RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

05/29/2020

RE: 400156
Lot 4 H3

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 60 individual, dated Truss Design Drawings and 0 Additional Drawings.

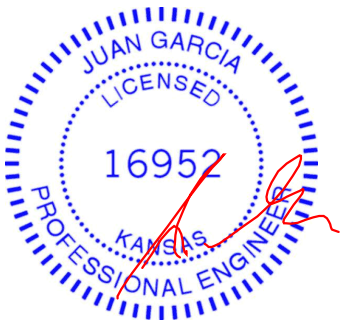
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I39353144	A1	4/30/2020	27	I39353170	D5	4/30/2020
2	I39353145	A2	4/30/2020	28	I39353171	D6	4/30/2020
3	I39353146	A3	4/30/2020	29	I39353172	D8	4/30/2020
4	I39353147	A4	4/30/2020	30	I39353173	E1	4/30/2020
5	I39353148	A5	4/30/2020	31	I39353174	E2	4/30/2020
6	I39353149	B1	4/30/2020	32	I39353175	E3	4/30/2020
7	I39353150	B2	4/30/2020	33	I39353176	J1	4/30/2020
8	I39353151	B3	4/30/2020	34	I39353177	J2	4/30/2020
9	I39353152	B4	4/30/2020	35	I39353178	J3	4/30/2020
10	I39353153	B5	4/30/2020	36	I39353179	J4	4/30/2020
11	I39353154	B6	4/30/2020	37	I39353180	LAY1	4/30/2020
12	I39353155	B7	4/30/2020	38	I39353181	LAY2	4/30/2020
13	I39353156	B8	4/30/2020	39	I39353182	LAY3	4/30/2020
14	I39353157	B9	4/30/2020	40	I39353183	LAY4	4/30/2020
15	I39353158	B10	4/30/2020	41	I39353184	V1	4/30/2020
16	I39353159	B11	4/30/2020	42	I39353185	V2	4/30/2020
17	I39353160	C1	4/30/2020	43	I39353186	V3	4/30/2020
18	I39353161	C2	4/30/2020	44	I39353187	V4	4/30/2020
19	I39353162	C3	4/30/2020	45	I39353188	V5	4/30/2020
20	I39353163	C4	4/30/2020	46	I39353189	V6	4/30/2020
21	I39353164	C5	4/30/2020	47	I39353190	V7	4/30/2020
22	I39353165	C6	4/30/2020	48	I39353191	V8	4/30/2020
23	I39353166	D1	4/30/2020	49	I39353192	V9	4/30/2020
24	I39353167	D2	4/30/2020	50	I39353193	V10	4/30/2020
25	I39353168	D3	4/30/2020	51	I39353194	V11	4/30/2020
26	I39353169	D4	4/30/2020	52	I39353195	V12	4/30/2020

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 30, 2020
Garcia, Juan

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

05/29/2020

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

RE: 400156 - Lot 4 H3

Site Information:

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

No.	Seal#	Truss Name	Date
53	I39353196	V13	4/30/2020
54	I39353197	V14	4/30/2020
55	I39353198	V15	4/30/2020
56	I39353199	V16	4/30/2020
57	I39353200	V17	4/30/2020
58	I39353201	V18	4/30/2020
59	I39353202	V19	4/30/2020
60	I39353203	V20	4/30/2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

05/29/2020

RE: 400156
Lot 4 H3

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 60 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I39353144	A1	4/30/2020	27	I39353170	D5	4/30/2020
2	I39353145	A2	4/30/2020	28	I39353171	D6	4/30/2020
3	I39353146	A3	4/30/2020	29	I39353172	D8	4/30/2020
4	I39353147	A4	4/30/2020	30	I39353173	E1	4/30/2020
5	I39353148	A5	4/30/2020	31	I39353174	E2	4/30/2020
6	I39353149	B1	4/30/2020	32	I39353175	E3	4/30/2020
7	I39353150	B2	4/30/2020	33	I39353176	J1	4/30/2020
8	I39353151	B3	4/30/2020	34	I39353177	J2	4/30/2020
9	I39353152	B4	4/30/2020	35	I39353178	J3	4/30/2020
10	I39353153	B5	4/30/2020	36	I39353179	J4	4/30/2020
11	I39353154	B6	4/30/2020	37	I39353180	LAY1	4/30/2020
12	I39353155	B7	4/30/2020	38	I39353181	LAY2	4/30/2020
13	I39353156	B8	4/30/2020	39	I39353182	LAY3	4/30/2020
14	I39353157	B9	4/30/2020	40	I39353183	LAY4	4/30/2020
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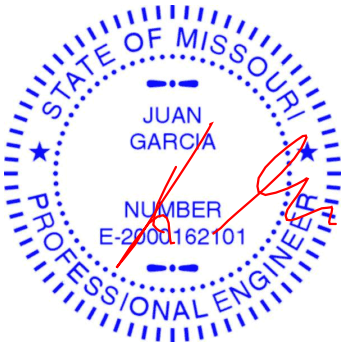
19	I39353162	C3	4/30/2020	45	I39353188	V5	4/30/2020
20	I39353163	C4	4/30/2020	46	I39353189	V6	4/30/2020
21	I39353164	C5	4/30/2020	47	I39353190	V7	4/30/2020
22	I39353165	C6	4/30/2020	48	I39353191	V8	4/30/2020
23	I39353166	D1	4/30/2020	49	I39353192	V9	4/30/2020
24	I39353167	D2	4/30/2020	50	I39353193	V10	4/30/2020
25	I39353168	D3	4/30/2020	51	I39353194	V11	4/30/2020
26	I39353169	D4	4/30/2020	52	I39353195	V12	4/30/2020

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

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193



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

April 30, 2020

Garcia, Juan

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

05/29/2020

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

RE: 400156 - Lot 4 H3

Site Information:

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

No.	Seal#	Truss Name	Date
53	I39353196	V13	4/30/2020
54	I39353197	V14	4/30/2020
55	I39353198	V15	4/30/2020
56	I39353199	V16	4/30/2020
57	I39353200	V17	4/30/2020
58	I39353201	V18	4/30/2020
59	I39353202	V19	4/30/2020
60	I39353203	V20	4/30/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A1	Hip Girder	1	1	I39353144

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:16 2019 Page 1

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-V2S9xztPPfefaLZIHAcX2CHU8pdo8zbrXizcEkyHLuv

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

-0-10-8	3-0-0	7-2-0	11-4-0	14-4-0	15-2-8
0-10-8	3-0-0	4-2-0	4-2-0	3-0-0	0-10-8

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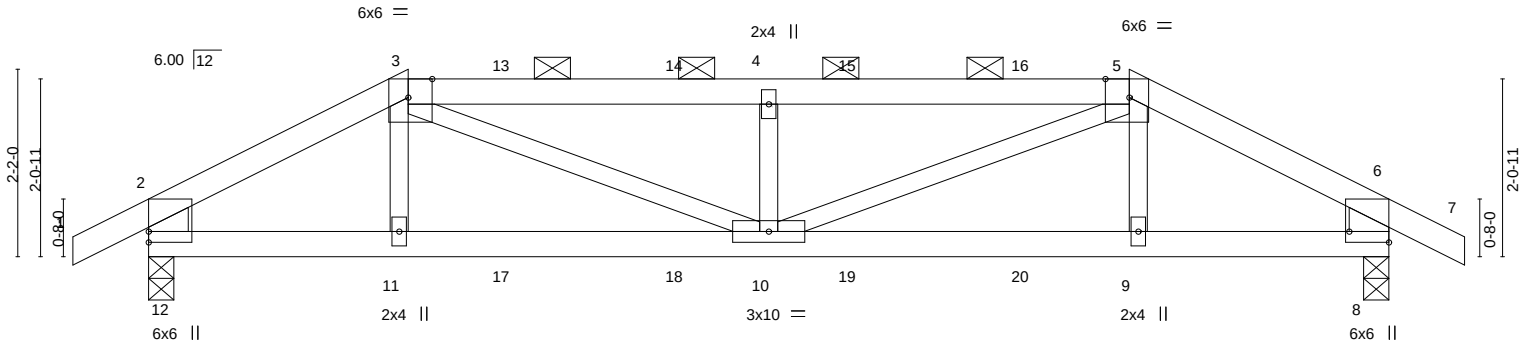


3-0-0	7-2-0	11-4-0	14-4-0
3-0-0	4-2-0	4-2-0	3-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.06	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.12	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	10	>999	240	Weight: 48 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-8: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-13 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 12=769/0-3-8, 8=769/0-3-8
Max Horz 12=42(LC 7)
Max Uplift 12=-212(LC 8), 8=-212(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-997/301, 3-4=-1469/442, 4-5=-1469/442, 5-6=-997/301, 2-12=-668/203, 6-8=-668/203
BOT CHORD 11-12=-250/822, 10-11=-254/822, 9-10=-239/822, 8-9=-234/822
WEBS 3-10=-197/715, 4-10=-417/205, 5-10=-198/715

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=212, 8=212.
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) 85 lb down and 145 lb up at 3-0-0, 70 lb down and 53 lb up at 4-2-0, 70 lb down and 53 lb up at 6-2-0, 70 lb down and 53 lb up at 8-2-0, and 70 lb down and 53 lb up at 10-2-0, and 85 lb down and 145 lb up at 11-4-0 on top chord, and 30 lb down at 3-0-0, 18 lb down at 4-2-0, 18 lb down at 6-2-0, 18 lb down at 8-2-0, and 18 lb down at 10-2-0, and 30 lb down at 11-3-4 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

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A1	Hip Girder	1	1	I39353144

Job Reference (optional)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 8-12=-20
   Concentrated Loads (lb)
   Vert: 3=-12(F) 5=-12(F) 11=-10(F) 9=-10(F) 13=-12(F) 14=-12(F) 15=-12(F) 16=-12(F) 17=-10(F) 18=-10(F) 19=-10(F) 20=-10(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

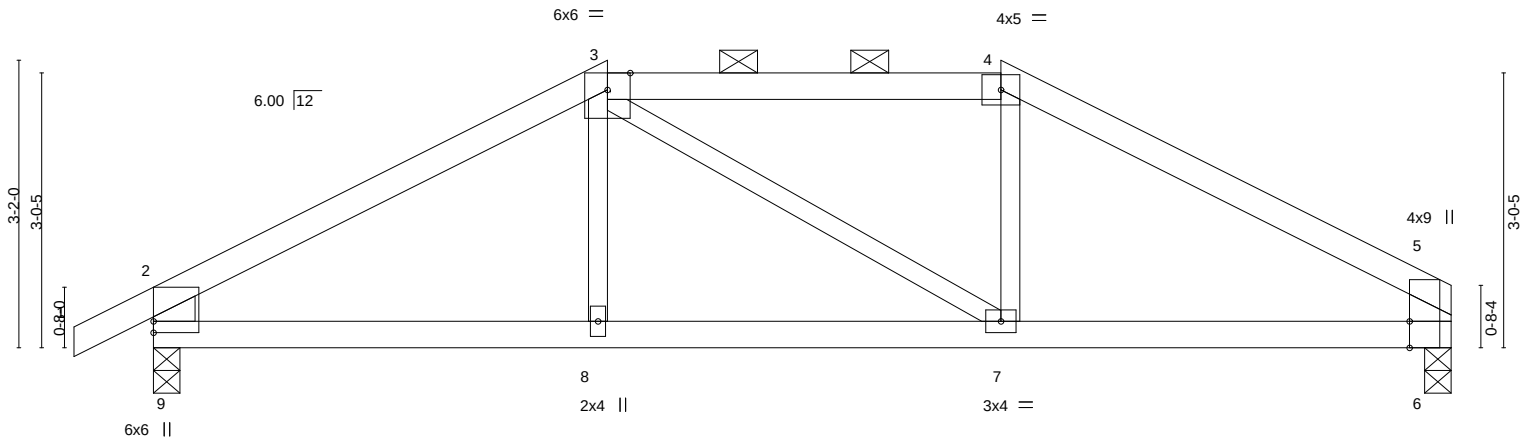
Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A2	Hip	1	1	I39353145

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:17 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-zE0Y9Ju2AzmWCV8Uru7maQqh8D?8tSc?mMj9mByHLuu

-0-10-8 5-0-0 9-4-0 14-3-8
0-10-8 5-0-0 4-4-0 4-11-8

Scale = 1:25.4



5-0-0 9-4-0 14-3-8
5-0-0 4-4-0 4-11-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.06	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.11	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-8	>999	240	Weight: 45 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-11 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. (lb/size) 9=703/0-3-8, 6=619/0-3-8
Max Horz 9=59(LC 5)
Max Uplift 9=-85(LC 8), 6=-59(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-880/67, 3-4=-699/95, 4-5=-866/65, 2-9=-637/119, 5-6=-537/90
BOT CHORD 8-9=-58/707, 7-8=-60/704, 6-7=-27/701

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A3	Roof Special Girder	1	1	I39353146

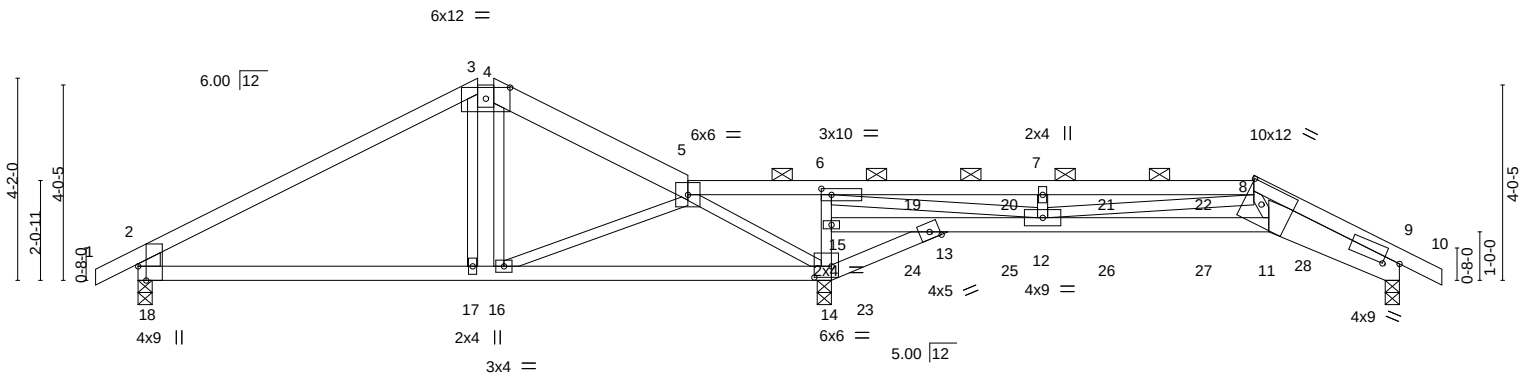
Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:18 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-RQawMfugxGuNqfjgObf?7dNqYdHzcnO8??SjJdyHLut

-0-10-8	7-0-0	7-4-0	11-4-0	14-3-8	16-8-5	18-7-12	23-0-0	26-0-0	26-10-8
0-10-8	7-0-0	0-4-0	4-0-0	2-11-8	2-4-13	1-11-7	4-4-4	3-0-0	0-10-8

Scale = 1:47.5



7-0-0	7-4-0	11-4-0	14-1-12	14-3-8	16-8-5	18-7-12	23-3-11	26-0-0
7-0-0	0-4-0	4-0-0	2-9-12	0-1-12	2-4-13	1-11-7	4-7-15	2-8-5

Plate Offsets (X,Y)-- [2:0-1-6,0-2-12], [3:0-6-0,0-2-12], [6:0-2-8,0-1-8], [8:0-4-5,0-5-0], [9:0-3-15,0-1-8], [14:0-4-4,0-2-12], [18:0-0-0,0-2-12], [18:0-3-8,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.11	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.21	11-12	>661	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.11	11-12	>999	240	Weight: 98 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 3-4,4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 9-11: 2x8 SP DSS
WEBS 2x3 SPF No.2 *Except* 2-18: 2x6 SPF No.2

BRACING-

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

REACTIONS. (lb/size) 18=607/0-3-8, 14=1440/0-3-8, 9=520/0-3-8
Max Horz 18=-61(LC 6)
Max Uplift 18=-147(LC 29), 14=-277(LC 9), 9=-166(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-620/170, 3-4=-462/203, 4-5=-540/202, 5-6=-116/747, 6-7=-834/335, 7-8=-834/335, 8-9=-1896/583, 2-18=-554/192
BOT CHORD 17-18=-115/462, 16-17=-115/460, 14-16=-336/323, 13-14=-855/215, 12-13=-765/189, 11-12=-425/1258, 9-11=-519/1714
WEBS 5-16=-61/407, 5-14=-995/141, 14-15=-553/207, 6-15=-615/222, 6-12=-456/1590, 8-12=-452/180, 8-11=-148/816, 7-12=-338/184

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=147, 14=277, 9=166.
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.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 54 lb up at 16-0-0, 71 lb down and 54 lb up at 18-0-0, 71 lb down and 54 lb up at 20-0-0, and 71 lb down and 54 lb up at 22-0-0, and 118 lb down and 146 lb up at 23-0-0 on top chord, and 18 lb down at 16-0-0, 18 lb down at 18-0-0, 18 lb down at 20-0-0, and 18 lb down at 22-0-0, and 30 lb down at 22-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A3	Roof Special Girder	1	1	I39353146

Job Reference (optional)

NOTES-

12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-8=-70, 8-10=-70, 14-18=-20, 13-14=-20, 11-13=-20, 9-11=-20
   Concentrated Loads (lb)
   Vert: 8=-13(F) 19=-13(F) 20=-13(F) 21=-13(F) 22=-13(F) 23=-10(F) 25=-10(F) 26=-10(F) 27=-10(F) 28=-10(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A4	Roof Special	1	1	I39353147

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:20 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OphgnLwwTu853yt3W0hTC2S9YR1C4eURSJxpNVyHLur

-0-10-8	7-2-0	9-4-0	14-3-8	16-8-5	21-0-0	23-3-11	26-0-0	26-10-8
0-10-8	7-2-0	2-2-0	4-11-8	2-4-13	4-3-11	2-3-11	2-8-5	0-10-8

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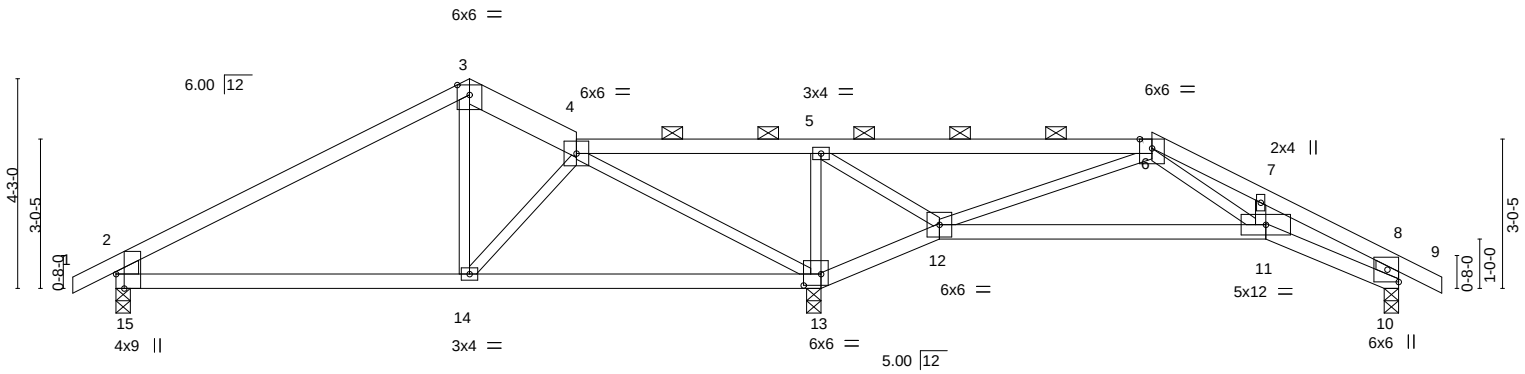

7-2-0	9-4-0	14-1-12	14-3-8	16-8-5	21-0-0	23-3-11	26-0-0
7-2-0	2-2-0	4-9-12	0-1-12	2-4-13	4-3-11	2-3-11	2-8-5

Plate Offsets (X,Y)-- [2:0-1-6,0-2-12], [8:0-1-6,0-2-12], [10:0-1-2,0-2-12], [13:0-4-4,0-2-12], [15:0-0-0,0-2-12], [15:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.08	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.18	11-12	>754	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	11-12	>999	240	Weight: 88 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-15,8-10: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-13.

REACTIONS. (lb/size) 15=579/0-3-8, 13=1442/0-3-8, 10=433/0-3-8
Max Horz 15=-69(LC 6)
Max Uplift 15=-132(LC 8), 13=-193(LC 9), 10=-112(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-559/135, 3-4=-456/167, 4-5=0/623, 5-6=0/435, 6-7=-631/185, 7-8=-789/152, 2-15=-530/177, 8-10=-620/145
BOT CHORD 14-15=-76/400, 13-14=-128/287, 12-13=-709/75, 11-12=-105/384, 10-11=-90/654
WEBS 4-13=-973/65, 5-13=-647/193, 5-12=0/277, 6-11=0/326, 6-12=-842/183

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=132, 13=193, 10=112.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A5	Half Hip Girder	1	2	I39353148

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:21 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-s?F2_hxYEBGyh6RF4jCilG_IuqK0p7PahzhNvyyHLuq

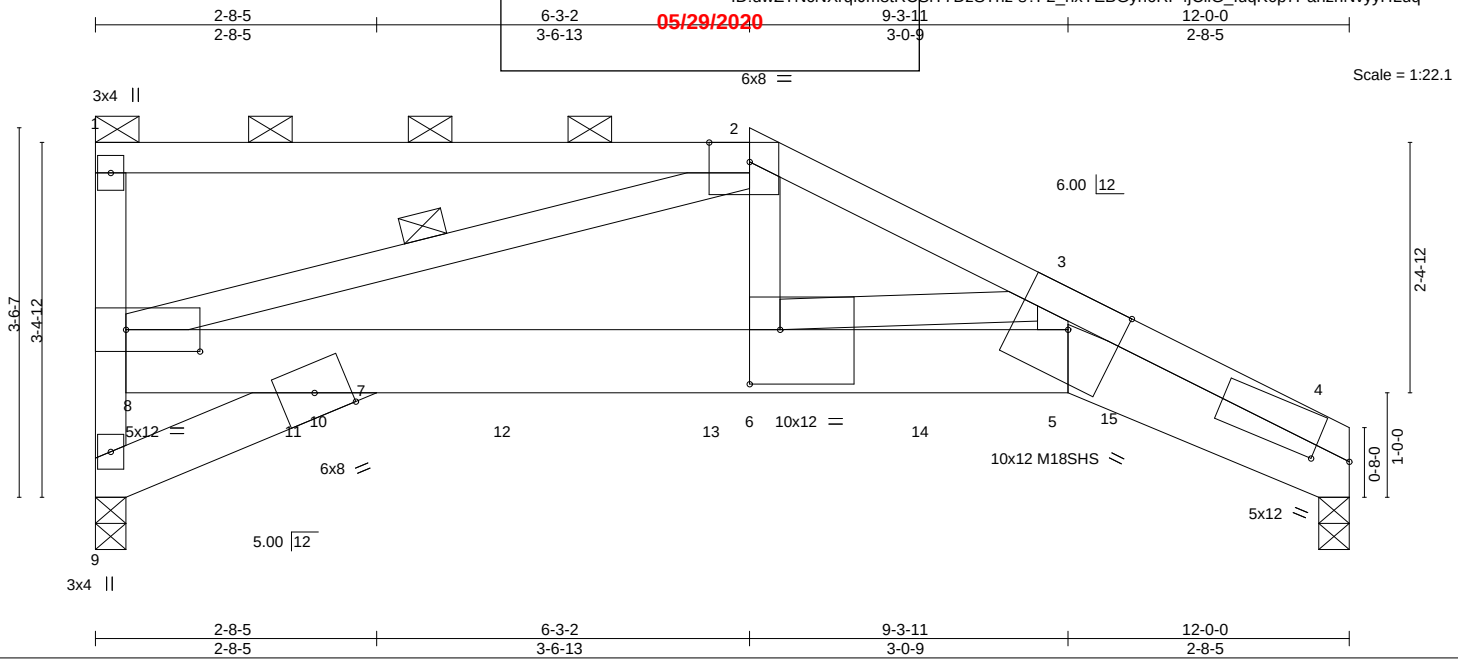

Plate Offsets (X,Y)-- [2:0-4-10,Edge], [4:0-4-3,0-1-5], [6:0-3-8,0-6-4], [8:0-8-8,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.13	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.23	5-6	>622	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.18	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	5-6	>999	240	Weight: 147 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
2-4: 2x4 SPF 2400F 2.0E
BOT CHORD 2x8 SP DSS *Except*
7-9: 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-5 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 2-8

