

RE: 400710 Lot 2 W2 MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

Site Information:

Customer: Project Name: 400710

Lot/Block: Model:
Address: Subdivision:
City: State:

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/04/2020

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: N/A Wind Speed: 115 mph Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 70 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	143489886	B1	11/4/2020	21	143489906	G2	11/4/2020
2	143489887	B2	11/4/2020	22	143489907	G3	11/4/2020
3	143489888	C1	11/4/2020	23	143489908	G4	11/4/2020
4	143489889	C2	11/4/2020	24	143489909	G5	11/4/2020
5	143489890	C3	11/4/2020	25	143489910	G6	11/4/2020
6	143489891	C4	11/4/2020	26	143489911	G7	11/4/2020
7	143489892	C5	11/4/2020	27	143489912	H1	11/4/2020
8	143489893	C6	11/4/2020	28	143489913	H2	11/4/2020
9	143489894	D1	11/4/2020	29	143489914	H3	11/4/2020
10	143489895	D2	11/4/2020	30	143489915	J4	11/4/2020
11	143489896	D3	11/4/2020	31	143489916	J5	11/4/2020
12	143489897	D4	11/4/2020	32	143489917	J6	11/4/2020
13	143489898	D5	11/4/2020	33	143489918	J6A	11/4/2020
14	143489899	D6	11/4/2020	34	143489919	J7	11/4/2020
15	143489900	E1	11/4/2020	35	143489920	J8	11/4/2020
16	143489901	E2	11/4/2020	36	143489921	J9	11/4/2020
17	143489902	E3	11/4/2020	37	143489922	J10	11/4/2020
18	143489903	E4	11/4/2020	38	143489923	J11	11/4/2020
19	143489904	E5	11/4/2020	39	143489924	J12	11/4/2020
20	143489905	G1	11/4/2020	40	143489925	J13	11/4/2020

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.



November 04, 2020

1 of 2



RE: 400710 - Lot 2 W2

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

Site Information:

Project Name: 400710

Project Customer: Lot/Block: Address: Subdivision:

City, County: State:

-	-		
No.	Seal#	Truss Name	Date
41	143489926	J14	11/4/2020
42	143489927	J15	11/4/2020
43	143489928	J16	11/4/2020
44	143489929	J17	11/4/2020
45	143489930	J18	11/4/2020
46	143489931	J19	11/4/2020
47	143489932	J20	11/4/2020
48	143489933	J21	11/4/2020
49	143489934	J22	11/4/2020
50	143489935	J23	11/4/2020
51	143489936	J24	11/4/2020
52	143489937	J25	11/4/2020
53	143489938	K1	11/4/2020
54	143489939	K2	11/4/2020
55	143489940	K3	11/4/2020
56	143489941	K4	11/4/2020
57	143489942	K5	11/4/2020
58	143489943	K6	11/4/2020
59	143489944	LAY2	11/4/2020
60	143489945	LAY3	11/4/2020
61	143489946	LAY4	11/4/2020
62	143489947	LAY5	11/4/2020
63	143489948	R1	11/4/2020
64	143489949	V1	11/4/2020
65	143489950	V2	11/4/2020
66	143489951	V3	11/4/2020
67	143489952	V4	11/4/2020
68	143489953	V5	11/4/2020
69	143489954	V6	11/4/2020
70	143489955	V7	11/4/2020



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Site Information:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: N/A Wind Speed: 115 mph Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 70 individual, dated Truss Design Drawings and 0 Additional Drawings.

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1	143489886	B1	11/4/2020	21	143489906	G2	11/4/2020
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5	143489890	C3	11/4/2020	25	I43489910	G6	11/4/2020
6	143489891	C4	11/4/2020	26	I43489911	G7	11/4/2020
7	143489892	C5	11/4/2020	27	I43489912	H1	11/4/2020
8	143489893	C6	11/4/2020	28	I43489913	H2	11/4/2020
9	143489894	D1	11/4/2020	29	143489914	H3	11/4/2020
10	143489895	D2	11/4/2020	30	I43489915	J4	11/4/2020
11	143489896	D3	11/4/2020	31	I43489916	J5	11/4/2020
12	143489897	D4	11/4/2020	32	I43489917	J6	11/4/2020
13	143489898	D5	11/4/2020	33	I43489918	J6A	11/4/2020
14	143489899	D6	11/4/2020	34	I43489919	J7	11/4/2020
15	143489900	E1	11/4/2020	35	143489920	J8	11/4/2020
16	I43489901	E2	11/4/2020	36	143489921	J9	11/4/2020
17	143489902	E3	11/4/2020	37	143489922	J10	11/4/2020
18	143489903	E4	11/4/2020	38	143489923	J11	11/4/2020
19	143489904	E5	11/4/2020	39	143489924	J12	11/4/2020
20	143489905	G1	11/4/2020	40	143489925	J13	11/4/2020

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.



November 04, 2020



RE: 400710 - Lot 2 W2

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

Site Information:

Project Name: 400710

Project Customer: Lot/Block: Address: Subdivision:

City, County: State:

-	-		
No.	Seal#	Truss Name	Date
41	143489926	J14	11/4/2020
42	143489927	J15	11/4/2020
43	143489928	J16	11/4/2020
44	143489929	J17	11/4/2020
45	143489930	J18	11/4/2020
46	I43489931	J19	11/4/2020
47	143489932	J20	11/4/2020
48	143489933	J21	11/4/2020
49	143489934	J22	11/4/2020
50	143489935	J23	11/4/2020
51	143489936	J24	11/4/2020
52	143489937	J25	11/4/2020
53	143489938	K1	11/4/2020
54	143489939	K2	11/4/2020
55	143489940	K3	11/4/2020
56	143489941	K4	11/4/2020
57	143489942	K5	11/4/2020
58	143489943	K6	11/4/2020
59	143489944	LAY2	11/4/2020
60	143489945	LAY3	11/4/2020
61	143489946	LAY4	11/4/2020
62	143489947	LAY5	11/4/2020
63	143489948	R1	11/4/2020
64	143489949	V1	11/4/2020
65	143489950	V2	11/4/2020
66	143489951	V3	11/4/2020
67	143489952	V4	11/4/2020
68	143489953	V5	11/4/2020
69	143489954	V6	11/4/2020
70	143489955	V7	11/4/2020

Job Truss Truss Type Qty Lot 2 W2 143489886 B1 400710 Common Supported Gable Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:24 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-xQ27_7bVQnVD3GkNvuJDAF6hTw6gy8nXxCThjYyMcEj -0-10-8 0-10-8 7-5-0 8-3-8 3-8-8 3-8-8 0-10-8 Scale = 1:26.1 4x5 = 10.00 12 5 3 6 1-0-0 1-0-0 12 11 10 9 8

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

L/d

120

120

n/a

Rigid ceiling directly applied or 6-0-0 oc bracing.

(loc)

8

-0.00

-0.00

-0.00

I/defl

n/r

n/r

n/a

except end verticals

PLATES

Weight: 32 lb

MT20

Structural wood sheathing directly applied or 6-0-0 oc purlins,

GRIP

197/144

FT = 10%

10.0 LUMBER-

25.0

10.0

0.0

LOADING (psf)

TCLL

TCDL

BCLL

BCDL

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

WEBS 2x3 SPF No.2

OTHERS 2x4 SPF No.2

REACTIONS. All bearings 7-5-0.

(lb) -Max Horz 12=-128(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 12, 8 except 11=-105(LC 8), 9=-103(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

2-0-0

1.15

1.15

YES

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.

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

- 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.

CSI.

TC

ВС

WB

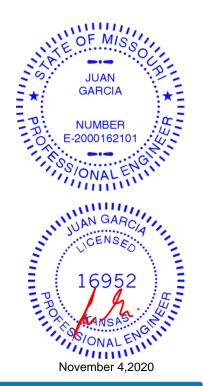
Matrix-R

0.07

0.04

0.04

- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8 except (jt=lb) 11=105, 9=103.
- 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.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Lot 2 W2 143489887 400710 B2 Common Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:24 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-xQ27_7bVQnVD3GkNvuJDAF6eJw4ty8mXxCThjYyMcEj

3-8-8

3-8-8

except end verticals.

3-4-8

3-4-8

Scale = 1:27.3 4x5 =

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

0-10-8

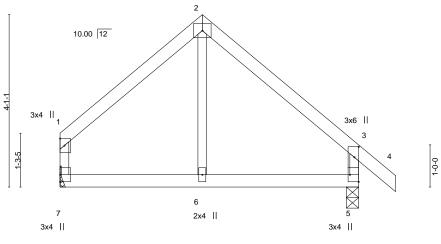


Plate Offsets (X,Y)--[3:0-3-0,0-1-4], [5:Edge,0-2-8] SPACING-CSI. DEFL. **PLATES** GRIP LOADING (psf) in (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.27 Vert(LL) -0.01 6 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.15 Vert(CT) -0.03 6 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-R >999 240 Weight: 24 lb 0.01 5-6

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

REACTIONS. (size) 7=Mechanical, 5=0-3-8

Max Horz 7=-125(LC 4) Max Uplift 7=-30(LC 9), 5=-51(LC 9)

Max Grav 7=304(LC 1), 5=383(LC 1)

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

TOP CHORD 1-2=-261/70, 2-3=-272/67, 3-5=-329/83

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





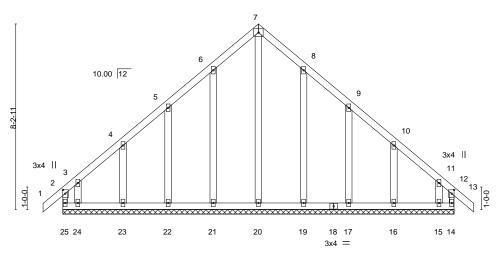
Job Truss Truss Type Qty Lot 2 W2 143489888 C1 400710 Common Supported Gable

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:25 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-PccVCTc7B5d4hPJZTbqSjTfr?KRHhWZgAsDEG_yMcEi

-0-10-8 0-10-8 8-8-0 8-8-0

> Scale = 1:51.0 4x5 =



17-4-0

Plate Offsets (X,Y)	[2:0-2-0,0-1-4], [12:0-2-0,0-1-4]			
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.15	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 13 n/r 120	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.08 WB 0.26	Vert(CT) -0.00 13 n/r 120 Vert(CT) -0.00 14 n/a n/a	197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 90 lb FT = 10%

LUMBER-**BRACING-**

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

REACTIONS. All bearings 17-4-0.

(lb) -Max Horz 25=-236(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 21, 22, 23, 19, 17, 16 except 25=-221(LC 4), 14=-172(LC 5),

24=-218(LC 8), 15=-202(LC 9)

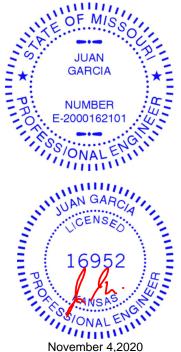
All reactions 250 lb or less at joint(s) 14, 21, 22, 23, 19, 17, 16, 15 except 25=269(LC 5), 20=263(LC Max Grav

9), 24=259(LC 6)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 22, 23, 19, 17, 16 except (jt=lb) 25=221, 14=172, 24=218, 15=202.
- 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 4,2020



Job Truss Truss Type Qty Lot 2 W2 143489889 400710 C2 Common

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:26 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-tpAtPpdlyOlxIZum1JLhFgBvDkfZQ_gqPWyooQyMcEh

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

> Scale = 1:50.8 4x5 =

> > Structural wood sheathing directly applied or 4-11-7 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

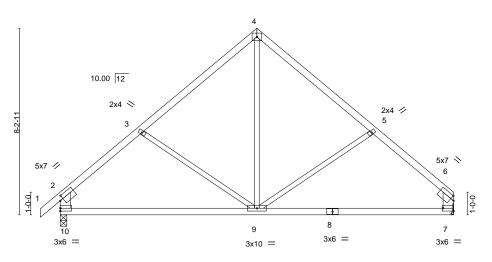


Plate Offsets (X,Y)	[2:0-1-13,0-2-0], [6:0-1-13,0-2-0], [7:Edge,0-1-8]

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. ii	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.10	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.2	9-10	>967	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.02	2 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.05	5 9	>999	240	Weight: 66 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

17-4-0

except end verticals.

LUMBER-

REACTIONS.

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

2-10,6-7: 2x6 SPF No.2

(size) 7=Mechanical, 10=0-3-8

Max Horz 10=232(LC 5)

Max Uplift 7=-73(LC 9), 10=-99(LC 8) Max Grav 7=757(LC 1), 10=839(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-847/136, 3-4=-639/154, 4-5=-639/154, 5-6=-852/136, 2-10=-745/140, TOP CHORD

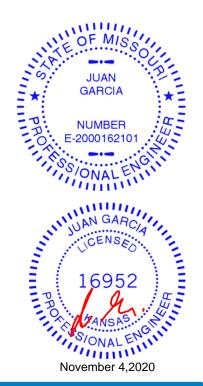
6-7=-658/113

BOT CHORD 9-10=-149/612, 7-9=-56/560

WEBS 4-9=-45/394

NOTES-

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





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Ply Lot 2 W2 143489890 400710 C3 Roof Special Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:27 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID: eIVztmttrvqeWtykiiM9UhzAKds-M?kFd9dOjiuowjTya0swouk4i8wB9KvzeAiLKsyMcEg17-4-0 -0-10-8 0-10-8 8-8-0

6-4-8

Scale = 1:48.8 4x5 = 10.00 12 8x12 // 8x12 🚿 4x9 📏 4x9 // 10 = E 3x6 3x6 3x10 =12 8 3x6 =3x4 II 3x4 II 15-0-8 17-4-0 2-3-8 2-3-8 6-4-8 [2:0-1-11,0-2-0], [7:Edge,0-1-8] SPACING-CSI. DEFL. L/d **PLATES** GRIP in (loc) I/defI Plate Grip DOL -0.08 1.15 TC 0.58 Vert(LL) 9-10 >999 360 MT20 197/144 Lumber DOL 1.15 ВС 0.88 Vert(CT) -0.18 9-10 >999 240

0.17

0.05 10-11

n/a

>999

except end verticals.

n/a

240

Rigid ceiling directly applied or 6-0-0 oc bracing.

Structural wood sheathing directly applied or 5-2-11 oc purlins,

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

6-4-8

2-3-8

LUMBER-

TCLL

TCDL

BCLL

BCDL

WEBS

Plate Offsets (X,Y)--

25.0

10.0

10.0

0.0

LOADING (psf)

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

2x3 SPF No.2 *Except* 2-13,6-7: 2x6 SPF No.2

REACTIONS. (size) 13=0-3-8, 7=Mechanical

Max Horz 13=186(LC 5) Max Uplift 13=-8(LC 8)

Max Grav 13=839(LC 1), 7=757(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

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

2-3=-813/26, 3-4=-804/56, 4-5=-804/66, 5-6=-797/20, 2-13=-765/20, 6-7=-651/0 12-13=-95/549, 10-11=-155/1091, 9-10=-59/1016, 7-8=-14/495 TOP CHORD

YES

BOT CHORD

WEBS 4-10=0/441, 5-10=-562/185, 3-10=-601/210

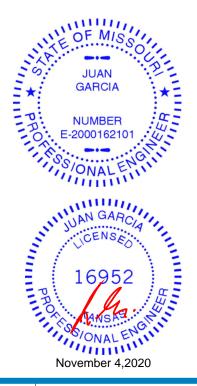
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate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

WB

Matrix-S

0.65

- 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.
- 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) 13.
- 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.



FT = 10%

Weight: 71 lb



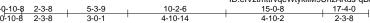


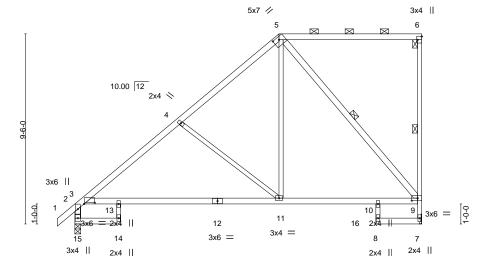
Job Truss Truss Type Qty Lot 2 W2 143489891 400710 C4 Half Hip

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:28 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-qBldqVe0U00fYt288kO9K5HBDYHgurq7sqRutJyMcEf

Scale = 1:57.6





15-0-8 7-10-14

Plate Off	sets (X,Y)	[3:0-6-6,0-0-13], [5:0-3-8	,0-1-10], [6:Edg	je,0-2-8], [9:	0-3-8,0-1-8]							
LOADIN	G (nef)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
	· · ·				0.70		(/					
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.22 11-13	>913	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.48 11-13	>426	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.19 7	n/a	n/a			
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-S	Wind(LL)	0.15 11-13	>999	240	Weight: 81 lb	FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

WEBS

1 Row at midpt

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

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

LUMBER-

2x4 SPF 2400F 2.0E *Except* TOP CHORD

5-6: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 *Except* 5-9,2-15: 2x4 SPF No.2

REACTIONS. (size) 7=Mechanical, 15=0-3-8

Max Horz 15=252(LC 8) Max Uplift 7=-62(LC 5)

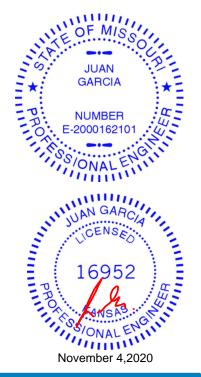
Max Grav 7=859(LC 2), 15=925(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-489/0, 3-4=-974/23, 4-5=-731/23, 7-9=-820/74, 2-15=-897/25 **BOT CHORD** 3-13=-197/817, 11-13=-197/817, 10-11=-55/502, 9-10=-55/502

WEBS 5-11=-12/664, 5-9=-756/85, 4-11=-409/181

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Lot 2 W2 143489892 400710 C5 Half Hip Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:28 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:eIVztmttrvqeWtykiiM9UhzAKds-qBldqVe0U00fYt288kO9K5HECYMUunm7sqRutJyMcEf

-0-10-8 0-10-8 5-6-0 5-6-0 6-0-4 5-9-11

Scale = 1:59.6

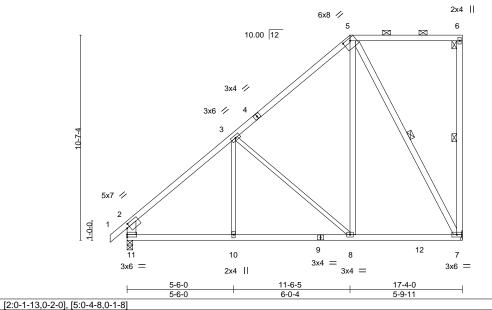


Plate Offsets (X,Y)--SPACING-DEFL. **PLATES** GRIP LOADING (psf) CSI. (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.60 Vert(LL) -0.07 8-10 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 BC 0.49 Vert(CT) -0.13 8-10 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.68 Horz(CT) 0.01 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

0.01 10-11

>999

1 Row at midpt

240

Structural wood sheathing directly applied or 5-0-2 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

Rigid ceiling directly applied or 10-0-0 oc bracing

Weight: 92 lb

Matrix-S

LUMBER-

BCDL

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

10.0

3-10,3-8: 2x3 SPF No.2, 2-11: 2x6 SPF No.2

REACTIONS. (size) 7=Mechanical, 11=0-3-8

Max Horz 11=283(LC 8) Max Uplift 7=-76(LC 8)

Max Grav 7=829(LC 13), 11=898(LC 13)

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

TOP CHORD 2-3=-896/0, 3-5=-532/5, 2-11=-776/0 10-11=-168/667, 8-10=-168/667, 7-8=-50/351 BOT CHORD **WEBS** 3-8=-426/155, 5-8=-18/557, 5-7=-716/104

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left 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.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





Job Truss Truss Type Qty Lot 2 W2 143489893 400710 C6 Monopitch Supported Gable

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:29 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-IOs02rfeFJ8W91cLiRvOtJpWyxoHdO7G5UBSPlyMcEe

Structural wood sheathing directly applied or 5-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

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

Scale = 1:28.8

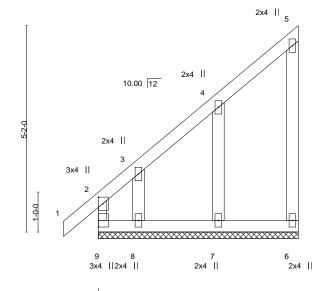


Plate Offse	ets (X,Y)	[2:0-2-0,0-1-4]										
LOADING	· /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	0.00	2	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	2	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	k-R						Weight: 25 lb	FT = 10%

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

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

2x3 SPF No.2 *Except* 5-6: 2x4 SPF No.2

OTHERS 2x4 SPF No.2

REACTIONS. All bearings 5-0-0.

