



RE: 400281
Lot 28 RT

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

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

Design Code: IRC2018/TPI2014
Wind Code: N/A
Roof Load: 45.0 psf

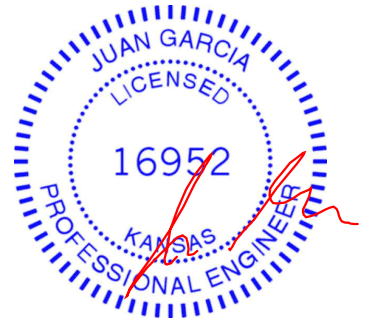
Design Program: MiTek 20/20 8.2
Wind Speed: 115 mph
Floor Load: N/A psf

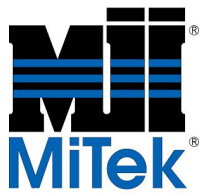
This package includes 86 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41256010	A1	5/11/2020	27	I41256036	H7	5/11/2020
2	I41256011	A2	5/11/2020	28	I41256037	H8	5/11/2020
3	I41256012	A3	5/11/2020	29	I41256038	H9	5/11/2020
4	I41256013	C1	5/11/2020	30	I41256039	H10	5/11/2020
5	I41256014	C2	5/11/2020	31	I41256040	H11	5/11/2020
6	I41256015	C3	5/11/2020	32	I41256041	J1	5/11/2020
7	I41256016	C4	5/11/2020	33	I41256042	J2	5/11/2020
8	I41256017	C5	5/11/2020	34	I41256043	J3	5/11/2020
9	I41256018	C6	5/11/2020	35	I41256044	J6	5/11/2020
10	I41256019	C7	5/11/2020	36	I41256045	J7	5/11/2020
11	I41256020	C8	5/11/2020	37	I41256046	J8	5/11/2020
12	I41256021	C9	5/11/2020	38	I41256047	J9	5/11/2020
13	I41256022	D1	5/11/2020	39	I41256048	J10	5/11/2020
14	I41256023	D2	5/11/2020	40	I41256049	J11	5/11/2020
15	I41256024	D3	5/11/2020	41	I41256050	J12	5/11/2020
16	I41256025	G1	5/11/2020	42	I41256051	J13	5/11/2020
17	I41256026	G2	5/11/2020	43	I41256052	J14	5/11/2020
18	I41256027	G3	5/11/2020	44	I41256053	J15	5/11/2020
19	I41256028	G4	5/11/2020	45	I41256054	J16	5/11/2020
20	I41256029	G5	5/11/2020	46	I41256055	J17A	5/11/2020
21	I41256030	H1	5/11/2020	47	I41256056	J18A	5/11/2020
22	I41256031	H2	5/11/2020	48	I41256057	J19	5/11/2020
23	I41256032	H3	5/11/2020	49	I41256058	J20	5/11/2020
24	I41256033	H4	5/11/2020	50	I41256059	J21	5/11/2020
25	I41256034	H5	5/11/2020	51	I41256060	J22	5/11/2020
26	I41256035	H6	5/11/2020	52	I41256061	J23	5/11/2020

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.





RE: 400281 - Lot 28 RT

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

Site Information:

Project Customer: Project Name:
Lot/Block:
Address:
City, County:

Subdivision:

State:

No.	Seal#	Truss Name	Date
53	I41256062	J24	5/11/2020
54	I41256063	J25	5/11/2020
55	I41256064	J34	5/11/2020
56	I41256065	J36	5/11/2020
57	I41256066	J37	5/11/2020
58	I41256067	J38	5/11/2020
59	I41256068	J39	5/11/2020
60	I41256069	J40	5/11/2020
61	I41256070	J41	5/11/2020
62	I41256071	J42	5/11/2020
63	I41256072	K1	5/11/2020
64	I41256073	K2	5/11/2020
65	I41256074	K3	5/11/2020
66	I41256075	K4	5/11/2020
67	I41256076	K5	5/11/2020
68	I41256077	K6	5/11/2020
69	I41256078	L1	5/11/2020
70	I41256079	L2	5/11/2020
71	I41256080	L3	5/11/2020
72	I41256081	L4	5/11/2020
73	I41256082	L5	5/11/2020
74	I41256083	LAY3	5/11/2020
75	I41256084	LAY4	5/11/2020
76	I41256085	LAY5	5/11/2020
77	I41256086	LAY6	5/11/2020
78	I41256087	P1	5/11/2020
79	I41256088	P2	5/11/2020
80	I41256089	V1	5/11/2020
81	I41256090	V2	5/11/2020
82	I41256091	V3	5/11/2020
83	I41256092	V4	5/11/2020
84	I41256093	V5	5/11/2020
85	I41256094	V6	5/11/2020
86	I41256095	V8	5/11/2020



RE: 400281
Lot 28 RT

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

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

Design Code: IRC2018/TPI2014
Wind Code: N/A
Roof Load: 45.0 psf

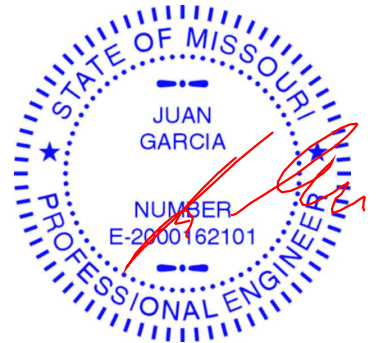
Design Program: MiTek 20/20 8.2
Wind Speed: 115 mph
Floor Load: N/A psf

This package includes 86 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41256010	A1	5/11/2020	27	I41256036	H7	5/11/2020
2	I41256011	A2	5/11/2020	28	I41256037	H8	5/11/2020
3	I41256012	A3	5/11/2020	29	I41256038	H9	5/11/2020
4	I41256013	C1	5/11/2020	30	I41256039	H10	5/11/2020
5	I41256014	C2	5/11/2020	31	I41256040	H11	5/11/2020
6	I41256015	C3	5/11/2020	32	I41256041	J1	5/11/2020
7	I41256016	C4	5/11/2020	33	I41256042	J2	5/11/2020
8	I41256017	C5	5/11/2020	34	I41256043	J3	5/11/2020
9	I41256018	C6	5/11/2020	35	I41256044	J6	5/11/2020
10	I41256019	C7	5/11/2020	36	I41256045	J7	5/11/2020
11	I41256020	C8	5/11/2020	37	I41256046	J8	5/11/2020
12	I41256021	C9	5/11/2020	38	I41256047	J9	5/11/2020
13	I41256022	D1	5/11/2020	39	I41256048	J10	5/11/2020
14	I41256023	D2	5/11/2020	40	I41256049	J11	5/11/2020
15	I41256024	D3	5/11/2020	41	I41256050	J12	5/11/2020
16	I41256025	G1	5/11/2020	42	I41256051	J13	5/11/2020
17	I41256026	G2	5/11/2020	43	I41256052	J14	5/11/2020
18	I41256027	G3	5/11/2020	44	I41256053	J15	5/11/2020
19	I41256028	G4	5/11/2020	45	I41256054	J16	5/11/2020
20	I41256029	G5	5/11/2020	46	I41256055	J17A	5/11/2020
21	I41256030	H1	5/11/2020	47	I41256056	J18A	5/11/2020
22	I41256031	H2	5/11/2020	48	I41256057	J19	5/11/2020
23	I41256032	H3	5/11/2020	49	I41256058	J20	5/11/2020
24	I41256033	H4	5/11/2020	50	I41256059	J21	5/11/2020
25	I41256034	H5	5/11/2020	51	I41256060	J22	5/11/2020
26	I41256035	H6	5/11/2020	52	I41256061	J23	5/11/2020

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, 2020. 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.

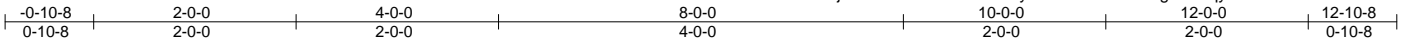


Job 400281	Truss A1	Truss Type Hip Girder	Qty 1	Ply 2	Lot 28 RT	I41256010
---------------	-------------	--------------------------	----------	----------	-----------	-----------

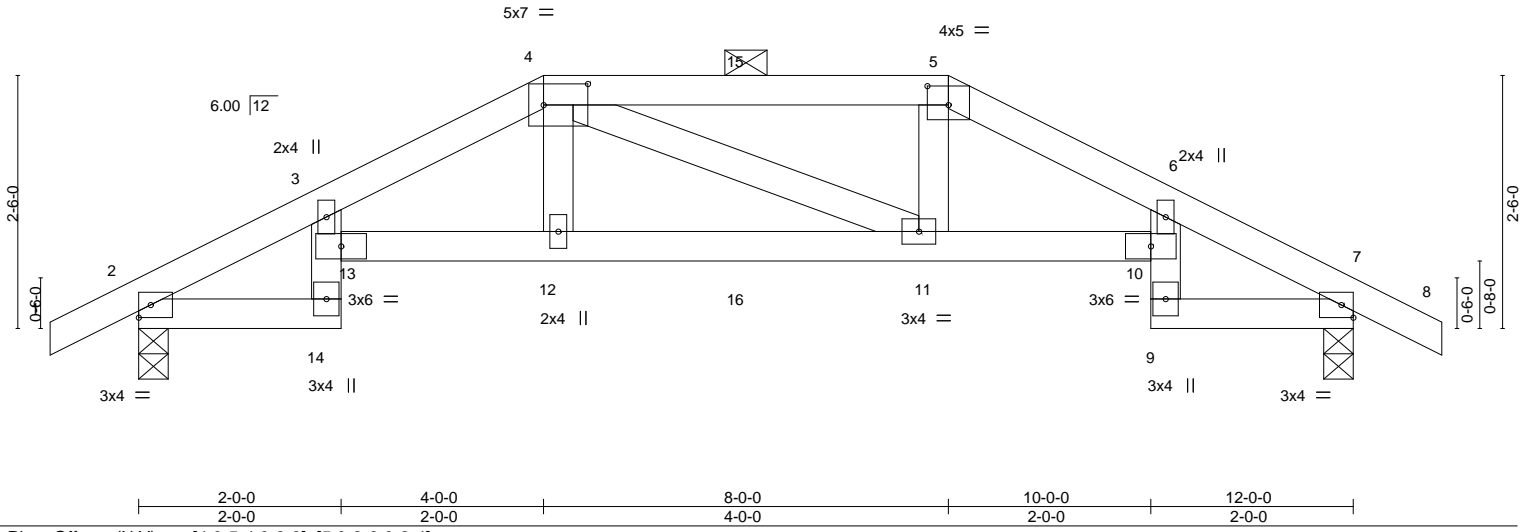
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:43 2020 Page 1

ID:mUYTXKzkejzuodxJ64TA8GzSnWQ-yhl77wwkS22ewWgGwZfqyJEo23cPF4Vxic3PTKzHe9l



Scale = 1:22.8



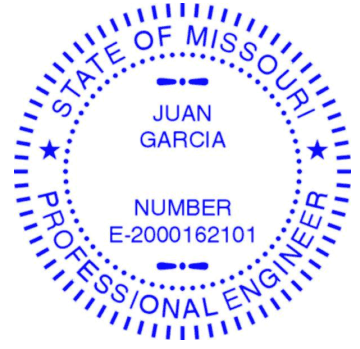
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	-0.05 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.08 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.08 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.04 12-13	>999	240	Weight: 80 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
 Max Horz 2=43(LC 33)
 Max Uplift 2=-215(LC 8), 7=-215(LC 9)
 Max Grav 2=899(LC 1), 7=899(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1301/305, 3-4=-1865/467, 4-5=-1742/436, 5-6=-1867/446, 6-7=-1301/307
 BOT CHORD 2-14=-239/971, 12-13=-397/1699, 11-12=-404/1741, 10-11=-365/1700, 7-9=-201/971
 WEBS 4-12=-91/447, 5-11=-88/445

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=215, 7=215.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 55 lb up at 4-0-0, and 80 lb down and 55 lb up at 6-0-0, and 72 lb down and 55 lb up at 8-0-0 on top chord, and 237 lb down and 105 lb up at 4-0-0, and 44 lb down and 27 lb up at 6-0-0, and 237 lb down and 105 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



May 11, 2020

LOAD CASE(S) Standard
 Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400281	Truss A1	Truss Type Hip Girder	Qty 1	Ply 2	Lot 28 RT Job Reference (optional)	I41256010
---------------	-------------	--------------------------	----------	-----------------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:43 2020 Page 2
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-yhI77wwkS22ewWgGwZfqyJEo23cPF4Vxic3PTKzHe9l

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-70, 5-8=-70, 2-14=-20, 10-13=-20, 7-9=-20
Concentrated Loads (lb)
Vert: 4=-27(F) 5=-27(F) 12=-237(F) 11=-237(F) 15=-27(F) 16=-44(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



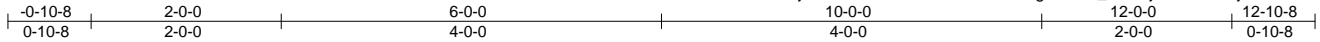
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss A2	Truss Type Roof Special	Qty 4	Ply 1	Lot 28 RT	I41256011
---------------	-------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Apr 4 2020 MiTek Industries, Inc. Mon May 11 11:05:02 2020 Page 1
 ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-Q1A3wgSTTXF_PwTLjo53m0bhIFjJbLiiHuiBO5zHbHF

Job Reference (optional)



5x7 =

Scale: 1/2"=1'

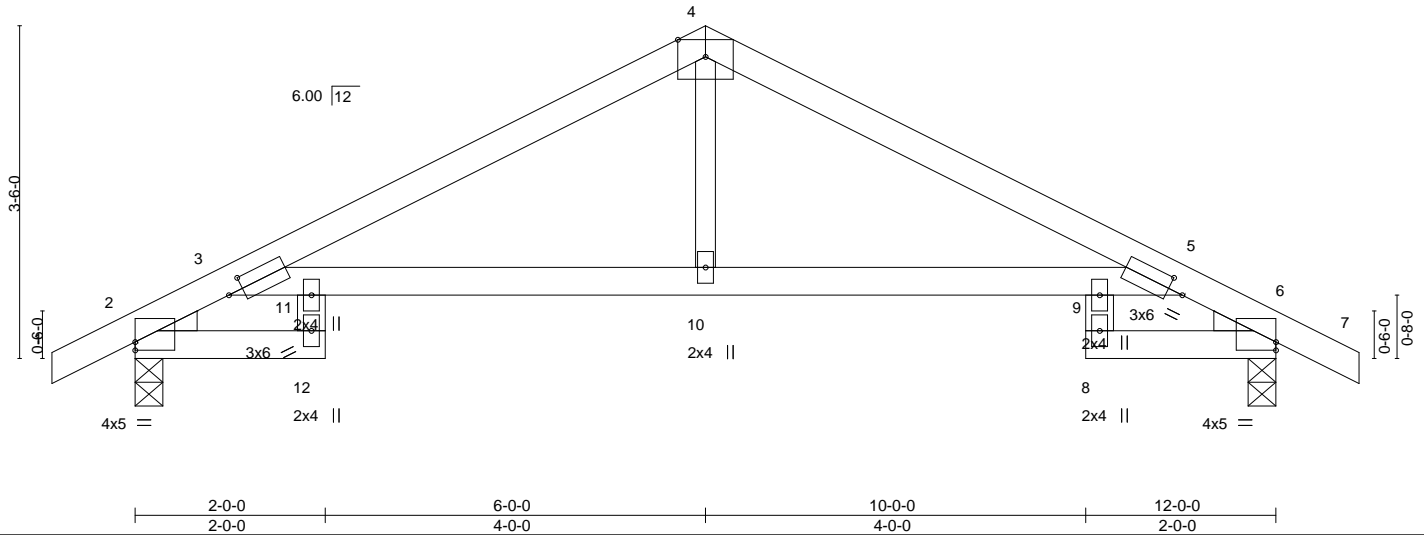


Plate Offsets (X,Y)--	[2:Edge,0-1-1], [3:0-1-15,0-1-8], [5:0-1-15,0-1-8], [6:Edge,0-1-1]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) -0.11	9-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.75	Vert(CT) -0.20	9-10	>709	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.18	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.09	10-11	>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*
 4-10: 2x3 SPF No.2
 WEDGE
 Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-1-10 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 10-0-0 oc bracing: 9-10

REACTIONS. (lb/size) 2=598/0-3-8, 6=598/0-3-8
 Max Horz 2=61(LC 12)
 Max Uplift 2=-89(LC 8), 6=-89(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-359/80, 3-4=-858/80, 4-5=-858/102, 5-6=-359/67
 BOT CHORD 3-11=-31/728, 10-11=-31/728, 9-10=-31/728, 5-9=-31/728
 WEBS 4-10=0/329

- 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 89 lb uplift at joint 2 and 89 lb uplift at joint 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256012
400281	A3	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:45 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-u4QtYcy?_flM9qqe1_i1kJ5YsKTjzSD9wYVYCzHe9G



Scale = 1:23.3

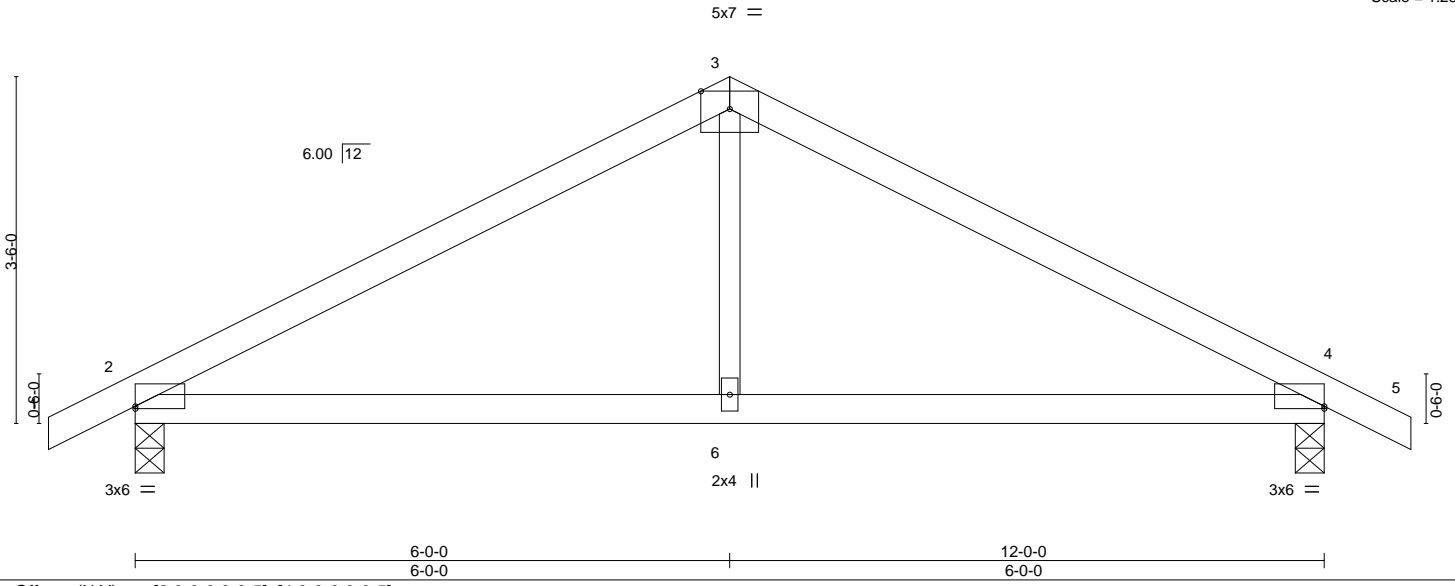


Plate Offsets (X,Y)--	[2:0-0-0,0-0-5], [4:0-0-0,0-0-5]
-----------------------	----------------------------------

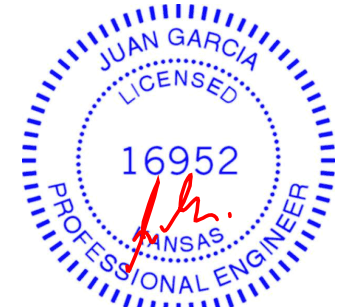
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.03 2-6 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.07 2-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.03 2-6 >999 240	Weight: 34 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 2=0-3-8, 4=0-3-8
 Max Horz 2=-61(LC 13)
 Max Uplift 2=-89(LC 8), 4=-89(LC 9)
 Max Grav 2=598(LC 1), 4=598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-721/87, 3-4=-721/87
 BOT CHORD 2-6=-22/549, 4-6=-22/549
 WEBS 3-6=0/284

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



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

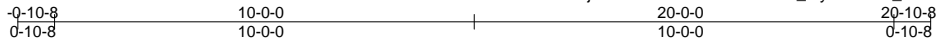
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss C1	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256013
---------------	-------------	--------------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:46 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-MG_FlyzdlzQDn_OrbhDXZxSM?GjoSPbNOal34fzHe9F



4x5 =

Scale = 1:54.9

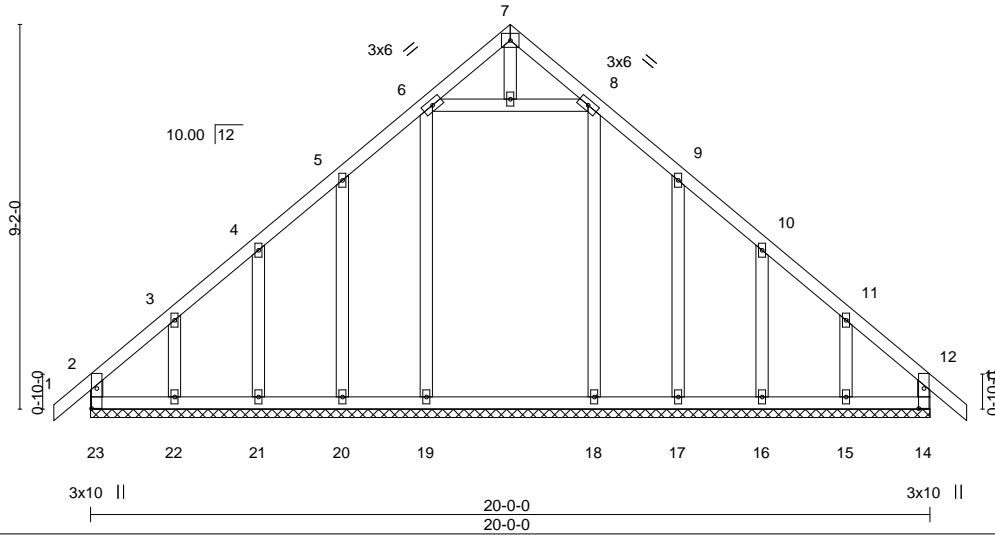


Plate Offsets (X,Y)--	[14:0-5-12,0-1-8], [23:0-5-12,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/def L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) -0.00 13 n/r 120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.01 13 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.01 14 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R			
				Weight: 103 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 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. All bearings 20-0-0.
(lb) - Max Horz 23=-260(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 23, 14, 19, 21, 18, 16 except 20=-126(LC 8), 22=-220(LC 8), 17=-128(LC 9), 15=-218(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 20, 21, 22, 17, 16, 15 except 23=316(LC 17), 14=312(LC 18), 19=341(LC 15), 18=333(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-23=-251/39, 2-3=-331/146, 11-12=-324/133
BOT CHORD 22-23=-118/268, 21-22=-118/268, 20-21=-118/268, 19-20=-118/268, 18-19=-118/268, 17-18=-118/268, 16-17=-118/268, 15-16=-118/268, 14-15=-118/268

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 14, 19, 21, 18, 16 except (jt=lb) 20=126, 22=220, 17=128, 15=218.
 - 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

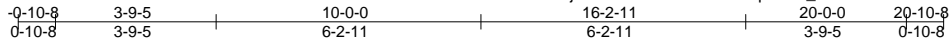


Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256014
400281	C2	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:47 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-qSYdzL_FWHY4P7z19Pkm69POrgwzBp1WdE1cc5zHe9E



5x7 =

Scale = 1:54.2

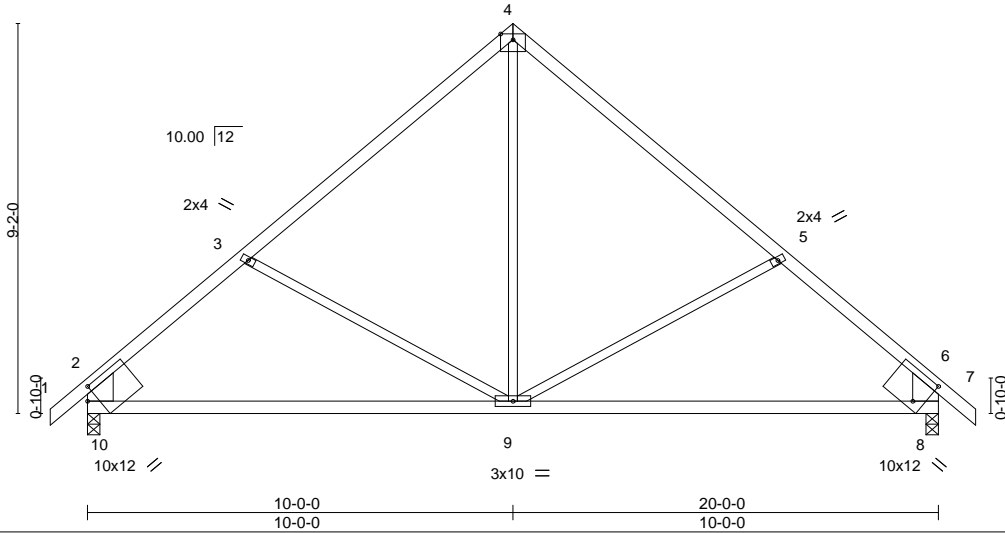


Plate Offsets (X,Y)-- [2:0-4-11,0-0-0], [6:0-4-11,0-0-0], [8:0-2-14,0-7-14], [8:0-2-13,0-2-5], [10:0-2-13,0-2-5], [10:0-2-11,0-3-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.70	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.73	Vert(LL) -0.17 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.34	Vert(CT) -0.34 8-9 >688 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.05 9 >999 240	Weight: 78 lb	FT = 10%

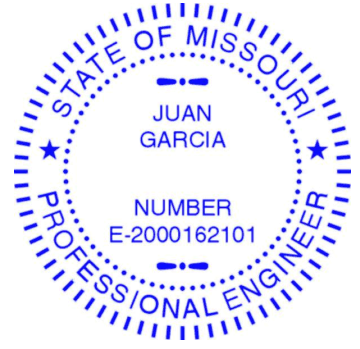
LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-10,6-8: 2x8 SP DSS

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-1-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 8=0-3-8
 Max Horz 10=265(LC 7)
 Max Uplift 10=-113(LC 8), 8=-113(LC 9)
 Max Grav 10=955(LC 1), 8=955(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1020/166, 3-4=-798/172, 4-5=-798/172, 5-6=-1020/166, 2-10=-854/160, 6-8=-854/160
 BOT CHORD 9-10=-182/771, 8-9=-48/685
 WEBS 4-9=-34/473, 5-9=-264/256, 3-9=-263/256

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 10=113, 8=113.
 - 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.



May 11, 2020

Job 400281	Truss C3	Truss Type Common	Qty 1	Ply 1	Lot 28 RT	I41256015
---------------	-------------	----------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:48 2020 Page 1

ID:mUYTXKzxejzudxJ64TA8GzSnWQ-Jf60Ae_tHagw0HYDj6F?fmXZe4GlwGygrunA8XzHe9D



5x7 =

Scale = 1:54.2

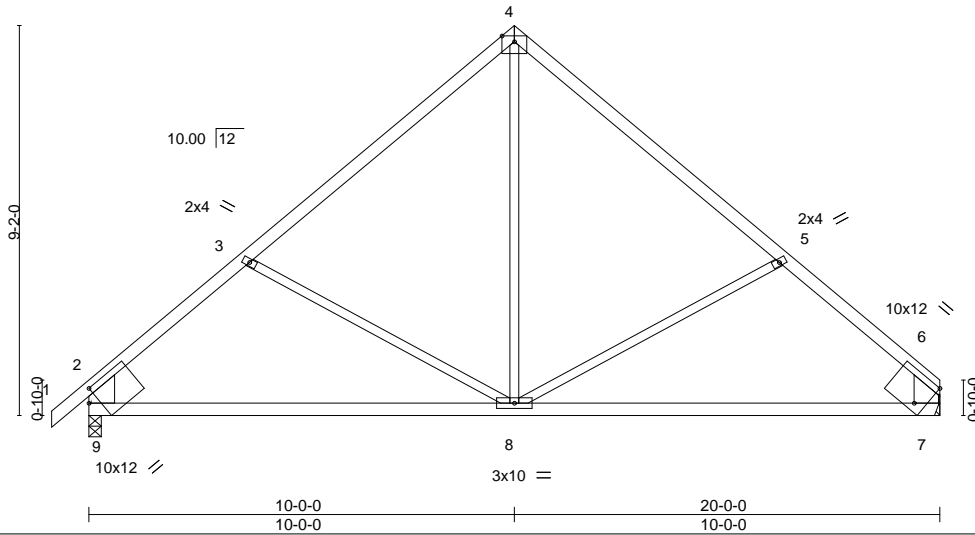


Plate Offsets (X,Y)--	[2:0-4-11,0-0-0], [6:Edge,0-7-14], [6:0-4-11,0-0-0], [7:0-2-13,0-2-5], [9:0-2-13,0-2-5], [9:0-2-11,0-3-3]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.69	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.72	Vert(LL) -0.17 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.36	Vert(CT) -0.35 8-9 >672 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 7 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.06 8 >999 240	Weight: 77 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-14 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-9,6-7: 2x8 SP DSS	

REACTIONS.
(size) 9=0-3-8, 7=Mechanical
Max Horz 9=257(LC 5)
Max Uplift 9=113(LC 8), 7=86(LC 9)
Max Grav 9=958(LC 1), 7=870(LC 1)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1022/165, 3-4=-799/172, 4-5=-799/172, 5-6=-1029/167, 2-9=-855/160, 6-7=-764/131
BOT CHORD 8-9=-199/759, 7-8=-86/702
WEBS 4-8=-33/473, 5-8=-280/259, 3-8=-264/256

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 9=113.
 - 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.