REACTIONS. (lb/size) 9=3571/0-3-8, 4=3571/0-3-8
Max Horz 9=-125(LC 6)
Max Uplift 9=-283(LC 4), 4=-401(LC 9)
Max Grav 9=3571(LC 1), 4=3581(LC 2)

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-3200/256, 1-2=-420/67, 2-3=-7491/553, 3-4=-11431/1174
BOT CHORD 7-9=-41/535, 7-8=-524/6259, 6-7=-458/6443, 5-6=-854/8836, 4-5=-1046/10392
WEBS 2-8=-6355/486, 2-6=-299/4827, 3-6=-2108/466, 3-5=-437/3419

NOTES-
1) N/A
2) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-2-0 oc, 2x8 - 4 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
3) 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.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 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
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
11) Bearing at joint(s) 9, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=283, 4=401.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

November 20,2019

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	A5	Half Hip Girder	1	2	I39353148

Wheeler Lumber, Waverly, KS 66871 — Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:21 2019 Page 2
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NOTES-

15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1218 lb down and 55 lb up at 2-0-0, 1269 lb down and 55 lb up at 4-0-0, 1270 lb down and 54 lb up at 6-0-0, and 1273 lb down and 204 lb up at 8-0-0, and 1254 lb down and 201 lb up at 10-0-0 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: 1-2=-70, 2-4=-70, 7-9=-20, 5-7=-20, 4-5=-20
   Concentrated Loads (lb)
   Vert: 10=-1218(B) 12=-1217(B) 13=-1217(B) 14=-1219(B) 15=-1217(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B1	Common Supported Gable	1	1	I39353149

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:23 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-oONpPNyompWgwQbeB8EAqh4pde7CH84t8HAU_qyHLuo

20-0-0
20-0-0
39-10-8
19-10-8

Scale = 1:67.3

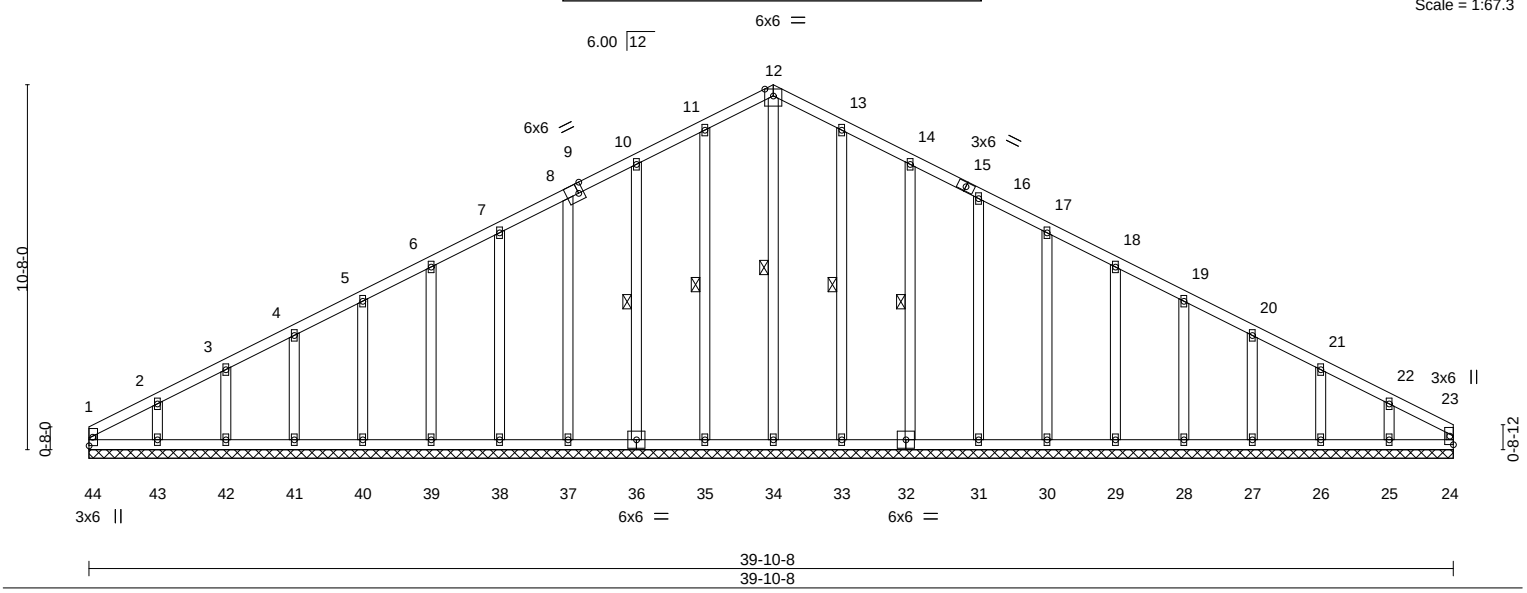

Plate Offsets (X,Y)-- [1:0-0-10,0-1-4], [8:0-1-15,0-0-0], [9:0-0-0,0-1-12], [9:0-1-12,Edge], [23:0-0-10,0-1-4], [24:0-0-0,0-1-4], [44:0-0-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 214 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 12-34, 11-35, 10-36, 13-33, 14-32

REACTIONS. All bearings 39-10-8.
(lb) - Max Horz 44=162(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 44, 35, 36, 37, 38, 39, 40, 41, 42, 33, 32, 31, 30, 29, 28, 27, 26 except 43=-121(LC 8), 25=-110(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 44, 24, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 33, 32, 31, 30, 29, 28, 27, 26, 25

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-46/265, 11-12=-49/286, 12-13=-49/278

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 44, 35, 36, 37, 38, 39, 40, 41, 42, 33, 32, 31, 30, 29, 28, 27, 26 except (jt=lb) 43=121, 25=110.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B2	Roof Special	1	1	I39353150

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:27 2019 Page 1
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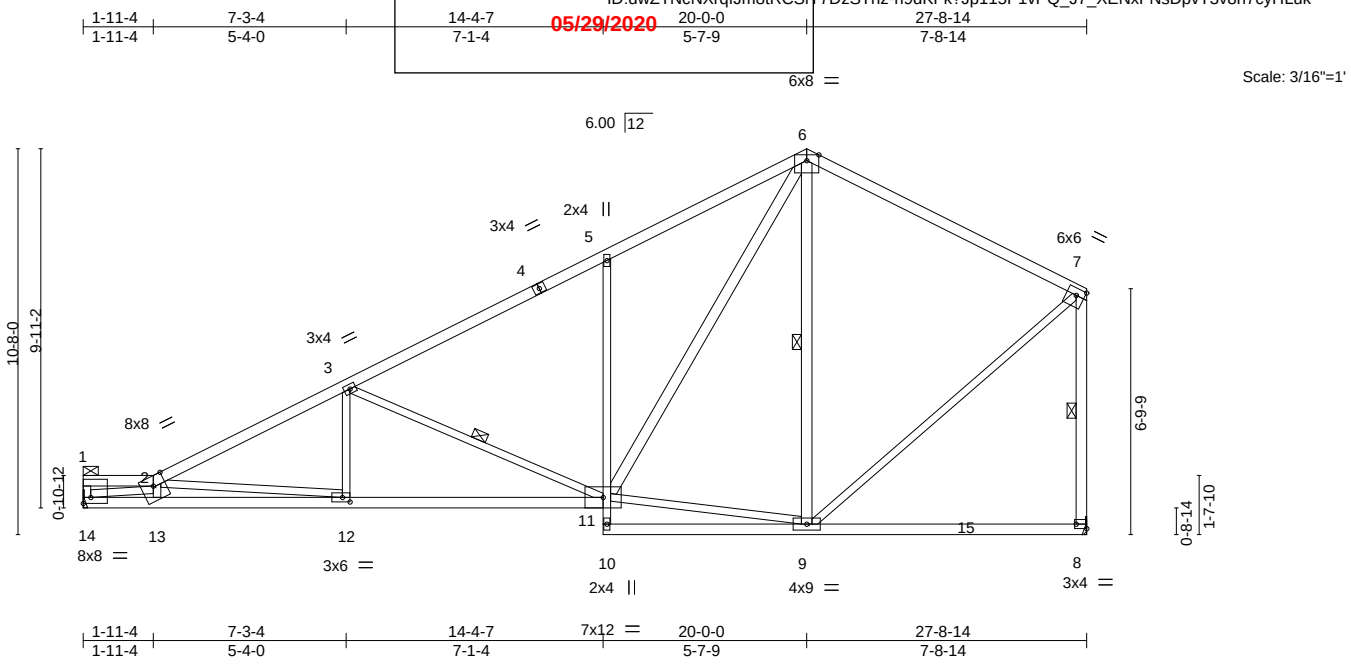


Plate Offsets (X,Y)-- [1:0-1-4,0-0-0], [7:Edge,0-2-4], [8:Edge,0-1-8], [12:0-2-8,0-1-8], [13:0-1-2,0-0-9], [14:Edge,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.17	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.32	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.12	12-13	>999	240	Weight: 131 lb	FT=10%

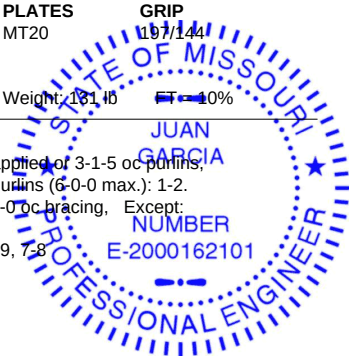
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x3 SPF No.2 *Except* 11-14: 2x4 SPF 2100F 1.8E, 8-10: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 6-11,6-9,7-8: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-5 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, Except: 6-0-0 oc bracing: 9-10.
WEBS 1 Row at midpt 3-11, 6-9, 7-8

REACTIONS. (lb/size) 14=1237/Mechanical, 8=1237/Mechanical
Max Horz 14=310(LC 7)
Max Uplift 14=-181(LC 8), 8=-147(LC 8)
Max Grav 14=1274(LC 2), 8=1316(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-273/35, 2-3=-2495/347, 3-5=-1563/254, 5-6=-1535/401, 6-7=-892/221, 7-8=-1167/190
BOT CHORD 13-14=-589/3197, 12-13=-575/3180, 11-12=-403/2222, 5-11=-474/265
WEBS 2-14=-3079/426, 2-12=-978/173, 3-12=0/424, 3-11=-981/249, 9-11=-41/726, 6-11=-345/1199, 6-9=-500/145, 7-9=-89/910

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=181, 8=147.



November 20,2019

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B2	Roof Special	1	1	I39353150

Job Reference (optional)

NOTES-

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.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B3	Roof Special	1	1	I39353151

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:28 2019 Page 1
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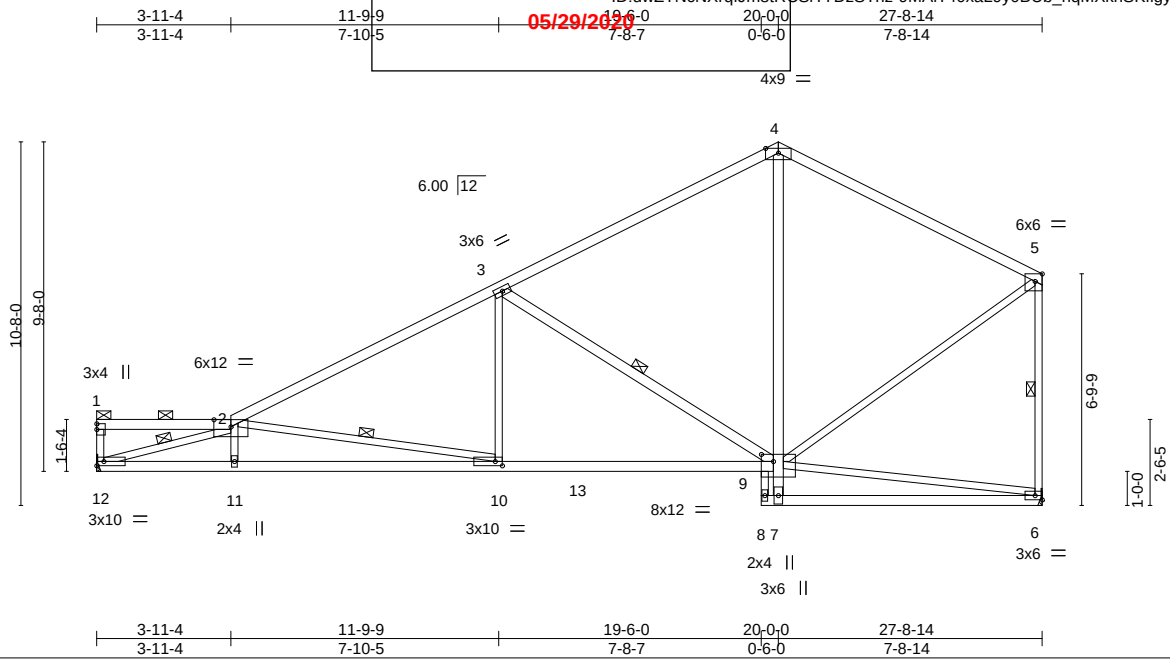

Plate Offsets (X,Y)-- [2:0-6-0,0-2-8], [5:0-2-8,Edge], [9:0-4-4,0-2-8], [10:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.24	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.44	10-11	>751	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16	10-11	>999	240	Weight: 124 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except* 1-2: 2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 8-9: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-9,4-7: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-6-4 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, Except: 6-0-0 oc bracing: 8-9.
WEBS	1 Row at midpt 2-12, 2-10, 3-9, 5-6

REACTIONS. (lb/size) 12=1239/Mechanical, 6=1240/Mechanical
Max Horz 12=304(LC 7)
Max Uplift 12=-184(LC 8), 6=-143(LC 8)
Max Grav 12=1293(LC 2), 6=1291(LC 2)

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

TOP CHORD	2-3=-2075/287, 3-4=-1036/198, 4-5=-975/227, 5-6=-1163/185
BOT CHORD	11-12=-557/3352, 10-11=-550/3364, 9-10=-278/1808, 8-9=-572/0
WEBS	2-12=-3430/460, 2-10=-1587/275, 3-10=0/616, 3-9=-1181/319, 7-9=0/780, 4-9=-26/434, 5-9=-93/971

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=184, 6=143.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B4	Roof Special	1	1	I39353152

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:29 2019 Page 1
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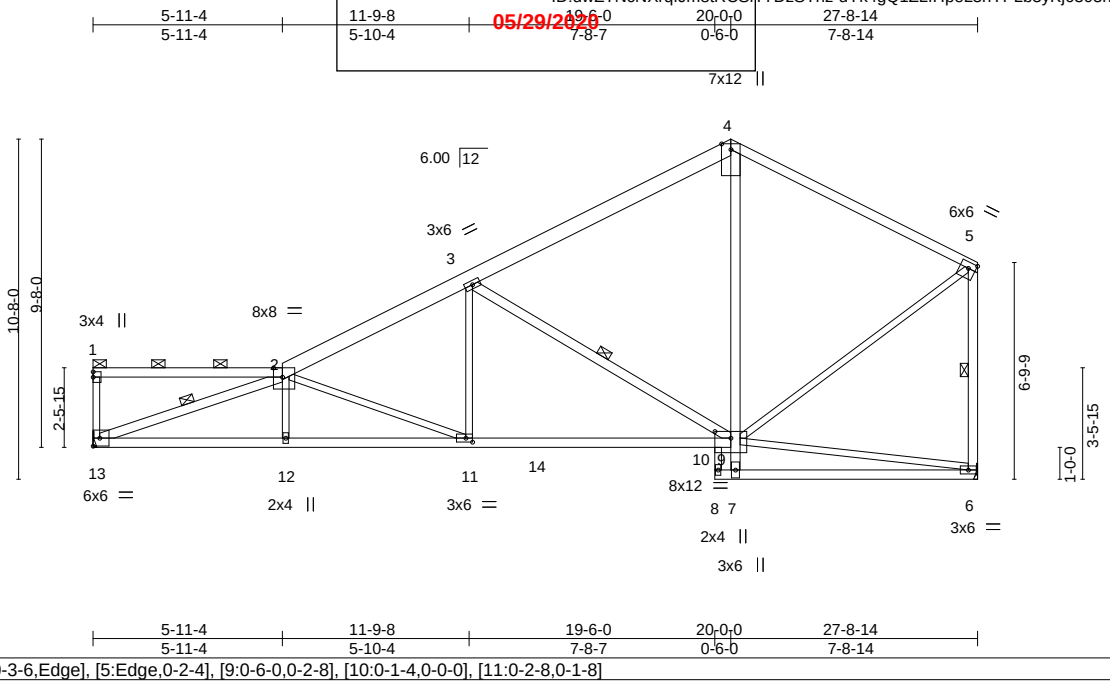

Plate Offsets (X,Y)-- [2:0-3-6,Edge], [5:Edge,0-2-4], [9:0-6-0,0-2-8], [10:0-1-4,0-0-0], [11:0-2-8,0-1-8]

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	0.56	Vert(LL)	-0.14	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.26	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	11-12	>999	240	Weight: 139 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-4: 2x6 SPF No.2, 4-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
8-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-13,3-9,4-7,5-6: 2x4 SPF No.2

BRACING-

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

REACTIONS. (lb/size) 13=1237/Mechanical, 6=1237/Mechanical
Max Horz 13=244(LC 7)
Max Uplift 13=-34(LC 8), 6=-7(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1970/65, 3-4=-998/73, 4-5=-968/93, 5-6=-1173/41
BOT CHORD 12-13=-81/2600, 11-12=-78/2605, 10-11=-43/1696, 9-10=-14/1736, 8-10=-496/0
WEBS 2-13=-2718/56, 2-11=-972/37, 3-11=0/522, 3-9=-1112/132, 7-9=0/700, 4-9=0/362, 5-9=0/923

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B5	Roof Special	1	1	I39353153

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:30 2019 Page 1
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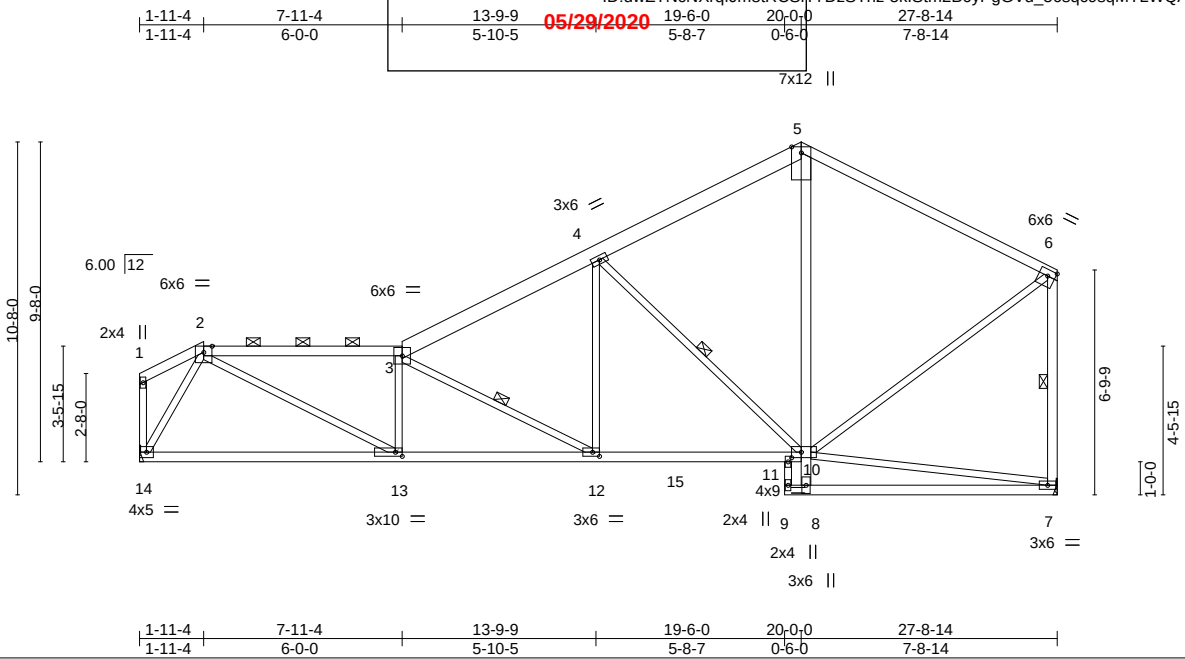


Plate Offsets (X,Y)-- [6:Edge,0-2-4], [10:0-3-8,0-2-0], [12:0-2-8,0-1-8], [13:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.15	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.29	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	12-13	>999	240	Weight: 138 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x6 SPF No.2, 5-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-8,6-7: 2x4 SPF No.2

BRACING-

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

REACTIONS. (lb/size) 7=1237/Mechanical, 14=1237/Mechanical
Max Horz 14=244(LC 7)
Max Uplift 7=-7(LC 8), 14=-35(LC 8)
Max Grav 7=1295(LC 2), 14=1289(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2306/47, 3-4=-1748/67, 4-5=-984/84, 5-6=-991/95, 6-7=-1177/44
BOT CHORD 13-14=-159/713, 12-13=-54/2325, 11-12=-26/1524, 10-11=-25/1543, 9-11=-420/0
WEBS 2-13=0/1864, 3-13=-696/92, 3-12=-941/47, 4-12=0/674, 4-10=-995/113, 8-10=0/620, 5-10=0/472, 2-14=-1313/92, 6-10=0/979

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 14.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B6	Roof Special	1	1	I39353154

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:31 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-Zwsq562qtGXXteCAfqN39NP_Nsej9dr3_X6vGNyHLug

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

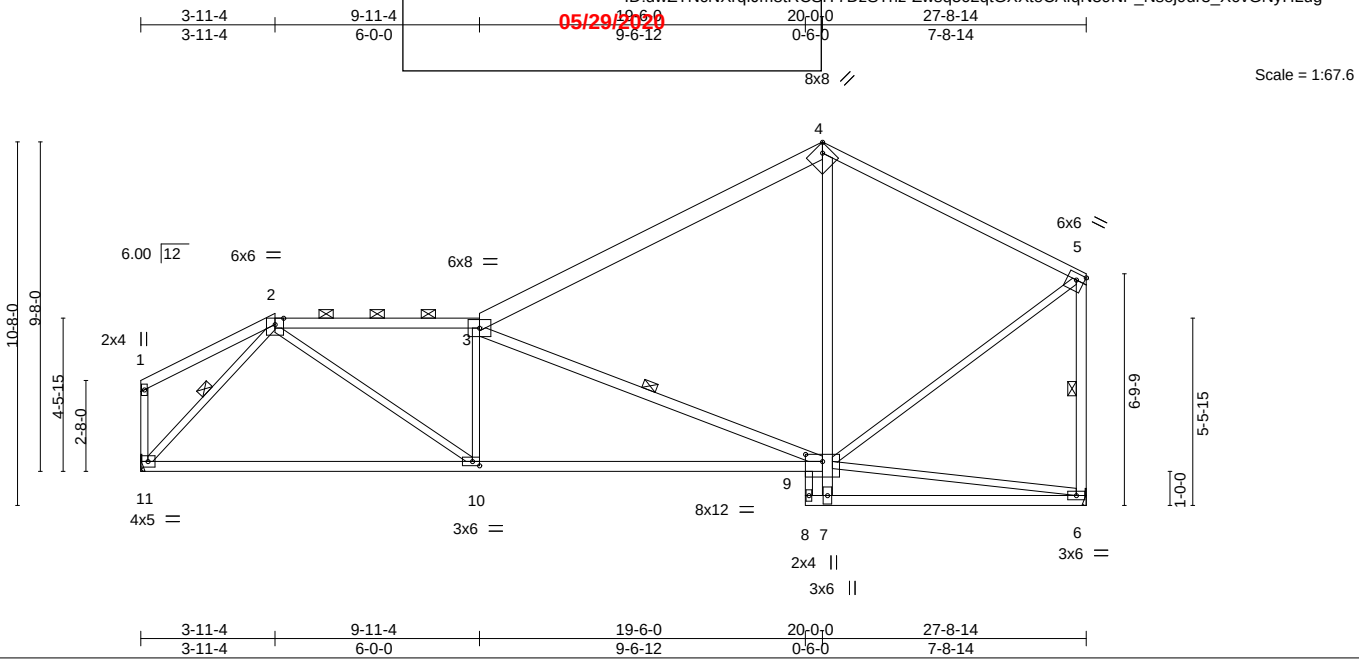


Plate Offsets (X,Y)-- [4:0-2-11,Edge], [5:Edge,0-2-4], [9:0-6-0,0-2-8], [10:0-2-8,0-1-8]

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	0.89	Vert(LL)	-0.21	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.46	9-10	>725	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	9-10	>999	240	Weight: 135 lb	FT = 10%

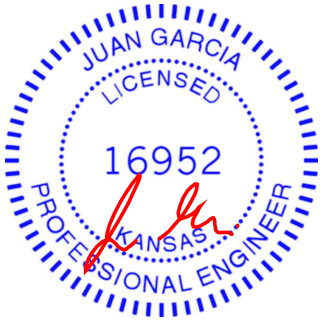
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 8-9: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 3-9,4-7,5-6: 2x4 SPF No.2

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

REACTIONS. (lb/size) 6=1239/Mechanical, 11=1238/Mechanical
Max Horz 11=244(LC 7)
Max Uplift 6=-5(LC 8), 11=-35(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1938/53, 3-4=-1039/62, 4-5=-981/98, 5-6=-1167/45
BOT CHORD 10-11=-125/952, 9-10=-31/1949, 8-9=-405/0
WEBS 2-10=0/1215, 3-10=-491/116, 3-9=-1270/105, 7-9=0/600, 4-9=0/340, 2-11=-1367/71, 5-9=0/930

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 11.
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.



