RE: 210382
Lot 49 W2

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

Site Information:

Customer: Project Name: 210382
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: 45.0 psf Floor Load: N/A psf

This package includes 41 individual, dated Truss Design Drawings and 0 Additional Drawings.

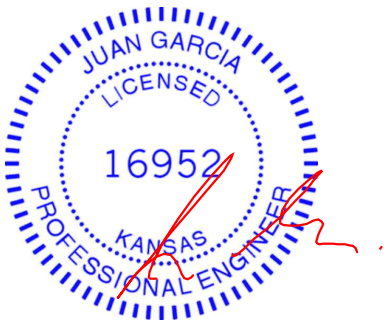
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43391944	A1	4/12/2021	21	I43391964	E6	4/12/2021
2	I43391945	A2	4/12/2021	22	I43391965	G1	4/12/2021
3	I43391946	B1	4/12/2021	23	I43391966	J1	4/12/2021
4	I43391947	B2A	4/12/2021	24	I43391967	J2	4/12/2021
5	I43391948	C1	4/12/2021	25	I43391968	J3	4/12/2021
6	I43391949	C2	4/12/2021	26	I43391969	R1	4/12/2021
7	I43391950	C3	4/12/2021	27	I43391970	V1	4/12/2021
8	I43391951	C4	4/12/2021	28	I43391971	V2	4/12/2021
9	I43391952	C5	4/12/2021	29	I43391972	V3	4/12/2021
10	I43391953	C6	4/12/2021	30	I43391973	V4	4/12/2021
11	I43391954	C7	4/12/2021	31	I43391974	V5	4/12/2021
12	I43391955	C8	4/12/2021	32	I43391975	V6	4/12/2021
13	I43391956	C9	4/12/2021	33	I43391976	V7	4/12/2021
14	I43391957	D1	4/12/2021	34	I43391977	V8	4/12/2021
15	I43391958	D2	4/12/2021	35	I43391978	V9	4/12/2021
16	I43391959	E1	4/12/2021	36	I43391979	V10	4/12/2021
17	I43391960	E2	4/12/2021	37	I43391980	V11	4/12/2021
18	I43391961	E3	4/12/2021	38	I43391981	V12	4/12/2021
19	I43391962	E4	4/12/2021	39	I43391982	V13	4/12/2021
20	I43391963	E5	4/12/2021	40	I43391983	V14	4/12/2021

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

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Kansas is April 30, 2022.

Kansas COA: E-943



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.

April 12, 2021

Garcia, Juan

RE: 210382 - Lot 49 W2

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

Site Information:

Project Customer: Project Name: 210382
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I43391984	V15	4/12/2021

RE: 210382
Lot 49 W2

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

Site Information:

Customer: Project Name: 210382
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: 45.0 psf Floor Load: N/A psf

This package includes 41 individual, dated Truss Design Drawings and 0 Additional Drawings.

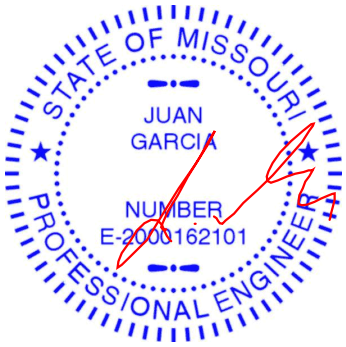
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43391944	A1	4/12/2021	21	I43391964	E6	4/12/2021
2	I43391945	A2	4/12/2021	22	I43391965	G1	4/12/2021
3	I43391946	B1	4/12/2021	23	I43391966	J1	4/12/2021
4	I43391947	B2A	4/12/2021	24	I43391967	J2	4/12/2021
5	I43391948	C1	4/12/2021	25	I43391968	J3	4/12/2021
6	I43391949	C2	4/12/2021	26	I43391969	R1	4/12/2021
7	I43391950	C3	4/12/2021	27	I43391970	V1	4/12/2021
8	I43391951	C4	4/12/2021	28	I43391971	V2	4/12/2021
9	I43391952	C5	4/12/2021	29	I43391972	V3	4/12/2021
10	I43391953	C6	4/12/2021	30	I43391973	V4	4/12/2021
11	I43391954	C7	4/12/2021	31	I43391974	V5	4/12/2021
12	I43391955	C8	4/12/2021	32	I43391975	V6	4/12/2021
13	I43391956	C9	4/12/2021	33	I43391976	V7	4/12/2021
14	I43391957	D1	4/12/2021	34	I43391977	V8	4/12/2021
15	I43391958	D2	4/12/2021	35	I43391978	V9	4/12/2021
16	I43391959	E1	4/12/2021	36	I43391979	V10	4/12/2021
17	I43391960	E2	4/12/2021	37	I43391980	V11	4/12/2021
18	I43391961	E3	4/12/2021	38	I43391981	V12	4/12/2021
19	I43391962	E4	4/12/2021	39	I43391982	V13	4/12/2021
20	I43391963	E5	4/12/2021	40	I43391983	V14	4/12/2021

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

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2022.

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.

April 12, 2021

Garcia, Juan

RE: 210382 - Lot 49 W2

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

Site Information:

Project Customer: Project Name: 210382
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I43391984	V15	4/12/2021

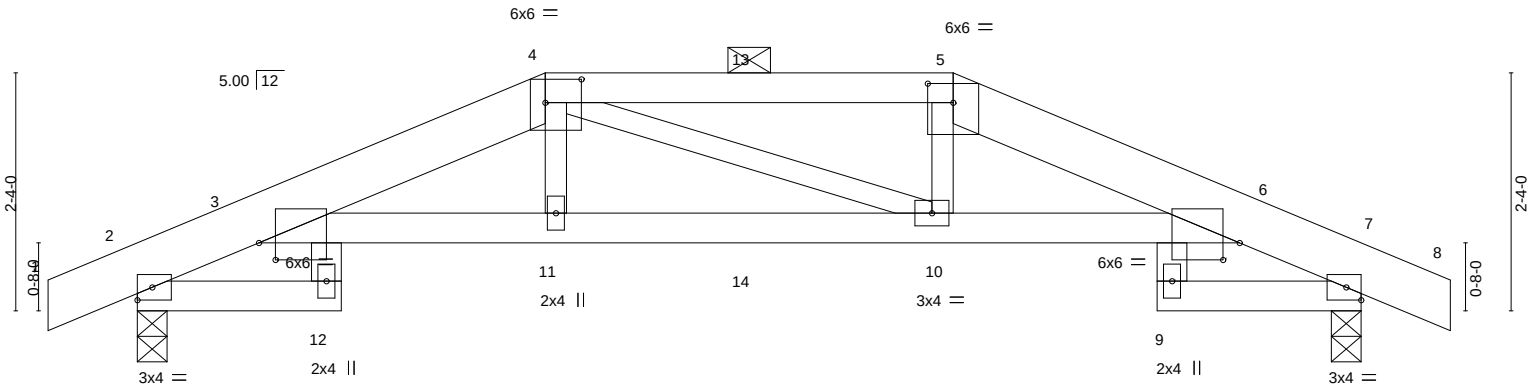
Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	A1	Hip Girder	1	1	I43391944
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871, Mitek

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Oct 28 14:01:12 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-tOJTS3vpwUArXj1hdCKPYJj1AryqgUrEYOJPwwyOsa5

-0-10-8 | 2-0-0 | 4-0-0 | 8-0-0 | 10-0-0 | 12-0-0 | 12-10-8
0-10-8 | 2-0-0 | 2-0-0 | 4-0-0 | 2-0-0 | 2-0-0 | 0-10-8

Scale = 1:22.6



2-0-0 | 4-0-0 | 8-0-0 | 10-0-0 | 12-0-0
2-0-0 | 2-0-0 | 4-0-0 | 2-0-0 | 2-0-0

Plate Offsets (X,Y)-- [3:0-1-15,0-2-0], [4:0-4-4,0-2-12], [5:0-3-0,0-2-4], [6:0-1-15,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.09	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.16	10-11	>881	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.15	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	10-11	>999	240	Weight: 45 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins, except
2-0-0 oc purlins (3-9-11 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 2=920/0-3-8, 7=920/0-3-8
Max Horz 2=37(LC 33)
Max Uplift 2=-201(LC 8), 7=-201(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-494/135, 3-4=-2093/498, 4-13=-1999/487, 5-13=-1999/487, 5-6=-2095/497, 6-7=-494/130
BOT CHORD 3-11=-431/1973, 11-14=-434/1997, 10-14=-434/1997, 6-10=-428/1975
WEBS 4-11=-45/312, 5-10=-54/333

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 201 lb uplift at joint 2 and 201 lb uplift at joint 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 55 lb up at 4-0-0, and 84 lb down and 55 lb up at 6-0-0, and 79 lb down and 55 lb up at 8-0-0 on top chord, and 231 lb down and 100 lb up at 4-0-0, and 35 lb down and 24 lb up at 6-0-0, and 231 lb down and 100 lb up at 7-11-4 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 6-8=-70, 2-12=-20, 3-6=-20, 7-9=-20

October 28,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

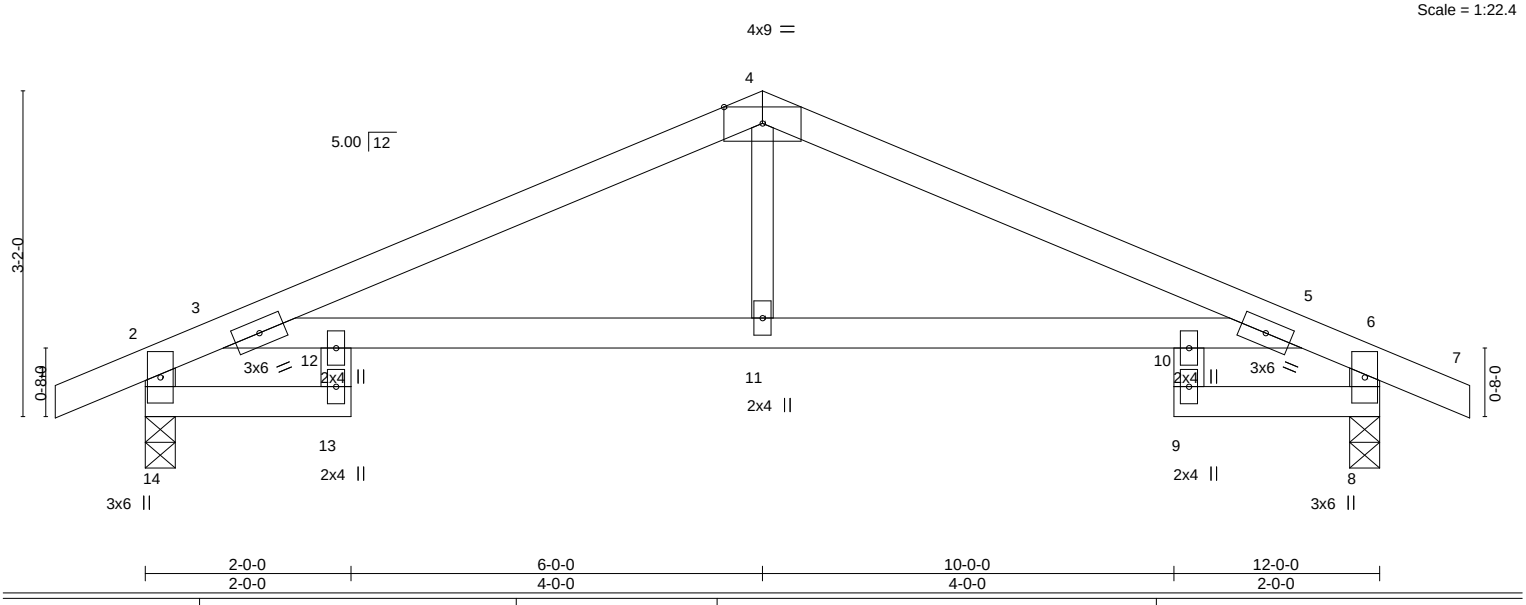
Vert: 4=-39(B) 5=-39(B) 11=-231(B) 10=-231(B) 13=-39(B) 14=-35(B)

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	A2	Roof Special	3	1	I43391945
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:27 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-506SfHVU8zHhE02gtdQ3hxXepBI1JG_LFvfROlyOvhY

-0-10-8 | 2-0-0 | 6-0-0 | 10-0-0 | 12-0-0 | 12-10-8
0-10-8 | 2-0-0 | 4-0-0 | 4-0-0 | 2-0-0 | 0-10-8

Scale = 1:22.4



2-0-0 | 6-0-0 | 10-0-0 | 12-0-0
2-0-0 | 4-0-0 | 4-0-0 | 2-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.08	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.16	11-12	>888	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.15	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.07	11-12	>999	240	Weight: 37 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-11: 2x3 SPF No.2

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

REACTIONS. (size) 14=0-3-8, 8=0-3-8
Max Horz 14=-36(LC 9)
Max Uplift 14=-91(LC 8), 8=-91(LC 9)
Max Grav 14=598(LC 1), 8=598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-936/87, 4-5=-936/102, 2-14=-622/117, 6-8=-622/112
BOT CHORD 3-12=-37/824, 11-12=-37/824, 10-11=-37/824, 5-10=-37/824
WEBS 4-11=0/312

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	B1	GABLE	1	1	I43391946

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:29 2020 Page 1

ID:bDljNJA6?5tiTk6El3KUKZyAkTB-1PED4yXkgaYPTKC3_2SXnMd3y?5en9teiD8YSByOvhW

-0-10-8 3-3-8 21-2-8 23-0-0 46-0-0 46-10-8

0-10-8 3-3-8 17-11-0 1-9-8 23-0-0 0-10-8

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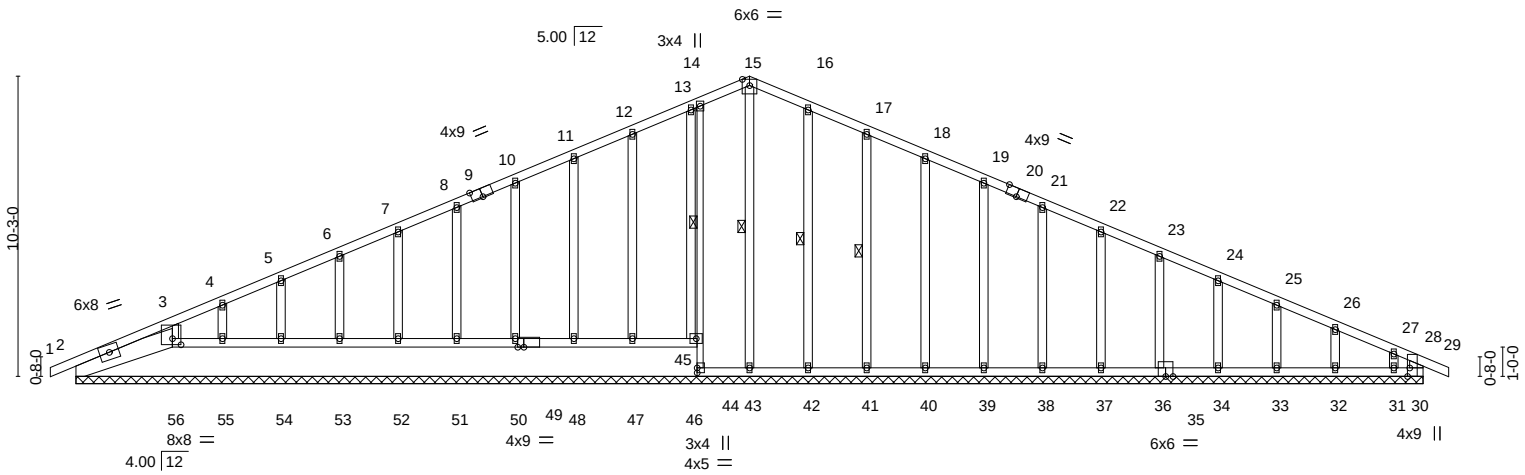


3-3-8 21-2-8 46-0-0

3-3-8 17-11-0 24-9-8

Plate Offsets (X,Y)-- [9:0-4-8,Edge], [20:0-4-8,Edge], [30:0-3-8,Edge], [49:0-2-8,Edge], [56:0-3-8,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	29	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.00	29	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.02	30	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 244 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-56: 2x8 SP DSS, 14-44: 2x3 SPF No.2
WEBS	2x6 SPF No.2 *Except*
	3-56: 2x3 SPF No.2
OTHERS	2x4 SPF 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: 2-56.
	1 Row at midpt 14-45
WEBS	1 Row at midpt 15-43, 16-42, 17-41

REACTIONS. All bearings 46-0-0.

(lb) - Max Horz 2=169(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 30, 2, 56, 47, 48, 50, 51, 52, 53, 54, 55, 42, 41, 40, 39, 38, 37, 36, 34, 33, 32, 31 except 45=-192(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 30, 2, 44, 43, 46, 47, 48, 50, 51, 52, 53, 54, 55, 42, 41, 40, 39, 38, 37, 36, 34, 33, 32, 31, 45 except 56=266(LC 1)

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

TOP CHORD 10-11=-35/268, 11-12=-35/288, 12-13=-35/310, 13-14=-32/321, 14-15=-34/327, 15-16=-34/321, 16-17=-31/288

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 45 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) 30, 2, 56, 47, 48, 50, 51, 52, 53, 54, 55, 42, 41, 40, 39, 38, 37, 36, 34, 33, 32, 31 except (jt=lb) 45=192.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 56, 46, 47, 48, 50, 51, 52, 53, 54, 55.
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.