May 11, 2020

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
---	---

Job 400281	Truss C4	Truss Type Roof Special Girder	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256016
---------------	-------------	-----------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:49 2020 Page 2
ID:mUYTXKzxejzudoxJ64TA8GzSnWQ-nrgON_?V2uoneR7QGqmEBaUkWTdFfZYp4YWjhzzHe9C

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-5=-70, 5-7=-70, 7-9=-70, 2-8=-20

Concentrated Loads (lb)

Vert: 7=-84(F) 10=-42(F) 16=-45(F) 17=-45(F) 18=-45(F) 19=-566(F) 20=-23(F) 21=-23(F) 22=-23(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	141256017
400281	C5	ROOF SPECIAL GIRDER	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:50 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-F1DmbK07pCweGbicqXHTkn1zvtuLO3yyJCGGDQzHe9B

Job Reference (optional)



5x7 =

Scale = 1:61.0

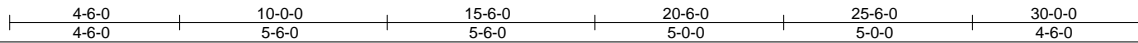
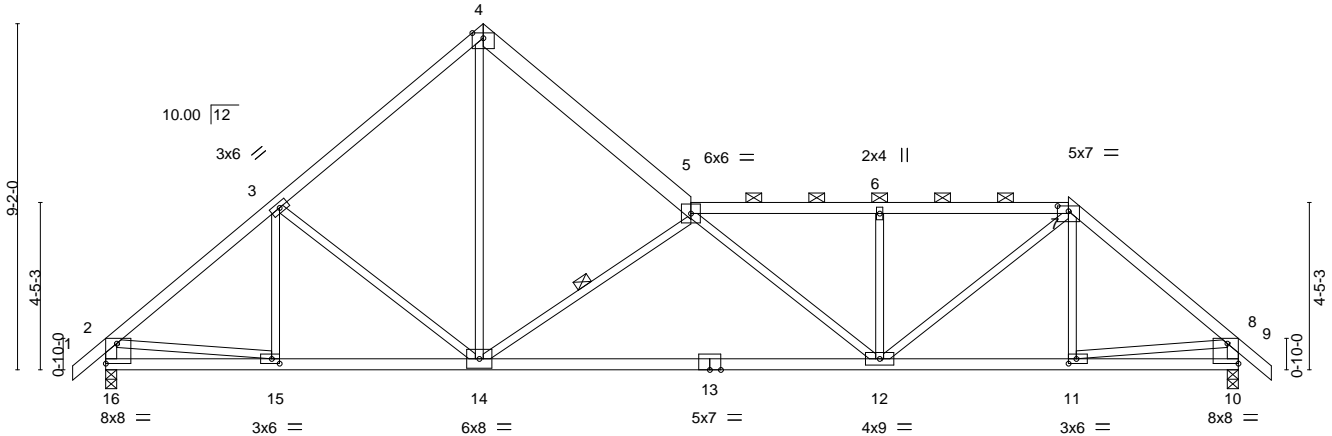


Plate Offsets (X,Y)--	[7:0-3-8,0-1-10], [10:Edge,0-6-6], [10:0-1-12,0-0-0], [11:0-2-8,0-1-8], [15:0-2-8,0-1-8], [16:0-1-12,0-0-0], [16:Edge,0-6-6]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.94	Vert(LL) -0.31 12-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.78	Vert(CT) -0.66 12-14 >537 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 10 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.10 12-14 >999 240	Weight: 129 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-9 max.): 5-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x3 SPF No.2 *Except* 2-16,8-10: 2x4 SPF No.2	WEBS 2-2-0 oc bracing: 12-14. 1 Row at midpt 5-14

REACTIONS. (size) 16=0-3-8, 10=0-3-8
 Max Horz 16=261(LC 7)
 Max Uplift 16=-134(LC 8), 10=-222(LC 9)
 Max Grav 16=1408(LC 1), 10=1408(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1647/209, 3-4=-1463/270, 4-5=-1447/214, 5-6=-2135/343, 6-7=-2137/345,
 7-8=-1647/264, 2-16=-1352/161, 8-10=-1356/249
 BOT CHORD 15-16=-218/361, 14-15=-159/1194, 12-14=-215/2369, 11-12=-92/1191
 WEBS 3-14=-262/213, 4-14=-172/1317, 5-14=-1681/406, 5-12=-304/126, 6-12=-415/176,
 7-12=-113/1231, 2-15=-60/1007, 8-11=-108/958

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=134, 10=222.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	
400281	C6	Roof Special	1	1		141256018
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:51 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-jEn8of1maV2VtlHoOEpiG?Z7GHE?7UC6Xs?qlszHe9A



5x12 ||

Scale = 1:62.6

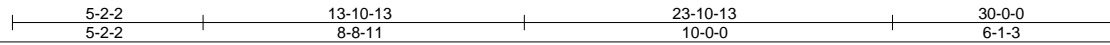
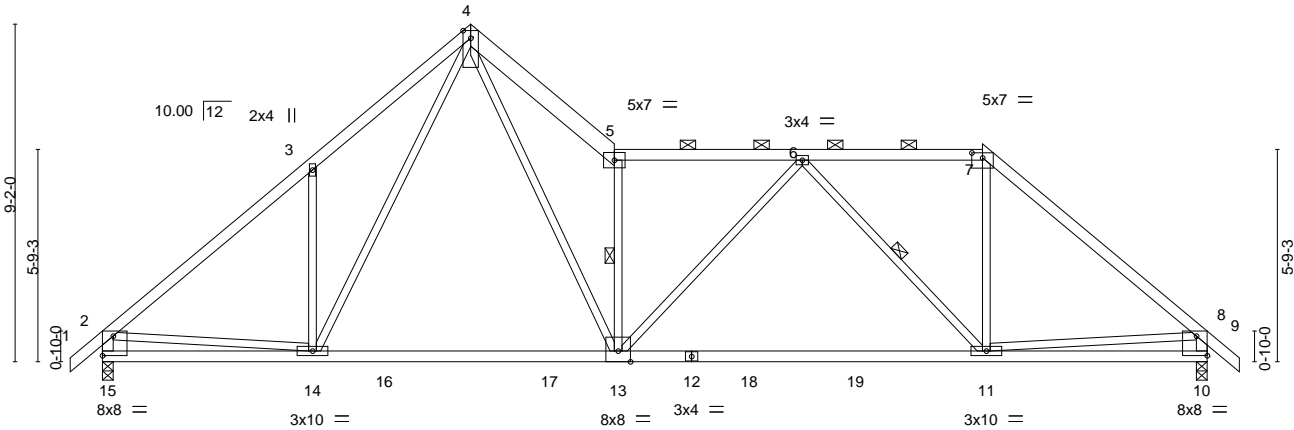


Plate Offsets (X, Y)-- [7:0-3-8,0-1-10], [10:Edge,0-6-6], [10:0-1-12,0-0-0], [15:0-1-12,0-0-0], [15:Edge,0-6-6]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.48	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.91	Vert(LL) -0.33 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.90	Vert(CT) -0.60 11-13 >596 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 10 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.11 13 >999 240	Weight: 132 lb	FT = 10%

LUMBER-
 TOP CHORD 2x4 SPF No.2 *Except*
 4-5: 2x6 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 12-15: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2 *Except*
 2-15,8-10: 2x4 SPF No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-9 max.): 5-7.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-13, 6-11

REACTIONS. (size) 15=0-3-8, 10=0-3-8
 Max Horz 15=261(LC 7)
 Max Uplift 15=-134(LC 8), 10=-222(LC 9)
 Max Grav 15=1509(LC 15), 10=1482(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1793/212, 3-4=-1801/365, 4-5=-2736/484, 5-6=-2016/283, 6-7=-1278/266, 7-8=-1798/251, 2-15=-1432/161, 8-10=-1418/245
 BOT CHORD 14-15=-281/561, 13-14=-73/1167, 11-13=-134/1806, 10-11=-238/418
 WEBS 3-14=-358/299, 4-14=-262/597, 4-13=-410/2334, 5-13=-1948/425, 6-13=-19/376, 6-11=-785/160, 7-11=-3/808, 2-14=0/965, 8-11=-122/984

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=134, 10=222.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400281	Truss C7	Truss Type Roof Special	Qty 1	Ply 1	Lot 28 RT	141256019
---------------	-------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:52 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-BQLW0?1OLpAMVvs_yyKxpC6DAhZPs?nFmWINIizHe99

5x12 ||

Scale = 1:61.6

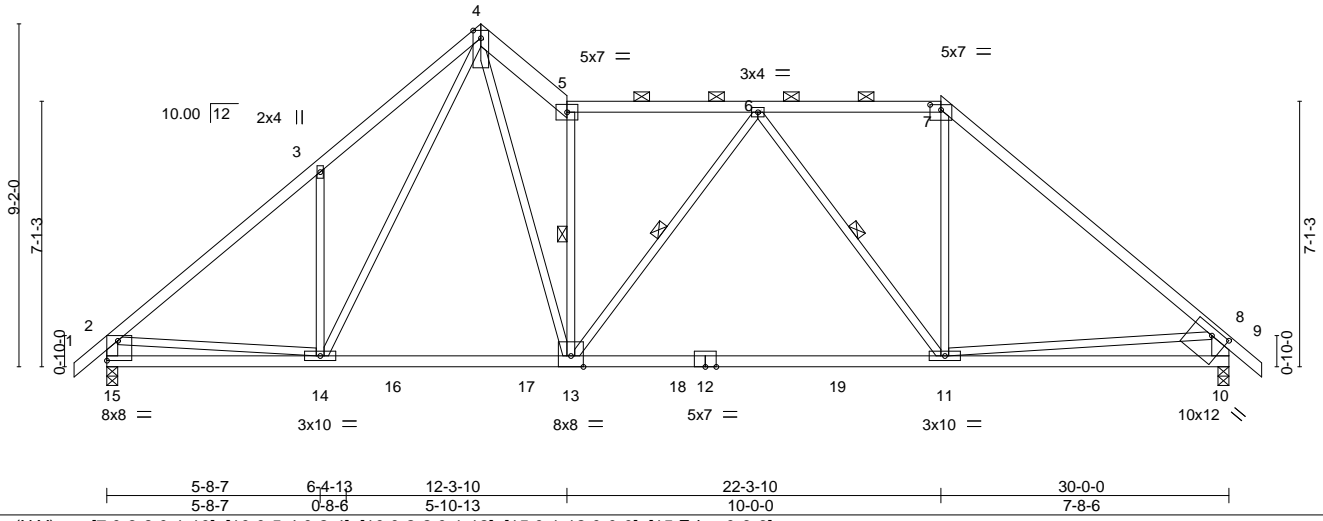


Plate Offsets (X,Y)--	[7:0-3-8,0-1-10], [10:0-5-4,0-2-4], [10:0-2-2,0-1-12], [15:0-1-12,0-0-0], [15:Edge,0-6-6]
-----------------------	---

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 0.79	Vert(LL)	-0.33	11-13	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.55	11-13	>643		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.04	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07	13	>999		
								Weight: 135 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-3-12 max.): 5-7.
BOT CHORD 2x4 SPF No.2 *Except* 10-12: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 11-13.
WEBS 2x3 SPF No.2 *Except* 2-15: 2x4 SPF No.2, 8-10: 2x6 SPF No.2	WEBS 1 Row at midpt 5-13, 6-13, 6-11

REACTIONS. (size) 15=0-3-8, 10=0-3-8
 Max Horz 15=263(LC 7)
 Max Uplift 15=-134(LC 8), 10=-223(LC 9)
 Max Grav 15=1508(LC 15), 10=1488(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1773/215, 3-4=-1781/368, 4-5=-2111/408, 5-6=-1573/259, 6-7=-1223/285,
 7-8=-1756/254, 2-15=-1417/165, 8-10=-1394/260
 BOT CHORD 14-15=-273/572, 13-14=-97/1181, 11-13=-133/1531, 10-11=-371/656
 WEBS 3-14=-358/300, 4-14=-276/535, 4-13=-354/1889, 5-13=-1512/358, 6-11=-529/179,
 7-11=-10/726, 2-14=0/939, 8-11=-184/799

- 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, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=134, 10=223.
 - 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.



May 11, 2020

Job 400281	Truss C8	Truss Type Roof Special	Qty 1	Ply 1	Lot 28 RT	141256020
---------------	-------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

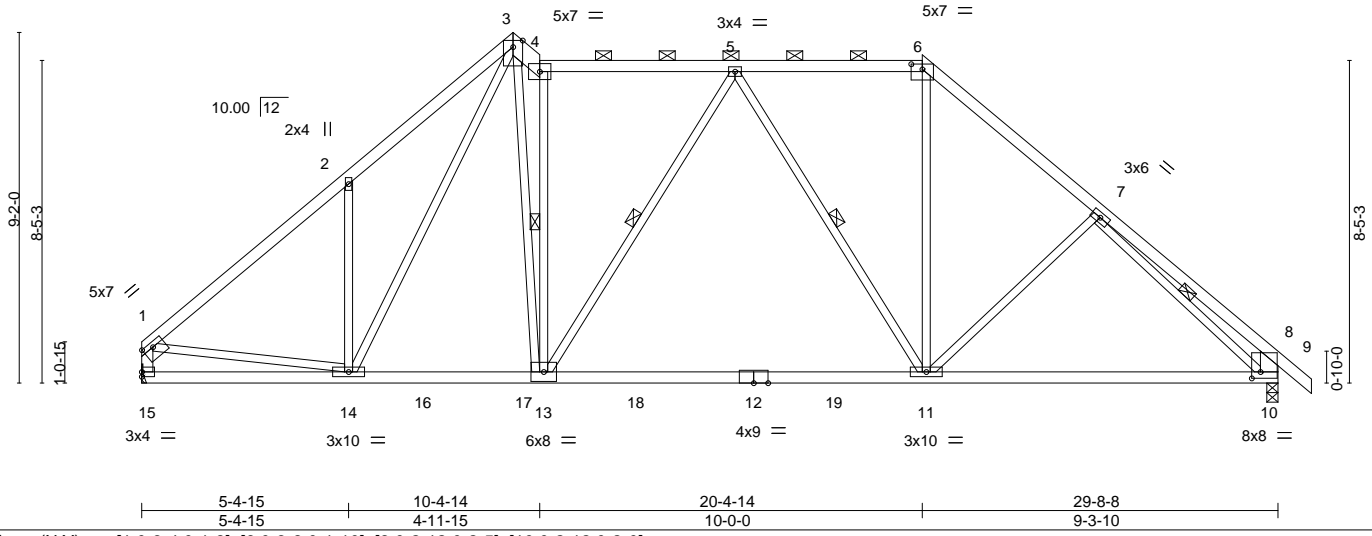
8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:53 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-fcvvDL2067ID72RBVfrALQfU25xJbSDP?AUwqlzHe98



6x8 ||

Scale = 1:60.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.86	Vert(LL) -0.36 11-13 >973 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.58 11-13 >610 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.04 10 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.06 11-13 >999 240	Weight: 140 lb	FT = 10%

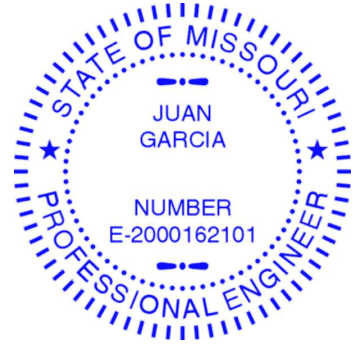
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
10-12: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
1-15: 2x4 SPF No.2, 8-10: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-2 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-13, 5-13, 5-11, 7-10

REACTIONS. (size) 15=Mechanical, 10=0-3-8
Max Horz 15=-256(LC 4)
Max Uplift 15=-129(LC 9), 10=-222(LC 9)
Max Grav 15=1425(LC 15), 10=1474(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1665/210, 2-3=-1692/366, 3-4=-1477/317, 4-5=-1217/242, 5-6=-1140/289,
6-7=-1574/302, 7-8=-570/171, 1-15=-1326/158, 8-10=-539/182
BOT CHORD 14-15=-232/387, 13-14=-119/1174, 11-13=-129/1317, 10-11=-111/1204
WEBS 2-14=-371/306, 3-14=-287/393, 3-13=-278/1435, 4-13=-941/253, 5-13=-282/142,
5-11=-319/189, 6-11=-62/707, 1-14=-62/1034, 7-10=-1214/120

- 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, 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) except (jt=lb) 15=129, 10=222.
 - 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400281	Truss C9	Truss Type Hip	Qty 1	Ply 1	Lot 28 RT	I41256021
---------------	-------------	-------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:54 2020 Page 1

ID:mUYTXKzxejzuoDxJ64TA8GzSnWQ-7pTHRh3etQQ4kCON3NMPudBgSUJTKyUYEqEUMBzHe97



Scale = 1:59.9

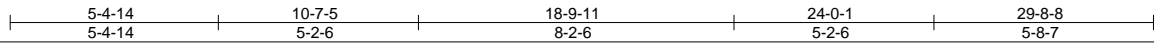
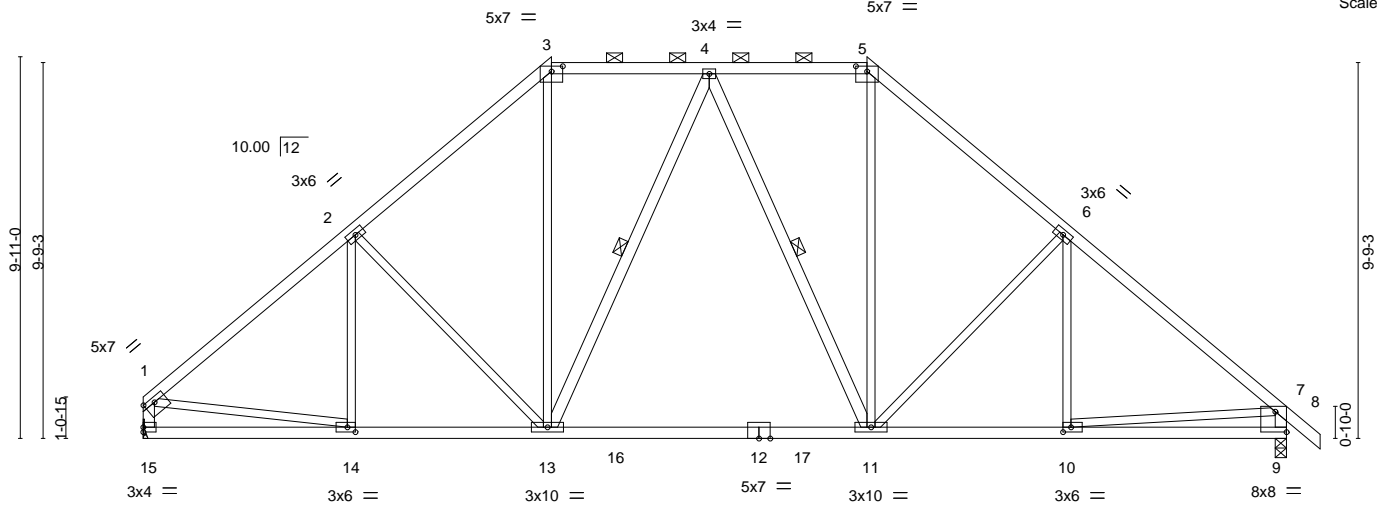


Plate Offsets (X, Y)--	[1:0-3-4,0-1-8], [3:0-3-8,0-1-10], [5:0-3-8,0-1-10], [9:Edge,0-6-6], [9:0-1-12,0-0-0], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8]
------------------------	---

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 0.35	Vert(LL)	-0.23	11-13	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.37	11-13	>944		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.04	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	13	>999		
								Weight: 144 lb	FT = 10%

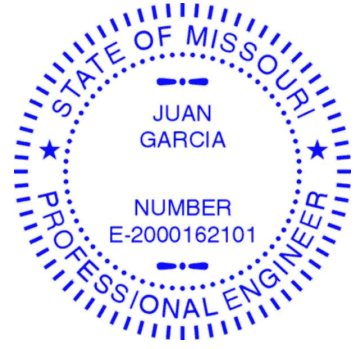
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-14 max.): 3-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 4-13, 4-11
4-13,4-11,1-15,7-9: 2x4 SPF No.2	

REACTIONS. (size) 15=Mechanical, 9=0-3-8
 Max Horz 15=-274(LC 4)
 Max Uplift 15=-113(LC 8), 9=-140(LC 9)
 Max Grav 15=1396(LC 2), 9=1456(LC 2)


FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1638/150, 2-3=-1446/206, 3-4=-1030/219, 4-5=-1041/221, 5-6=-1459/209, 6-7=-1713/158, 1-15=-1297/143, 7-9=-1351/172
 BOT CHORD 14-15=-244/379, 13-14=-170/1299, 11-13=-96/1093, 10-11=0/1236, 9-10=-119/367
 WEBS 2-13=-327/222, 3-13=-52/617, 4-13=-300/178, 4-11=-279/179, 5-11=-52/624, 6-11=-373/226, 1-14=0/1034, 7-10=-15/906

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=113, 9=140.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
---	---

Job 400281	Truss D1	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 28 RT	I41256022
---------------	-------------	--------------------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:55 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-b?1fe14GekYxMMaZd4teRku1upo3V1iSUz1udzHe96



4x5 =

Scale = 1:37.7

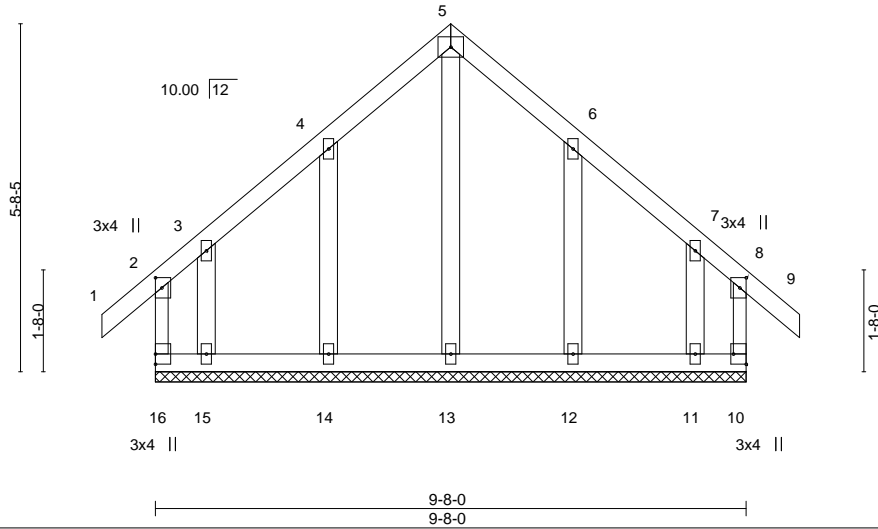


Plate Offsets (X,Y)--	[2:0-2-0,0-1-4], [8:0-2-0,0-1-4], [10:Edge,0-2-8]
-----------------------	---

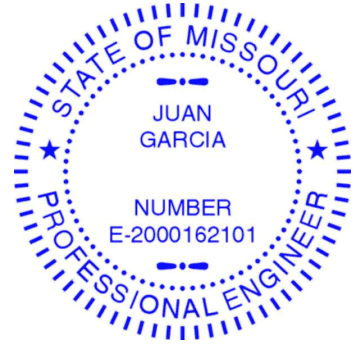
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	-0.00	9	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.00	9	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	-0.00	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 48 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 9-8-0.
 (lb) - Max Horz 16=178(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 14, 12 except 16=195(LC 4), 10=188(LC 5), 15=173(LC 5), 11=168(LC 4)
 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 12, 11 except 15=254(LC 6)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 12 except (jt=lb) 16=195, 10=188, 15=173, 11=168.
 - 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.



May 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256023
400281	D2	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:56 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-4Bb1rN4uP2go_W9mBoOtz2HxKI7rozmrh8jbR3zHe95



4x5 =

Scale = 1:37.2

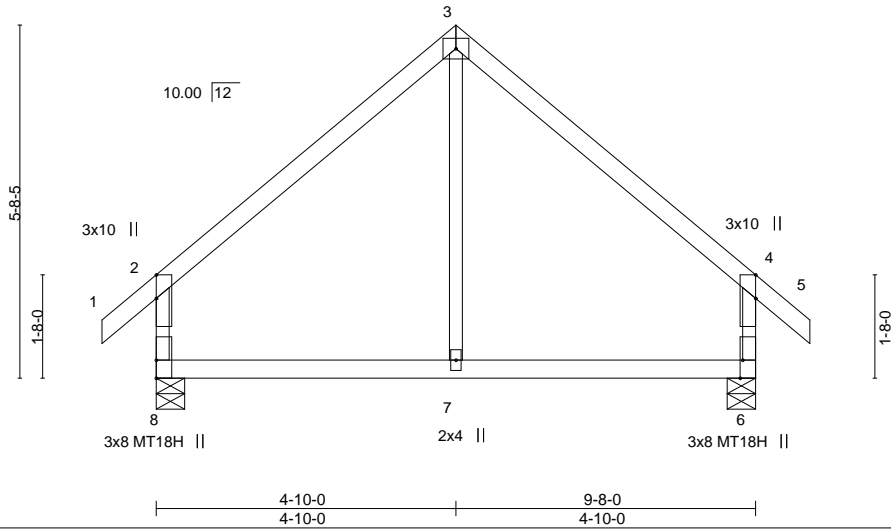


Plate Offsets (X, Y)--	[2:0-4-9,Edge], [4:0-4-9,0-0-0], [6:0-3-8,Edge]
------------------------	---

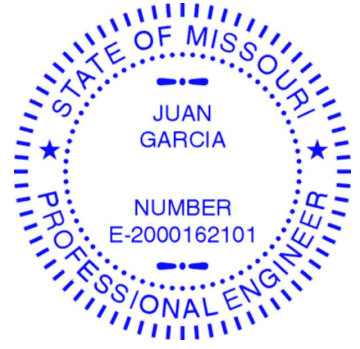
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.05	7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.09	7	>999	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.02	7-8	>999	240		
									Weight: 35 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 8=0-5-8, 6=0-5-8
 Max Horz 8=178(LC 7)
 Max Uplift 8=-59(LC 8), 6=-59(LC 9)
 Max Grav 8=494(LC 1), 6=494(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-360/101, 3-4=-360/101, 2-8=-415/104, 4-6=-415/104

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

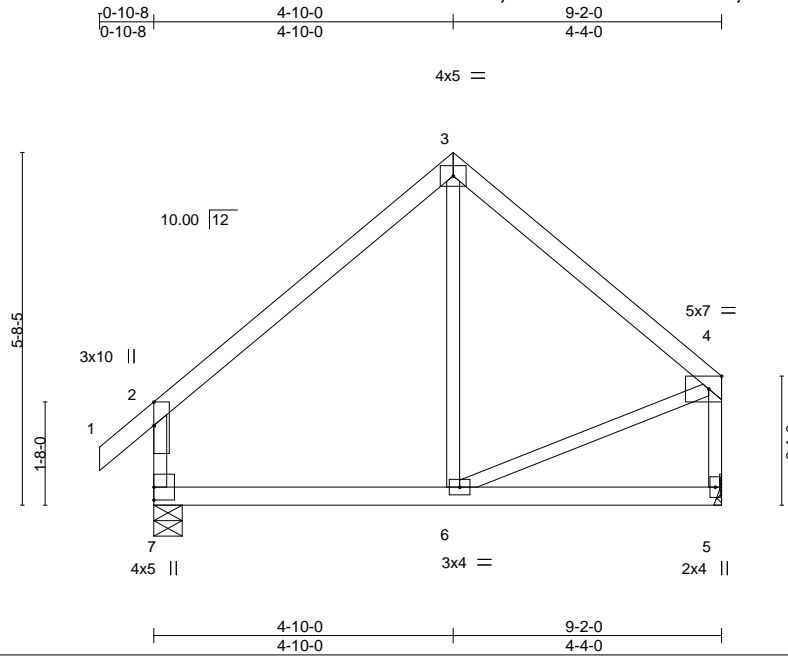
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256024
400281	D3	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:57 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-YO8P3j5W9LofbgkykVv6WGp7HiSEXQ?_woS8zWzHe94



Scale = 1:37.2

Plate Offsets (X,Y)--	[2:0-4-9,Edge], [4:0-2-8,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 0.57	Vert(LL) -0.02 6 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.05 5-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) -0.03 6 >999 240	Weight: 36 lb	FT = 10%

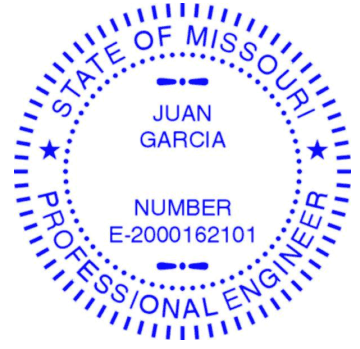
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 7=0-5-8, 5=Mechanical
 Max Horz 7=177(LC 5)
 Max Uplift 7=-55(LC 8), 5=-43(LC 8)
 Max Grav 7=475(LC 1), 5=399(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-349/82, 3-4=-318/100, 2-7=-405/101, 4-5=-350/74

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 11, 2020

Job 400281	Truss G1	Truss Type Roof Special Girder	Qty 1	Ply 1	Lot 28 RT	141256025
---------------	-------------	-----------------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:58 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-OaioG369wfxWDqJ8IDRL2TMD06k6GmH88SChVyzHe93

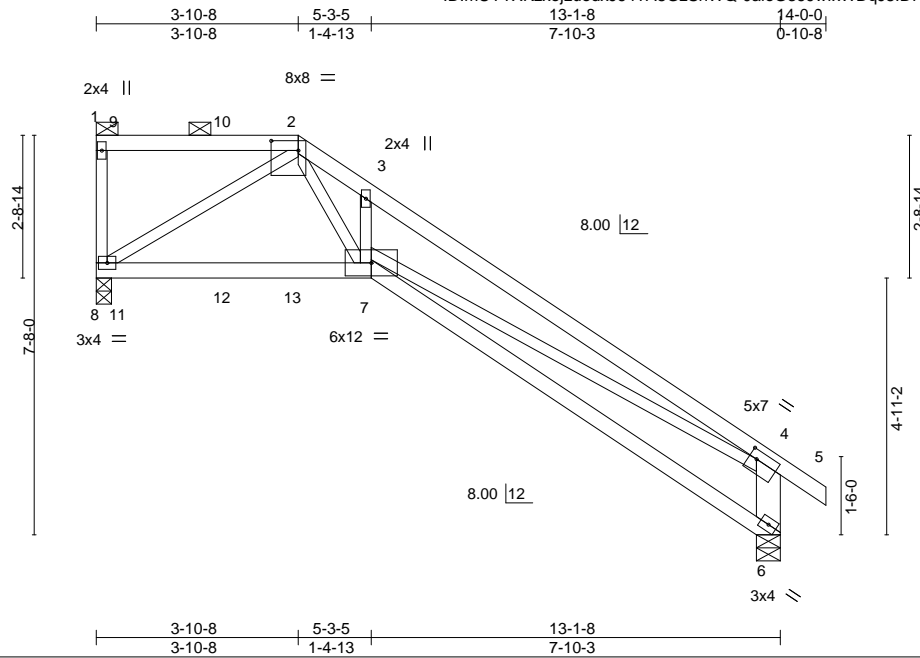


Plate Offsets (X,Y)--	[2:0-6-4,0-2-4], [4:0-1-12,0-2-0]
-----------------------	-----------------------------------

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 0.89	Vert(LL)	-0.14	6-7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.31	6-7	>498		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.50	Horz(CT)	0.12	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07	7-8	>999	Weight: 53 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-3-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 4-6: 2x6 SPF No.2	

REACTIONS. (size) 8=0-3-8, 6=0-5-8
 Max Horz 8=-225(LC 4)
 Max Uplift 8=-192(LC 9), 6=-171(LC 9)
 Max Grav 8=578(LC 1), 6=657(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1730/553, 3-4=-1751/325, 4-6=-778/305
 BOT CHORD 7-8=-80/652, 6-7=-183/402
 WEBS 2-8=-723/183, 2-7=-451/1450, 3-7=-533/409, 4-7=-25/1117


- 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) Provide adequate drainage to prevent water ponding.
 - 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) 6 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) except (jt=lb) 8=192, 6=171.
 - 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) 67 lb down and 59 lb up at 0-5-8, and 74 lb down and 57 lb up at 2-5-8, and 66 lb down and 59 lb up at 3-10-8 on top chord, and 20 lb down and 20 lb up at 0-5-8, and 17 lb down and 20 lb up at 2-5-8, and 17 lb down and 20 lb up at 3-9-12 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



May 11, 2020

Continued on page 2

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
---	--

Job 400281	Truss G1	Truss Type Roof Special Girder	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256025
---------------	-------------	-----------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:58 2020 Page 2
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-0aioG369wfxWDqj8IDRL2TMD06k6GmH88SChVyzHe93

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-5=-70, 7-8=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 9=-2(F) 11=-4(F) 12=0(F) 13=0(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss G2	Truss Type Roof Special	Qty 1	Ply 1	Lot 28 RT	I41256026
---------------	-------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:48:59 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-UmGAUO7nhz3NrzLswyabhuYNNV55?DJHN6xF1OzHe92

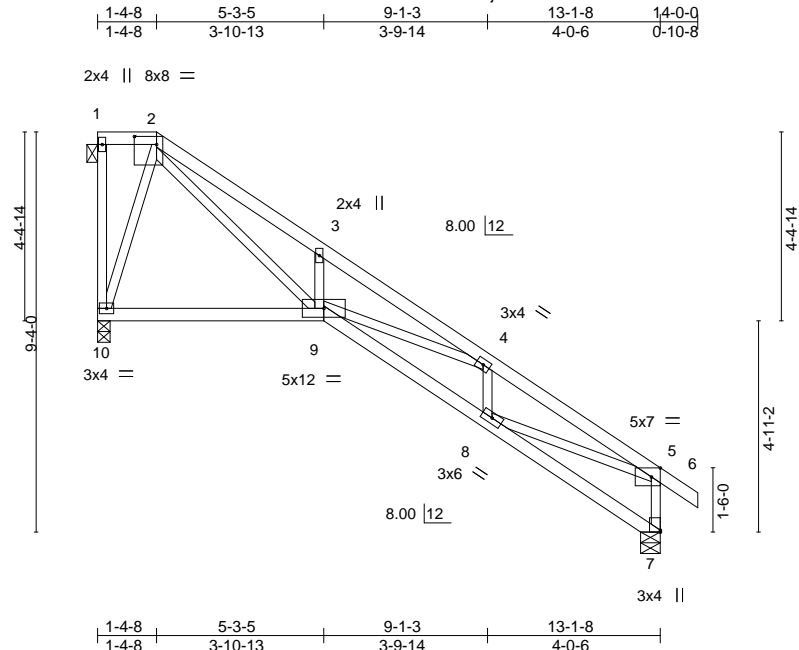


Plate Offsets (X,Y)--	[2:0-6-4,0-2-4], [5:0-2-8,Edge]
-----------------------	---------------------------------

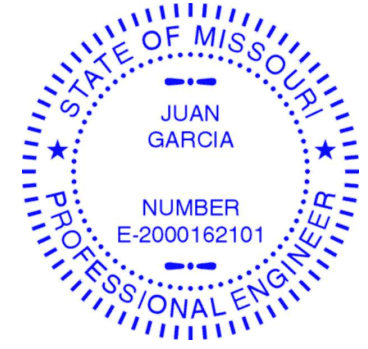
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.38	Vert(LL) -0.08 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.15 8-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.11 7 n/a n/a	Weight: 56 lb	FT = 10%
	Code IRC2018/TPI2014		Wind(LL) 0.06 8-9 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 10=0-3-8, 7=0-5-8
 Max Horz 10=-292(LC 4)
 Max Uplift 10=-79(LC 9), 7=-139(LC 9)
 Max Grav 10=579(LC 1), 7=652(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1491/237, 3-4=-1492/105, 4-5=-1428/250, 5-7=-634/170
 BOT CHORD 8-9=-186/1354
 WEBS 2-10=-541/114, 2-9=-236/1490, 3-9=-290/193, 4-8=-301/99, 5-8=-128/1132

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFERS (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) Provide adequate drainage to prevent water ponding.
 - 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) 7 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) 10 except (jt=lb) 7=139.
 - 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.



