RE: 400422
Lot 77 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 8.4
Wind Code: N/A
Wind Speed: 115 mph
Roof Load: 45.0 psf
Floor Load: N/A psf

This package includes 68 individual, dated Truss Design Drawings and 0 Additional Drawings.

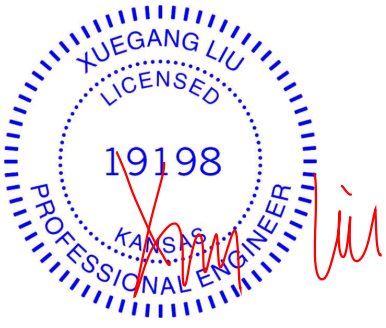
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I42065388	B1A	7/17/2020	27	I42065414	D8	7/17/2020
2	I42065389	B2A	7/17/2020	28	I42065415	D9	7/17/2020
3	I42065390	B3A	7/17/2020	29	I42065416	E1	7/17/2020
4	I42065391	B4A	7/17/2020	30	I42065417	E2	7/17/2020
5	I42065392	B5	7/17/2020	31	I42065418	E3	7/17/2020
6	I42065393	B6	7/17/2020	32	I42065419	E4	7/17/2020
7	I42065394	B7	7/17/2020	33	I42065420	J2	7/17/2020
8	I42065395	B8	7/17/2020	34	I42065421	J5	7/17/2020
9	I42065396	B9	7/17/2020	35	I42065422	J6A	7/17/2020
10	I42065397	B10	7/17/2020	36	I42065423	J7A	7/17/2020
11	I42065398	B11	7/17/2020	37	I42065424	J8	7/17/2020
12	I42065399	B12	7/17/2020	38	I42065425	J9	7/17/2020
13	I42065400	B13	7/17/2020	39	I42065426	J10	7/17/2020
14	I42065401	B14	7/17/2020	40	I42065427	J11	7/17/2020
15	I42065402	C1	7/17/2020	41	I42065428	J12	7/17/2020
16	I42065403	C2	7/17/2020	42	I42065429	J13	7/17/2020
17	I42065404	C3	7/17/2020	43	I42065430	J14	7/17/2020
18	I42065405	C4	7/17/2020	44	I42065431	J15	7/17/2020
19	I42065406	C5	7/17/2020	45	I42065432	J16	7/17/2020
20	I42065407	D1	7/17/2020	46	I42065433	J17	7/17/2020
21	I42065408	D2	7/17/2020	47	I42065434	J18	7/17/2020
22	I42065409	D3	7/17/2020	48	I42065435	J19	7/17/2020
23	I42065410	D4	7/17/2020	49	I42065436	J20	7/17/2020
24	I42065411	D5	7/17/2020	50	I42065437	J21	7/17/2020
25	I42065412	D6	7/17/2020	51	I42065438	J22	7/17/2020
26	I42065413	D7	7/17/2020	52	I42065439	J23	7/17/2020

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: Liu, Xuegang

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.

July 17, 2020

Liu, Xuegang

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

RE: 400422 - Lot 77 RR

Site Information:

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

No.	Seal#	Truss Name	Date
53	I42065440	J24	7/17/2020
54	I42065441	J25	7/17/2020
55	I42065442	J26	7/17/2020
56	I42065443	J27	7/17/2020
57	I42065444	J28	7/17/2020
58	I42065445	J29	7/17/2020
59	I42065446	J30	7/17/2020
60	I42065447	LAY2	7/17/2020
61	I42065448	LAY3	7/17/2020
62	I42065449	LAY4	7/17/2020
63	I42065450	LAY5	7/17/2020
64	I42065451	LAY6	7/17/2020
65	I42065452	LAY7	7/17/2020
66	I42065453	V5	7/17/2020
67	I42065454	V6	7/17/2020
68	I42065455	V7	7/17/2020

RE: 400422
Lot 77 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 8.4
Wind Code: N/A
Wind Speed: 115 mph
Roof Load: 45.0 psf
Floor Load: N/A psf

This package includes 68 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I42065388	B1A	7/17/2020	27	I42065414	D8	7/17/2020
2	I42065389	B2A	7/17/2020	28	I42065415	D9	7/17/2020
3	I42065390	B3A	7/17/2020	29	I42065416	E1	7/17/2020
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6	I42065393	B6	7/17/2020	32	I42065419	E4	7/17/2020
7	I42065394	B7	7/17/2020	33	I42065420	J2	7/17/2020
8	I42065395	B8	7/17/2020	34	I42065421	J5	7/17/2020
9	I42065396	B9	7/17/2020	35	I42065422	J6A	7/17/2020
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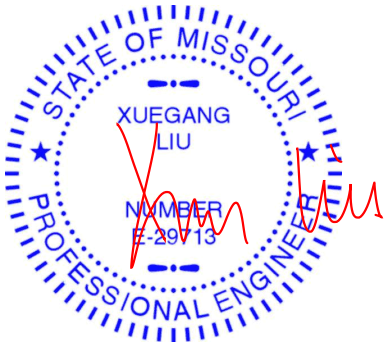
16	I42065403	C2	7/17/2020	42	I42065429	J13	7/17/2020
17	I42065404	C3	7/17/2020	43	I42065430	J14	7/17/2020
18	I42065405	C4	7/17/2020	44	I42065431	J15	7/17/2020
19	I42065406	C5	7/17/2020	45	I42065432	J16	7/17/2020
20	I42065407	D1	7/17/2020	46	I42065433	J17	7/17/2020
21	I42065408	D2	7/17/2020	47	I42065434	J18	7/17/2020
22	I42065409	D3	7/17/2020	48	I42065435	J19	7/17/2020
23	I42065410	D4	7/17/2020	49	I42065436	J20	7/17/2020
24	I42065411	D5	7/17/2020	50	I42065437	J21	7/17/2020
25	I42065412	D6	7/17/2020	51	I42065438	J22	7/17/2020
26	I42065413	D7	7/17/2020	52	I42065439	J23	7/17/2020

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: Liu, Xuegang

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.

July 17, 2020

Liu, Xuegang

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

RE: 400422 - Lot 77 RR

Site Information:

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

No.	Seal#	Truss Name	Date
53	I42065440	J24	7/17/2020
54	I42065441	J25	7/17/2020
55	I42065442	J26	7/17/2020
56	I42065443	J27	7/17/2020
57	I42065444	J28	7/17/2020
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63	I42065450	LAY5	7/17/2020
64	I42065451	LAY6	7/17/2020
65	I42065452	LAY7	7/17/2020
66	I42065453	V5	7/17/2020
67	I42065454	V6	7/17/2020
68	I42065455	V7	7/17/2020

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B1A	Half Hip Girder	1	2	I42065388
					Job Reference (optional)

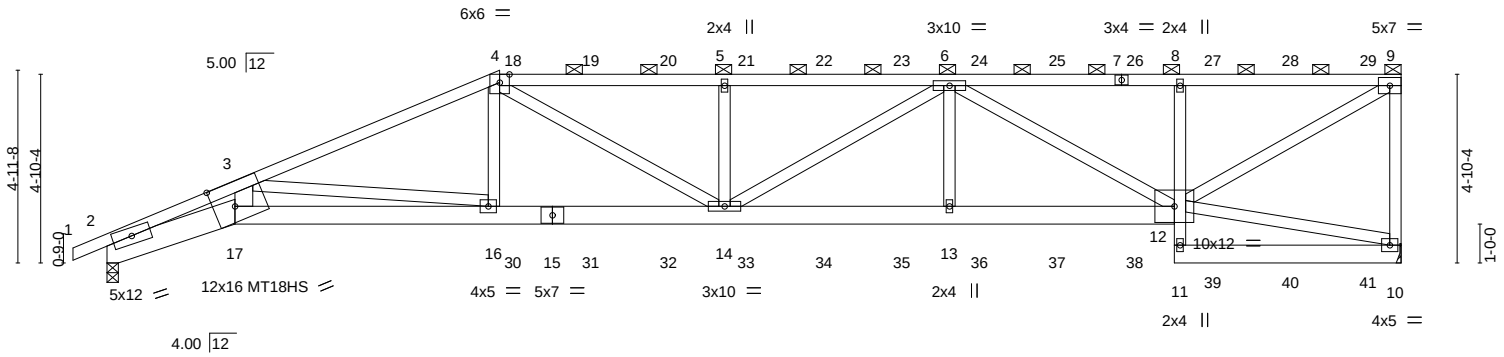
Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:29 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-o4SKj7ovdQjMK5ouOLNWb2WhT5uSq2IDcyWVUryxDe8

-0-10-8 | 3-3-8 | 10-1-3 | 15-10-10 | 21-8-1 | 27-5-8 | 33-3-8

0-10-8 | 3-3-8 | 6-9-11 | 5-9-7 | 5-9-7 | 5-9-7 | 5-10-0

Scale = 1:59.3



3-3-8 | 10-1-3 | 15-10-10 | 21-8-1 | 27-5-8 | 33-3-8

3-3-8 | 6-9-11 | 5-9-7 | 5-9-7 | 5-9-7 | 5-10-0

Plate Offsets (X,Y)-- [17:0-6-8,0-7-4]

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	0.94	Vert(LL)	-0.30	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.53	14-16	>750	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.57	Horz(CT)	0.24	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.25	14-16	>999	240	Weight: 369 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x4 SPF 2100F 1.8E

BOT CHORD 2x6 SP 2400F 2.0E *Except*
2-17: 2x8 SP DSS, 8-11: 2x4 SPF No.2

WEBS 2x4 SPF No.2 *Except*
3-17: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-4 max.): 4-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=150(LC 7)
Max Uplift 10=-547(LC 5), 2=-490(LC 8)
Max Grav 10=2988(LC 1), 2=2756(LC 1)

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

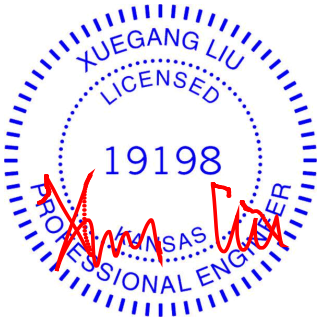
TOP CHORD 2-3=-11442/2216, 3-4=-7079/1513, 4-5=-7281/1512, 5-6=-7278/1511, 6-8=-4026/785, 8-9=-4009/795, 9-10=-2833/620

BOT CHORD 2-17=-2161/10449, 16-17=-1931/9247, 14-16=-1459/6438, 13-14=-1336/6602, 12-13=-1336/6602, 8-12=-655/200

WEBS 3-17=-520/2875, 3-16=-2768/507, 4-16=-358/1582, 4-14=-148/1163, 5-14=-774/266, 6-14=-268/789, 6-13=0/516, 6-12=-2986/612, 9-12=-919/4682

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=547, 2=490.



July 17,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 114 lb down and 78 lb up at 10-5-7, 116 lb down and 78 lb up at 12-5-7, 116 lb down and 78 lb up at 14-5-7, 116 lb down and 78 lb up at 16-5-7, 116 lb down and 78 lb up at 18-5-7, 116 lb down and 78 lb up at 20-5-7, 116 lb down and 79 lb up at 22-5-7, 76 lb down and 24 lb up at 24-5-7, 76 lb down and 24 lb up at 26-5-7, 124 lb down and 94 lb up at 28-5-7, and 124 lb down and 94 lb up at 30-5-7, and 129 lb down and 91 lb up at 32-5-7 on top chord, and 706 lb down and 320 lb up at 10-1-3, 71 lb down and 21 lb up at 10-5-7, 71 lb down and 21 lb up at 12-5-7, 71 lb down and 21 lb up at 14-5-7, 71 lb down and 21 lb up at 16-5-7, 71 lb down and 21 lb up at 18-5-7, 71 lb down and 21 lb up at 20-5-7, 91 lb down at 22-5-7, 142 lb down and 73 lb up at 24-5-7, 142 lb down and 73 lb up at 26-5-7, 71 lb down at 28-5-7, and 71 lb down at 30-5-7, and 77 lb down at 32-5-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

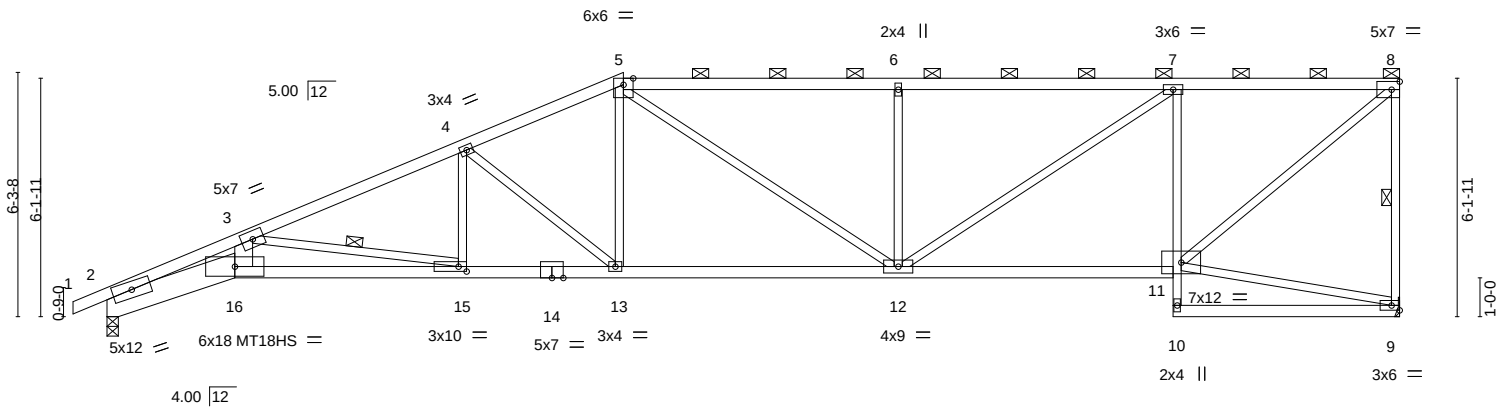
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-9=-70, 2-17=-20, 12-17=-20, 10-11=-20
   Concentrated Loads (lb)
   Vert: 16=-706(F) 18=-93(F) 19=-93(F) 20=-93(F) 21=-93(F) 22=-93(F) 23=-93(F) 24=-100(F) 25=-24(F) 26=-24(F) 27=-114(F) 28=-114(F) 29=-125(F) 30=-71(F) 31=-71(F) 32=-71(F) 33=-71(F) 34=-71(F) 35=-71(F) 36=-75(F) 37=-142(F) 38=-142(F) 39=-50(F) 40=-50(F) 41=-53(F)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B2A	Half Hip	1	1	I42065389
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:30 2020 Page 1
ID:eIl3htjhC3ucpFh1ifG0EczUTUF-HG?ixToXOkrDxFN4y2ul7F2v2VEnZTrMrcG20lyxDe7

-0-10-8 3-3-8 9-1-14 13-3-10 20-4-9 27-5-8 33-3-8
0-10-8 3-3-8 5-10-6 4-1-12 7-0-15 7-0-15 5-10-0

Scale = 1:59.3



3-3-8 9-1-14 13-3-10 20-4-9 27-5-8 33-3-8
3-3-8 5-10-6 4-1-12 7-0-15 7-0-15 5-10-0

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

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	0.76	Vert(LL)	-0.31	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.59	15-16	>673	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.30	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	15-16	>999	240	Weight: 138 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
2-16: 2x8 SP DSS, 14-16: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-16: 2x6 SPF No.2

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

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=195(LC 7)
Max Uplift 9=-70(LC 5), 2=-14(LC 8)
Max Grav 9=1486(LC 1), 2=1559(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6322/163, 3-4=-3369/55, 4-5=-2681/77, 5-6=-2493/114, 6-7=-2490/112, 7-8=-1535/98, 8-9=-1429/106
BOT CHORD 2-16=-328/5761, 15-16=-301/5027, 13-15=-170/3074, 12-13=-150/2417, 11-12=-126/1545, 7-11=-1119/141
WEBS 3-16=-38/1822, 5-13=0/613, 5-12=-39/312, 6-12=-565/130, 7-12=-40/1142, 8-11=-118/1988, 4-13=-827/83, 4-15=0/403, 3-15=-1978/132

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

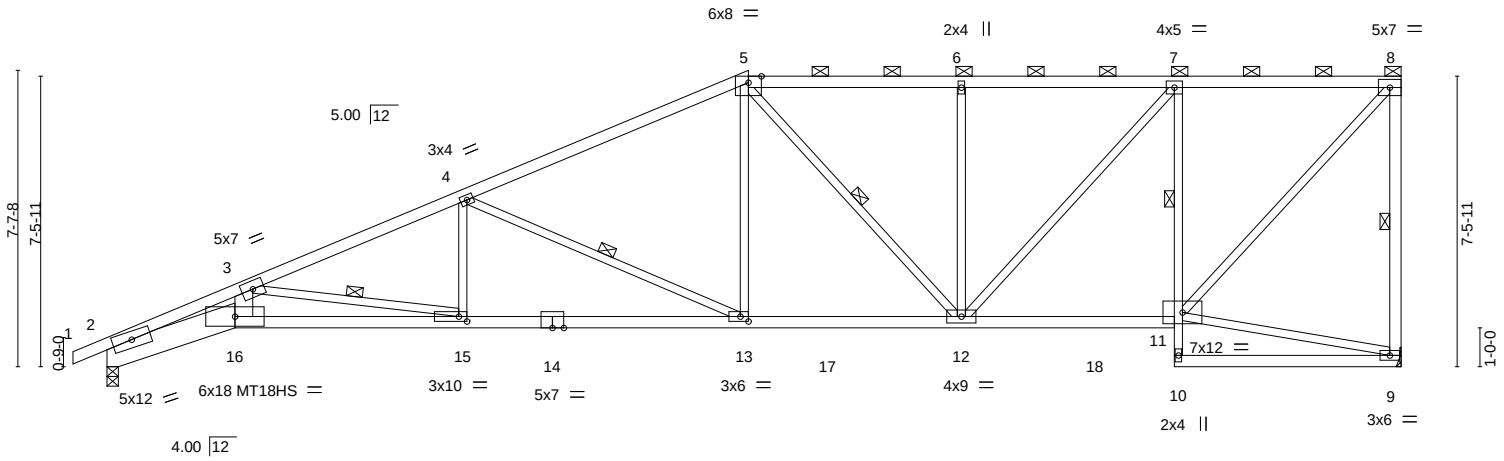
Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065390
400422	B3A	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:31 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-lTZ48pp991z4ZPyHWmP_gTb3TuWDIu2W4G?cYkyxDe6

-0-10-8	3-3-8	9-1-14	16-6-0	21-11-12	27-5-8	33-3-8
0-10-8	3-3-8	5-10-5	7-4-2	5-5-12	5-5-12	5-10-0

Scale = 1:59.3



3-3-8	9-1-14	16-6-0	21-11-12	27-5-8	33-3-8
3-3-8	5-10-5	7-4-2	5-5-12	5-5-12	5-10-0

Plate Offsets (X,Y)-- [13:0-2-8,0-1-8], [15:0-2-8,0-1-8]

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	0.78	Vert(LL)	-0.35	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.62	15-16	>639	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.30	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	15-16	>999	240	Weight: 147 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 5-8: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 2-16: 2x8 SP DSS, 14-16: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 8-9: 2x4 SPF No.2, 3-16: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-12 max.): 5-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 13-15.
1 Row at midpt 7-11

WEBS 1 Row at midpt 8-9, 3-15, 4-13, 5-12

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=240(LC 7)
Max Uplift 9=-68(LC 5), 2=-30(LC 8)
Max Grav 9=1568(LC 2), 2=1608(LC 2)

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

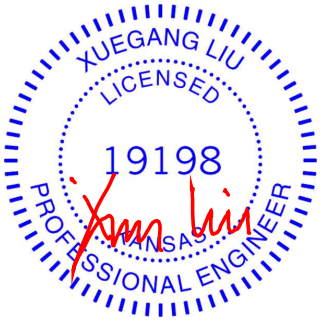
TOP CHORD 2-3=-6535/151, 3-4=-3556/56, 4-5=-2374/60, 5-6=-1916/91, 6-7=-1914/89, 7-8=-1245/86, 8-9=-1469/107

BOT CHORD 2-16=-338/5963, 15-16=-306/5181, 13-15=-168/3266, 12-13=-134/2103, 11-12=-113/1253, 7-11=-1120/129

WEBS 3-16=-51/1948, 3-15=-1939/139, 4-15=0/534, 4-13=-1262/122, 5-13=0/764, 5-12=-287/52, 6-12=-424/95, 7-12=-30/992, 8-11=-101/1813

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B4A	Half Hip	1	1	I42065391
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:32 2020 Page 1

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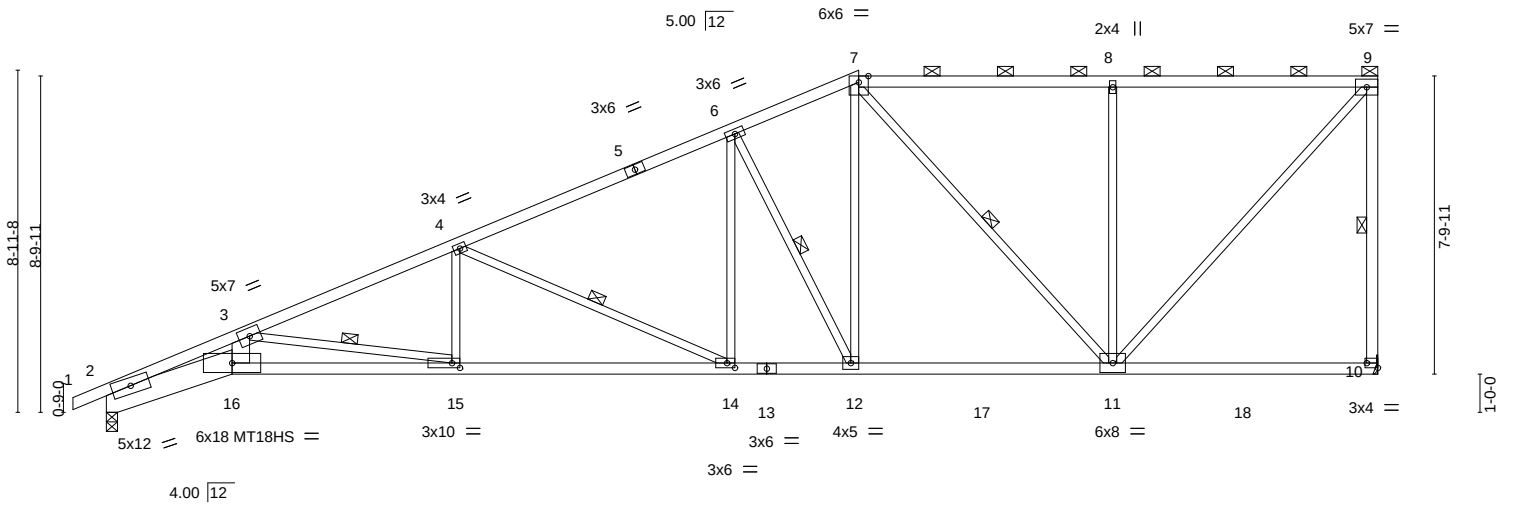
-0-10-8 3-3-8 9-1-13 16-4-4 19-8-6 26-4-3 33-3-8

0-10-8 3-3-8 5-10-5 7-2-7 3-4-3 6-7-13 6-11-5

Scale = 1:60.3



3-3-8 9-1-13 16-4-4 19-8-6 26-4-3 33-3-8

3-3-8 5-10-5 7-2-7 3-4-3 6-7-13 6-11-5

Plate Offsets (X,Y)-- [10:Edge,0-1-8], [14:0-2-8,0-1-8], [15:0-2-8,0-1-8]

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	0.78	Vert(LL)	-0.35	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.61	15-16	>647	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.26	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	15-16	>999	240	Weight: 147 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
2-16: 2x8 SP DSS, 13-16: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
9-10: 2x4 SPF No.2, 3-16: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-7 max.): 7-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 9-10, 3-15, 4-14, 6-12, 7-11

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=271(LC 5)
Max Uplift 10=-66(LC 5), 2=-41(LC 8)
Max Grav 10=1605(LC 2), 2=1606(LC 2)

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

TOP CHORD 2-3=-6532/248, 3-4=-3552/96, 4-6=-2359/73, 6-7=-1861/84, 7-8=-1198/86, 8-9=-1196/85, 9-10=-1468/94

BOT CHORD 2-16=-327/5961, 15-16=-297/5180, 14-15=-150/3261, 12-14=-119/2097, 11-12=-111/1675

WEBS 3-16=-47/1944, 3-15=-1943/178, 4-15=0/544, 4-14=-1278/117, 6-14=0/684, 6-12=-887/102, 7-12=-37/997, 7-11=-728/50, 8-11=-562/136, 9-11=-72/1758

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

XUEGANG LIU
LICENSED
19198
KANSAS
PROFESSIONAL ENGINEER

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B5	Half Hip	1	1	I42065392
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:34 2020 Page 1
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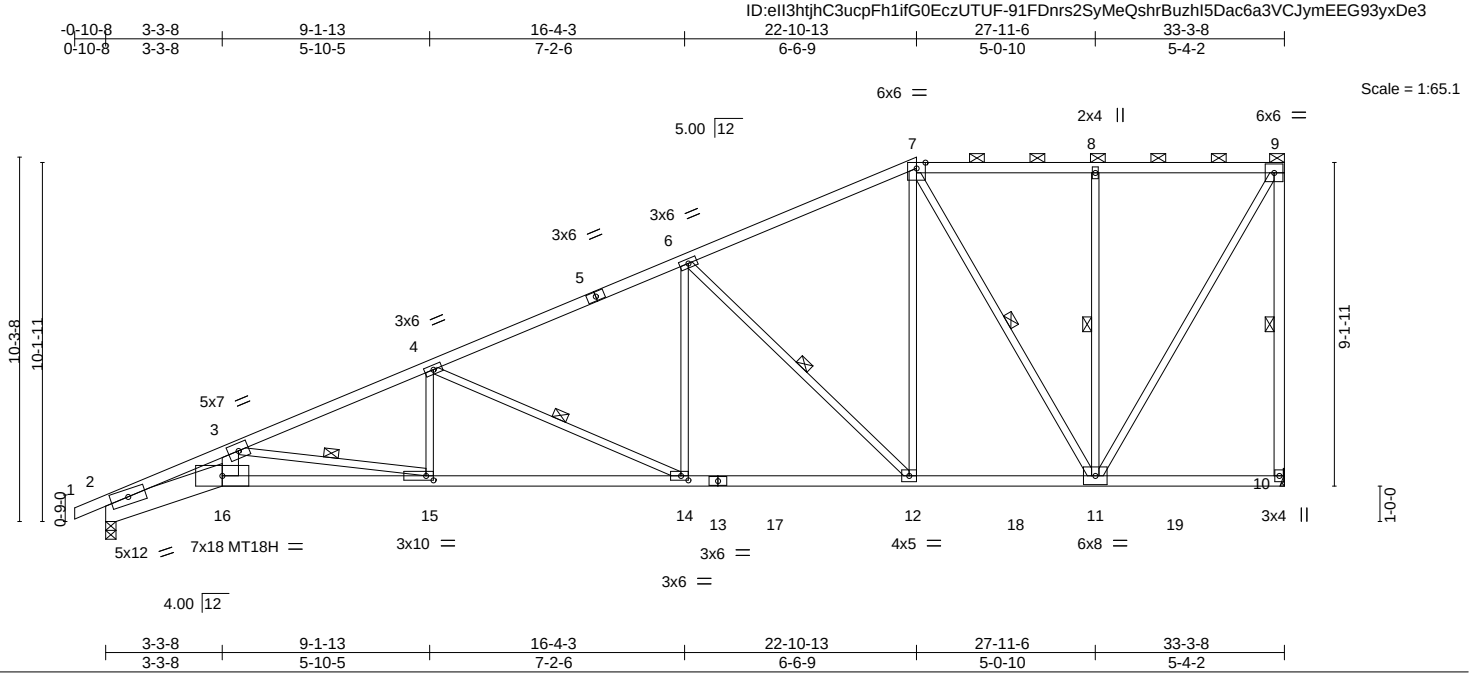


Plate Offsets (X,Y)-- [14:0-2-8,0-1-8], [15:0-2-8,0-1-8]

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	0.79	Vert(LL)	-0.36	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.63	15-16	>632	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.26	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	15-16	>999	240	Weight: 153 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
2-16: 2x8 SP DSS, 13-16: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
9-10: 2x4 SPF No.2, 3-16: 2x6 SPF No.2

BRACING-

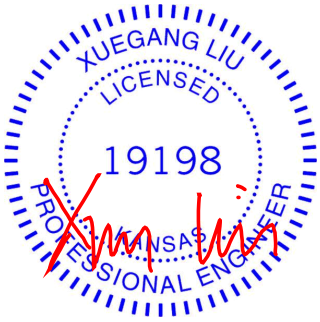
TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-10, 3-15, 4-14, 6-12, 7-11, 8-11

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=315(LC 5)
Max Uplift 10=-63(LC 5), 2=-48(LC 8)
Max Grav 10=1620(LC 2), 2=1618(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6600/305, 3-4=-3572/122, 4-6=-2412/96, 6-7=-1482/91, 7-8=-830/85, 8-9=-827/84, 9-10=-1510/80
BOT CHORD 2-16=-398/6025, 15-16=-360/5235, 14-15=-162/3277, 12-14=-117/2152, 11-12=-101/1287
WEBS 3-16=-66/1968, 3-15=-1982/200, 4-15=0/533, 4-14=-1236/117, 6-14=0/781, 6-12=-1188/121, 7-12=-15/1065, 7-11=-949/57, 8-11=-425/108, 9-11=-62/1603

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065393
400422	B6	Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:35 2020 Page 1

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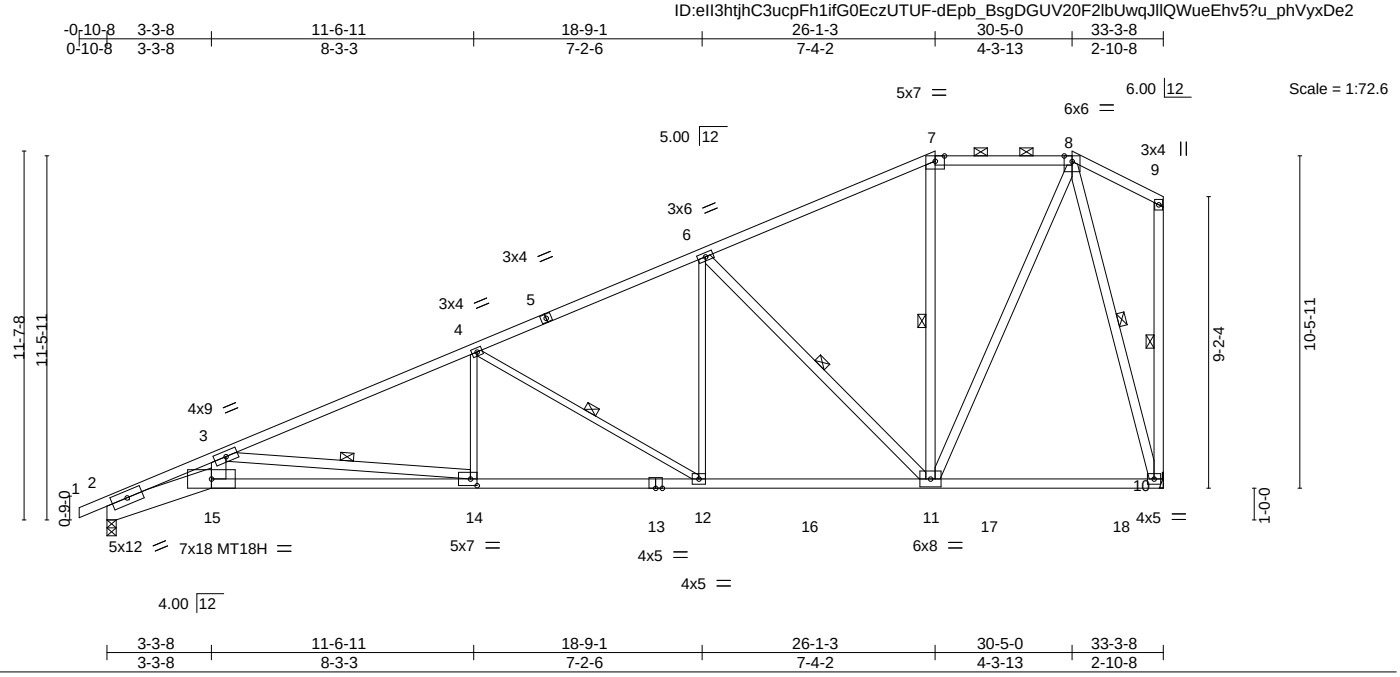


Plate Offsets (X,Y)-- [14:0-2-8,0-2-8]

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	0.78	Vert(LL)	-0.47	14-15	>851	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.84	14-15	>470	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.30	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	14-15	>999	240	Weight: 170 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
2-15: 2x8 SP DSS, 13-15: 2x4 SPF 2100F 1.8E

WEBS 2x4 SPF No.2 *Except*
3-15: 2x6 SPF No.2, 4-14,4-12,6-12: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 14-15.