October 28,2020

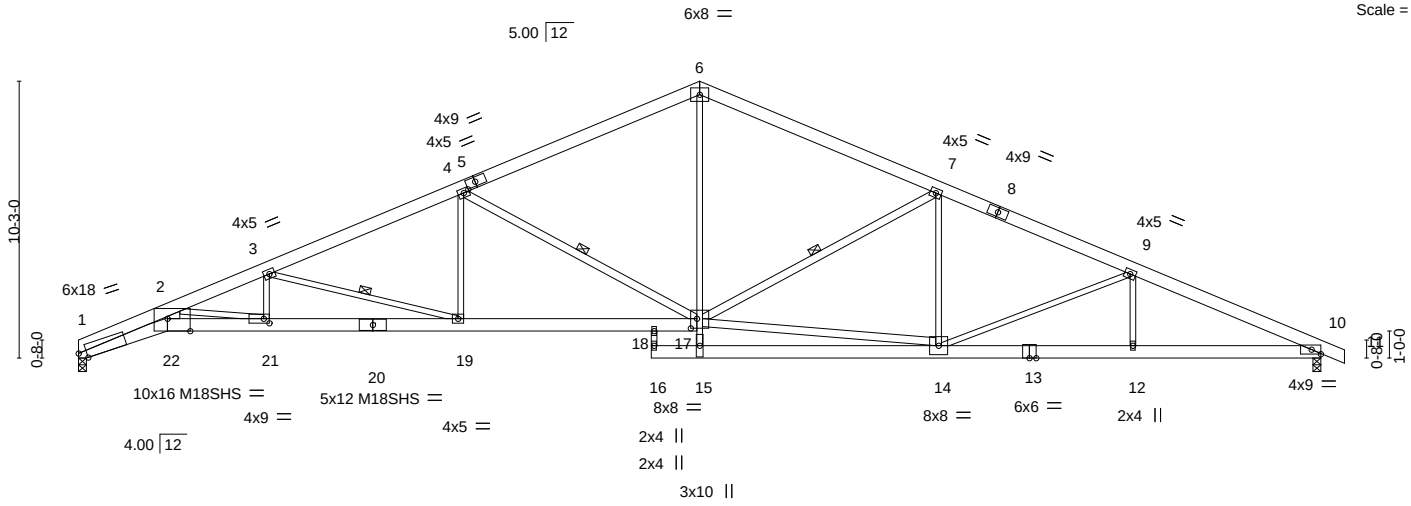
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	B2A	Roof Special	7	1	I43391947
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:30 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-VbobHIXMRugG5TnFYmzmJZ92FPGiWPAnxtt6_dyOvhV

3-3-8 | 6-11-8 | 14-1-14 | 21-2-8 | 23-0-0 | 31-10-3 | 39-0-8 | 46-0-0 | 46-10-8
3-3-8 | 3-8-0 | 7-2-6 | 7-0-10 | 1-9-8 | 8-10-3 | 7-2-5 | 6-11-8 | 0-10-8

Scale = 1:85.3



3-3-8 | 6-11-8 | 14-1-14 | 21-2-8 | 23-0-0 | 31-10-3 | 39-0-8 | 46-0-0
3-3-8 | 3-8-0 | 7-2-6 | 7-0-10 | 1-9-8 | 8-10-3 | 7-2-5 | 6-11-8

Plate Offsets (X,Y)-- [1:0-3-9,Edge], [5:0-4-2,0-2-0], [17:0-2-12,0-4-4], [21:0-2-8,0-2-0], [22:0-10-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.48	19-21	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.88	19-21	>624	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.45	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.36	19-21	>999	240	Weight: 251 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
1-5: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SPF No.2 *Except*
1-22,20-22: 2x6 SP DSS, 17-20: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
2-22: 2x6 SPF No.2, 4-17,7-17,14-17: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-11-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-4-11 oc bracing.
WEBS 1 Row at midpt 3-19, 4-17, 7-17

REACTIONS. (size) 1=0-3-8, 10=0-3-8
Max Horz 1=-178(LC 13)
Max Uplift 1=-265(LC 8), 10=-288(LC 9)
Max Grav 1=2056(LC 1), 10=2129(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8955/1296, 2-3=-6165/828, 3-4=-4443/563, 4-6=-3089/371, 6-7=-3064/394, 7-9=-3724/474, 9-10=-4386/539
BOT CHORD 1-22=-1329/8191, 21-22=-1158/7077, 19-21=-853/5769, 18-19=-494/4023, 17-18=-494/4023, 12-14=-409/3910, 10-12=-409/3910
WEBS 2-22=-335/2314, 3-21=-19/555, 3-19=-1817/374, 4-19=-7/677, 4-17=-1490/387, 15-17=0/403, 6-17=-113/1681, 7-17=-863/315, 9-14=-629/190, 9-12=0/278, 14-17=-246/3333, 2-21=-1332/310

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=265, 10=288.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C1	GABLE	1	1	I43391948
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871, Mitek

8.420 s Aug 25 2020 MiTek Industries, Inc. Wed Oct 28 14:04:03 2020 Page 1
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-MH96LYz4f1jaY?cZ9duV_NJCVmHVEbJPtVFyQWyOsXQ

-0-10-8	3-3-8	6-11-8	14-1-14	21-2-8	25-0-0	31-0-9	38-2-15	46-0-0
0-10-8	3-3-8	3-8-0	7-2-6	7-0-10	3-9-8	6-0-9	7-2-6	7-9-1

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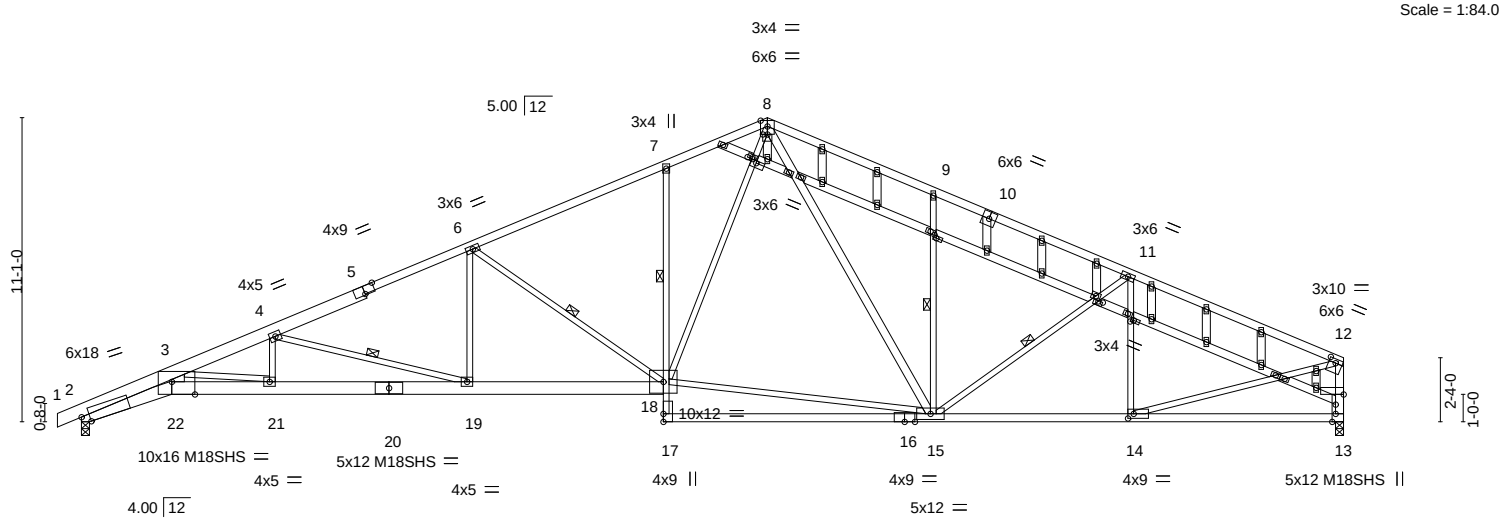

3-3-8	6-11-8	14-1-14	21-2-8	31-0-9	38-2-15	46-0-0
3-3-8	3-8-0	7-2-6	7-0-10	9-10-1	7-2-6	7-9-1

Plate Offsets (X,Y)-- [2:0-3-9,Edge], [5:0-4-8,Edge], [8:0-2-0,0-0-0], [12:0-3-0,0-1-12], [13:0-3-8,Edge], [14:0-2-8,0-2-0], [22:0-10-2,Edge], [24:0-2-5,0-1-0], [24:0-2-0,0-0-12], [26:0-1-4,0-1-0], [27:0-2-0,0-0-4], [28:0-1-4,0-1-0], [30:0-3-8,0-4-7]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.49	19-21	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.91	15-17	>601	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.43	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.37	19-21	>999	240	Weight: 264 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-5: 2x6 SPF 1650F 1.4E, 10-12: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except*
	2-22,20-22: 2x6 SP DSS, 7-17: 2x3 SPF No.2
	18-20: 2x6 SPF 1650F 1.4E
WEBS	2x3 SPF No.2 *Except*
	3-22: 2x6 SPF No.2
	8-15,12-13,23-24,24-25,25-26,26-27,27-28,28-29,29-30: 2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-11-10 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-1-14 oc bracing. Except:
	1 Row at midpt 7-18
WEBS	1 Row at midpt 4-19, 6-18, 9-15, 11-15

REACTIONS. (lb/size) 2=2129/0-3-8, 13=2056/0-3-8
Max Horz 2=200(LC 12)
Max Uplift 2=-301(LC 8), 13=-245(LC 9)

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

TOP CHORD	2-3=-8916/1366, 3-4=-6135/896, 4-5=-4369/572, 5-6=-4190/590, 6-7=-3217/450, 7-8=-3170/548, 8-9=-2839/480, 9-10=-2678/360, 10-11=-2852/330, 11-12=-2865/345, 12-13=-1978/286
BOT CHORD	2-22=-1415/8150, 21-22=-1230/7042, 20-21=-947/5737, 19-20=-947/5737, 18-19=-531/3927, 7-18=-416/212, 14-15=-272/2559
WEBS	3-22=-365/2305, 3-21=-1328/288, 4-21=-12/545, 4-19=-1885/433, 6-19=-27/719, 6-18=-1295/311, 15-18=-174/2089, 8-18=-348/1633, 8-15=-243/689, 9-15=-478/244, 11-14=-534/154, 12-14=-242/2533

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 2 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 301 lb uplift at joint 2 and 245 lb uplift at joint 13.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C2	Roof Special	5	1	I43391949
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:34 2020 Page 1
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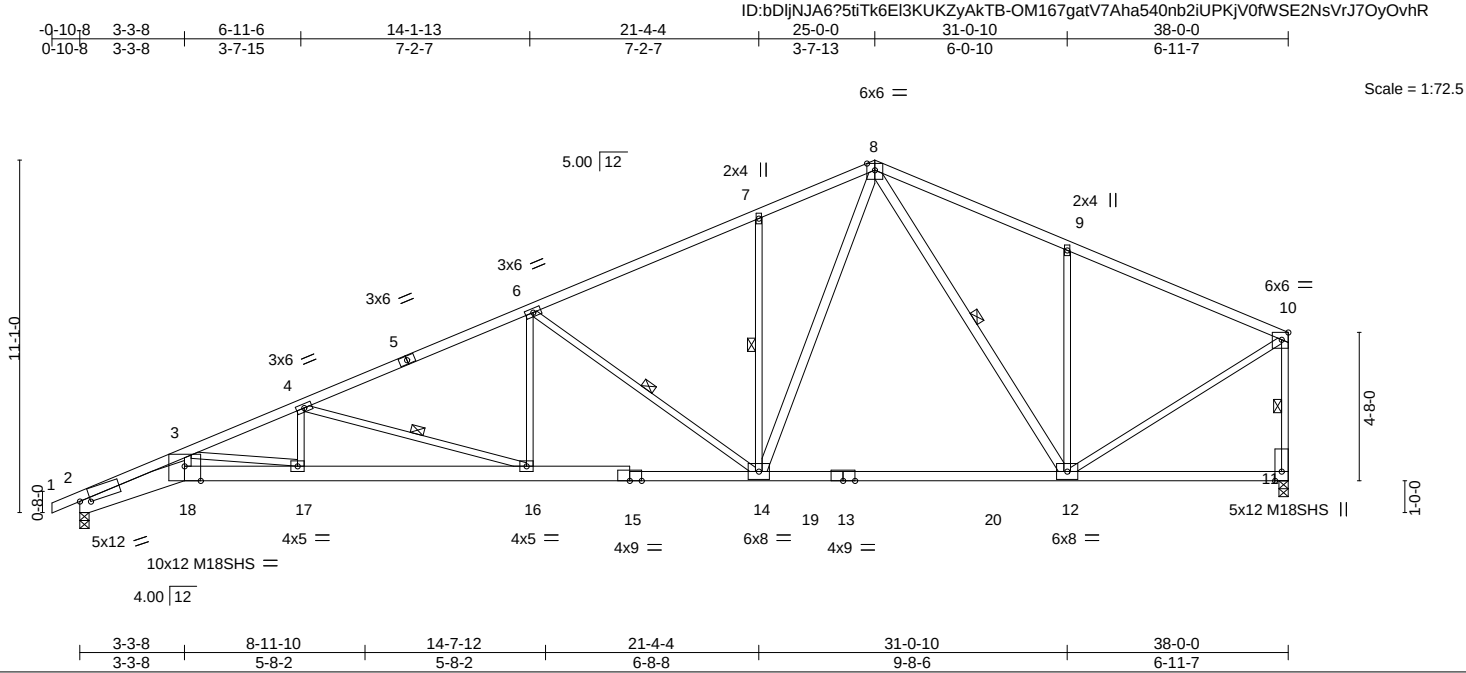

Plate Offsets (X,Y)-- [2:0-3-15,0-1-6], [10:0-2-8,Edge], [18:0-6-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.42	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.70	12-14	>644	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.26	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27	17	>999	240	Weight: 183 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x8 SP DSS *Except*
15-18: 2x6 SP DSS, 11-13: 2x4 SPF 2100F 1.8E
13-15: 2x4 SPF 2400F 2.0E
WEBS 2x3 SPF No.2 *Except*
8-14,8-12: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-7-9 oc bracing.
WEBS 1 Row at midpt 4-16, 6-14, 7-14, 8-12, 10-11

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=227(LC 8)
Max Uplift 2=-274(LC 8), 11=-166(LC 9)
Max Grav 2=1833(LC 2), 11=1804(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7254/1229, 3-4=-5085/792, 4-6=-3419/512, 6-7=-2349/363, 7-8=-2315/462, 8-9=-1684/296, 9-10=-1668/224, 10-11=-1725/192
BOT CHORD 2-18=-1319/6623, 17-18=-1220/6118, 16-17=-864/4705, 14-16=-493/3088, 12-14=-117/1564
WEBS 3-18=-290/1638, 3-17=-1442/363, 4-17=-35/732, 4-16=-1690/388, 6-16=-30/704, 6-14=-1235/329, 7-14=-415/212, 8-14=-316/1507, 8-12=-355/109, 9-12=-534/278, 10-12=-138/1740

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=274, 11=166.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C3	Roof Special	2	1	I43391950
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:35 2020 Page 1
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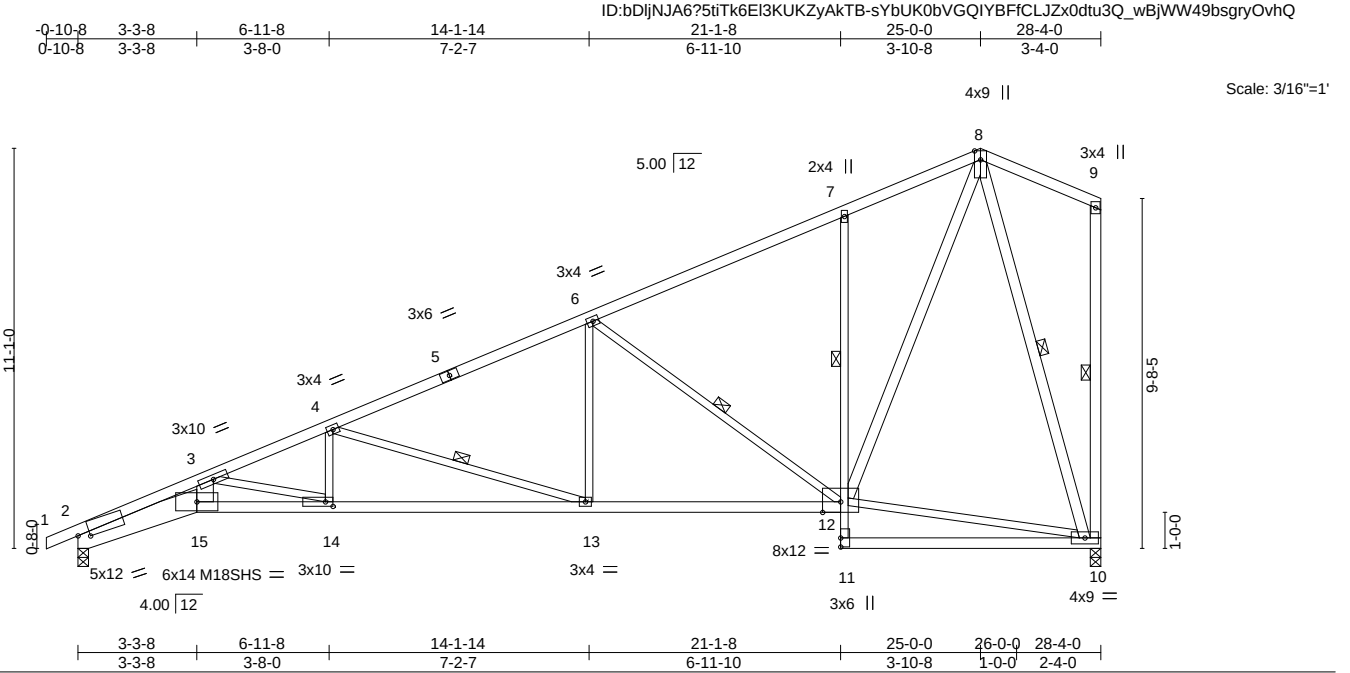

Plate Offsets (X,Y)-- [2:0-3-15,0-1-6], [14:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.27	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.49	14-15	>687	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.24	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24	14-15	>999	240	Weight: 145 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E, 7-11: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	3-15: 2x6 SPF No.2, 8-12,9-10,8-10: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-9-11 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 7-9-4 oc bracing. Except:
	1 Row at midpt 7-12
WEBS	1 Row at midpt 4-13, 6-12, 9-10, 8-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=410(LC 7)
Max Uplift 2=-216(LC 8), 10=-223(LC 8)
Max Grav 2=1335(LC 1), 10=1261(LC 1)

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

TOP CHORD	2-3=-5496/1064, 3-4=-3246/565, 4-6=-1996/333, 6-7=-1003/211, 7-8=-963/308
BOT CHORD	2-15=-1168/5033, 14-15=-1018/4360, 13-14=-647/2996, 12-13=-322/1758, 7-12=-409/213
WEBS	3-15=-325/1561, 3-14=-1404/382, 4-14=-12/443, 4-13=-1298/341, 6-13=-6/575, 6-12=-1155/299, 10-12=-149/297, 8-12=-339/1361, 8-10=-1173/202

