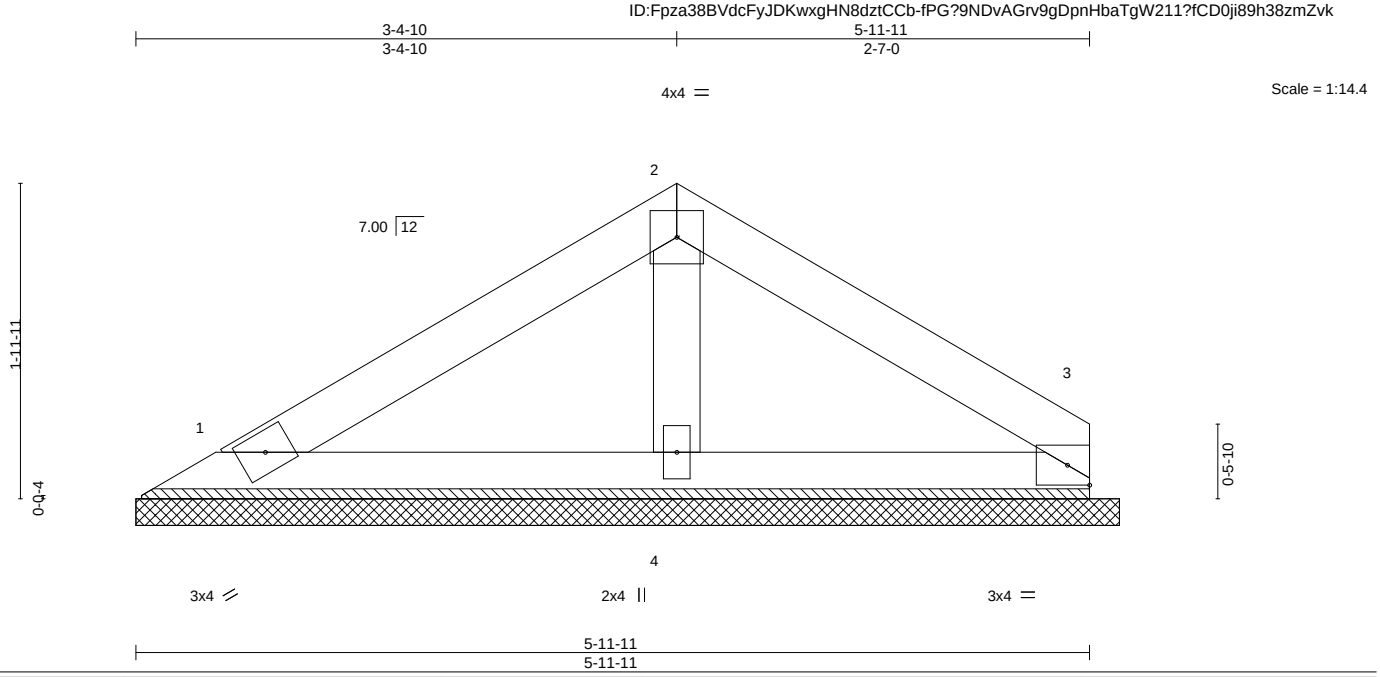

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 20 lb	FT = 3%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

