

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

07/01/2020

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

Re: 400360 Lot 22 HT

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

Pages or sheets covered by this seal: I41695373 thru I41695473

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193



June 18,2020

Sevier, Scott

,Engineer

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 or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO 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.

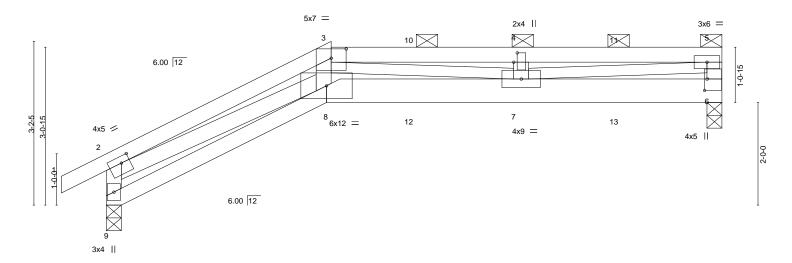


Plate Offsets (X,Y)	[2:0-2-0,0-1-8], [3:0-3-8,0-2-3], [4:0-2-3,	0-0-13], [6:0-2-11,0-0-9]	3-3-3		3-10-13
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.34	DEFL. in Vert(LL) -0.13	7-8 >999 360	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	BC 0.60 WB 0.45 Matrix-S	Vert(CT) -0.22 Horz(CT) 0.12 Wind(LL) 0.11	7-8 >629 240 6 n/a n/a 8 >999 240	Weight: 96 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

6-8: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-7,5-7: 2x3 SPF No.2

REACTIONS. (size) 9=0-3-8, 6=0-3-8 Max Horz 9=90(LC 5)

Max Uplift 9=-205(LC 8), 6=-225(LC 5) Max Grav 9=967(LC 1), 6=941(LC 1)

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

TOP CHORD 2-9=-1037/300, 2-3=-4369/1066, 3-4=-3110/763, 4-5=-3110/763, 5-6=-688/202

BOT CHORD 8-9=-190/372, 7-8=-1011/3967, 6-7=-150/567

WEBS 2-8=-883/3688, 3-8=-410/1756, 3-7=-872/302, 4-7=-453/241, 5-7=-636/2587

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.

Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x3 - 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) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=205, 6=225.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 108 lb down and 98 lb up at 6-0-0, and 108 lb down and 98 lb up at 8-0-0, and 108 lb down and 98 lb up at 10-0-0 on top chord, and 357 lb down and 132 lb

Continued 4n5pagen2bottom chord. The design/selection of such connection device(s) is the responsibility of others



OF MISS

12-0-0

Structural wood sheathing directly applied or 5-9-15 oc purlins,

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

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





RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695373 HALF HIP GIRDER AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 2 Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:48 2020 Page 2 В1 400360

Waverly, KS 66871 Wheeler Lumber,

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-9ORvujZWu9K1oFJqpPXUmHqbTt1pliNPouOUKjz5OMP

07/01/2020 LOAD CASE(S) Standard

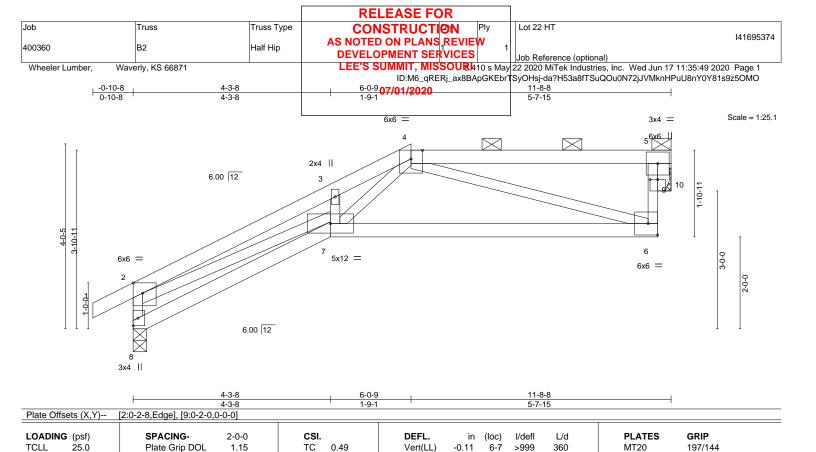
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-5=-70, 8-9=-20, 6-8=-20

Concentrated Loads (lb)

Vert: 8=-357(F) 7=-42 4=-100(F) 10=-100(F) 11=-100(F) 12=-42 13=-42





LUMBER-

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

10.0

10.0

0.0

Wind(LL) **BRACING-**

Vert(CT)

Horz(CT)

-0.24

0.09

0.05

6-7

10

7

>575

>999

n/a

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

240

n/a

240

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

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

Max Horz 8=90(LC 5)

Max Uplift 8=-9(LC 8), 10=-26(LC 5) Max Grav 8=590(LC 1), 10=487(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. 2-8=-629/73, 2-3=-1835/80, 3-4=-1722/134, 6-9=0/300, 5-9=0/300 TOP CHORD

BOT CHORD 6-7=-88/898

WEBS 2-7=-9/1441, 4-7=-84/922, 4-6=-730/80, 5-10=-578/38

- 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.

1.15

YES

ВС

WB 0.57

Matrix-S

0.49

- 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.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10.
- 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.



June 18,2020

FT = 10%

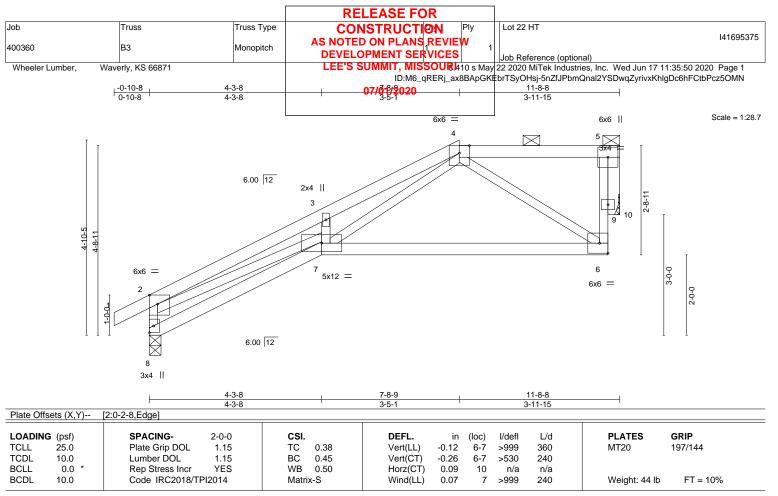
Weight: 42 lb











LUMBER-

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

BRACING-

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

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

Max Horz 8=108(LC 5)

Max Uplift 8=-8(LC 8), 10=-25(LC 5) Max Grav 8=590(LC 1), 10=487(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-8=-626/84, 2-3=-1846/134, 3-4=-1786/202, 6-9=-7/369, 5-9=-7/369 TOP CHORD

BOT CHORD 6-7=-61/534

WEBS 2-7=-57/1457, 4-7=-159/1300, 4-6=-516/84, 5-10=-502/26

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10.
- 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.

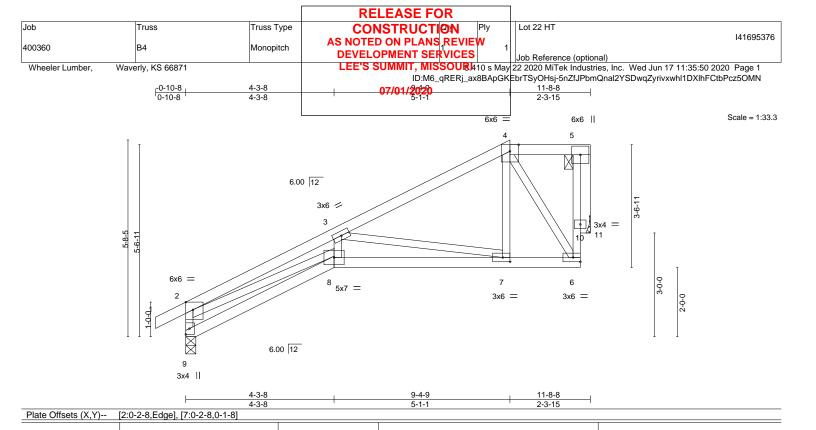


June 18,2020









LUMBER-

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

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

25.0

10.0

10.0

0.0

Wind(LL) **BRACING-**

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

TOP CHORD **BOT CHORD**

(loc)

8 >999

8 >731

8

11

-0.11

-0.19

0.10

0.07

I/defl

n/a

>999

Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5. Rigid ceiling directly applied or 10-0-0 oc bracing

L/d

360

240

n/a

240

REACTIONS.

(size) 9=0-3-8, 11=Mechanical

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 9=125(LC 5)

Max Uplift 9=-2(LC 8), 11=-38(LC 8) Max Grav 9=590(LC 1), 11=487(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-9=-608/89, 2-3=-1900/201, 3-4=-444/13, 6-10=-44/463, 5-10=-44/463 TOP CHORD

BOT CHORD 7-8=-251/1566 6-7=-20/322

WEBS 2-8=-128/1536, 3-8=-44/578, 3-7=-1255/236, 4-7=0/335, 4-6=-530/54, 5-11=-492/38

2-0-0

1.15

1.15

YES

CSI.

TC

ВС

WB

Matrix-S

0.34

0.49

0.78

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 11.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



GRIP

197/144

FT = 10%

PLATES

Weight: 48 lb

MT20

June 18,2020



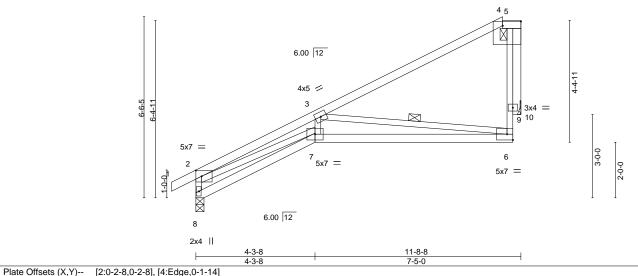






RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695377 AS NOTED ON PLANS REVIE 400360 B5 Monopitch **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:51 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsi-Zz72WlcPB4icfi1PUX5BOwS1d53By?JrUsd8x2z5OMM 11-8-8 0-7-15 -0-10-8 0-10-8 07/01/20<mark>20</mark>-9 4-3-8 Scale = 1:41.5 10x12 M18SHS =



LOADING (not)	SDACING 200	CCI	DEEL		(100)	1/4.561	1 /4	DLATES	CDID
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL)	-0.14	7	>985	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT)	-0.29	6-7	>475	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT)	0.13	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.10	7	>999	240	Weight: 47 lb	FT = 10%

LUMBER-

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

BRACING-

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

WEBS 1 Row at midpt

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

Max Horz 8=145(LC 8) Max Uplift 10=-65(LC 8)

Max Grav 8=590(LC 1), 10=487(LC 1)

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

2-8=-596/83, 2-3=-2027/227, 6-9=-1/288, 5-9=-1/288 TOP CHORD

BOT CHORD 6-7=-303/1684

WEBS 2-7=-164/1697, 3-7=-42/638, 3-6=-1600/303, 5-10=-493/66

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections
- 8) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 18,2020







RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695378 AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 400360 B6 Monopitch DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:52 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-19hQj5c1yOqTHscb2FcQx7_CxUOJhRO_jWMhTUz5OML 07/01/2020¹¹⁻⁸⁻⁸
7-5-0 0-10-8 0-10-8 4-3-8

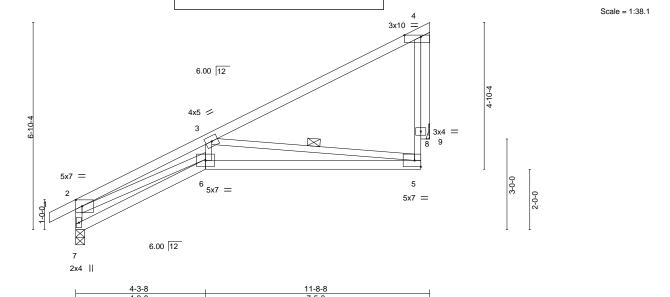


Plate Offsets (X,Y)--[2:0-2-8,0-2-8], [4:0-6-8,Edge] SPACING-DEFL. GRIP LOADING (psf) CSI. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.63 Vert(LL) -0.14 >972 360 MT20 197/144 6 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.63 Vert(CT) -0.295-6 >471 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.77 Horz(CT) 0.13 9 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-S Wind(LL) >999 240 Weight: 47 lb 0.10 6

LUMBER-

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

BRACING-TOP CHORD

Structural wood sheathing directly applied or 3-10-7 oc purlins,

except end verticals.

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

WEBS 1 Row at midpt

REACTIONS. (size) 7=0-3-8, 9=Mechanical

Max Horz 7=151(LC 8) Max Uplift 9=-71(LC 8)

Max Grav 7=590(LC 1), 9=487(LC 1)

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

2-7=-595/83, 2-3=-2040/231, 5-8=-2/291, 4-8=-2/291 TOP CHORD

BOT CHORD 5-6=-313/1697

WEBS 2-6=-169/1715, 3-6=-46/642, 3-5=-1623/314, 4-9=-492/72

- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.

4-3-8

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.



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT AS NOTED ON PLANS REVIE В7 400360 Monopitch **DEVELOPMENT SERVICES** Wheeler Lumber, Waverly, KS 66871

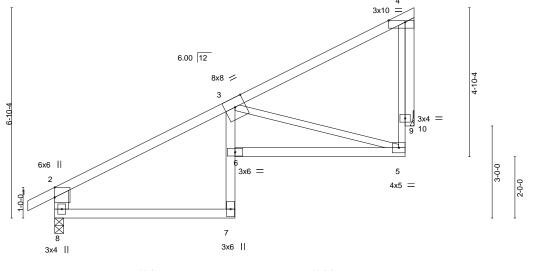
DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:53 2020 Page 1 ID:M6_qRERj_ax8BApGKEprTSyOHsj-VMFoxRdfjiyJv0Bncy7fTLXNJugWQu?8xA6F?wz5OMK

0-10-8 0-10-8 07/01/2020 5-10-8 5-10-0

Scale = 1:37.5

141695379



5-10-8 5-10-8 Plate Offsets (X Y)-- [2:0-3-15 Edge] [4:0-6-8 Edge]

	.0010 (71,17)	[=:0 0 :0;=ugo]; [::0 0 0;=										
LOADIN	IG (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)	-0.16	7	>858	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.28	7	>491	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.18	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	12014	Matri	x-S	Wind(LL)	0.11	7	>999	240	Weight: 46 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

3-7: 2x4 SPF 2100F 1.8E 2x3 SPF No.2 *Except*

WEBS 2-8: 2x6 SPF No.2 **OTHERS** 2x4 SPF No.2

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

Max Horz 8=151(LC 8) Max Uplift 10=-70(LC 8)

Max Grav 8=594(LC 1), 10=480(LC 1)

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

TOP CHORD 2-3=-590/0, 5-9=-20/338, 4-9=-20/338, 2-8=-552/38

BOT CHORD 7-8=-84/422, 5-6=-166/1008 3-5=-979/176, 4-10=-484/71 **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); 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 10.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

Rigid ceiling directly applied or 6-0-1 oc bracing.

except end verticals.

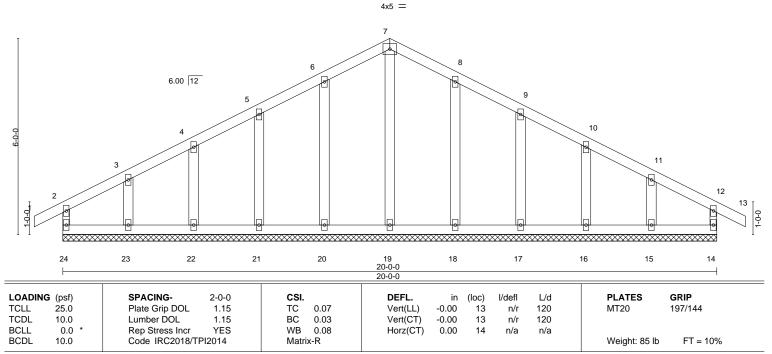
June 18,2020



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695380 Common Supported Gable DEVELOPMENT SERVICES C1 400360 Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:54 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:M6_qRERi_ax8BApGKEbrT\$yOHsi-zYpA8meHT?4AWAm_9geu0Y4g6ID79WiHAqroYNz5OMJ 07/01/2020 0-10-8 10-0-0

Scale = 1:35.2



LUMBER-BRACING-

10-0-0

10-0-0

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

0-10-8 0-10-8

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

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

except end verticals.