November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Lot 4 H3
400156	B7	Roof Special		2	1	I39353155
						Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2026

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:32 2019 Page 1
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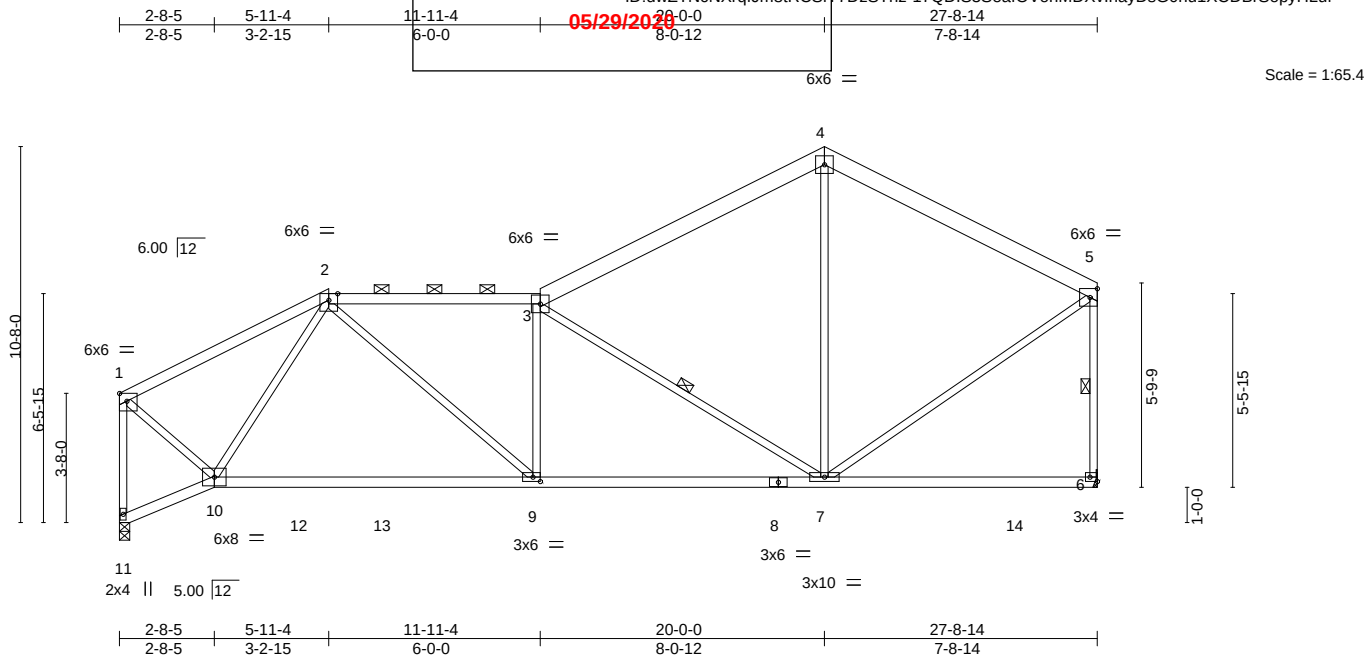

Plate Offsets (X,Y)-- [1:Edge,0-2-11], [6:Edge,0-1-8], [9:0-2-8,0-1-8]

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	0.59	Vert(LL)	-0.29	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.50	9-10	>654	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	9	>999	240	Weight: 126 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4,4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS. (lb/size) 11=1239/0-3-8, 6=1239/Mechanical
Max Horz 11=236(LC 5)
Max Uplift 11=-35(LC 8), 6=-7(LC 8)
Max Grav 11=1302(LC 2), 6=1314(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-992/42, 2-3=-1741/71, 3-4=-1009/72, 4-5=-978/96, 1-11=-1309/48, 5-6=-1174/48
BOT CHORD 9-10=-119/1146, 7-9=-34/1744
WEBS 2-10=-641/69, 2-9=0/835, 3-9=-316/84, 3-7=-1113/98, 4-7=0/392, 1-10=0/1103, 5-7=0/983

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 6.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B8	Roof Special	1	1	I39353156

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:33 2019 Page 1
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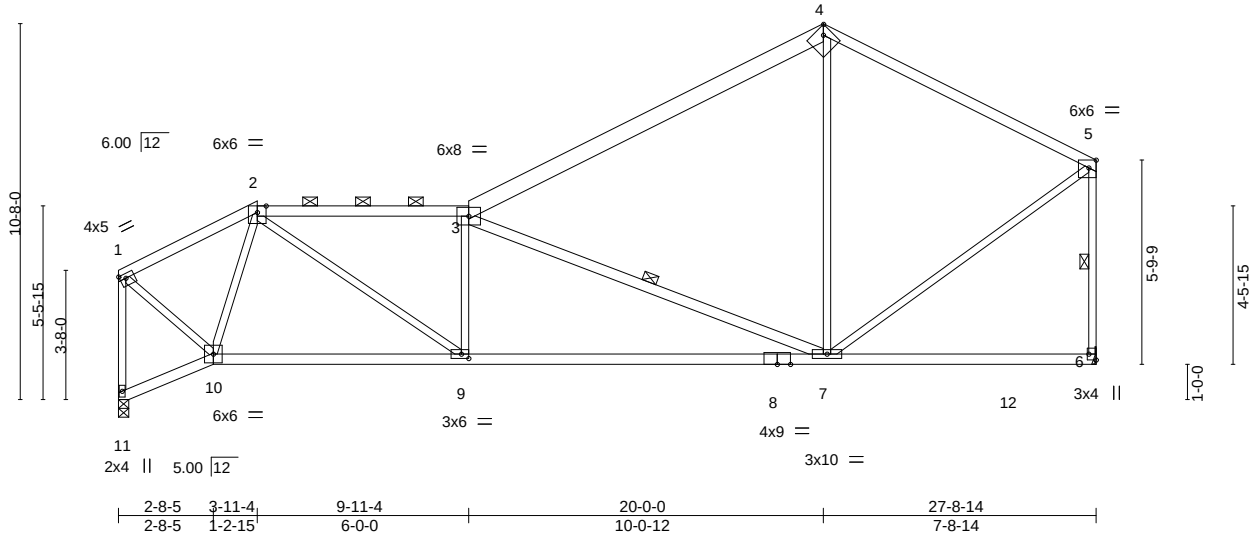

Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [4:0-2-11,0-2-9], [5:0-2-8,Edge], [6:Edge,0-2-8], [9:0-2-8,0-1-8]

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	0.99	Vert(LL)	-0.22	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.47	7-9	>710	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	9	>999	240	Weight: 124 lb	FT=10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 6-8: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 3-7: 2x4 SPF No.2

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

REACTIONS. (lb/size) 11=1239/0-3-8, 6=1239/Mechanical
Max Horz 11=238(LC 5)
Max Uplift 11=-34(LC 8), 6=-7(LC 8)
Max Grav 11=1275(LC 2), 6=1308(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-953/43, 2-3=-1998/66, 3-4=-1036/59, 4-5=-995/91, 1-11=-1245/56, 5-6=-1183/42
BOT CHORD 9-10=-149/1034, 7-9=-60/2007
WEBS 2-10=-662/58, 2-9=0/1237, 3-9=-502/109, 3-7=-1301/122, 4-7=0/349, 1-10=-21/1110, 5-7=0/994

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 6.
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.

Continued on page 2

STATE OF MISSOURI JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B8	Roof Special	1	1	I39353156

Job Reference (optional)

NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B9	Roof Special	1	1	I39353157

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:34 2019 Page 1
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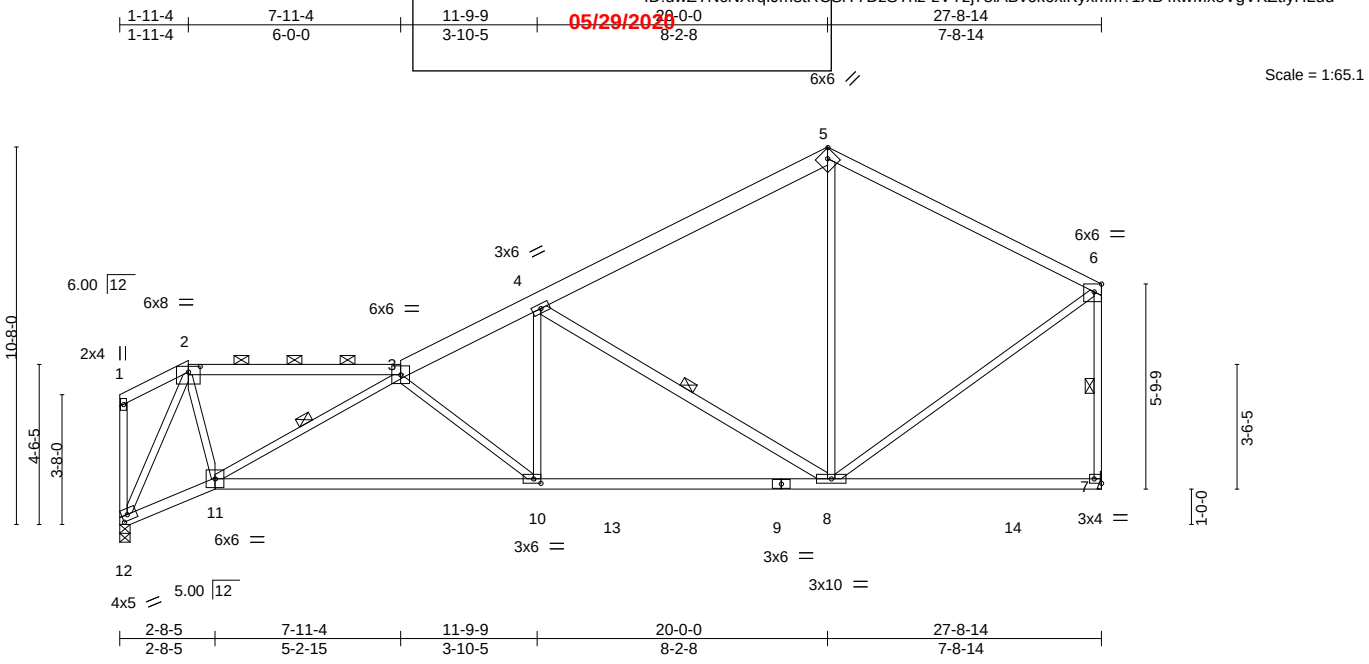

Plate Offsets (X,Y)-- [2:0-4-0,0-1-15], [5:0-2-12,0-2-10], [6:0-2-8,Edge], [7:Edge,0-1-8], [10:0-2-8,0-1-8], [12:0-1-14,0-2-0]

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	0.73	Vert(LL)	-0.18	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.38	10-11	>873	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	10	>999	240	Weight: 127 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x6 SPF No.2, 5-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
4-8: 2x4 SPF No.2

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

REACTIONS. (lb/size) 12=1239/0-3-8, 7=1239/Mechanical
Max Horz 12=238(LC 5)
Max Uplift 12=-34(LC 8), 7=-7(LC 8)
Max Grav 12=1275(LC 2), 7=1308(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-936/33, 3-4=-1996/63, 4-5=-999/75, 5-6=-959/95, 6-7=-1174/47
BOT CHORD 11-12=-200/799, 10-11=-108/2183, 8-10=-50/1787
WEBS 2-11=0/1289, 3-11=-1473/66, 4-8=-1150/119, 5-8=0/399, 2-12=-1646/65, 6-8=0/978, 3-10=-584/76, 4-10=0/680

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 12 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) 12, 7.
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.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B9	Roof Special	1	1	I39353157

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:34 2019 Page 2
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-zVYzj75iABv6k6xlKyxmm?1XB4kwMxoVgVKZtiyHLud

NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B10	Roof Special	3	1	I39353158

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:25 2019 Page 1
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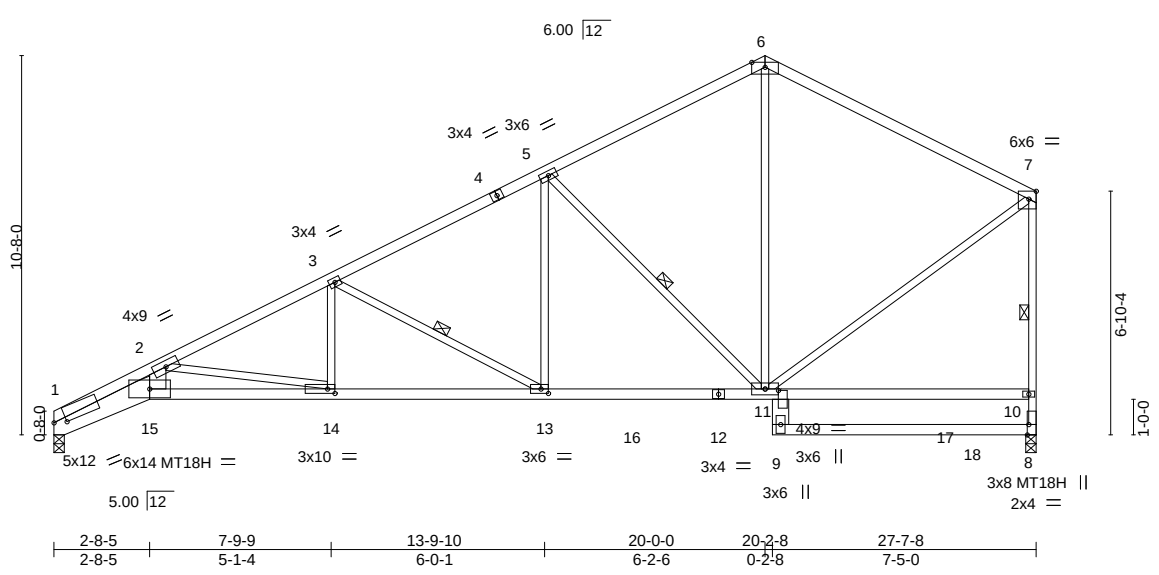


Plate Offsets (X,Y)-- [1:0-4-3,0-1-5], [7:0-2-8,Edge], [8:0-3-8,Edge], [11:0-0-8,0-4-8], [13:0-2-8,0-1-8], [14:0-2-8,0-1-8]

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	0.81	Vert(LL)	-0.25	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.44	14-15	>747	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.22	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	14-15	>999	240	Weight: 127 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except* 1-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E, 9-11: 2x6 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-15: 2x6 SPF No.2

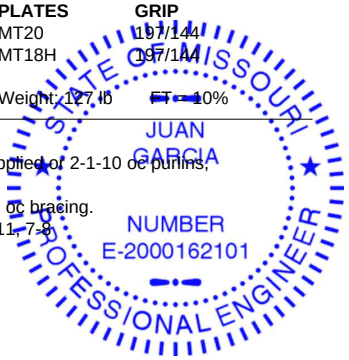
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-6 oc bracing.
WEBS 1 Row at midpt 3-13, 5-11, 7-8

REACTIONS. (lb/size) 1=1232/0-3-8, 8=1232/0-3-8
Max Horz 1=321(LC 7)
Max Uplift 1=-176(LC 8), 8=-152(LC 8)
Max Grav 1=1300(LC 2), 8=1449(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5408/987, 2-3=-2615/399, 3-5=-1760/281, 5-6=-957/199, 6-7=-968/220, 8-10=-1299/193, 7-10=-1224/195
BOT CHORD 1-15=-1066/4952, 14-15=-898/4059, 13-14=-433/2357, 11-13=-208/1539
WEBS 2-15=-337/1923, 2-14=-1725/471, 3-14=-8/478, 3-13=-930/255, 5-13=-40/690, 5-11=-1003/282, 7-11=-107/1005, 6-11=-47/459

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=176, 8=152.

Continued on page 2



November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B10	Roof Special	3	1	I39353158

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:25 2019 Page 2
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-knVZq2_3IQnO9jl0JZHfv69_9Sgzlr4Acbfa2jyHLum

NOTES-

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.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	B11	Roof Special	1	1	I39353159

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:26 2019 Page 1
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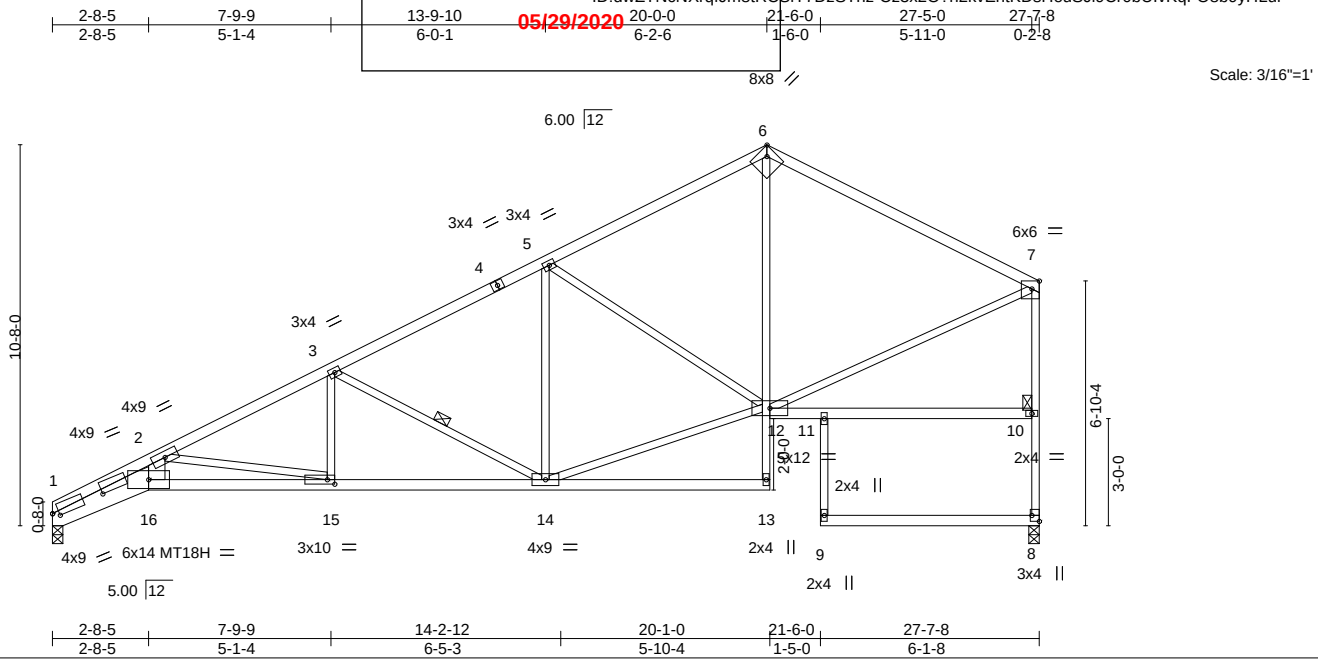

Plate Offsets (X,Y)-- [1:1-6-2,0-0-6], [1:0-2-3,0-1-8], [6:0-2-12,Edge], [7:0-2-8,Edge], [8:Edge,0-2-8], [15:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.22	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.41	15-16	>805	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.22	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.19	15-16	>999	240	Weight: 130 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
1-16: 2x8 SP DSS, 13-16: 2x4 SPF 2100F 1.8E
6-13,9-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16: 2x6 SPF No.2

BRACING-

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

REACTIONS. (lb/size) 1=1232/0-3-8, 8=1232/0-3-8
Max Horz 1=321(LC 7)
Max Uplift 1=-176(LC 8), 8=-152(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5119/986, 2-3=-2469/399, 3-5=-1649/280, 5-6=-1150/214, 6-7=-1167/230, 8-10=-1171/183, 7-10=-1153/186
BOT CHORD 1-16=-1065/4588, 15-16=-898/3783, 14-15=-433/2179, 6-12=-56/512
WEBS 2-16=-337/1733, 2-15=-1625/471, 3-15=-9/398, 3-14=-896/256, 12-14=-209/1447, 5-12=-597/232, 7-12=-124/1003

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=176, 8=152.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	C1	Roof Special	1	1	I39353160

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:35 2019 Page 1
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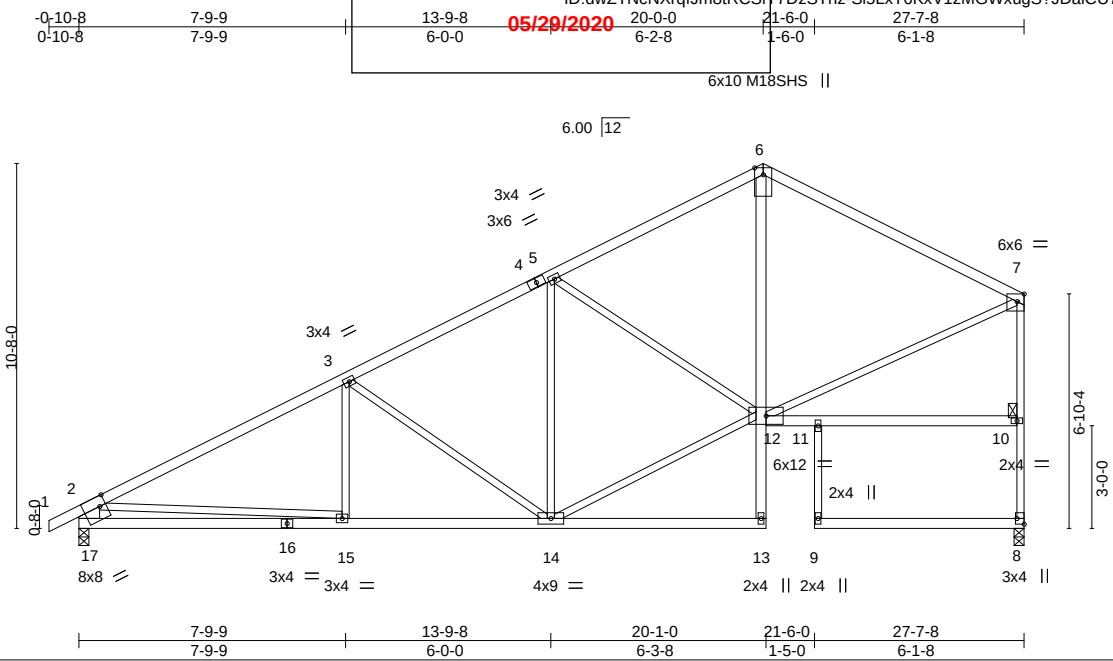

Plate Offsets (X,Y)-- [7:0-2-8,Edge], [8:Edge,0-2-8], [17:0-3-4,0-1-10], [17:0-2-4,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.09	15-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.19	15-17	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	-0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	14-15	>999	240	Weight: 133 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 6-7: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* 9-11: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-17: 2x8 SP DSS

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-5-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-0-13 oc bracing.
WEBS	1 Row at midpt 7-8

REACTIONS. (lb/size) 17=1309/0-3-8, 8=1223/0-3-8
Max Horz 17=332(LC 5)
Max Uplift 17=-201(LC 8), 8=-151(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1946/273, 3-5=-1420/251, 5-6=-1143/213, 6-7=-1162/229, 2-17=-1234/245, 8-10=-1162/183, 7-10=-1146/184
BOT CHORD 15-17=-414/786, 14-15=-332/1629, 6-12=-53/506
WEBS 3-14=-548/189, 12-14=-193/1302, 5-12=-367/195, 7-12=-123/998, 2-15=0/844

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=201, 8=151.
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

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	
400156	C2	Roof Special	1	1	Job Reference (optional)	I39353161