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

NOTES-
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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V8	GABLE	1	1	I44749943
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:20 2021 Page 1
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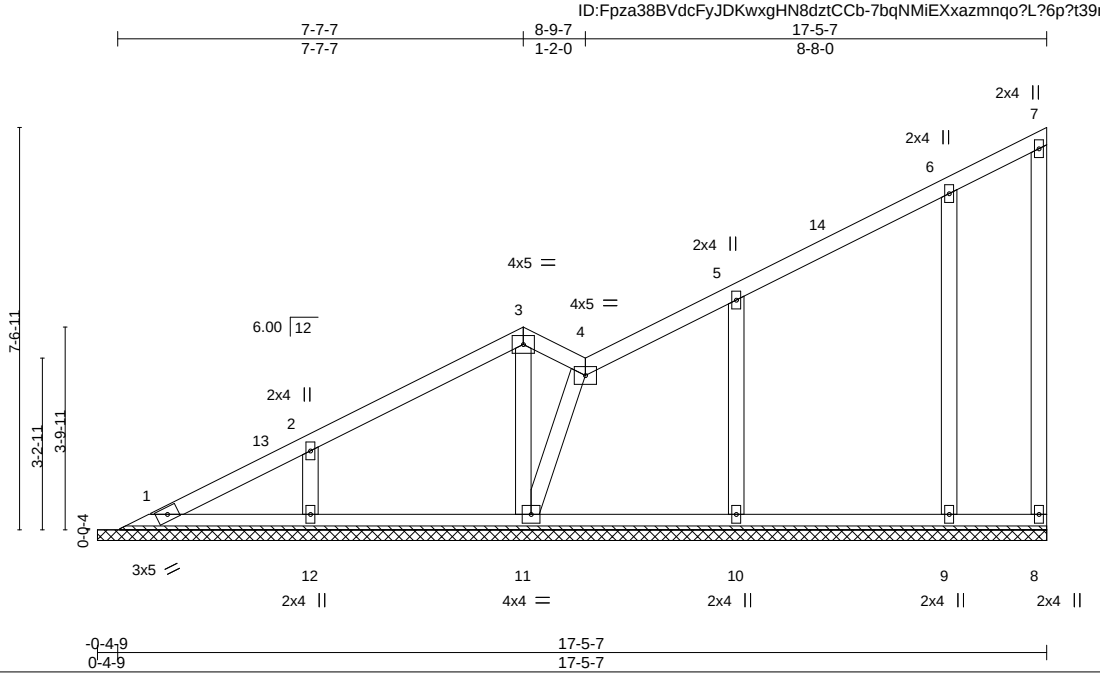

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	8	n/a	n/a		
BCLL	0.0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

LUMBER-

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 6-0-0 oc bracing.

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

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

NOTES-

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V9	GABLE	1	1	I44749944
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:21 2021 Page 1
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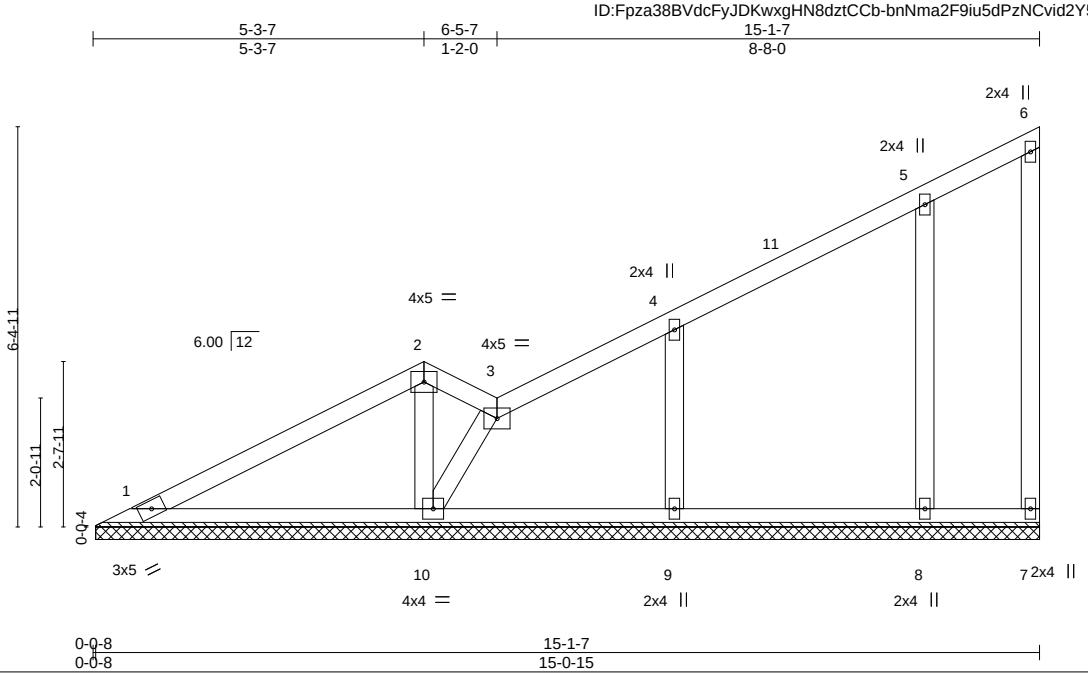