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

REACTIONS. All bearings 20-0-0.

(lb) -Max Horz 24=98(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15 Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.
- 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.

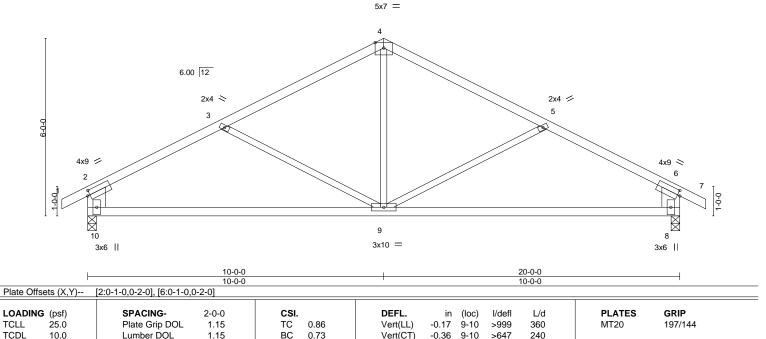


June 18,2020



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695381 AS NOTED ON PLANS REVIE 400360 C2 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:55 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-RkNYM6fvEJC18JLAjN97YmcfTiORuxxRPUbL4pz5OMI 20-0-0 20-10-8 0-10-8 0-10-8 0-10-8 10-0-0 07/01/2020 5-4-9 5-4-9 4-7-8



TCDL BCLL 0.0 Rep Stress Incr Code IRC2018/TPI2014 BCDL 10.0

Wind(LL) **BRACING-**

Horz(CT)

TOP CHORD

WB 0.21

Matrix-S

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

Weight: 69 lb

except end verticals.

8

9

0.03

0.08

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

n/a

>999

n/a

240

2x4 SPF No.2 **BOT CHORD WEBS** 2x3 SPF No.2 *Except* 2-10,6-8: 2x8 SP DSS

TOP CHORD 2x4 SPF 2100F 1.8E

(size) 10=0-3-8, 8=0-3-8 Max Horz 10=102(LC 7)

Max Uplift 10=-134(LC 8), 8=-134(LC 9) Max Grav 10=955(LC 1), 8=955(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1166/193, 3-4=-929/133, 4-5=-929/133, 5-6=-1166/193, 2-10=-851/182, TOP CHORD

YES

6-8=-851/182

BOT CHORD 9-10=-172/920, 8-9=-105/920

WEBS 4-9=0/415

NOTES-

LUMBER-

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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=134, 8=134.
- 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.



June 18,2020

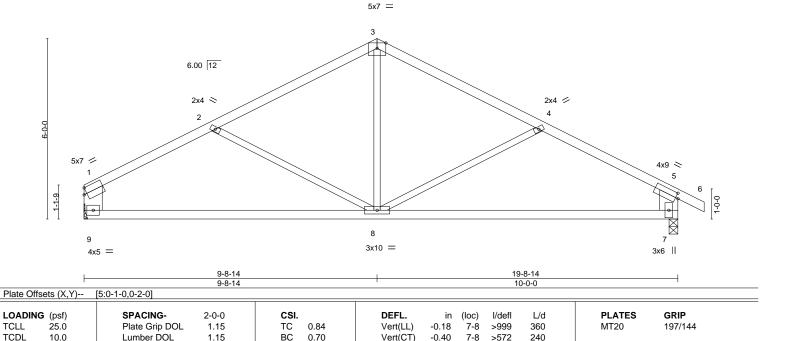
FT = 10%

Scale = 1:38.9



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695382 AS NOTED ON PLANS REVIE 400360 C3 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:56 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrT\$yOHsj-wxwxZSgX?dKumTwMH5gM5z9gd6lBdO7ad8KvcFz5OMH 20-7-6 0-10-8 19-8-14 07/01/2020 4-4-6 5-4-9 5-4-9 4-7-7



Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.03

0.11

n/a

>999

except end verticals.

7-8

n/a

240

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

Structural wood sheathing directly applied or 4-7-1 oc purlins,

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SPF 2100F 1.8E 2x4 SPF No.2 **BOT CHORD WEBS** 2x3 SPF No.2 *Except*

0.0

10.0

1-9,5-7: 2x8 SP DSS

REACTIONS. (size) 9=Mechanical, 7=0-3-8

Max Horz 9=-110(LC 4)

Max Uplift 9=-104(LC 8), 7=-133(LC 9) Max Grav 9=859(LC 1), 7=946(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

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

1-2=-1108/183, 2-3=-902/131, 3-4=-907/130, 4-5=-1147/192, 1-9=-747/148, TOP CHORD

YES

WB 0.21

Matrix-S

5-7=-838/181

BOT CHORD 8-9=-160/866, 7-8=-104/905

WEBS 3-8=0/393

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) except (jt=lb) 9=104, 7=133.
- 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.



June 18,2020

FT = 10%

Weight: 68 lb

Scale = 1:38.3



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695383 AS NOTED ON PLANS REVIE 400360 C4 Monopitch **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:56 2020 Page 1

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-wxwxZSgX?dKumTwMH5gM5z9?F6uedPKad8KvcFz5OMH Wheeler Lumber, Waverly, KS 66871

07701/2020

Scale = 1:19.4

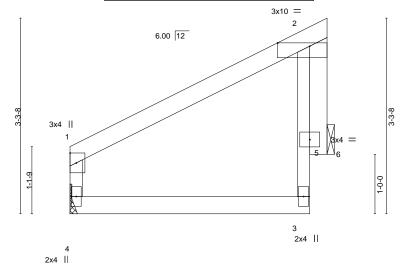


Plate Of	fsets (X,Y)	[2:0-6-8,Edge]										
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	x-R	Wind(LL)	0.00	3-4	>999	240	Weight: 15 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-14 oc purlins,

except end verticals.

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

REACTIONS. (size) 4=Mechanical, 6=Mechanical

Max Horz 4=81(LC 5)

Max Uplift 4=-3(LC 8), 6=-61(LC 8) Max Grav 4=186(LC 1), 6=158(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) 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) 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) 4, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 18,2020



Job Truss Truss Type 400360 C5 Monopitch

Waverly, KS 66871

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIE **DEVELOPMENT SERVICES**

Lot 22 HT

141695384

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:35:57 2020 Page 1 ID:M6_qRERj_ax8BApGKEb|TSyOHsj-O7UJnog9mwSlNdVZroBbeBiCTVFxMuEjso4S8iz5OMG

07/01/2020

Scale = 1:14.4

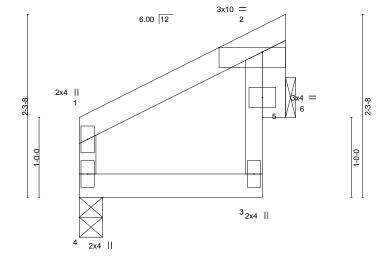


Plate Offsets (X,Y)	[2:0-6-8,Edge]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00 4 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 3 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) -0.00 6 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) -0.00 4 >999 240	Weight: 9 lb FT = 10%

LUMBER-

Wheeler Lumber,

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

BRACING-

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

except end verticals.

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

REACTIONS.

(size) 4=0-3-8, 6=Mechanical

Max Horz 4=56(LC 5)

Max Uplift 4=-2(LC 8), 6=-33(LC 8) Max Grav 4=107(LC 1), 6=81(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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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5-6-4

Scale = 1:75.4

0-10-8

5-0-0

5-10-3

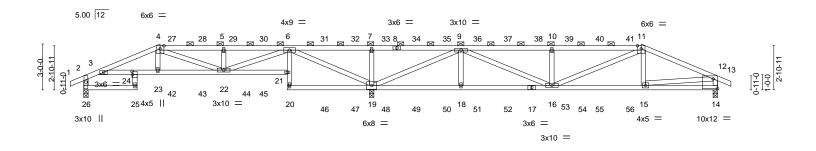
Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-11.

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

6-0-0 oc bracing: 21-22,19-20.

141695385



3-6-0	5-0-0 9-2-0	13-4-0	18-10-4	24-8-7	30-7-13	36-6-0	41-6-0	
3-6-0	1-6-0 4-2-0	4-2-0	5-6-4	5-10-3	5-11-7	5-10-3	5-0-0	<u> </u>
Plate Offsets (X,Y)	[14:Edge,0-7-11], [24:0-2-8,0-	-0-8]						
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 0.65	Vert(LL)	-0.07 22-23 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1	.15	BC 0.45	Vert(CT)	-0.11 15-16 >999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.54	Horz(CT)	0.07 14 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI201	14	Matrix-S	Wind(LL)	0.05 22-23 >999	240	Weight: 322 lb	FT = 10%
				. ,				

LUMBER-**BRACING-**TOP CHORD

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

REACTIONS.

3-6-0

1-6-0

4-2-0

4-2-0

BOT CHORD (size) 26=0-3-8, 19=0-3-8, 14=0-3-8

Max Horz 26=-21(LC 6) Max Uplift 26=-133(LC 4), 19=-435(LC 5), 14=-125(LC 9) Max Grav 26=926(LC 19), 19=3412(LC 1), 14=1212(LC 20)

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

TOP CHORD 2-3=-660/104, 3-4=-2144/384, 4-5=-1734/327, 5-6=-1732/326, 6-7=-368/2602,

7-9=-368/2602, 9-10=-2076/225, 10-11=-2078/226, 11-12=-1934/231, 2-26=-919/156,

12-14=-1168/144

BOT CHORD 25-26=-57/371, 3-24=-269/1587, 23-24=-318/1958, 22-23=-309/1908, 18-19=0/566,

16-18=0/566, 15-16=-170/1719

WEBS 5-22=-326/57, 6-22=-320/1862, 6-19=-2835/438, 7-19=-579/180, 9-19=-3389/405,

9-18=0/319, 9-16=-229/1675, 10-16=-629/197, 11-16=0/436, 12-15=-158/1499,

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.

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

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 26=133, 19=435, 14=125.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Continued on page 2

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



Job Truss Truss Type D1 400360 Hip Girder

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

Lot 22 HT

141695385

Wheeler Lumber, Waverly, KS 66871

DEVELOPMENT SERVICES | Z | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:01 2020 Page 2 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-GukqcAjgq9yBsEoK4eGXo1skK7VHlaGJnQ2gHTz5OMC

NOTES
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 50 lb down and 13 lb up at 5-9-0, 51 lb down and 13 lb up at 13-9-0, 76 lb down and 13 lb up at 13-9-0, 76 lb down and 13 lb up at 15-9-0, 76 lb down and 15 lb up at 15-9-0, 76 lb dow 17-9-0, 76 lb down and 58 lb up at 19-9-0, 76 lb down and 58 lb up at 29-9-0, 76 lb down and 58 lb up at 29-9-0, 76 lb down and 58 lb up at 39-9-0, 76 lb do top chord, and 222 lb down and 103 lb up at 5-0-0, 80 lb down and 50 lb up at 5-9-0, 80 lb down and 50 lb up at 7-9-0, 80 lb down and 50 lb up at 9-9-0, 80 lb down and 50 lb up at 11-9-0, 34 lb down at 13-5-12, 34 lb down at 15-9-0, 34 lb down at 17-9-0, 34 lb down at 19-9-0, 34 lb down at 21-9-0, 34 lb down at 23-9-0, 3 25-9-0, 34 lb down at 27-9-0, 34 lb down at 29-9-0, 34 lb down at 31-9-0, 34 lb down at 33-9-0, and 34 lb down at 35-9-0, and 222 lb down and 101 lb up at 36-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

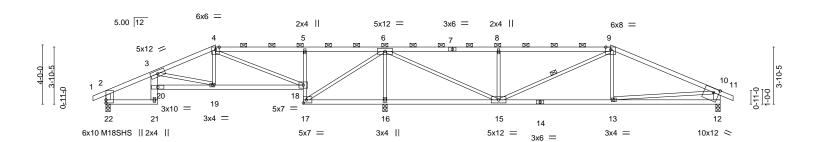
Vert: 1-2=-70, 2-4=-70, 4-11=-70, 11-12=-70, 12-13=-70, 25-26=-20, 21-24=-20, 14-20=-20

Concentrated Loads (lb)

Vert: 21=-23(F) 6=-51(F) 15=-222(F) 23=-222(F) 27=-9(F) 28=-9(F) 29=-9(F) 30=-9(F) 31=-51(F) 32=-51(F) 33=-51(F) 34=-51(F) 35=-51(F) 36=-51(F) 36= 38=-51(F) 39=-51(F) 40=-51(F) 41=-51(F) 42=-80(F) 43=-80(F) 44=-80(F) 45=-80(F) 46=-23(F) 47=-23(F) 48=-23(F) 49=-23(F) 50=-23(F) 51=-23(F) 51=-23 53=-23(F) 54=-23(F) 55=-23(F) 56=-23(F)

16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695386 AS NOTED ON PLANS REVIE 400360 D2 Hip DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:02 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-k4lCqWklbT52UONWdLnmLEPuLWq?1yLS04nDqvz5OMB 97/01/2020 26-6-6 42-4-8 0-10-8 41-6-0 3-6-0 3-10-13 5-11-3 5-6-4 7-6-14 7-4-13



⊢	3-6-0 7-4-13	13-4-0	18-10-4	26-6-6	34-1-3	41-6-0	
Plate Offsets (X,Y)	3-6-0 3-10-13 [12:0-4-8,0-3-4]	5-11-3	5-6-4	7-8-2	7-6-14	7-4-13	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/1	2-0-0 1.15 1.15 YES	CSI. TC 0.76 BC 0.55 WB 0.87 Matrix-S	DEFL. in (loc Vert(LL) -0.09 19-2(Vert(CT) -0.18 13-1! Horz(CT) 0.06 1. Wind(LL) 0.06 19-2() >999 360 5 >999 240 2 n/a n/a	PLATES GRIP MT20 197/144 M18SHS 197/144 Weight: 148 lb FT =	1

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

3-21: 2x6 SPF No.2, 5-17: 2x3 SPF No.2

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

2-22: 2x4 SPF 2100F 1.8E, 10-12: 2x6 SPF No.2

REACTIONS. 22=0-3-8, 16=0-3-8 (req. 0-3-10), 12=0-3-8 (size)

Max Horz 22=36(LC 12)

Max Uplift 22=-113(LC 8), 16=-366(LC 5), 12=-135(LC 9) Max Grav 22=664(LC 21), 16=2309(LC 1), 12=904(LC 22)

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

TOP CHORD 2-3=-742/122, 3-4=-899/137, 6-8=-790/212, 8-9=-792/213, 9-10=-1243/185,

2-22=-581/126, 10-12=-839/173

BOT CHORD 21-22=-106/591, 19-20=-258/1416, 18-19=-46/777, 17-18=-771/150, 5-18=-401/168,

16-17=-1205/184, 15-16=-1205/184, 13-15=-106/1050, 12-13=-194/521 3-19=-646/219, 4-19=0/341, 4-18=-794/63, 6-17=-225/1459, 6-16=-2150/448, 6-15=-330/2081, 8-15=-591/242, 9-15=-352/18, 9-13=0/268, 10-13=-15/572

NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone: cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=113 16=366 12=135
- 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.



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

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

9-15

Rigid ceiling directly applied or 5-1-5 oc bracing.

1 Row at midpt

June 18,2020

Scale = 1:77.8



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



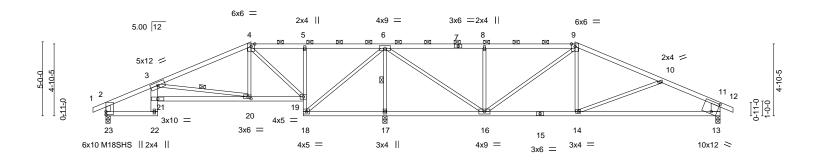
RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT AS NOTED ON PLANS REVIE 400360 D3 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:04 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-hTPyFBmY74LmjiXvImpEQfUD5KVKVrGITNGKuoz5OM9 1**97/01/2026**-6-15 0-7-3 31-8-6 41-6-0 3-6-0 6-3-10 3-6-6 5-6-4 6-1-7 5-8-15 4-0-10

Scale = 1:77.8

0-10-8

141695387



┕	3-6-0 9-9-10	13-4-0	18-10-4	25-6-15	31-8-6	41-6-0	
	3-6-0 6-3-10	3-6-6	5-6-4	6-8-11	6-1-7	9-9-10	<u> </u>
Plate Offsets (X,Y)	[13:0-4-8,0-8-1], [20:0-2-8,0)-1-8]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 *	Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC 0.81 BC 0.62 WB 0.84	Vert(LL) -0.20 13 Vert(CT) -0.40 13 Horz(CT) 0.05	3-14 >673 240 13 n/a n/a	MT20	GRIP 197/144 197/144
BCDL 10.0	Code IRC2018/TPI2	014	Matrix-S	Wind(LL) 0.08 20	0-21 >999 240	Weight: 154 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*

4-7,7-9: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except*

3-22: 2x6 SP DSS, 5-18: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-23: 2x4 SPF 2100F 1.8E, 11-13: 2x8 SP DSS

(size) 23=0-3-8, 17=0-3-8 (req. 0-3-11), 13=0-3-8 REACTIONS.