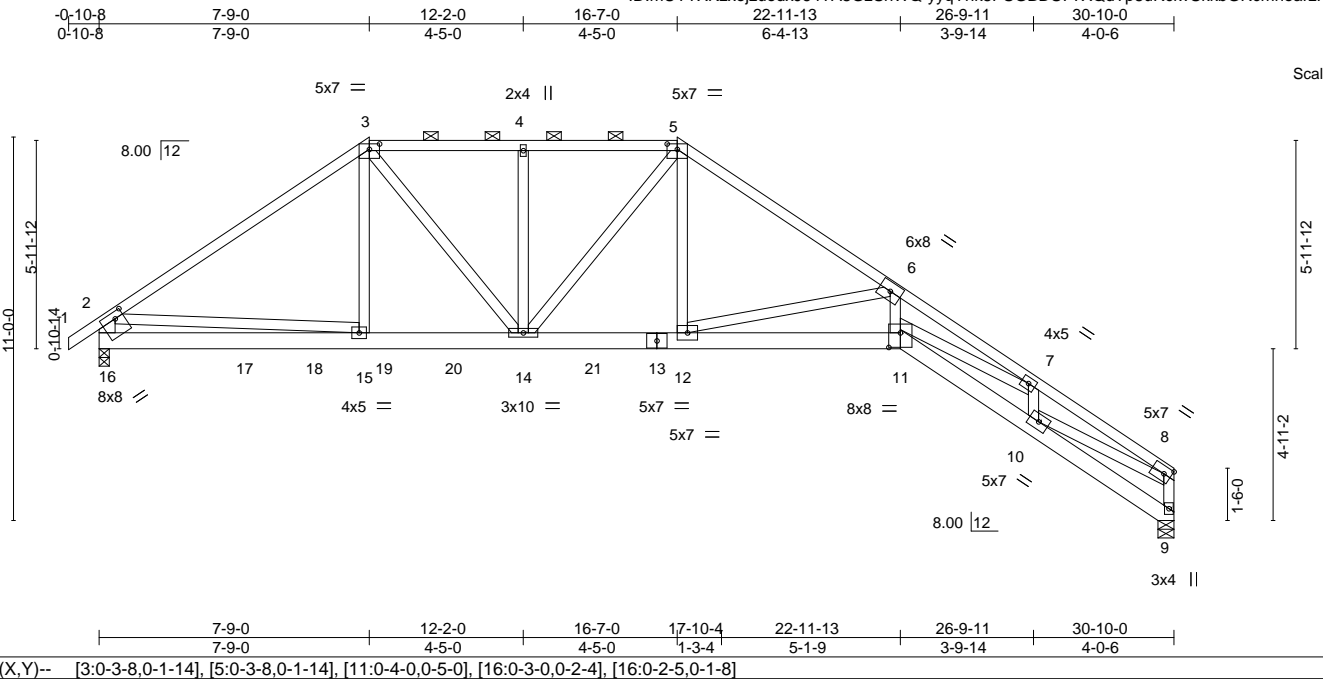
May 11, 2020

Job 400281	Truss G3	Truss Type HIP GIRDER	Qty 1	Ply 2	Lot 28 RT	I41256027
---------------	-------------	--------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:00 2020 Page 1

ID:mUYTXKzxejuodxJ64TA8GzSnWQ-yyqYhk8PSGBDS7TXQdTp8uRckvSkkbGRCmhoarzHe91



Scale = 1:66.1

Plate Offsets (X,Y)--	[3:0-3-8,0-1-14], [5:0-3-8,0-1-14], [11:0-4-0,0-5-0], [16:0-3-0,0-2-4], [16:0-2-5,0-1-8]				
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 0.68	Vert(LL) -0.32 11 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.55 11 >659 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.72	Horz(CT) 0.41 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.27 11 >999 240	Weight: 361 lb	FT = 10%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x6 SP 2400F 2.0E
 WEBS 2x4 SPF No.2 *Except*
 2-16: 2x6 SPF No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-5-8, 16=0-3-8
 Max Horz 16=-264(LC 4)
 Max Uplift 9=-452(LC 9), 16=-694(LC 8)
 Max Grav 9=1911(LC 1), 16=2631(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3504/944, 3-4=-3354/972, 4-5=-3354/972, 5-6=-4080/1051, 6-7=-9974/2317,
 7-8=-5777/1364, 8-9=-1866/481, 2-16=-2366/658
 BOT CHORD 15-16=-485/1315, 14-15=-783/2787, 12-14=-666/3263, 11-12=-1707/7861,
 10-11=-1307/5646
 WEBS 3-15=-271/771, 3-14=-327/1066, 4-14=-365/163, 5-14=-393/386, 5-12=-396/1755,
 6-12=-4690/1164, 6-11=-823/4085, 7-11=-729/3680, 7-10=-1521/415, 8-10=-1077/4789,
 2-15=-629/1870

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-4-0 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.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=452, 16=694.
 - 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.



May 11, 2020

On the ground representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400281	Truss G3	Truss Type HIP GIRDER	Qty 1	Ply 2	Lot 28 RT Job Reference (optional)	I41256027
---------------	-------------	--------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:00 2020 Page 2

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-yyqYhk8PSGBDS7TXQdTp8uRckvSkkbGRcmhoarzHe91

NOTES-

- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 327 lb down and 158 lb up at 4-2-0, 235 lb down and 113 lb up at 6-2-0, 307 lb down and 129 lb up at 8-2-0, 307 lb down and 129 lb up at 10-2-0, 307 lb down and 129 lb up at 12-2-0, and 307 lb down and 129 lb up at 14-2-0, and 307 lb down and 129 lb up at 16-2-0 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: 1-2=-70, 2-3=-70, 3-5=-70, 5-8=-70, 11-16=-20, 9-11=-20

Concentrated Loads (lb)

Vert: 13=-232(F) 14=-232(F) 17=-327(F) 18=-235(F) 19=-232(F) 20=-232(F) 21=-232(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

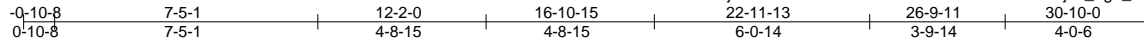
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss G4	Truss Type Hip	Qty 3	Ply 1	Lot 28 RT	I41256028
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)	

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:01 2020 Page 1
 ID:mUYTXKzxejzuoDxJ64TA8GzSnWQ-Q9Ovw481DaJ44H2jzL_2g6_meJfRT0yarQQM6HzHe90



Scale = 1:65.0

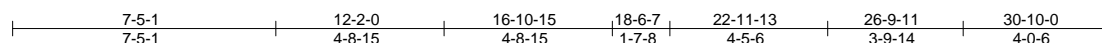
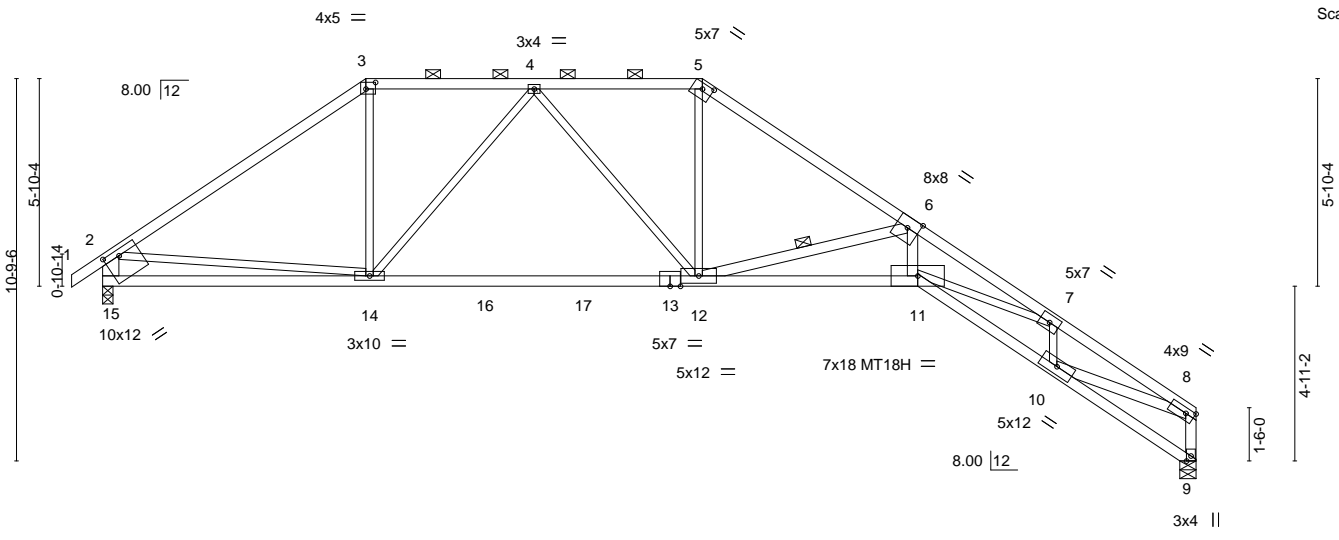


Plate Offsets (X, Y)--	[3:0-3-4,0-2-4], [5:0-3-8,0-1-14], [8:Edge,0-1-12], [15:0-2-5,0-1-8], [15:0-5-4,0-2-0]
------------------------	--

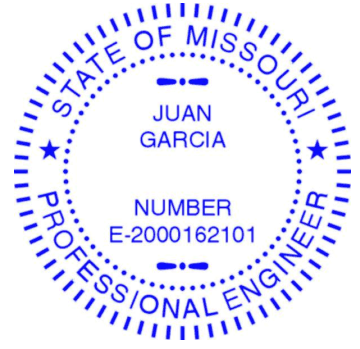
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.74	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(LL) -0.43 11 >846 360	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.89	Vert(CT) -0.76 11-12 >484 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.60 9 n/a n/a		
			Wind(LL) 0.25 11 >999 240	Weight: 124 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-8: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-13 max.): 3-5.
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 13-15: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 8-9,6-12,6-11,8-10: 2x4 SPF No.2, 2-15: 2x6 SPF No.2	WEBS 1 Row at midpt 6-12

REACTIONS.
(size) 9=0-5-8, 15=0-3-8 Max Horz 15=-263(LC 4) Max Uplift 9=-172(LC 9), 15=-107(LC 8) Max Grav 9=1450(LC 16), 15=1499(LC 2)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1918/107, 3-4=-1497/135, 4-5=-2024/215, 5-6=-2481/188, 6-7=-6725/583, 7-8=-4067/452, 8-9=-1417/209, 2-15=-1394/145 BOT CHORD 14-15=-271/741, 12-14=-109/1869, 11-12=-328/5283, 10-11=-416/4009 WEBS 3-14=-5713, 4-14=-682/168, 6-12=-3390/484, 6-11=-180/2957, 7-11=-11/2318, 7-10=-1079/170, 8-10=-316/3380, 2-14=-148/1079, 5-12=0/1014, 4-12=-50/353

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=172, 15=107.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



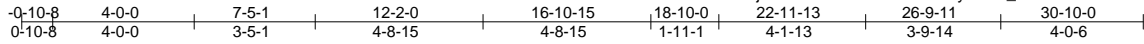
May 11, 2020

Job 400281	Truss G5	Truss Type Piggyback Base Girder	Qty 1	Ply 2	Lot 28 RT	141256029
---------------	-------------	-------------------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:02 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-uLyl6Q9f_uRxiRdvX2VHDJWtYj?HCR0k34AvejzHe9?



Scale = 1:65.1

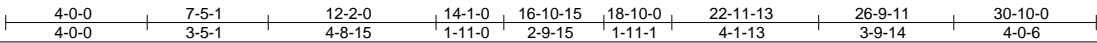
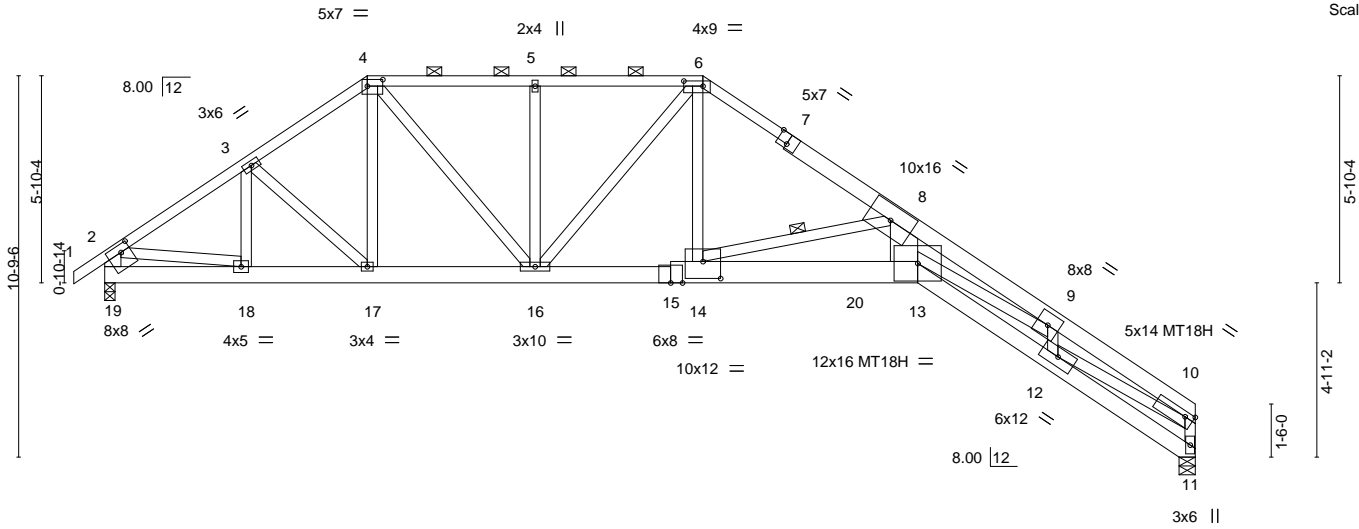


Plate Offsets (X, Y)-- [4:0-5-4,0-2-4], [6:0-6-8,0-1-12], [7:0-3-8,Edge], [10:Edge,0-1-12], [14:0-6-0,0-5-12], [19:0-3-4,0-2-8], [19:0-2-5,0-1-8]

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 0.98	Vert(LL)	-0.50	13-14	>734	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.88	13-14	>414	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.96	Horz(CT)	0.63	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11	13	>999		
								Weight: 401 lb	FT = 10%

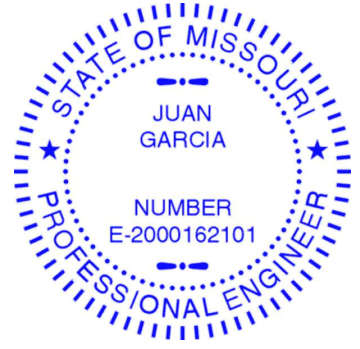
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
 7-10: 2x6 SPF 1650F 1.4E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
 13-15: 2x8 SP DSS
WEBS 2x4 SPF No.2 *Except*
 8-13: 2x10 SP DSS, 10-12: 2x4 SPF 2100F 1.8E, 2-19: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-14

REACTIONS. (size) 11=0-5-8, 19=0-3-8
 Max Horz 19=-260(LC 25)
 Max Grav 11=3155(LC 1), 19=2257(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2895/0, 3-4=-3043/0, 4-5=-3539/0, 5-6=-3539/0, 6-8=-5507/0, 8-9=-19512/0, 9-10=-10599/0, 10-11=-3172/0, 2-19=-2116/0
BOT CHORD 18-19=-135/529, 17-18=0/2335, 16-17=0/2478, 14-16=0/4635, 13-14=0/13683, 12-13=0/10436, 11-12=-9/322
WEBS 3-18=-445/0, 3-17=-75/309, 4-16=0/1678, 8-13=0/10186, 9-13=0/7844, 9-12=-2706/0, 10-12=0/8862, 2-18=0/1893, 5-16=-338/180, 6-16=-1700/0, 6-14=0/3827, 8-14=-9455/0

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-4-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-4-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 9-12 2x4 - 1 row at 0-7-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 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.



May 11, 2020

On the ground representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss G5	Truss Type Piggyback Base Girder	Qty 1	Ply 2	Lot 28 RT Job Reference (optional)	I41256029
---------------	-------------	-------------------------------------	----------	-----------------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:02 2020 Page 2
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-uLyI6Q9f_uRxiRdvX2VHDJWtYj?HCR0k34AvejzHe9?

NOTES-

- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2593 lb down at 21'-2-7" 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: 1-2=-70, 2-4=-70, 4-6=-70, 6-10=-70, 13-19=-20, 11-13=-20
Concentrated Loads (lb)
Vert: 20=-2593(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



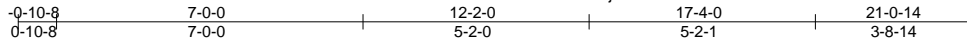
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss H1	Truss Type Common	Qty 2	Ply 1	Lot 28 RT	I41256030
---------------	-------------	----------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:03 2020 Page 1

ID:mUYTXKzxejzuoedXJ64TA8GzSnWQ-MXWhJmAHIBZaJbC65m0WIX39b7Tcx_utlkvSA9zHe9_



4x5 =

Scale = 1:52.6

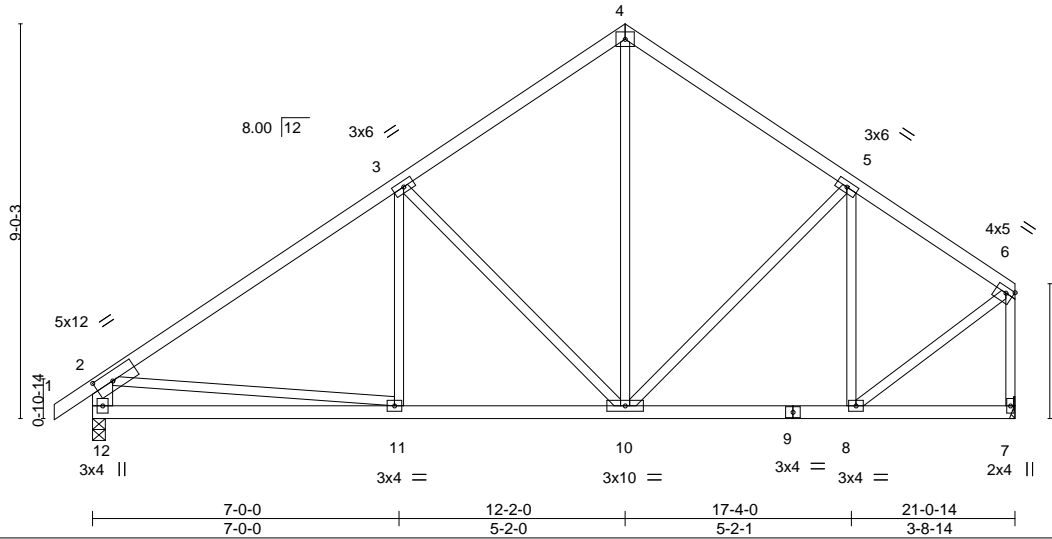


Plate Offsets (X,Y)-- [2:0-4-15,0-2-8], [6:Edge,0-1-8]

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 0.52	Vert(LL) -0.06 11-12 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.12 11-12 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.60	Horz(CT) 0.02 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.01 11 >999 240	Weight: 93 lb	FT = 10%

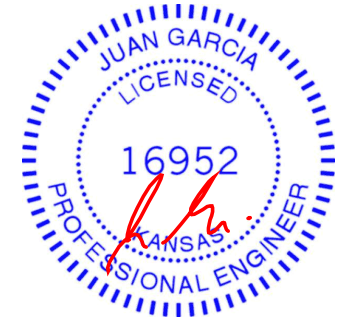
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-12: 2x6 SPF No.2	

REACTIONS. (size) 12=0-3-8, 7=Mechanical
 Max Horz 12=223(LC 5)
 Max Uplift 12=-19(LC 8)
 Max Grav 12=1013(LC 1), 7=931(LC 1)


FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1169/34, 3-4=-783/85, 4-5=-776/96, 5-6=-716/41, 2-12=-946/58, 6-7=-902/12
 BOT CHORD 11-12=-228/526, 10-11=-28/869, 8-10=-0/566
 WEBS 3-10=-457/108, 4-10=-33/420, 5-8=-342/52, 2-11=0/461, 6-8=0/708

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 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) 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) 12.
- 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.



May 11, 2020

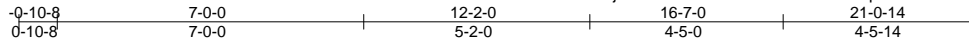
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
---	---

Job 400281	Truss H2	Truss Type Roof Special	Qty 1	Ply 1	Lot 28 RT	I41256031
---------------	-------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:07 2020 Page 1

ID:mUYTXKzxejzuoqxJ64TA8GzSnWQ-FJIB98DopQ3EoCVtKc5SwMEMgkpQtoDSDLtIxZHe8w



6x8 ||

Scale = 1:52.6

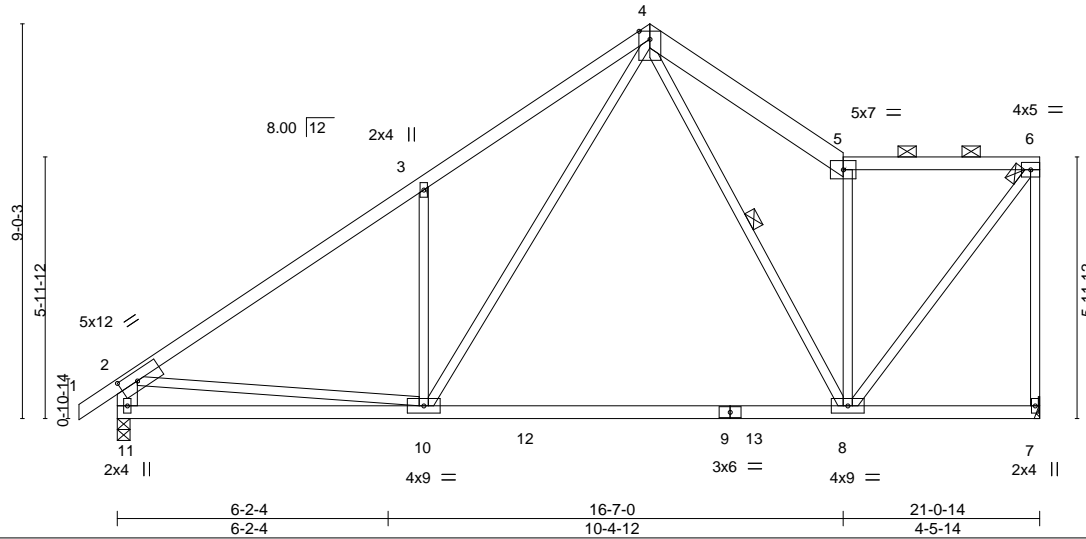


Plate Offsets (X,Y)-- [2:0-4-15,0-2-8]

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 0.90	Vert(LL)	-0.28	8-10	>874	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.45	8-10	>556		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	8-10	>999		
								Weight: 97 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-11: 2x6 SPF No.2

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

REACTIONS. (size) 7=Mechanical, 11=0-3-8
Max Horz 11=255(LC 7)
Max Uplift 7=-19(LC 9), 11=-17(LC 8)
Max Grav 7=1025(LC 13), 11=1107(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1300/22, 3-4=-1328/159, 4-5=-918/89, 5-6=-678/36, 6-7=-1014/23, 2-11=-1026/48
BOT CHORD 10-11=-276/536, 8-10=-43/646
WEBS 3-10=-438/186, 4-10=-111/864, 4-8=-78/290, 5-8=-725/96, 6-8=0/1138, 2-10=0/662

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

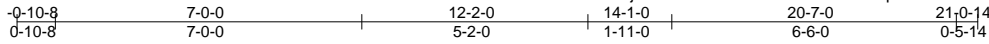
Job 400281	Truss H3	Truss Type Roof Special	Qty 1	Ply 1	Lot 28 RT	I41256032
---------------	-------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:07 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-FJIB98DopQ3EoCVtKc5SwMEpakowtpnTDLtglxzHe8w

Job Reference (optional)



6x8 ||

Scale = 1:52.6

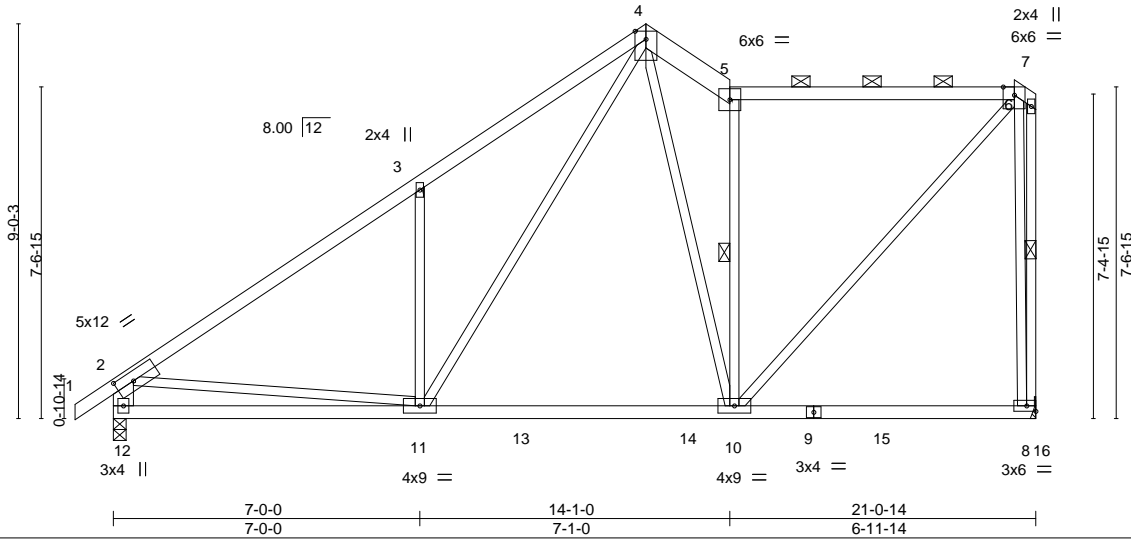


Plate Offsets (X,Y)-- [2:0-4-15,0-2-8], [6:0-3-1,Edge]

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 0.65	Vert(LL)	-0.10	10-11	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.16	10-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	11	>999		
								Weight: 105 lb	FT = 10%

LUMBER-
 TOP CHORD 2x4 SPF No.2 *Except*
 4-5: 2x6 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-12: 2x6 SPF No.2

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

REACTIONS. (size) 12=0-3-8, 8=Mechanical
 Max Horz 12=209(LC 8)
 Max Uplift 8=-26(LC 9)
 Max Grav 12=1111(LC 13), 8=1048(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1277/0, 3-4=-1305/136, 4-5=-907/53, 5-6=-709/29, 2-12=-1006/35
 BOT CHORD 11-12=-287/536, 10-11=-42/641
 WEBS 3-11=-439/187, 4-11=-140/767, 4-10=-12/446, 5-10=-779/105, 2-11=0/571, 6-8=-1065/123, 6-10=-34/989

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



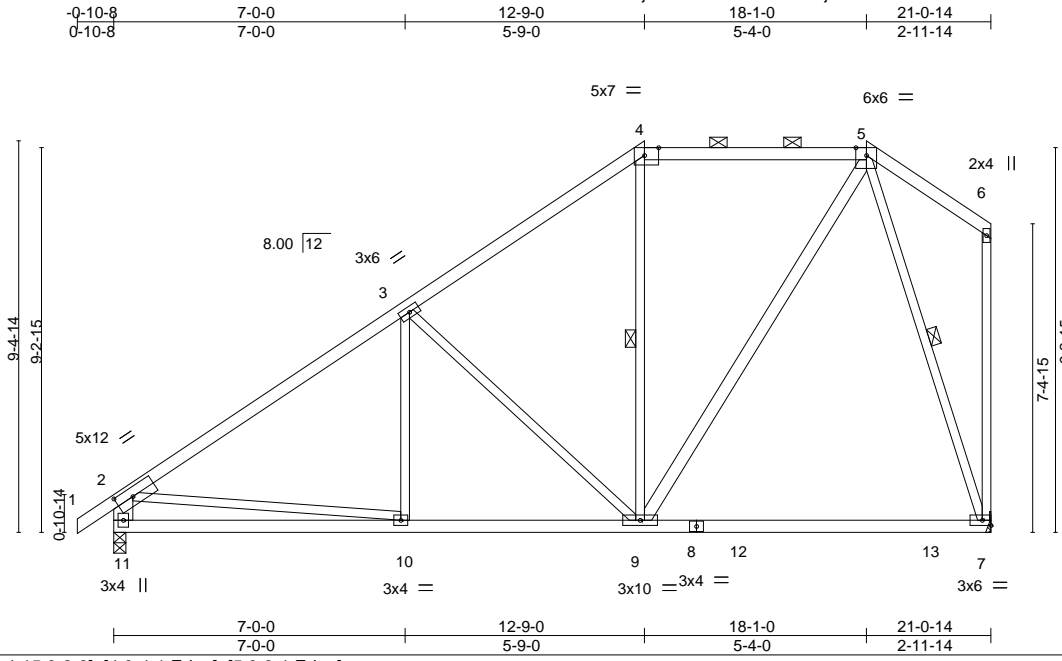
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256033
400281	H4	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:08 2020 Page 1

ID:mUYTXKzxejuodxJ64TA8GzSnWQ-jvJZnTEQakB5QM43uJchSam1b890cDvcS?dDrNzHe8v



Scale = 1:55.4

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 0.50	Vert(LL)	-0.23	7-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.36	7-9	>698		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	-0.03	7-9	>999	Weight: 102 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
5-9: 2x4 SPF No.2, 2-11: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-9, 5-7

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Horz 11=279(LC 5)
Max Uplift 11=-17(LC 8)
Max Grav 11=1078(LC 13), 7=1015(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1209/34, 3-4=-802/74, 4-5=-595/93, 2-11=-956/57
BOT CHORD 10-11=-283/582, 9-10=-127/1017, 7-9=-72/282
WEBS 3-9=-514/122, 5-9=-27/692, 2-10=0/523, 5-7=-845/100

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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) 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, 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) 11.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



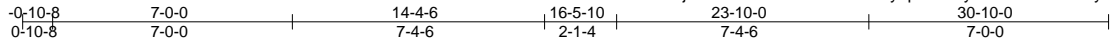
May 11, 2020

Job 400281	Truss H5	Truss Type HIP GIRDER	Qty 1	Ply 2	Lot 28 RT	I41256034
---------------	-------------	--------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:09 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-BhtyapF2L1Jy1WfGR07w?nJ9yXRRkLdGlgfMnNpzHe8u



Scale = 1:67.3

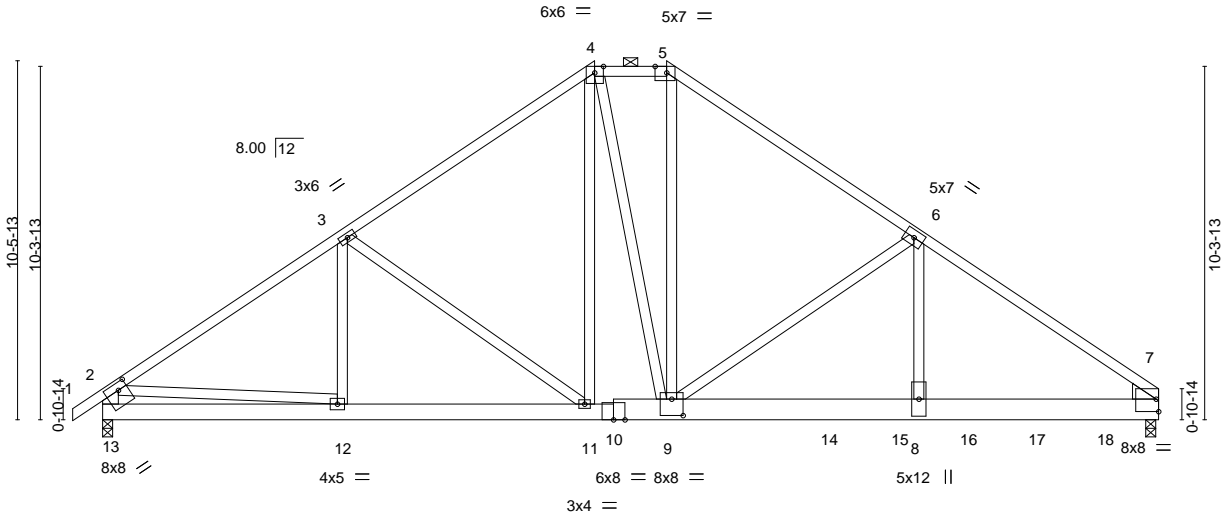


Plate Offsets (X, Y)--	[4:0-3-1,Edge], [5:0-4-1,Edge], [7:Edge,0-4-6], [7:0-6-6,0-0-9], [7:0-0-7,0-0-5], [9:0-4-0,0-5-12], [13:0-2-5,0-1-8], [13:0-3-4,0-2-8]
------------------------	--

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 0.65	Vert(LL)	-0.14	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.25	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.93	Horz(CT)	0.04	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07	8-9	>999	Weight: 399 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-7: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 5-7-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x6 SP DSS *Except* 7-10: 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 2-13: 2x6 SPF No.2	
WEDGE Right: 2x6 SPF No.2	

REACTIONS. (size) 13=0-3-8, 7=0-3-8
 Max Horz 13=-219(LC 25)
 Max Uplift 13=-56(LC 8), 7=-217(LC 9)
 Max Grav 13=2631(LC 1), 7=4999(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3720/93, 3-4=-3428/153, 4-5=-3172/168, 5-6=-3983/163, 6-7=-7368/256,
 2-13=-2518/93
 BOT CHORD 12-13=-205/828, 11-12=-85/2989, 9-11=0/2784, 8-9=-121/5816, 7-8=-121/5816
 WEBS 3-11=-512/232, 4-11=-614/298, 4-9=-153/2059, 5-9=-75/1914, 6-9=-3232/287,
 6-8=-97/3517, 2-12=0/2256

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-3-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - The Fabrication Tolerance at joint 7 = 6%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 7=217.
 - 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss H5	Truss Type HIP GIRDER	Qty 1	Ply 2	Lot 28 RT Job Reference (optional)	I41256034
---------------	-------------	--------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:09 2020 Page 2
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-BhtyapF2L1Jy1WfGR07w?nJ9yXRkLdGlgfMnNpzHe8u

NOTES-

- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2954 lb down and 26 lb up at 21-2-7, 479 lb down and 66 lb up at 23-3-4, 476 lb down and 67 lb up at 25-3-4, and 476 lb down and 67 lb up at 27-3-4, and 476 lb down and 67 lb up at 29-3-4 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: 1-2=-70, 2-4=-70, 4-5=-70, 5-7=-70, 7-13=-20
Concentrated Loads (lb)
Vert: 14=-2906(F) 15=-479(F) 16=-476(F) 17=-476(F) 18=-476(F)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