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 73 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-10.

REACTIONS. All bearings 15-0-15.
(lb) - Max Horz 1=198(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 7, 10, 9, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=391(LC 2), 9=372(LC 35), 8=272(LC 2)

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V10	GABLE	1	1	I44749945
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:09 2021 Page 1
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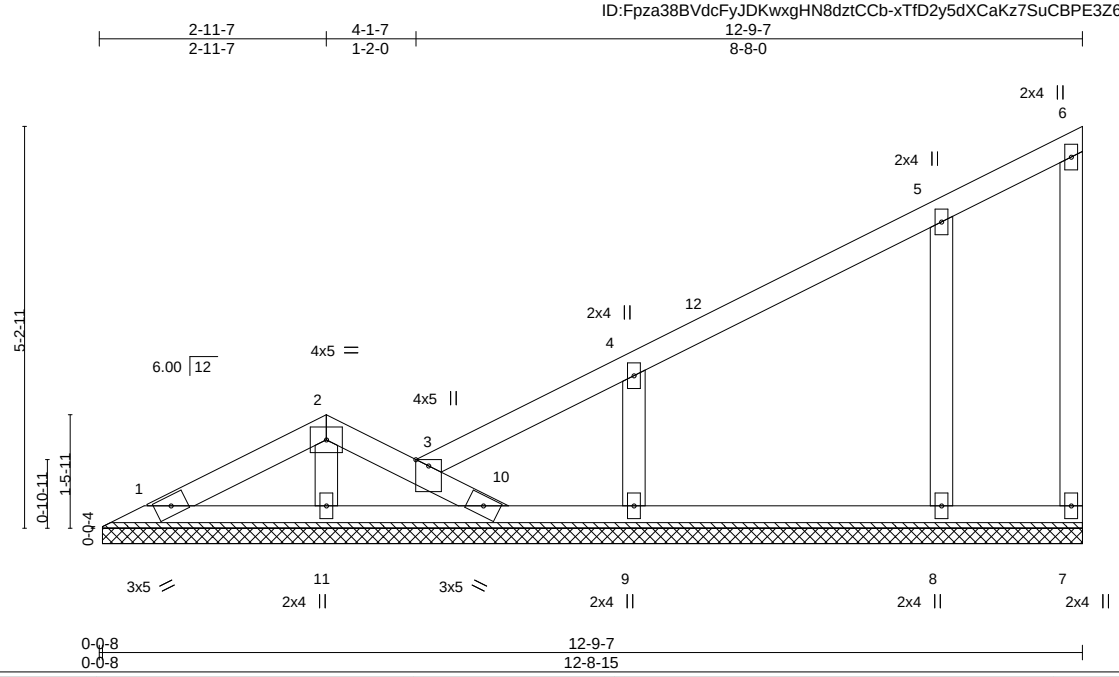

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 58 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