WEBS 1 Row at midpt 3-14, 4-12, 6-11, 7-11, 9-10, 8-10

REACTIONS. (size) 2=0-3-8, 10=Mechanical
Max Horz 2=335(LC 5)
Max Uplift 2=-52(LC 8), 10=-30(LC 8)
Max Grav 2=1612(LC 2), 10=1613(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6888/375, 3-4=-3171/120, 4-6=-2059/110, 6-7=-1071/100, 7-8=-910/117
BOT CHORD 2-15=-483/6319, 14-15=-447/5479, 12-14=-153/2877, 11-12=-98/1822, 10-11=-75/381
WEBS 3-15=-61/2106, 3-14=-2617/295, 4-14=0/568, 4-12=-1226/117, 6-12=0/883, 6-11=-1295/137, 8-11=-59/1333, 8-10=-1447/86

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B7	Roof Special	2	1	I42065394
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:36 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-5QNzBWtI_acMfAqEJJ?9NWIwkvGsz9eFDYjNExyxDe1

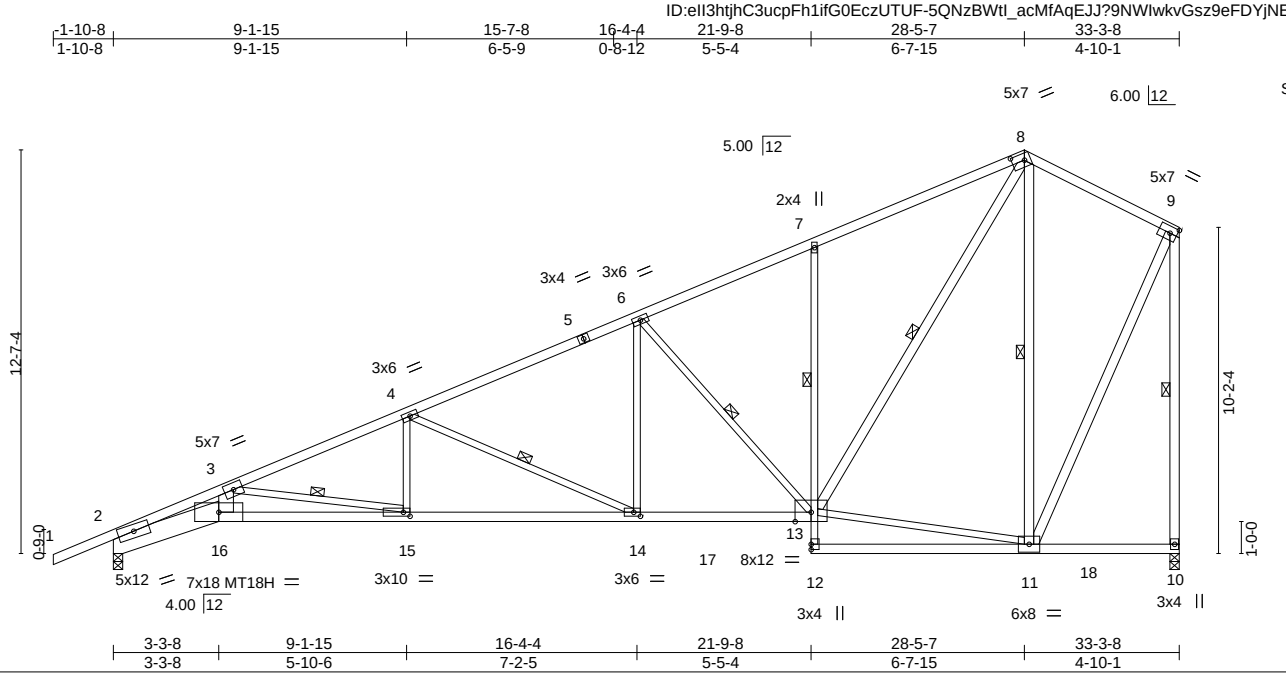


Plate Offsets (X,Y)-- [8:0-4-11,0-2-8], [14:0-2-8,0-1-8], [15:0-2-8,0-1-8]

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	0.81	Vert(LL)	-0.34	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.61	15-16	>653	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.27	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.29	15-16	>999	240	Weight: 179 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except* 8-9: 2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 2-16: 2x8 SP DSS, 7-12: 2x3 SPF No.2, 10-12: 2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-16: 2x6 SPF No.2, 8-13,9-10,9-11,8-11: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-7-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-7-0 oc bracing. Except: 1 Row at midpt 7-13
WEBS	1 Row at midpt 3-15, 6-13, 8-13, 9-10, 4-14, 8-11

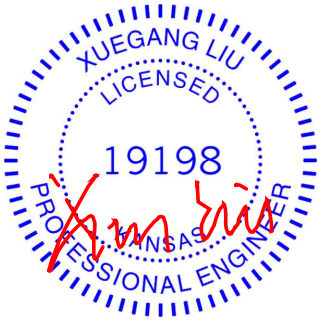
REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=458(LC 8)
Max Uplift 2=-246(LC 8), 10=-272(LC 8)
Max Grav 2=1663(LC 2), 10=1579(LC 2)

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

TOP CHORD	2-3=-6414/1292, 3-4=-3510/538, 4-6=-2355/335, 6-7=-1541/251, 7-8=-1555/370, 8-9=-631/147, 9-10=-1497/289
BOT CHORD	2-16=-1601/5848, 15-16=-1422/5090, 14-15=-816/3221, 13-14=-505/2096, 7-13=-447/228
WEBS	3-16=-422/1892, 3-15=-1892/613, 6-13=-1103/273, 11-13=-106/475, 8-13=-447/1668, 9-11=-231/1231, 4-15=-6/521, 4-14=-1235/342, 6-14=-56/776, 8-11=-996/309

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=246, 10=272.
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.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

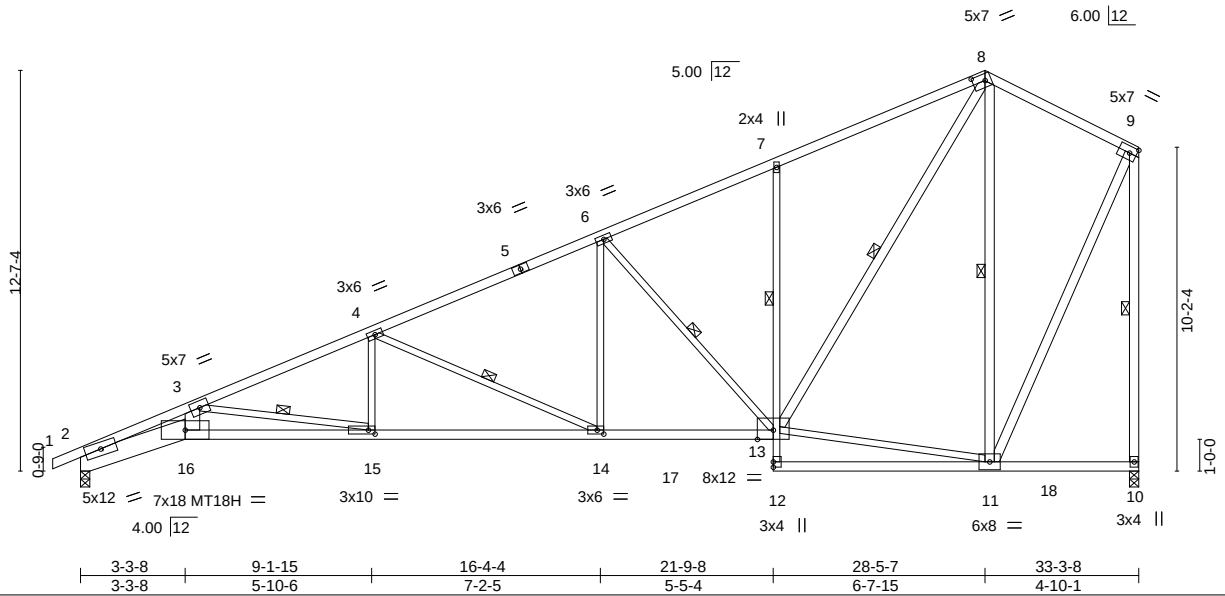
Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065395
400422	B8	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:37 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-ZcwMPsuwktkDHKPQs0WOvkr5_JbuickOSCTwmOyxDe0

-0-10-8	3-3-8	9-1-15	16-4-4	21-9-8	28-5-7	33-3-8
0-10-8	3-3-8	5-10-6	7-2-5	5-5-4	6-7-15	4-10-1

Scale = 1:72.5



3-3-8	9-1-15	16-4-4	21-9-8	28-5-7	33-3-8
3-3-8	5-10-6	7-2-5	5-5-4	6-7-15	4-10-1

Plate Offsets (X,Y)-- [8:0-4-11,0-2-8], [14:0-2-8,0-1-8], [15:0-2-8,0-1-8]

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	0.78	Vert(LL)	-0.35	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.62	15-16	>641	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.28	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.30	15-16	>999	240	Weight: 178 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
2-16: 2x8 SP DSS, 13-16: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
3-16: 2x6 SPF No.2, 8-13,8-11,9-10,9-11: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-10 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-5-15 oc bracing. Except:
1 Row at midpt 7-13

WEBS 1 Row at midpt 3-15, 4-14, 6-13, 8-13, 8-11, 9-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=444(LC 8)
Max Uplift 2=-222(LC 8), 10=-274(LC 8)
Max Grav 2=1603(LC 2), 10=1581(LC 2)

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

TOP CHORD 2-3=-6527/1341, 3-4=-3533/548, 4-6=-2362/338, 6-7=-1544/252, 7-8=-1560/372, 8-9=-632/147, 9-10=-1500/290

BOT CHORD 2-16=-1651/5957, 15-16=-1459/5175, 14-15=-826/3243, 13-14=-507/2102, 7-13=-449/229

WEBS 3-16=-446/1948, 3-15=-1957/641, 4-15=-10/531, 4-14=-1252/350, 6-14=-59/783, 6-13=-1106/274, 11-13=-107/475, 8-13=-449/1673, 8-11=-999/311, 9-11=-233/1234

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=222, 10=274.
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.

STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

XUEGANG LIU
LICENSED
19198
KANSAS
PROFESSIONAL ENGINEER

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

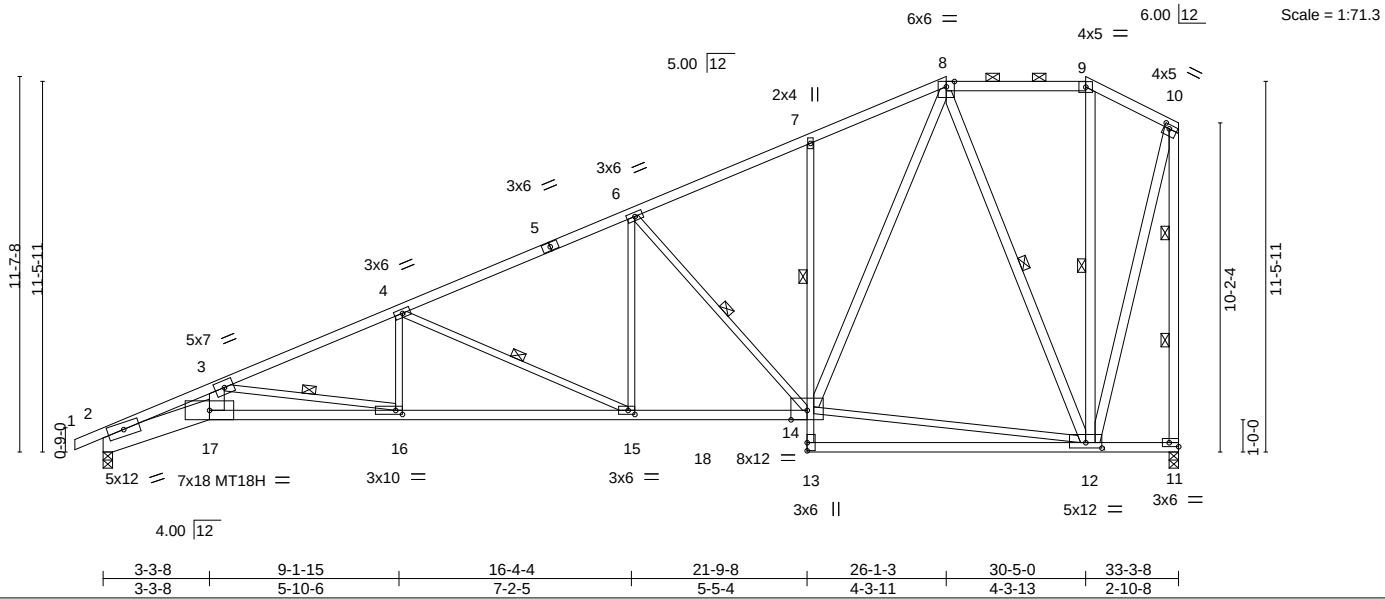
Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065396
400422	B9	Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:38 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-2pUkcCvYVBs4vU_dQk1dSxNDdjx8R2FYhsCTIqyxDe?

-0-10-8	3-3-8	9-1-15	16-4-4	21-9-8	26-1-3	30-5-0	33-3-8
0-10-8	3-3-8	5-10-6	7-2-5	5-5-4	4-3-11	4-3-13	2-10-8

Scale = 1:71.3



3-3-8	9-1-15	16-4-4	21-9-8	26-1-3	30-5-0	33-3-8
3-3-8	5-10-6	7-2-5	5-5-4	4-3-11	4-3-13	2-10-8

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

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	0.91	Vert(LL)	-0.35	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.62	16-17	>643	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.28	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.27	16-17	>999	240	Weight: 188 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-5: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except*
	2-17: 2x8 SP DSS, 14-17: 2x4 SPF 2100F 1.8E, 7-13: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	3-17: 2x6 SPF No.2, 8-14,8-12,9-12,10-11,10-12: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-6-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.
BOT CHORD	Rigid ceiling directly applied or 7-4-7 oc bracing. Except:
	1 Row at midpt 7-14
WEBS	1 Row at midpt 3-16, 4-15, 6-14, 8-12, 9-12
	2 Rows at 1/3 pts 10-11

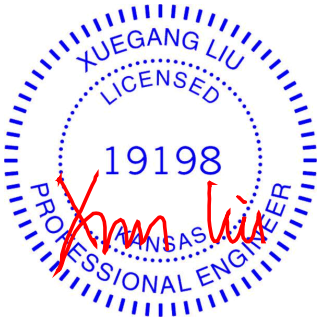
REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=453(LC 7)
Max Uplift 2=-250(LC 8), 11=-204(LC 8)
Max Grav 2=1601(LC 2), 11=1543(LC 2)

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

TOP CHORD	2-3=-6522/1186, 3-4=-3526/568, 4-6=-2360/386, 6-7=-1535/305, 7-8=-1504/387, 8-9=-389/158, 9-10=-478/179, 10-11=-1571/227
BOT CHORD	2-17=-1285/5952, 16-17=-1137/5171, 15-16=-626/3236, 14-15=-335/2101, 7-14=-311/169
WEBS	3-17=-335/1947, 3-16=-1959/517, 4-16=0/531, 4-15=-1246/320, 6-15=-46/782, 6-14=-1126/275, 12-14=-207/669, 8-14=-332/1502, 8-12=-1172/266, 10-12=-142/1382

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) 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, with BCDL = 10.0psf.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=250, 11=204.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

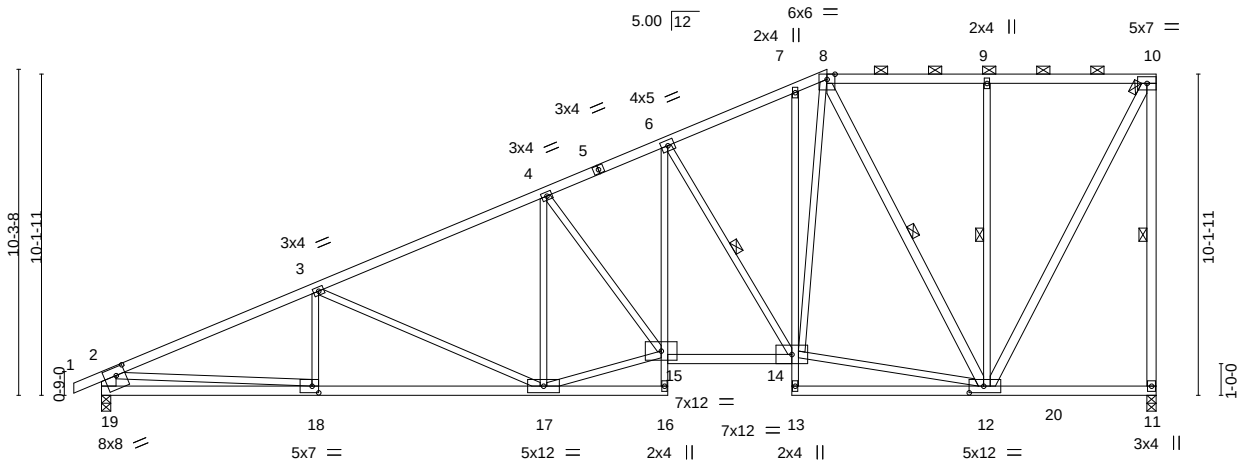
Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065397
400422	B10	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:20 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-ZLPwr2hGlfbdljc9NyjPj8eD4ToYDtnuY2rWftyxDeH

-0-10-8	6-9-0	13-11-7	17-10-8	21-9-8	22-10-13	27-11-6	33-3-8
0-10-8	6-9-0	7-2-7	3-11-1	3-11-0	1-1-5	5-0-10	5-4-2

Scale = 1:72.7



6-9-0	13-11-7	17-10-8	21-9-8	27-11-6	33-3-8
6-9-0	7-2-7	3-11-1	3-11-0	6-1-14	5-4-2

Plate Offsets (X,Y)-- [12:0-5-8,0-2-8], [18:0-2-8,0-2-8], [19:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.20	17-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.38	17-18	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	17-18	>999	240	Weight: 181 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 6-16,7-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 10-11,8-12,10-12: 2x4 SPF No.2, 2-19: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.

BOT CHORD Rigid ceiling directly applied or 7-5-3 oc bracing.

WEBS 1 Row at midpt 10-11, 6-14, 8-12, 9-12

REACTIONS. (size) 11=0-3-8, 19=0-3-8
Max Horz 19=388(LC 8)
Max Uplift 11=-230(LC 4), 19=-214(LC 8)
Max Grav 11=1566(LC 2), 19=1589(LC 2)

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

TOP CHORD 2-3=-2823/340, 3-4=-2245/276, 4-6=-2089/319, 6-7=-1482/229, 7-8=-1363/256, 8-9=-716/102, 9-10=-718/103, 10-11=-1460/253, 2-19=-1488/248

BOT CHORD 18-19=-496/648, 17-18=-628/2536, 6-15=-180/956, 14-15=-395/1882

WEBS 3-17=-590/200, 15-17=-444/2050, 6-14=-1074/281, 12-14=-215/1143, 8-14=-277/1111, 8-12=-1059/263, 9-12=-416/173, 10-12=-217/1512, 2-18=-132/1894

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=230, 19=214.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

XUEGANG LIU
LICENSED
19198
KANSAS
PROFESSIONAL ENGINEER

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B11	Half Hip	1	1	I42065398

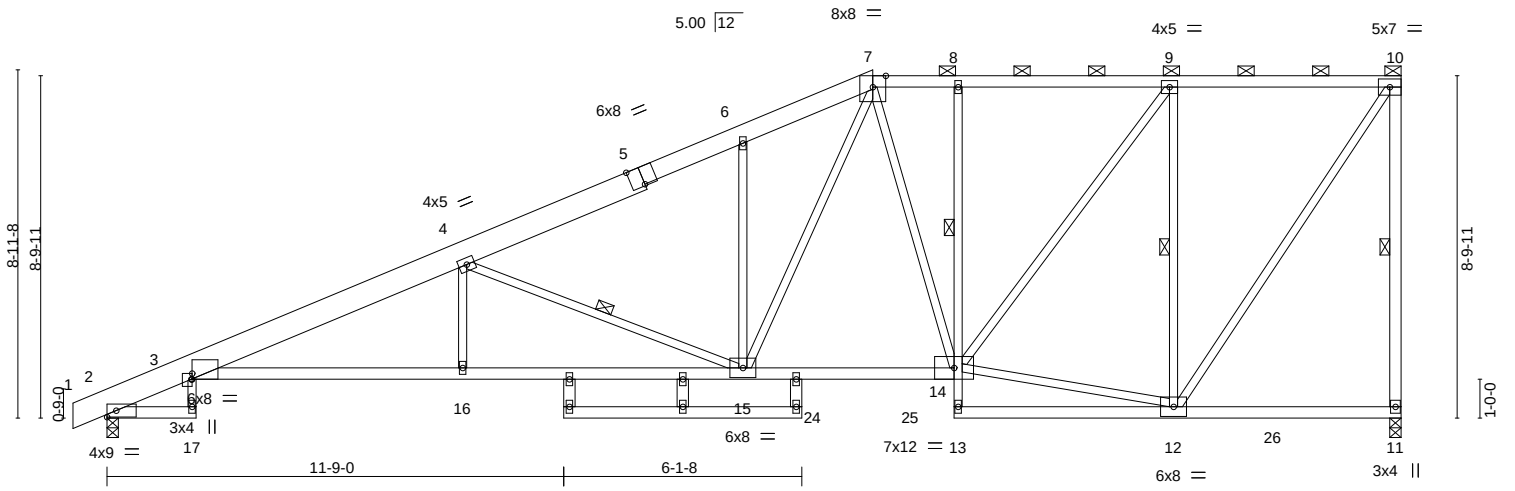
Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:21 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-1XzI2OhuWzjUMtBMwfEeGMAMvsAYyKG2nia4CJyxDeG

-0-10-8	2-3-8	9-1-13	16-4-5	19-8-6	21-9-8	27-5-4	33-3-8
0-10-8	2-3-8	6-10-5	7-2-8	3-4-2	2-1-2	5-7-12	5-10-4

Scale = 1:59.3



2-3-8	9-1-13	13-10-12	19-8-6	21-9-8	27-5-4	33-3-8
2-3-8	6-10-5	4-9-0	5-9-10	2-1-2	5-7-12	5-10-4

Plate Offsets (X,Y)-- [3:0-1-13,0-0-3], [3:0-3,0-0-0], [5:0-4-0,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	0.79	Vert(LL)	-0.35	3-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.62	3-16	>636	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.33	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25	3-16	>999	240	Weight: 193 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
7-10: 2x4 SPF No.2, 1-5: 2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except*
3-17,8-13: 2x3 SPF No.2, 3-14: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
10-11,18-20,19-21,22-23: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-11 max.): 7-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-17.
1 Row at midpt 8-14

WEBS 1 Row at midpt 10-11, 4-15, 9-12

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=374(LC 5)
Max Uplift 11=-245(LC 5), 2=-228(LC 8)
Max Grav 11=1593(LC 2), 2=1608(LC 2)

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

TOP CHORD 2-3=-928/20, 3-4=-3744/519, 4-6=-2412/326, 6-7=-2306/405, 7-8=-1559/272, 8-9=-1556/272, 9-10=-904/212, 10-11=-1474/262

BOT CHORD 3-16=-574/3552, 15-16=-572/3551, 14-15=-319/1646, 8-14=-302/129

WEBS 4-16=0/281, 4-15=-1568/382, 7-15=-262/1143, 7-14=-314/129, 12-14=-200/882, 9-14=-169/1097, 9-12=-1286/334, 10-12=-245/1606

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=245, 2=228.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B12	Half Hip	1	1	I42065399
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:22 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-WkWhFkiWHGrL_0mYUNltoZjWeGVihn6B?MKdklyxDeF

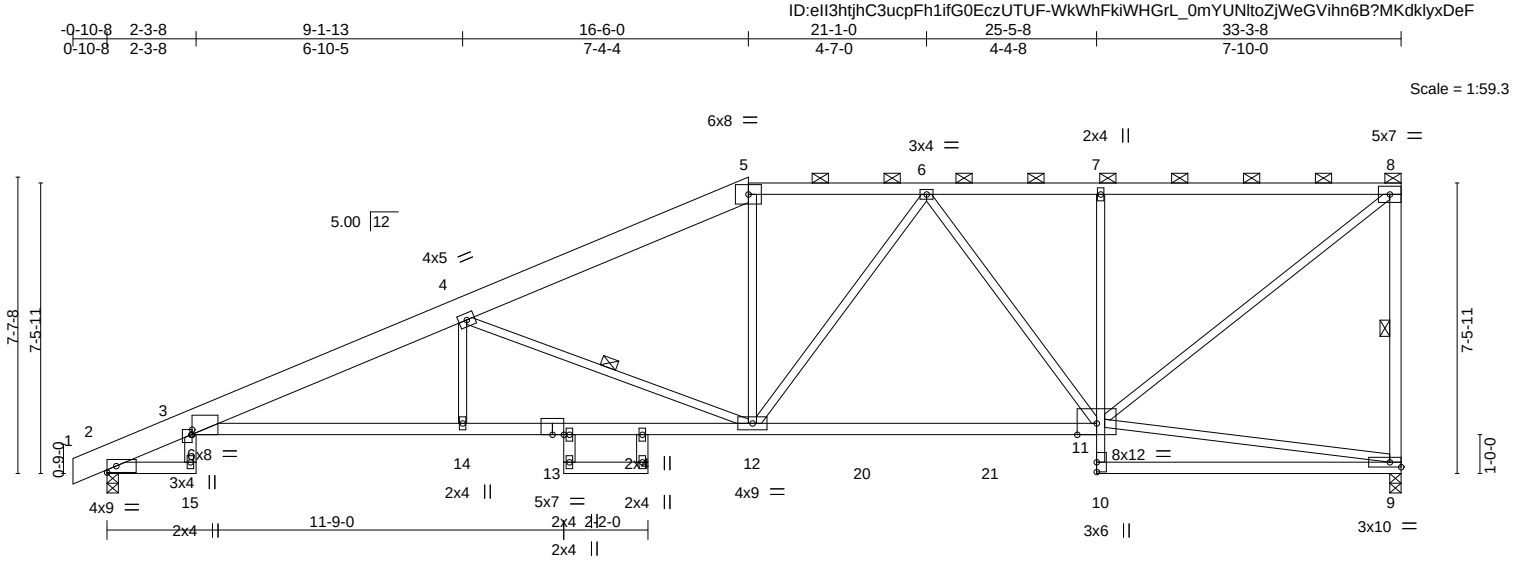


Plate Offsets (X,Y)-- [3:0-0-3,0-0-0], [3:0-1-9,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.36	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.63	3-14	>632	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.33	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	3-14	>999	240	Weight: 173 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
5-8: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
3-13,11-13: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-9,16-18,17-19: 2x4 SPF No.2

BRACING-

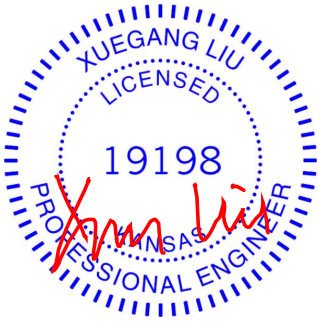
TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-3 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.
WEBS 1 Row at midpt 8-9, 4-12

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=316(LC 5)
Max Uplift 9=-255(LC 5), 2=-210(LC 8)
Max Grav 9=1557(LC 2), 2=1607(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-899/38, 3-4=-3729/453, 4-5=-2422/318, 5-6=-2142/318, 6-7=-1540/290, 7-8=-1537/293, 8-9=-1429/304
BOT CHORD 3-14=-556/3537, 12-14=-555/3536, 11-12=-385/1916, 7-11=-505/218
WEBS 4-14=0/262, 4-12=-1519/385, 5-12=0/616, 6-12=-69/385, 6-11=-641/120, 8-11=-339/1952

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=255, 2=210.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B13	Half Hip	1	1	I42065400
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:23 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-_w43T4j81azCcALk24G6LnGgxgt8QFRKE03AGCyxDeE