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=216, 10=223.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C4	Common	1	1	I43391951
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:36 2020 Page 1
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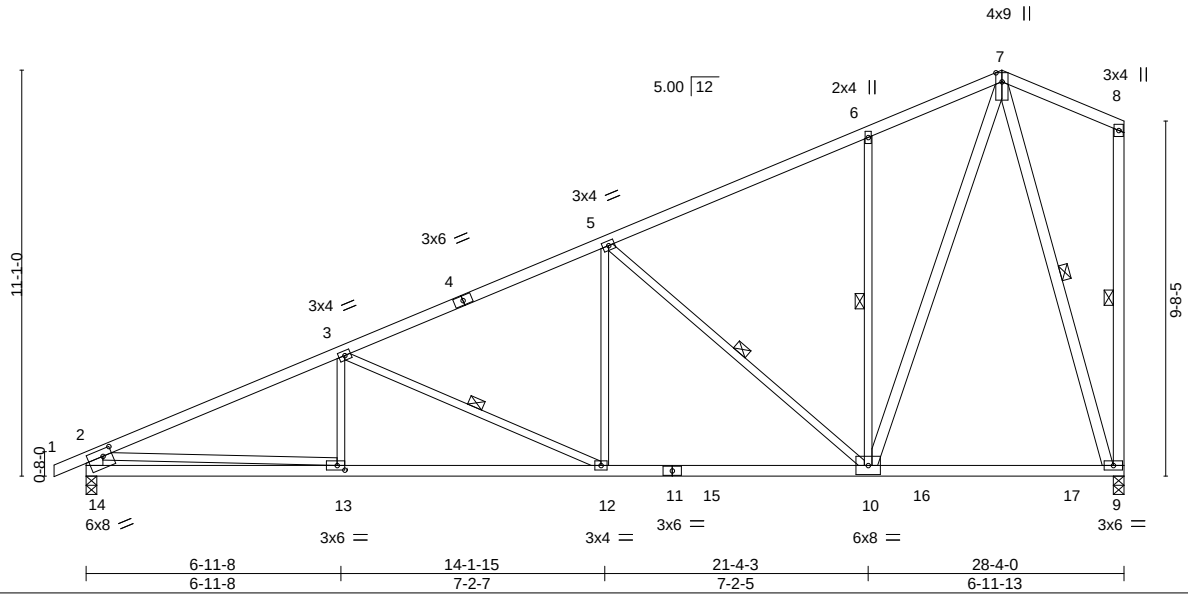
-0-10-8 6-11-8 14-1-15 21-4-3 25-0-0 28-4-0
0-10-8 6-11-8 7-2-7 7-2-5 3-7-13 3-4-0

Scale = 1:62.9



6-11-8 14-1-15 21-4-3 28-4-0
6-11-8 7-2-7 7-2-5 6-11-13

Plate Offsets (X,Y)-- [13:0-2-8,0-1-8], [14:0-3-0,0-2-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.14	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.27	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	12-13	>999	240	Weight: 138 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-10,8-9,7-9: 2x4 SPF No.2, 2-14: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-8-14 oc bracing.
WEBS 1 Row at midpt 3-12, 5-10, 6-10, 8-9, 7-9

REACTIONS. (size) 14=0-3-8, 9=0-3-8
Max Horz 14=417(LC 5)
Max Uplift 14=-216(LC 8), 9=-223(LC 8)
Max Grav 14=1385(LC 2), 9=1369(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2427/347, 3-5=-1774/281, 5-6=-947/196, 6-7=-918/296, 2-14=-1268/252
BOT CHORD 13-14=-408/763, 12-13=-452/2167, 10-12=-272/1569, 9-10=-125/347
WEBS 3-12=-658/198, 5-12=0/555, 5-10=-1025/271, 6-10=-419/219, 7-10=-336/1404, 2-13=-82/1407, 7-9=-1195/186

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=216, 9=223.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

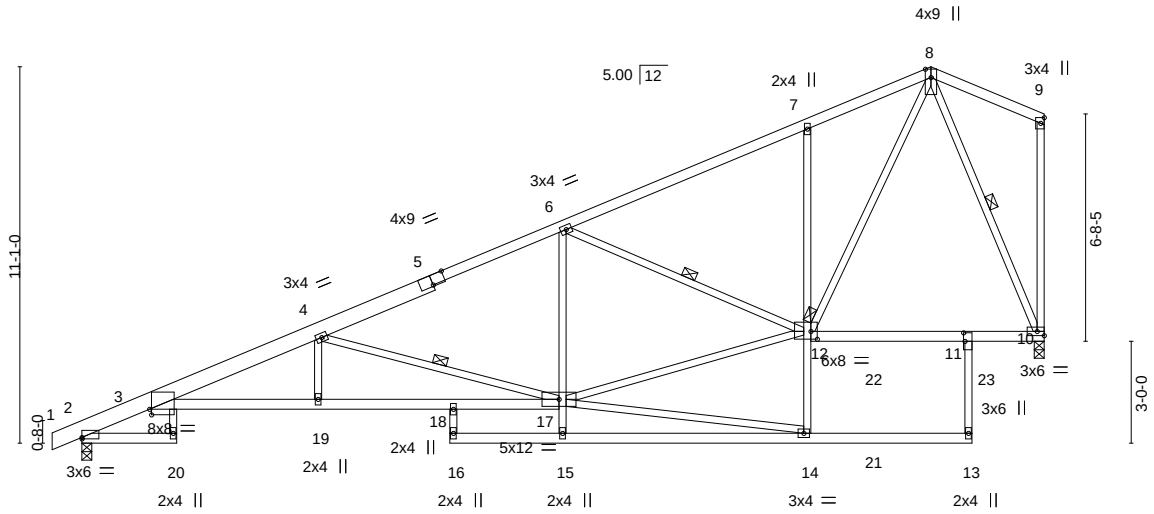
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C5	Roof Special	1	1	I43391952
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:37 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-oxjElhdlo2YGRYpbSkcP52yEKDhifcKpYT4zkjyOvhO

-0-10-8	2-9-8	6-11-8	10-10-0	14-1-13	21-4-5	25-0-0	28-4-0
0-10-8	2-9-8	4-2-0	3-10-9	3-3-13	7-2-8	3-7-11	3-4-0

Scale = 1:67.8



2-9-8	6-11-8	10-10-0	14-1-13	21-4-5	25-0-0	26-2-8	28-4-0
2-9-8	4-2-0	3-10-9	3-3-13	7-2-8	3-7-11	1-2-8	2-1-8

Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [3:0-0-11,0-1-15], [5:0-4-8,Edge], [11:0-3-0,0-0-8], [12:0-2-4,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.36	20	>944	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.62	20	>547	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.30	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.30	20	>999	240	Weight: 153 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 3-17: 2x4 SPF 2100F 1.8E, 16-18,11-13: 2x3 SPF No.2
WEBS	2x3 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-17, 8-10, 6-12
JOINTS	1 Brace at Jt(s): 12

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=361(LC 5)
Max Uplift 2=-203(LC 8), 10=-226(LC 8)
Max Grav 2=1432(LC 2), 10=1460(LC 2)

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

TOP CHORD	2-3=-802/0, 3-4=-3649/606, 4-6=-2184/339, 6-7=-1381/247, 7-8=-1353/344
BOT CHORD	3-19=-790/3481, 18-19=-790/3481, 17-18=-760/3458, 11-12=-111/472, 10-11=-112/500
WEBS	4-19=0/298, 4-17=-1630/428, 12-14=0/306, 7-12=-435/222, 8-12=-368/1682, 8-10=-1275/219, 15-17=0/266, 6-17=0/302, 6-12=-788/226, 12-17=-396/1943

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=203, 10=226.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C6	Roof Special	3	1	I43391953
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:38 2020 Page 1
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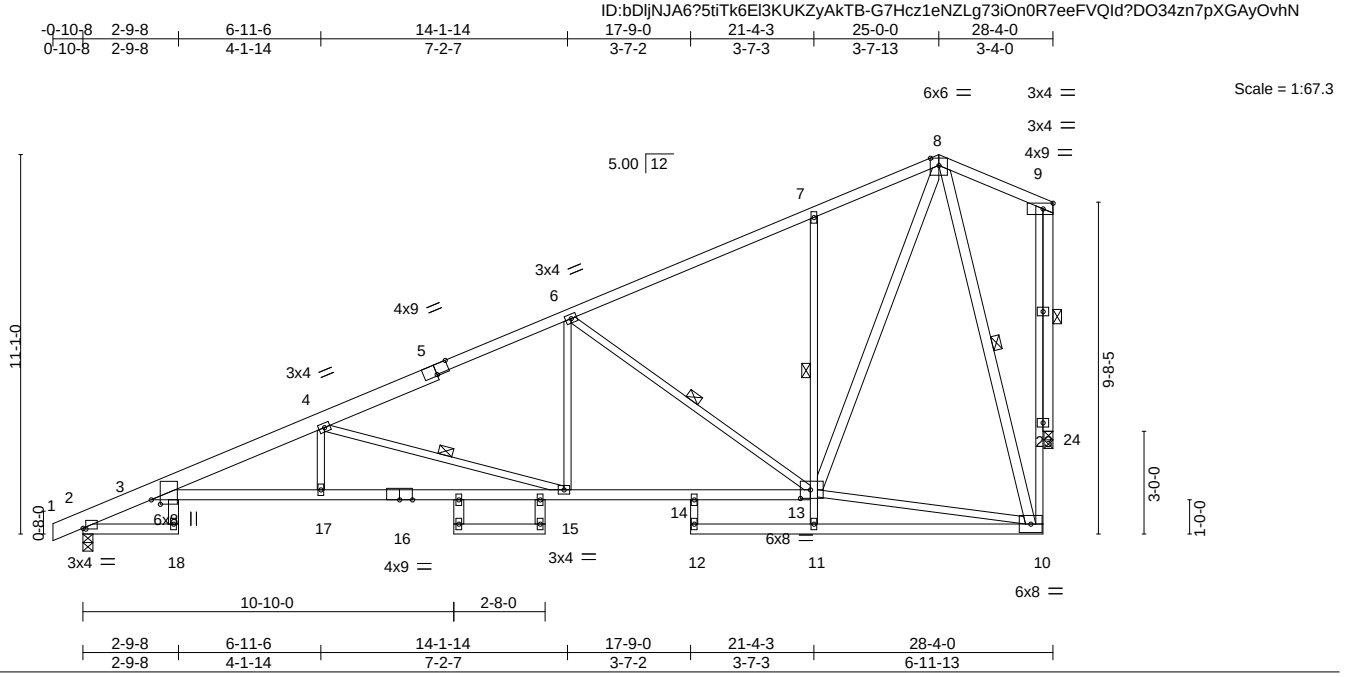

Plate Offsets (X,Y)-- [2:0-1-0,0-0-4], [3:0-1-9,0-3-3], [5:0-4-8,Edge], [13:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.31	18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.57	18	>593	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.45	24	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.31	18	>999	240	Weight: 164 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 3-16: 2x4 SPF 2100F 1.8E, 12-14: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-18,8-13,8-10,19-21,20-22: 2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-4-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-15, 6-13, 8-10, 7-11, 9-24

REACTIONS. (size) 2=0-3-8, 24=0-3-2
Max Horz 2=358(LC 8)
Max Uplift 2=-177(LC 8), 24=-253(LC 8)
Max Grav 2=1349(LC 1), 24=1239(LC 1)

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

TOP CHORD	2-3=-626/0, 3-4=-3378/548, 4-6=-2014/281, 6-7=-999/139, 7-8=-978/243, 10-23=-220/1123, 9-23=-220/1123
BOT CHORD	3-17=-814/3212, 15-17=-813/3212, 14-15=-401/1751, 13-14=-379/1700
WEBS	4-17=0/274, 4-15=-1526/431, 6-15=-40/597, 6-13=-1145/313, 8-13=-347/1385, 8-10=-1138/267, 10-13=-64/273, 11-13=0/272, 7-13=-444/225, 9-24=-1240/253

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 24 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=177, 24=253.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C7	Roof Special	1	1	I43391954
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:39 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-kKr?ANe?Kfo_gsz_a9etBT1b?1LJ7Xe6?nZ4pcyOvhM

-0-10-8 2-9-8 6-11-6 14-1-14 21-1-8 25-0-0 28-4-0
0-10-8 2-9-8 4-1-14 7-2-7 6-11-10 3-10-8 3-4-0

Scale: 3/16"=1'

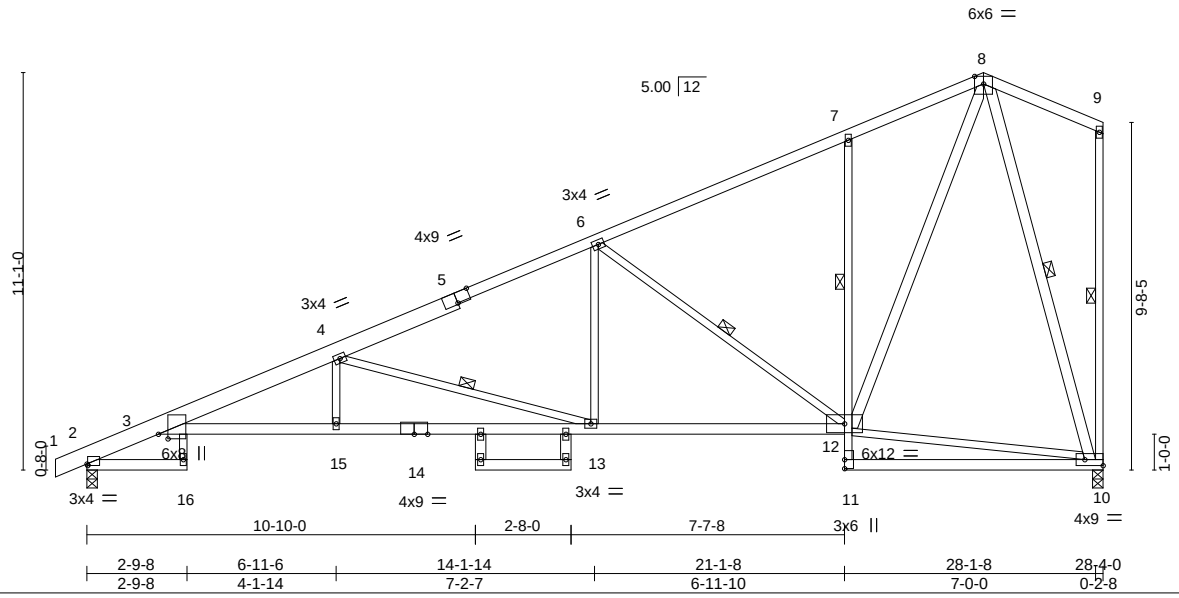

Plate Offsets (X,Y)-- [2:0-0-4,0-0-8], [3:0-1-9,0-3-3], [5:0-4-8,Edge], [10:Edge,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.31	16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.57	16	>587	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.35	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.33	16	>999	240	Weight: 152 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-14: 2x4 SPF 2100F 1.8E, 7-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-12,8-10,17-19,18-20: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 7-12
WEBS 1 Row at midpt 4-13, 6-12, 9-10, 8-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=412(LC 8)
Max Uplift 2=-175(LC 8), 10=-254(LC 8)
Max Grav 2=1351(LC 1), 10=1264(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-625/0, 3-4=-3385/570, 4-6=-2018/285, 6-7=-1007/148, 7-8=-975/248
BOT CHORD 3-15=-892/3219, 13-15=-891/3219, 12-13=-458/1753, 7-12=-429/218
WEBS 4-15=0/268, 4-13=-1531/453, 6-13=-36/606, 6-12=-1137/305, 8-12=-355/1374, 10-12=-89/299, 8-10=-1182/297

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) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=175, 10=254.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C8	Roof Special	1	1	I43391955
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:40 2020 Page 1
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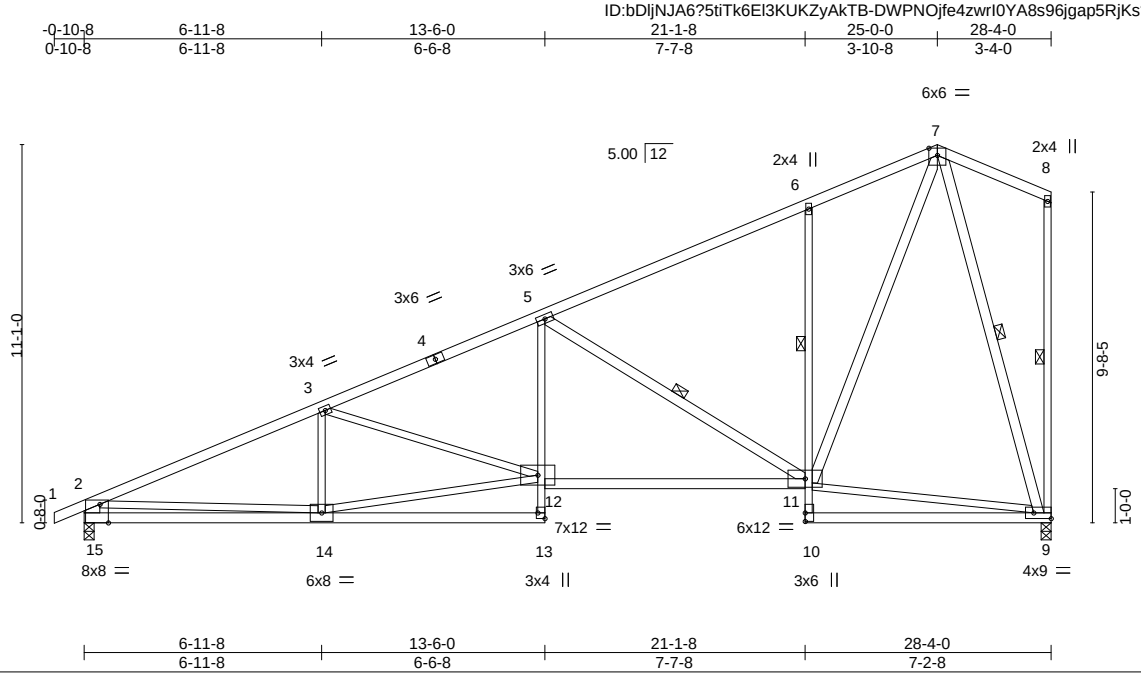

Plate Offsets (X,Y)-- [9:Edge,0-2-0], [13:Edge,0-2-8], [15:0-3-0,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.17	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.39	11-12	>865	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	11-12	>999	240	Weight: 146 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-13,6-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-11,7-11,7-9: 2x4 SPF No.2, 2-15: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-11-7 oc bracing. Except:
1 Row at midpt 6-11
WEBS 1 Row at midpt 5-11, 8-9, 7-9

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 15=400(LC 8)
Max Uplift 15=-184(LC 8), 9=-254(LC 8)
Max Grav 15=1339(LC 1), 9=1258(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2309/270, 3-5=-2131/327, 5-6=-1025/145, 6-7=-983/253, 2-15=-1268/221
BOT CHORD 14-15=-545/792, 5-12=-47/583, 11-12=-515/1912, 6-11=-463/240
WEBS 3-14=-314/189, 12-14=-541/2013, 5-11=-1258/353, 7-11=-362/1386, 2-14=-23/1252, 7-9=-1178/294, 9-11=-74/324