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

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V11	GABLE	1	1	I44749946
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:10 2021 Page 1
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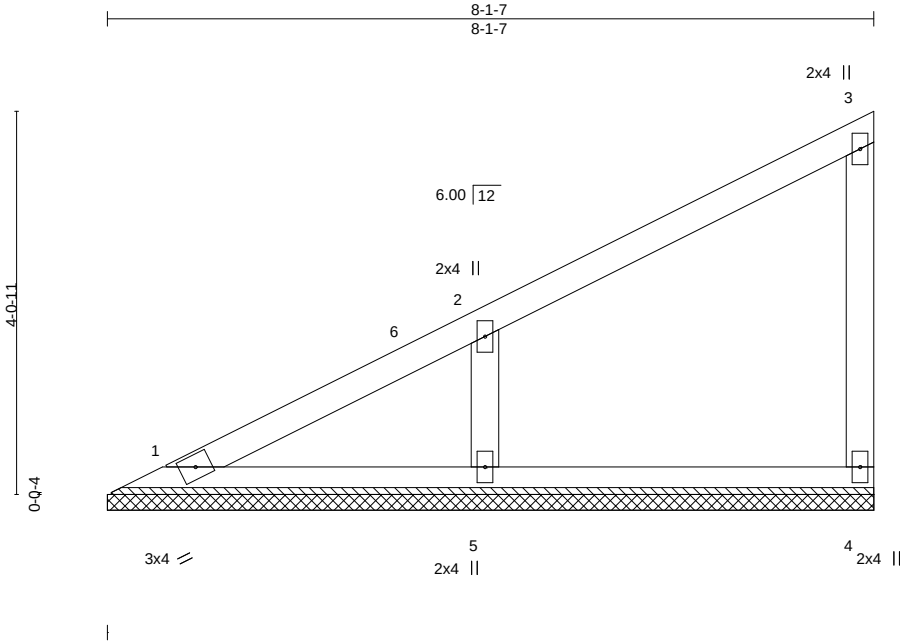

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0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

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

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

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

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

NOTES-
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.

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V12	Valley	1	1	I44749947
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:11 2021 Page 1
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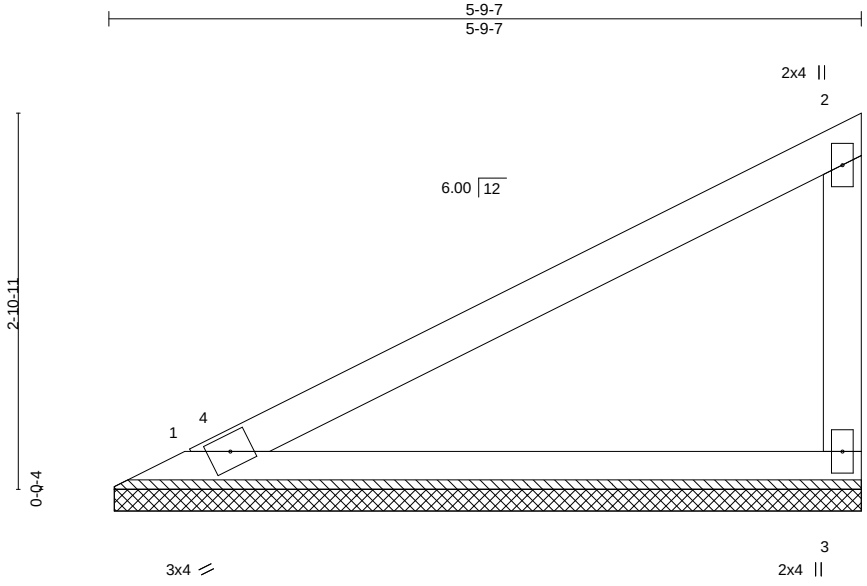

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress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

