



RE: 400280
Lot 86 RR

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

Design Program: MiTek 20/20 8.2

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

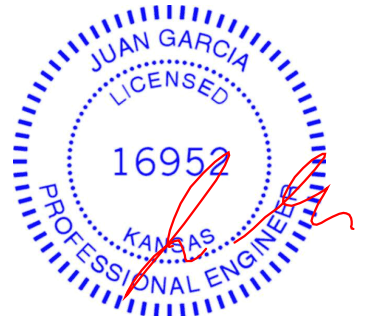
Floor Load: N/A psf

This package includes 45 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41238139	B1	5/7/2020	27	I41238165	J6	5/7/2020
2	I41238140	B2	5/7/2020	28	I41238166	J7	5/7/2020
3	I41238141	B3A	5/7/2020	29	I41238167	J8	5/7/2020
4	I41238142	B4A	5/7/2020	30	I41238168	J9	5/7/2020
5	I41238143	B6A	5/7/2020	31	I41238169	J10	5/7/2020
6	I41238144	C1A	5/7/2020	32	I41238170	V1	5/7/2020
7	I41238145	C2A	5/7/2020	33	I41238171	V2	5/7/2020
8	I41238146	C3A	5/7/2020	34	I41238172	V3	5/7/2020
9	I41238147	C4A	5/7/2020	35	I41238173	V4	5/7/2020
10	I41238148	C5A	5/7/2020	36	I41238174	V5	5/7/2020
11	I41238149	C6	5/7/2020	37	I41238175	V6	5/7/2020
12	I41238150	C7	5/7/2020	38	I41238176	V7	5/7/2020
13	I41238151	C8	5/7/2020	39	I41238177	V8	5/7/2020
14	I41238152	C9	5/7/2020	40	I41238178	V9	5/7/2020
15	I41238153	C10	5/7/2020	41	I41238179	V10	5/7/2020
16	I41238154	C11	5/7/2020	42	I41238180	V11	5/7/2020
17	I41238155	D1	5/7/2020	43	I41238181	V12	5/7/2020
18	I41238156	D2	5/7/2020	44	I41238182	V13	5/7/2020
19	I41238157	D3	5/7/2020	45	I41238183	V14	5/7/2020
20	I41238158	E1	5/7/2020				
21	I41238159	E2	5/7/2020				
22	I41238160	E3	5/7/2020				
23	I41238161	G1	5/7/2020				
24	I41238162	G2	5/7/2020				
25	I41238163	G3	5/7/2020				
26	I41238164	J5	5/7/2020				

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.





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Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

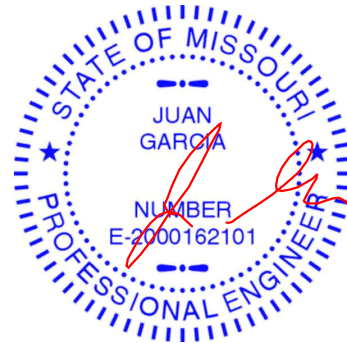
Floor Load: N/A psf

This package includes 45 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41238139	B1	5/7/2020	27	I41238165	J6	5/7/2020
2	I41238140	B2	5/7/2020	28	I41238166	J7	5/7/2020
3	I41238141	B3A	5/7/2020	29	I41238167	J8	5/7/2020
4	I41238142	B4A	5/7/2020	30	I41238168	J9	5/7/2020
5	I41238143	B6A	5/7/2020	31	I41238169	J10	5/7/2020
6	I41238144	C1A	5/7/2020	32	I41238170	V1	5/7/2020
7	I41238145	C2A	5/7/2020	33	I41238171	V2	5/7/2020
8	I41238146	C3A	5/7/2020	34	I41238172	V3	5/7/2020
9	I41238147	C4A	5/7/2020	35	I41238173	V4	5/7/2020
10	I41238148	C5A	5/7/2020	36	I41238174	V5	5/7/2020
11	I41238149	C6	5/7/2020	37	I41238175	V6	5/7/2020
12	I41238150	C7	5/7/2020	38	I41238176	V7	5/7/2020
13	I41238151	C8	5/7/2020	39	I41238177	V8	5/7/2020
14	I41238152	C9	5/7/2020	40	I41238178	V9	5/7/2020
15	I41238153	C10	5/7/2020	41	I41238179	V10	5/7/2020
16	I41238154	C11	5/7/2020	42	I41238180	V11	5/7/2020
17	I41238155	D1	5/7/2020	43	I41238181	V12	5/7/2020
18	I41238156	D2	5/7/2020	44	I41238182	V13	5/7/2020
19	I41238157	D3	5/7/2020	45	I41238183	V14	5/7/2020
20	I41238158	E1	5/7/2020				
21	I41238159	E2	5/7/2020				
22	I41238160	E3	5/7/2020				
23	I41238161	G1	5/7/2020				
24	I41238162	G2	5/7/2020				
25	I41238163	G3	5/7/2020				
26	I41238164	J5	5/7/2020				

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	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238139
400280	B1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:20 2020 Page 1
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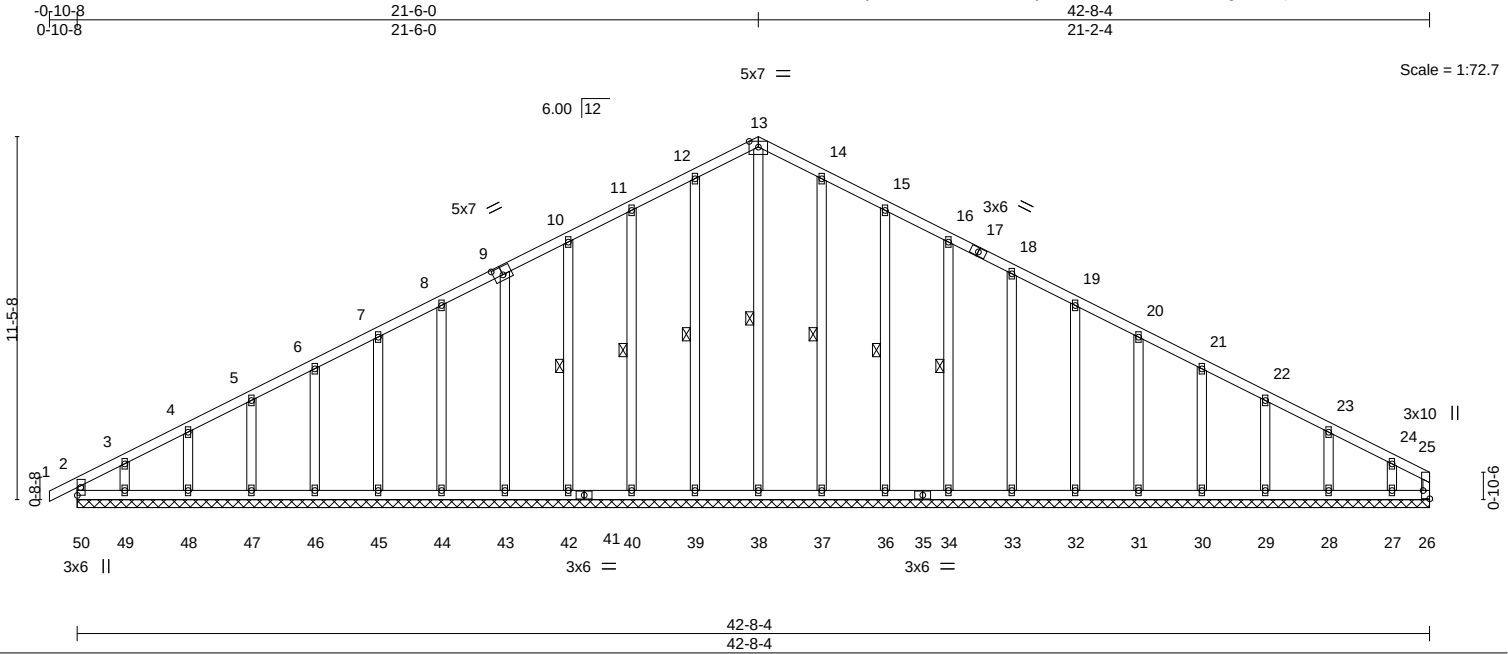
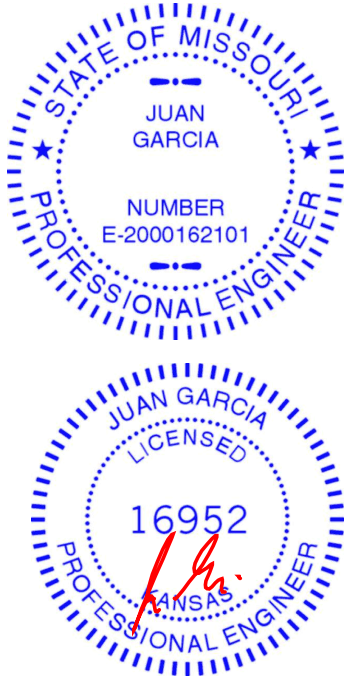


Plate Offsets (X,Y)--		[2:0-0-10,0-1-4], [9:0-3-8,0-3-0], [25:0-0-10,0-1-4], [25:Edge,0-2-8], [26:0-0-0,0-1-4], [50:0-0-0,0-1-4]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	in (loc) l/defl L/d	GRIP
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(LL) -0.00 1 n/r 120	MT20 197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Vert(CT) -0.00 1 n/r 120	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Horz(CT) 0.01 26 n/a n/a	
					Weight: 241 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	WEBS	1 Row at midpt 13-38, 12-39, 11-40, 10-42, 14-37, 15-36, 16-34
OTHERS	2x4 SPF No.2		
REACTIONS. All bearings 42-8-4.			
(lb) - Max Horz 50=191(LC 12)			
Max Uplift All uplift 100 lb or less at joint(s) 50, 26, 39, 40, 42, 43, 44, 45, 46, 47, 48, 37, 36, 34, 33, 32, 31, 30, 29, 28 except 49=-135(LC 8), 27=-144(LC 9)			
Max Grav All reactions 250 lb or less at joint(s) 50, 26, 38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, 37, 36, 34, 33, 32, 31, 30, 29, 28, 27			

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-39/266, 11-12=-37/294, 12-13=-40/314, 13-14=-41/306, 14-15=-37/265

- 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 50, 26, 39, 40, 42, 43, 44, 45, 46, 47, 48, 37, 36, 34, 33, 32, 31, 30, 29, 28 except (jt=lb) 49=135, 27=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.



May 7,2020

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238140
400280	B2	Roof Special	6	1		

Wheeler Lumber, Waverly, KS 66871

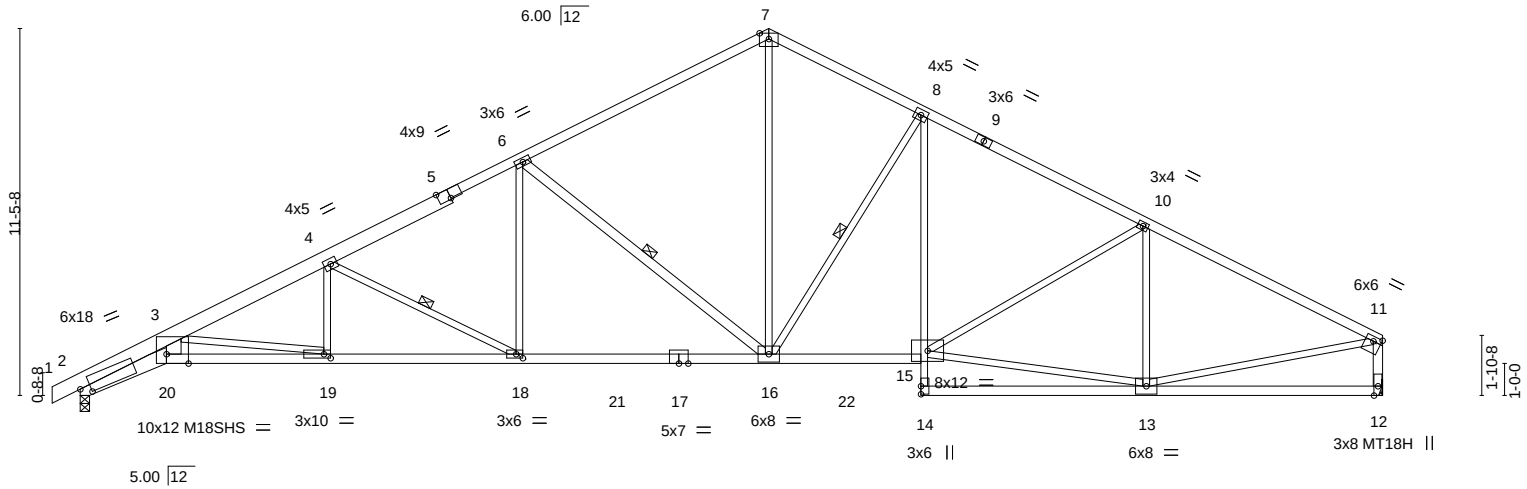
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:22 2020 Page 1

ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-nyceWxc9Vvyh7PEWnzGN6rrnw?acFssuf8lSBzIrt3

-0-10-8	2-8-5	7-8-9	13-8-9	21-6-0	26-3-0	33-3-7	40-8-0
0-10-8	2-8-5	5-0-4	6-0-0	7-9-7	4-9-0	7-0-7	7-4-9

5x7 =

Scale = 1:71.9



2-8-5	7-8-9	13-8-9	21-6-0	26-3-0	33-3-7	40-8-0
2-8-5	5-0-4	6-0-0	7-9-7	4-9-0	7-0-7	7-4-9

Plate Offsets (X,Y)-- [2:0-3-14,0-2-8], [5:0-4-8,Edge], [11:Edge,0-1-12], [18:0-2-8,0-1-8], [19:0-2-8,0-1-8], [20:0-8-4,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 0.94	Vert(LL)	-0.39 16-18	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.69 16-18	>703	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.38 12	n/a	n/a	M18SHS	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.25 19-20	>999	240	Weight: 185 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SPF 1650F 1.4E
BOT CHORD 2x4 SPF No.2 *Except*
2-20: 2x6 SPF 1650F 1.4E, 17-20: 2x4 SPF 2100F 1.8E
8-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-20: 2x6 SPF No.2, 6-16,11-12: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-18, 6-16, 8-16

REACTIONS.

(size) 2=0-3-8, 12=Mechanical
Max Horz 2=207(LC 12)
Max Uplift 2=-257(LC 8), 12=-214(LC 9)
Max Grav 2=1969(LC 2), 12=1906(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7459/1118, 3-4=-4238/548, 4-6=-3272/428, 6-7=-2277/318, 7-8=-2234/357,
8-10=-2731/334, 10-11=-2595/296, 11-12=-1788/250
BOT CHORD 2-20=-1167/6621, 19-20=-969/5370, 18-19=-576/3821, 16-18=-340/2840,
15-16=-111/2360, 8-15=-55/546
WEBS 3-20=-387/2611, 3-19=-1580/398, 4-19=-1/450, 4-18=-1109/267, 6-18=-34/798,
6-16=-1153/326, 7-16=-167/1594, 8-16=-800/259, 13-15=-210/2158, 10-13=-645/171,
11-13=-159/2158

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 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 12=214.
- 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 7,2020

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 86 RR	I41238141
400280	B3A	Roof Special	2	1		

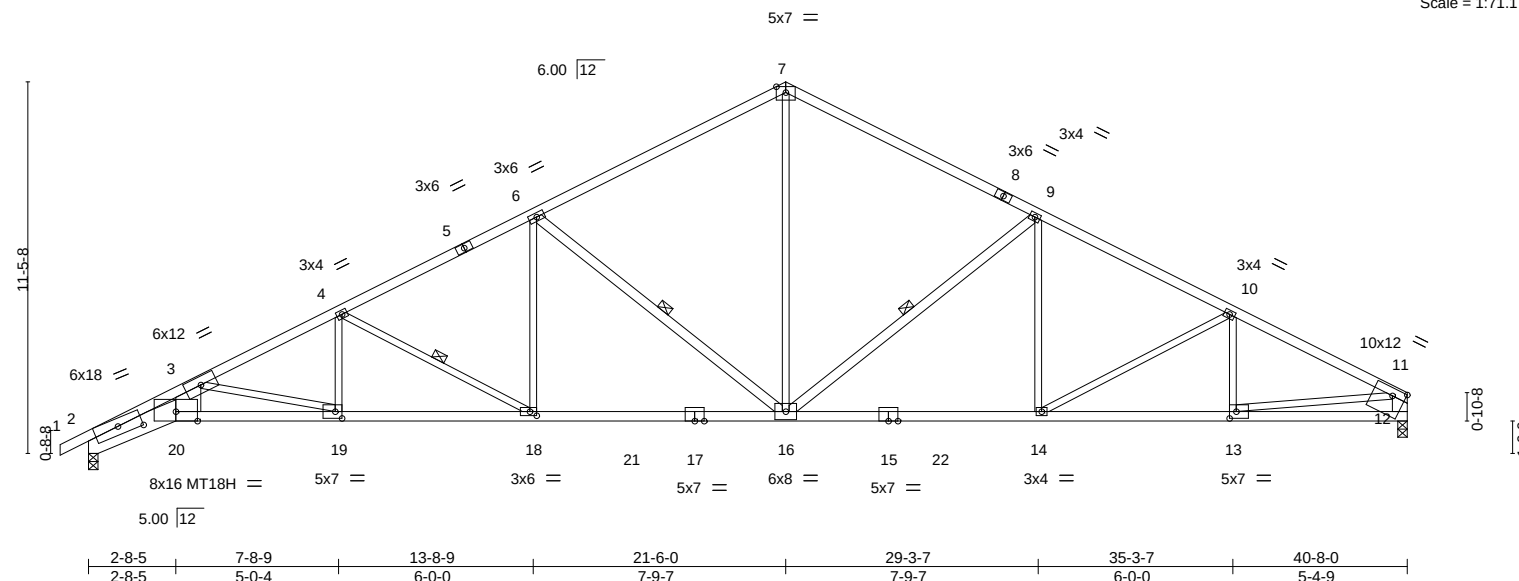
Wheeler Lumber, Waverly, KS 66871

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ID: bDljNJA6?5tiTk6Ei3KUKZyAkTB-F9A1kHcnGD4XlZoiLgoce2O2TKMdLhC07JtJ7ezlrt2

-0-10-8	2-8-5	7-8-9	13-8-9	21-6-0	29-3-7	35-3-7	40-3-11	40-8-0
0-10-8	2-8-5	5-0-4	6-0-0	7-9-7	7-9-7	6-0-0	5-0-4	0-4-5

Scale = 1:71.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.37 16-18 >999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.64 16-18 >755	240	MT18H	197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.32 12 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24 19-20 >999	240			

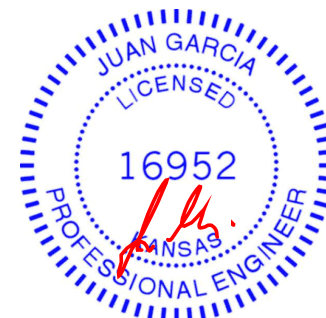
LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-20: 2x8 SP DSS
WEBS 2x3 SPF No.2 *Except*
3-20: 2x10 SP DSS, 6-16,9-16: 2x4 SPF No.2, 11-12: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-8-3 oc bracing: 2-20
7-8-15 oc bracing: 19-20.
WEBS 1 Row at midpt 4-18, 6-16, 9-16