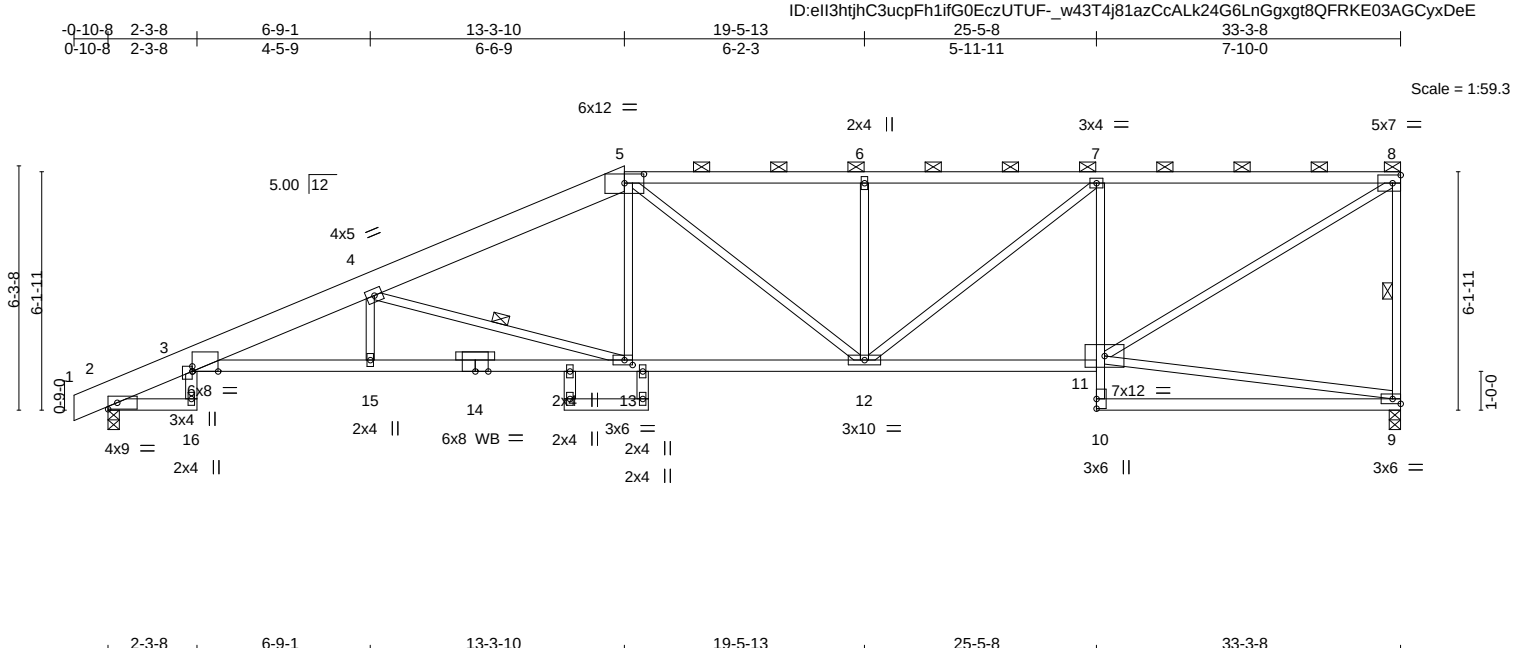


Plate Offsets (X,Y)-- [3:0-1-9,0-0-1], [3:0-7-15,0-0-0], [5:0-6-0,0-2-13], [13:0-2-8,0-1-8]

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	0.88	Vert(LL)	-0.27	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.51	13-15	>776	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.30	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.21	13-15	>999	240	Weight: 163 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
5-8: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
3-14,11-14: 2x4 SPF 2100F 1.8E, 7-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
17-19,18-20: 2x4 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-

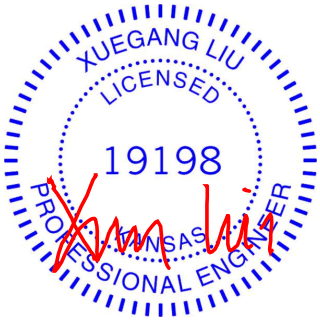
TOP CHORD Structural wood sheathing directly applied or 3-3-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-14 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 9-9-9 oc bracing.
WEBS 1 Row at midpt 8-9, 4-13

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=258(LC 5)
Max Uplift 9=-264(LC 5), 2=-184(LC 4)
Max Grav 9=1486(LC 1), 2=1561(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-768/59, 3-4=-4023/473, 4-5=-2765/405, 5-6=-2508/443, 6-7=-2507/443, 7-8=-1932/381, 8-9=-1406/314
BOT CHORD 3-15=-646/3861, 13-15=-644/3859, 12-13=-459/2478, 11-12=-415/1933, 7-11=-1002/289
WEBS 4-13=-1461/338, 5-13=-26/575, 6-12=-408/173, 7-12=-94/738, 8-11=-433/2248

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=264, 2=184.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

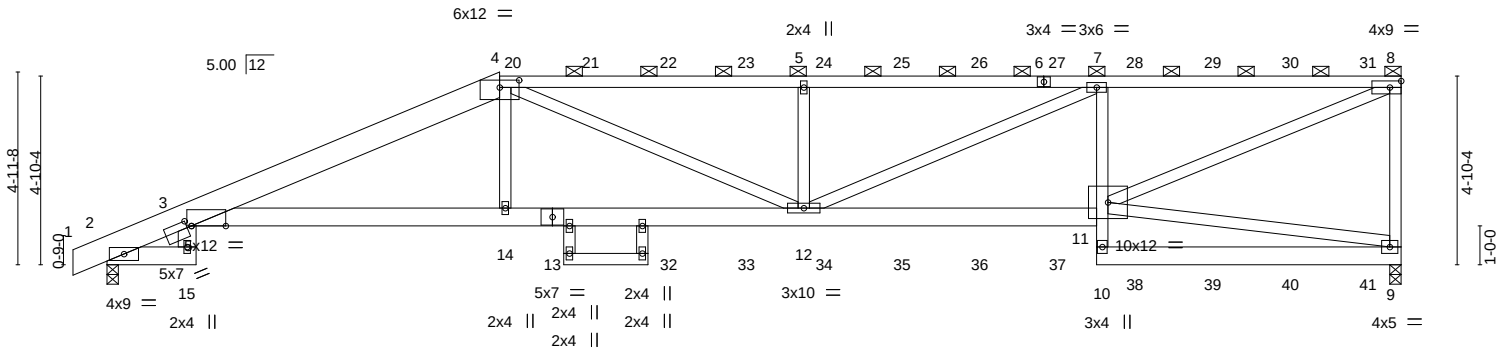
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	B14	Half Hip Girder	1	2	I42065401
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:26 2020 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-OVmB56l1KVLnTe3JjCqpzPuD4twAdeLnw_IrtXyxDeB

-0-10-8 2-3-8 10-1-3 17-11-2 25-5-8 33-3-8
0-10-8 2-3-8 7-9-11 7-9-14 7-6-6 7-10-0

Scale = 1:59.3



2-3-8 10-1-3 17-11-2 25-5-8 33-3-8
2-3-8 7-9-11 7-9-14 7-6-6 7-10-0

Plate Offsets (X,Y)-- [3:0-1-7,0-2-3], [3:0-10-10,0-0-0], [4:0-6-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.28	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.50	12-14	>786	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.27	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	12-14	>999	240	Weight: 394 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 1-4: 2x8 SP DSS
BOT CHORD 2x6 SP 2400F 2.0E *Except* 7-10,16-17: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 3-15: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-11 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-15.

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=153(LC 5)
Max Uplift 9=-534(LC 5), 2=-444(LC 8)
Max Grav 9=2945(LC 1), 2=2690(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1386/228, 3-4=-6956/1382, 4-5=-7169/1427, 5-7=-7167/1427, 7-8=-5438/1086, 8-9=-2749/631
BOT CHORD 3-14=-1384/6491, 12-14=-1393/6541, 11-12=-1113/5483, 10-11=0/298, 7-11=-1744/506
WEBS 3-15=-46/299, 4-14=-214/1170, 4-12=-122/733, 5-12=-823/248, 7-12=-403/1859, 8-11=-1172/5835

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 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
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=534, 2=444.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 115 lb down and 81 lb up at 10-5-7, 111 lb down and 63 lb up at 12-5-7, 111 lb down and 63 lb up at 14-5-7, 111 lb down and 63 lb up at 16-5-7, 111 lb down and 63 lb up at 18-5-7, 111 lb down and 63 lb up at 20-5-7, 111 lb down and 63 lb up at 22-5-7, 111 lb down and 63 lb up at 24-5-7, 124 lb down and 94 lb up at 26-5-7, 124 lb down and 94 lb up at 28-5-7, and 124 lb down and 94 lb up at 30-5-7, and 129 lb down and 91 lb up at 32-5-7 on top chord, and 703 lb down and 311 lb up at 10-1-3, 82 lb down at 10-5-7, 80 lb down and 34 lb up at 14-5-7, 80 lb down and 34 lb up at 16-5-7, 80 lb down and 34 lb up at 18-5-7, 80 lb down and 34 lb up at 20-5-7, 80 lb down and 34 lb up at 22-5-7, 80 lb down and 34 lb up at 24-5-7, 71 lb down at 26-5-7, 71 lb down at 28-5-7, and 71 lb down at 30-5-7, and 77 lb down at 32-5-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

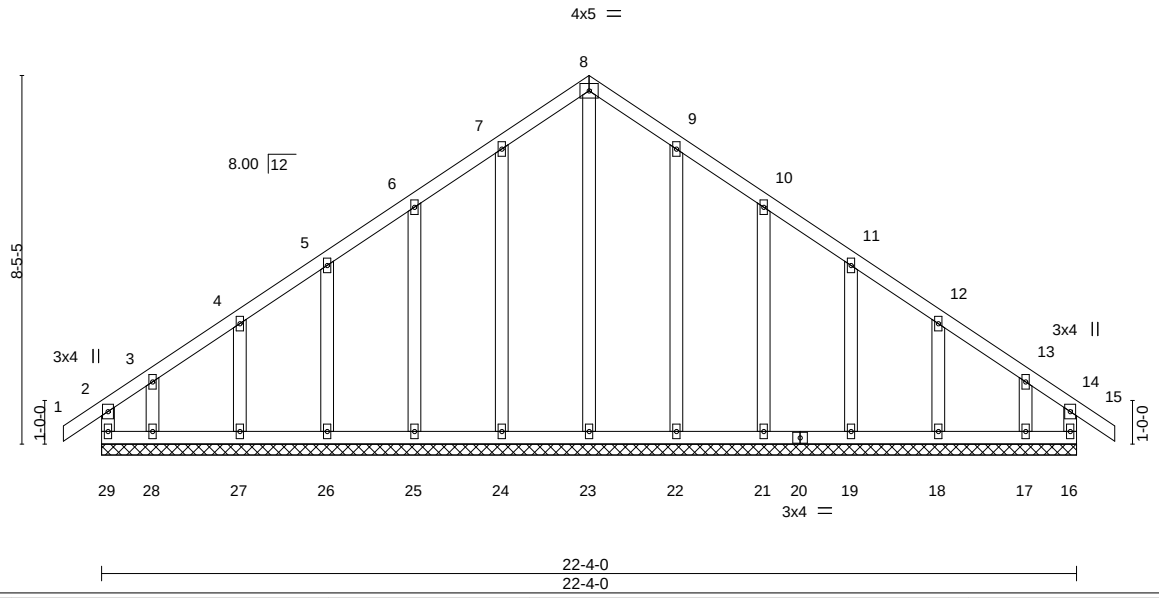
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-8=-70, 2-15=-20, 3-11=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 14=-772(B) 20=-102(B) 21=-81(B) 22=-81(B) 23=-81(B) 24=-81(B) 25=-81(B) 26=-81(B) 27=-81(B) 28=-114(B) 29=-114(B) 30=-114(B) 31=-125(B) 32=-80(B) 33=-80(B) 34=-80(B) 35=-80(B) 36=-80(B) 37=-80(B) 38=-50(B) 39=-50(B) 40=-50(B) 41=-53(B)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	C1	Common Supported Gable	1	1	I42065402
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:40 2020 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-_BcU1uwp1o6o8n8?Y945XMTm0Xoyv5Vr8AhaMjyxDdz

-0-10-8 / 0-10-8 | 11-2-0 / 11-2-0 | 22-4-0 / 11-2-0 | 23-2-8 / 0-10-8

Scale = 1:52.8



22-4-0 / 22-4-0

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	0.09	Vert(LL)	-0.00	15	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	15	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 114 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 22-4-0.
(lb) - Max Horz 29=239(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 16, 24, 25, 26, 27, 22, 21, 19, 18 except 29=-151(LC 4), 28=-163(LC 8), 17=-146(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 29, 16, 23, 24, 25, 26, 27, 28, 22, 21, 19, 18, 17

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 24, 25, 26, 27, 22, 21, 19, 18 except (jt=lb) 29=151, 28=163, 17=146.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	C2	Common	1	1	I42065403
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:41 2020 Page 1

ID:eIl3htjhC3ucpFh1ifG0EczUTUF-SOAsFExRo6EfmxjC5sbK4a?nvwzZeWZ_NpR7u9yxDdy

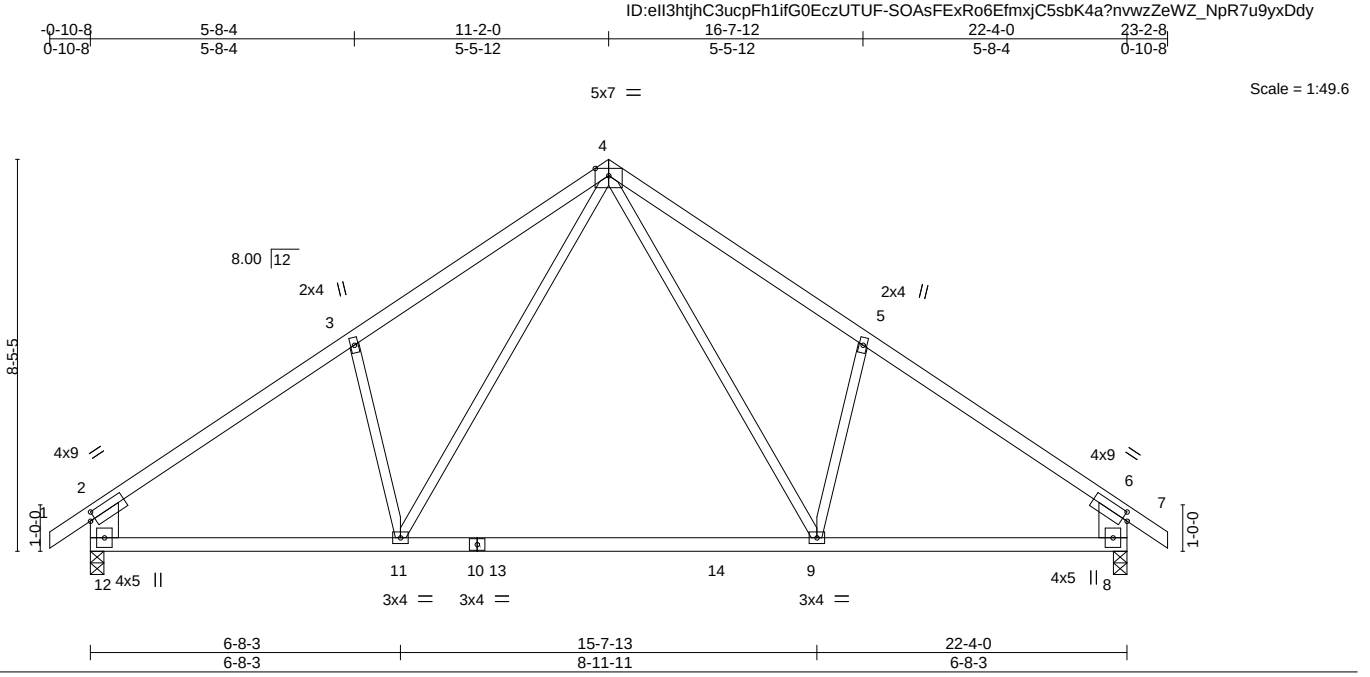


Plate Offsets (X,Y)-- [2:0-1-5,0-2-0], [6:0-1-5,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.40	9-11	>653	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.66	9-11	>396	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	9-11	>999	240	Weight: 85 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
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 4-8-11 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=-243(LC 6)
Max Uplift 12=-136(LC 8), 8=-136(LC 9)
Max Grav 12=1153(LC 15), 8=1153(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1340/149, 3-4=-1232/275, 4-5=-1232/275, 5-6=-1340/149, 2-12=-1038/167, 6-8=-1038/167
BOT CHORD 11-12=-139/1127, 9-11=0/787, 8-9=-27/994
WEBS 4-9=-170/597, 5-9=-255/254, 4-11=-170/597, 3-11=-255/254

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=136, 8=136.
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.

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065404
400422	C3	GABLE	1	1	Job Reference (optional)	

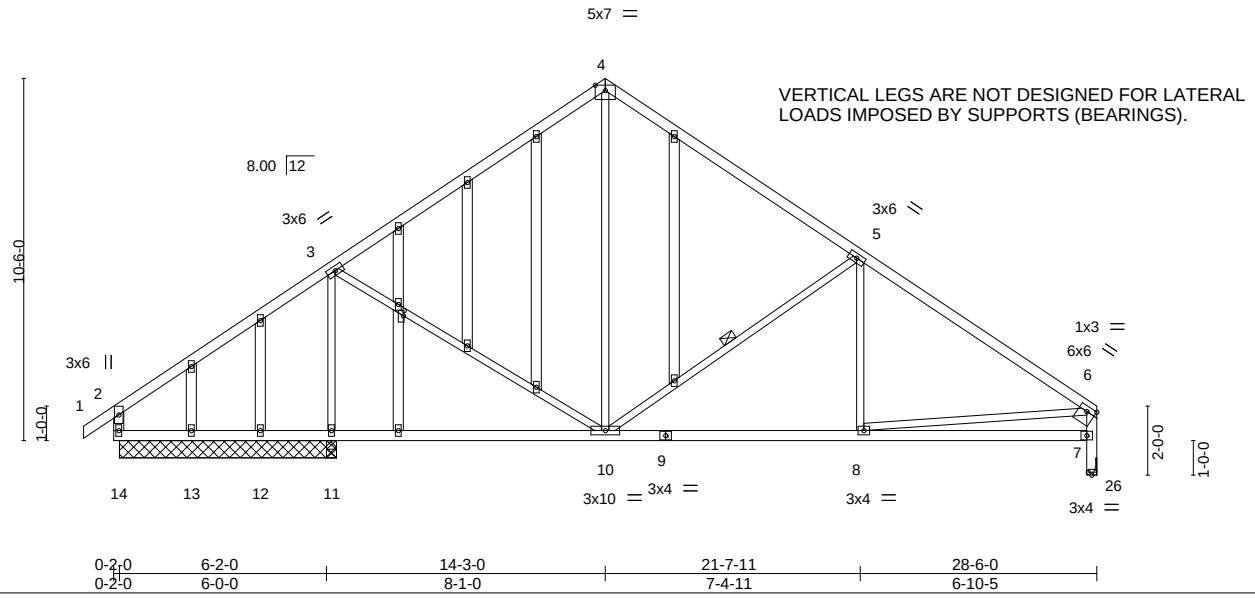
Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:42 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-wakFSay3ZQMWO5IOfa6ZcnYxmKOFNuI7cTAhQbyxDdx

-0-10-8 6-3-12 14-3-0 21-7-11 28-6-0

0-10-8 6-3-12 7-11-4 7-4-11 6-10-5

Scale = 1:66.8



0-2-0 6-2-0 14-3-0 21-7-11 28-6-0

0-2-0 6-0-0 8-1-0 7-4-11 6-10-5

Plate Offsets (X,Y)-- [6:Edge,0-1-12], [19:0-1-13,0-0-4], [26:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.07	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.14	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-10	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-14,6-26: 2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. All bearings 6-3-8 except (jt=length) 26=Mechanical.

(lb) - Max Horz 14=320(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 12, 11 except 14=-119(LC 8), 26=-135(LC 9)

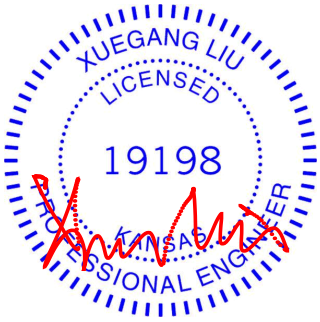
Max Grav All reactions 250 lb or less at joint(s) 13 except 14=324(LC 21), 11=1263(LC 1), 11=1263(LC 1), 26=991(LC 1)

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

TOP CHORD	3-4=-796/234, 4-5=-784/224, 5-6=-1268/191, 2-14=-311/149, 7-26=-991/135, 6-7=-927/171
BOT CHORD	13-14=-262/276, 12-13=-262/276, 11-12=-262/276, 10-11=-262/276, 8-10=-89/962
WEBS	3-11=-1107/152, 4-10=-76/315, 3-10=0/533, 5-10=-584/261, 6-8=-39/735

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 11 except (jt=lb) 14=119, 26=135.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 17,2020

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065405
400422	C4	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:43 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-OmIdgwzhKjUN?FtaDHdo9?56WkjZ6MlHq7wEy2yxDdw

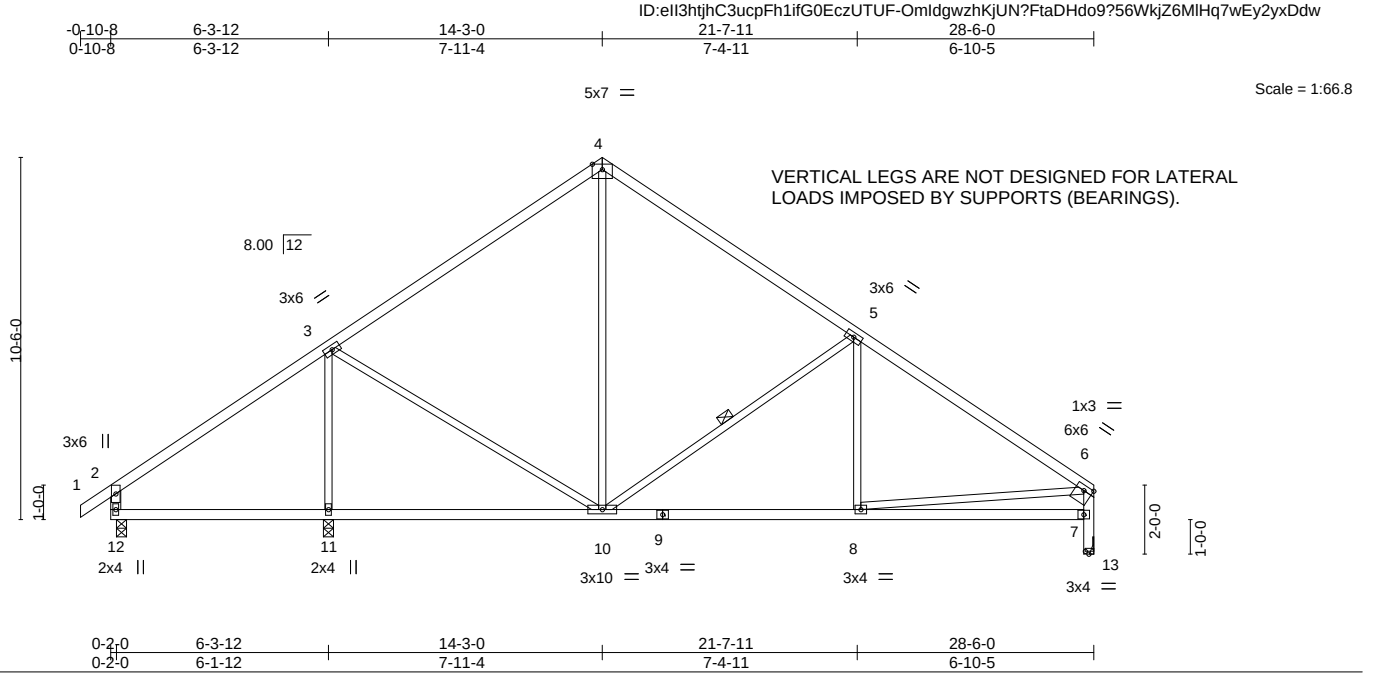


Plate Offsets (X,Y)-- [6:Edge,0-1-12], [13:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.06	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.13	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-10	>999	240	Weight: 111 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-12,6-13: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 12=0-3-8, 11=0-3-8, 13=Mechanical
Max Horz 12=320(LC 7)
Max Uplift 12=-120(LC 8), 11=-59(LC 8), 13=-134(LC 9)
Max Grav 12=373(LC 21), 11=1240(LC 1), 13=997(LC 1)

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

TOP CHORD	3-4=-805/231, 4-5=-793/226, 5-6=-1277/188, 2-12=-326/153, 7-13=-997/134, 6-7=-933/169
BOT CHORD	11-12=-267/317, 10-11=-267/317, 8-10=-86/970
WEBS	3-11=-1083/147, 3-10=-14/521, 4-10=-73/333, 5-10=-584/261, 6-8=-41/742

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 12=120, 13=134.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 17,2020

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	C5	Roof Special	1	1	I42065406
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:44 2020 Page 1
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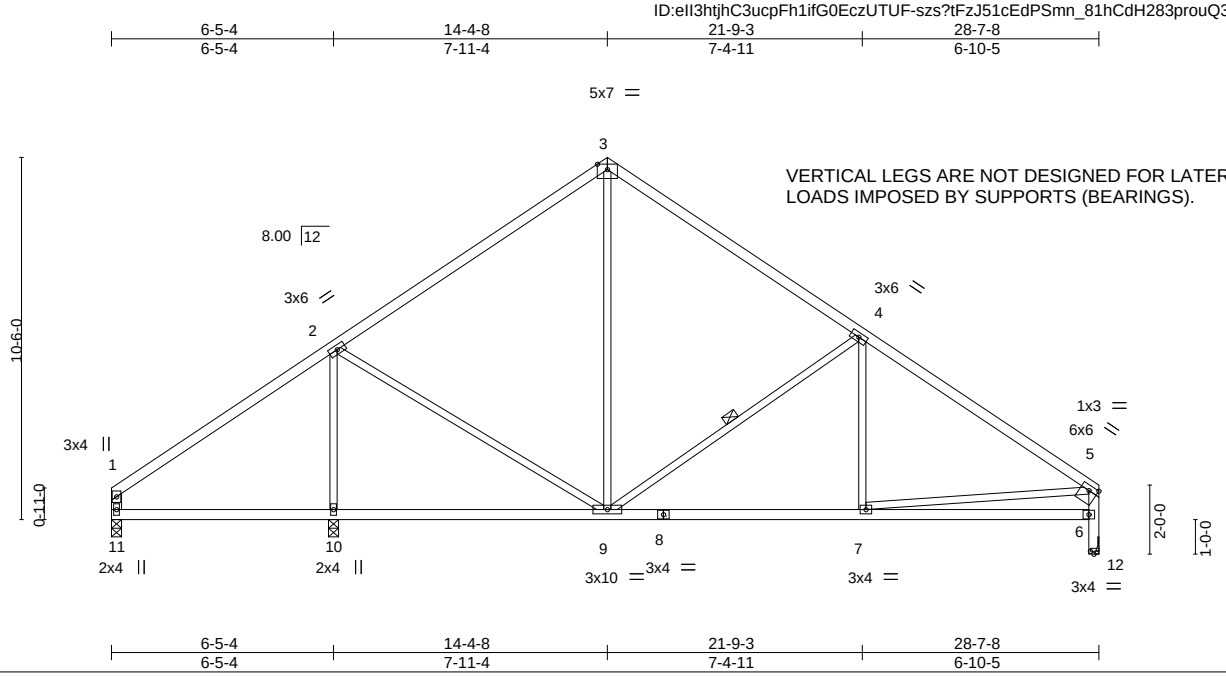


Plate Offsets (X,Y)-- [5:Edge,0-1-12], [12:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.06	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.13	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-9	>999	240	Weight: 110 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,5-12: 2x4 SPF No.2

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

REACTIONS. (size) 11=0-3-8, 10=0-3-8, 12=Mechanical
Max Horz 11=308(LC 7)
Max Uplift 11=-80(LC 8), 10=-83(LC 8), 12=-130(LC 9)
Max Grav 11=302(LC 21), 10=1254(LC 1), 12=997(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-805/225, 3-4=-792/219, 4-5=-1276/183, 1-11=-252/113, 6-12=-997/130, 5-6=-932/165
BOT CHORD 10-11=-256/316, 9-10=-256/316, 7-9=-82/969
WEBS 2-10=-1096/171, 2-9=-16/516, 3-9=-67/336, 4-9=-584/261, 5-7=-35/742

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 10 except (jt=lb) 12=130.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 17,2020

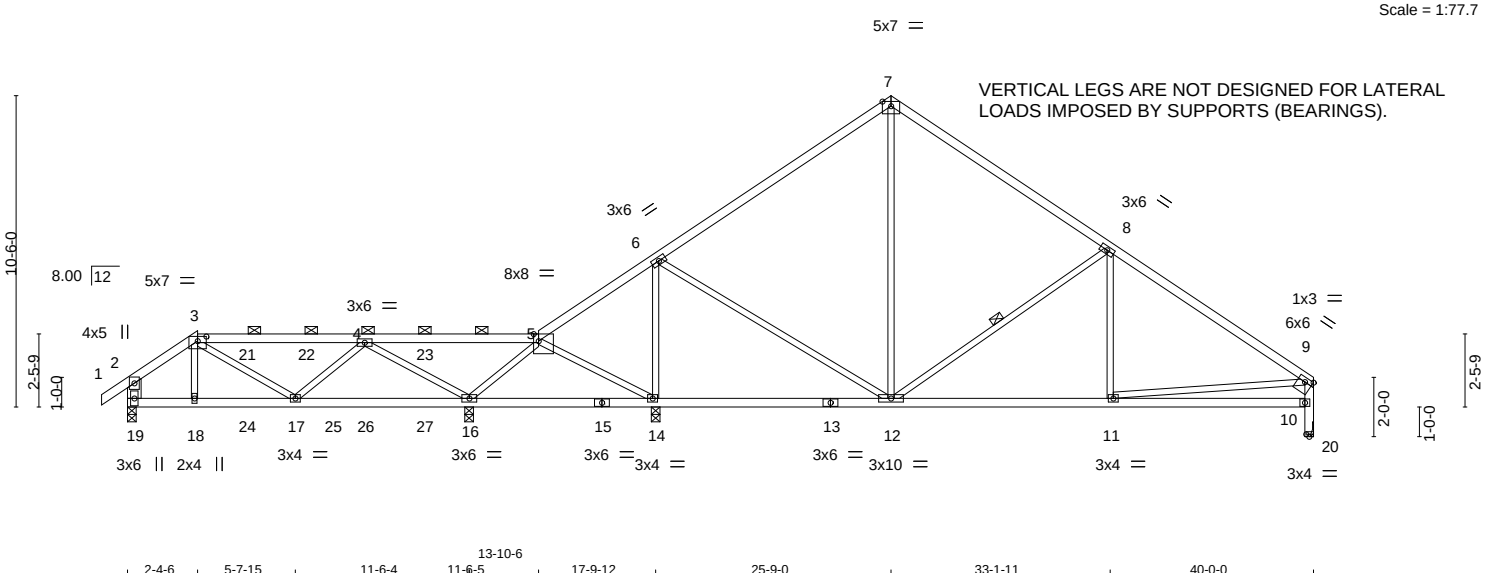
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	
400422	D1	Roof Special Girder	1	1	Job Reference (optional)	I42065407