Max Horz 9=200(LC 5) (lb) -

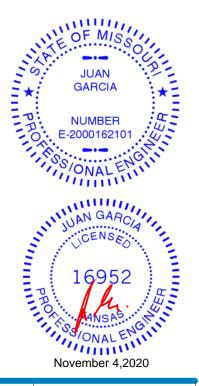
Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 9=-105(LC 4), 8=-185(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 9, 6, 7, 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=lb) 9=105, 8=185.
- 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.







Job Truss Truss Type Qty Lot 2 W2 143489894 D1 400710 Common Supported Gable Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:30 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-maQOFAgG0dGNnBBXG9QdQWMiZL9IMqGPK8w?xByMcEd 0-10-8 0-10-8 12-2-8 6-1-4 6-1-4 0-10-8 Scale = 1:34.3 4x5 = 5 10.00 12 3 8 16 15 14 11 10 12-2-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI Plate Grip DOL Vert(LL) -0.00 120 197/144 **TCLL** 25.0 1.15 TC 0.09 9 n/r MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.06 Vert(CT) -0.00 120 n/r

LUMBER-

BCLL

BCDL

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

WEBS 2x3 SPF No.2 **OTHERS** 2x4 SPF No.2

0.0

10.0

BRACING-

Horz(CT)

0.00

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

n/a

Weight: 56 lb

FT = 10%

except end verticals

10

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

n/a

REACTIONS. All bearings 12-2-8.

(lb) -Max Horz 16=181(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15=-129(LC 8), 11=-127(LC 9)

WB

Matrix-R

0.10

Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

YES

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.

Rep Stress Incr

Code IRC2018/TPI2014

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 12 except (it=lb) 15=129, 11=127.
- 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.









Job Truss Truss Type Qty Lot 2 W2 143489895 D2 400710 Roof Special Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:30 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-maQOFAgG0dGNnBBXG9QdQWMg8L5aMnhPK8w?xByMcEd

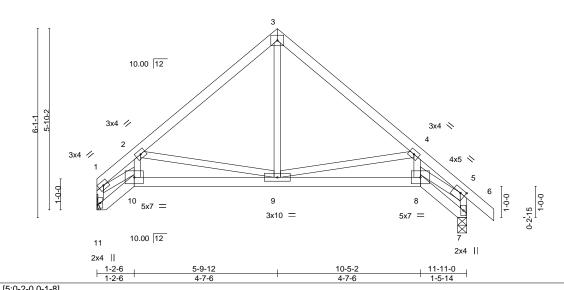
11-11-0 12-9-8 1-5-14 0-10-8 10-5-2 4-7-6 4-7-6

> Scale = 1:37.1 4x5 =

> > Structural wood sheathing directly applied or 5-9-9 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.



			0		•								
Plate Offse	ets (X,Y)	[5:0-2-0,0-1-8]											
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.02	8-9	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	8-9	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.04	7	n/a	n/a			
BCDL	10.0	Code IRC2018/TI	PI2014	Matr	x-S	Wind(LL)	0.01	9-10	>999	240	Weight: 50 lb	FT = 10%	
						1 '							

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

(size) 11=Mechanical, 7=0-3-8

Max Horz 11=-177(LC 4) Max Uplift 11=-49(LC 8), 7=-74(LC 9)

Max Grav 11=524(LC 1), 7=598(LC 1)

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

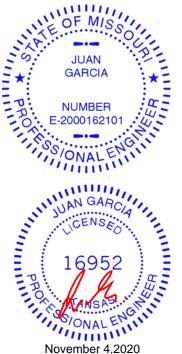
1-11=-527/67, 1-2=-876/161, 2-3=-557/86, 3-4=-555/102, 4-5=-978/110, 5-7=-563/62 TOP CHORD

BOT CHORD 9-10=-190/796, 8-9=-70/729

WFBS 1-10=-156/696, 2-9=-423/233, 3-9=-1/307, 4-9=-406/199, 5-8=-83/772

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.
- Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 2 W2 143489896 D3 400710 Roof Special Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:31 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-EmzmSWgunxOEPKmjpsxsykurvIRi5EsZYngZTeyMcEc 11-11-0 4-7-6 4-7-6 1-5-14 Scale = 1:37.1 4x5 = 3 10.00 12 3x4 // 3x4 💉 2 3x4 1-0-0 8 7 5x7 = 3x10 = 5x7 = 10.00 12 6 10 2x4 2x4 || 1-2-6 5-9-12 10-5-2 11-11-0 4-7-6 1-5-14 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI TCLL 25.0 Plate Grip DOL 1.15 TC Vert(LL) -0.02 >999 360 197/144 0.25 7-8 MT20

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

-0.04

0.05

0.01

7-8

7-8

6

>999

>999

except end verticals.

n/a

240

n/a

240

Rigid ceiling directly applied or 6-0-0 oc bracing.

Structural wood sheathing directly applied or 5-8-5 oc purlins,

Weight: 48 lb

FT = 10%

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

WEBS 2x3 SPF No.2

REACTIONS. 10=Mechanical, 6=Mechanical Max Horz 10=-130(LC 4)

Max Grav 10=527(LC 1), 6=527(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 1-10=-507/11, 1-2=-842/56, 2-3=-561/37, 3-4=-560/43, 4-5=-1009/30, 5-6=-503/0

1.15

YES

BOT CHORD 8-9=-134/739, 7-8=-32/759

1-9=-61/670, 2-8=-390/146, 3-8=0/308, 4-8=-423/122, 5-7=-31/787 **WEBS**

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

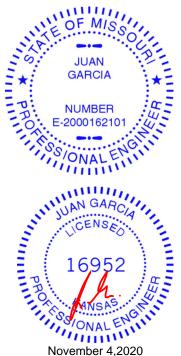
ВС

WB 0.27

Matrix-S

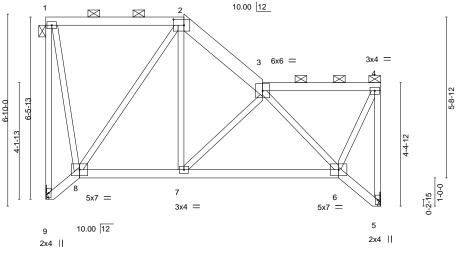
0.27

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 2 W2 143489897 D4 400710 Roof Special Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:32 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-izX8gshWYEW50ULwNZS5VxRyG9nlqfkinRP604yMcEb 11-11-0 10-5-2 3-8-10 2-9-10 2-8-8 1-5-14 Scale = 1:41.0 3x4 = 5x7 = 10.00 |12 \bowtie



		1-2-6 ₁	4-11-0	₁ 7-8-10	10-5-2	₁ 11-11-0	
		1-2-6	3-8-10	2-9-10	2-8-8	1-5-14	
Plate Offsets (X,Y)	[2:0-4-8,0-2-8]						

		· ' ·							
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 0.46	Vert(LL) -	-0.03 6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -	-0.07 6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.42	Horz(CT)	0.03	5 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.01	>999	240	Weight: 63 lb	FT = 10%

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

2-3: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 8-9.

REACTIONS. (size) 9=Mechanical, 5=Mechanical

Max Horz 9=-201(LC 4)

Max Uplift 9=-61(LC 4), 5=-22(LC 5) Max Grav 9=527(LC 1), 5=527(LC 1)

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

1-9=-503/73, 2-3=-440/31, 4-5=-525/32 TOP CHORD

7-8=-69/303, 6-7=-65/457 BOT CHORD

WEBS 1-8=-30/357, 2-8=-402/68, 2-7=0/303, 3-6=-417/53, 4-6=-4/429

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 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) 9, 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 4,2020



Job Truss Truss Type Qty Lot 2 W2 143489898 400710 D5 Roof Special

Wheeler Lumber, Waverly, KS - 66871, Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:32 2020 Page 1

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

1-9

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 3-4.

ID:eIVztmttrvqeWtykiiM9UhzAKds-izX8gshWYEW50ULwNZS5VxRyI9ISqdlinRP604yMcEb 11-11-0 10-5-2 2-1-6 2-9-10 4-3-11 1-5-14

Scale = 1:46.5 8x8 = 10.00 |12

11-11-0

6-0-0 oc bracing: 8-9.

1 Row at midpt

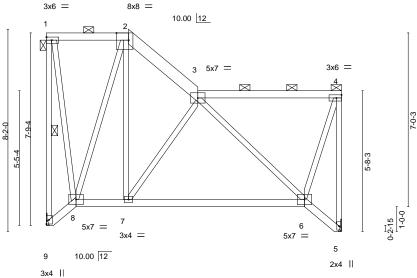


Plate Offsets (X,Y)--[2:0-5-13,Edge] SPACING-LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.50 Vert(LL) -0.08 6-7 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 BC 0.36 Vert(CT) -0.166-7 >892 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.55 Horz(CT) 0.03 5 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL 10.0 Wind(LL) 6-7 >999 240 Weight: 71 lb Matrix-S 0.01

BRACING-

TOP CHORD

BOT CHORD

WEBS

10-5-2

6-1-6

2-9-10

2-1-6

LUMBER-

REACTIONS.

2x4 SPF No.2 *Except* TOP CHORD

2-3: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2

> (size) 9=Mechanical, 5=Mechanical

Max Horz 9=-239(LC 4)

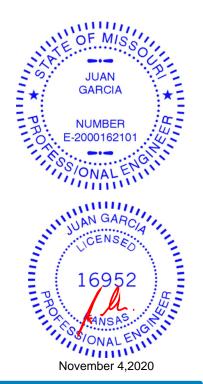
Max Uplift 9=-74(LC 4), 5=-53(LC 5) Max Grav 9=527(LC 1), 5=527(LC 1)

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

1-9=-489/86, 2-3=-350/66, 4-5=-537/57 TOP CHORD 8-9=-259/264, 7-8=-104/252, 6-7=-112/377 BOT CHORD

WEBS 1-8=-44/390, 2-8=-454/60, 2-7=0/408, 3-7=-311/71, 3-6=-349/98, 4-6=-18/374

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 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) 9, 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Lot 2 W2 143489899 400710 D6 ROOF SPECIAL GIRDER

Wheeler Lumber, Waverly, KS - 66871,

| **Z** | Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:33 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-A95WtCi8IYeyeew6xHzK19_6qZ2QZ0cs059fYWyMcEa

Structural wood sheathing directly applied or 6-0-0 oc purlins,

1-7

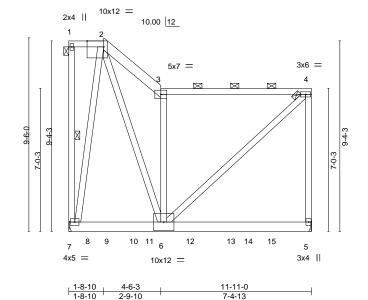
Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 3-4.



Scale = 1:56.6



				1-8-10	2-9-10		7-4-13					
Plate Off	sets (X,Y)	[2:0-9-13,Edge]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.13	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.23	5-6	>613	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.08	5-6	>999	240	Weight: 200 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

BOT CHORD 2x6 SP 2400F 2.0E **WEBS** 2x4 SPF No.2

REACTIONS. (size) 7=Mechanical, 5=Mechanical

Max Horz 7=-347(LC 4)

Max Uplift 7=-438(LC 4), 5=-485(LC 5) Max Grav 7=3144(LC 2), 5=2955(LC 2)

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

2-3=-2430/359, 3-4=-1774/243, 4-5=-1819/362 TOP CHORD

BOT CHORD 6-7=-266/576

WEBS 2-7=-2708/438, 2-6=-534/4294, 3-6=-1851/394, 4-6=-388/2353

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 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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) 7=438 5=485
- 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1081 lb down and 77 lb up at 1-11-12, 1084 lb down and 232 lb up at 3-11-12, 974 lb down and 63 lb up at 5-11-12, and 1004 lb down and 63 lb up at 7-11-12, and 937 lb down and 196 lb up at 9-11-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



November 4,2020

CAARIGASE(S)geStandard

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Ply Qty Job Truss Truss Type Lot 2 W2 143489899 D6 400710 ROOF SPECIAL GIRDER

Wheeler Lumber,

Waverly, KS - 66871,

Job Reference (optional)

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:33 2020 Page 2
ID:elVztmttrvqeWtykiiM9UhzAKds-A95WtCi8IYeyeew6xHzK19_6qZ2QZ0cs059fYWyMcEa

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-7=-20

Concentrated Loads (lb)

Vert: 9=-1028(B) 11=-1048(B) 12=-940(B) 13=-938(B) 15=-937(B)



Job	Truss	Truss Type		Qty	Ply	Lot 2 W2		1434	189900
400710	E1	Half Hip Supported		1	1			1101	00000
M/h = al = alash = a	M				100 - 0	Job Reference (op	tional)	4.00:44:04.0000 D	- 4
Wheeler Lumber,	Waverly, KS - 66871,		ID:				ustries, Inc. Wed Nov - u3smpGoVIV_UZaMW0		
-0-10-8 0-10-8		9-0-0				18-3-8			
'0-10-8		9-0-0	"			9-3-8		'	
			4x5 =					Scale =	= 1:34.0
			4x5 =						
			6,	₹	7	\		1 10 11	
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				L	1				
	6.00	5							
		4							
5-2-0	. /							5-0-1	
"]	3								
2	_//								
0-8-0				L.	1				
119/			····	******			***************************************		
	22 21	20 19	18	17	,	16 15	14	13 12	
3x6		20 19	10	17		3x4 =	14	13 12	
0,0	"					3A4 —			
			18-3-8						
			18-3-8						
LOADING (psf)	SPACING- 2	2-0-0 CSI.	DEFL.	in	(loc)	l/defl L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15 TC 0.09	Vert(LL)	0.00	1	n/r 120	MT20	197/144	
TCDL 10.0		1.15 BC 0.05	Vert(CT)		1	n/r 120			
BCLL 0.0 * BCDL 10.0	Rep Stress Incr Code IRC2018/TPI2	YES WB 0.06 014 Matrix-R	Horz(CT	-0.00	12	n/a n/a	Weight: 83	lb FT = 10%	
	Code INC2010/1F12	717 IVIAUIX-K					vveignt. 63	ID F1 = 1076	
LUMBER-			BRACIN						
TOP CHORD 2x4 S	SPF No.2		TOP CH	ORD	Structu	ral wood sheathing	directly applied or 6-0	0-0 oc purlins,	

BOT CHORD

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

BOT CHORD 2x3 SPF No.2 *Except* WEBS

11-12: 2x4 SPF No.2

2x4 SPF No.2 **OTHERS**

REACTIONS. All bearings 18-3-8.

Max Horz 22=203(LC 5) (lb) -

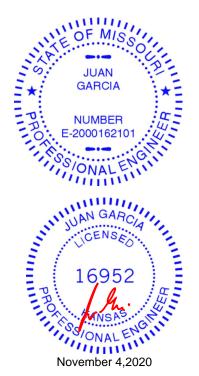
Max Uplift All uplift 100 lb or less at joint(s) 22, 12, 18, 19, 20, 17, 15, 14, 13 except 21=-106(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 22, 12, 18, 19, 20, 21, 17, 15, 14, 13

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 arip 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.
- Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 12, 18, 19, 20, 17, 15, 14, 13 except (it=lb) 21=106.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-11.

Rigid ceiling directly applied or 6-0-0 oc bracing.



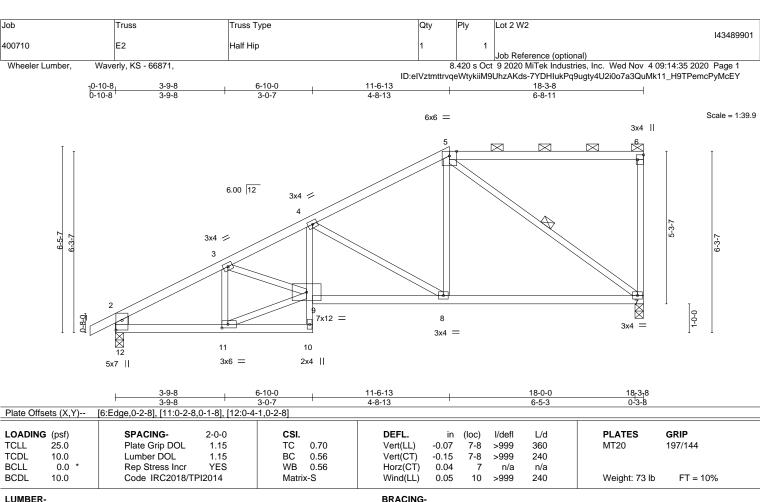
👠 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

NAKNING - Verity design parameters and KEAD NOTES ON THIS AND INCLUDED MITER KETERNUE PAGE MIT-74.5 (ev. 3) 19/2020 BETOKE USE.