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Jul 27 2019 MiTek Industries, Inc. Wed Nov 20 10:42:02 2019 Page 1
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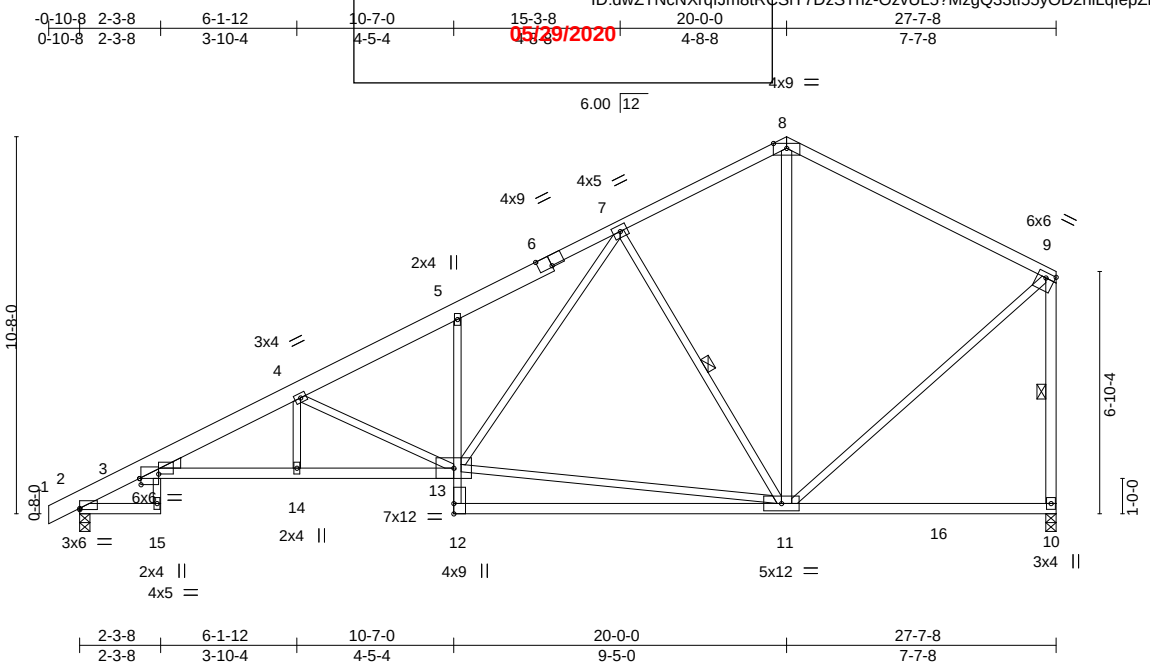

Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [3:0-0-8,0-2-2], [3:0-6-8,0-1-8], [6:0-4-8,Edge], [9:Edge,0-1-12]

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	0.97	Vert(LL)	-0.25	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.53	11-12	>623	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.25	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.18	15	>999	240	Weight: 147 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-6: 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-15,5-12: 2x3 SPF No.2, 3-13: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
8-11,9-10: 2x4 SPF No.2
WEDGE
Left: 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:
6-0-0 oc bracing: 2-15.
WEBS 1 Row at midpt 7-11, 9-10

REACTIONS. (lb/size) 2=1314/0-3-8, 10=1229/0-3-8
Max Horz 2=327(LC 5)
Max Uplift 2=-192(LC 8), 10=-152(LC 8)
Max Grav 2=1346(LC 2), 10=1309(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-872/30, 3-4=-2944/461, 4-5=-2075/341, 5-6=-2016/422, 6-7=-1959/437, 7-8=-853/209, 8-9=-890/220, 9-10=-1169/189
BOT CHORD 3-14=-558/2797, 13-14=-558/2797
WEBS 4-13=-1119/283, 11-13=-177/970, 7-13=-270/1162, 7-11=-848/306, 8-11=-72/428, 9-11=-88/923

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2 and 152 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

STATE OF MISSOURI JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	C2	Roof Special	1	1	I39353161

Job Reference (optional)

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-OzvUL5?MzgQ33tl55yOD2niLqIepZFXePRo5RnyHJSZ

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	I39353162
400156	C3	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 27 2019 MiTek Industries, Inc. Wed Nov 20 10:42:19 2019 Page 1
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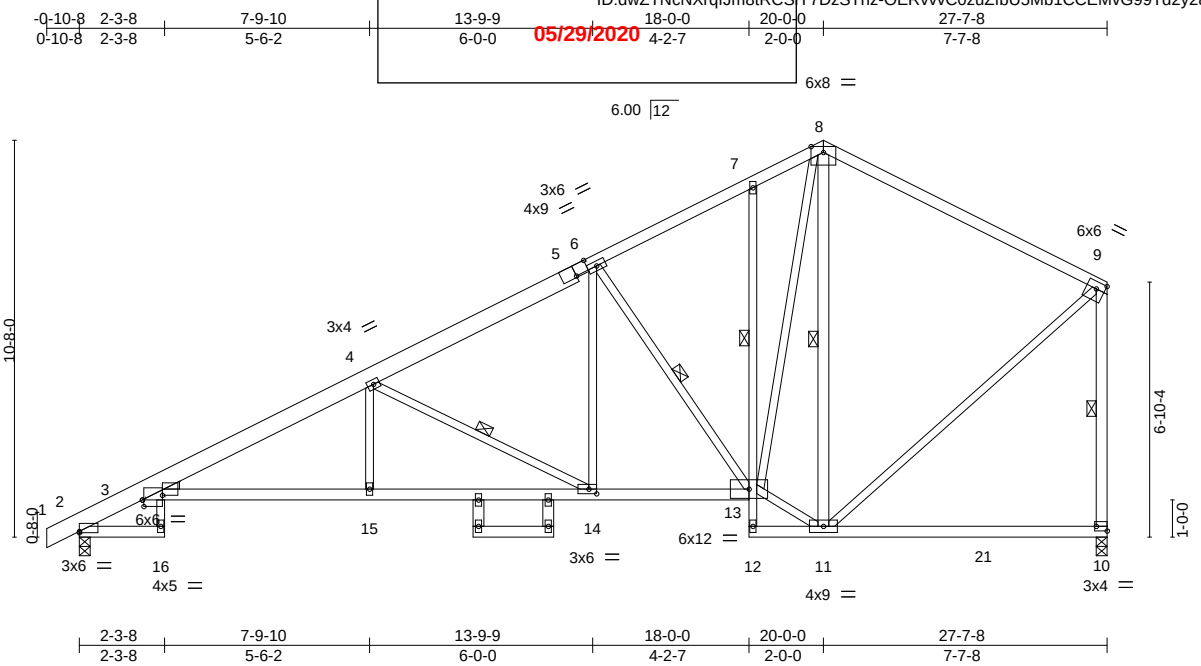

Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [3:0-0-8,0-2-2], [3:0-6-8,0-1-8], [5:0-4-5,Edge], [9:Edge,0-2-4], [10:Edge,0-1-8], [14:0-2-8,0-1-8]

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	0.93	Vert(LL)	-0.27	3-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.48	3-15	>681	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.31	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	16	>999	240	Weight: 154 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-16,7-12: 2x3 SPF No.2, 3-13: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
8-11,9-10,17-19,18-20: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

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

REACTIONS. (lb/size) 2=1314/0-3-8, 10=1229/0-3-8
Max Horz 2=327(LC 5)
Max Uplift 2=-192(LC 8), 10=-152(LC 8)
Max Grav 2=1346(LC 2), 10=1309(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-872/30, 3-4=-2641/402, 4-5=-1699/281, 5-6=-1542/285, 6-7=-1105/240, 7-8=-1024/295, 8-9=-881/224, 9-10=-1164/196
BOT CHORD 3-15=-478/2466, 14-15=-477/2466, 13-14=-198/1445
WEBS 4-15=0/285, 4-14=-1155/316, 6-14=-80/721, 6-13=-839/234, 11-13=-63/811, 8-13=-292/1170, 8-11=-750/158, 9-11=-94/914

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2 and 152 lb uplift at joint 10.

STATE OF MISSOURI JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

November 20,2019

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	C3	Roof Special	1	1	I39353162

Job Reference (optional)

NOTES-

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.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	I39353163
400156	C4	Roof Special	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 — 8.240 s Jul 27 2019 MiTek Industries, Inc. Wed Nov 20 10:42:36 2019 Page 1
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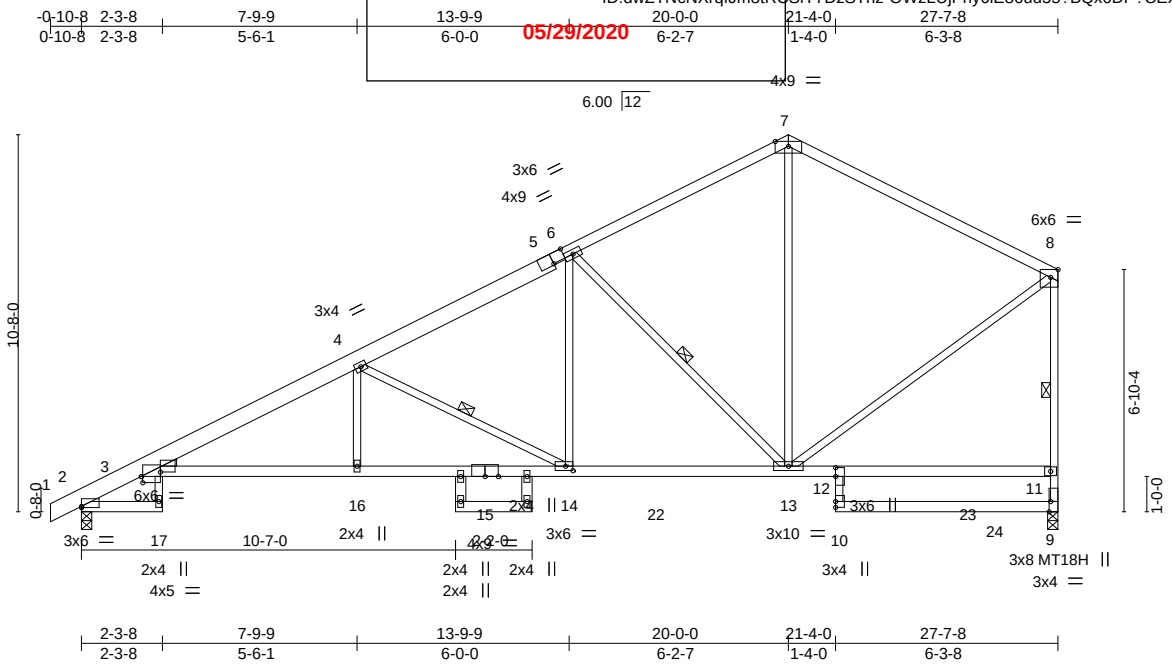

Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [3:0-0-8,0-2-2], [3:0-6-8,0-1-8], [5:0-4-4,Edge], [8:0-2-8,Edge], [9:0-3-8,Edge], [12:0-3-0,0-0-0], [14:0-2-8,0-1-8]

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	0.76	Vert(LL)	-0.28	3-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.49	3-16	>668	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.30	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	17	>999	240	Weight: 140 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
7-8: 2x4 SPF 2100F 1.8E, 1-5: 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-17,10-12: 2x3 SPF No.2, 3-15: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
18-20,19-21: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-17.
8-7-0 oc bracing: 14-16
WEBS 1 Row at midpt 4-14, 6-13, 8-9

REACTIONS. (lb/size) 2=1316/0-3-8, 9=1231/0-3-8
Max Horz 2=326(LC 5)
Max Uplift 2=-192(LC 8), 9=-152(LC 8)
Max Grav 2=1376(LC 2), 9=1438(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-889/30, 3-4=-2713/399, 4-5=-1780/286, 5-6=-1623/290, 6-7=-992/207, 7-8=-986/226, 9-11=-1297/190, 8-11=-1208/197
BOT CHORD 3-16=-474/2532, 15-16=-473/2531, 14-15=-473/2531, 14-22=-207/1523, 13-22=-207/1523
WEBS 4-16=0/280, 4-14=-1140/301, 6-14=-65/750, 6-13=-963/279, 7-13=-50/476, 8-13=-110/1005

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 2 and 152 lb uplift at joint 9.

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	C4	Roof Special	2	1	I39353163

Job Reference (optional)

NOTES-

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.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	C5	Roof Special	1	1	I39353164

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:40 2019 Page 1
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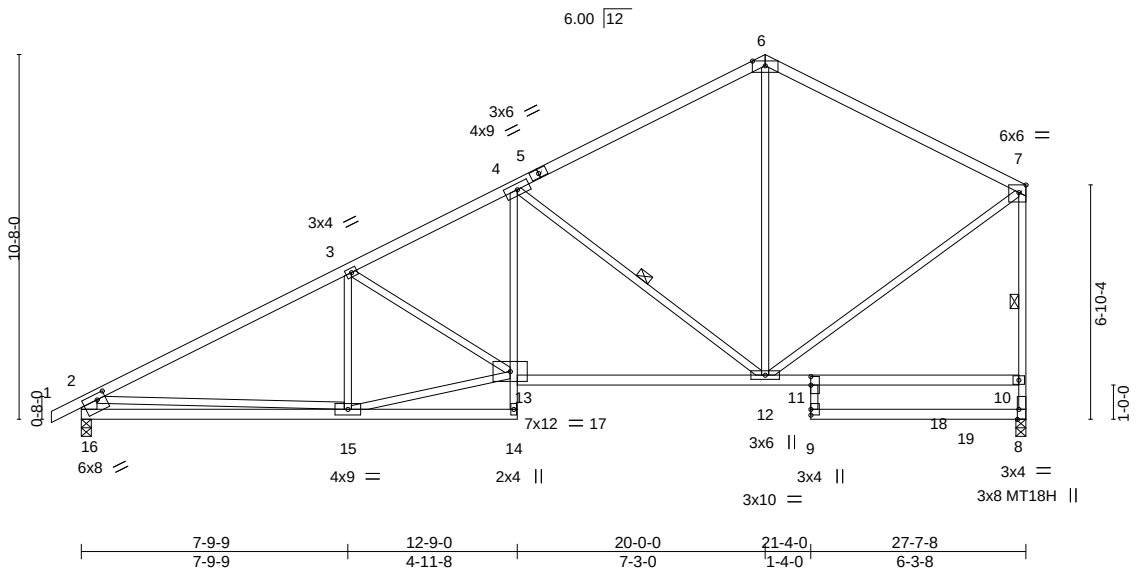


Plate Offsets (X,Y)-- [7:0-2-8,Edge], [8:0-3-8,Edge], [11:0-3-0,0-0-0], [16:0-3-0,0-2-0], [16:0-2-7,0-1-4]

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	0.75	Vert(LL)	-0.15	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.28	12-13	>999	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	13	>999	240	Weight: 126 lb	FT=10%

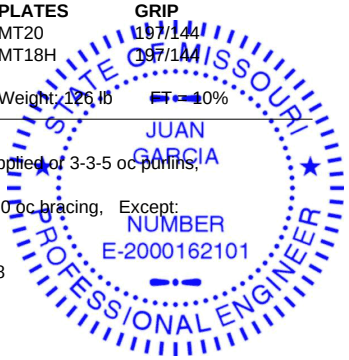
LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 6-7: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except* 4-14,9-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 2-16: 2x6 SP DSS

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-8-9 oc bracing: 15-16 6-0-0 oc bracing: 14-15.
WEBS 1 Row at midpt 4-12, 7-8

REACTIONS. (lb/size) 16=1307/0-3-8, 8=1227/0-3-8
Max Horz 16=332(LC 5)
Max Uplift 16=-200(LC 8), 8=-152(LC 8)
Max Grav 16=1359(LC 2), 8=1431(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2057/270, 3-4=-1909/320, 4-6=-1013/197, 6-7=-987/225, 2-16=-1232/244, 8-10=-1292/190, 7-10=-1207/195
BOT CHORD 15-16=-451/948, 4-13=-65/716, 12-13=-262/1708
WEBS 3-15=-298/150, 13-15=-304/1813, 4-12=-1078/316, 6-12=-26/447, 2-15=0/867, 7-12=-111/1008

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=200, 8=152.
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.



November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	C6	Common Supported Gable	1	1	I39353165

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:41 2019 Page 1
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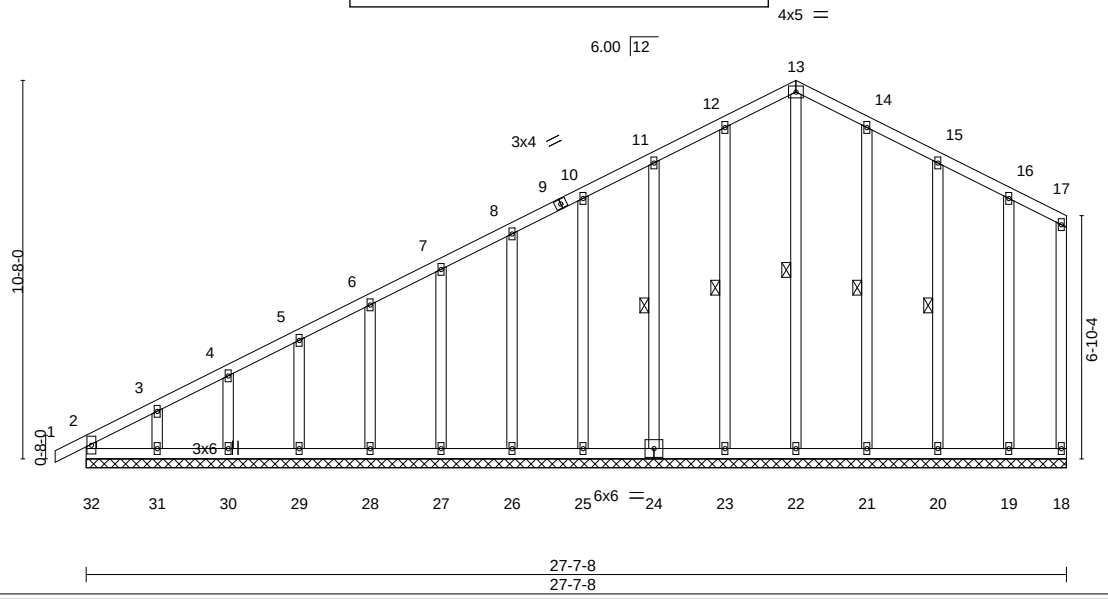

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 167 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 13-22, 12-23, 11-24, 14-21, 15-20

REACTIONS. All bearings 27-7-8.
(lb) - Max Horz 32=332(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 32, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 21, 20, 19 except 31=-140(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 32, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 21, 20, 19

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-299/102

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 21, 20, 19 except (jt=lb) 31=140.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D1	Common Supported Gable	1	1	I39353166

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:43 2019 Page 1
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0-10-8 10-0-0 10-0-0 0-10-8

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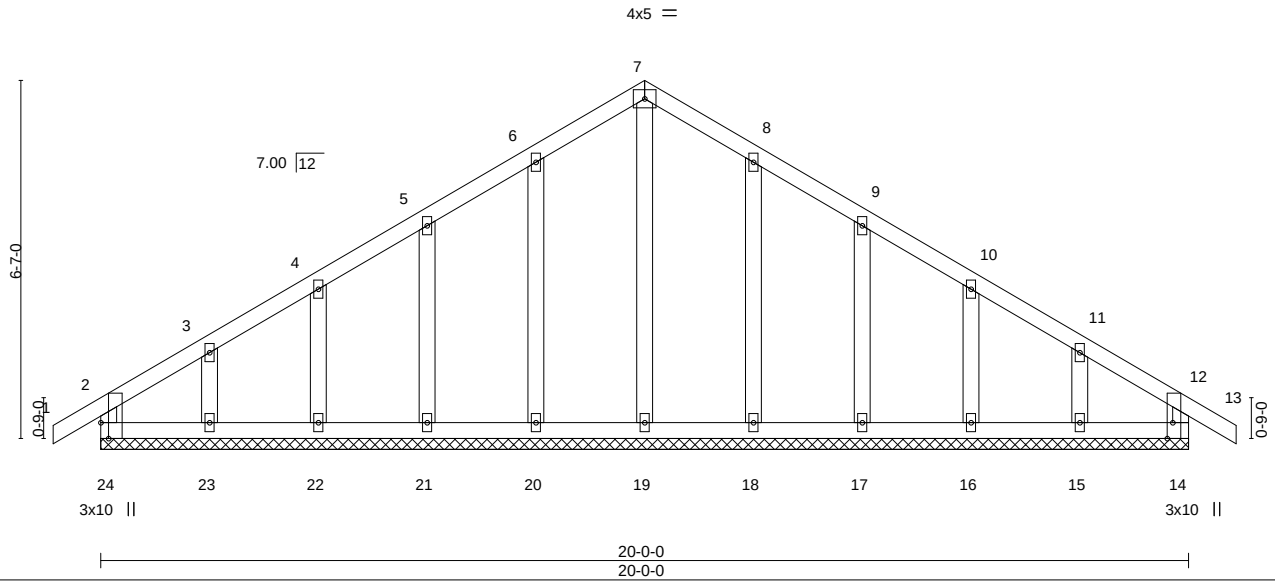

Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [12:0-1-0,0-1-12], [14:0-0-0,0-1-12], [14:0-3-8,Edge], [24:0-0-0,0-1-12], [24:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							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.

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 24=-186(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D2	Common	5	1	I39353167

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:44 2019 Page 1
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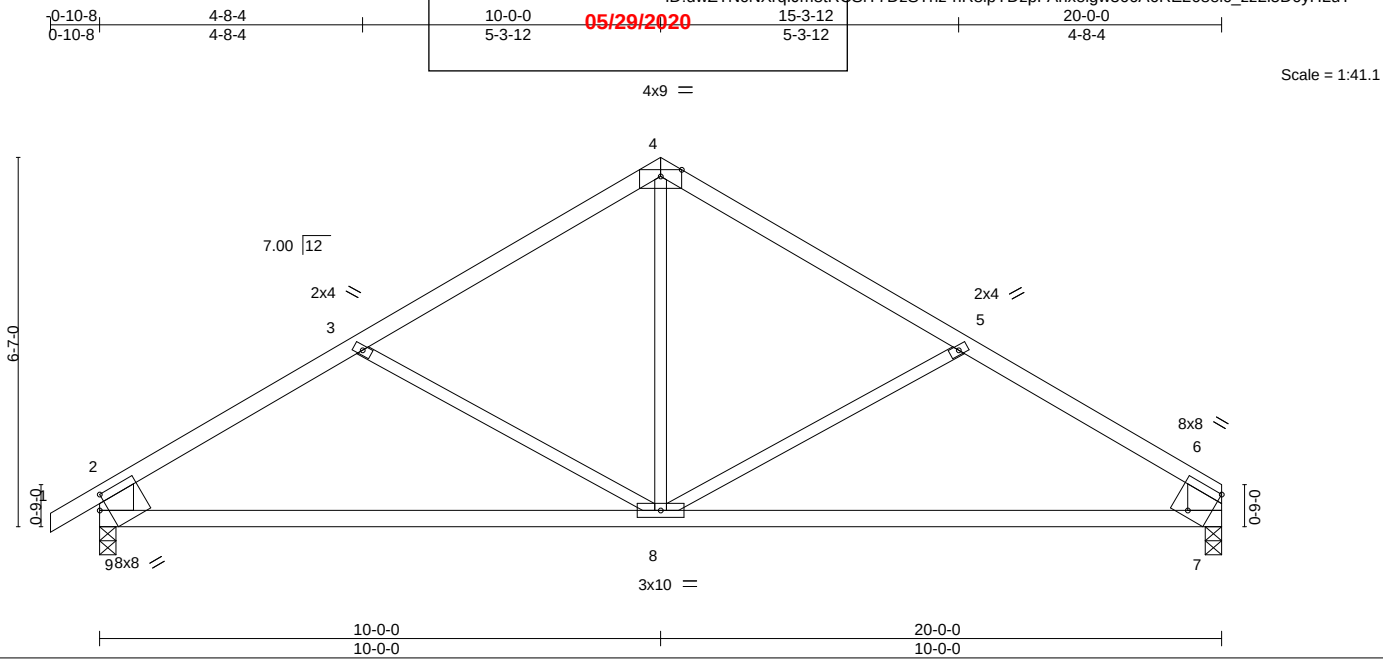

Plate Offsets (X,Y)-- [2:0-4-3,0-0-0], [6:Edge,0-6-10], [6:0-4-3,0-0-0], [7:0-3-2,0-1-13], [9:0-3-2,0-1-13], [9:0-1-11,0-2-15]

LOADING (psf)		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)	-0.17	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.36	8-9	>649	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	8	>999	240	Weight: 68 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-9,6-7: 2x8 SP DSS

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

REACTIONS. (lb/size) 9=958/0-3-8, 7=870/0-3-8
Max Horz 9=183(LC 5)
Max Uplift 9=-130(LC 8), 7=-103(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1177/186, 3-4=-911/140, 4-5=-911/140, 5-6=-1188/189, 2-9=-854/178, 6-7=-762/149
BOT CHORD 8-9=-185/920, 7-8=-111/931
WEBS 4-8=-4/472, 5-8=-292/215, 3-8=-273/210

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=130, 7=103.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D3	Common Supported Gable	1	1	I39353168

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:45 2019 Page 1
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6-0-0 12-0-0 12-10-8
6-0-0 6-0-0 0-10-8