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:46 2020 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-pLzIlx?ZdesxsibuPBVndjcExkUJiqjW58uZMyxDdt

-0-10-8 2-4-6 | 7-11-15 | 13-10-6 | 17-9-12 | 25-9-0 | 33-1-11 | 40-0-0
0-10-8 2-4-6 | 5-7-10 | 5-10-7 | 3-11-6 | 7-11-4 | 7-4-11 | 6-10-5

Scale = 1:77.7



13-10-6
2-4-6 | 5-7-15 | 11-6-4 | 11-6-5 | 17-9-12 | 25-9-0 | 33-1-11 | 40-0-0
2-4-6 | 3-3-9 | 5-10-5 | 0-0-1 2-4-1 | 3-11-6 | 7-11-4 | 7-4-11 | 6-10-5

Plate Offsets (X,Y)-- [3:0-3-8,0-1-14], [5:0-2-0,Edge], [9:Edge,0-1-12], [20:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.07	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.14	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.02	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	11-12	>999	240	Weight: 155 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-19: 2x6 SPF No.2, 9-20: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 14-16,12-14.
WEBS 1 Row at midpt 8-12

REACTIONS. All bearings 0-3-8 except (jt=length) 20=Mechanical.
(lb) - Max Horz 19=320(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) except 19=-152(LC 8), 16=-241(LC 4), 14=-260(LC 29), 20=-126(LC 30)
Max Grav All reactions 250 lb or less at joint(s) except 19=600(LC 21), 16=1126(LC 21), 14=1205(LC 1), 20=969(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-533/155, 3-4=-556/164, 4-5=-217/530, 6-7=-757/217, 7-8=-747/179, 8-9=-1234/176, 2-19=-470/138, 10-20=-969/126, 9-10=-905/161
BOT CHORD 18-19=-340/500, 17-18=-343/502, 16-17=-328/498, 14-16=-262/184, 11-12=-76/934
WEBS 4-16=-1202/443, 5-16=-515/188, 6-14=-1156/265, 6-12=-6/595, 7-12=-57/290, 8-12=-583/262, 9-11=0/707

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 19, 241 lb uplift at joint 16, 260 lb uplift at joint 14 and 126 lb uplift at joint 20.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 93 lb down and 84 lb up at 2-4-6, 82 lb down and 69 lb up at 4-0-0, 82 lb down and 69 lb up at 6-0-0, and 82 lb down and 69 lb up at 8-0-0, and 82 lb down and 69 lb up at 10-0-0 on top chord, and 29 lb down at 2-4-6, 24 lb down at 4-0-0, 24 lb down at 6-0-0, and 24 lb down at 8-0-0, and 24 lb down at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

XUEGANG LIU
LICENSED
19198
KANSAS
PROFESSIONAL ENGINEER

July 17,2020

LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-7=-70, 7-9=-70, 10-19=-20
   Concentrated Loads (lb)
   Vert: 3=-18(F) 18=-16(F) 4=-32(F) 21=-32(F) 22=-32(F) 23=-32(F) 24=-17(F) 25=-17(F) 26=-17(F) 27=-17(F)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	D2	Roof Special	1	1	I42065408

Job Reference (optional)

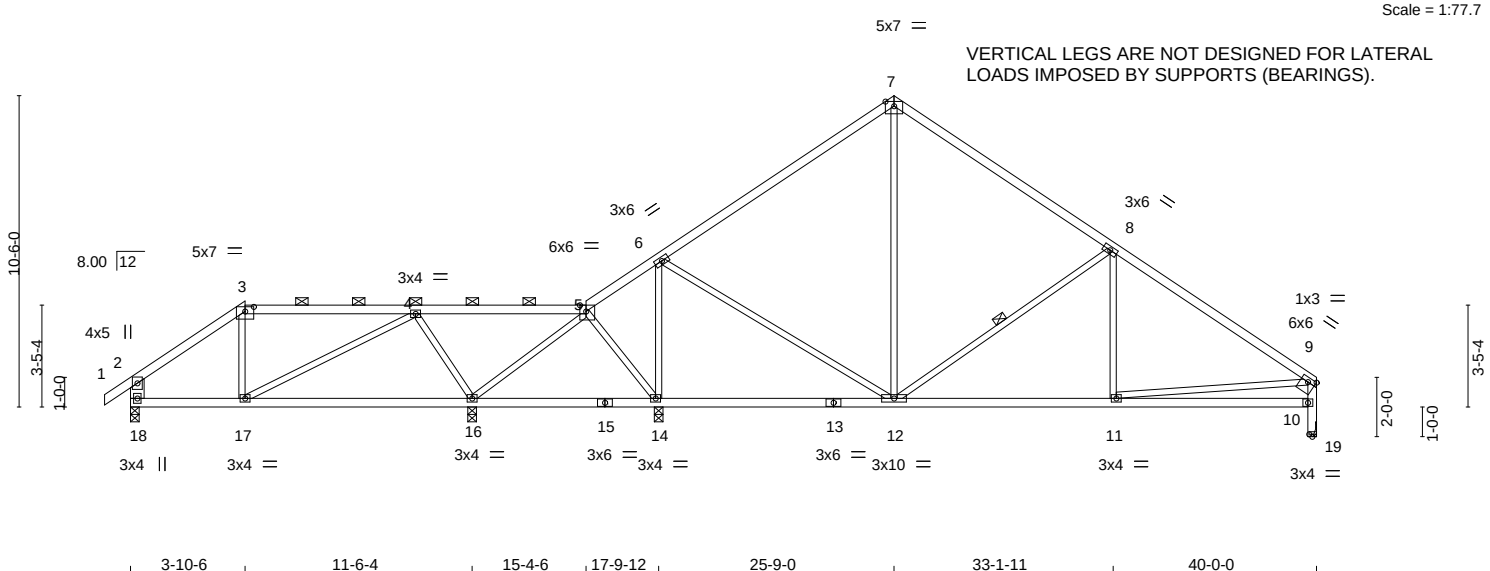
Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:47 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-HYX8VH0COy_oUsALS7ikJrFoZL5O29xtlluS6pyxDds

-0-10-8	3-10-6	9-7-6	15-4-6	17-9-12	25-9-0	33-1-11	40-0-0
0-10-8	3-10-6	5-9-0	5-9-0	2-5-6	7-11-4	7-4-11	6-10-5

Scale = 1:77.7

VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).



3-10-6	11-6-4	15-4-6	17-9-12	25-9-0	33-1-11	40-0-0
3-10-6	7-7-14	3-10-2	2-5-6	7-11-4	7-4-11	6-10-5

Plate Offsets (X,Y)-- [3:0-3-8,0-1-14], [5:0-2-8,Edge], [9:Edge,0-1-12], [19:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.08	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.17	16-17	>792	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	11-12	>999	240	Weight: 156 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-18: 2x6 SPF No.2, 9-19: 2x4 SPF No.2

BRACING-

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

REACTIONS. All bearings 0-3-8 except (jt=length) 19=Mechanical.
(lb) - Max Horz 18=258(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 18, 16, 14, 19
Max Grav All reactions 250 lb or less at joint(s) except 18=483(LC 19), 16=1021(LC 19), 14=1197(LC 1), 19=966(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-440/41, 3-4=-295/61, 4-5=0/376, 6-7=-752/117, 7-8=-742/96, 8-9=-1229/51, 2-18=-437/54, 10-19=-966/16, 9-10=-902/52
BOT CHORD 17-18=-172/378, 11-12=0/930
WEBS 4-17=0/328, 4-16=-740/109, 5-16=-374/73, 6-14=-1173/104, 6-12=0/605, 7-12=-16/285, 8-12=-567/137, 9-11=0/703

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 16, 14, 19.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 17,2020

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	
400422	D3	Roof Special	1	1	Job Reference (optional)	I42065409

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:48 2020 Page 1
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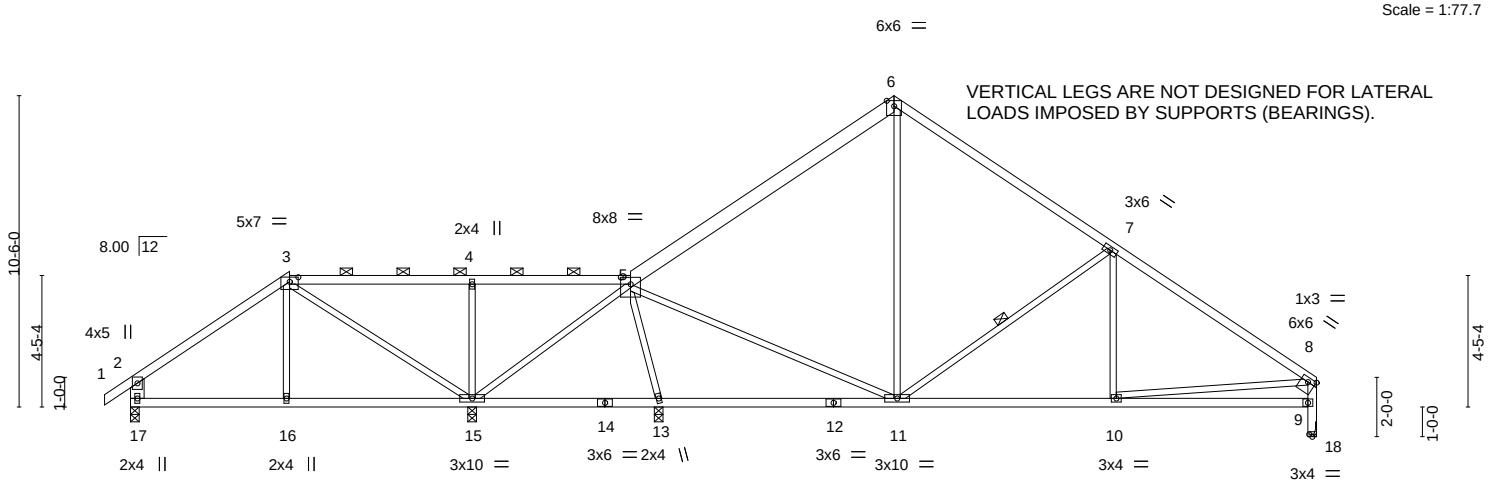
-0-10-8	5-4-6	11-1-6	11-6-4	16-10-6	25-9-0	33-1-11	40-0-0
0-10-8	5-4-6	5-9-0	0-4-14	5-4-2	8-10-10	7-4-11	6-10-5

Scale = 1:77.7



5-4-6	11-6-4	16-10-6	17-8-0	25-9-0	33-1-11	40-0-0
5-4-6	6-1-14	5-4-2	0-9-10	8-1-0	7-4-11	6-10-5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.07	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.15	11-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.02	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	10-11	>999	240	Weight: 163 lb	FT = 10%

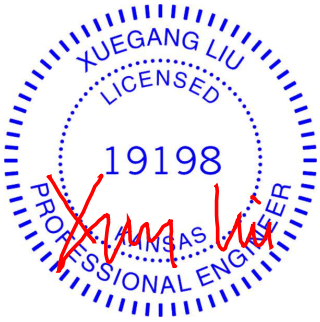
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-17: 2x6 SPF No.2, 8-18: 2x4 SPF No.2

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

REACTIONS. All bearings 0-3-8 except (jt=length) 18=Mechanical.
(lb) - Max Horz 17=257(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 17, 15, 13, 18
Max Grav All reactions 250 lb or less at joint(s) except 17=498(LC 19), 15=1086(LC 1), 13=1067(LC 1), 18=998(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-417/83, 5-6=-821/122, 6-7=-801/107, 7-8=-1277/60, 2-17=-447/90, 9-18=-998/23, 8-9=-934/59
BOT CHORD 16-17=-193/371, 15-16=-195/368, 10-11=0/969
WEBS 3-15=-529/0, 4-15=-436/123, 5-15=-372/65, 5-11=0/723, 6-11=-14/300, 7-11=-552/133, 8-10=0/739, 5-13=-945/136

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 15, 13, 18.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	D4	Roof Special	1	1	I42065410

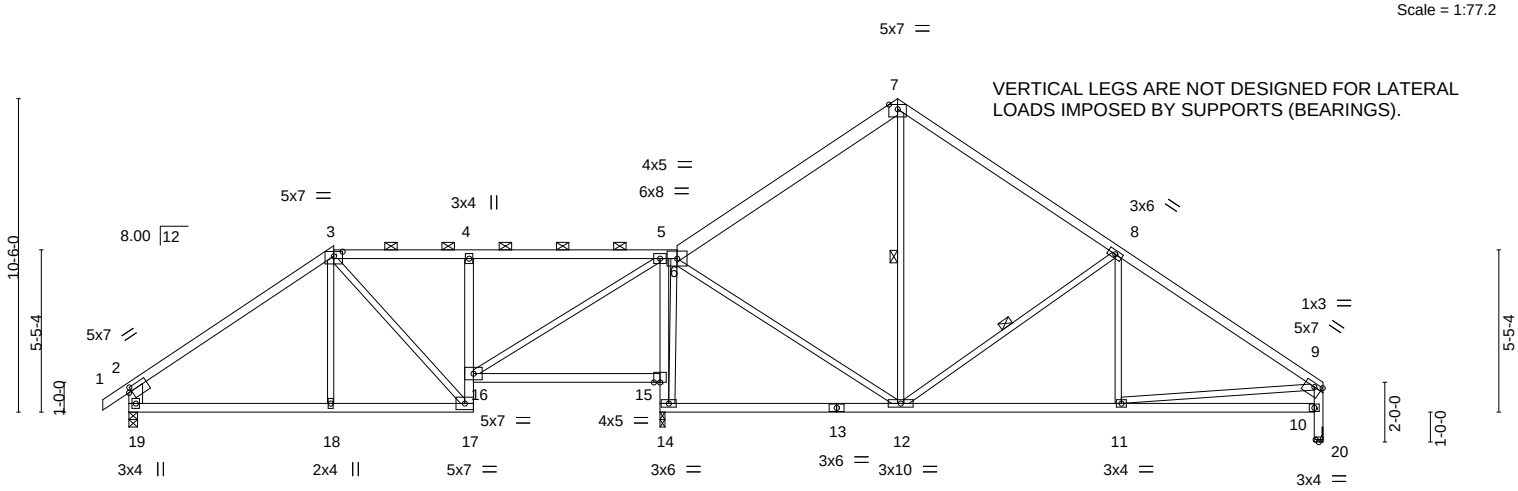
Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:49 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-Dwfuwz1SwZEWjAKkZYkCOGLAZ9kjW5o9D3NZAhyxDdq

-0-10-8	6-10-6	11-6-8	17-9-8	18-4-6	25-9-0	33-1-11	40-0-0
0-10-8	6-10-6	4-8-2	6-3-0	0-6-14	7-4-10	7-4-11	6-10-5

Scale = 1:77.2



6-10-6	11-6-8	17-9-8	17-10-8	25-9-0	33-1-11	40-0-0
6-10-6	4-8-2	6-3-0	0-1-0	7-10-8	7-4-11	6-10-5

Plate Offsets (X,Y)-- [2:0-1-5,0-1-12], [3:0-3-8,0-1-14], [9:0-3-0,0-1-8], [20:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.11	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.22	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	20	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	17-18	>999	240	Weight: 171 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-19: 2x6 SPF No.2, 9-20: 2x4 SPF No.2

BRACING-

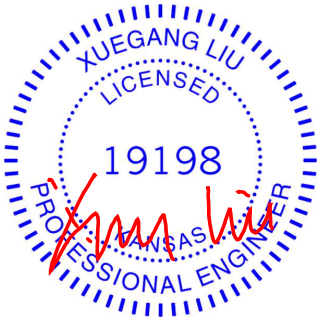
TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 4-5-15 oc bracing.
WEBS 1 Row at midpt 7-12, 8-12

REACTIONS. (size) 19=0-3-8, 14=0-2-0 (req. 0-3-1), 20=Mechanical
Max Horz 19=257(LC 7)
Max Uplift 19=-47(LC 8), 14=-21(LC 8), 20=-44(LC 9)
Max Grav 19=781(LC 19), 14=1961(LC 1), 20=906(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-786/73, 3-4=-477/131, 4-5=-564/110, 5-6=-87/316, 6-7=-655/161, 7-8=-649/141, 8-9=-1135/94, 2-19=-702/95, 10-20=-906/44, 9-10=-840/80
BOT CHORD 18-19=-100/538, 17-18=-102/536, 4-16=-387/119, 15-16=-326/6, 14-15=-1200/63, 5-15=-1104/106, 11-12=-17/852
WEBS 5-16=-46/1041, 6-14=-737/70, 6-12=0/771, 8-12=-560/132, 9-11=0/628

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 14, 20.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	D5	Roof Special	1	1	I42065411
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:51 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-9JneLf3iRBVEzUU7hymgUhQWmyQ1_taSgNsfFayxDdo

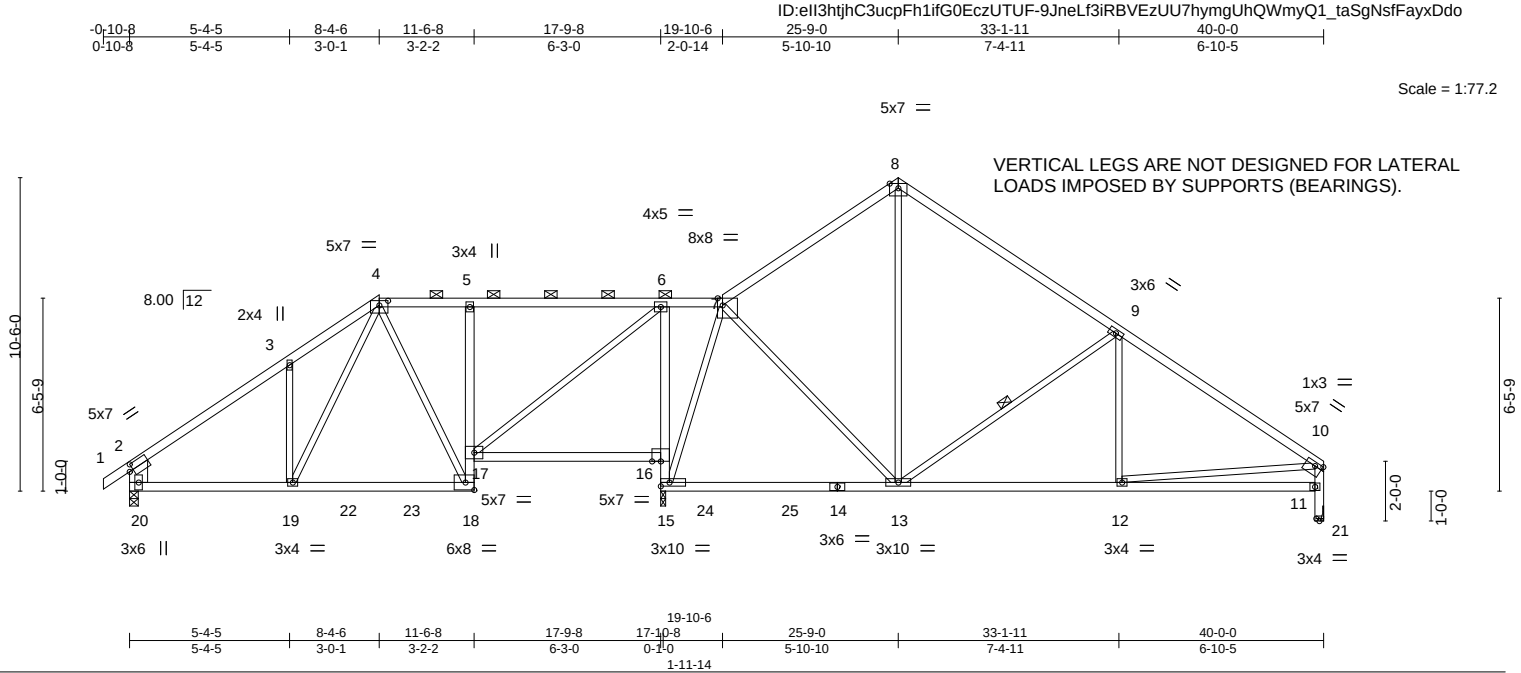


Plate Offsets (X,Y)-- [2:0-1-11,0-2-8], [4:0-3-8,0-1-14], [7:0-2-0,Edge], [10:0-3-0,0-1-8], [21:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.16	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.27	13-15	>973	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	-0.03	21	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	17	>999	240	Weight: 174 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-20: 2x8 SP DSS, 10-21: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 20=0-3-8, 15=0-2-0 (req. 0-3-4), 21=Mechanical
Max Horz 20=258(LC 7)
Max Uplift 20=-47(LC 8), 15=-22(LC 8), 21=-50(LC 9)
Max Grav 20=792(LC 21), 15=2087(LC 2), 21=1022(LC 14)

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

TOP CHORD	2-3=-847/67, 3-4=-730/162, 4-5=-448/122, 5-6=-490/112, 6-7=-83/377, 7-8=-708/176, 8-9=-713/151, 9-10=-1247/102, 2-20=-688/77, 11-21=-1022/50, 10-11=-911/85
BOT CHORD	19-20=-108/686, 18-19=-84/501, 17-18=-27/315, 5-17=-361/100, 16-17=-319/8, 15-16=-1069/56, 6-16=-951/94, 12-13=-25/910
WEBS	6-17=-45/989, 7-15=-958/9, 7-13=0/642, 8-13=-85/284, 9-13=-650/134, 10-12=0/687, 4-19=-79/427

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15, 21.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 17,2020

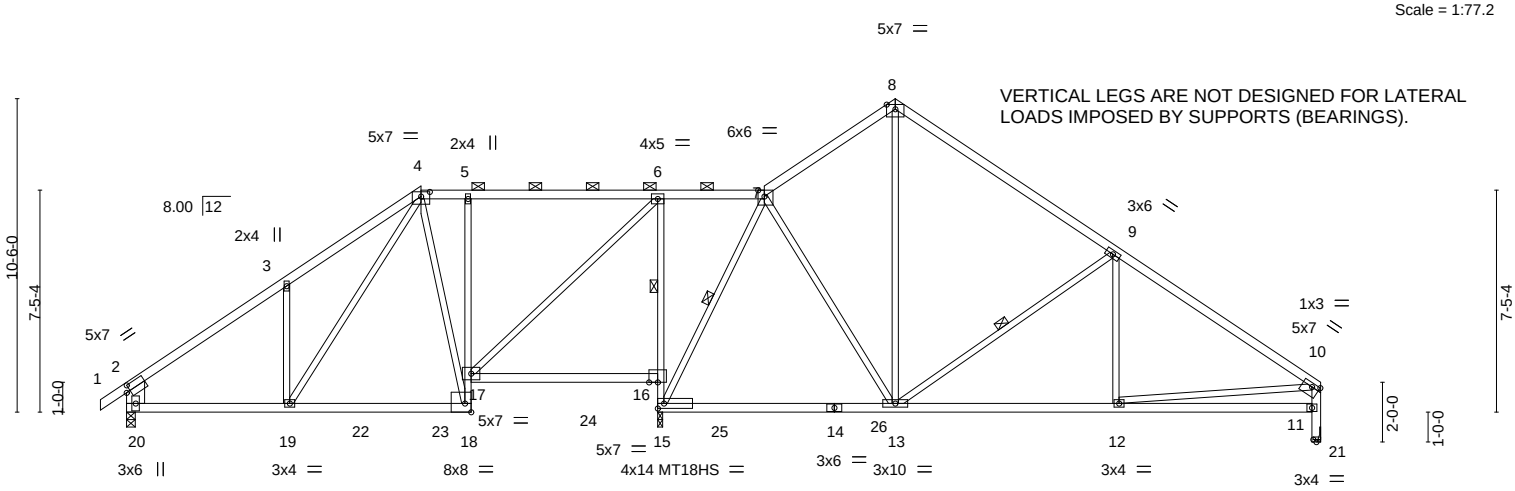
Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	D6	Roof Special	1	1	I42065412
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:52 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-dVK0Y?4KCUd5ae3JFgHv0uzhWMgOjR?cv1bDn0yxDdn

-0-10-8	5-4-5	9-10-6	11-6-8	17-9-8	21-4-6	25-9-0	33-1-11	40-0-0
0-10-8	5-4-5	4-6-0	1-8-2	6-3-0	3-6-14	4-4-10	7-4-11	6-10-5

Scale = 1:77.2



5-4-5	9-10-6	11-6-8	17-9-8	17-10-8	21-4-6	25-9-0	33-1-11	40-0-0
5-4-5	4-6-0	1-8-2	6-3-0	0-1-0	3-5-14	4-4-10	7-4-11	6-10-5

Plate Offsets (X,Y)-- [2:0-1-11,0-2-8], [4:0-3-8,0-1-14], [7:0-2-8,Edge], [10:0-3-0,0-1-8], [18:Edge,0-3-8], [21:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.20	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.32	13-15	>812	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	-0.04	21	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	16-17	>999	240	Weight: 175 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 5-18,6-15: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-20: 2x8 SP DSS, 10-21: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17
1-11-14 oc bracing: 15-16.
1 Row at midpt 6-16

WEBS 1 Row at midpt 7-15, 9-13

REACTIONS. (size) 20=0-3-8, 15=0-2-0 (req. 0-3-6), 21=Mechanical
Max Horz 20=258(LC 7)
Max Uplift 20=-51(LC 8), 15=-15(LC 8), 21=-60(LC 9)
Max Grav 20=797(LC 14), 15=2141(LC 2), 21=1035(LC 14)

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

TOP CHORD 2-3=-866/73, 3-4=-778/189, 4-5=-401/132, 5-6=-416/127, 6-7=-97/359, 7-8=-684/196, 8-9=-736/167, 9-10=-1265/118, 2-20=-679/80, 11-21=-1035/60, 10-11=-922/95

BOT CHORD 19-20=-98/700, 18-19=-64/425, 17-18=-41/395, 5-17=-325/117, 16-17=-273/10, 15-16=-1136/76, 6-16=-978/113, 12-13=-37/925

WEBS 6-17=-44/923, 7-15=-973/0, 3-19=-278/157, 4-19=-98/519, 7-13=0/537, 8-13=-109/338, 9-13=-646/134, 10-12=0/701

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15, 21.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

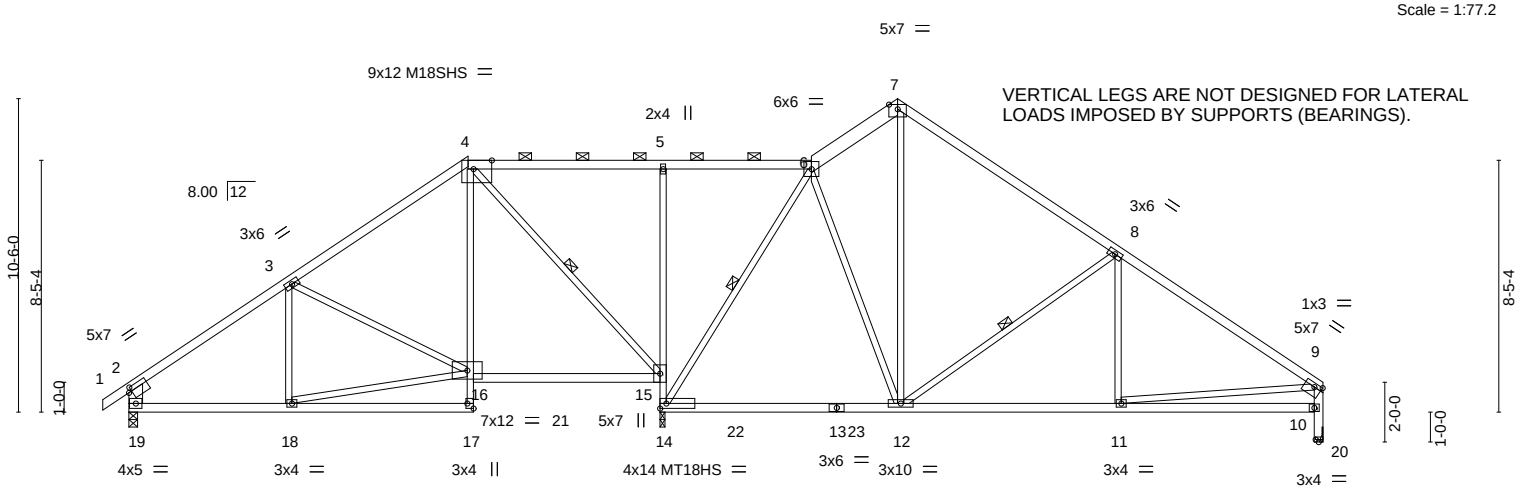
Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	D7	Roof Special	1	1	I42065413
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:54 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-auSnzg5bk6tpqxChM5KN5J20SARuBH3uML4JrvyxDdl

-0-10-8	5-4-4	11-4-6	17-9-8	22-10-6	25-9-0	33-1-10	40-0-0
0-10-8	5-4-4	6-0-1	6-5-2	5-0-14	2-10-10	7-4-10	6-10-6

Scale = 1:77.2



5-4-4	11-6-8	17-9-8	17-10-8	22-10-6	25-9-0	33-1-10	40-0-0
5-4-4	6-2-4	6-3-0	0-1-0	4-11-14	2-10-10	7-4-10	6-10-6

Plate Offsets (X,Y)-- [2:0-1-5,0-1-12], [4:0-7-6,Edge], [9:0-3-0,0-1-8], [17:Edge,0-2-8], [20:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.21	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.33	12-14	>788	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	-0.06	14	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	17-18	>999	240	Weight: 178 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 4-17,5-14: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-19: 2x6 SPF No.2, 9-20: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-6 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18 3-6-14 oc bracing: 14-15.