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

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

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

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

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V13	GABLE	1	1	I44749948
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:11 2021 Page 1
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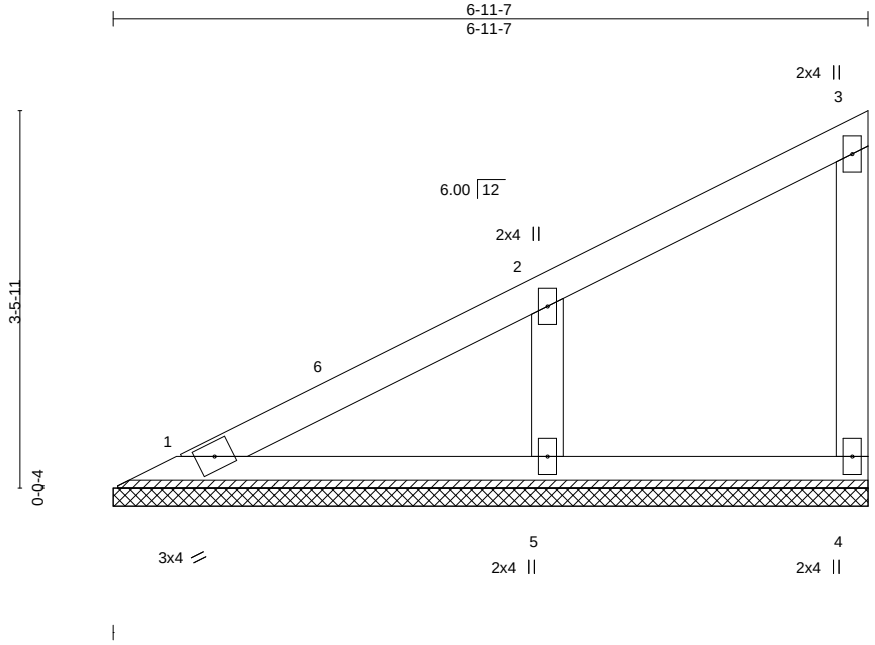

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0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

LUMBER-

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

BRACING-

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

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

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

NOTES-

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V14	GABLE	1	1	I44749949
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:12 2021 Page 1
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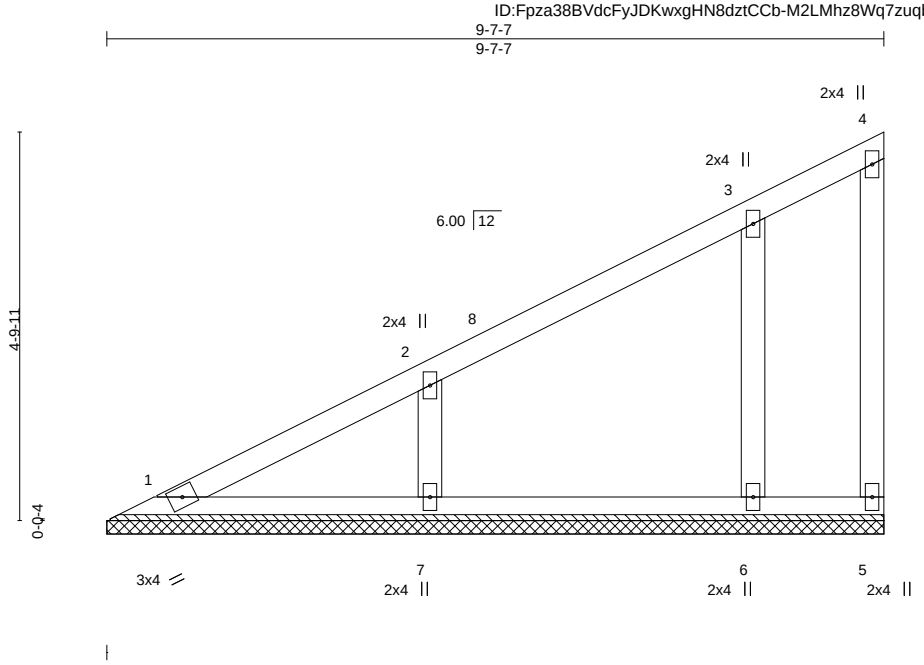


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 43 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