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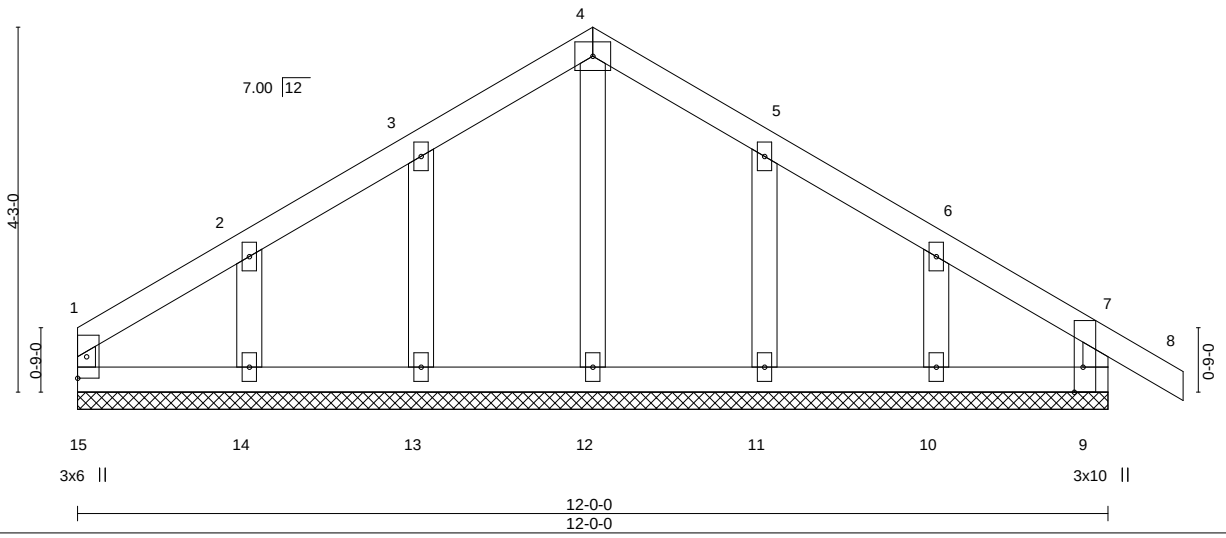

Plate Offsets (X,Y)-- [1:0-0-12,0-1-4], [7:0-1-0,0-1-12], [9:0-0-0,0-1-12], [9:0-3-8,Edge], [15:0-0-0,0-1-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	8	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	8	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 45 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 7-9: 2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. All bearings 12-0-0.
(lb) - Max Horz 15=-119(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 15, 9, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 15, 9, 12, 13, 14, 11, 10

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9, 13, 14, 11, 10.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
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16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D4	GABLE	1	1	I39353169

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:47 2019 Page 1

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-5?qtSaFs6AYGo6RFbBgpol3oEJ88vp3Pf0_lqRyHLuQ

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

2-6-13	9-2-3	11-9-0	15-6-8	19-4-0	25-2-8	29-2-8	34-4-8	39-2-8
2-6-13	6-7-6	2-6-13	3-9-8	3-9-8	5-10-8	4-0-0	5-2-1	4-10-0

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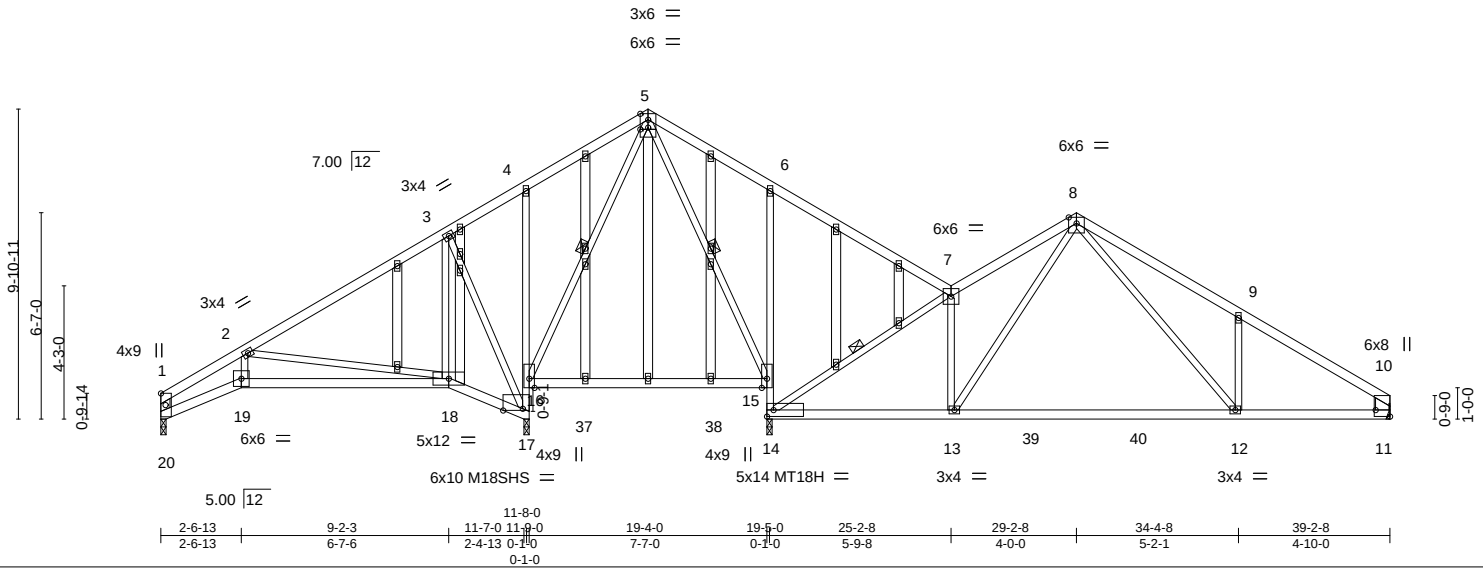

Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [5:0-3-0,0-0-11], [10:0-1-10,0-2-12], [10:Edge,0-5-8], [11:0-0-0,0-2-12], [17:0-7-8,Edge], [20:0-0-12,0-1-12], [27:0-1-12,0-0-12]

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	0.51	Vert(LL)	-0.29	12-13	>817	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.50	12-13	>469	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	-0.08	14	n/a	n/a	M18SHS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	12-13	>999	240	Weight: 206 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 4-17,6-14: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 1-20: 2x4 SPF 2100F 1.8E, 10-11: 2x6 SP DSS
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-7-10 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 3-10-5 oc bracing.
WEBS	1 Row at midpt 5-16, 5-15, 7-14

REACTIONS. All bearings 0-2-0 except (jt=length) 14=0-2-8 (input: 0-2-0), 17=0-2-2 (input: 0-2-0), 11=Mechanical.
(lb) - Max Horz 20=-257(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 20=-117(LC 9), 14=-213(LC 9), 11=-186(LC 9), 17=-234(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 20=386(LC 16), 14=1594(LC 16), 11=924(LC 16), 17=1359(LC 15)

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

TOP CHORD	1-2=-798/262, 2-3=-167/357, 3-4=-88/535, 4-5=-48/576, 5-6=0/511, 6-7=0/477, 7-8=-996/437, 8-9=-1310/409, 9-10=-1296/265, 1-20=-496/154, 10-11=-816/188
BOT CHORD	19-20=-356/865, 18-19=-338/777, 16-17=-749/66, 14-15=-822/80, 6-15=-417/240, 13-14=-190/751, 12-13=-79/586, 11-12=-173/1012
WEBS	2-19=-35/395, 2-18=-862/308, 3-18=-25/372, 3-17=-686/226, 5-16=-439/61, 5-15=-310/0, 7-14=-1309/287, 7-13=-1/294, 8-13=-205/305, 8-12=-147/668, 9-12=-302/224

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) WARNING: Required bearing size at joint(s) 14, 17 greater than input bearing size.
11) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
12) Refer to girder(s) for truss to truss connections.

Continued on page 2)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

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PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D4	GABLE	1	1	I39353169

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:47 2019 Page 2
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-5?qtSaFs6AYGo6RFbBgpol3oEJ88vp3Pf0_lqRyHLuQ

NOTES-

13) Bearing at joint(s) 20, 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
14) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 20, 213 lb uplift at joint 14, 186 lb uplift at joint 11 and 234 lb uplift at joint 17.
16) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3	
400156	D5	Roof Special	4	1	Job Reference (optional)	I39353170

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:48 2019 Page 1
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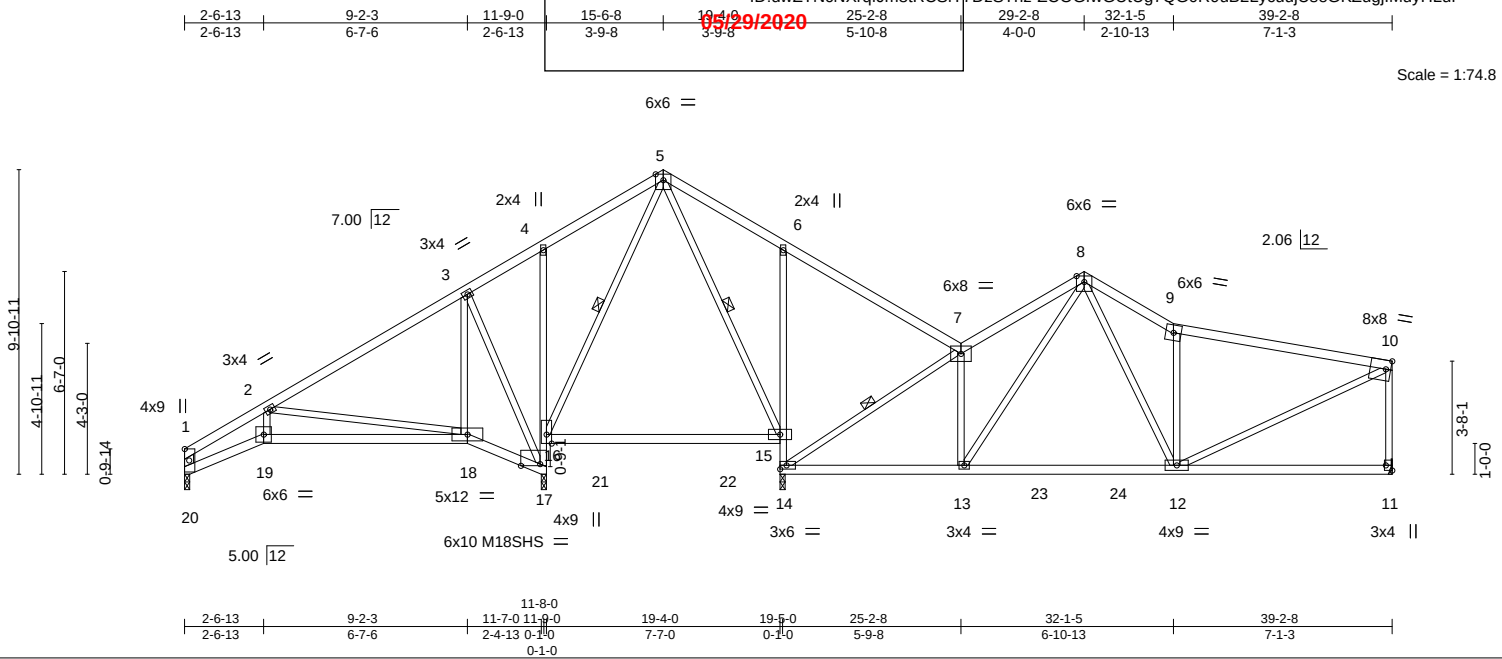

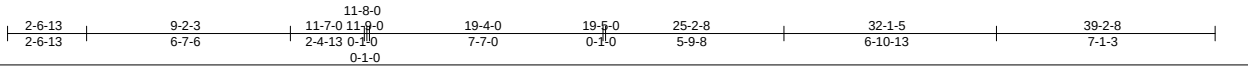

Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [10:0-1-15,Edge], [11:Edge,0-2-8], [17:0-7-8,Edge], [20:0-0-12,0-1-12]

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	0.84	Vert(LL)	-0.20	15-16	>468	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.29	15-16	>324	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.08	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	18-19	>999	240	Weight: 170 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-17,6-14: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-20: 2x4 SPF 2100F 1.8E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-3-12 oc bracing.
WEBS 1 Row at midpt 5-16, 5-15, 7-14

REACTIONS. All bearings 0-2-0 except (jt=length) 14=0-2-4 (input: 0-2-0), 17=0-2-4 (input: 0-2-0), 11=Mechanical.
(lb) - Max Horz 20=-255(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 20 except 14=-237(LC 9), 11=-156(LC 9), 17=-232(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 20=385(LC 16), 14=1431(LC 16), 11=844(LC 24), 17=1421(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-809/257, 2-3=-160/346, 3-4=-78/524, 4-5=-40/551, 5-6=-43/352, 6-7=-6/366, 7-8=-1021/235, 8-9=-1057/260, 9-10=-912/155, 1-20=-502/152, 10-11=-758/188
BOT CHORD 19-20=-362/872, 18-19=-343/783, 16-17=-810/64, 14-15=-679/143, 6-15=-415/240, 13-14=-167/776, 12-13=-129/599
WEBS 2-19=-36/397, 2-18=-861/313, 3-18=-26/373, 3-17=-687/227, 5-16=-503/23, 7-14=-1213/223, 8-13=-121/344, 8-12=-108/620, 9-12=-732/260, 10-12=-152/909

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) WARNING: Required bearing size at joint(s) 14, 17 greater than input bearing size.
8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
9) Refer to girder(s) for truss to truss connections.
10) Bearing at joint(s) 20, 17 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 at joint(s) 20.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20 except (jt=lb) 14=237, 11=156, 17=232.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

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LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D6	Roof Special Girder	1	2	I39353171

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:50 2019 Page 1
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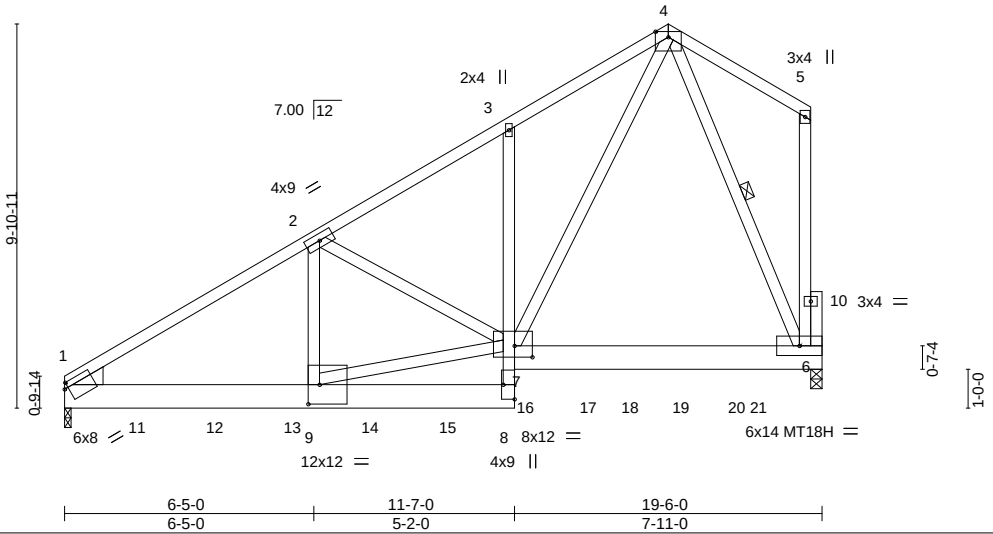

Plate Offsets (X,Y)-- [1:0-1-3,0-1-11], [7:0-5-8,0-3-8], [8:Edge,0-3-8], [9:0-3-8,0-6-0]

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	0.73	Vert(LL)	-0.20	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.35	6-7	>663	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10	6-7	>999	240	Weight: 279 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
1-8: 2x8 SP DSS, 6-7: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x6 SP No.2

BRACING-

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

REACTIONS. (lb/size) 1=6211/0-2-0 (req. 0-5-0), 6=6466/0-3-8 (req. 0-5-4)
Max Horz 1=330(LC 5)
Max Uplift 1=-427(LC 8), 6=-276(LC 8)
Max Grav 1=6350(LC 2), 6=6657(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8979/451, 2-3=-6193/305, 3-4=-6201/425, 4-5=-287/109, 5-6=-265/76
BOT CHORD 1-9=-494/7489, 7-8=0/984, 3-7=-318/192, 6-7=-135/1896
WEBS 2-9=-185/2801, 7-9=-449/7703, 2-7=-2612/315, 4-7=-454/7819, 4-6=-4418/244

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates 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, with BCDL = 10.0psf.
8) WARNING: Required bearing size at joint(s) 1, 6 greater than input bearing size.
9) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=427, 6=276.
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.

November 20,2019

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D6	Roof Special Girder	1	2	I39353171

Wheeler Lumber, Waverly, KS 66871 — Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:50 2019 Page 2
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NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1281 lb down and 167 lb up at 1-10-8, 1256 lb down and 163 lb up at 3-10-8, 1255 lb down and 27 lb up at 5-10-8, 1260 lb down and 27 lb up at 7-10-8, 1219 lb down and 25 lb up at 9-10-8, 1279 lb down and 27 lb up at 11-10-8, 1268 lb down and 27 lb up at 13-10-8, and 1258 lb down and 27 lb up at 15-10-8, and 1284 lb down and 27 lb up at 17-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-5=-70, 1-8=-20, 6-7=-20
   Concentrated Loads (lb)
   Vert: 11=-1217(B) 12=-1220(B) 13=-1217(B) 14=-1217(B) 15=-1219(B) 16=-1219(B) 18=-1219(B) 19=-1219(B) 21=-1219(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	D8	Roof Special	1	1	I39353172

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:51 2019 Page 1

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-_n3OHxIMAP2hHjk0q1klybEPmwb2rjU?aeyyzCyHLuM

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

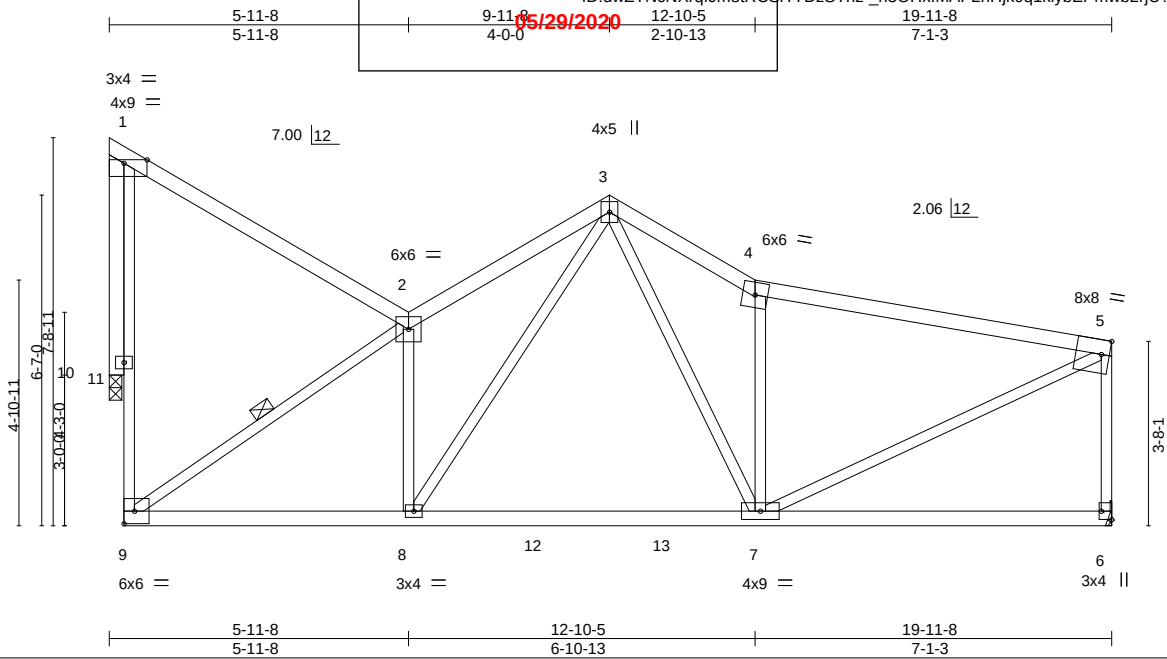

Plate Offsets (X,Y)-- [1:0-5-8,Edge], [5:0-1-15,Edge], [6:Edge,0-2-8]

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	0.86	Vert(LL)	-0.12	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.19	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.41	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	7-8	>999	240	Weight: 90 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (lb/size) 6=888/Mechanical, 11=864/0-3-0
Max Horz 11=-210(LC 4)
Max Uplift 6=-140(LC 9), 11=-187(LC 9)
Max Grav 6=931(LC 2), 11=969(LC 16)

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

TOP CHORD	9-10=-90/818, 1-10=-90/818, 2-3=-1350/172, 3-4=-1211/232, 4-5=-1037/130, 5-6=-830/171
BOT CHORD	8-9=-113/1060, 7-8=-104/735
WEBS	2-9=-1285/216, 2-8=-300/83, 3-8=-19/635, 3-7=-108/614, 4-7=-774/251, 5-7=-124/1054, 1-11=-972/188

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=140, 11=187.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	E1	Common Supported Gable	1	1	I39353173

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:52 2019 Page 1
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0-10-8 10-4-0 10-4-0 0-10-8

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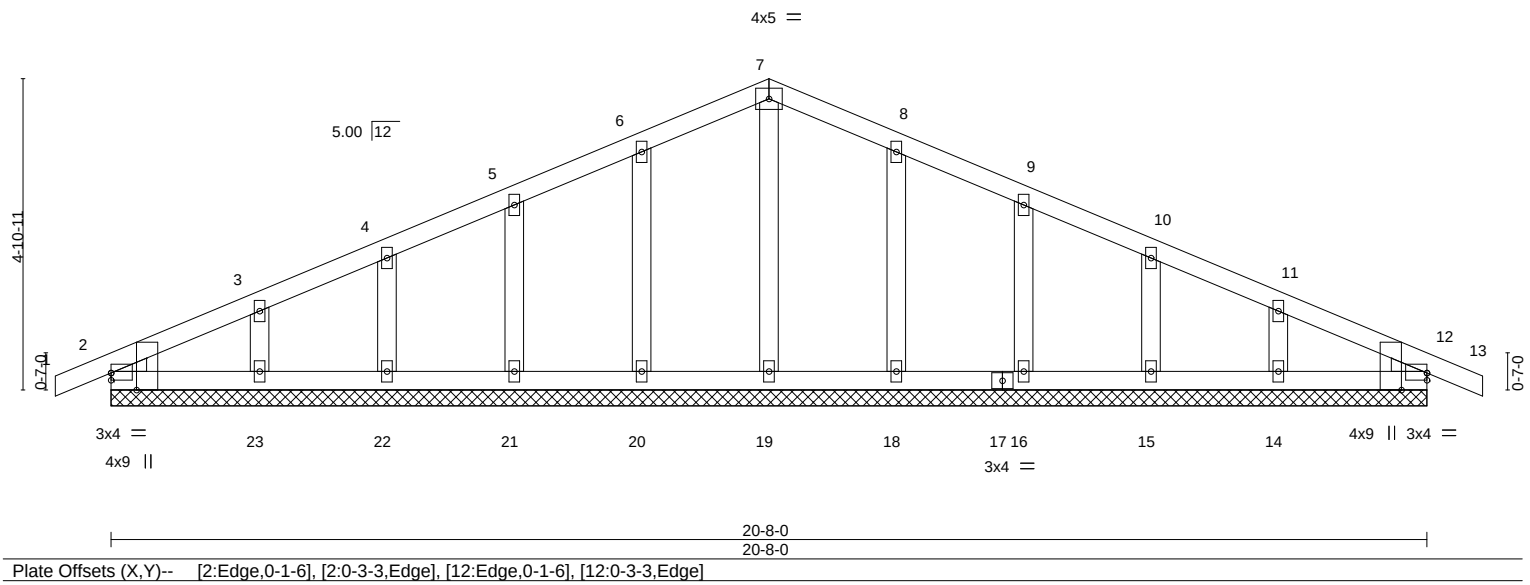

Plate Offsets (X,Y)-- [2:Edge,0-1-6], [2:0-3-3,Edge], [12:Edge,0-1-6], [12:0-3-3,Edge]

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	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 78 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2, Right: 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 20-8-0.
(lb) - Max Horz 2=-82(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 23, 18, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 18, 16, 15, 14, 12

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 23, 18, 16, 15, 14, 12.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	E2	Common	4	1	I39353174

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:54 2019 Page 1
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0-10-8 6-3-3 10-4-0 14-4-13 20-8-0 21-6-8
0-10-8 6-3-3 4-0-13 4-0-13 6-3-3 0-10-8