WEBS 1 Row at midpt 4-15, 6-14, 8-12

REACTIONS. (size) 19=0-3-8, 14=0-2-0 (req. 0-3-4), 20=Mechanical
Max Horz 19=257(LC 7)
Max Uplift 19=-53(LC 8), 14=-11(LC 8), 20=-54(LC 9)
Max Grav 19=832(LC 13), 14=2055(LC 2), 20=1063(LC 14)

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

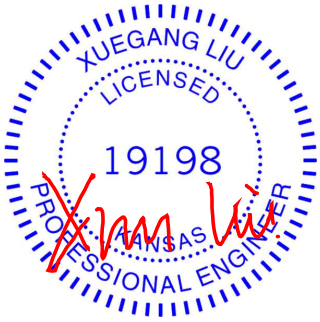
TOP CHORD 2-3=-917/81, 3-4=-594/126, 6-7=-715/187, 7-8=-791/158, 8-9=-1307/109, 2-19=-714/80, 10-20=-1063/54, 9-10=-949/90

BOT CHORD 18-19=-107/784, 4-16=0/560, 15-16=-69/476, 14-15=-1111/86, 5-15=-470/117, 12-14=0/355, 11-12=-29/958

WEBS 16-18=-107/780, 3-16=-357/89, 4-15=-890/43, 6-14=-952/0, 6-12=0/380, 7-12=-98/412, 8-12=-628/131, 9-11=0/728

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 14, 20.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	D8	Roof Special	1	1	I42065414
					Job Reference (optional)

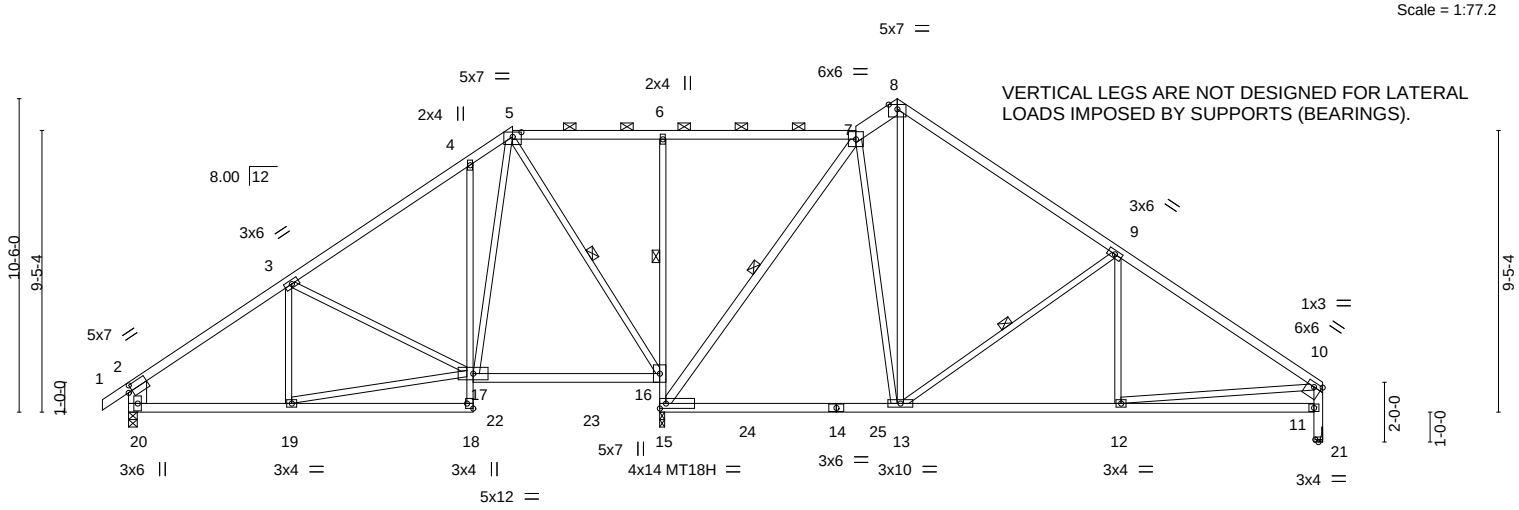
Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:55 2020 Page 1

ID:eIl3htjhC3ucpFh1ifG0EczUTUF-2409B06DVP?gR5nuworceXaBGamywm?2b?qtOLyxDdk

-0-10-8 5-4-5 11-6-8 12-10-6 17-9-8 24-4-6 25-9-0 33-1-11 40-0-0

0-10-8 5-4-5 6-2-3 1-3-14 4-11-2 6-6-14 1-4-10 7-4-11 6-10-5

Scale = 1:77.2



5-4-5 11-6-8 12-10-6 17-9-8 17-10-8 24-4-6 25-9-0 33-1-11 40-0-0

5-4-5 6-2-3 1-3-14 4-11-2 0-1-0 6-5-14 1-4-10 7-4-11 6-10-5

Plate Offsets (X,Y)-- [2:0-1-11,0-2-8], [5:0-3-8,0-1-14], [10:Edge,0-1-12], [18:Edge,0-2-8], [21:0-1-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.21	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.33	13-15	>788	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	-0.07	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	18-19	>999	240	Weight: 191 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 4-18,6-15: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 7-15,10-21: 2x4 SPF No.2, 2-20: 2x8 SP DSS

BRACING-

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

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19
3-3-3 oc bracing: 15-16.
1 Row at midpt 6-16

WEBS 1 Row at midpt 5-16, 7-15, 9-13

REACTIONS. (size) 20=0-3-8, 15=0-2-0 (req. 0-3-5), 21=Mechanical
Max Horz 20=257(LC 7)
Max Uplift 20=-58(LC 8), 15=-3(LC 8), 21=-61(LC 9)
Max Grav 20=817(LC 13), 15=2099(LC 2), 21=1052(LC 14)

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

TOP CHORD 2-3=-873/86, 3-4=-547/134, 4-5=-486/210, 7-8=-665/193, 8-9=-773/169, 9-10=-1289/119, 2-20=-700/84, 11-21=-1052/61, 10-11=-938/97

BOT CHORD 19-20=-108/750, 4-17=-360/128, 16-17=-62/278, 15-16=-1160/91, 6-16=-473/110, 13-15=0/402, 12-13=-38/944

WEBS 17-19=-108/741, 3-17=-359/84, 5-17=-108/898, 5-16=-822/40, 7-15=-997/0, 8-13=-108/428, 9-13=-628/129, 10-12=0/714, 7-13=0/375

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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, with BCDL = 10.0psf.
7) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15, 21.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

XUEGANG LIU
LICENSED
19198
KANSAS
PROFESSIONAL ENGINEER

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	
400422	D9	HALF HIP GIRDER	1	3	Job Reference (optional)	I42065415

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:58:57 2020 Page 1
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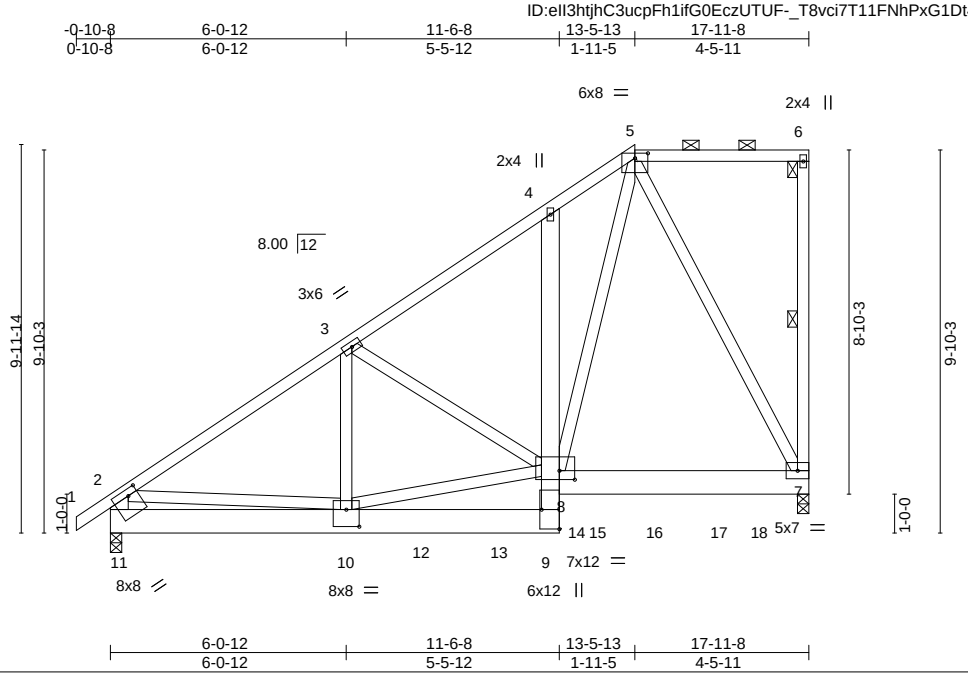

Plate Offsets (X,Y)-- [5:0-4-0,0-1-9], [8:0-4-12,0-2-12], [9:Edge,0-5-8], [10:0-4-0,0-5-4], [11:0-3-0,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.09	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.16	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	7-8	>999	240	Weight: 440 lb	FT = 10%

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

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

REACTIONS. (size) 7=0-3-8 (req. 0-3-9), 11=0-3-8
Max Horz 11=300(LC 5)
Max Uplift 7=-492(LC 5), 11=-513(LC 8)
Max Grav 7=6793(LC 2), 11=5275(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7703/770, 3-4=-5222/437, 4-5=-5101/504, 2-11=-5063/520
BOT CHORD 10-11=-413/1577, 9-10=-177/1060, 8-9=-100/1976, 7-8=-271/2451
WEBS 3-10=-417/2483, 8-10=-579/5333, 3-8=-2472/461, 5-8=-672/7414, 5-7=-5319/472, 2-10=-437/4772

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) WARNING: Required bearing size at joint(s) 7 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=492, 11=513.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2968 lb down and 567 lb up at 6-0-13, 1466 lb down and 90 lb up at 8-0-0, 1533 lb down and 88 lb up at 10-0-0, 1567 lb down and 86 lb up at 12-0-0, and 1570 lb down and 83 lb up at 14-0-0, and 1573 lb down and 50 lb up at 16-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

XUEGANG LIU
LICENSED
19198
PROFESSIONAL ENGINEER
July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-5=-70, 5-6=-70, 9-11=-20, 7-8=-20
   Concentrated Loads (lb)
   Vert: 10=-2968(B) 12=-1466(B) 13=-1464(B) 14=-1464(B) 16=-1464(B) 18=-1464(B)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	E1	Hip Girder	1	1	I42065416

Job Reference (optional)

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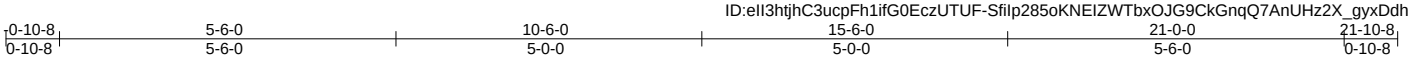

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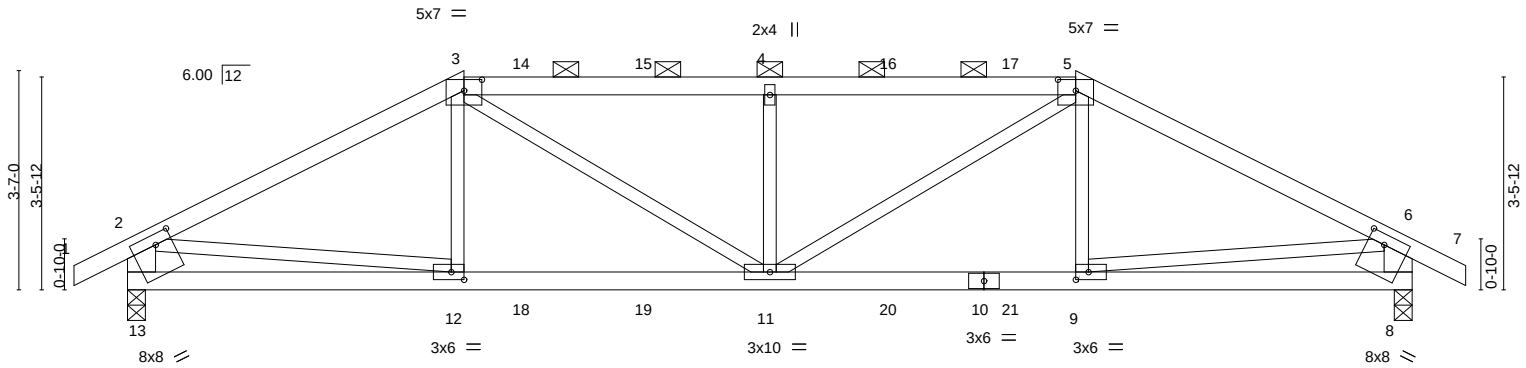

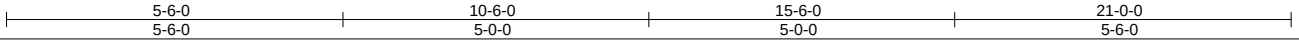

Plate Offsets (X,Y)-- [3:0-3-8,0-2-3], [5:0-3-8,0-2-3], [8:0-3-4,0-2-0], [9:0-2-8,0-1-8], [12:0-2-8,0-1-8], [13:0-3-4,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.09	11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.17	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	11	>999	240	Weight: 78 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,6-8: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-8 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 9-6-11 oc bracing.

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=-65(LC 27)
Max Uplift 13=-297(LC 8), 8=-297(LC 9)
Max Grav 13=1406(LC 1), 8=1406(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2099/442, 3-4=-2363/520, 4-5=-2363/520, 5-6=-2099/442, 2-13=-1350/322, 6-8=-1350/322
BOT CHORD 12-13=-168/396, 11-12=-380/1793, 9-11=-338/1793, 8-9=-137/396
WEBS 3-11=-177/748, 4-11=-574/252, 5-11=-177/748, 2-12=-333/1429, 6-9=-336/1429

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=297, 8=297.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 63 lb up at 6-6-0, 100 lb down and 63 lb up at 8-6-0, 100 lb down and 63 lb up at 10-6-0, and 100 lb down and 63 lb up at 12-6-0, and 100 lb down and 63 lb up at 14-6-0 on top chord, and 234 lb down and 134 lb up at 5-6-0, 32 lb down at 6-6-0, 32 lb down at 8-6-0, 32 lb down at 10-6-0, 32 lb down at 12-6-0, and 32 lb down at 14-6-0, and 234 lb down and 134 lb up at 15-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

July 17,2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-13=-20
   Concentrated Loads (lb)
   Vert: 12=-234(B) 11=-22(B) 4=-46(B) 9=-234(B) 14=-46(B) 15=-46(B) 16=-46(B) 17=-46(B) 18=-22(B) 19=-22(B) 20=-22(B) 21=-22(B)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	
400422	E2	Hip	1	1	Job Reference (optional)	I42065417

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:00 2020 Page 1
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0-10-8	3-5-5	8-2-0	12-10-0	17-6-11	21-0-0	21-10-8
0-10-8	3-5-5	4-8-10	4-8-0	4-8-10	3-5-5	0-10-8

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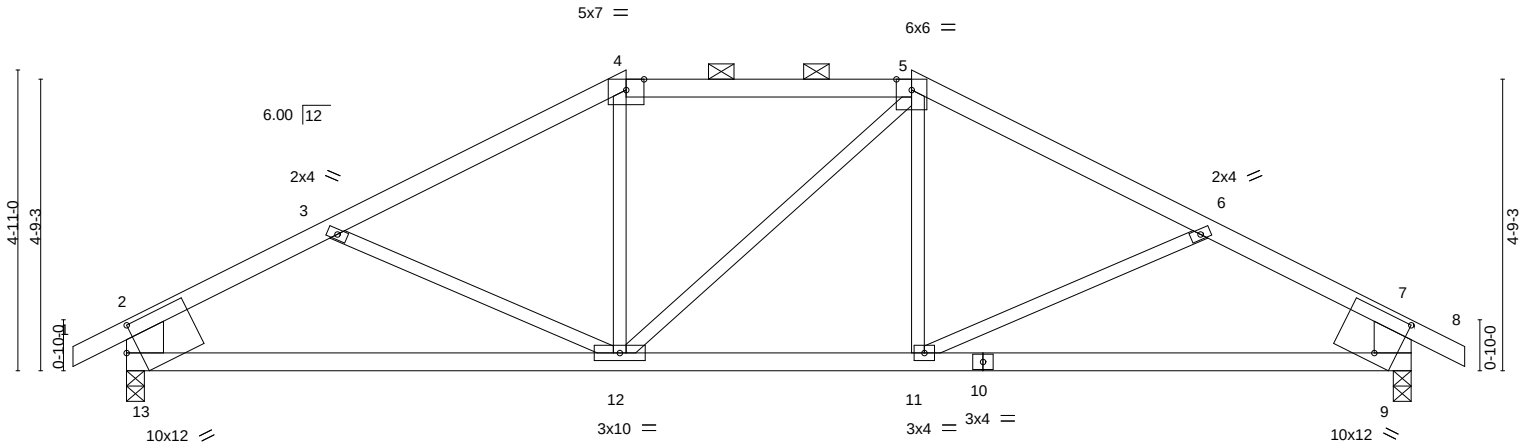

8-2-0	12-10-0	21-0-0
8-2-0	4-8-0	8-2-0

Plate Offsets (X,Y)-- [9:0-4-1,0-8-2], [13:0-2-7,0-4-14]

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	0.75	Vert(LL)	-0.11	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.21	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	11-12	>999	240	Weight: 76 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-13,7-9: 2x8 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-8 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 13=0-3-8, 9=0-3-8
Max Horz 13=-83(LC 6)
Max Uplift 13=-123(LC 8), 9=-123(LC 9)
Max Grav 13=1000(LC 1), 9=1000(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1274/179, 3-4=-1157/109, 4-5=-997/135, 5-6=-1157/109, 6-7=-1274/180, 2-13=-909/165, 7-9=-909/165
BOT CHORD 12-13=-158/1011, 11-12=-2/997, 9-11=-103/1011

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=123, 9=123.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

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LICENSED
19198
ARKANSAS
PROFESSIONAL ENGINEER

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065418
400422	E3	Common	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:01 2020 Page 1

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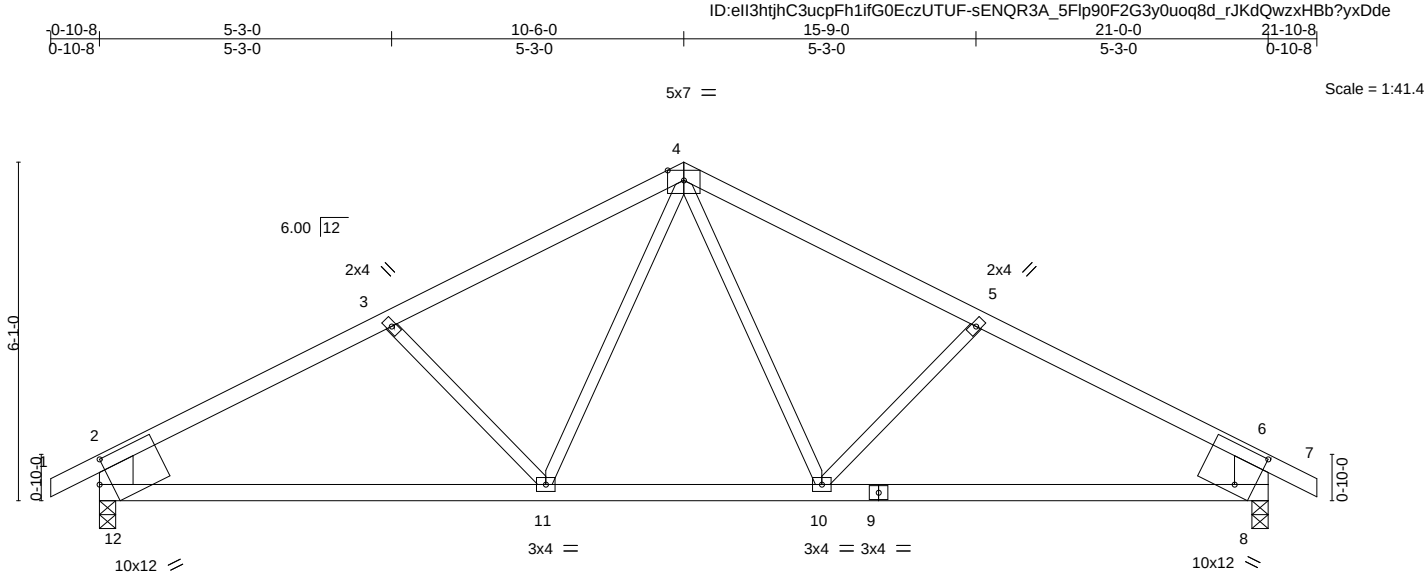

Plate Offsets (X,Y)-- [8:0-4-1,0-8-2], [12:0-2-7,0-4-14]

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	0.99	Vert(LL)	-0.16	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.25	10-11	>968	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	10-11	>999	240	Weight: 73 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, 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=99(LC 7)
Max Uplift 12=-140(LC 8), 8=-140(LC 9)
Max Grav 12=1000(LC 1), 8=1000(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1318/195, 3-4=-1092/171, 4-5=-1092/171, 5-6=-1318/195, 2-12=-898/182, 6-8=-898/182
BOT CHORD 11-12=-177/1066, 10-11=-25/819, 8-10=-100/1066
WEBS 4-10=-62/308, 4-11=-62/308

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=140, 8=140.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	
400422	E4	COMMON GIRDER	1	3	Job Reference (optional)	I42065419

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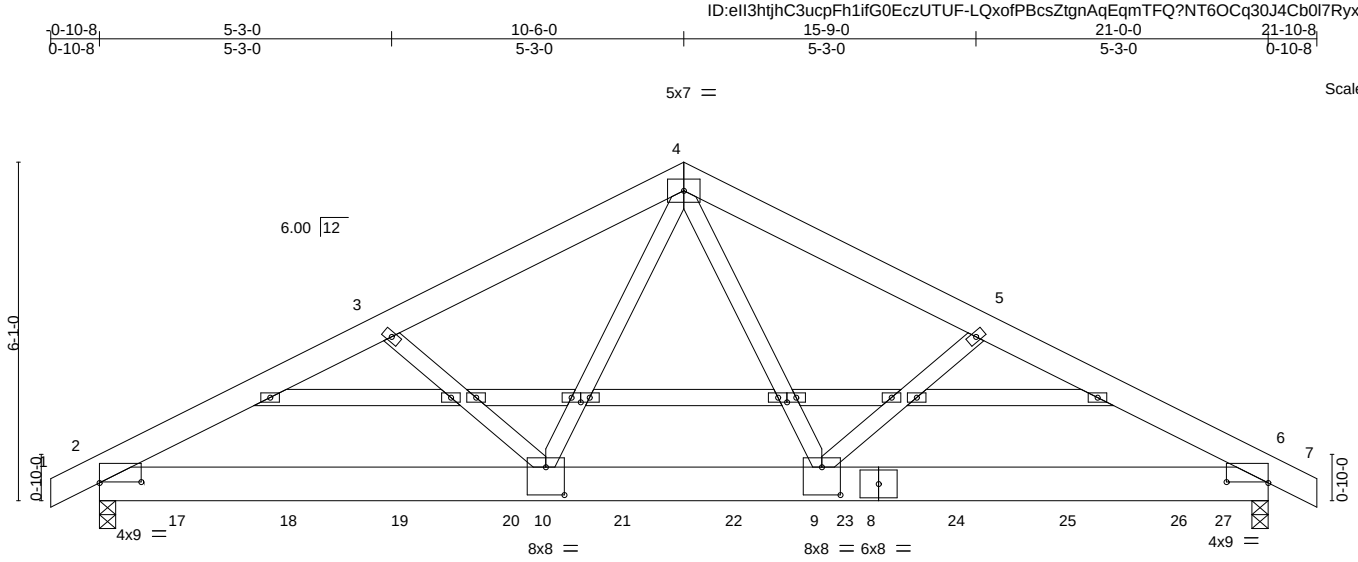

Plate Offsets (X,Y)-- [2:0-9-0,0-0-3], [6:0-9-0,0-0-3], [9:0-4-0,0-6-0], [10:0-4-0,0-6-0], [13:0-1-15,0-1-0], [14:0-1-15,0-1-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.09	6-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.16	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	6-9	>999	240	Weight: 447 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=65(LC 7)
Max Uplift 2=-371(LC 8), 6=-634(LC 9)
Max Grav 2=5598(LC 1), 6=6623(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7994/531, 3-4=-7828/526, 4-5=-8125/614, 5-6=-8314/623
BOT CHORD 2-10=-471/6942, 9-10=-320/5548, 6-9=-500/7235
WEBS 4-9=-363/4009, 5-9=-243/251, 4-10=-175/3392, 3-10=-251/271

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are 2x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=371, 6=634.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 929 lb down and 81 lb up at 1-5-7, 944 lb down and 74 lb up at 3-5-7, 909 lb down and 80 lb up at 5-5-7, 903 lb down and 69 lb up at 7-5-7, 882 lb down and 63 lb up at 9-5-7, 978 lb down and 43 lb up at 11-5-7, 946 lb down and 36 lb up at 13-5-7, 949 lb down and 146 lb up at 15-5-7, 977 lb down and 150 lb up at 17-5-7, and 977 lb down and 154 lb up at 19-5-7, and 971 lb down and 155 lb up at 19-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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Continued on page 2

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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: 17=-885(F) 18=-901(F) 19=-876(F) 20=-872(F) 21=-882(F) 22=-978(F) 23=-946(F) 24=-949(F) 25=-977(F) 26=-977(F) 27=-971(F)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J2	Jack-Open	1	1	I42065420
					Job Reference (optional)

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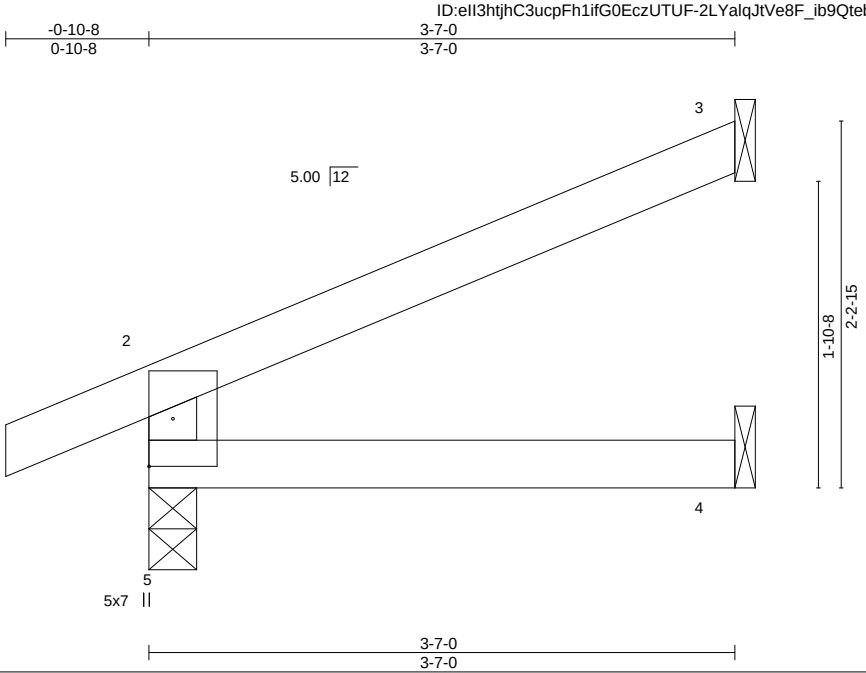


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

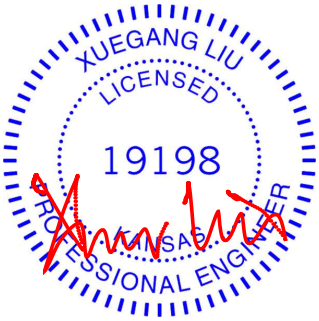
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=65(LC 8)
Max Uplift 5=-34(LC 8), 3=-54(LC 8)
Max Grav 5=234(LC 1), 3=103(LC 1), 4=63(LC 3)

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

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



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Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J5	Diagonal Hip Girder	1	1	I42065421
					Job Reference (optional)

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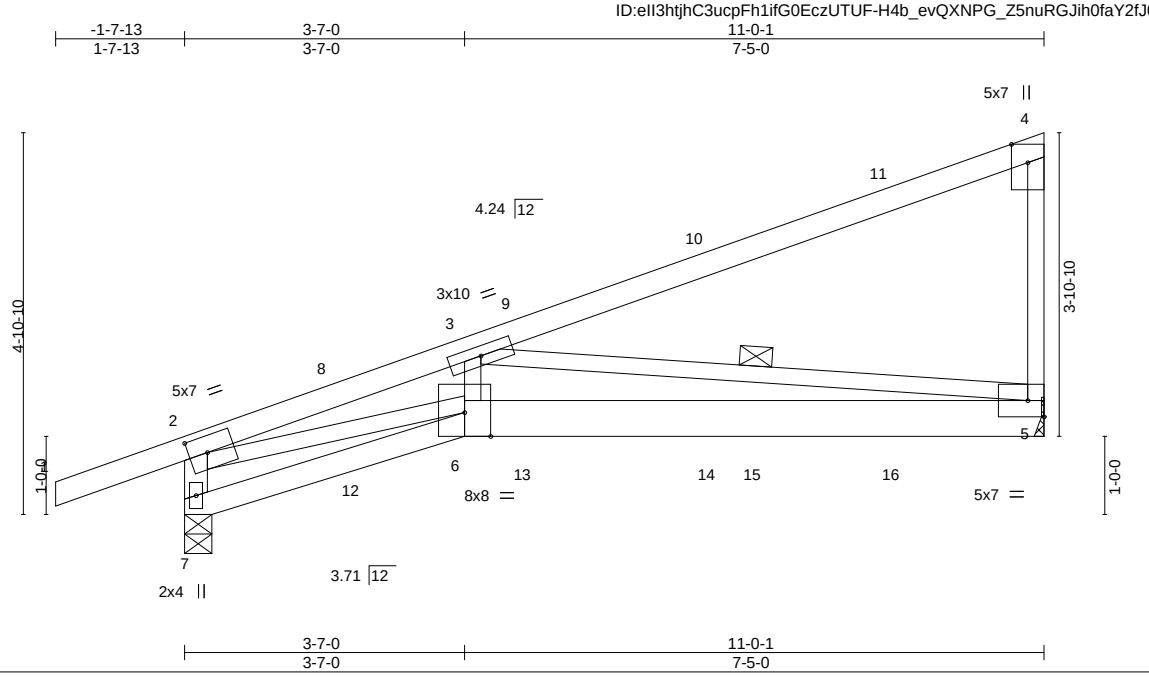


Plate Offsets (X,Y)-- [2:0-2-13,0-2-8]

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	0.93	Vert(LL)	-0.13	5-6	>961	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.26	5-6	>500	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	5-6	>888	240	Weight: 45 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
2-7: 2x4 SPF No.2

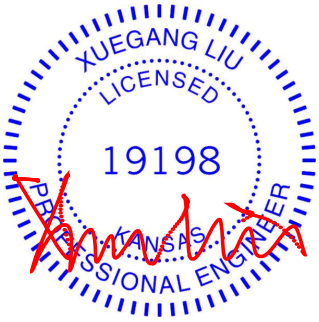
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-5

