RE: 400157
Lot 62 H4

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

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

Design Code: IRC2018/TPI2014
Design Program: MiTek 20/20 8.2
Wind Code: N/A
Wind Speed: 115 mph
Roof Load: 45.0 psf
Floor Load: N/A psf

This package includes 92 individual, dated Truss Design Drawings and 0 Additional Drawings.

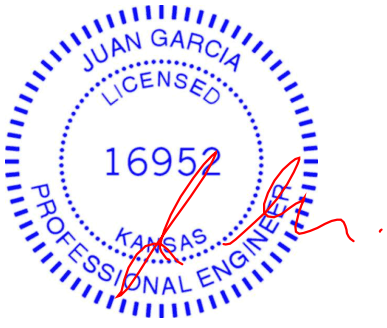
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41085165	A1	4/24/2020	27	I41085191	G2	4/24/2020
2	I41085166	A2	4/24/2020	28	I41085192	G3	4/24/2020
3	I41085167	A3	4/24/2020	29	I41085193	G4	4/24/2020
4	I41085168	A4	4/24/2020	30	I41085194	G5	4/24/2020
5	I41085169	B1	4/24/2020	31	I41085195	G6	4/24/2020
6	I41085170	B2	4/24/2020	32	I41085196	H1	4/24/2020
7	I41085171	B3	4/24/2020	33	I41085197	H2	4/24/2020
8	I41085172	B4	4/24/2020	34	I41085198	H3	4/24/2020
9	I41085173	B5	4/24/2020	35	I41085199	H4	4/24/2020
10	I41085174	B6	4/24/2020	36	I41085200	J1	4/24/2020
11	I41085175	B7	4/24/2020	37	I41085201	J2	4/24/2020
12	I41085176	B8	4/24/2020	38	I41085202	J3	4/24/2020
13	I41085177	B9	4/24/2020	39	I41085203	J4	4/24/2020
14	I41085178	B10	4/24/2020	40	I41085204	J5	4/24/2020
15	I41085179	B11	4/24/2020	41	I41085205	J6	4/24/2020
16	I41085180	C1	4/24/2020	42	I41085206	J7	4/24/2020
17	I41085181	C2	4/24/2020	43	I41085207	J8	4/24/2020
18	I41085182	C3	4/24/2020	44	I41085208	J9	4/24/2020
19	I41085183	C4	4/24/2020	45	I41085209	J10	4/24/2020
20	I41085184	D1	4/24/2020	46	I41085210	J11	4/24/2020
21	I41085185	D2	4/24/2020	47	I41085211	J12	4/24/2020
22	I41085186	D3	4/24/2020	48	I41085212	J13	4/24/2020
23	I41085187	E1	4/24/2020	49	I41085213	J14	4/24/2020
24	I41085188	E2	4/24/2020	50	I41085214	J15	4/24/2020
25	I41085189	E3	4/24/2020	51	I41085215	J16	4/24/2020
26	I41085190	G1	4/24/2020	52	I41085216	J17	4/24/2020

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

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943



IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

April 24, 2020

Garcia, Juan

RE: 400157 - Lot 62 H4

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

Site Information:

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

No.	Seal#	Truss Name	Date
53	I41085217	J18	4/24/2020
54	I41085218	J19	4/24/2020
55	I41085219	J20	4/24/2020
56	I41085220	J21	4/24/2020
57	I41085221	J22	4/24/2020
58	I41085222	J23	4/24/2020
59	I41085223	J24	4/24/2020
60	I41085224	J25	4/24/2020
61	I41085225	J26	4/24/2020
62	I41085226	J27	4/24/2020
63	I41085227	J28	4/24/2020
64	I41085228	J29	4/24/2020
65	I41085229	J30	4/24/2020
66	I41085230	J31	4/24/2020
67	I41085231	J32	4/24/2020
68	I41085232	J33	4/24/2020
69	I41085233	J34	4/24/2020
70	I41085234	J35	4/24/2020
71	I41085235	J36	4/24/2020
72	I41085236	J37	4/24/2020
73	I41085237	LAY1	4/24/2020
74	I41085238	LAY2	4/24/2020
75	I41085239	LAY3	4/24/2020
76	I41085240	LAY4	4/24/2020
77	I41085241	LAY5	4/24/2020
78	I41085242	LAY6	4/24/2020
79	I41085243	LAY7	4/24/2020
80	I41085244	V1	4/24/2020
81	I41085245	V2	4/24/2020
82	I41085246	V3	4/24/2020
83	I41085247	V4	4/24/2020
84	I41085248	V5	4/24/2020
85	I41085249	V6	4/24/2020
86	I41085250	V7	4/24/2020
87	I41085251	V8	4/24/2020
88	I41085252	V9	4/24/2020
89	I41085253	V10	4/24/2020
90	I41085254	V11	4/24/2020
91	I41085255	V12	4/24/2020
92	I41085256	V13	4/24/2020

RE: 400157
Lot 62 H4

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

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

Design Code: IRC2018/TPI2014
Design Program: MiTek 20/20 8.2
Wind Code: N/A
Wind Speed: 115 mph
Roof Load: 45.0 psf
Floor Load: N/A psf

This package includes 92 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41085165	A1	4/24/2020	27	I41085191	G2	4/24/2020
2	I41085166	A2	4/24/2020	28	I41085192	G3	4/24/2020
3	I41085167	A3	4/24/2020	29	I41085193	G4	4/24/2020
4	I41085168	A4	4/24/2020	30	I41085194	G5	4/24/2020
5	I41085169	B1	4/24/2020	31	I41085195	G6	4/24/2020
6	I41085170	B2	4/24/2020	32	I41085196	H1	4/24/2020
7	I41085171	B3	4/24/2020	33	I41085197	H2	4/24/2020
8	I41085172	B4	4/24/2020	34	I41085198	H3	4/24/2020
9	I41085173	B5	4/24/2020	35	I41085199	H4	4/24/2020
10	I41085174	B6	4/24/2020	36	I41085200	J1	4/24/2020
11	I41085175	B7	4/24/2020	37	I41085201	J2	4/24/2020
12	I41085176	B8	4/24/2020	38	I41085202	J3	4/24/2020
13	I41085177	B9	4/24/2020	39	I41085203	J4	4/24/2020
14	I41085178	B10	4/24/2020	40	I41085204	J5	4/24/2020
15	I41085179	B11	4/24/2020	41	I41085205	J6	4/24/2020
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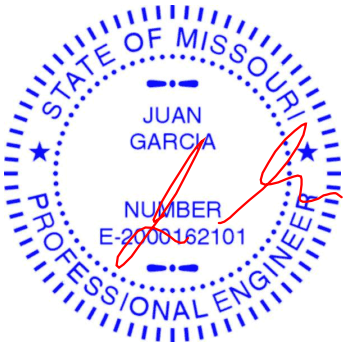
17	I41085181	C2	4/24/2020	43	I41085207	J8	4/24/2020
18	I41085182	C3	4/24/2020	44	I41085208	J9	4/24/2020
19	I41085183	C4	4/24/2020	45	I41085209	J10	4/24/2020
20	I41085184	D1	4/24/2020	46	I41085210	J11	4/24/2020
21	I41085185	D2	4/24/2020	47	I41085211	J12	4/24/2020
22	I41085186	D3	4/24/2020	48	I41085212	J13	4/24/2020
23	I41085187	E1	4/24/2020	49	I41085213	J14	4/24/2020
24	I41085188	E2	4/24/2020	50	I41085214	J15	4/24/2020
25	I41085189	E3	4/24/2020	51	I41085215	J16	4/24/2020
26	I41085190	G1	4/24/2020	52	I41085216	J17	4/24/2020

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

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2020.

Missouri COA: 001193



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April 24, 2020

Garcia, Juan

RE: 400157 - Lot 62 H4

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

Site Information:

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

No.	Seal#	Truss Name	Date
53	I41085217	J18	4/24/2020
54	I41085218	J19	4/24/2020
55	I41085219	J20	4/24/2020
56	I41085220	J21	4/24/2020
57	I41085221	J22	4/24/2020
58	I41085222	J23	4/24/2020
59	I41085223	J24	4/24/2020
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75	I41085239	LAY3	4/24/2020
76	I41085240	LAY4	4/24/2020
77	I41085241	LAY5	4/24/2020
78	I41085242	LAY6	4/24/2020
79	I41085243	LAY7	4/24/2020
80	I41085244	V1	4/24/2020
81	I41085245	V2	4/24/2020
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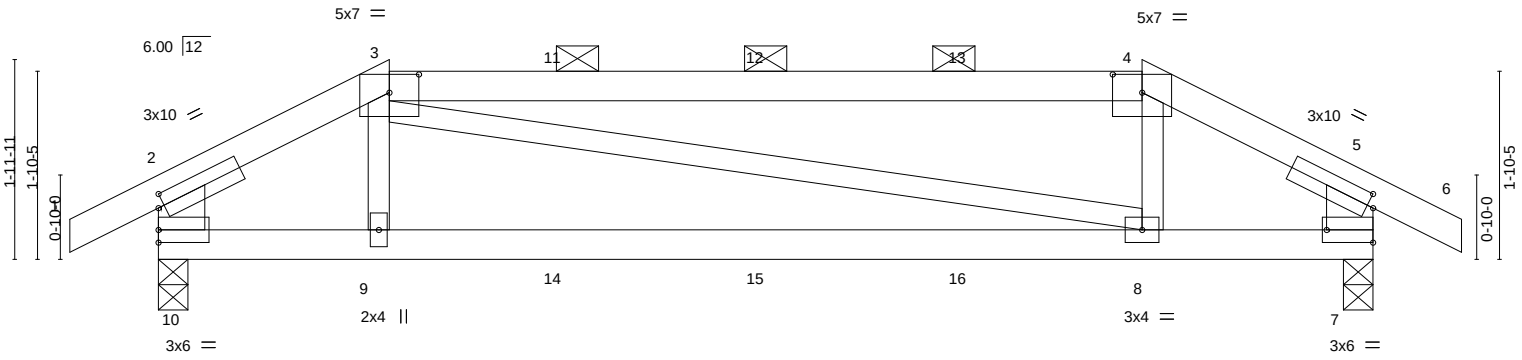
86	I41085250	V7	4/24/2020
87	I41085251	V8	4/24/2020
88	I41085252	V9	4/24/2020
89	I41085253	V10	4/24/2020
90	I41085254	V11	4/24/2020
91	I41085255	V12	4/24/2020
92	I41085256	V13	4/24/2020

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	A1	Hip Girder	1	1	I41085165
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:13 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-IPO1r4Ggy1NHKQ5XkndXCe_hkRzRF4KNGA2bvTzNnCm

-0-10-8 2-3-6 9-8-10 12-0-0 12-10-8
0-10-8 2-3-6 7-5-4 2-3-6 0-10-8

Scale = 1:22.8



2-3-6 9-8-10 12-0-0
2-3-6 7-5-4 2-3-6

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.11	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.25	8-9	>558	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	8-9	>999	240	Weight: 40 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x6 SPF No.2

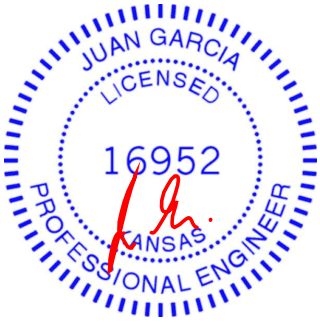
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=45(LC 7)
Max Uplift 10=-123(LC 8), 7=-123(LC 9)
Max Grav 10=634(LC 1), 7=634(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-824/150, 3-4=-682/159, 4-5=-815/148, 2-10=-534/82, 5-7=-539/83
BOT CHORD 9-10=-140/698, 8-9=-149/695, 7-8=-120/683

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) 10=123, 7=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.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 58 lb up at 2-3-6, 68 lb down and 48 lb up at 4-0-0, 68 lb down and 48 lb up at 6-0-0, and 68 lb down and 48 lb up at 8-0-0, and 73 lb down and 58 lb up at 9-8-10 on top chord, and 20 lb down at 2-3-6, 17 lb down at 4-0-0, 17 lb down at 6-0-0, and 17 lb down at 8-0-0, and 20 lb down at 9-8-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20



April 24,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-2(F) 4=-2(F) 9=-6(F) 8=-6(F) 11=-10(F) 12=-10(F) 13=-10(F) 14=-9(F) 15=-9(F) 16=-9(F)

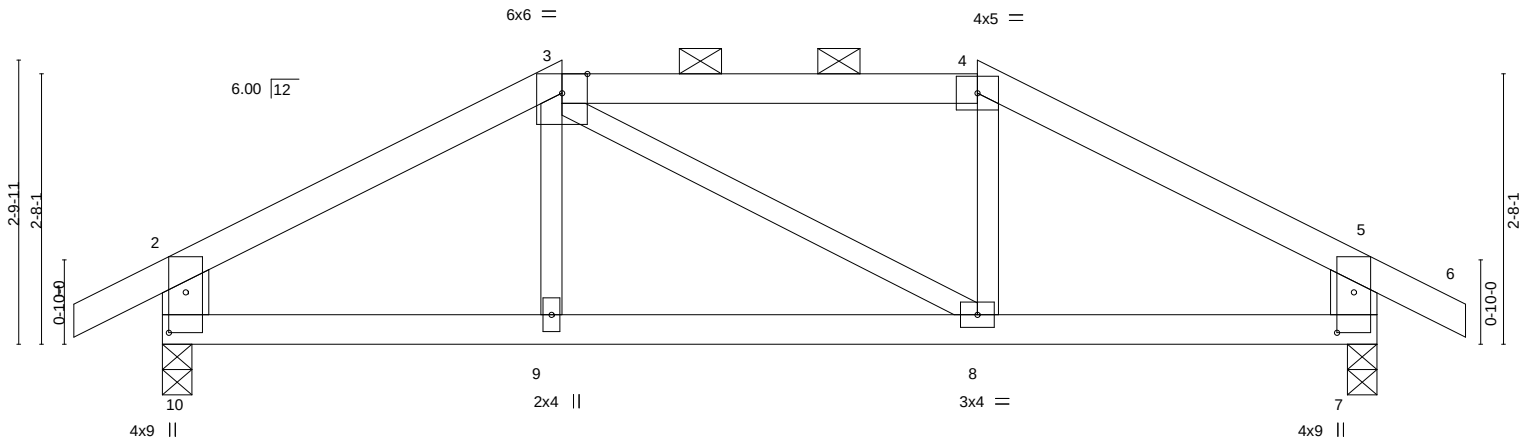
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	A2	HIP	1	1	I41085166
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:14 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-mbyP3QHIjKV8yagjIU8mlsWxaqML_Y3XVqo8SvzNnCl

-0-10-8	3-11-6	8-0-10	12-0-0	12-10-8
0-10-8	3-11-6	4-1-4	3-11-6	0-10-8

Scale = 1:22.8



3-11-6	8-0-10	12-0-0
3-11-6	4-1-4	3-11-6

Plate Offsets (X,Y)-- [7:0-4-13,0-2-0], [10:0-4-13,0-2-0]

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	0.45	Vert(LL)	-0.05	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.09	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 40 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=55(LC 7)
Max Uplift 10=-73(LC 8), 7=-73(LC 9)
Max Grav 10=597(LC 1), 7=597(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-664/61, 3-4=-521/72, 4-5=-664/60, 2-10=-522/97, 5-7=-523/97
BOT CHORD 9-10=-43/522, 8-9=-45/520, 7-8=-17/522

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) 10, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	A3	HIP	1	1	I41085167
					Job Reference (optional)

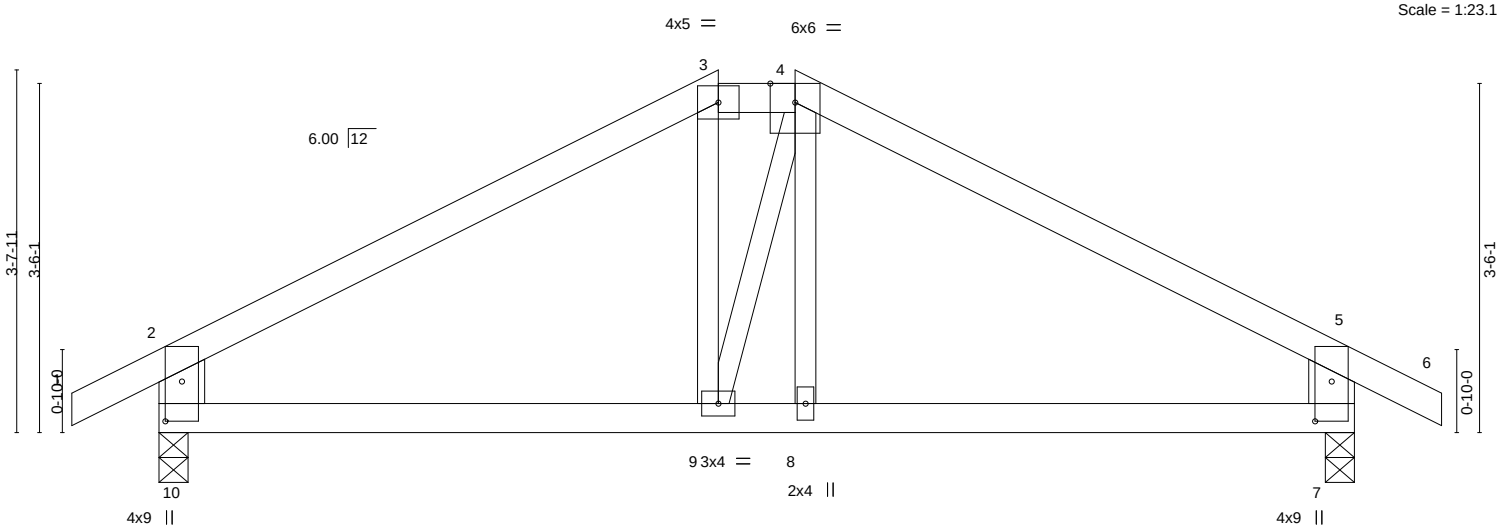
Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:18 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-eNCwvoKpmZ?aQCzVXKDivihc8SmewLg6QRmMbgzNnCh

-0-10-8 | 5-7-6 | 6-4-10 | 12-0-0 | 12-10-8

0-10-8 | 5-7-6 | 0-9-4 | 5-7-6 | 0-10-8

Scale = 1:23.1



5-7-6 | 6-4-10 | 12-0-0

5-7-6 | 0-9-4 | 5-7-6

Plate Offsets (X,Y)-- [7:0-4-13,0-2-0], [10:0-4-13,0-2-0]

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	0.47	Vert(LL)	-0.03	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.05	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.00	9-10	>999	240	Weight: 40 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=-65(LC 6)
Max Uplift 10=-87(LC 8), 7=-87(LC 9)
Max Grav 10=597(LC 1), 7=597(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-617/71, 3-4=-462/106, 4-5=-616/71, 2-10=-533/127, 5-7=-533/127
BOT CHORD 9-10=-20/464, 8-9=0/461, 7-8=0/463

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) 10, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	A4	COMMON	2	1	I41085168
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:22 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-X8RRk9NJqoV0vpHGmAHe4YrH337Os9YiK3kZkSzNnCd

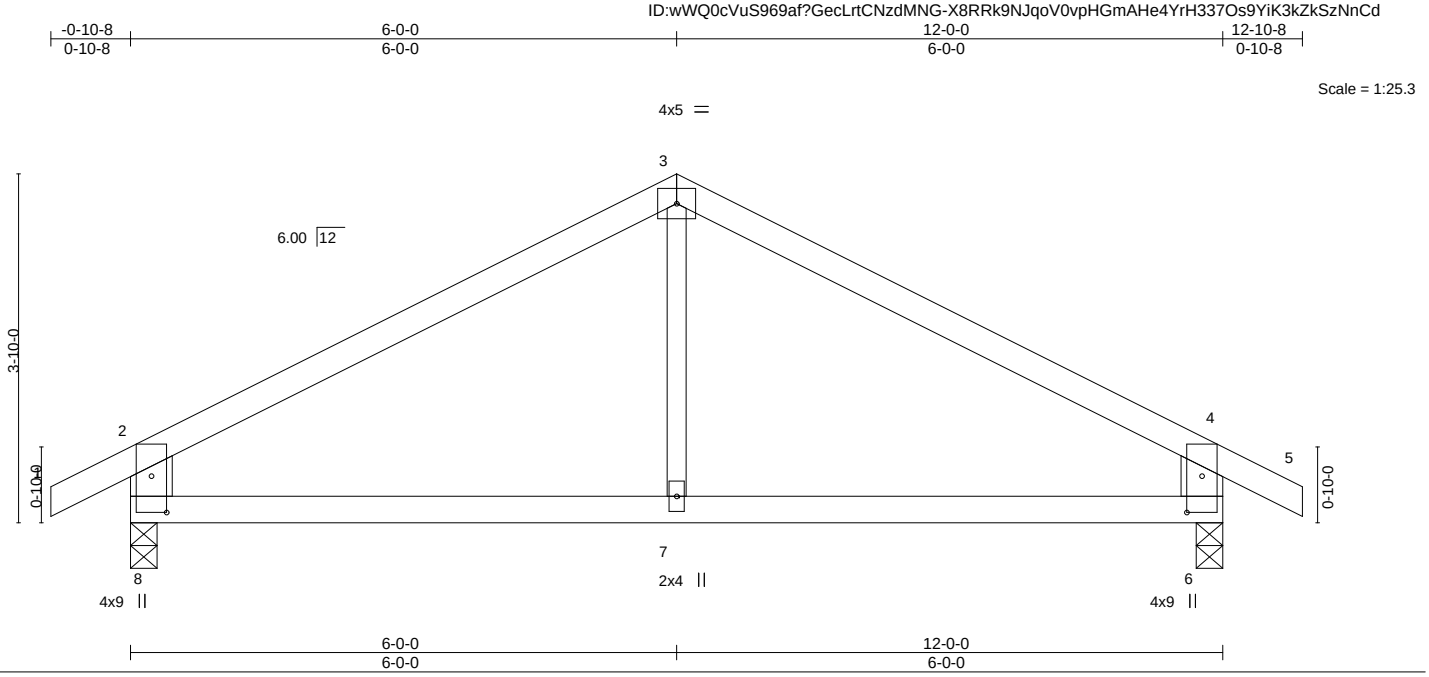


Plate Offsets (X,Y)-- [6:0-4-13,0-2-0], [8:0-4-13,0-2-0]

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	0.48	Vert(LL)	-0.03	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	7-8	>999	240	Weight: 36 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x6 SPF No.2 *Except*
3-7: 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, 6=0-3-8
Max Horz 8=-69(LC 6)
Max Uplift 8=-89(LC 8), 6=-89(LC 9)
Max Grav 8=597(LC 1), 6=597(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-606/90, 3-4=-606/90, 2-8=-536/131, 4-6=-536/131
BOT CHORD 7-8=-12/448, 6-7=-12/448

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) 8, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

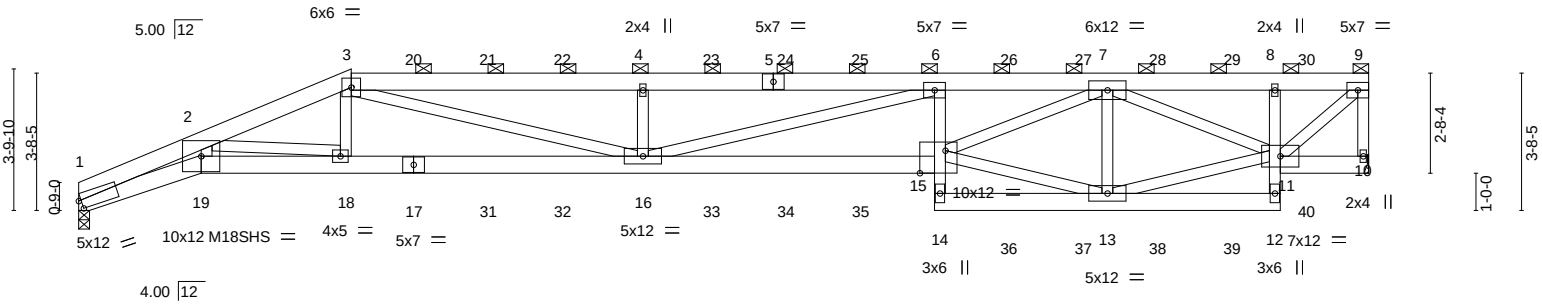
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B1	Half Hip Girder	1	2	I41085169
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:27 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-t5EKntRSfK7I?a9DYjtpnbZ404jyXDwRULRKPfzNnCY

3-3-8	7-3-14	15-1-15	23-0-0	27-7-12	32-3-8	34-8-0
3-3-8	4-0-6	7-10-1	7-10-1	4-7-12	4-7-12	2-4-8

Scale = 1:61.9



3-3-8	7-3-14	15-1-15	23-0-0	27-7-12	32-3-8	34-8-0
3-3-8	4-0-6	7-10-1	7-10-1	4-7-12	4-7-12	2-4-8

Plate Offsets (X,Y)-- [1:0-0-13,0-2-12], [15:0-8-4,0-7-4]

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	0.72	Vert(LL)	-0.43	15-16	>963	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.78	15-16	>530	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.25	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.29	15-16	>999	240	Weight: 452 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
1-3: 2x6 SP DSS
BOT CHORD 2x6 SP 2400F 2.0E *Except*
6-14,8-12: 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

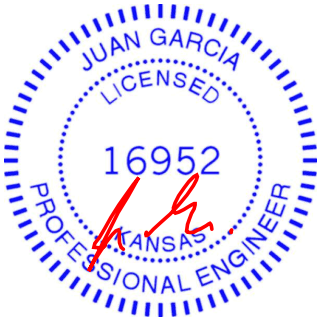
TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 10=Mechanical
Max Horz 1=96(LC 24)
Max Uplift 1=-303(LC 4), 10=-288(LC 5)
Max Grav 1=2884(LC 1), 10=2954(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11872/1430, 2-3=-8993/1104, 3-4=-11806/1275, 4-6=-11803/1274, 6-7=-11403/1191, 7-8=-2815/308, 8-9=-2799/303, 9-10=-2699/285
BOT CHORD 1-19=-1376/10754, 18-19=-1239/9688, 16-18=-1070/8351, 15-16=-1243/11721, 6-15=-716/251, 13-14=-86/600, 12-13=-63/674, 8-11=-393/141
WEBS 2-19=-357/2926, 2-18=-1266/201, 3-18=-161/1455, 3-16=-257/3745, 4-16=-1102/339, 13-15=-451/4745, 7-15=-757/6804, 7-13=-2210/367, 11-13=-469/4604, 7-11=-2628/245, 9-11=-386/3752

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row 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) 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) 1 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) 1=303, 10=288.



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Continued on page 2

MiTek
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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) 111 lb down and 74 lb up at 9-0-0, 111 lb down and 74 lb up at 11-0-0, 111 lb down and 74 lb up at 13-0-0, 111 lb down and 74 lb up at 15-0-0, 111 lb down and 74 lb up at 17-0-0, 111 lb down and 74 lb up at 19-0-0, 111 lb down and 74 lb up at 21-0-0, 111 lb down and 74 lb up at 23-0-0, 110 lb down and 74 lb up at 25-0-0, 110 lb down and 74 lb up at 27-0-0, 110 lb down and 74 lb up at 29-0-0 , and 110 lb down and 74 lb up at 31-0-0, and 111 lb down and 74 lb up at 33-0-0 on top chord, and 645 lb down and 221 lb up at 7-3-14, 68 lb down at 9-0-0, 68 lb down at 11-0-0, 68 lb down at 13-0-0, 68 lb down at 15-0-0, 68 lb down at 17-0-0, 68 lb down at 19-0-0, 68 lb down at 21-0-0, 68 lb down at 23-1-12, 69 lb down at 25-0-0, 69 lb down at 27-0-0, 69 lb down at 29-0-0, and 69 lb down at 31-0-0, and 68 lb down at 33-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-9=-70, 1-19=-20, 15-19=-20, 12-14=-20, 10-11=-20
   Concentrated Loads (lb)
   Vert: 17=-51(F) 6=-111(F) 18=-645(F) 16=-51(F) 4=-111(F) 15=-51(F) 20=-111(F) 21=-111(F) 22=-111(F) 23=-111(F) 24=-111(F) 25=-111(F) 26=-110(F) 27=-110(F) 28=-110(F) 29=-110(F) 30=-111(F) 31=-51(F) 32=-51(F) 33=-51(F) 34=-51(F) 35=-51(F) 36=-52(F) 37=-52(F) 38=-52(F) 39=-52(F) 40=-51(F)

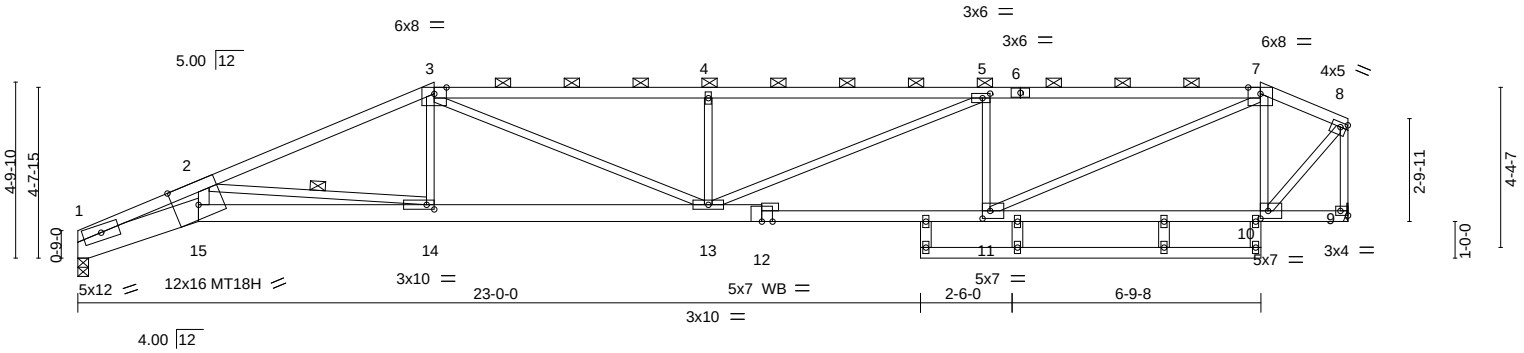
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B2	Hip	1	1	I41085170
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:33 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-iFcb2wWDEAuSkVdNv__D0sp4xViGxxlKsHufdJzNnCS

3-3-8	9-8-11	17-2-8	24-9-8	32-3-5	34-8-0
3-3-8	6-5-3	7-5-13	7-7-1	7-5-13	2-4-11

Scale = 1:62.9



3-3-8	9-8-11	17-2-8	24-9-8	32-3-5	34-8-0
3-3-8	6-5-3	7-5-13	7-7-1	7-5-13	2-4-11

Plate Offsets (X,Y)-- [5:0-2-8,0-1-8], [8:0-2-0,0-1-8], [9:Edge,0-1-8], [10:0-2-8,0-2-8], [11:0-2-8,0-2-8], [14:0-2-8,0-1-8], [15:0-8-0,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	0.88	Vert(LL)	-0.41	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.73	13-14	>567	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.29	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	13-14	>999	240	Weight: 151 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 7-8: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 1-15: 2x8 SP DSS, 12-15: 2x6 SPF 1650F 1.4E

WEBS 2x3 SPF No.2 *Except* 2-15,16-18,10-17,19-20,21-22: 2x4 SPF No.2

OTHERS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-6 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-7.

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 2-14

REACTIONS. (size) 1=0-3-8, 9=Mechanical
Max Horz 1=104(LC 5)
Max Uplift 1=-11(LC 4), 9=-55(LC 5)
Max Grav 1=1549(LC 1), 9=1549(LC 1)

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

TOP CHORD 1-2=-6392/187, 2-3=-3667/121, 3-4=-4113/179, 4-5=-4110/177, 5-7=-3340/167, 7-8=-1078/58, 8-9=-1568/44

BOT CHORD 1-15=-260/5815, 14-15=-244/5275, 13-14=-142/3332, 11-13=-167/3340, 10-11=-53/1029

WEBS 2-15=-9/1618, 2-14=-1942/151, 3-14=0/544, 3-13=-71/1052, 4-13=-583/131, 5-13=-27/849, 5-11=-929/143, 7-11=-124/2553, 7-10=-1017/119, 8-10=-51/1528

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) 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) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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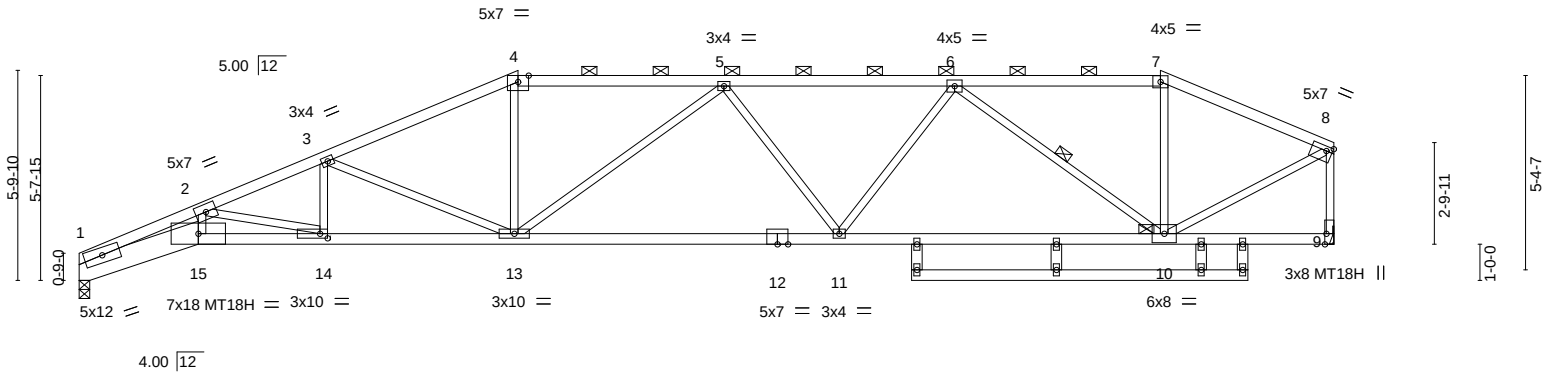
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B3	Hip	1	1	I41085171
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:34 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-AS9zFGWr?U0JLfCZThVSZ4LHXu2CgOLT5xeC9lzNnCR

3-3-8	6-9-2	12-1-8	17-9-12	24-2-4	29-10-8	34-8-0
3-3-8	3-5-10	5-4-7	5-8-4	6-4-7	5-8-4	4-9-8

Scale: 3/16"=1'



3-3-8	6-9-2	12-1-8	21-0-0	29-10-8	34-8-0
3-3-8	3-5-10	5-4-7	8-10-8	8-10-8	4-9-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.30	13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.61	11-13	>679	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	13	>999	240	Weight: 144 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
1-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
16-18,17-19,20-21,22-23: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 1=0-3-8, 9=Mechanical
Max Horz 1=105(LC 5)
Max Uplift 9=-33(LC 5)
Max Grav 1=1549(LC 1), 9=1549(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6318/120, 2-3=-4059/78, 3-4=-3076/85, 4-5=-2765/91, 5-6=-2912/100, 6-7=-1437/72, 7-8=-1609/65, 8-9=-1520/46
BOT CHORD 1-15=-198/5731, 14-15=-182/5257, 13-14=-121/3747, 11-13=-137/3083, 10-11=-124/2604
WEBS 2-15=-19/1741, 2-14=-1559/69, 3-14=0/422, 3-13=-1051/106, 4-13=0/805, 5-13=-575/77, 5-11=-308/81, 6-11=0/540, 6-10=-1501/96, 7-10=0/322, 8-10=-31/1622

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) 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) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B4	Hip	1	1	I41085172
					Job Reference (optional)

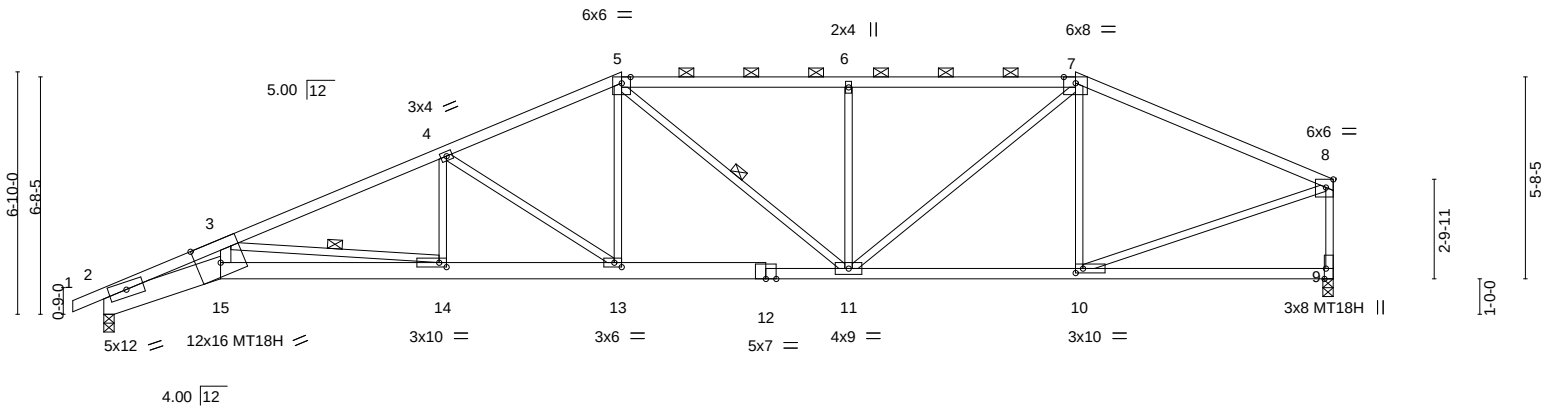
Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:36 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-7qHkgyY5X5G1bzLya6XweVRbUikM8IHmYF7JDezNnCP

-0-10-8 3-3-8 9-6-11 14-7-3 21-0-0 27-4-13 34-8-0

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

Scale = 1:65.0



3-3-8 9-6-11 14-7-3 21-0-0 27-4-13 34-8-0

3-3-8 6-3-3 5-0-8 6-4-13 6-4-13 7-3-3

Plate Offsets (X,Y)-- [8:0-2-8,Edge], [9:0-3-8,Edge], [10:0-2-8,0-1-8], [13:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-8-0,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	0.80	Vert(LL)	-0.32	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.59	14-15	>695	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24	14-15	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
5-7: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
2-15: 2x8 SP DSS, 12-15: 2x6 SPF 1650F 1.4E

WEBS 2x3 SPF No.2 *Except*
3-15: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-12 oc purlins, except end verticals, and 2-0-0 oc purlins (2-11-6 max.): 5-7.