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=223(LC 8)
Max Uplift 2=257(LC 8), 12=214(LC 9)
Max Grav 2=1966(LC 2), 12=1911(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7981/1231, 3-4=-4143/545, 4-6=-3238/427, 6-7=-2276/317, 7-9=-2277/348, 9-10=-2921/345, 10-11=-3070/340, 11-12=-1803/239
BOT CHORD 2-20=-1299/7160, 19-20=-1030/5509, 18-19=-579/3695, 16-18=-362/2834, 14-16=-145/2556, 13-14=-251/2683, 12-13=-71/383
WEBS 3-20=-450/2889, 3-19=-1868/460, 4-19=-20/531, 4-18=-980/246, 6-18=-31/739, 6-16=-1146/329, 7-16=-134/1517, 9-16=-821/273, 9-14=0/383, 11-13=-182/2320

- 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 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) 2 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) 2=257, 12=214.
 - 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 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238142
400280	B4A	Roof Special	2	1		

Wheeler Lumber, Waverly, KS 66871

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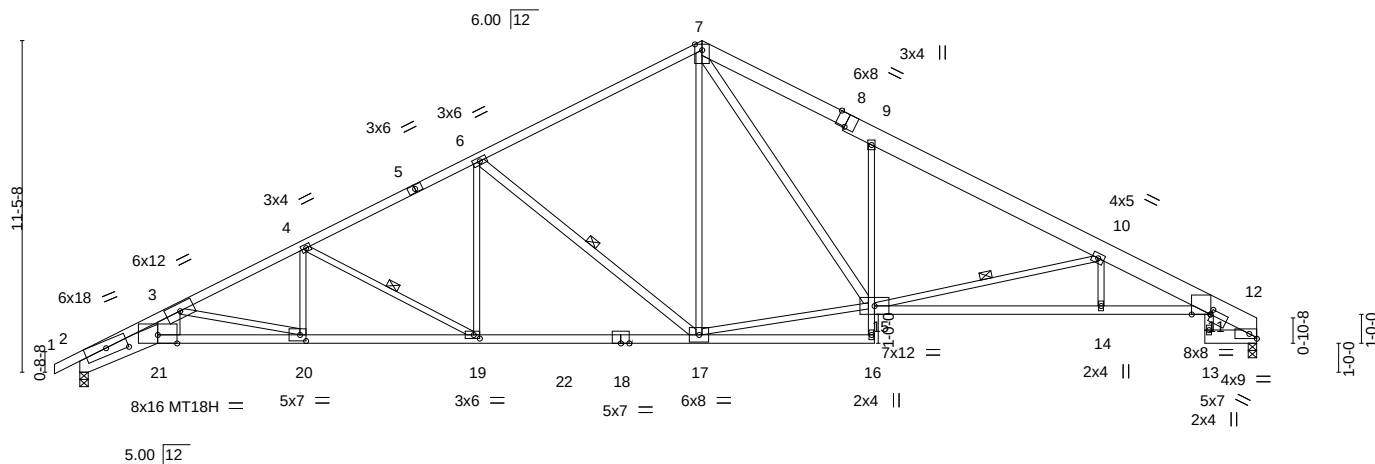
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Job Reference (optional)

0-10-8	2-8-5	7-8-9	13-8-9	21-6-0	27-5-8	35-3-8	38-10-8	40-8-0
0-10-8	2-8-5	5-0-4	6-0-0	7-9-7	5-11-8	7-10-0	3-7-1	1-9-8

6x8 ||

Scale = 1:79.6



2-8-5	7-8-9	13-8-9	21-6-0	27-5-8	35-3-8	38-10-8	40-8-0
2-8-5	5-0-4	6-0-0	7-9-7	5-11-8	7-10-0	3-7-1	1-9-8

Plate Offsets (X,Y)-- [2:0-9-0,0-3-2], [8:0-4-0,Edge], [11:0-7-13,0-0-0], [11:0-0-3,0-2-4], [19:0-2-8,0-1-8], [20:0-2-8,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.81	Vert(LL)	-0.41 17-19	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.73 17-19	>668	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.50 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.25 19	>999	240		
								Weight: 211 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
7-8: 2x6 SPF No.2, 8-12: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-21: 2x8 SP DSS, 9-16: 2x3 SPF No.2, 12-13: 2x6 SPF No.2
16-18: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
11-13,6-17,7-15: 2x4 SPF No.2, 3-21: 2x10 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-19, 6-17, 10-15

REACTIONS.

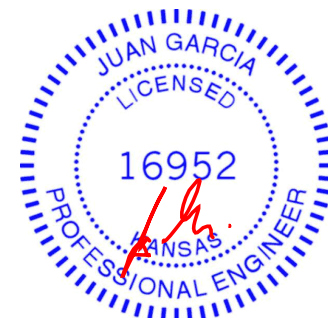
(size) 2=0-3-8, 12=0-3-8
Max Horz 2=221(LC 8)
Max Uplift 2=-257(LC 8), 12=-212(LC 9)
Max Grav 2=1955(LC 2), 12=1889(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7936/1230, 3-4=-4114/546, 4-6=-3215/427, 6-7=-2259/321, 7-9=-3203/511,
9-10=-3212/340, 10-11=-4521/480, 11-12=-1204/154
BOT CHORD 2-21=-1297/7120, 20-21=-1029/5478, 19-20=-579/3669, 17-19=-360/2814, 9-15=-562/302,
14-15=-375/4241, 11-14=-378/4241
WEBS 3-21=-449/2875, 3-20=-1862/458, 4-20=-20/528, 4-19=-974/248, 6-19=-31/744,
6-17=-1138/322, 7-17=-99/723, 15-17=-91/1921, 7-15=-342/1600, 10-15=-1487/302

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 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) 2 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) 2=257, 12=212.
- 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 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR
400280	C1A	Roof Special Girder	1	1	I41238144
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:30 2020 Page 2
ID:bDljNJA6?5tiTk6Ei3KUKZyAkTB-YV5gCgiAdNyY5dr2FeQFRXAGo9mFUup2ku4AjkzIrsx

NOTES-
12) 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, 4-9=-70, 9-11=-70, 19-22=-20, 12-18=-20
Concentrated Loads (lb)
Vert: 21=-0(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238145
400280	C2A	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:32 2020 Page 1

ID: bDlJNJA675tiTk6EI3KUKZyAkTB-UtDQdLjQ9_CGKx_RN3SjWyFZAyPwnJLCCZHocIrsV

Job Reference (optional)

Scale = 1:80.6

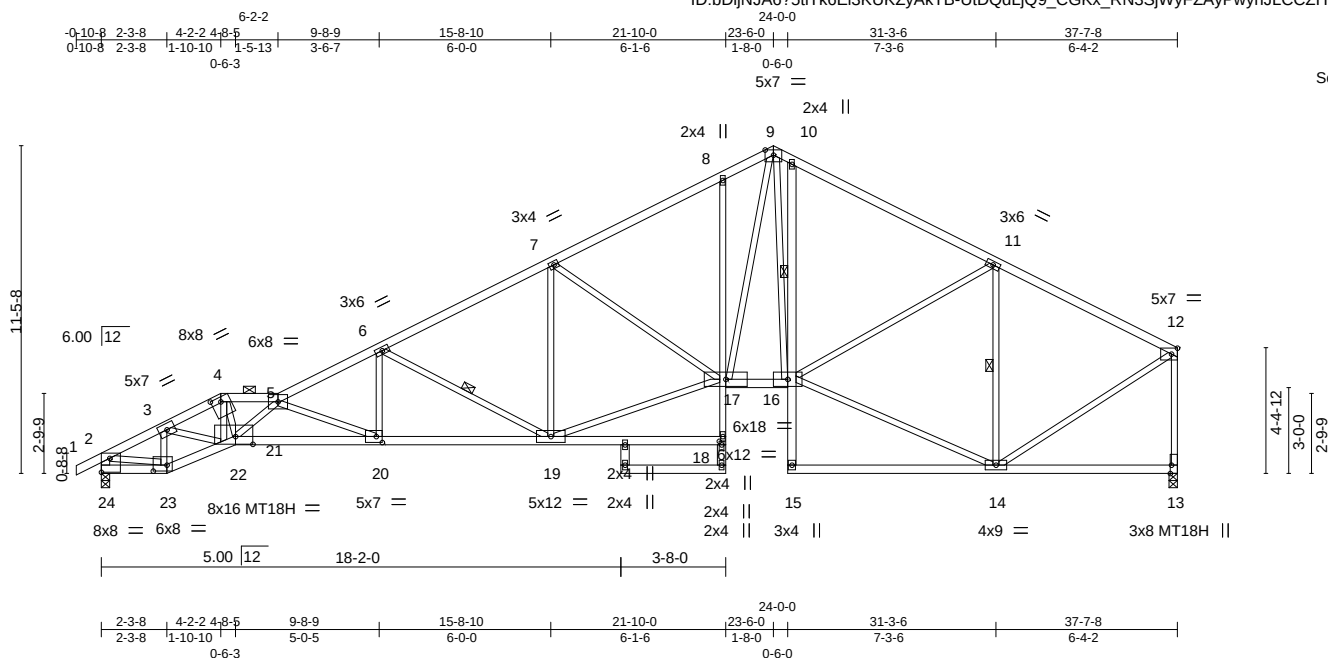


Plate Offsets (X,Y)--		[4:0-4-0,0-1-15], [13:0-3-8,Edge], [18:0-1-8,0-1-0], [20:0-2-8,0-2-8], [21:0-7-4,0-3-4], [23:0-5-12,0-2-8], [24:Edge,0-5-13], [24:0-1-12,0-0-0]															
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		L/defl	L/d	PLATES		GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.94	Vert(LL)	-0.32	19-20	>999	360		MT20	197/144		
TCDL	10.0	Lumber DOL		1.15		BC	0.99	Vert(CT)	-0.59	19-20	>764	240		MT18H	197/144		
BCLL	0.0 *	Rep Stress Incr		YES		WB	0.89	Horz(CT)	0.30	13	n/a	n/a					
BCDL	10.0	Code IRC2018/TPI2014				Matrix-S		Wind(LL)	0.25	19-20	>999	240		Weight: 192 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 18-21: 2x4 SPF 2100F 1.8E, 8-18: 2x3 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-24,25-27,18-26: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-2 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-6 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
 1 Row at midpt 10-16
 WEBS 1 Row at midpt 11-14, 6-19

REACTIONS.

(size) 24=0-3-8, 13=0-3-8
 Max Horz 24=271(LC 5)
 Max Uplift 24=-261(LC 8), 13=-169(LC 9)
 Max Grav 24=1754(LC 1), 13=1681(LC 1)

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

TOP CHORD 2-3=-2455/352, 3-4=-4103/676, 4-5=-4405/733, 5-6=-4176/627, 6-7=-2867/432,
 7-8=-2472/383, 8-9=-2391/468, 9-10=-2143/407, 10-11=-2207/355, 11-12=-1467/204,
 2-24=-1688/270, 12-13=-1629/194
 BOT CHORD 23-24=-225/377, 22-23=-502/2243, 21-22=-747/3756, 20-21=-1012/5577,
 19-20=-635/3722, 8-17=-276/172, 16-17=-97/1815, 10-16=-382/246
 WEBS 3-23=-1310/284, 3-22=-284/1686, 5-20=-2014/409, 6-20=-92/904, 4-22=-654/109,
 5-21=-1661/241, 9-17=-369/1416, 9-16=-291/681, 14-16=-148/1343, 11-16=-59/708,
 11-14=-1194/220, 2-23=-258/1828, 12-14=-115/1491, 4-21=-370/2434, 17-19=-368/2576,
 7-17=-528/213, 6-19=-1406/324

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.
- 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) except (jt=lb) 24=261, 13=169.
- 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 7,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238146
400280	C3A	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:33 2020 Page 1

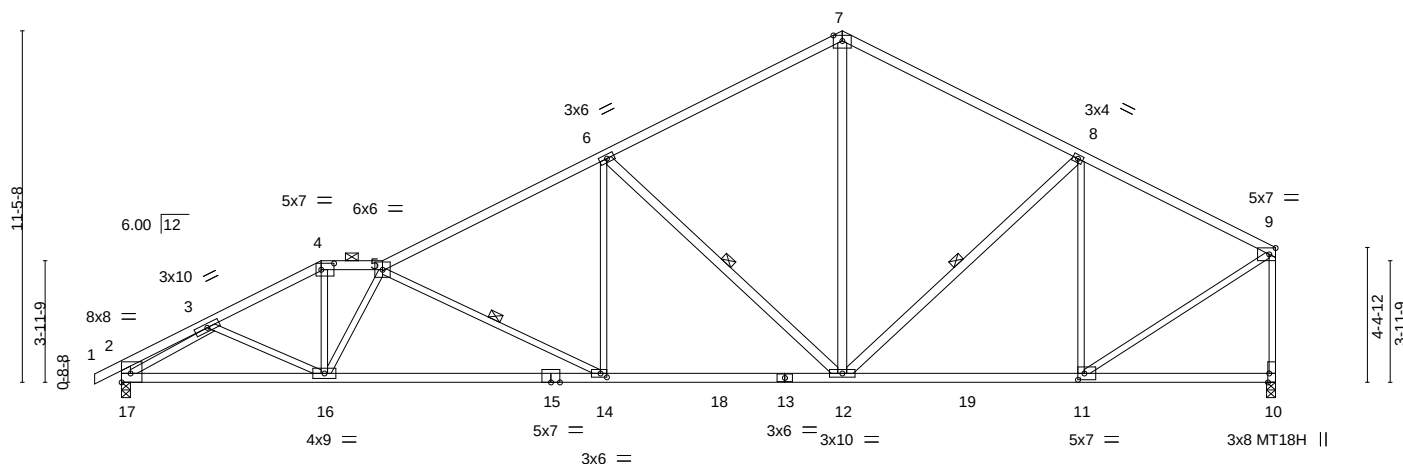
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Job Reference (optional)

0-10-8	2-11-0	6-6-2	8-6-2	15-8-10	23-6-0	31-3-7	37-7-8
0-10-8	2-11-0	3-7-2	2-0-0	7-2-8	7-9-6	7-9-7	6-4-1

5x7 =

Scale = 1:75.1



6-6-2	8-6-2	16-0-1	23-6-0	31-3-7	37-7-8
6-6-2	2-0-0	7-5-15	7-5-15	7-9-7	6-4-1

Plate Offsets (X,Y)-- [2:Edge,0-3-8], [2:0-1-12,0-0-14], [4:0-5-0,0-2-8], [10:0-3-8,Edge], [11:0-2-8,0-2-8], [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 0.94	Vert(LL)	-0.24 14-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.46 14-16	>974	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.10 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13 14-16	>999	240		
								Weight: 167 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF 2100F 1.8E *Except*
 10-13: 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 6-12,7-12,8-12,2-17: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-11 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-14, 6-12, 8-12

REACTIONS.

(size) 10=0-3-8, 17=0-3-8
 Max Horz 17=271(LC 5)
 Max Uplift 10=-169(LC 9), 17=-261(LC 8)
 Max Grav 10=1798(LC 2), 17=1830(LC 2)

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

TOP CHORD 2-3=-613/79, 3-4=-2960/388, 4-5=-2649/378, 5-6=-2680/371, 6-7=-1729/294,
 7-8=-1727/323, 8-9=-1571/205, 2-17=-451/94, 9-10=-1714/195
 BOT CHORD 16-17=-514/2364, 14-16=-531/3158, 12-14=-312/2330, 11-12=-136/1365
 WEBS 3-16=0/288, 4-16=-109/1145, 5-16=-1106/200, 5-14=-928/245, 6-14=-8/771,
 6-12=-1210/331, 7-12=-119/1042, 8-12=-103/263, 8-11=-681/165, 3-17=-2270/347,
 9-11=-124/1620

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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=169, 17=261.
- 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 7, 2020

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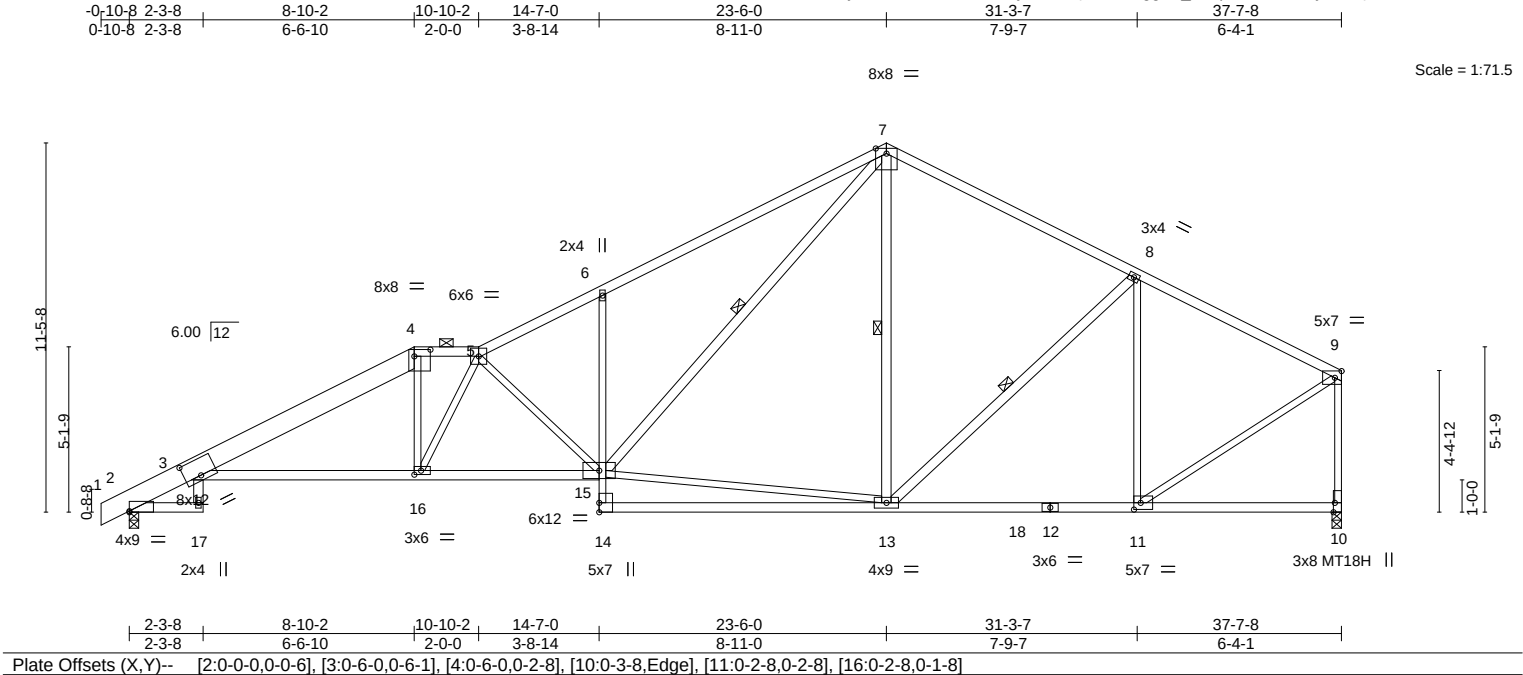


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238147
400280	C4A	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:34 2020 Page 1
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-QGKB21lggbS_aF8pUUUBbNLujm9wQhidfW2OtVzIrst