Max Horz 23=53(LC 8)

Max Uplift 23=-120(LC 8), 17=-337(LC 5), 13=-158(LC 9) Max Grav 23=650(LC 21), 17=2368(LC 1), 13=899(LC 22)

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

TOP CHORD 2-3=-722/137, 3-4=-559/101, 6-8=-442/162, 8-9=-445/163, 9-10=-960/160,

10-11=-1193/262, 2-23=-569/132, 11-13=-796/208

BOT CHORD 22-23=-136/574, 20-21=-383/1584, 19-20=-17/423, 18-19=-800/133, 5-19=-310/127,

17-18=-1087/161, 16-17=-1087/161, 14-16=-43/835, 13-14=-184/995

WEBS 3-20=-1166/371, 4-20=0/353, 4-19=-687/86, 6-18=-162/1281, 6-17=-2207/414,

6-16=-237/1650, 8-16=-483/199, 9-16=-576/27, 9-14=0/346

- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) WARNING: Required bearing size at joint(s) 17 greater than input bearing size.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=120, 17=337, 13=158.
- 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.



Structural wood sheathing directly applied or 4-7-14 oc purlins,

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

Rigid ceiling directly applied or 5-2-9 oc bracing.

1 Row at midpt

June 18,2020



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695388 AS NOTED ON PLANS REVIE D4 Monopitch Girder 400360 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Z | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May | 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:05 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:M6_qRERi_ax8BApGKEbrTSyOHsi-9fzKSXnBuOTdLs65JULTyt1TmktWENUvi10tQEz5OM8 70-10-8 0-10-8 07/01/2020 3-8-9

Scale = 1:40.5 5x7 =

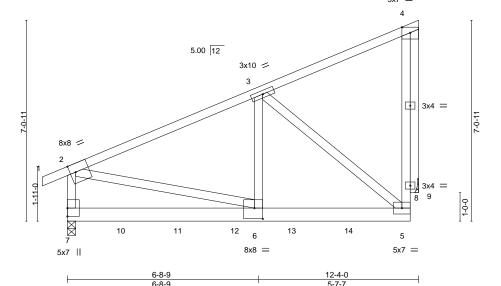


Plate Off	sets (X,Y)	[2:0-2-5,Eage], [6:0-3-8,0	-4-8]									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.07	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.14	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.52	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.05	6-7	>999	240	Weight: 157 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SPF No.2

REACTIONS. (size) 7=0-3-8, 9=Mechanical

Max Horz 7=188(LC 5)

Max Uplift 7=-363(LC 8), 9=-447(LC 8) Max Grav 7=2815(LC 1), 9=2682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-2818/331, 3-4=-287/15, 5-8=-388/2606, 4-8=-388/2606, 2-7=-1867/272 TOP CHORD

BOT CHORD 6-7=-278/419 5-6=-422/2517

WEBS 3-6=-278/2482, 3-5=-3029/525, 2-6=-154/2158, 4-9=-2688/449

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. 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) 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) 7=363, 9=447,
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 839 lb down and 124 lb up at 1-11-4, 839 lb down and 124 lb up at 3-11-4, 839 lb down and 124 lb up at 5-11-4, 839 lb down and 124 lb up at 7-11-4, and 839 lb down and 124 lb up at 9-11-4, and 175 lb down and 14 lb up at 11-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



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

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

except end verticals.

June 18,2020

Continued on page 2





Job Truss Truss Type D4 400360 Monopitch Girder

Waverly, KS 66871

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 2 Job Reference (optional)

LEE'S SUMMIT, MISSOURI410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:05 2020 Page 2

Lot 22 HT

I41695388

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-9fzKSXnBuOTdLs65JULTyt1TmktWENUvi10tQEz5OM8

07/01/2020

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Wheeler Lumber,

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

Concentrated Loads (lb)

Vert: 5=-175(F) 10=-839(F) 11=-839(F) 12=-839(F) 13=-839(F) 14=-839(F)



5x7 = 5x7 | 5.00 12 3x10 = 0-11-0 10 11 5 2x4 || 4x5 = 3x6

		-	2-11-6		-				5-8-10			
Plate Off	sets (X,Y)	[2:0-0-10,0-1-8], [3:0-3-	9,Edge]									
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	0.75	Vert(LL)	-0.06	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.13	5-6	>738	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix	r-S	Wind(LL)	0.04	5-6	>999	240	Weight: 30 lb	FT = 10%

BOT CHORD

8-8-0

Structural wood sheathing directly applied or 5-1-1 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

LUMBER-**BRACING-**TOP CHORD

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

2-7: 2x8 SP DSS

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

Max Horz 7=81(LC 7)

Max Uplift 5=-123(LC 5), 7=-149(LC 4) Max Grav 5=533(LC 1), 7=657(LC 1)

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

2-3=-783/156, 4-5=-260/114, 2-7=-537/119 TOP CHORD

BOT CHORD 6-7=-176/662, 5-6=-180/653 **WEBS** 3-6=0/281, 3-5=-579/149

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 arip 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) 5=123, 7=149.
- 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) 77 lb down and 67 lb up at 2-11-6, and 82 lb down and 67 lb up at 5-0-5, and 82 lb down and 67 lb up at 7-0-5 on top chord, and 175 lb down and 64 lb up at 2-11-6, and 32 lb down at 5-0-5, and 32 lb down at 7-0-5 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

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



June 18,2020

Continued on page 2





Job Truss Truss Type G1 400360 Half Hip Girder

RELEASE FOR CONSTRUCTION

Lot 22 HT

I41695389

Waverly, KS 66871 Wheeler Lumber,

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-dsXjftnpfhbTy0hHsBsiV4ZaX8ATzqt2xhlRzgz5OM7

07/01/2020

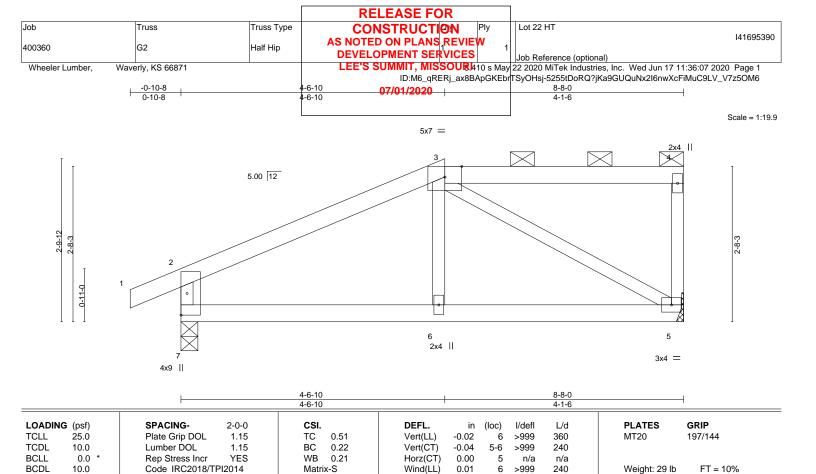
LOAD CASE(S) Standard Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 3=-48(F) 6=-175(F) 8=-48(F) 9=-48(F) 10=-23(F) 11=-23(F)





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

5=Mechanical, 7=0-3-8 (size) Max Horz 7=109(LC 5) Max Uplift 5=-69(LC 5), 7=-71(LC 8) Max Grav 5=377(LC 1), 7=453(LC 1)

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

TOP CHORD 2-3=-435/55, 2-7=-390/99 **BOT CHORD** 6-7=-81/339, 5-6=-83/337

WEBS 3-5=-372/70

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
- 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.
- 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) 5, 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.



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

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

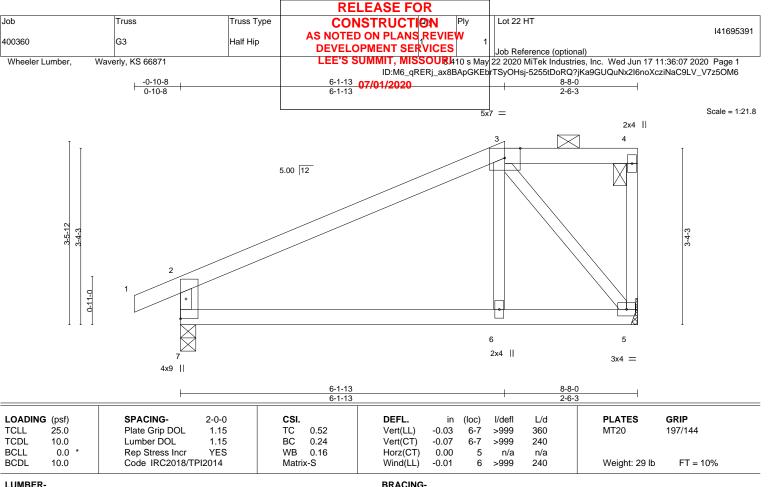
Rigid ceiling directly applied or 10-0-0 oc bracing

June 18,2020



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





TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

5=Mechanical, 7=0-3-8 (size) Max Horz 7=138(LC 7) Max Uplift 5=-65(LC 5), 7=-77(LC 8) Max Grav 5=377(LC 1), 7=453(LC 1)

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

2-3=-365/47, 2-7=-399/119 TOP CHORD **BOT CHORD** 6-7=-68/260, 5-6=-69/256

WEBS 3-5=-418/87

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
- 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.
- 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) 5, 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.



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

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

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

June 18,2020



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695392 AS NOTED ON PLANS REVIE 400360 G4 Half Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:08 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-ZEfT4Zp3AJrBCJrg_cuAaVfvtxv9RoALO?EY1Zz5OM5 -0-10-8 0-10-8 8-8-0 07/<u>01/2</u>020 0-11-0 Scale = 1:25.8 4x9 = 3x6 = 5.00 12 0-11-0 6 5 2x4 Ш 3x10 MT18H || 6x6 =

7-9-0	8-8-0
7-9-0	0-11-0

BRACING-

TOP CHORD

BOT CHORD

Plate Offsets (X,Y)	[3:0-4-8,0-1-15]			-	. •
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (lo	oc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.08	6-7 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.18	6-7 >578 240	MT18H 197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.27	Horz(CT) 0.00	5 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.03 (6-7 >999 240	Weight: 31 lb FT = 10%

LUMBER-

REACTIONS.

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

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

Max Horz 7=167(LC 5)

Max Uplift 5=-73(LC 8), 7=-77(LC 8) Max Grav 5=377(LC 1), 7=453(LC 1)

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

TOP CHORD 2-3=-285/32, 4-5=-546/61, 2-7=-402/131

WEBS 3-6=-481/245, 4-6=-189/785

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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
- 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.



Structural wood sheathing directly applied or 5-8-3 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

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT AS NOTED ON PLANS REVIE 400360 G5 Monopitch **DEVELOPMENT SERVICES**

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:09 2020 Page 1 ID:M6_qRERj_ax8BApGKEprTSyOHsj-1RDrlvqhxcz2pTPsYJPP7jB9qLF6AGmUdf_5Z?z5OM4

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

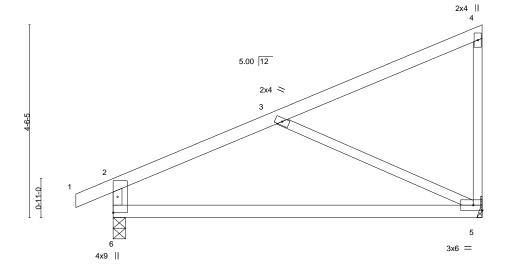
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

-0-10-8 0-10-8 8-8-0 07/01/2020 3-11-10

Scale = 1:27.1

141695393



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	0.42	Vert(LL)	-0.17	5-6	>603	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.32	5-6	>313	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-S	Wind(LL)	-0.01	5-6	>999	240	Weight: 29 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Wheeler Lumber,

Waverly, KS 66871

TOP CHORD 2x4 SPF No.2 2x4 SPF 2100F 1.8E **BOT CHORD**

WEBS 2x3 SPF No.2

REACTIONS. 5=Mechanical, 6=0-3-8 (size)

Max Horz 6=188(LC 5) Max Uplift 5=-91(LC 8), 6=-74(LC 8) Max Grav 5=377(LC 1), 6=453(LC 1)

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

TOP CHORD 2-3=-436/118, 2-6=-359/123

BOT CHORD 5-6=-143/351 WEBS 3-5=-370/189

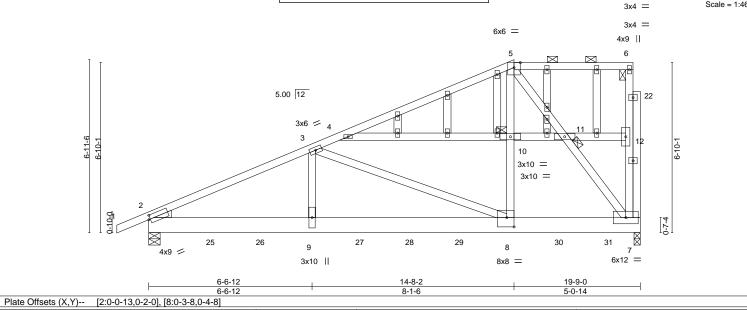
NOTES-

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



June 18,2020





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	0.75	Vert(LL)	-0.08	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.15	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-S	Wind(LL)	0.06	8-9	>999	240	Weight: 291 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

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

WEDGE Left: 2x4 SP No.3

REACTIONS. (size) 7=0-3-0, 2=0-5-8

Max Horz 2=282(LC 28)

Max Uplift 7=-509(LC 5), 2=-474(LC 8) Max Grav 7=3096(LC 1), 2=3401(LC 1)

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

TOP CHORD 2-3=-5171/785, 3-4=-2388/416, 4-5=-1946/273

2-9=-764/4561, 8-9=-764/4561, 7-8=-378/2139 **BOT CHORD**

3-9=-172/1914, 3-8=-2577/434, 8-10=-369/2740, 5-10=-369/2742, 5-11=-3024/512, **WEBS**

7-11=-3147/536, 4-10=-446/209, 10-11=-537/213, 11-12=-330/174

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 - Top chords connected as follows: 2x4 1 row at 0-7-0 oc.
 - Bottom chords connected as follows: 2x8 2 rows staggered at 0-9-0 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) 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.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 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) except (jt=lb) 7=509, 2=474.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuierencestagianzdard ANSI/TPI 1.



OF MISS

SCOTT M.

SEVIER

PE-2001018807

Structural wood sheathing directly applied or 5-2-15 oc purlins,

except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.

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

1 Brace at Jt(s): 6, 10, 11

Scale = 1:46.3

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR Job Truss Truss Type Н1 400360 GABLE

CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

Lot 22 HT

141695394

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May | 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:10 2020 Page 2 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-VdnDVFqJiw5vRd_351wefwkFOlbjvcwesJje6Rz5OM3

Wheeler Lumber,

- NOTES13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 474 lb down and 39 lb up at 0-2-12, 467 lb down and 45 lb up at 2-6-4, 467 lb down and 58 lb up at 4-6-4, 467 lb down and 91 lb up at 12-6-4, 467 lb down and 91 lb up at 12-6-4, 467 lb down and 91 lb up at 14-6-4, and 467 lb down and 91 lb up at 18-6-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) Studding applied to ply: 1(Front)

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-70, 5-6=-70, 2-7=-20

Waverly, KS 66871

Concentrated Loads (lb)

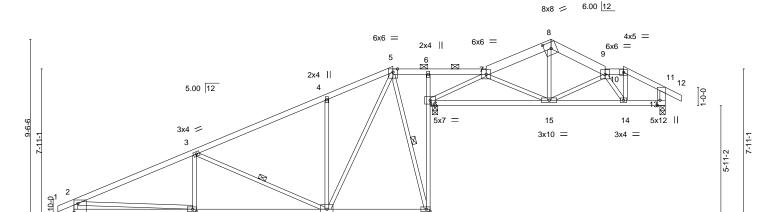
Vert: 2=-474(B) 9=-467(B) 8=-467(B) 25=-467(B) 26=-467(B) 27=-467(B) 28=-467(B) 29=-467(B) 30=-467(B) 31=-461(B)



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Roof Special Girder AS NOTED ON PLANS REVIE 141695395 400360 H2 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:12 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-S0u_wwsaEXLdgx8RDSz6kLpdhYDCNaPxJdClAKz5OM1 28-10-12 29-10-12 32-2-0 33-0-8 2-11-5 1-0-0 2-3-4 0-10-8 1<mark>07301/2020</mark>9-4-8 6-6-12 6-6-12 13-9-2 7-2-6 0-10-8 3-6-6

Scale = 1:62.7



22

17

3x6 =

19-4-8 19_r9₁8 22-5-2

25-11-7

1 Row at midpt

28-10-12 29-10-12 32-2-0

Structural wood sheathing directly applied or 4-5-12 oc purlins,

Rigid ceiling directly applied or 9-10-4 oc bracing

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7, 9-10.