BOT CHORD Rigid ceiling directly applied or 9-8-9 oc bracing.

WEBS 1 Row at midpt 3-14, 5-11

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=142(LC 8)
Max Uplift 2=-200(LC 8), 9=-180(LC 5)
Max Grav 2=1621(LC 1), 9=1548(LC 1)

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

TOP CHORD 2-3=-6328/818, 3-4=-3610/416, 4-5=-2705/382, 5-6=-2414/404, 6-7=-2414/404, 7-8=-1866/269, 8-9=-1483/215

BOT CHORD 2-15=-856/5747, 14-15=-791/5208, 13-14=-392/3292, 11-13=-304/2423, 10-11=-222/1651

WEBS 3-15=-161/1622, 3-14=-1932/423, 4-14=-6/487, 4-13=-1035/259, 5-13=-71/678, 6-11=-558/215, 7-11=-168/1077, 7-10=-421/160, 8-10=-201/1682

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.
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=200, 9=180.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

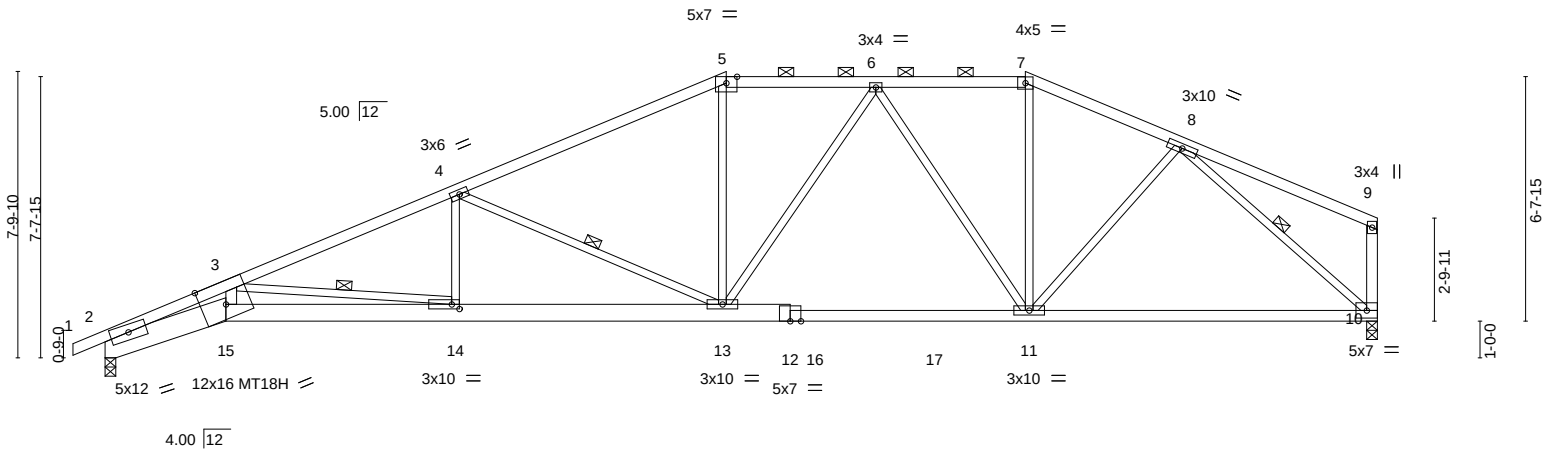
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B5	Hip	1	1	I41085173
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:38 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-3DPU5dZL3iWkqGVLiXaOjwWxeWQ2cAH30ZcPIWzNnCN

-0-10-8	3-3-8	9-6-9	16-11-2	21-0-0	25-0-14	29-2-15	34-8-0
0-10-8	3-3-8	6-3-1	7-4-8	4-0-14	4-0-14	4-2-1	5-5-1

Scale = 1:62.8



3-3-8	9-6-9	16-11-2	25-0-14	34-8-0
3-3-8	6-3-1	7-4-8	8-1-13	9-7-2

Plate Offsets (X,Y)-- [14:0-2-8,0-1-8], [15:0-8-0,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	0.82	Vert(LL)	-0.36	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.62	14-15	>663	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.28	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25	14-15	>999	240	Weight: 149 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, 12-15: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
3-15,9-10: 2x4 SPF No.2

BRACING-

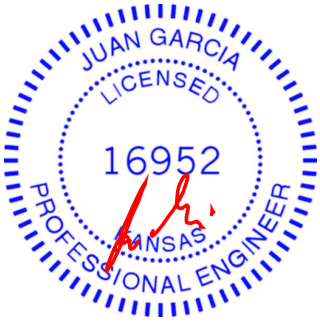
TOP CHORD Structural wood sheathing directly applied or 2-6-12 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-10 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-14, 4-13, 8-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=159(LC 8)
Max Uplift 2=-219(LC 8), 10=-145(LC 5)
Max Grav 2=1669(LC 2), 10=1619(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6551/910, 3-4=-3772/465, 4-5=-2520/295, 5-6=-2240/297, 6-7=-1775/244, 7-8=-1971/251
BOT CHORD 2-15=-956/5962, 14-15=-878/5376, 13-14=-460/3460, 11-13=-227/2107, 10-11=-185/1499
WEBS 3-15=-198/1765, 3-14=-1932/422, 4-14=0/584, 4-13=-1333/342, 5-13=0/646, 6-13=-85/306, 6-11=-687/132, 7-11=-21/524, 8-11=0/512, 8-10=-1922/231

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) 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=219, 10=145.
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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

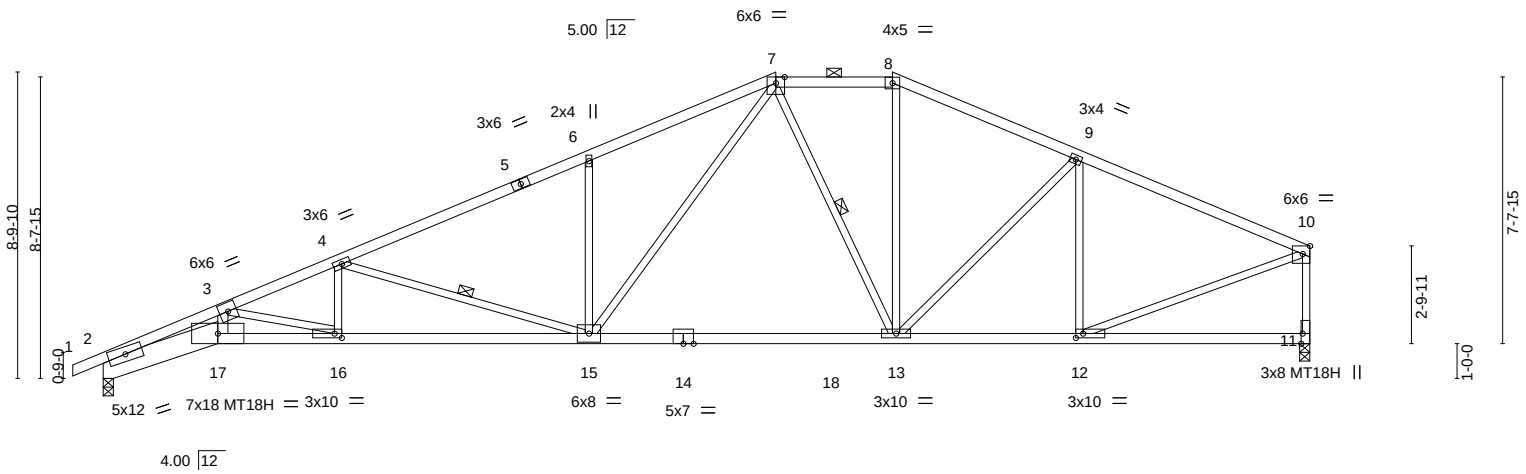
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B6	Hip	1	1	I41085174
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:40 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-?bXFWJbcbKmS3afjpycsoLbH2J6h48dLTs5WMPzNnCL

-0-10-8	3-3-8	6-9-0	13-11-7	19-3-14	22-8-2	28-0-9	34-8-0
0-10-8	3-3-8	3-5-8	7-2-8	5-4-7	3-4-3	5-4-7	6-7-7

Scale = 1:66.2



3-3-8	6-9-0	13-11-7	19-3-14	22-8-2	28-0-9	34-8-0
3-3-8	3-5-8	7-2-8	5-4-7	3-4-3	5-4-7	6-7-7

Plate Offsets (X,Y)-- [10:0-2-8,Edge], [11:0-3-8,Edge], [12:0-2-8,0-1-8], [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	0.83	Vert(LL)	-0.42	13-15	>993	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.71	13-15	>581	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.24	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.23	16	>999	240	Weight: 142 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
WEBS 2x3 SPF No.2 *Except*
3-17: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-14 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 8-0-12 oc bracing.
WEBS 1 Row at midpt 4-15, 7-13

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=177(LC 8)
Max Uplift 2=-235(LC 8), 11=-151(LC 9)
Max Grav 2=1680(LC 2), 11=1625(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6595/1001, 3-4=-4274/609, 4-6=-2966/374, 6-7=-2942/491, 7-8=-1750/242, 8-9=-1964/250, 9-10=-1900/182, 10-11=-1514/184
BOT CHORD 2-17=-1055/5995, 16-17=-952/5393, 15-16=-648/3961, 13-15=-144/1866, 12-13=-137/1695
WEBS 3-17=-290/1881, 3-16=-1481/314, 4-16=-5/505, 4-15=-1359/347, 6-15=-449/242, 7-15=-295/1362, 7-13=-430/157, 8-13=-53/492, 9-12=-504/117, 10-12=-117/1766

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=235, 11=151.
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.

April 24,2020

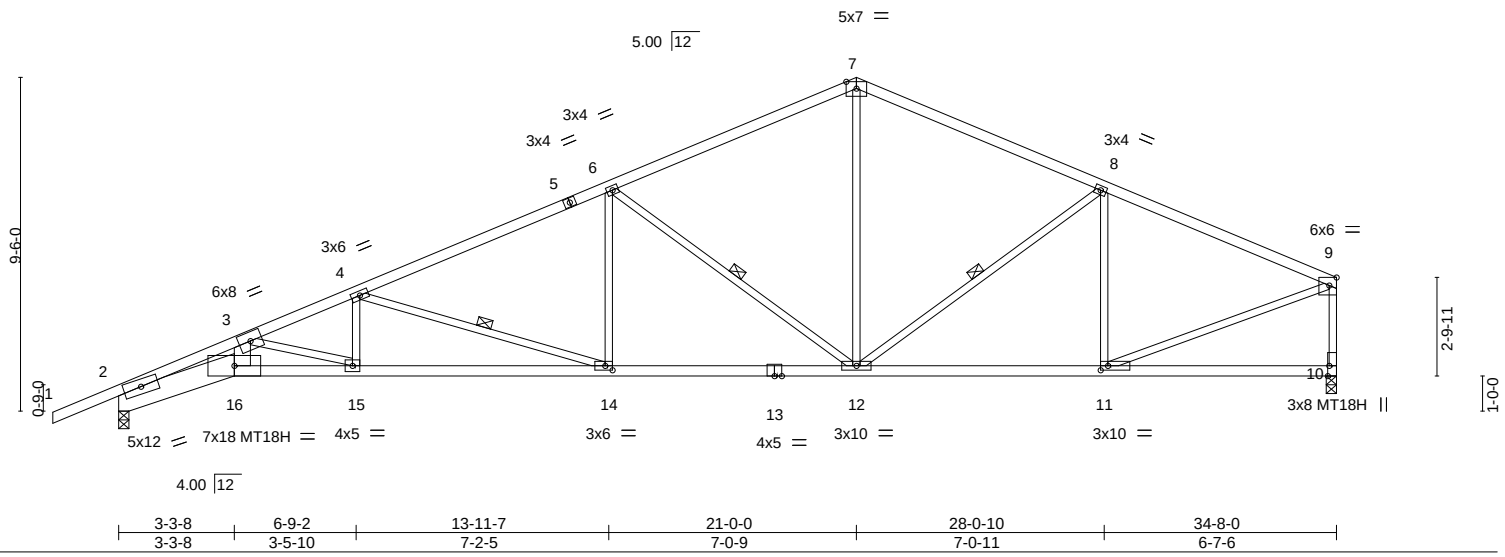
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B7	Roof Special	1	1	I41085175
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:42 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-x_e?x?ds7x0AJup6xNeKtmhcT7p5Y0oexAadRHzNnCJ

-1-10-8	3-3-8	6-9-2	13-11-7	21-0-0	28-0-10	34-8-0
1-10-8	3-3-8	3-5-10	7-2-5	7-0-9	7-0-11	6-7-6

Scale = 1:65.6



3-3-8	6-9-2	13-11-7	21-0-0	28-0-10	34-8-0
3-3-8	3-5-10	7-2-5	7-0-9	7-0-11	6-7-6

Plate Offsets (X,Y)-- [9:0-2-8,Edge], [10:0-3-8,Edge], [11:0-2-8,0-1-8], [14:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.28	15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.54	14-15	>769	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.23	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23	15	>999	240	Weight: 139 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* 3-16: 2x6 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=205(LC 8)
Max Uplift 2=-268(LC 8), 10=-166(LC 9)
Max Grav 2=1694(LC 1), 10=1545(LC 1)

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

TOP CHORD	2-3=-6239/1028, 3-4=-4032/617, 4-6=-2794/409, 6-7=-1810/282, 7-8=-1811/304, 8-9=-1834/206, 9-10=-1485/196
BOT CHORD	2-16=-1092/5652, 15-16=-962/4954, 14-15=-666/3729, 12-14=-365/2495, 11-12=-160/1626
WEBS	3-16=-301/1738, 3-15=-1272/307, 4-15=0/447, 4-14=-1294/316, 6-14=-6/557, 6-12=-1148/309, 7-12=-88/868, 8-11=-480/144, 9-11=-143/1702

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=268, 10=166.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

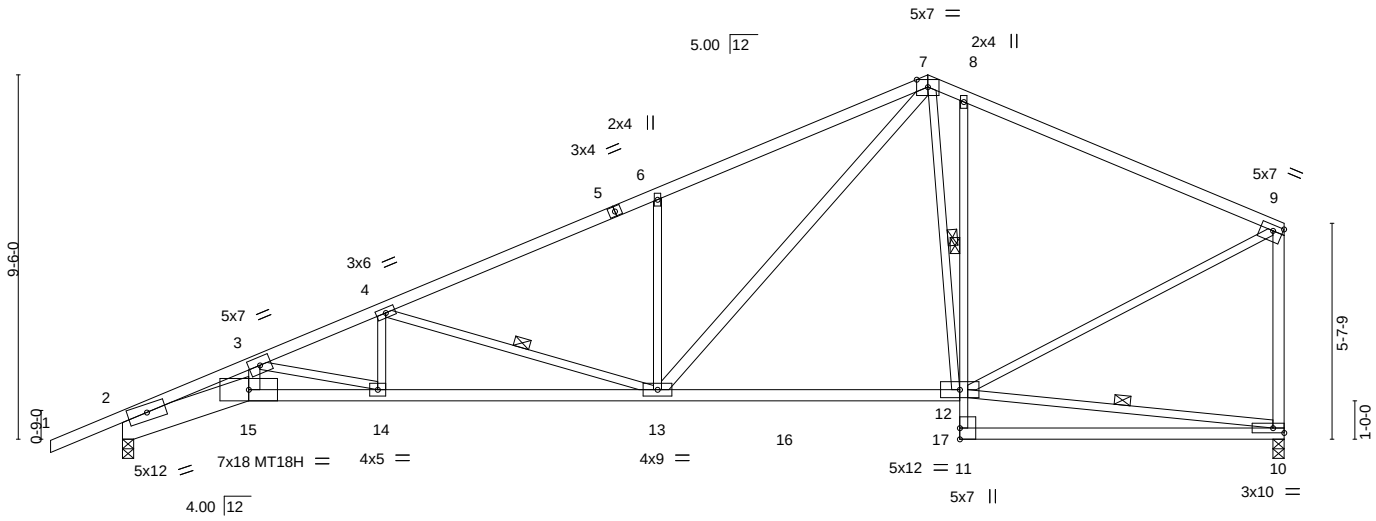
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B8	Roof Special	1	1	I41085176
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:44 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-uNmlMhe6fYHuYBzU2ohozBmxuwWl0xbxOU3kWAzNnCH

-1-10-8	3-3-8	6-9-2	13-11-7	21-0-0	21-10-0	30-3-8
1-10-8	3-3-8	3-5-10	7-2-5	7-0-9	0-10-0	8-5-8

Scale = 1:60.1



3-3-8	6-9-2	13-11-7	21-0-0	21-10-0	30-3-8
3-3-8	3-5-10	7-2-5	7-0-9	0-10-0	8-5-8

Plate Offsets (X,Y)-- [9:0-3-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.28	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.48	12-13	>744	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.21	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	14-15	>999	240	Weight: 142 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, 12-15: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-15,7-13,9-10: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-4-8 oc bracing: 14-15.
1 Row at midpt 8-12
WEBS 1 Row at midpt 4-13, 7-12, 10-12

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=234(LC 7)
Max Uplift 2=-250(LC 8), 10=-139(LC 8)
Max Grav 2=1530(LC 2), 10=1423(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5543/913, 3-4=-3572/558, 4-6=-2357/350, 6-7=-2367/490, 7-8=-1345/278, 8-9=-1328/239, 9-10=-1282/185
BOT CHORD 2-15=-971/5026, 14-15=-881/4527, 13-14=-598/3305, 12-13=-114/1125, 8-12=-729/377
WEBS 3-15=-256/1565, 3-14=-1264/292, 4-14=0/468, 4-13=-1257/316, 6-13=-542/279, 7-13=-357/1504, 7-12=-255/528, 9-12=-127/1258

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=250, 10=139.
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
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B9	Roof Special	1	1	I41085177
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:46 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-qluWnMgNAAXcnV6tADjG2crGOkB_UrzEsoYra2zNnCF

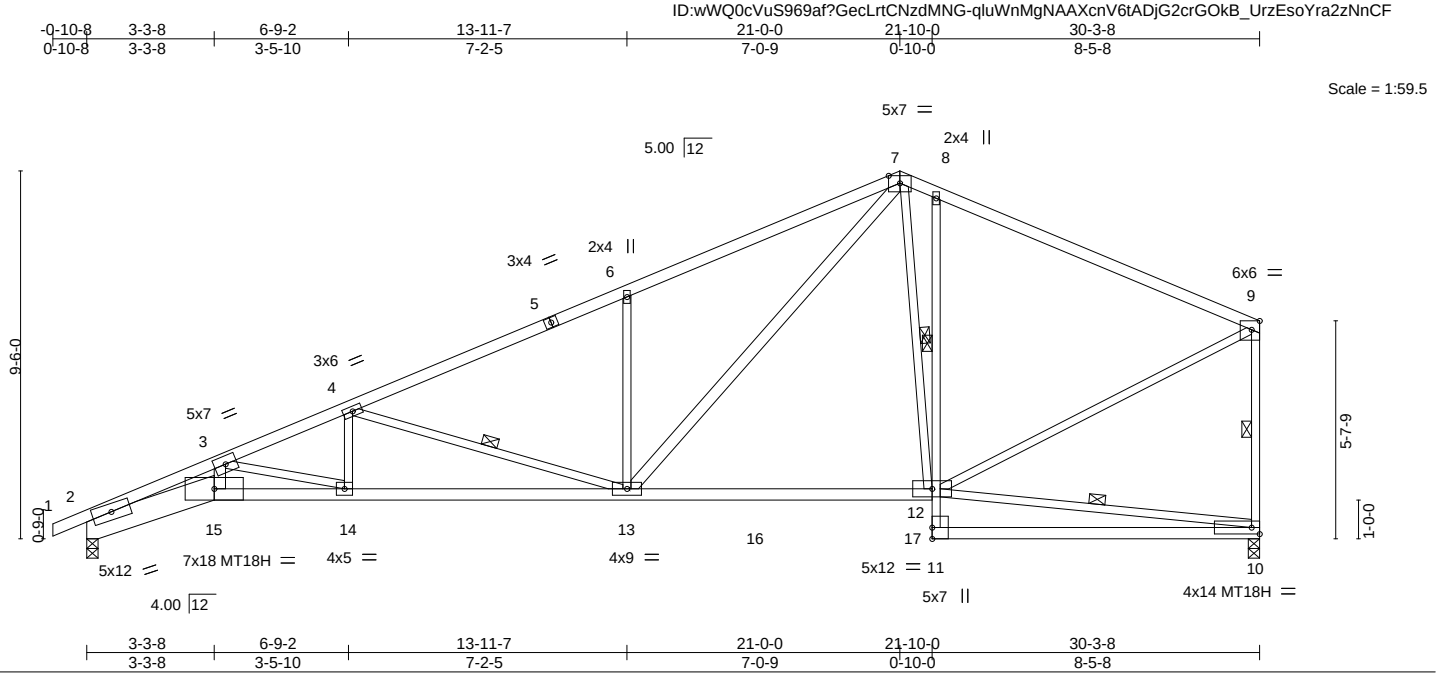


Plate Offsets (X,Y)-- [9:0-2-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.29	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.49	12-13	>730	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.21	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.20	14-15	>999	240	Weight: 139 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, 12-15: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-15,7-13: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-2-5 oc bracing. Except:
1 Row at midpt 8-12
WEBS 1 Row at midpt 4-13, 7-12, 9-10, 10-12

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=225(LC 7)
Max Uplift 2=-226(LC 8), 10=-140(LC 8)
Max Grav 2=1471(LC 2), 10=1427(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5664/964, 3-4=-3611/573, 4-6=-2372/355, 6-7=-2383/495, 7-8=-1366/284, 8-9=-1337/241, 9-10=-1288/186
BOT CHORD 2-15=-1021/5143, 14-15=-922/4625, 13-14=-612/3341, 12-13=-114/1133, 8-12=-769/400
WEBS 3-15=-280/1623, 3-14=-1327/320, 4-14=-5/484, 4-13=-1280/326, 6-13=-542/279, 7-13=-361/1513, 7-12=-273/560, 9-12=-129/1285

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=226, 10=140.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B10	Hip	1	1	I41085178
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:29 2020 Page 1
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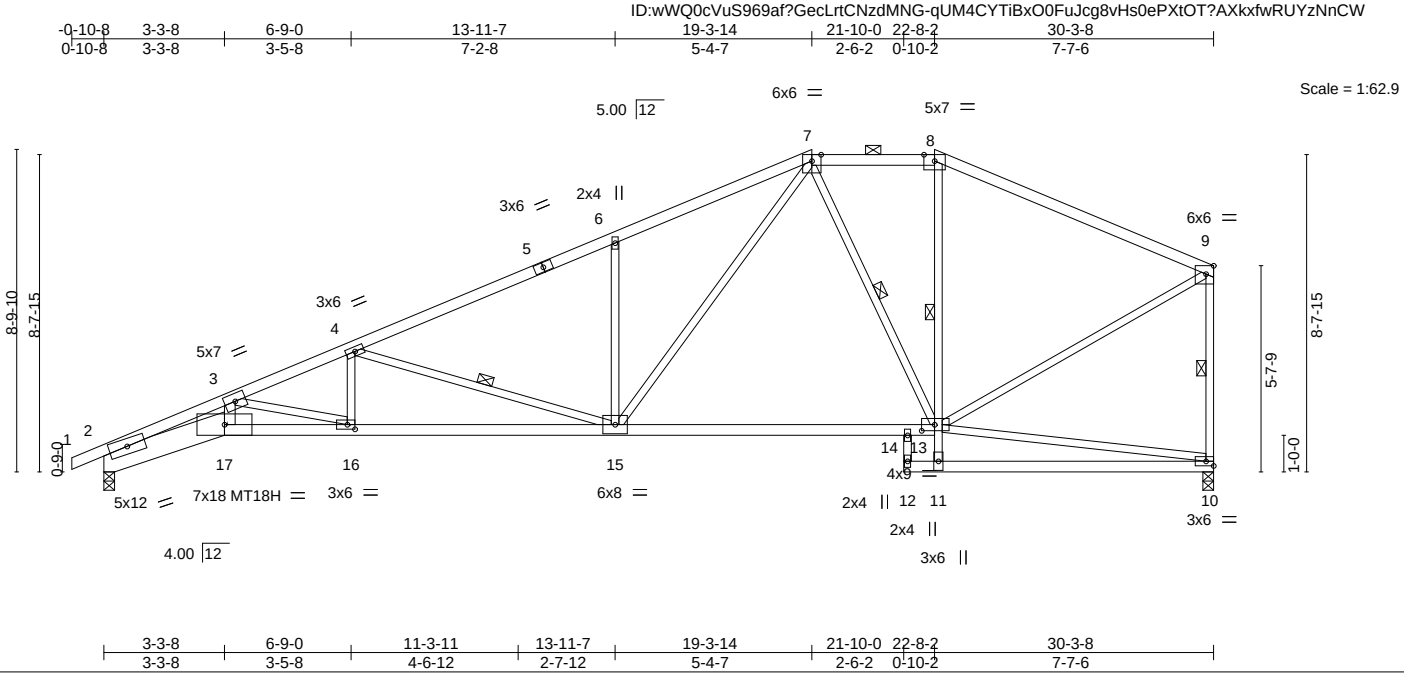

Plate Offsets (X,Y)-- [9:0-2-8,Edge], [13:0-4-4,0-2-0], [16:0-2-8,0-1-8]

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	0.78	Vert(LL)	-0.23	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.43	15-16	>836	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.20	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	16-17	>999	240	Weight: 134 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-6 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-13, 8-11, 9-10, 4-15

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=226(LC 7)
Max Uplift 2=-220(LC 8), 10=-117(LC 8)
Max Grav 2=1425(LC 1), 10=1351(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5407/917, 3-4=-3467/553, 4-6=-2243/332, 6-7=-2223/448, 7-8=-1067/195, 8-9=-1226/190, 9-10=-1292/148
BOT CHORD 2-17=-964/4892, 16-17=-869/4408, 15-16=-582/3207, 14-15=-167/1259, 13-14=-142/1301, 12-14=-318/0
WEBS 3-17=-265/1509, 7-15=-301/1234, 7-13=-561/170, 11-13=0/531, 9-13=-105/1210, 6-15=-457/243, 4-15=-1285/333, 4-16=0/419, 3-16=-1242/297

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left 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) 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=220, 10=117.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	B11	Hip	1	1	I41085179
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:31 2020 Page 1
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-0-10-8 3-3-8 9-1-14 16-11-2 21-10-0 23-6-0 25-0-14 30-3-8
0-10-8 3-3-8 5-10-6 7-9-3 4-10-14 1-8-0 1-6-14 5-2-10

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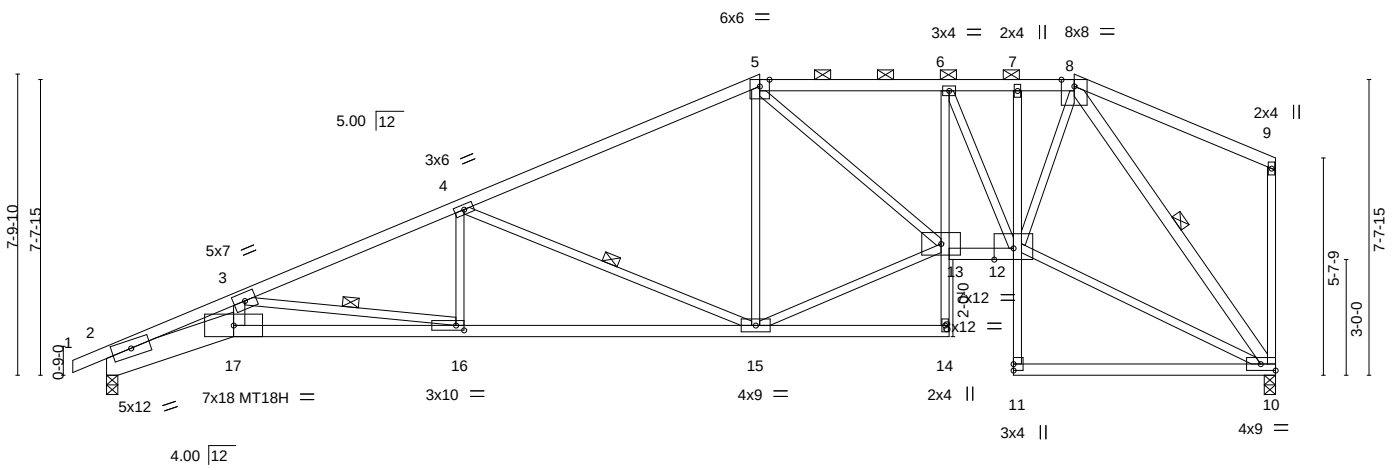


3-3-8 9-1-14 16-11-2 21-10-0 23-6-0 25-0-14 30-3-8
3-3-8 5-10-6 7-9-3 4-10-14 1-8-0 1-6-14 5-2-10

Plate Offsets (X,Y)-- [10:Edge,0-2-0], [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	0.69	Vert(LL)	-0.28	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.53	16-17	>686	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.34	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.22	16-17	>999	240	Weight: 146 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
6-14,7-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17,8-10: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-6 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-8-5 oc bracing: 16-17.
WEBS 1 Row at midpt 3-16, 4-15, 8-10

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=229(LC 7)
Max Uplift 2=-207(LC 8), 10=-153(LC 5)
Max Grav 2=1425(LC 1), 10=1351(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5557/864, 3-4=-3019/424, 4-5=-1840/241, 5-6=-1975/314, 6-7=-1578/251, 7-8=-1569/251
BOT CHORD 2-17=-902/5045, 16-17=-821/4541, 15-16=-415/2763, 6-13=-67/618, 12-13=-345/1980
WEBS 3-17=-217/1573, 3-16=-1798/410, 4-16=0/463, 4-15=-1267/334, 13-15=-260/1718, 5-13=-137/547, 6-12=-999/154, 10-12=-257/1212, 8-12=-172/1440, 8-10=-1961/323

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.
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=207, 10=153.
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.

April 24,2020

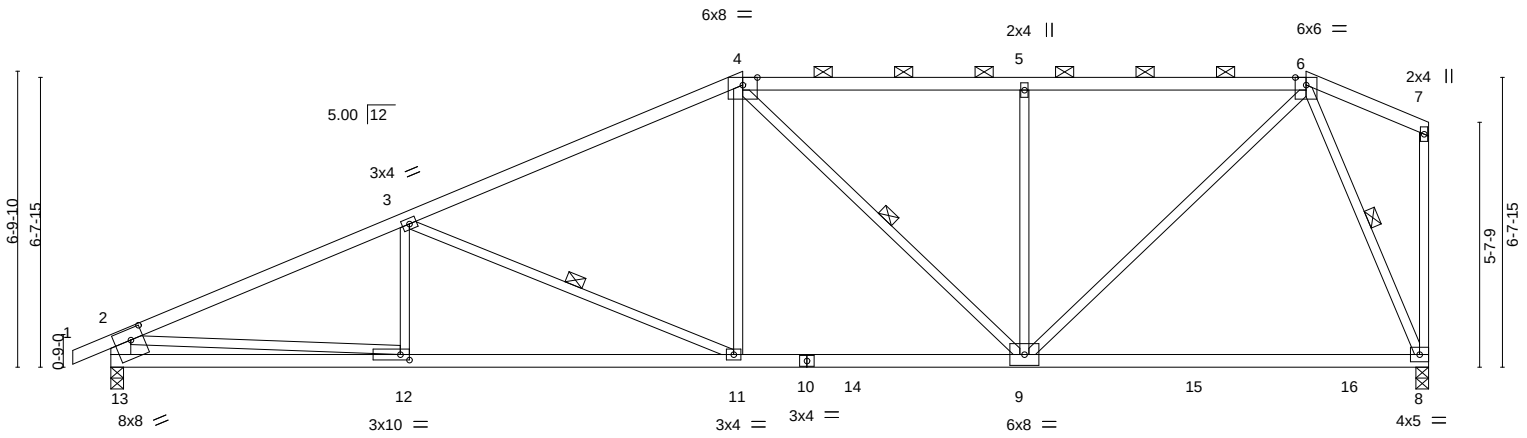
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	C1	Hip	1	1	I41085180
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:48 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-m80GC2hdinnK1pGGHdlk71wiqYsVynLXJ61xfxzNnCD

-0-10-8	6-9-2	14-6-5	21-0-0	27-5-11	30-3-8
0-10-8	6-9-2	7-9-3	6-5-11	6-5-11	2-9-13

Scale = 1:53.0



6-9-2	14-6-5	21-0-0	27-5-11	30-3-8
6-9-2	7-9-3	6-5-11	6-5-11	2-9-13

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.29	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.49	8-9	>727	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	11-12	>999	240	Weight: 121 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 10-13: 2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-13: 2x6 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-5-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-10 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-11, 4-9, 6-8

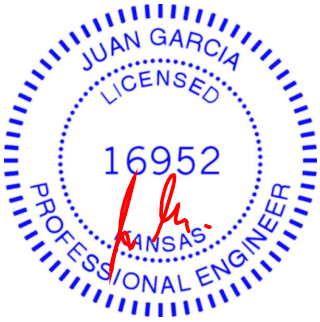
REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=239(LC 5)
Max Uplift 13=-192(LC 8), 8=-196(LC 5)
Max Grav 13=1476(LC 2), 8=1452(LC 2)

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

TOP CHORD	2-3=-2596/299, 3-4=-1939/272, 4-5=-1518/277, 5-6=-1518/277, 2-13=-1366/224
BOT CHORD	12-13=-264/607, 11-12=-339/2329, 9-11=-277/1704, 8-9=-147/530
WEBS	3-11=-672/237, 4-11=-16/520, 4-9=-273/113, 5-9=-543/216, 6-9=-163/1398, 6-8=-1324/276, 2-12=-123/1728

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=192, 8=196.
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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	C2	Half Hip	1	1	I41085181
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:50 2020 Page 1

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-0-10-8	2-3-8	7-1-14	11-1-0	12-1-8	18-0-15	24-1-9	30-3-8
0-10-8	2-3-8	4-10-6	3-11-2	1-0-8	5-11-7	6-0-11	6-1-15

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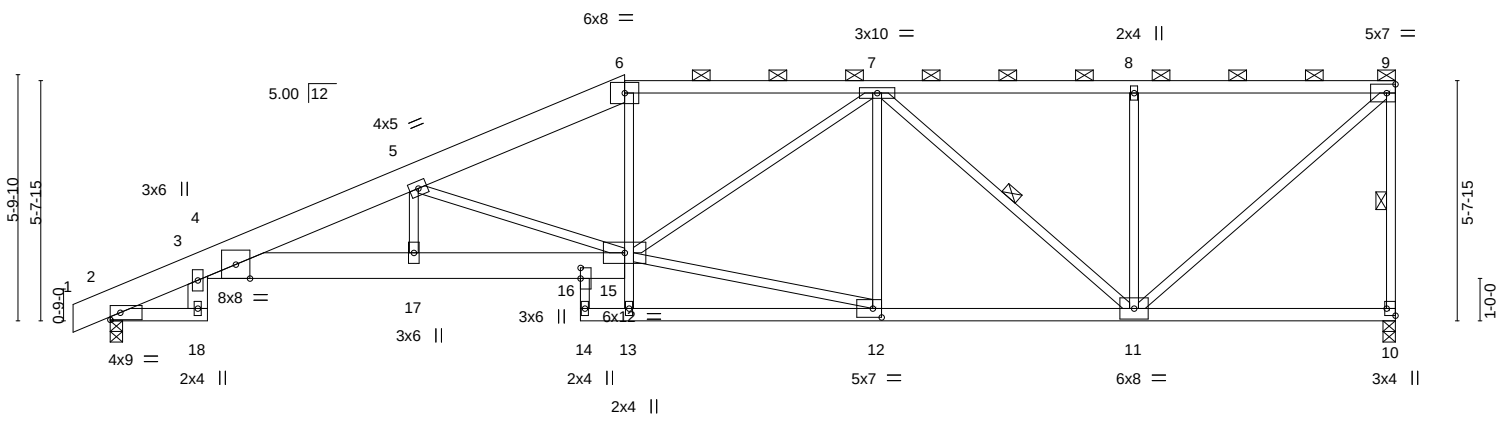


2-3-8	7-1-14	11-1-0	12-1-8	18-0-15	24-1-9	30-3-8
2-3-8	4-10-6	3-11-2	1-0-8	5-11-7	6-0-11	6-1-15

Plate Offsets (X,Y)-- [10:Edge,0-2-8], [12:0-2-8,0-2-8], [16:0-3-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.20	17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.36	16-17	>990	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.22	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	17	>999	240	Weight: 166 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
6-9: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
4-15: 2x8 SP DSS, 14-16: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
3-18: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-14 max.): 6-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 14-16
9-7-14 oc bracing: 11-12.