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 1.00	Vert(LL) -0.35 13-14 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.67 13-14 >665 240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.89	Horz(CT) 0.34 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.24 3-16 >999 240	Weight: 191 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-8-2 max.): 4-5.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 7-13, 8-13, 7-15
3-17,7-13,8-13,7-15: 2x4 SPF No.2	

REACTIONS.	(size) 2=0-3-8, 10=0-3-8
	Max Horz 2=266(LC 5)
	Max Uplift 2=-257(LC 8), 10=-168(LC 9)
	Max Grav 2=1812(LC 2), 10=1772(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1044/52, 3-4=-3531/479, 4-5=-3255/518, 5-6=-3075/471, 6-7=-3196/672, 7-8=-1698/321, 8-9=-1543/206, 9-10=-1686/196
BOT CHORD	3-16=-532/3225, 15-16=-546/3460, 6-15=-611/335, 11-13=-137/1339
WEBS	5-15=-998/188, 7-13=-114/258, 8-13=-91/276, 8-11=-688/160, 9-11=-125/1589, 4-16=0/697, 5-16=-499/74, 7-15=-531/2024, 13-15=-89/1249

- 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.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 10=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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 7,2020

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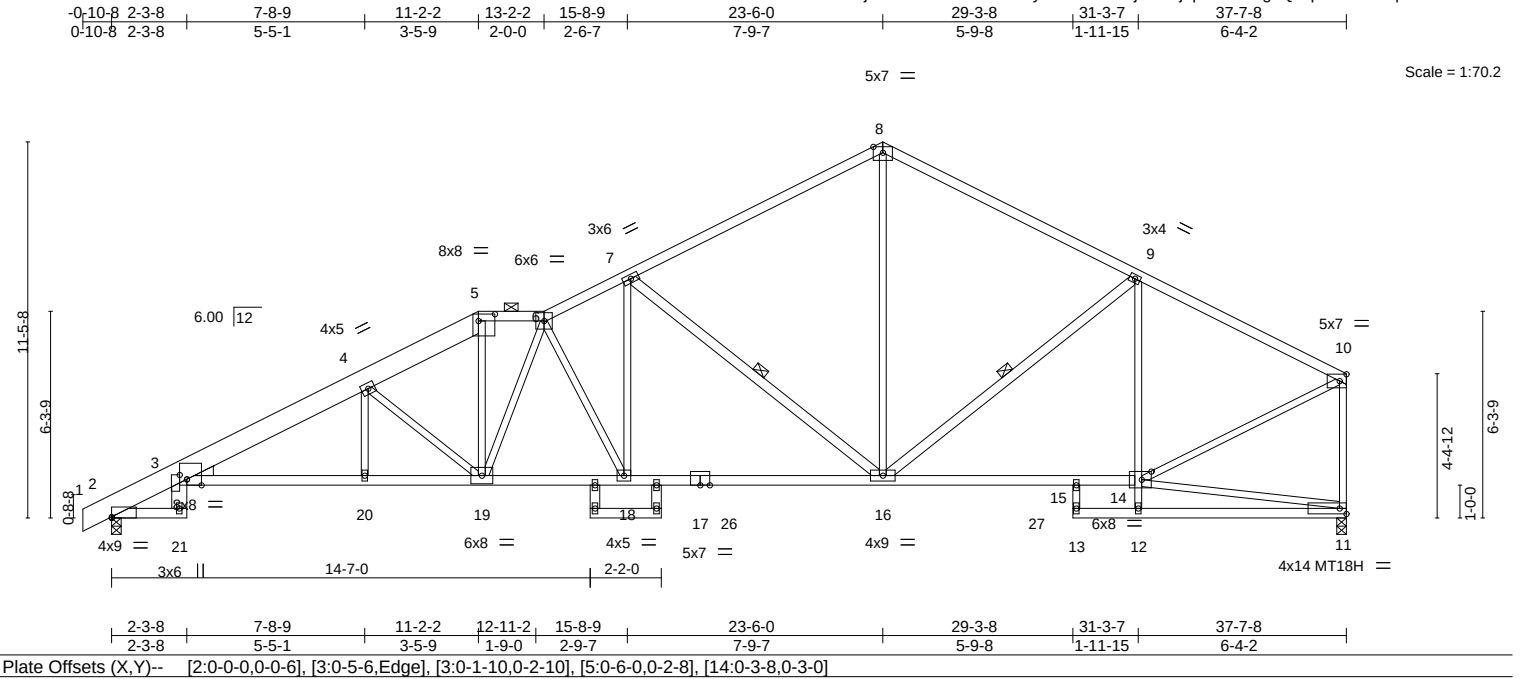
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238148
400280	C5A	Roof Special	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:36 2020 Page 1

ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-NfSxTjnxCDJhpYICcvXfgoQEascud6w6qXVxNzlrSr



Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238149
400280	C6	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:37 2020 Page 1

ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-rr0Jg3nZzWYRitOAc2uD?zOPz6ud5O4LUG2TqzIrsq

Job Reference (optional)

0-10-8 2-3-8 7-8-10 10-7-2 12-7-2 15-8-10 23-6-0 29-3-8 31-3-7 37-7-8
0-10-8 2-3-8 5-5-2 2-10-8 2-0-0 3-1-7 7-9-6 5-9-8 1-11-15 6-4-2

5x7 =

Scale = 1:69.6

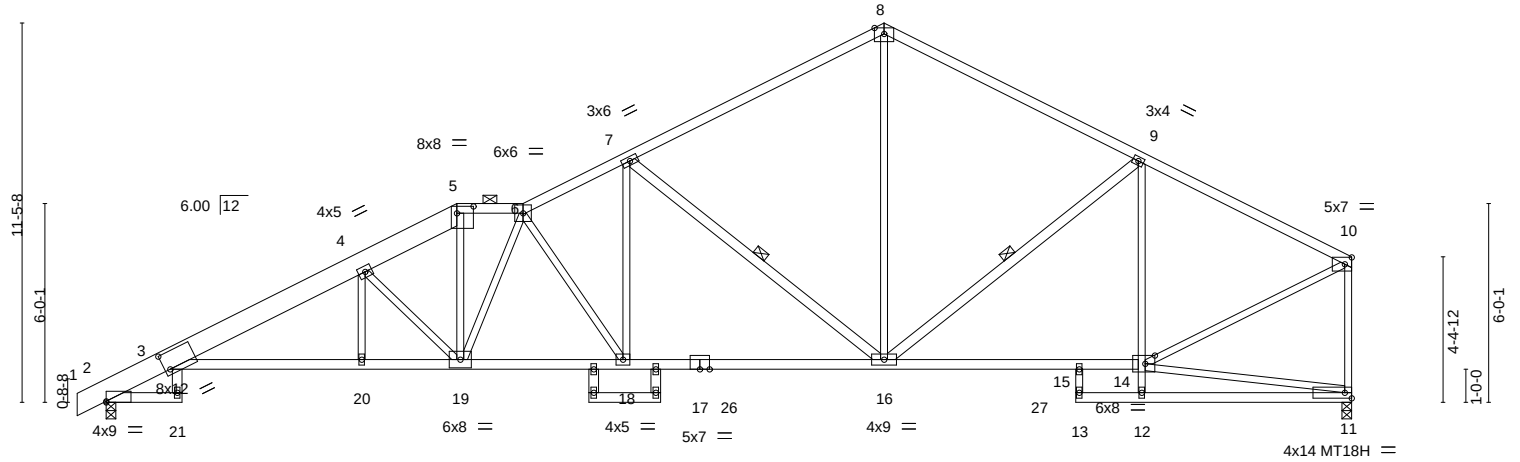


Plate Offsets (X,Y)--	[2:0-0-0,0-0-6], [3:0-1-13,0-6-1], [5:0-6-0,0-2-8], [14:0-3-8,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.97	Vert(LL)	-0.31 16-18	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.55 16-18	>812	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.33 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.21 18-19	>999	240		
								Weight: 197 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-17: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
3-21,7-16,9-16,22-24,23-25: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-3 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 1 Row at midpt 7-16, 9-16

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=266(LC 5)
Max Uplift 2=-257(LC 8), 11=-168(LC 9)
Max Grav 2=1845(LC 2), 11=1830(LC 2)

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

TOP CHORD 2-3=-1062/51, 3-4=-3990/573, 4-5=-3426/532, 5-6=-2955/476, 6-7=-2995/438,
7-8=-1901/299, 8-9=-1903/330, 9-10=-1858/217, 10-11=-1743/201
BOT CHORD 3-20=-651/3725, 19-20=-650/3725, 18-19=-460/3147, 16-18=-358/2688, 15-16=-157/1615,
14-15=-157/1615
WEBS 4-19=-1157/286, 5-19=-188/1401, 6-19=-536/58, 6-18=-829/184, 7-18=-68/972,
7-16=-1389/361, 8-16=-118/1187, 12-14=0/337, 9-14=-578/152, 10-14=-142/1792

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.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238150
400280	C7	Roof Special	1	1		
Job Reference (optional)						

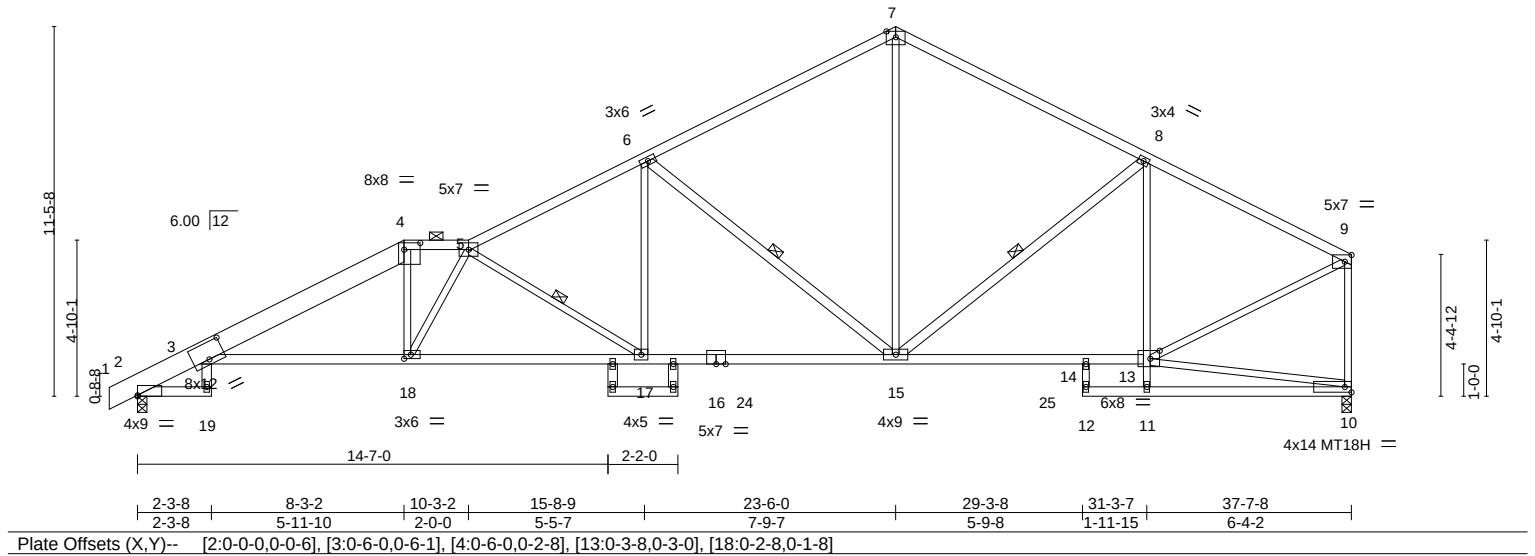
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:38 2020 Page 1
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0-10-8 2-3-8	8-3-2	10-3-2	15-8-9	23-6-0	29-3-8	31-3-7	37-7-8
0-10-8 2-3-8	5-11-10	2-0-0	5-5-7	7-9-7	5-9-8	1-11-15	6-4-2

5x7 =

Scale = 1:71.4



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 0.97	Vert(LL)	-0.33 15-17	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.57 15-17	>781	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.36 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.22 3-18	>999	240		
								Weight: 186 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
3-16: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
3-19,6-15,8-15,20-22,21-23: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-8-5 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-19
2-2-0 oc bracing: 15-17.
WEBS 1 Row at midpt 5-17, 6-15, 8-15

REACTIONS.

(size) 2=0-3-8, 10=0-3-8
Max Horz 2=266(LC 5)
Max Uplift 2=-257(LC 8), 10=-168(LC 9)
Max Grav 2=1845(LC 2), 10=1830(LC 2)

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

TOP CHORD 2-3=-1062/53, 3-4=-3693/488, 4-5=-3424/527, 5-6=-3041/433, 6-7=-1902/299,
7-8=-1902/331, 8-9=-1858/217, 9-10=-1743/201
BOT CHORD 3-18=-553/3391, 17-18=-590/3726, 15-17=-358/2693, 14-15=-157/1615, 13-14=-157/1615
WEBS 4-18=0/807, 5-18=-662/88, 5-17=-1231/276, 6-17=-56/965, 6-15=-1396/361,
7-15=-120/1190, 11-13=0/338, 8-13=-578/152, 9-13=-142/1792

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.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 10=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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238151
400280	C8	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:39 2020 Page 1

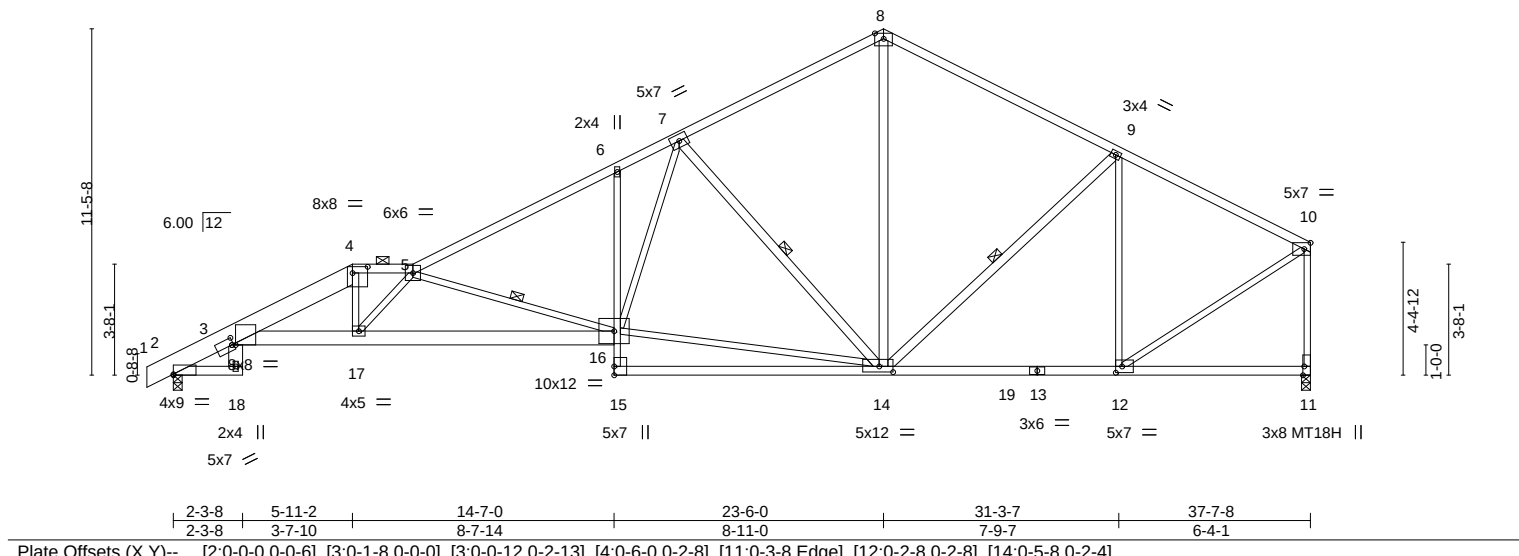
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Job Reference (optional)

0-10-8 2-3-8	5-11-2	7-11-2	14-7-0	16-8-14	23-6-0	31-3-7	37-7-8
0-10-8 2-3-8	3-7-10	2-0-0	6-7-14	2-1-14	6-9-3	7-9-7	6-4-1

5x7 =

Scale = 1:76.2



Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238152
400280	C9	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:40 2020 Page 1

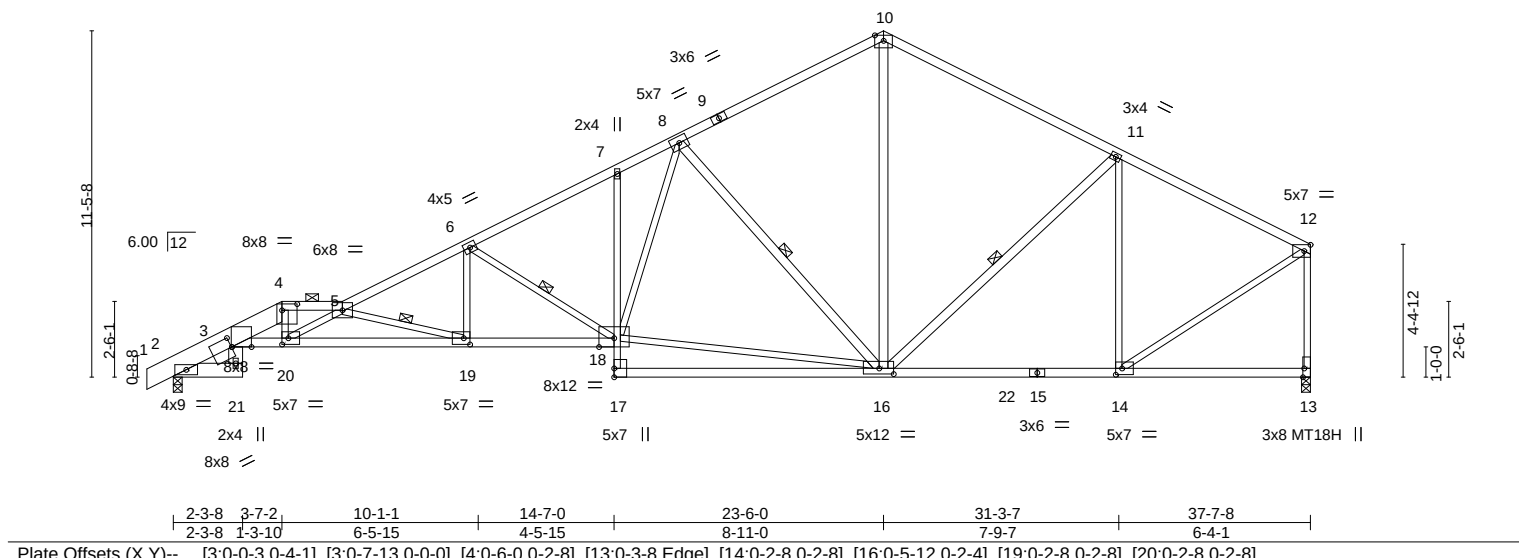
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Job Reference (optional)

0-10-8 2-3-8 3-7-2 5-7-2 9-8-9 14-7-0 16-8-14 23-6-0 31-3-7 37-7-8
0-10-8 2-3-8 1-3-10 2-0-0 4-1-6 4-10-7 2-1-14 6-9-3 7-9-7 6-4-1