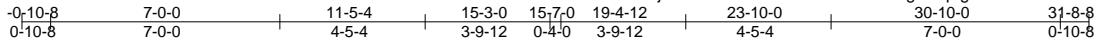
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256035
400281	H6	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

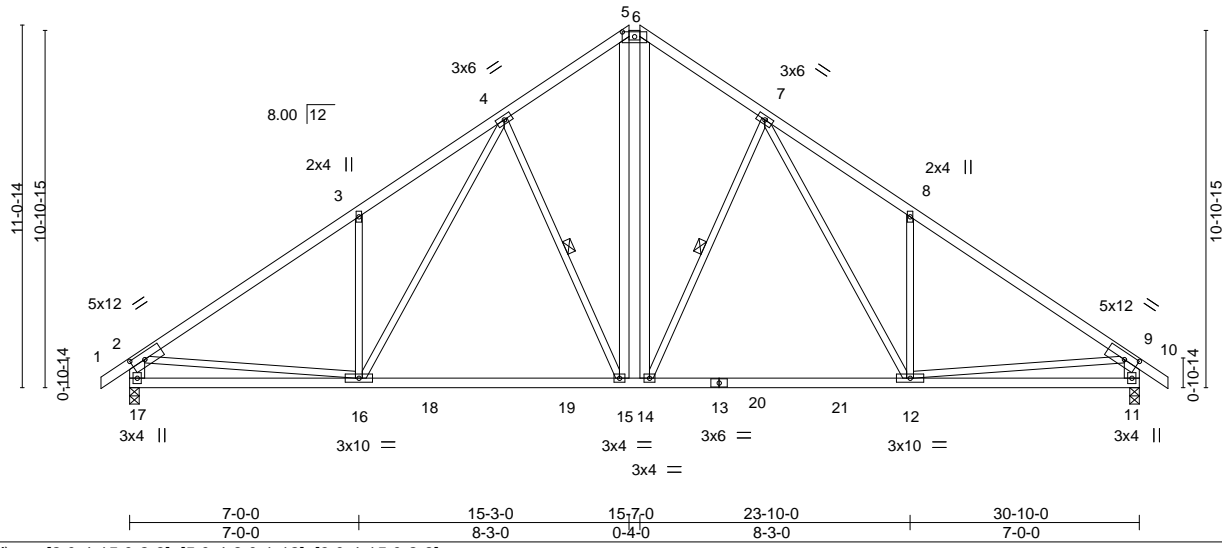
8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:10 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-fuRko9Fg6LRpfgES?ke9Y?sLWxmr4BbvJ6KvFzHe8t



4x9 =

Scale = 1:70.4



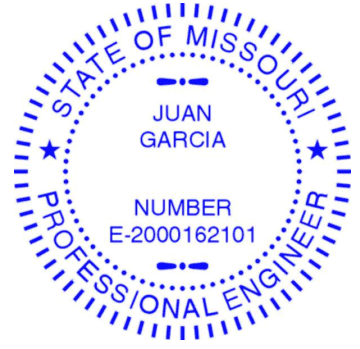
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.19 12-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.31 12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.04 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 15-16	>999	240	Weight: 153 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-15 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 9-11-12 oc bracing.
WEBS 2x3 SPF No.2 *Except* 5-15,6-14: 2x4 SPF No.2, 2-17,9-11: 2x6 SPF No.2	WEBS 1 Row at midpt 4-15, 7-14

REACTIONS. (size) 17=0-3-8, 11=0-3-8
 Max Horz 17=307(LC 7)
 Max Uplift 17=-180(LC 8), 11=-180(LC 9)
 Max Grav 17=1591(LC 15), 11=1591(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2017/208, 3-4=-2028/390, 4-5=-1395/277, 5-6=-1102/251, 6-7=-1395/277, 7-8=-2027/389, 8-9=-2017/208, 2-17=-1491/215, 9-11=-1490/215
 BOT CHORD 16-17=-343/715, 15-16=-101/1439, 14-15=0/1202, 12-14=-25/1354, 11-12=-189/497
 WEBS 3-16=-410/274, 4-16=-223/682, 4-15=-560/261, 5-15=-141/653, 6-14=-141/653, 7-14=-560/261, 7-12=-222/681, 8-12=-408/273, 2-16=0/1181, 9-12=0/1194

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=180, 11=180.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

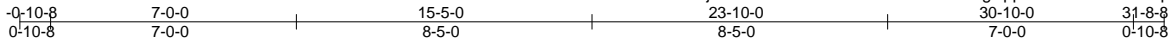
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss H7	Truss Type Common	Qty 2	Ply 1	Lot 28 RT	I41256036
---------------	-------------	----------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:11 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-74?i?VGIsfZgHppeZRAO4COX8L5hpcK28zrtRizHe8s



5x7 =

Scale = 1:65.6

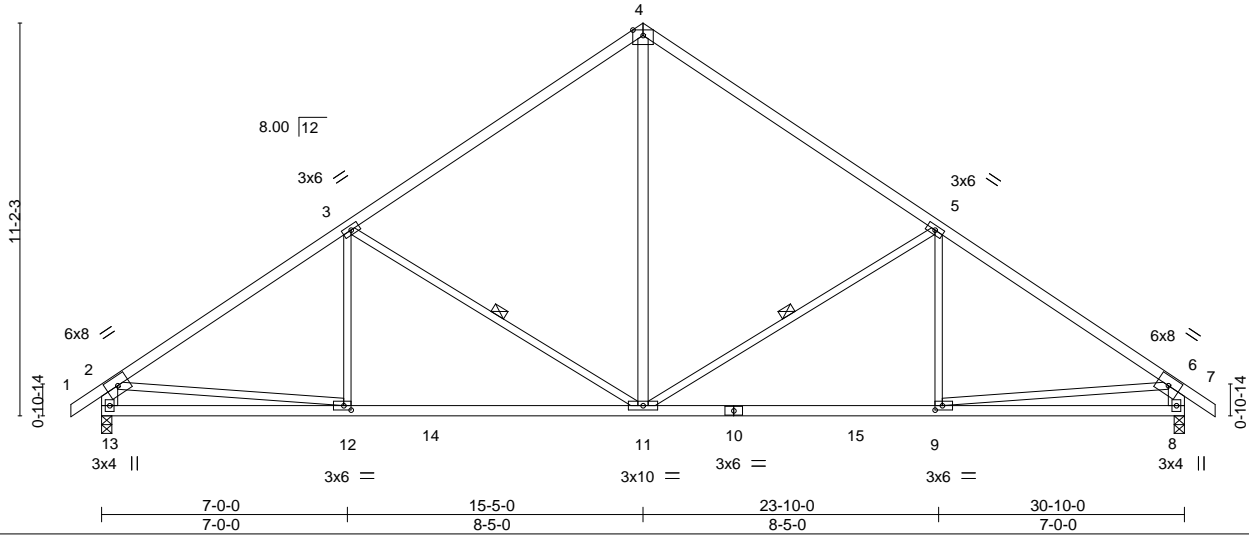


Plate Offsets (X,Y)--	[9:0-2-8,0-1-8], [12:0-2-8,0-1-8]
-----------------------	-----------------------------------

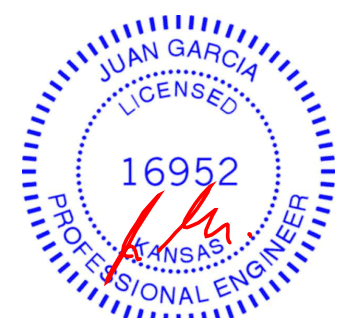
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.14	11-12	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.26	11-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.05	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	11-12	>999	Weight: 129 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 5-2-2 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 5-11, 3-11
4-11: 2x4 SPF No.2, 2-13,6-8: 2x6 SPF No.2	

REACTIONS.	(size) 13=0-3-8, 8=0-3-8
	Max Horz 13=312(LC 7)
	Max Uplift 13=-180(LC 8), 8=-180(LC 9)
	Max Grav 13=1566(LC 15), 8=1566(LC 16)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2001/224, 3-4=-1445/264, 4-5=-1445/264, 5-6=-2001/225, 2-13=-1462/214, 6-8=-1462/214
BOT CHORD	12-13=-273/592, 11-12=-239/1777, 9-11=-73/1570, 8-9=-99/372
WEBS	4-11=-81/949, 5-11=-718/283, 5-9=0/269, 3-11=-718/283, 3-12=0/269, 2-12=-6/1233, 6-9=-15/1246

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=180, 8=180.
 - 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256037
400281	H8	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:13 2020 Page 1

ID:mUYTKKzxejzuodxJ64TA8GzSnWQ-4T6SQBIZOGpNW7z1gsCs9dUs99nVHTgLBHK_WazHe8q

0-10-8	2-3-8	7-0-0	15-1-2	15-8-14	18-8-0	20-0-0	23-10-0	30-10-0	31-8-8
0-10-8	2-3-8	4-8-8	8-1-2	0-7-12	2-11-2	1-4-0	3-10-0	7-0-0	0-10-8

Scale = 1:70.2

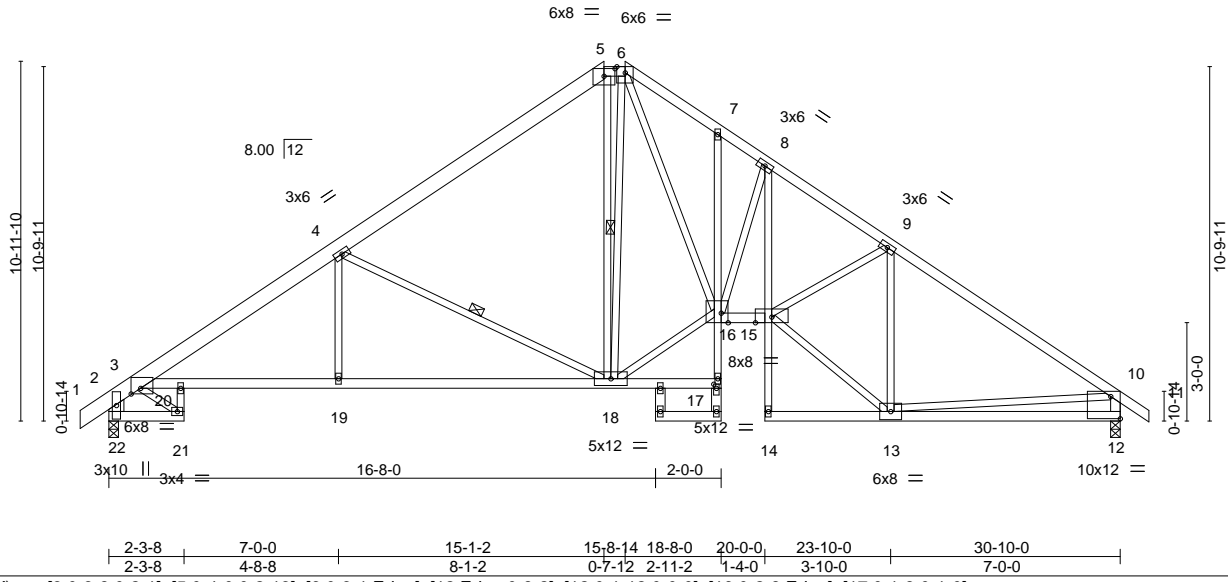


Plate Offsets (X,Y)--	[3:0-3-8,0-2-1], [5:0-4-0,0-2-13], [6:0-3-1,Edge], [12:Edge,0-8-2], [12:0-1-12,0-0-0], [16:0-2-8,Edge], [17:0-1-8,0-1-0]
-----------------------	--

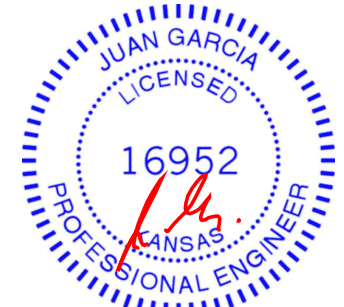
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.16	14	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.30	18-19	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.27	12	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.12	19-20	>999	Weight: 179 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-5: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-4-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2 *Except* 7-17,8-14: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 17-18
WEBS 2x3 SPF No.2 *Except* 2-22: 2x6 SPF No.2, 10-12,23-25,17-24: 2x4 SPF No.2	WEBS 1 Row at midpt 4-18, 6-18

REACTIONS. (size) 22=0-3-8, 12=0-3-8
 Max Horz 22=301(LC 7)
 Max Uplift 22=-179(LC 8), 12=-178(LC 9)
 Max Grav 22=1448(LC 1), 12=1442(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-992/182, 3-4=-2256/290, 4-5=-1510/233, 5-6=-1109/250, 6-7=-2084/300,
 7-8=-2093/265, 8-9=-2525/252, 9-10=-1856/214, 2-22=-1423/195, 10-12=-1371/217
 BOT CHORD 21-22=-140/363, 3-20=-307/1903, 19-20=-305/1895, 18-19=-304/1897, 15-16=-34/2016,
 8-15=-94/949, 12-13=-182/487
 WEBS 20-21=-100/300, 4-19=0/339, 4-18=-910/340, 5-18=-23/275, 6-18=-457/0, 16-18=0/1309,
 6-16=-133/1686, 8-16=-915/145, 13-15=-63/1826, 9-15=0/683, 9-13=-1144/114,
 10-13=0/944, 3-21=-459/177

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFERS (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) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) The Fabrication Tolerance at joint 10 = 2%
 - 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) except (jt=lb) 22=179, 12=178.
 - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

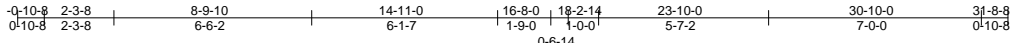
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	
400281	H9	Roof Special	1	1		I41256038
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:14 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-YfgrdXIB9ayE8HXDEaj5ir00yY9V0uYVqx4Y21zHe8p



Scale = 1:75.8

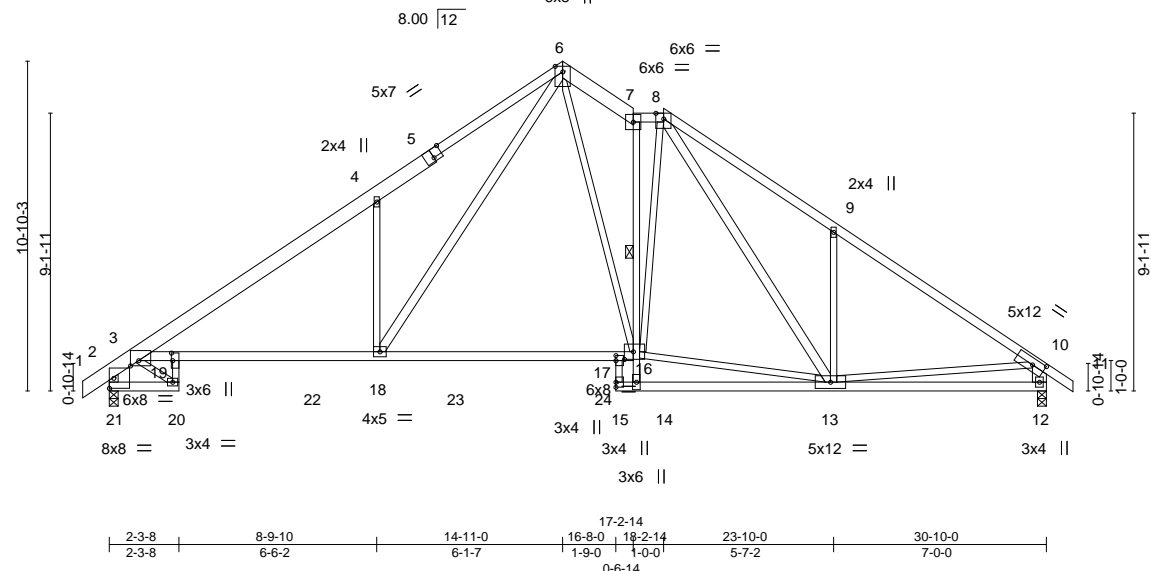


Plate Offsets (X,Y)--	[2:0-1-12,0-1-3], [3:0-3-4,0-2-1], [5:0-3-8,Edge], [8:0-3-1,Edge], [10:0-4-15,0-2-8], [16:0-3-8,0-3-0], [17:0-2-0,0-0-0], [19:0-3-0,0-0-8], [21:0-1-12,0-0-0]
-----------------------	---

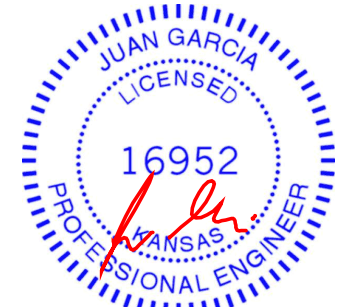
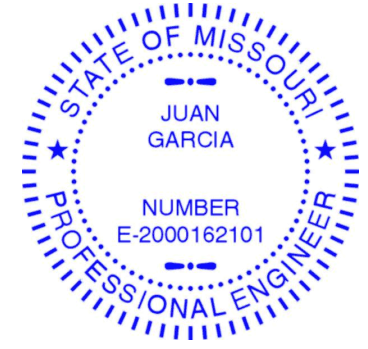
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	-0.25 18-19	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.44 18-19	>836	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.21 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.20 18-19	>999	240	Weight: 168 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2, 1-5: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-8 max.): 7-8.
BOT CHORD 2x4 SPF No.2 *Except* 19-20,15-17: 2x3 SPF No.2, 3-16: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 6-18,8-13,2-21: 2x4 SPF No.2, 10-12: 2x6 SPF No.2	WEBS 1 Row at midpt 7-14

REACTIONS.	(size) 21=0-3-8, 12=0-3-8 Max Horz 21=300(LC 7) Max Uplift 21=-177(LC 8), 12=-187(LC 9) Max Grav 21=1614(LC 15), 12=1569(LC 16)
-------------------	--

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1144/207, 3-4=-2343/251, 4-6=-2540/523, 6-7=-1728/318, 7-8=-1442/232, 8-9=-1972/417, 9-10=-1969/226, 2-21=-1577/191, 10-12=-1449/225
BOT CHORD 20-21=-218/503, 19-20=-135/344, 3-19=-202/2019, 18-19=-230/2111, 17-18=-7/1322, 16-17=0/1372, 15-17=-390/0, 12-13=-167/501
WEBS 4-18=-756/414, 6-18=-408/1450, 6-16=-217/1046, 8-13=-279/396, 9-13=-419/295, 10-13=0/1151, 14-16=0/549, 7-16=-703/139, 8-16=-63/402, 13-16=0/1479, 3-20=-506/238

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - The Fabrication Tolerance at joint 2 = 0%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=177, 12=187.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

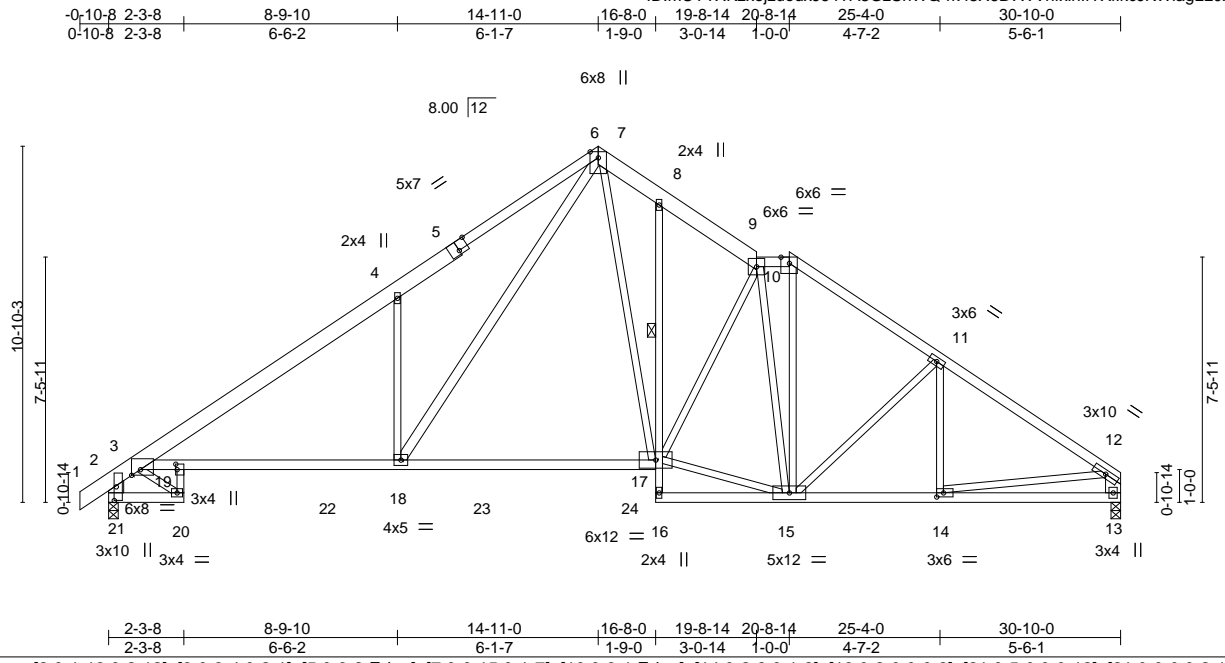
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss H10	Truss Type Roof Special	Qty 1	Ply 1	Lot 28 RT	I41256039
---------------	--------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:04 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-rk43X6BvWVhfxlnlFTXllkcJKWlagnLL0XOf0iczHe8z



Scale = 1:70.2

Plate Offsets (X,Y)--	[2:0-1-13,0-2-12], [3:0-3-4,0-2-1], [5:0-3-8,Edge], [7:0-0-15,0-1-7], [10:0-3-1,Edge], [14:0-2-8,0-1-8], [19:0-2-0,0-0-8], [21:0-5-0,0-0-12], [21:0-0-0,0-2-12]
-----------------------	---

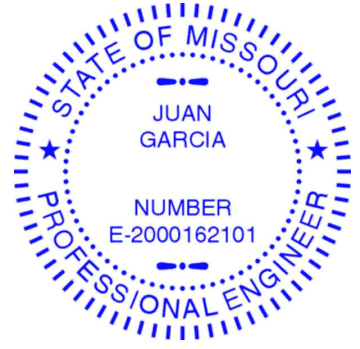
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.22	18-19	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.40	18-19	>921		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.20	13	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.19	18-19	>999		
								Weight: 171 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 6-9,1-5: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-1-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-5 max.): 9-10.
BOT CHORD 2x4 SPF No.2 *Except* 19-20,8-16: 2x3 SPF No.2, 3-17: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16. 1 Row at midpt 8-17
WEBS 2x3 SPF No.2 *Except* 6-18: 2x4 SPF No.2, 2-21,12-13: 2x6 SPF No.2	


REACTIONS. (size) 21=0-3-8, 13=0-3-8
 Max Horz 21=297(LC 5)
 Max Uplift 21=-178(LC 8), 13=-161(LC 9)
 Max Grav 21=1611(LC 15), 13=1483(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1131/206, 3-4=-2314/250, 4-6=-2499/522, 6-7=-889/271, 7-8=-1680/320,
 8-9=-1695/263, 9-10=-1385/252, 10-11=-1707/254, 11-12=-1950/224, 2-21=-1586/195,
 12-13=-1387/190
 BOT CHORD 20-21=-219/461, 19-20=-139/323, 3-19=-212/1980, 18-19=-241/2070, 17-18=-22/1295,
 14-15=-116/1534, 13-14=-64/255
 WEBS 4-18=-736/413, 6-18=-402/1424, 7-17=-235/1080, 15-17=-18/1584, 9-17=-321/212,
 9-15=-760/98, 10-15=-63/626, 11-15=-310/160, 12-14=-52/1324, 3-20=-456/237

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=178, 13=161.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
---	---

Job 400281	Truss J1	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	Lot 28 RT	I41256041
---------------	-------------	-----------------------------------	----------	----------	-----------	-----------

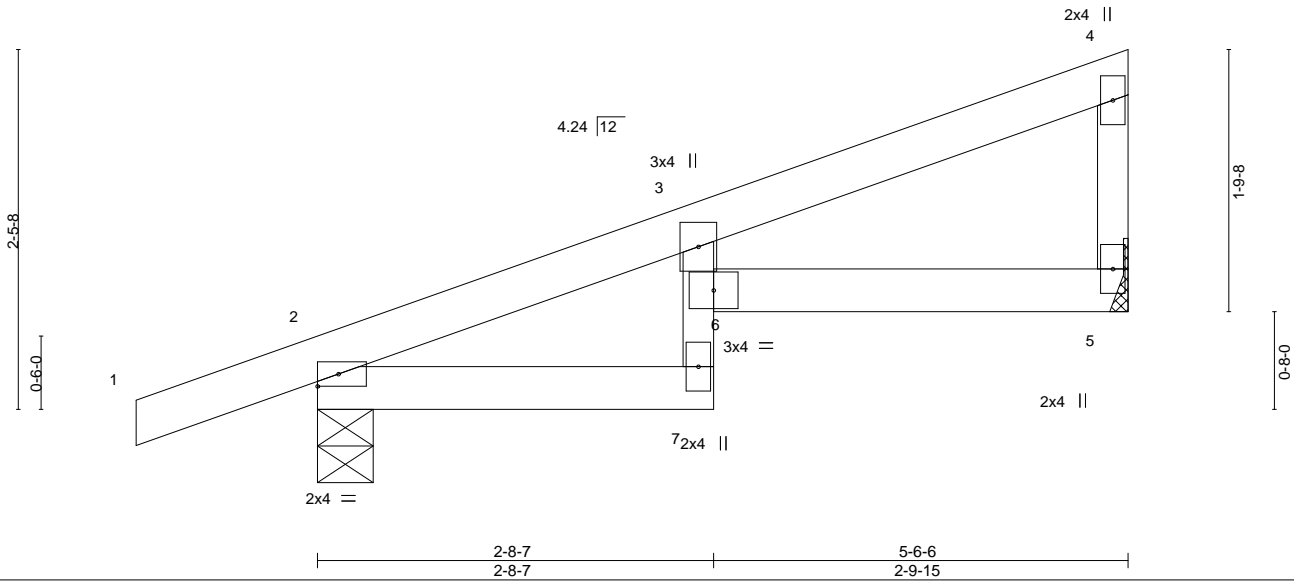
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:15 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-0rEDrtJpwt45mR6PoHEKF2ZG0yZ6lZGe3bp5bTzHe8o



Scale = 1:15.7



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 0.30	Vert(LL)	-0.04	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.07	7	>883		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.02	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.04	6	>999		
								Weight: 16 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 5-6-6 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=Mechanical, 2=0-4-9
 Max Horz 2=89(LC 5)
 Max Uplift 5=49(LC 8), 2=104(LC 4)
 Max Grav 5=222(LC 1), 2=349(LC 1)

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

TOP CHORD 2-3=-300/28

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=104.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 40 lb up at 2-9-8, and 70 lb down and 40 lb up at 2-9-8 on top chord, and 2 lb down at 2-7-3, and 2 lb down at 2-7-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-70, 2-7=-20, 5-6=-20



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J2	Truss Type Jack-Open	Qty 3	Ply 1	Lot 28 RT	I41256042
---------------	-------------	-------------------------	----------	----------	-----------	-----------

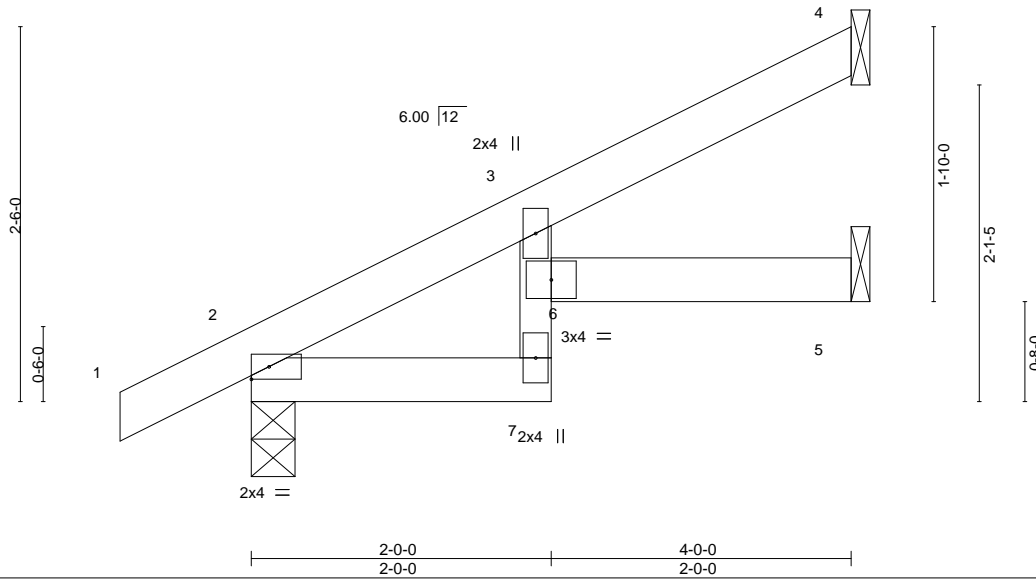
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:22 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-JB9sJGPCH1y65W9liFsz1XLVtn_4uj?ggB0zKZzHe8h



Scale = 1:15.4



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 0.13	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.02	6	>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)	0.01	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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=97(LC 8)
 Max Uplift 4=-46(LC 8), 2=-34(LC 8), 5=-7(LC 8)
 Max Grav 4=97(LC 1), 2=252(LC 1), 5=67(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) 4, 2, 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J3	Truss Type Jack-Open	Qty 4	Ply 1	Lot 28 RT Job Reference (optional)	I41256043
---------------	-------------	-------------------------	----------	----------	---------------------------------------	-----------

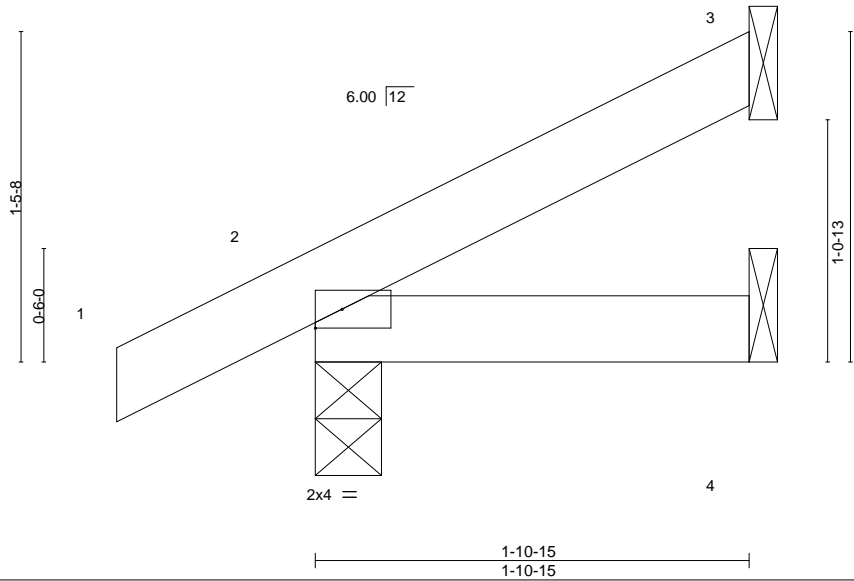
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:27 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-f9zIMzTL5ZaOCH1jVoS8ka3OnoIAZ_EPpTjk0mzHe8c



Scale = 1:10.2



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 0.05	Vert(LL)	-0.00	2 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	2-4 >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-P	Wind(LL)	0.00	2 ****	240	Weight: 6 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 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=55(LC 8)
Max Uplift 3=-36(LC 8), 2=-28(LC 8)
Max Grav 3=50(LC 1), 2=163(LC 1), 4=37(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) 3, 2.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss J6	Truss Type JACK-CLOSED SUPPORTE	Qty 2	Ply 1	Lot 28 RT I41256044
---------------	-------------	------------------------------------	----------	----------	------------------------

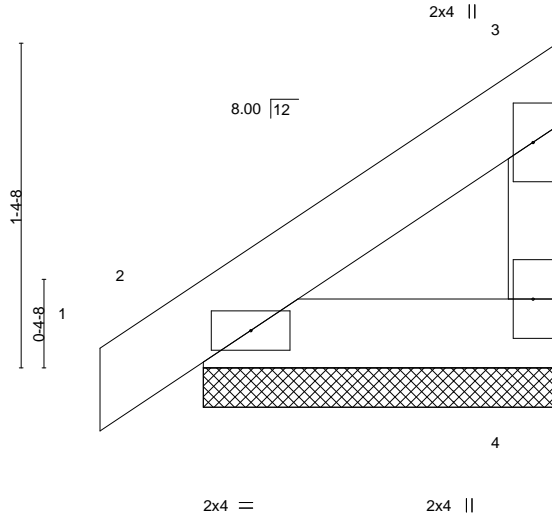
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:33 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-UJK0c1X6hPLYwCUtr3ZYzrJPiDoozjilCOB2DQzHe8W



Scale = 1:9.8



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 0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-P						Weight: 5 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 1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=1-6-0, 2=1-6-0
Max Horz 2=43(LC 5)
Max Uplift 4=-17(LC 8), 2=-17(LC 8)
Max Grav 4=64(LC 15), 2=98(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; MWFERS (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) 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.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 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) 4, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss J7	Truss Type JACK-CLOSED	Qty 2	Ply 1	Lot 28 RT I41256045
---------------	-------------	---------------------------	----------	----------	------------------------

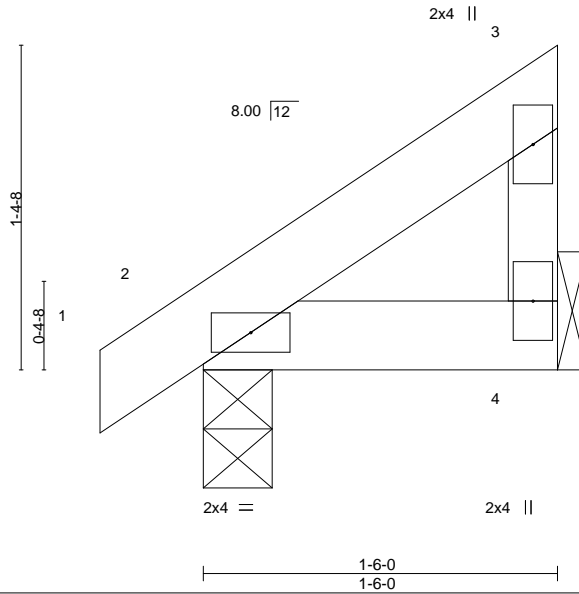
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:34 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-yVuPqMYkSjTPXM33Pm4nW3raUc82i9zRQ2wbmszHe8V



Scale = 1:9.8



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 0.02	Vert(LL)	-0.00	2 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	2 >999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2 ****	240	Weight: 5 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 1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=43(LC 5)
Max Uplift 4=-16(LC 8), 2=-17(LC 8)
Max Grav 4=62(LC 15), 2=100(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) 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) 4, 2.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



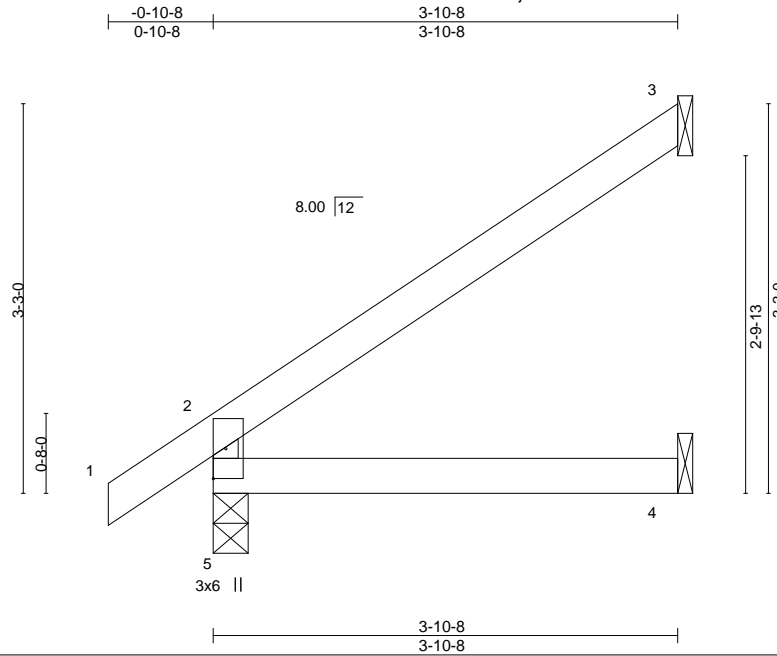
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256046
400281	J8	Jack-Open	4	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:35 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-QhRn1iZMD1bG9WeFzUb02GOIT0SaRcDafig9JzHe8U



Scale = 1:19.2

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

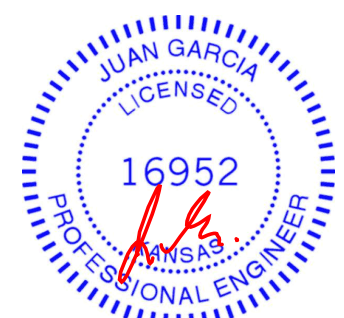
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(LL) -0.01 4-5 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.02 4-5 >999 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) -0.01 3 n/a n/a	Weight: 11 lb	FT = 10%
			Wind(LL) 0.01 4-5 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=118(LC 8)
 Max Uplift 5=-11(LC 8), 3=-80(LC 8)
 Max Grav 5=244(LC 1), 3=123(LC 15), 4=71(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) The Fabrication Tolerance at joint 5 = 2%, joint 5 = 2%
 - 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) Refer to girder(s) for truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.