Design valid for use only with MITER'S connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Sefety Internation, excluded, MD 2008. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qu Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2 *Except* BOT CHORD

4-10: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-12: 2x6 SP DSS

REACTIONS. (size) 7=0-3-8, 12=0-3-8

Max Horz 12=241(LC 5)

Max Uplift 7=-135(LC 5), 12=-134(LC 8) Max Grav 7=806(LC 1), 12=888(LC 1)

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

2-3=-1172/155, 3-4=-1506/258, 4-5=-865/134, 2-12=-788/150 **BOT CHORD** 11-12=-217/955, 4-9=-48/366, 8-9=-260/1346, 7-8=-147/706

WEBS 3-11=-395/134, 9-11=-220/976, 3-9=-52/405, 4-8=-725/238, 5-8=-30/478, 5-7=-866/128

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=135, 12=134.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-5-2 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

Rigid ceiling directly applied or 10-0-0 oc bracing

1 Row at midpt

November 4,2020







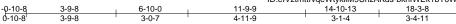
ID:eIVztmttrvqeWtykiiM9UhzAKds-bknfWEk1bT0WV6fhcPX1fncaVm3amKgli3NK9ryMcEX

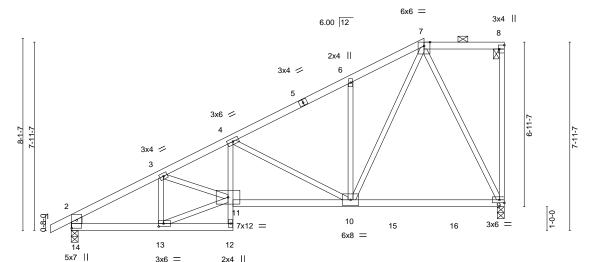
Structural wood sheathing directly applied or 3-11-15 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.

Rigid ceiling directly applied or 10-0-0 oc bracing

Scale = 1:48.7





	1 3-9-8	6-10-0	10-10-7	18-3-8		1	
	3-9-8	3-0-7	4-0-7	7-5-1		7	
Plate Offsets (X,Y)	[8:Edge,0-2-8], [13:0-2-8,0-1-8], [14:0-4	-1,0-2-8]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.70	Vert(LL)	-0.10 9-10 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT)	-0.16 9-10 >999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Horz(CT)	0.04 9 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.06 12 >999	240	Weight: 80 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

4-12: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-14: 2x6 SP DSS

REACTIONS. (size) 9=0-3-8, 14=0-3-8

Max Horz 14=310(LC 5)

Max Uplift 9=-133(LC 8), 14=-137(LC 8) Max Grav 9=860(LC 2), 14=903(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1209/160, 3-4=-1562/282, 4-6=-862/148, 6-7=-834/239, 2-14=-789/152 **BOT CHORD**

13-14=-256/1016, 4-11=-53/429, 10-11=-316/1430, 9-10=-112/344 WEBS 3-13=-393/149, 11-13=-257/1042, 3-11=-58/425, 4-10=-795/246, 6-10=-290/176,

7-10=-229/915, 7-9=-736/155

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





Job Truss Truss Type Qty Lot 2 W2 143489903 E4 400710 Monopitch Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:36 2020 Page 1

Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-bknfWEk1bT0WV6fhcPX1fnccGm4CmQ4li3NK9ryMcEX

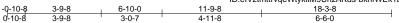
Structural wood sheathing directly applied or 4-5-2 oc purlins,

7-8, 6-8

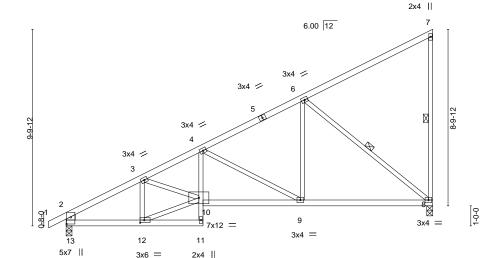
Rigid ceiling directly applied or 8-9-4 oc bracing.

except end verticals.

1 Row at midpt



Scale = 1:57.5



	3-9-8	₁ 6-10-0	11-9-8	18-0-0	18 _⊺ 3 _г 8	
	3-9-8	3-0-7	4-11-8	6-2-8	0-3-8	
-8,0-1-8], [13:0-4-	-1,0-2-8]					

Plate Offsets (X,Y)	[12:0-2-8,0-1-8], [13:0-4-1,0-2-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.07 10 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(CT) -0.13 9-10 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.04 8 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06 10 >999 240	Weight: 77 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

4-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-13: 2x6 SP DSS

(size) 8=0-3-8, 13=0-3-8

Max Horz 13=379(LC 8)

Max Uplift 8=-251(LC 8), 13=-76(LC 8) Max Grav 8=806(LC 1), 13=888(LC 1)

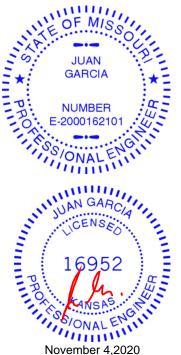
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1173/57, 3-4=-1502/209, 4-6=-840/46, 2-13=-788/97 **BOT CHORD** 12-13=-373/957, 4-10=-100/374, 9-10=-447/1336, 8-9=-221/696

WEBS 3-12=-398/189, 10-12=-385/983, 3-10=-75/395, 4-9=-725/256, 6-9=-21/476,

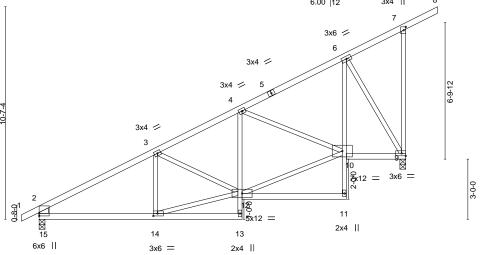
6-8=-893/283

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb)
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 2 W2 143489904 400710 E5 Monopitch Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:37 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-3wL1jalfMn8N7GEtA72GC?8m7ARHVs9Rxj7thHyMcEW 18-3-8 -0-10-8 0-10-8 5-9-9 5-9-9 15-4-0 19-10-8 4-3-15 5-2-8 2-11-8 Scale = 1:57.5 6.00 12 3x4 || 8 7



10-1-8 15-4-0 18-3-8 4-3-15 [7:0-2-0 0-1-4] [14:0-2-8 0-1-8]

Plate Offset	ts (X,Y)	[7:0-2-0,0-1-4], [14:0-2-8	,0-1-8]									
LOADING	(f)	CD A CINIC	0.00	001		DEEL	:- (1	\	1/-1-41	1.7-1	DI ATEO	ODID
LOADING	(pst)	SPACING-	2-0-0	CSI.		DEFL.	in (le	oc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.05 13-	-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.11 11-	-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-S	Wind(LL)	0.03	12	>999	240	Weight: 86 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SPF No.2 TOP CHORD

2x4 SPF No.2 *Except* BOT CHORD

4-13,6-11: 2x3 SPF No.2 2x3 SPF No.2 *Except*

WEBS 2-15: 2x6 SP DSS

REACTIONS. (size) 9=0-3-8, 15=0-3-8

Max Horz 15=385(LC 5)

Max Uplift 9=-264(LC 8), 15=-102(LC 8) Max Grav 9=929(LC 1), 15=882(LC 1)

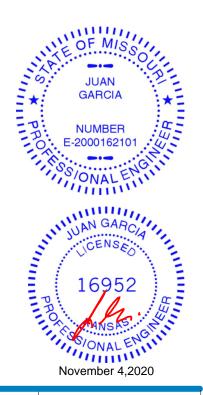
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1177/98, 3-4=-994/127, 4-6=-553/69, 2-15=-802/139 **BOT CHORD** 14-15=-287/953, 6-10=-126/628, 9-10=-96/418

WEBS 12-14=-272/942, 10-12=-237/896, 4-10=-460/164, 6-9=-814/243

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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=264, 15=102.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-6-1 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.



Job Truss Truss Type Qty Lot 2 W2 143489905 400710 G1 Roof Special Girder Job Reference (optional)

Waverly, KS - 66871, Wheeler Lumber,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:38 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-X6uPwwmH74GEkPp3kqZVkChzUajjEI0bANsQDkyMcEV

Structural wood sheathing directly applied or 4-4-6 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

8-3-10 oc bracing: 16-17

6-0-0 oc bracing: 15-16.

20-3-8 12-1-8 4-3-15

3x4 || 10 Scale = 1:57.5 9 3x6 / 8 3x4 / 3x4 / 6 10-7-4 3x4 / 6.00 12 **%**12 = 3x6 = 1-3-12 13 5x12 ⊠ 18 2x4 || 15 5x7 || 3x4 = 4x9 = 2x4 |

1-3-8 12-1-8 1-3-8 4-6-2

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

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.55	Vert(LL) -0.08 16-17 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.18 16-17 >999 240	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.76	Horz(CT) 0.03 11 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 16-17 >999 240	Weight: 96 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SPF No.2 TOP CHORD

BOT CHORD 2x4 SPF No.2 *Except*

6-15,8-13: 2x3 SPF No.2

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

REACTIONS. (size) 11=0-3-8, 18=0-3-8

Max Horz 18=385(LC 5)

Max Uplift 11=-273(LC 8), 18=-126(LC 8) Max Grav 11=1019(LC 1), 18=969(LC 1)

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

TOP CHORD 2-3=-1050/65, 3-4=-870/62, 4-5=-1532/132, 5-6=-1183/146, 6-8=-614/75, 2-18=-808/79

BOT CHORD 17-18=-307/807, 16-17=-504/2179, 8-12=-139/744, 11-12=-89/473

WEBS 3-17=-13/614, 4-17=-1484/225, 4-16=-870/197, 14-16=-295/1329, 5-14=-376/91,

12-14=-257/1071, 6-12=-576/179, 8-11=-923/253

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=273, 18=126.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 42 lb up at 1-3-8 on top chord, and 5 lb down and 3 lb up at 1-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)

LOAD CASE(S) Standard

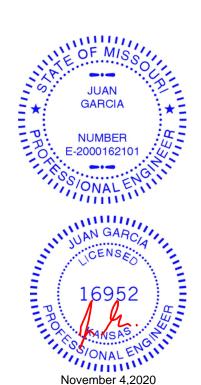
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-9=-70, 9-10=-70, 15-18=-20, 13-14=-20, 11-12=-20

Continued on page 2

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE





November 4,2020

Job	Truss	Truss Type	Qty	Ply	Lot 2 W2
400710	G1	Roof Special Girder	1	1	143489905
400710	GI	Roof Special Gilder		'	Job Reference (optional)

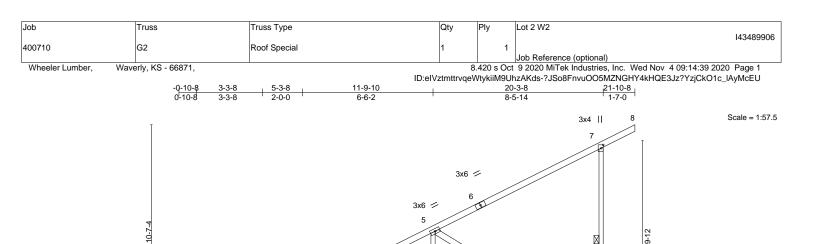
Wheeler Lumber,

Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:38 2020 Page 2 ID:eIVztmttrvqeWtykiiM9UhzAKds-X6uPwwmH74GEkPp3kqZVkChzUajjEI0bANsQDkyMcEV

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 17=3(F)





∯ 13 12 3x4 =7x12 / 3x6 =3x4 = 11-9-10 20-3-8 2-0-0

10

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

6.00 12

4x5 =

5x7 =

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.17	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.31	9-11	>762	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-S	Wind(LL)	0.07	11-12	>999	240	Weight: 84 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

5-9: 2x4 SPF No.2, 2-13: 2x6 SP 2400F 2.0E

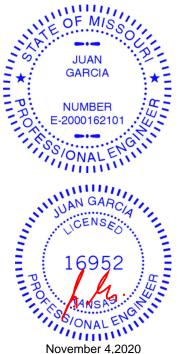
REACTIONS. (size) 9=0-3-8, 13=0-3-8 Max Horz 13=409(LC 8)

Max Uplift 9=-313(LC 8), 13=-86(LC 8) Max Grav 9=1043(LC 2), 13=996(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1427/52, 3-4=-1212/67, 4-5=-1171/0, 7-9=-372/194, 2-13=-897/91

BOT CHORD 12-13=-403/1177 11-12=-436/1709 9-11=-255/993 **WEBS** 3-12=0/661, 4-12=-744/51, 4-11=-750/189, 5-11=0/601, 5-9=-1161/298

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 9=313.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



2-3-12

9

Structural wood sheathing directly applied or 2-4-4 oc purlins,

except end verticals, and 2-0-0 oc purlins (5-1-14 max.): 3-4.

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

1 Row at midpt



Job Truss Truss Type Qty Lot 2 W2 143489907 400710 G3 Roof Special Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:40 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, $ID: elVztmttrvqeWtykiiM9UhzAKds-TV0ALbnYfiWy_jySrFbzpdmEvNPvi9oudhLXlcyMcET$

8-4-2

6x10 M18SHS 💸

29-10-11

7-9-0

29-10-11

4-6-4 oc bracing: 14-16.

1 Row at midpt

Scale = 1:83.0

37₋10₋8 0-10-8

7-1-5

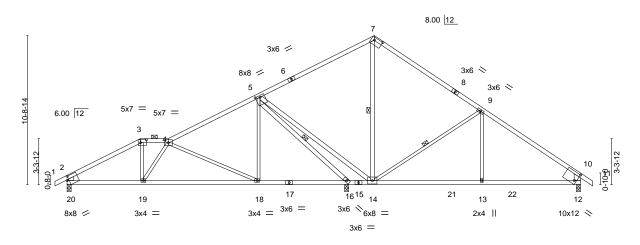
37-0-0

Structural wood sheathing directly applied or 2-2-0 oc purlins,

5-16, 7-14, 9-14

except end verticals, and 2-0-0 oc purlins (5-9-6 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:



			5-3-8	2-0-0	6-6-1	' (6-4-3 1-11-	15 7·	9-0	1	7-1-5	
Plate Off	sets (X,Y)	[3:0-5-0,0)-2-8], [5:0-4-0,	0-1-8], [7:0-	7-4,0-2-4], [12:0	-1-14,0-7-1],	[20:0-1-10,0-3-4]					
LOADIN	G (psf)	SP	ACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Pla	ate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.16 18-19	>999	360	MT20	197/144
TCDL	10.0	Lu	mber DOL	1.15	BC	0.65	Vert(CT)	-0.33 18-19	>730	240	M18SHS	197/144
BCLL	0.0 *	Re	p Stress Incr	YES	WB	0.93	Horz(CT)	0.04 12	n/a	n/a		
BCDL	10.0	Co	de IRC2018/T	PI2014	Matri	x-S	Wind(LL)	0.06 18-19	>999	240	Weight: 155 lb	FT = 10%

20-1-12

22-1-11

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

7-3-8

13-9-9

2-0-0

6-6-1

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

5-16,5-14,7-14: 2x4 SPF No.2, 2-20: 2x6 SP DSS

5-3-8

10-12: 2x6 SPF No.2

-0₇10₇8 0-10-8

20=0-3-8, 12=0-3-8, 16=0-3-8 (size)

Max Horz 20=315(LC 7)

Max Uplift 20=-174(LC 8), 12=-183(LC 9), 16=-179(LC 8) Max Grav 20=894(LC 21), 12=807(LC 16), 16=2012(LC 2)

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

 $2\text{-}3\text{=-}1231/216,\ 3\text{-}4\text{=-}1026/228,\ 4\text{-}5\text{=-}663/204,\ 5\text{-}7\text{=-}120/305,\ 7\text{-}9\text{=-}177/293,}$

9-10=-824/227, 2-20=-828/197, 10-12=-696/222

BOT CHORD 19-20=-279/1024, 18-19=-332/1154, 16-18=-147/541, 14-16=-1430/145, 13-14=-70/554,

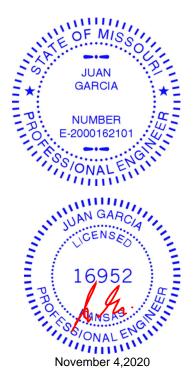
12-13=-70/554

WEBS 3-19=-12/421, 4-19=-281/119, 4-18=-703/204, 5-18=0/589, 5-16=-2562/276, 5-14=0/1620, 7-14=-570/24, 9-14=-829/268, 9-13=0/406

NOTES-

REACTIONS.

- 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) The Fabrication Tolerance at joint 7 = 6%
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=174 12=183 16=179 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.