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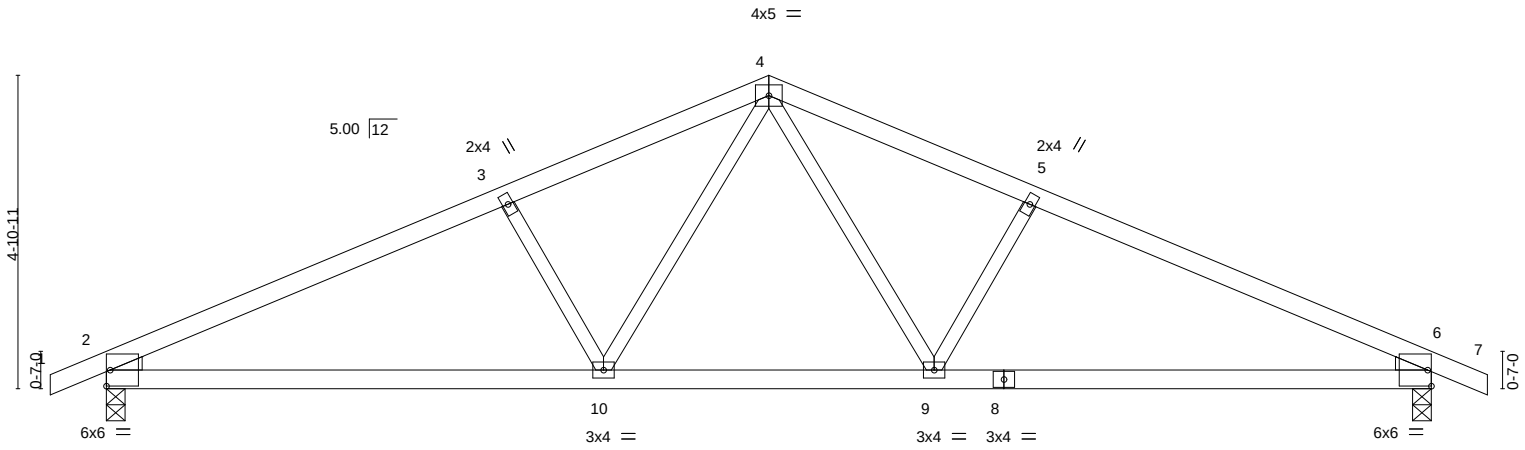

7-9-1 12-10-15 20-8-0
7-9-1 5-1-14 7-9-1

Plate Offsets (X,Y)-- [2:0-0-6,0-0-2], [2:0-4-11,0-0-5], [6:0-0-6,0-0-2], [6:0-4-11,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.11	6-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.25	6-9	>977	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	2-10	>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
WEDGE
Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=988/0-3-8, 6=988/0-3-8
Max Horz 2=-82(LC 9)
Max Uplift 2=-141(LC 8), 6=-141(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1643/210, 3-4=-1437/214, 4-5=-1437/214, 5-6=-1643/211
BOT CHORD 2-10=-199/1413, 9-10=-56/1021, 6-9=-117/1413
WEBS 4-9=-107/507, 5-9=-339/190, 4-10=-107/507, 3-10=-339/190

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=141, 6=141.
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

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	E3	Common Girder	1	2	I39353175

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:55:59 2019 Page 1
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0-10-8 6-3-3 10-4-0 14-4-13 20-8-0 21-6-8
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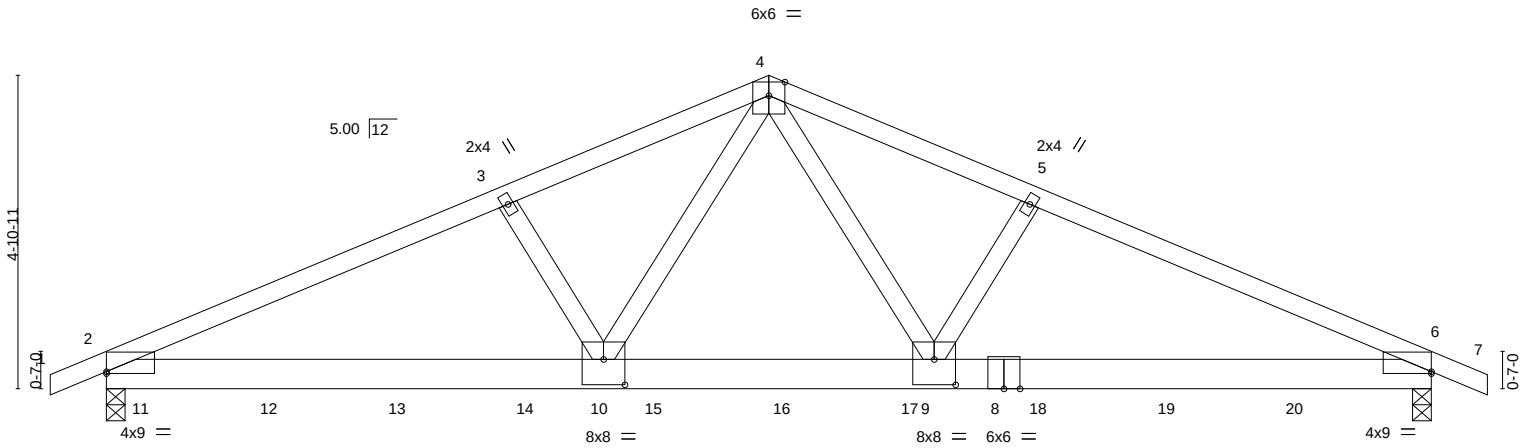

7-9-1 12-10-15 20-8-0
7-9-1 5-1-14 7-9-1

Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [6:Edge,0-0-6], [9:0-4-0,0-4-12], [10:0-4-0,0-4-12]

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	0.56	Vert(LL)	-0.20	6-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.36	6-9	>688	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	2-10	>999	240	Weight: 188 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2

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

REACTIONS. (lb/size) 2=5382/0-3-8 (req. 0-4-4), 6=4842/0-3-8 (req. 0-3-13)
Max Horz 2=49(LC 29)
Max Uplift 2=-868(LC 8), 6=-657(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8360/1350, 3-4=-8188/1361, 4-5=-8270/1243, 5-6=-8442/1231
BOT CHORD 2-10=-1223/7564, 9-10=-839/5787, 6-9=-1065/7638
WEBS 4-9=-475/3599, 4-10=-694/3552

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
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) 2, 6 greater than input bearing size.
8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=868, 6=657.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 916 lb down and 154 lb up at 0-7-4, 824 lb down and 176 lb up at 2-7-4, 824 lb down and 176 lb up at 4-7-4, 824 lb down and 176 lb up at 6-7-4, 824 lb down and 176 lb up at 8-7-4, 795 lb down and 206 lb up at 10-7-4, 850 lb down and 123 lb up at 12-7-4, 850 lb down and 123 lb up at 14-7-4, and 850 lb down and 123 lb up at 16-7-4, and 850 lb down and 123 lb up at 18-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

November 20,2019

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	E3	Common Girder	1	2	I39353175

Job Reference (optional)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-7=-70, 2-6=-20
   Concentrated Loads (lb)
   Vert: 11=-873(F) 12=-801(F) 13=-801(F) 14=-801(F) 15=-801(F) 16=-771(F) 17=-850(F) 18=-850(F) 19=-850(F) 20=-850(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	J1	Diagonal Hip Girder	2	1	I39353176

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:00 2019 Page 1
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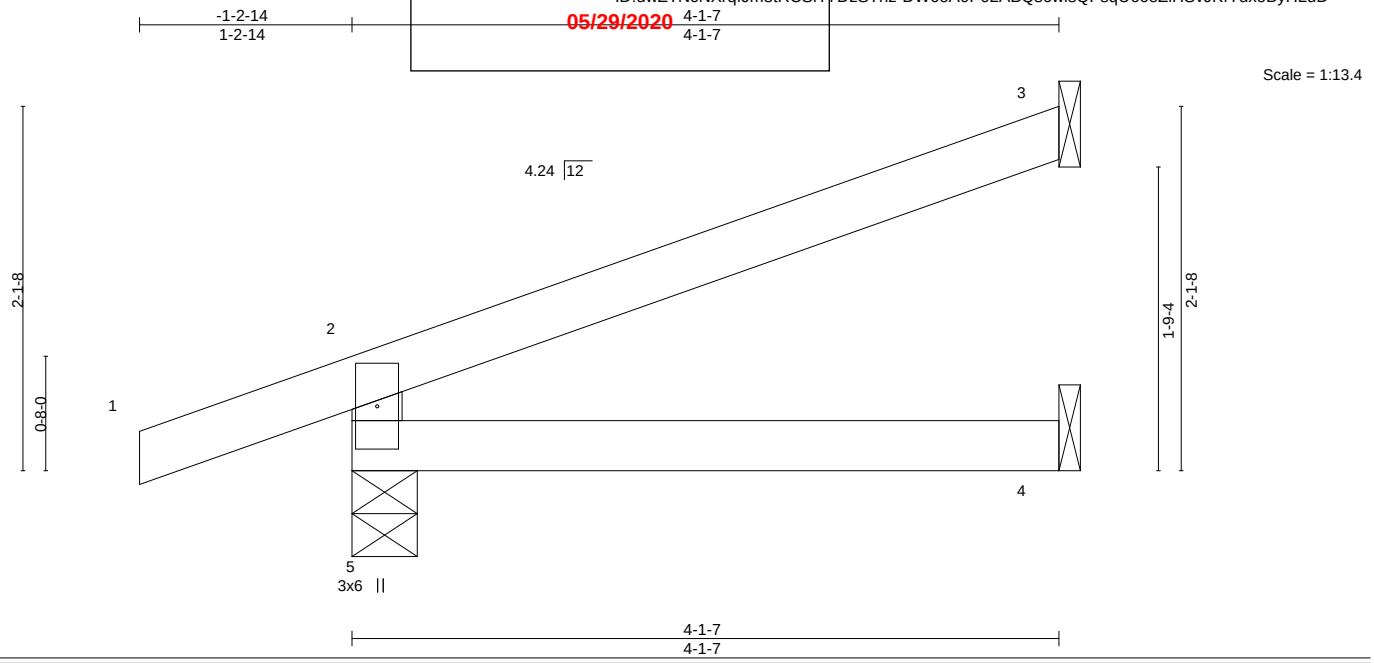

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=144/0-4-9, 3=80/Mechanical, 4=24/Mechanical
Max Horz 5=81(LC 12)
Max Uplift 5=-91(LC 6), 3=-51(LC 12)
Max Grav 5=144(LC 1), 3=80(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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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) 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.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 30 lb down and 11 lb up at -1-2-14, and 30 lb down and 11 lb up at -1-2-14 on top 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
Concentrated Loads (lb)
Vert: 1=-46(F=-23, B=-23)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=34, B=34)-to-3=-72(F=-1, B=-1), 5=0(F=10, B=10)-to-4=-21(F=-0, B=-0)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	J2	Jack-Open	6	1	I39353177

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:01 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-higAOMQepUJHUGVxQ7w5MieICy69BMZTuCNUKdyHLuC

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0-10-8 3-0-0

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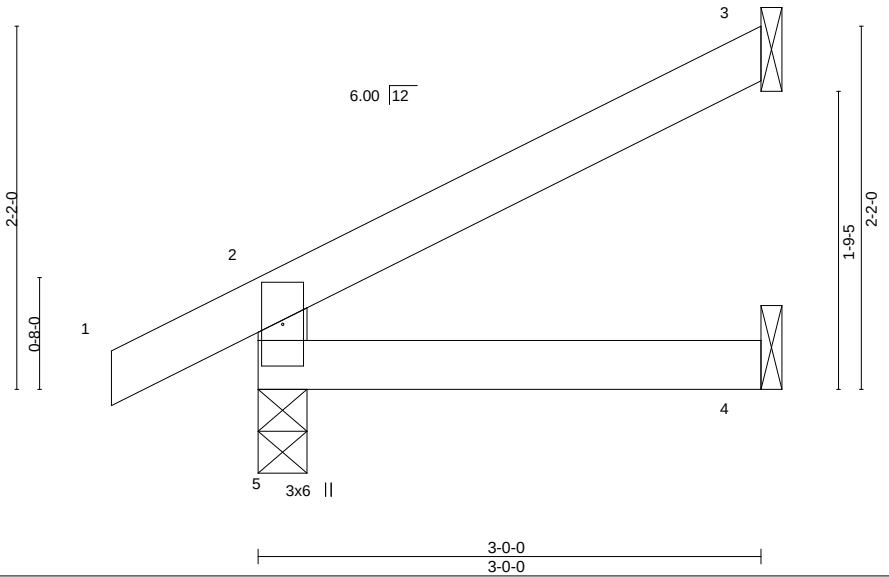


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 9 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 3-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=210/0-3-8, 3=82/Mechanical, 4=30/Mechanical
Max Horz 5=69(LC 8)
Max Uplift 5=-27(LC 8), 3=-49(LC 8)
Max Grav 5=210(LC 1), 3=82(LC 1), 4=52(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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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) 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.

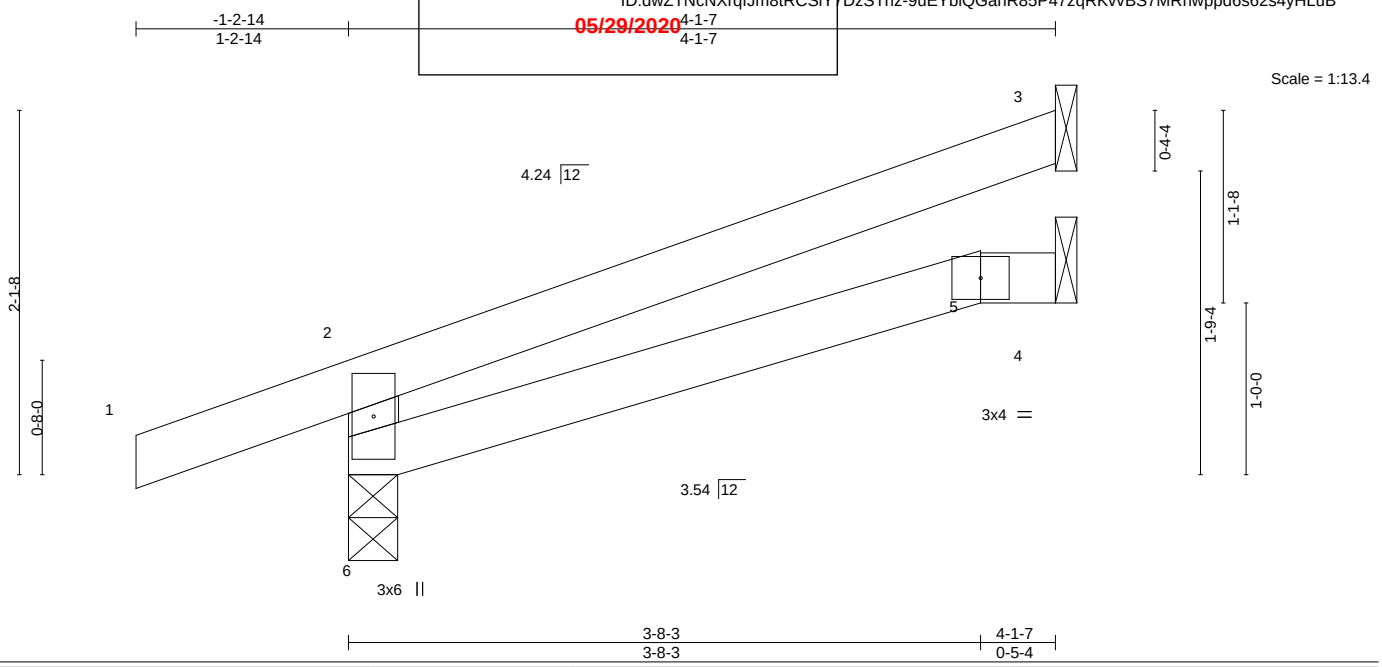
November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	J3	Jack-Open Girder	1	1	I39353178

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:02 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-9uEYbiQGanR85P47zqRKvvBS7MRnwppd6s62s4yHLuB



LOADING (psf)		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	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	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	5-6	>999	240	Weight: 12 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 6=144/0-3-7, 3=80/Mechanical, 4=24/Mechanical
Max Horz 6=80(LC 12)
Max Uplift 6=-90(LC 6), 3=-51(LC 12)
Max Grav 6=144(LC 1), 3=80(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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
5) Refer to girder(s) for truss to truss connections.
6) 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 30 lb down and 11 lb up at -1-2-14, and 30 lb down and 11 lb up at -1-2-14 on top 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
Concentrated Loads (lb)
Vert: 1=-46(F=-23, B=-23)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=34, B=34)-to-3=-72(F=-1, B=-1), 6=0(F=10, B=10)-to-5=-19(F=1, B=1), 5=-19(F=1, B=1)-to-4=-21(F=-0, B=-0)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	J4	Jack-Open	5	1	I39353179

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:03 2019 Page 1
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0-10-8 3-0-0

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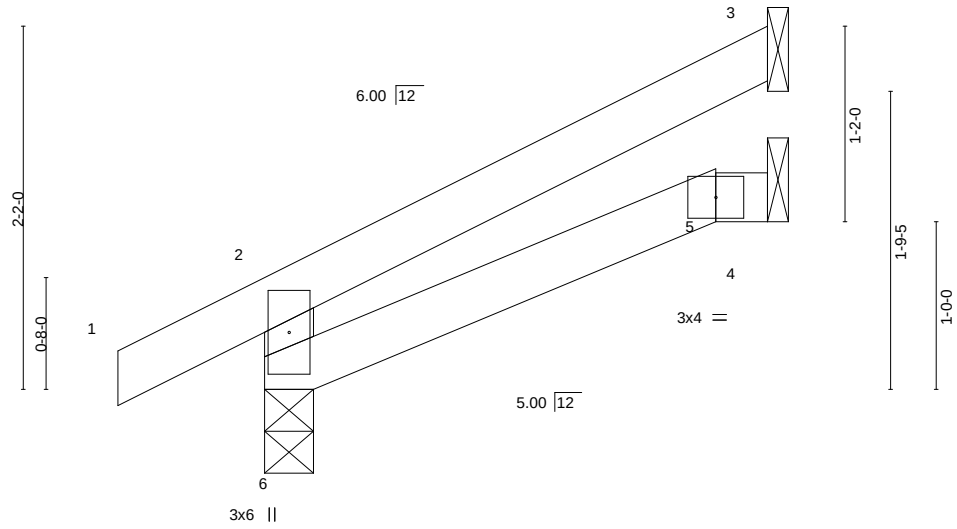

2-8-5 3-0-0
2-8-5 0-3-11

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	0.10	Vert(LL)	-0.00	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	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	5-6	>999	240	Weight: 9 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 3-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 6=210/0-3-8, 3=83/Mechanical, 4=30/Mechanical
Max Horz 6=68(LC 8)
Max Uplift 6=-26(LC 8), 3=-50(LC 8)
Max Grav 6=210(LC 1), 3=83(LC 1), 4=52(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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
5) Refer to girder(s) for truss to truss connections.
6) 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3.
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

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November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	LAY1	GABLE	1	1	I39353180

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:05 2019 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

4-1-0
4-1-0

8-1-15
4-1-0

Scale = 1:30.1

3x4 =

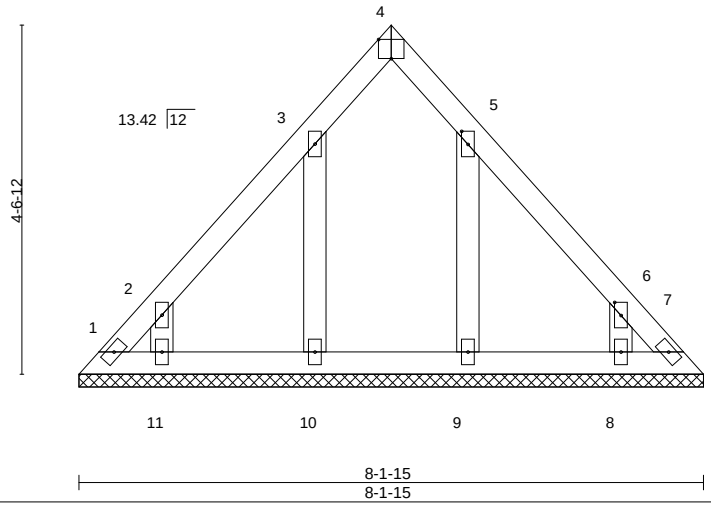

Plate Offsets (X,Y)-- [4:Edge,0-3-0], [5:0-2-1,0-1-0], [6:0-2-1,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	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	0.03	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 30 lb	FT = 10%

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

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

REACTIONS. All bearings 8-1-15.
(lb) - Max Horz 1=113(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-127(LC 8), 10=-105(LC 8), 9=-103(LC 9), 8=-128(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 10, 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=127, 10=105, 9=103, 8=128.
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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	LAY2	GABLE	1	1	I39353181

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:07 2019 Page 1
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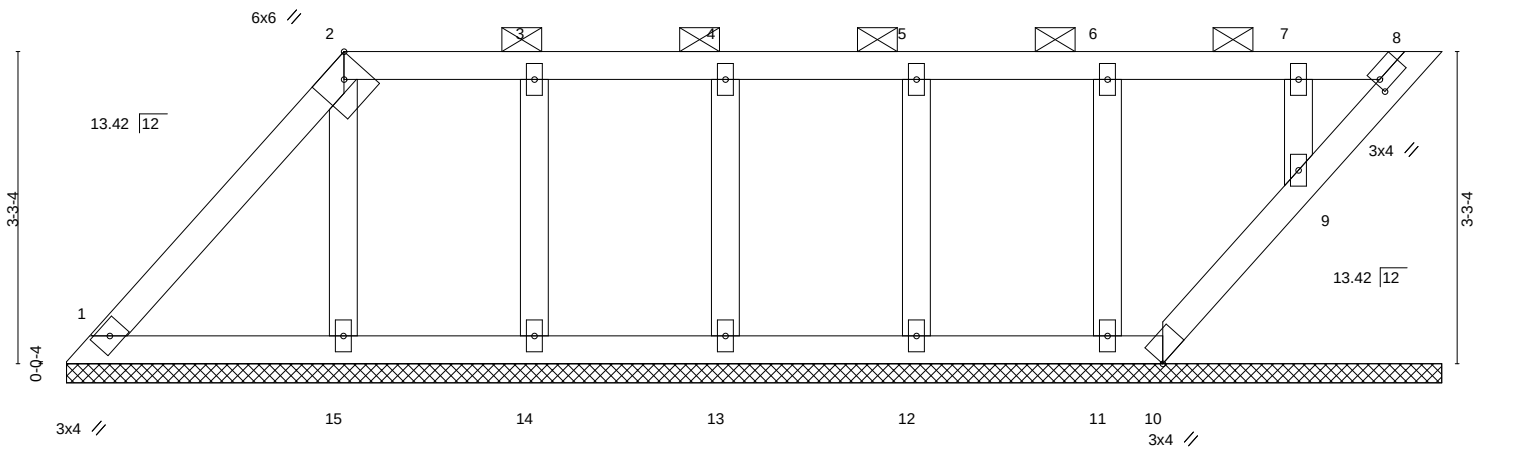
2-11-1
2-11-1

14-5-0
11-5-15

Scale: 1/2"=1'



0-0-4 11-5-15 14-5-0
0-0-4 11-5-12 2-11-1

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 52 lb	FT = 10%

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

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

REACTIONS. All bearings 14-4-12.
(lb) - Max Horz 1=121(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 8, 10, 15, 14, 13, 12, 11, 9
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 10, 15, 14, 13, 12, 11, 9

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10, 15, 14, 13, 12, 11, 9.
9) Non Standard bearing condition. Review required.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
NSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	LAY3	GABLE	1	1	I39353182

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:08 2019 Page 1

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-_2bqslV19dBHqKXHK5Yk9ARVfnVzKWOVVnZM4jyHLu5

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

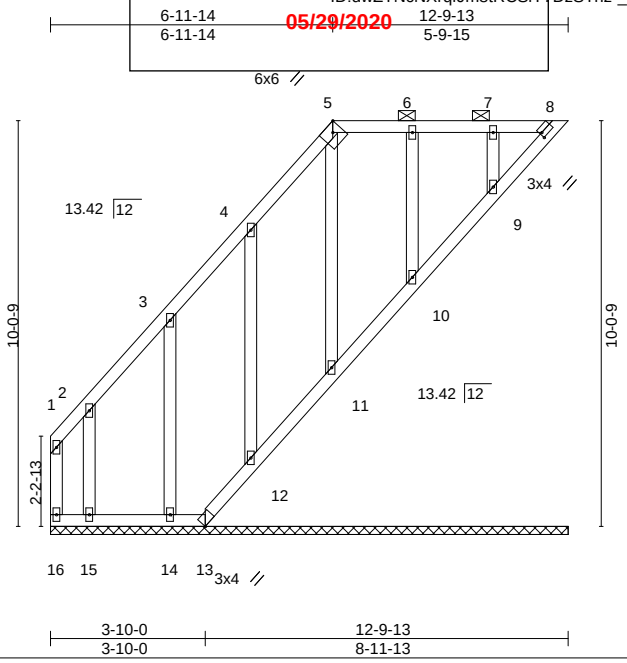


Plate Offsets (X,Y)-- [5:0-2-10,Edge], [8:0-0-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 69 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, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-9-13.
(lb) - Max Horz 16=286(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 16, 11, 10, 9 except 8=-297(LC 8), 13=-140(LC 6), 15=-205(LC 8), 14=-133(LC 8), 12=-161(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 16, 8, 15, 14, 12, 11, 10, 9 except 13=314(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-190/346, 5-6=-131/267, 6-7=-130/267, 7-8=-130/267
BOT CHORD 15-16=-268/130, 14-15=-268/130, 13-14=-268/130, 12-13=-415/213, 11-12=-411/211, 10-11=-410/210, 9-10=-410/210, 8-9=-408/201