3-18, 5-17

		6-6-12	1	7-2-6	3-7-2	2-0-5 (0-5-0 2-7-10	3-6-6	2-11-5	1-0-0 2-3-4	7	
Plate Off	Plate Offsets (X,Y) [8:0-4-7,0-4-0], [13:0-3-8,Edge], [19:0-2-8,0-1-8], [20:Edge,0-5-12]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	D	EFL.	in (loc)	I/defl L/d	PI	LATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.64	l v	ert(LL)	-0.08 18-19	>999 360	M	T20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC 0.62	l v	ert(CT)	-0.16 18-19	>999 240				
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.45	Н	lorz(CŤ)	-0.03 16	n/a n/a				
BCDL	10.0	Code IRC2018/TP	12014	Matrix-S	l w	/ind(LL)	0.05 18-19	>999 240	W	eight: 135 lb	FT = 10%	
						` '				• • • • •		

BRACING-

TOP CHORD

BOT CHORD

WEBS

17-4-3

18

6x8

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

20

8x8

7-8,8-9: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except*

6-6-12

6-17: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 *Except* 11-13: 2x4 SPF No.2

REACTIONS. (size) 20=0-5-8, 16=0-3-8, 13=0-3-8

Max Horz 20=275(LC 29)

Max Uplift 20=-128(LC 29), 16=-307(LC 8), 13=-131(LC 9) Max Grav 20=941(LC 23), 16=1527(LC 2), 13=637(LC 2)

19

3x6 =

13-9-2

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

TOP CHORD 2-3=-1435/162, 3-4=-736/79, 4-5=-710/176, 7-8=-695/111, 8-9=-701/108,

9-10=-460/117, 10-11=-613/122, 2-20=-862/161, 11-13=-499/124

BOT CHORD 19-20=-346/376, 18-19=-355/1262, 16-17=-167/796, 6-16=-303/106, 15-16=-118/682,

14-15=-104/722, 13-14=-70/477

WEBS 3-18=-723/221, 4-18=-429/218, 5-18=-249/1015, 5-17=-725/197, 7-16=-776/151,

8-15=-11/345, 9-14=-492/65, 10-14=-18/355, 2-19=-9/890

- 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) 20=128, 16=307, 13=131,
- 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) 54 lb down and 85 lb up at 29-10-12 on top chord, and 5 lb down and 5 lb up at 29-10-12 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

Continued on page 2

PE-2001018807 O SSIONAL

June 18,2020

OF MISS

SCOTT M.

SEVIER

NUMBER



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT Roof Special Girder AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
Job Reference (optional)

LEE'S SUMMIT, MISSOUR410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:12 2020 Page 2

ID:M6_qRERj_ax8BAPGKEbrTSyOHsj-S0u_wwsaEXLdgx8RDSz6kLpdhYDCNaPxJdCIAKz5OM1 H2 400360

07/01/2020

Waverly, KS 66871 Wheeler Lumber,

I41695395

LOAD CASE(S) Standard

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

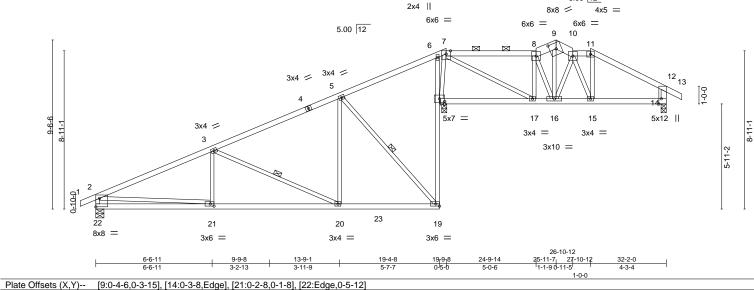
Vert: 1-2=-70, 2-5=-70, 5-7=-70, 7-8=-70, 8-9=-70, 9-10=-70, 10-11=-70, 11-12=-70, 17-20=-20, 13-16=-20

Concentrated Loads (lb) Vert: 14=1(B)



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695396 AS NOTED ON PLANS REVIE 400360 НЗ Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:13 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-wCSM7GtC?rTUI4jdn9ULHZMoHyaO6_H4YHyIjmz5OM0 26-10-12 25-11-7 27-10-12 1-1-9 0-11-5 07/01/2020 33-0-8 1-0-0 Scale = 1:65.0 6.00 12



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 0.59 BC 0.56 WB 0.60	DEFL. in (loc) l/defl L/d Vert(LL) -0.08 20-21 >999 360 Vert(CT) -0.15 20-21 >999 240 Horz(CT) -0.05 18 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.04 20-21 >999 240	Weight: 133 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

8-9,9-10: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except* 6-19: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 12-14: 2x4 SPF No.2

REACTIONS. (size) 22=0-5-8, 18=0-3-8, 14=0-3-8

Max Horz 22=275(LC 8)

Max Uplift 22=-128(LC 8), 18=-296(LC 8), 14=-105(LC 9) Max Grav 22=943(LC 23), 18=1520(LC 2), 14=637(LC 2)

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

TOP CHORD 2-3=-1438/161, 3-5=-741/81, 7-8=-680/109, 8-9=-648/131, 9-10=-608/117, 10-11=-531/123, 11-12=-682/104, 2-22=-860/161, 12-14=-539/128

BOT CHORD 21-22=-348/378, 20-21=-354/1265, 19-20=-156/609, 18-19=-152/771, 6-18=-329/123,

16-17=-42/685, 15-16=-32/605, 14-15=-34/538

WEBS 7-18=-389/79, 7-17=-42/695, 8-16=-298/59, 9-16=-76/357, 5-19=-926/236,

3-20=-720/217, 2-21=-5/890, 5-20=-6/576

- 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) 22=128, 18=296, 14=105,
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 4-6-3 oc purlins,

Rigid ceiling directly applied or 9-10-6 oc bracing

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8, 10-11.

5-19, 3-20

June 18,2020

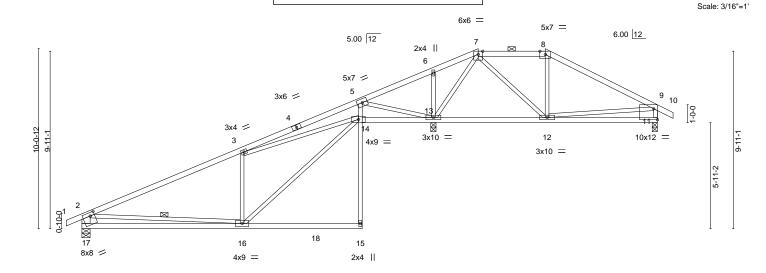


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695397 AS NOTED ON PLANS REVIE 400360 H4 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:15 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbr SyOHsj-sba6YyuSXSjCYOt0uaWqM_R53mFuat9N?bRPnfz5OM_ 22-1-13 25-10-12 07/01/2020² 32-2-0 33-0-8 -0-10-8 0-10-8 8-11-7 6-8-9 2-6-1 3-8-15



	8-11-7	6-8-9	3-11-12 6-3-0	6-3-4
Plate Offsets (X,Y)	[8:0-3-10,Edge], [11:Edge,0-7-5], [17:0-	3-0,0-2-4]		
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 0.82	Vert(LL) -0.14 16-17 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.29 16-17 >809 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.70	Horz(CT) 0.03 13 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.04 16-17 >999 240	Weight: 129 lb FT = 10%
			` '	•

15-8-0

LUMBER-

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

5-15: 2x3 SPF No.2 2x3 SPF No.2 *Except*

WEBS 2-17: 2x6 SPF No.2 **BRACING-**

WEBS

19-7-12

TOP CHORD

Structural wood sheathing directly applied or 4-7-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8. Rigid ceiling directly applied or 6-0-0 oc bracing

BOT CHORD 1 Row at midpt

25-10-12

32-2-0

REACTIONS. (size) 17=0-5-8, 11=0-3-8, 13=0-3-8

Max Horz 17=284(LC 8)

Max Uplift 17=-85(LC 8), 11=-92(LC 9), 13=-368(LC 8) Max Grav 17=788(LC 2), 11=496(LC 22), 13=1972(LC 2)

8-11-7

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

TOP CHORD 2-3=-938/31, 3-5=-419/90, 5-6=-345/1363, 6-7=-275/1320, 7-8=-291/105, 8-9=-419/124,

2-17=-697/135, 9-11=-441/122

BOT CHORD 16-17=-498/739, 5-14=-128/733, 12-13=-505/208, 11-12=-108/263

WEBS 3-16=-498/281, 14-16=-290/1047, 3-14=-492/80, 5-13=-1475/433, 6-13=-297/138,

7-13=-1344/220, 7-12=-69/741, 8-12=-331/110, 2-16=-5/286

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) 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) 17, 11 except (it=lb) 13=368.
- 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.

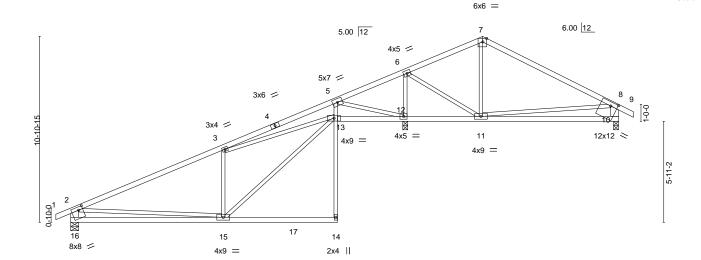


June 18,2020



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695398 AS NOTED ON PLANS REVIE 400360 Н6 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:16 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbiTSyOHsj-Kn8Vmlv4lmr39YSCSH13vB_GqAb7JHfWEFAzl5z5OLz **07/01/2020**2 19-11-3 3-11-12 0-3-7 15-8-0 24-2-5 32-2-0 33-0-8 0-10-8 6-8-9 4-3-3 7-11-11



		8-11-7	6-8-9	3-11-12	4-6-9	7-1	1-11	
Plate Off	sets (X,Y)	[7:0-2-12,Edge], [10:0-4-12,0-2-12], [16	5:0-3-0,0-2-4]					
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/det	fl L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL)	-0.14 15-16 >999	9 360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.62	Vert(CT)	-0.29 15-16 >803	3 240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.88	Horz(CT)	0.04 12 n/s	a n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL)	0.04 13 >999	9 240	Weight: 128	lb FT = 10%

19-7-12

BRACING-

TOP CHORD

BOT CHORD

24-2-5

except end verticals.

32-2-0

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

Rigid ceiling directly applied or 5-0-10 oc bracing

15-8-0

LUMBER-

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

5-14: 2x3 SPF No.2

2x3 SPF No.2 *Except* **WEBS** 2-16,8-10: 2x6 SPF No.2

REACTIONS. (size) 16=0-5-8, 10=0-3-8, 12=0-3-8

Max Horz 16=299(LC 8)

Max Uplift 16=-80(LC 8), 10=-106(LC 9), 12=-394(LC 8) Max Grav 16=793(LC 2), 10=475(LC 22), 12=1955(LC 2)

8-11-7

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

TOP CHORD 2-3=-951/21, 3-5=-514/104, 5-6=-333/1338, 6-7=-129/281, 7-8=-268/257,

2-16=-703/130, 8-10=-403/152

BOT CHORD 15-16=-510/739, 5-13=-132/783, 12-13=-107/308, 11-12=-1188/301, 10-11=-217/528 **WEBS** 3-15=-510/285, 13-15=-297/1063, 3-13=-429/57, 5-12=-1547/422, 6-12=-1414/323,

6-11=-179/1306, 7-11=-462/164, 2-15=-4/293, 8-11=-578/264

NOTES-

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



June 18,2020

Scale = 1:67.7



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695399 AS NOTED ON PLANS REVIE 400360 Н7 Roof Special DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:17 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-ozitzewi34zwni1P0?YIRPXRWZwc2mggTvwWrXz5OLy 24-2-5 32-2-0 07/0<u>1/2</u>520+

5-9-0

5x7 /

6-5-1

Scale = 1:67.5

7-11-11

32-2-0

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

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

except end verticals.

1 Row at midpt

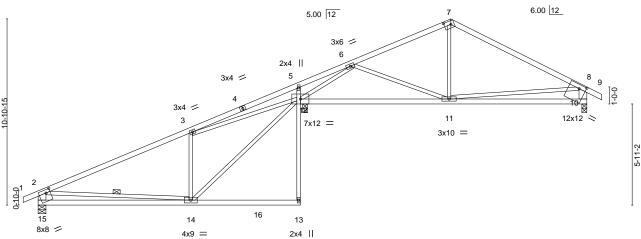


Plate Offsets (X,Y)	Plate Offsets (X,Y) [7:0-4-11,0-2-8], [10:0-4-12,0-2-12], [15:0-3-0,0-2-4]											
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP								
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.14 11-12 >999 360	MT20 197/144								
TCDL 10.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.28 14-15 >646 240									
BCLL 0.0 *	Rep Stress Incr YES	WB 0.76	Horz(CT) -0.02 10 n/a n/a									
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.03 14-15 >999 240	Weight: 126 lb FT = 10%								

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2 *Except* BOT CHORD 5-13: 2x3 SPF No.2

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

2-15,8-10: 2x6 SPF No.2

REACTIONS. (size) 15=0-5-8, 10=0-3-8, 12=0-3-8

Max Horz 15=299(LC 8)

Max Uplift 15=-74(LC 8), 10=-115(LC 9), 12=-302(LC 8) Max Grav 15=759(LC 2), 10=831(LC 2), 12=1506(LC 2)

8-11-6

8-11-6

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-872/20, 6-7=-884/118, 7-8=-950/117, 2-15=-672/125, 8-10=-758/156 **BOT CHORD** 14-15=-510/740, 5-12=-286/97, 11-12=-184/822, 10-11=-228/536 WEBS 3-14=-458/274, 12-14=-282/977, 3-12=-682/105, 6-12=-911/189, 7-11=0/338,

2-14=-59/306, 8-11=-23/379

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 10=115, 12=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.



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695400 AS NOTED ON PLANS REVIE 400360 H8 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:18 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-G9FFB_xKqN6mPsbbZi4X_c3b_zGcnDhphZf3N_z5OLx

-0-10-8 0-10-8 8-11-6 15-4-8<mark>07/01/2020</mark> 6-5-2 23-2-0 27-0-6 8-11-6 2-10-1 6.00 12

3x4 || 5.00 12 2x4 || 1-6-13 5x7 _ 3x4 = 3x4 = **6**x12 = 10-10-15 3x4 = 7x12 = 11 3 3x6 II 16 14 13 8x8 = 4x9 = 2x4 || 15-4-8 27-0-6 7-4-8 8-11-6

Plate Off	Plate Offsets (X,Y) [7:0-4-11,0-2-8], [11:Edge,0-2-8], [15:0-3-0,0-2-4]											
LOADIN	\(\(\frac{1}{2}\)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.14 14-15	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.28 14-15	>646	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.02 9	n/a	n/a			
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-S	Wind(LL)	0.02 14-15	>999	240	Weight: 116 lb	FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

5-13,6-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-15: 2x6 SPF No.2

(size) 15=0-5-8, 12=0-3-8, 9=Mechanical

Max Horz 15=245(LC 8)

Max Uplift 12=-122(LC 8), 9=-7(LC 8)

Max Grav 15=756(LC 2), 12=1284(LC 2), 9=529(LC 2)

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

TOP CHORD 2-3=-877/0, 5-6=-880/65, 6-7=-851/121, 2-15=-668/22 **BOT CHORD** 14-15=-337/753, 5-12=-682/142, 6-10=-529/165, 9-10=-0/394

WEBS 3-14=-442/162, 12-14=-112/963, 3-12=-638/26, 10-12=-62/258, 5-10=-13/439,

7-10=-123/808, 2-14=-87/256, 7-9=-498/15

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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) 9 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.