5x7 =

Scale = 1:76.2



Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238153
400280	C10	Roof Special Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:27 2020 Page 1
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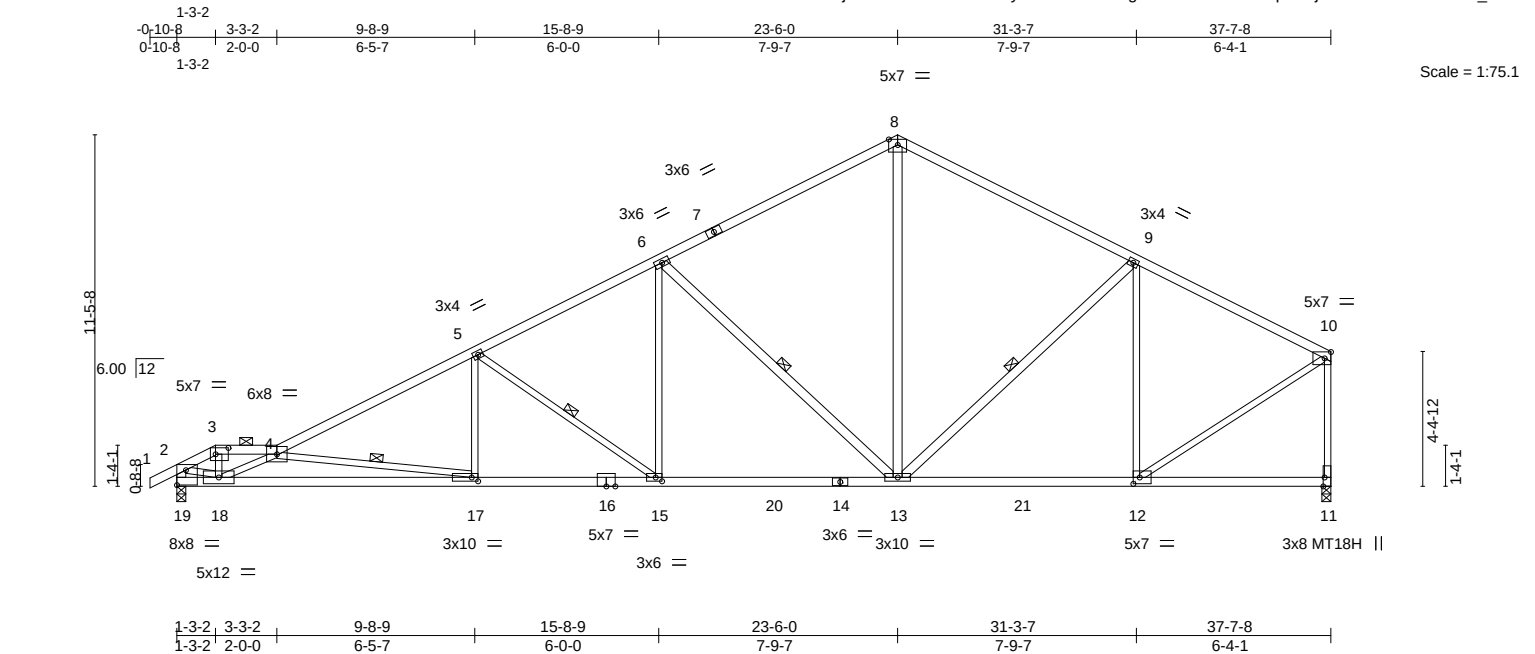


Plate Offsets (X,Y)--		[3:0-5-0,0-2-8], [11:0-3-8,Edge], [12:0-2-8,0-2-8], [15:0-2-8,0-1-8], [17:0-2-8,0-1-8], [19:0-1-12,0-0-0], [19:Edge,0-5-13]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.99	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.82	Vert(LL) -0.27 17-18 >999 360
BCLL 0.0 *	Rep Stress Incr NO	WB 0.89	Vert(CT) -0.49 17-18 >924 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.11 11 n/a n/a
			Wind(LL) 0.16 17 >999 240
			PLATES
			MT20 197/144
			MT18H 197/144
			Weight: 166 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-8,4-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
6-13,8-13,9-13,2-19: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-1-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-4-14 oc bracing: 17-18.
WEBS 1 Row at midpt 4-17, 5-15, 6-13, 9-13

REACTIONS.

(size) 19=0-3-8, 11=0-3-8
Max Horz 19=271(LC 7)
Max Uplift 19=-287(LC 8), 11=-169(LC 9)
Max Grav 19=1808(LC 2), 11=1797(LC 2)

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

TOP CHORD 2-3=-2214/229, 3-4=-2034/217, 4-5=-3470/453, 5-6=-2650/389, 6-8=-1727/292, 8-9=-1729/324, 9-10=-1568/206, 2-19=-1797/205, 10-11=-1712/195
BOT CHORD 18-19=-252/314, 17-18=-871/4708, 15-17=-497/3059, 13-15=-313/2306, 12-13=-137/1362
WEBS 3-18=-120/991, 4-18=-3051/562, 4-17=-1670/378, 5-17=-0/528, 5-15=-925/227, 6-15=-52/806, 6-13=-1172/330, 8-13=-113/1031, 9-13=-98/267, 9-12=-684/164, 2-18=-153/1835, 10-12=-124/1617

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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=287, 11=169.
- 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) 127 lb down and 81 lb up at 1-3-2 on top chord, and 10 lb down and 13 lb up at 1-3-2 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

Continued on page 2



May 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR
400280	C10	Roof Special Girder	1	1	I41238153
Job Reference (optional)					

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, 4-8=-70, 8-10=-70, 11-19=-20
Concentrated Loads (lb)
Vert: 3=21(B) 18=3(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238154
400280	C11	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:28 2020 Page 1
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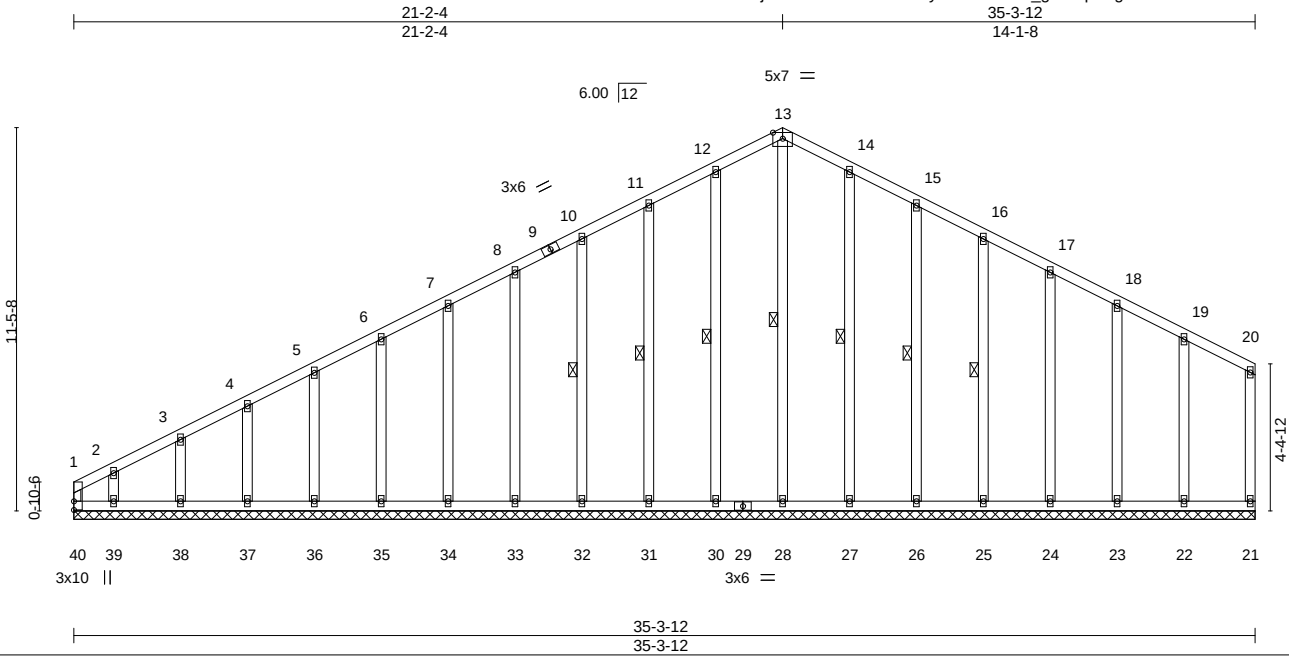


Plate Offsets (X,Y)-- [1:0-0-10,0-1-4], [40:0-0-0,0-1-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	21	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 215 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
20-21: 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.
WEBS 1 Row at midpt 13-28, 12-30, 11-31, 10-32, 14-27, 15-26, 16-25

REACTIONS.

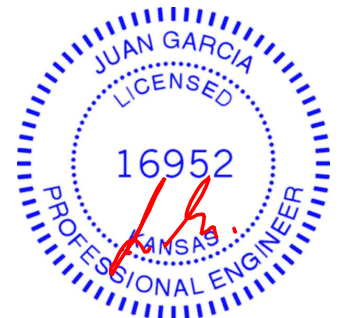
All bearings 35-3-12.
(lb) - Max Horz 40=261(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 21, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 27, 26, 25, 24, 23, 22 except 40=-117(LC 6), 39=-207(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 21, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 27, 26, 25, 24, 23, 22 except 40=250(LC 8)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-278/141, 11-12=-92/252, 12-13=-79/273, 13-14=-74/265

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 on 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) 21, 28, 30, 31, 32, 33, 34, 35, 36, 37, 38, 27, 26, 25, 24, 23, 22 except (jt=lb) 40=-117, 39=207.
- 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 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238155
400280	D1	GABLE	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:41 2020 Page 1

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0-10-8 11-3-3 12-8-0
0-10-8 11-3-3 1-4-13

4x5 =

Scale = 1:44.2

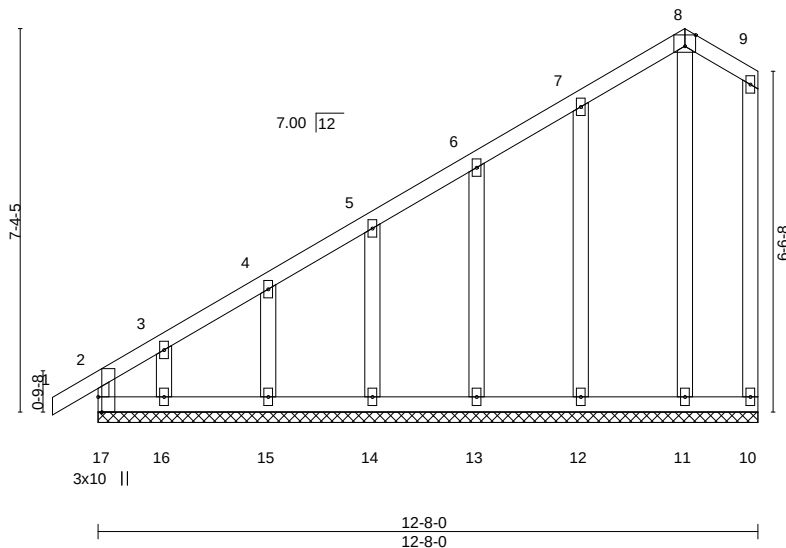


Plate Offsets (X,Y)-- [2:0-0-12,0-1-4], [8:0-2-7,Edge], [17:0-0-0,0-1-4], [17:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00 1 n/r 120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00 1 n/r 120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00 10 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R				Weight: 66 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
9-10: 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.

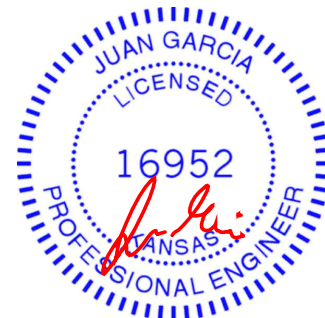
All bearings 12-8-0.
(lb) - Max Horz 17=280(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 12, 13, 14, 15 except 17=-106(LC 4), 16=-159(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 17, 10, 11, 12, 13, 14, 15, 16

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-262/174

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11, 12, 13, 14, 15 except (jt=lb) 17=106, 16=159.
- 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 7, 2020

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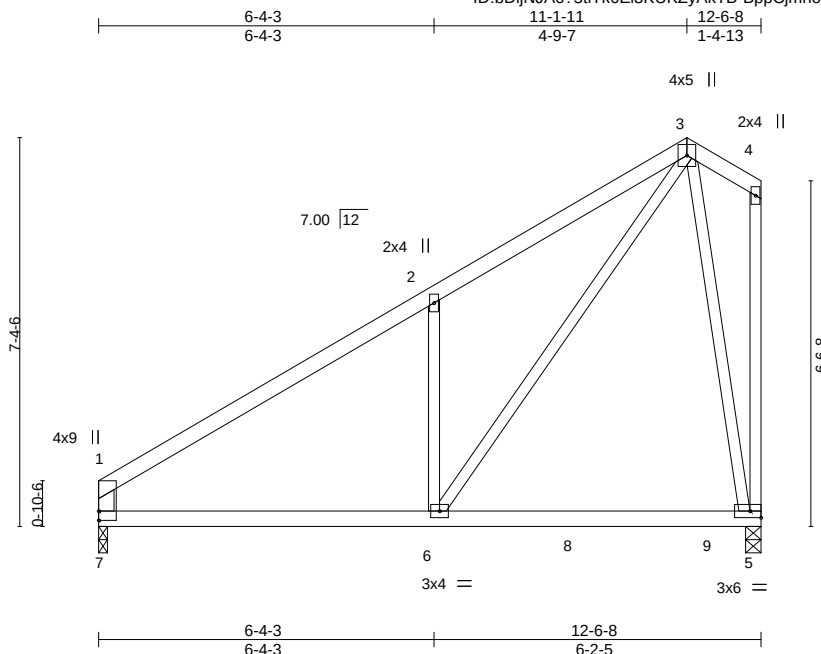


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238156
400280	D2	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:42 2020 Page 1
ID:bDljNJA675tiTk6EI3KUKZyAkTB-BppCjmrio3TrXTIMyAd3w3gOB_zHIKJpVm_p91zlrsl



Scale = 1:43.6

Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [7:0-0-0,0-1-12]									
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	0.40	Vert(LL)	-0.08 5-6 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.13 5-6 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.01 5 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.03 5-6 >999 240	Weight: 52 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-7: 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 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-2-0, 5=0-3-8
Max Horz 7=269(LC 5)
Max Uplift 7=-62(LC 8), 5=-122(LC 8)
Max Grav 7=604(LC 15), 5=683(LC 15)

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

TOP CHORD 1-2=-693/71, 2-3=-698/241, 1-7=-496/102
BOT CHORD 6-7=-117/597
WEBS 2-6=-434/281, 3-6=-255/820, 3-5=-595/141

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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=122.
- 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 7, 2020

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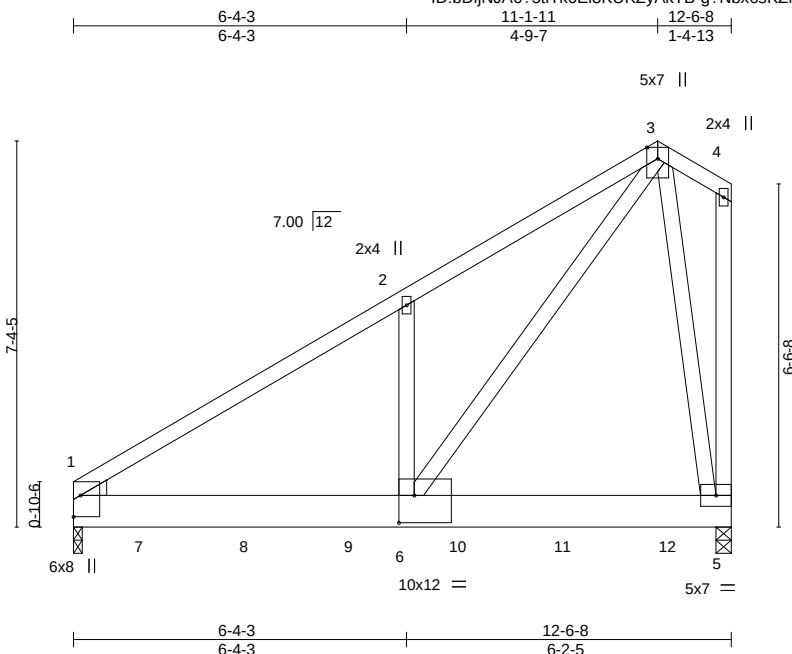


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	
400280	D3	COMMON GIRDER	1	3		I41238157

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:43 2020 Page 1
ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-g?Nbx6sKZMbi9dKYWt9ISGDWnOlc1ovyjQjMhTzlrsk



Scale = 1:43.9

Plate Offsets (X,Y)--		[1:Edge,0-1-9], [1:0-0-15,0-5-9], [1:0-0-7,0-0-13], [6:0-3-8,0-6-4]							
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)	-0.07 1-6 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.13 1-6 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.01 5 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05 1-6 >999 240	Weight: 250 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 1=0-2-0 (req. 0-3-3)
Max Horz 1=264(LC 28)
Max Uplift 5=816(LC 8), 1=728(LC 8)
Max Grav 5=6319(LC 2), 1=6063(LC 2)

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

TOP CHORD 1-2=-6815/806, 2-3=-6617/957
BOT CHORD 1-6=-728/5648, 5-6=-174/747
WEBS 2-6=-438/468, 3-6=-1201/8588, 3-5=-3922/544

NOTES-

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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
- 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.
- WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=816, 1=728.
- 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) 1872 lb down and 234 lb up at 1-4-8, 1872 lb down and 234 lb up at 3-4-8, 1872 lb down and 234 lb up at 5-4-8, 1872 lb down and 234 lb up at 7-4-8, and 1863 lb down and 234 lb up at 9-4-8, and 1863 lb down and 234 lb up at 11-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



May 7, 2020

LOAD CASE(S)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR
400280	D3	COMMON GIRDER	1	3	I41238157

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:43 2020 Page 2
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-g?Nbx6sKZMbi9dKYWt9ISGDWnOlc1ovyjQjMhTzlrsk

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-3=-70, 3-4=-70, 1-5=-20
- Concentrated Loads (lb)
- Vert: 7=-1796(B) 8=-1796(B) 9=-1796(B) 10=-1796(B) 11=-1796(B) 12=-1796(B)

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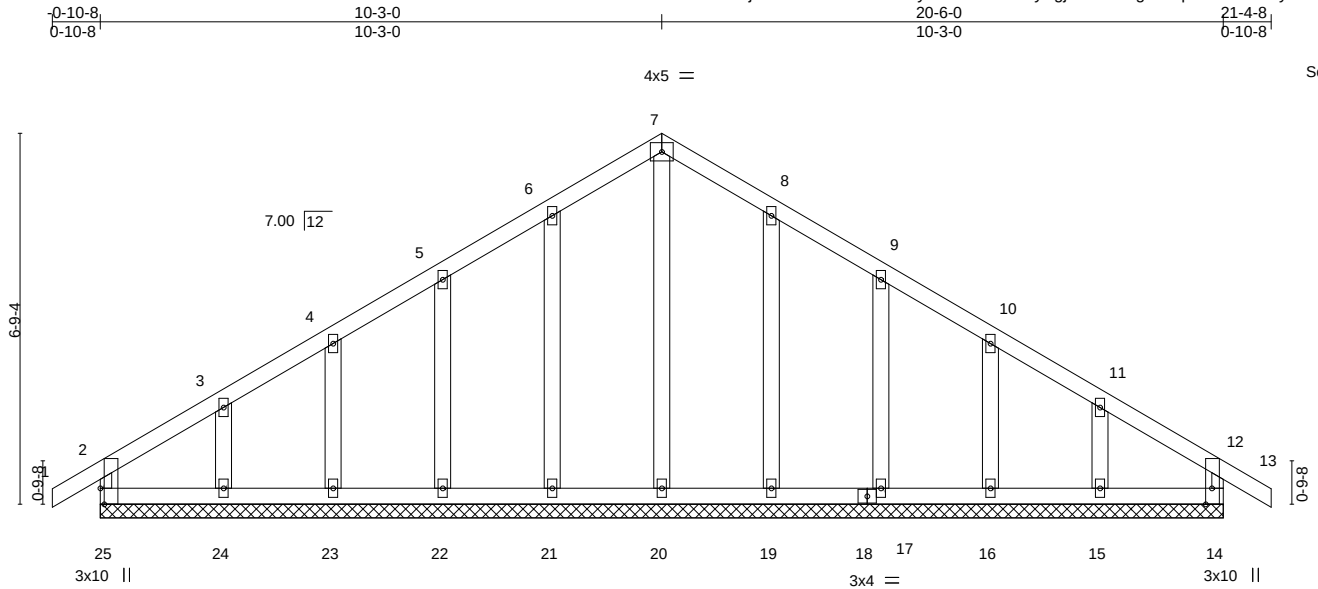


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238158
400280	E1	Common Supported Gable	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:44 2020 Page 1
ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-8Bxz8StyKgjZmnvk4agX?UlpYokVmON6y4TwDwzIrsj



Scale = 1:42.1

Plate Offsets (X,Y)--		[2:0-0-12,0-1-4], [12:0-0-12,0-1-4], [14:0-0-0,0-1-4], [14:0-3-8,Edge], [25:0-0-0,0-1-4], [25:0-3-8,Edge]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	13	n/r
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	13	n/r
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	14	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R				
						Weight: 91 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 10-0-0 oc bracing.