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

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

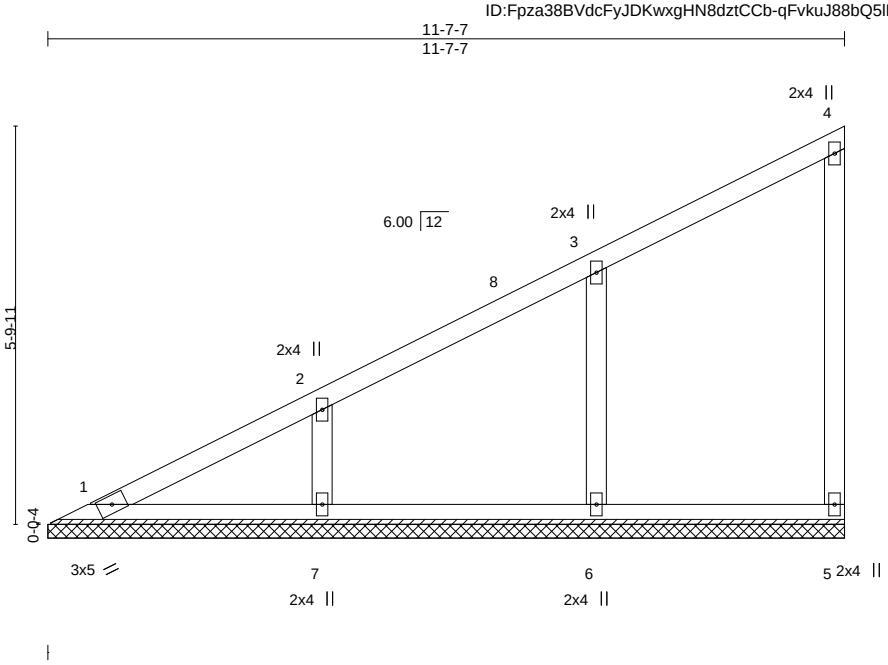
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V15	GABLE	1	1	I44749950
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:13 2021 Page 1
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-qFvkuJ88bQ5lRlmfR1UADPG?fcxsoVcqJCiNrUzmZvq



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	0.23	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(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							Weight: 51 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-306/97

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V16	GABLE	1	1	I44749951
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:14 2021 Page 1
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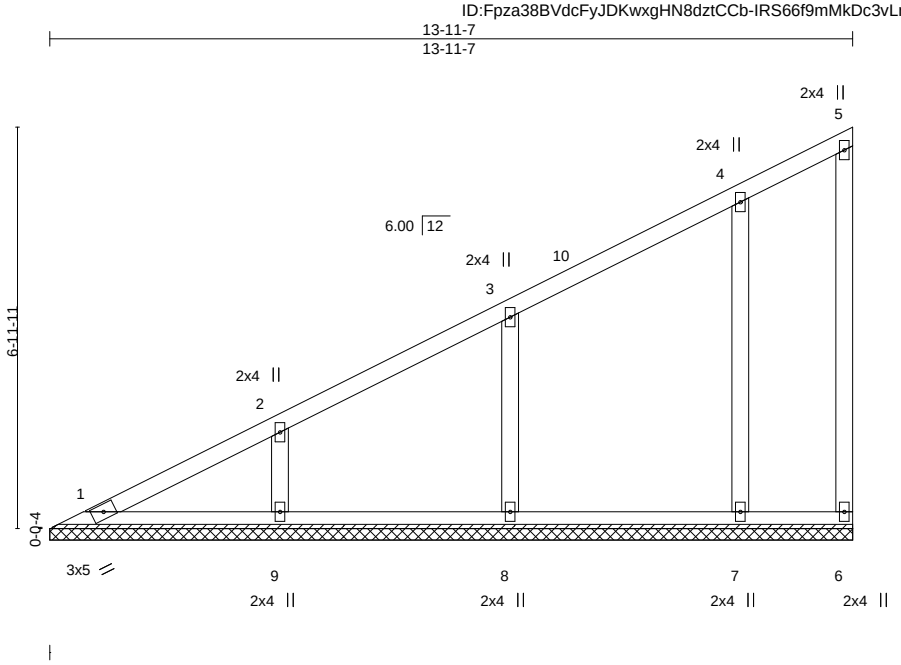