June 18,2020

Scale: 3/16"=1'

5x7 🖊

Structural wood sheathing directly applied or 4-9-6 oc purlins,

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

except end verticals.

1 Row at midpt



RELEASE FOR Job Truss Truss Type CONSTRUCTION AS NOTED ON PLANS REVIE 400360 H9 GABLE **DEVELOPMENT SERVICES**

Lot 22 HT

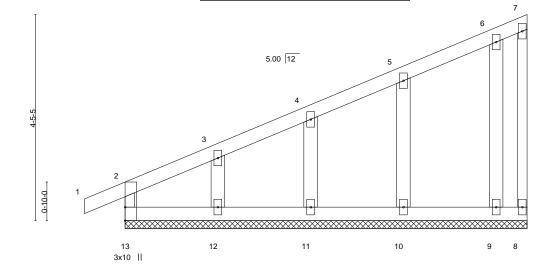
DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:19 2020 Page 1 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-kMpdOKxzbhEd0?An7QbmXqcyyNlgWrgzwDPdvQz5OLw

07/01/28200

Scale = 1:24.8

141695401



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	0.13	Vert(LL)	0.00	2	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	12014	Matri	x-R						Weight: 36 lb	FT = 10%

LUMBER-

Wheeler Lumber,

Waverly, KS 66871

-0-10-8 0-10-8

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

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

BRACING-

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

except end verticals.

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

REACTIONS. All bearings 8-8-0.

(lb) -Max Horz 13=184(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 8, 12, 11, 10, 9 Max Grav All reactions 250 lb or less at joint(s) 13, 8, 12, 11, 10, 9

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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 12, 11, 10, 9.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 18,2020



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695402 400360 J6 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:46 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-SYyq3YGvE_dom9kzCba57WDNJGssL2Qx7wRYMMz5OLV **07/01/2620**10 1-4-6 Scale = 1:19.8 2x4 II 3 3.84 12 1-1-13 1-2-15 3x6 = 3x4 = 2 0-0 3.84 12 2x4 || 6-8-10 0-5-8 6-3-2 LOADING (psf) SPACING-2-0-0 DEFL. **PLATES** GRIP CSI. (loc) I/defI L/d

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

-0.11

-0.22

-0.00

-0.01

4-5

4-5

4-5

>706

>351

>999

except end verticals

n/a

360

240

n/a

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

240

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

25.0

10.0

0.0

10.0

3-4: 2x6 SPF No.2

REACTIONS.

(size) 5=0-3-11, 4=Mechanical

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 5=97(LC 5)

Max Uplift 5=-110(LC 4), 4=-106(LC 8) Max Grav 5=409(LC 1), 4=383(LC 1)

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

TOP CHORD 2-5=-342/176, 3-4=-286/151

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

TC

ВС

WB

Matrix-P

0.88

0.51

0.02

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

1.15

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.
- Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=110, 4=106,
- 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) 78 lb down and 48 lb up at 2-11-12, and 76 lb down and 56 lb up at 4-2-6, and 97 lb down and 85 lb up at 6-1-3 on top chord, and 6 lb down at 2-11-12, and 13 lb down at 4-2-6, and 48 lb down at 6-1-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

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

Concentrated Loads (lb) Vert: 8=-77(F) 9=-1(F) 10=-1(B) 11=-36(F)

SCOTT M. **SEVIER** NUMBER ROLLESSIONAL STONAL PE-2001018807

OF MISS

June 18,2020

197/144

FT = 10%

MT20

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

Weight: 24 lb



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

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

ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Qua
Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695403 AS NOTED ON PLANS REVIE 400360 J7 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:47 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEprTSyOHsj-wlWDGuHX?llfNJJAml5KfkmkVfJE4V14MaB6uoz5OLU **07/01/2620**10 0-10-8 Scale = 1:14.6 6.00 12 1-1-12 2x4 ||

LOADING	,	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL) -0.00 4-5 >999 360 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.00 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) 0.00 4-5 >999 240 Weight: 9 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

6.00 12

LUMBER-

REACTIONS.

2x4 SPF No.2 TOP CHORD 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 5)

Max Uplift 5=-16(LC 8), 3=-50(LC 8)

Max Grav 5=193(LC 1), 3=72(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

2x4

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



1-1-5

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

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

June 18,2020







RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695404 AS NOTED ON PLANS REVIE 400360 J8 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:47 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEprTSyOHsj-wlWDGuHX?llfNJJAml5KfkmkrfJO4V14MaB6uoz5OLU

07/01/20205-2

Scale = 1:12.6 5.00 12 1-0-1 2x4 || 2 0-10-11 0-10-1 5.00 12 2x4

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.0) 4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.0) 4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.0	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.0	0 4-5	>999	240	Weight: 8 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. 5=0-3-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 5=50(LC 5)

Max Uplift 5=-26(LC 4), 3=-41(LC 8) Max Grav 5=185(LC 1), 3=65(LC 1), 4=43(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

-0-10-8

0-10-8

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



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

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

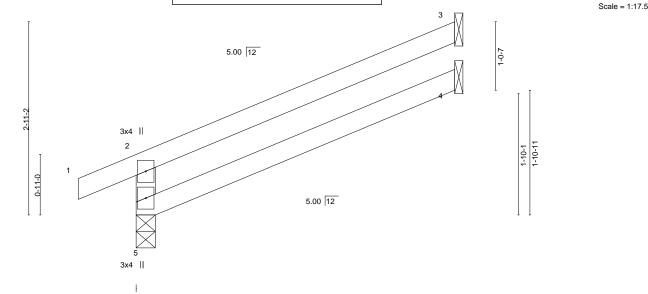
June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695405 AS NOTED ON PLANS REVIE 400360 J9 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:48 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-Ox3bUEI9mbtW?TuMK0cZCxJrU3cDpyHEbEwfREz5OLT -0-10-8 07/01/<mark>2</mark>020 0-10-8



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL . ir	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.33	Vert(LL) -0.02	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.05	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.03	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.03	4-5	>999	240	Weight: 14 lb	FT = 10%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

WEBS 2x4 SPF No.2

REACTIONS. 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=83(LC 8)

Max Uplift 5=-35(LC 8), 3=-77(LC 8)

Max Grav 5=287(LC 1), 3=145(LC 1), 4=87(LC 3)

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

NOTES-

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



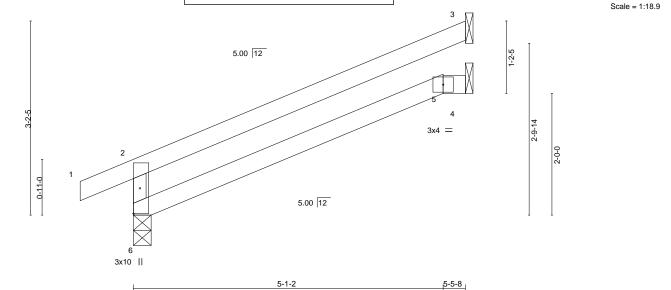
Structural wood sheathing directly applied or 4-9-15 oc purlins,

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

June 18,2020



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695406 AS NOTED ON PLANS REVIE 400360 J10 Jack-Open DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:19 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrT\$yOHsj-kMpdOKxzbhEd0?An7QbmXqcslNhHWr6zwDPdvQz5OLw 07/01/2020 0-10-8



	<u> </u>		5-1-2		0-4-6	
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 0.46	Vert(LL) -	0.04 5-6 >9	999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) -	0.09 5-6 >	702 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.04 3	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.04 5-6 >9	999 240	Weight: 15 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

> 6=0-3-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 6=94(LC 8)

Max Uplift 6=-37(LC 8), 3=-90(LC 8)

Max Grav 6=313(LC 1), 3=170(LC 1), 4=101(LC 3)

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

TOP CHORD 2-6=-269/85

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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

June 18,2020

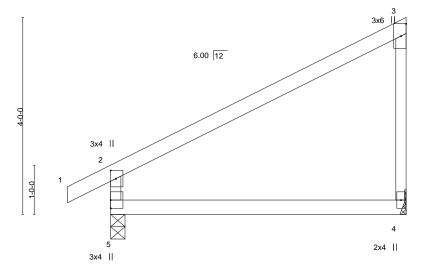


RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695407 AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 400360 J11 Jack-Closed DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:20 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:M6_qRERi_ax8BApGKEbrTSyOHsj-DYN?bfybM?MUe9I_h76?31811n19FIM69t8ARsz5OLv -0-10-8 07/01/20200 0-10-8

Scale = 1:23.4



6-0-0

BRACING-

TOP CHORD

BOT CHORD

Plate Off	sets (X,Y)	[2:0-2-0,0-1-4]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.10	4-5	>674	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a			
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.03	4-5	>999	240	Weight: 19 lb	FT = 10%	

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=158(LC 5)

Max Uplift 5=-50(LC 8), 4=-70(LC 8) Max Grav 5=335(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=-290/96

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.



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

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

June 18,2020







RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695408 AS NOTED ON PLANS REVIE 400360 J12 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:21 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-hkxNp?zD7IULGJKAFrdEcFhC9BNR_lbFNXuk_Jz5OLu -0-10-8 07/01/2020

3x4 = 3x6 | |

5 2x4 ||

4 3 6.00 12 3x4 ||

3-0-0 6-0-0

Plate Offse	els (A, Y)	[2:0-2-0,0-1-4], [3:0-2-0,0	-2-8], [4:Euge	9,0-2-8]								
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	0.46	Vert(LL)	-0.05	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.10	5-6	>684	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.02	5-6	>999	240	Weight: 19 lb	FT = 10%

LUMBER-**BRACING-**

3x4

0-10-8

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, and 2-0-0 oc purlins: 3-4.

WEBS 2x3 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing REACTIONS.

(size) 6=0-3-8, 5=Mechanical Max Horz 6=152(LC 5)

Max Uplift 6=-52(LC 8), 5=-62(LC 8)

Max Grav 6=335(LC 1), 5=255(LC 1)

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

TOP CHORD 2-6=-290/98

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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 6, 5.
- 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.



June 18,2020

Scale = 1:23.7



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695409 AS NOTED ON PLANS REVIE 400360 J13 Jack-Closed Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:22 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-9xVm0L_rtccCtTvMoY8T8SEOdalXjAVPcBdHWlz5OLt -0-10-8 07/01/2020 0-10-8 3-7-0 2-5-0 Scale = 1:20.0

> 5x7 = 2x4 || 3 6.00 12 3x6 II 0-0-5 2x4 II 3x4 =

3-7-0	6-0-0
3-7-0	2-5-0

BRACING-

TOP CHORD

BOT CHORD

Plate Offsets (X,Y)	[2:0-3-0,0-1-4], [3:0-5-0,0-2-8]	3-1-0	2-0-0	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.35	DEFL. in (loc) I/defl L/d Vert(LL) -0.01 6 >999 360	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	BC 0.17 WB 0.09 Matrix-S	Vert(CT) -0.02 6 >999 240 Horz(CT) 0.00 5 n/a n/a Wind(LL) 0.01 6 >999 240	Weight: 22 lb FT = 10%

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 7=111(LC 5)

Max Uplift 7=-84(LC 8), 5=-131(LC 5) Max Grav 7=382(LC 1), 5=415(LC 1)

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

2-7=-323/104, 2-3=-294/74 TOP CHORD

WEBS 3-5=-292/101

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) 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 except (jt=lb) 5=131.
- 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) 171 lb down and 155 lb up at 3-7-0, and 71 lb down and 71 lb up at 5-10-12 on top chord, and 62 lb down at 3-7-0, and 41 lb down at 5-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

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

Concentrated Loads (lb)

Vert: 4=-62(B) 5=-25(B) 6=-42(B) 3=-77(B)



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

except end verticals, and 2-0-0 oc purlins: 3-4.

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

June 18,2020



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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695410 400360 J14 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:22 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-9xVm0L_rtccCtTvMoY8T8SEOkakwjBrPcBdHWlz5OLt 07/01/202011-5 4-11-5 1-2-14 Scale = 1:16.5 0-4-4 4.24 12 2x4 || 2-4-12 1-0-0 4-11-5 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP (loc) L/d Plate Grip DOL Vert(LL) -0.02 197/144 **TCLL** 25.0 1.15 TC 0.35 4-5 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.21 Vert(CT) -0.05 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) 0.02 3 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Wind(LL) 0.03 4-5 >999 240 Weight: 14 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 **WEBS** 2x6 SPF No.2

REACTIONS.

5=0-4-9, 3=Mechanical, 4=Mechanical (size) Max Horz 5=82(LC 4)

Max Grav 5=327(LC 1), 3=140(LC 1), 4=86(LC 3)

Max Uplift 5=-97(LC 4), 3=-71(LC 8)

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

TOP CHORD 2-5=-288/127

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, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 30 lb up at 2-2-7, and 69 lb down and 30 lb up at 2-2-7 on top chord, and 5 lb down and 10 lb up at 2-2-7, and 5 lb down and 10 lb up at 2-2-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 4-5=-20 Concentrated Loads (lb)

Vert: 7=2(F=1, B=1)

OF MISS SCOTT M. SEVIER NUMBER PE-2001018807 SSIONAL

Structural wood sheathing directly applied or 4-11-5 oc purlins,

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

except end verticals.

June 18,2020



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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT AS NOTED ON PLANS REVIE 400360 J15 Jack-Open DEVELOPMENT SERVICES

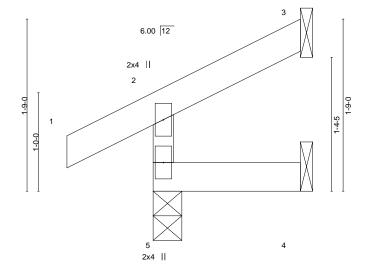
DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:23 2020 Page 1

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-d738Eh_Tewk3VdUYMGfihgmdt_78Se5YrrNq2Bz5OLs -0-10-8 **07/01/2020**5-15 0-10-8

Scale = 1:11.7

141695411



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	F	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	l l	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0	* F	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	(Code IRC2018/TPI	12014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

1-5-15 1-5-15

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 1-5-15 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

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

Max Horz 5=43(LC 5)

Max Uplift 5=-16(LC 8), 3=-27(LC 8), 4=-2(LC 8) Max Grav 5=155(LC 1), 3=27(LC 1), 4=26(LC 3)

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

NOTES-

Wheeler Lumber,

Waverly, KS 66871

- 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.



June 18,2020

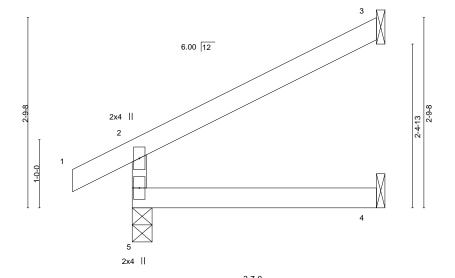


RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695412 AS NOTED ON PLANS REVIE 400360 J16 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:24 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:M6_gRERi_ax8BApGKEprTSyOHsj-5JdWR1?5PDsw7n3lwzAxEtJn1OR0B5Li4V6Oadz5OLr -0-10-8 07/01/2020 0-10-8

Scale = 1:16.9



				0.7.0	
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 0.17	Vert(LL) -0.01 4-5 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) -0.01 4-5 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.01 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.01 4-5 >999 240	Weight: 10 lb FT = 10%

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=76(LC 8)

Max Uplift 5=-20(LC 8), 3=-66(LC 8)

Max Grav 5=232(LC 1), 3=106(LC 1), 4=66(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 3-7-0 oc purlins,

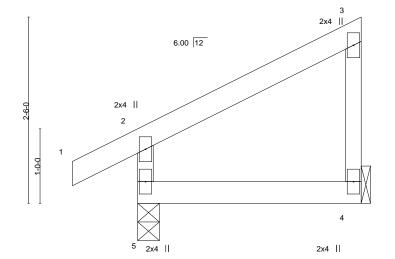
Rigid ceiling directly applied or 10-0-0 oc bracing

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695413 AS NOTED ON PLANS REVIE 400360 J17 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:24 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-5JdWR1?5PDsw7n3lwzAxEtJolOSjB5Li4V6Oadz5OLr 07/01/2026-0-0 3-0-0 0-10-



3-0-0

BRACING-

TOP CHORD

BOT CHORD

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 0.09	Vert(LL)	-0.00 4-5	>999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT)	-0.01 4-5	>999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00 4	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.00 4-5	>999 240	Weight: 10 lb FT = 10%

LUMBER-

REACTIONS.