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 11, 10, 9 except (jt=lb) 8=297, 13=140, 15=205, 14=133, 12=161.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 12, 11, 10, 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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	LAY4	GABLE	1	1	I39353183

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:10 2019 Page 1
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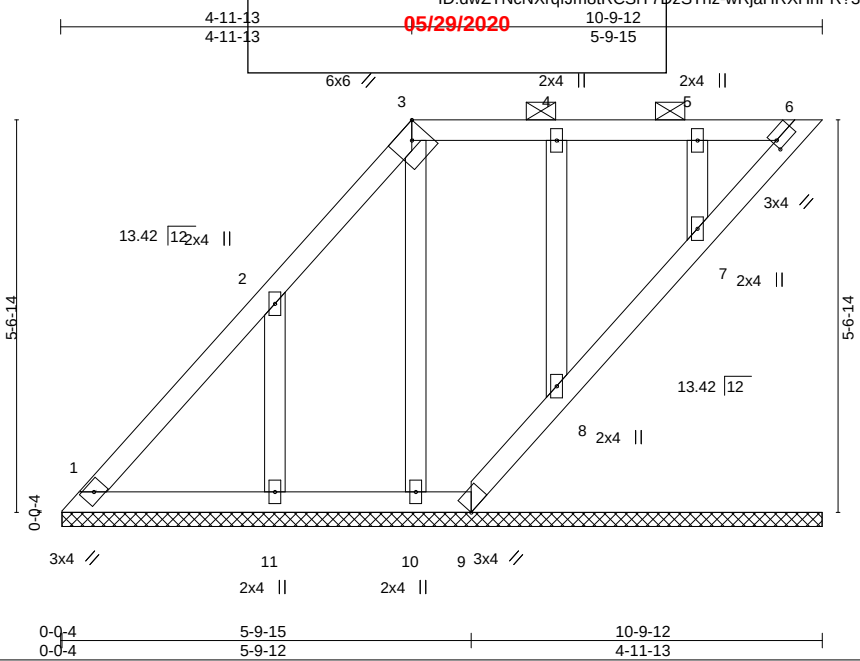


Plate Offsets (X,Y)-- [3:0-2-10,Edge], [6:0-0-11,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
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-S							Weight: 44 lb	FT = 10%

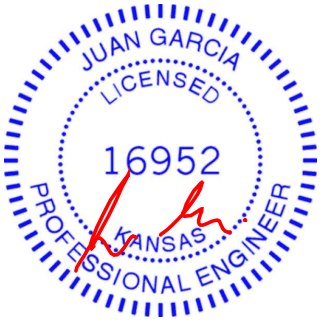
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. All bearings 10-9-8.
(lb) - Max Horz 1=215(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 6, 9, 10, 8, 7 except 11=-199(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 9, 10, 8, 7 except 11=303(LC 15)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9, 10, 8, 7 except (jt=lb) 11=199.
8) Non Standard bearing condition. Review required.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V1	Valley	1	1	I39353184

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:11 2019 Page 1
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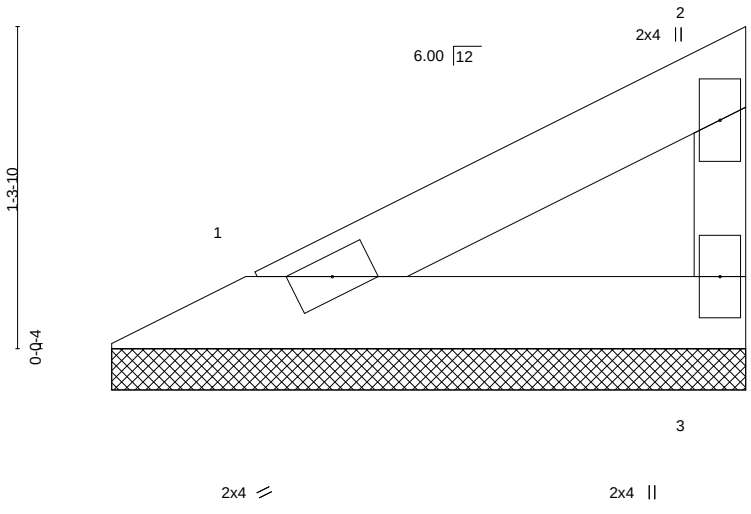

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=84/2-6-12, 3=84/2-6-12
Max Horz 1=39(LC 5)
Max Uplift 1=-11(LC 8), 3=-21(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V2	Valley	1	1	I39353185

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:21 2019 Page 1
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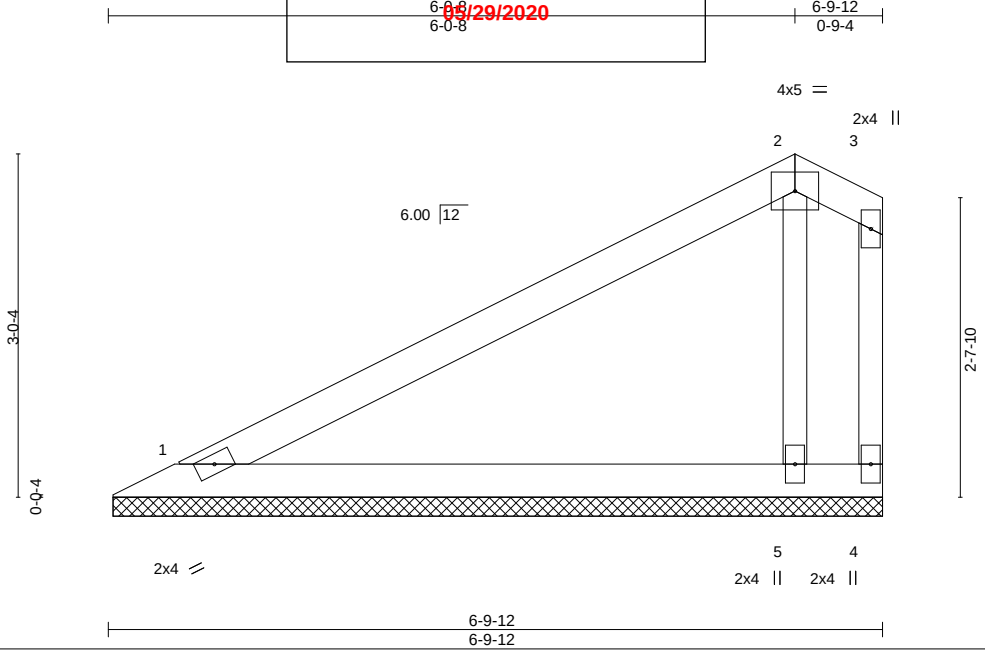

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 19 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 6-9-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=231/6-9-4, 4=-68/6-9-4, 5=384/6-9-4
Max Horz 1=103(LC 5)
Max Uplift 1=-41(LC 8), 4=-176(LC 3)
Max Grav 1=231(LC 1), 5=402(LC 3)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=176.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V3	Valley	1	1	I39353186

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:22 2019 Page 1
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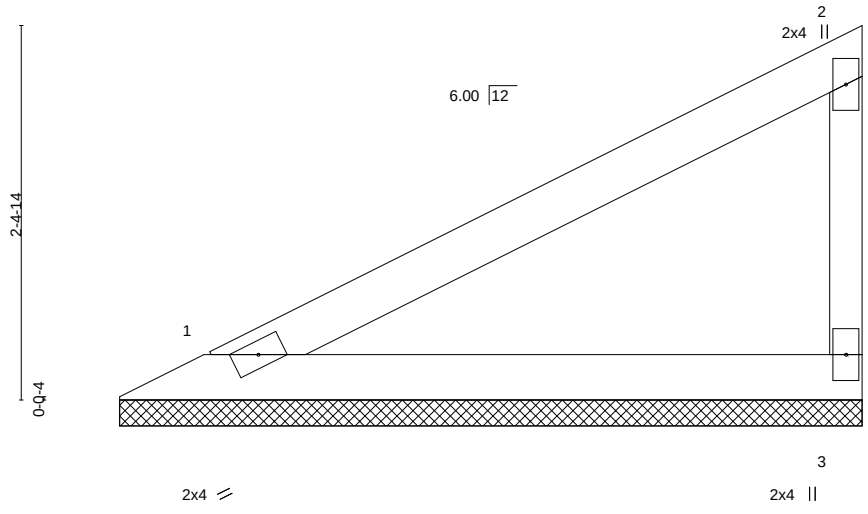

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 10%

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

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

REACTIONS. (lb/size) 1=184/4-9-4, 3=184/4-9-4
Max Horz 1=85(LC 5)
Max Uplift 1=-24(LC 8), 3=-45(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V4	Valley	1	1	I39353187

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:23 2019 Page 1
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2-9-12

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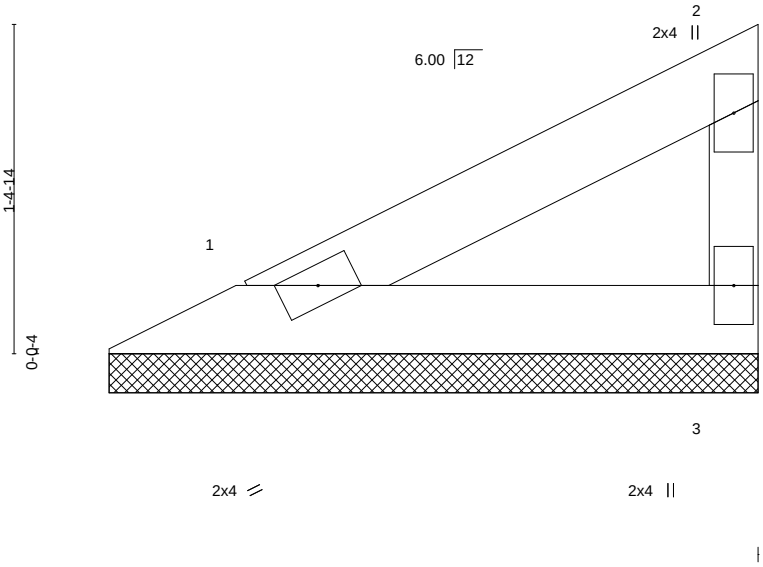

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 7 lb	FT = 10%

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

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

REACTIONS. (lb/size) 1=94/2-9-4, 3=94/2-9-4
Max Horz 1=44(LC 5)
Max Uplift 1=-12(LC 8), 3=-23(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/28/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V5	Valley	1	1	I39353188

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:24 2019 Page 1
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9-8-4

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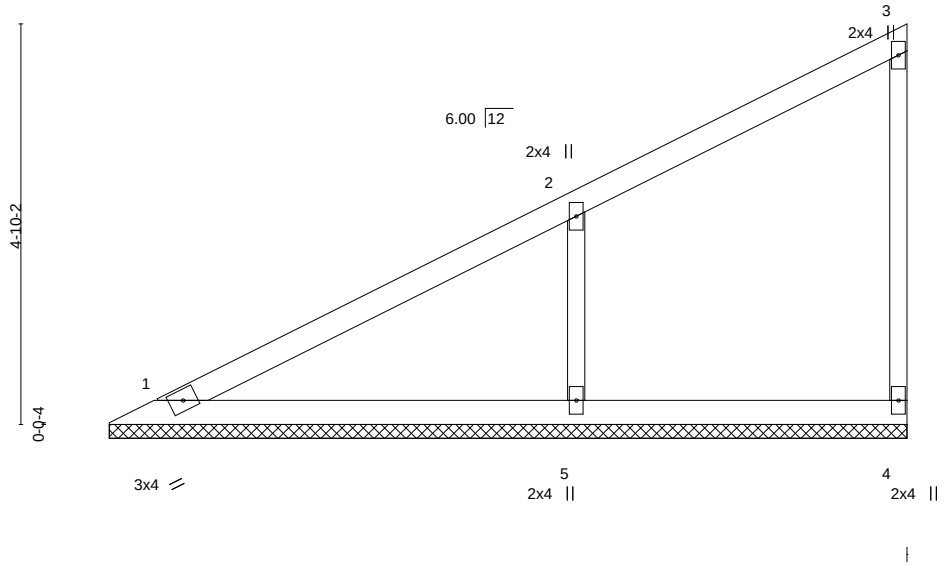

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 28 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. (lb/size) 1=183/9-7-12, 4=117/9-7-12, 5=506/9-7-12
Max Horz 1=187(LC 5)
Max Uplift 4=-28(LC 5), 5=-152(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-383/203

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=152.
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

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V6	Valley	1	1	I39353189

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:25 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-_J7FQZih9sKtMyLYqALjLmeNdeIBpDg?PxBm9EyHLtq

7-4-4

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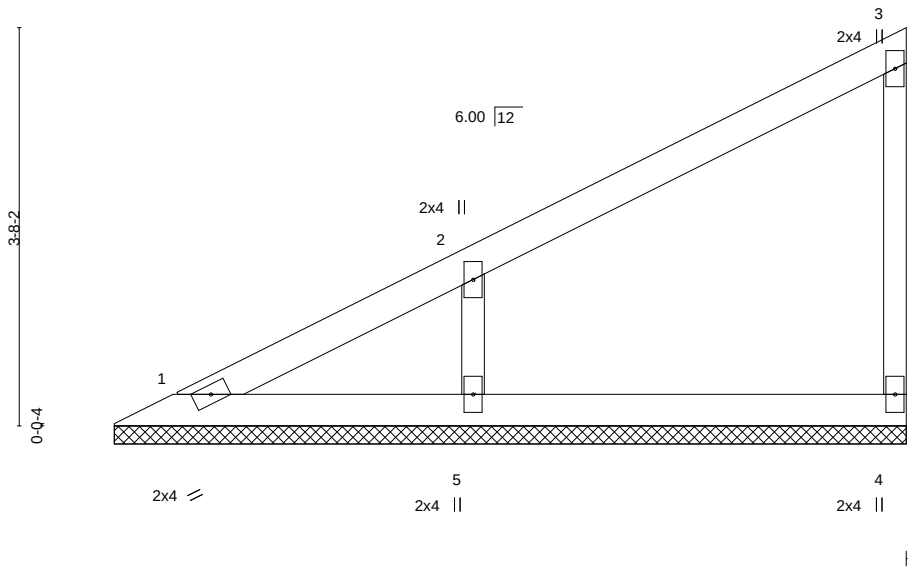

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 20 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. (lb/size) 1=73/7-3-12, 4=141/7-3-12, 5=382/7-3-12
Max Horz 1=138(LC 5)
Max Uplift 4=-26(LC 8), 5=-115(LC 8)
Max Grav 1=87(LC 16), 4=141(LC 1), 5=382(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-297/165

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=115.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V7	Valley	1	1	I39353190

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:25 2019 Page 1
ID:dwZTNcNXrqfJm8tRCSY7DzSTnz-_J7FQZih9sKtMyLYqALjLmeLFeHrpDV?PxBm9EyHLtq

5-0-4
5-0-4

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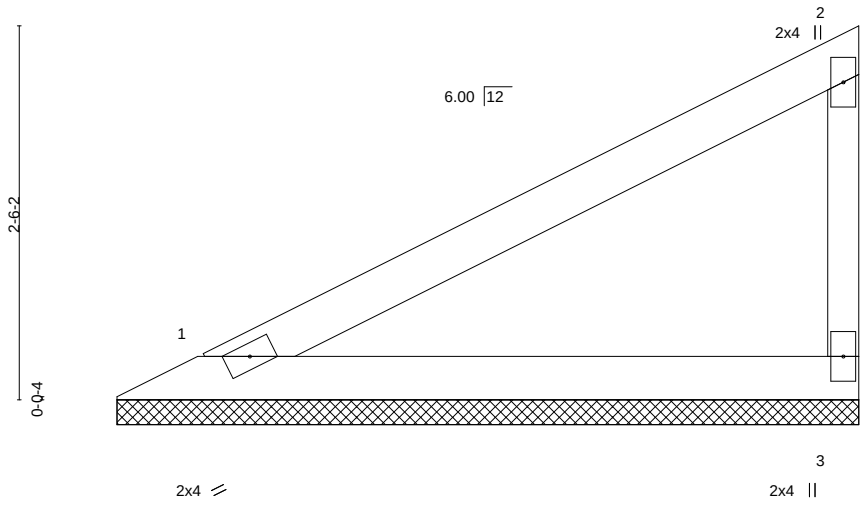

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 13 lb	FT = 10%

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

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

REACTIONS. (lb/size) 1=193/4-11-12, 3=193/4-11-12
Max Horz 1=89(LC 7)
Max Uplift 1=-25(LC 8), 3=-47(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V8	Valley	1	1	I39353191

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:26 2019 Page 1
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2-8-4

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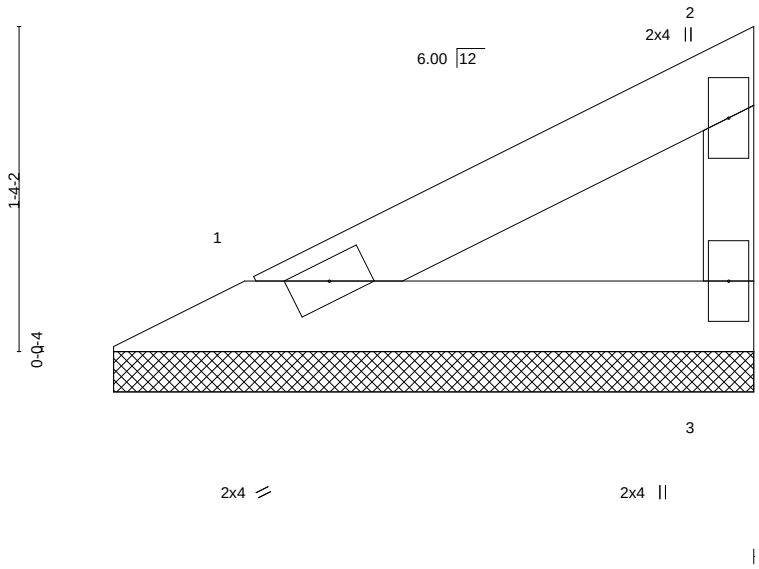

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 6 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=88/2-7-12, 3=88/2-7-12
Max Horz 1=41(LC 5)
Max Uplift 1=-11(LC 8), 3=-22(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V9	Valley	1	1	I39353192

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:27 2019 Page 1
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3-8-7 3-8-7

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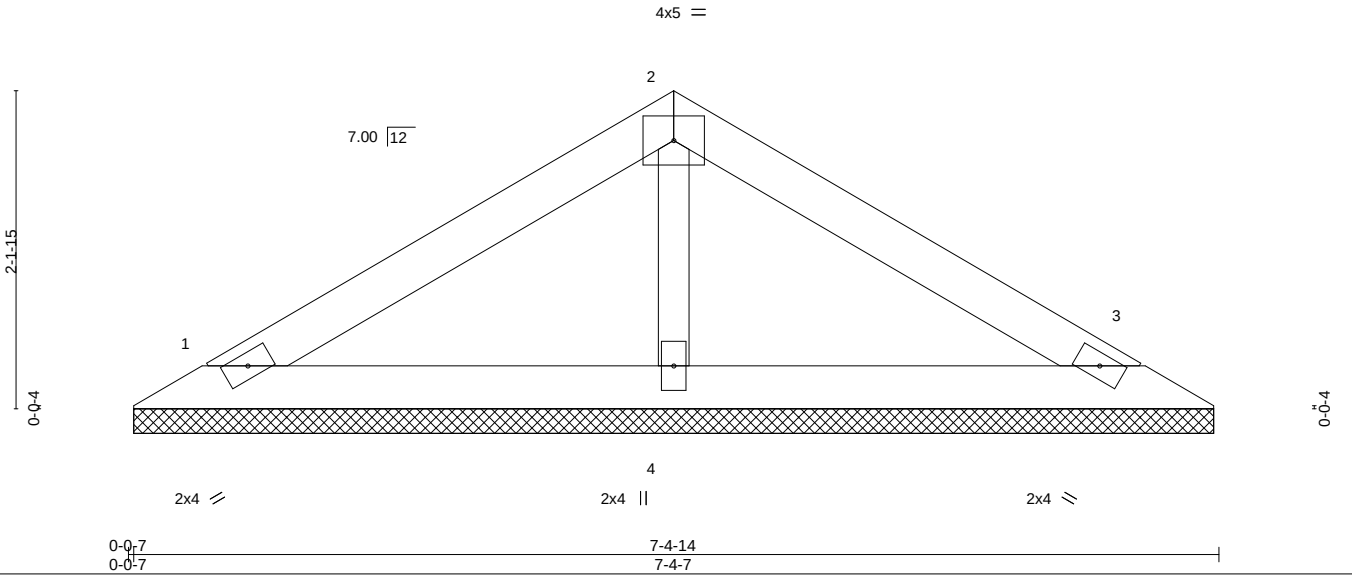

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 18 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. (lb/size) 1=154/7-4-0, 3=154/7-4-0, 4=261/7-4-0
Max Horz 1=-48(LC 6)
Max Uplift 1=-35(LC 8), 3=-41(LC 9)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V10	Valley	1	1	I39353193

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:12 2019 Page 1
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1-11-14 3-11-11
1-11-14 1-11-14

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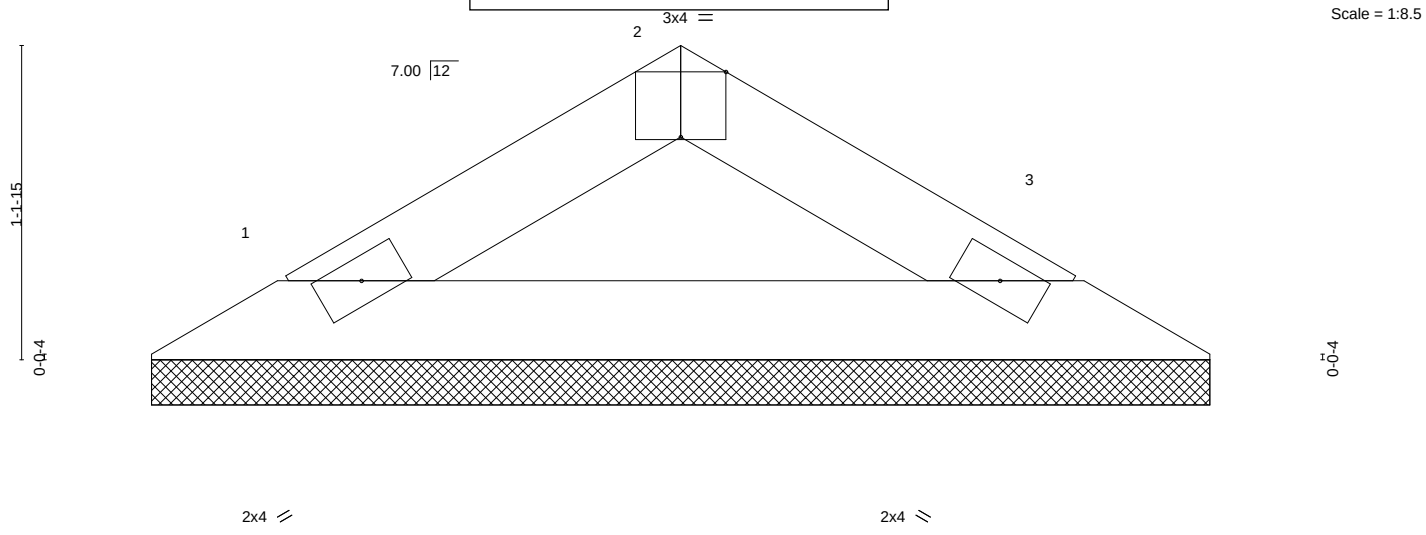

0-0-7 3-11-11
0-0-7 3-11-5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 8 lb	FT = 10%

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

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

REACTIONS. (lb/size) 1=130/3-10-14, 3=130/3-10-14
Max Horz 1=-22(LC 4)
Max Uplift 1=-16(LC 8), 3=-16(LC 9)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V11	Valley	1	1	I39353194

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:13 2019 Page 1
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7-0-10
7-0-10
7-7-2
0-6-8