May 11, 2020

Job 400281	Truss J9	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256047
---------------	-------------	-----------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:35 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-QhRn1iZMD1bG9WeFzUb02GOh_0RaRcDafig9IjzHe8U



Scale = 1:18.8

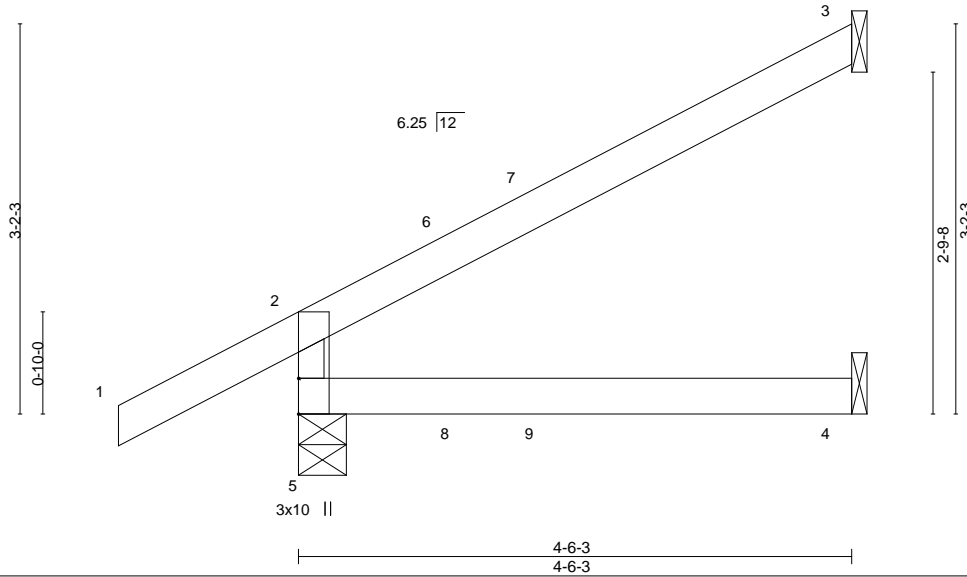


Plate Offsets (X,Y)--	[2:0-0-10,0-1-4], [5:0-0-0,0-1-4]
-----------------------	-----------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) -0.02 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.04 4-5 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-R	Horz(CT) -0.02 3 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.02 4-5 >999 240	Weight: 13 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-3 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

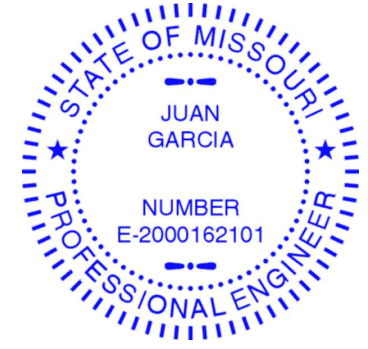
REACTIONS. (size) 5=0-4-11, 3=Mechanical, 4=Mechanical
 Max Horz 5=113(LC 8)
 Max Uplift 5=-55(LC 8), 3=-80(LC 8)
 Max Grav 5=323(LC 1), 3=129(LC 1), 4=82(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-285/82

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.
 - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 29 lb up at 1-4-2, and 74 lb down and 36 lb up at 2-0-6 on top chord, and 4 lb down and 6 lb up at 1-4-2, and 8 lb down and 14 lb up at 2-0-6 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, 2-3=-70, 4-5=-20
 Concentrated Loads (lb)
 Vert: 8=3(B) 9=2(F)



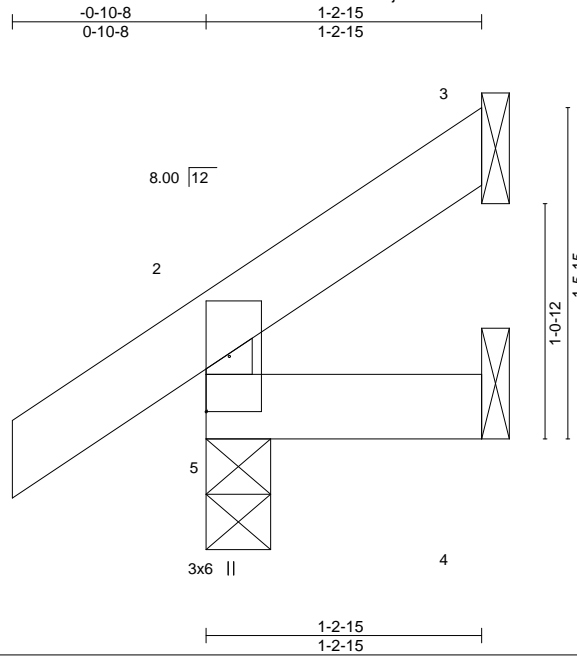
May 11, 2020

Job 400281	Truss J10	Truss Type JACK-OPEN	Qty 1	Ply 1	Lot 28 RT 141256048
---------------	--------------	-------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:15 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-0rEDrtJpwt45mR6PoHEKF2ZJcyfglZGe3bp5bTzHe8o



Scale = 1:10.4

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

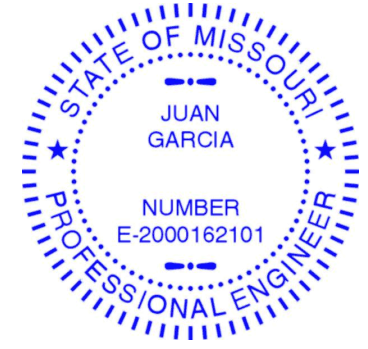
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(LL) -0.00 5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 3 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.00 5 >999 240	Weight: 5 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-2-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=48(LC 8)
 Max Uplift 5=-19(LC 8), 3=-21(LC 8), 4=-1(LC 8)
 Max Grav 5=149(LC 1), 3=21(LC 15), 4=20(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; TC DL=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, 4.
 - 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.



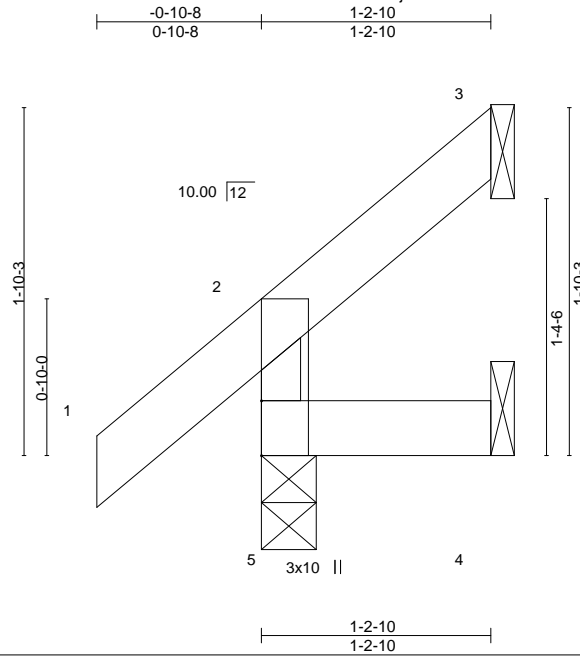
May 11, 2020

Job 400281	Truss J11	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT I41256049
---------------	--------------	-------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:16 2020 Page 1

ID:mUYTXKzxejzudoxJ64TA8GzSnWQ-U1ob2CKRhBCyNbhcm?IZnG6UKM_JU0WnHFZe7vzHe8n



Scale = 1:12.3

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

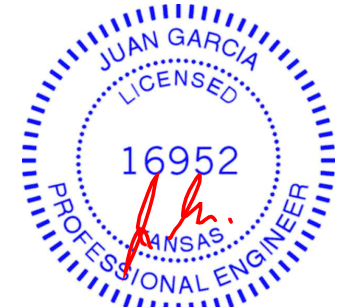
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 5 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-2-10 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=58(LC 8)
 Max Uplift 5=-4(LC 8), 3=-29(LC 8), 4=-8(LC 8)
 Max Grav 5=149(LC 1), 3=22(LC 15), 4=20(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; TC DL=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, 4.
 - 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.



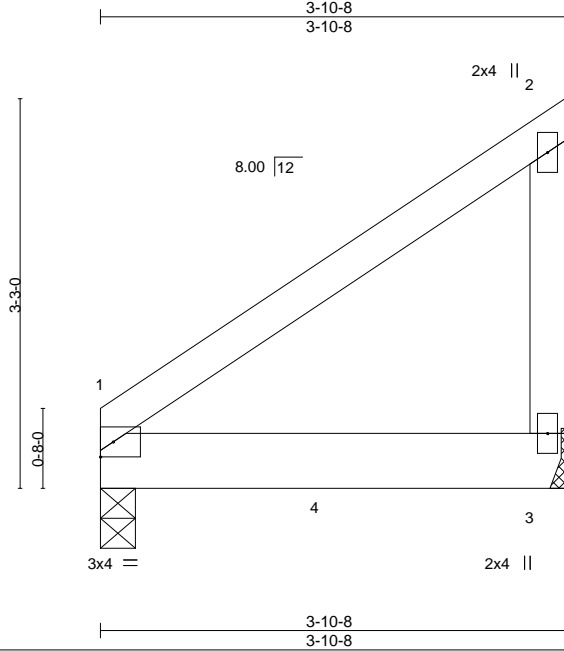
May 11, 2020

Job 400281	Truss J12	Truss Type JACK-CLOSED GIRDER	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256050
---------------	--------------	----------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:17 2020 Page 1

ID:mUYTXKzxejuodxJ64TA8GzSnWQ-yEMzGYL3SVKp?kGoviGoKTecmm8dDTmxWvCfMzHe8m



Scale = 1:19.2

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 0.28	Vert(LL)	-0.03	1-3	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	-0.05	1-3	>844		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.02	1-3	>999		
								Weight: 15 lb	FT = 10%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 8-9-15 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=Mechanical
 Max Horz 1=109(LC 5)
 Max Uplift 1=-57(LC 8), 3=-101(LC 8)
 Max Grav 1=587(LC 1), 3=586(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) 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) 1 except (jt=lb) 3=101.
- 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) 850 lb down and 106 lb up at 1-11-4 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, 1-3=-20
 Concentrated Loads (lb)
 Vert: 4=-850(B)



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J13	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256051
---------------	--------------	-----------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:18 2020 Page 2
ID:mUYTXKzxejzudxJ64TA8GzSnWQ-QQwLTuMhDoSgdur_TP01shBIOATBysu4IZ2IBozHe8l

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 7=1(B) 10=-2(F) 11=-5(B) 12=4(F) 13=-25(F) 14=-6(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



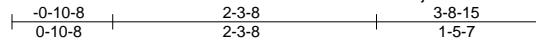
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss J14	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT I41256052
---------------	--------------	-------------------------	----------	----------	------------------------

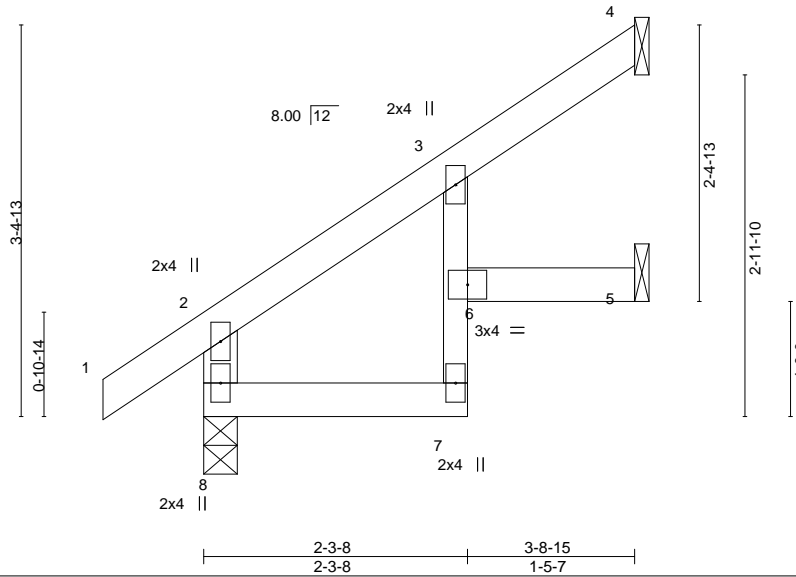
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:18 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-QQwLTuMhDoSgdur_TP01shBqAAeMyv?4lZ2lBozHe8l



Scale = 1:20.0



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 0.11	Vert(LL)	-0.01	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	6	>999		
								Weight: 13 lb	FT = 10%

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

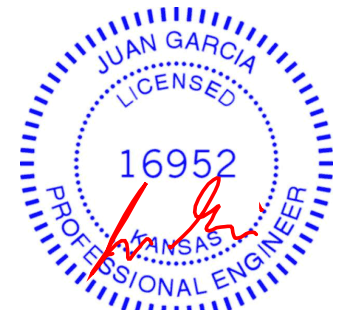
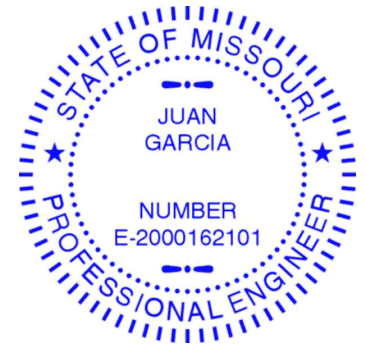
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=110(LC 8)
 Max Uplift 8=-4(LC 8), 4=-53(LC 8), 5=-25(LC 8)
 Max Grav 8=241(LC 1), 4=98(LC 15), 5=65(LC 15)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



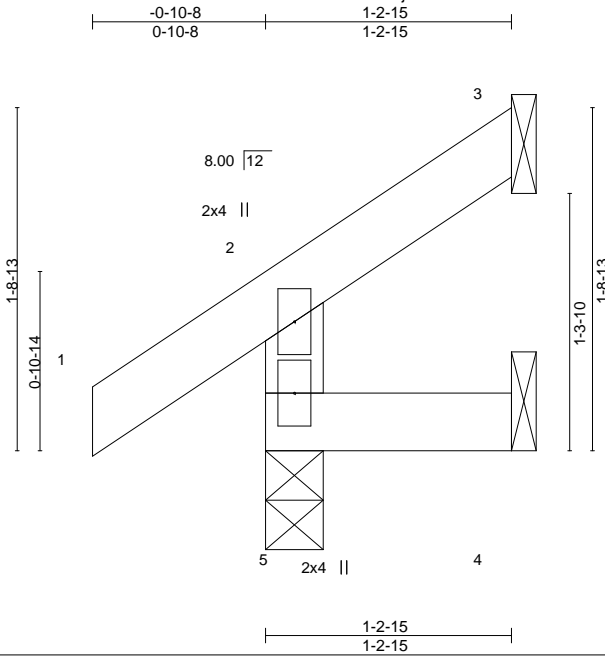
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J15	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256053
---------------	--------------	-------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:19 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-ucUkgEMK_6aXE2QB17JGPuj?WZOWhMFE_DnJkEzHe8k



Scale = 1:11.7

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 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 5 lb	FT = 10%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 1-2-15 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=44(LC 8)
 Max Uplift 5=-11(LC 8), 3=-25(LC 8), 4=-6(LC 8)
 Max Grav 5=154(LC 1), 3=21(LC 15), 4=18(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, 4.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J16	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT I41256054
---------------	--------------	-------------------------	----------	----------	------------------------

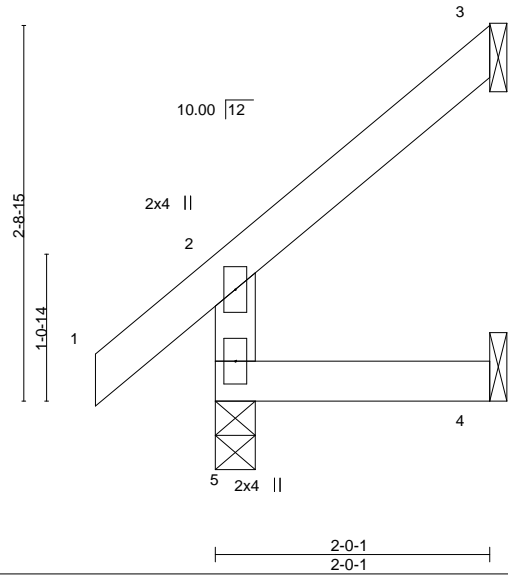
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:20 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-Np16uaNylQiOsc?NbqqVy6GAEzMAQpVNCtXsGgzHe8j



Scale = 1:16.8



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 0.07	Vert(LL)	0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 8 lb	FT = 10%

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

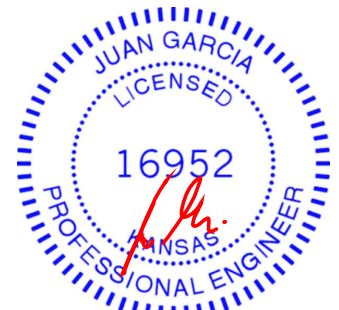
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=79(LC 8)
Max Uplift 3=-56(LC 8), 4=-11(LC 8)
Max Grav 5=173(LC 1), 3=57(LC 15), 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) 3, 4.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



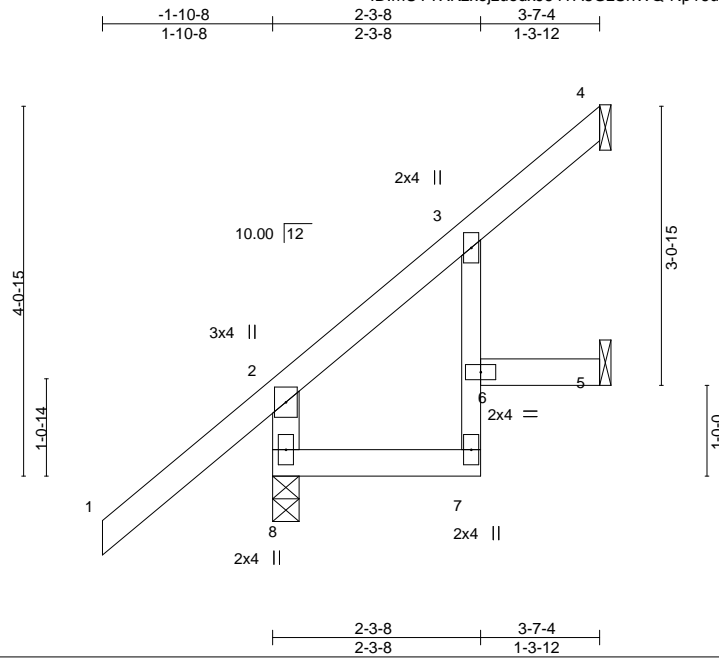
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss J17A	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256055
---------------	---------------	-------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:20 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-Np16uaNylQiOsC?NbbqVv6G7izLdQpVNCtXsGgzHe8j



Scale = 1:25.4

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 0.30	Vert(LL) 0.01	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT) -0.01	7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT) -0.01	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R				Weight: 15 lb	FT = 10%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-7-4 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=162(LC 8)
 Max Uplift 8=-13(LC 8), 4=-60(LC 8), 5=-31(LC 8)
 Max Grav 8=336(LC 1), 4=89(LC 15), 5=48(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-8=-300/49

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

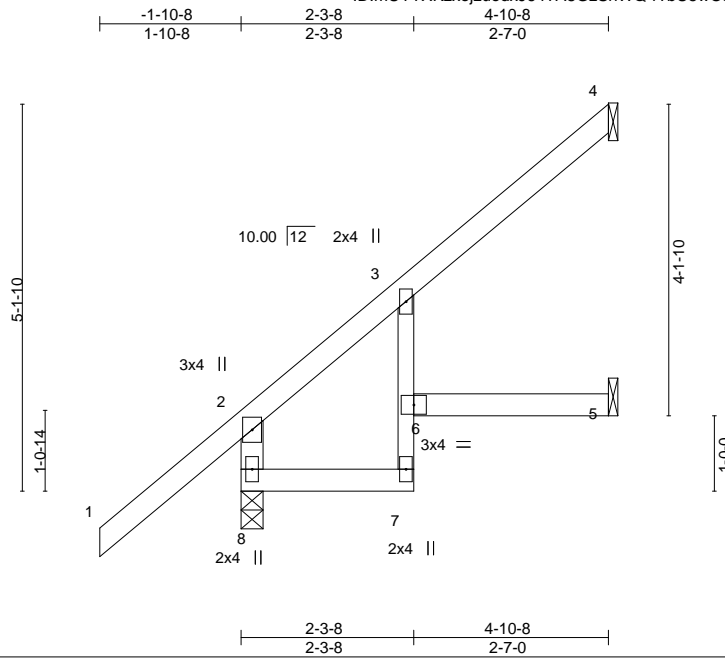


Job 400281	Truss J18A	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT I41256056
---------------	---------------	-------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:21 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-r?bU5wOaWjqFUMaZ8YLkUJpISNgn9GIWRXGPo7zHe8i



Scale = 1:30.6

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)	-0.03	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.05	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.04	6	>999	Weight: 18 lb	FT = 10%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-10-8 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=142(LC 8)
 Max Uplift 4=-62(LC 8), 5=-9(LC 8)
 Max Grav 8=382(LC 1), 4=135(LC 13), 5=74(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-8=-342/5

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 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) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



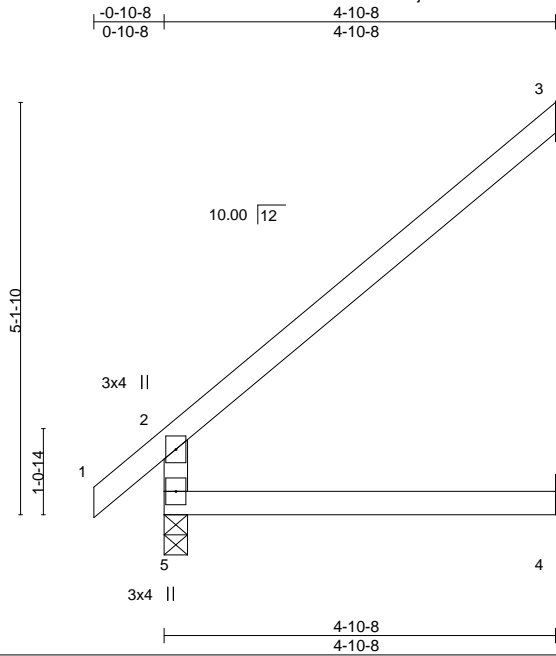
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J19	Truss Type Jack-Open	Qty 6	Ply 1	Lot 28 RT I41256057
---------------	--------------	-------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:21 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-r?bU5wOaWjqFUMaZ8YLkUJpHvNF19GIWRXGPo7zHe8i



Scale = 1:28.7

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 0.33	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.05	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.04	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.04	4-5	>999	240	Weight: 15 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-8 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=123(LC 8)
Max Uplift 3=81(LC 8)
Max Grav 5=289(LC 1), 3=156(LC 13), 4=89(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-254/6

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 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) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

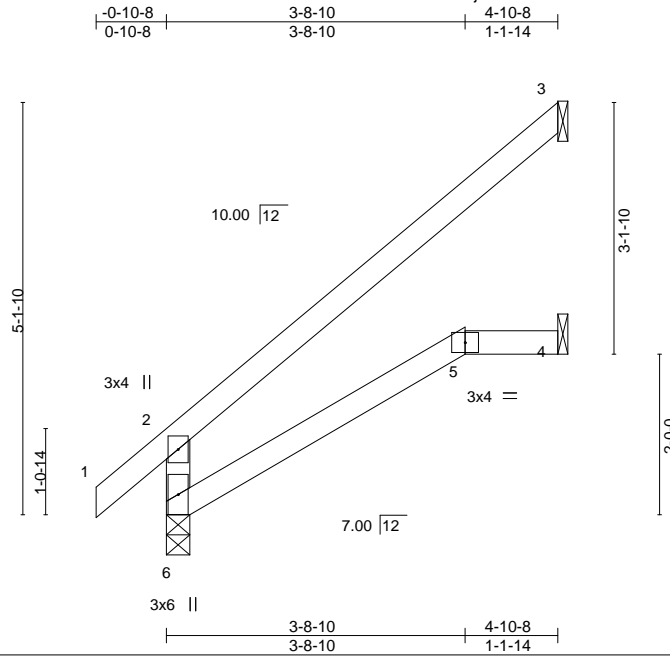
Job 400281	Truss J20	Truss Type Jack-Open	Qty 2	Ply 1	Lot 28 RT I41256058
---------------	--------------	-------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:23 2020 Page 1

Job Reference (optional)

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-nOjEWcPq2L4zjfjyGzNCZkudJBKddAFpurIWt?zHe8g



Scale = 1:28.7

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 0.34	Vert(LL)	-0.03 5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.06 5-6	>980	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.05 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.04 5-6	>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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-10-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 6=123(LC 8)
 Max Uplift 3=83(LC 8)
 Max Grav 6=289(LC 1), 3=158(LC 13), 4=89(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-6=-252/4

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



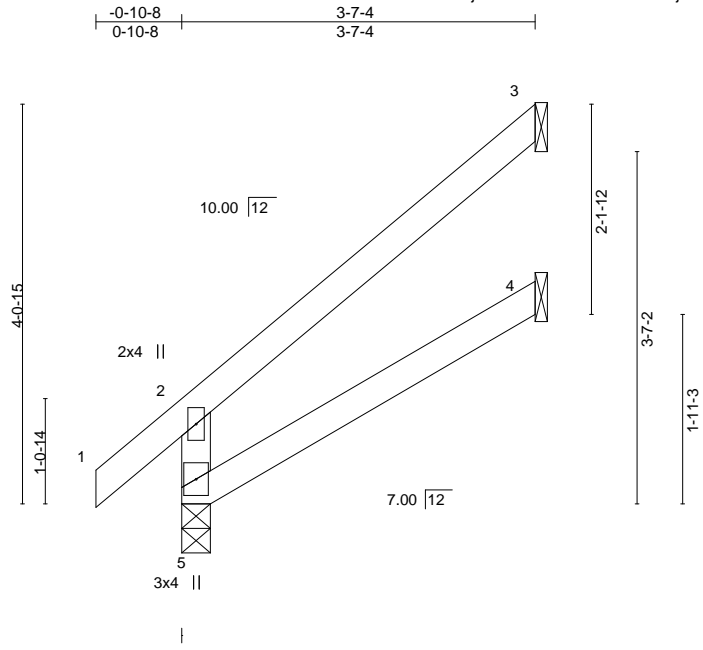
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J21	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256059
---------------	--------------	-------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:23 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-nOjEWcPq2L4zjfyGzNCZkug4BLOdAFpuriWt?zHe8g



Scale = 1:23.5

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)	0.02	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R							
									Weight: 13 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=132(LC 8)
Max Uplift 3=99(LC 8), 4=-8(LC 8)
Max Grav 5=235(LC 1), 3=119(LC 15), 4=64(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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss J22	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT I41256060
---------------	--------------	-------------------------	----------	----------	------------------------

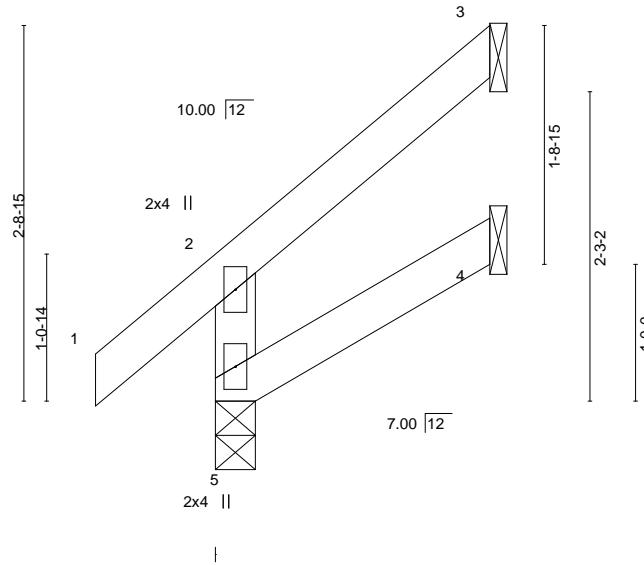
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:24 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-FaHdkyQSpeCqLpI8qguR6yRsEaj3MdUz7VV3PSzHe8f



Scale = 1:16.8



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 0.07	Vert(LL)	0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 8 lb	FT = 10%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-0-1 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=78(LC 8)
 Max Uplift 3=-58(LC 8), 4=-12(LC 8)
 Max Grav 5=173(LC 1), 3=58(LC 15), 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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



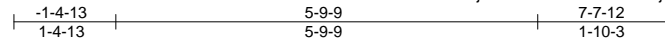
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	141256061
400281	J23	Diagonal Hip Girder	1	1		

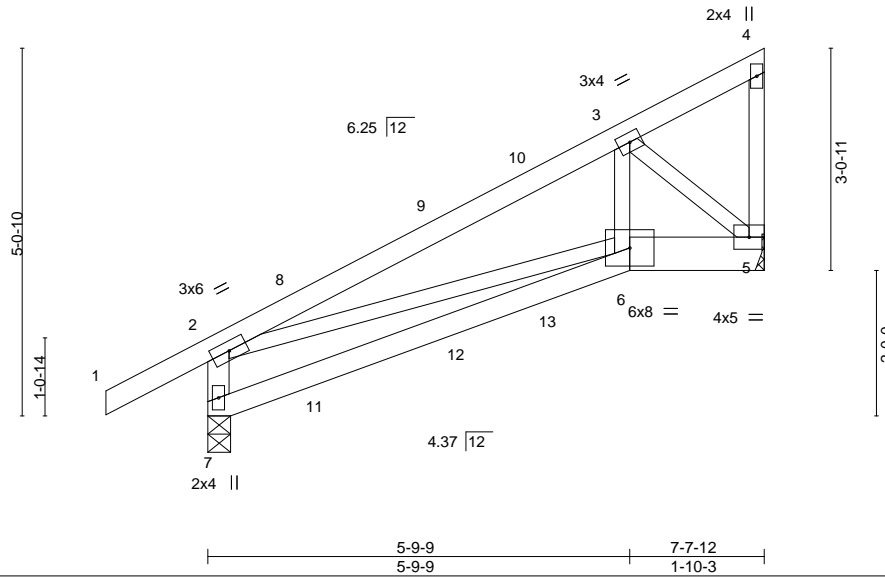
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:25 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-jmr?xHR4ZyKgyztKNNQge9zz8_zA52L6M9EdxuzHe8e



Scale = 1:31.7



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 0.38	Vert(LL)	-0.07	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.14	6-7	>644	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.15	Horz(CT)	-0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.03	6-7	>999	240	Weight: 32 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 5-6: 2x6 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-7: 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.