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) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=184, 9=254.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	C9	GABLE	1	1	I43391956
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:42 2020 Page 1
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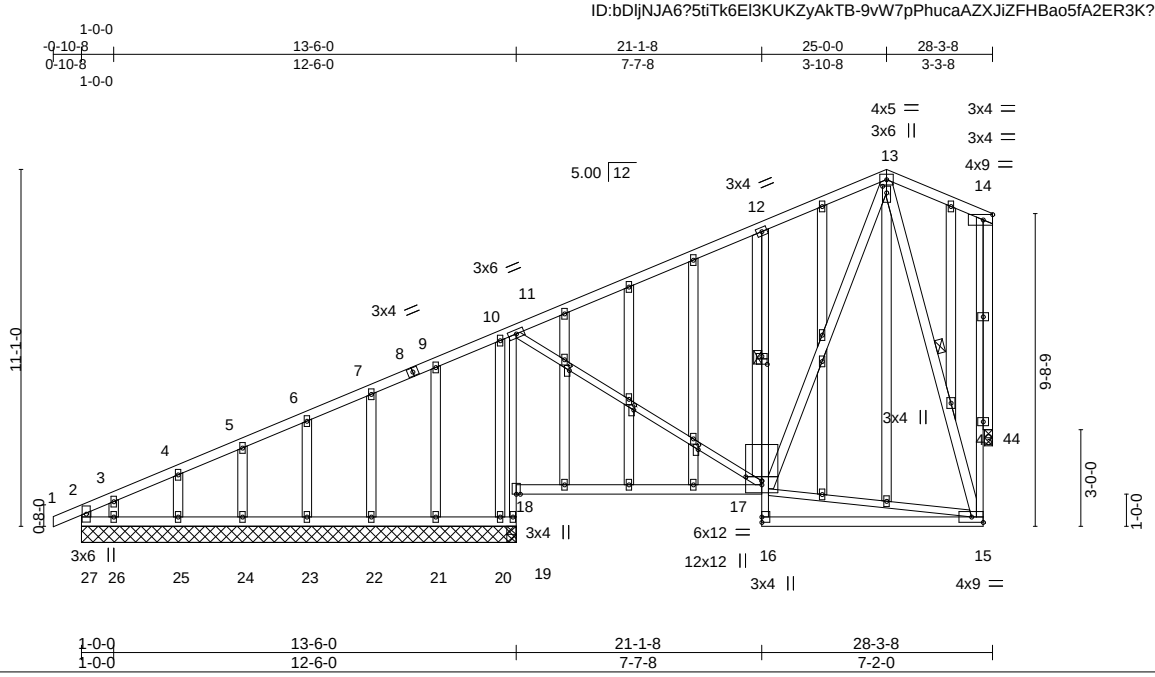

Plate Offsets (X,Y)-- [12:0-2-0,3-7-7], [13:0-2-7,0-1-8], [17:0-1-8,0-6-0], [34:0-1-13,0-0-4], [37:0-1-13,0-0-4], [40:0-1-13,0-0-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.13	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.26	17-18	>688	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	-0.18	44	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	15-16	>999	240	Weight: 215 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	11-19,12-16: 2x3 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	11-17,14-15,15-17: 2x3 SPF No.2
OTHERS	2x4 SPF 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, Except:
	4-9-15 oc bracing: 18-19
	10-0-0 oc bracing: 16-17.
	1 Row at midpt 12-17
WEBS	1 Row at midpt 13-15

REACTIONS. All bearings 13-6-0 except (jt=length) 44=0-3-0.
(lb) - Max Horz 27=347(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 27, 20, 22, 23, 24, 25 except 19=-360(LC 8), 26=-190(LC 8), 44=-131(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 27, 20, 21, 22, 23, 24, 25, 26 except 19=985(LC 1), 19=985(LC 1), 44=604(LC 1)

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

TOP CHORD	2-3=-318/114, 3-4=-262/109, 11-12=-441/29, 12-13=-405/137, 15-43=-99/494, 14-43=-99/494
BOT CHORD	18-19=-1001/289, 11-18=-921/337, 12-17=-471/242
WEBS	11-17=-12/400, 13-15=-463/143, 13-17=-177/461, 14-44=-605/131

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 44 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) 27, 20, 22, 23, 24, 25 except (jt=lb) 19=360, 26=190, 44=131.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	D1	Roof Special	4	1	I43391957
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:44 2020 Page 1
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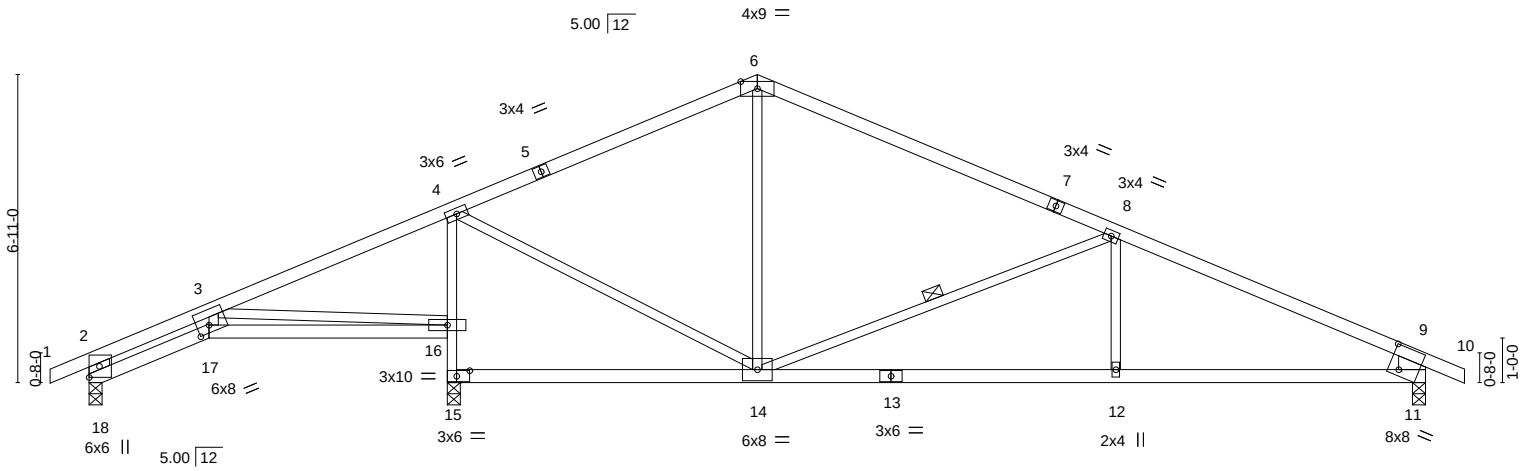
-0-10-8 2-8-5 8-0-8 15-0-0 23-0-9 30-0-0 30-10-8
0-10-8 2-8-5 5-4-3 6-11-8 8-0-9 6-11-7 0-10-8

Scale = 1:51.7



2-8-5 8-0-8 8-2-4 15-0-0 23-0-9 30-0-0
2-8-5 5-4-3 0-1-12 6-9-12 8-0-9 6-11-7

Plate Offsets (X,Y)-- [11:0-2-13,0-6-6], [15:0-3-8,0-1-8], [17:0-3-4,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.13	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.28	12-14	>936	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	-0.03	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	12-14	>999	240	Weight: 103 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-18: 2x6 SPF No.2, 9-11: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-0-7 oc bracing.
WEBS 1 Row at midpt 8-14

REACTIONS. (size) 18=0-3-8, 11=0-3-8, 15=0-3-8
Max Horz 18=100(LC 8)
Max Uplift 18=-60(LC 4), 11=-192(LC 9), 15=-212(LC 8)
Max Grav 18=312(LC 21), 11=1003(LC 1), 15=1511(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-409/104, 2-3=-511/105, 3-4=-83/378, 4-6=-770/224, 6-8=-783/196, 8-9=-1558/299, 9-11=-906/222
BOT CHORD 17-18=-171/440, 16-17=-160/381, 15-16=-1467/247, 4-16=-1326/253, 12-14=-199/1345, 11-12=-199/1345
WEBS 3-16=-605/216, 4-14=0/953, 8-14=-805/250, 8-12=0/274

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 18, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 11=192, 15=212.
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.

October 28,2020

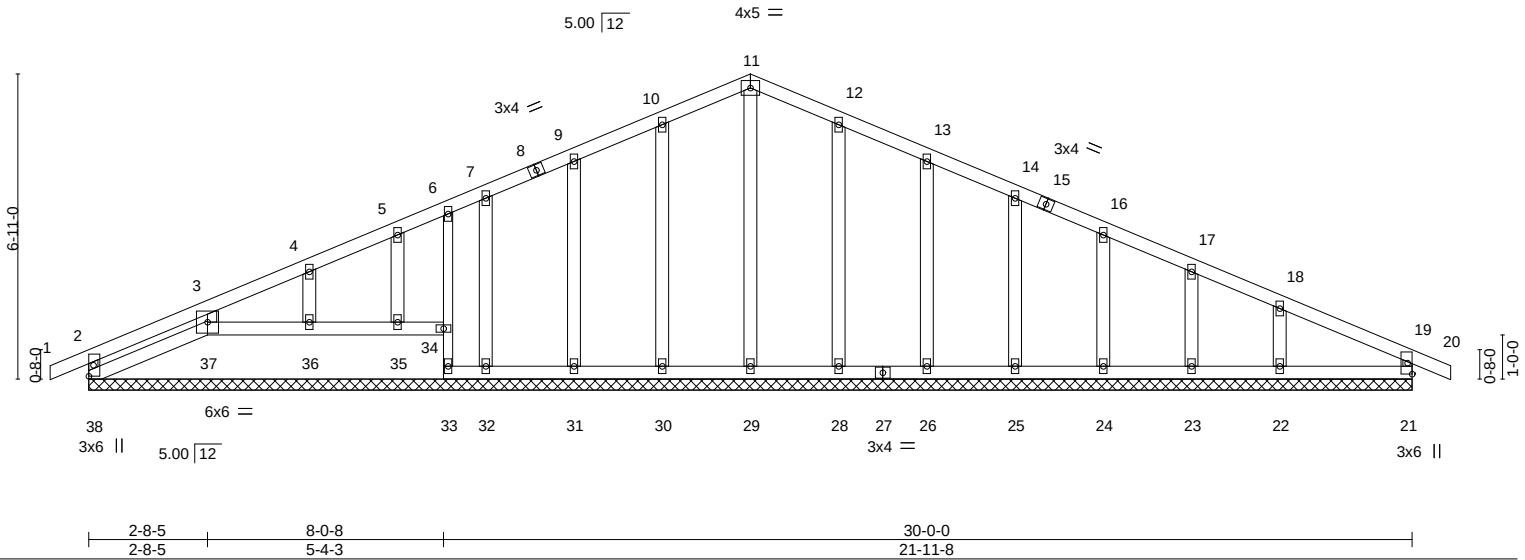
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	D2	Roof Special Supported Gable	1	1	I43391958
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:45 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-ZUCGRQjmvVZ8OnQ7wPlHQkHoZSaaXPD?Oi0O0GyOvhG

-0-10-8 2-8-5 8-0-8 15-0-0 30-0-0 30-10-8
0-10-8 2-8-5 5-4-3 6-11-8 15-0-0 0-10-8

Scale = 1:52.2



2-8-5 8-0-8 30-0-0
2-8-5 5-4-3 21-11-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	19	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 128 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-33: 2x3 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x4 SPF 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: 37-38.

REACTIONS. All bearings 30-0-0.
(lb) - Max Horz 38=-102(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 38, 21, 37, 34, 33, 30, 31, 32, 35, 36, 28, 26, 25, 24, 23, 22
Max Grav All reactions 250 lb or less at joint(s) 38, 21, 37, 34, 33, 29, 30, 31, 32, 35, 36, 28, 26, 25, 24, 23, 22

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) 34 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) 38, 21, 37, 34, 33, 30, 31, 32, 35, 36, 28, 26, 25, 24, 23, 22.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 37, 35, 36.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	E1	GABLE	1	1	I43391959
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:46 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-1gmeemkOgph_0x?KU7GWzxqvorreGtD8cMlyZiyOvhF

-0-10-8 | 4-6-0 | 9-0-0 | 9-10-8
0-10-8 | 4-6-0 | 4-6-0 | 0-10-8

Scale = 1:25.8

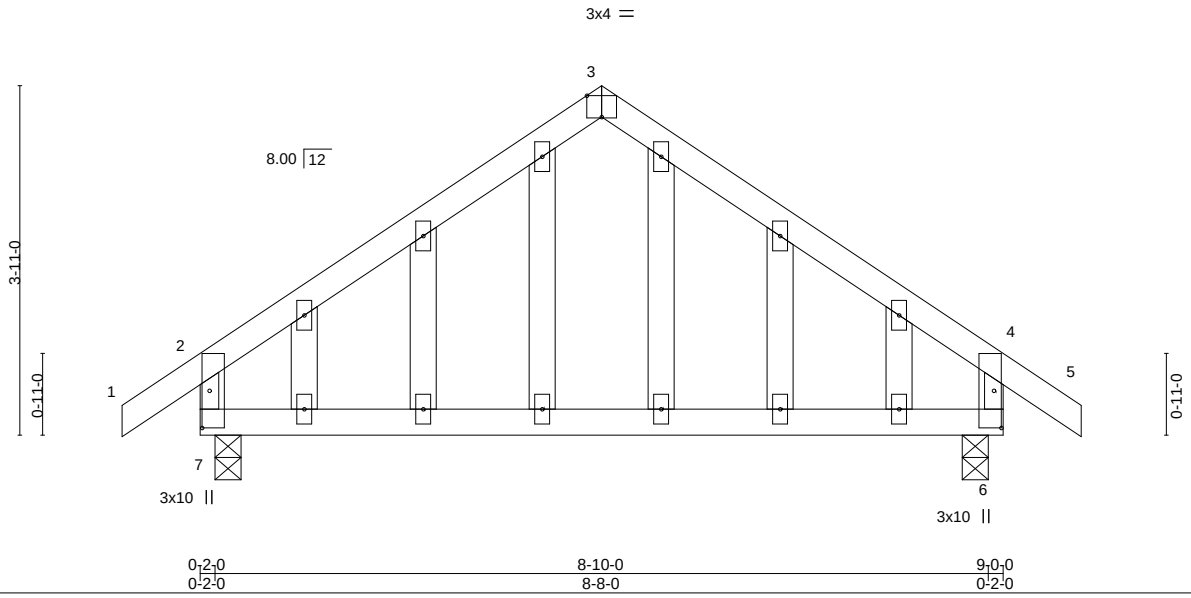


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [6:0-5-0,0-1-0], [7:0-5-0,0-1-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.19	6-7	>569	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.36	6-7	>292	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	6-7	>999	240	Weight: 40 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x3 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 7=0-3-8, 6=0-3-8
Max Horz 7=119(LC 7)
Max Uplift 7=-66(LC 8), 6=-66(LC 9)
Max Grav 7=464(LC 1), 6=464(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-352/105, 3-4=-352/105, 2-7=-376/122, 4-6=-376/122

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6.
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.

October 28,2020

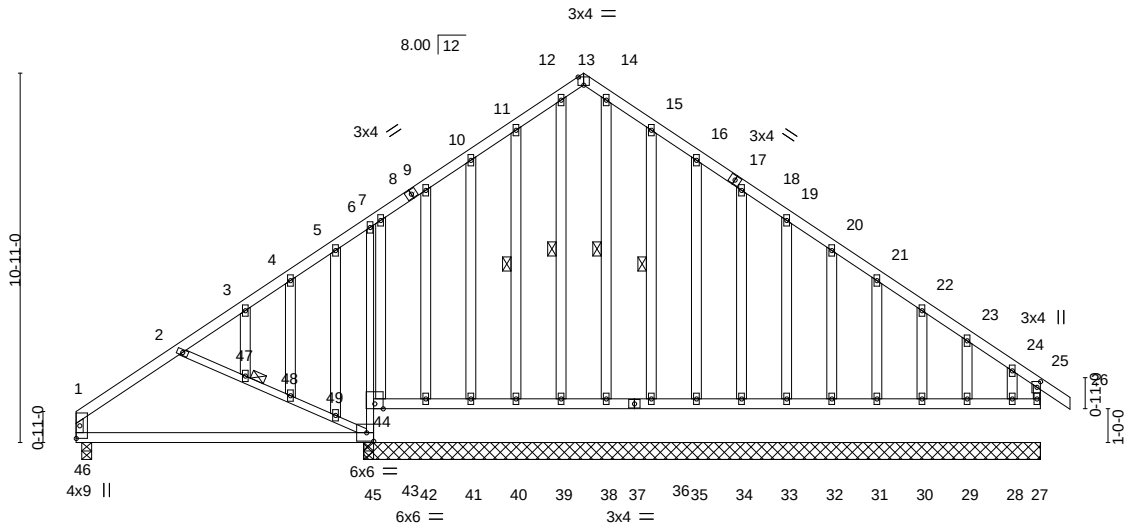
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	E2	GABLE	1	1	I43391960
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:48 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-_3uO3SlfCQxiFE9icYI_2MvD6fT6kkKR4gE3dbyOvhD

3-1-12	8-9-8	15-0-0	28-6-0	29-4-8
3-1-12	5-7-12	6-2-8	13-6-0	0-10-8

Scale = 1:68.1



0-2-0	8-6-0	8-9-8	28-6-0
0-2-0	8-4-0	0-3-8	19-8-8

Plate Offsets (X,Y)-- [13:0-2-0,Edge], [25:0-2-0,0-1-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.19	45-46	>534	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.38	45-46	>270	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.03	27	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.01	45-46	>999	240	Weight: 193 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 6-45: 2x3 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x4 SPF 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, Except: 10-0-0 oc bracing: 45-46,44-45.
WEBS	1 Row at midpt 11-40, 12-39, 14-38, 15-36
JOINTS	1 Brace at Jt(s): 47

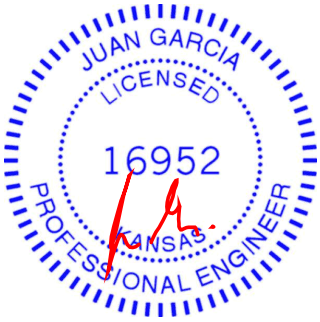
REACTIONS. All bearings 20-0-0 except (jt=length) 46=0-3-8.
(lb) - Max Horz 46=-285(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 46, 45, 27, 35, 41, 40, 39, 34, 33, 32, 31, 30, 29, 38, 36 except 44=-437(LC 9), 43=-314(LC 16), 28=-195(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 45, 27, 35, 42, 41, 40, 39, 34, 33, 32, 31, 30, 29, 38, 28, 36 except 46=365(LC 16), 44=551(LC 16), 45=250(LC 15), 43=346(LC 9)

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

TOP CHORD	1-2=-392/113, 11-12=-160/256, 1-46=-270/81
BOT CHORD	45-46=-130/361, 6-44=-346/212
WEBS	2-47=-335/219, 47-48=-338/220, 48-49=-354/231, 45-49=-355/231

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) N/A
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 44 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) 46, 45, 27, 35, 41, 40, 39, 34, 33, 32, 31, 30, 29, 38, 36 except (jt=lb) 44=437, 43=314, 28=195.
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.