Job Truss Truss Type Qty Lot 2 W2 143489908 400710 G4 Roof Special 1 Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:41 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-xhaYZxoAQ?epbtXePy6CMrJN8ng_RhU1sL54q2yMcES

8-4-1

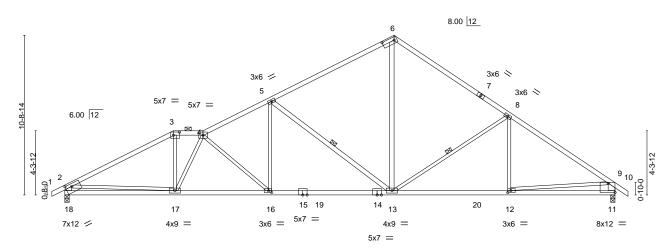
Scale = 1:77.5 5x12 M18SHS 🥠

29-10-11

7-9-0

37-0-0

0-10-8



		₁ 7-3-8	9-3-8	13-9-10 _I	22-1-11	29-10-11	37-0-0	
		7-3-8	2-0-0	4-6-2	8-4-1	7-9-0	7-1-5	
Plate Offs	ets (X,Y)	[3:0-5-0,0-2-8], [6:0-9-11	,0-2-8], [11:Ed	ge,0-7-7], [12:0-2-8,0-1	I-8], [16:0-2-8,0-1-8], [18	3:0-5-0,0-2-4]		
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.97	Vert(LL) -(0.26 13-16 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.97	Vert(CT) -(0.46 13-16 >960 240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.10 11 n/a n/a		
BCDL	10.0	Code IRC2018/Ti	PI2014	Matrix-S	Wind(LL)	0.12 16 >999 240	Weight: 156 lb	FT = 10%

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

4-6,6-7: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 *Except*

5-13,6-13: 2x4 SPF No.2, 2-18: 2x6 SP DSS, 9-11: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (3-6-10 max.): 3-4.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. **WEBS** 1 Row at midpt 5-13, 8-13

REACTIONS. (size) 18=0-3-8, 11=0-3-8

-0₇10₇8 0-10-8

7-3-8

Max Horz 18=315(LC 7)

Max Uplift 18=-255(LC 8), 11=-191(LC 9) Max Grav 18=1789(LC 2), 11=1841(LC 16)

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

TOP CHORD 2-3=-2906/375, 3-4=-2526/384, 4-5=-2752/387, 5-6=-1815/282, 6-8=-1928/326,

8-9=-2441/242, 2-18=-1661/297, 9-11=-1728/227

17-18=-431/1023, 16-17=-431/2928, 13-16=-320/2452, 12-13=-105/1928, 11-12=-148/518 **BOT CHORD WEBS**

9-3-8 2-0-0

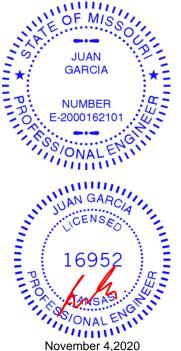
4-6-2

3-17=-1/978, 4-17=-948/90, 4-16=-636/149, 5-16=-11/721, 5-13=-1181/328,

6-13=-131/1315, 8-13=-647/262, 2-17=0/1550, 9-12=-42/1463

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=255, 11=191.
- 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 4,2020

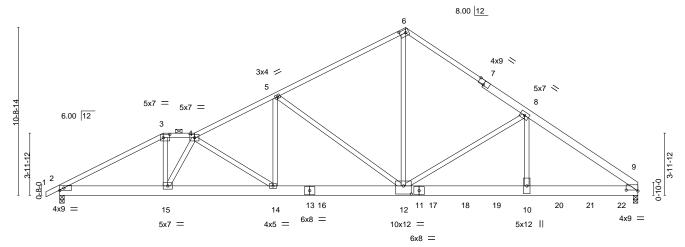
Job Truss Truss Type Qty Ply Lot 2 W2 143489909 400710 G5 Roof Special Girder | **2** | Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:43 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:eIVztmttrvqeWtykiiM9UhzAKds-u4iI_dqQydvXrBh1WN9gRGOnAbRqvVkKJfaBuxyMcEQ 37-0-0 -0₋10-8 29-10-11 5-2-1 8-4-3 7-9-0 7-1-5

> Scale = 1:73.7 5x7 /

Structural wood sheathing directly applied or 4-4-3 oc purlins, except

2-0-0 oc purlins (5-3-5 max.): 3-4.



		6-7-8	₁ 8-7-8 ₁	13-9-9	1	22-1-11	1	29-10-11	1	37-0-0	1
		6-7-8	2-0-0	5-2-1	ı	8-4-3	1	7-9-0	1	7-1-5	1
Plate Offse	ets (X,Y)	[3:0-5-0,0-2-8], [6:0-4-11	0-2-8], [7:0-4	4-8,Edge], [9:0-9	9-0,0-0-11],	[12:0-6-0,0-6-4]					
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.22 10-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.39 10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO		0.92	Horz(CT)	0.07 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix-	·S	Wind(LL)	0.15 10-12	>999	240	Weight: 460 lb	FT = 10%

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SPF No.2 *Except*

4-6,6-7: 2x4 SPF 2100F 1.8E, 7-9: 2x6 SPF No.2

BOT CHORD 2x8 SP DSS BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 9=0-3-8 Max Horz 2=291(LC 5)

Max Uplift 2=-422(LC 8), 9=-474(LC 9) Max Grav 2=3303(LC 2), 9=6129(LC 1)

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

2-3=-6239/748, 3-4=-5505/714, 4-5=-6512/792, 5-6=-5703/722, 6-8=-6083/795, TOP CHORD

8-9=-9081/742

BOT CHORD 2-15=-743/5396, 14-15=-886/6739, 12-14=-699/5808, 10-12=-526/7296, 9-10=-526/7296 **WEBS** 3-15=-209/2654, 4-15=-2650/290, 4-14=-1127/227, 5-14=-114/726, 5-12=-1205/437,

6-12=-595/5383, 8-12=-2881/310, 8-10=0/2883

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, 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=422, 9=474,
- 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) 3109 lb down and 458 lb up at 23-10-7, 507 lb down and 94 lb up at 25-11-4, 507 lb down and 81 lb up at 27-11-4, 507 lb down at 29-11-4, 507 lb down at 31-11-4, and 504 lb down and 69 lb up at 33-11-4, and 505 lb down and 68 lb up at 35-11-4 on bottom chord. The

Contidesign/adjaction of such connection device(s) is the responsibility of others



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job	Truss	Truss Type	Qty	Ply	Lot 2 W2
400740	CF	Roof Chariel Circles	4	_	143489909
400710	G5	Roof Special Girder	1	2	Joh Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:43 2020 Page 2 ID:eIVztmttrvqeWtykiiM9UhzAKds-u4iI_dqQydvXrBh1WN9gRGOnAbRqvVkKJfaBuxyMcEQ

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-9=-70, 2-9=-20

Concentrated Loads (lb)

Vert: 10=-507(B) 17=-2990(B) 18=-507(B) 19=-507(B) 20=-507(B) 21=-504(B) 22=-505(B)



Job Truss Truss Type Qty Lot 2 W2 143489910 400710 G6 Roof Special Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:43 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-u4iI_dqQydvXrBh1WN9gRGOmXbNQvVEKJfaBuxyMcEQ -0-10-8 0-10-8 23-8-14 4-7-0 2-0-0 7-2-9 5-3-15 4-7-6 Scale = 1:55.1 5x7 = 2x4 || 6 \square 3x6 / 5 X 4x5 = 5x7 = 6.00 12 3 10 14 13 12 11 9 8 3x4 =8x8 / 3x4 =3x6 = 3x4 =4x5 =12-10-4 19-1-8 4-7-0 4-7-6 Plate Offsets (X,Y)--[3:0-3-0,0-2-4], [6:0-5-0,0-2-8], [12:0-2-8,0-1-8], [13:0-1-10,0-3-4] SPACING-GRIP LOADING (psf) DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.25 11-12 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.91 Vert(CT) -0.50 11-12 >566 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.95 Horz(CT) 0.05 8 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% BCDL 10.0 Matrix-S 0.07 11-12 >999 240 Weight: 103 lb LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 *Except* TOP CHORD Structural wood sheathing directly applied or 3-7-9 oc purlins, 1-3: 2x4 SPF 2100F 1.8E except end verticals, and 2-0-0 oc purlins (4-7-11 max.): 3-4, 6-7. **BOT CHORD** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 2x3 SPF No.2 *Except* **WEBS** 7-8, 4-11, 5-9, 6-8 1 Row at midpt 2-13: 2x8 SP DSS

WEBS

REACTIONS. (size) 8=Mechanical, 13=0-3-8

Max Horz 13=249(LC 8)

Max Uplift 8=-57(LC 8), 13=-11(LC 8) Max Grav 8=1130(LC 2), 13=1166(LC 2)

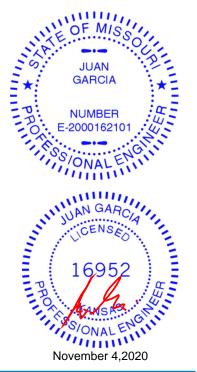
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1739/0, 3-4=-1474/0, 4-5=-1304/0, 5-6=-603/18, 2-13=-1069/27

BOT CHORD 12-13=-180/1443, 11-12=-199/1896, 9-11=-102/1096, 8-9=-35/474

WEBS 3-12=0/797, 4-12=-757/37, 4-11=-857/103, 5-11=0/620, 5-9=-974/103, 6-9=-25/920,

6-8=-1044/77

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left 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) 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) 8, 13.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







Job Truss Truss Type Qty Lot 2 W2 143489911 400710 G7 Roof Special Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:45 2020 Page 1

Wheeler Lumber, Waverly, KS - 66871,

ID:eIVztmttrvqeWtykiiM9UhzAKds-qTq3OJrgUE9F4UrPeoB8WhU54O2QNTadnz3IzqyMcEO

21-0-0

Structural wood sheathing directly applied or 4-0-2 oc purlins,

Rigid ceiling directly applied or 7-5-2 oc bracing.

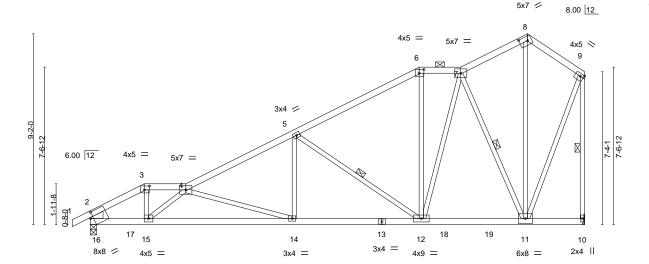
1 Row at midpt

except end verticals, and 2-0-0 oc purlins (4-4-14 max.): 3-4, 6-7.

5-12, 7-11, 9-10

21-0-0 15-9-8 17-9-8 23-8-14 2-7-0 2-0-0 5-2-9 5-11-15 2-0-0 3-2-8 2-8-14

Scale = 1:55.3



2-7-0 Plate Offsets (X,Y)--[3:0-3-0,0-2-4], [6:0-2-12,0-2-4], [8:0-4-11,0-2-8], [9:Edge,0-1-8], [16:0-1-10,0-3-4] SPACING-GRIP LOADING (psf) 2-0-0 DEFL. (loc) I/defl L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.16 14-15 >999 360 197/144 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.94 Vert(CT) -0.30 14-15 >925 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.70 Horz(CT) 0.06 10 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL Matrix-S Wind(LL) 0.10 14-15 >999 240 Weight: 113 lb 10.0

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2 *Except*

1-3: 2x4 SPF 2100F 1.8E 2x4 SPF No.2

BOT CHORD WEBS 2x3 SPF No.2 *Except*

2-16: 2x8 SP 2400F 2.0E

(size) 16=0-3-8, 10=Mechanical

2-7-0

Max Horz 16=313(LC 8)

Max Uplift 16=-244(LC 8), 10=-212(LC 8) Max Grav 16=1406(LC 2), 10=1121(LC 2)

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

2-3=-1861/249, 3-4=-1585/235, 4-5=-1803/230, 5-6=-1007/148, 6-7=-825/172, TOP CHORD

7-8=-394/86, 8-9=-408/103, 2-16=-1183/194, 9-10=-1091/220

BOT CHORD 15-16=-482/1522, 14-15=-630/2443, 12-14=-402/1580, 11-12=-160/677 **WEBS**

3-15=-87/993, 4-15=-1154/212, 4-14=-913/240, 5-14=0/527, 5-12=-923/250,

7-12=-144/591, 7-11=-914/250, 9-11=-169/873

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=244, 10=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) 288 lb down and 91 lb up at 1-11-4 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



November 4,2020

Continued on page 2

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 2 W2
400710	G7	Roof Special Girder	1	1	I43489911
400710	or .	Troof opedial direct	l'		Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:45 2020 Page 2 ID:eIVztmttrvqeWtykiiM9UhzAKds-qTq3OJrgUE9F4UrPeoB8WhU54O2QNTadnz3IzqyMcEO

LOAD CASE(S) Standard

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

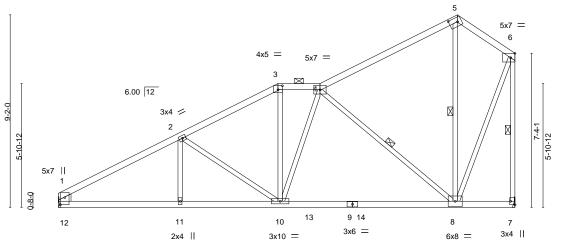
Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 10-16=-20

Concentrated Loads (lb) Vert: 17=-288(B)



Job Truss Truss Type Qty Lot 2 W2 143489912 400710 Н1 Roof Special Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:46 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:elVztmttrvqeWtykiiM9UhzAKds-IfNRcfsIFYH6ieQcCWiN3u0HjoOn6xWm?dorVGyMcEN 21-8-14 12-5-8 19-0-0 5-9-10 4-7-14 2-0-0 6-6-8 2-8-14 Scale = 1:54.9 5x7 / 8.00 |12 5



5-9-10 Plate Offsets (X,Y)--[1:0-4-1,0-2-8], [3:0-2-8,0-2-4], [5:0-4-11,0-2-8], [7:Edge,0-2-8] SPACING-DEFL. GRIP LOADING (psf) CSI. (loc) I/defI L/d **PLATES** -0.17 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.72 Vert(LL) 8-10 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.93 Vert(CT) -0.31 8-10 >816 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.59 Horz(CT) 0.03 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-S Wind(LL) 0.06 10-11 >999 240 Weight: 95 lb

10-5-8

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 WEBS 2x3 SPF No.2 *Except* 1-12: 2x8 SP DSS

BRACING-TOP CHORD

12-5-8

Structural wood sheathing directly applied or 4-0-1 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-3 max.): 3-4. **BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc bracing.

19-0-0

WEBS 1 Row at midpt 4-8, 5-8, 6-7

REACTIONS. (size) 12=Mechanical, 7=Mechanical

Max Horz 12=270(LC 5)

Max Uplift 12=-23(LC 8), 7=-43(LC 8) Max Grav 12=1001(LC 2), 7=1009(LC 2)

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

TOP CHORD 1-2=-1494/55, 2-3=-1187/61, 3-4=-1013/71, 4-5=-482/62, 5-6=-437/92, 1-12=-837/57,

5-9-10

6-7=-1026/53

BOT CHORD 11-12=-106/1295, 10-11=-106/1295, 8-10=-59/983 WEBS 2-10=-323/88, 3-10=0/351, 4-8=-872/118, 6-8=-8/863

NOTES-

1) Unbalanced roof live loads have been considered for this design.

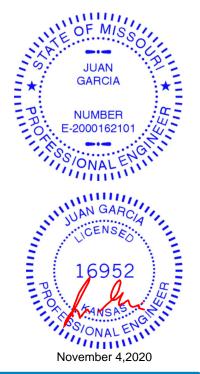
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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) Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord







Job Truss Truss Type Qty Lot 2 W2 143489913 400710 H2 Roof Special Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:47 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-mrxpp?tx?rPzJo?oIDDcc6ZQwCnHrNKwEHYP2iyMcEM 21-8-14 -0-10-8 0-10-8 13-9-10 19-0-0 2-0-0 4-8-2 5-2-6 2-8-14 5x7 🥢 Scale = 1:54.9 8.00 |12 6 2x4 || 2x4 || 5 4x5 = 5x7 = 3 6.00 12 7-4-1 9 13 11 10 8 3x6 = 8x8 / 3x6 = 3x4 = 6x8 = 14-0-12 7-1-8 19-0-0 21-8-14 7-1-8 4-11-4 2-8-14 Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [6:0-4-11,0-2-8], [12:0-1-10,0-3-4]

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL . ir	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.88	Vert(LL) -0.24	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.73	Vert(CT) -0.37	8-10	>683	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.03	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.04	8-10	>999	240	Weight: 92 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

2-12: 2x8 SP DSS

Max Horz 12=278(LC 5) Max Uplift 12=-36(LC 8), 8=-43(LC 8) Max Grav 12=1067(LC 2), 8=1044(LC 13)

(size) 12=0-3-8, 8=Mechanical

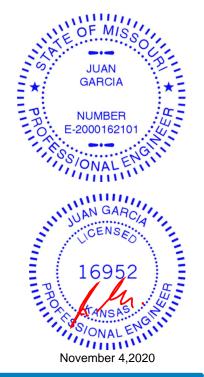
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1459/47, 3-4=-1212/71, 4-5=-1041/53, 5-6=-1045/142, 2-12=-960/82 TOP CHORD

11-12=-88/1230 10-11=-68/1335 8-10=-60/279 BOT CHORD

WEBS 3-11=0/434, 4-11=-274/7, 4-10=-593/79, 5-10=-400/136, 6-10=-108/1208, 6-8=-891/64

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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 2-2-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (5-3-15 max.): 3-4.

6-8

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

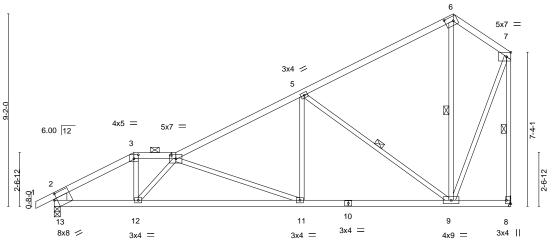
1 Row at midpt



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty Lot 2 W2 143489914 400710 НЗ Roof Special Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:48 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-E2VB1KuZm9XqxyZ_Jxkr8J6dCc7capy3TxHya9yMcEL 21-8-14 -0-10-8 0-10-8 3-9-8 2-0-0 6-0-1 7-2-7 2-8-14 Scale = 1:54.9 5x7 / 8.00 |12



3-9-8 19-0-0 21-8-14 5-9-8 3-9-8 2-0-0

BRACING-

TOP CHORD

BOT CHORD

WEBS

Plate Offsets (X,Y)--[3:0-2-8,0-2-4], [6:0-4-11,0-2-8], [8:Edge,0-2-8], [13:0-1-10,0-3-4] SPACING-LOADING (psf) 2-0-0 DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.72 Vert(LL) -0.11 11-12 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.72 Vert(CT) -0.27 11-12 >951 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.73 Horz(CT) 0.04 8 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S 0.09 11-12 >999 240 Weight: 94 lb

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-13: 2x8 SP DSS

REACTIONS. (size) 13=0-3-8, 8=Mechanical

Max Horz 13=354(LC 28)

Max Uplift 13=-193(LC 8), 8=-176(LC 8) Max Grav 13=1042(LC 1), 8=957(LC 1)

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

2-3=-1454/231, 3-4=-1217/228, 4-5=-1246/197, 5-6=-435/115, 6-7=-361/163, TOP CHORD

2-13=-957/194, 7-8=-944/200

12-13=-314/1188, 11-12=-408/1699, 9-11=-199/1050 **BOT CHORD**

WEBS 3-12=-36/626, 4-12=-752/159, 4-11=-694/223, 5-11=0/486, 5-9=-963/285, 7-9=-111/765

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=193, 8=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.
- 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) 76 lb down and 94 lb up at 3-9-8 on top chord, and 9 lb down and 7 lb up at 3-9-8 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

GARCIA NUMBER E-2000162101 ONALE 16952 AANSAS November 4,2020

Structural wood sheathing directly applied or 4-5-4 oc purlins,

except end verticals, and 2-0-0 oc purlins (5-1-14 max.): 3-4.