REACTIONS.

(size) 7=0-3-12, 5=Mechanical
 Max Horz 7=172(LC 5)
 Max Uplift 7=-130(LC 8), 5=-201(LC 5)
 Max Grav 7=464(LC 32), 5=382(LC 31)

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

TOP CHORD 2-7=-404/191, 2-3=-576/247
 BOT CHORD 5-6=-282/442
 WEBS 2-6=-188/478, 3-5=-578/369

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=130, 5=201.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 84 lb down and 34 lb up at 1-4-2, 82 lb down and 71 lb up at 3-3-7, and 118 lb down and 107 lb up at 4-6-9, and 114 lb down and 123 lb up at 5-10-3 on top chord, and 9 lb down and 12 lb up at 1-4-2, 13 lb down and 22 lb up at 3-3-7, and 24 lb down at 4-6-9, and 30 lb down and 28 lb up at 5-9-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-70, 2-4=-70, 6-7=-20, 5-6=-20



May 11, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job 400281	Truss J23	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256061
---------------	--------------	-----------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:25 2020 Page 2
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-jmr?xHR4ZyKgyztKNNQge9zz8_zA52L6M9EdxuzHe8e

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 6=-13(F) 3=-14(F) 10=-1(B) 11=4(B) 12=1(F) 13=-8(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



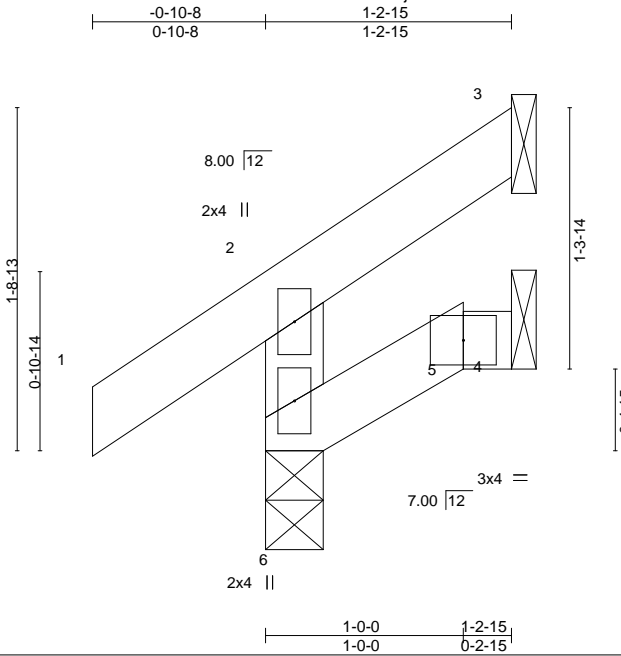
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss J24	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256062
---------------	--------------	-------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:26 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-BzPN8dSjKGSXa7SXx5xvBNWCKOP6qX_Gbp_ATKzHe8d



Scale = 1:11.7

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 0.07	Vert(LL) -0.00	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT) -0.00	6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT) -0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R				Weight: 5 lb	FT = 10%

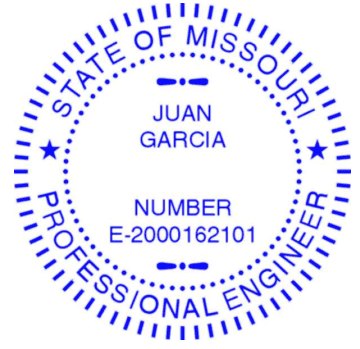
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-2-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 6=45(LC 5)
 Max Uplift 6=8(LC 8), 3=-26(LC 8), 4=-7(LC 8)
 Max Grav 6=154(LC 1), 3=21(LC 15), 4=18(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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.



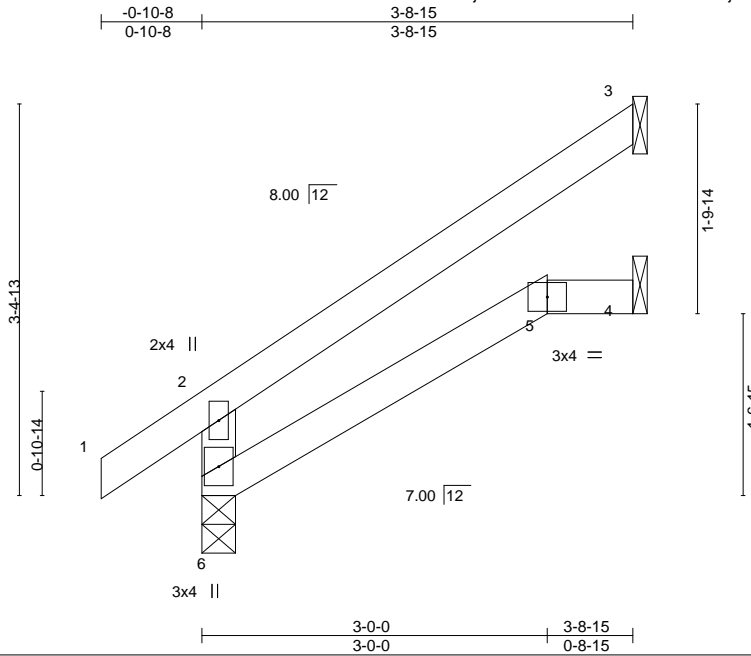
May 11, 2020

Job 400281	Truss J25	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256063
---------------	--------------	-------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:26 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-BzPN8dSjKGSXa7SXx5vBNWB50OiqX_Gbp_ATKzHe8d



Scale = 1:20.0

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 0.18	Vert(LL)	-0.01 5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.02 5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01 5-6	>999	240	Weight: 12 lb	FT = 10%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 6=109(LC 8)
 Max Uplift 6=-3(LC 8), 3=-81(LC 8)
 Max Grav 6=241(LC 1), 3=118(LC 15), 4=66(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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



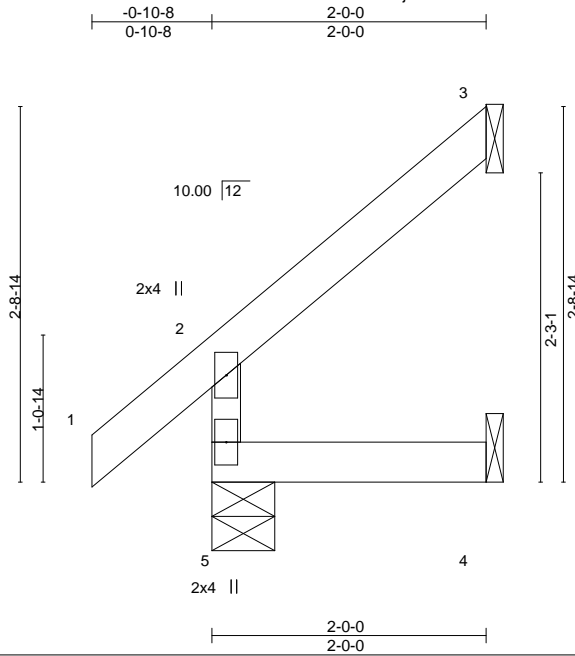
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J34	Truss Type Jack-Open	Qty 3	Ply 1	Lot 28 RT I41256064
---------------	--------------	-------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:28 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-8LW7ZJTzstiFpRcv3WzNGobXmC52IRUY26THYDzHe8b



Scale = 1:16.8

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 0.10	Vert(LL)	0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 7 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 2-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=81(LC 8)
 Max Uplift 3=-59(LC 8), 4=-9(LC 8)
 Max Grav 5=171(LC 1), 3=61(LC 15), 4=36(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) 3, 4.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



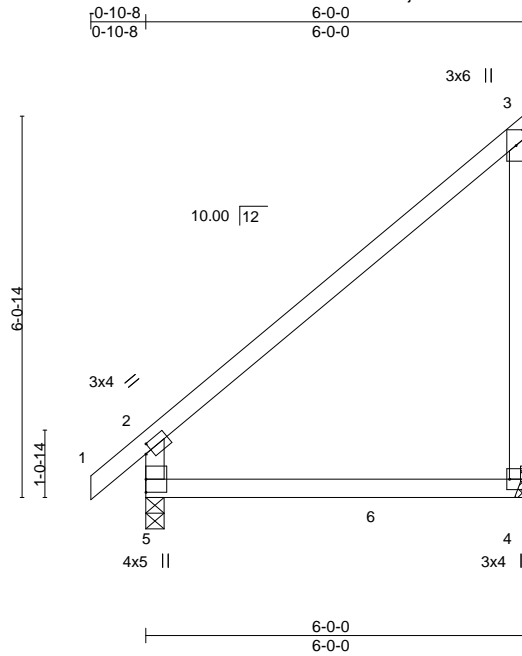
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J36	Truss Type Jack-Closed	Qty 5	Ply 1	Lot 28 RT I41256065
---------------	--------------	---------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:28 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-8LW7ZJTzstiFpRcv3WzNGobRjC0JIRUY26THYDzHe8b



Scale = 1:36.7



Plate Offsets (X,Y)-- [2:0-1-4,0-1-8], [4: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 0.49	Vert(LL)	-0.06	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.12	4-5	>572	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.06	4-5	>999	240	Weight: 22 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2 *Except*
 3-4: 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) 5=0-3-8, 4=Mechanical
 Max Horz 5=238(LC 5)
 Max Uplift 5=-17(LC 8), 4=-109(LC 5)
 Max Grav 5=381(LC 16), 4=370(LC 15)

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

TOP CHORD 2-5=-294/72

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=109.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



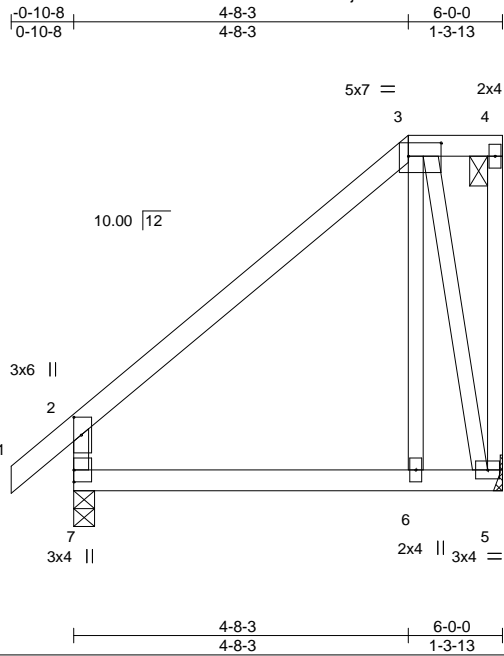
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J37	Truss Type Jack-Closed	Qty 1	Ply 1	Lot 28 RT 141256066
---------------	--------------	---------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:29 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-cY4WnfUbdBq6RaB6cDUcp?8gMbOw1spiHmCq4fzHe8a



Scale: 3/8"=1'

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

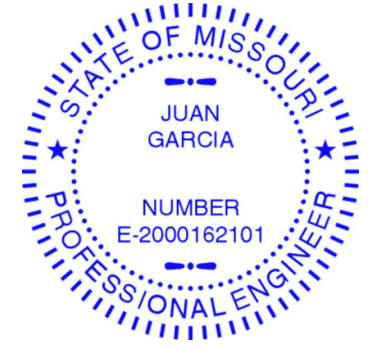
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(LL) -0.01 6-7 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.19	Vert(CT) -0.03 6-7 >999 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) -0.00 5 n/a n/a	Weight: 28 lb	FT = 10%
			Wind(LL) 0.01 6-7 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 7=0-3-8, 5=Mechanical
 Max Horz 7=199(LC 5)
 Max Uplift 7=-32(LC 8), 5=-93(LC 5)
 Max Grav 7=335(LC 1), 5=255(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-295/78
 WEBS 3-5=-343/150

- 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; MWFERS (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) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256067
400281	J38	Jack-Closed	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:30 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-4keu_?VDOUzz3kmlAx?rLDhps?kCmKCrVQyOc5zHe8Z



Scale = 1:23.5

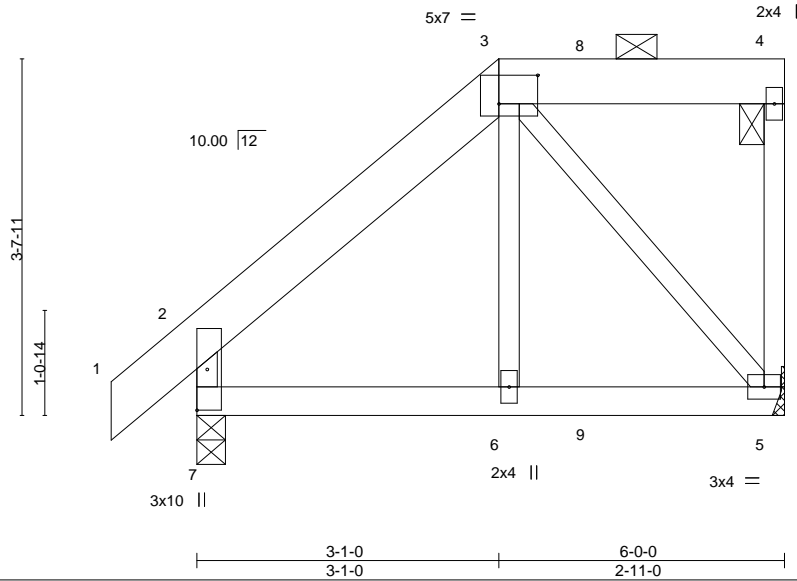


Plate Offsets (X,Y)--	[2:0-1,0-1-4], [3:0-4-12,0-3-8], [7:0-0-0,0-1-4]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.32	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(LL) -0.01 6 >999 360		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.11	Vert(CT) -0.01 5-6 >999 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) -0.00 5 n/a n/a	Weight: 30 lb	FT = 10%
			Wind(LL) 0.01 6 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

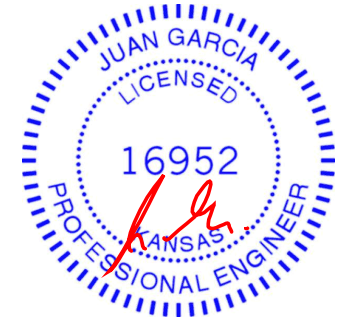
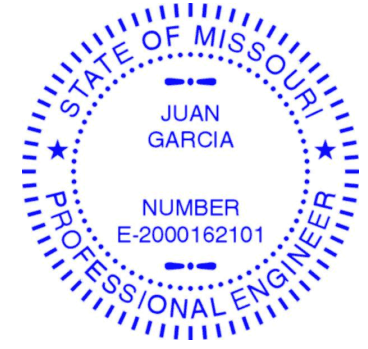
REACTIONS. (size) 7=0-3-8, 5=Mechanical
 Max Horz 7=143(LC 5)
 Max Uplift 7=-96(LC 8), 5=-138(LC 5)
 Max Grav 7=395(LC 1), 5=347(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-337/113, 2-3=-312/90
 WEBS 3-5=-277/131

- 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) Provide adequate drainage to prevent water ponding.
 - 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) 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) 7 except (jt=lb) 5=138.
 - 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) 119 lb down and 114 lb up at 3-1-0, and 108 lb down and 98 lb up at 4-0-12 on top chord, and 37 lb down at 3-1-0, and 36 lb down at 4-0-12 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: 1-2=-70, 2-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-18(B) 3=-56(B) 8=-53(B) 9=-25(B)



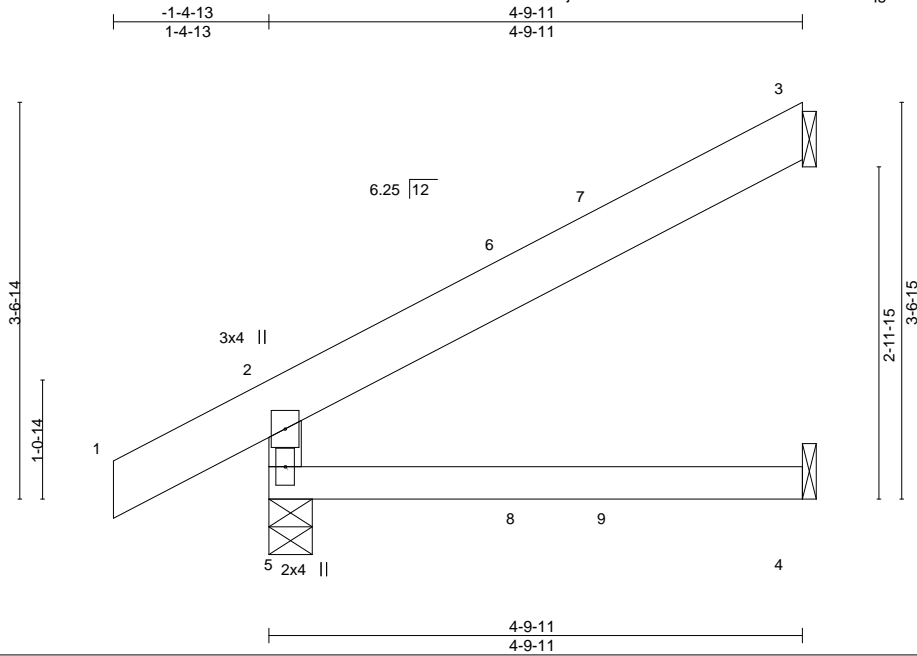
May 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256068
400281	J39	DIAGONAL HIP GIRDER	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:31 2020 Page 1

ID:mUYTXKzxejzuoDxJ64TA8GzSnWQ-YwCGCLWr9o5qguLUkeW4uQD12P4IVoD?k4hx9YzHe8Y



Scale = 1:20.8

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 0.16	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.04	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	240		
									Weight: 19 lb	FT = 10%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-9-11 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-11, 3=Mechanical, 4=Mechanical
 Max Horz 5=115(LC 8)
 Max Uplift 5=-51(LC 8), 3=-98(LC 8)
 Max Grav 5=333(LC 1), 3=150(LC 31), 4=80(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-285/78

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 50 lb up at 2-3-15, and 98 lb down and 78 lb up at 3-1-12 on top chord, and 12 lb down and 20 lb up at 2-3-15, and 12 lb down at 3-1-12 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, 2-3=-70, 4-5=-20
 Concentrated Loads (lb)
 Vert: 8=1(F) 9=-2(B)



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J40	Truss Type JACK-OPEN	Qty 1	Ply 1	Lot 28 RT I41256069
---------------	--------------	-------------------------	----------	----------	------------------------

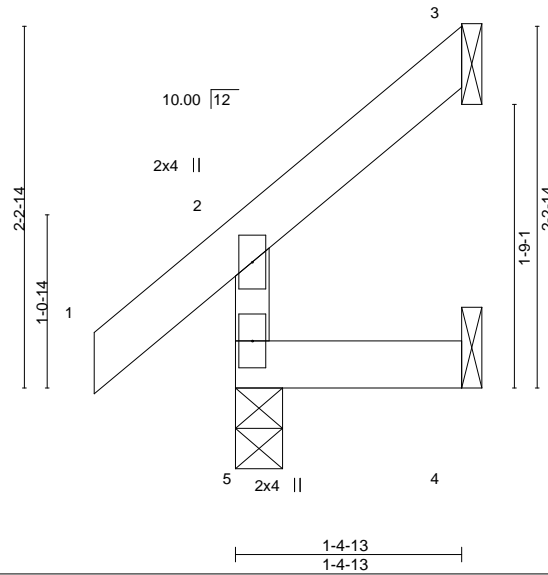
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:31 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-YwCGCLWr9o5qguLUkeW4uQD2QP62VoD?k4hx9YzHe8Y



Scale = 1:14.3



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	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					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 1-4-13 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=61(LC 8)
Max Uplift 3=-41(LC 8), 4=-13(LC 8)
Max Grav 5=152(LC 1), 3=34(LC 15), 4=24(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) 3, 4.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



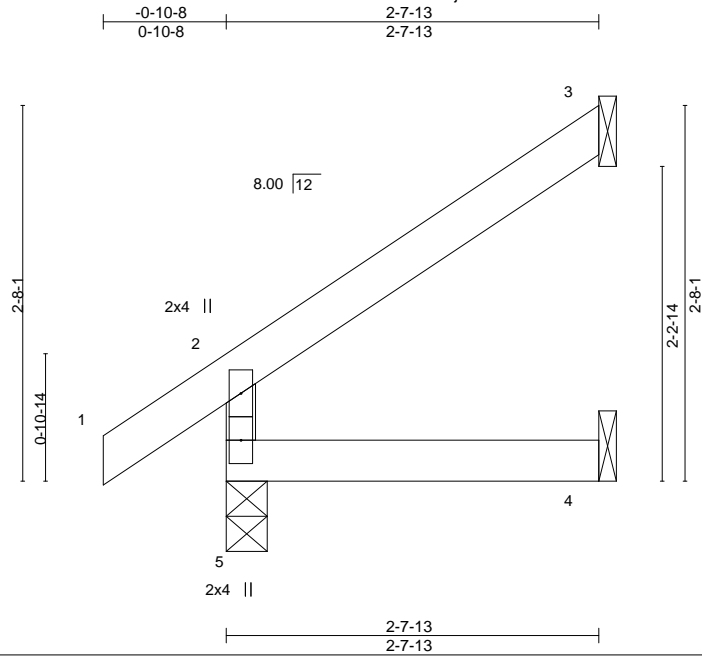
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss J41	Truss Type Jack-Open	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256070
---------------	--------------	-------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:32 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-06mePhWUw6Dh12wglM2JRemDopS?EFT8zkRVh_zHe8X



Scale = 1:16.4

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 0.10	Vert(LL)	-0.00	4-5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999		
								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 2-7-13 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=81(LC 8)
 Max Uplift 5=-6(LC 8), 3=-59(LC 8)
 Max Grav 5=194(LC 1), 3=81(LC 15), 4=47(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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



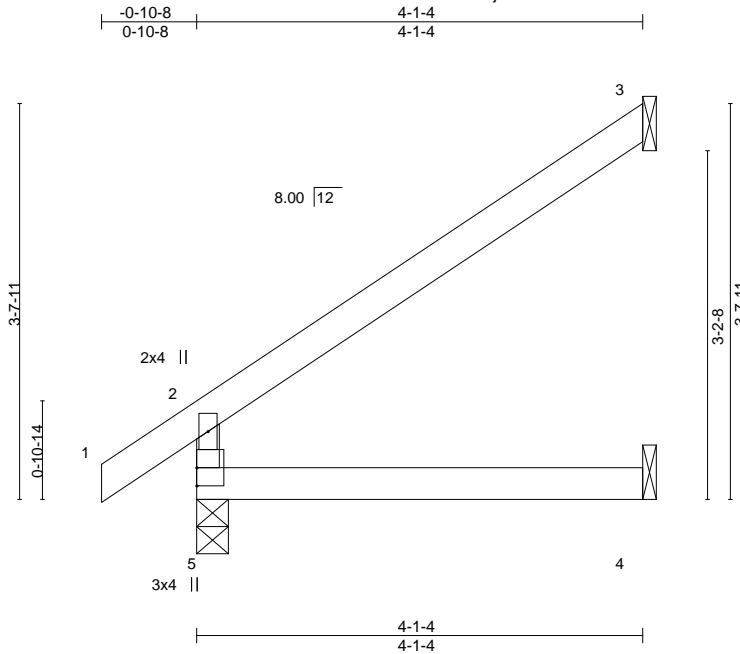
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss J42	Truss Type JACK-OPEN	Qty 1	Ply 1	Lot 28 RT I41256071
---------------	--------------	-------------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:33 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-UJK0c1X6hPLYwCUtr3ZYzrJMSDmpzjilCOB2DQzHe8W



Scale = 1:21.2

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 0.23	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	240	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 4-1-4 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=121(LC 8)
 Max Uplift 5=4(LC 8), 3=90(LC 8)
 Max Grav 5=254(LC 1), 3=133(LC 15), 4=76(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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

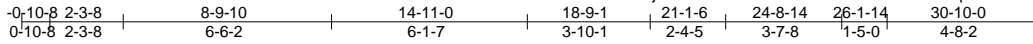
Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	141256072
400281	K1	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:37 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-N4ZXSOaclerzOpoe4vdU8hTyPq?TvJkt609FMBzHe8S

Job Reference (optional)



Scale = 1:72.0

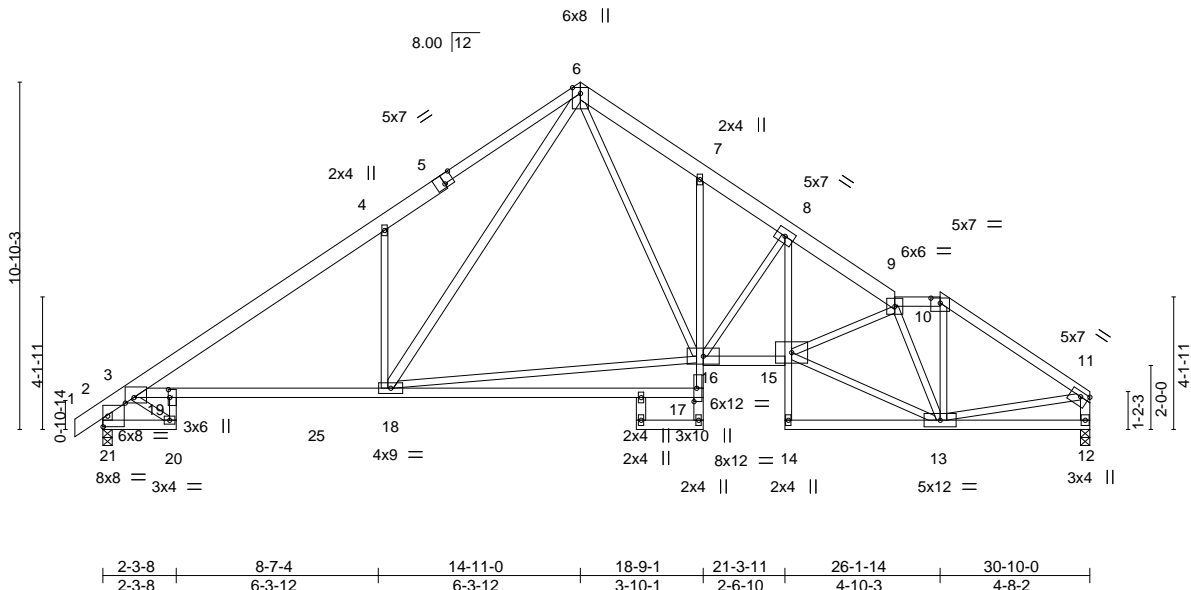


Plate Offsets (X,Y)--	[2:0-1-12,0-1-3], [3:0-3-4,0-2-1], [5:0-3-8,Edge], [10:0-3-8,0-1-14], [11:Edge,0-1-12], [17:0-0-0,0-1-12], [17:0-0-0,0-1-4], [17:0-5-0,0-1-0], [19:0-3-0,0-0-8], [21:0-1-12,0-0-0]
-----------------------	--

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 0.62	Vert(LL) -0.26	18-19	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.67	Vert(CT) -0.48	17-18	>757	240		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.83	Horz(CT) 0.29	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL) 0.22	18-19	>999	240	Weight: 174 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 6-9: 2x6 SPF No.2, 1-5: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 3-0-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-8 max.): 9-10.
BOT CHORD 2x4 SPF No.2 *Except* 19-20,7-17,8-14: 2x3 SPF No.2, 3-17: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 6-18,2-21,11-12,22-24,17-23: 2x4 SPF No.2	

REACTIONS.
(size) 21=0-3-8, 12=0-3-8 Max Horz 21=300(LC 5) Max Uplift 21=-177(LC 8), 12=-163(LC 9) Max Grav 21=1578(LC 15), 12=1446(LC 16)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1117/187, 3-4=-2267/248, 4-6=-2440/508, 6-7=-2159/379, 7-8=-2190/273, 8-9=-2888/297, 9-10=-1475/220, 10-11=-1798/208, 2-21=-1540/192, 11-12=-1364/184 BOT CHORD 20-21=-212/477, 19-20=-133/327, 3-19=-215/1950, 18-19=-242/2039, 15-16=-102/2437, 8-15=-79/1093 WEBS 4-18=-745/412, 6-18=-366/1284, 8-16=-1131/202, 13-15=-183/2254, 9-15=0/381, 9-13=-1898/162, 10-13=-22/725, 11-13=-65/1350, 16-18=-79/1161, 6-16=-261/1420, 3-20=-478/231

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - The Fabrication Tolerance at joint 2 = 0%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=177, 12=163.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

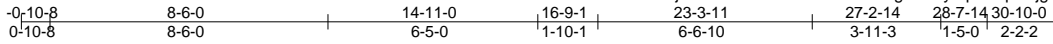
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256073
400281	K2	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:38 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-rG7vgkbEYyzq0zNqec9jgv041ElGeko1LgupvezHe8R



6x8 ||

Scale = 1:70.5

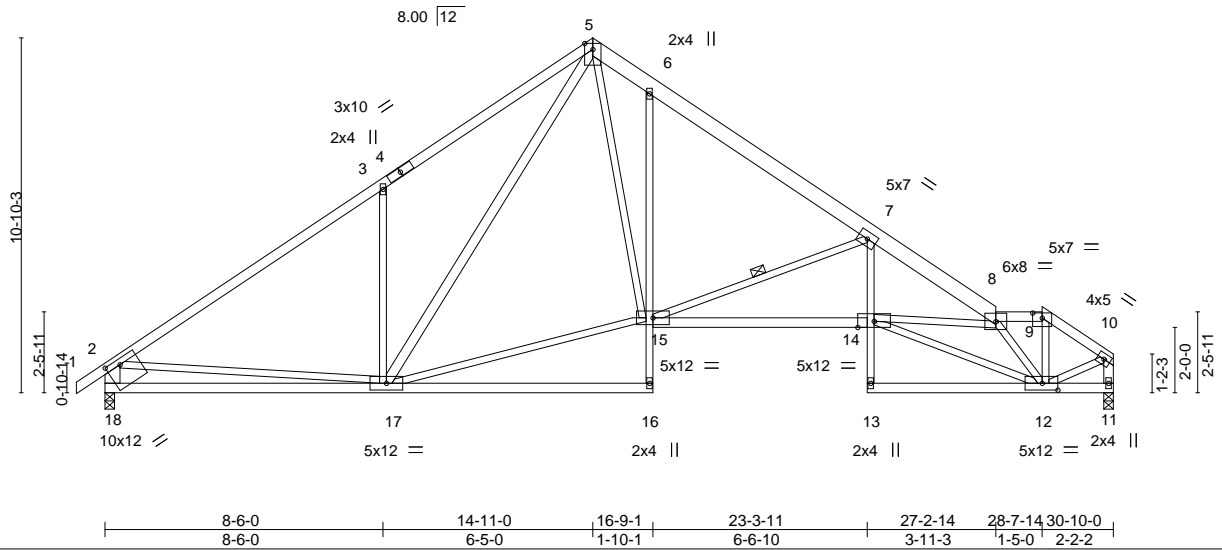


Plate Offsets (X,Y)--	[9:0-3-8,0-1-14], [12:0-5-12,0-2-8], [18:0-5-4,0-2-0], [18:0-2-5,0-1-8]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.82	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.89	Vert(LL) -0.19 14-15 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.91	Vert(CT) -0.42 14-15 >879 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.21 11 n/a n/a		
			Wind(LL) 0.13 14-15 >999 240	Weight: 158 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-8: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-7 max.): 8-9.
BOT CHORD 2x4 SPF No.2 *Except* 6-16,7-13: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-11-0 oc bracing: 17-18.
WEBS 2x3 SPF No.2 *Except* 5-17,10-11: 2x4 SPF No.2, 2-18: 2x6 SPF No.2	WEBS 1 Row at midpt 7-15

REACTIONS.
(size) 18=0-3-8, 11=0-3-8 Max Horz 18=301(LC 5) Max Uplift 18=-178(LC 8), 11=-163(LC 9) Max Grav 18=1449(LC 1), 11=1369(LC 1)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1837/207, 3-5=-1778/432, 5-6=-1794/366, 6-7=-1874/262, 7-8=-3557/388, 8-9=-1158/152, 9-10=-1411/157, 2-18=-1370/225, 10-11=-1331/152 BOT CHORD 17-18=-426/833, 6-15=-376/253, 14-15=-241/2975, 7-14=-47/1183 WEBS 3-17=-540/356, 5-17=-297/517, 5-15=-272/1351, 7-15=-1645/343, 12-14=-286/2638, 8-14=-16/452, 8-12=-2419/291, 9-12=-19/539, 2-17=0/769, 10-12=-102/1238, 15-17=-28/1194

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=178, 11=163.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

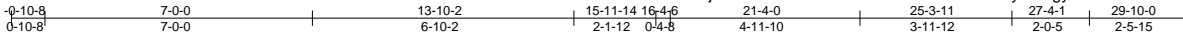
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss K3	Truss Type Hip	Qty 1	Ply 1	Lot 28 RT	I41256074
---------------	-------------	-------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:39 2020 Page 1