REACTIONS.

All bearings 20-6-0.
(lb) - Max Horz 25=-190(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 19, 17, 16, 15 except 24=-101(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 17, 16, 15

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
- 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) 25, 14, 21, 22, 23, 19, 17, 16, 15 except (jt=lb) 24=101.
- 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 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238159
400280	E2	Common	6	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:45 2020 Page 1

ID:bDljnJA6?5tiTk6EI3KUKZyAkTB-cNVLLoua5_rQOxUxeIBmXhloNCvcVqzFBkCTIMzlrsl

5-2-12	10-3-0	15-3-4	20-6-0	21-4-8
5-2-12	5-0-4	5-0-4	5-2-12	0-10-8

4x5 //

Scale = 1:42.8

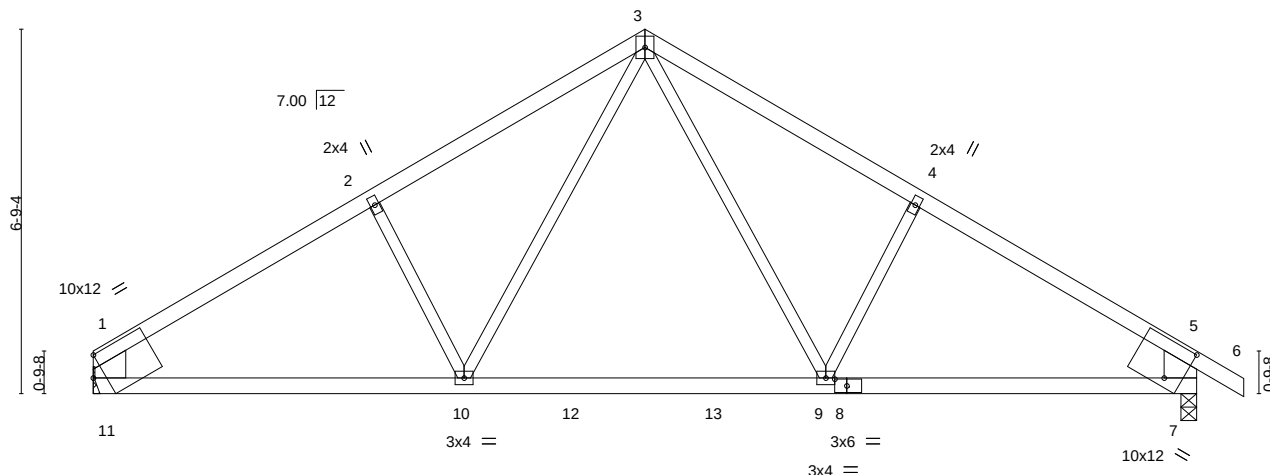


Plate Offsets (X,Y)--	[1:0-4-3,0-0-0], [1:Edge,0-4-7], [5:0-4-3,0-0-0], [7:0-3-11,0-8-1], [7:0-3-2,0-1-13], [8:0-2-11,0-1-8], [11:0-3-2,0-1-13]
-----------------------	---

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.22	9-10	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.35	9-10	>679	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.03	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09	9-10	>999	240	
								Weight: 72 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,5-7: 2x8 SP DSS

BRACING-

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

REACTIONS.

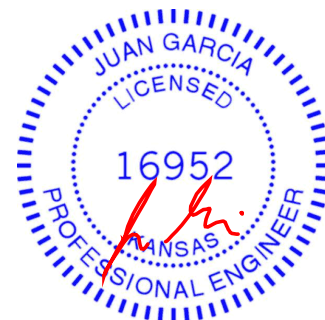
(size) 11=Mechanical, 7=0-3-8
Max Horz 11=-188(LC 4)
Max Uplift 11=-105(LC 8), 7=-133(LC 9)
Max Grav 11=979(LC 15), 7=1058(LC 16)

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

TOP CHORD 1-2=-1294/162, 2-3=-1170/207, 3-4=-1157/207, 4-5=-1297/162, 1-11=-831/138, 5-7=-929/168
BOT CHORD 10-11=-151/1141, 9-10=-12/805, 7-9=-57/1007
WEBS 3-9=-106/498, 3-10=-106/490, 2-10=-264/203

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, 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) 11=105, 7=133.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 7, 2020

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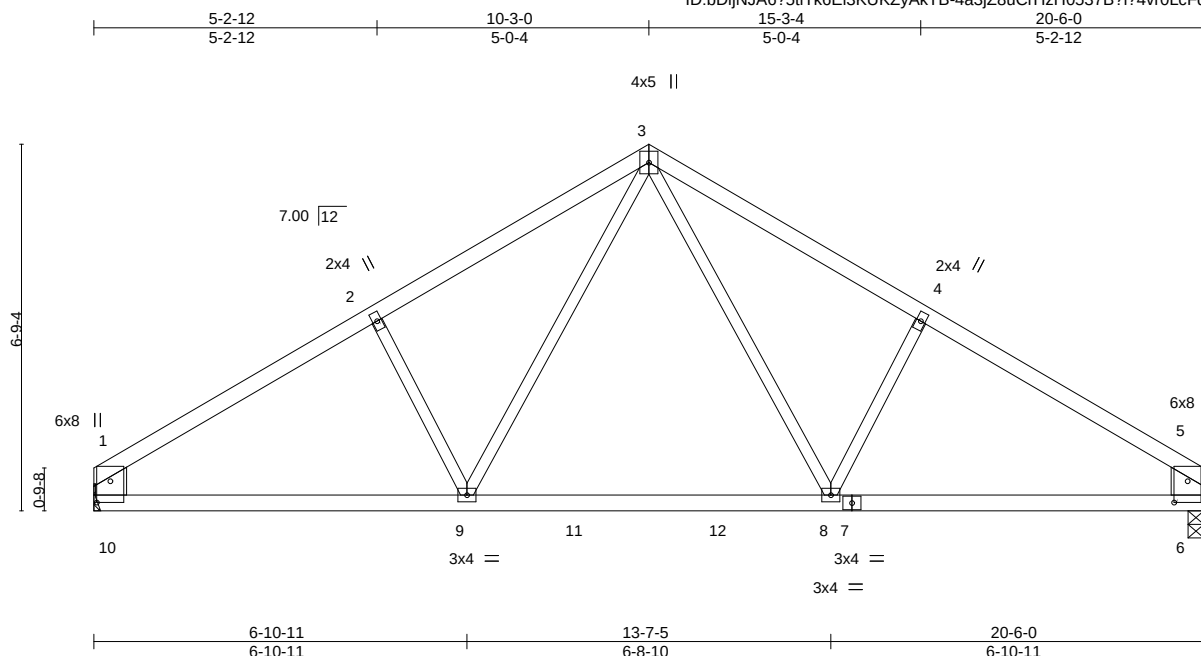
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238160
400280	E3	Common	5	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:46 2020 Page 1

ID:bDljNJA6?5tiTk6Ei3KUKZyAkTB-4a3jZ8uCrHzH0537B?i?4vr0LcFqEHDOQOy1lozlrsh



Scale = 1:42.6

Plate Offsets (X,Y)--		[1:0-4-12,0-3-0], [5:0-4-12,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.64	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(LL) -0.24 8-9 >977 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Vert(CT) -0.40 8-9 >598 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.03 6 n/a n/a
			Wind(LL) 0.08 8-9 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 71 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,5-6: 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=Mechanical, 6=0-3-8
Max Horz 10=141(LC 5)
Max Uplift 10=-7(LC 8), 6=-7(LC 9)
Max Grav 10=980(LC 13), 6=980(LC 14)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1301/38, 2-3=-1176/78, 3-4=-1176/78, 4-5=-1301/38, 1-10=-833/44, 5-6=-833/44
BOT CHORD 9-10=-35/1114, 8-9=0/786, 6-8=0/1013
WEBS 3-8=-38/486, 4-8=-264/130, 3-9=-38/486, 2-9=-264/130

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
- 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) 10, 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 7, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238161
400280	G1	Common Supported Gable	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:47 2020 Page 1
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-Ymd5mUvqcb57dFeJlJDEd6NK4?mQzllYe2haqEzlrsg

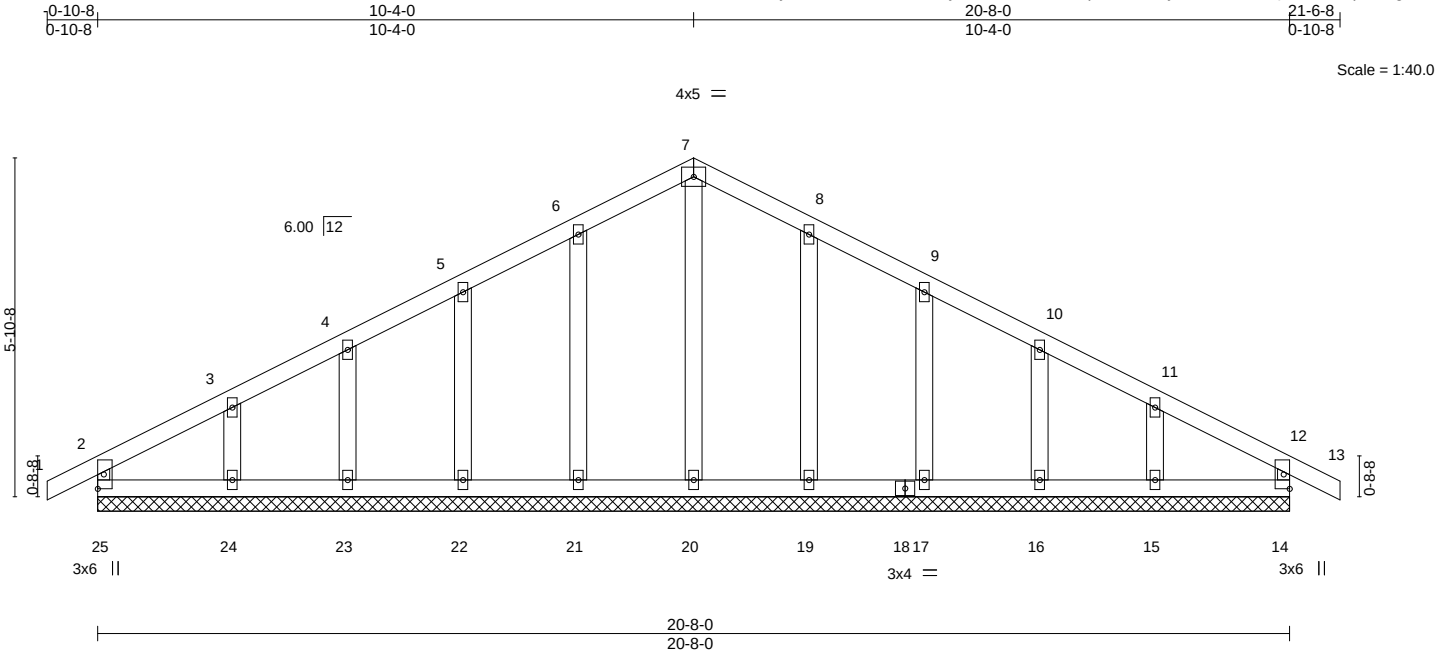
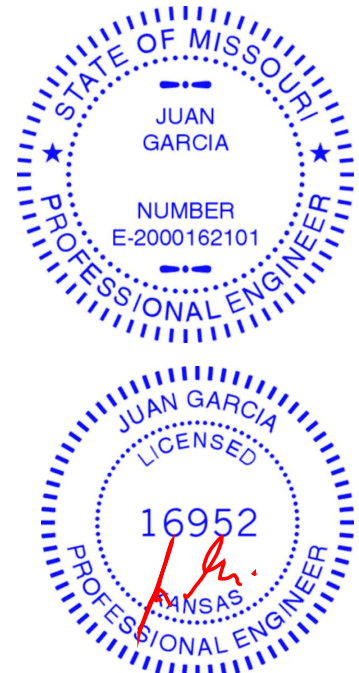


Plate Offsets (X,Y)--		[2:0-0-10,0-1-4], [12:0-0-10,0-1-4], [14:0-0-0,0-1-4], [25:0-0-0,0-1-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
		DEFL.	in (loc)
		Vert(LL)	-0.00 13 n/r 120
		Vert(CT)	-0.00 13 n/r 120
		Horz(CT)	0.00 14 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 85 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	
OTHERS 2x4 SPF No.2	

REACTIONS.	ALL BEARINGS 20-8-0.
(lb) - Max Horz 25=-89(LC 6)	
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15	
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 17, 16, 15	
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
 - 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) 25, 14, 21, 22, 23, 24, 19, 17, 16, 15.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	141238162
400280	G2	Common	4	1		

Wheeler Lumber, Waverly, KS 66871

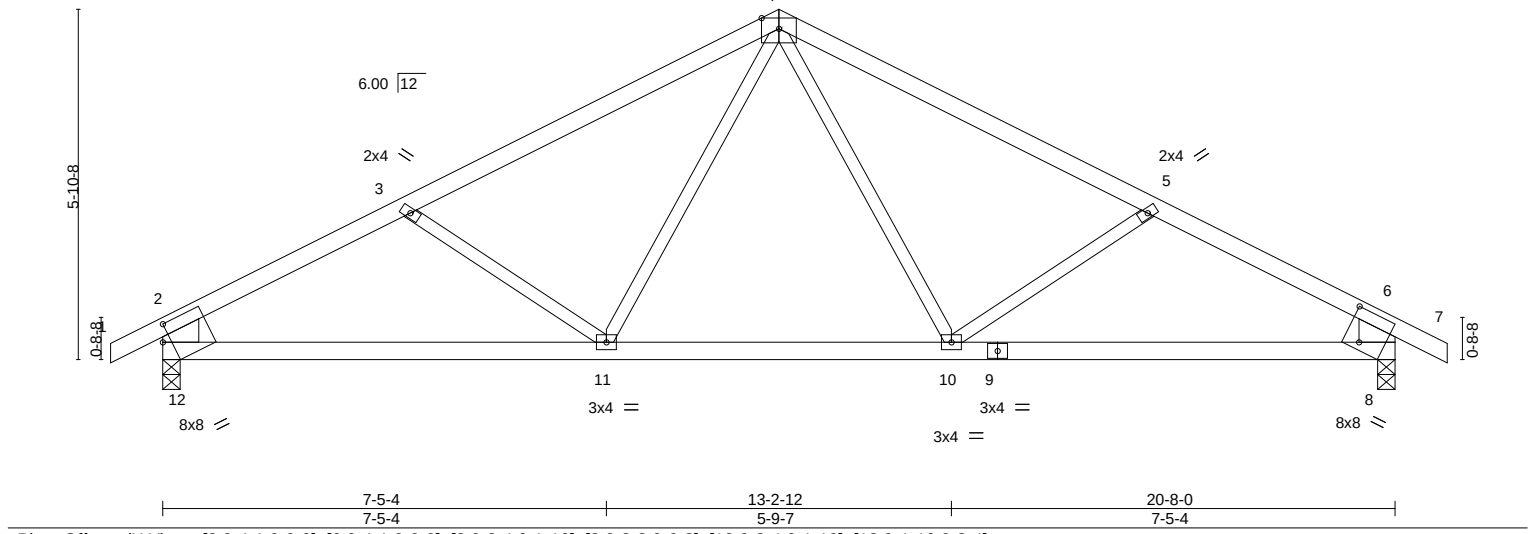
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:48 2020 Page 1

ID: bDljNJA6?5tiTk6EI3KUKZyAkTB-0yAU_qwSNvD_FODWJQkT9KwJAPy2iCAhthR7MhzIrsf

16-6-3 20-8-0 21-6-8
6-2-3 4-1-13 0-10-8

5x7 =

Scale = 1:38.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.88	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.14 10-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.22 10-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.09 10-11 >999 240	Weight: 71 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-8: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 12=0-3-8, 8=0-3-8
Max Horz 12=-93(LC 6)
Max Uplift 12=-139(LC 8), 8=-139(LC 9)
Max Grav 12=985(LC 1), 8=985(LC 1)

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

TOP CHORD 2-3=-1375/219, 3-4=-1152/156, 4-5=-1152/156, 5-6=-1375/220, 2-12=-892/174,
6-8=-892/174
BOT CHORD 11-12=-217/1132, 10-11=-33/827, 8-10=-137/1132
WEBS 4-10=-36/300, 5-10=-273/205, 4-11=-36/300, 3-11=-273/205

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) except (it=lb) 12=139, 8=139.
- 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 7, 2020