5-9, 6-9, 7-8

Rigid ceiling directly applied or 9-2-1 oc bracing.

1 Row at midpt

November 4,2020

Continued on page 2



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 2 W2
400710	H3	Roof Special Girder	1	1	143489914
400710		Intoo Special Gilder	'	'	Job Reference (optional)

Wheeler Lumber,

Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:48 2020 Page 2 ID:eIVztmttrvqeWtykiiM9UhzAKds-E2VB1KuZm9XqxyZ_Jxkr8J6dCc7capy3TxHya9yMcEL

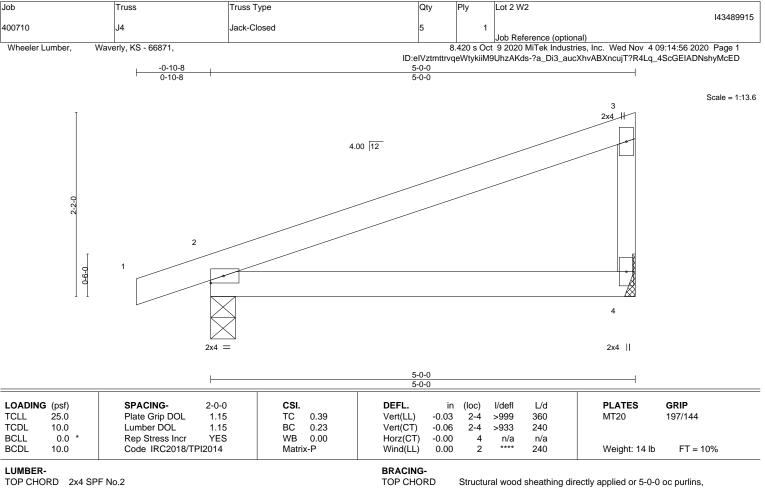
LOAD CASE(S) Standard

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, 4-6=-70, 6-7=-70, 8-13=-20
Concentrated Loads (lb)

Vert: 12=3(B)





BOT CHORD

except end verticals

Rigid ceiling directly applied or 10-0-0 oc bracing

2x4 SPF No.2 2x4 SPF No.2

BOT CHORD **WEBS** 2x3 SPF No.2

REACTIONS. 4=Mechanical, 2=0-3-8 (size)

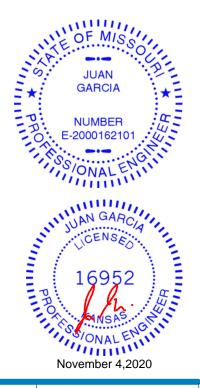
Max Horz 2=84(LC 5) Max Uplift 4=-45(LC 8), 2=-81(LC 4)

Max Grav 4=206(LC 1), 2=293(LC 1)

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

NOTES-

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



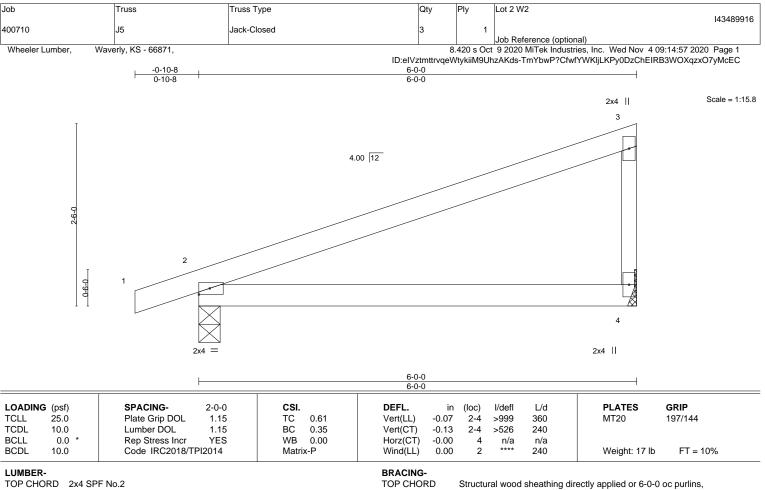


Design valid for use only with MiTek's connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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BOT CHORD

except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS.

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

WEBS 2x3 SPF No.2

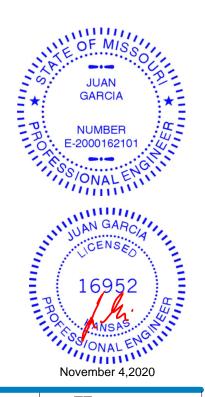
> 4=Mechanical, 2=0-3-8 (size) Max Horz 2=98(LC 5)

Max Uplift 4=-55(LC 8), 2=-88(LC 4) Max Grav 4=252(LC 1), 2=337(LC 1)

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

NOTES-

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



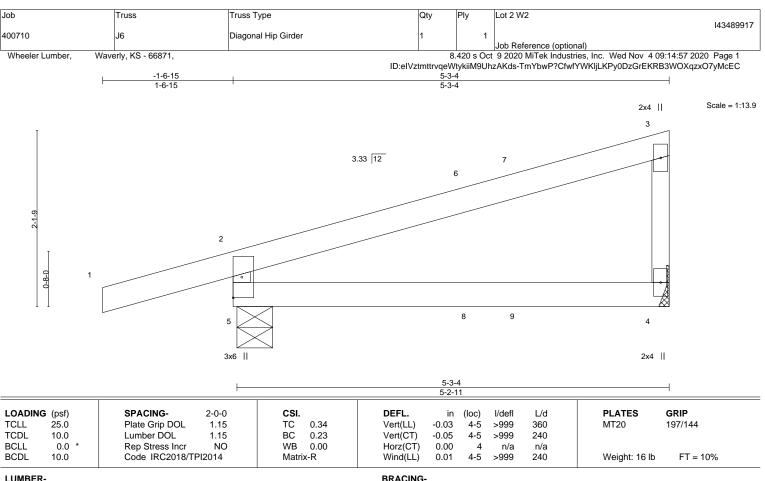
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek's connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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TOP CHORD

BOT CHORD

LUMBER-TOP CHORD BOT CHORD

REACTIONS.

2x4 SPF No.2 2x4 SPF No.2

WEBS 2x3 SPF No.2

(size) 5=0-5-3, 4=Mechanical Max Horz 5=86(LC 7)

Max Uplift 5=-120(LC 4), 4=-43(LC 8)

Max Grav 5=365(LC 1), 4=208(LC 1)

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

TOP CHORD 2-5=-322/154

NOTES-

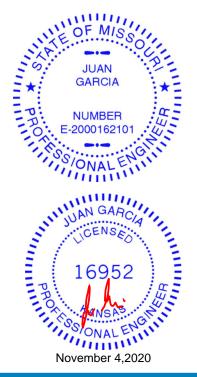
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=120.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 28 lb up at 2-11-5, and 94 lb down and 63 lb up at 3-6-6 on top chord, and 2 lb down and 1 lb up at 2-11-5, and 11 lb down at 3-6-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)

LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 4-5=-20

Concentrated Loads (lb) Vert: 8=1(F)



Structural wood sheathing directly applied or 5-3-4 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

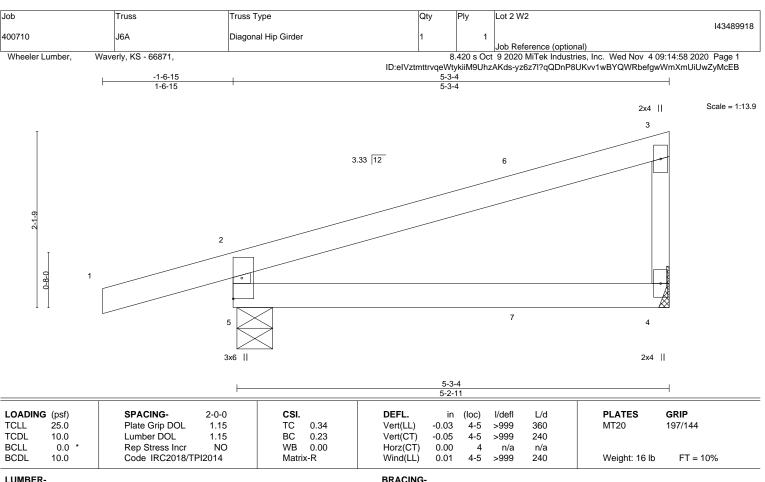
except end verticals

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

REACTIONS.

2x4 SPF No.2 2x4 SPF No.2

BOT CHORD **WEBS** 2x3 SPF No.2

> 5=0-5-3, 4=Mechanical (size) Max Horz 5=86(LC 5)

Max Uplift 5=-120(LC 4), 4=-43(LC 8) Max Grav 5=365(LC 1), 4=208(LC 1)

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

TOP CHORD 2-5=-322/154

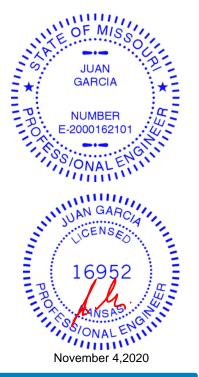
NOTES-

- 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=120.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 94 lb down and 63 lb up at 3-6-6 on top chord, and 11 lb down at 3-6-6 on bottom chord. The design/selection of such connection device(s) is the
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 4-5=-20



Structural wood sheathing directly applied or 5-3-4 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals



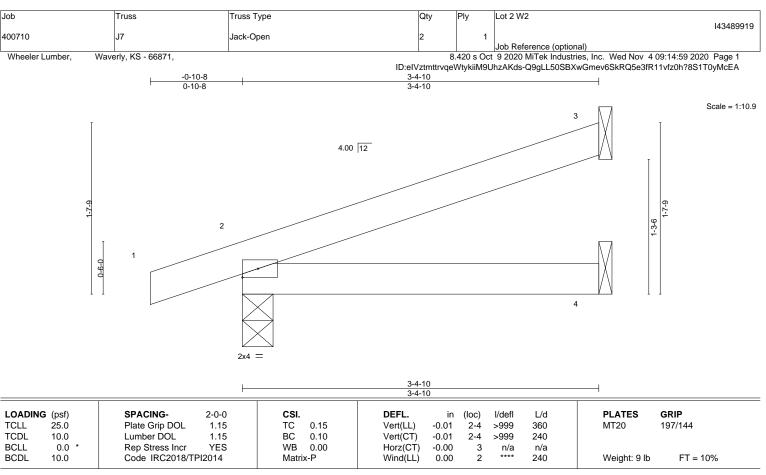
\Lambda WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

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ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANS/TPI1 Qu
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





LUMBER-

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

BRACING-

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-4-10 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS.

3=Mechanical, 2=0-3-8, 4=Mechanical (size)

Max Horz 2=58(LC 4)

Max Uplift 3=-53(LC 8), 2=-66(LC 4)

Max Grav 3=100(LC 1), 2=226(LC 1), 4=64(LC 3)

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

- 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:59 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-Q9gLL50SBXwGmev6SkRQ5e3gh12Bfz0h?8S1T0yMcEA

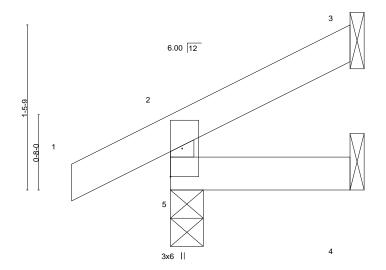
Structural wood sheathing directly applied or 1-7-2 oc purlins,

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

except end verticals.



Scale = 1:10.2



1-7-2

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	I2014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

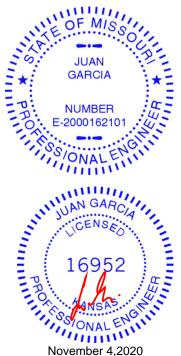
WEBS 2x3 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=41(LC 8)

Max Uplift 5=-25(LC 8), 3=-25(LC 8) Max Grav 5=158(LC 1), 3=32(LC 1), 4=27(LC 3)

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

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





Job Truss Truss Type Qty Lot 2 W2 143489921 400710 J9 Diagonal Hip Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:00 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-uLEkYR14yr27NoUI0SyfdrbjqRJFOQGqDoBb?SyMcE9 6-3-4 1-8-7 6-3-4 Scale = 1:22.6 3x4 || 3 5.15 12 3x4 || 1-0-0 8 9 2x4 || 3x4 || 6-2-10 Plate Offsets (X,Y)--[2:0-2-0,0-1-4] SPACING-**PLATES** LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defl L/d GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.55 Vert(LL) -0.06 4-5 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.35 Vert(CT) -0.124-5 >609 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) -0.00 n/a n/a 4 Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-R Wind(LL) >999 240 Weight: 20 lb 0.05 4-5

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

REACTIONS. (size) 5=0-5-9, 4=Mechanical

Max Horz 5=157(LC 5)

Max Uplift 5=-103(LC 8), 4=-116(LC 5) Max Grav 5=418(LC 1), 4=255(LC 1)

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

TOP CHORD 2-5=-367/135

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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=103 4=116
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 95 lb down and 57 lb up at 2-6-1, and 72 lb down and 34 lb up at 2-6-15, and 87 lb down and 73 lb up at 4-10-15 on top chord, and 4 lb down at 2-6-1, and 11 lb down and 18 lb up at 2-6-15, and 18 lb down and 19 lb up at 4-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

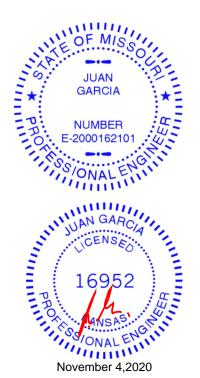
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 4-5=-20

Concentrated Loads (lb)

Vert: 8=-0(F=-2, B=2) 9=-1(B)



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.



\Lambda WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANS/TPI1 Qu
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 2 W2 143489922 400710 J10 Diagonal Hip Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:48 2020 Page 1

Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-E2VB1KuZm9XqxyZ_Jxkr8J6jjcFFa_I3TxHya9yMcEL

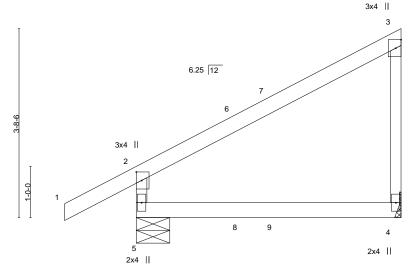
Structural wood sheathing directly applied or 5-2-3 oc purlins,

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

except end verticals.

5-2-3 5-2-3 1-4-13

Scale = 1:22.5



BRACING-

TOP CHORD

BOT CHORD

Plate Offs	ets (X,Y)	[2:0-2-0,0-1-4]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.03	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-

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

WEBS 2x3 SPF No.2

REACTIONS. (size) 5=0-7-14, 4=Mechanical

Max Horz 5=149(LC 5)

Max Uplift 5=-75(LC 8), 4=-76(LC 5) Max Grav 5=344(LC 1), 4=219(LC 31)

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

TOP CHORD 2-5=-302/100

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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 88 lb down and 53 lb up at 2-0-15, and 79 lb down and 59 lb up at 2-9-1 on top chord, and 6 lb down and 11 lb up at 2-0-15, and 10 lb down and 18 lb up at 2-9-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

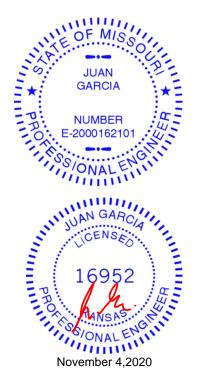
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 4-5=-20

Concentrated Loads (lb)

Vert: 8=1(B) 9=1(F)





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek's connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



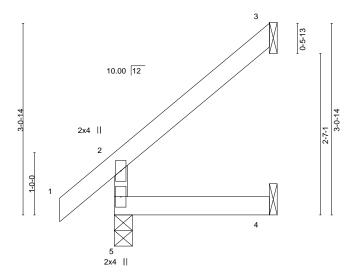
Job Truss Truss Type Qty Lot 2 W2 143489923 400710 J11 Jack-Open

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:49 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-iE3aEguBXTfgZ68BteG4hXeyJ?d2JRXChb1W6byMcEK

-0-10-8 0-10-8 2-5-14

Scale = 1:18.5



LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d (loc) I/defl TCLL 25.0 Plate Grip DOL Vert(LL) 0.00 >999 240 1.15 TC 0.12 4-5 4-5 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.07 Vert(CT) -0.00 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.01 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R

PLATES GRIP 197/144 MT20

Weight: 9 lb FT = 10%

LUMBER-

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

BRACING-

BOT CHORD

TOP CHORD

Structural wood sheathing directly applied or 2-5-14 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 5=97(LC 8)

Max Uplift 3=-70(LC 8), 4=-6(LC 8)

Max Grav 5=187(LC 1), 3=78(LC 15), 4=45(LC 3)

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

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





Job Truss Truss Type Qty Lot 2 W2 143489924 400710 J12 Jack-Open 10

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:49 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-iE3aEguBXTfgZ68BteG4hXex0?dgJRXChb1W6byMcEK

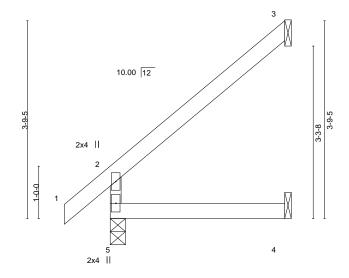
Structural wood sheathing directly applied or 3-4-0 oc purlins,

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

except end verticals.

0-10-8 3-4-0

Scale = 1:22.0



LOADING TCLL	25.Ó	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.14	· ' '	in (loc) -0.01 4-5	l/defl L/d >999 360	PLATES MT20	GRIP 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) -	0.01 4-5	>999 240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -	0.01 3	n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.01 4-5	>999 240	Weight: 11 lb	FT = 10%

3-4-0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=88(LC 8) Max Uplift 3=-59(LC 8)

Max Grav 5=222(LC 1), 3=107(LC 13), 4=61(LC 3)

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

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





Job	Truss	Truss Type	Qty	Ply	Lot 2 W2	
400740	140	lasti On an		,	143489925	5
400710	J13	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:50 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-BQdyS0vpImnXAFjNRLnJDkB7vP_s2unMwFm3e1yMcEJ

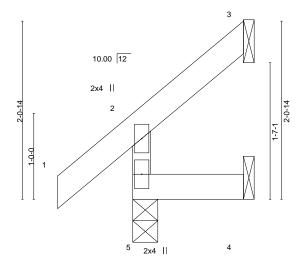
Structural wood sheathing directly applied or 1-3-7 oc purlins,

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

except end verticals.