October 28,2020

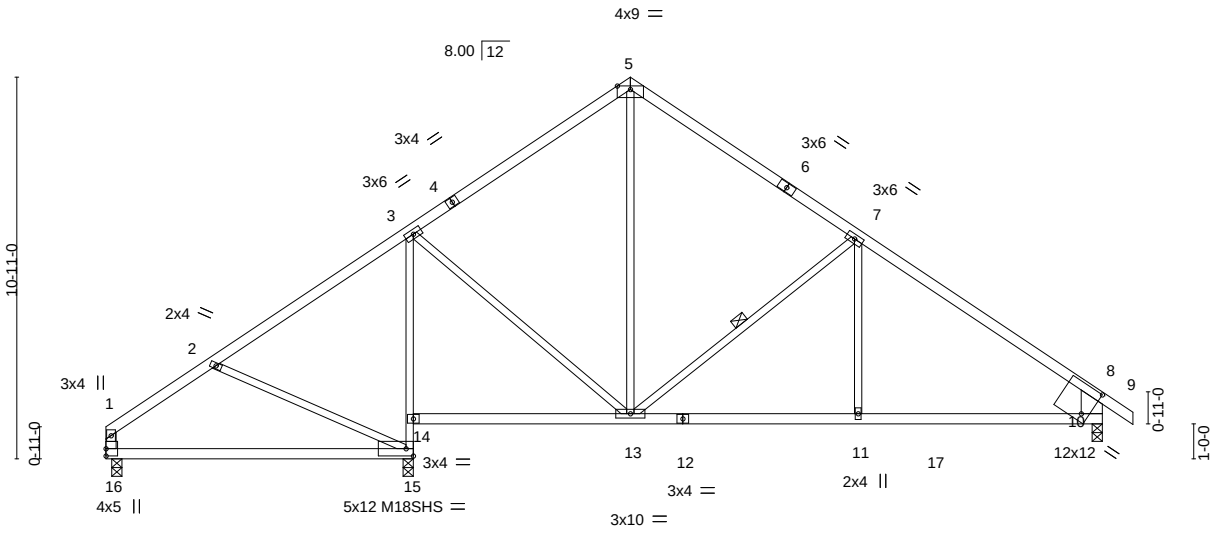
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	E3	Roof Special	1	1	I43391961
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:49 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-SFSnHomHzk3ZtOkv9FpDaaSJL3kTT8xaJK_c91yOvhC

3-1-12	8-9-8	15-0-0	21-6-3	28-6-0	29-4-8
3-1-12	5-7-12	6-2-8	6-6-3	6-11-13	0-10-8

Scale = 1:65.9



0-2-0	8-7-12	8-9-8	15-0-0	21-6-3	28-6-0
0-2-0	8-5-12	0-1-12	6-2-8	6-6-3	6-11-13

Plate Offsets (X,Y)-- [10:0-2-7,0-9-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.19	15-16	>551	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.37	15-16	>277	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	-0.03	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	11-13	>999	240	Weight: 110 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-16: 2x4 SPF No.2, 8-10: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-1-6 oc bracing.
WEBS 1 Row at midpt 7-13

REACTIONS. (size) 16=0-3-8, 15=0-3-8, 10=0-3-8
Max Horz 16=-287(LC 6)
Max Uplift 16=-78(LC 9), 15=-234(LC 8), 10=-161(LC 9)
Max Grav 16=425(LC 16), 15=1532(LC 15), 10=1063(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-402/173, 2-3=-239/259, 3-5=-688/235, 5-7=-646/200, 7-8=-1168/188, 1-16=-263/124, 8-10=-919/204
BOT CHORD 15-16=-147/345, 14-15=-1242/205, 3-14=-1143/237, 11-13=-38/819, 10-11=-38/819
WEBS 2-15=-348/195, 3-13=0/566, 5-13=-107/266, 7-13=-604/241, 7-11=0/283

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 15=234, 10=161.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	E4	Roof Special	2	1	I43391962
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:50 2020 Page 1
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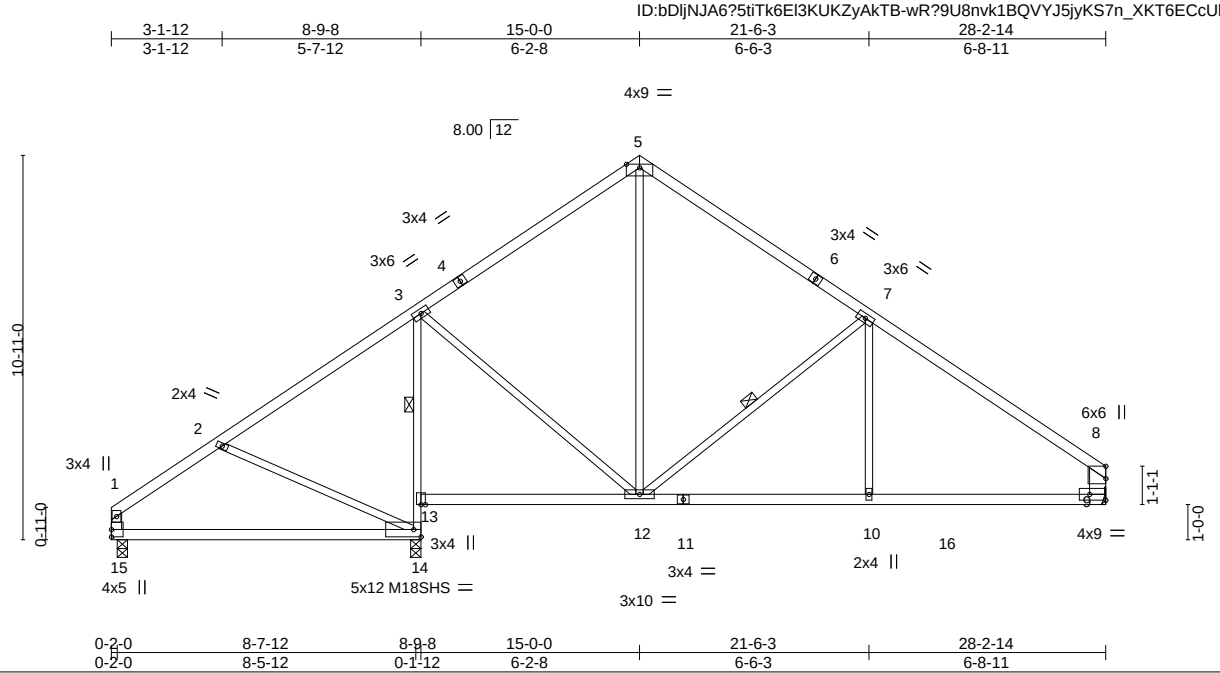

Plate Offsets (X,Y)-- [8:0-4-3,0-0-0], [9:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.19	14-15	>536	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.39	14-15	>266	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	-0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	10-12	>999	240	Weight: 108 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	3-14: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	1-15: 2x4 SPF No.2, 8-9: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-10-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 3-9-2 oc bracing. Except:
	1 Row at midpt 3-13
WEBS	1 Row at midpt 7-12

REACTIONS. (size) 15=0-3-8, 14=0-3-8, 9=Mechanical
Max Horz 15=285(LC 5)
Max Uplift 15=-53(LC 9), 14=-247(LC 8), 9=-123(LC 9)
Max Grav 15=377(LC 16), 14=1578(LC 15), 9=954(LC 16)

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

TOP CHORD	1-2=-330/137, 2-3=-198/319, 3-5=-649/219, 5-7=-607/183, 7-8=-1090/167, 8-9=-784/159
BOT CHORD	14-15=-151/295, 13-14=-1286/216, 3-13=-1184/248, 10-12=-56/768, 9-10=-56/768
WEBS	2-14=-358/197, 3-12=0/604, 7-12=-575/237, 7-10=0/254

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 15 except (jt=lb) 14=247, 9=123.
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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	E5	Roof Special	4	1	I43391963
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:51 2020 Page 1
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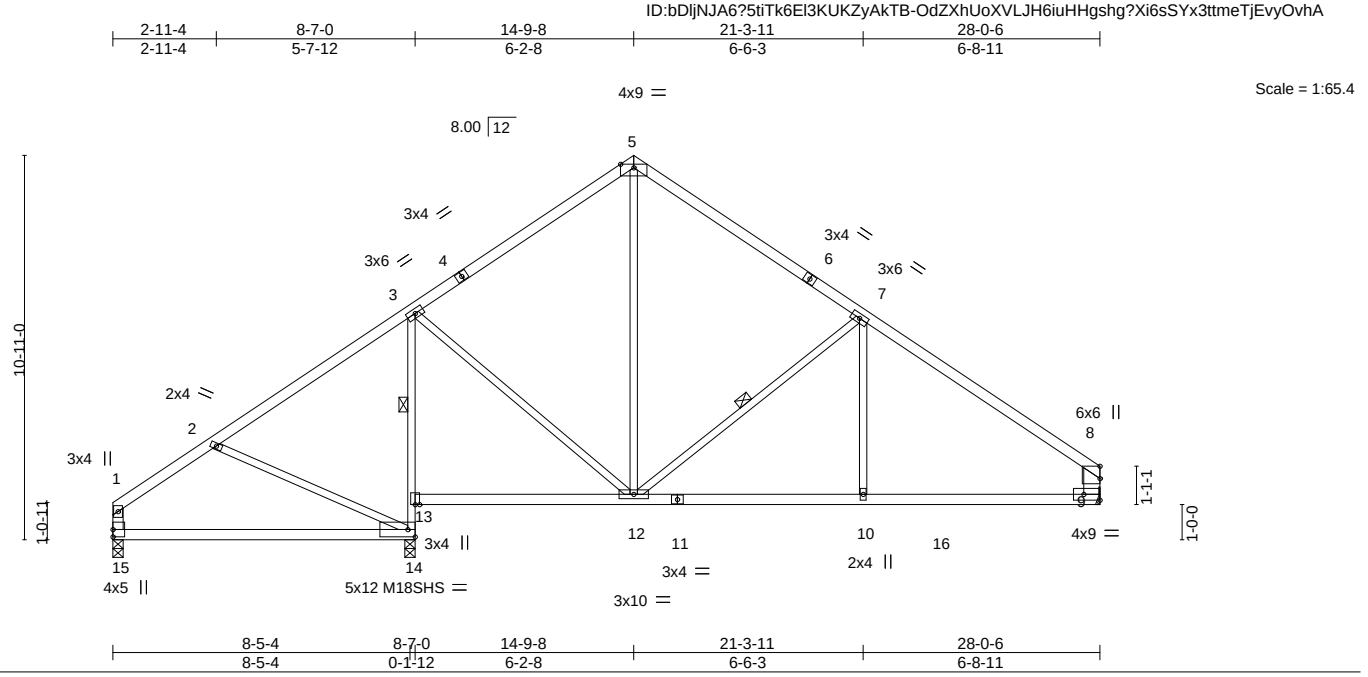

Plate Offsets (X,Y)-- [8:0-4-3,0-0-0], [9:Edge,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.17	14-15	>583	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.35	14-15	>289	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	-0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	10-12	>999	240	Weight: 107 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-15: 2x4 SPF 2400F 2.0E, 8-9: 2x6 SPF 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 3-9-2 oc bracing. Except:
1 Row at midpt 3-13
WEBS 1 Row at midpt 7-12

REACTIONS. (size) 15=0-3-8, 14=0-3-8, 9=Mechanical
Max Horz 15=229(LC 5)
Max Uplift 15=-12(LC 4), 14=-63(LC 8), 9=-20(LC 9)
Max Grav 15=346(LC 14), 14=1560(LC 13), 9=941(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-282/91, 2-3=-149/303, 3-5=-631/123, 5-7=-597/102, 7-8=-1076/57, 8-9=-772/61
BOT CHORD 14-15=-121/258, 13-14=-1282/66, 3-13=-1179/98, 10-12=0/762, 9-10=0/762
WEBS 2-14=-339/114, 3-12=0/612, 7-12=-561/129, 7-10=0/255

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=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 15, 14, 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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	E6	Common	4	1	I43391964
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:52 2020 Page 1
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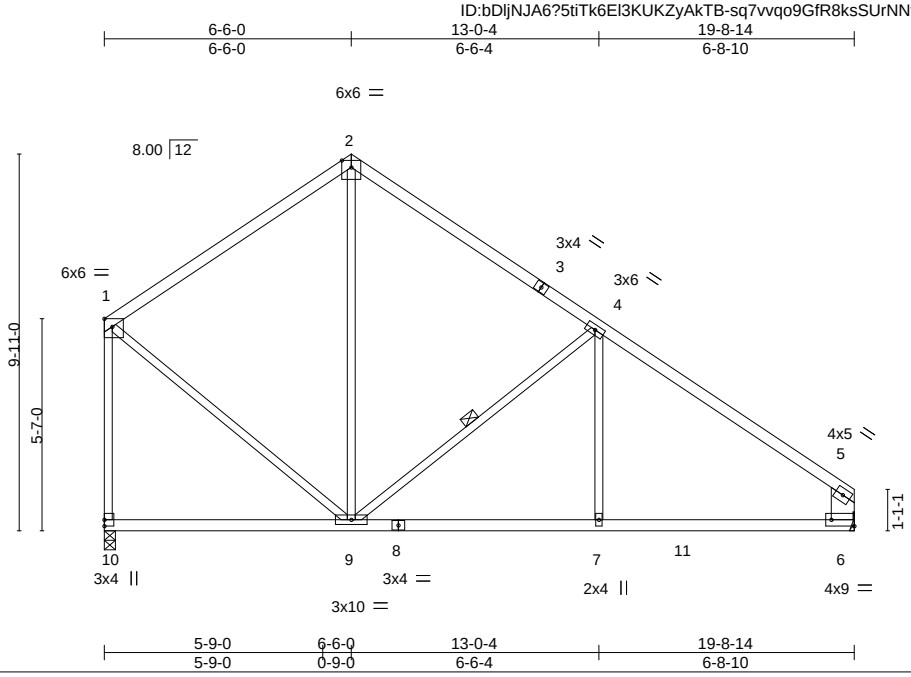

Plate Offsets (X,Y)-- [1:Edge,0-2-9], [6:Edge,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.16	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.28	7-9	>820	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	7-9	>999	240	Weight: 81 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-6: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-9

REACTIONS. (size) 10=0-3-8, 6=Mechanical
Max Horz 10=-259(LC 4)
Max Uplift 10=-13(LC 9), 6=-6(LC 9)
Max Grav 10=948(LC 14), 6=957(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-633/98, 2-4=-672/80, 4-5=-1088/36, 1-10=-858/47, 5-6=-781/48
BOT CHORD 7-9=0/805, 6-7=0/805
WEBS 2-9=-11/250, 4-9=-534/131, 1-9=-5/624

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=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 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.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	G1	GABLE	1	2	I43391965
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:54 2020 Page 1
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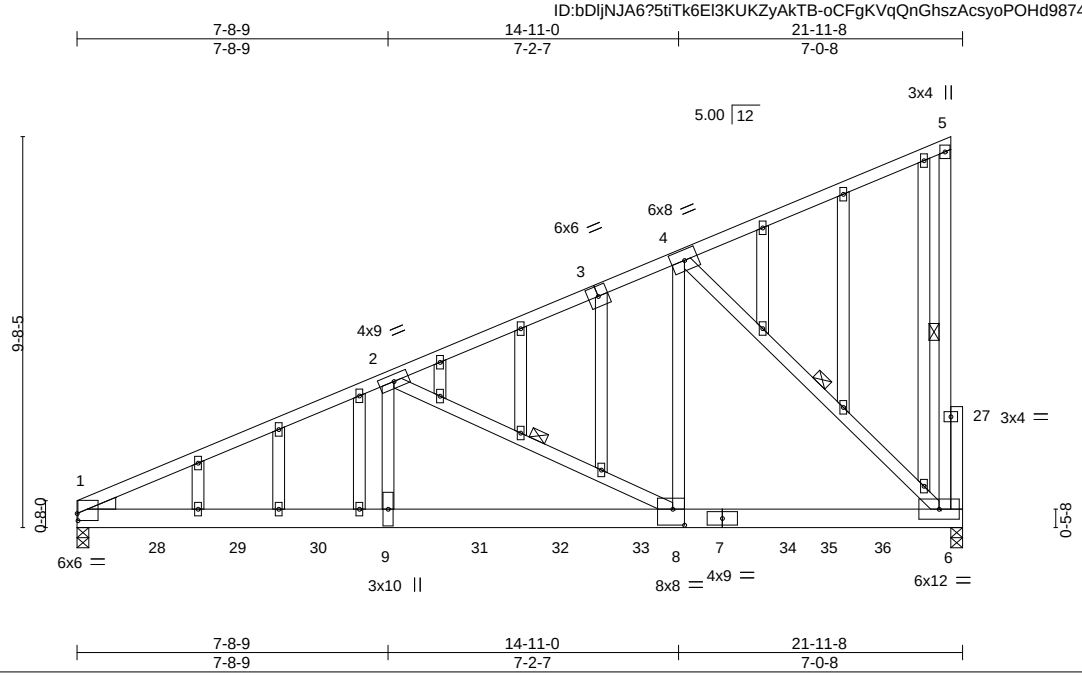

Plate Offsets (X,Y)-- [1:0-0-4,0-2-2], [8:0-3-8,0-4-12]

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC	0.93	Vert(LL)	-0.20	1-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC	0.86	Vert(CT)	-0.35	1-9	>731	240		
BCLL	0.0 *	Rep Stress Incr NO	WB	0.91	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	0.13	1-9	>999	240	Weight: 313 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-3: 2x4 SPF 2400F 2.0E
BOT CHORD	2x6 SP 2400F 2.0E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
WEDGE	
Left: 2x4 SP No.3	

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-6, 2-8, 4-6

REACTIONS. (size) 6=0-3-8 (req. 0-4-3), 1=0-3-8 (req. 0-4-2)
Max Horz 1=404(LC 24)
Max Uplift 6=-363(LC 8), 1=-465(LC 8)
Max Grav 6=5342(LC 2), 1=5238(LC 2)

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

TOP CHORD	1-2=-9437/646, 2-4=-4798/290
BOT CHORD	1-9=-698/8522, 8-9=-698/8522, 6-8=-268/4353
WEBS	2-9=-155/3659, 2-8=-4633/511, 4-8=-215/5524, 4-6=-5972/468