ID:mUYTXKzxejzuoDXJ64TA8GzSnWQ-JThlt4ctGF5he7y1CKgyD6ZHvddONBeAaKeMR4zHe8Q



Scale = 1:60.3

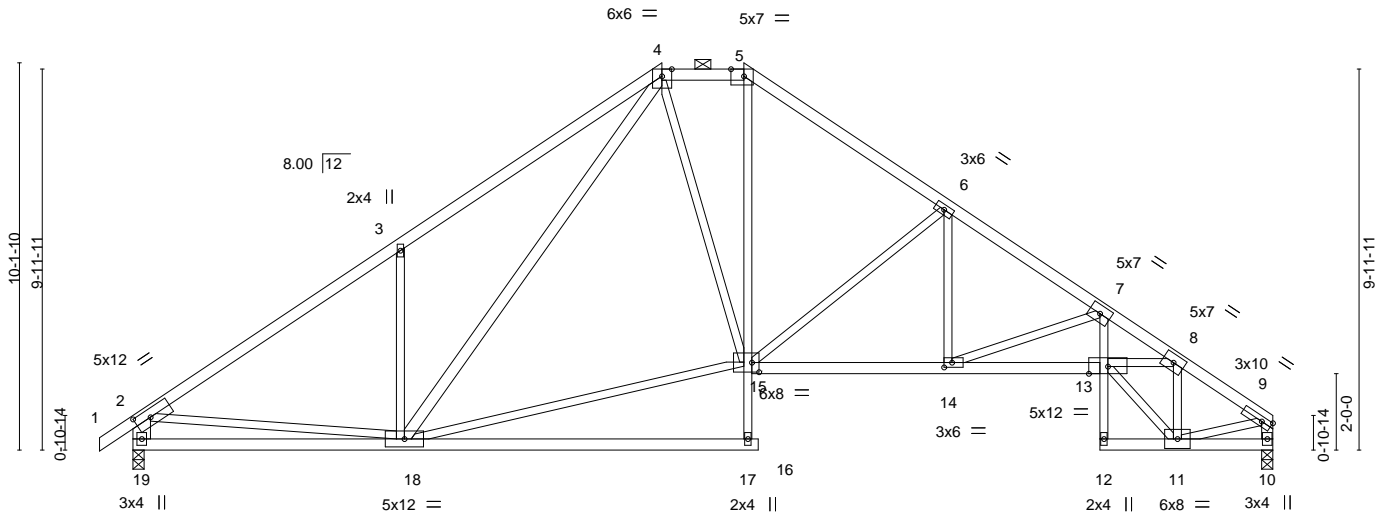


Plate Offsets (X, Y)--	[2:0-4-15,0-2-8], [4:0-3-1,Edge], [5:0-4-1,Edge], [14:0-2-8,0-1-8], [15:0-2-4,0-3-0]
------------------------	--

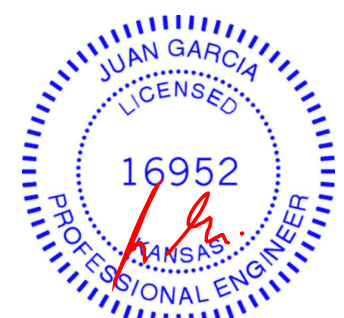
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.20	17-18	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.45	17-18	>789		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.23	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11	13-14	>999		
								Weight: 143 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-14 max.): 4-5.
BOT CHORD 2x4 SPF No.2 *Except* 16-19: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 4-18,9-10: 2x4 SPF No.2, 2-19: 2x6 SPF No.2	

REACTIONS.	(size)
	19=0-3-8, 10=0-3-8
	Max Horz 19=275(LC 5)
	Max Uplift 19=-169(LC 8), 10=-144(LC 9)
	Max Grav 19=1406(LC 1), 10=1326(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1806/195, 3-4=-1780/406, 4-5=-1261/218, 5-6=-1642/237, 6-7=-2344/232, 7-8=-4132/395, 8-9=-1569/175, 2-19=-1346/201, 9-10=-1272/153
BOT CHORD	18-19=-305/572, 14-15=-46/1922, 13-14=-248/3432, 7-13=-103/1412
WEBS	3-18=-503/332, 4-18=-262/450, 4-15=-43/440, 5-15=-109/619, 6-15=-835/226, 6-14=-6/573, 7-14=-1610/233, 11-13=-167/1803, 8-13=-127/2156, 8-11=-1685/188, 2-18=0/1011, 9-11=-94/1165, 15-18=-37/1193

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=169, 10=144.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



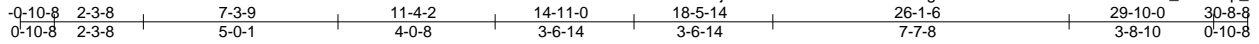
May 11, 2020

Job 400281	Truss K4	Truss Type Hip	Qty 1	Ply 1	Lot 28 RT	141256075
---------------	-------------	-------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:40 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-nfFg4QdV1ZDYGHXDm1BBIK5Rs1_W6ecJp_NwzWzHe8P



Scale = 1:59.3

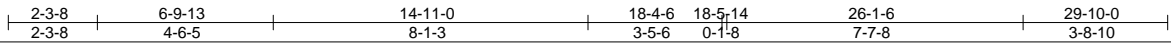
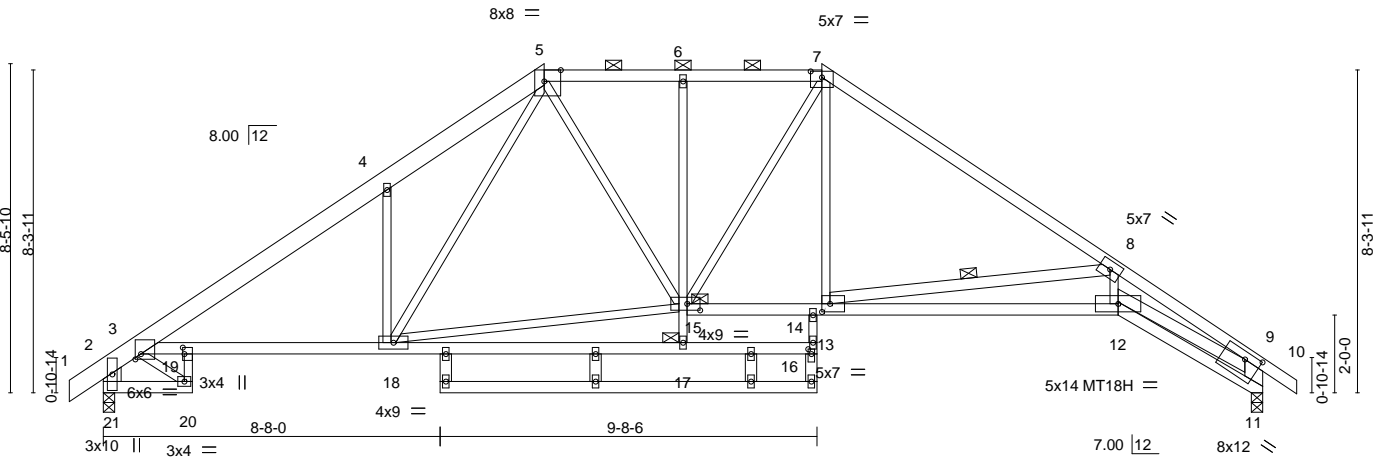


Plate Offsets (X, Y)--	[3:0-1-12,0-1-10], [5:0-5-2,Edge], [7:0-3-8,0-1-14], [11:0-3-3,0-0-3], [11:0-5-0,0-2-4], [13:0-2-8,0-2-8], [15:0-4-0,0-2-0], [16:0-1-8,0-1-0], [19:0-2-0,0-0-8]
------------------------	---

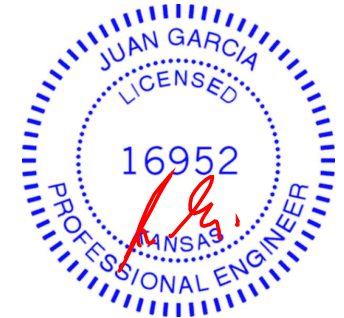
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.23 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.47 12-13	>747	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.95	Horz(CT)	0.41 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14 12-13	>999	240		Weight: 169 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS *Except* 5-7: 2x4 SPF No.2, 7-10: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-12 max.): 5-7.
BOT CHORD 2x4 SPF No.2 *Except* 19-20,14-16: 2x3 SPF No.2, 12-15: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x3 SPF No.2 *Except* 8-13,9-12,22-24,16-23,25-26,27-28: 2x4 SPF No.2 2-21,9-11: 2x6 SPF No.2	WEBS 1 Row at midpt 8-13 JOINTS 1 Brace at Jt(s): 15, 17

REACTIONS. (size) 21=0-3-8, 11=0-3-8
 Max Horz 21=241(LC 7)
 Max Uplift 21=-153(LC 8), 11=-153(LC 9)
 Max Grav 21=1399(LC 1), 11=1399(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-972/150, 3-4=-2107/204, 4-5=-2166/392, 5-6=-1606/170, 6-7=-1606/170,
 7-8=-1997/134, 8-9=-4704/430, 2-21=-1383/169, 9-11=-1449/144
 BOT CHORD 20-21=-145/327, 3-19=-147/1662, 18-19=-167/1727, 14-15=0/1456, 13-14=0/1540,
 12-13=-309/3724
 WEBS 4-18=-579/307, 5-18=-273/737, 5-15=-78/508, 6-15=-287/135, 7-15=-149/294,
 8-13=-2201/446, 8-12=-30/1497, 9-12=-366/3874, 7-13=0/507, 15-18=-86/1288,
 3-20=-319/156

- 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) All plates are MT20 plates unless otherwise indicated.
 - 5) All plates are 2x4 MT20 unless otherwise indicated.
 - 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) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=153, 11=153.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	141256076
400281	K5	Hip	1	1		

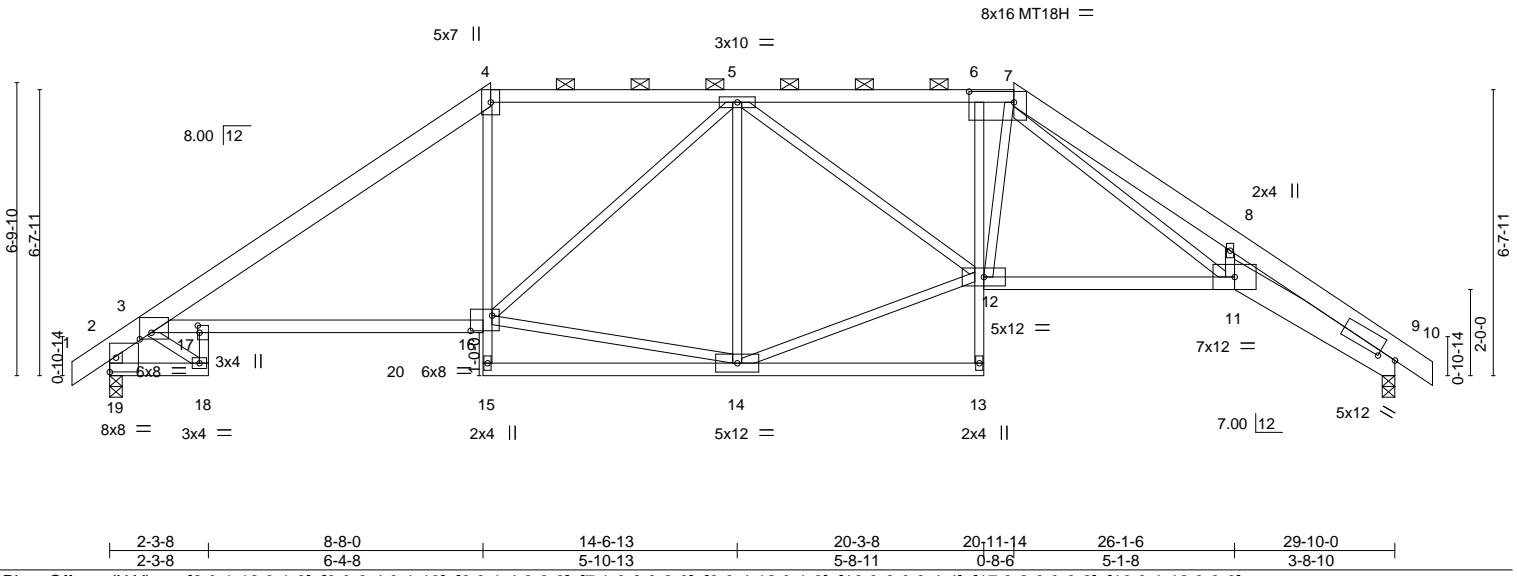
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:41 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-Frp2lmd7otLPtR6PJiQIXef0Rjir6BT1e7TVyzHe8O

0-10-8	2-3-8	8-10-2	14-6-13	20-3-8	20-11-14	26-1-6	29-10-0	30-8-8
0-10-8	2-3-8	6-6-10	5-8-11	5-8-11	0-8-6	5-1-8	3-8-10	0-10-8

Scale = 1:53.5



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 0.52	Vert(LL) -0.32	11-12	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT) -0.57	11-12	>623	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT) 0.51	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL) 0.20	16-17	>999		Weight: 162 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS *Except* 4-7: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-2-11 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-10 max.): 4-7.
BOT CHORD 2x4 SPF No.2 *Except* 17-18,4-15,6-13: 2x3 SPF No.2, 3-16: 2x4 SPF 2100F 1.8E 9-11: 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-15,13-14.
WEBS 2x3 SPF No.2 *Except* 2-19: 2x4 SPF No.2	

REACTIONS.	(size) 19=0-3-8, 9=0-3-8
	Max Horz 19=-183(LC 6)
	Max Uplift 19=-130(LC 8), 9=-130(LC 9)
	Max Grav 19=1468(LC 2), 9=1434(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1040/178, 3-4=-2102/168, 4-5=-1684/191, 5-6=-2065/150, 6-7=-2075/148, 7-8=-4685/363, 8-9=-5362/202, 2-19=-1424/140
BOT CHORD	18-19=-219/386, 17-18=-130/266, 3-17=-176/1656, 16-17=-199/1721, 4-16=-22/672, 11-12=-80/1999, 9-11=-100/4628
WEBS	14-16=-166/1720, 5-14=-755/172, 12-14=-169/1752, 5-12=-9/534, 7-12=-192/551, 7-11=-276/2521, 8-11=-39/839, 3-18=-399/238

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - The Fabrication Tolerance at joint 2 = 2%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=130, 9=130.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss K6	Truss Type Hip Girder	Qty 1	Ply 2	Lot 28 RT	141256077
---------------	-------------	--------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:44 2020 Page 1

ID:mUYTXKzzejzuodxJ64TA8GzSnWQ-gQUAwng?5oj_kuq_?tF7wAG60eRN2ZQvjCL76HzHe8L

0-10-8	2-3-8	6-4-2	8-8-0	14-5-12	20-3-8	23-5-14	26-1-6	29-10-0	30-8-8
0-10-8	2-3-8	4-0-10	2-3-14	5-9-12	5-9-12	3-2-6	2-7-8	3-8-10	0-10-8

Scale = 1:53.2

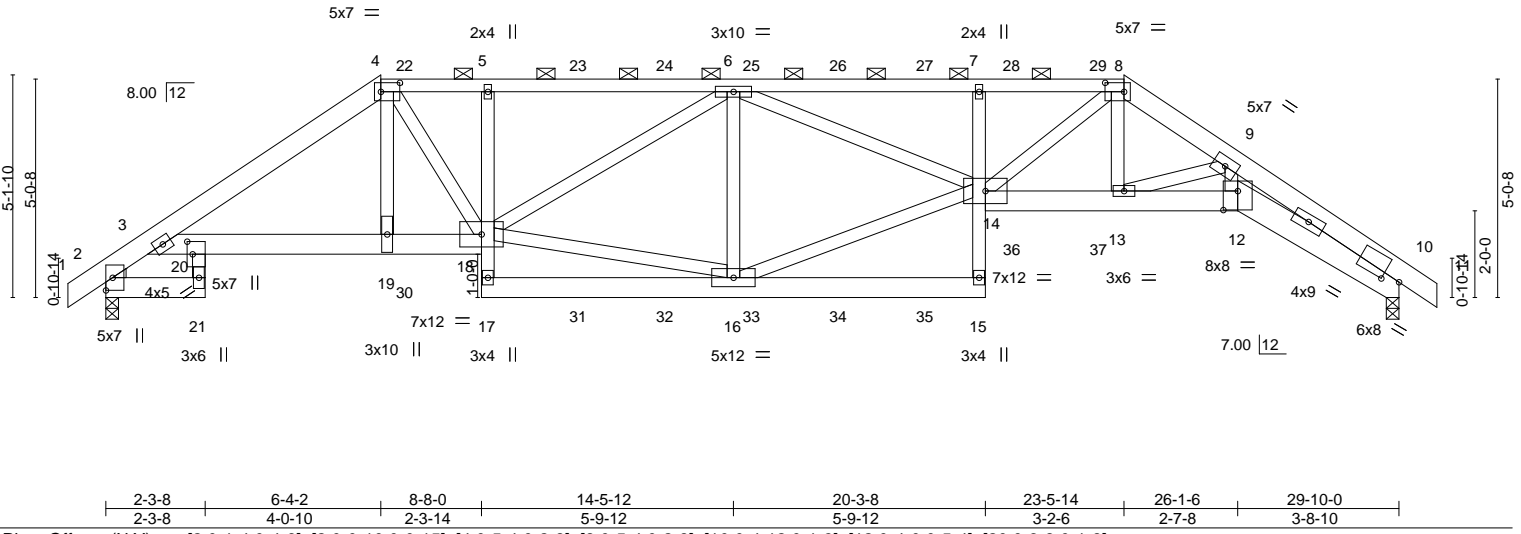


Plate Offsets (X,Y)--	[2:0-1-4,0-4-6]	[2:0-0-10,0-0-15]	[4:0-5-4,0-2-8]	[8:0-5-4,0-2-8]	[10:0-4-12,0-1-9]	[12:0-4-0,0-5-4]	[20:0-3-8,0-1-8]
-----------------------	-----------------	-------------------	-----------------	-----------------	-------------------	------------------	------------------

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 0.72	Vert(LL)	-0.20	15	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.36	15	>974		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.45	Horz(CT)	0.29	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.19	15	>999	Weight: 381 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 4-8: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins, except
BOT CHORD 2x6 SP 2400F 2.0E *Except* 20-21,5-17,7-15: 2x4 SPF No.2, 10-12: 2x8 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
WEDGE Left: 2x3 SPF No.2	

REACTIONS. (size) 2=0-3-8, 10=0-3-8
 Max Horz 2=-126(LC 6)
 Max Uplift 2=-579(LC 8), 10=-569(LC 9)
 Max Grav 2=2202(LC 1), 10=2214(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2298/613, 3-4=-3983/1141, 4-5=-3781/1103, 5-6=-3787/1109, 6-7=-5531/1494,
 7-8=-5520/1484, 8-9=-5225/1413, 9-10=-8565/2119
 BOT CHORD 2-21=-212/647, 20-21=-98/351, 3-20=-787/2618, 19-20=-993/3265, 18-19=-1008/3309,
 5-18=-415/240, 16-17=-155/640, 7-14=-440/247, 13-14=-1183/4528, 12-13=-1472/6045,
 10-12=-1799/7400
 WEBS 4-19=-378/1104, 4-18=-328/945, 16-18=-859/3102, 6-16=-1589/643, 14-16=-1002/3667,
 6-14=-561/2029, 8-14=-386/1335, 8-13=-449/1587, 9-13=-1722/470, 9-12=-720/3148

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss K6	Truss Type Hip Girder	Qty 1	Ply 2	Lot 28 RT Job Reference (optional)	I41256077
---------------	-------------	--------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:44 2020 Page 2
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-gQUAwng?5oj_kuq_?tF7wAG60eRN2ZQvjclL76HzHe8L

NOTES-

- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 114 lb down and 71 lb up at 6-11-0, 123 lb down and 90 lb up at 8-11-0, 123 lb down and 90 lb up at 10-11-0, 123 lb down and 90 lb up at 12-11-0, 123 lb down and 90 lb up at 14-11-0, 123 lb down and 90 lb up at 16-11-0, 123 lb down and 90 lb up at 18-11-0, and 125 lb down and 91 lb up at 20-11-0, and 121 lb down and 91 lb up at 22-11-0 on top chord, and 320 lb down and 234 lb up at 6-4-2, 51 lb down and 29 lb up at 6-11-0, 49 lb down at 8-9-12, 49 lb down at 10-11-0, 49 lb down at 12-11-0, 49 lb down at 14-11-0, 49 lb down at 16-11-0, 49 lb down at 18-11-0, 49 lb down at 20-11-0, and 49 lb down at 22-11-0, and 318 lb down and 233 lb up at 23-5-14 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: 1-4=-70, 4-8=-70, 8-11=-70, 2-21=-20, 18-20=-20, 15-17=-20, 12-14=-20, 10-12=-20

Concentrated Loads (lb)

Vert: 18=-38(B) 5=-75(B) 19=-314(B) 13=-315(B) 22=-53(B) 23=-75(B) 24=-75(B) 25=-75(B) 26=-75(B) 27=-75(B) 28=-76(B) 29=-76(B) 30=-36(B) 31=-38(B) 32=-38(B) 33=-38(B) 34=-38(B) 35=-38(B) 36=-36(B) 37=-36(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss L1	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256078
---------------	-------------	--	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:45 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-8dZ87gds5srM2PAYanMSNoQP2pdn2U3yG5hekzHe8K



4x5 ||
5x7 =

Scale = 1:34.7

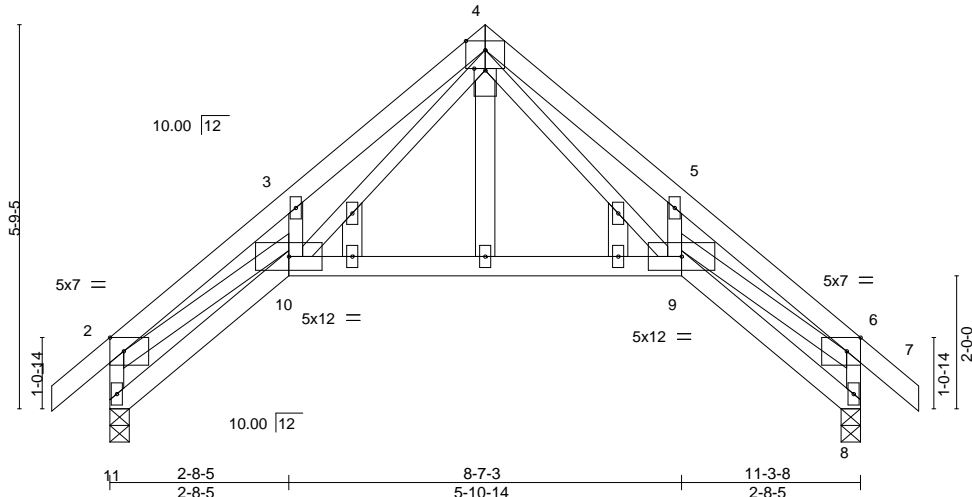


Plate Offsets (X,Y)--	[2:0-2-8,Edge], [4:0-0-5,0-2-0], [6:0-2-8,Edge]
-----------------------	---

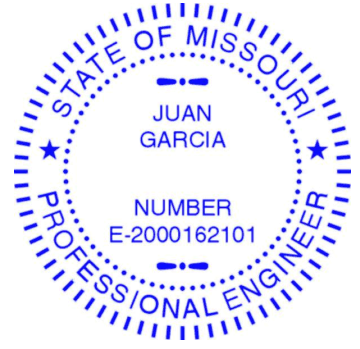
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.07 9-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.33	Vert(CT) -0.17 9-10 >767 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.16 8 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.05 9-10 >999 240	Weight: 54 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 11=0-3-8, 8=0-3-8
 Max Horz 11=-178(LC 6)
 Max Uplift 11=-69(LC 8), 8=-69(LC 9)
 Max Grav 11=567(LC 1), 8=567(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-11=-609/138, 2-3=-1375/156, 3-4=-1372/303, 4-5=-1260/148, 5-6=-1300/40, 6-8=-577/84
 BOT CHORD 10-11=-211/272, 9-10=-28/434
 WEBS 4-9=-128/861, 6-9=0/971, 4-10=-254/1036, 2-10=-41/1010

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 11, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

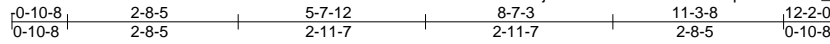


May 11, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	
400281	L2	Roof Special	2	1		I41256079
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:46 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-cpcxLThGdP_i_C_N6llb?bLb8S9sVWkCBWqEBAzHe8J



5x7 =

Scale = 1:36.3

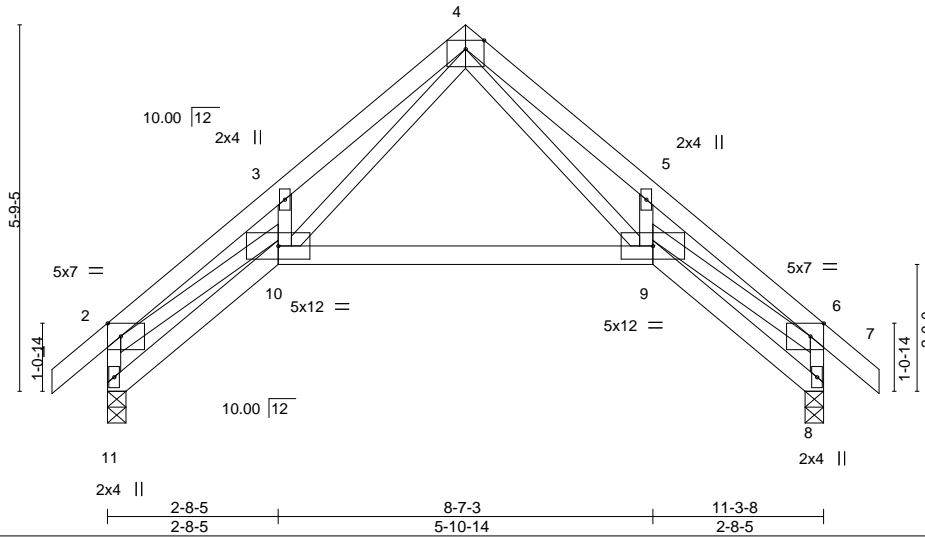


Plate Offsets (X,Y)--	[2:0-2-8,Edge], [6:0-2-8,Edge]
-----------------------	--------------------------------

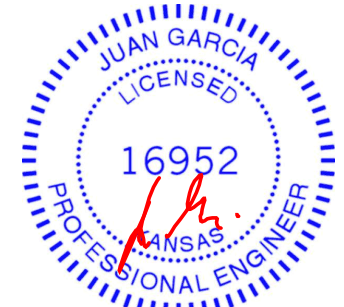
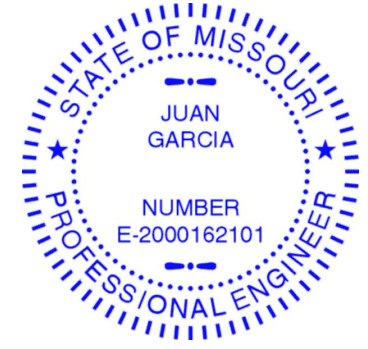
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.07 9-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.33	Vert(CT) -0.17 9-10 >767 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.16 8 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.05 9-10 >999 240	Weight: 49 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 11=0-3-8, 8=0-3-8
 Max Horz 11=178(LC 7)
 Max Uplift 11=-69(LC 8), 8=-69(LC 9)
 Max Grav 11=567(LC 1), 8=567(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-11=-609/138, 2-3=-1375/156, 3-4=-1372/303, 4-5=-1260/148, 5-6=-1300/40, 6-8=-577/84
 BOT CHORD 10-11=-211/272, 9-10=-28/434
 WEBS 4-9=-128/861, 6-9=0/971, 4-10=-254/1036, 2-10=-41/1010

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 11, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 11, 2020

Job 400281	Truss L3	Truss Type Roof Special	Qty 3	Ply 1	Lot 28 RT Job Reference (optional)	I41256080
---------------	-------------	----------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:47 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-4?AJYpiuOj6ZbMZZg?pqYoumtsV4FyrlQaanjczHe8l



5x7 =

Scale = 1:36.3

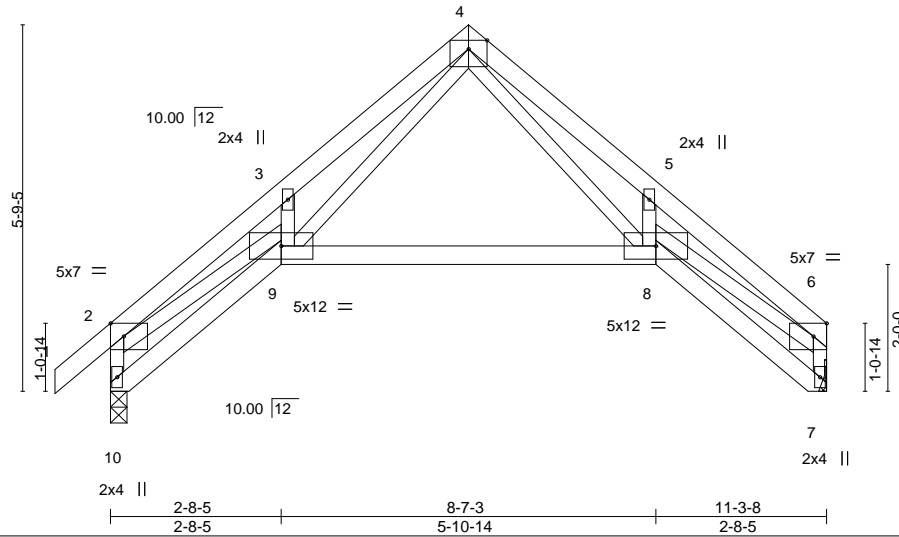


Plate Offsets (X,Y)--	[2:0-2-8,Edge], [6:0-2-8,Edge]
-----------------------	--------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.07 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.34	Vert(CT) -0.17 8-9 >763 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.16 7 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.05 8-9 >999 240	Weight: 48 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-15 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.
(size) 10=0-3-2, 7=Mechanical
Max Horz 10=170(LC 5)
Max Uplift 10=-68(LC 8), 7=-47(LC 9)
Max Grav 10=570(LC 1), 7=496(LC 1)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-602/149, 2-3=-1356/191, 3-4=-1354/336, 4-5=-1301/219, 5-6=-1329/71, 6-7=-508/69
BOT CHORD 9-10=-213/253, 8-9=-41/421
WEBS 4-8=-186/900, 6-8=-7/997, 4-9=-281/1019, 2-9=-69/995

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 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.