Scale = 1:13.4



BRACING-

TOP CHORD

BOT CHORD

LOADING	G (psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-R						Weight: 5 lb	FT = 10%

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 5=58(LC 8)

Max Uplift 3=-36(LC 8), 4=-12(LC 8)

Max Grav 5=150(LC 1), 3=27(LC 15), 4=22(LC 3)

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

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







Job Truss Truss Type Qty Lot 2 W2 143489926 400710 J14 Jack-Open Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:50 2020 Page 1

Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-BQdyS0vpImnXAFjNRLnJDkB7gP_R2unMwFm3e1yMcEJ

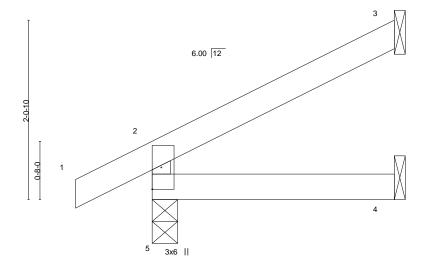
Structural wood sheathing directly applied or 2-9-3 oc purlins,

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

except end verticals.



Scale = 1:13.2



2-9-3	1
2-9-3	٦

BRACING-

TOP CHORD

BOT CHORD

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	PI2014	Matri	x-R	Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size)

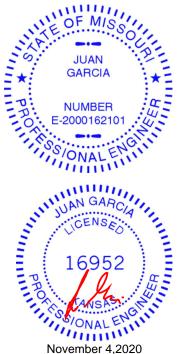
Max Horz 5=64(LC 8)

Max Uplift 5=-26(LC 8), 3=-47(LC 8)

Max Grav 5=198(LC 1), 3=77(LC 1), 4=49(LC 3)

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

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





Job Truss Truss Type Qty Lot 2 W2 143489927 400710 J15 Jack-Open

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:51 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-fdBKfMwR34vOoPIZ_3IYmyjIVpJynL1V9vWcBTyMcEI

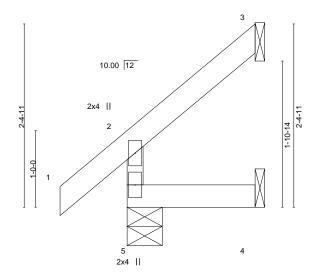
Structural wood sheathing directly applied or 1-8-1 oc purlins,

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

except end verticals.

0-10-8 1-8-1

Scale = 1:15.0



1-8-1 1-8-1

BRACING-

TOP CHORD

BOT CHORD

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.	00 5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.	00 5	>999	180		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.	00 3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R					Weight: 6 lb	FT = 10%

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

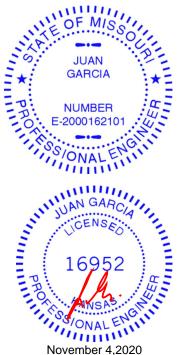
> 5=0-5-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=71(LC 8)

Max Uplift 3=-48(LC 8), 4=-9(LC 8)

Max Grav 5=160(LC 1), 3=46(LC 15), 4=29(LC 3)

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

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





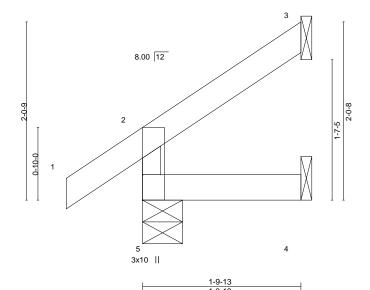
Job Truss Truss Type Qty Lot 2 W2 143489928 400710 J16 Jack-Open

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:51 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-fdBKfMwR34vOoPIZ_3IYmyjIhpJ7nL1V9vWcBTyMcEI



Scale = 1:13.2



LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	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/TF	PI2014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

LUMBER-

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

WEBS 2x3 SPF No.2

Wind(LL) BRACING-

Structural wood sheathing directly applied or 1-9-13 oc purlins, TOP CHORD except end verticals.

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. 5=0-5-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 5=61(LC 8)

Max Uplift 5=-10(LC 8), 3=-40(LC 8), 4=-2(LC 8) Max Grav 5=165(LC 1), 3=49(LC 15), 4=32(LC 3)

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

NOTES-

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

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 2 W2 143489929 400710 J17 Diagonal Hip Girder

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:52 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-7plisix3qN1FQZtmYmpnJ9GRXDeaWoHfOZFAjwyMcEH

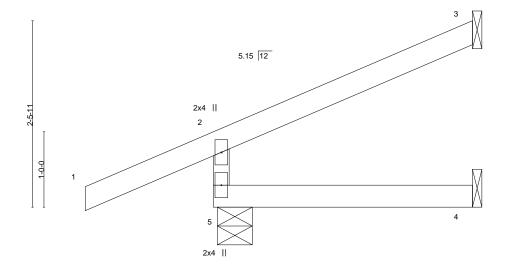
Structural wood sheathing directly applied or 3-5-4 oc purlins,

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

except end verticals.

3-5-4 3-5-4 1-8-7

Scale = 1:15.3



3-4-10													
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	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/TF	PI2014	Matri	k-R	Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-5-9, 3=Mechanical, 4=Mechanical (size)

Max Horz 5=96(LC 12)

Max Uplift 5=-88(LC 12), 3=-65(LC 12), 4=-3(LC 19) Max Grav 5=162(LC 1), 3=39(LC 1), 4=47(LC 3)

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

NOTES-

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

LOAD CASE(S) Standard

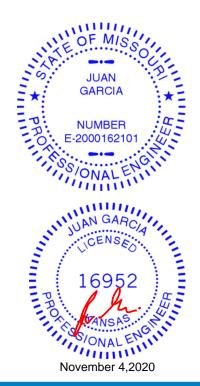
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Concentrated Loads (lb)

Vert: 1=-54(F=-27, B=-27)

Trapezoidal Loads (plf)

Vert; 1=-0(F=35, B=35)-to-2=-32(F=19, B=19), 2=-2(F=34, B=34)-to-3=-60(F=5, B=5), 5=-0(F=10, B=10)-to-4=-17(F=1, B=1)





\Lambda WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek's connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 2 W2 143489930 400710 J18 Diagonal Hip Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:52 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-7plisix3qN1FQZtmYmpnJ9GTGDfHWoHfQZFAjwyMcEH 1-2-14 2-6-5 Scale = 1:10.7 4.24 12 0-8-0 3x6 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI Plate Grip DOL Vert(LL) -0.00 197/144 **TCLL** 25.0 1.15 TC 0.08 4-5 >999 360 MT20

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

-0.00

-0.00

0.00

4-5

3

5 >999

>999

except end verticals.

n/a

240

n/a

240

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

Structural wood sheathing directly applied or 2-6-5 oc purlins,

Weight: 8 lb

FT = 10%

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

WEBS 2x3 SPF No.2

5=0-4-9, 3=Mechanical, 4=Mechanical REACTIONS. (size) Max Horz 5=61(LC 12)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Uplift 5=-105(LC 6), 3=-39(LC 12) Max Grav 5=81(LC 1), 3=29(LC 1), 4=32(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

ВС

WB

Matrix-R

0.03

0.00

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

NO

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (|t=|b|) 5=105.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 16 lb down and 6 lb up at -1-2-14, and 16 lb down and 6 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

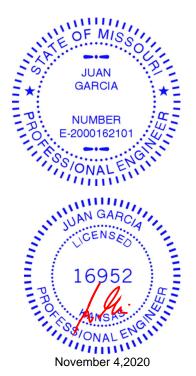
LOAD CASE(S) Standard

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

Vert: 1=-24(F=-12, B=-12)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-6=-16(F=27, B=27), 6=0(F=35, B=35)-to-2=-7(F=31, B=31), 2=-7(F=31, B=31)-to-3=-50(F=10, B=10), 5=-2(F=9, B=9)-to-4=-14(F=3, B=3)







Job Truss Truss Type Qty Lot 2 W2 143489931 400710 J19 Jack-Closed Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:53 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-b?I442xhbh962jSy6UK0rNpbpdzBFFKocD?jFMyMcEG 1-10-8 0-8-8 Scale = 1:10.9

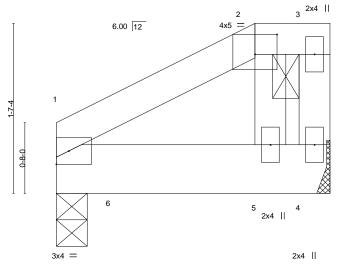


Plate Offsets (X,Y)--[2:0-2-8,0-2-4] SPACING-DEFL. LOADING (psf) CSI. (loc) I/defl L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.00 1-5 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.18 Vert(CT) -0.01 1-5 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.01 Horz(CT) 0.00 n/a n/a 4 Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-S Wind(LL) >999 240 Weight: 11 lb 0.00 5

1-10-8 0-7-0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. (size) 1=0-3-8, 4=Mechanical

Max Horz 1=51(LC 5)

Max Uplift 1=-37(LC 8), 4=-71(LC 5) Max Grav 1=860(LC 2), 4=308(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 34 lb down and 59 lb up at 2-5-4 on top chord, and 986 lb down and 38 lb up at 0-7-12, and 3 lb down and 2 lb up at 1-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

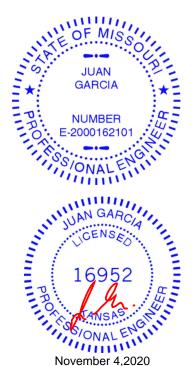
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 1-4=-20

Concentrated Loads (lb)

Vert: 5=1(F) 6=-945(B)



Structural wood sheathing directly applied or 2-7-0 oc purlins,

except end verticals, and 2-0-0 oc purlins: 2-3.

Rigid ceiling directly applied or 10-0-0 oc bracing







Job Truss Truss Type Qty Lot 2 W2 143489932 400710 J20 Diagonal Hip Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:53 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

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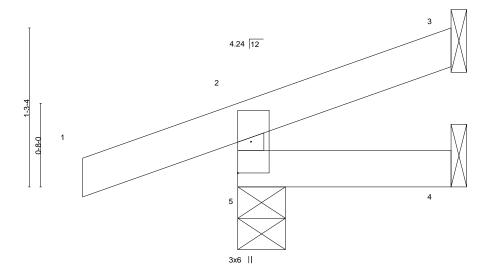
Structural wood sheathing directly applied or 1-8-7 oc purlins,

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

except end verticals

1-2-14 1-8-7

Scale = 1:9.2



			1-8-7 1-8-7	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.08 BC 0.02 WB 0.00	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.00 5 >999 360 MT20 197/144 Vert(CT) -0.00 5 >999 240 Horz(CT) 0.00 3 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00 5 >999 240 Weight: 6 lb FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-4-9, 3=Mechanical, 4=Mechanical (size) Max Horz 5=46(LC 7)

Max Uplift 5=-103(LC 6), 3=-13(LC 8)

Max Grav 5=75(LC 1), 3=20(LC 1), 4=23(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=103.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 8 lb down and 3 lb up at -1-2-14 , and 8 lb down and 3 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)

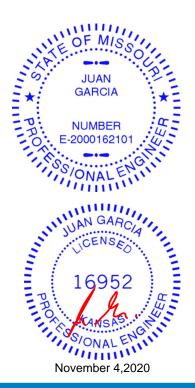
LOAD CASE(S) Standard

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

Concentrated Loads (lb)

Vert: 1=-13(F=-6, B=-6) Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-2=-23(F=24, B=24), 2=-23(F=24, B=24)-to-3=-50(F=10, B=10), 5=-6(F=7, B=7)-to-4=-14(F=3, B=3)





MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

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ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

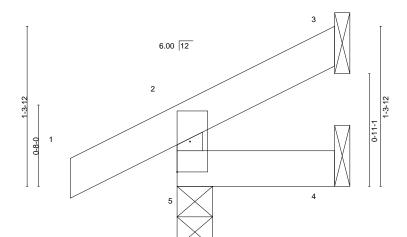
available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 2 W2 143489933 400710 J21 Jack-Open Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:54 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-3BsTHOyKM?Hzft18gBrFOaLpy0L5_inxrskGnoyMcEF -0-10-8 1-3-8

1-3-8

0-10-8



LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

3x6 ||

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 5=35(LC 8)

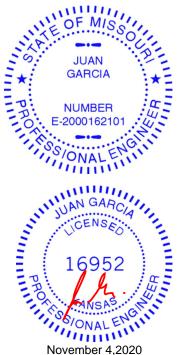
Max Uplift 5=-26(LC 8), 3=-18(LC 8)

Max Grav 5=150(LC 1), 3=17(LC 1), 4=21(LC 3)

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

NOTES-

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



Structural wood sheathing directly applied or 1-3-8 oc purlins,

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

except end verticals.

Scale = 1:9.4



Job	Truss	Truss Type	Qty	Ply	Lot 2 W2
400710	J22	JACK-CLOSED SUPPORTE	2	1	143489934
400710	022	SACK GEOGED GOLLOKIE	_		Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:54 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-3BsTHOyKM?Hzft18gBrFOaLqZ0L?_inxrskGnoyMcEF

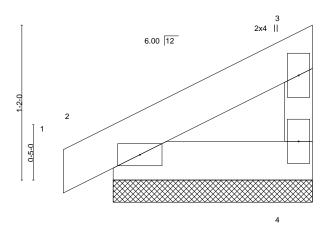
Structural wood sheathing directly applied or 1-6-0 oc purlins,

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

except end verticals.

1-6-0 0-4-8 1-6-0

Scale = 1:8.7



2x4 || 2x4 =

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	ix-P	'					Weight: 5 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

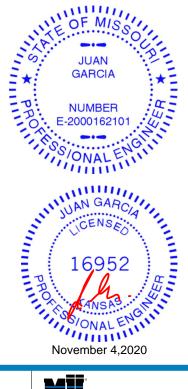
TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 **WEBS**

2x3 SPF No.2

4=1-6-0, 2=1-6-0 (size) Max Horz 2=35(LC 5) Max Uplift 4=-15(LC 8), 2=-17(LC 8) Max Grav 4=59(LC 1), 2=93(LC 1)

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

- 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
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job	Truss	Truss Type	Qty	Ply	Lot 2 W2	7
400710	J23	JACK-CLOSED	2	1	143489935	
400710	323	JACK-CLOSED	_	'	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:55 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-XOQrVkzy7IPqH1cKDvNUwou?LQhFj9154WUqKFyMcEE

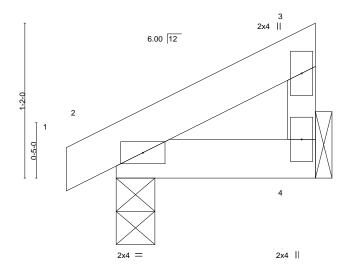
Structural wood sheathing directly applied or 1-6-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

1-6-0 0-4-8 1-6-0

Scale = 1:8.7



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

1-6-0 1-6-0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

4=Mechanical, 2=0-3-8 (size) Max Horz 2=35(LC 5) Max Uplift 4=-15(LC 8), 2=-17(LC 8) Max Grav 4=57(LC 1), 2=94(LC 1)

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

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





Job Truss Truss Type Qty Lot 2 W2 143489936 400710 J24 Diagonal Hip Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:14:55 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-XOQrVkzy7IPqH1cKDvNUwouzkQhsj9154WUqKFyMcEE 1-6-15 2-10-7 Scale = 1:10.1 3 2x4_H 3.33 12 2 3x6 II 2-10-7 2-9-14 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP (loc) I/defI L/d Plate Grip DOL Vert(LL) -0.00 >999 197/144 **TCLL** 25.0 1.15 TC 0.19 4-5 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) -0.00 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) -0.00 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Wind(LL) -0.00 4-5 >999 240 Weight: 10 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 3-4: 2x3 SPF No.2

REACTIONS. (size) 5=0-5-3, 4=Mechanical

Max Horz 5=83(LC 7)

Max Uplift 5=-111(LC 6), 4=-36(LC 12) Max Grav 5=132(LC 1), 4=41(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=111.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 28 lb down and 10 lb up at -1-6-15, and 28 lb down and 10 lb up at -1-6-15 on top chord. The design/selection of such connection device(s) is the
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

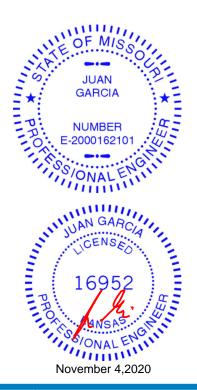
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Concentrated Loads (lb)

Vert: 1=-43(F=-21, B=-21)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-2=-30(F=20, B=20), 2=-2(F=34, B=34)-to-3=-49(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=10))



Structural wood sheathing directly applied or 2-10-7 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.



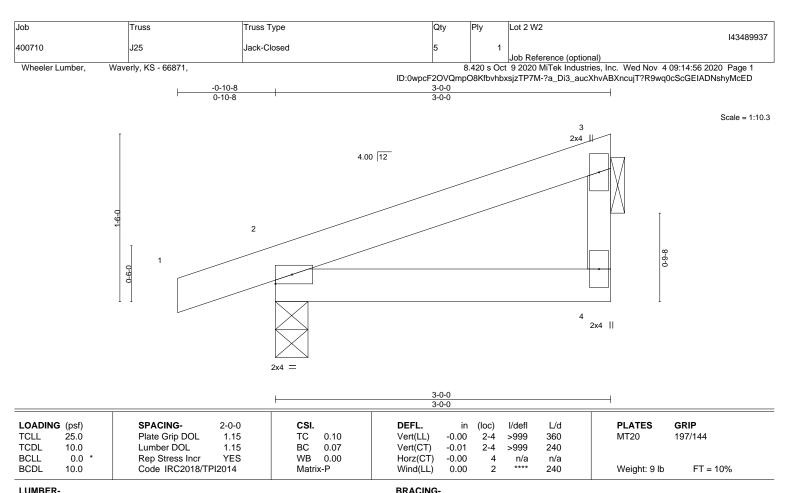
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANS/TPI1 Qu
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 4=Mechanical, 2=0-3-8 (size) Max Horz 2=54(LC 5) Max Uplift 4=-24(LC 8), 2=-70(LC 4)

Max Grav 4=110(LC 1), 2=208(LC 1)

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

NOTES-

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

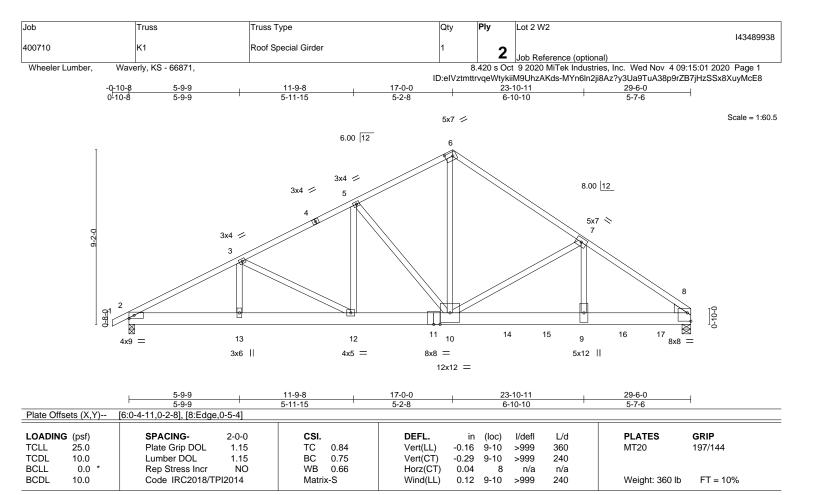


Structural wood sheathing directly applied or 3-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.





BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied or 10-0-0 oc bracing

LUMBER-

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

WEDGE

Right: 2x6 SPF No.2

REACTIONS. (size) 2=0-3-8, 8=0-5-8

Max Horz 2=247(LC 26)

Max Uplift 2=-363(LC 8), 8=-312(LC 9) Max Grav 2=2624(LC 1), 8=5003(LC 1)

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

TOP CHORD 2-3=-4868/638, 3-5=-4362/598, 5-6=-4268/637, 6-7=-4565/679, 7-8=-7569/776 BOT CHORD 2-13=-636/4187, 12-13=-636/4187, 12-12=-485/3817, 9-10=-550/5950, 8-9=-550/5950

3-13=0/272, 3-12=-432/203, 5-12=-396/339, 5-10=-617/533, 6-10=-542/3923,

7-10=-2670/357, 7-9=-105/2922

NOTES

WEBS

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

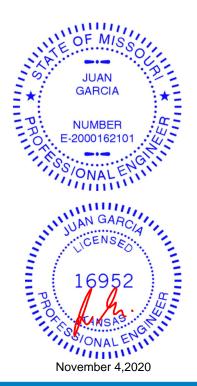
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) The Fabrication Tolerance at joint 8 = 6%
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=363, 8=312.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2935 lb down and 505 lb up at 19-10-7, 507 lb down and 73 lb up at 21-11-4, 507 lb down and 42 lb up at 23-11-4, and 507 lb down at 25-11-4, and 507 lb down at 27-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

19-10-7, 507 lb down and 73 lb up at 21-11-4, 507 lb down and 42 lb up at 23-11-4, and 507 lb down at 25-1 at 27-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



CAAQGASE(S)geStandard

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

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ANSI/TPIT Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Qty Job Truss Truss Type Ply Lot 2 W2 143489938 400710 K1 Roof Special Girder

Wheeler Lumber,

Waverly, KS - 66871,

| Z | Job Reference (optional)

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:01 2020 Page 2
ID:eIVztmttrvqeWtykiiM9UhzAKds-MYn6In2ji8Az?y3Ua9TuA38p9rZB7jHzSSx8XuyMcE8

LOAD CASE(S) Standard

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

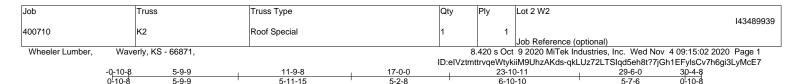
Uniform Loads (plf)

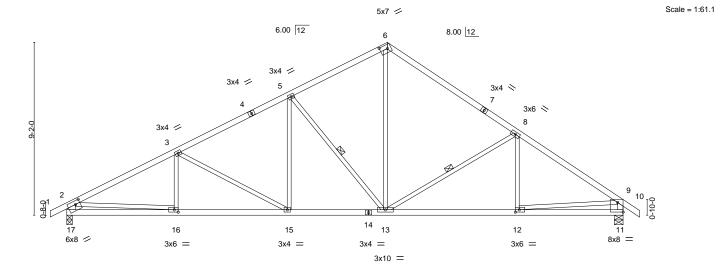
Vert: 1-6=-70, 6-8=-70, 2-8=-20

Concentrated Loads (lb)

Vert: 9=-507(F) 14=-2907(F) 15=-507(F) 16=-507(F) 17=-507(F)







23-10-11

except end verticals.

1 Row at midpt

Structural wood sheathing directly applied or 3-5-15 oc purlins,

5-13, 8-13

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

	3-9-9		11-9-0	17-0-0			23-10-11		29-0-0	
		5-9-9	5-11-15		5-2-8	6-1	10-10		5-7-6	
Plate Off	sets (X,Y)	[6:0-4-11,0-2-8], [11:Edge,0	-6-2], [12:0-2-8,0-1-8],	[16:0-2-8,0-1-	8], [17:0-3-0,0-2-4]					
LOADIN	G (psf)	SPACING-	2-0-0 CSI		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15 TC	0.69	Vert(LL)	-0.10 15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15 BC	0.54	Vert(CT)	-0.19 15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES WB	0.50	Horz(CT)	0.05 11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	014 Mat	rix-S	Wind(LL)	0.07 15-16	>999	240	Weight: 120 lb	FT = 10%
					` '					

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

2x3 SPF No.2 *Except*

2-17: 2x6 SPF No.2, 9-11: 2x4 SPF No.2

5-9-9

REACTIONS. (size) 17=0-3-8, 11=0-5-8

Max Horz 17=270(LC 7)

Max Uplift 17=-201(LC 8), 11=-160(LC 9) Max Grav 17=1388(LC 1), 11=1382(LC 1)

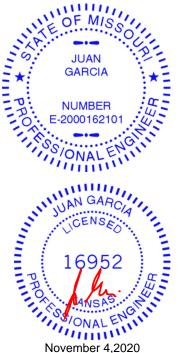
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2173/288, 3-5=-1761/264, 5-6=-1292/236, 6-8=-1429/257, 8-9=-1818/197,

2-17=-1326/230 9-11=-1327/185

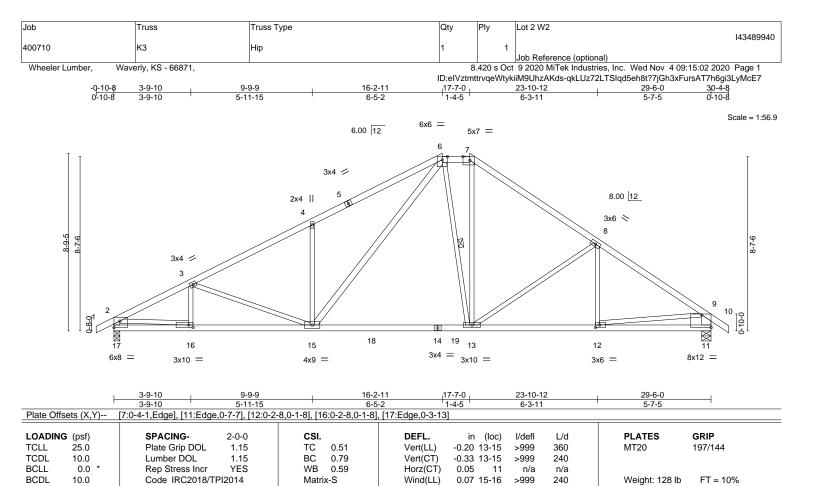
BOT CHORD 16-17=-249/545, 15-16=-316/1861, 13-15=-174/1493, 12-13=-76/1434, 11-12=-65/273 WEBS 3-15=-438/161, 5-15=-15/347, 5-13=-681/225, 6-13=-129/859, 8-13=-478/228,

2-16=-67/1321, 9-12=-51/1168

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=201, 11=160.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







LUMBER-

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

6-15,2-17: 2x4 SPF No.2, 9-11: 2x6 SPF No.2

BRACING-

WEBS

TOP CHORD

Structural wood sheathing directly applied or 3-7-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-11 max.): 6-7. Rigid ceiling directly applied or 10-0-0 oc bracing.

BOT CHORD 6-13 1 Row at midpt

REACTIONS. (size) 17=0-3-8, 11=0-5-8

Max Horz 17=259(LC 7)

Max Uplift 17=-196(LC 8), 11=-157(LC 9) Max Grav 17=1436(LC 2), 11=1466(LC 16)

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

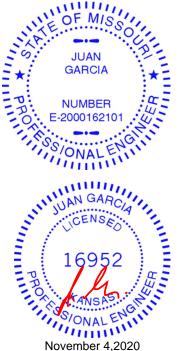
2-3=-2273/289, 3-4=-2056/266, 4-6=-2061/413, 6-7=-1198/221, 7-8=-1545/233, TOP CHORD

8-9=-1857/189. 2-17=-1355/210. 9-11=-1368/186

BOT CHORD 16-17=-189/448, 15-16=-336/1995, 13-15=-44/1216, 12-13=-62/1476, 11-12=-71/313 **WEBS** 3-15=-267/134, 4-15=-449/258, 6-15=-273/933, 6-13=-329/179, 7-13=-101/628,

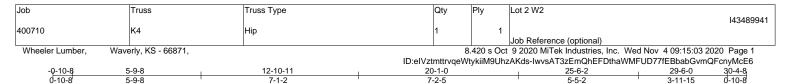
8-13=-430/209, 2-16=-179/1612, 9-12=-40/1192

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=196, 11=157,
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

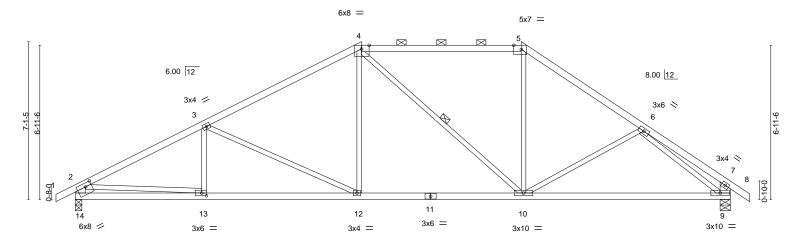


November 4,2020





Scale = 1:51.9



	7 7 7			-10-11	20-1-0	+	29-6-0	+
5-9-8 7-1-2 Plate Offsets (X,Y) [4:0-4-2,Edge], [5:0-4-1,Edge], [13:0-2-8,0-1-8				· · -	7-2-5 		9-5-0	·
LOADING ((psf)	SPACING-	2-0-0	CSI.	DEFL. in (loc) 1/e	defl L/d	PLATES GRIP	
	25.0 10.0	Plate Grip DOL Lumber DOL	1.15 1.15	TC 1.00 BC 0.78	,	999 360 999 240	MT20 197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.79		n/a n/a		
BCDL 1	10.0	Code IRC2018/	ΓPI2014	Matrix-S	Wind(LL) 0.06 12-13 >	999 240	Weight: 115 lb FT = 10	%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

2-14,7-9: 2x6 SPF No.2

(size) 14=0-3-8, 9=0-5-8

Max Horz 14=212(LC 7) Max Uplift 14=-175(LC 8), 9=-137(LC 9) Max Grav 14=1431(LC 2), 9=1430(LC 2)

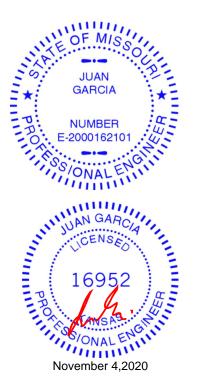
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-2278/249, 3-4=-1784/190, 4-5=-1332/177, 5-6=-1685/147, 6-7=-475/16, TOP CHORD

2-14=-1334/202 7-9=-417/63

BOT CHORD 13-14=-193/535, 12-13=-249/1975, 10-12=-101/1512, 9-10=-94/1375 **WEBS** 3-12=-528/216, 4-12=-11/512, 4-10=-340/118, 5-10=-3/505, 2-13=-80/1477,

6-9=-1401/190

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



Structural wood sheathing directly applied or 2-2-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-5.

4-10

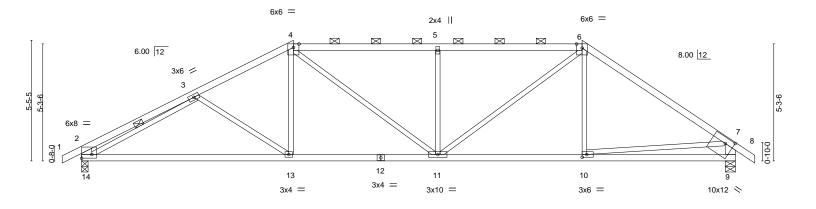
Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt



Job Truss Truss Type Qty Lot 2 W2 143489942 Hip 400710 K5 Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:04 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-m7TEOp4b?3YYsPo3FI1bohmOl2a4K65Q8Q9o8DyMcE5 30-4-8 0-10-8 -0-10-8 0-10-8 22-7-0 5-2-0 4-4-10 6-6-3 6-6-3 6-11-0

Scale = 1:52.0



	9-6-11	16-0-13	22-7-0	29-6-0
	9-6-11	6-6-3	6-6-3	6-11-0
Plate Offsets (X,Y)-	[2:Edge,0-2-0], [6:0-3-1,Edge], [9:0-4-8,)-3-0], [10:0-2-8,0-1-8]		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. DEFL TC 0.62 Vert(I BC 0.74 Vert(I WB 0.46 Horz(Matrix-S	LL) -0.19 13-14 >999 360 CT) -0.39 13-14 >885 240 CT) 0.07 9 n/a n/a	PLATES GRIP MT20 197/144 Weight: 112 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

2-14,7-9: 2x6 SPF No.2

(size) 14=0-3-8, 9=0-5-8 Max Horz 14=166(LC 7)

Max Uplift 14=-144(LC 8), 9=-110(LC 9) Max Grav 14=1384(LC 1), 9=1384(LC 1)

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

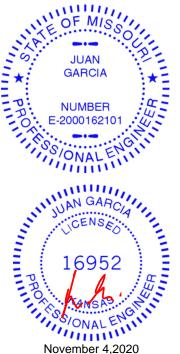
2-3=-763/104, 3-4=-1926/182, 4-5=-1950/259, 5-6=-1949/259, 6-7=-1774/182, TOP CHORD

2-14=-576/135, 7-9=-1322/148

BOT CHORD 13-14=-257/1802, 11-13=-199/1668, 10-11=-84/1360, 9-10=-229/517 **WEBS** 4-13=0/346, 4-11=-149/475, 5-11=-564/229, 6-11=-203/818, 3-14=-1397/150,

7-10=-220/967

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=144, 9=110,
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-6-8 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-5-8 max.): 4-6.

3-14

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

1 Row at midpt

November 4,2020



Job Truss Truss Type Qty Lot 2 W2 143489943 400710 K6 Hip Girder Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:06 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-jVb?pU6rXhoG5jySNi33t6rfBsE0o_mjckevC6yMcE3 -0-10-8 0-10-8 18-10-0 29-6-0 30-4-8 0-10-8

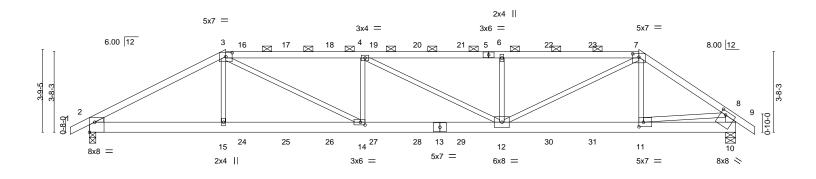
6-4-4

6-3-0

6-3-0

Scale = 1:52.6

4-5-0



	6-2-11	12-5-11		18-10-0	_	25-1-0		6-0
	6-2-11	6-3-0	'	6-4-4	1	6-3-0	4-:	5-0
Plate Offsets (X,Y)	[2:Edge,0-5-8], [3:0-3-8,0-	2-3], [7:0-3-8,0-1-14], [1	0:0-2-12,0-2	2-0], [11:0-2-8,0-2-8], [14:0-2-8,0	-1-8]			
LOADING (psf)	SPACING-	2-0-0 CS		,	oc) I/defl	L/d	PLATES	GRIP
TCLL 25.0 TCDL 10.0	Plate Grip DOL Lumber DOL	1.15 TC 1.15 BC	0.94 0.84	Vert(LL) -0.21 12- Vert(CT) -0.37 12-	14 >934	360 240	MT20	197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr Code IRC2018/TPI	NO WB 2014 Ma	0.64 rix-S	Horz(CT) 0.07 Wind(LL) 0.20 12-	10 n/a 14 >999	n/a 240	Weight: 121 lb	FT = 10%

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

2x4 SPF No.2 *Except* TOP CHORD

5-7,3-5: 2x4 SPF 2100F 1.8E

6-2-11

BOT CHORD 2x6 SPF No.2

2x3 SPF No.2 *Except* **WEBS**

8-10: 2x6 SPF No.2

WEDGE

Left: 2x3 SPF No.2

REACTIONS. (size) 2=0-3-8, 10=0-5-8

Max Horz 2=111(LC 7)

Max Uplift 2=-414(LC 8), 10=-407(LC 4) Max Grav 2=1769(LC 1), 10=1811(LC 1)

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

TOP CHORD 2-3=-3124/787, 3-4=-3794/1005, 4-6=-3570/948, 6-7=-3572/949, 7-8=-2431/622,

8-10=-1741/415

BOT CHORD 2-15=-726/2643, 14-15=-724/2630, 12-14=-1016/3792, 11-12=-477/1954, 10-11=-136/448

WEBS 3-15=-71/415, 3-14=-389/1412, 4-14=-496/281, 4-12=-271/95, 6-12=-580/302,

7-12=-515/1861, 8-11=-457/1542

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=414, 10=407.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 93 lb down and 65 lb up at 7-0-0, 95 lb down and 65 lb up at 9-0-0, 95 lb down and 65 lb up at 11-0-0, 95 lb down and 65 lb up at 13-0-0, 95 lb down and 65 lb up at 15-0-0, 95 lb down and 65 lb up at 17-0-0, 95 lb down and 65 lb up at 19-0-0, 95 lb down and 65 lb up at 21-0-0, and 95 lb down and 65 lb up at 23-0-0, and 87 lb down and 67 lb up at 25-1-0 on top chord, and 216 lb down and 155 lb up at 6-2-11, 28 lb down at 7-0-0, 28 lb down at 9-0-0, 28 lb down at 11-0-0, 28 lb down at 13-0-0, 28 lb down at 15-0-0, 28 lb do down at 19-0-0, 28 lb down at 21-0-0, and 28 lb down at 23-0-0, and 190 lb down and 108 lb up at 25-0-0 on bottom chord. The

JNALEN JNALEN JUAN GARCIA ICENSES 16952 ovember / November 4,2020

GARCIA

NUMBER

-2000162101

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (3-4-14 max.): 3-7.