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

5=0-3-8, 4=Mechanical (size) Max Horz 5=96(LC 5) Max Uplift 5=-35(LC 8), 4=-36(LC 5) Max Grav 5=206(LC 1), 4=114(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) 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.



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

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

except end verticals.

June 18,2020

Scale = 1:15.5



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695414 AS NOTED ON PLANS REVIE 400360 J18 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:25 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-ZWBufN0jAX_nkxexUgiAm5sxfomowYbrl9sx74z5OLq 07/01/2020

4.00 12 2x4_# 2x4 || 3 2x4 2x4 ||

4-3-4

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	0.24	Vert(LL)	-0.01	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	3-4	>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)	0.01	3-4	>999	240	Weight: 13 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=0-3-8, 3=Mechanical (size) Max Horz 4=108(LC 5) Max Uplift 4=-29(LC 4), 3=-44(LC 5) Max Grav 4=183(LC 1), 3=183(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, 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 4-3-4 oc purlins,

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

except end verticals.

June 18,2020

Scale = 1:17.6



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695415 AS NOTED ON PLANS REVIE 400360 J19 Jack-Closed **DEVELOPMENT SERVICES**

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:26 2020 Page 1 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-1ikGsj1Mxr6eM4D71ODPJIO1tC49f?r?XpbUfWz5OLp

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

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

except end verticals.

07/01/20204-0

Scale = 1:18.5

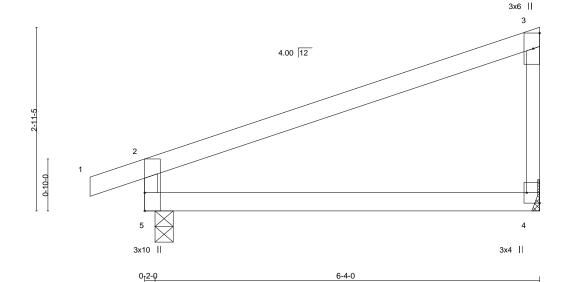


Plate Oil	1ate Offsets (A, f) [4:Edge,0-2-8]												
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES (SRIP								
TCLL	25.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.06 4-5 >999 360 MT20	197/144								
TCDL	10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.12 4-5 >605 240									
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 4 n/a n/a									
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02 4-5 >999 240 Weight: 18 lb	FT = 10%								

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Wheeler Lumber,

Waverly, KS 66871

-0-10-8 0-10-8

TOP CHORD 2x4 SPF No.2

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

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

Max Horz 5=120(LC 5)

Max Uplift 5=-86(LC 4), 4=-61(LC 8) Max Grav 5=350(LC 1), 4=270(LC 1)

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

TOP CHORD 2-5=-303/131

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.



June 18,2020



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695416 400360 J20 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:27 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-Vulf332_i8EV_EoKb5kerWxChbQNOS48mTL2Byz5OLo 07/01/2020 6-1-3 6-1-3 1-4-6 Scale = 1:19.9 3x6 || 3 3.84 12 3x4 || 10 11 4

2x4 ||

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

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

except end verticals.

Plate Offsets (X,Y)	[2:0-2-0,0-1-4]			
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 0.53	Vert(LL) -0.05 4-5 >999 360 MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.10 4-5 >686 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00 4 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02 4-5 >999 240 Weight: 18 lb FT = 10%	

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=0-4-9, 4=Mechanical Max Horz 5=122(LC 7)

Max Uplift 5=-120(LC 4), 4=-70(LC 8)

Max Grav 5=381(LC 1), 4=254(LC 1)

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

TOP CHORD 2-5=-332/155

NOTES-

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

2x4

- 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.
- 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) 64 lb down and 18 lb up at 1-10-11, and 79 lb down and 48 lb up at 3-0-14, and 79 lb down and 60 lb up at 4-5-15 on top chord, and 6 lb down and 11 lb up at 1-10-11, and 7 lb down at 3-0-14, and 14 lb down at 4-5-15 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: 9=2(B) 10=-1(F) 11=-2(B)



June 18,2020



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

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

ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Qua
Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695417 AS NOTED ON PLANS REVIE 400360 J21 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:27 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-Vulf332_i8EV_EoKb5kerWxJubUfOS48mTL2Byz5OLo

07/01/20206-0

5.00 12 2x4 || 0-11-0

I	2-6-0	1
	2-6-0	1

BRACING-

TOP CHORD

BOT CHORD

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. ir	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=49(LC 5)

Max Uplift 5=-27(LC 4), 3=-41(LC 8) Max Grav 5=188(LC 1), 3=67(LC 1), 4=44(LC 3)

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

NOTES-

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

0-10-8

- 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 2-6-0 oc purlins,

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

except end verticals.

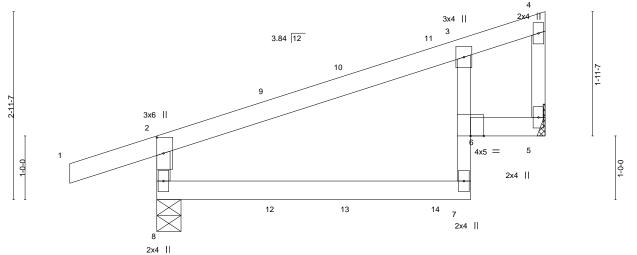
June 18,2020

Scale = 1:12.7



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695418 400360 J22 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:28 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-_5s1HP2cTSMMbOMW9pFtOjUR3?kx7vKH_64bjPz5OLn 07/01/2020 6-1-3 1-4-6 1-2-1 Scale = 1:18.1



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

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	0.29	Vert(LL)	-0.02	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.04	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	12014	Matri	x-R	Wind(LL)	0.02	6	>999	240	Weight: 19 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

3-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. (size) 8=0-4-9, 5=Mechanical

Max Horz 8=105(LC 5)

Max Uplift 8=-118(LC 4), 5=-71(LC 8) Max Grav 8=381(LC 1), 5=254(LC 1)

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

TOP CHORD 2-8=-335/144

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.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 8=118.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 18 lb up at 1-10-11, and 79 lb down and 48 lb up at 3-0-14, and 79 lb down and 60 lb up at 4-5-15 on top chord, and 6 lb down and 11 lb up at 1-10-11, and 7 lb down at 3-0-14, and 14 lb down at 4-5-15 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, 2-4=-70, 7-8=-20, 5-6=-20

Concentrated Loads (lb)

Vert: 12=2(F) 13=-1(B) 14=-2(F)



6-1-2

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

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

except end verticals.

June 18,2020



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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT AS NOTED ON PLANS REVIE 400360 J23 Jack-Open **DEVELOPMENT SERVICES**

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:29 2020 Page 1 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-SHQPUk3EEmUDDYxijWm6xx0fNPAbsMaRDmq9Grz5OLm

Structural wood sheathing directly applied or 1-1-14 oc purlins,

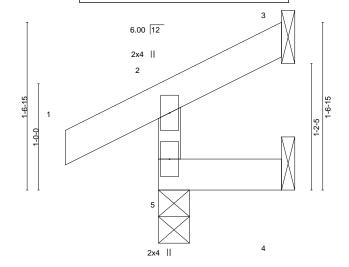
Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

07/01/2020-1-14 0-10-8

Scale = 1:10.8

141695419



1-1-14 1-1-14

BRACING-

TOP CHORD

BOT CHORD

LOADIN	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	0.02	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/TPI20	014	Matri	x-R						Weight: 4 lb	FT = 10%

LUMBER-

Wheeler Lumber,

Waverly, KS 66871

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

2x3 SPF No.2

WEBS

REACTIONS.

5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=38(LC 5) Max Uplift 5=-17(LC 8), 3=-19(LC 8), 4=-5(LC 5) Max Grav 5=148(LC 1), 3=10(LC 15), 4=19(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.



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT AS NOTED ON PLANS REVIE 400360 J24 Jack-Open **DEVELOPMENT SERVICES**

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:30 2020 Page 1

Structural wood sheathing directly applied or 2-9-14 oc purlins,

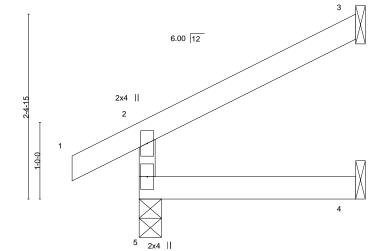
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

141695420

Scale = 1:15.0

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-wT_ni44s?3c3riWvGEHLT8ZqhpV7bpqaSQZioHz5OLI **07/01/2026** 9-14 0-10-8



BRACING-

TOP CHORD

BOT CHORD

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 0.09	Vert(LL) -0.00 4-5 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) -0.01 4-5 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.01 3 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00 4-5 >999 240	Weight: 9 lb FT = 10%

LUMBER-

REACTIONS.

Wheeler Lumber,

Waverly, KS 66871

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=61(LC 8)

Max Uplift 5=-18(LC 8), 3=-53(LC 8)

Max Grav 5=201(LC 1), 3=79(LC 1), 4=51(LC 3)

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

NOTES-

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



June 18,2020







RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695421 AS NOTED ON PLANS REVIE 400360 J25 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:30 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGK\bar{E}brTSyOHsj-wT_ni44s?3c3riWvGEHLT8ZqTpTgbpqaSQZioHz5OLI 4-0-0 -0-10-8 0<u>770</u>1/2020 0-10-8 0-9-0 Scale = 1:17.9 2x4 || 3 6.00 12 2-0-0 2x4 || 2 $_{3x4} = _{5}$ 9 2x4 || 2x4 || 4-0-0 3-3-0

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

I/defI

>999

>999

except end verticals.

n/a

L/d

360

240

n/a

240

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

(loc)

6

4

6 >999

7-8

-0.01

-0.01

-0.01

0.00

PLATES

Weight: 13 lb

MT20

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

GRIP

197/144

FT = 10%

LUMBER-

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

25.0

10.0

0.0

10.0

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

3-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 8=60(LC 8)

Max Uplift 4=-2(LC 8), 5=-30(LC 8)

Max Grav 8=250(LC 1), 4=63(LC 1), 5=100(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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

CSI.

TC

ВС

WB

Matrix-R

0.11

0.15

0.00

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

2-0-0

1.15

1.15

YES

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



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695422 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400360 J26 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:31 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-OgY9vQ5UmNkwSs55qxoa0M6zSDpBKG4kh4JFKjz5OLk -0-10-8 07/01/2<mark>020</mark> 0-10-8 Scale = 1:17.9 6.00 12 2x4 || 2 1-0-0

				-		4-0-0						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

4-0-0

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=60(LC 8)

Max Uplift 3=-45(LC 8)

Max Grav 5=250(LC 1), 3=121(LC 1), 4=74(LC 3)

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

NOTES-

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



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

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

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695423 AS NOTED ON PLANS REVIE 400360 J27 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:31 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-OgY9vQ5UmNkwSs55qxoa0M60uDr7KG4kh4JFKjz5OLk

+07/01/2020

1-4-8

-0-10-8

0-10-8

4.00 12 2 -3-8 0-10-0

1-4-8
1-4-8

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	0.06	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 YE	ES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI201	4	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

BOT CHORD

3x10 ||

LUMBER-BRACING-TOP CHORD

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

WEBS 2x3 SPF No.2

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

Max Horz 5=31(LC 5)

Max Uplift 5=-54(LC 4), 3=-17(LC 8)

Max Grav 5=152(LC 1), 3=21(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) 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 1-4-8 oc purlins,

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

except end verticals.

June 18,2020

Scale = 1:9.3



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695424 AS NOTED ON PLANS REVIE 400360 J28 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:32 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-ss6Y7m56Xhsn4?gHOeKpYZe8Nc9X3jKtvk2ptAz5OLj 07/01/20<mark>20</mark>1-4 -0-10-8 0-10-8 Scale = 1:13.6 4.00 12 2-1-12 2 6-6-1 4 3x10 3-11-4

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

L/d

360

240

n/a

240

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

(loc)

4-5

4-5

4-5

3

>999

>999

>999

except end verticals.

n/a

-0.01

-0.02

0.01

0.01

PLATES

Weight: 11 lb

MT20

Structural wood sheathing directly applied or 3-11-4 oc purlins,

GRIP

197/144

FT = 10%

LUMBER-

LOADING (psf)

TCLL

TCDL

BCLL

BCDL

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

WEBS 2x3 SPF No.2

10.0

0.0

10.0

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 5=60(LC 4)

Max Uplift 5=-61(LC 4), 3=-58(LC 8)

Max Grav 5=247(LC 1), 3=118(LC 1), 4=72(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

CSI.

0.21

0.13

0.00

TC

ВС

WB

Matrix-R

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

2-0-0

1.15

1.15

YES

- 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.



June 18,2020

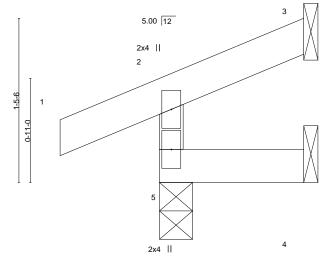








RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695425 AS NOTED ON PLANS REVIE 400360 J29 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | | Job Reference (optional)
LEE'S SUMMIT, MISSOUR 410 s May | 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:33 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-K2fwK66II__ei9FTyMr25nBLN0XaoAa08OoMPcz5OLi 07/01/2020 0-10-8 Scale = 1:10.1



1-3-4

LOADING	(psf)	SPACING- 2-0-	0 C S	il.	DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	5 TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	5 BC	0.01	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr YE	S WI	3 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Ma	trix-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=36(LC 5)

Max Uplift 5=-32(LC 4), 3=-18(LC 8), 4=-2(LC 5) Max Grav 5=150(LC 1), 3=15(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, 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.



Structural wood sheathing directly applied or 1-3-4 oc purlins,

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

June 18,2020

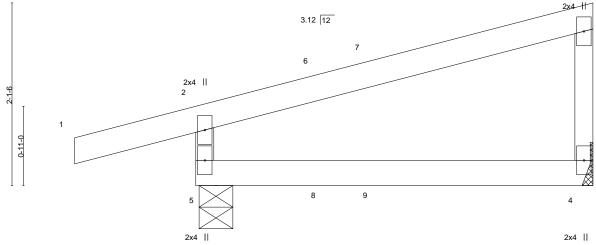






RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695426 400360 J30 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:34 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-oEDIYS7N3I7VJJqgV3MHe_kUGQrPXdpAN2Xwx2z5OLh 07/01/2020 1-4-13 4-7-2 Scale = 1:13.3 3 3.12 12



		4-0-11	
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 0.25 Vert(LL) -0.02 4-5 >999	360 MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.17 Vert(CT) -0.03 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/TPI2014	Matrix-R Wind(LL) 0.00 4-5 >999	240 Weight: 14 lb FT = 10%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

WEBS 2x3 SPF No.2

REACTIONS. 5=0-4-11, 4=Mechanical (size)

Max Horz 5=82(LC 22) Max Uplift 5=-109(LC 4), 4=-41(LC 8)

Max Grav 5=319(LC 1), 4=178(LC 1)

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

TOP CHORD 2-5=-282/135

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) 4 except (jt=lb) 5=109.
- 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) 74 lb down and 19 lb up at 1-6-3, and 61 lb down and 18 lb up at 2-1-6 on top chord, and 3 lb down and 2 lb up at 1-6-3, and 4 lb down and 8 lb up at 2-1-6 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

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=2(F) 9=2(B)

SCOTT M. SEVIER NUMBER PE-2001018807 SSIONAL

Structural wood sheathing directly applied or 4-7-2 oc purlins,

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

except end verticals.

June 18,2020

OF MISS





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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695427 400360 J31 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:34 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-oEDIYS7N3I7VJJqgV3MHe_kRkQq5XdpAN2Xwx2z5OLh **07/01/2020**5-5-5 -1-2-14

> 3x6 || 3 4.24 12 3x4 || 2 4

TOP CHORD

BOT CHORD

2x4 ||

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

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

except end verticals.