REACTIONS. (size) 7=0-4-3, 5=Mechanical
Max Horz 7=196(LC 5)
Max Uplift 7=-247(LC 4), 5=-282(LC 8)
Max Grav 7=734(LC 1), 5=744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-685/259, 2-3=-1907/712, 4-5=-255/145
BOT CHORD 5-6=-777/1750
WEBS 2-6=-687/1800, 3-6=-75/378, 3-5=-1702/751

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=247, 5=282.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 20 lb up at 2-0-9, 105 lb down and 70 lb up at 3-6-14, 80 lb down and 58 lb up at 4-4-14, and 105 lb down and 87 lb up at 6-9-3, and 120 lb down and 94 lb up at 9-1-8 on top chord, and 13 lb down and 16 lb up at 2-0-9, 14 lb down at 3-7-4, 15 lb down and 16 lb up at 4-4-14, 28 lb down at 6-9-3, and 251 lb down and 109 lb up at 7-4-3, and 53 lb down and 43 lb up at 9-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) 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



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Continued on page 2

MiTek
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Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 6-7=-20, 5-6=-20
   Concentrated Loads (lb)
   Vert: 6=-4(B) 10=-23(F) 11=-44(F) 12=2(F) 13=-0(F) 14=-13(F) 15=-251(B) 16=-51(F)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J6A	Jack-Open	1	1	I42065422
					Job Reference (optional)

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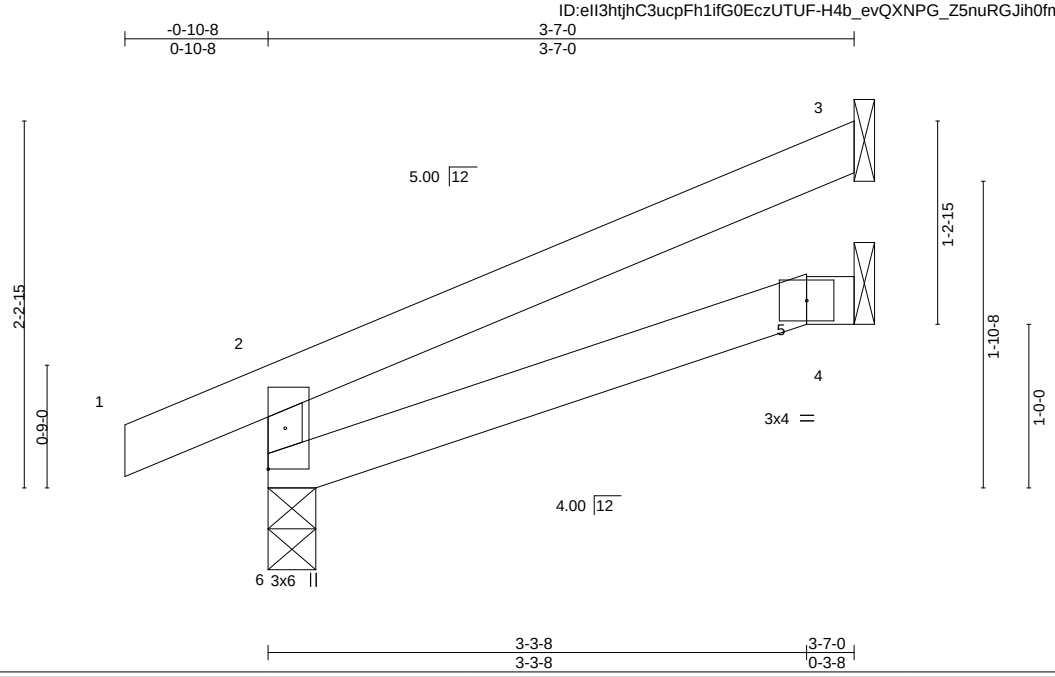


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

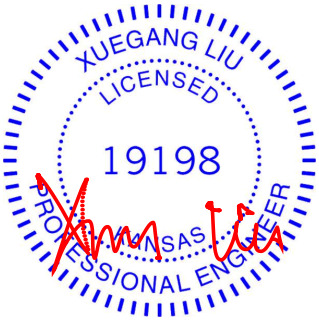
TOP CHORD	Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=65(LC 8)
Max Uplift 6=-32(LC 8), 3=-58(LC 8)
Max Grav 6=232(LC 1), 3=106(LC 1), 4=65(LC 3)

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

NOTES-

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



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Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J7A	Jack-Closed	1	1	I42065423
					Job Reference (optional)

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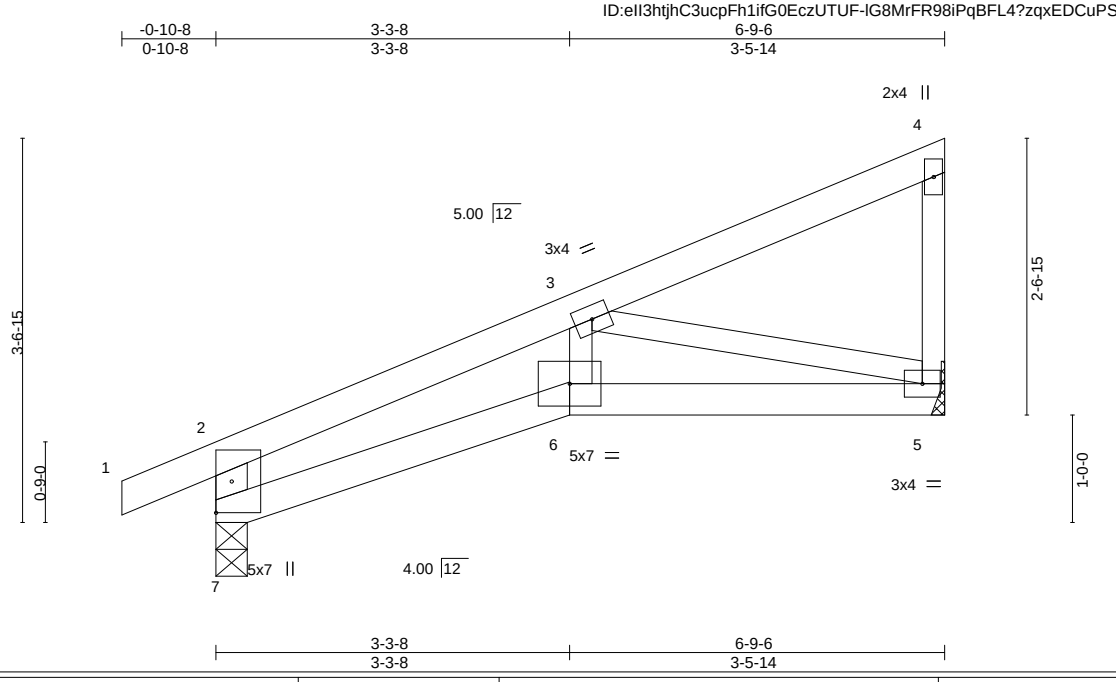


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.06	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	6	>999	240	Weight: 23 lb	FT = 10%

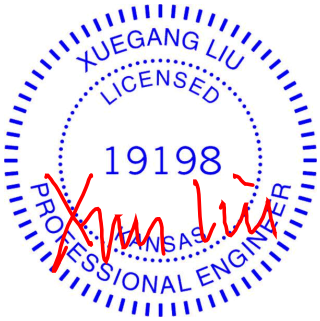
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-7: 2x4 SPF No.2

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

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=131(LC 5)
Max Uplift 7=-62(LC 8), 5=-71(LC 8)
Max Grav 7=371(LC 1), 5=288(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-450/120, 2-3=-579/122
BOT CHORD 6-7=-152/491, 5-6=-143/450
WEBS 3-5=-445/167

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



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Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J8	Jack-Open	1	1	I42065424
					Job Reference (optional)

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0-10-8 1-0-9

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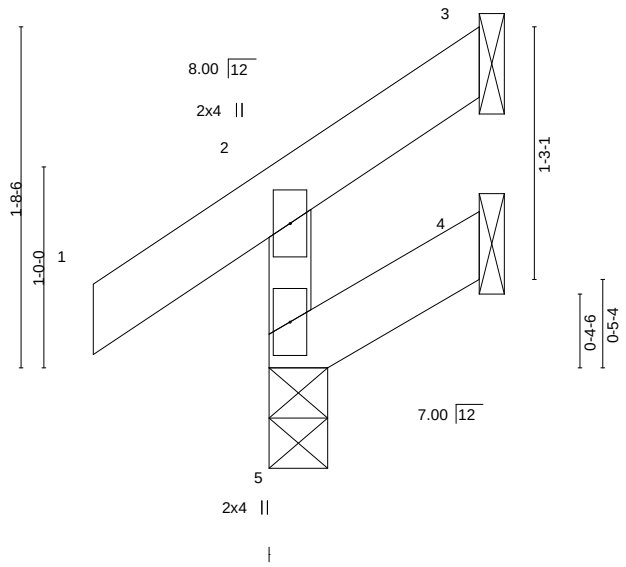

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 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 1-0-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=44(LC 5)
Max Uplift 5=-4(LC 8), 3=-23(LC 8), 4=-11(LC 8)
Max Grav 5=146(LC 1), 3=15(LC 6), 4=21(LC 6)

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

NOTES-

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

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J9	Jack-Open	1	1	I42065425
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:23 2020 Page 1

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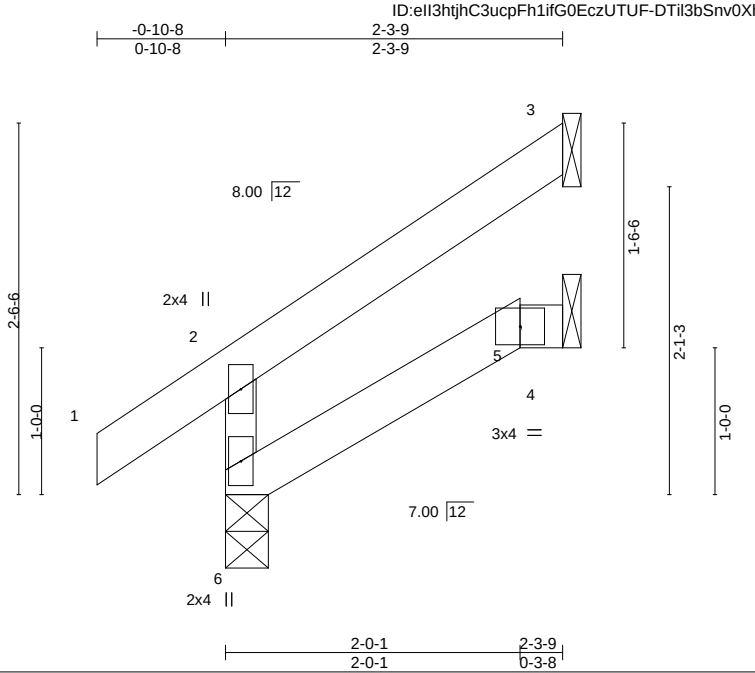


LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5-6	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

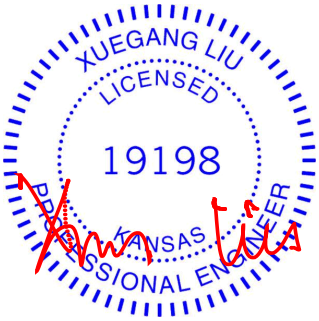
TOP CHORD	Structural wood sheathing directly applied or 2-3-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=69(LC 8)
Max Uplift 3=-55(LC 8), 4=-3(LC 8)
Max Grav 6=180(LC 1), 3=69(LC 15), 4=41(LC 3)

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

NOTES-

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



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J10	Jack-Open	1	1	I42065426

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:03 2020 Page 1

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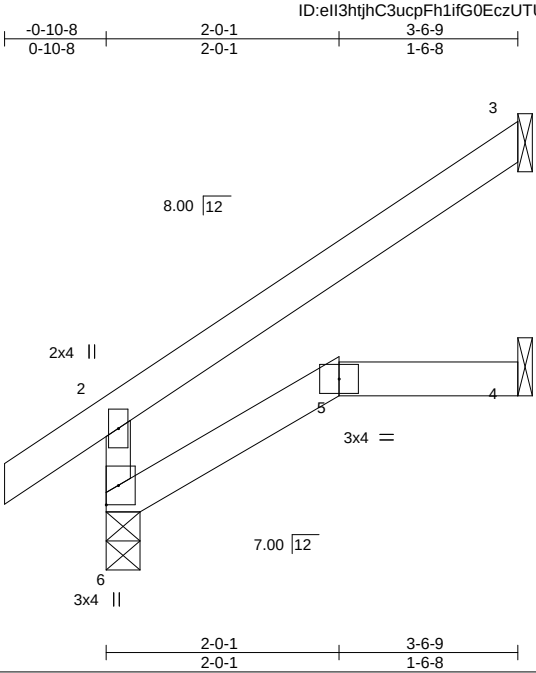

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	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 3-6-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=103(LC 8)
Max Uplift 3=-82(LC 8)
Max Grav 6=231(LC 1), 3=115(LC 15), 4=65(LC 3)

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

NOTES-

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

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J11	Jack-Open	1	1	I42065427
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:04 2020 Page 1
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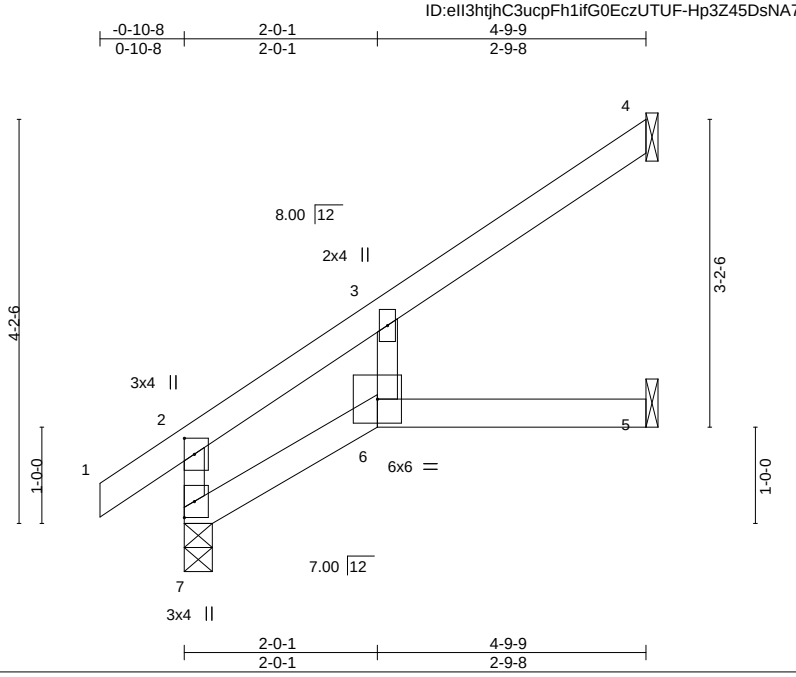

Plate Offsets (X,Y)-- [2:0-2-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	5-6	>894	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.05	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.06	6	>919	240	Weight: 15 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=137(LC 8)
Max Uplift 4=-83(LC 8), 5=-19(LC 8)
Max Grav 7=284(LC 1), 4=137(LC 15), 5=81(LC 15)

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

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

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J12	Jack-Open	6	1	I42065428
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:05 2020 Page 1
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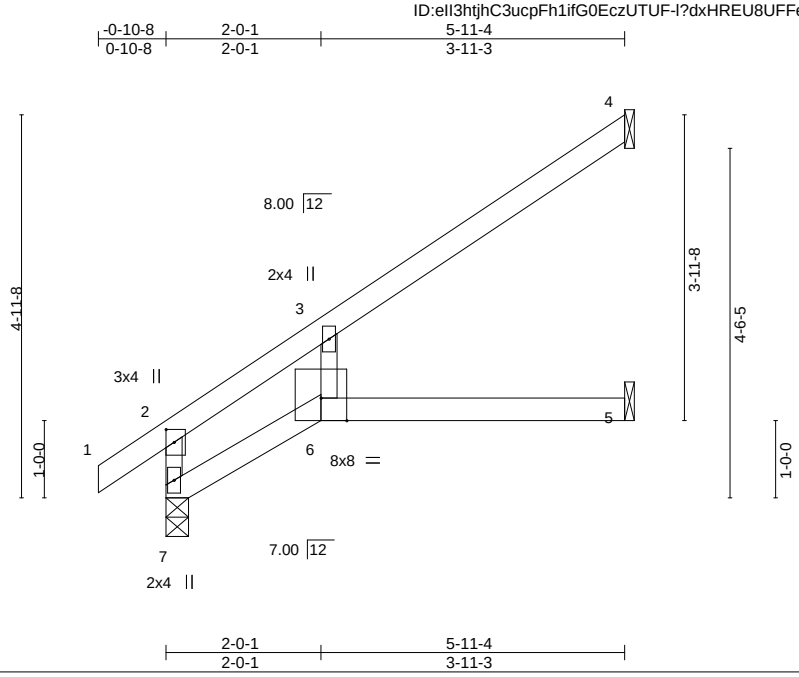


Plate Offsets (X,Y)-- [2:0-2-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.08	5-6	>857	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.15	5-6	>462	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.09	5-6	>739	240	Weight: 18 lb	FT = 10%

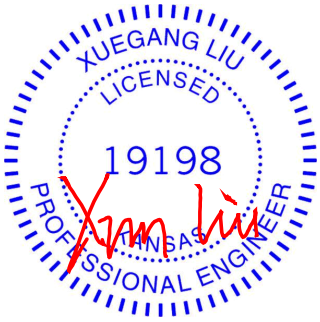
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=118(LC 8)
Max Uplift 4=-64(LC 8), 5=-1(LC 8)
Max Grav 7=334(LC 1), 4=170(LC 13), 5=103(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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J13	Jack-Open	1	1	I42065429
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:06 2020 Page 1
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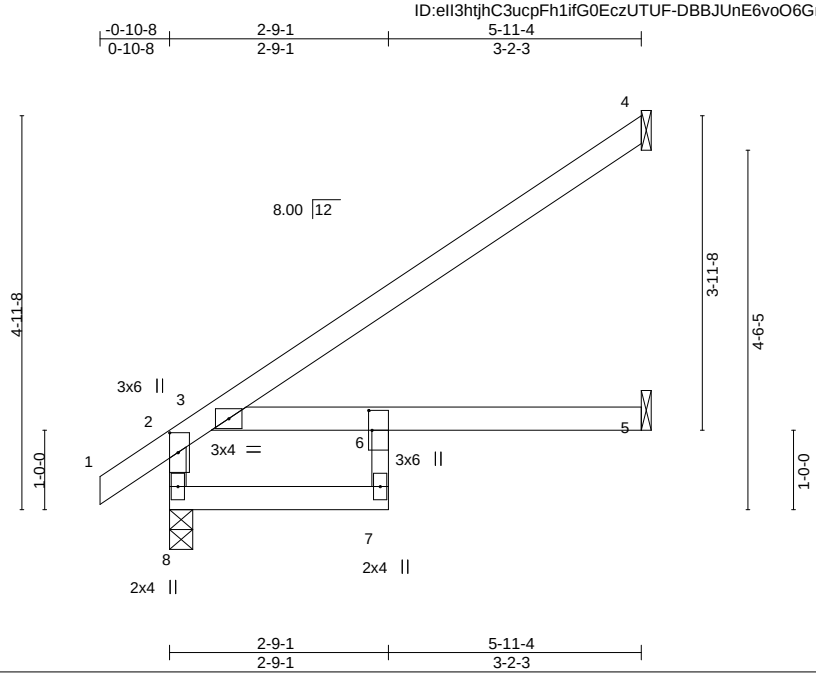


Plate Offsets (X,Y)-- [2:0-3-0,0-1-4], [6:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.14	5-6	>506	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.06	5-6	>999	240	Weight: 20 lb	FT = 10%

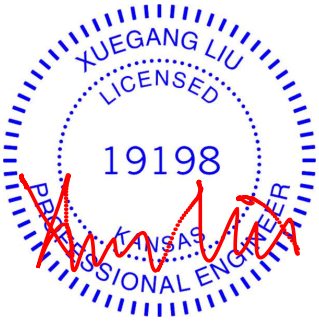
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-7: 2x3 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=119(LC 8)
Max Uplift 4=-66(LC 8)
Max Grav 8=366(LC 1), 4=174(LC 13), 5=131(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-343/0

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



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J14	Jack-Open	2	1	I42065430
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:07 2020 Page 1
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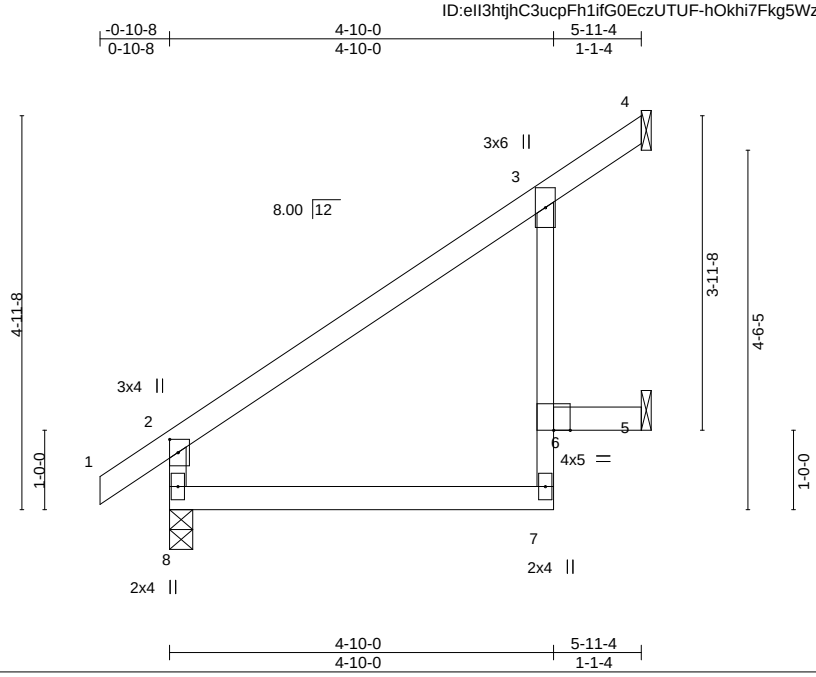


Plate Offsets (X,Y)-- [2:0-2-0,0-1-4]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.06	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	6	>999	240	Weight: 20 lb	FT = 10%

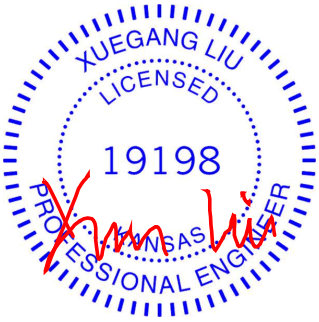
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=119(LC 8)
Max Uplift 4=-10(LC 8), 5=-53(LC 8)
Max Grav 8=334(LC 1), 4=92(LC 13), 5=172(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-290/11

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



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J15	Jack-Open	7	1	I42065431
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:07 2020 Page 1

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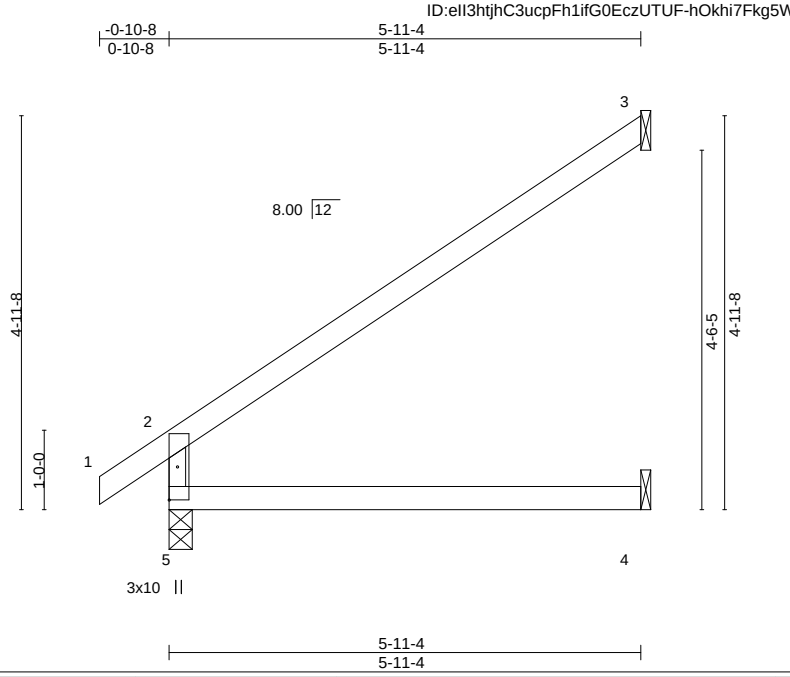

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.12	4-5	>569	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=119(LC 8)
Max Uplift 3=-80(LC 8)
Max Grav 5=334(LC 1), 3=191(LC 13), 4=111(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-288/25

NOTES-

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

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J16	Diagonal Hip Girder	1	1	I42065432
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:08 2020 Page 1
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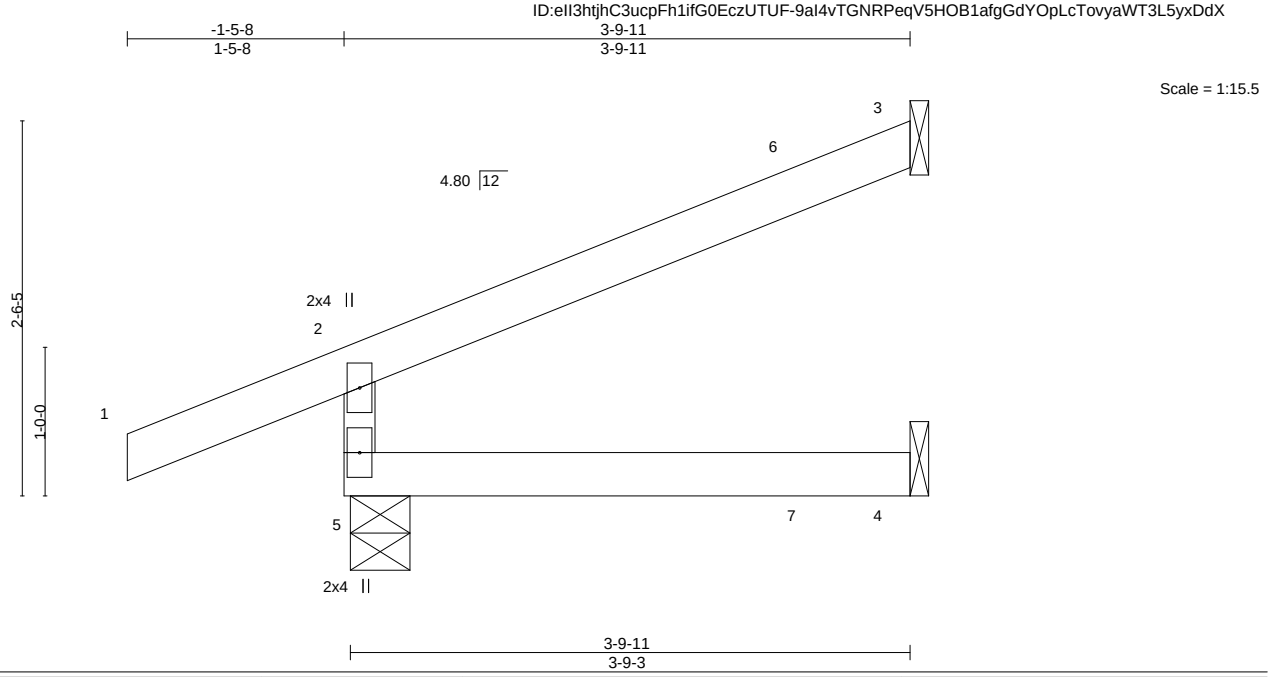

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	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 3-9-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-13, 3=Mechanical, 4=Mechanical
Max Horz 5=71(LC 8)
Max Uplift 5=-64(LC 4), 3=-73(LC 8)
Max Grav 5=298(LC 1), 3=105(LC 1), 4=73(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-260/95

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 57 lb up at 3-2-0 on top chord, and 15 lb down at 3-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 6=-1(F) 7=-5(F)

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J17	Jack-Open	1	1	I42065433

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:09 2020 Page 1

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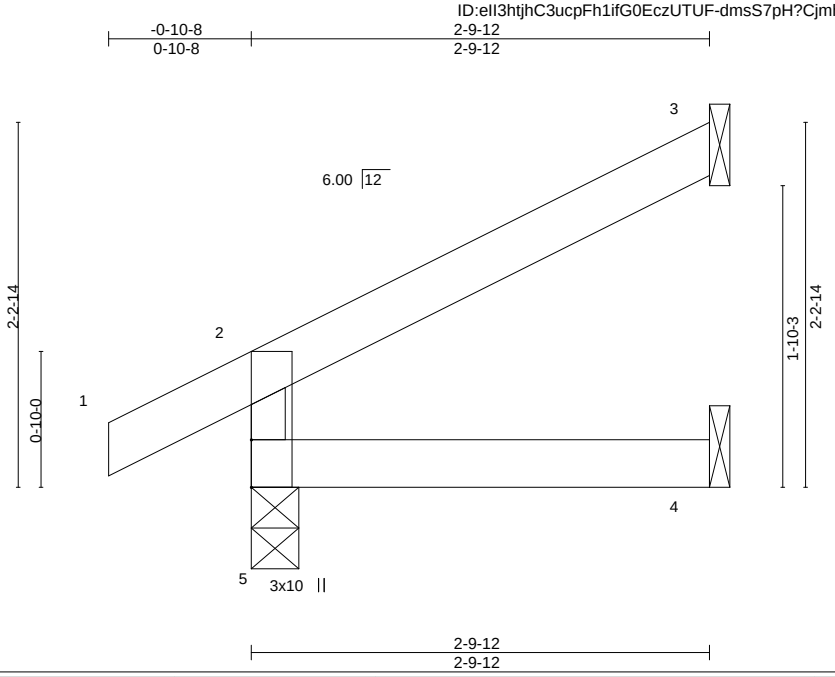


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

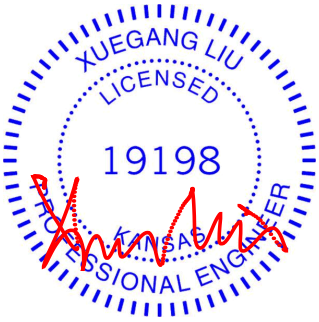
TOP CHORD	Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=63(LC 8)
Max Uplift 5=-22(LC 8), 3=-50(LC 8)
Max Grav 5=200(LC 1), 3=79(LC 1), 4=50(LC 3)

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

NOTES-

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



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J18	Jack-Open	4	1	I42065434
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:10 2020 Page 1