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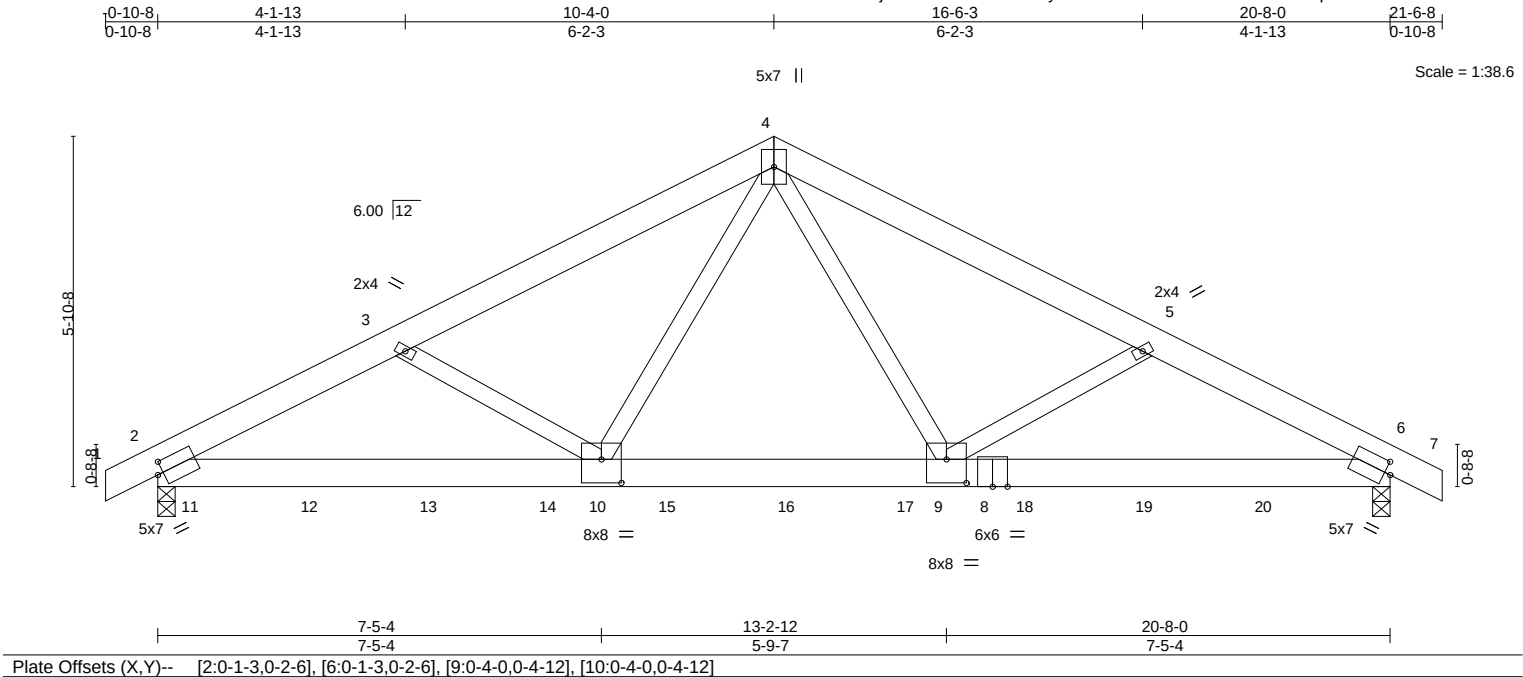


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	
400280	G3	Common Girder	1	2		I41238163

Wheeler Lumber, Waverly, KS 66871

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ID:bDljNJA6?5tiTk6El3KUKZyAkTB-U9ksBAx58CLrtYoit8FiiXTZFPg9RZDr6LAhu7zlrse
16-6-3 20-8-0 21-6-8
6-2-3 4-1-13 0-10-8



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 0.53	Vert(LL)	-0.15 2-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.27 2-10	>923	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.46	Horz(CT)	0.05 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09 6-9	>999	240	Weight: 232 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

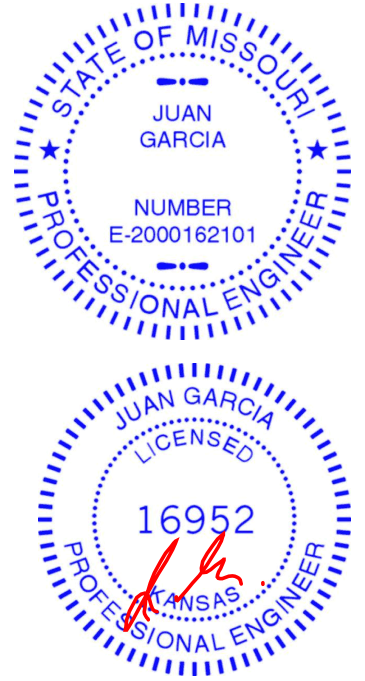
REACTIONS. (size) 2=0-3-8 (req. 0-4-9), 6=0-3-8 (req. 0-4-0)
Max Horz 2=-64(LC 25)
Max Uplift 2=-264(LC 8), 6=-459(LC 9)
Max Grav 2=5780(LC 2), 6=5112(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7893/489, 3-4=-7793/468, 4-5=-7770/669, 5-6=-7862/695
BOT CHORD 2-10=-442/6891, 9-10=-313/5139, 6-9=-572/6857
WEBS 4-9=-451/3688, 5-9=-282/288, 4-10=-72/3731, 3-10=-291/279

- 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.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 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.
 - WARNING: Required bearing size at joint(s) 2, 6 greater than input bearing size.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 6=459.
 - 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) 925 lb down and 22 lb up at 0-7-4, 920 lb down and 27 lb up at 2-7-4, 920 lb down and 27 lb up at 4-7-4, 920 lb down and 27 lb up at 6-7-4, 920 lb down and 27 lb up at 8-7-4, 918 lb down and 125 lb up at 10-7-4, 918 lb down and 125 lb up at 12-7-4, 918 lb down and 125 lb up at 14-7-4, and 918 lb down and 125 lb up at 16-7-4, and 918 lb down and 125 lb up at 18-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



May 7,2020

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238163
400280	G3	Common Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:49 2020 Page 2
ID:bDljNJA6?5tiTk6El3KUKZyAkTB-U9ksBAx58CLrtYoit8FiiXTZFpG9RZDr6LAhu7zlrse

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-4=-70, 4-7=-70, 2-6=-20
 - Concentrated Loads (lb)
 - Vert: 11=-881(F) 12=-875(F) 13=-875(F) 14=-875(F) 15=-875(F) 16=-873(F) 17=-873(F) 18=-873(F) 19=-873(F) 20=-873(F)

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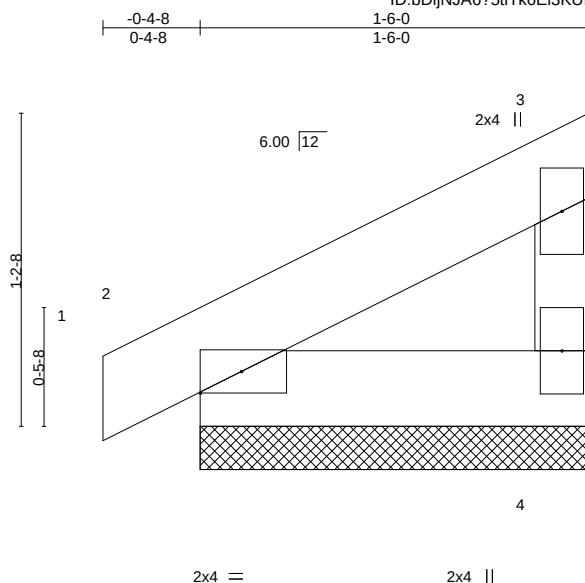
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238164
400280	J5	Jack-Closed Supported Gable	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:50 2020 Page 1

ID: bDljNJA6?5tiTk6Ei3KUKZyAkTB-yLIEPVxjvWTiUiNuQrnxEI?sxDnNA7b_K?wERZzIrsd



Scale = 1:8.9

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 0.03	Vert(LL)	-0.00	1	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	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-

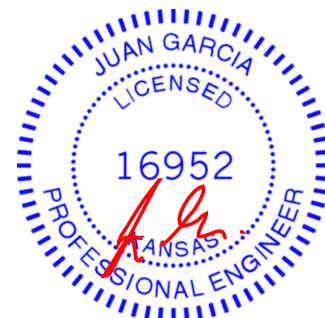
TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=1-6-0, 2=1-6-0
Max Horz 2=36(LC 5)
Max Uplift 4=-16(LC 8), 2=-16(LC 8)
Max Grav 4=59(LC 1), 2=93(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) 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 7, 2020

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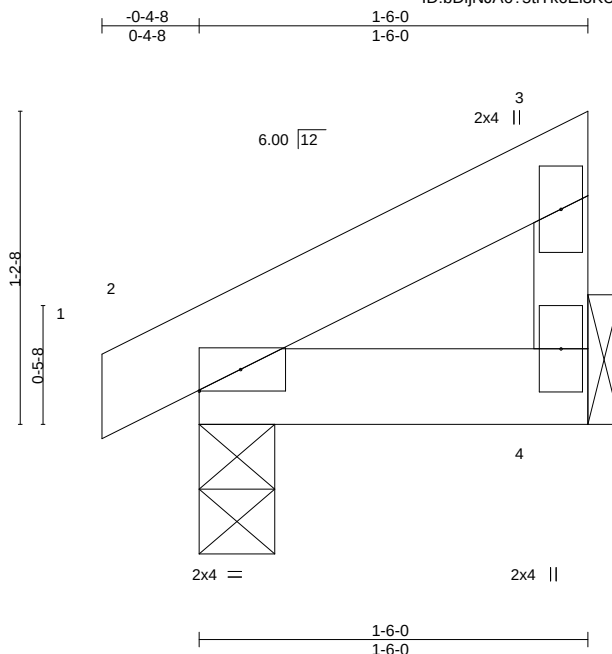


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238165
400280	J6	Jack-Closed	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:51 2020 Page 1
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Scale = 1:8.9

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 0.02	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-

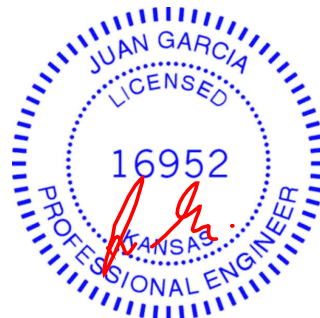
TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=36(LC 5)
Max Uplift 4=-16(LC 8), 2=-17(LC 8)
Max Grav 4=57(LC 1), 2=94(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 7, 2020

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

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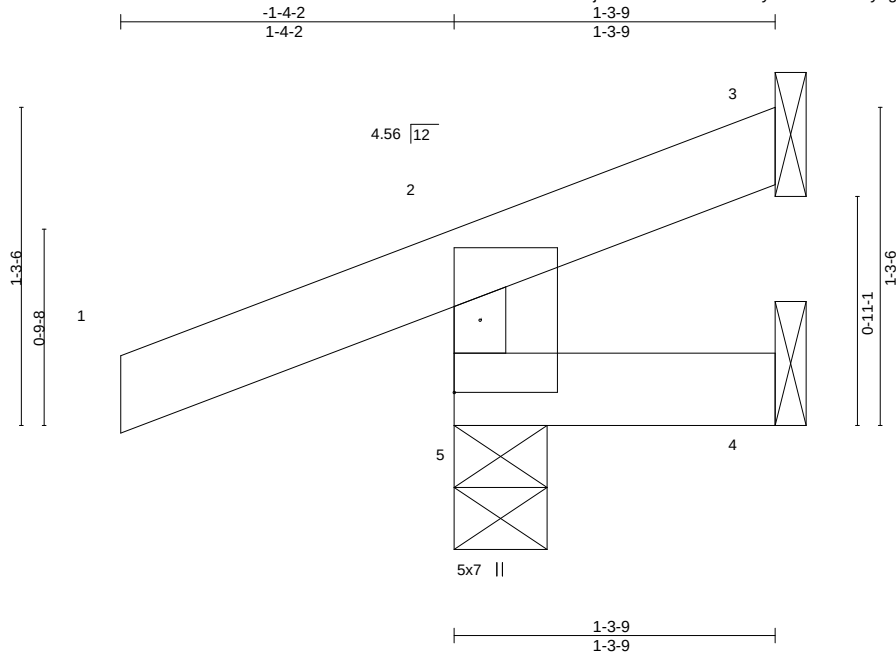


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238166
400280	J7	Jack-Open Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:51 2020 Page 1
ID:bDljNJA6?5tiTk6E13KUKZyAkTB-RXscryLgqcZ6sx4_YlAnyY0Fd7jvar7Zffoz0zlrsc



Scale = 1:9.3

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [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	0.12	Vert(LL)	-0.00 5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00 5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00 3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00 5	>999	240	Weight: 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 1-3-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-8, 3=Mechanical, 4=Mechanical
Max Horz 5=46(LC 7)
Max Uplift 5=-147(LC 12), 3=-20(LC 5), 4=-1(LC 5)
Max Grav 5=68(LC 9), 3=32(LC 15), 4=18(LC 3)

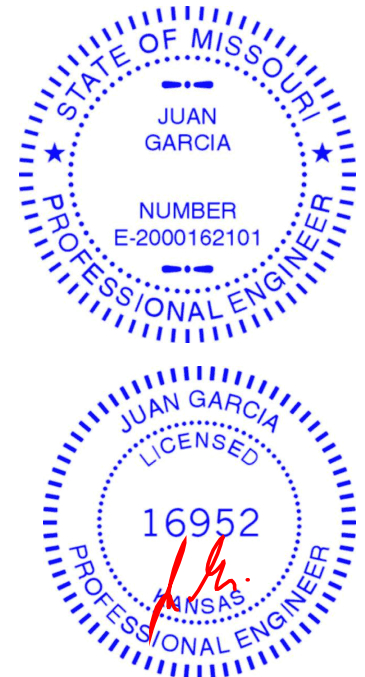
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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) 3, 4 except (jt=lb) 5=147.
- 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) 1 lb down and 3 lb up at -1-4-2, and 1 lb down and 3 lb up at -1-4-2 on top 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
Concentrated Loads (lb)
Vert: 1=5(F=2, B=2)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-2=-27(F=21, B=21), 2=-27(F=21, B=21)-to-3=-50(F=10, B=10), 5=-8(F=6, B=6)-to-4=-14(F=3, B=3)



May 7, 2020

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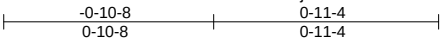
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238167
400280	J8	Jack-Open	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:52 2020 Page 1

ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-vkQ_pBzzR7kQk0WHYGpPKA4Bq0Tye15HoJPLVSzlrbs



Scale = 1:9.6

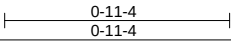
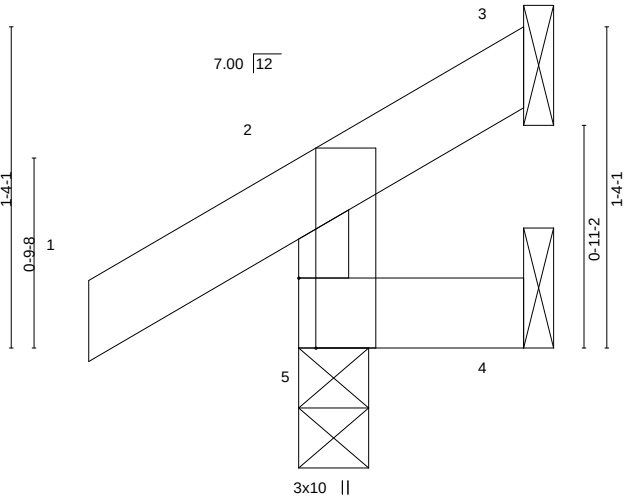


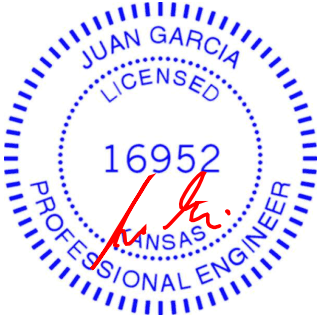
Plate Offsets (X,Y)-- [2:0-0-12,0-1-4], [5:0-3-8,Edge], [5:0-0-0,0-1-4]																	
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240				MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	180							
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a							
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R										Weight: 4 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 0-11-4 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=33(LC 5)
Max Uplift 5=-21(LC 8), 3=-11(LC 8), 4=-4(LC 8)
Max Grav 5=146(LC 1), 3=7(LC 4), 4=14(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 7,2020

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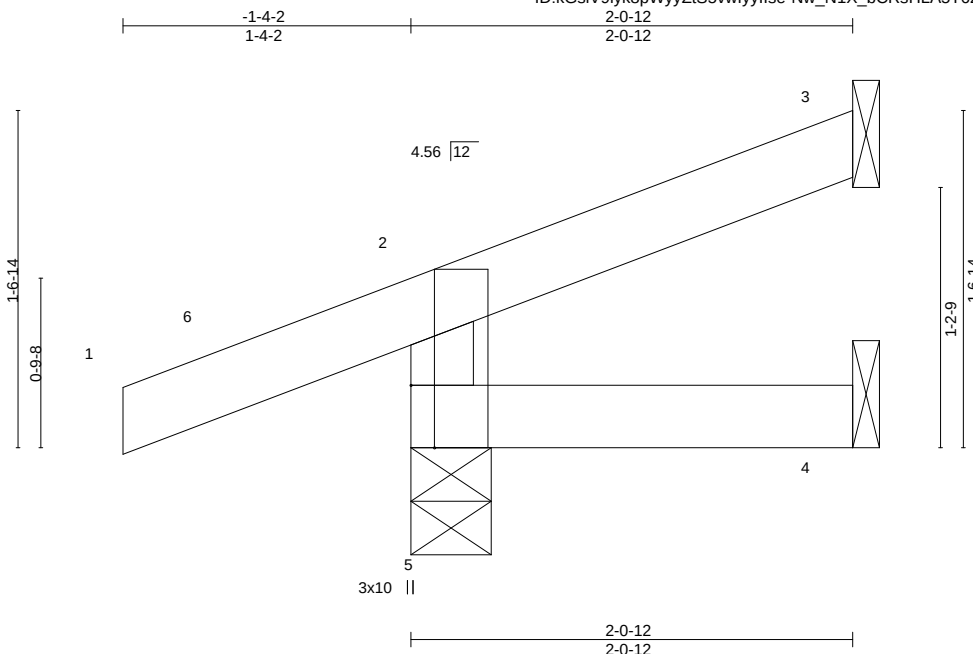


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238168
400280	J9	Jack-Open Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:53 2020 Page 1
ID:kGslV9lyk8pWyyZtS5vwlyllse-Nw_N1X_bCRsHLA5T6zKesNdLBQp1NULQ1z8u1uzlrsa



Scale = 1:10.8

Plate Offsets (X,Y)-- [2:0-0-11,0-1-12], [5:0-3-8,Edge], [5:0-0-0,0-1-12]									
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	0.09	Vert(LL)	-0.00 5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00 5 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00 3 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00 5 >999 240	Weight: 7 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 2-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-8, 3=Mechanical, 4=Mechanical
Max Horz 5=59(LC 7)
Max Uplift 5=120(LC 12), 3=20(LC 12)
Max Grav 5=72(LC 1), 3=24(LC 1), 4=26(LC 3)

FORCES.