Plate Off	fsets (X,Y)	[2:0-2-0,0-1-4]										
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	0.41	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.07	4-5	>962	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/TPI	12014	Matri	x-R	Wind(LL)	0.02	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-**BRACING-**

1-2-14

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

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

2x3 SPF No.2

Max Horz 5=122(LC 5) Max Uplift 5=-106(LC 4), 4=-62(LC 8) Max Grav 5=341(LC 1), 4=223(LC 1)

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

TOP CHORD 2-5=-298/135

NOTES-

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) 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=106
- 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) 71 lb down and 39 lb up at 2-8-7, and 71 lb down and 39 lb up at 2-8-7 on top chord, and 4 lb down and 10 lb up at 2-8-7, and 4 lb down and 10 lb up at 2-8-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 7=1(F=1, B=1)

OF MISS SCOTT M. SEVIER NUMBER PE-2001018807 SSIONAL

June 18,2020

Scale = 1:19.8





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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695428 AS NOTED ON PLANS REVIE 400360 J32 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:35 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbiTSyOHsj-GRnglo8?qcFMxTPs3ntWACGhsqDsG43JbiHTTVz5OLg **07/01/2020**0-3 d-10-8 Scale = 1:12.6 6.00 12 2x4 || 1-11-2 1-0-0 2x4 ||

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/TF	PI2014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 10%

1-10-3 1-10-3

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=47(LC 5)

Max Uplift 5=-17(LC 8), 3=-35(LC 8)

Max Grav 5=166(LC 1), 3=43(LC 1), 4=33(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 1-10-3 oc purlins,

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

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695429 DEVELOPMENT SERVICES AS NOTED ON PLANS 400360 J33 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:36 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGK\bar{E}brTSyOHsj-IdL2y89davNDZd_2dUOljPpqJEXR?XJTqM000xz5OLf -0-10-8 07/01/2020 0-10-8 Scale = 1:17.8 6.00 12 2x4 ||

3-11-4

BRACING-

TOP CHORD

BOT CHORD

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	0.21	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	I2014	Matri	x-R	Wind(LL)	0.01	4-5	>999	240	Weight: 11 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=84(LC 8)

Max Uplift 5=-21(LC 8), 3=-72(LC 8)

Max Grav 5=247(LC 1), 3=118(LC 1), 4=72(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

2x4 ||

- 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 3-11-4 oc purlins,

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

except end verticals.

June 18,2020





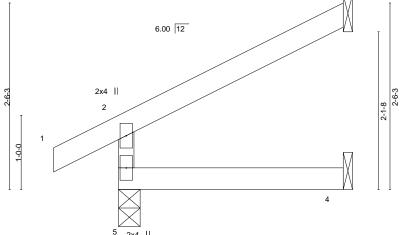


RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695430 AS NOTED ON PLANS REVIE 400360 J34 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:36 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-ldL2y89davNDZd_2dUOljPpswEYM?XJTqM000xz5OLf

-0-10-8 07/01/2020 C 0-10-8 3

Scale = 1:15.5



3-0-6 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) Plate Grip DOL Vert(LL) -0.00 197/144 **TCLL** 1.15 TC 0.11 4-5 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.07 Vert(CT) -0.01 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.01 3 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Wind(LL) 0.00 4-5 >999 240 Weight: 9 lb FT = 10%

LUMBER-

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

2x3 SPF No.2

TOP CHORD

BRACING-

Structural wood sheathing directly applied or 3-0-6 oc purlins,

except end verticals.

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

REACTIONS.

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

Max Horz 5=65(LC 8) Max Uplift 5=-19(LC 8), 3=-56(LC 8)

Max Grav 5=209(LC 1), 3=87(LC 1), 4=55(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.



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT AS NOTED ON PLANS REVIE 400360 J35 Jack-Open **DEVELOPMENT SERVICES**

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:37 2020 Page 1

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-DpvRAT9FLDV4AnYFBCv_FdM1LduRk_Zc30maYNz5OLe

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

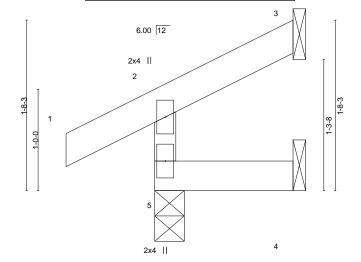
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

07/01/2020-4-6 0-10-8

Scale = 1:11.4

141695431



1-4-6

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	0.07	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	2014	Matri	x-R	Wind(LL)	0.00	5	>999	240	Weight: 5 lb	FT = 10%

LUMBER-BRACING-

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

Wheeler Lumber,

Waverly, KS 66871

WEBS 2x3 SPF No.2

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

Max Horz 5=41(LC 5)

Max Uplift 5=-16(LC 8), 3=-24(LC 8), 4=-3(LC 5) Max Grav 5=152(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-

REACTIONS.

- 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.

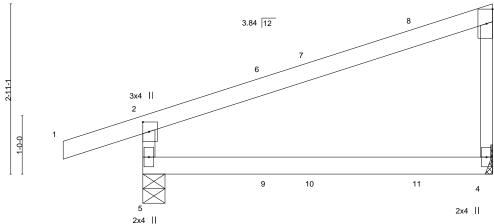


June 18,2020



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695432 400360 J36 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:38 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-h0TpNpAt6Xdxow7RkvQDoqu5A1A1TRpmlgV74qz5OLd 07/01/2020 6-0-0 6-0-0 1-4-6 Scale = 1:19.8 3x6 || 3



6-0-0

Plate Off	sets (X,Y)	[2:0-2-0,0-1-4]			
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 0.51	Vert(LL) -0.05 4-5 >999 360 MT20 197/144	
TCDL	10.0	Lumber DOL 1.15	BC 0.31	Vert(CT) -0.10 4-5 >704 240	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00 4 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02 4-5 >999 240 Weight: 18 lb FT = 10%	,

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=0-4-9, 4=Mechanical

Max Horz 5=120(LC 22)

Max Uplift 5=-118(LC 4), 4=-75(LC 8) Max Grav 5=378(LC 1), 4=256(LC 1)

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

TOP CHORD 2-5=-330/155

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=118
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 25 lb up at 2-2-9, and 78 lb down and 47 lb up at 2-11-11, and 79 lb down and 62 lb up at 4-9-13 on top chord, and 5 lb down and 10 lb up at 2-2-9, and 6 lb down at 2-11-11, and 18 lb down at 4-9-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 8=-3(F) 9=1(F) 10=-1(B) 11=-7(F)



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

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

except end verticals.

June 18,2020



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

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

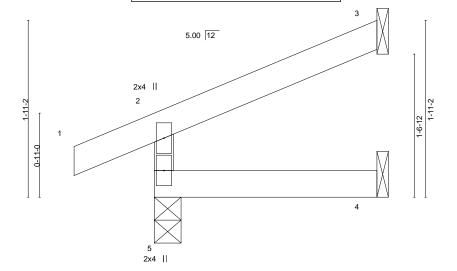
ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Qua
Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695433 AS NOTED ON PLANS REVIE 400360 J37 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:38 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-h0TpNpAt6Xdxow7RkvQDoquB61EHTRpmlgV74qz5OLd -0-10-8 07/01/20205-2



BRACING-

TOP CHORD

BOT CHORD

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc)	I/defI	L/d	PLATES G	RIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00	4-5	>999	360	MT20 1	97/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

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=48(LC 5)

Max Uplift 5=-27(LC 4), 3=-40(LC 8) Max Grav 5=185(LC 1), 3=64(LC 1), 4=43(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

0-10-8

- 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 2-5-2 oc purlins,

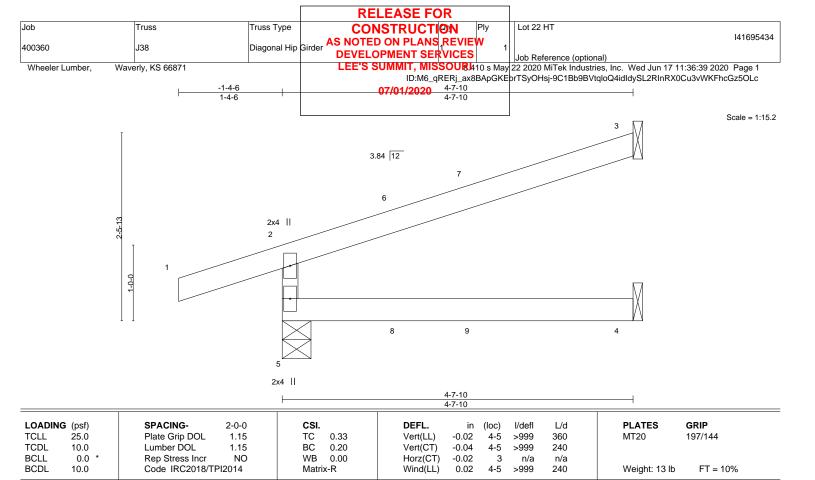
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

June 18,2020

Scale = 1:12.6





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=72(LC 4)

Max Uplift 5=-99(LC 4), 3=-68(LC 8)

Max Grav 5=319(LC 1), 3=136(LC 1), 4=85(LC 3)

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

TOP CHORD 2-5=-280/126

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, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 23 lb up at 1-7-5, and 65 lb down and 32 lb up at 2-7-2 on top chord, and 4 lb down and 7 lb up at 1-7-5, and 5 lb down and 10 lb up at 2-7-2 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=2(F) 9=1(B)

OF MISS SCOTT M. SEVIER NUMBER PE-2001018807 SSIONAL

Structural wood sheathing directly applied or 4-7-10 oc purlins,

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

except end verticals.

June 18,2020



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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



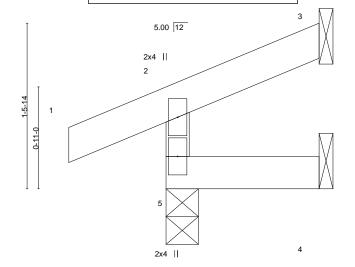
RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695435 AS NOTED ON PLANS REVIE 400360 J39 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:40 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:M6_qRERi_ax8BApGkEbrTSyOHsj-dObZoVC8e8tf1EHqsKThtF_XcrwCxKl2l__E9iz5OLb

-0-10-8 07/01/2020 0-10-8 1-4-8

Scale = 1:10.4



1-4-8

LOADING (p	osf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25	5.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10	0.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240		
BCLL C	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10	0.0	Code IRC2018/TP	12014	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=37(LC 5)

Max Uplift 5=-31(LC 4), 3=-21(LC 8), 4=-1(LC 5) Max Grav 5=152(LC 1), 3=21(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) 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.



Structural wood sheathing directly applied or 1-4-8 oc purlins,

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

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695436 AS NOTED ON PLANS REVIE 400360 J40 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:40 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-dObZoVC8e8tf1EHqsKThtF_Xbrw5xKl2l__E9iz5OLb -0-10-8 07/01/2020 7-5 0-10-8 Scale: 1"=1' 3 6.00 12

2x4 || 2 -2-0 2x4

1-7-5

BRACING-

TOP CHORD

BOT CHORD

LOADING	\(\(\)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	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/TP	12014	Matri	x-R	Wind(LL)	0.00	5	>999	240	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=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=44(LC 5)

Max Uplift 5=-16(LC 8), 3=-30(LC 8), 4=-1(LC 8) Max Grav 5=158(LC 1), 3=32(LC 1), 4=28(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.



Structural wood sheathing directly applied or 1-7-5 oc purlins,

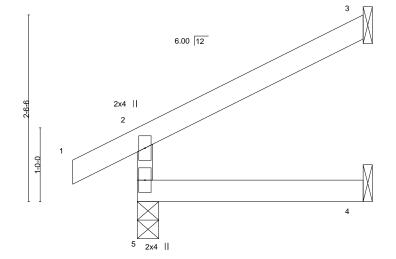
Rigid ceiling directly applied or 10-0-0 oc bracing.

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695437 AS NOTED ON PLANS REVIE 400360 J41 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:41 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-5b8x0rCmPS?WfOs0Q1_wQTWidFFVgnYC_eknh8z5OLa 07/01/20200-12 0-10



LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) Plate Grip DOL Vert(LL) -0.00 >999 197/144 **TCLL** 1.15 TC 0.11 4-5 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.07 Vert(CT) -0.01 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.01 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Wind(LL) 0.00 4-5 >999 240 Weight: 9 lb FT = 10%

3-0-12

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=66(LC 8)

Max Uplift 5=-19(LC 8), 3=-57(LC 8) Max Grav 5=210(LC 1), 3=88(LC 1), 4=56(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 3-0-12 oc purlins,

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

except end verticals.

June 18,2020

Scale = 1:15.6



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695438 AS NOTED ON PLANS REVIE 400360 J42 Jack-Closed Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:42 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-ZniKDBDOAl7NHYRCzlV9yg3s0eXqPEoLClTLDbz5OLZ 07/<mark>01/2</mark>020 Scale = 1:15.6 2x4 6.00 12

> 3-0-12 3-0-12

> > BRACING-

TOP CHORD

BOT CHORD

3

except end verticals.

Structural wood sheathing directly applied or 3-0-12 oc purlins,

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

2x4 ||

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.01	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.01	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	014	Matri	k-R	Wind(LL)	0.00	3-4	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2 2x6 SPF No.2 **BOT CHORD**

WEBS 2x3 SPF No.2

> 4=0-3-8, 3=Mechanical (size) Max Horz 4=85(LC 5) Max Uplift 4=-26(LC 8), 3=-43(LC 8) Max Grav 4=443(LC 1), 3=304(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

3x10 ||

- 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, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 490 lb down and 29 lb up at 1-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-70, 3-4=-20 Concentrated Loads (lb) Vert: 5=-490(B)



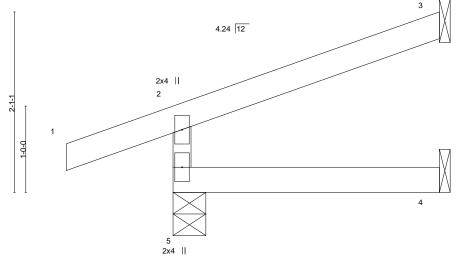
June 18,2020





RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695439 400360 J43 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:43 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsi-1zGiQXE0x3FDvi0OXS0OVub2s2xH8h2VRyDul1z5OLY 07/01/2020 1-2-14 3-1-1 Scale = 1:13.3



LOADING TCLL	25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	TC	0.13	DEFL. Vert(LL)	in -0.00	(loc) 4-5	l/defl >999	L/d 360	PLATES MT20	GRIP 197/144
TCDL BCLL BCDL	10.0 0.0 * 10.0	Lumber DOL 1.15 Rep Stress Incr NC Code IRC2018/TPI2014	WE	0.05 3 0.00 trix-R	Vert(CT) Horz(CT) Wind(LL)	-0.00 -0.01 0.00	4-5 3 4-5	>999 n/a >999	240 n/a 240	Weight: 9 lb	FT = 10%

TOP CHORD

BOT CHORD

3-1-1

except end verticals.

LUMBER-BRACING-

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

WEBS 2x3 SPF No.2

> (size) 5=0-4-9, 3=Mechanical, 4=Mechanical Max Horz 5=68(LC 7)

Max Uplift 5=-89(LC 6), 3=-57(LC 12), 4=-3(LC 19) Max Grav 5=104(LC 1), 3=38(LC 1), 4=41(LC 3)

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

NOTES-

REACTIONS.

- 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) 23 lb down and 8 lb up at -1-2-14, and 23 lb down and 8 lb up at -1-2-14 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=-35(F=-17, B=-17)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-2=-23(F=23, B=23), 2=-2(F=34, B=34)-to-3=-54(F=8, B=8), 5=-0(F=10, B=10)-to-4=-15(F=2, B=2)



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

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

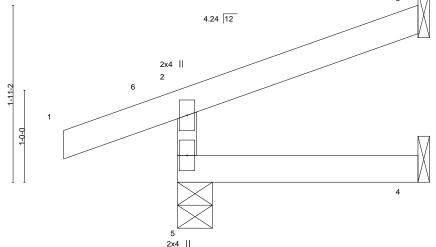
June 18,2020





RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141695440 400360 J44 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:43 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEprTSyOHsi-1zGiQXE0x3FDvi0OXS0OVub2l2xY8h2VRyDul1z5OLY 07/01/2020 1-2-14 Scale = 1:12.5



				· · · · · · · · · · · · · · · · · · ·	
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 0.10	Vert(LL) -0.00 4-5 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 4-5 >999 240	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) -0.00 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00 4-5 >999 240	Weight: 8 lb FT = 10%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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=63(LC 7) Max Uplift 5=-95(LC 6), 3=-47(LC 12), 4=-2(LC 19) Max Grav 5=85(LC 1), 3=28(LC 1), 4=34(LC 3)

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

NOTES-

REACTIONS.

- 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) 17 lb down and 6 lb up at -1-2-14, and 17 lb down and 6 lb up at -1-2-14 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=-26(F=-13, B=-13)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-6=-18(F=26, B=26), 6=0(F=35, B=35)-to-2=-6(F=32, B=32), 2=-6(F=32, B=32)-to-3=-49(F=10, B=10), 5=-2(F=9, B=9)-to-4=-14(F=3, B=3)



Structural wood sheathing directly applied or 2-7-6 oc purlins,

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

except end verticals.