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 0-4-0 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) 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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) 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.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) WARNING: Required bearing size at joint(s) 6, 1 greater than input bearing size.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=363, 1=465.
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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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 844 lb down and 143 lb up at 1-11-4, 844 lb down and 143 lb up at 3-11-4, 840 lb down and 40 lb up at 5-11-4, 840 lb down and 40 lb up at 7-11-4, 840 lb down and 40 lb up at 9-11-4, 840 lb down and 40 lb up at 11-11-4, 882 lb down and 26 lb up at 13-11-4, 868 lb down and 26 lb up at 15-11-4, and 878 lb down and 26 lb up at 17-11-4, and 882 lb down and 26 lb up at 19-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-70, 1-6=-20
   Concentrated Loads (lb)
   Vert: 7=-850(B) 9=-795(B) 28=-798(B) 29=-798(B) 30=-795(B) 31=-795(B) 32=-795(B) 33=-850(B) 35=-850(B) 36=-850(B)

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	J1	Diagonal Hip Girder	2	1	I43391966
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:55 2020 Page 1
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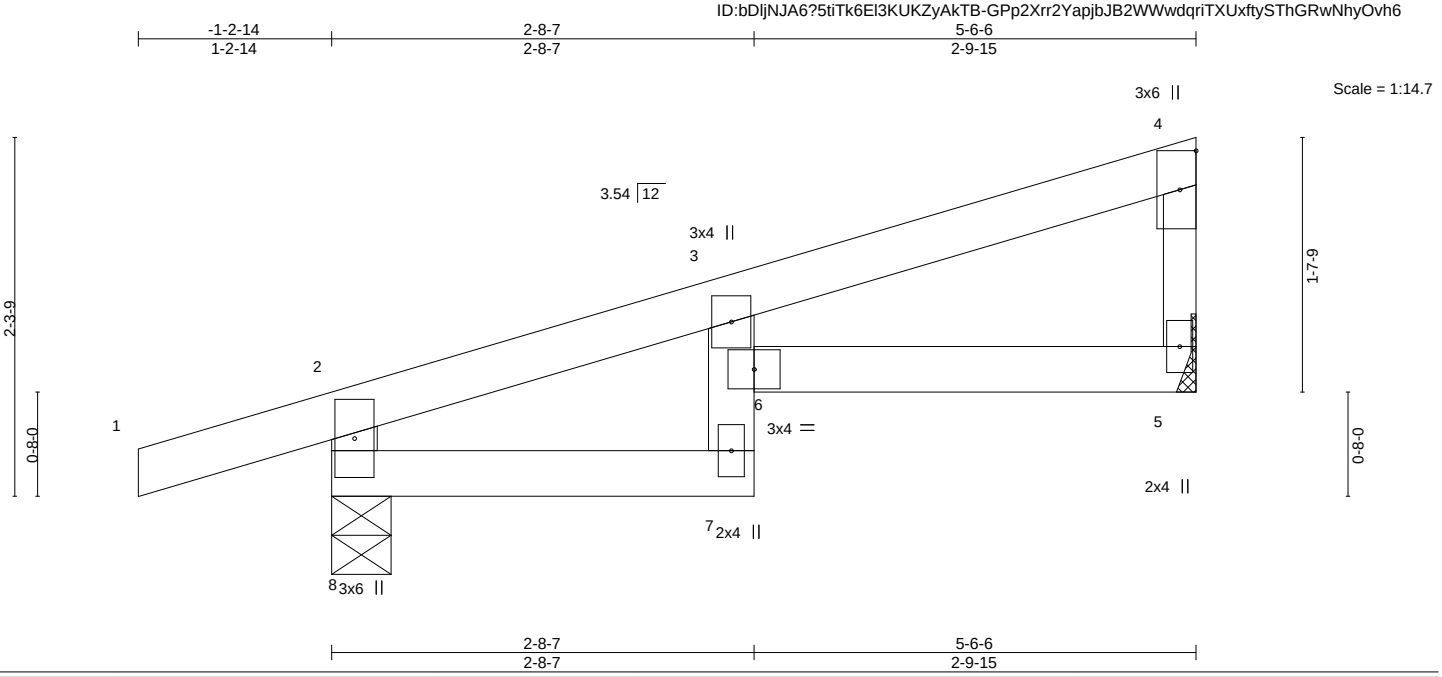

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.07	6	>952	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6	>999	240	Weight: 16 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-5: 2x3 SPF No.2

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

REACTIONS. (size) 8=0-4-9, 5=Mechanical
Max Horz 8=81(LC 22)
Max Uplift 8=-103(LC 4), 5=-48(LC 8)
Max Grav 8=347(LC 1), 5=225(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-312/116, 2-3=-250/35

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 8=103.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 34 lb up at 2-9-8, and 68 lb down and 34 lb up at 2-9-8 on top chord, and 2 lb down and 0 lb up at 2-6-11, and 2 lb down and 0 lb up at 2-6-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 7=1(F=0, B=0)

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	J2	Jack-Open	3	1	I43391967
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:55 2020 Page 1
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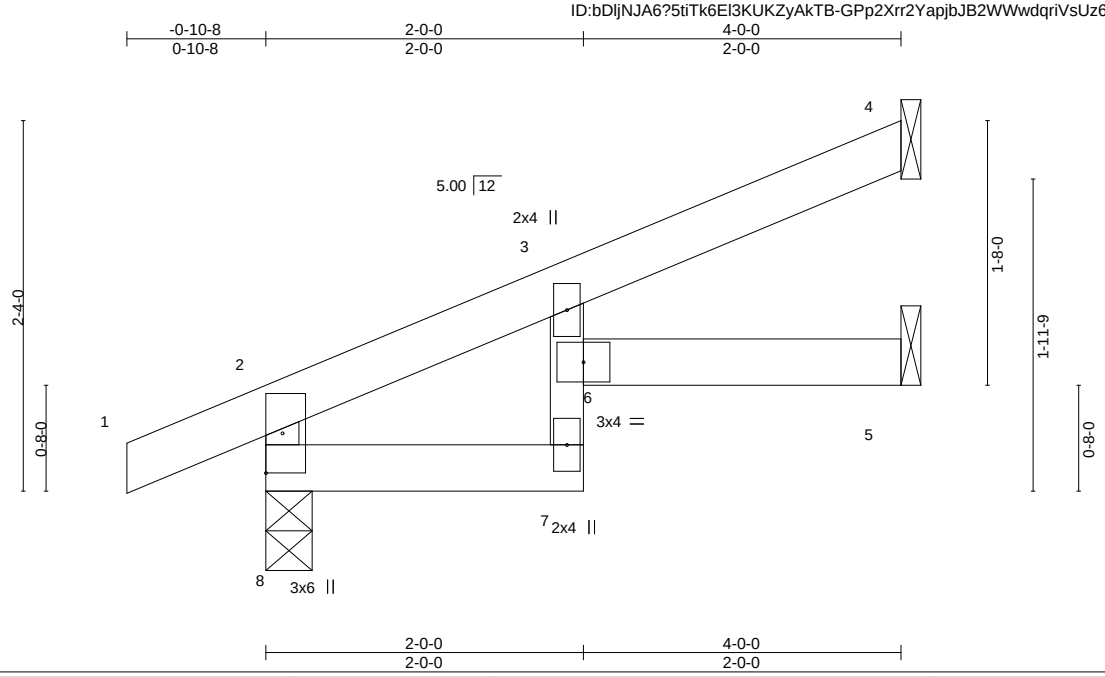

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	6	>999	240	Weight: 12 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=74(LC 8)
Max Uplift 8=-37(LC 8), 4=-46(LC 8), 5=-4(LC 8)
Max Grav 8=250(LC 1), 4=109(LC 1), 5=62(LC 3)

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	J3	Jack-Open	4	1	I43391968
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:56 2020 Page 1
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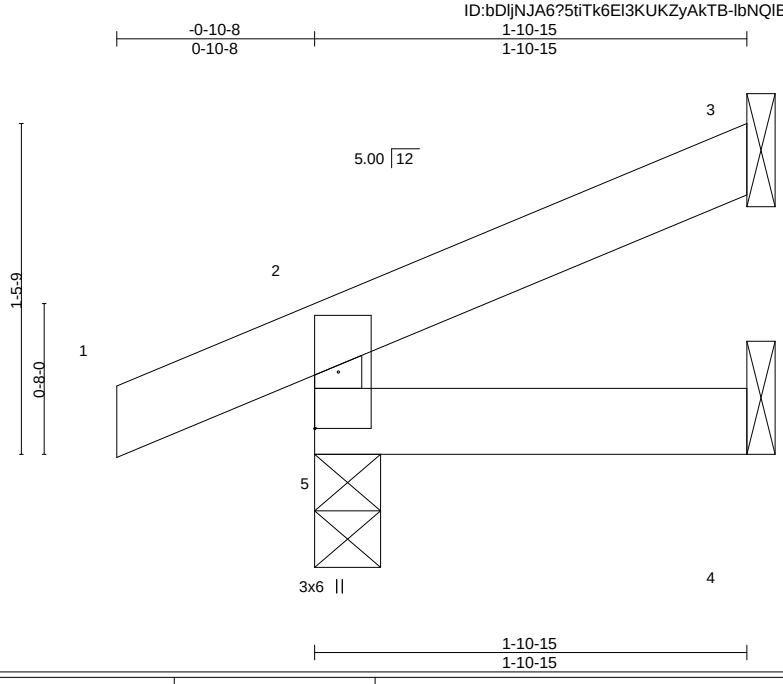

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=39(LC 8)
Max Uplift 5=-33(LC 4), 3=-28(LC 8)
Max Grav 5=168(LC 1), 3=46(LC 1), 4=33(LC 3)

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	R1	Flat Girder	1	2	I43391969

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:57 2020 Page 1
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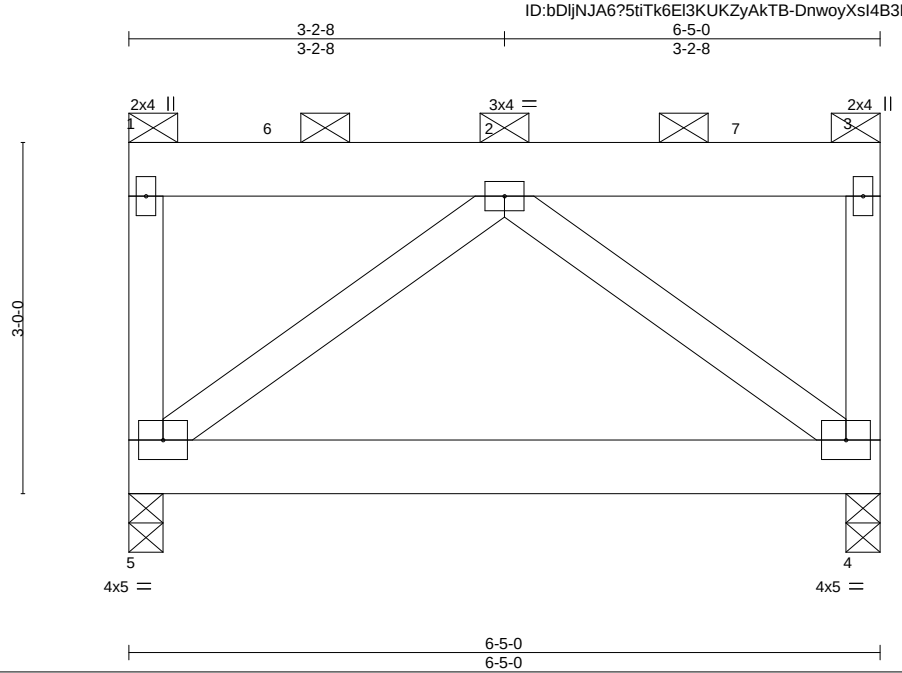

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.00	5	****	240	Weight: 72 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD 2-0-0 oc purlins: 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 4=0-3-8
Max Horz 5=97(LC 22)
Max Uplift 5=-400(LC 4), 4=-416(LC 5)
Max Grav 5=1989(LC 1), 4=2070(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-5=-666/147, 3-4=-747/162
BOT CHORD 4-5=-371/1520
WEBS 2-5=-1975/456, 2-4=-1975/455

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, 2x6 - 2 rows staggered 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) 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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=400, 4=416.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1169 lb down and 244 lb up at 1-3-12, and 1169 lb down and 244 lb up at 3-3-12, and 1170 lb down and 244 lb up at 5-3-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-70, 4-5=-20

Concentrated Loads (lb)

Vert: 2=-1169 6=-1169 7=-1170

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V1	Valley	1	1	I43391970
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:58 2020 Page 1
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5-10-8 11-9-0
5-10-8 5-10-8

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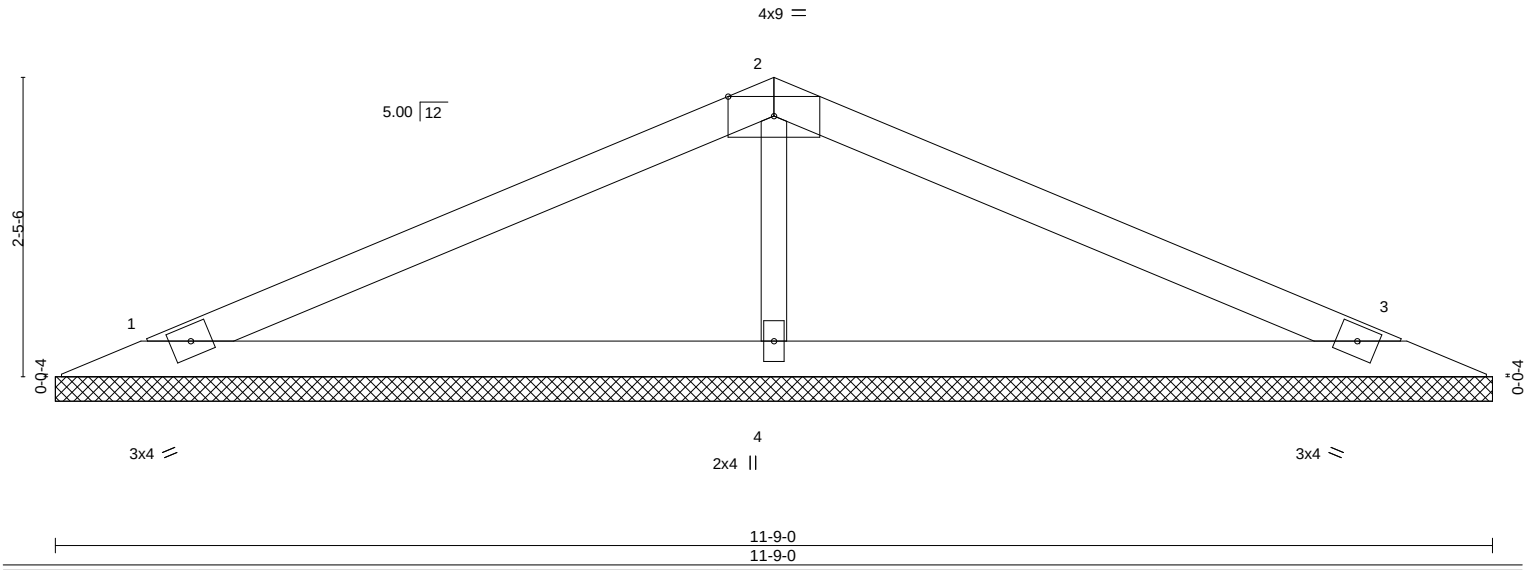

11-9-0
11-9-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 27 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF 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=11-9-0, 3=11-9-0, 4=11-9-0
Max Horz 1=38(LC 12)
Max Uplift 1=-44(LC 8), 3=-50(LC 9), 4=-32(LC 8)
Max Grav 1=211(LC 21), 3=211(LC 22), 4=507(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-353/93

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V2	Valley	1	1	I43391971
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:03 2020 Page 1
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3-10-8 / 3-10-8 | 7-9-0 / 3-10-8

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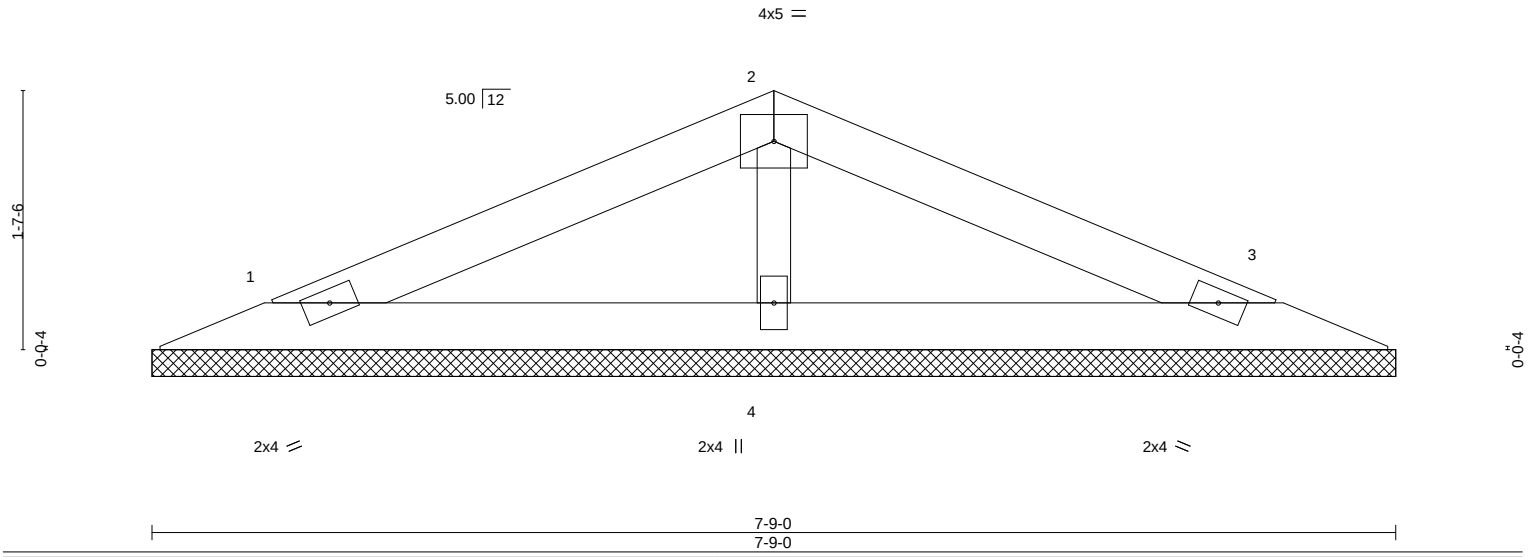