WEBS 1 Row at midpt 9-10, 7-11

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=237(LC 5)
Max Uplift 10=-241(LC 5), 2=-174(LC 4)
Max Grav 10=1350(LC 1), 2=1420(LC 1)

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

TOP CHORD 2-3=-686/56, 4-5=-3751/455, 5-6=-2597/383, 6-7=-2317/372, 7-8=-1272/268, 8-9=-1272/268, 9-10=-1296/265

BOT CHORD 4-17=-608/3522, 16-17=-607/3523, 15-16=-582/3415, 11-12=-368/1866

WEBS 5-17=0/329, 5-15=-1303/283, 6-15=-24/630, 12-15=-353/1763, 7-11=-794/133, 8-11=-462/197, 9-11=-297/1685, 7-15=-102/551

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) 10=241, 2=174.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	C3	Half Hip	1	1	I41085182
					Job Reference (optional)

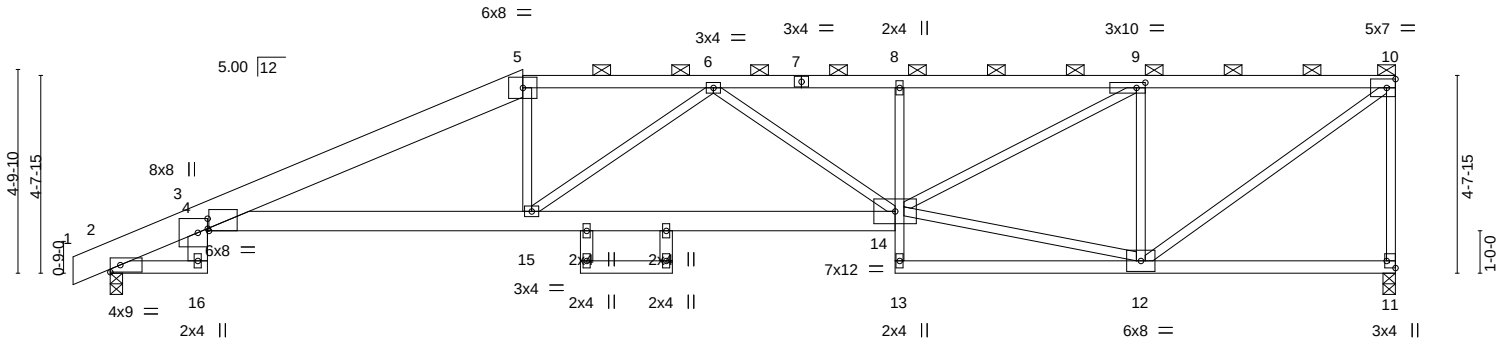
Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:51 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-AjhPq4kV?i9uuG?qymJRlfYAOlrj97mz?4FcFGzNnCA

-0-10-8 2-3-8 6-2-7 9-8-11 14-2-10 18-6-0 24-3-8 30-3-8

0-10-8 2-3-8 3-10-15 3-6-4 4-5-14 4-3-6 5-9-8 6-0-0

Scale = 1:54.3



2-3-8 9-8-11 18-6-0 24-3-8 30-3-8

2-3-8 7-5-3 8-9-5 5-9-8 6-0-0

Plate Offsets (X,Y)-- [3:0-4-0,0-2-12], [4:0-0-6,Edge], [9:0-2-8,0-1-8], [11: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	0.76	Vert(LL)	-0.31	4-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.56	4-15	>644	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.31	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24	4-15	>999	240	Weight: 146 lb	FT = 10%

LUMBER-

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

BOT CHORD 2x4 SPF No.2 *Except*
3-16,4-14: 2x6 SPF No.2, 8-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*
17-19,18-20: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-8 max.): 5-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 4-15
9-3-13 oc bracing: 14-15.

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=193(LC 5)
Max Uplift 11=-245(LC 5), 2=-193(LC 4)
Max Grav 11=1350(LC 1), 2=1420(LC 1)

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

TOP CHORD 2-3=-1157/130, 3-4=-184/259, 4-5=-3043/421, 5-6=-2822/432, 6-8=-2941/527, 8-9=-2929/530, 9-10=-1532/312, 10-11=-1297/269

BOT CHORD 2-16=-102/541, 4-15=-501/2806, 14-15=-619/3063, 8-14=-338/139

WEBS 5-15=0/487, 6-15=-303/163, 12-14=-281/1434, 9-14=-303/1614, 9-12=-1269/345, 10-12=-339/1887

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) 11=245, 2=193.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	C4	Half Hip Girder	1	2	I41085183
					Job Reference (optional)

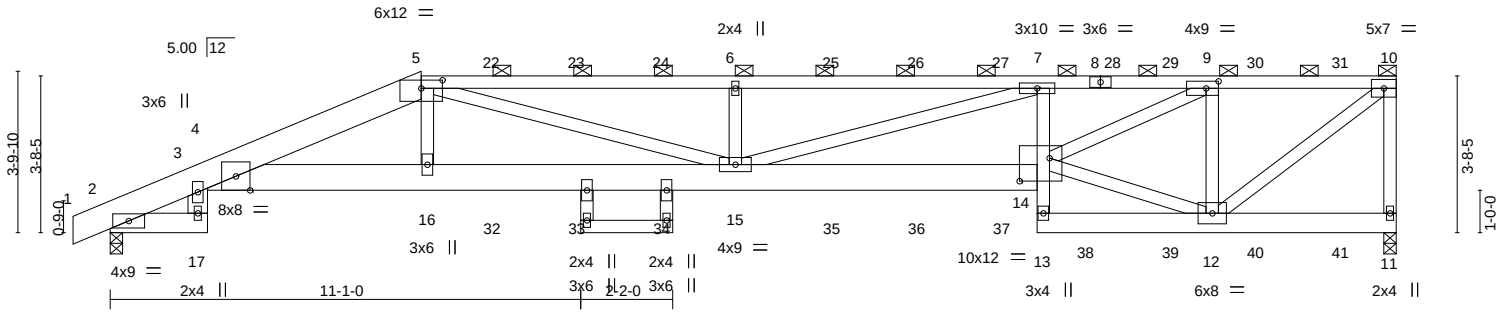
Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:55 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-3UxvgRn03xfKMuIcBbNNvVjpNMK25wgZwiDpO1zNnC6

-0-10-8 2-3-8 7-3-14 14-8-11 21-10-0 25-11-8 30-3-8

0-10-8 2-3-8 5-0-6 7-4-13 7-1-5 4-1-8 4-4-0

Scale = 1:54.3



2-3-8 7-3-14 14-8-11 21-10-0 25-11-8 30-3-8

2-3-8 5-0-6 7-4-13 7-1-5 4-1-8 4-4-0

Plate Offsets (X,Y)-- [5:0-6-0,0-2-5], [9:0-3-8,0-2-0], [14:0-8-8,0-6-8]

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	0.95	Vert(LL)	-0.35	15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.63	15	>570	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.27	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.26	15	>999	240	Weight: 376 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
5-8: 2x4 SPF 2100F 1.8E, 8-10: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
2-17,11-13: 2x6 SP 2400F 2.0E, 4-14: 2x8 SP DSS

WEBS 2x4 SPF No.2 *Except*
3-17: 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 (4-1-0 max.): 5-10.

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

REACTIONS. (size) 11=0-3-8, 2=0-3-8
Max Horz 2=149(LC 22)
Max Uplift 11=-354(LC 5), 2=-395(LC 4)
Max Grav 11=2628(LC 1), 2=2584(LC 1)

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

TOP CHORD 2-3=-1331/188, 3-4=-254/34, 4-5=-7930/1222, 5-6=-9034/1275, 6-7=-9032/1276, 7-9=-8199/1144, 9-10=-2923/420, 10-11=-2509/381

BOT CHORD 4-16=-1240/7451, 15-16=-1253/7552, 14-15=-1261/8526, 7-14=-836/270, 12-13=-78/428

WEBS 3-17=-37/289, 5-16=-190/1535, 5-15=-97/1544, 6-15=-908/336, 7-15=-109/551, 12-14=-361/2649, 9-14=-866/5845, 9-12=-3062/560, 10-12=-484/3673

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 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=354, 2=395.
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) 112 lb down and 58 lb up at 9-0-0, 112 lb down and 58 lb up at 11-0-0, 116 lb down and 68 lb up at 13-0-0, 117 lb down and 69 lb up at 15-0-0, 117 lb down and 69 lb up at 17-0-0, 117 lb down and 69 lb up at 19-0-0, 117 lb down and 69 lb up at 21-0-0, 116 lb down and 68 lb up at 23-0-0, 116 lb down and 68 lb up at 25-0-0, and 116 lb down and 68 lb up at 27-0-0, and 116 lb down and 68 lb up at 29-0-0 on top chord, and 657 lb down and 229 lb up at 7-3-14, 76 lb down at 9-0-0, 76 lb down at 11-0-0, 69 lb down at 13-0-0, 68 lb down at 15-0-0, 68 lb down at 17-0-0, 68 lb down at 19-0-0, 68 lb down at 21-0-0, 69 lb down at 23-0-0, 69 lb down at 25-0-0, and 69 lb down at 27-0-0, and 69 lb down at 29-0-0 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

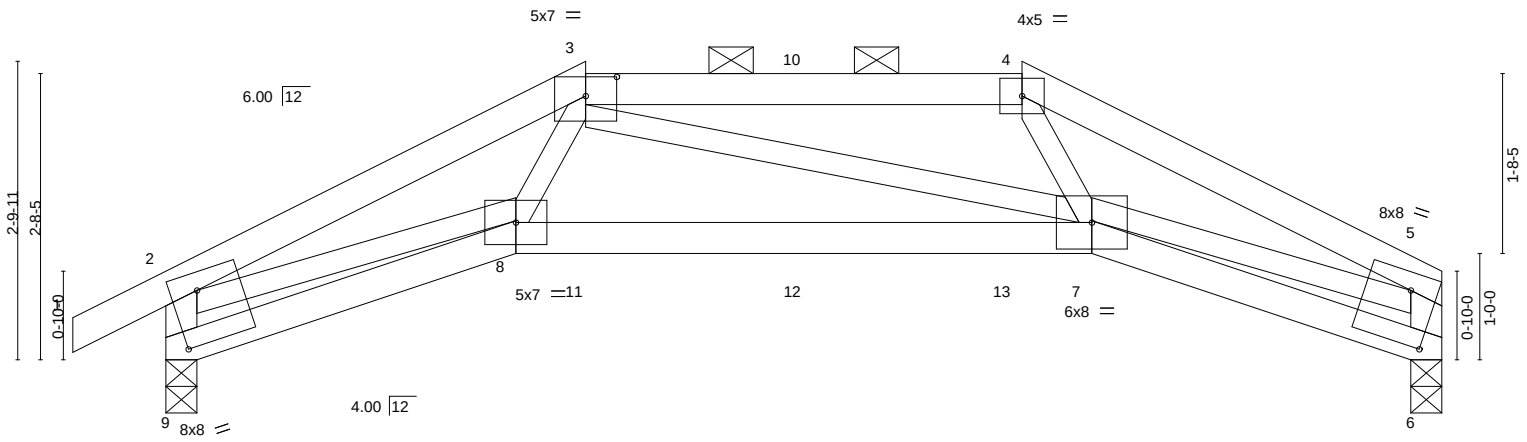
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-70, 5-10=-70, 2-17=-20, 4-14=-20, 11-13=-20
   Concentrated Loads (lb)
   Vert: 16=-657(B) 15=-51(B) 6=-111(B) 22=-97(B) 23=-97(B) 24=-110(B) 25=-111(B) 26=-111(B) 27=-111(B) 28=-110(B) 29=-110(B) 30=-110(B) 31=-110(B) 32=-71(B) 33=-71(B) 34=-52(B) 35=-51(B) 36=-51(B) 37=-51(B) 38=-52(B) 39=-52(B) 40=-52(B) 41=-52(B)

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	D1	Hip Girder	1	1	I41085184
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:36:57 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-?t2g47oGbYv2cBS_J0Pr_woEzA_3Zq9sN0iwTwzNnC4

-0-10-8	3-11-6	8-0-10	12-0-0
0-10-8	3-11-6	4-1-4	3-11-6

Scale = 1:21.7



3-3-8	8-8-8	12-0-0
3-3-8	5-5-0	3-3-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.14	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.27	7-8	>517	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.10	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	7-8	>999	240	Weight: 43 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-8: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-9,5-6: 2x4 SPF No.2

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

REACTIONS. (size) 9=0-3-8, 6=0-3-8
Max Horz 9=59(LC 5)
Max Uplift 9=-213(LC 8), 6=-190(LC 9)
Max Grav 9=1002(LC 1), 6=926(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2595/533, 3-4=-1904/451, 4-5=-2537/495, 2-9=-1045/258, 5-6=-961/223
BOT CHORD 7-8=-452/1953
WEBS 3-8=-79/781, 4-7=-75/786, 2-8=-403/2093, 5-7=-418/2066

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) Bearing at joint(s) 9, 6 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) 9=213, 6=190.
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) 101 lb down and 85 lb up at 3-11-6, and 98 lb down and 85 lb up at 6-0-0, and 101 lb down and 85 lb up at 8-0-10 on top chord, and 258 lb down and 74 lb up at 3-11-6, and 49 lb down at 6-0-0, and 274 lb down and 79 lb up at 7-11-10 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).

LOAD CASE(S) Standard

April 24,2020

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, 3-4=-70, 4-5=-70, 8-9=-20, 7-8=-20, 6-7=-20
   Concentrated Loads (lb)
   Vert: 3=-78(F) 4=-78(F) 10=-78(F) 11=-258(F) 12=-37(F) 13=-274(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	D2	Hip	1	1	I41085185
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:01 2020 Page 1
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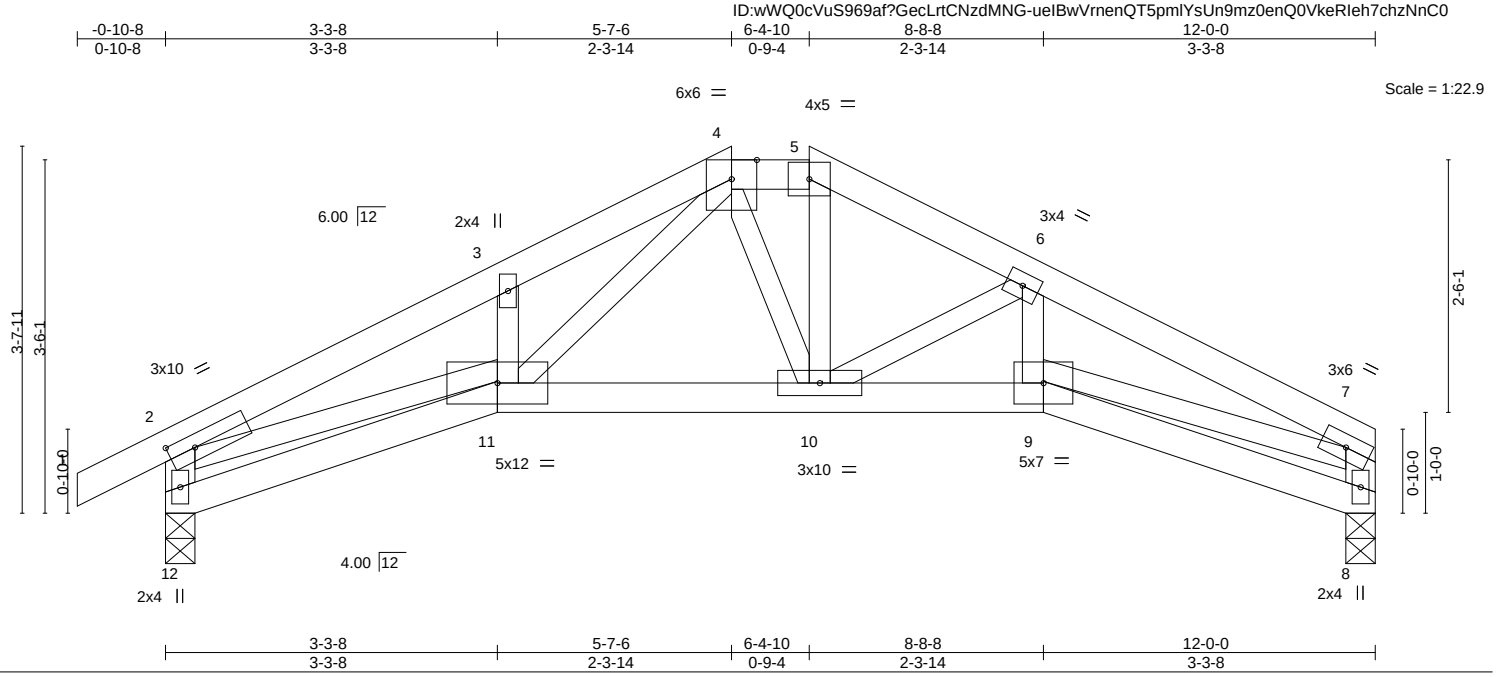

Plate Offsets (X,Y)-- [2:0-3-3,0-1-8]

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	0.19	Vert(LL)	-0.04	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.07	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	11	>999	240	Weight: 46 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,7-8: 2x4 SPF No.2

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

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=69(LC 5)
Max Uplift 12=-86(LC 8), 8=-62(LC 9)
Max Grav 12=601(LC 1), 8=524(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1169/138, 3-4=-1126/206, 4-5=-687/85, 5-6=-805/87, 6-7=-1191/123, 2-12=-605/125, 7-8=-521/88
BOT CHORD 10-11=-26/674, 9-10=-81/1000
WEBS 4-11=-138/453, 6-10=-349/111, 2-11=-47/838, 7-9=-54/880

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) Bearing at joint(s) 12, 8 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) 12, 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	D3	Roof Special Girder	1	2	I41085186
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:03 2020 Page 1
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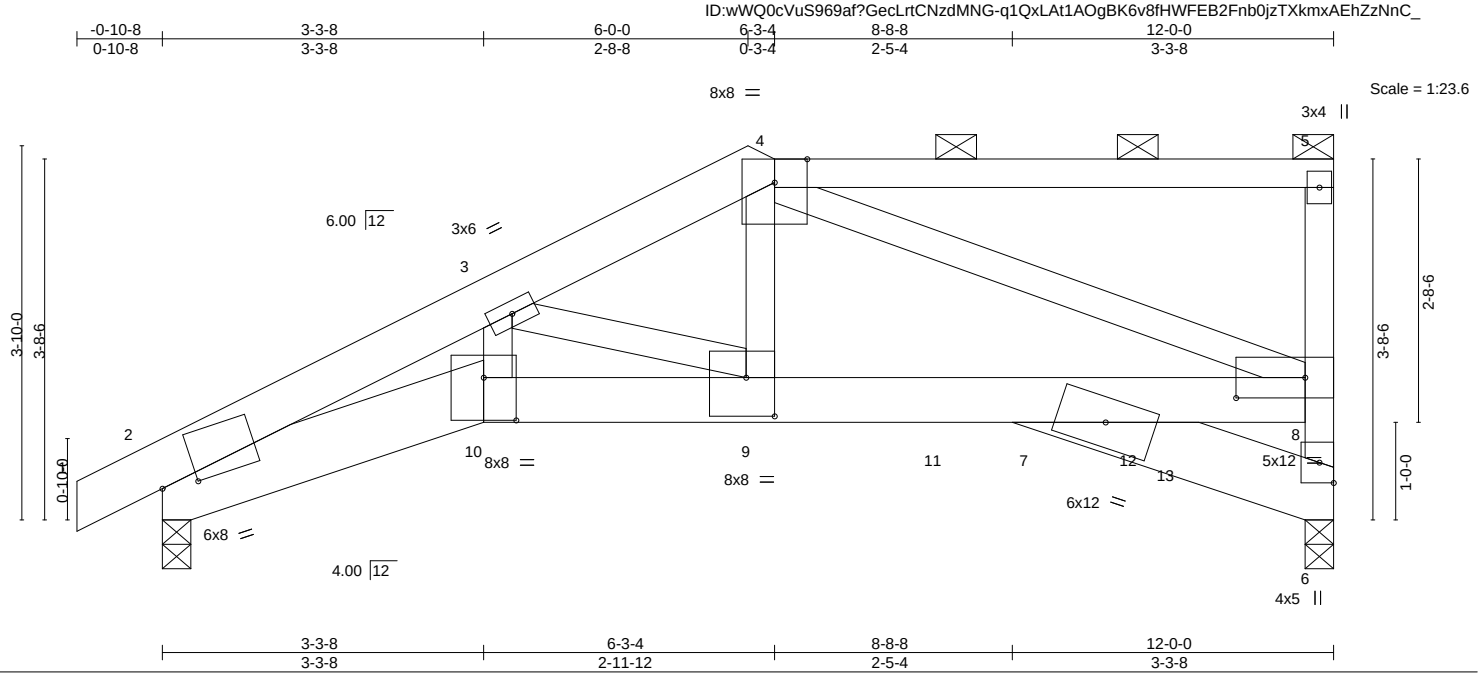


Plate Offsets (X,Y)-- [2:0-4-7,0-0-8], [8:0-8-8,0-2-8], [9:0-3-8,0-4-12], [10:0-4-0,0-5-4]

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	0.67	Vert(LL)	-0.10	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.18	7-9	>764	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.12	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	7-9	>999	240	Weight: 156 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 4-5: 2x4 SPF No.2
BOT CHORD	2x8 SP DSS *Except* 8-10: 2x6 SP 2400F 2.0E
WEBS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=109(LC 24)
Max Uplift 6=-287(LC 5), 2=-197(LC 8)
Max Grav 6=4292(LC 1), 2=2774(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8458/631, 3-4=-7400/536, 4-5=-328/43, 6-8=-3824/288
BOT CHORD 2-10=-641/7348, 9-10=-592/6863, 7-9=-518/6410, 7-8=-504/6095
WEBS 3-10=-127/1412, 4-9=-365/5332, 4-8=-6626/504

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-3-0 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.
8) Bearing at joint(s) 6, 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) except (jt=lb) 6=287, 2=197.
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) 2934 lb down and 308 lb up at 6-0-13, and 1529 lb down and 75 lb up at 8-0-0, and 1495 lb down and 72 lb up at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

April 24,2020

Continued on page 2

LOAD CASE(S) Standard

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: 1-4=-70, 4-5=-70, 2-10=-20, 7-10=-20, 6-7=-20

Concentrated Loads (lb)

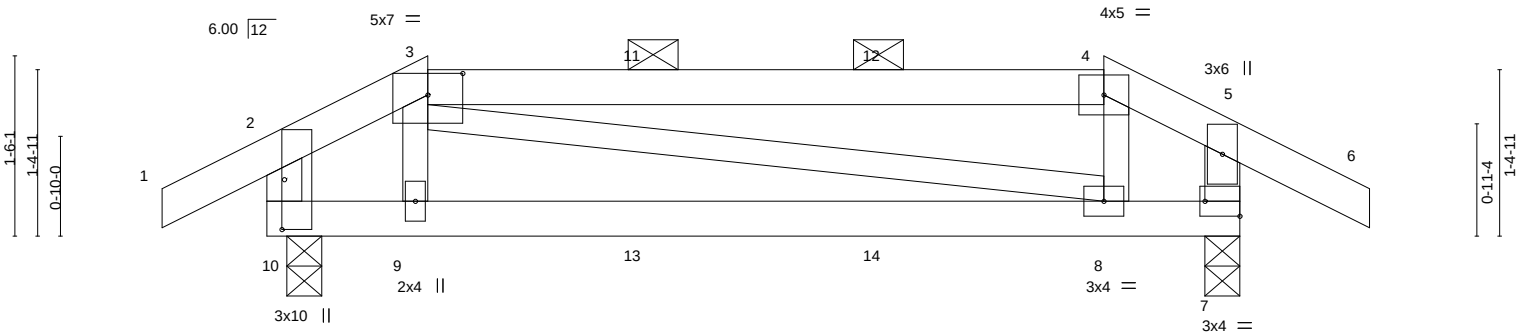
Vert: 9=-2934(B) 11=-1529(B) 12=-1479(B)

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	E1	Hip Girder	1	1	I41085187
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:06 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-Ec54zCvwTJ2mBaejLP4ysqgoOo7TA3mASvOuGuzNnBx

-0-10-8 1-4-2 6-11-14 8-1-8 9-2-8
0-10-8 1-4-2 5-7-12 1-1-10 1-1-0

Scale = 1:19.2



0-2-0 1-4-2 6-11-14 8-1-8
0-2-0 1-2-2 5-7-12 1-1-10

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.03	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.08	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	8-9	>999	240	Weight: 29 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x4 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=40(LC 7)
Max Uplift 10=-51(LC 5), 7=-57(LC 5)
Max Grav 10=414(LC 21), 7=431(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-429/52, 3-4=-320/62, 4-5=-370/42, 2-10=-312/27, 5-7=-315/24
BOT CHORD 9-10=-53/365, 8-9=-62/368, 7-8=-29/315

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) 10, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 22 lb up at 1-4-2, 51 lb down and 28 lb up at 3-2-0, and 51 lb down and 28 lb up at 5-2-0, and 64 lb down and 22 lb up at 6-11-14 on top chord , and 10 lb down and 8 lb up at 1-4-2, 5 lb down and 2 lb up at 3-2-0, and 5 lb down and 2 lb up at 5-2-0, and 10 lb down and 8 lb up at 6-11-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20
Concentrated Loads (lb)
Vert: 9=8(F) 8=8(F) 13=2(F) 14=2(F)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	E2	Hip	1	1	I41085188
					Job Reference (optional)

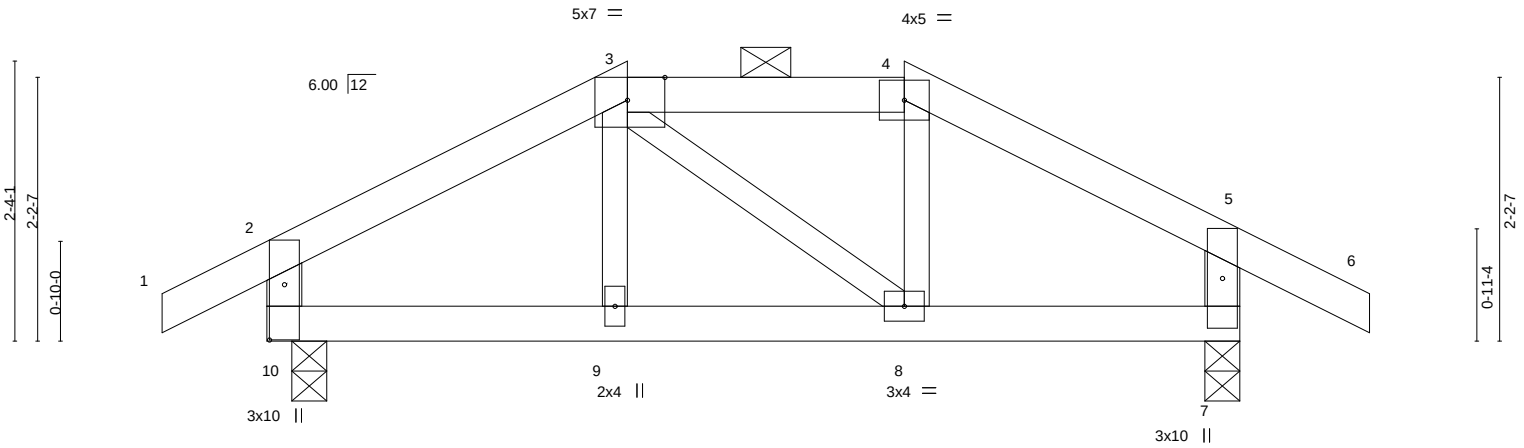
Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:08 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-B_DqOuxA?wlUQto6Sq6QxFlBgcqHezfTvDt?LnzNnBv

-0-10-8 | 3-0-2 | 5-3-14 | 8-1-8 | 9-2-8

0-10-8 | 3-0-2 | 2-3-12 | 2-9-10 | 1-1-0

Scale = 1:19.2



0-2-8 | 3-0-2 | 5-3-14 | 8-1-8

0-2-8 | 2-9-10 | 2-3-12 | 2-9-10

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

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	0.27	Vert(LL)	-0.02	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.04	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01	8-9	>999	240	Weight: 28 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x4 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=49(LC 7)
Max Uplift 10=-59(LC 8), 7=-62(LC 9)
Max Grav 10=422(LC 1), 7=441(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-390/35, 3-4=-267/49, 4-5=-364/32, 2-10=-361/78, 5-7=-369/80
BOT CHORD 9-10=-20/294, 8-9=-22/293, 7-8=-1/268

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) 10, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	E3	Common	4	1	I41085189
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:10 2020 Page 1
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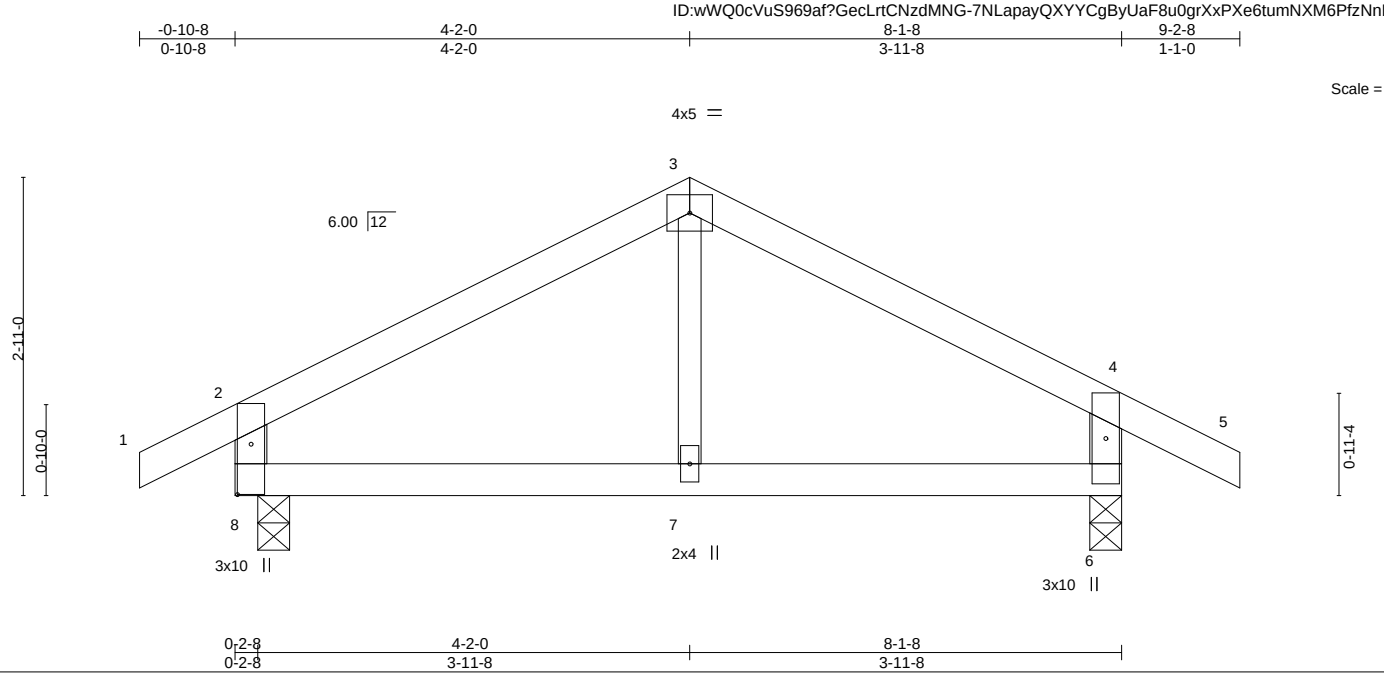


Plate Offsets (X,Y)-- [8:0-5-9,0-1-8]

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	0.29	Vert(LL)	-0.01	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	7-8	>999	240	Weight: 25 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-7: 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, 6=0-3-8
Max Horz 8=58(LC 7)
Max Uplift 8=-67(LC 8), 6=-71(LC 9)
Max Grav 8=422(LC 1), 6=441(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-358/58, 3-4=-358/61, 2-8=-368/95, 4-6=-382/97
BOT CHORD 7-8=0/252, 6-7=0/252

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) 8, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

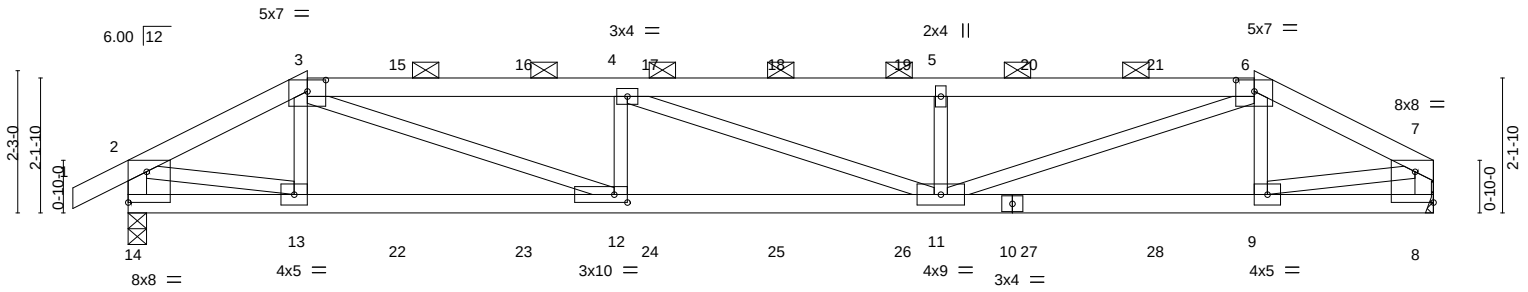
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	G1	HIP GIRDER	1	1	I41085190
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:13 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-Xy0jRb?JpTwnXfg3FNibeITwbdM9J5mC3Vbm0_zNnBq

0-10-8	2-10-1	7-9-10	12-10-6	17-9-15	20-8-0
0-10-8	2-10-1	4-11-9	5-0-13	4-11-9	2-10-1

Scale = 1:36.5



2-10-1	7-9-10	12-10-6	17-9-15	20-8-0
2-10-1	4-11-9	5-0-13	4-11-9	2-10-1

Plate Offsets (X,Y)-- [3:0-3-8,0-2-3], [6:0-3-8,0-2-3], [7:Edge,0-5-13], [8:0-1-12,0-0-0], [12:0-2-8,0-1-8], [14:0-1-12,0-0-0], [14:Edge,0-5-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.19	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.36	11-12	>677	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.17	11-12	>999	240	Weight: 72 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-12 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-0-4 oc bracing: 11-12.

REACTIONS. (size) 14=0-3-8, 8=Mechanical
Max Horz 14=49(LC 5)
Max Uplift 14=-228(LC 5), 8=-220(LC 4)
Max Grav 14=1222(LC 1), 8=1147(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1695/356, 3-4=-3156/711, 4-5=-3156/708, 5-6=-3158/709, 6-7=-1707/356, 2-14=-1202/231, 7-8=-1126/224
BOT CHORD 12-13=-335/1500, 11-12=-706/3153, 9-11=-315/1516
WEBS 3-12=-412/1782, 4-12=-491/231, 5-11=-485/229, 6-11=-411/1772, 2-13=-292/1410, 7-9=-296/1420

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 100 lb uplift at joint(s) except (jt=lb) 14=228, 8=220.
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) 88 lb down and 74 lb up at 2-10-1, 78 lb down and 63 lb up at 4-4-0, 78 lb down and 63 lb up at 6-4-0, 78 lb down and 63 lb up at 8-4-0, 78 lb down and 63 lb up at 10-4-0, 78 lb down and 63 lb up at 12-4-0, 78 lb down and 63 lb up at 14-4-0, and 78 lb down and 63 lb up at 16-4-0, and 88 lb down and 74 lb up at 17-9-15 on top chord, and 32 lb down at 2-10-1, 24 lb down at 4-4-0, 24 lb down at 6-4-0, 24 lb down at 8-4-0, 24 lb down at 10-4-0, 24 lb down at 12-4-0, 24 lb down at 14-4-0, and 24 lb down at 16-4-0, and 32 lb down at 17-9-15 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).