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0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

LUMBER-

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

BRACING-

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-269/78

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

February 11,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
W2-52	V17	GABLE	1	1	I44749952
					Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Wed Feb 10 10:17:14 2021 Page 1
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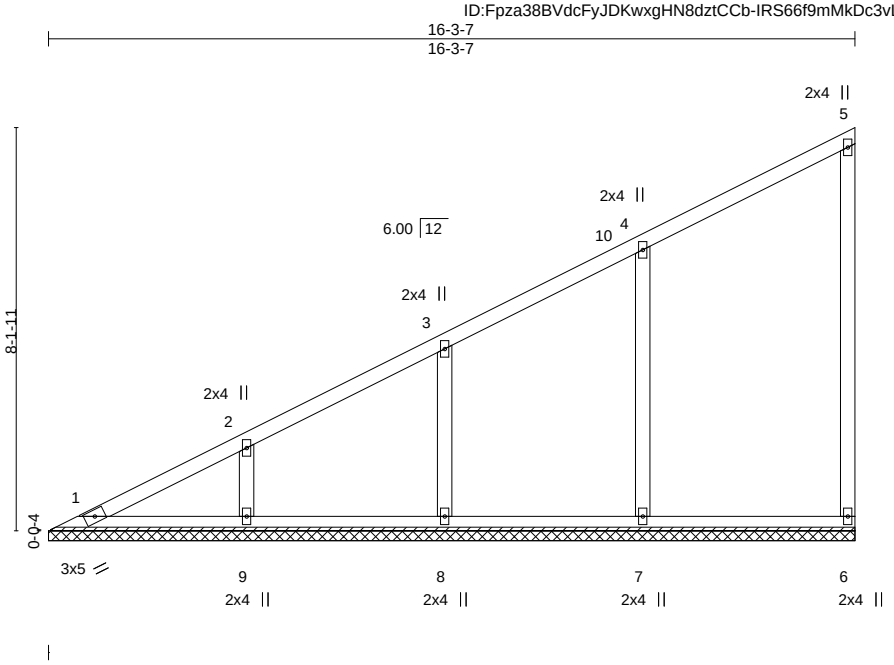

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 77 lb	FT = 3%
BCDL	10.0											

LUMBER-

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

BRACING-

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-328/109

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

February 11,2021

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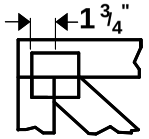
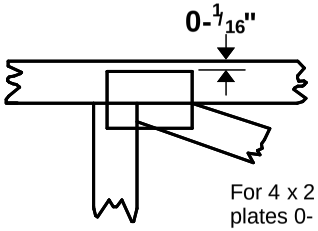
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

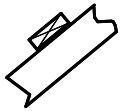
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

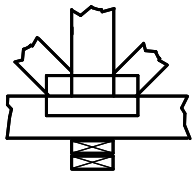
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

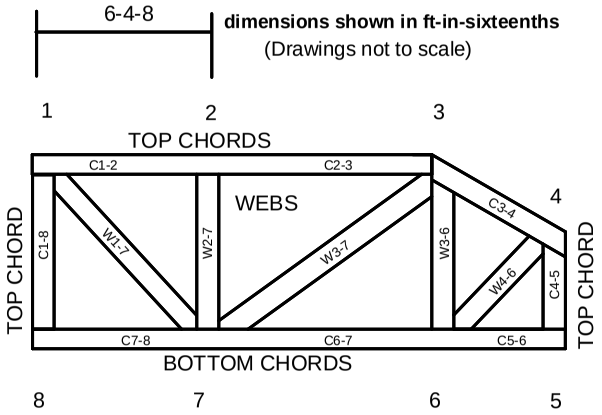


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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. 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.