7-9-0 / 7-9-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 17 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF 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=7-9-0, 3=7-9-0, 4=7-9-0
Max Horz 1=-23(LC 9)
Max Uplift 1=-33(LC 8), 3=-37(LC 9), 4=-7(LC 8)
Max Grav 1=142(LC 1), 3=142(LC 1), 4=278(LC 1)

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V3	Valley	1	1	I43391972
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:04 2020 Page 1
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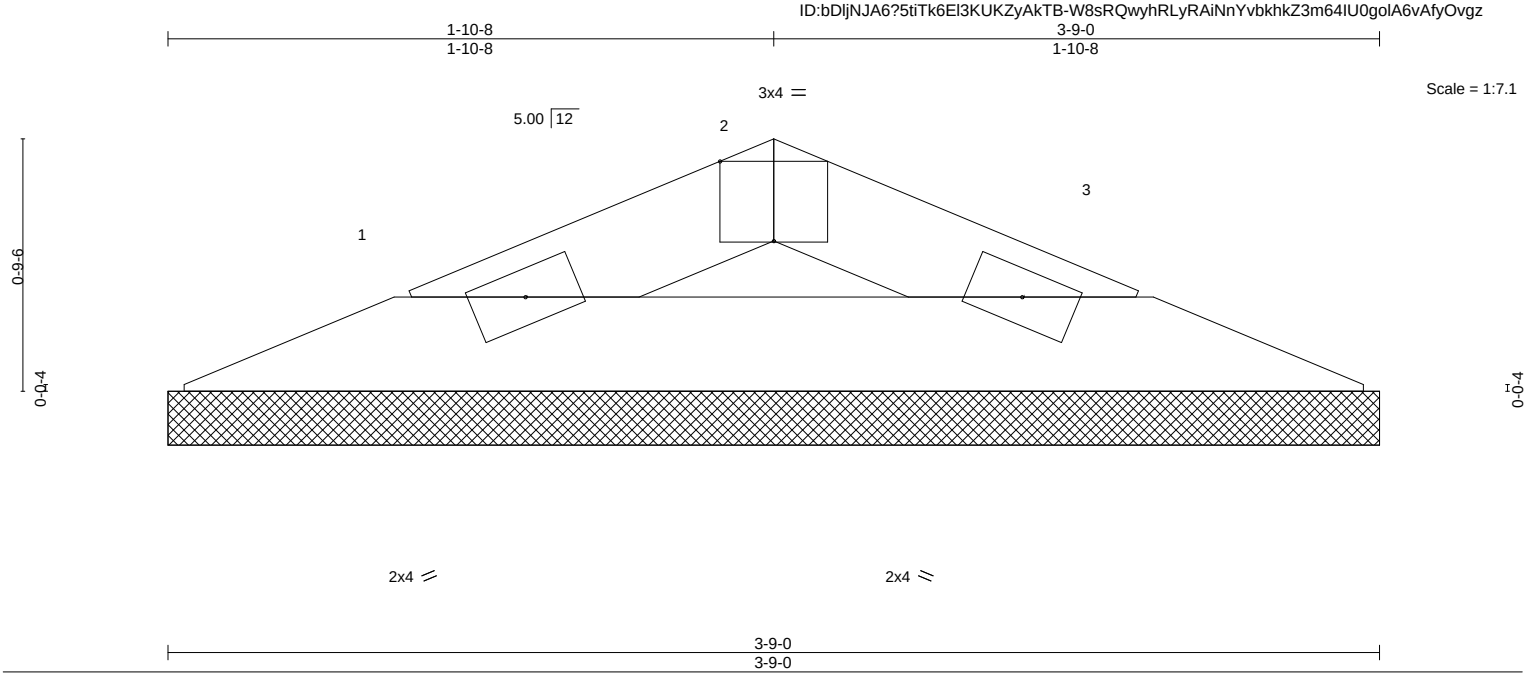

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-9-0, 3=3-9-0
Max Horz 1=8(LC 8)
Max Uplift 1=-13(LC 8), 3=-13(LC 9)
Max Grav 1=101(LC 1), 3=101(LC 1)

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V4	GABLE	1	1	I43391973
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:04 2020 Page 1
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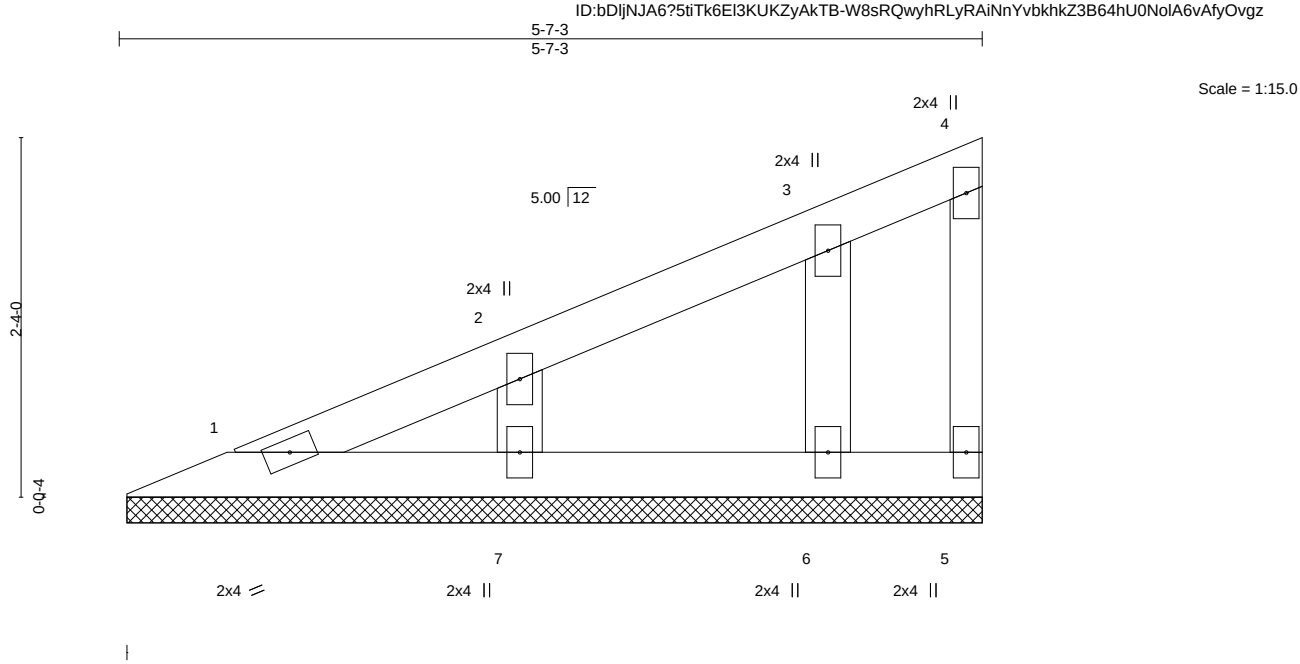


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 10%

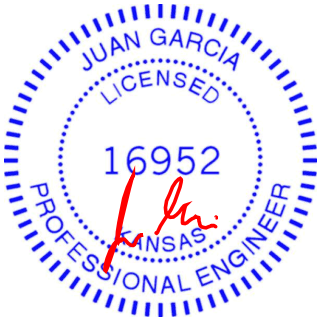
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-6-10.
(lb) - Max Horz 1=87(LC 5)
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, 7, 6

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V5	Valley	1	1	I43391974
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:05 2020 Page 1
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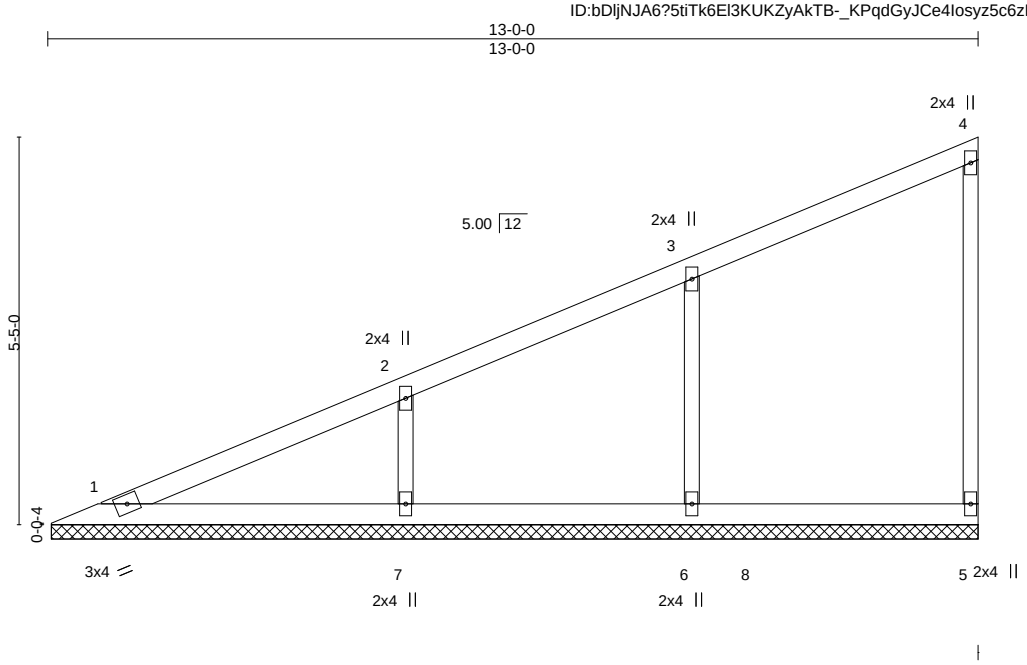

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 38 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF 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 12-11-6.
(lb) - Max Horz 1=221(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-111(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=411(LC 2), 7=424(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-296/143, 2-7=-315/161

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=111.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V6	Valley	1	1	I43391975
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:06 2020 Page 1
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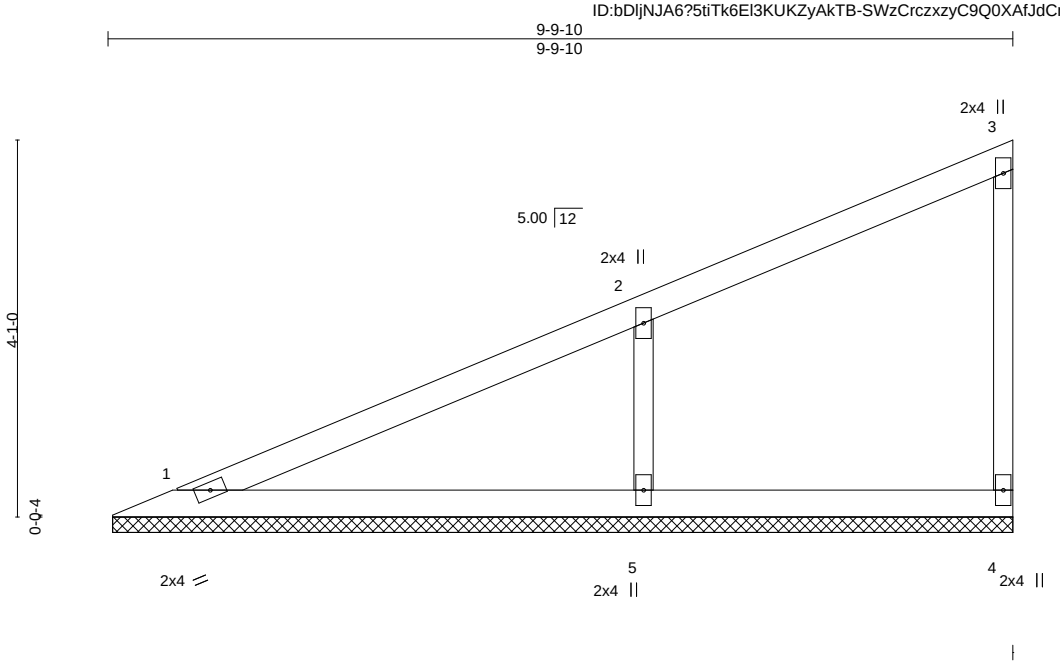


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 27 lb	FT = 10%

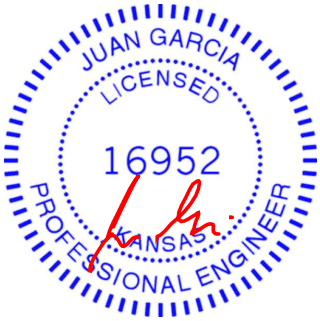
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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=9-9-0, 4=9-9-0, 5=9-9-0
Max Horz 1=163(LC 5)
Max Uplift 4=-23(LC 5), 5=-134(LC 8)
Max Grav 1=182(LC 1), 4=117(LC 1), 5=505(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-383/188

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=134.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V7	Valley	1	1	I43391976
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:07 2020 Page 1
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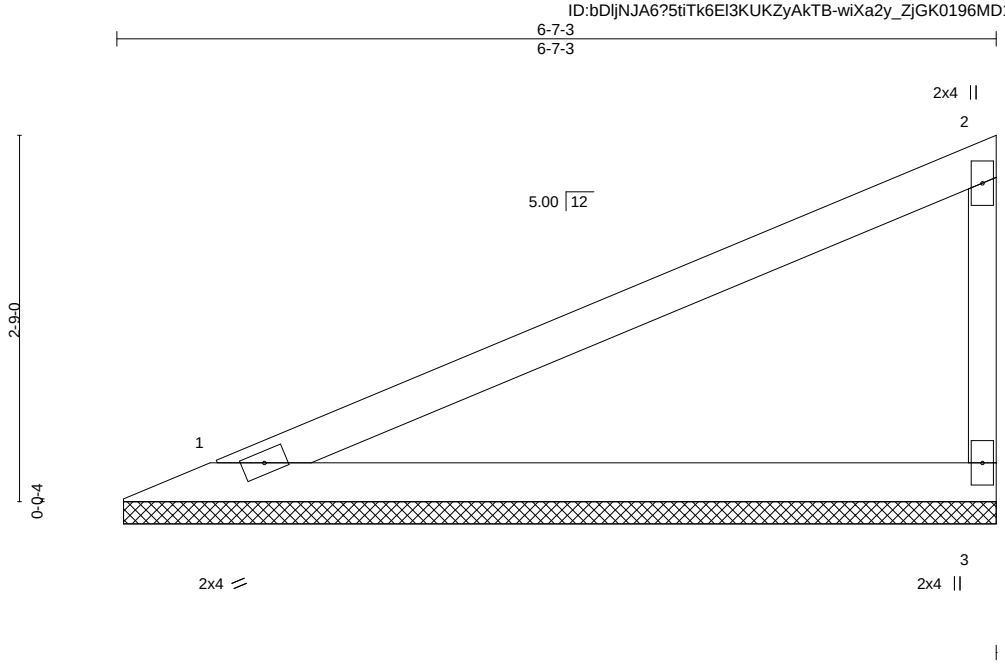


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 16 lb	FT = 10%

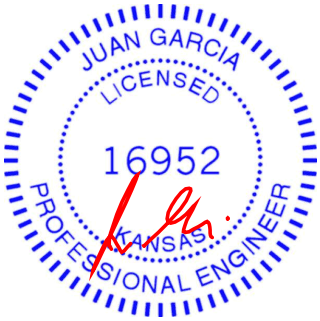
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-7-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-6-10, 3=6-6-10
Max Horz 1=105(LC 5)
Max Uplift 1=-38(LC 8), 3=-59(LC 8)
Max Grav 1=258(LC 1), 3=258(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V8	Valley	1	1	I43391977
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:07 2020 Page 1
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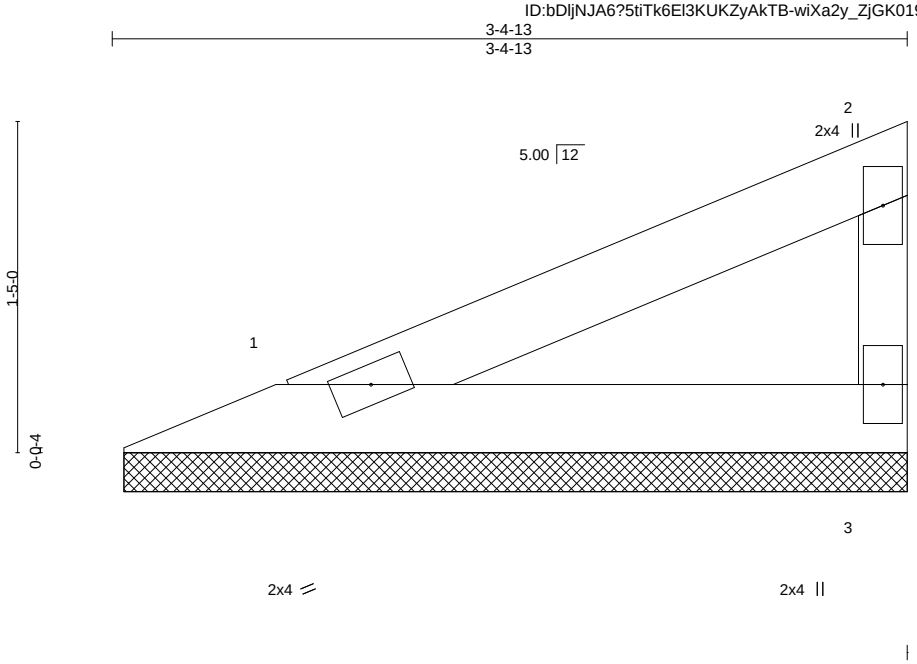

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 8 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-4-3, 3=3-4-3
Max Horz 1=47(LC 5)
Max Uplift 1=-17(LC 8), 3=-26(LC 8)
Max Grav 1=114(LC 1), 3=114(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V9	Valley	1	1	I43391978
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:08 2020 Page 1
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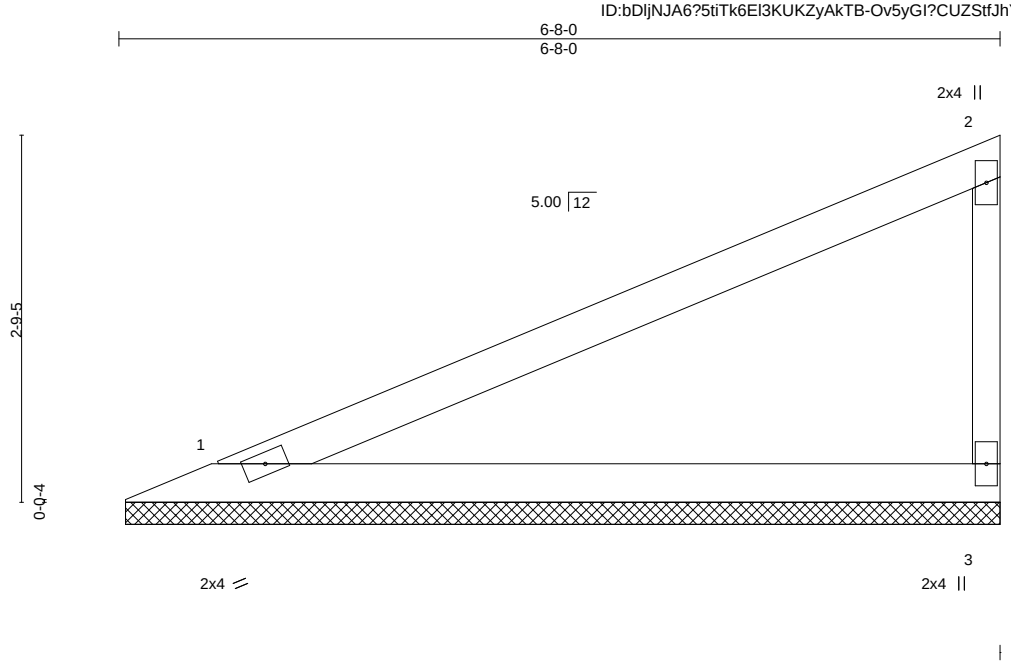