April 24,2020

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, 3-6=-70, 6-7=-70, 8-14=-20
   Concentrated Loads (lb)
   Vert: 3=-30(F) 6=-30(F) 13=-19(F) 9=-19(F) 15=-33(F) 16=-33(F) 17=-33(F) 18=-33(F) 19=-33(F) 20=-33(F) 21=-33(F) 22=-19(F) 23=-19(F) 24=-19(F) 25=-19(F) 26=-19(F) 27=-19(F) 28=-19(F)

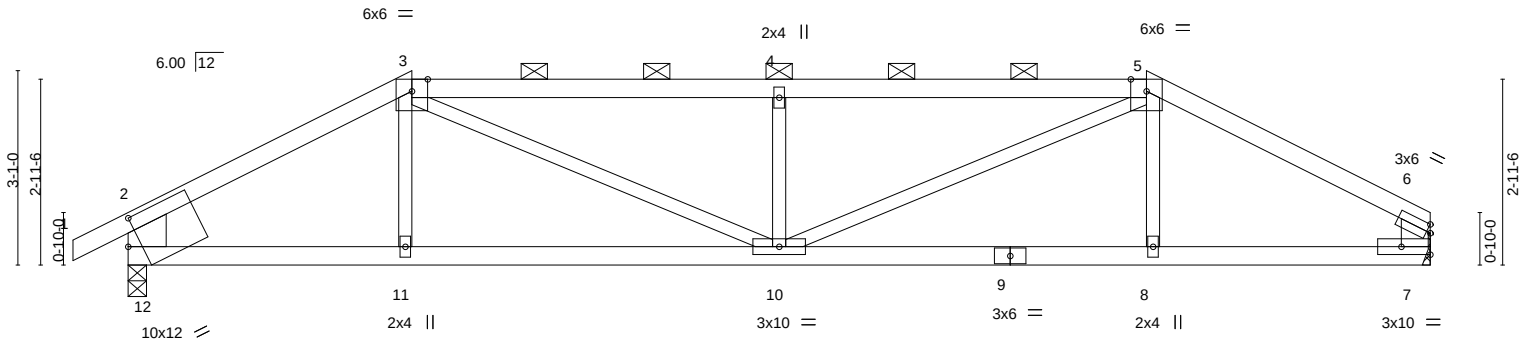
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	G2	HIP	1	1	I41085191
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:15 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-TK8TsH0ZL4AUmyqSMok3jjYFJQ3Rn4_VWp4t5tzNnBo

0-10-8	4-6-1	10-4-0	16-1-15	20-8-0
0-10-8	4-6-1	5-9-15	5-9-15	4-6-1

Scale = 1:36.6



4-6-1	10-4-0	16-1-15	20-8-0
4-6-1	5-9-15	5-9-15	4-6-1

Plate Offsets (X,Y)-- [2:0-4-1,0-0-0], [7:Edge,0-1-8], [12:0-3-4,0-1-10], [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	0.89	Vert(LL)	-0.16	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.32	8-10	>767	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	8-10	>999	240	Weight: 68 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-9: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-12: 2x8 SP DSS, 6-7: 2x6 SP DSS

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

REACTIONS. (size) 12=0-3-8, 7=Mechanical
Max Horz 12=62(LC 5)
Max Uplift 12=-102(LC 5), 7=-93(LC 4)
Max Grav 12=991(LC 1), 7=904(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1305/174, 3-4=-1846/295, 4-5=-1846/295, 5-6=-1305/171, 2-12=-867/114, 6-7=-745/100
BOT CHORD 11-12=-154/1070, 10-11=-157/1071, 8-10=-117/1091, 7-8=-114/1089
WEBS 3-10=-183/903, 4-10=-533/204, 5-10=-182/887

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 100 lb uplift at joint(s) 7 except (jt=lb) 12=102.
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.

April 24,2020

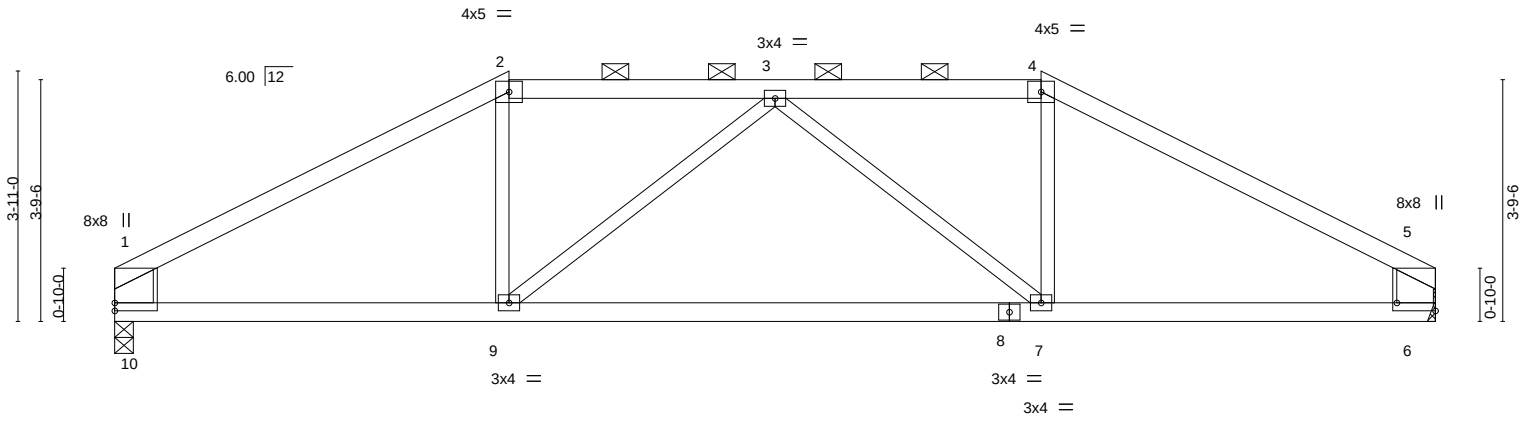
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	G3	HIP	1	1	I41085192
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:17 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-QjGEHz2pthRC?G_qUDmXo8ddIEmLF_mo_7Z_9mzNnBm

6-2-1	10-4-0	14-5-15	20-8-0
6-2-1	4-1-15	4-1-15	6-2-1

Scale = 1:36.1



6-2-1	14-5-15	20-8-0
6-2-1	8-3-15	6-2-1

Plate Offsets (X,Y)-- [1:0-1-13,0-3-10], [5:0-1-13,0-3-10], [5:Edge,0-7-4], [6:0-0-0,0-3-10], [10:0-0-0,0-3-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.25	7-9	>951	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.58	7-9	>416	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	7-9	>999	240	Weight: 66 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,5-6: 2x8 SP DSS

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

REACTIONS. (size) 10=0-3-8, 6=Mechanical
Max Horz 10=53(LC 5)
Max Grav 10=903(LC 1), 6=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1309/1, 2-3=-1063/19, 3-4=-1063/19, 4-5=-1309/1, 1-10=-794/24, 5-6=-794/24
BOT CHORD 9-10=0/1068, 7-9=-26/1288, 6-7=0/1068
WEBS 2-9=0/339, 3-9=-384/84, 3-7=-384/83, 4-7=0/339

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) This truss 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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	G4	HIP	1	1	I41085193
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:19 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-M6O_if33PJhwFa8Dbep?tZjzL1TZjvA5RR24EezNnBk

7-10-1 12-9-15 20-8-0
7-10-1 4-11-15 7-10-1

Scale = 1:36.1

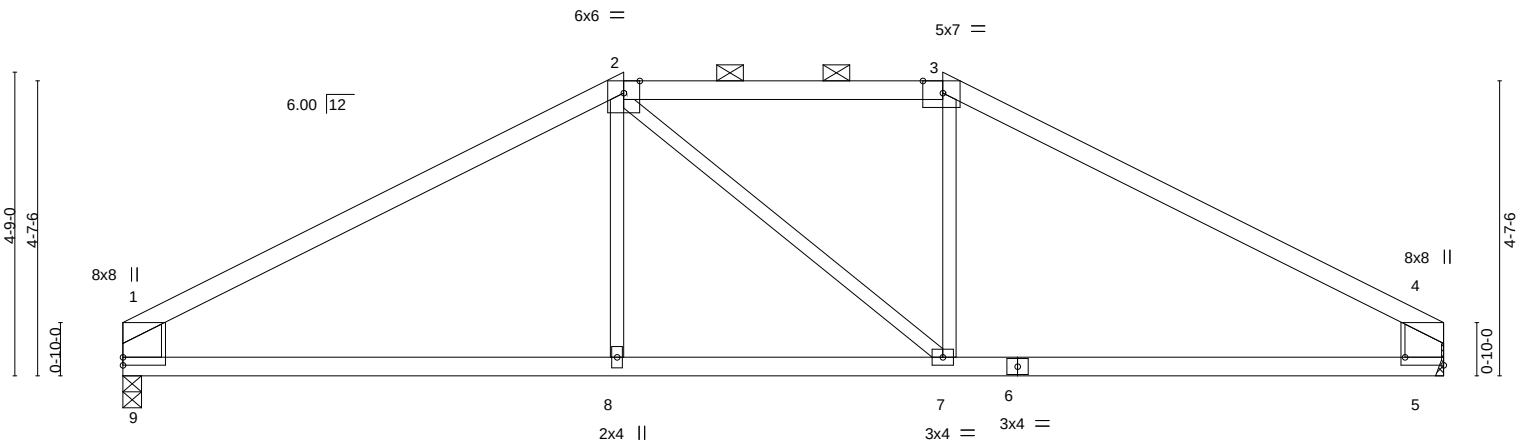


Plate Offsets (X,Y)-- [1:0-1-13,0-3-10], [3:0-3-12,Edge], [4:0-1-13,0-3-10], [4:Edge,0-7-4], [5:0-0-0,0-3-10], [9:0-0-0,0-3-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.18	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.33	7-8	>737	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	7-8	>999	240	Weight: 65 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-9,4-5: 2x8 SP DSS

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

REACTIONS. (size) 9=0-3-8, 5=Mechanical
Max Horz 9=-63(LC 4)
Max Grav 9=903(LC 1), 5=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1243/0, 2-3=-994/38, 3-4=-1243/0, 1-9=-792/51, 4-5=-792/51
BOT CHORD 8-9=0/996, 7-8=0/993, 5-7=0/996

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) This truss 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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	G5	HIP	1	1	I41085194
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:20 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-qIxMv?4iAcpnsjjP9MKEQnF4DRp2SLkEg5nem4zNnBj

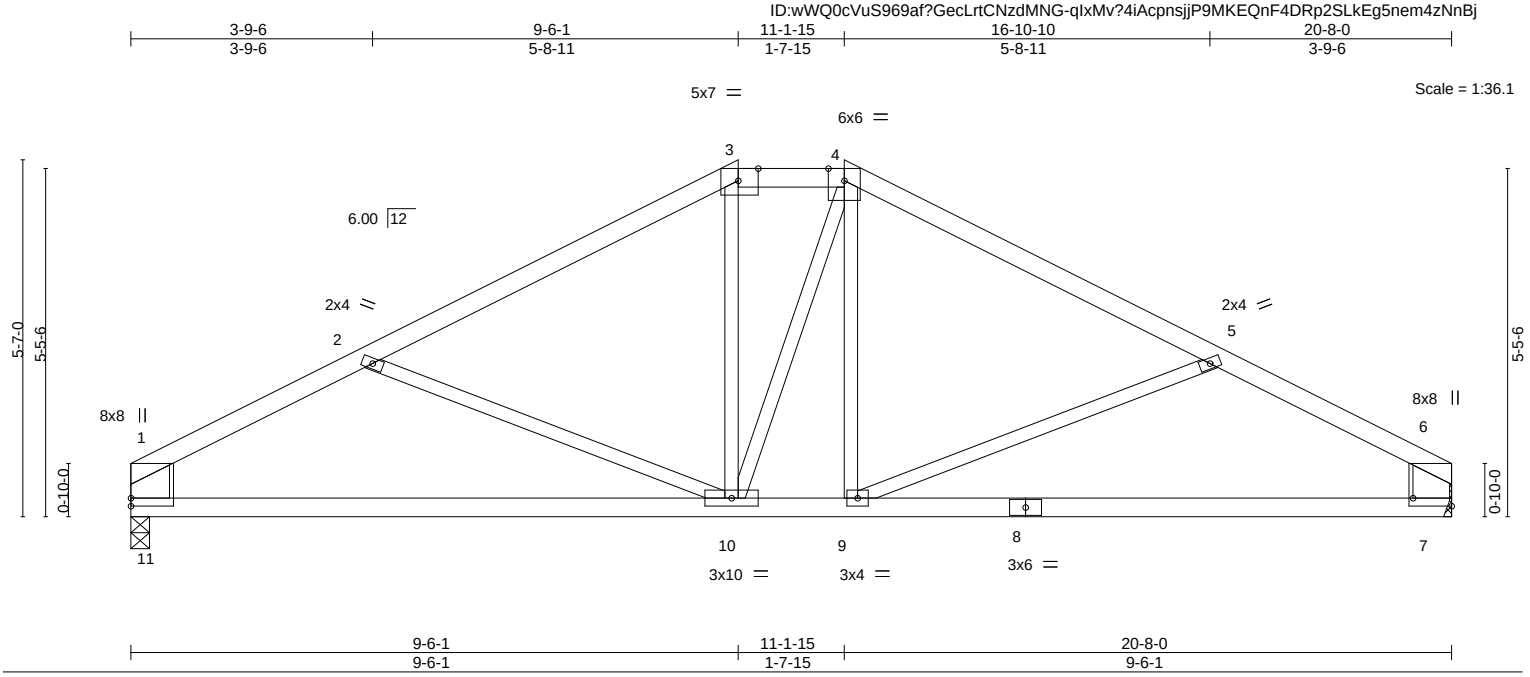


Plate Offsets (X,Y)-- [1:0-1-13,0-3-10], [3:0-3-12,Edge], [6:0-1-13,0-3-10], [6:Edge,0-7-4], [7:0-0-0,0-3-10], [11:0-0-0,0-3-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.17	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.36	7-9	>672	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	9-10	>999	240	Weight: 75 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,6-7: 2x8 SP DSS

BRACING-

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

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Horz 11=-72(LC 6)
Max Uplift 11=-7(LC 8), 7=-7(LC 9)
Max Grav 11=903(LC 1), 7=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1305/68, 2-3=-1062/16, 3-4=-894/39, 4-5=-1062/16, 5-6=-1304/68, 1-11=-789/55, 6-7=-789/55
BOT CHORD 10-11=-66/1064, 9-10=0/893, 7-9=-34/1064

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) 11, 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 24,2020

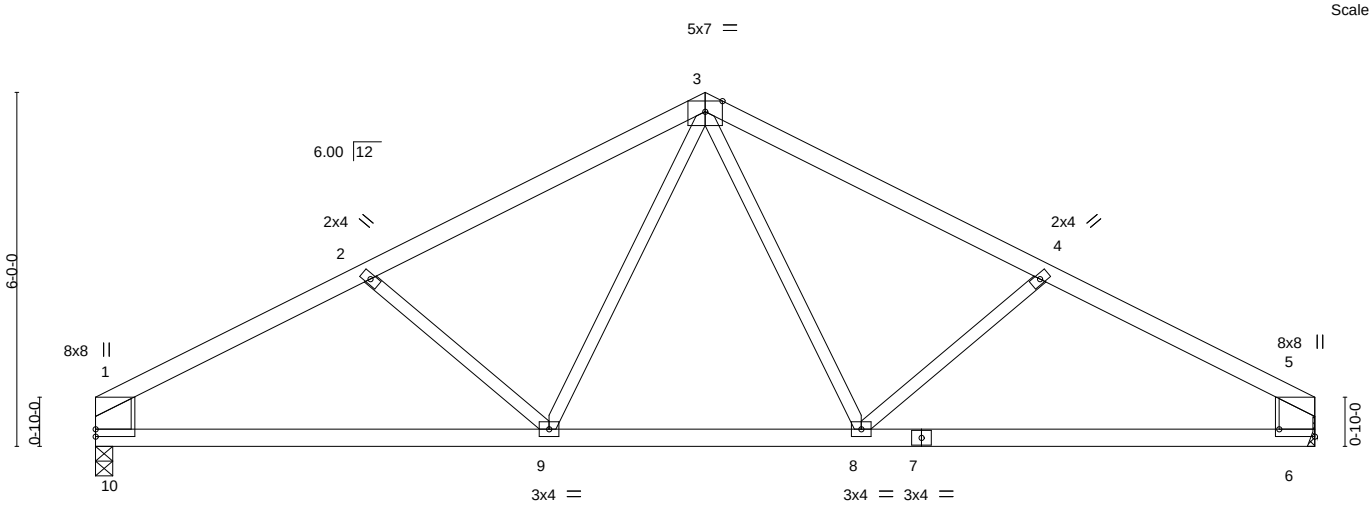
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	G6	COMMON	5	1	I41085195
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:22 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-mh37Kg6yiE3V61soHmMiVCLT?FUKwHhX7PGlqzzNnBh

4-7-14	10-4-0	16-0-2	20-8-0
4-7-14	5-8-1	5-8-2	4-7-15

Scale = 1:39.1



7-8-4	12-11-12	20-8-0
7-8-4	5-3-8	7-8-4

Plate Offsets (X,Y)-- [1:0-1-13,0-3-10], [5:0-1-13,0-3-10], [5:Edge,0-7-4], [6:0-0-0,0-3-10], [10:0-0-0,0-3-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.23	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.36	8-9	>669	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	8-9	>999	240	Weight: 70 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,5-6: 2x8 SP DSS

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

REACTIONS. (size) 10=0-3-8, 6=Mechanical
Max Horz 10=-77(LC 4)
Max Uplift 10=-10(LC 8), 6=-10(LC 9)
Max Grav 10=903(LC 1), 6=903(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1318/57, 2-3=-1086/42, 3-4=-1086/42, 4-5=-1318/57, 1-10=-788/50, 5-6=-788/50
BOT CHORD 9-10=-56/1079, 8-9=0/809, 6-8=-19/1079
WEBS 3-8=-2/287, 4-8=-263/125, 3-9=-2/287, 2-9=-263/125

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

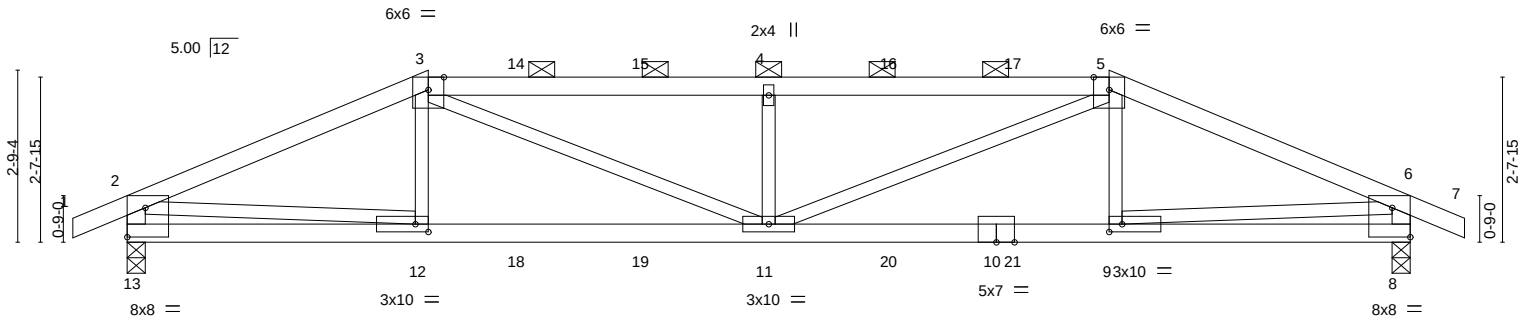
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	H1	HIP GIRDER	1	1	I41085196
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:25 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-BGIFzi8q?9R4zVbNyvwP7qyykSVe7WvzqNVPRIzNnBe

0-10-8	4-10-3	10-4-0	15-9-13	20-8-0	21-6-8
0-10-8	4-10-3	5-5-13	5-5-13	4-10-3	0-10-8

Scale = 1:37.1



4-10-3	10-4-0	15-9-13	20-8-0
4-10-3	5-5-13	5-5-13	4-10-3

Plate Offsets (X,Y)-- [8:Edge,0-5-11], [8:0-1-12,0-0-0], [9:0-2-8,0-1-8], [12:0-2-8,0-1-8], [13:0-1-12,0-0-0], [13:Edge,0-5-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.15	11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.28	9-11	>878	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14	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* 2-13,6-8: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-4-13 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-5 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 8-6-2 oc bracing.

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=24(LC 8)
Max Uplift 13=-310(LC 4), 8=-310(LC 5)
Max Grav 13=1400(LC 1), 8=1400(LC 1)

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

TOP CHORD	2-3=-2443/565, 3-4=-3110/784, 4-5=-3110/784, 5-6=-2443/565, 2-13=-1346/327, 6-8=-1346/327
BOT CHORD	12-13=-150/457, 11-12=-472/2190, 9-11=-476/2190, 8-9=-128/457
WEBS	3-11=-270/1078, 4-11=-629/315, 5-11=-270/1078, 2-12=-395/1750, 6-9=-395/1750

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=310, 8=310.
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) 85 lb down and 75 lb up at 6-4-0, 85 lb down and 75 lb up at 8-4-0, 85 lb down and 75 lb up at 10-4-0, and 85 lb down and 75 lb up at 12-4-0, and 85 lb down and 75 lb up at 14-4-0 on top chord, and 249 lb down and 105 lb up at 4-10-3, 29 lb down at 6-4-0, 29 lb down at 8-4-0, 29 lb down at 10-4-0, 29 lb down at 12-4-0, and 29 lb down at 14-4-0, and 249 lb down and 105 lb up at 15-9-13 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

April 24,2020

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, 5-6=-70, 6-7=-70, 8-13=-20
   Concentrated Loads (lb)
   Vert: 12=-249(B) 11=-23(B) 4=-42(B) 9=-249(B) 14=-42(B) 15=-42(B) 16=-42(B) 17=-42(B) 18=-23(B) 19=-23(B) 20=-23(B) 21=-23(B)

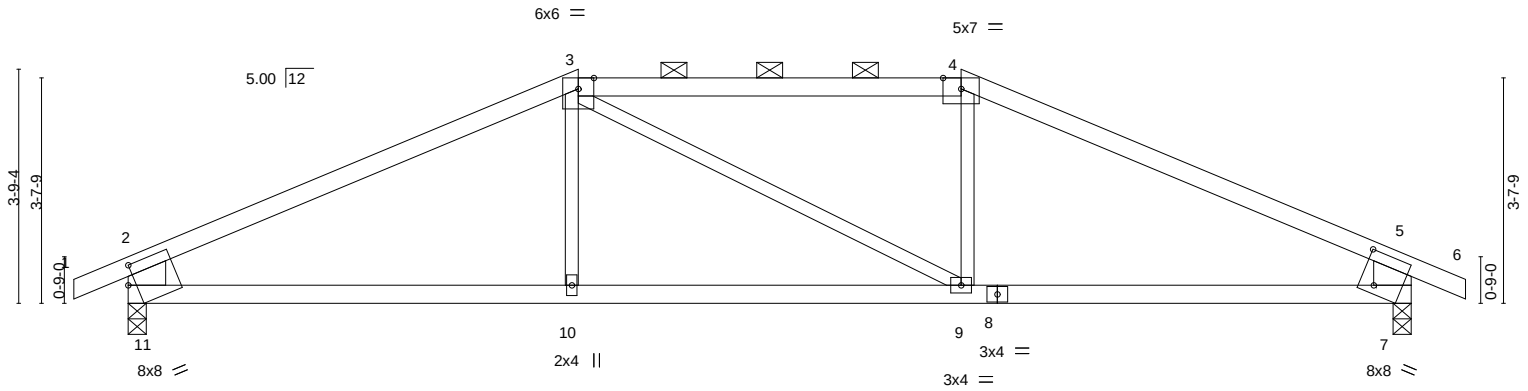
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	H2	HIP	1	1	I41085197
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:26 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-fSJeA29SmSZwaeAZWcReg2V9Tst1s3T720Ey_kzNnBd

0-10-8 7-3-0 13-5-0 20-8-0 21-6-8
0-10-8 7-3-0 6-2-0 7-3-0 0-10-8

Scale = 1:37.1



7-3-0 13-5-0 20-8-0
7-3-0 6-2-0 7-3-0

Plate Offsets (X,Y)-- [2:0-3-15,0-0-0], [5:0-3-15,0-0-0], [7:0-2-13,0-6-6], [7:0-3-6,0-1-6], [11:0-3-6,0-1-6], [11:0-1-8,0-3-9]

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	0.76	Vert(LL)	-0.13	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.26	9-10	>916	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	9-10	>999	240	Weight: 64 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 3-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-11,5-7: 2x8 SP DSS

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

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=39(LC 8)
Max Uplift 11=-123(LC 4), 7=-123(LC 5)
Max Grav 11=985(LC 1), 7=985(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1447/171, 3-4=-1228/185, 4-5=-1447/171, 2-11=-897/163, 5-7=-897/163
BOT CHORD 10-11=-84/1231, 9-10=-86/1227, 7-9=-88/1231
WEBS 3-10=0/254, 4-9=0/254

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) 11=123, 7=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 JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

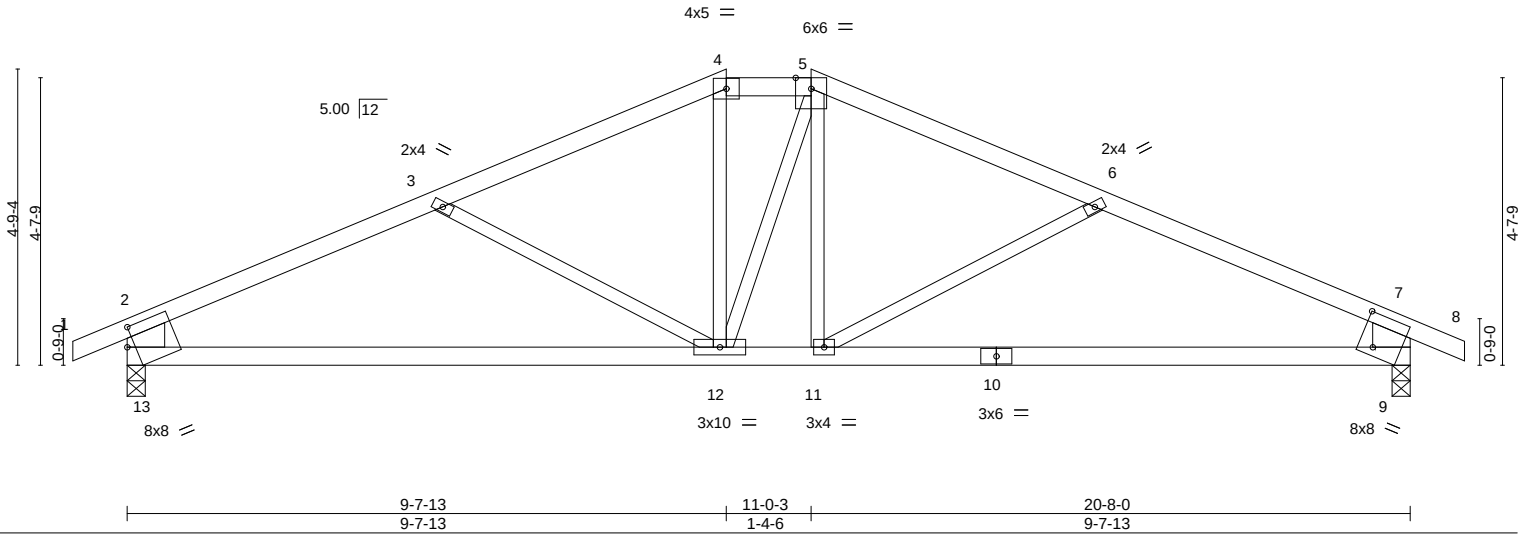
Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	H3	HIP	1	1	I41085198
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:27 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-7es0NO95WmhnColl3KytCF2GkGDQbXIGHg_VWAzNnBc

0-10-8	5-1-0	9-7-13	11-0-3	15-7-0	20-8-0	21-6-8
0-10-8	5-1-0	4-6-13	1-4-6	4-6-13	5-1-0	0-10-8

Scale = 1:37.1



9-7-13	11-0-3	20-8-0
9-7-13	1-4-6	9-7-13

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

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	0.98	Vert(LL)	-0.18	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.38	9-11	>636	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	11-12	>999	240	Weight: 72 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,7-9: 2x8 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-3 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=57(LC 8)
Max Uplift 13=-137(LC 8), 9=-137(LC 9)
Max Grav 13=985(LC 1), 9=985(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1435/214, 3-4=-1175/120, 4-5=-1048/141, 5-6=-1174/121, 6-7=-1435/214, 2-13=-879/186, 7-9=-878/186
BOT CHORD 12-13=-190/1223, 11-12=-13/1046, 9-11=-134/1223

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=137, 9=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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 24,2020

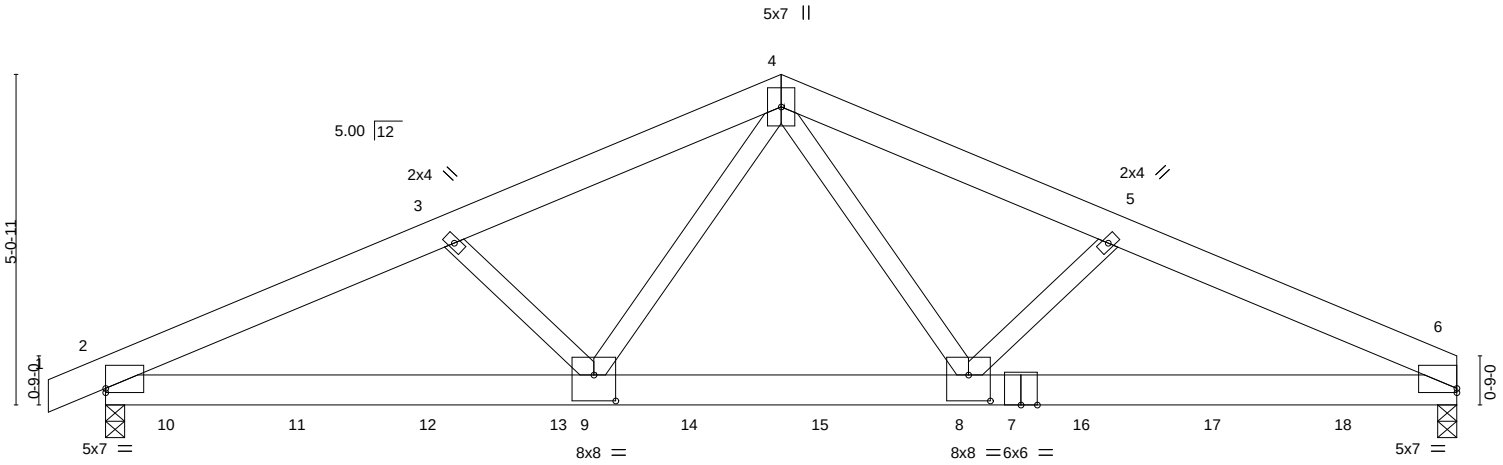
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	H4	COMMON GIRDER	1	2	I41085199
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:29 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-31_mo3BL2NxVS6v8Bk_LHg7ib3rj3MxZk_Tca3zNnBa

0-10-8 | 5-4-0 | 10-4-0 | 15-4-0 | 20-8-0
0-10-8 | 5-4-0 | 5-0-0 | 5-0-0 | 5-4-0

Scale = 1:35.2



7-5-10 | 13-2-6 | 20-8-0
7-5-10 | 5-8-12 | 7-5-10

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.18	6-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.32	6-8	>771	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	6-8	>999	240	Weight: 218 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8 (req. 0-4-4), 2=0-3-8 (req. 0-4-6)
Max Horz 2=50(LC 27)
Max Uplift 6=-38(LC 9), 2=-6(LC 8)
Max Grav 6=5420(LC 1), 2=5560(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8864/0, 3-4=-8724/0, 4-5=-8823/0, 5-6=-8941/0
BOT CHORD 2-9=0/7981, 8-9=0/6054, 6-8=0/8048
WEBS 4-8=0/3845, 5-8=-169/301, 4-9=-107/3669, 3-9=-187/275

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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) 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) WARNING: Required bearing size at joint(s) 6, 2 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
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) 884 lb down and 28 lb up at 1-0-0, 883 lb down and 30 lb up at 3-0-0, 883 lb down and 30 lb up at 5-0-0, 883 lb down and 30 lb up at 7-0-0, 883 lb down and 30 lb up at 9-0-0, 883 lb down and 27 lb up at 11-0-0, 883 lb down at 13-0-0, 883 lb down at 15-0-0, and 884 lb down and 113 lb up at 17-0-0, and 1127 lb down and 241 lb up at 19-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

April 24,2020

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: 1-4=-70, 4-6=-70, 2-6=-20
   Concentrated Loads (lb)
   Vert: 8=-883(F) 10=-884(F) 11=-883(F) 12=-883(F) 13=-883(F) 14=-883(F) 15=-883(F) 16=-883(F) 17=-884(F) 18=-1127(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J1	Diagonal Hip Girder	2	1	I41085200
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:29 2020 Page 1
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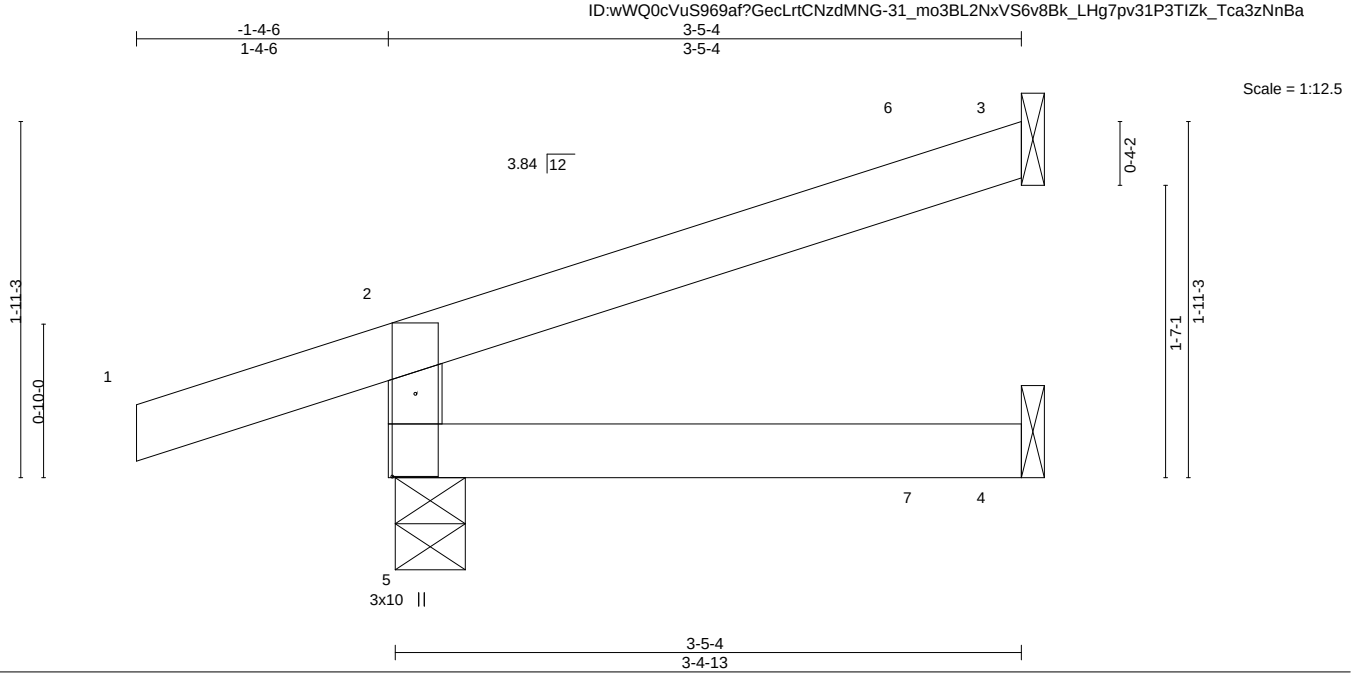