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

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) 3 except (jt=lb) 5=120.
- 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) 10 lb down and 4 lb up at -1-4-2, and 10 lb down and 4 lb up at -1-4-2 on top 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
Concentrated Loads (lb)
Vert: 1=-15(F=-7, B=-7)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-6=-10(F=30, B=30), 6=0(F=35, B=35)-to-2=-16(F=27, B=27), 2=-16(F=27, B=27)-to-3=-49(F=10, B=10), 5=-5(F=8, B=8)-to-4=-14(F=3, B=3)



May 7, 2020

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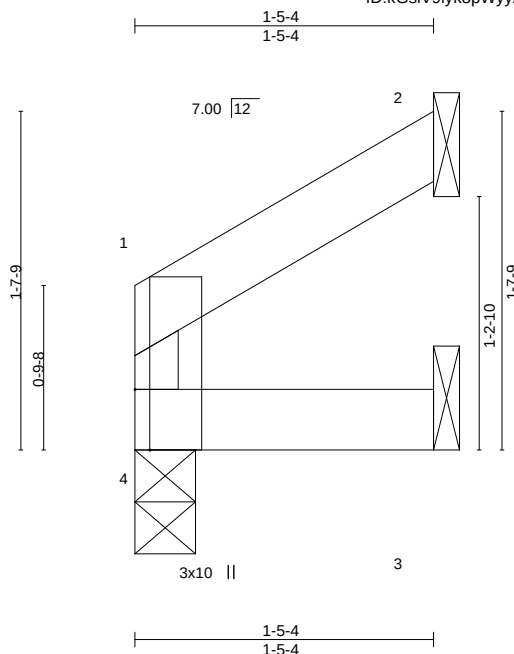
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR
400280	J10	Jack-Open	1	1	I41238169
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:50 2020 Page 1

ID:kGslV9lyk8pWyyZtS5vlyyIlse-yLIEPVxjvWTiUiNuQrnxEI?sxDnPA7b_K?wERZzIrsd



Scale = 1:11.1

Plate Offsets (X,Y)--		[1:0-0-12,0-1-4], [4:0-3-8,Edge], [4:0-0-0,0-1-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.03
TCDL 10.0	Lumber DOL	1.15	BC 0.01
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 4 >999 360
			Vert(CT) -0.00 4 >999 240
			Horz(CT) -0.00 2 n/a n/a
			Wind(LL) 0.00 4 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 4 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 1-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=29(LC 5)
Max Uplift 2=32(LC 8)
Max Grav 4=59(LC 1), 2=48(LC 15), 3=26(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) 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 7, 2020

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Chesterfield, MO 63017

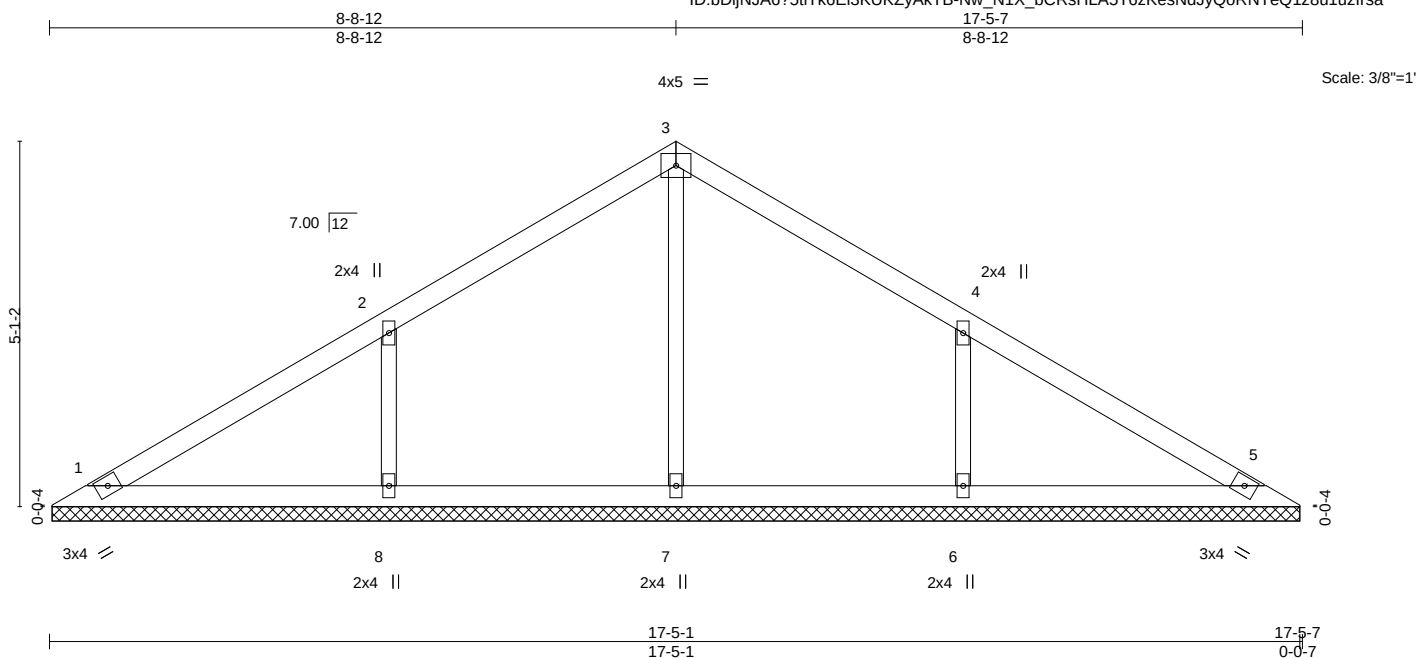
Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238170
400280	V1	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:53 2020 Page 1

ID: bDlJNJA6?5tiTk6EI3KUKZyAkTB-Nw_N1X_bCRsHLA5T6zKesNdJyQoRNTeQ1z8u1uzlrSa

Job Reference (optional)



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)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 49 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.

All bearings 17-4-10.
(lb) - Max Horz 1=125(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-155(LC 8), 6=-155(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=261(LC 1), 8=452(LC 15), 6=451(LC 16)

FORCES.

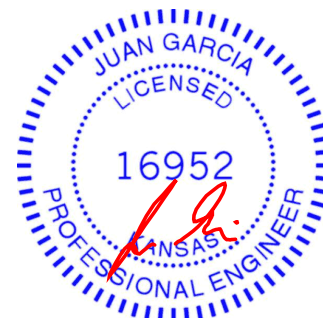
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS

2-8=-348/203, 4-6=-348/203

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=155, 6=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 7, 2020

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Chesterfield, MO 63017

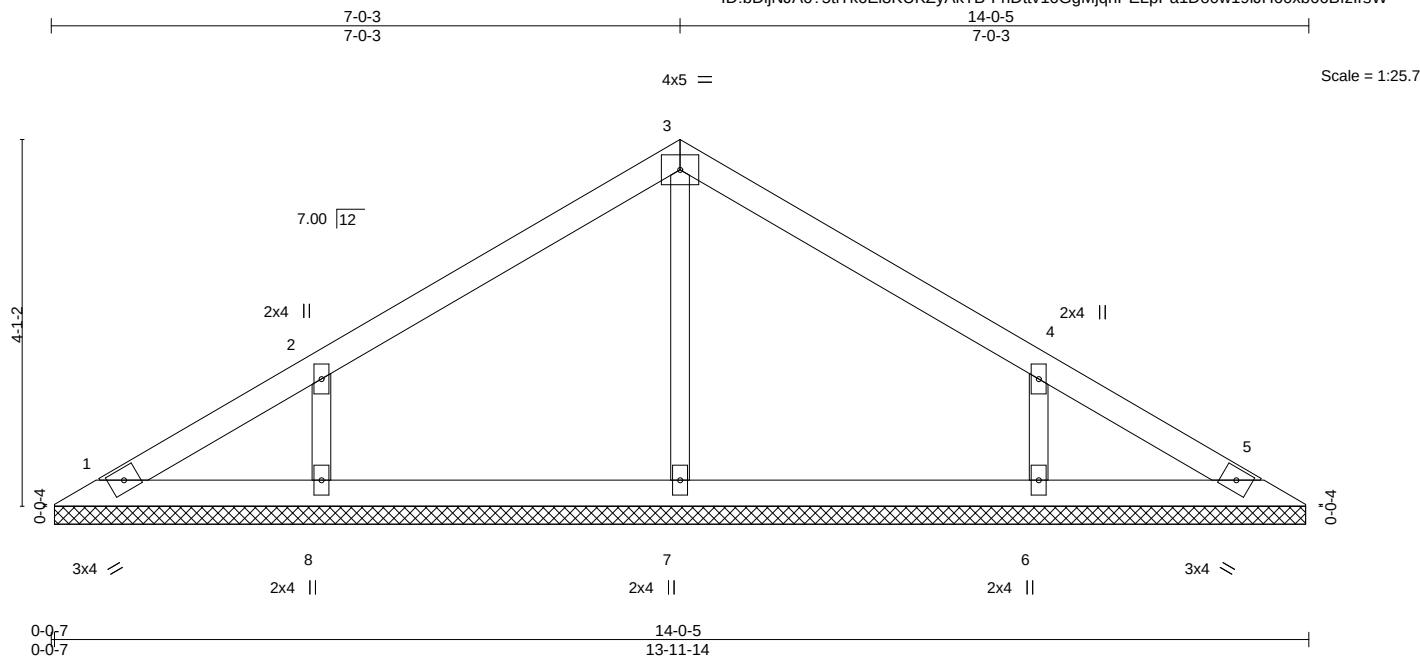
Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238171
400280	V2	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:57 2020 Page 1

ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-FhDttv16GgMjqnPElpPa1Do0w19jH60xb66Bfzlrw

Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 38 lb	FT = 10%

LUMBER-

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

All bearings 13-11-7.
(lb) - Max Horz 1=-99(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-127(LC 8), 6=-126(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=297(LC 1), 8=357(LC 15), 6=357(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-284/168, 4-6=-284/168

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 except (jt=lb) 8=127, 6=126.
- 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 7, 2020

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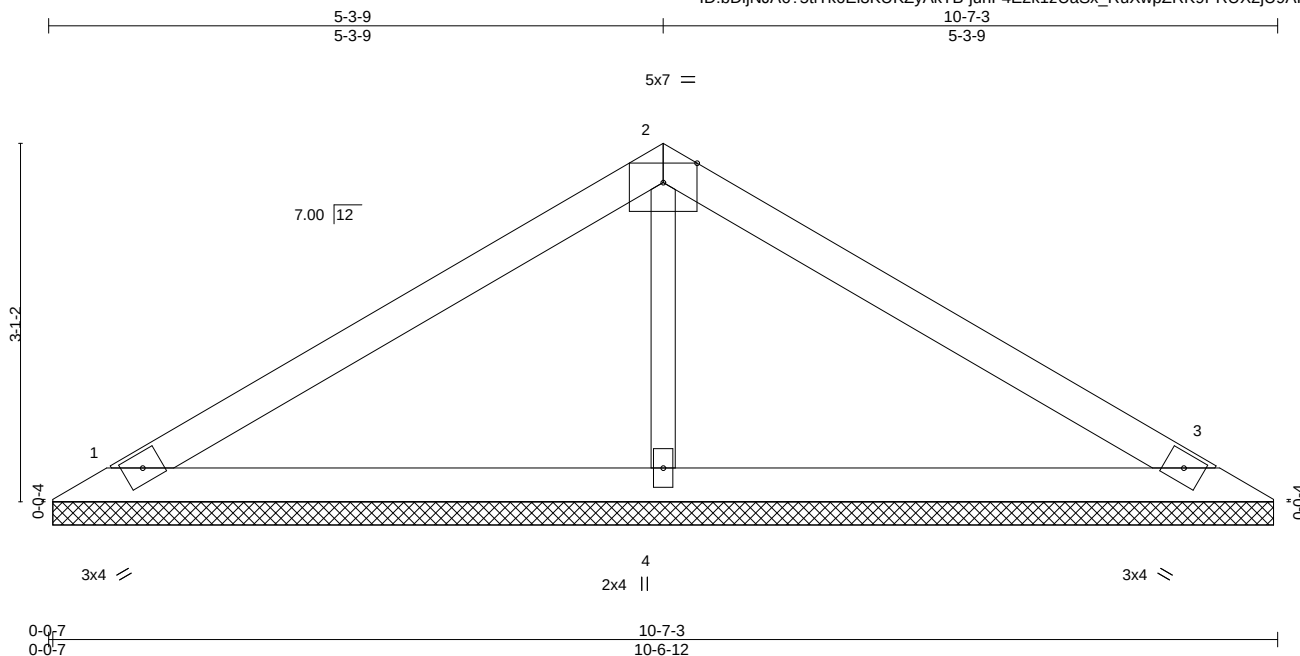


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238172
400280	V3	Valley	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:58 2020 Page 1
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-junF4E2k1zUaSx_RuXwpZRK9PRUX2jU9AFsfj6zIrsV



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 27 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

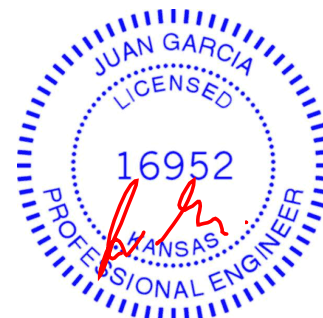
(size) 1=10-6-5, 3=10-6-5, 4=10-6-5
Max Horz 1=-73(LC 4)
Max Uplift 1=-42(LC 8), 3=-51(LC 9), 4=-21(LC 8)
Max Grav 1=210(LC 1), 3=210(LC 1), 4=436(LC 1)

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

WEBS 2-4=-291/75

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, 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 7, 2020

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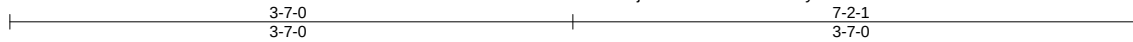


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238173
400280	V4	Valley	1	1	Job Reference (optional)	

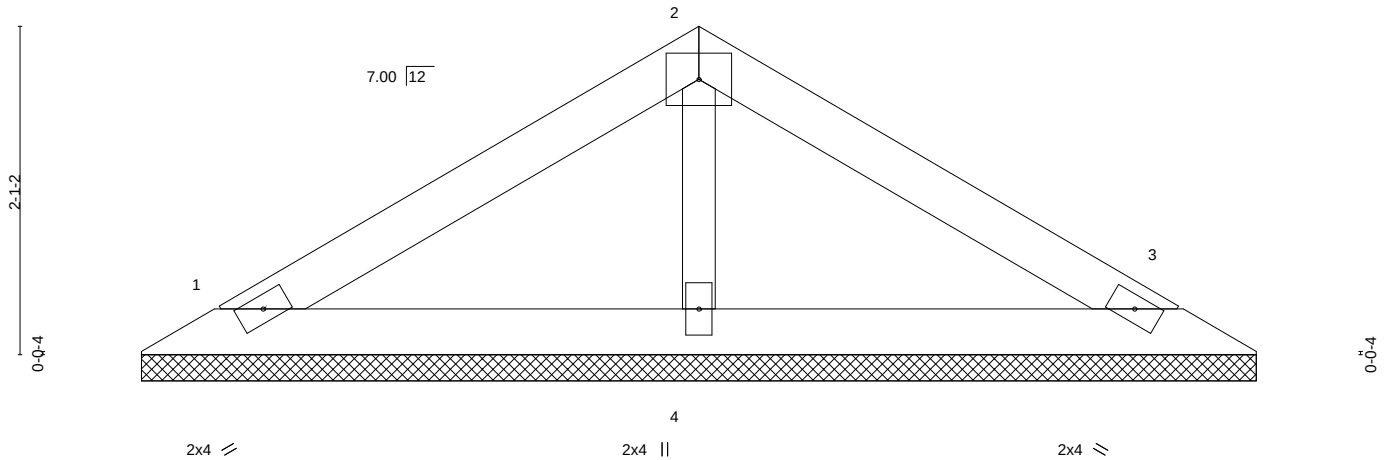
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:59 2020 Page 1
ID: bDljNJA675tiTk6EI3KUKZyAKTB-C4LeHa2MoHcr35ZdSER26etMurrUnBJPvDFYzIrsU



4x5 =

Scale = 1:14.7



0-0-7		7-2-1										
0-0-7		7-1-10										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

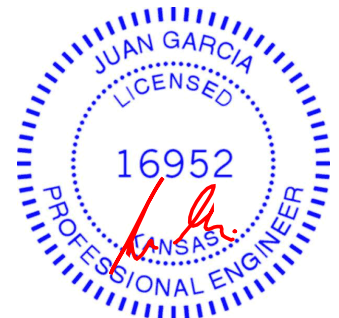
REACTIONS.

(size) 1=7-1-3, 3=7-1-3, 4=7-1-3
Max Horz 1=-46(LC 4)
Max Uplift 1=-33(LC 8), 3=-39(LC 9)
Max Grav 1=148(LC 1), 3=148(LC 1), 4=251(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 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

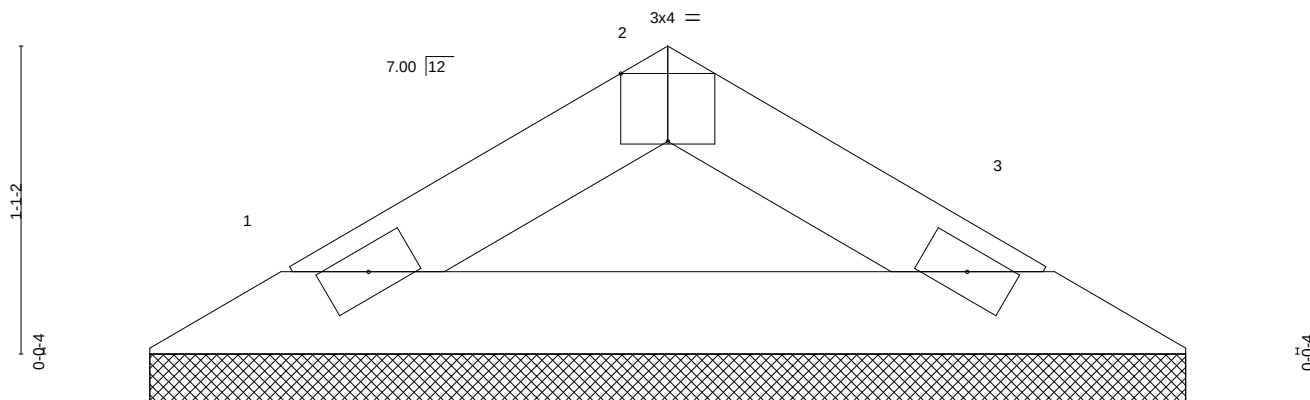
Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238174
400280	V5	Valley	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:59 2020 Page 1
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-C4LeHa2MoHcR35ZdSER26etOfrrcnBqJPvDFYzIrsU

1-10-7 3-8-14
1-10-7 1-10-7

Scale = 1:8.2



2x4

2x4

0-0-7
0-0-7

3-8-14
3-8-7

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-8-1, 3=3-8-1
Max Horz 1=20(LC 7)
Max Uplift 1=-14(LC 8), 3=-14(LC 9)
Max Grav 1=120(LC 1), 3=120(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.