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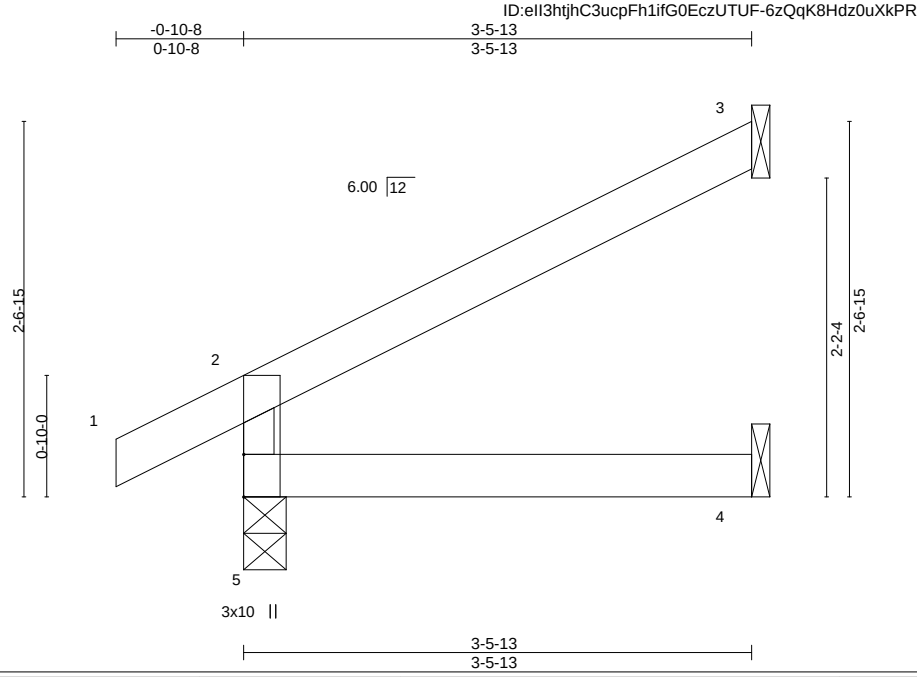

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-5-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=77(LC 8)
Max Uplift 5=-24(LC 8), 3=-62(LC 8)
Max Grav 5=228(LC 1), 3=102(LC 1), 4=63(LC 3)

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

NOTES-

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

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J19	Diagonal Hip Girder	2	1	I42065435
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:11 2020 Page 1

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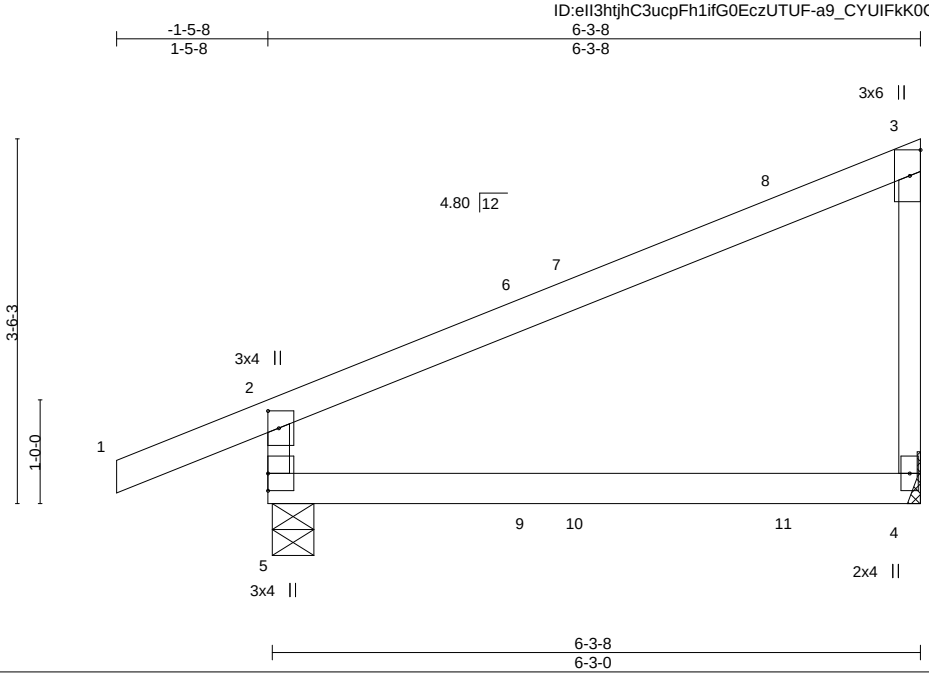

Plate Offsets (X,Y)-- [2:0-2-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.06	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.12	4-5	>591	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 20 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-4-13, 4=Mechanical
Max Horz 5=149(LC 5)
Max Uplift 5=-98(LC 4), 4=-100(LC 5)
Max Grav 5=399(LC 1), 4=268(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-348/134

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=100.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 36 lb up at 2-6-15, and 87 lb down and 57 lb up at 3-0-12, and 93 lb down and 73 lb up at 5-0-15 on top chord, and 9 lb down and 14 lb up at 2-6-15, and 8 lb down at 3-0-12, and 21 lb down at 5-0-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 8=-3(F) 9=1(F) 10=-2(B) 11=-7(F)

STATE OF MISSOURI
XUEGANG LIU
NUMBER E-29713
PROFESSIONAL ENGINEER

XUEGANG LIU
LICENSED
19198
KANSAS
PROFESSIONAL ENGINEER

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J20	Jack-Open	2	1	I42065436
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:13 2020 Page 1

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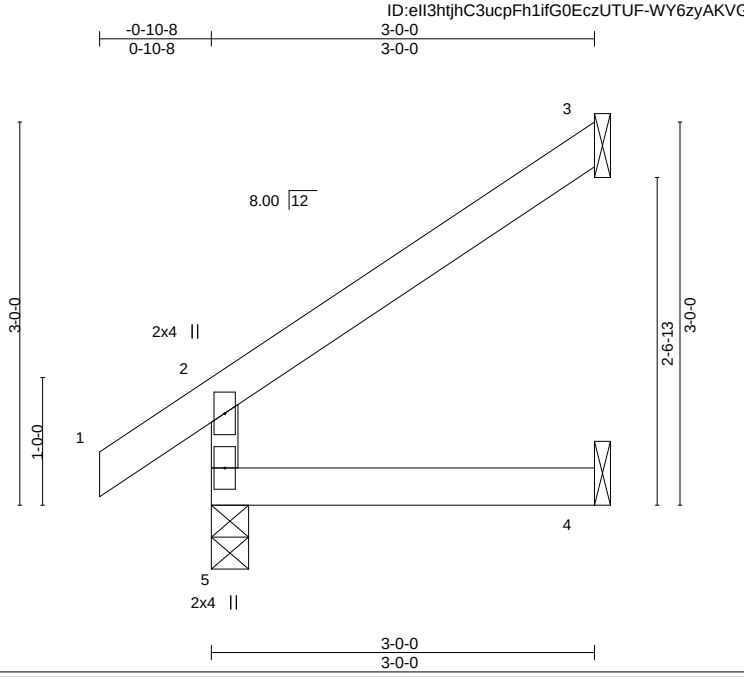


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 9 lb	FT = 10%

LUMBER-

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

BRACING-

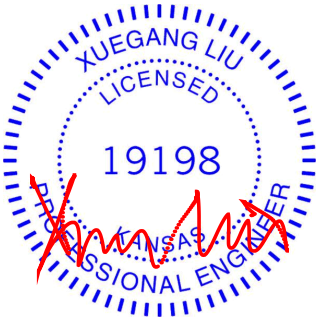
TOP CHORD	Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=89(LC 8)
Max Uplift 5=-2(LC 8), 3=-68(LC 8)
Max Grav 5=208(LC 1), 3=94(LC 15), 4=54(LC 3)

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

NOTES-

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



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J21	Jack-Open	5	1	I42065437
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:13 2020 Page 1

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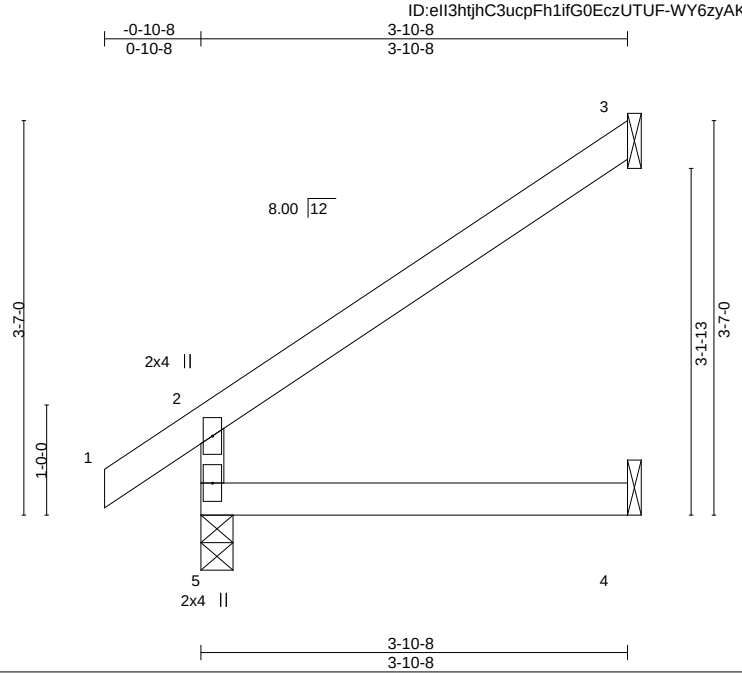


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

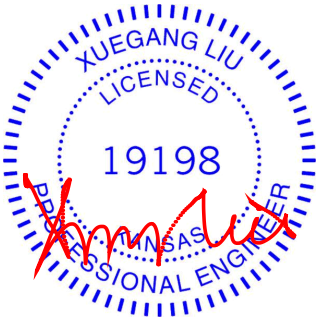
TOP CHORD	Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=80(LC 8)
Max Uplift 3=-54(LC 8)
Max Grav 5=244(LC 1), 3=122(LC 13), 4=71(LC 3)

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

NOTES-

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



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J22	Jack-Open	2	1	I42065438
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:14 2020 Page 1

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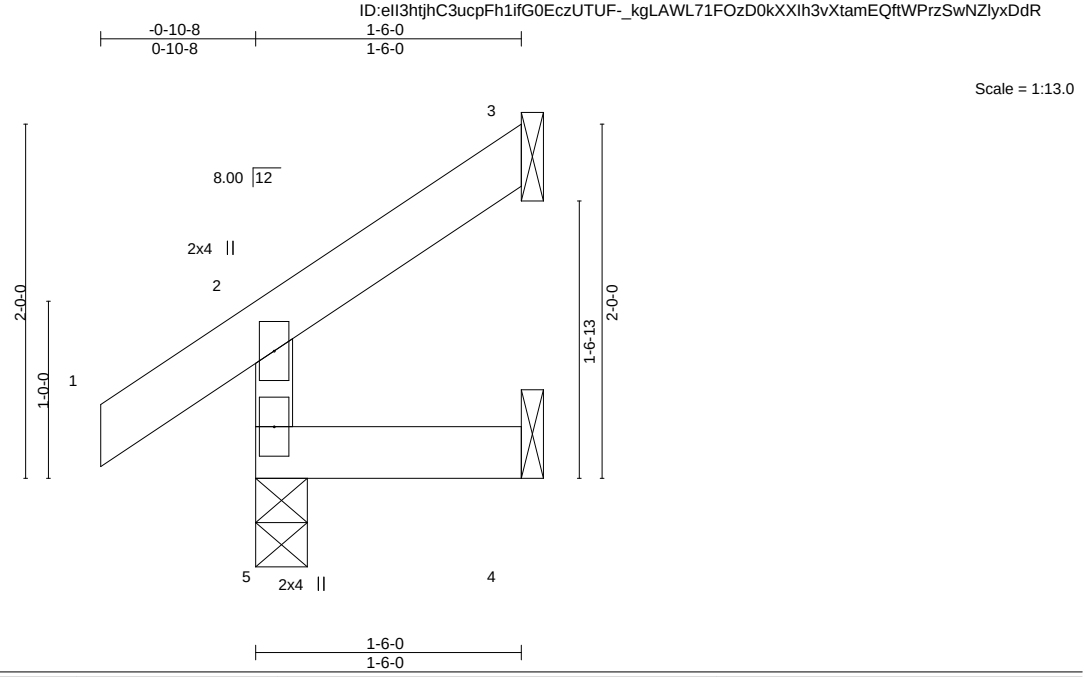


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 6 lb	FT = 10%

LUMBER-

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

BRACING-

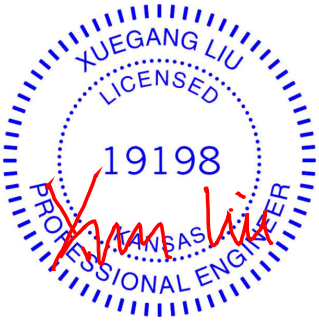
TOP CHORD	Structural wood sheathing directly applied or 1-6-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 8)
Max Uplift 5=-5(LC 8), 3=-35(LC 8), 4=-6(LC 8)
Max Grav 5=155(LC 1), 3=36(LC 15), 4=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) 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.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J23	Jack-Open	2	1	I42065439
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:15 2020 Page 1

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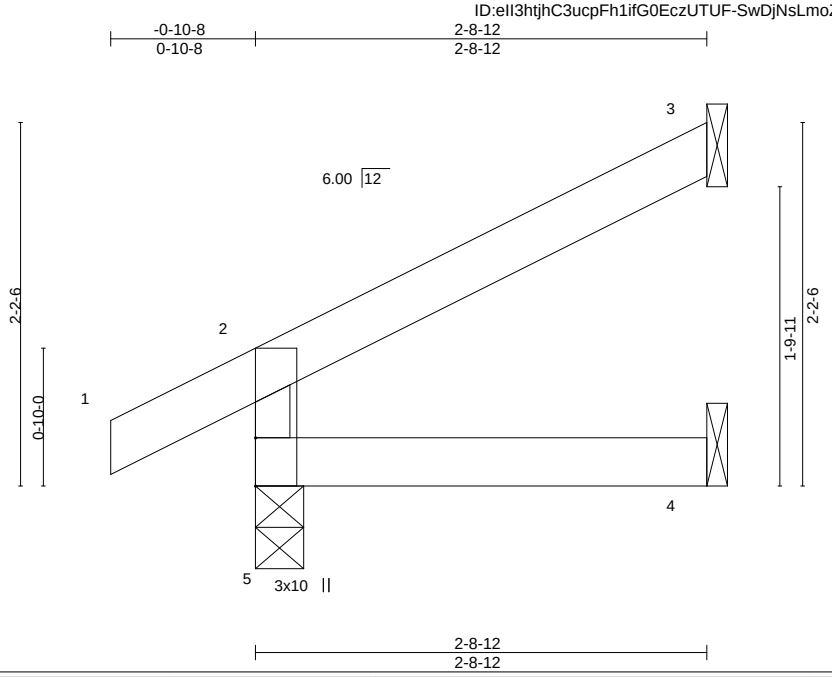

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-8-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=61(LC 8)
Max Uplift 5=-22(LC 8), 3=-48(LC 8)
Max Grav 5=197(LC 1), 3=76(LC 1), 4=49(LC 3)

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

NOTES-

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

July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J24	Jack-Open	7	1	I42065440
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:15 2020 Page 1

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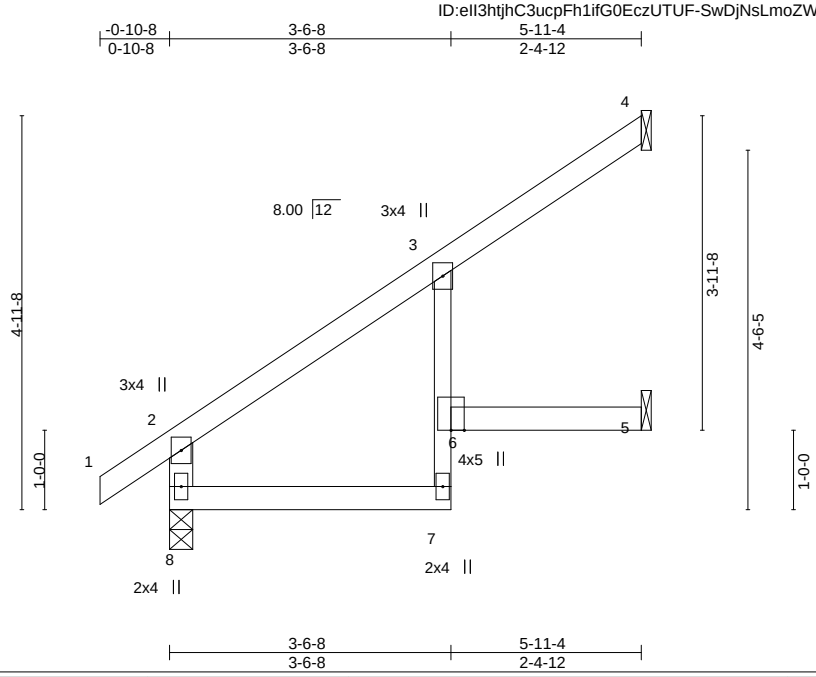


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.07	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.12	6	>578	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.07	6	>999	240	Weight: 19 lb	FT = 10%

LUMBER-

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

BRACING-

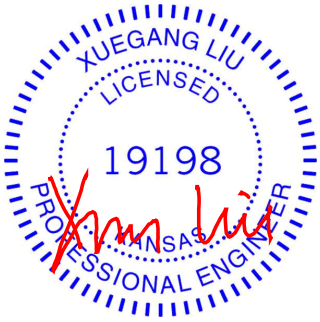
TOP CHORD	Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=118(LC 8)
Max Uplift 4=-49(LC 8), 5=-14(LC 8)
Max Grav 8=336(LC 1), 4=156(LC 13), 5=106(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-304/7

NOTES-

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



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J25	Jack-Open	1	1	I42065441
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:16 2020 Page 1
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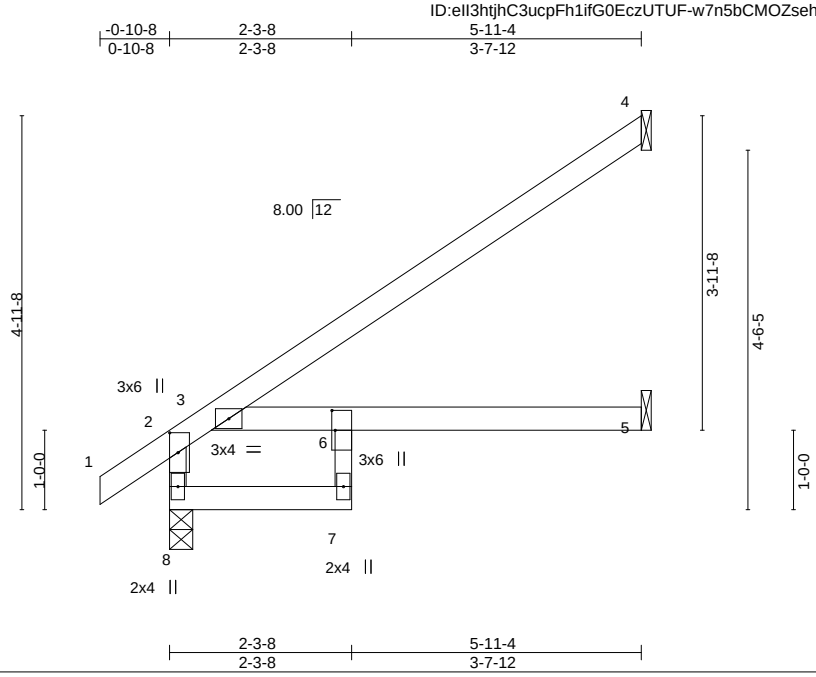


Plate Offsets (X,Y)-- [2:0-3-0,0-1-4], [6:0-3-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.13	5-6	>519	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.07	5-6	>999	240	Weight: 19 lb	FT = 10%

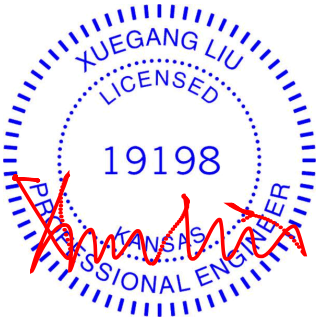
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-7: 2x3 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=119(LC 8)
Max Uplift 4=-67(LC 8)
Max Grav 8=360(LC 1), 4=176(LC 13), 5=122(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-342/0

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
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 77 RR
400422	J26	Diagonal Hip Girder	1	1	I42065442
					Job Reference (optional)

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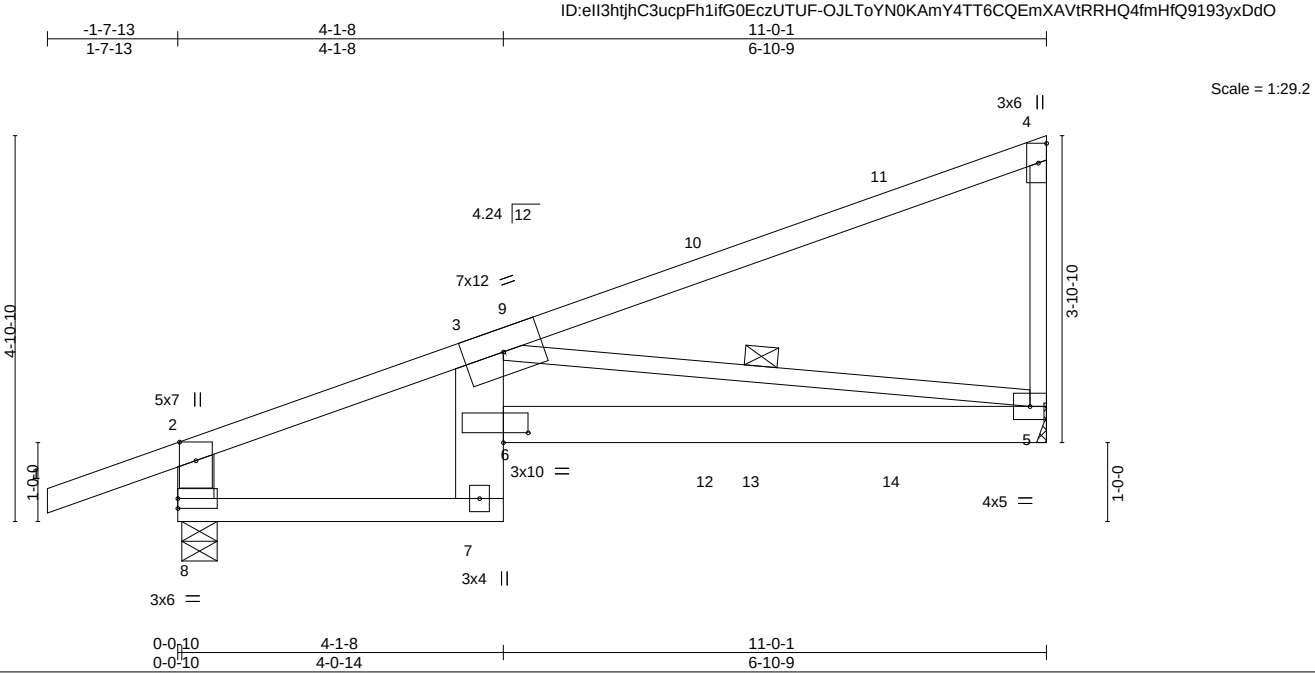


Plate Offsets (X,Y)-- [6:0-3-12,0-1-8]

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	1.00	Vert(LL)	-0.14	5-6	>909	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.26	5-6	>498	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	5-6	>848	240	Weight: 47 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x8 SP DSS, 5-6: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
2-8: 2x6 SPF No.2

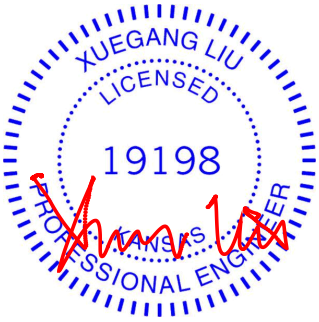
BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-5

REACTIONS. (size) 8=0-5-6, 5=Mechanical
Max Horz 8=196(LC 5)
Max Uplift 8=-227(LC 4), 5=-273(LC 8)
Max Grav 8=744(LC 1), 5=741(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-638/230, 2-3=-731/193
BOT CHORD 7-8=-262/596, 3-6=-2/250, 5-6=-763/1988
WEBS 3-5=-1956/758

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) except (jt=lb) 8=227, 5=273.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 103 lb down and 68 lb up at 3-6-14, 85 lb down and 48 lb up at 4-4-14, and 91 lb down and 55 lb up at 6-9-3, and 121 lb down and 91 lb up at 9-1-8 on top chord, and 13 lb down at 3-9-14, 39 lb down and 49 lb up at 6-9-3, and 251 lb down and 109 lb up at 7-4-3, and 47 lb down and 42 lb up at 9-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20



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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 7=-6(F) 9=-4(B) 10=-9(B) 11=-48(B) 12=-31(B) 13=-251(F) 14=-44(B)

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J27	Jack-Open	1	1	I42065443
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:18 2020 Page 1
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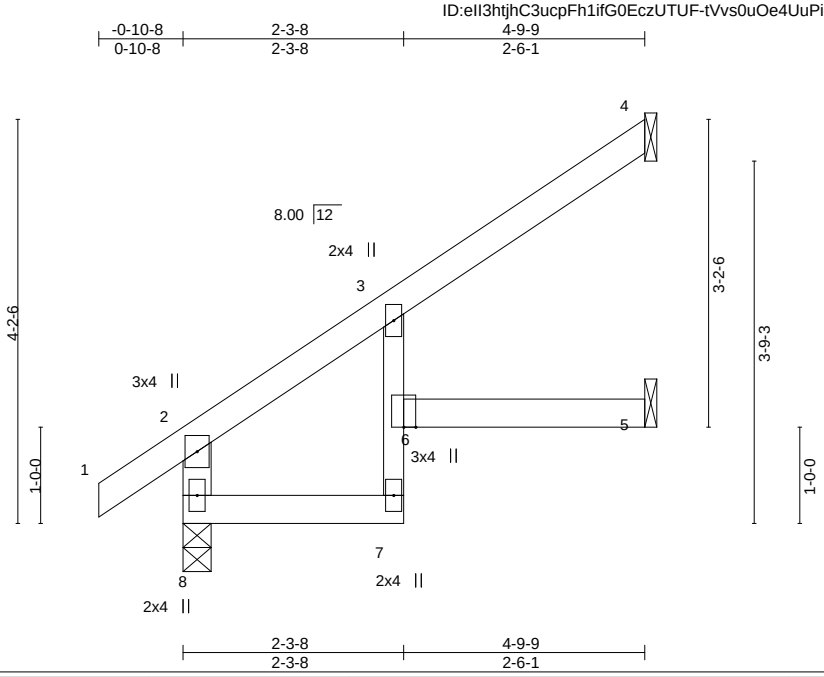

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	7	>942	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.05	6	>999	240	Weight: 16 lb	FT = 10%

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

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

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=138(LC 8)
Max Uplift 8=-1(LC 8), 4=-81(LC 8), 5=-19(LC 8)
Max Grav 8=286(LC 1), 4=140(LC 15), 5=76(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-262/38

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J28	Jack-Open	1	1	I42065444
					Job Reference (optional)

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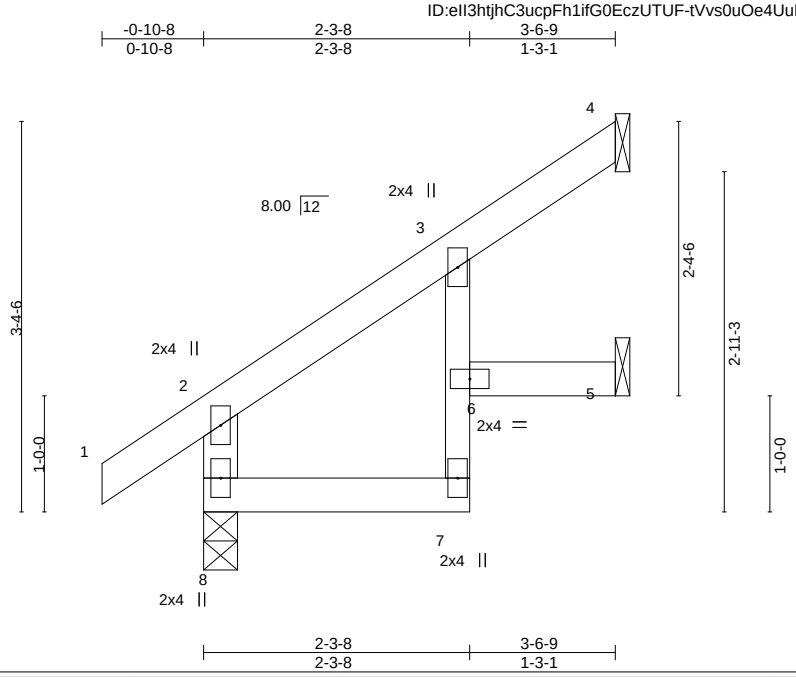


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	6	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

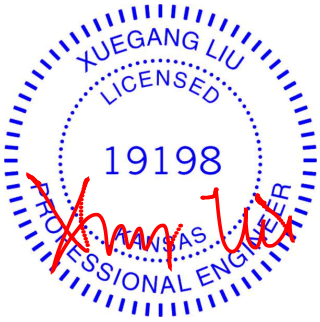
TOP CHORD Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=104(LC 8)
Max Uplift 8=-2(LC 8), 4=-48(LC 8), 5=-30(LC 8)
Max Grav 8=233(LC 1), 4=90(LC 15), 5=64(LC 15)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J29	Jack-Open	1	1	I42065445

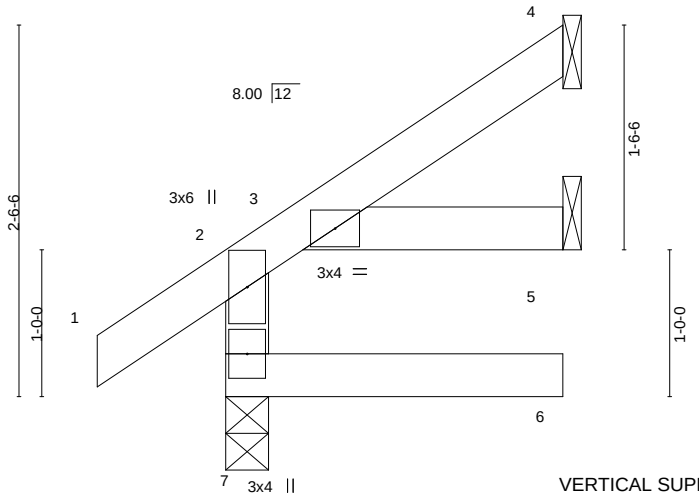
Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:19 2020 Page 1

ID:eIl3htjhC3ucpFh1ifG0EczUTUF-LiTEDDOGrn0GKndVKrGEcbaQzF5dYnea6ke8EyyxDdM

-0-10-8 2-3-9
0-10-8 2-3-9

Scale = 1:15.7



VERTICAL SUPPORT OF FREE END OF CHORD IS REQUIRED.