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

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	0.17	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	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 3-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=59(LC 4)
Max Uplift 5=-91(LC 4), 3=-52(LC 8)
Max Grav 5=276(LC 1), 3=90(LC 1), 4=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) 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) 60 lb down and 42 lb up at 2-11-11 on top chord, and 12 lb down at 2-11-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J2	Jack-Open	3	1	I41085201
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:38 2020 Page 1
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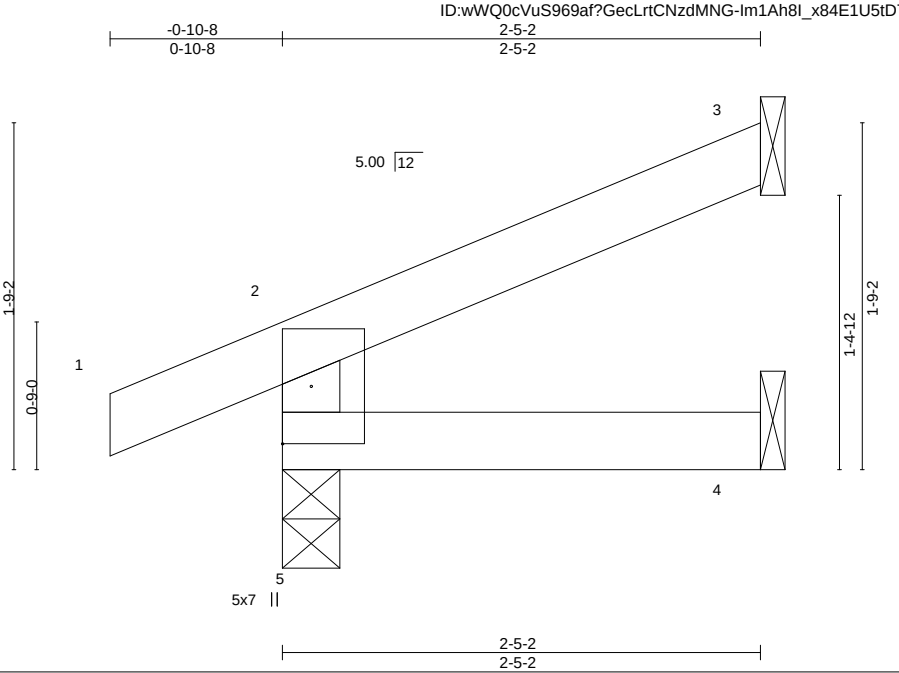


Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 7 lb	FT = 10%

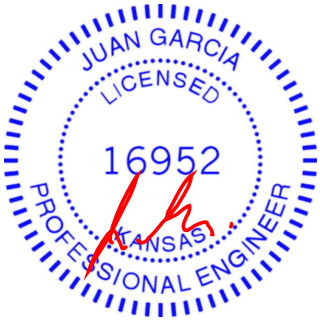
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 5=0-3-8, 4=Mechanical
Max Horz 5=45(LC 8)
Max Uplift 3=-36(LC 8), 5=-31(LC 4)
Max Grav 3=62(LC 1), 5=188(LC 1), 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J3	Jack-Open	3	1	I41085202
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:47 2020 Page 1
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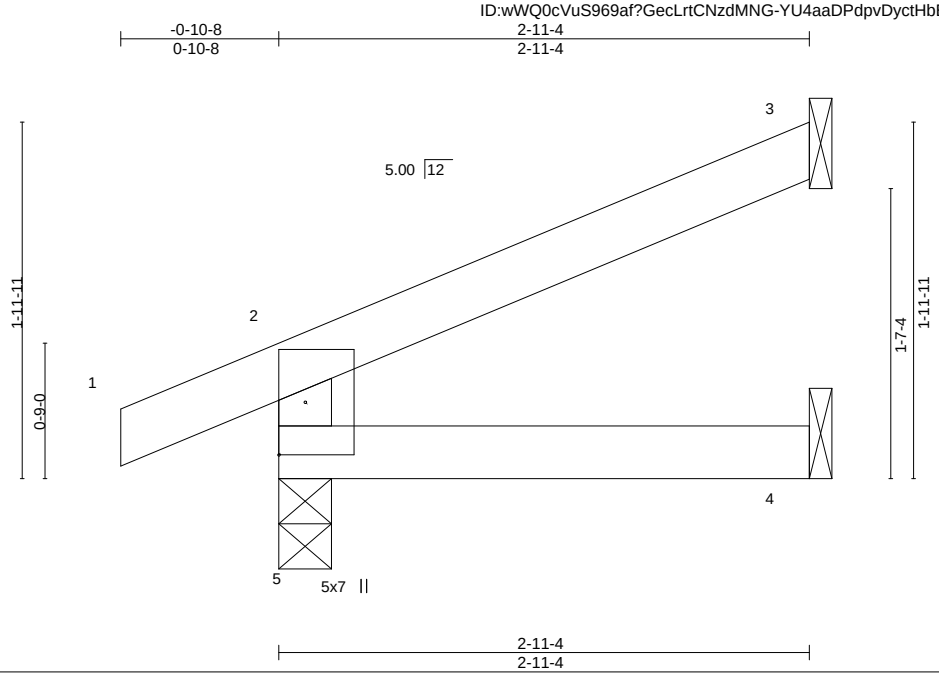

Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	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 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 5=0-3-8, 4=Mechanical
Max Horz 5=54(LC 8)
Max Uplift 3=-44(LC 8), 5=-31(LC 8)
Max Grav 3=80(LC 1), 5=208(LC 1), 4=51(LC 3)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J4	Jack-Open	12	1	I41085203
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:54 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-qr?D2dU0935yxyJx9VxCoyf?38WEQnUFUN0Rz6zNnBB

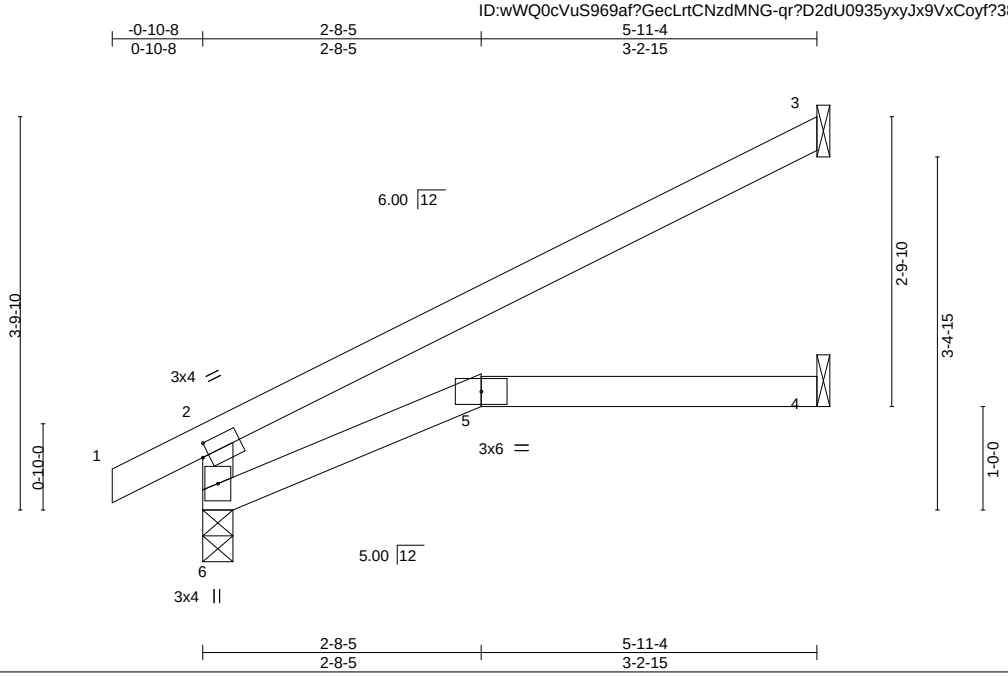

Plate Offsets (X,Y)-- [2:0-0-12,0-1-8]

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	0.53	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.12	4-5	>597	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	5	>999	240	Weight: 16 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 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=88(LC 8)
Max Uplift 3=-60(LC 8)
Max Grav 6=336(LC 1), 3=181(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/44

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J5	Jack-Open	9	1	I41085204
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:55 2020 Page 1

ID:wWQ0cVuS969af?GecLrtCNzdMNG-J1ZbFyVfwNDpZ6u8iCSRL9C9tYs09DkOj1m_VZzNnBA

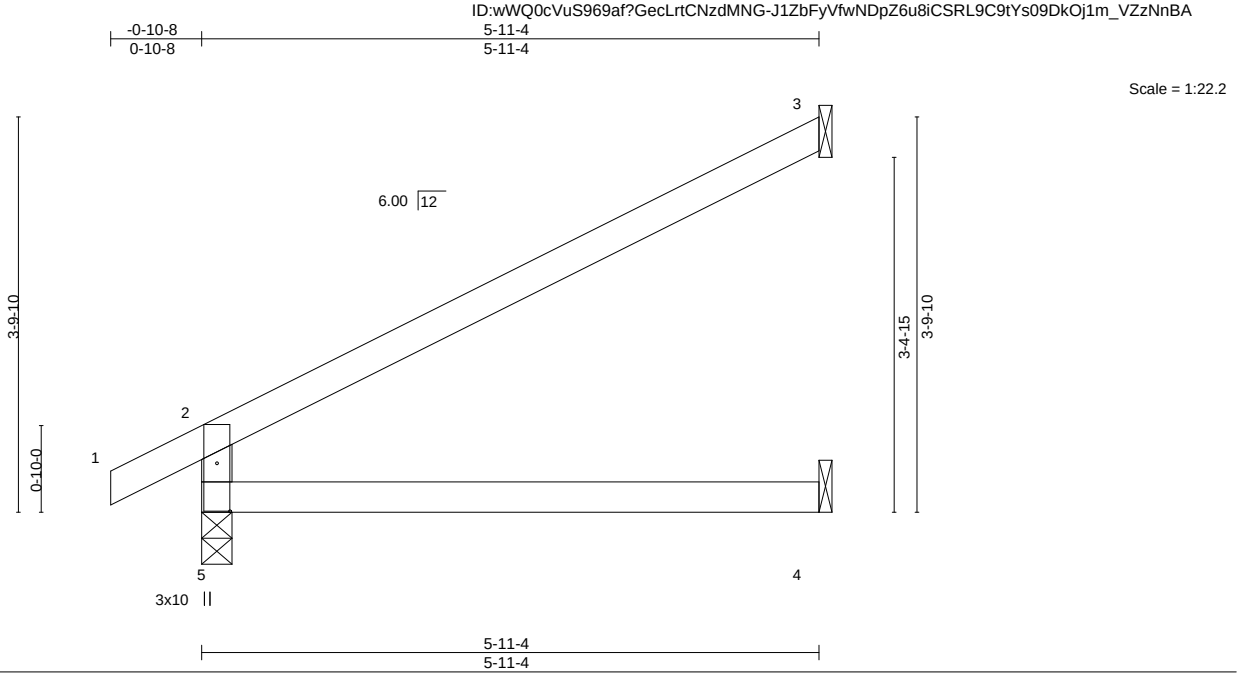

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	4-5	>609	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 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=89(LC 8)
Max Uplift 3=-60(LC 8)
Max Grav 5=336(LC 1), 3=180(LC 1), 4=109(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-293/45

NOTES-

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J6	Jack-Open	1	1	I41085205
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:55 2020 Page 1
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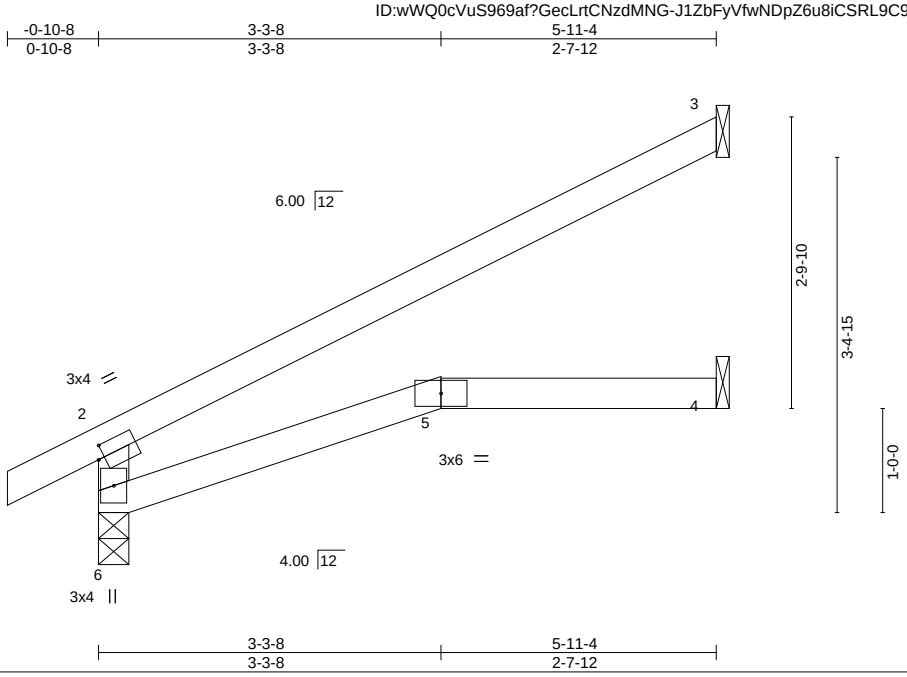

Plate Offsets (X,Y)-- [2:0-0-12,0-1-8]

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	0.53	Vert(LL)	-0.05	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.12	5-6	>594	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	5-6	>999	240	Weight: 16 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-4 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=88(LC 8)
Max Uplift 3=-60(LC 8)
Max Grav 6=336(LC 1), 3=181(LC 1), 4=108(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/44

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J7	Diagonal Hip Girder	1	1	I41085206
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:57 2020 Page 1
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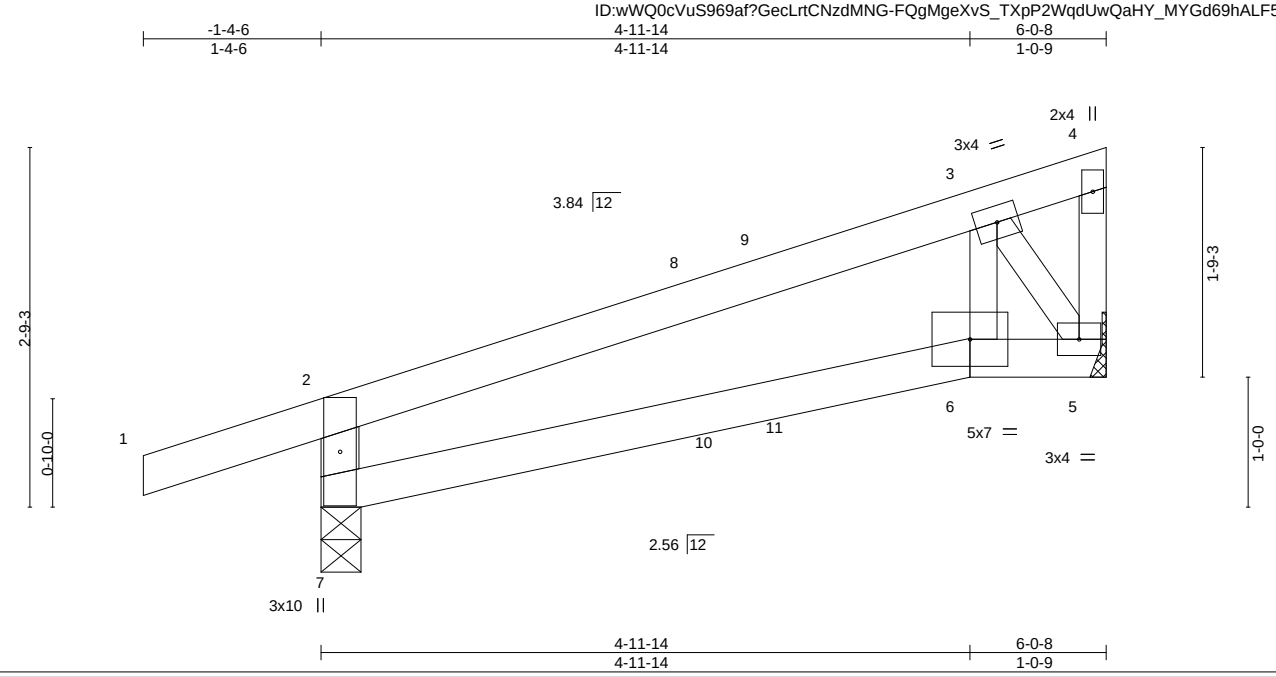

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.02	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.00	6	>999	240	Weight: 19 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=0-3-11, 5=Mechanical
Max Horz 7=99(LC 5)
Max Uplift 7=-109(LC 4), 5=-56(LC 8)
Max Grav 7=381(LC 1), 5=247(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-373/151, 2-3=-304/63
WEBS 3-5=-383/145

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) 5 except (jt=lb) 7=109.
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) 77 lb down and 44 lb up at 2-11-11, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 5 lb down at 2-11-11, and 6 lb down and 0 lb up at 3-6-3 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
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: 10=-1(F) 11=0(B)

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J8	Diagonal Hip Girder	1	1	I41085207
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:58 2020 Page 1
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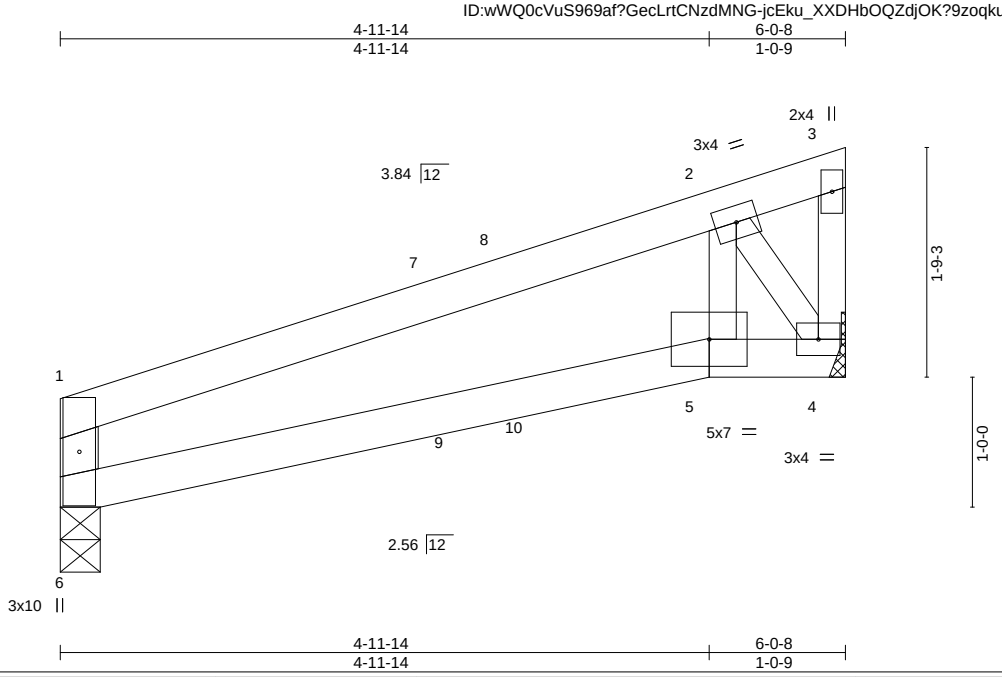

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.00	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 *Except*
1-6: 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) 6=0-3-11, 4=Mechanical
Max Horz 6=88(LC 5)
Max Uplift 6=-39(LC 4), 4=-61(LC 8)
Max Grav 6=262(LC 1), 4=263(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-256/83, 1-2=-326/68
BOT CHORD 5-6=-89/273, 4-5=-84/252
WEBS 2-4=-430/155

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, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 77 lb down and 44 lb up at 2-11-11, and 72 lb down and 50 lb up at 3-6-3 on top chord, and 5 lb down at 2-11-11, and 8 lb down at 3-6-3 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 5-6=-20, 4-5=-20
Concentrated Loads (lb)
Vert: 9=-1(B) 10=-3(F)

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J9	Jack-Open	3	1	I41085208
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:59 2020 Page 1
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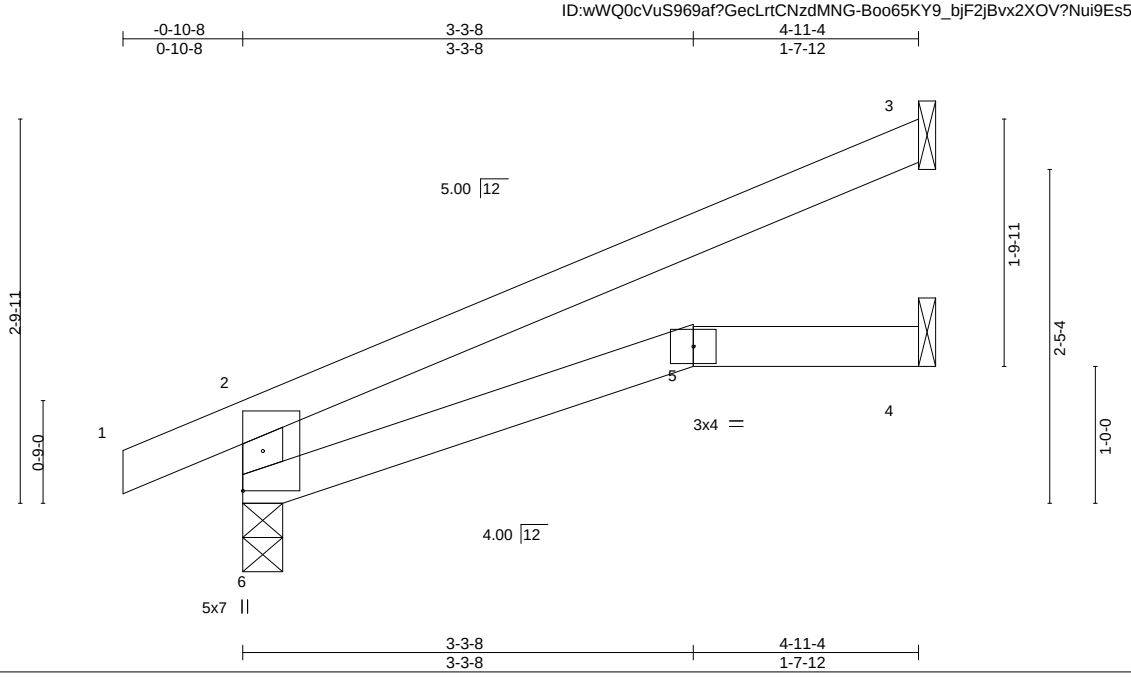

Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [6:0-0-9,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.05	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	5-6	>999	240	Weight: 14 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-4 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=88(LC 8)
Max Uplift 6=-39(LC 8), 3=-76(LC 8)
Max Grav 6=292(LC 1), 3=148(LC 1), 4=89(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-254/84

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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J10	Jack-Open	2	1	I41085209
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:30 2020 Page 1
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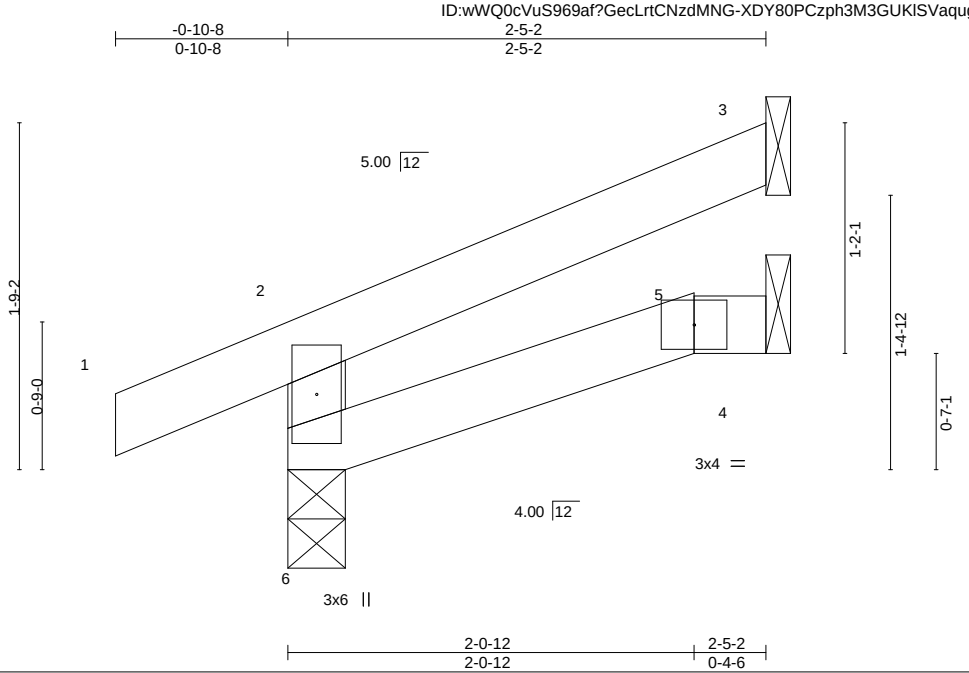

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 8 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-2 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=46(LC 5)
Max Uplift 6=-31(LC 4), 3=-37(LC 8)
Max Grav 6=188(LC 1), 3=62(LC 1), 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) 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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J11	Jack-Open	1	1	I41085210
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:31 2020 Page 1
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0-10-8 2-2-6

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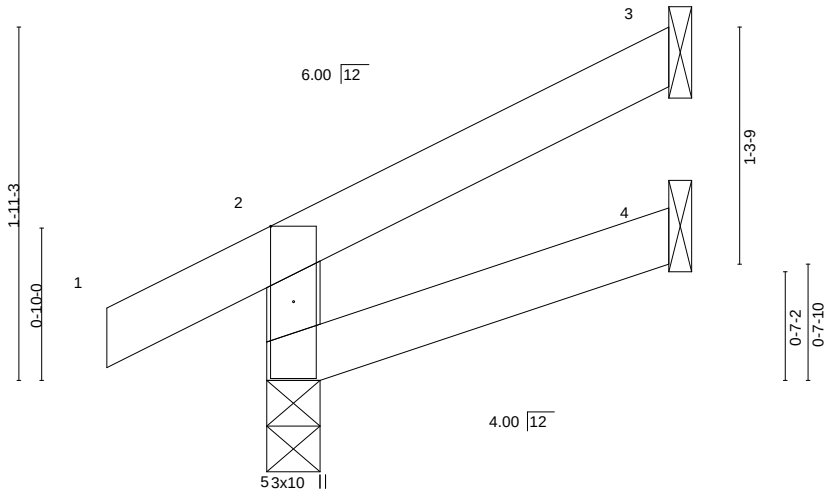

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-6 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=50(LC 8)
Max Uplift 5=-21(LC 8), 3=-38(LC 8)
Max Grav 5=179(LC 1), 3=53(LC 1), 4=36(LC 3)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J12	Jack-Open	1	1	I41085211
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:32 2020 Page 1
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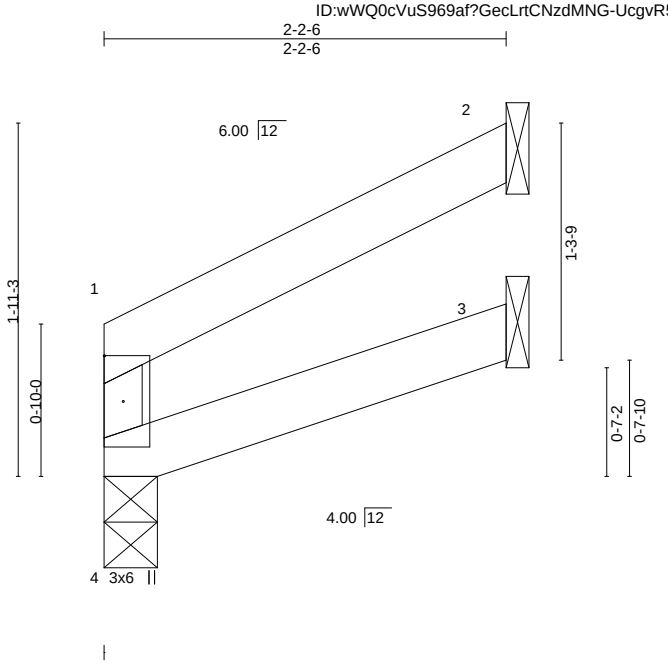


Plate Offsets (X,Y)-- [1:0-0-10,0-1-4], [4:0-0-7,0-1-4]

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	0.06	Vert(LL)	-0.00	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 6 lb	FT = 10%

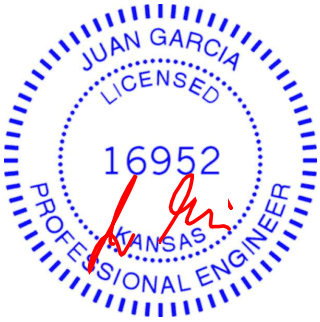
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=39(LC 5)
Max Uplift 2=-42(LC 8)
Max Grav 4=91(LC 1), 2=68(LC 1), 3=40(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) 4 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) 2.
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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J13	Diagonal Hip Girder	1	1	I41085212
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:33 2020 Page 1
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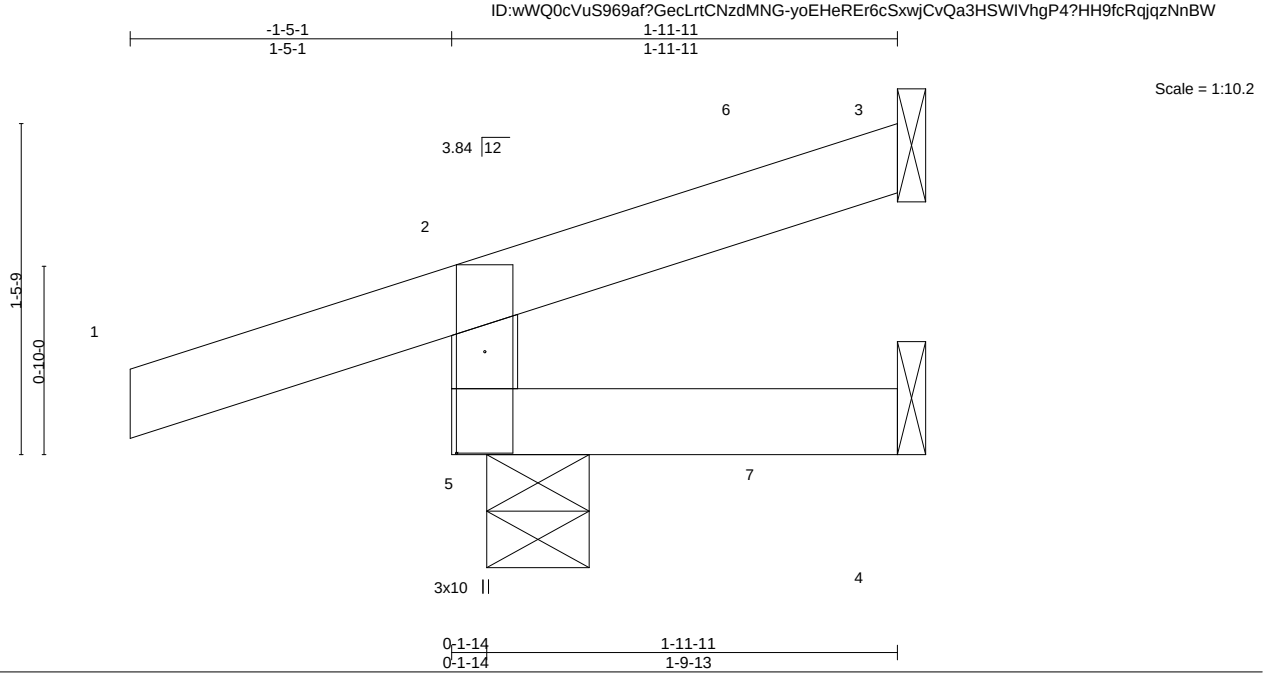


Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

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	0.19	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	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.00	5	>999	240	Weight: 7 lb	FT = 10%

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

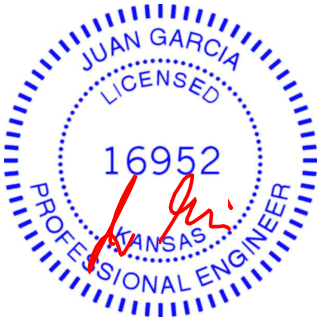
BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-7, 3=Mechanical, 4=Mechanical
Max Horz 5=41(LC 4)
Max Uplift 5=-96(LC 4), 3=-21(LC 8)
Max Grav 5=238(LC 1), 3=33(LC 31), 4=30(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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 51 lb down and 16 lb up at 1-5-12 on top chord, and 3 lb down and 4 lb up at 1-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J14	Jack-Open Girder	1	1	I41085213
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:34 2020 Page 1
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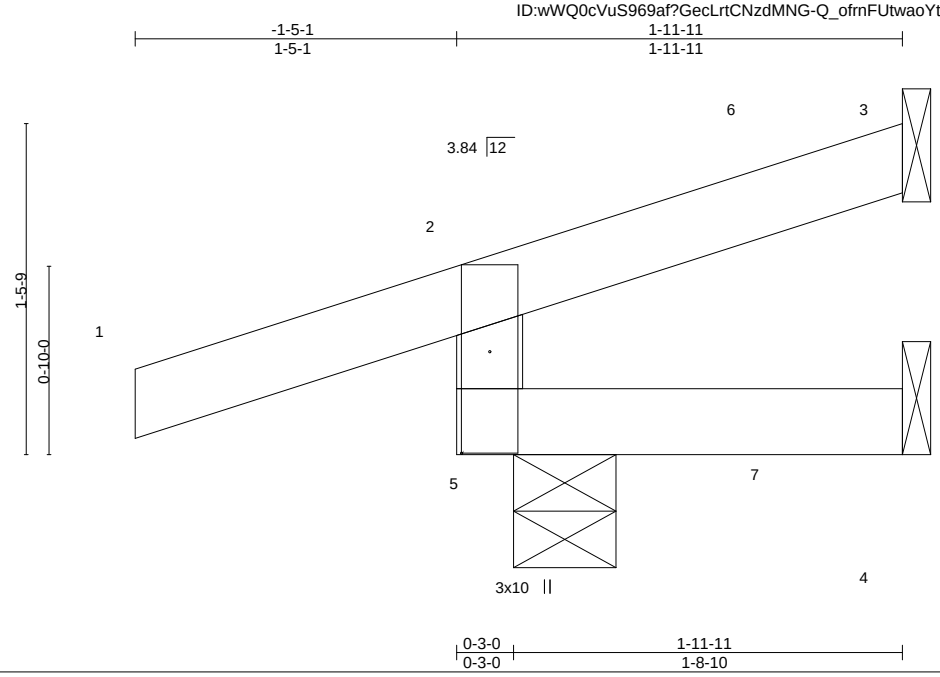

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

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	0.19	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	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.00	5	>999	240	Weight: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-7, 3=Mechanical, 4=Mechanical
Max Horz 5=41(LC 4)
Max Uplift 5=-96(LC 4), 3=-21(LC 8)
Max Grav 5=238(LC 1), 3=33(LC 31), 4=30(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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 51 lb down and 16 lb up at 1-5-12 on top chord, and 3 lb down and 4 lb up at 1-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J15	Jack-Open	2	1	I41085214
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:35 2020 Page 1
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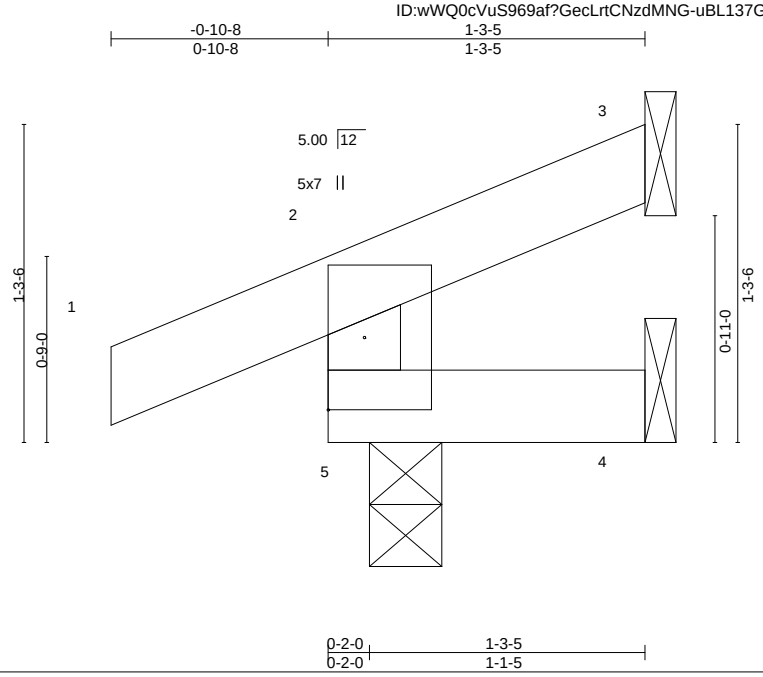

Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-3-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=33(LC 5)
Max Uplift 3=-16(LC 8), 5=-37(LC 4)
Max Grav 3=15(LC 1), 4=19(LC 3), 5=154(LC 1)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J16	Jack-Open	2	1	I41085215
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:35 2020 Page 1
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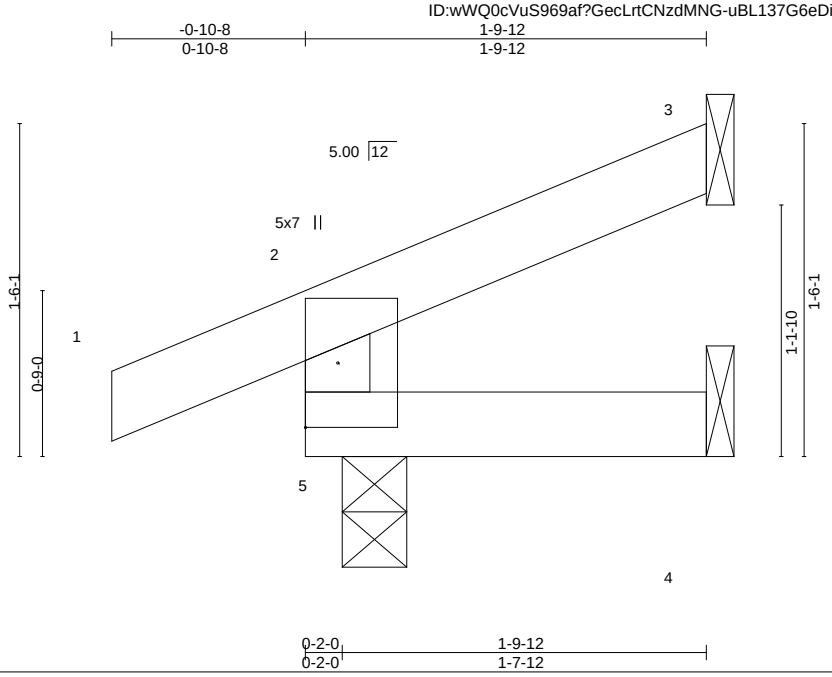


Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

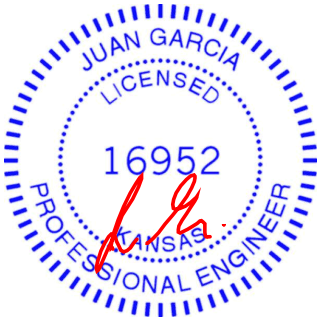
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=39(LC 5)
Max Uplift 3=-26(LC 8), 5=-33(LC 4)
Max Grav 3=40(LC 1), 4=30(LC 3), 5=168(LC 1)

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

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



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J17	Diagonal Hip Girder	2	1	I41085216
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:36 2020 Page 1
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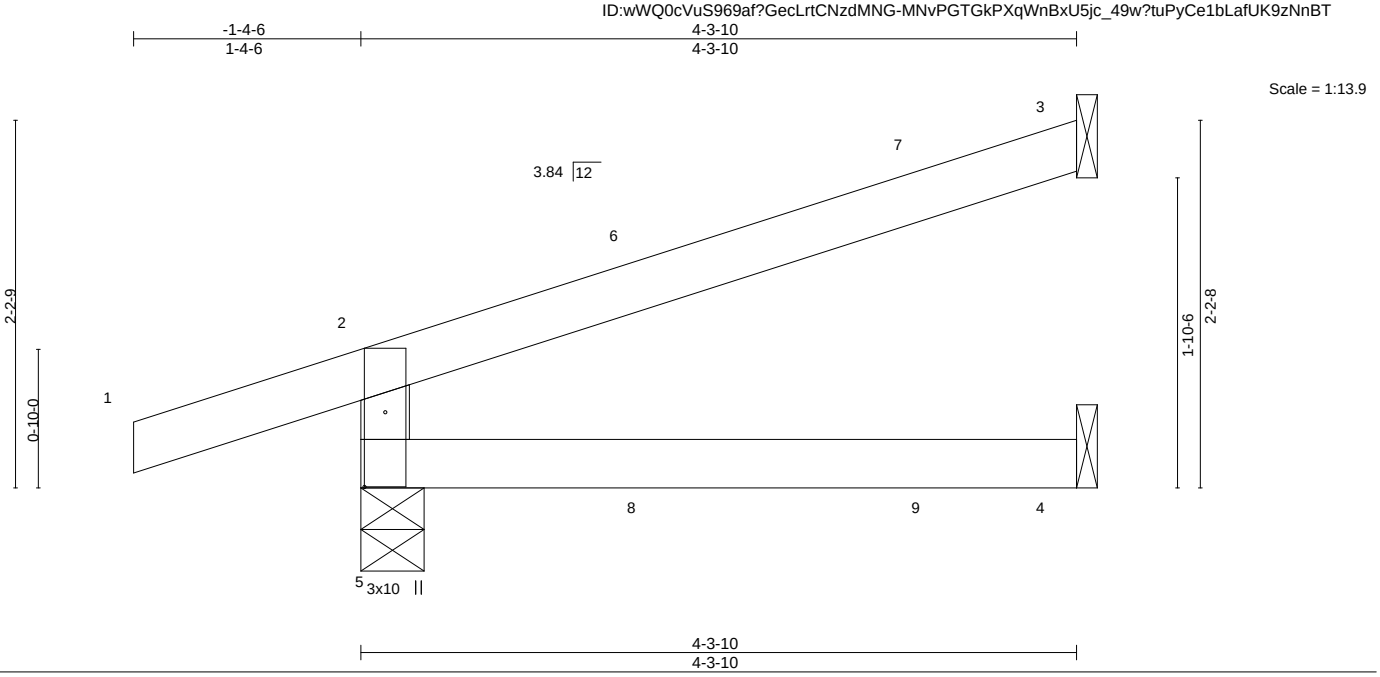

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

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	0.25	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	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: 12 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=70(LC 4)
Max Uplift 5=-98(LC 4), 3=-66(LC 8)
Max Grav 5=308(LC 1), 3=121(LC 1), 4=78(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-272/128

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) 64 lb down and 14 lb up at 1-9-6, and 71 lb down and 50 lb up at 3-5-14 on top chord, and 4 lb down and 9 lb up at 1-9-6, and 14 lb down at 3-5-14 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: 7=-0(F) 8=5(B) 9=-4(F)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J18	Jack-Open	2	1	I41085217
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:37 2020 Page 1
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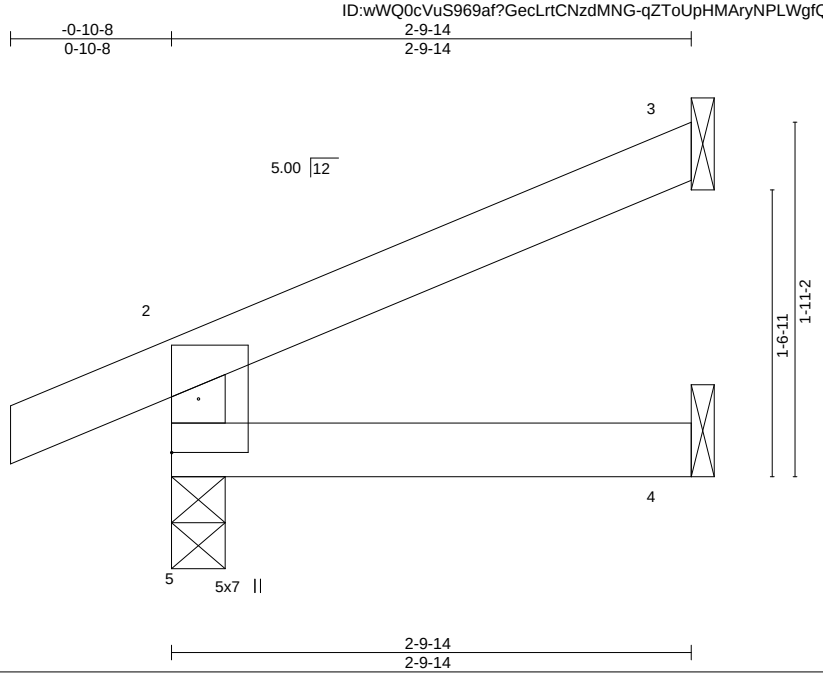

Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	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 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 5=0-3-8, 4=Mechanical
Max Horz 5=52(LC 8)
Max Uplift 3=-43(LC 8), 5=-31(LC 8)
Max Grav 3=77(LC 1), 5=203(LC 1), 4=48(LC 3)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J19	Jack-Open	7	1	I41085218
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:38 2020 Page 1
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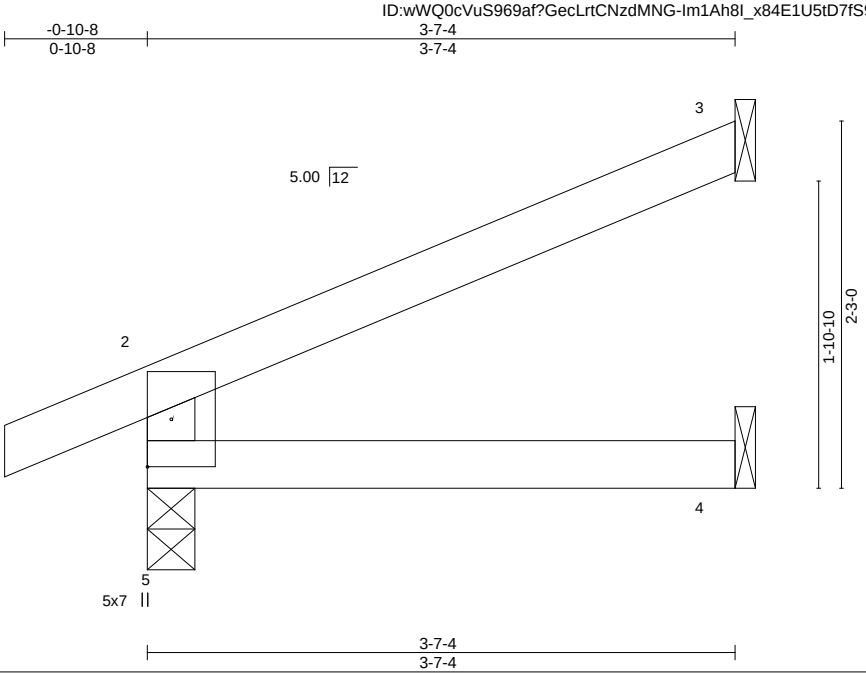


Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	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%

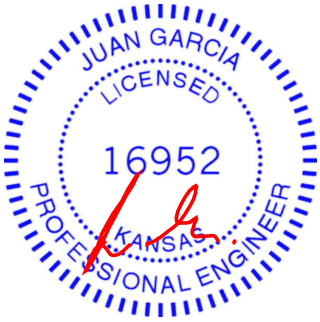
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 5=0-3-8, 4=Mechanical
Max Horz 5=65(LC 8)
Max Uplift 3=-55(LC 8), 5=-34(LC 8)
Max Grav 3=103(LC 1), 5=235(LC 1), 4=64(LC 3)

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

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



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J20	Jack-Open	2	1	I41085219
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:39 2020 Page 1
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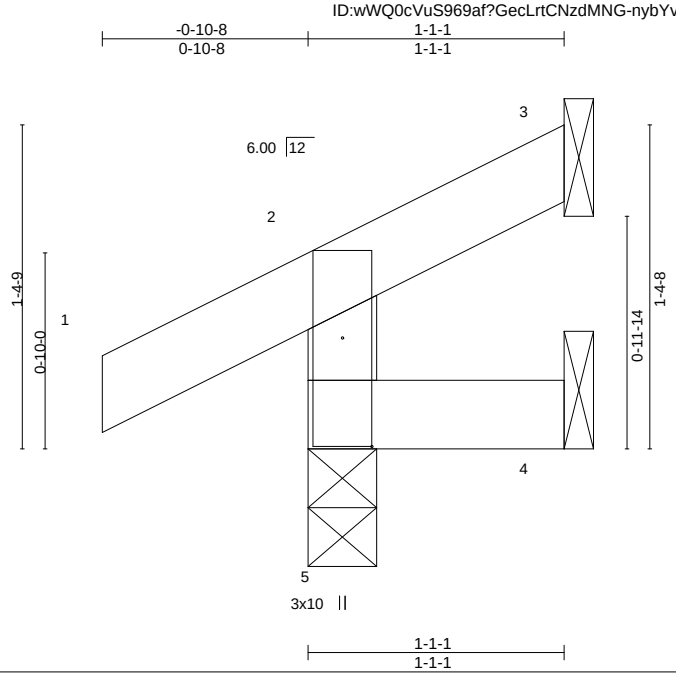


Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

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

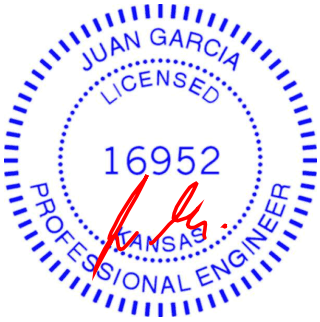
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=34(LC 5)
Max Uplift 5=-23(LC 8), 3=-14(LC 8), 4=-3(LC 5)
Max Grav 5=153(LC 1), 3=6(LC 15), 4=15(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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J21	Jack-Open	2	1	I41085220
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:40 2020 Page 1
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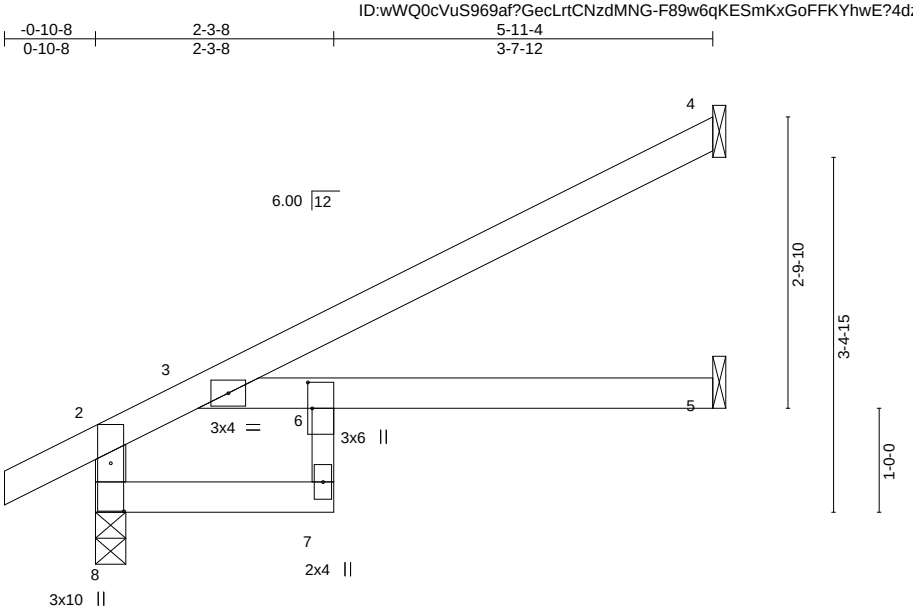

Plate Offsets (X,Y)-- [6:0-3-0,0-0-8], [8:0-5-9,0-1-8]

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	0.44	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13	5-6	>530	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)	0.05	5-6	>999	240	Weight: 18 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-7: 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=89(LC 8)
Max Uplift 4=-49(LC 8)
Max Grav 8=354(LC 1), 4=167(LC 1), 5=116(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-345/13

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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J22	Diagonal Hip Girder	1	1	I41085221
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:41 2020 Page 1
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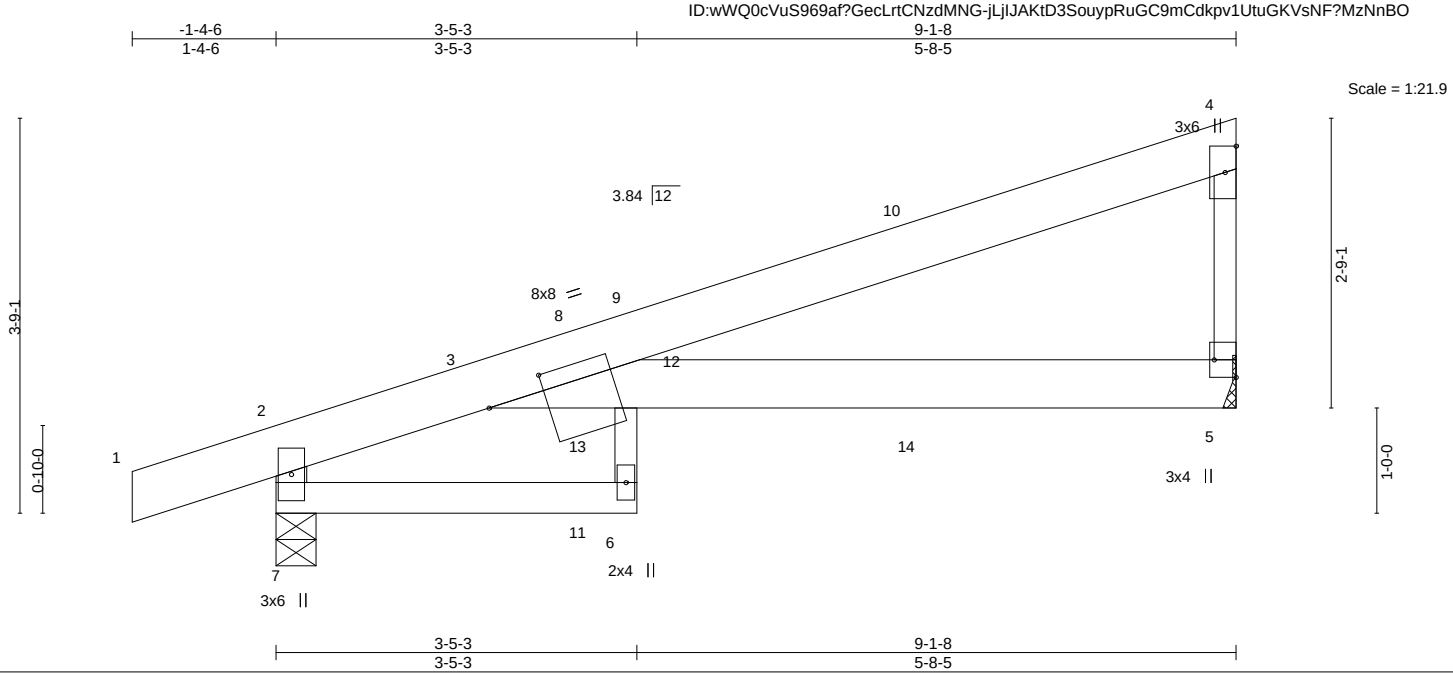

Plate Offsets (X,Y)-- [3:0-6-8,0-1-14], [5:Edge,0-2-8]

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	0.69	Vert(LL)	-0.17	6	>610	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.34	6	>315	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.12	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.19	6	>553	240	Weight: 39 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-6: 2x3 SPF No.2, 3-5: 2x6 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 6-0-0 oc bracing.

REACTIONS. (size) 7=0-4-9, 5=Mechanical
Max Horz 7=137(LC 5)
Max Uplift 7=-140(LC 4), 5=-198(LC 8)
Max Grav 7=571(LC 1), 5=688(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-541/163, 4-5=-296/122

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) 7=140, 5=198.
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) 76 lb down and 44 lb up at 2-11-11, 67 lb down and 42 lb up at 3-6-4, and 108 lb down and 68 lb up at 6-1-3, and 88 lb down and 59 lb up at 6-1-8 on top chord, and 5 lb down at 2-11-11, 47 lb down and 32 lb up at 6-1-3, and 39 lb down and 29 lb up at 6-1-8, and 215 lb down and 80 lb up at 9-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 6-7=-20, 3-5=-20
Concentrated Loads (lb)
Vert: 5=-215(B) 10=-27(F=-19, B=-9) 11=-1(F) 14=-85(F=-47, B=-38)

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J23	Jack-Open	1	1	I41085222
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:42 2020 Page 1
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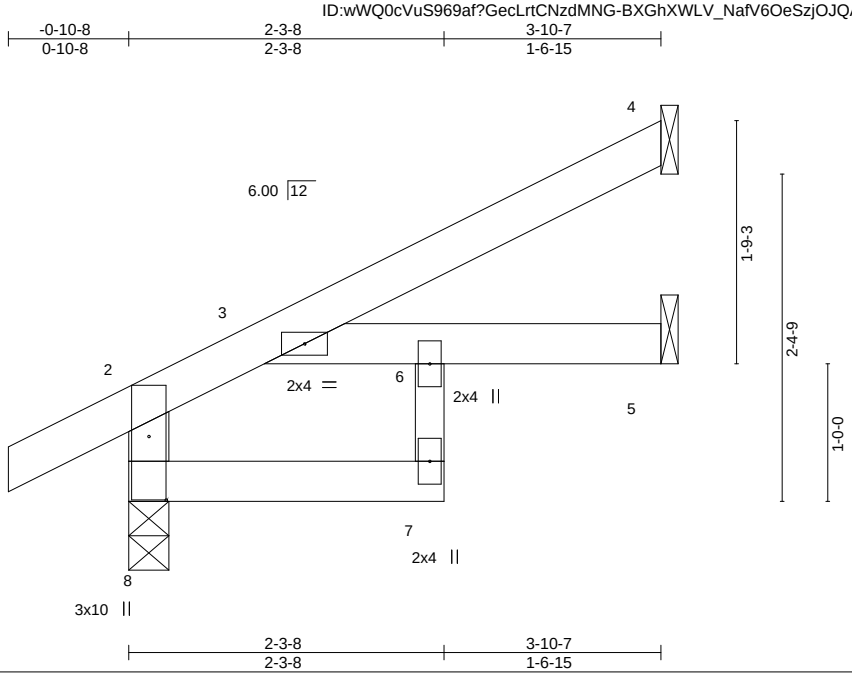

Plate Offsets (X,Y)-- [8:0-5-9,0-1-8]

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	0.14	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	6	>999	240	Weight: 13 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-7 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=84(LC 8)
Max Uplift 8=-17(LC 8), 4=-51(LC 8), 5=-3(LC 8)
Max Grav 8=261(LC 1), 4=100(LC 1), 5=85(LC 3)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J24	Jack-Open	1	1	I41085223
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:42 2020 Page 1
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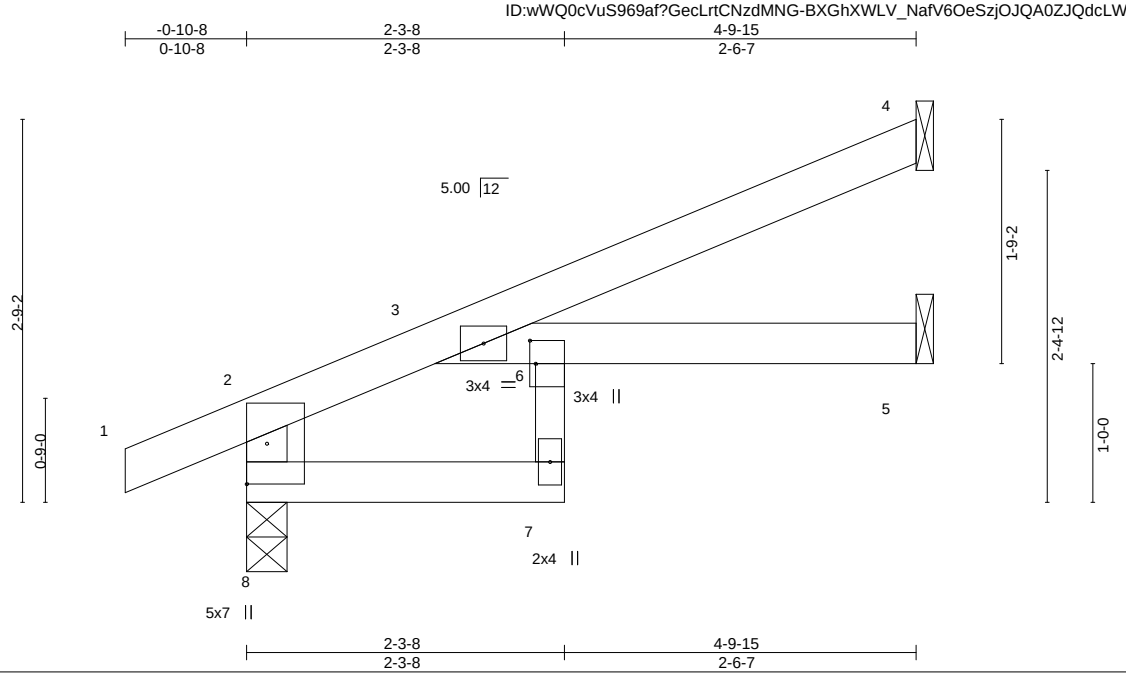

Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [6:0-2-0,0-0-8], [8:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	5-6	>999	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)	0.03	6	>999	240	Weight: 15 lb	FT = 10%

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

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

REACTIONS. (size) 4=Mechanical, 8=0-3-8, 5=Mechanical
Max Horz 8=86(LC 8)
Max Uplift 4=-57(LC 8), 8=-33(LC 8), 5=-1(LC 8)
Max Grav 4=128(LC 1), 8=298(LC 1), 5=94(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-287/59

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, 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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J25	Jack-Closed	1	1	I41085224
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:43 2020 Page 1
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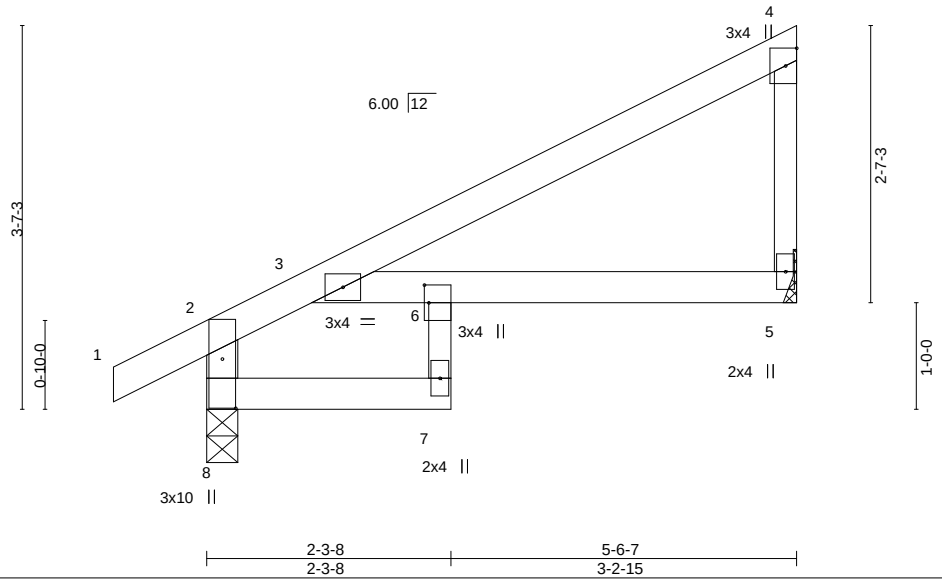
-0-10-8 2-3-8 5-6-7
0-10-8 2-3-8 3-2-15

Scale = 1:21.6



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

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

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	0.30	Vert(LL)	-0.03	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.07	5-6	>874	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	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 2x4 SPF No.2 *Except*
4-5: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-7 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=126(LC 5)
Max Uplift 8=-48(LC 8), 5=-64(LC 8)
Max Grav 8=316(LC 1), 5=231(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-305/76

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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J26	Jack-Open	1	1	I41085225
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:44 2020 Page 1
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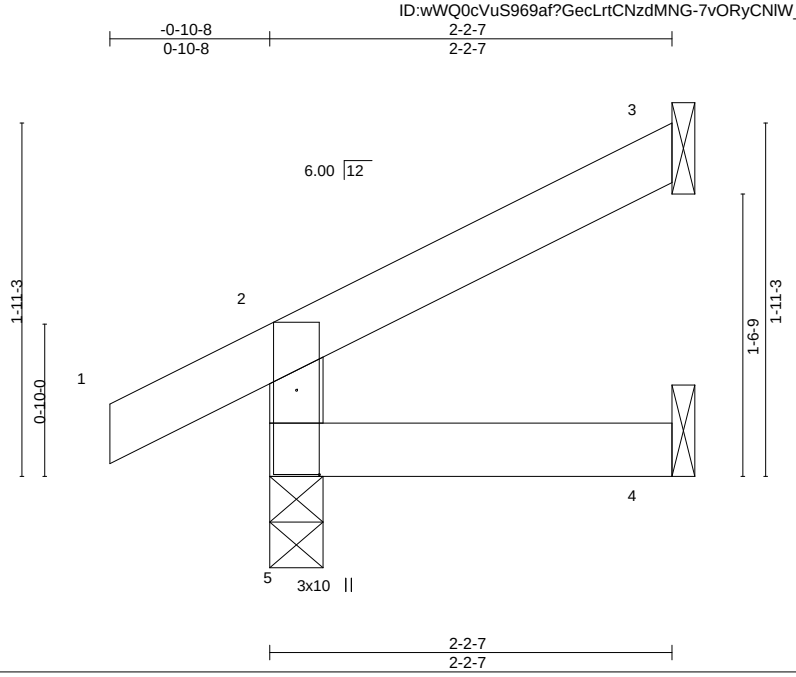

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

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)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	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: 7 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-7 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=-22(LC 8), 3=-37(LC 8)
Max Grav 5=179(LC 1), 3=54(LC 1), 4=36(LC 3)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J27	Diagonal Hip Girder	2	1	I41085226
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:45 2020 Page 1
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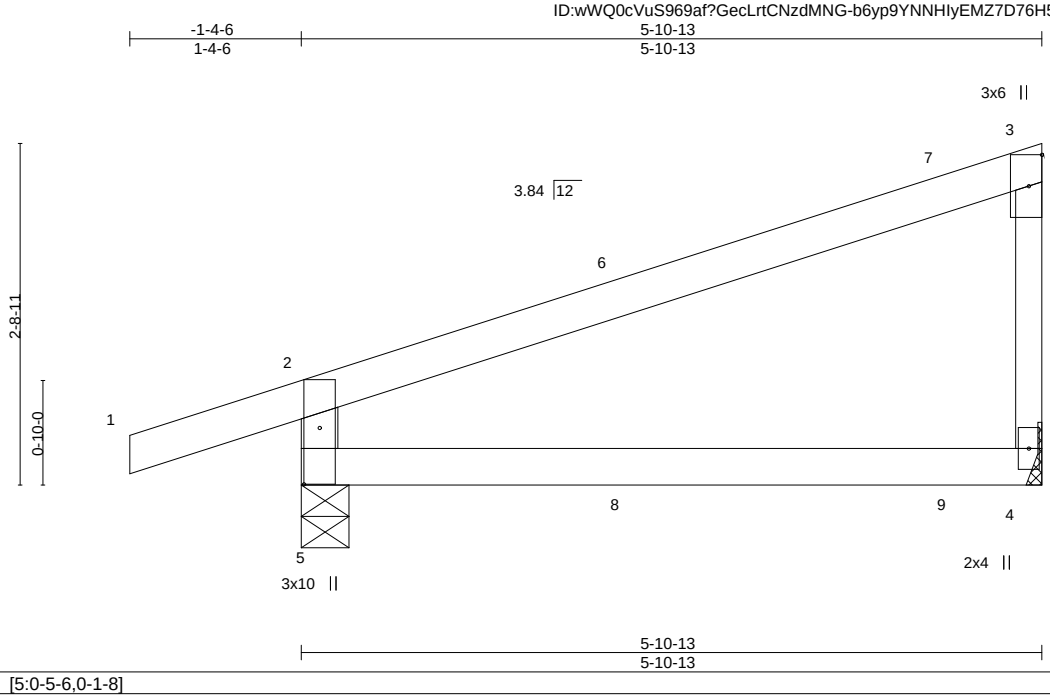

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

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	0.48	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.09	4-5	>769	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)	0.02	4-5	>999	240	Weight: 18 lb	FT = 10%

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

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

REACTIONS. (size) 5=0-4-9, 4=Mechanical
Max Horz 5=113(LC 5)
Max Uplift 5=-113(LC 4), 4=-74(LC 8)
Max Grav 5=378(LC 1), 4=280(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-333/155

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 except (jt=lb) 5=113.
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) 64 lb down and 30 lb up at 2-7-13, and 75 lb down and 42 lb up at 2-10-8, and 74 lb down and 63 lb up at 5-3-1 on top chord, and 4 lb down and 2 lb up at 2-7-13, and 4 lb down at 2-10-8, and 23 lb down at 5-3-1 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: 7=-29(B) 8=2(F=-0, B=2) 9=-16(B)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J28	Jack-Open	2	1	I41085227
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:46 2020 Page 1
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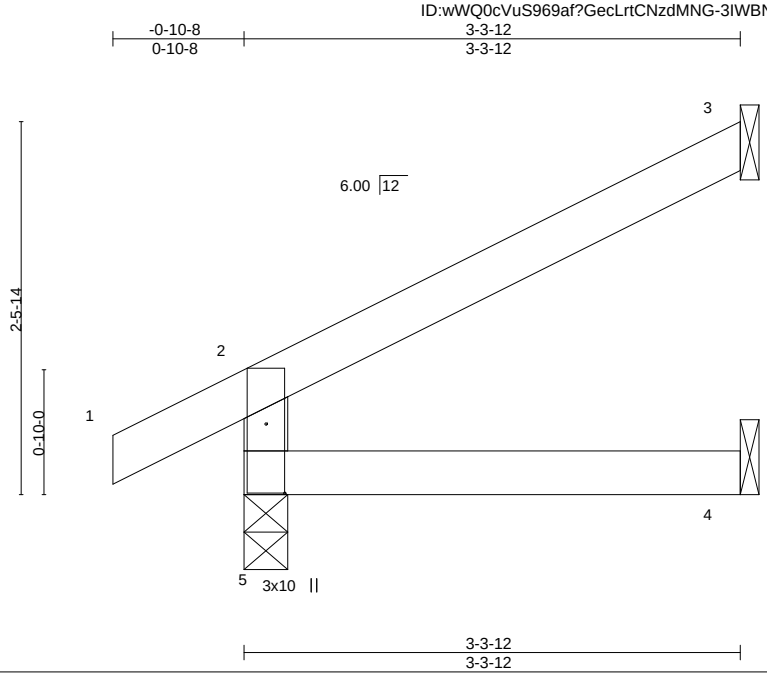

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

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	0.13	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	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 3-3-12 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=73(LC 8)
Max Uplift 5=-24(LC 8), 3=-57(LC 8)
Max Grav 5=223(LC 1), 3=93(LC 1), 4=58(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J29	Jack-Open	5	1	I41085228
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:46 2020 Page 1
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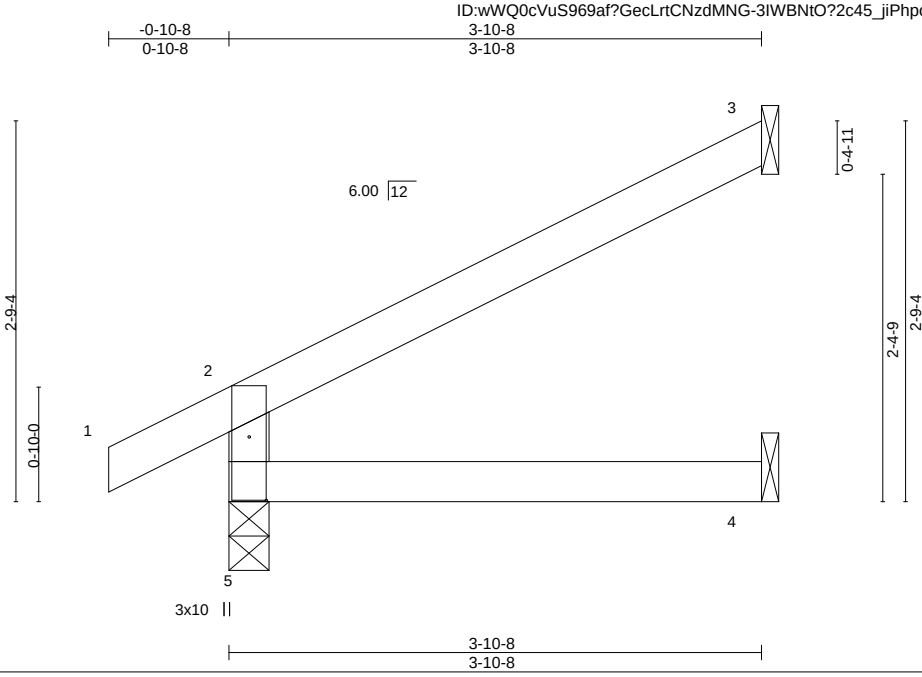

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

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	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	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: 11 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 3-10-8 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=84(LC 8)
Max Uplift 5=-26(LC 8), 3=-66(LC 8)
Max Grav 5=246(LC 1), 3=112(LC 1), 4=69(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J30	Jack-Open	2	1	I41085229
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:48 2020 Page 1
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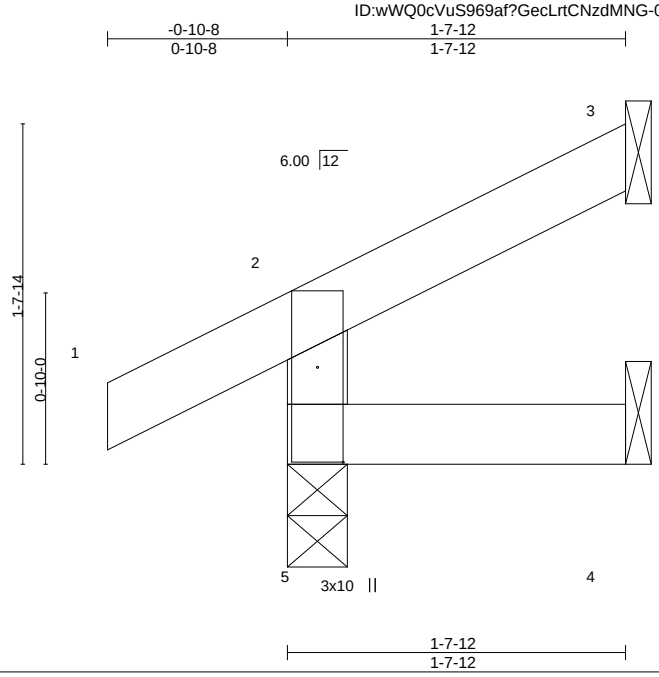