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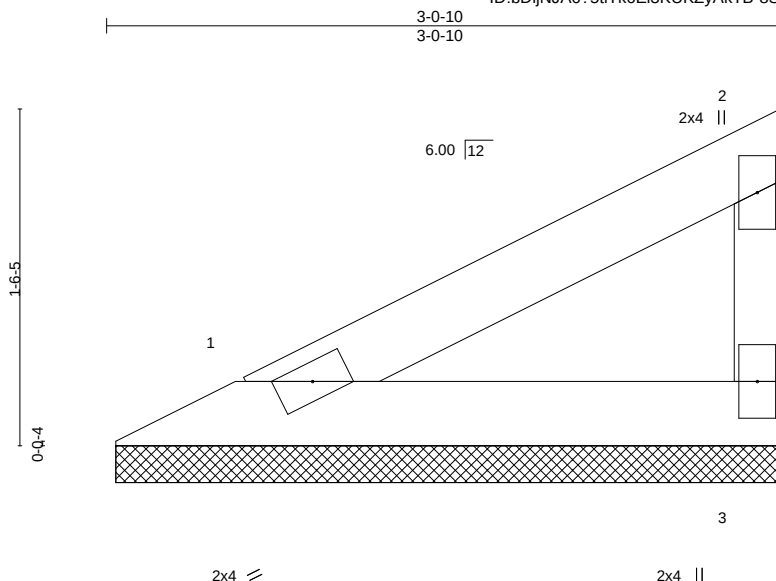
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238176
400280	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:24:01 2020 Page 1

ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-8STOiG4cJus8JOi?afTWB3yjfXQF5KcsD4JKRzIrsS



Scale = 1:10.4

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 0.09	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 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

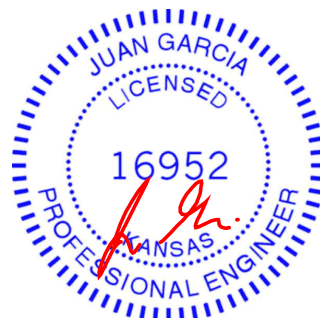
TOP CHORD Structural wood sheathing directly applied or 3-0-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-0-2, 3=3-0-2
Max Horz 1=48(LC 5)
Max Uplift 1=-13(LC 8), 3=-26(LC 8)
Max Grav 1=104(LC 1), 3=104(LC 1)

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

NOTES-

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



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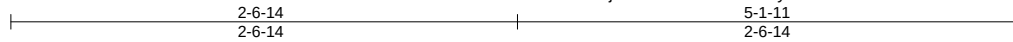
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238177
400280	V8	Valley	1	1		

Wheeler Lumber, Waverly, KS 66871

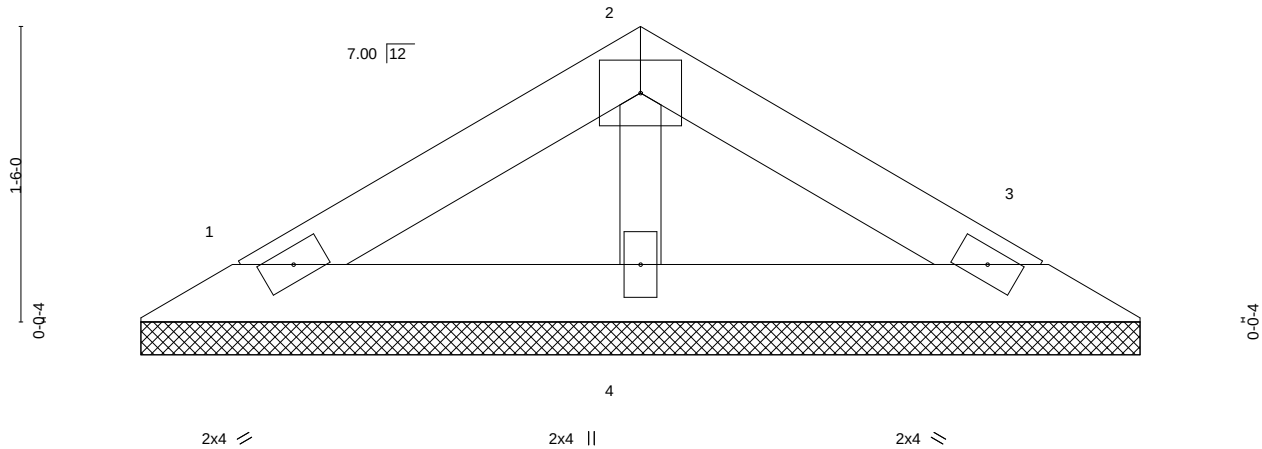
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:24:01 2020 Page 1

ID:bDljNJA6?5tiTk6Ei3KUKZyAkTB-8STOiG4cJus8JOi?afTWB3yjUfXeF50csD4JKRzIrsS



4x5 =

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)	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 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-0-14, 3=5-0-14, 4=5-0-14
Max Horz 1=-31(LC 4)
Max Uplift 1=-22(LC 8), 3=-26(LC 9)
Max Grav 1=99(LC 1), 3=99(LC 1), 4=167(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.



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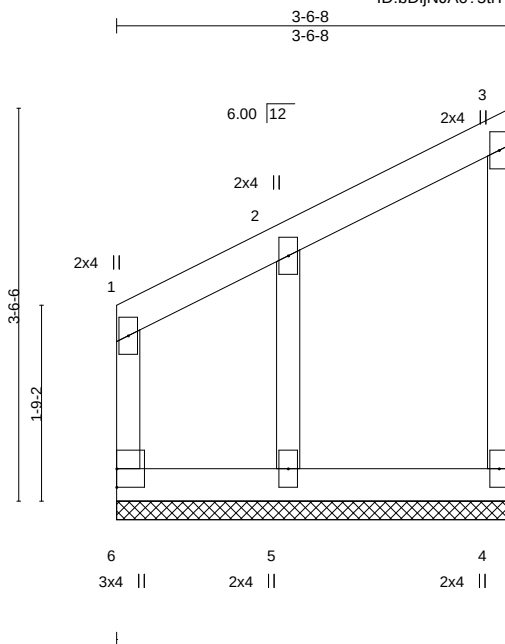


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR
400280	V9	Valley	1	1	I41238178
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:24:02 2020 Page 1
ID:bDljNJA6?5tiTk6EI3KUKZyAkTB-cf1mwc5F4C_?xYHC7M_lkHVtj2sB_Y7l5tqtstzIrsR



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 0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 14 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 3-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=3-6-8, 4=3-6-8, 5=3-6-8
Max Horz 6=127(LC 5)
Max Uplift 6=-29(LC 4), 4=-22(LC 5), 5=-96(LC 5)
Max Grav 6=120(LC 7), 4=71(LC 1), 5=183(LC 15)

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

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
- 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.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed on 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) 6, 4, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 7, 2020

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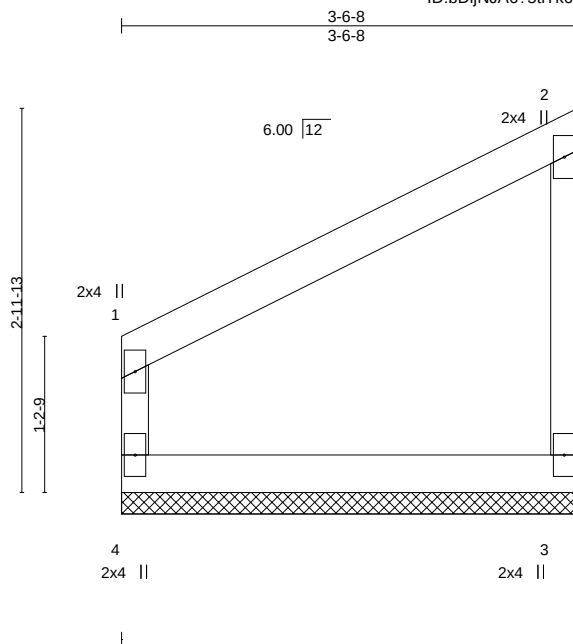


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR
400280	V10	Valley	1	1	I41238179
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:54 2020 Page 1
ID:bDljNJA6?5tTK6EI3KUKZyAkTB-r6YIEt_DzI_8zJgffhrtPbAVpq896xbaFduSaLzIrsZ



Scale = 1:17.9

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 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	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-R					Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=3-6-8, 3=3-6-8
Max Horz 4=106(LC 5)
Max Uplift 4=-14(LC 8), 3=-44(LC 5)
Max Grav 4=150(LC 1), 3=150(LC 1)

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

NOTES-

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



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Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238181
400280	V12	Valley	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:55 2020 Page 1
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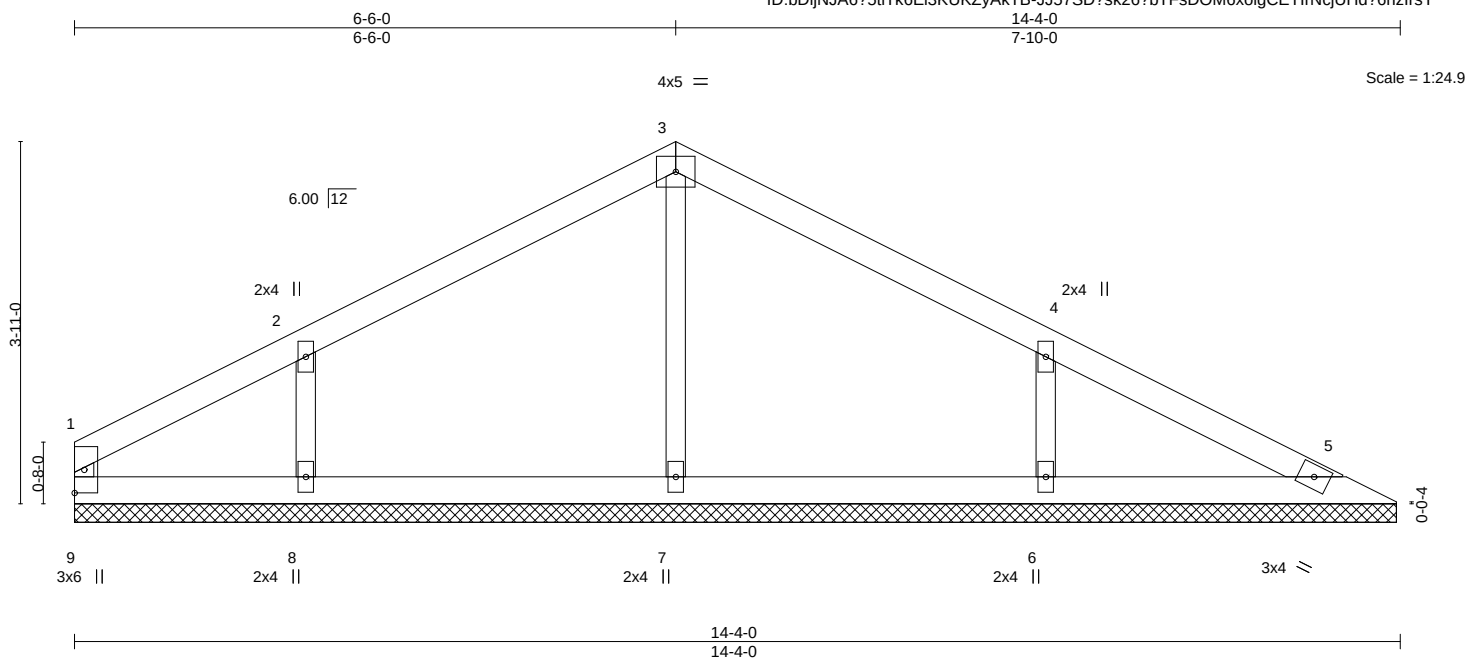


Plate Offsets (X,Y)-- [1:0-0-10,0-1-4], [9:0-0-0,0-1-4]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a - n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a - n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00 5 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 39 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

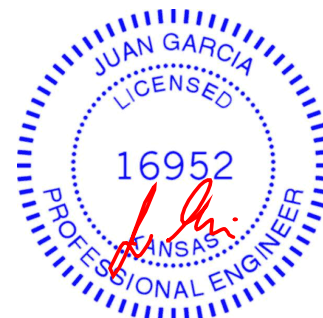
All bearings 14-3-8.
(lb) - Max Horz 9=-65(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 9, 5 except 8=-119(LC 8), 6=-121(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 9, 5 except 7=314(LC 1), 8=346(LC 21), 6=384(LC 22)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-277/157, 4-6=-301/164

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) 9, 5 except (jt=lb) 8=119, 6=121.
- 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 7, 2020

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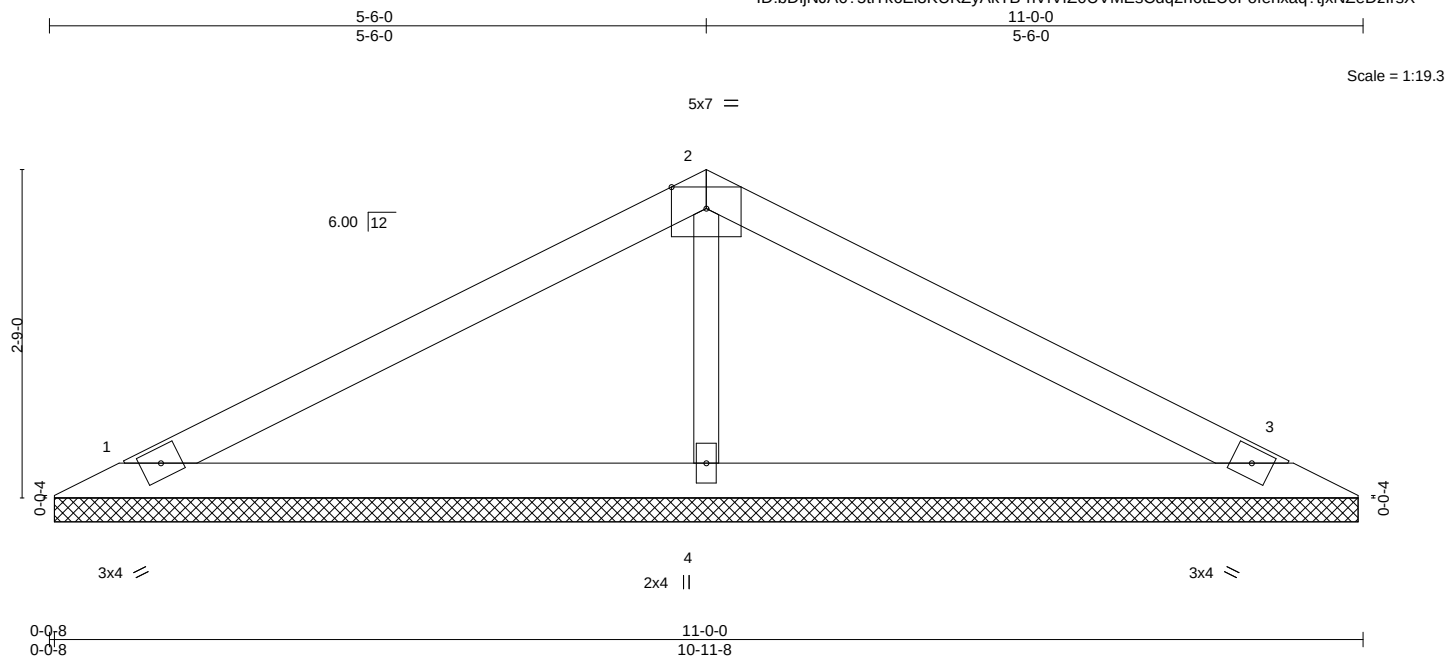


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238182
400280	V13	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:56 2020 Page 1
ID:bDljNJA6?5tiTk6EI3KUKZyAKTB-nVfVfZOUVMEsCdq2n6tLU0Fofenxaq?txNZeDzIrsX



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)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 27 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

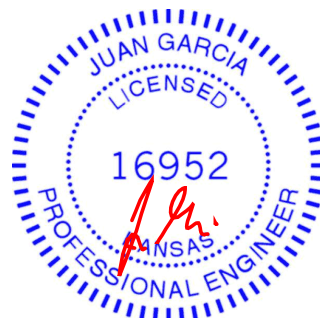
(size) 1=10-11-0, 3=10-11-0, 4=10-11-0
Max Horz 1=43(LC 8)
Max Uplift 1=42(LC 8), 3=50(LC 9), 4=26(LC 8)
Max Grav 1=207(LC 21), 3=207(LC 22), 4=465(LC 1)

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

WEBS 2-4=-318/83

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, 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 7, 2020

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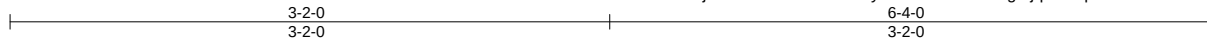


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 86 RR	I41238183
400280	V14	Valley	1	1		

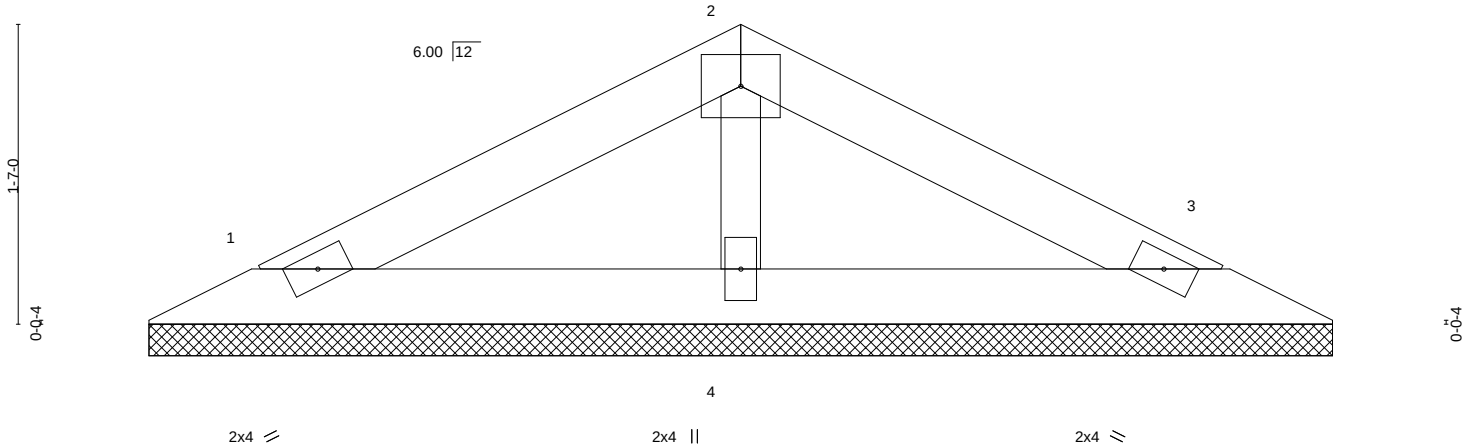
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu May 7 15:23:57 2020 Page 1
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4x5 =

Scale = 1:12.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00				
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
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=6-3-0, 3=6-3-0, 4=6-3-0
Max Horz 1=22(LC 8)
Max Uplift 1=27(LC 8), 3=31(LC 9), 4=3(LC 8)
Max Grav 1=119(LC 1), 3=119(LC 1), 4=218(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, 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.



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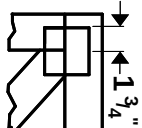
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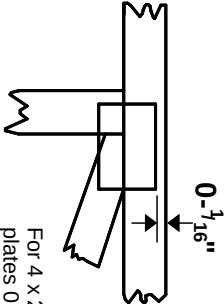
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

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

*** Plate location details available in MITek 2012 software or upon request.**

PLATE SIZE

4 X 4

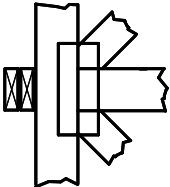
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



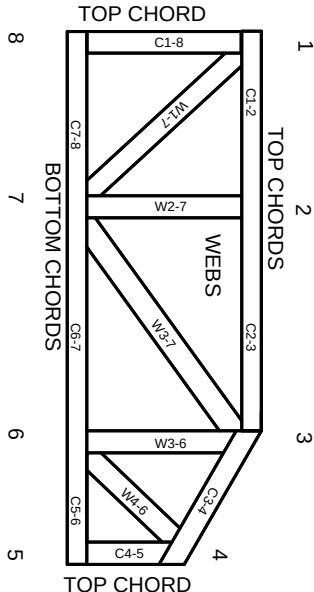
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.