Rigid ceiling directly applied or 7-4-1 oc bracing.

Cordenian/selection of such connection device(s) is the responsibility of others



Job	Truss	Truss Type	Qty	Ply	Lot 2 W2	
400710	K6	Hip Girder	1	1		143489943
400710	No	nip Gildei	'	'	Job Reference (optional)	

Wheeler Lumber,

Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:06 2020 Page 2 ID:eIVztmttrvqeWtykiiM9UhzAKds-jVb?pU6rXhoG5jySNi33t6rfBsE0o_mjckevC6yMcE3

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-7=-70, 7-8=-70, 8-9=-70, 2-10=-20

Concentrated Loads (lb)

Vert: 7=-27(B) 15=-216(B) 6=-27(B) 12=-15(B) 11=-190(B) 16=-27(B) 17=-27(B) 18=-27(B) 19=-27(B) 20=-27(B) 21=-27(B) 22=-27(B) 23=-27(B) 24=-15(B)

25=-15(B) 26=-15(B) 27=-15(B) 28=-15(B) 29=-15(B) 30=-15(B) 31=-15(B)

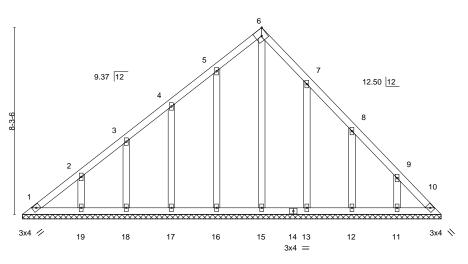
Job Truss Truss Type Qty Ply Lot 2 W2 143489944 400710 LAY2 Lay-In Gable

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:06 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-jVb?pU6rXhoG5jySNi33t6rtysRVo5yjckevC6yMcE3

10-7-4 7-11-7

> Scale = 1:51.1 6x6 //



18-6-10

Plate Offsets (X,Y)	[6:0-2-12,Edge]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/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 0.04	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(CT) 0.01 10 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Weight: 87 lb FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 **BRACING-**

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS. All bearings 18-6-10.

Max Horz 1=210(LC 5) (lb) -

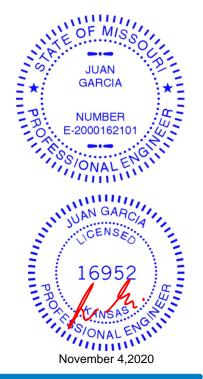
Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 16, 17, 18, 19 except 13=-124(LC 9), 12=-124(LC 9),

11=-122(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 10, 15, 16, 17, 18, 19, 13, 12, 11

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 16, 17, 18, 19 except (jt=lb) 13=124, 12=124, 11=122.
- 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.









Job Truss Truss Type Qty Lot 2 W2 143489945 400710 LAY3 GABLE Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:07 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-Bi9N0q6TI_w7jtWewQaIQKO0SGnpXa5sqOOTIYyMcE2 7-5-3 7-5-3 Scale = 1:27.6 X \bowtie 18.03 12 8 7 4x5 // 10 9 4-1-3 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 25.0 Plate Grip DOL 1.15 Vert(LL) 197/144 TC 0.14 n/a n/a 999 MT20 **TCDL** 10.0 Lumber DOL 1.15 BC 0.03 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 5 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 37 lb FT = 10% LUMBER-BRACING-TOP CHORD 2-0-0 oc purlins: 1-5, except end verticals.

BOT CHORD

TOP CHORD 2x4 SPF No.2

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

OTHERS 2x4 SPF No.2

REACTIONS. All bearings 7-5-3.

(lb) -Max Horz 10=-134(LC 6)

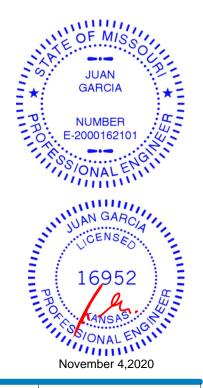
Max Uplift All uplift 100 lb or less at joint(s) 10, 5, 9, 8, 6 except 7=-120(LC 6)

Max Grav All reactions 250 lb or less at joint(s) 10, 5, 7, 9, 8, 6

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 5, 9, 8, 6 except (it=lb) 7=120.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 5-6.



Design valid for use only with MiTek's connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Lot 2 W2 143489946 400710 LAY4 Lay-In Gable

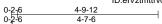
Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:08 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-fuilDA763I2_L05qU75XyXx9Xg7rG07?3270H_yMcE1

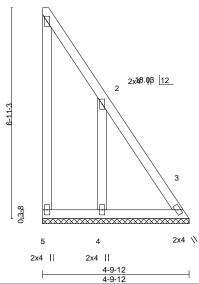
Structural wood sheathing directly applied or 4-9-12 oc purlins,

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

except end verticals.



Scale = 1:37.9 2x4 ||



LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	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	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P						Weight: 26 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS. (size) 5=4-9-12, 3=4-9-12, 4=4-9-12

Max Horz 5=-260(LC 4)

Max Uplift 5=-138(LC 6), 3=-125(LC 7), 4=-302(LC 9) Max Grav 5=131(LC 5), 3=256(LC 4), 4=341(LC 16)

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

2-3=-314/249 TOP CHORD WEBS 2-4=-285/336

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=138, 3=125, 4=302,
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





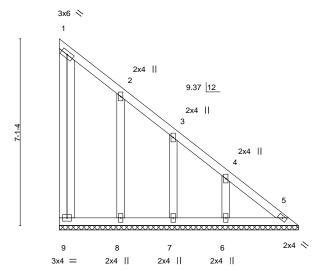


Job Truss Truss Type Qty Lot 2 W2 143489947 400710 LAY5 Lay-In Gable Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:08 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:eIVztmttrvqeWtykiiM9UhzAKds-fuilDA763I2_L05qU75XyXxCqq6OG08?3270H_yMcE1

9-1-3

Scale = 1:43.8



LOADING (psf) TCLL 25.0 TCDL 10.0	Plate Grip DOL Lumber DOL	-0-0 1.15 1.15	CSI. TC BC	0.10 0.07	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20
BCLL 0.0 BCDL 10.0	Rep Stress Incr Code IRC2018/TPI20	YES)14	WB Matri	0.07 x-S	Horz(CT)	0.00	5	n/a	n/a	Weight: 48 lb

LUMBER-BRACING-

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

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

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

REACTIONS. All bearings 9-1-3. Max Horz 9=-261(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 9, 5, 8, 7 except 6=-105(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 9, 5, 8, 7, 6

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 5, 8, 7 except (it=lb) 6=105.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



GRIP 197/144

FT = 10%



Job Truss Truss Type Qty Ply Lot 2 W2 143489948 R1 400710 Roof Special Girder Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:09 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-74G7RW8kqcAryAg12rdmVITFF3LW?Ny9IitZpRyMcE0

Structural wood sheathing directly applied or 5-5-11 oc purlins,

3-7, 1-8

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

1 Row at midpt

7-3-14 7-6-6

6.00 12 Scale = 1:61.2 5x7 /

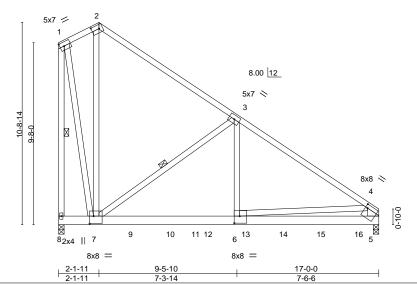


Plate Offsets (X,Y)-- [2:0-4-11,0-2-8], [4:0-1-4,0-2-4], [6:0-3-8,0-4-8], [7:0-2-8,0-4-12]

	• ()	0040000		201		DEE!		<i>(</i> 1)	1/1 0		DI 4750	anin .
LOADIN	G (pst)	SPACING- 2	2-0-0	CSI.		DEFL.	ın	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.11	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.19	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-S	Wind(LL)	0.03	6-7	>999	240	Weight: 241 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

4-5: 2x8 SP DSS

(size) 8=0-3-8, 5=0-3-8 Max Horz 8=-382(LC 6)

Max Grav 8=3517(LC 1), 5=3881(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-859/90, 2-3=-1032/45, 3-4=-4058/0, 1-8=-3949/0, 4-5=-2536/0 TOP CHORD

BOT CHORD 7-8=-217/306, 6-7=0/3273, 5-6=0/1776

WFBS 2-7=-128/671, 3-7=-3175/0, 3-6=0/3023, 1-7=0/3642, 4-6=0/1503

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 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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) 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) This truss 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) 787 lb down and 96 lb up at 1-11-4, 824 lb down and 82 lb up at 3-11-4, 737 lb down at 5-11-4, 737 lb down at 7-11-4, 737 lb down at 9-11-4, 737 lb down at 11-11-4, and 737 lb down at 13-11-4, and 737 lb down and 93 lb up at 15-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

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

GARCIA NUMBER -2000162101 ONALE 16952 PROMALEN November 4,2020 November 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Controlled S. This costign is based only upon parameters shown, and is for an individual druining Component, not a fundamental property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Qty Job Truss Truss Type Ply Lot 2 W2 143489948 R1 400710 Roof Special Girder

Wheeler Lumber,

Waverly, KS - 66871,

Z Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:09 2020 Page 2 ID:eIVztmttrvqeWtykiiM9UhzAKds-74G7RW8kqcAryAg12rdmVITFF3LW?Ny9IitZpRyMcE0

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 7=-741(F) 9=-747(F) 10=-737(F) 12=-737(F) 13=-737(F) 14=-737(F) 15=-737(F) 16=-737(F)



Job Truss Truss Type Qty Lot 2 W2 143489949 Valley 400710 V1 Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:10 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

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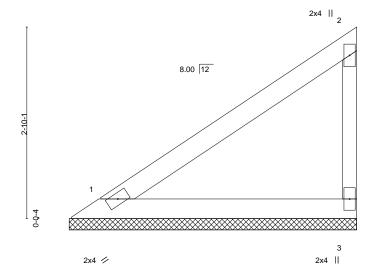
Structural wood sheathing directly applied or 4-3-2 oc purlins,

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

except end verticals.

4-3-2

Scale = 1:17.1



LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	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/TF	PI2014	Matri	x-P						Weight: 12 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

1=4-3-2, 3=4-3-2 (size) Max Horz 1=98(LC 5) Max Uplift 1=-14(LC 8), 3=-48(LC 8) Max Grav 1=165(LC 1), 3=178(LC 15)

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

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





Job Truss Truss Type Qty Lot 2 W2 143489950 Valley 400710 V2

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:10 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-bGqWes9MbvliaKFDcY8?1y0WSTnRkxwIWMc7MtyMcE?

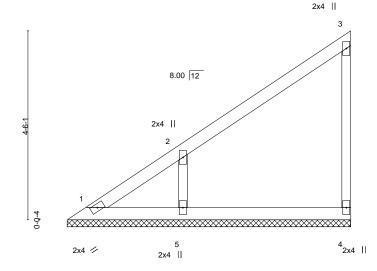
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

6-9-2

Scale = 1:27.5



LOADIN	G (psf)	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 0.10	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%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x3 SPF No.2

REACTIONS. (size) 1=6-9-2, 4=6-9-2, 5=6-9-2

Max Horz 1=164(LC 5)

Max Uplift 1=-23(LC 4), 4=-38(LC 5), 5=-142(LC 8) Max Grav 1=86(LC 16), 4=158(LC 15), 5=381(LC 15)

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

2-5=-299/191 **WEBS**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=142
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Job Truss Truss Type Qty Lot 2 W2 143489951 Valley 400710 V3

Wheeler Lumber, Waverly, KS - 66871,

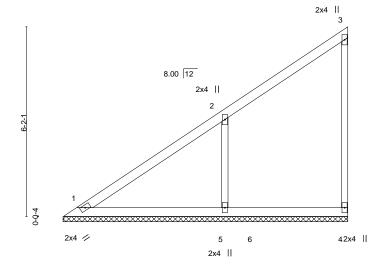
Job Reference (optional)
8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:11 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-3TOusC9_MDQZCUqP9GfEaAYg_t6QTNMSI0MguJyMcE_

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

Scale = 1:37.5



LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.30 BC 0.18 WB 0.10	DEFL. in (Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	(loc) I/defl L/d - n/a 999 - n/a 999 4 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	(, , , , , , , , , , , , , , , , , , ,		Weight: 29 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.2 **WEBS OTHERS** 2x3 SPF No.2

REACTIONS.

(size) 1=9-3-2, 4=9-3-2, 5=9-3-2

Max Horz 1=230(LC 5)

Max Uplift 4=-45(LC 5), 5=-189(LC 8)

Max Grav 1=225(LC 16), 4=186(LC 15), 5=608(LC 15)

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

2-5=-393/232 **WEBS**

- 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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=189
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 2 W2 143489952 400710 V4 Valley

Wheeler Lumber, Waverly, KS - 66871,

Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:11 2020 Page 1 ID:eIVztmttrvqeWtykiiM9UhzAKds-3TOusC9_MDQZCUqP9GfEaAYdst6zTM3SI0MguJyMcE_

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

11-9-2

Scale = 1:46.5

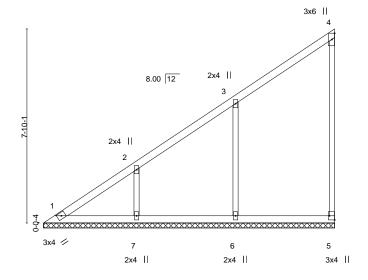


Plate Of	fsets (X,Y)	[5:Edge,0-2-8]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	n/a		n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-S						Weight: 40 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2 **OTHERS** 2x3 SPF No.2

REACTIONS. All bearings 11-9-2. (lb) -

Max Horz 1=297(LC 5)

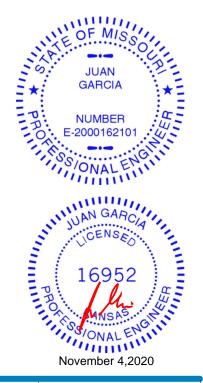
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 6=-154(LC 8), 7=-138(LC 8) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=512(LC 15), 7=423(LC 15)

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

TOP CHORD 1-2=-264/180

WEBS 3-6=-331/186, 2-7=-283/185

- 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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 6=154, 7=138,
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Qty Lot 2 W2 143489953 Valley 400710 V5 Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:12 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

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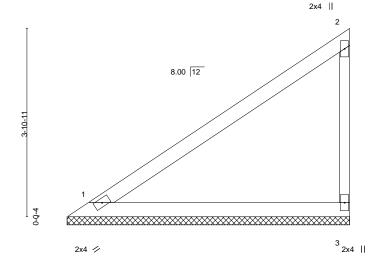
Structural wood sheathing directly applied or 5-10-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

5-10-0

Scale: 1/2"=1'



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 25.0 Plate Grip DOL Vert(LL) 999 197/144 1.15 TC 0.54 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.29 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 17 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x3 SPF No.2

1=5-10-0, 3=5-10-0 (size) Max Horz 1=139(LC 5) Max Uplift 1=-20(LC 8), 3=-68(LC 8) Max Grav 1=236(LC 1), 3=254(LC 15)

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

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





Job Truss Truss Type Qty Lot 2 W2 143489954 Valley 400710 V6 Job Reference (optional)
8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:12 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871,

ID:elVztmttrvqeWtykiiM9UhzAKds-XfyG3YAc7XYQpePcjzAT6N5tLHTMCrEb_g5DPlyMcDz

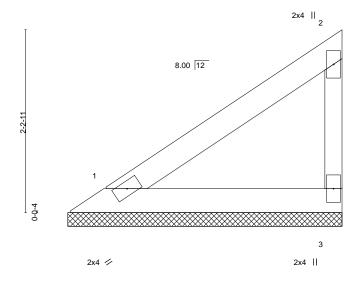
Structural wood sheathing directly applied or 3-4-0 oc purlins,

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

except end verticals.

3-4-0

Scale = 1:14.0



LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-P						Weight: 9 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 1=3-4-0, 3=3-4-0 (size) Max Horz 1=73(LC 5)

Max Uplift 1=-10(LC 8), 3=-36(LC 8) Max Grav 1=124(LC 1), 3=133(LC 15)

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

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







Job Truss Truss Type Qty Lot 2 W2 143489955 Valley 400710 V7 Job Reference (optional) 8.420 s Oct 9 2020 MiTek Industries, Inc. Wed Nov 4 09:15:13 2020 Page 1 Wheeler Lumber, Waverly, KS - 66871, ID:eIVztmttrvqeWtykiiM9UhzAKds-?rWeHtBEuqqGRo_oHhhifbe3xhq2xIUkDKrnxCyMcDy 2-9-0 2x4 || 2 Scale: 1"=1' 8.00 12 0-0-4 3 2x4 || 2x4 🥢

LOADIN TCLL	25.Ó	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.08	DEFL. Vert(LL)	n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
TCDL BCLL	10.0 0.0 *	Lumber DOL Rep Stress Incr	1.15 YES	BC WB	0.04 0.00	Vert(CT) Horz(CT)	n/a -0.00	- 3	n/a n/a	999 n/a		
BCDL	10.0	Code IRC2018/TP		Matri		1.0.2(0.1)	0.00	Ū	.,, α	1,70	Weight: 7 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

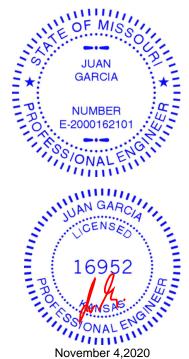
REACTIONS. 1=2-9-0, 3=2-9-0 (size)

Max Horz 1=57(LC 5) Max Uplift 1=-8(LC 8), 3=-28(LC 8) Max Grav 1=97(LC 1), 3=105(LC 15)

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

NOTES-

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



Structural wood sheathing directly applied or 2-9-0 oc purlins,

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

except end verticals.

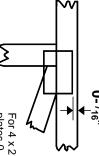


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE



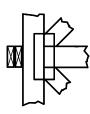
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



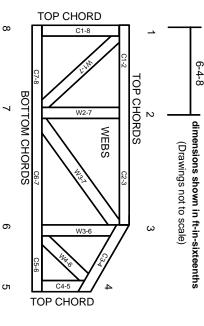
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

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.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

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- Cut members to bear tightly against each other.
- 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.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

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- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21.The design does not take into account any dynamic or other loads other than those expressly stated.