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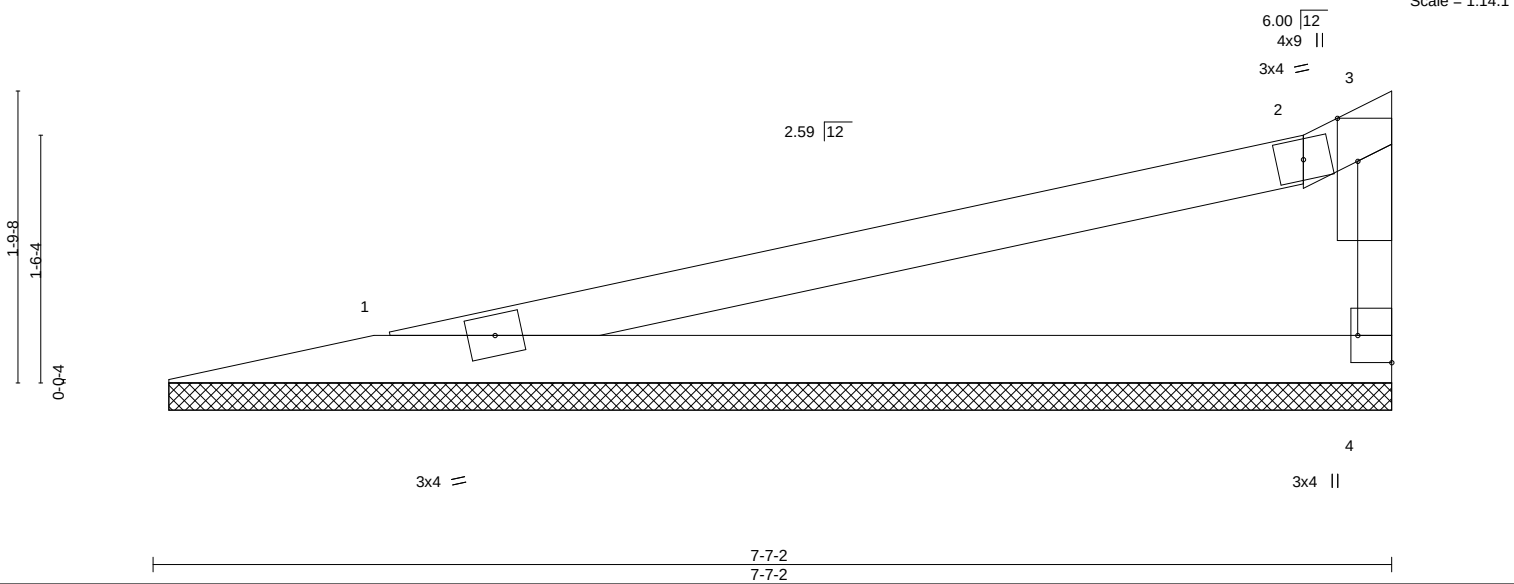

7-7-2
7-7-2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 17 lb	FT = 10%

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

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

REACTIONS. (lb/size) 1=272/7-6-0, 4=272/7-6-0
Max Horz 1=60(LC 5)
Max Uplift 1=-48(LC 4), 4=-54(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V12	Valley	1	1	I39353195

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:14 2019 Page 1
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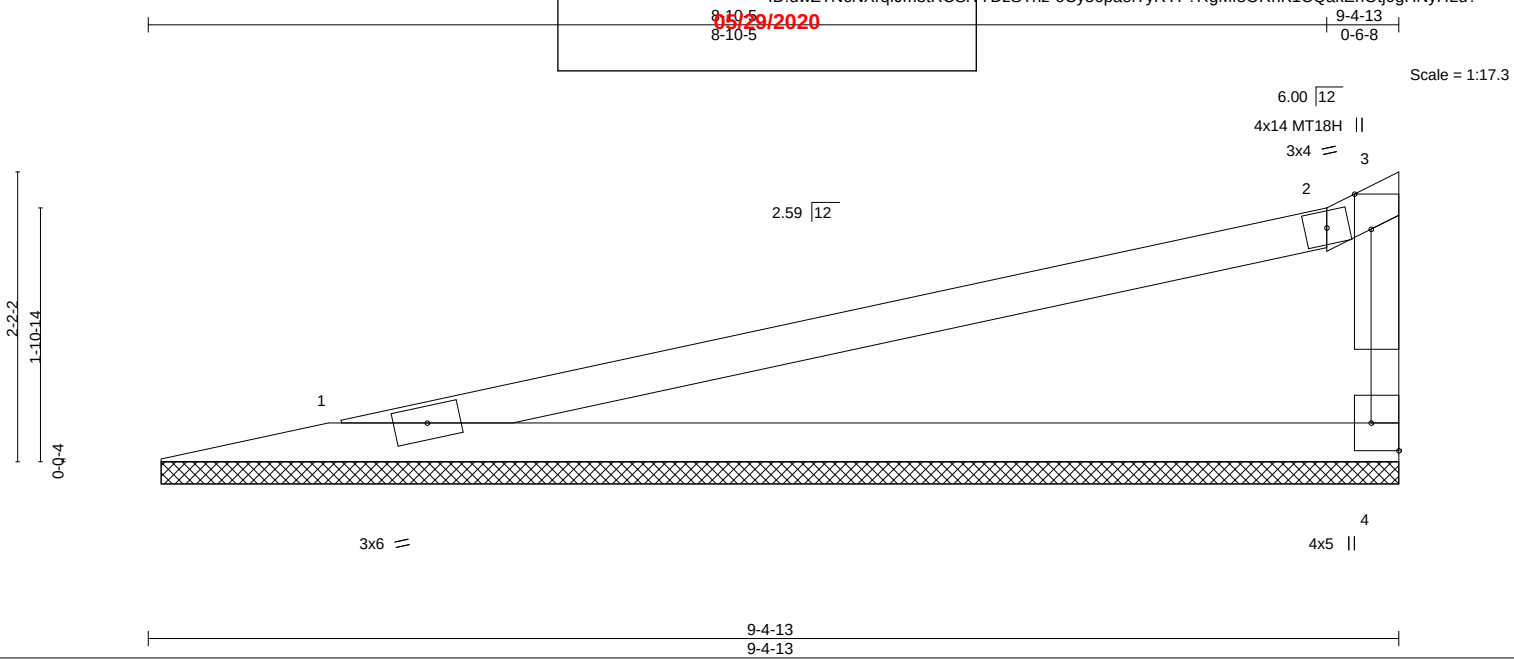


9-4-13
9-4-13

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	n/a	-	n/a	999	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 21 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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=353/9-3-10, 4=353/9-3-10
Max Horz 1=77(LC 5)
Max Uplift 1=-63(LC 4), 4=-70(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-251/109

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) All plates are MT20 plates 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V13	Valley	1	1	I39353196

Job Reference (optional)

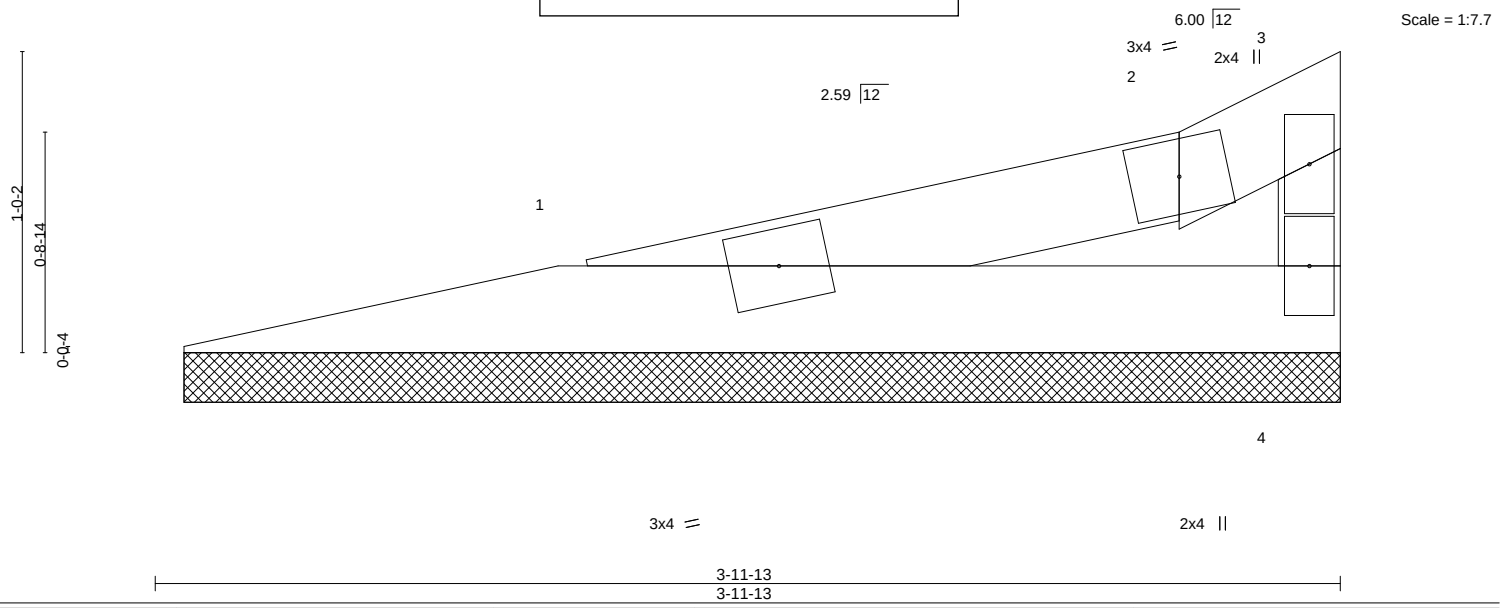
Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:15 2019 Page 1

ID:dwZTNcNXrqfJm8tRCSiY7DzSTnz-HOWTK9bQWn4H9PadE3ANxfEizcugTh1X6NmEqpyHLu_

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

3-5-5
3-5-5

3-11-13
0-6-8



3-11-13
3-11-13

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

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=109/3-10-10, 4=109/3-10-10
Max Horz 1=27(LC 5)
Max Uplift 1=-19(LC 4), 4=-22(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V14	Valley	1	1	I39353197

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:15 2019 Page 1
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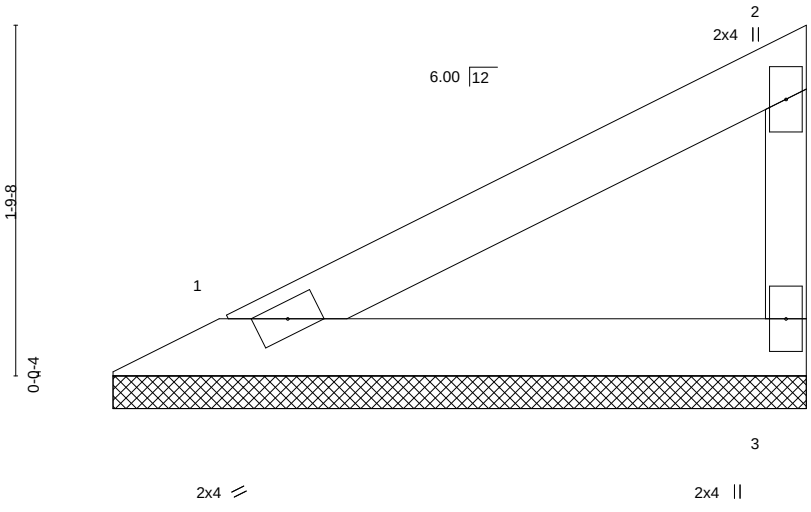

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=128/3-6-7, 3=128/3-6-7
Max Horz 1=59(LC 5)
Max Uplift 1=-16(LC 8), 3=-31(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V15	Valley	1	1	I39353198

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:16 2019 Page 1
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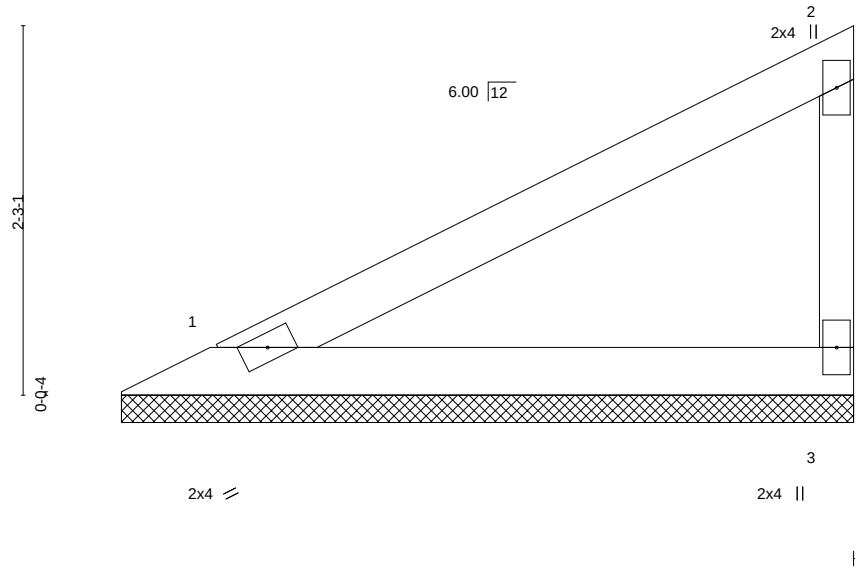

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 11 lb	FT = 10%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=170/4-5-10, 3=170/4-5-10
Max Horz 1=79(LC 5)
Max Uplift 1=-22(LC 8), 3=-42(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V16	Valley	1	1	I39353199

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:17 2019 Page 1
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5-2-6
5-2-6

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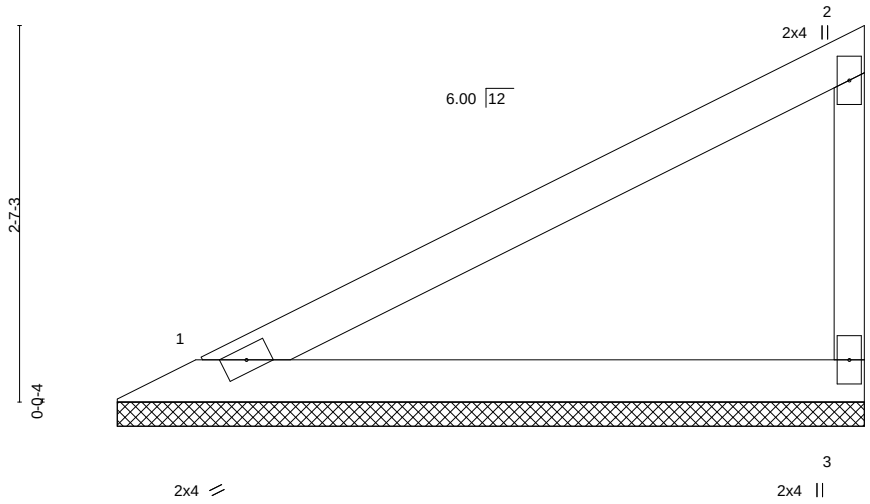

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 13 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 5-2-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=201/5-1-14, 3=201/5-1-14
Max Horz 1=93(LC 5)
Max Uplift 1=-26(LC 8), 3=-49(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V17	Valley	1	1	I39353200

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:19 2019 Page 1
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5-10-10

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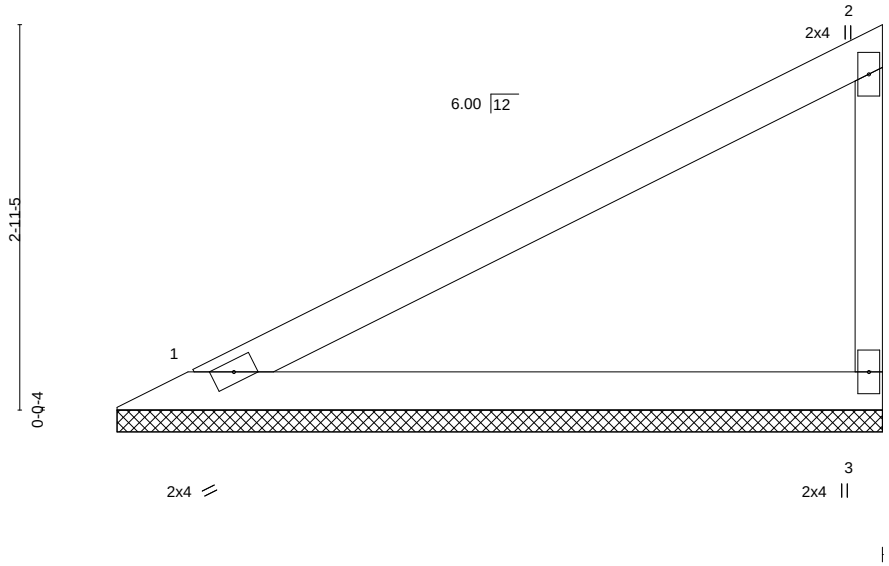

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 15 lb	FT = 10%

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

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

REACTIONS. (lb/size) 1=232/5-10-2, 3=232/5-10-2
Max Horz 1=107(LC 5)
Max Uplift 1=-30(LC 8), 3=-57(LC 8)

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V18	GABLE	1	1	I39353201

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:20 2019 Page 1
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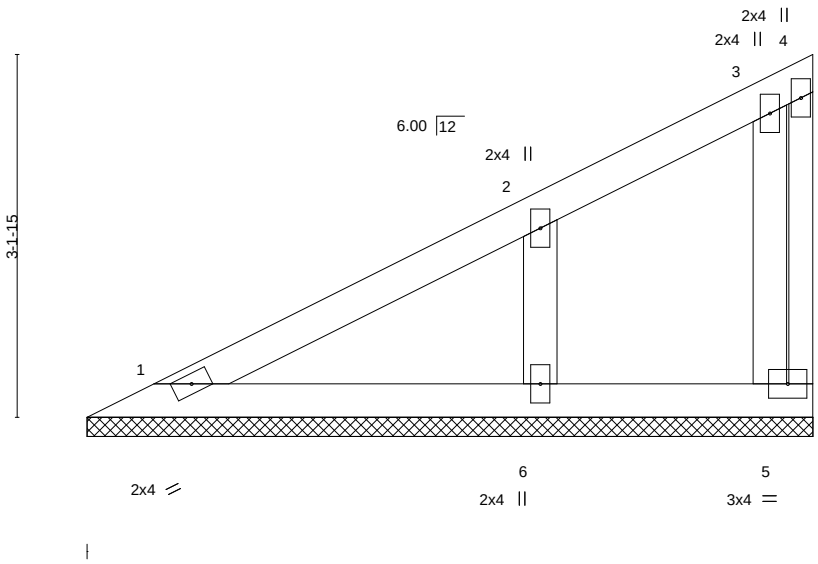

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	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. (lb/size) 1=122/6-3-14, 5=62/6-3-14, 6=316/6-3-14
Max Horz 1=117(LC 5)
Max Uplift 5=-23(LC 5), 6=-94(LC 8)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V19	Valley	1	1	I39353202

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:20 2019 Page 1
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7-1-10
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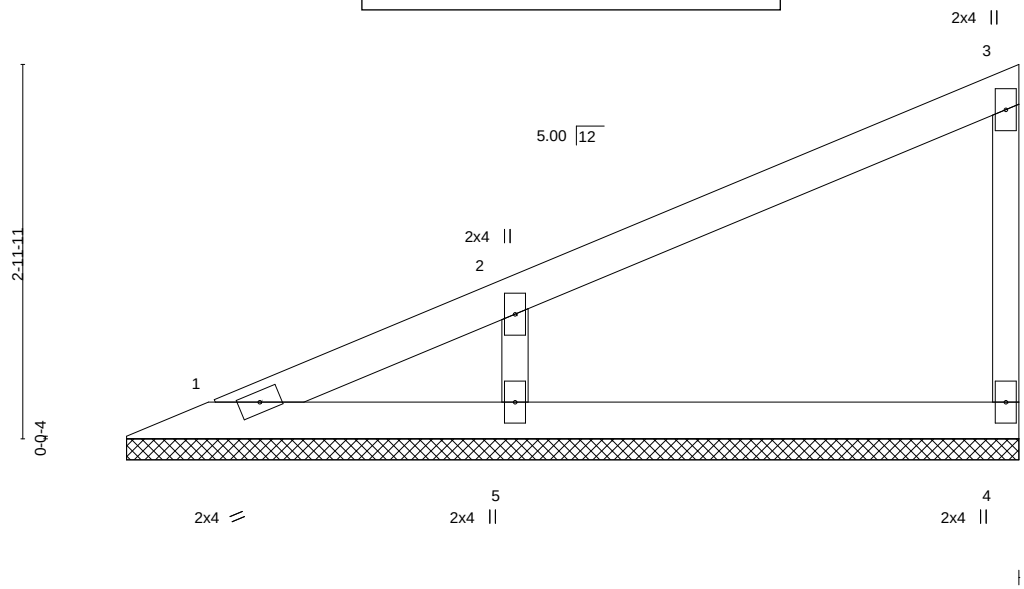


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 18 lb	FT = 10%

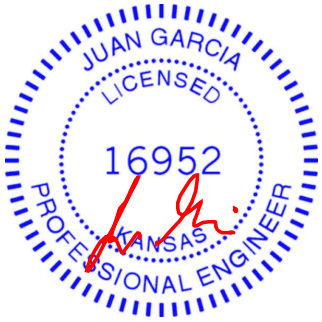
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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. (lb/size) 1=53/7-1-0, 4=142/7-1-0, 5=370/7-1-0
Max Horz 1=115(LC 5)
Max Uplift 4=-27(LC 8), 5=-98(LC 8)
Max Grav 1=62(LC 16), 4=142(LC 1), 5=370(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-288/148

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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 20,2019

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 4 H3
400156	V20	Valley	1	1	I39353203

Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871 8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Nov 20 07:56:22 2019 Page 1
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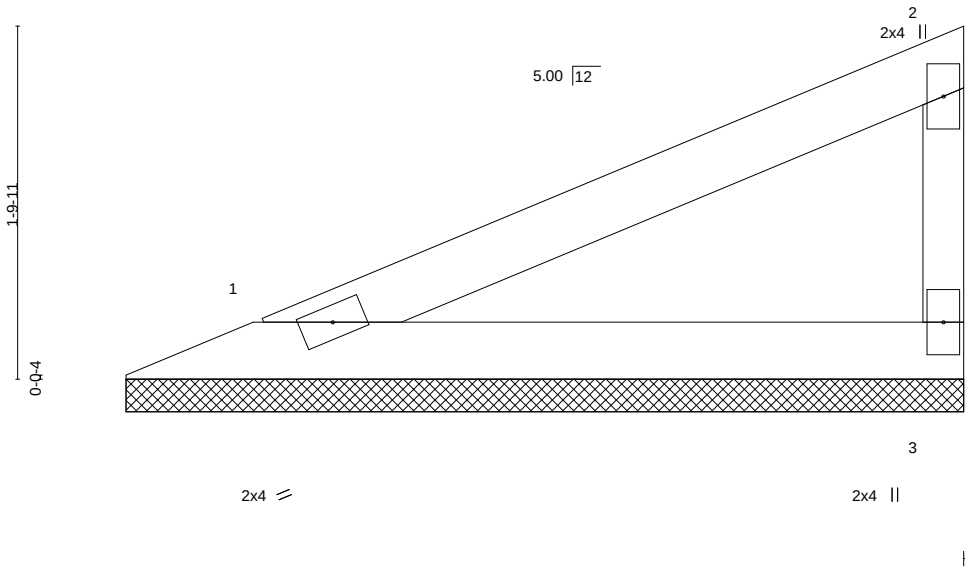
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/29/2020

4-4-0
4-4-0

Scale = 1:11.8



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	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 4-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=156/4-3-6, 3=156/4-3-6
Max Horz 1=64(LC 5)
Max Uplift 1=-23(LC 8), 3=-36(LC 8)

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

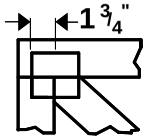
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom 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) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
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.

November 20,2019

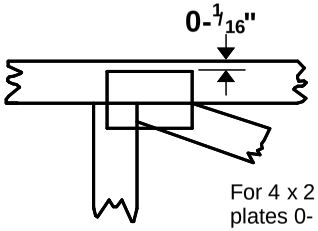
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

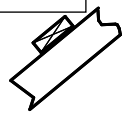
***Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 X 4

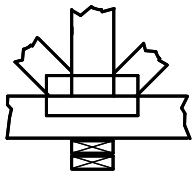
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

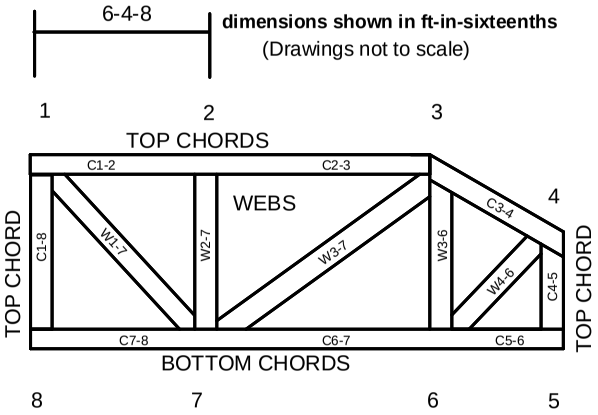


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.