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-7-12 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=41(LC 5)
Max Uplift 5=-22(LC 8), 3=-27(LC 8)
Max Grav 5=163(LC 1), 3=33(LC 1), 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.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J31	Jack-Open	2	1	I41085230
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:49 2020 Page 1
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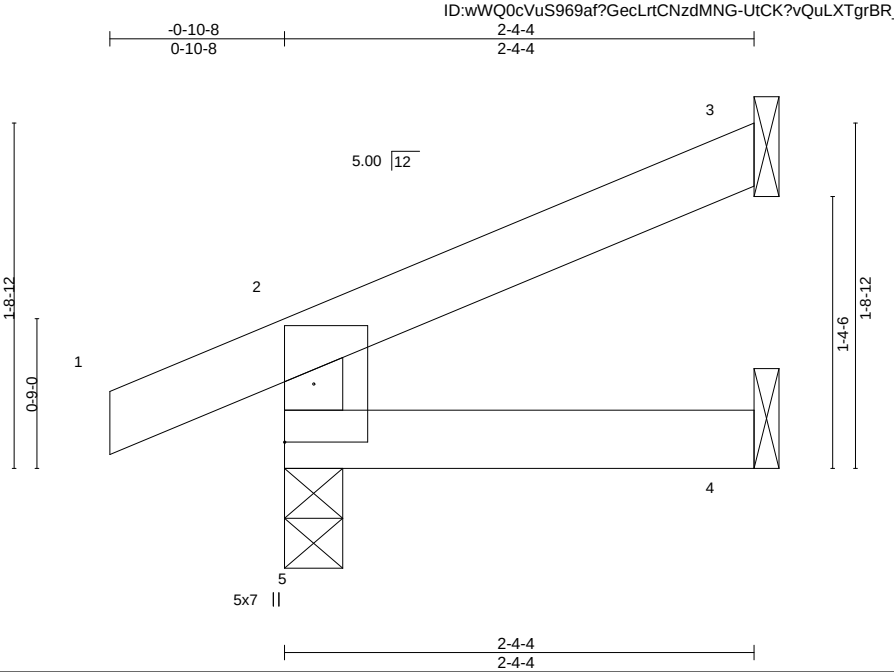

Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	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: 7 lb	FT = 10%

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

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

REACTIONS. (size) 3=Mechanical, 5=0-3-8, 4=Mechanical
Max Horz 5=44(LC 8)
Max Uplift 3=-35(LC 8), 5=-32(LC 4)
Max Grav 3=59(LC 1), 5=185(LC 1), 4=39(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 62 H4
400157	J32	Diagonal Hip Girder	1	1	I41085231
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:50 2020 Page 1
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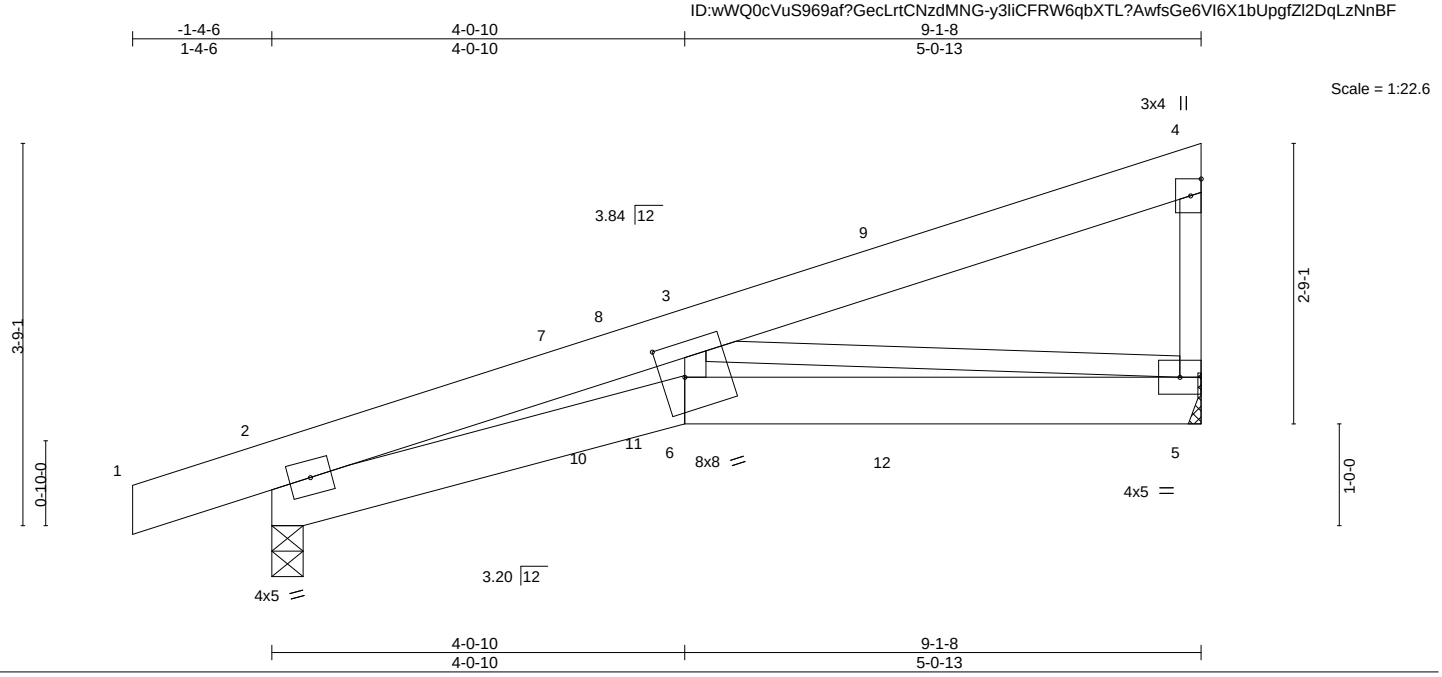

Plate Offsets (X,Y)-- [6:0-2-12,0-4-0]

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	0.59	Vert(LL)	-0.06	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.10	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	6	>999	240	Weight: 42 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 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=Mechanical, 2=0-3-11
Max Horz 2=129(LC 5)
Max Uplift 5=-190(LC 8), 2=-146(LC 4)
Max Grav 5=676(LC 1), 2=552(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1391/309
BOT CHORD 2-6=-355/1257, 5-6=-341/1156
WEBS 3-6=-1/399, 3-5=-1136/346

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) 2 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) 5=190, 2=146.
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) 80 lb down and 51 lb up at 2-11-11, 67 lb down and 43 lb up at 3-6-4, and 115 lb down and 85 lb up at 6-1-3, and 94 lb down and 73 lb up at 6-1-8 on top chord, and 7 lb down at 2-11-11, 6 lb down and 0 lb up at 3-6-4, 30 lb down at 6-1-3, and 24 lb down at 6-1-8, and 215 lb down and 81 lb up at 9-0-4 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 2-6=-20, 5-6=-20

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Continued on page 2

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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-215(F) 9=-61(F=-22, B=-39) 10=-4(B) 11=0(F) 12=-44(F=-16, B=-28)

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J33	Jack-Open	1	1	I41085232
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:50 2020 Page 1
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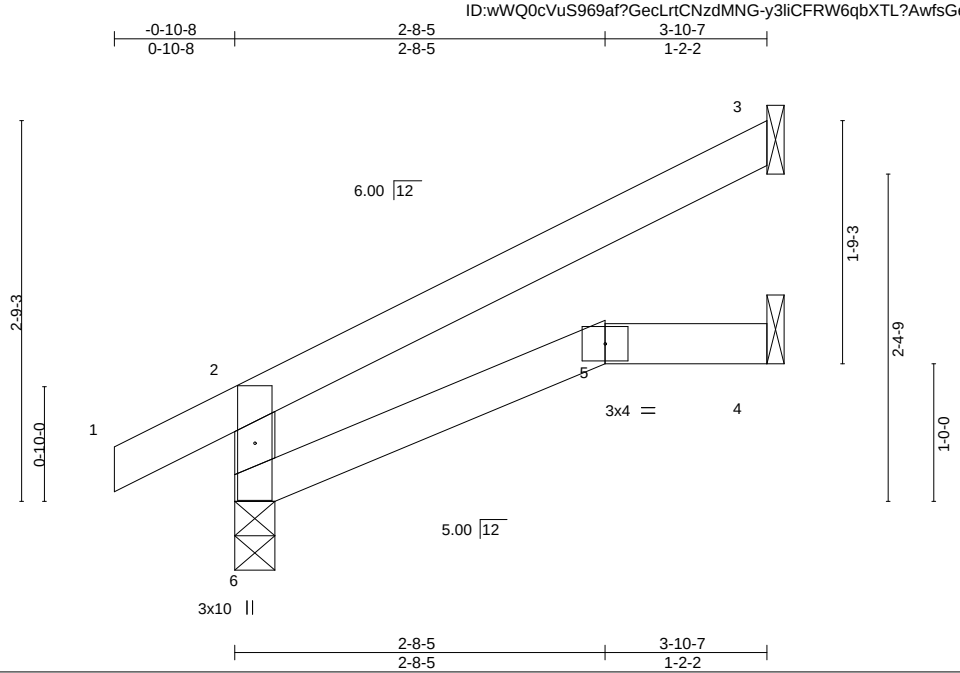

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		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 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-7 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=83(LC 8)
Max Uplift 6=-24(LC 8), 3=-67(LC 8)
Max Grav 6=246(LC 1), 3=113(LC 1), 4=69(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 62 H4
400157	J34	Jack-Open	1	1	I41085233
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:51 2020 Page 1
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0-10-8 2-2-7

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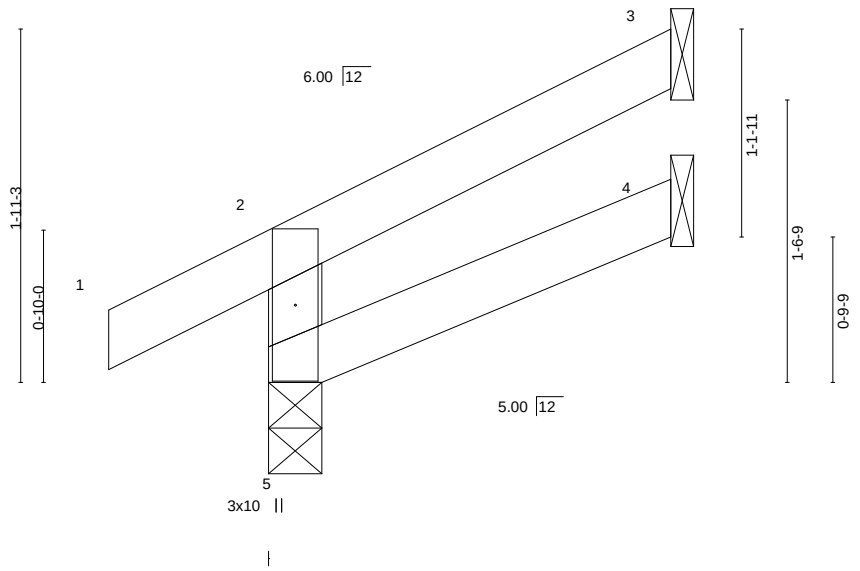


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

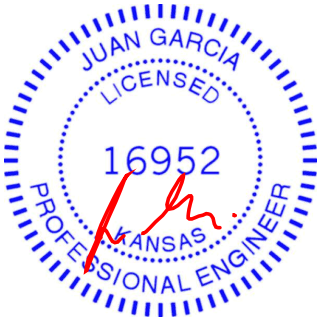
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-7 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=49(LC 8)
Max Uplift 5=-21(LC 8), 3=-38(LC 8)
Max Grav 5=179(LC 1), 3=54(LC 1), 4=36(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
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 62 H4
400157	J35	Jack-Open	1	1	I41085234
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:52 2020 Page 1
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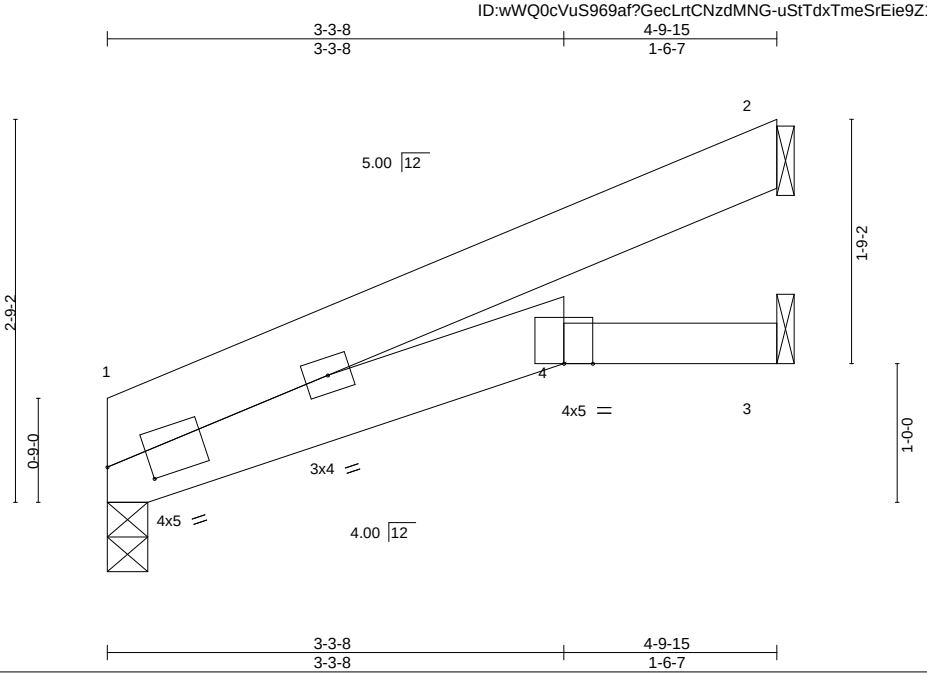

Plate Offsets (X,Y)-- [1:0-3-9,0-2-4]

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	0.15	Vert(LL)	-0.01	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	4	>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-P		Wind(LL)	0.01	4	>999	240	Weight: 18 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
3-4: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=94(LC 8)
Max Uplift 1=-16(LC 8), 2=-75(LC 8)
Max Grav 1=208(LC 1), 2=148(LC 1), 3=85(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) 1 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) 1, 2.
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 62 H4
400157	J36	Jack-Open	1	1	I41085235
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:53 2020 Page 1
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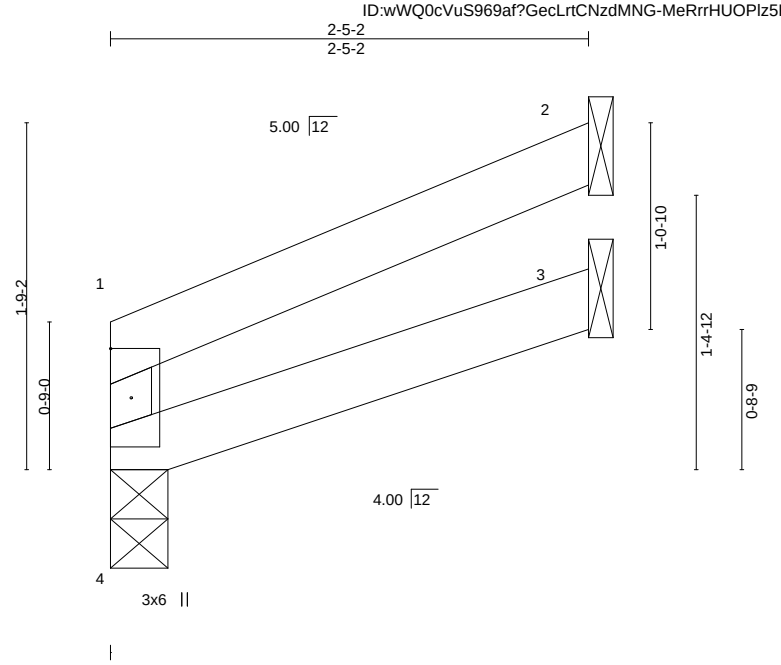

Plate Offsets (X,Y)-- [1:0-0-8,0-1-4], [4:0-0-7,0-1-4]

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	0.08	Vert(LL)	-0.00	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=37(LC 5)
Max Uplift 4=-3(LC 8), 2=-41(LC 8)
Max Grav 4=102(LC 1), 2=75(LC 1), 3=44(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) 4 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, 2.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	J37	Jack-Closed	1	1	I41085236
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:53 2020 Page 1
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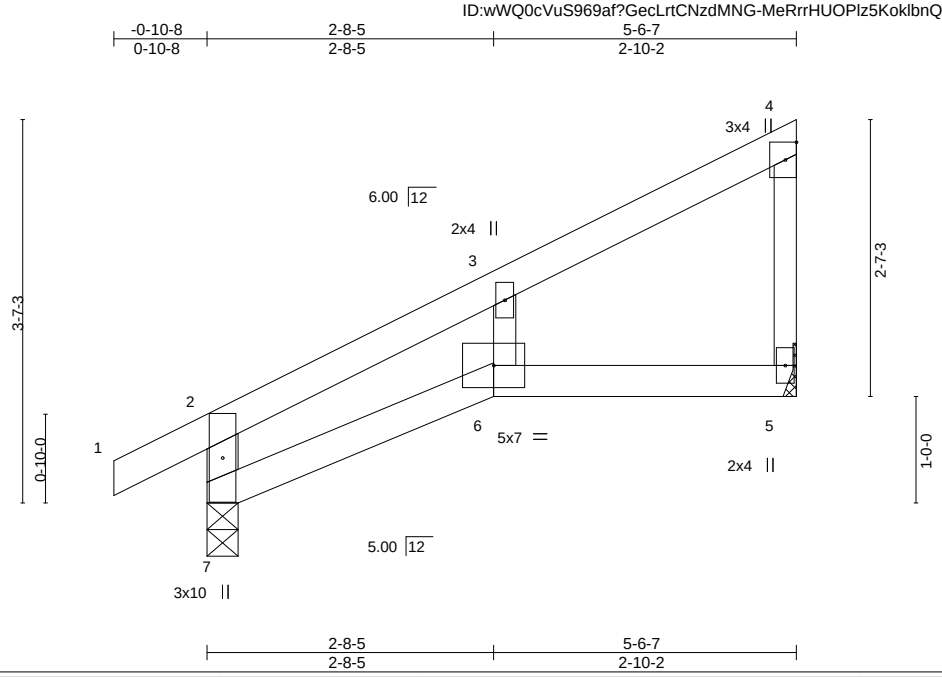


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.06	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.10	6	>625	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.07	6	>951	240	Weight: 18 lb	FT = 10%

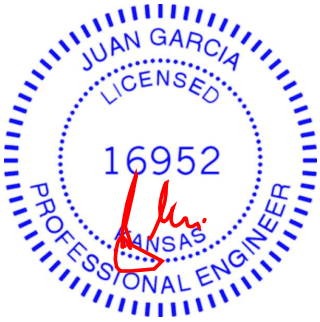
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-7: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-7 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=127(LC 5)
Max Uplift 7=-47(LC 8), 5=-65(LC 8)
Max Grav 7=316(LC 1), 5=231(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-270/54

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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	LAY1	GABLE	1	1	I41085237
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:37:59 2020 Page 1
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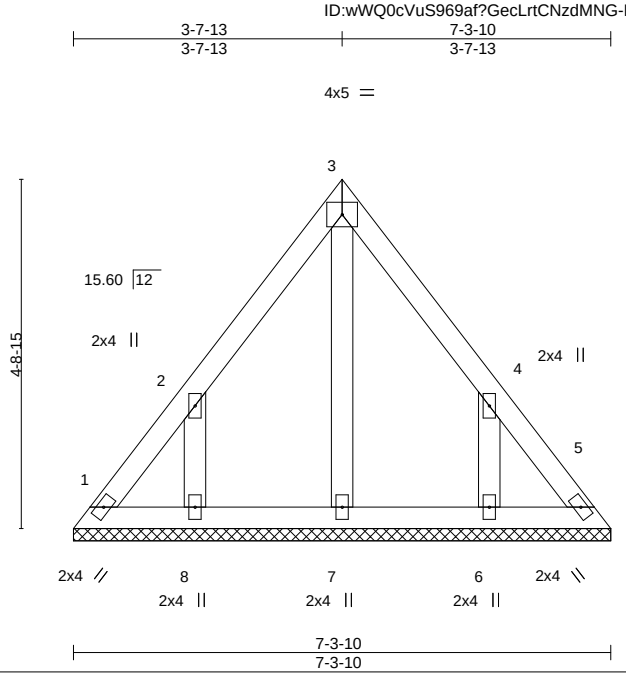

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 29 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 7-3-10.
(lb) - Max Horz 1=-123(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-185(LC 8), 6=-185(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-
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, 5 except (jt=lb) 8=185, 6=185.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	LAY2	Lay-In Gable	1	1	I41085238
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:00 2020 Page 1
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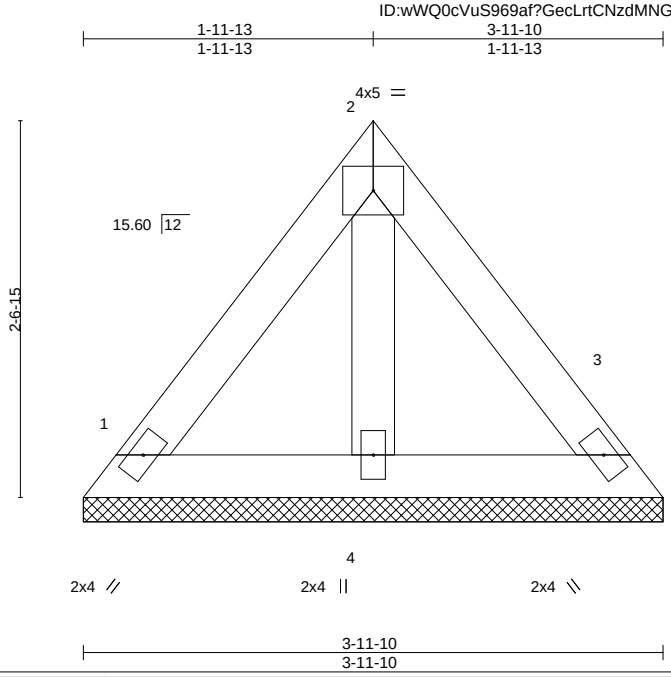

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 10%

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

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

REACTIONS. (size) 1=3-11-10, 3=3-11-10, 4=3-11-10
Max Horz 1=62(LC 5)
Max Uplift 1=-29(LC 9), 3=-24(LC 8)
Max Grav 1=98(LC 1), 3=98(LC 1), 4=107(LC 1)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	LAY3	GABLE	3	1	I41085239
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:01 2020 Page 1
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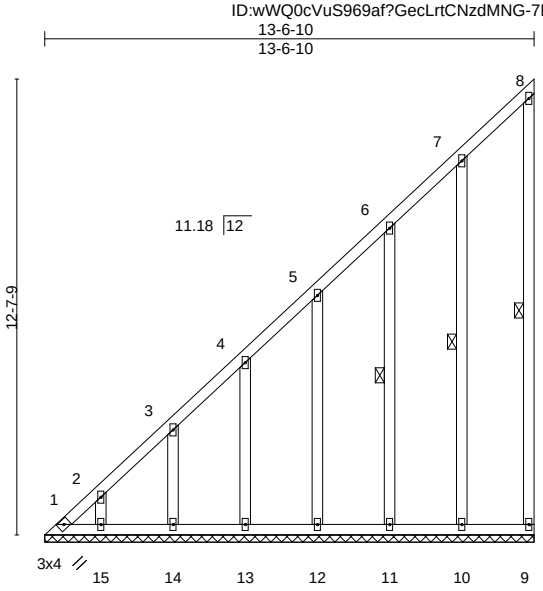

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 88 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 8-9, 7-10, 6-11

REACTIONS. All bearings 13-6-10.
(lb) - Max Horz 1=496(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 9, 15 except 1=-142(LC 6), 10=-107(LC 8), 11=-105(LC 8), 12=-104(LC 8), 13=-104(LC 8), 14=-107(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 9, 10, 11, 12, 13, 14, 15 except 1=442(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-658/247, 2-3=-574/218, 3-4=-467/179, 4-5=-364/142, 5-6=-260/107

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 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) 9, 15 except (jt=lb) 1=142, 10=107, 11=105, 12=104, 13=104, 14=107.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	LAY4	GABLE	1	1	I41085240
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:02 2020 Page 1
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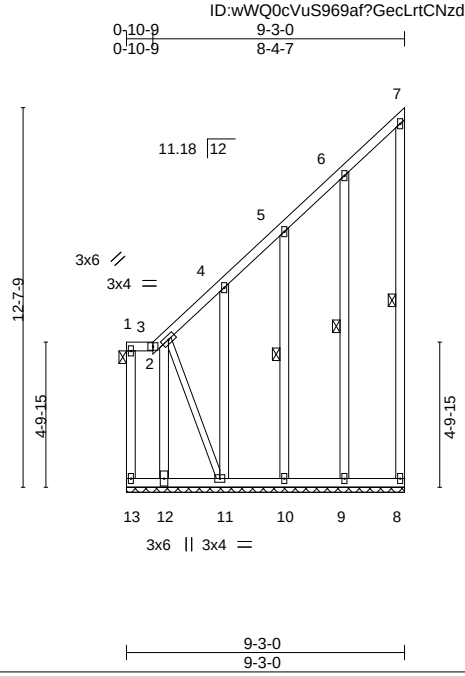

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 81 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	3-11: 2x3 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. All bearings 9-3-0.
(lb) - Max Horz 13=274(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 13, 8 except 9=-101(LC 8), 10=-117(LC 8), 11=-721(LC 8), 12=-362(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 13, 8, 9, 10 except 11=524(LC 6), 12=751(LC 8)

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

TOP CHORD	3-4=-349/133, 4-5=-266/109
BOT CHORD	12-13=-269/171, 11-12=-269/171
WEBS	3-12=-735/443, 3-11=-445/702

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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8 except (jt=lb) 9=101, 10=117, 11=721, 12=362.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	LAY5	Lay-In Gable	1	1	I41085241
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:03 2020 Page 1
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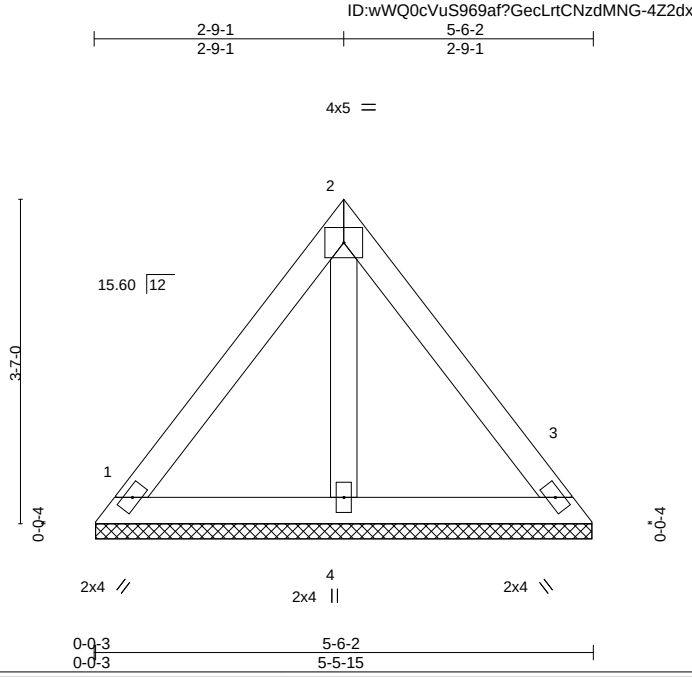

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 19 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 5-6-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-5-12, 3=5-5-12, 4=5-5-12
Max Horz 1=90(LC 5)
Max Uplift 1=-43(LC 9), 3=-35(LC 8)
Max Grav 1=143(LC 1), 3=143(LC 1), 4=157(LC 1)

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

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

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	LAY6	GABLE	1	1	I41085242
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:04 2020 Page 1
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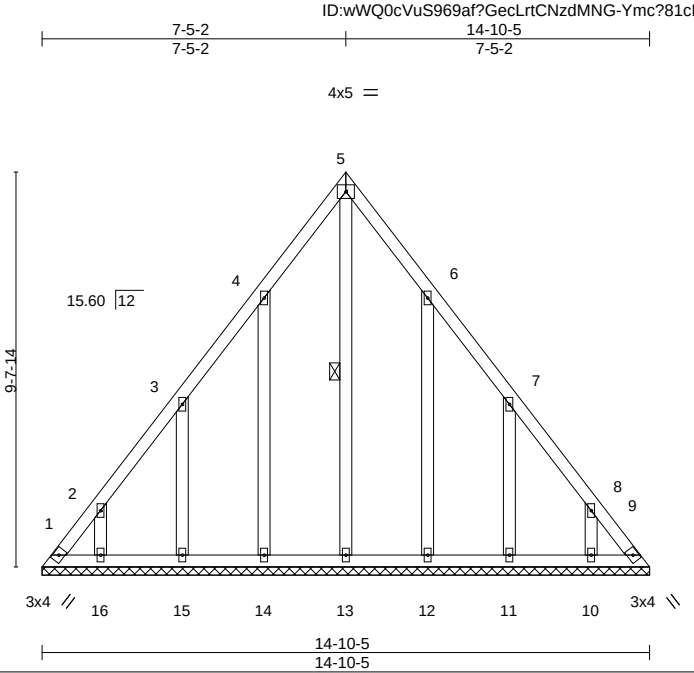


LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 81 lb	FT = 10%

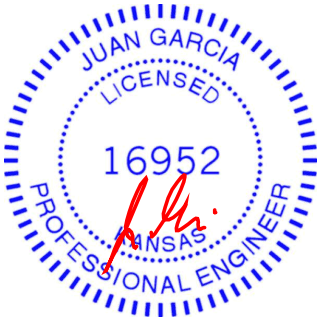
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

REACTIONS. All bearings 14-10-5.
(lb) - Max Horz 1=-261(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-170(LC 6), 9=-135(LC 7), 14=-174(LC 8), 15=-178(LC 8), 16=-150(LC 8), 12=-172(LC 9), 11=-178(LC 9), 10=-150(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 13, 14, 15, 16, 12, 11, 10 except 1=314(LC 8), 9=292(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-403/249, 2-3=-260/191, 8-9=-375/205

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 170 lb uplift at joint 1, 135 lb uplift at joint 9, 174 lb uplift at joint 14, 178 lb uplift at joint 15, 150 lb uplift at joint 16, 172 lb uplift at joint 12, 178 lb uplift at joint 11 and 150 lb uplift at joint 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	LAY7	GABLE	1	1	I41085243
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:05 2020 Page 1
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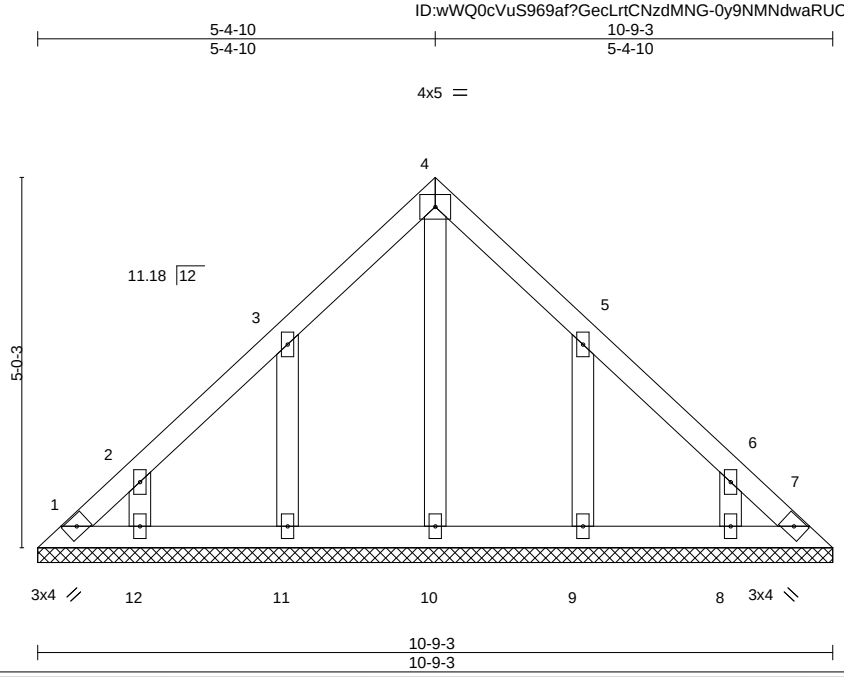

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 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 10-9-3.
(lb) - Max Horz 1=-122(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 8 except 11=-114(LC 8), 9=-113(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 12, 8 except (jt=lb) 11=114, 9=113.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V1	Valley	1	1	I41085244
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:07 2020 Page 1
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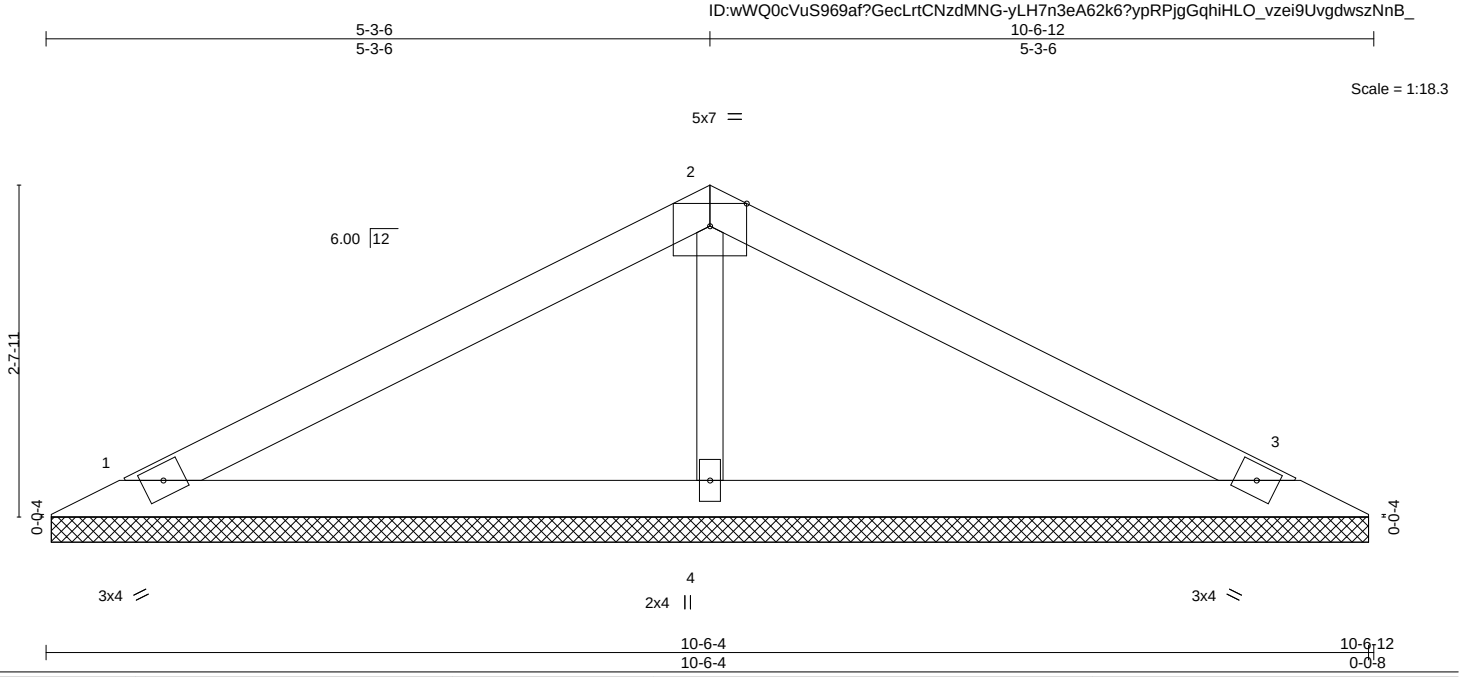

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 25 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=10-5-12, 3=10-5-12, 4=10-5-12
Max Horz 1=41(LC 12)
Max Uplift 1=-40(LC 8), 3=-48(LC 9), 4=-25(LC 8)
Max Grav 1=197(LC 21), 3=197(LC 22), 4=444(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-303/79