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 17 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 1=6-7-6, 3=6-7-6
Max Horz 1=106(LC 5)
Max Uplift 1=-38(LC 8), 3=-59(LC 8)
Max Grav 1=261(LC 1), 3=261(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V10	Valley	1	1	I43391979
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:59 2020 Page 1
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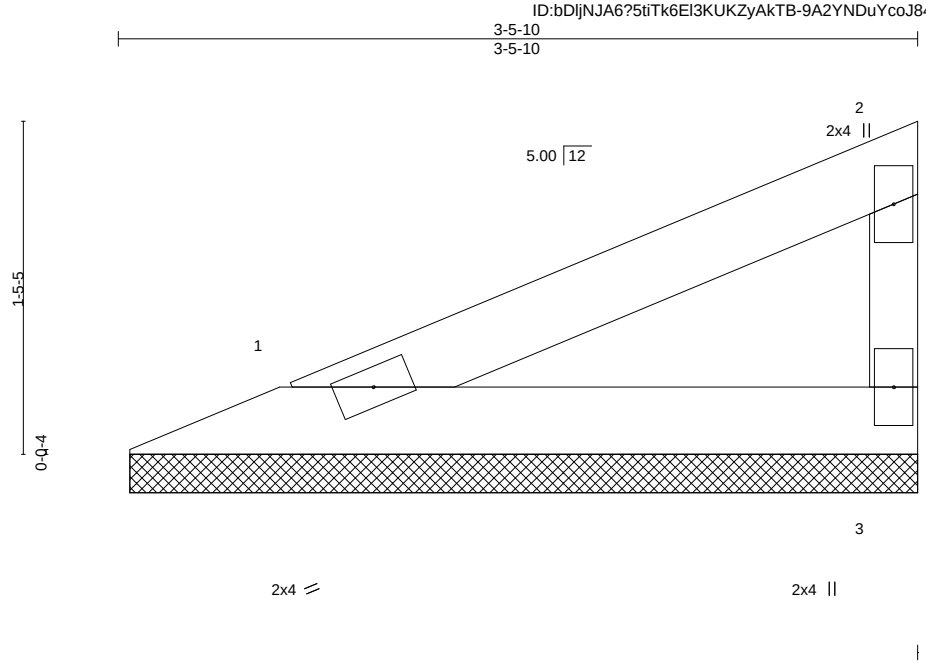


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 8 lb	FT = 10%

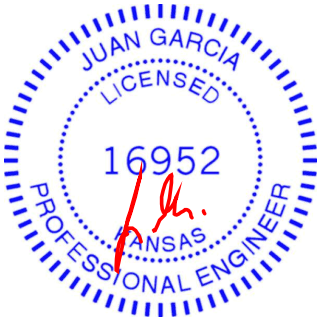
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 1=3-5-0, 3=3-5-0
Max Horz 1=48(LC 5)
Max Uplift 1=-17(LC 8), 3=-27(LC 8)
Max Grav 1=117(LC 1), 3=117(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V11	Valley	1	1	I43391980
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:28:59 2020 Page 1
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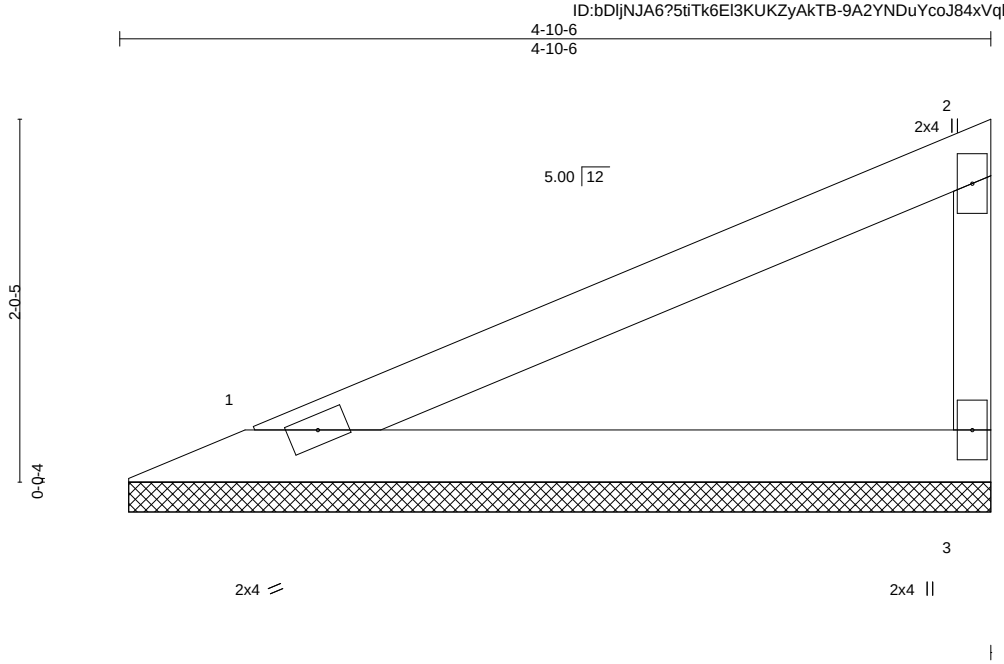


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 10%

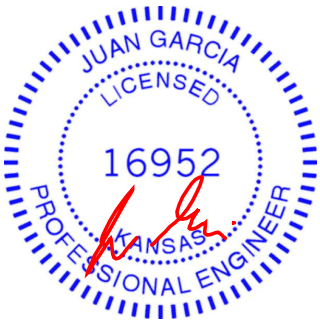
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 1=4-9-13, 3=4-9-13
Max Horz 1=73(LC 5)
Max Uplift 1=-26(LC 8), 3=-41(LC 8)
Max Grav 1=180(LC 1), 3=180(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V12	Valley	1	1	I43391981
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:00 2020 Page 1
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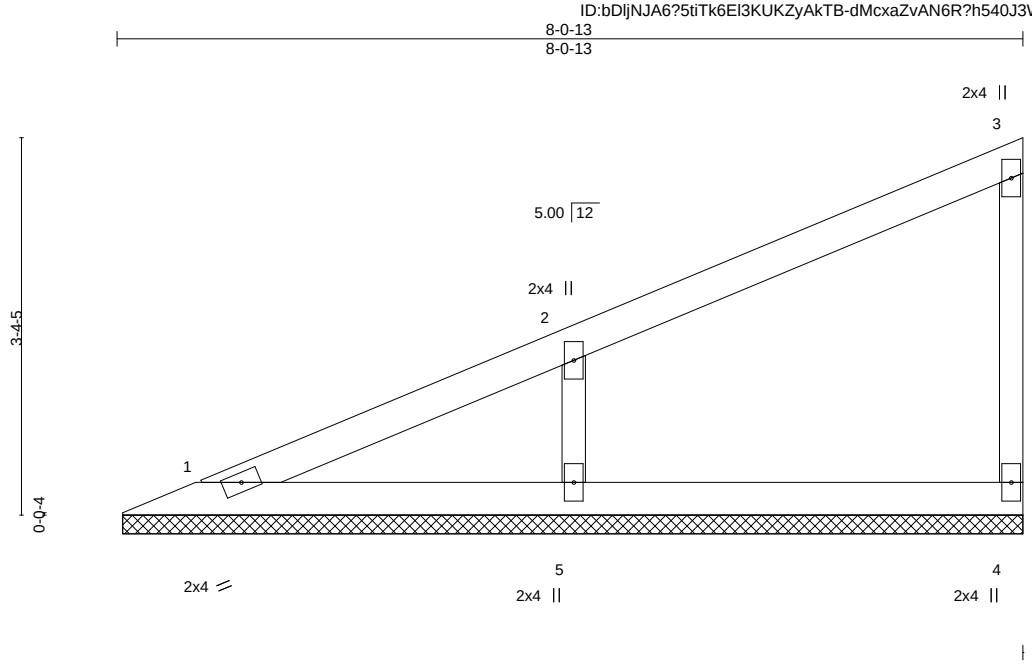

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2

BRACING-

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

REACTIONS. (size) 1=8-0-3, 4=8-0-3, 5=8-0-3
Max Horz 1=132(LC 5)
Max Uplift 4=-24(LC 8), 5=-108(LC 8)
Max Grav 1=104(LC 1), 4=137(LC 1), 5=407(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-317/163

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=108.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V13	Valley	1	1	I43391982
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:01 2020 Page 1
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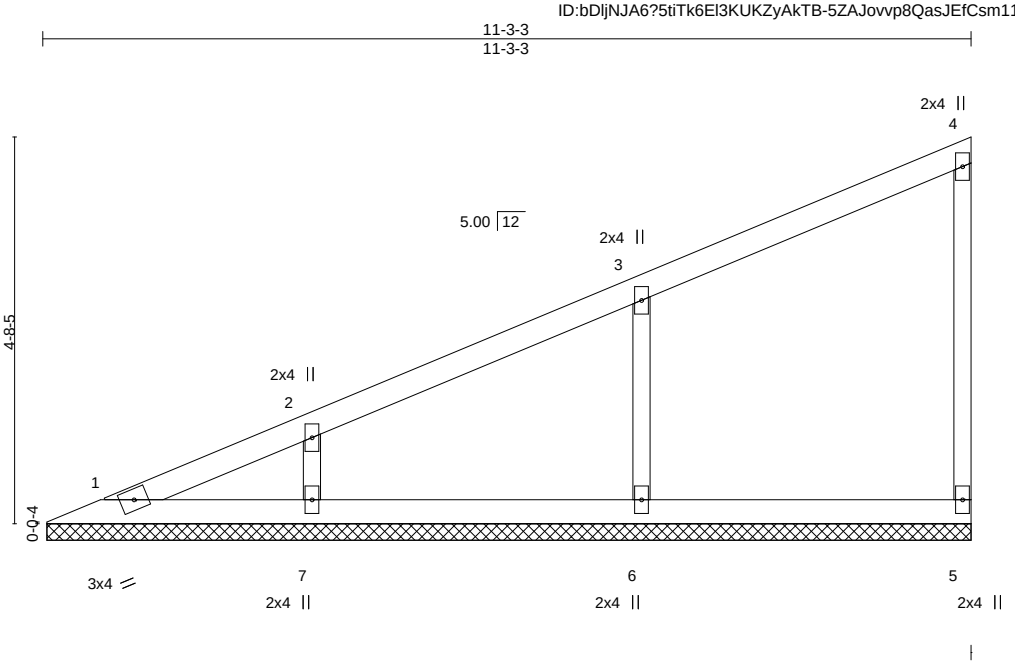


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 32 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2

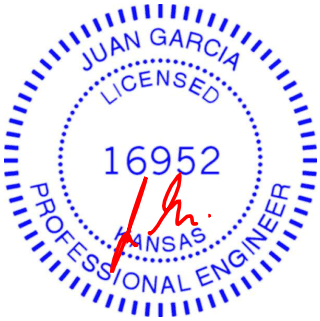
BRACING-

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 11-2-10.
(lb) - Max Horz 1=190(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 5, 7 except 6=-106(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=401(LC 1), 7=317(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-313/154

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7 except (jt=lb) 6=106.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V14	Valley	1	1	I43391983
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:02 2020 Page 1
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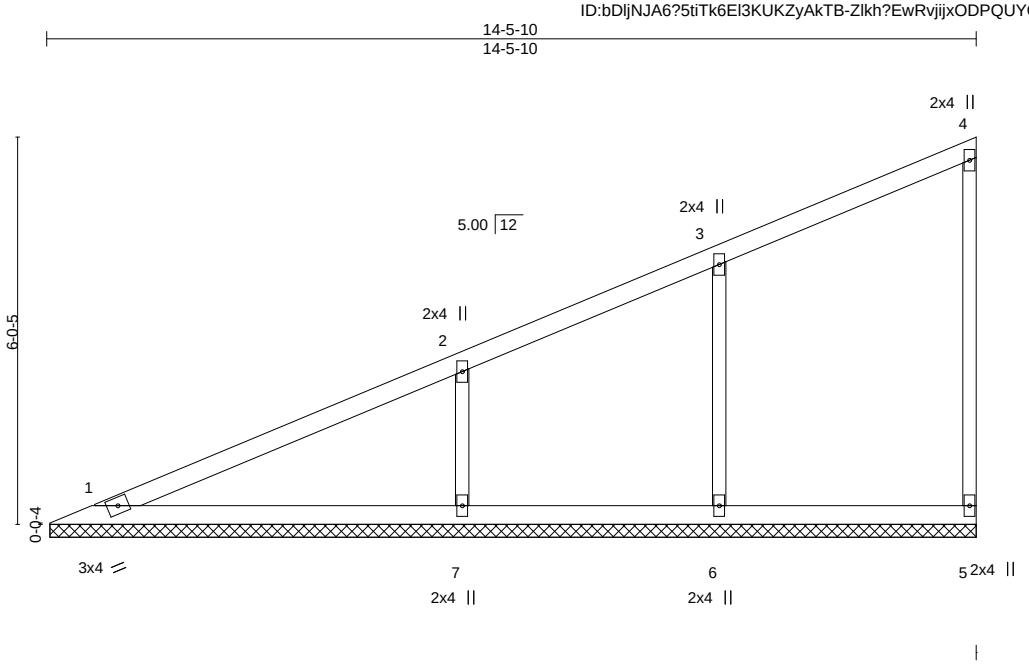

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 43 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF 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 14-5-0.
(lb) - Max Horz 1=248(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=-140(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=381(LC 2), 7=536(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-267/127, 2-7=-394/200

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=140.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 28,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 49 W2
210382	V15	Valley	1	1	I43391984
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Oct 28 10:29:02 2020 Page 1
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-Zlkh?EwRvjijxODPQUYGcJUdiIMw03fVIsdo7nyOvh?

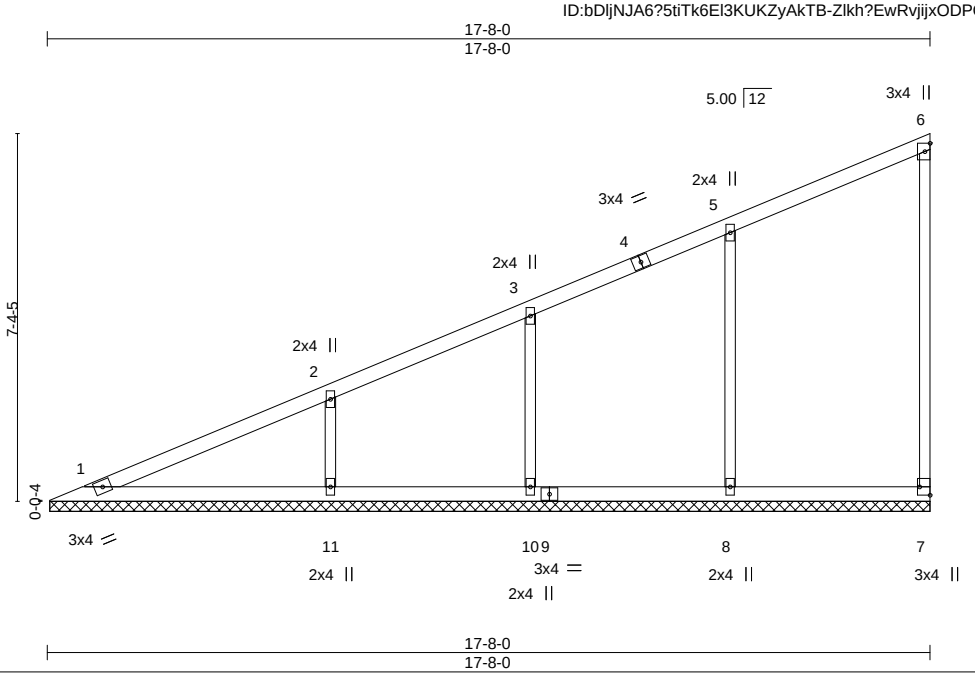

Plate Offsets (X,Y)-- [7:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 55 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF 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 17-7-6.
(lb) - Max Horz 1=306(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 7, 10 except 8=-107(LC 8), 11=-126(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 7, 1 except 8=485(LC 2), 10=347(LC 2), 11=484(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-252/74
WEBS 5-8=-313/141, 2-11=-357/178

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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10 except (jt=lb) 8=107, 11=126.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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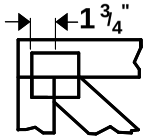
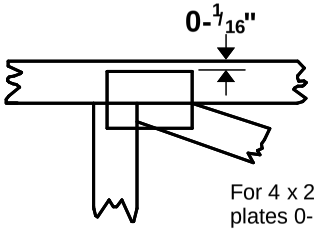
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

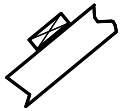
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

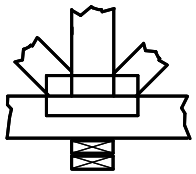
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

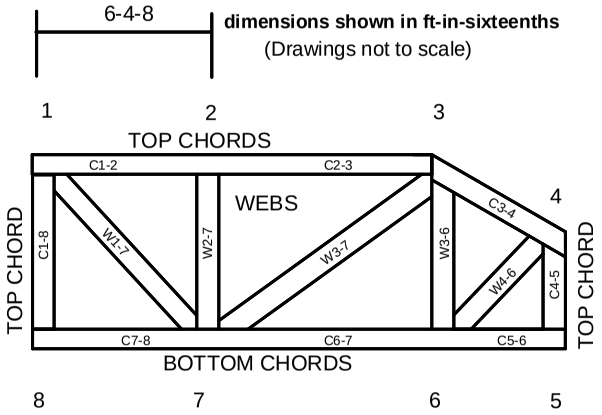


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.