May 11, 2020

Job 400281	Truss L4	Truss Type Roof Special	Qty 1	Ply 1	Lot 28 RT	I41256081
---------------	-------------	----------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:48 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-YBkhm9jW90EQDV8IEjk340QxeGqL_P2VeEJLF3zHe8H



5x7 =

Scale = 1:36.3

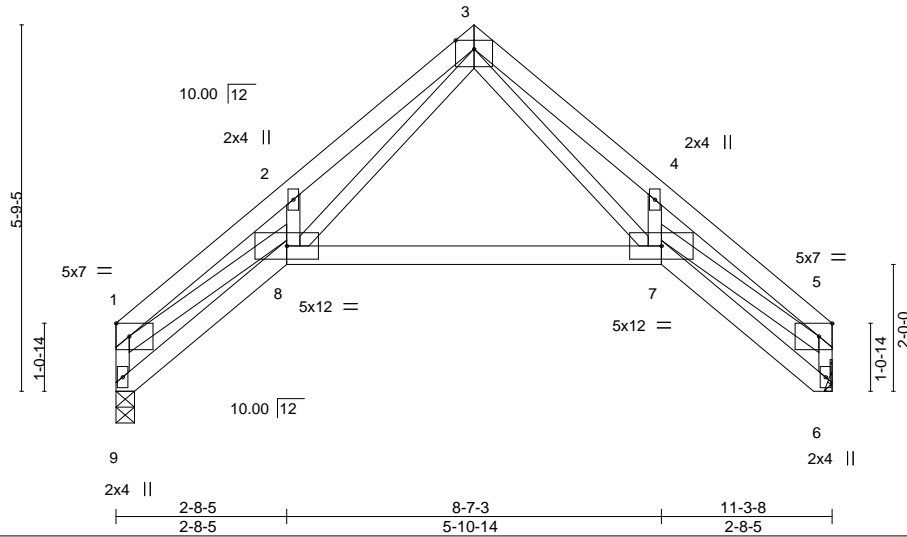


Plate Offsets (X,Y)-- [5:0-2-8,Edge]

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 0.17	Vert(LL)	-0.07	7-8	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.17	7-8	>760		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.17	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	7-8	>999	Weight: 47 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 4-10-11 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-3-8, 6=Mechanical
 Max Horz 9=-156(LC 4)
 Max Uplift 9=-46(LC 8), 6=-46(LC 9)
 Max Grav 9=499(LC 1), 6=499(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-9=-535/110, 1-2=-1380/185, 2-3=-1389/337, 3-4=-1311/218, 4-5=-1339/70,
 5-6=-511/68
 BOT CHORD 7-8=-40/425
 WEBS 3-7=-186/905, 5-7=-6/1005, 3-8=-284/1053, 1-8=-91/1024

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

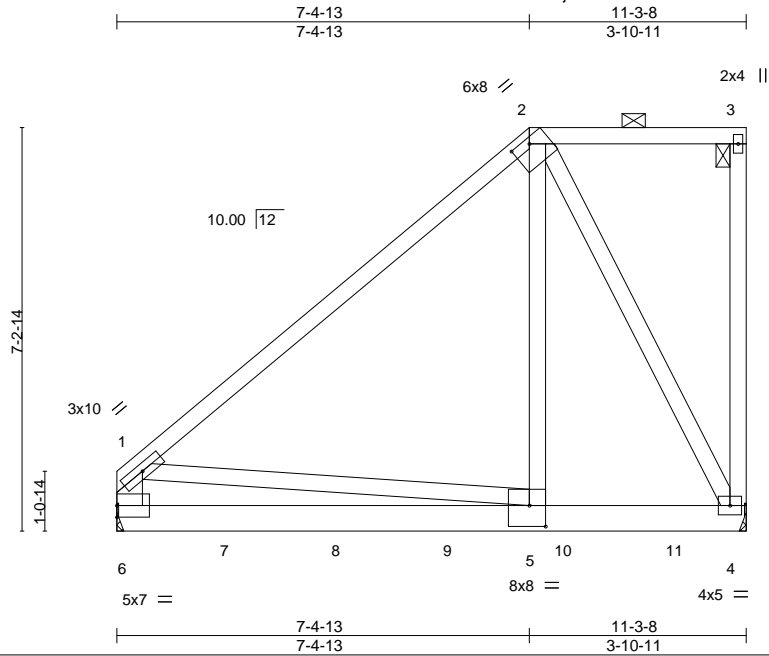


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss L5	Truss Type Half Hip Girder	Qty 1	Ply 2	Lot 28 RT Job Reference (optional)	I41256082
---------------	-------------	-------------------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:49 2020 Page 1
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-0OI3zVk8wKMHrfjynQrIdDz0mf7lJnhetu3unVzHe8G



Scale = 1:41.3

Plate Offsets (X,Y)--	[2:0-4-0,0-1-4], [5:0-3-8,0-4-8]				
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 0.53	Vert(LL) -0.10 5-6 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.18 5-6 >710 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.64	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) -0.02 5-6 >999 240	Weight: 148 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 1-6: 2x6 SPF No.2	

REACTIONS. (size) 4=Mechanical, 6=Mechanical
 Max Horz 6=220(LC 20)
 Max Uplift 4=6(LC 5)
 Max Grav 4=2974(LC 2), 6=2613(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1890/0, 1-6=-1349/0
 BOT CHORD 5-6=0/1454, 4-5=0/1392
 WEBS 2-5=0/3253, 2-4=-2885/0, 1-5=-326/149

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 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.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 911 lb down at 2-0-12, 911 lb down at 4-0-12, 982 lb down and 39 lb up at 6-0-12, and 1009 lb down and 46 lb up at 8-0-12, and 995 lb down and 20 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



May 11, 2020

Job 400281	Truss L5	Truss Type Half Hip Girder	Qty 1	Ply 2	Lot 28 RT Job Reference (optional)	I41256082
---------------	-------------	-------------------------------	----------	-----------------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:49 2020 Page 2
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-0OI3zVk8wKMHRfjynQrIdDz0mf7Ijnhetu3unVzHe8G

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 4-6=-20
- Concentrated Loads (lb)
 - Vert: 7=-911(B) 8=-911(B) 9=-911(B) 10=-911(B) 11=-911(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400281	Truss LAY3	Truss Type GABLE	Qty 1	Ply 1	Lot 28 RT I41256083
---------------	---------------	---------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:50 2020 Page 1

ID:mUYTXKzzejzuodxJ64TA8GzSnWQ-UarSBkrmheU7Spi8L8MX9RWIX3bTSNJ06YoSKxzHe8F

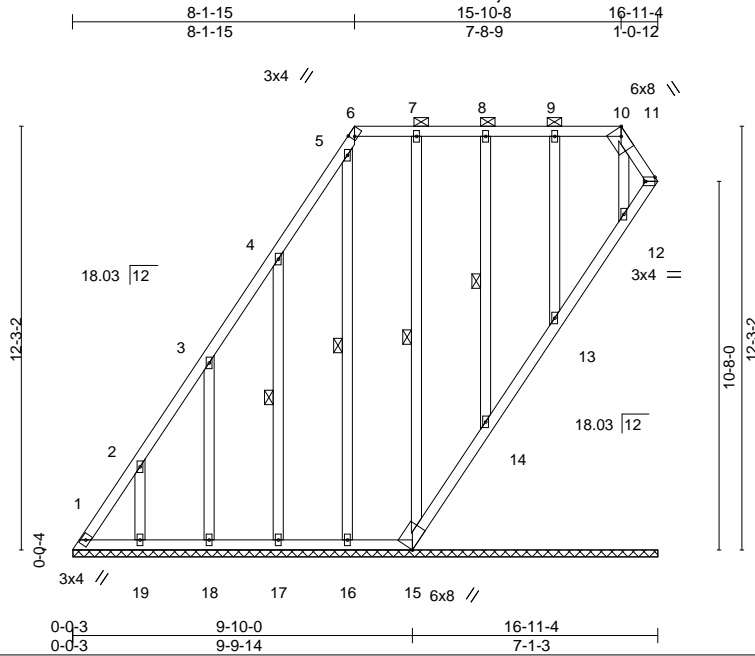


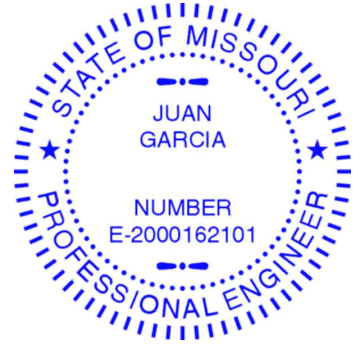
Plate Offsets (X,Y)--	[6:0-1-1,Edge], [10:0-2-15,Edge], [11:Edge,0-1-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) n/a - n/a 999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT) -0.01 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 116 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midpt 4-17, 5-16, 7-15, 8-14

REACTIONS. All bearings 16-11-1.
 (lb) - Max Horz 1=455(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 14, 13, 12 except 1=218(LC 6), 11=-227(LC 8), 19=-223(LC 8), 18=-214(LC 8), 17=-239(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 11, 15, 18, 16, 14, 13, 12 except 1=518(LC 8), 19=250(LC 15), 17=256(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-634/320, 2-3=-420/223
 WEBS 4-17=-216/262

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 16, 14, 13, 12 except (jt=lb) 1=218, 11=227, 19=223, 18=214, 17=239.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 14, 13, 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

Job 400281	Truss LAY4	Truss Type GABLE	Qty 1	Ply 1	Lot 28 RT	I41256084
---------------	---------------	---------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

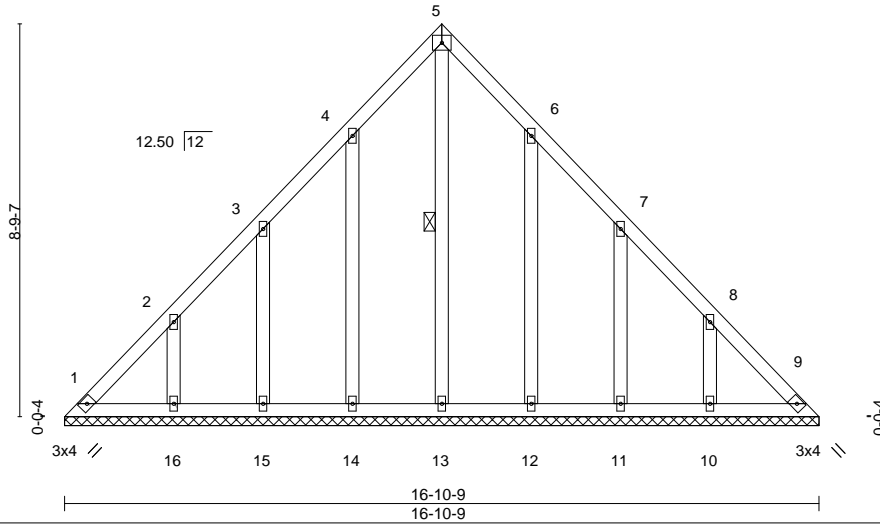
8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:51 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-ymPqOAIOSxc_4zsKvrtmie2TWTxBqJxKBY?sNzHe8E



4x5 =

Scale = 1:51.6



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 0.07	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 83 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 OTHERS 2x4 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.
 WEBS 1 Row at midpt 5-13

REACTIONS.

All bearings 16-10-9.
 (lb) - Max Horz 1=223(LC 4)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=125(LC 8), 15=119(LC 8), 16=142(LC 8),
 12=123(LC 9), 11=119(LC 9), 10=142(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

FORCES.

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

TOP CHORD 1-2=281/186

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=125, 15=119, 16=142, 12=123, 11=119, 10=142.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



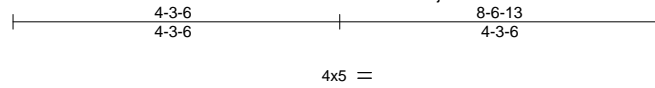
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss LAY5	Truss Type GABLE	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256085
---------------	---------------	---------------------	----------	----------	---------------------------------------	-----------

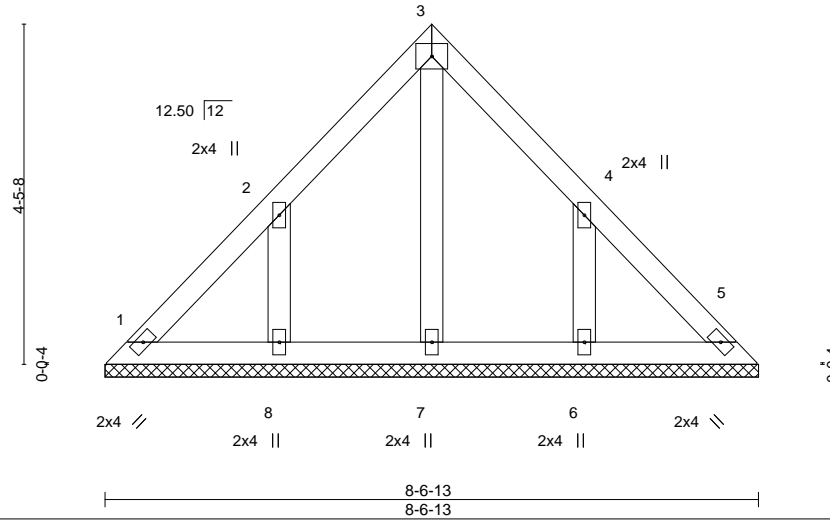
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:52 2020 Page 1

ID:mUYTXKzxejzuoJ64TA8GzSnWQ-RzzCcWm0CFkri7RWTPY?FsbfMh3wIx5ZrHYOqzHe8D



Scale = 1:30.2



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	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 31 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 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. All bearings 8-6-13.
(lb) - Max Horz 1=108(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-151(LC 8), 6=-151(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=151, 6=151.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256086
400281	LAY6	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:52 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-RzzCcWm0CFkri7RWTYP?Fsbe3tHpwFu5ZrHYOqzHe8D



4x5 =

Scale = 1:48.8

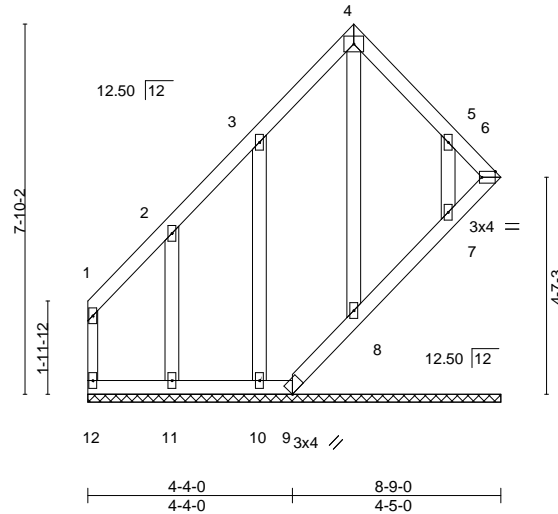


Plate Offsets (X,Y)-- [6:Edge,0-1-8]

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 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 46 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 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: 8-9.

REACTIONS. All bearings 8-9-0.
(lb) - Max Horz 12=180(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 12 except 6=338(LC 5), 9=149(LC 6), 8=145(LC 6), 10=133(LC 8), 11=118(LC 8), 7=120(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 12, 9, 10, 11, 7 except 6=309(LC 6), 8=384(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=158/275, 4-5=191/296
WEBS 4-8=369/190

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 6=338, 9=149, 8=145, 10=133, 11=118, 7=120.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 8, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

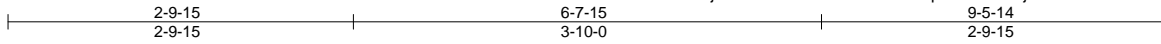


Job	Truss	Truss Type	Qty	Ply	Lot 28 RT	I41256087
400281	P1	Piggyback	1	1		

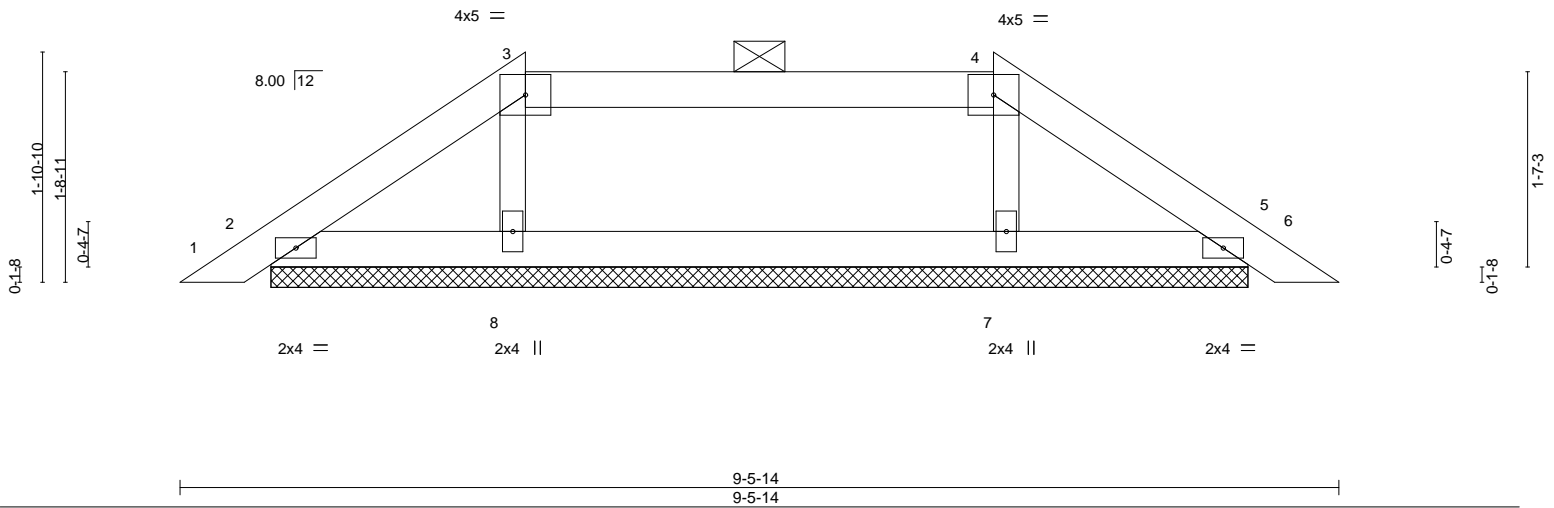
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:53 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-v9XapsnfzZsijH0j0GwEn38meHcWf7EoV16wGzHe8C



Scale = 1:18.9



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 0.28	Vert(LL)	0.00	6	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	6	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 23 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, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-0-0.
 (lb) - Max Horz 2=43(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7, 8
 Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 7=265(LC 22), 8=265(LC 21)

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) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 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) 2, 5, 7, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



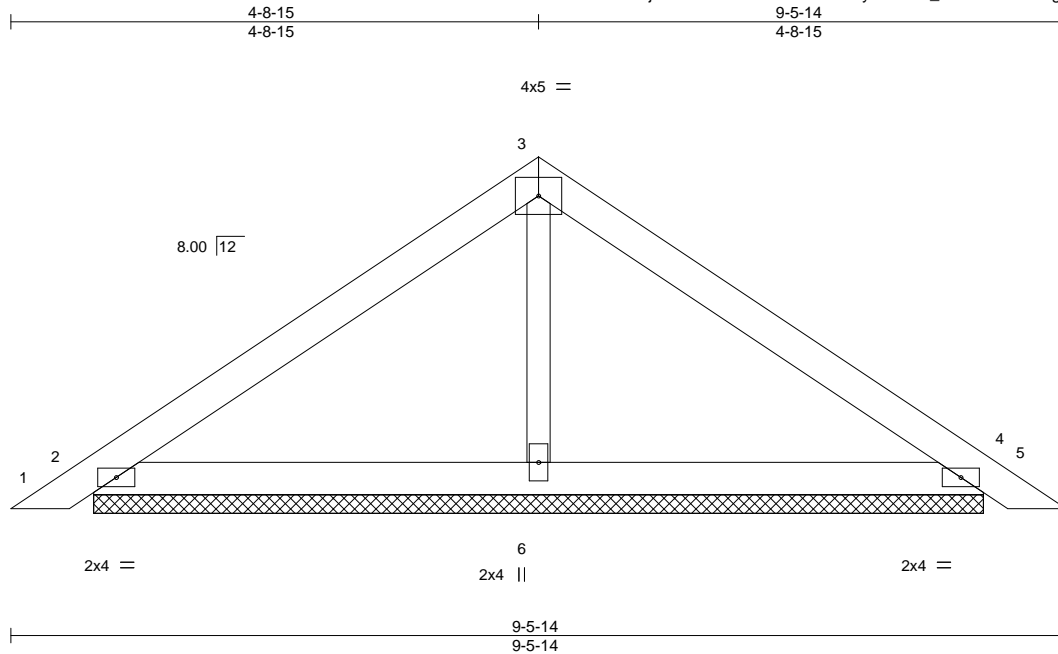
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss P2	Truss Type Piggyback	Qty 3	Ply 1	Lot 28 RT	I41256088
---------------	-------------	-------------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:54 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-NL5y1CnHks_ZxQbvazRTKHgxCgwrOB9N19mfTizHe8B



Scale = 1:20.7

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 0.29	Vert(LL)	0.01	5	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	0.02	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 24 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) 2=8-0-0, 4=8-0-0, 6=8-0-0
 Max Horz 2=-78(LC 6)
 Max Uplift 2=-57(LC 8), 4=-67(LC 9)
 Max Grav 2=239(LC 1), 4=239(LC 1), 6=310(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) 2, 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.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss V1	Truss Type Valley	Qty 1	Ply 1	Lot 28 RT	I41256089
---------------	-------------	----------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

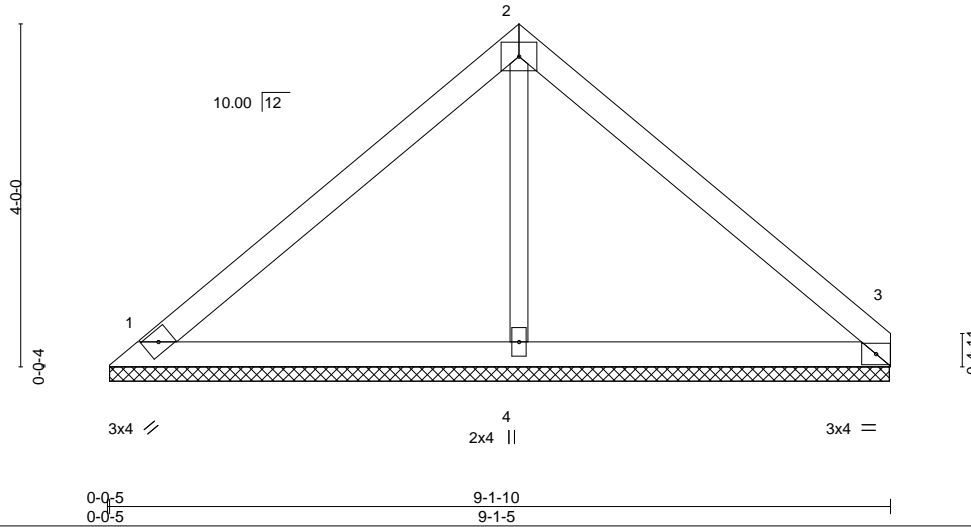
8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:55 2020 Page 1

ID:mUYTXKzxejzuo dxJ64TA8GzSnWQ-rYfLEyovVA6QZaA58hyisUD6L4Gf7d1XFpWC79zHe8A



4x5 =

Scale = 1:26.9



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 0.27	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 26 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=9-1-2, 3=9-1-2, 4=9-1-2
 Max Horz 1=96(LC 5)
 Max Uplift 1=37(LC 8), 3=-48(LC 9), 4=-8(LC 8)
 Max Grav 1=221(LC 1), 3=218(LC 1), 4=347(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; MWFERS (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) 1, 3, 4.
- 6) Non Standard bearing condition. Review required.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

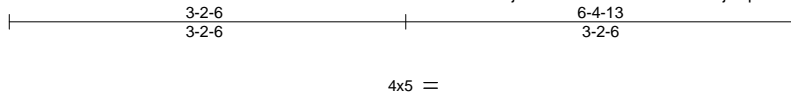


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

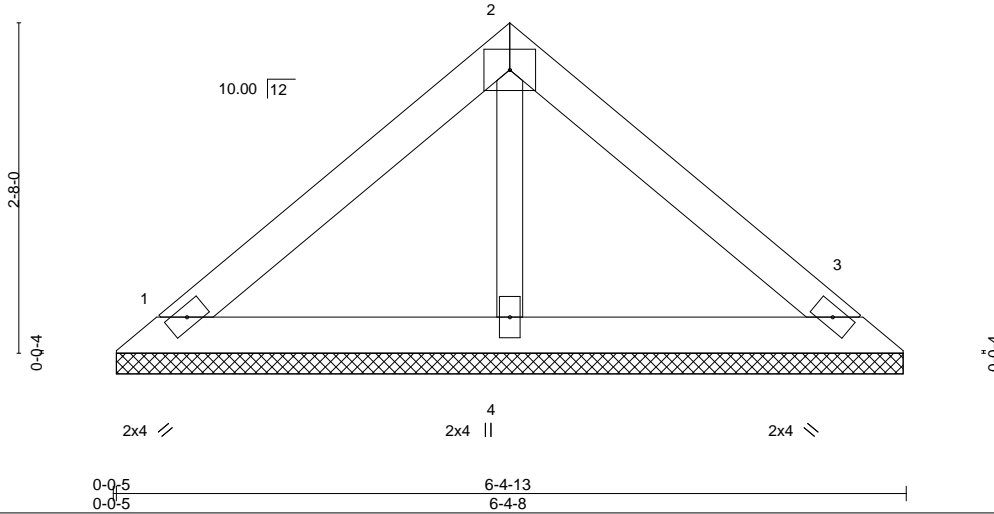
Job 400281	Truss V2	Truss Type Valley	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256090
---------------	-------------	----------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:56 2020 Page 1
ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-JkDjRupXGUEHAKliOTxPimJ5UdOs5_gUTFmXbzHe89



Scale = 1:18.6



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 0.14	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	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=6-4-3, 3=6-4-3, 4=6-4-3
 Max Horz 1=61(LC 5)
 Max Uplift 1=31(LC 8), 3=39(LC 9)
 Max Grav 1=152(LC 1), 3=152(LC 1), 4=200(LC 1)

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

NOTES-

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



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



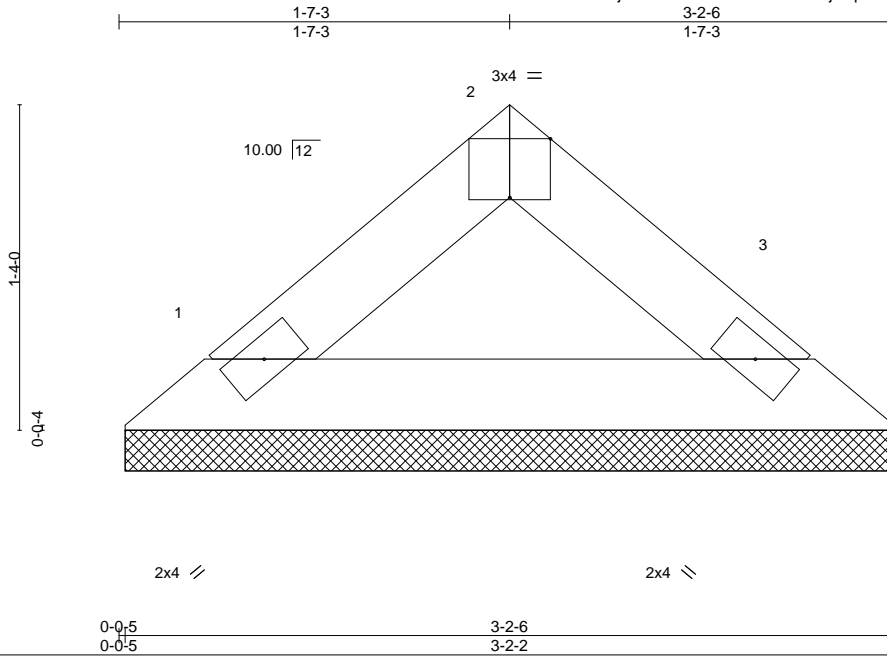
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss V3	Truss Type Valley	Qty 1	Ply 1	Lot 28 RT I41256091
---------------	-------------	----------------------	----------	----------	------------------------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:56 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-JkDjRupXGUEHAKliOTxPimLyUeas5PgUTFmXbzHe89



Scale = 1:9.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2'-0"-0	TC 0.02	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2018/TPI2014			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 3-2-6 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-1-13, 3=3-1-13
 Max Horz 1=-26(LC 4)
 Max Uplift 1=-11(LC 8), 3=-11(LC 9)
 Max Grav 1=108(LC 1), 3=108(LC 1)

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

NOTES-

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



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



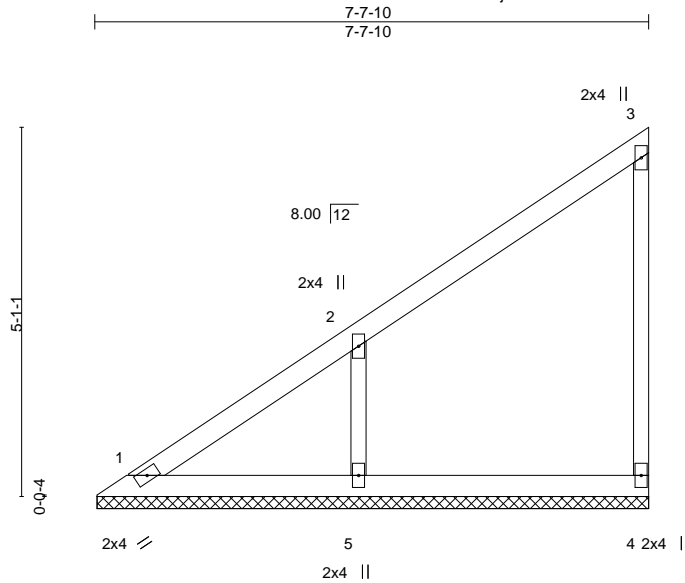
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss V4	Truss Type Valley	Qty 1	Ply 1	Lot 28 RT	I41256092
---------------	-------------	----------------------	----------	----------	-----------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:57 2020 Page 1

ID:mUYTXKzxejzudxJ64TA8GzSnWQ-nwn5fEq91nM8ouKUF6_AyviSRuz?bYhqj7?J41zHe88



Scale: 3/8"=1'

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	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 24 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=7-7-4, 4=7-7-4, 5=7-7-4
 Max Horz 1=187(LC 5)
 Max Uplift 1=-13(LC 4), 4=-41(LC 5), 5=-155(LC 8)
 Max Grav 1=130(LC 16), 4=155(LC 15), 5=415(LC 15)

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

WEBS 2-5=-326/208

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=155.
- 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



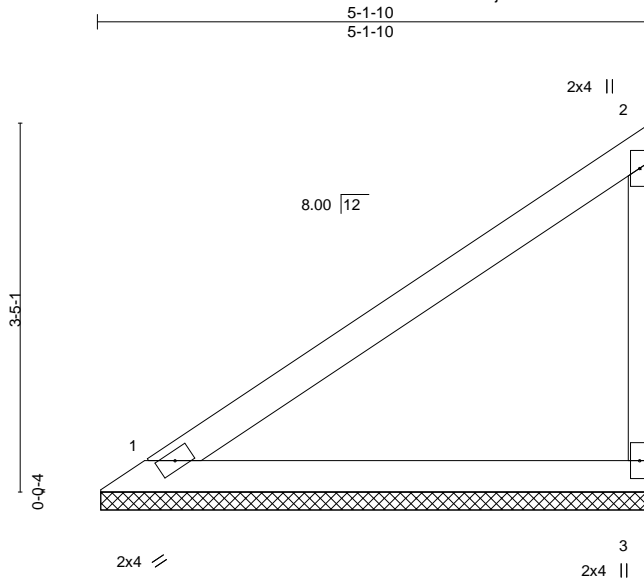
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss V5	Truss Type Valley	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256093
---------------	-------------	----------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:57 2020 Page 1

ID:mUYTXKzxejzuodxJ64TA8GzSnWQ-nwn5fEq91nM8ouKUF6_AyvlQpuxMbYfqj7?J41zHe88



Scale = 1:21.4

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 0.40	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 14 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 5-1-10 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-1-4, 3=5-1-4
 Max Horz 1=121(LC 5)
 Max Uplift 1=-17(LC 8), 3=-59(LC 8)
 Max Grav 1=205(LC 1), 3=220(LC 15)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



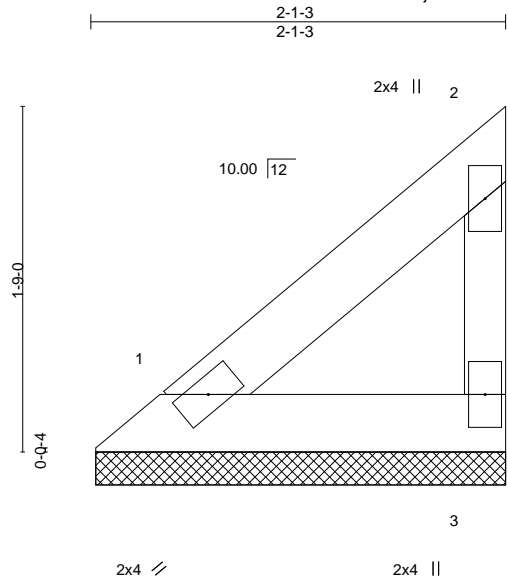
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss V6	Truss Type Valley	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256094
---------------	-------------	----------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:58 2020 Page 1

ID:mUYTXKzxejuodxJ64TA8GzSnWQ-F7KTsarno5U?Q2vgppVPU7rh9IKaK?vznkctzHe87



Scale = 1:11.7

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 0.04	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					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 2-1-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-0-14, 3=2-0-14
 Max Horz 1=53(LC 5)
 Max Uplift 1=-2(LC 8), 3=-25(LC 8)
 Max Grav 1=72(LC 1), 3=81(LC 15)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



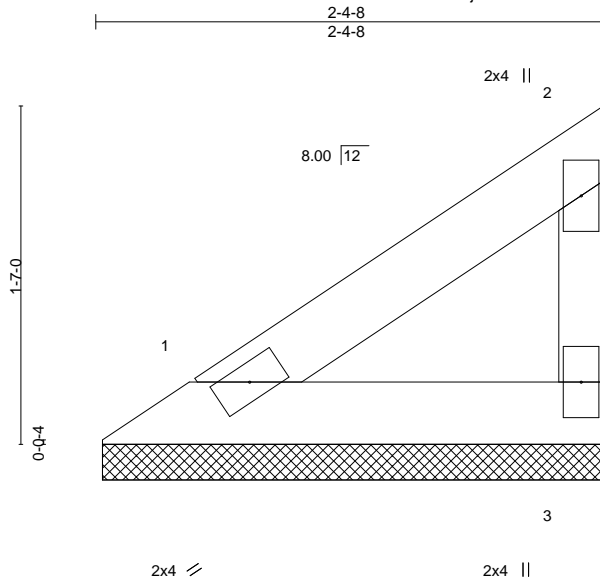
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400281	Truss V8	Truss Type Valley	Qty 1	Ply 1	Lot 28 RT Job Reference (optional)	I41256095
---------------	-------------	----------------------	----------	----------	---------------------------------------	-----------

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon May 11 07:49:59 2020 Page 1

ID:mUYTXKzxejuodxJ64TA8GzSnWQ-jJur4vrPZPcs1CUtNW1f1KOSjhgi3S96ARUQ8wzHe86



Scale = 1:10.8

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 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					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 2-4-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-4-2, 3=2-4-2
 Max Horz 1=48(LC 5)
 Max Uplift 1=7(LC 8), 3=23(LC 8)
 Max Grav 1=81(LC 1), 3=86(LC 15)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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.



May 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

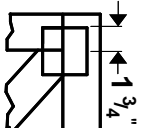
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



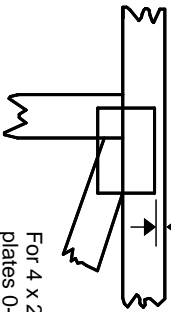
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

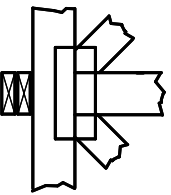
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

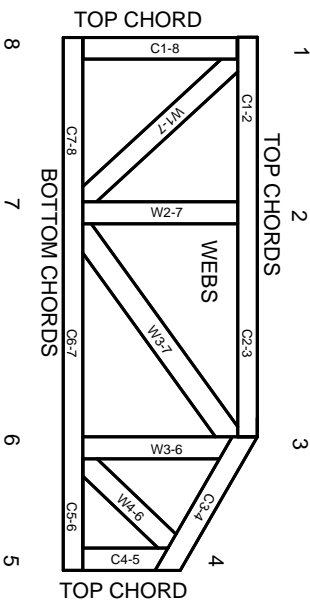


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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.

© 2012 MITek® All Rights Reserved

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.



MITek Engineering Reference Sheet: Mill-7473 rev. 10/03/2015