2-3-9
2-3-9

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)	-0.05	6	>552	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.09	6	>278	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6	>933	240	Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

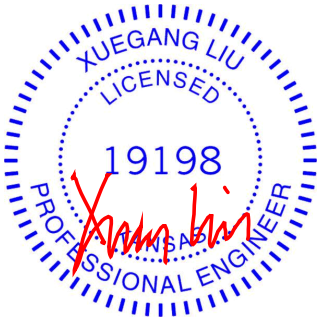
TOP CHORD	Structural wood sheathing directly applied or 2-3-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=70(LC 8)
Max Uplift 4=-39(LC 8), 5=-3(LC 8)
Max Grav 7=197(LC 1), 4=71(LC 15), 5=60(LC 3)

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

NOTES-

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



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	J30	Jack-Closed	1	1	I42065446
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:19 2020 Page 1
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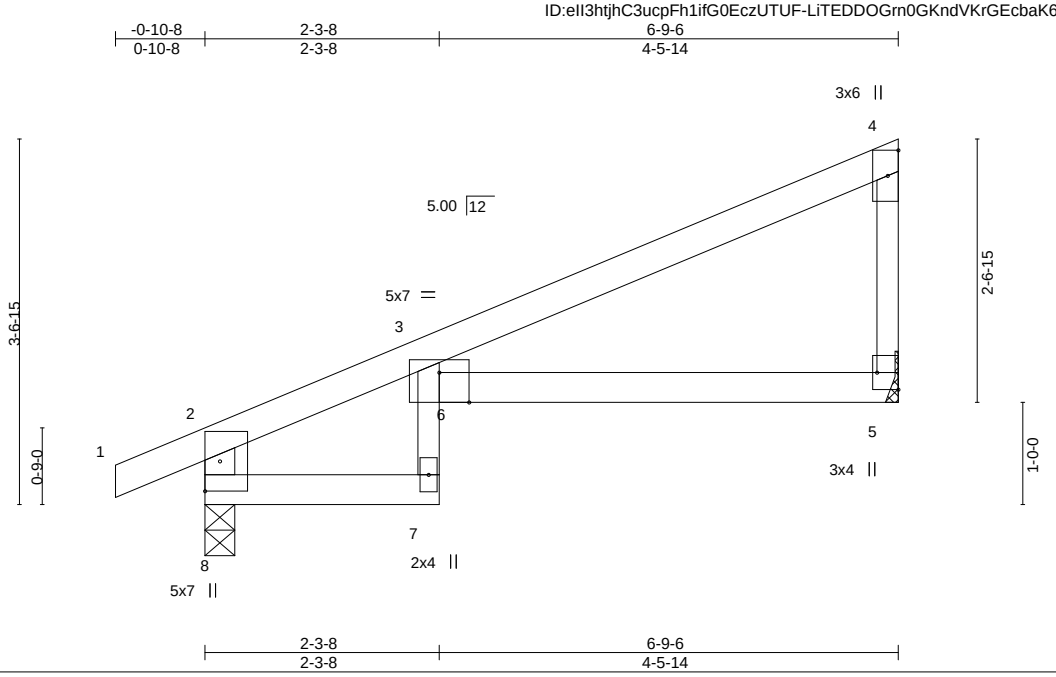


Plate Offsets (X,Y)-- [3:0-3-8,Edge], [5:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.11	5-6	>686	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.21	5-6	>380	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.10	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.12	5-6	>670	240	Weight: 20 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-5: 2x3 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 5=Mechanical
Max Horz 8=131(LC 5)
Max Uplift 8=-62(LC 8), 5=-71(LC 8)
Max Grav 8=371(LC 1), 5=288(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-359/86, 2-3=-284/36

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

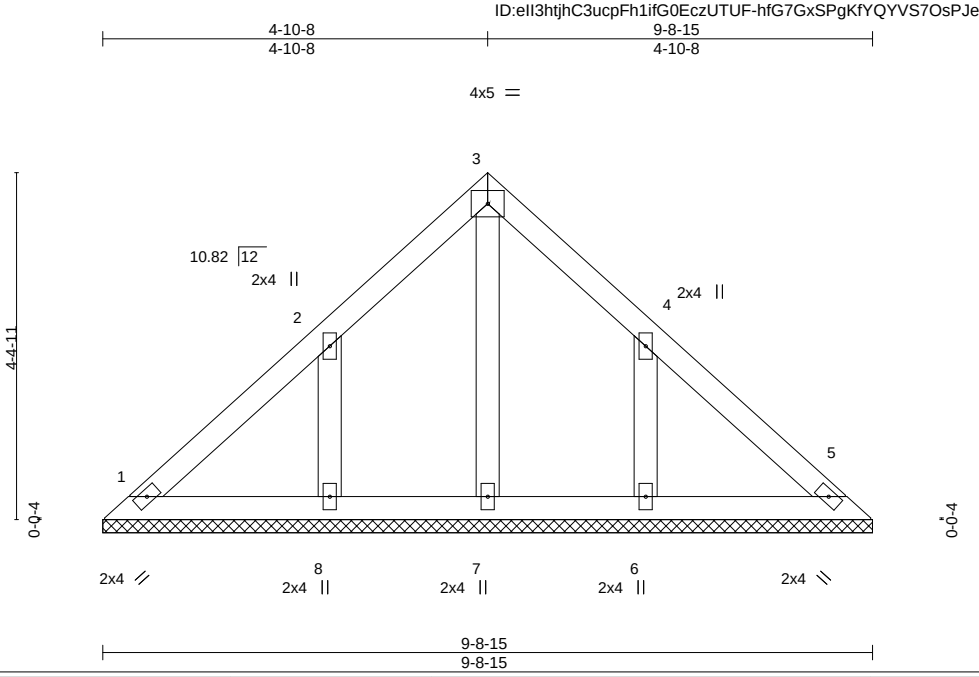
July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	LAY2	GABLE	1	1	I42065447
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:24 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-hfG7GxSPgKfYQYVS7OsPJeHIBGqmD2RJG0Lvv9yxDdH



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	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 34 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 9-8-15.

(lb) - Max Horz 1=106(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-138(LC 8), 6=-137(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=268(LC 15), 6=268(LC 16)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=138, 6=137.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 17,2020

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	LAY3	GABLE	2	1	I42065448
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:25 2020 Page 1
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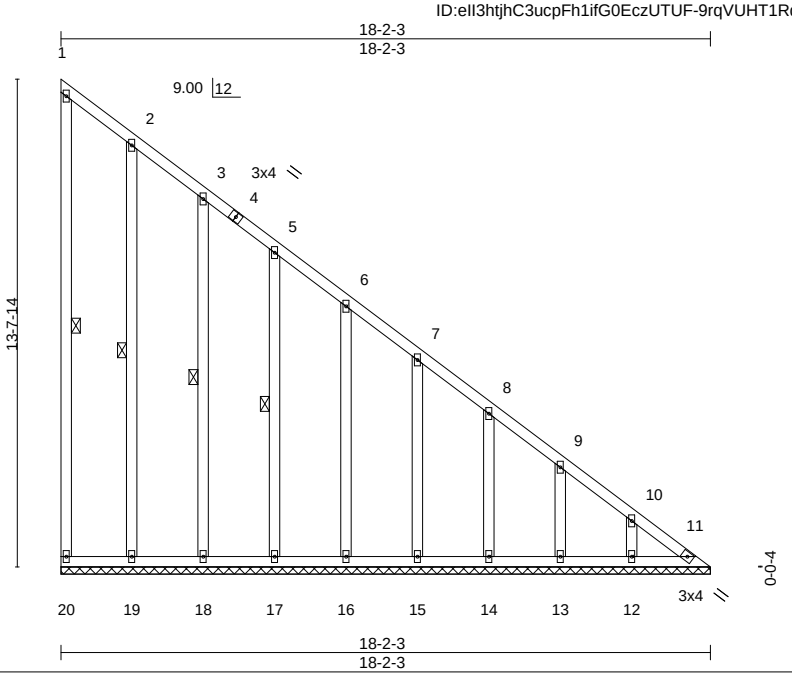


LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 119 lb	FT = 10%

LUMBER-

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

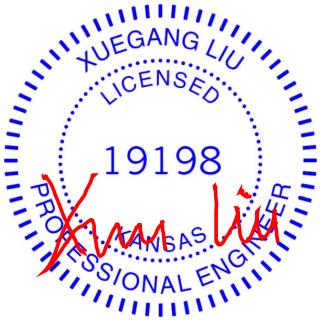
BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 1-20, 2-19, 3-18, 5-17

REACTIONS. All bearings 18-2-3.
(lb) - Max Horz 20=-539(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 20, 19, 18, 17, 16, 15, 14, 13, 12 except 11=-103(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 20, 19, 18, 17, 16, 15, 14, 13, 12 except 11=378(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-269/106, 6-7=-345/134, 7-8=-422/161, 8-9=-499/189, 9-10=-575/216, 10-11=-650/245
BOT CHORD 19-20=-194/539, 18-19=-194/539, 17-18=-194/539, 16-17=-194/539, 15-16=-194/539, 14-15=-194/539, 13-14=-194/539, 12-13=-194/539, 11-12=-194/539

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 right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 19, 18, 17, 16, 15, 14, 13, 12 except (jt=lb) 11=103.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	LAY4	GABLE	1	1	I42065449
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:26 2020 Page 1
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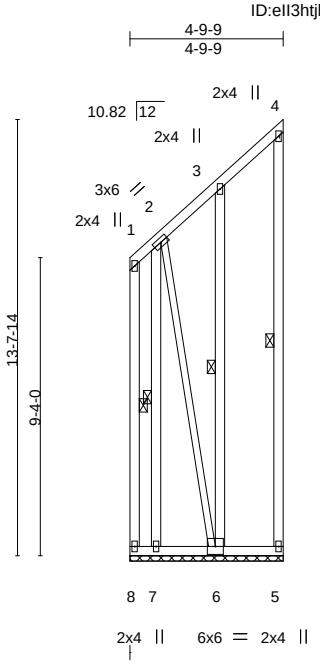


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 70 lb	FT = 10%

LUMBER-

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

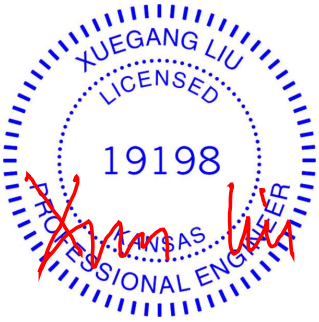
BRACING-

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

REACTIONS. All bearings 4-9-9.
(lb) - Max Horz 8=166(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 8, 5 except 7=-150(LC 6), 6=-821(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 8, 5 except 7=633(LC 8), 6=408(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-613/183, 2-6=-289/808

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 ; 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) 8, 5 except (jt=lb) 7=150, 6=821.
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.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	LAY5	GABLE	1	1	I42065450
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:26 2020 Page 1
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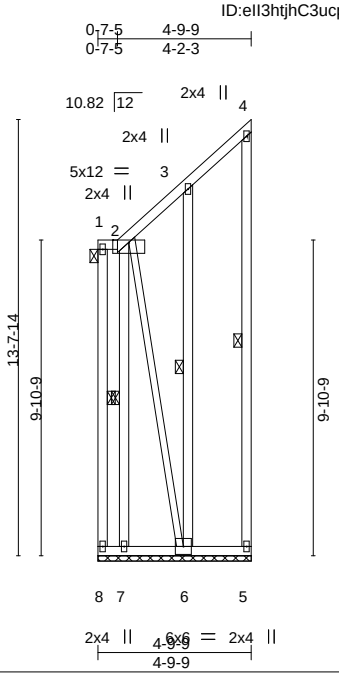


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 70 lb	FT = 10%

LUMBER-

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

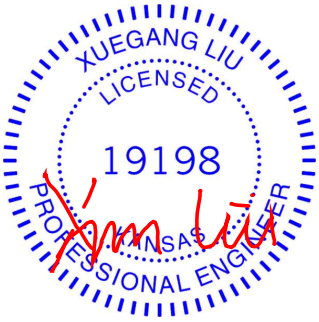
BRACING-

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

REACTIONS. All bearings 4-9-9.
(lb) - Max Horz 8=146(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 8, 5 except 7=-232(LC 6), 6=-814(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 8, 5 except 7=791(LC 8), 6=413(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-7=-772/264, 2-6=-259/719

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 ; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5 except (jt=lb) 7=232, 6=814.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	LAY6	GABLE	1	1	I42065451
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:27 2020 Page 1

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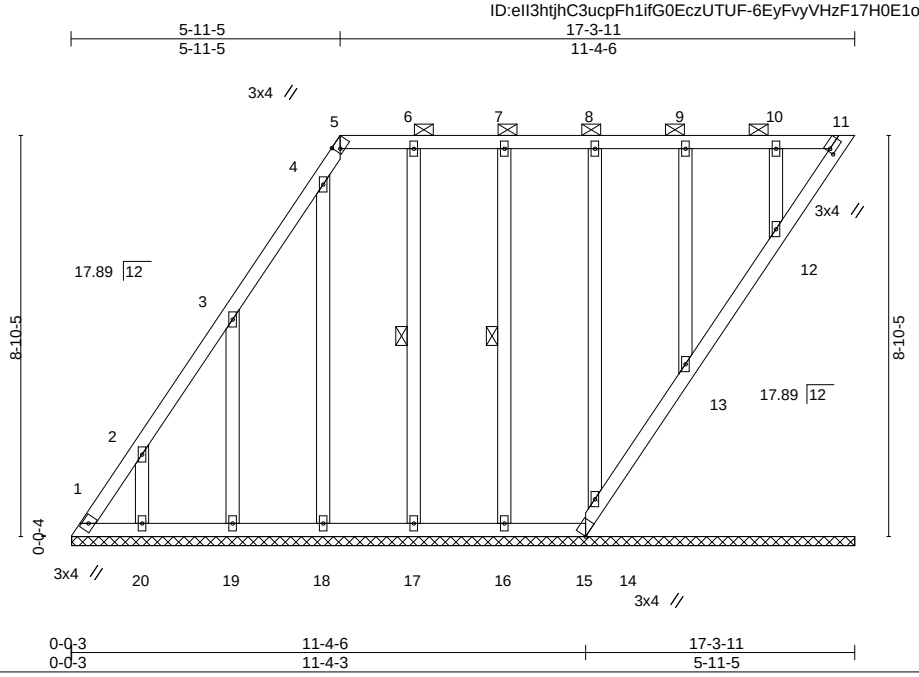


Plate Offsets (X,Y)-- [5:0-1-1,Edge], [11:0-0-13,0-1-8]

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 101 lb	FT = 10%

LUMBER-

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

BRACING-

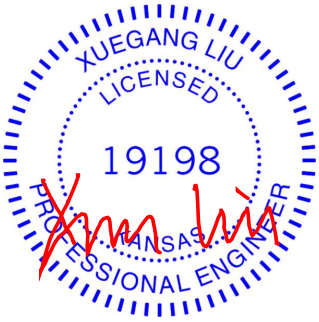
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-17, 7-16

REACTIONS. All bearings 17-3-8.
(lb) - Max Horz 1=350(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 15, 18, 17, 16, 14, 13, 12 except 1=-158(LC 6), 20=-192(LC 8), 19=-240(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 20, 18, 17, 16, 14, 13, 12 except 1=398(LC 8), 19=260(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-487/232, 2-3=-304/152
WEBS 3-19=-220/265

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 15, 18, 17, 16, 14, 13, 12 except (jt=lb) 1=158, 20=192, 19=240.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 14, 13, 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR	I42065452
400422	LAY7	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:29 2020 Page 1

ID:eII3htjhC3ucpFh1ifG0EczUTUF-2d40JeWYVsHrWJOQvxSa0h?96HX3uGg2PH3gbNyxDdC

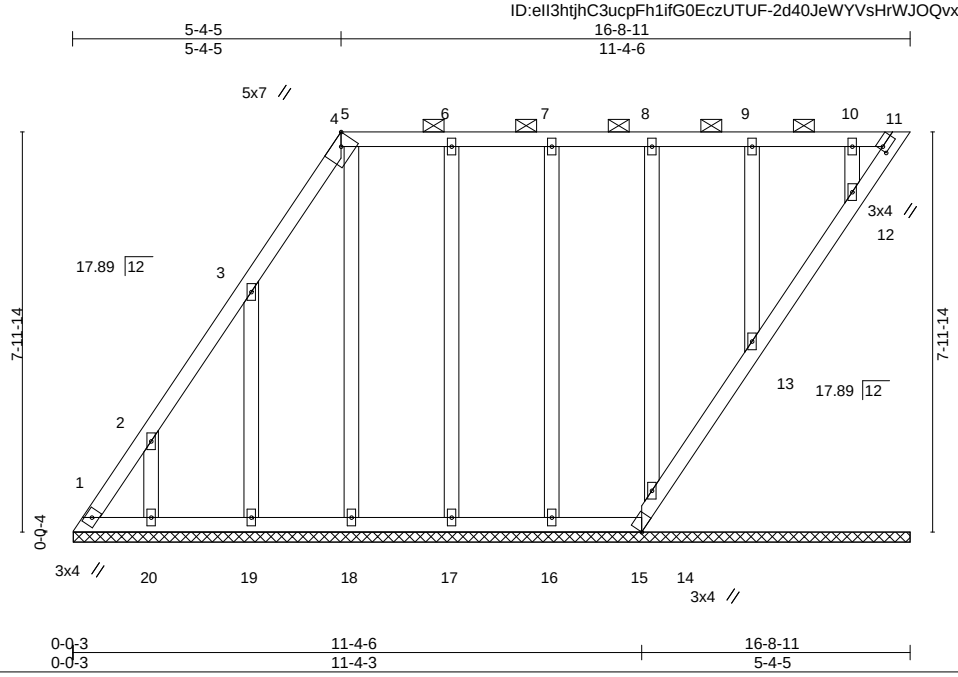


Plate Offsets (X,Y)-- [4:0-2-15,Edge], [11:0-0-13,0-1-8]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 94 lb	FT = 10%

LUMBER-

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

BRACING-

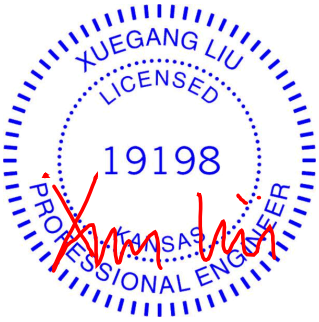
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.

REACTIONS. All bearings 16-8-8.
(lb) - Max Horz 1=314(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 15, 18, 17, 16, 14, 13, 12 except 1=-119(LC 6), 20=-197(LC 8), 19=-224(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 20, 18, 17, 16, 14, 13, 12 except 1=327(LC 8), 19=251(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-402/185

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
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) 11, 15, 18, 17, 16, 14, 13, 12 except (jt=lb) 1=119, 20=197, 19=224.
8) Non Standard bearing condition. Review required.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 17,2020

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	V5	Valley	1	1	I42065453
					Job Reference (optional)

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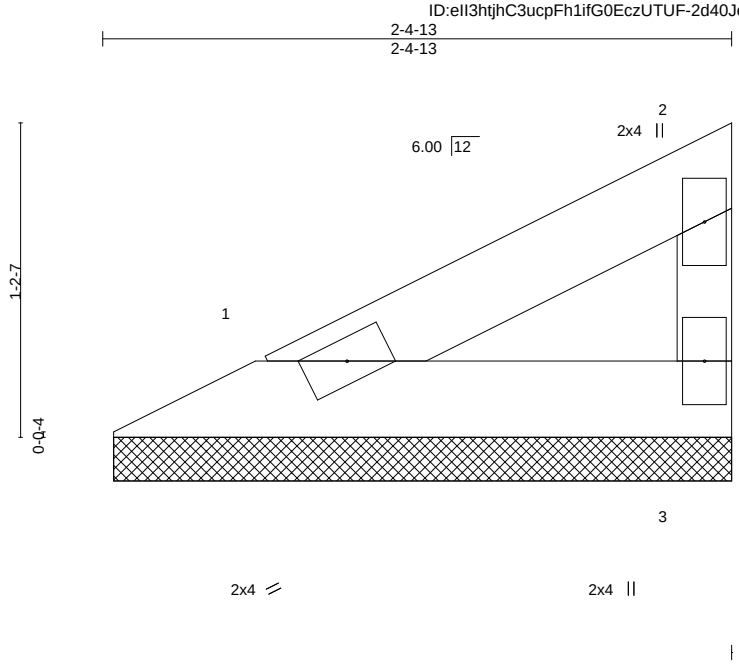
ID:eII3htjhC3ucpFh1ifG0EczUTUF-2d40JeWYVsHrWJOQvxSa0h?9KHXCuI62PH3gbNyxDdC



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	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: 5 lb	FT = 10%

LUMBER-

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

BRACING-

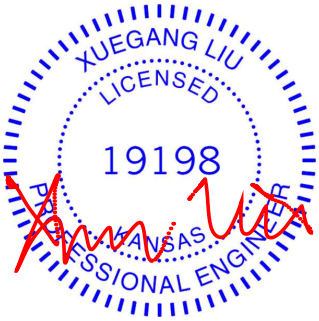
TOP CHORD	Structural wood sheathing directly applied or 2-4-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-4-5, 3=2-4-5
Max Horz 1=35(LC 5)
Max Uplift 1=-10(LC 8), 3=-18(LC 8)
Max Grav 1=75(LC 1), 3=75(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.



July 17,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	V6	Valley	1	1	I42065454

Job Reference (optional)

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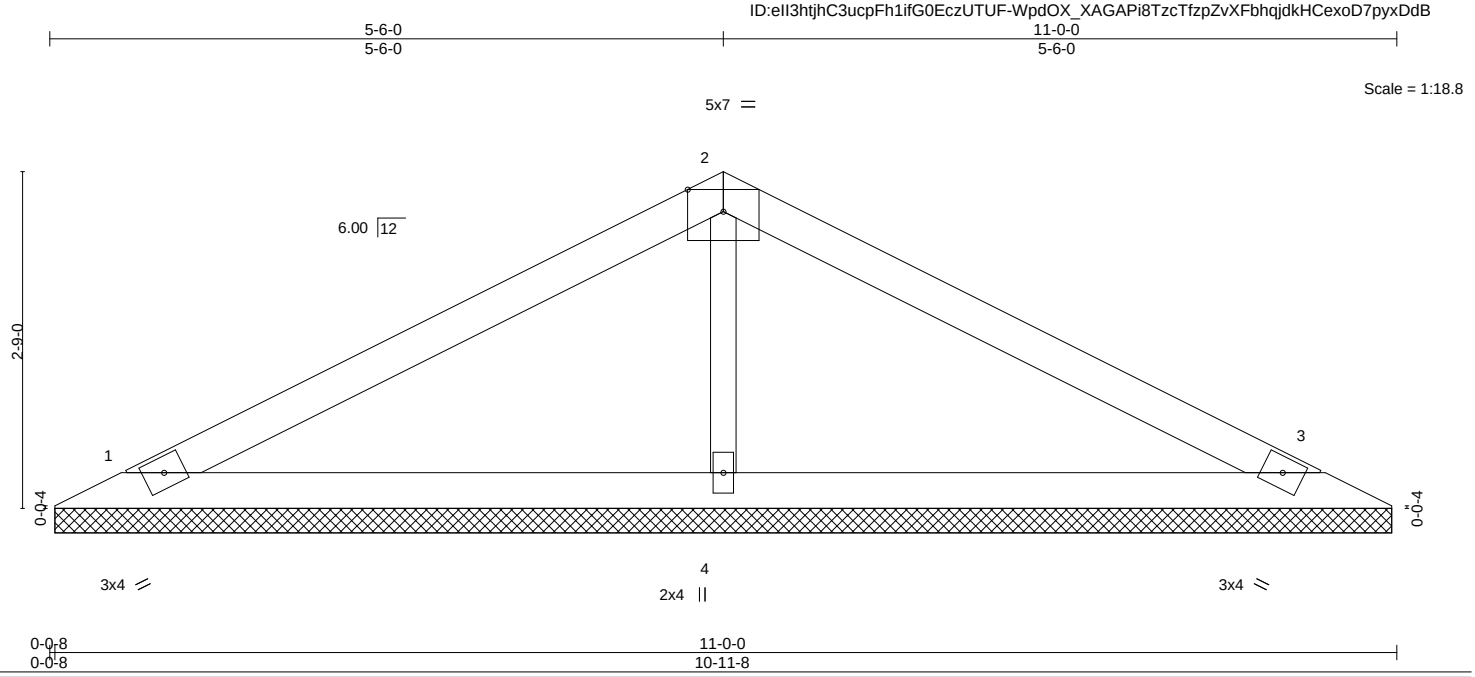
ID:eII3htjhC3ucpFh1ifG0EczUTUF-WpdOX_XAGAPi8TzcTfzpZvXFbhqjdkHCexoD7pyxDdB



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-

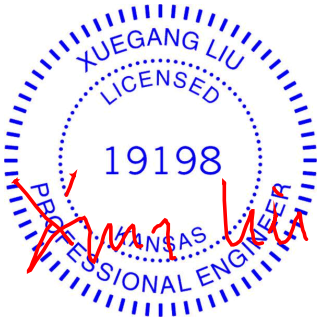
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=10-11-0, 3=10-11-0, 4=10-11-0
Max Horz 1=-43(LC 9)
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-

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



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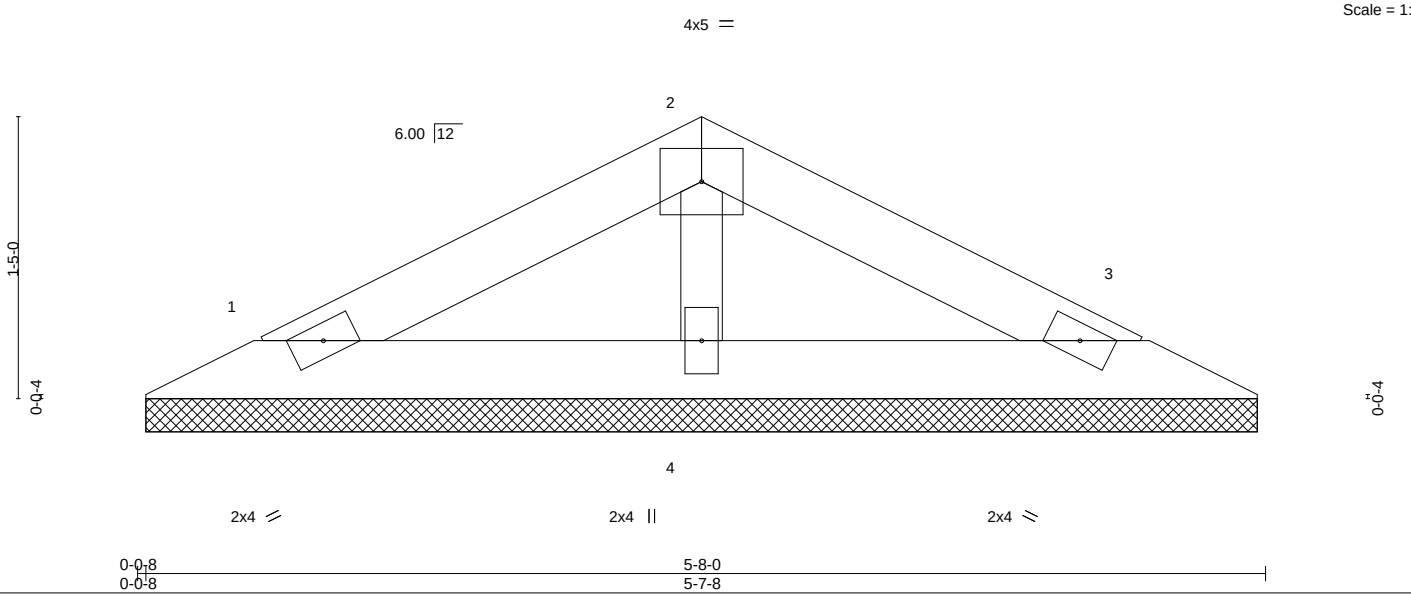
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 77 RR
400422	V7	Valley	1	1	I42065455
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.410 s May 22 2020 MiTek Industries, Inc. Fri Jul 17 07:59:31 2020 Page 1
ID:eII3htjhC3ucpFh1ifG0EczUTUF-_?BmkKYo1TXZmdXp1MU2564UD4DPMCELtbYnfFyxDdA

2-10-0 / 2-10-0 — 5-8-0 / 2-10-0

Scale = 1:11.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 13 lb	FT = 10%

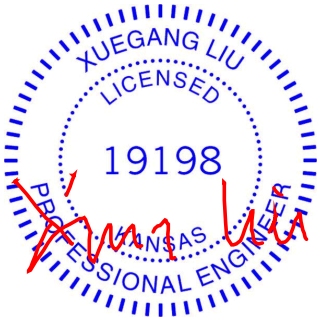
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. (size) 1=5-7-0, 3=5-7-0, 4=5-7-0
Max Horz 1=20(LC 8)
Max Uplift 1=-24(LC 8), 3=-27(LC 9), 4=-2(LC 8)
Max Grav 1=104(LC 1), 3=104(LC 1), 4=189(LC 1)

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

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



July 17,2020

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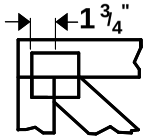
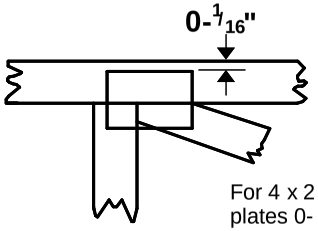
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

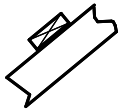
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

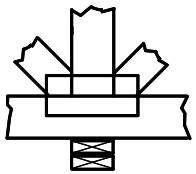
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

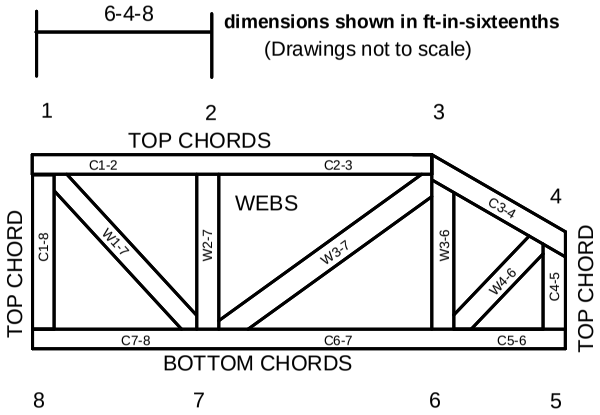


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.