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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V2	Valley	1	1	I41085245
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:17 2020 Page 1
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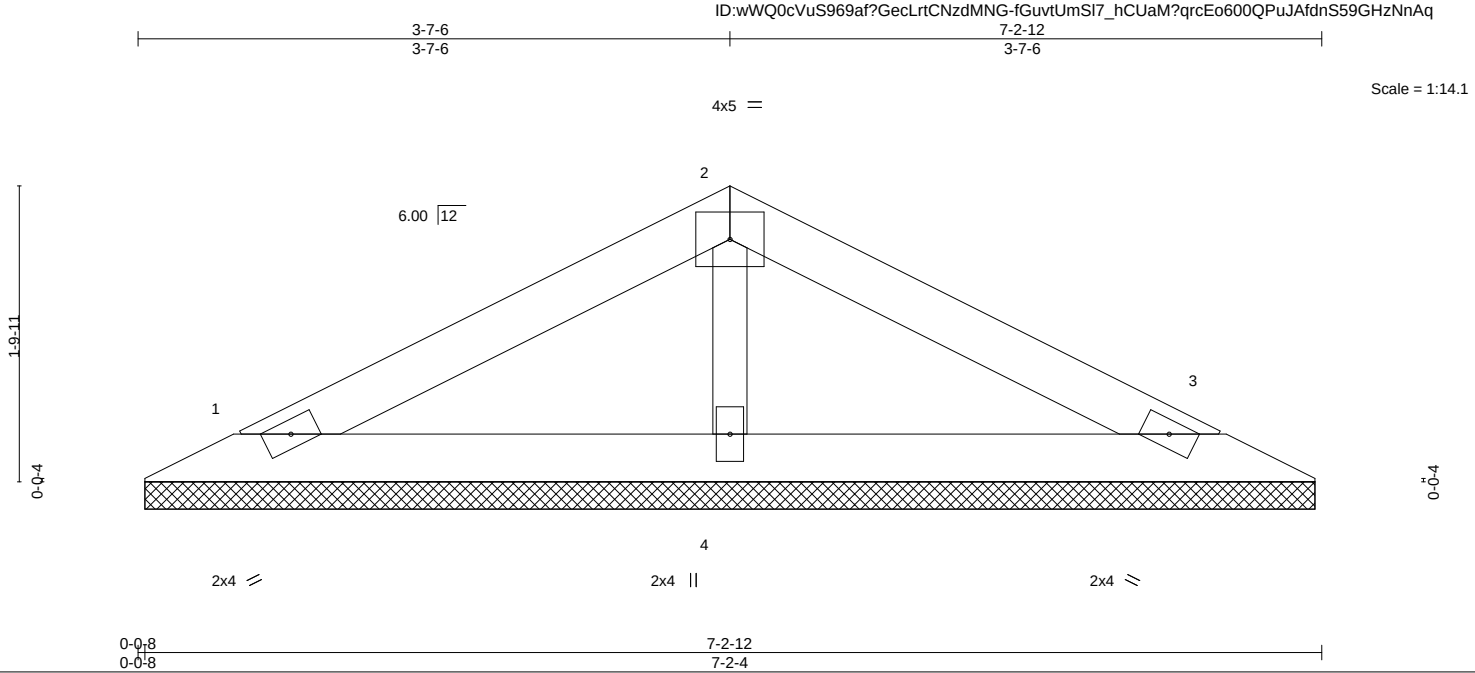

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 17 lb	FT = 10%

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

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

REACTIONS. (size) 1=7-1-12, 3=7-1-12, 4=7-1-12
Max Horz 1=26(LC 12)
Max Uplift 1=-32(LC 8), 3=-37(LC 9), 4=-3(LC 8)
Max Grav 1=140(LC 1), 3=140(LC 1), 4=257(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V3	Valley	1	1	I41085246
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:18 2020 Page 1

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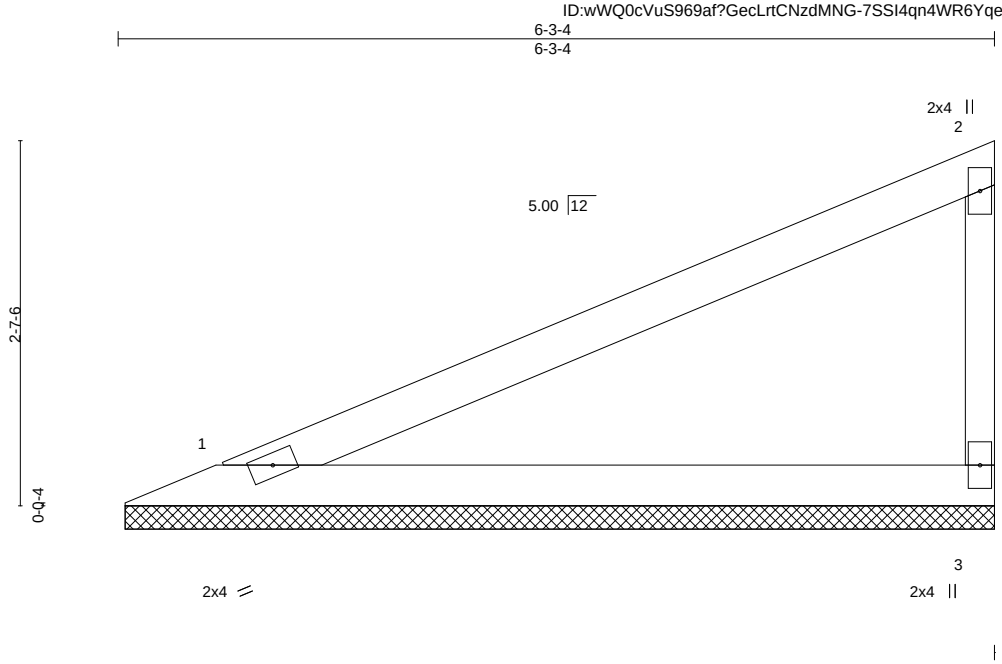

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 16 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-3-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-2-11, 3=6-2-11
Max Horz 1=99(LC 5)
Max Uplift 1=-36(LC 8), 3=-55(LC 8)
Max Grav 1=244(LC 1), 3=244(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V4	Valley	1	1	I41085247
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:19 2020 Page 1
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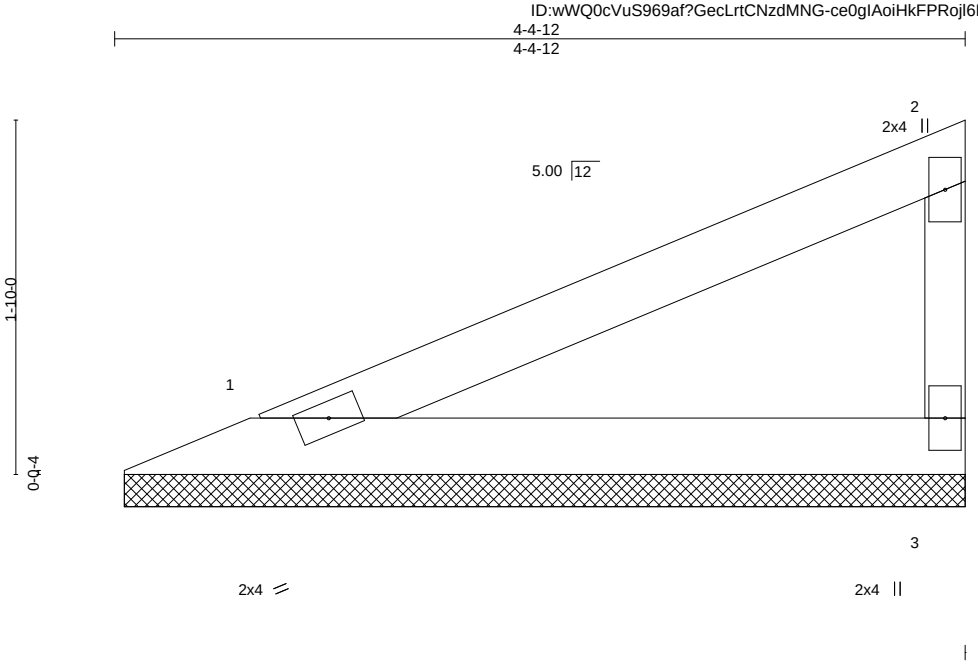

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 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 4-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-4-3, 3=4-4-3
Max Horz 1=65(LC 5)
Max Uplift 1=-23(LC 8), 3=-36(LC 8)
Max Grav 1=159(LC 1), 3=159(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V5	Valley	1	1	I41085248
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:21 2020 Page 1
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4-10-10 9-9-4
4-10-10 4-10-10

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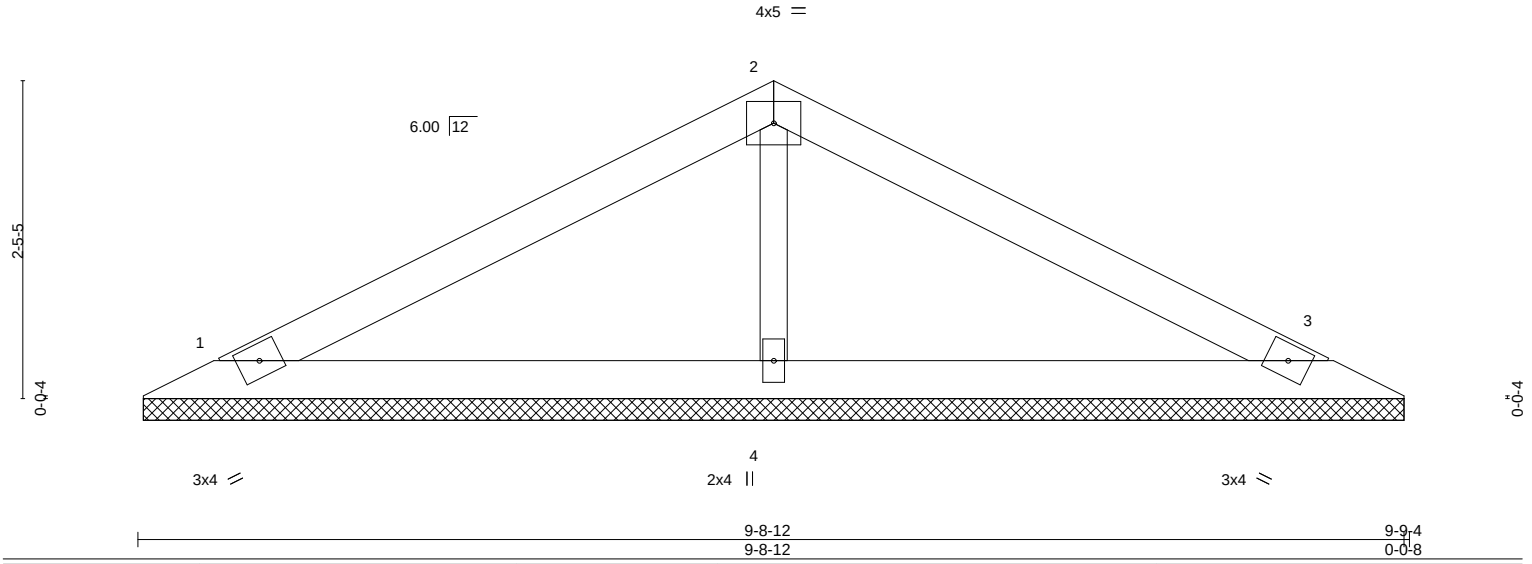


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 23 lb	FT = 10%

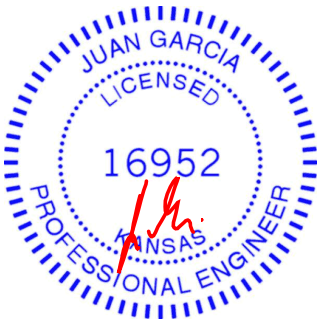
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. (size) 1=9-8-4, 3=9-8-4, 4=9-8-4
Max Horz 1=38(LC 8)
Max Uplift 1=-37(LC 8), 3=-44(LC 9), 4=-23(LC 8)
Max Grav 1=180(LC 21), 3=180(LC 22), 4=406(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-277/73

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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V6	Valley	1	1	I41085249
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:22 2020 Page 1
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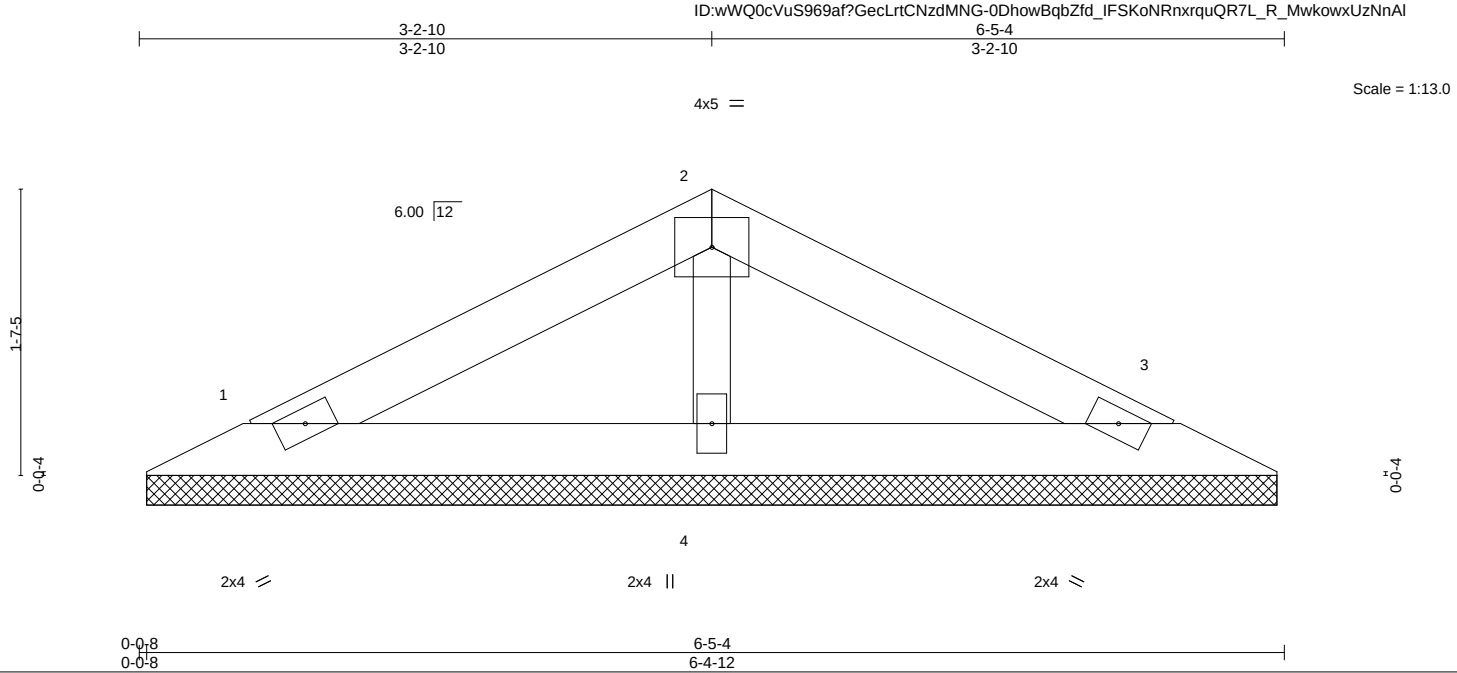

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 15 lb	FT = 10%

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

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

REACTIONS. (size) 1=6-4-4, 3=6-4-4, 4=6-4-4
Max Horz 1=23(LC 8)
Max Uplift 1=-28(LC 8), 3=-32(LC 9), 4=-3(LC 8)
Max Grav 1=122(LC 1), 3=122(LC 1), 4=223(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V7	Valley	1	1	I41085250
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:23 2020 Page 1
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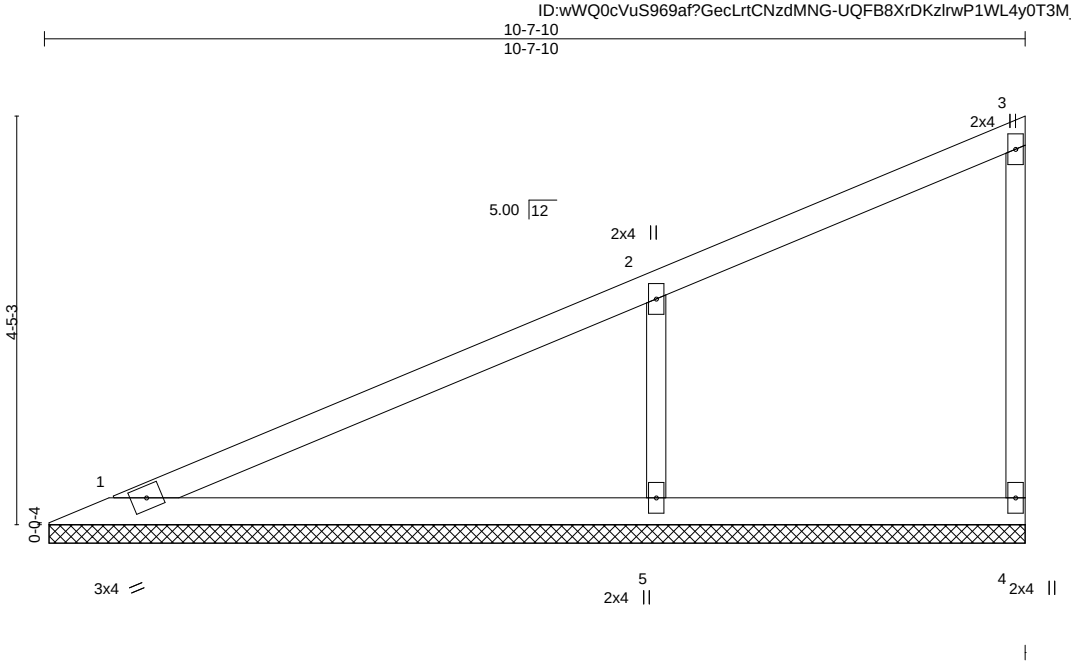

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 29 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=10-7-0, 4=10-7-0, 5=10-7-0
Max Horz 1=178(LC 5)
Max Uplift 1=-4(LC 8), 4=-23(LC 5), 5=-150(LC 8)
Max Grav 1=214(LC 1), 4=99(LC 1), 5=567(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-427/209

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, 4 except (jt=lb) 5=150.
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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V8	Valley	1	1	I41085251
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:24 2020 Page 1
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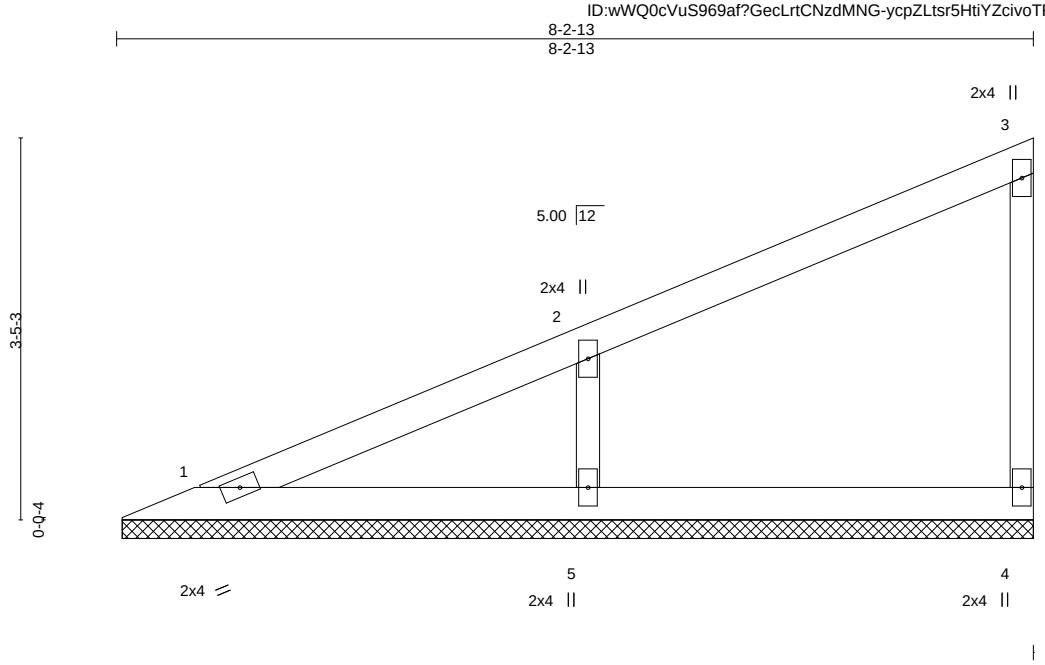


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 10%

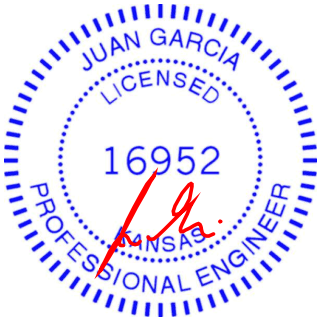
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS. (size) 1=8-2-3, 4=8-2-3, 5=8-2-3
Max Horz 1=135(LC 5)
Max Uplift 4=-23(LC 8), 5=-110(LC 8)
Max Grav 1=112(LC 1), 4=136(LC 1), 5=416(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-323/166

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=110.
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.



April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V9	Valley	1	1	I41085252
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:26 2020 Page 1
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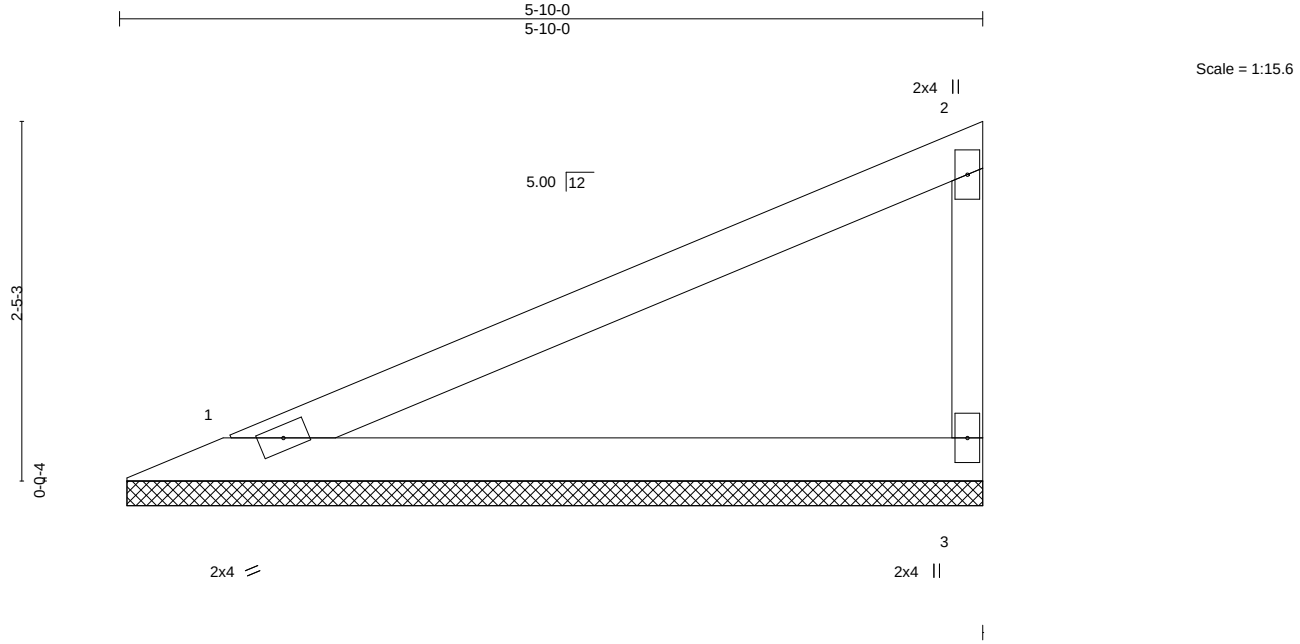

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 14 lb	FT = 10%

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

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

REACTIONS. (size) 1=5-9-6, 3=5-9-6
Max Horz 1=91(LC 5)
Max Uplift 1=-33(LC 8), 3=-51(LC 8)
Max Grav 1=224(LC 1), 3=224(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V10	Valley	1	1	I41085253
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:08 2020 Page 1
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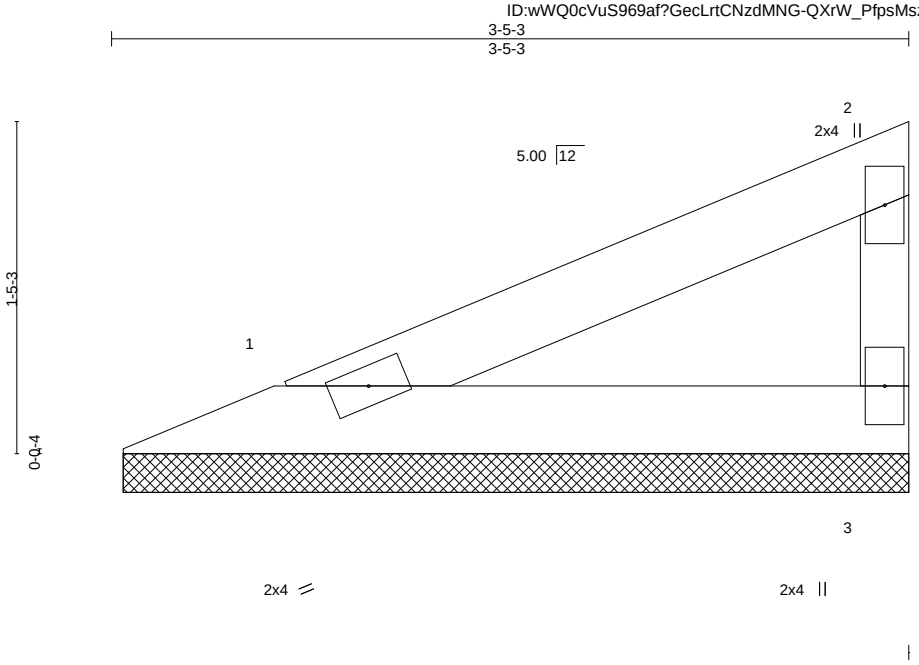

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014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

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

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

REACTIONS. (size) 1=3-4-10, 3=3-4-10
Max Horz 1=47(LC 5)
Max Uplift 1=-17(LC 8), 3=-26(LC 8)
Max Grav 1=116(LC 1), 3=116(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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V11	Valley	1	1	I41085254
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:12 2020 Page 1
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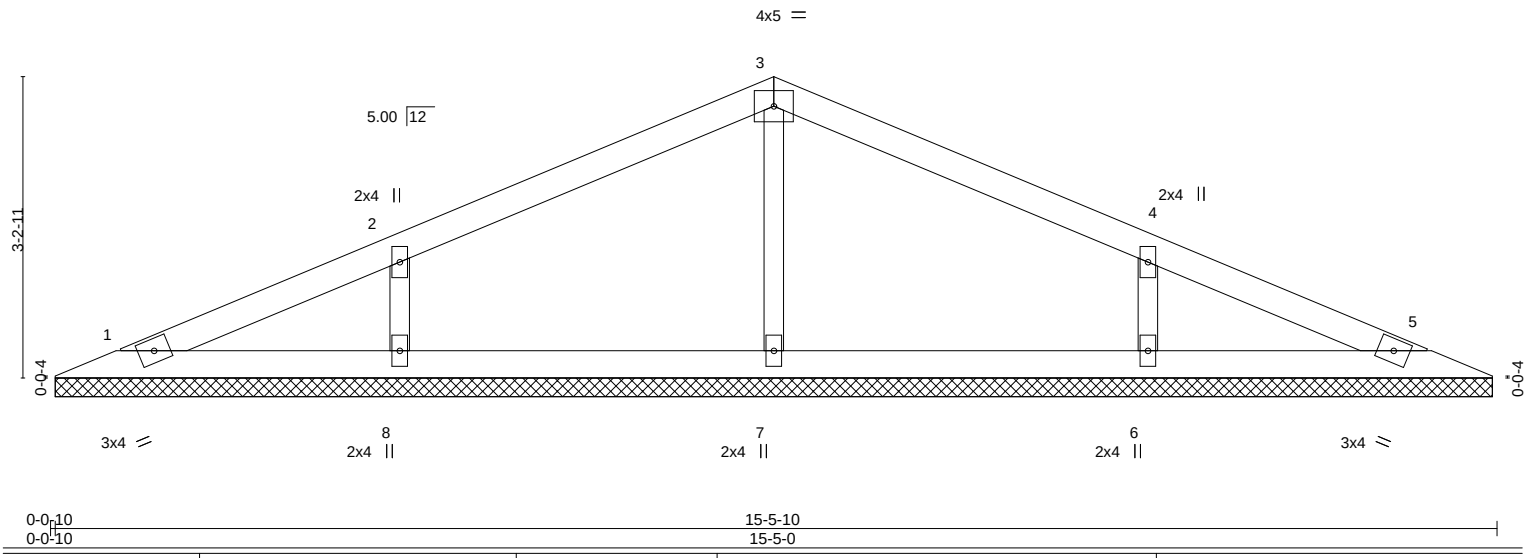
7-8-13 15-5-10
7-8-13 7-8-13

Scale = 1:24.6



0-0-10 15-5-10
0-0-10 15-5-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 39 lb	FT = 10%

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

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

REACTIONS. All bearings 15-4-6.
(lb) - Max Horz 1=-51(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-105(LC 8), 6=-105(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=316(LC 1), 8=374(LC 21), 6=374(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-294/148, 4-6=-294/148

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, 5 except (jt=lb) 8=105, 6=105.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 24,2020

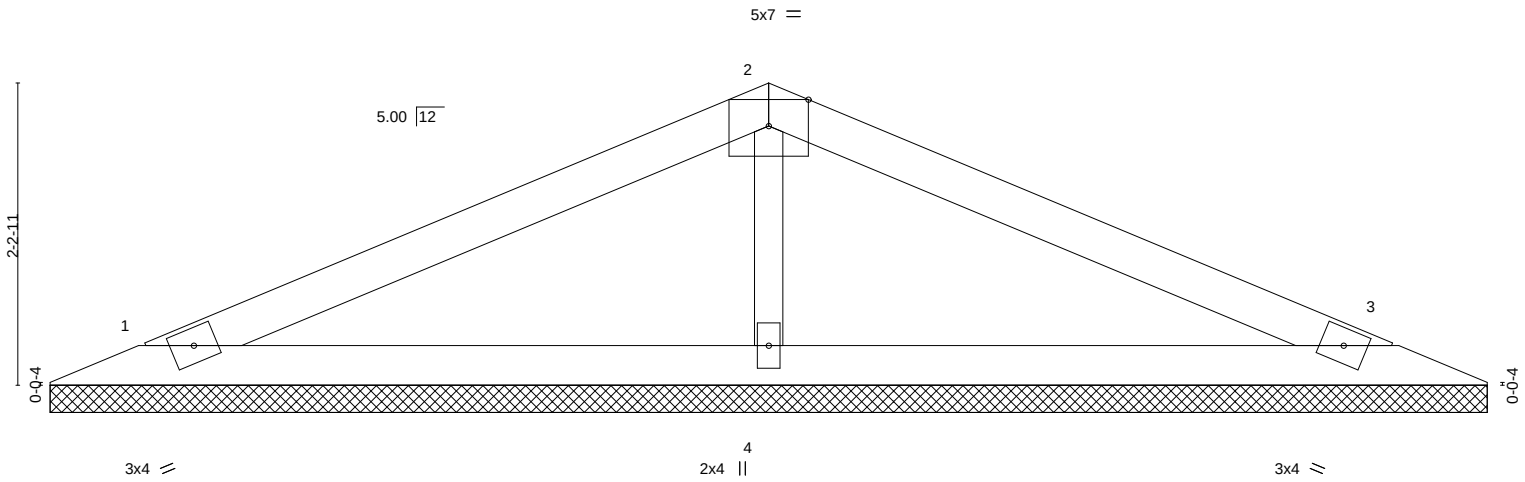
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V12	Valley	1	1	I41085255
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:13 2020 Page 1
ID:wWQ0cVuS969af?GecLrtCNzdMNG-nVeP16jxhuUGjtGbm_ng3yyI?o1PNME2sq7x7WzNnAu

5-4-0 10-8-0
5-4-0 5-4-0

Scale = 1:16.9



0-0-10 10-8-0
0-0-10 10-7-6

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 25 lb	FT = 10%

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

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

REACTIONS. (size) 1=10-6-13, 3=10-6-13, 4=10-6-13
Max Horz 1=34(LC 8)
Max Uplift 1=-39(LC 8), 3=-45(LC 9), 4=-28(LC 8)
Max Grav 1=189(LC 21), 3=189(LC 22), 4=453(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-315/83

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.

April 24,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 62 H4
400157	V13	Valley	1	1	I41085256
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Apr 23 16:38:15 2020 Page 1
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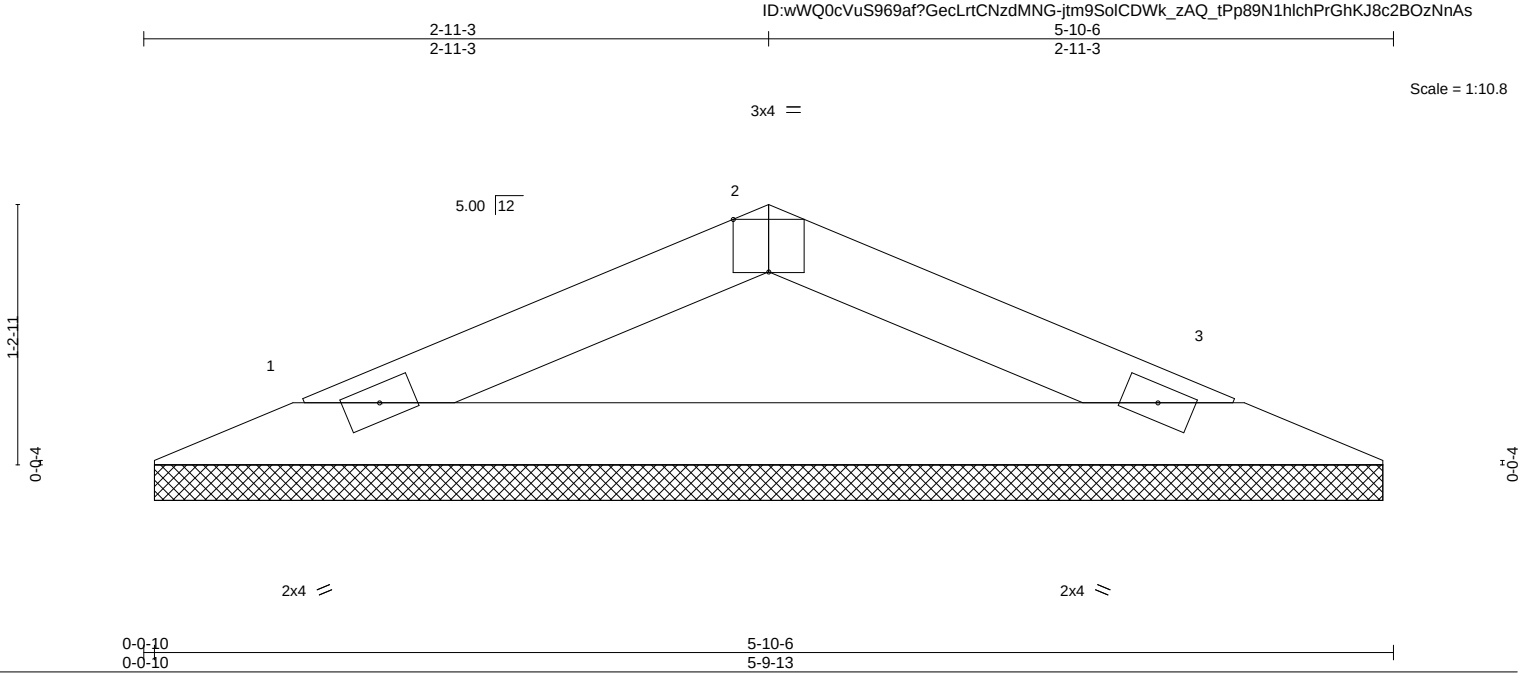


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	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	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 10%

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

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

REACTIONS. (size) 1=5-9-3, 3=5-9-3
Max Horz 1=16(LC 8)
Max Uplift 1=-25(LC 8), 3=-25(LC 9)
Max Grav 1=196(LC 1), 3=196(LC 1)

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

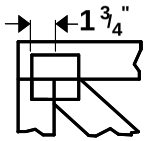
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed;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

April 24,2020

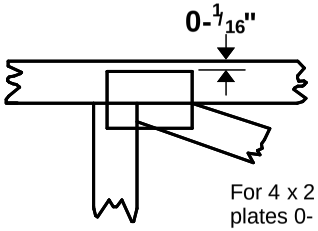
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

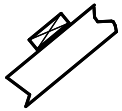
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

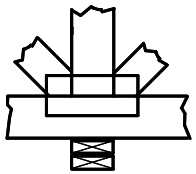
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

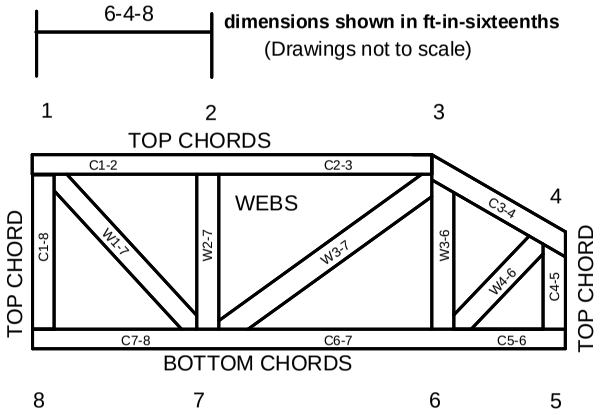


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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