June 18,2020



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695441 AS NOTED ON PLANS REVIE 400360 J45 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:44 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-WAq4etFeiNN4Wrbb5AXd158DaSHxt8legcyRITz5OLX 07/01/20201-4 1-11-4 0-10-8 Scale = 1:12.8 3 6.00 12 2x4 || 1-11-10 1-6-15

			1-11-4					
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.07	Vert(LL) -0.00	n (loc)	l/defl >999	L/d 360	PLATES MT20	GRIP 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00) 4-5	>999	240		
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-R	Horz(CT) -0.00 Wind(LL) 0.00		n/a >999	n/a 240	Weight: 6 lb	FT = 10%

1-11-4

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=48(LC 5)

Max Uplift 5=-17(LC 8), 3=-37(LC 8)

Max Grav 5=169(LC 1), 3=47(LC 1), 4=35(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 1-11-4 oc purlins,

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

except end verticals.

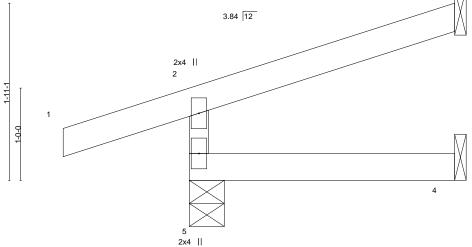
June 18,2020











		II.	2-10-8	1
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.13	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 4-5 >999 360	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	BC 0.04 WB 0.00 Matrix-R	Vert(CT) -0.00 4-5 >999 240 Horz(CT) -0.01 3 n/a n/a Wind(LL) 0.00 4-5 >999 240	Weight: 9 lb FT = 10%

TOP CHORD

BOT CHORD

2-10-8

except end verticals.

LUMBER-BRACING-

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

WEBS 2x3 SPF No.2 REACTIONS.

5=0-4-9, 3=Mechanical, 4=Mechanical (size) Max Horz 5=61(LC 7) Max Uplift 5=-95(LC 6), 3=-52(LC 12), 4=-3(LC 19) Max Grav 5=109(LC 1), 3=27(LC 1), 4=37(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) 24 lb down and 9 lb up at -1-4-6 , and 24 lb down and 9 lb up at -1-4-6 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=-36(F=-18, B=-18)

Trapezoidal Loads (plf)

Vert: 1=-0(F=35, B=35)-to-2=-26(F=22, B=22), 2=-2(F=34, B=34)-to-3=-50(F=10, B=10), 5=-0(F=10, B=10)-to-4=-14(F=3, B=36)-to-4=-14(F=3, B=36)-to-4= B=3)



Structural wood sheathing directly applied or 2-10-8 oc purlins,

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

June 18,2020



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

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

ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Sefety Information, available from Truss Plate pictities 218 N. Les Street, Suite 312, Alexanderia, VA 22314. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Qua
Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695443 TED ON PLANS REVIE Jack-Closed Supported Cable LOPMENT SERVICES 400360 J47 DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:45 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:pq50?Ycap6WpLXoTu4wfY2za1nE-_MOSrDGGTgVx8?Anft3saJhO?sd_cb3ovGi?qwz5OLW -0-10-8 07/01/20205-8 0-10-8

5

6

5.00 12

LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defl Plate Grip DOL Vert(LL) -0.00 120 197/144 **TCLL** 25.0 1.15 TC 0.09 n/r MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) -0.00 120 n/r **BCLL** 0.0 Rep Stress Incr YES WB 0.03 Horz(CT) -0.00 6 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-R Weight: 19 lb FT = 10%

LUMBER-BRACING-

ŀ

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 5-5-8 oc purlins, 2x4 SPF No.2 BOT CHORD except end verticals. **WEBS** 2x3 SPF No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. All bearings 5-5-8. (lb) -Max Horz 9=129(LC 5)

2x3 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 9, 6, 7, 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-

OTHERS

- 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6, 7, 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 18,2020

Scale = 1:18.7



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695444 Roof Special Structural Gable

DEVELOPMENT SERVICES 400360 K1 Job Reference (optional) LEE'S SUMMIT, MISSOUR410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:49 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-s7dzhaJnXv?NddTYuj7ok9r2ETt7YMpNpugCzhz5OLS |-0-10-8 | 0-10-8 10-6-8 12-10-0 2-3-8 2-3-8 07/01/2020 4-1-8 4-1-8 2-3-8 0-10-8 Scale: 3/8"=1' 3x4

4x5 =

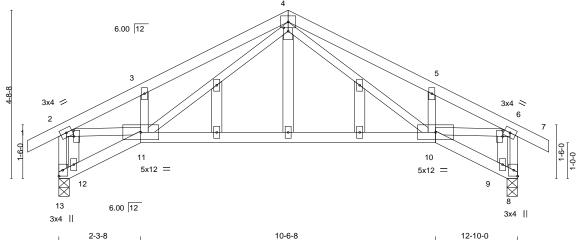


Plate Offsets (X,Y)--[2:0-2-0,0-0-0], [4:0-1-2,0-1-8], [6:0-2-0,0-0-0] DEFL. LOADING (psf) SPACING-CSI. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.20 Vert(LL) -0.16 10-11 >912 360 MT20 197/144 -0.33 10-11 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.54 Vert(CT) >436 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.24 Horz(CT) 0.04 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-S Wind(LL) 0.03 10-11 >999 240 Weight: 58 lb

LUMBER-**BRACING-**

2-3-8

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 6-0-0 oc bracing

2x4 SPF No.2 REACTIONS. (size) 12=0-3-8, 9=0-3-8

Max Horz 12=97(LC 7)

Max Uplift 12=-92(LC 8), 9=-92(LC 9) Max Grav 12=637(LC 1), 9=637(LC 1)

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

TOP CHORD 2-13=-527/84, 2-3=-747/84, 3-4=-780/170, 4-5=-780/157, 5-6=-747/71, 6-8=-527/76

BOT CHORD 10-11=-10/431

WEBS 4-10=-74/324, 6-10=-40/693, 4-11=-83/324, 2-11=-52/693

OTHERS

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



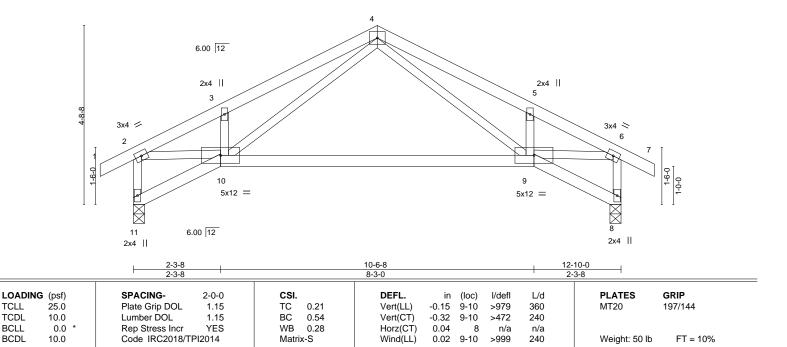
June 18,2020



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695445 AS NOTED ON PLANS REVIE 400360 K2 Roof Special DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:50 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyDHsj-KJBLuwJPHD8EEm2lRQe1HMODntCLHoPX2YPmV7z5OLR 13-8-8 0-10-8 12-10-0 6-5-0 10-6-8 2-3-8 2-3-8 07/01/2020 4-1-8 2-3-8 0-10-8 Scale = 1:30.3

4x5 =



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

WEBS 2x3 SPF No.2

REACTIONS. (size)

Max Horz 11=97(LC 7) Max Uplift 11=-90(LC 8), 8=-90(LC 9) Max Grav 11=637(LC 1), 8=637(LC 1)

11=0-3-8, 8=0-3-8

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

TOP CHORD 2-11=-635/99, 2-3=-942/113, 3-4=-970/198, 4-5=-970/182, 5-6=-942/96, 6-8=-635/90

BOT CHORD 9-10=-19/505

WEBS 4-9=-94/442, 6-9=-56/817, 4-10=-105/442, 2-10=-70/817

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
- 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) Bearing at joint(s) 11, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
- 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.



Structural wood sheathing directly applied or 5-8-1 oc purlins,

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

except end verticals

June 18,2020

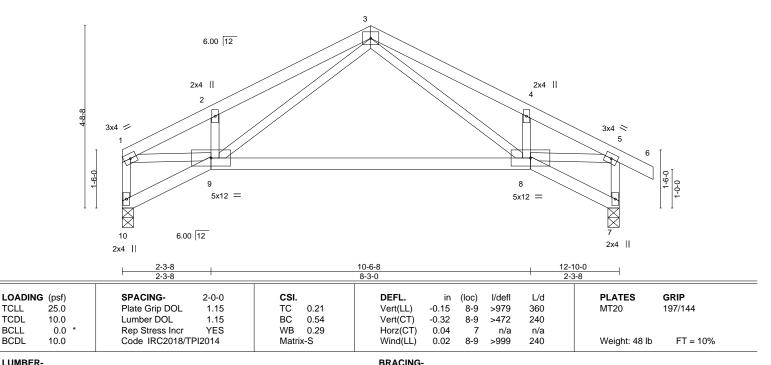


M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695446 AS NOTED ON PLANS REVIE 400360 K3 Roof Special DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:51 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrT\$yOHsj-oWlj6GK12WG5swdx?89GqaxOXHYZ0FagHB9J1Zz5OLQ 10-6-8 12-10-0 13-8-8 07/01/2020 4-1-8 4-1-8 2-3-8 0-10-8 Scale = 1:29.7 4x5 =



TOP CHORD

BOT CHORD

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

WEBS 2x3 SPF No.2

REACTIONS.

10=0-3-8, 7=0-3-8 (size) Max Horz 10=-100(LC 4) Max Uplift 10=-68(LC 8), 7=-90(LC 9) Max Grav 10=565(LC 1), 7=639(LC 1)

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

TOP CHORD 1-10=-567/71, 1-2=-961/107, 2-3=-995/195, 3-4=-975/181, 4-5=-947/96, 5-7=-638/90

BOT CHORD 8-9=-17/510

WEBS 3-8=-94/441, 5-8=-55/821, 3-9=-102/464, 1-9=-81/832

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
- 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) Bearing at joint(s) 10, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 5-7-3 oc purlins,

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

except end verticals

June 18,2020



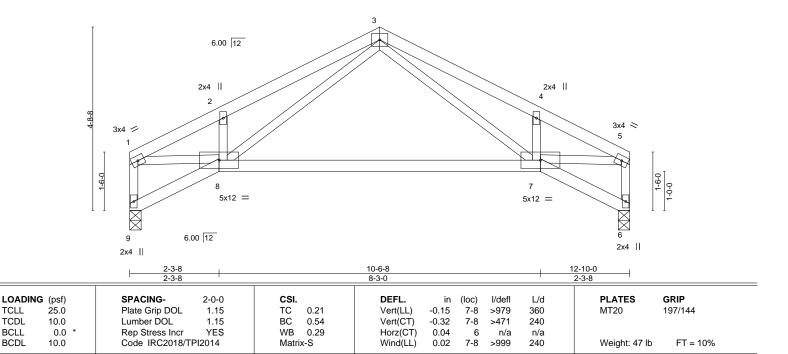




RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695447 AS NOTED ON PLANS REVIE 400360 K4 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:53 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-lutUXyMla8Wp5EnJ7ZCkv?0k44E0U91zkVeQ6Sz5OLO 10-6-8 12-10-0 07/01/2020 4-1-8 4-1-8 2-3-8

4x5 =



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

WEBS 2x3 SPF No.2

REACTIONS.

9=0-3-8, 6=0-3-8 (size) Max Horz 9=-91(LC 4) Max Uplift 9=-68(LC 8), 6=-68(LC 9) Max Grav 9=568(LC 1), 6=568(LC 1)

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

TOP CHORD 1-9=-569/74, 1-2=-966/113, 2-3=-1000/201, 3-4=-1000/192, 4-5=-966/104, 5-6=-569/69

BOT CHORD 7-8=-28/515

WEBS 3-7=-101/464, 5-7=-78/836, 3-8=-107/464, 1-8=-86/836

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
- 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) Bearing at joint(s) 9, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 5-7-0 oc purlins,

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

except end verticals

June 18,2020

Scale = 1:29.6

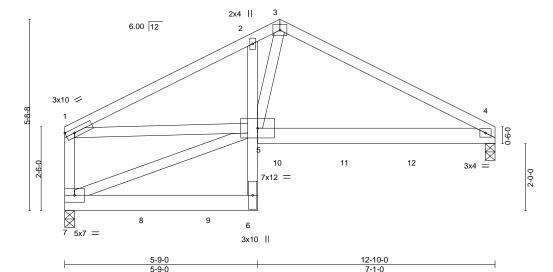






RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION Roof Special Girder AS NOTED ON PLANS REVIE 141695448 400360 K5 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Z | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:54 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrT\$yOHsj-D5RsklNwLRegjOMWgGjzRCZrmUbADbH6z9Nzeuz5OLN 12-10-0 07701/2020 5-9-0 6-5-0 Scale = 1:34.4 4x5 =



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 0.40	Vert(LL) -0.11	4-5 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.19	4-5 >776	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.35	Horz(CT) 0.03	4 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.06	4-5 >999	240	Weight: 139 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No 2

2x6 SP 2400F 2.0E *Except* **BOT CHORD**

2-6: 2x4 SPF No.2 **WEBS** 2x4 SPF No.2

REACTIONS. (size) 4=0-3-8, 7=0-3-8 Max Horz 7=-90(LC 6)

Max Uplift 4=-175(LC 9), 7=-229(LC 8) Max Grav 4=2661(LC 1), 7=3237(LC 1)

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

TOP CHORD 1-2=-3494/344, 2-3=-3482/393, 3-4=-2943/294, 1-7=-1816/196

BOT CHORD 5-6=-27/988, 2-5=-267/152, 4-5=-215/2541

WFBS 3-5=-304/2710, 1-5=-249/2868

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.

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

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

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design. 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;

- MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
- will fit between the bottom chord and any other members. 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=175, 7=229.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 793 lb down and 54 lb up at 0-1-12, 785 lb down and 40 lb up at 2-5-0, 787 lb down and 67 lb up at 4-5-0, 924 lb down and 208 lb up at 6-5-0, 490 lb down and 32 lb up at 8-5-0, and 509 lb down and 27 lb up at 10-5-0, and 516 lb down and 20 lb up at 12-8-4 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

OF MISSO SCOTT M. SEVIER PE-2001018807 SSIONAL

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

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

except end verticals.

June 18,2020

Continued on page 2





Job Truss Truss Type 400360 K5

RELEASE FOR CONSTRUCTION

07/01/2020

Lot 22 HT

141695448

Roof Special Girder AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 2 Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:54 2020 Page 2 ID:M6_qRERj_ax8BApGKEbrT\$yOHsj-D5RsklNwLRegjOMWgGjzRCZrmUbADbH6z9Nzeuz5OLN

LOAD CASE(S) Standard

Wheeler Lumber,

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 6-7=-20, 4-5=-20

Waverly, KS 66871

Concentrated Loads (lb)

Vert: 4=-499(B) 7=-793(B) 8=-785(B) 9=-787(B) 10=-924(B) 11=-490(B) 12=-492(B)

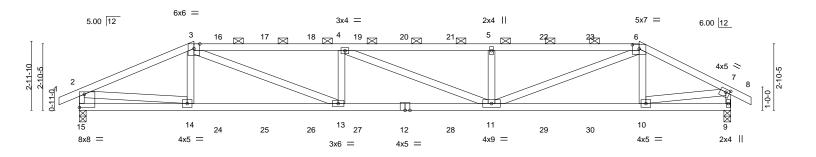


RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT AS NOTED ON PLANS REVIE 400360 L1 Hip Girder **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:56 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-9TYc9zOAt3uNyhVuohlRXde61ICzhV4PQTs4jnz5OLL -0-10-8 0-10-8 11-3-4 24-0-12 28-0-0 07/01/2020 4-11-2 6-4-2 6-4-2 3-11-4

Scale = 1:49.5

28-10-8 0-10-8

141695449



		4-11-2	11-3-4		17-8-10			1-0-12	28-0	
Dieta Offee	4-11-2 6-4-2 Plate Offsets (X,Y) [6:0-3-8,0-2-3], [7:0-2-0,0-1-8], [15:Edge.				6-5-6	· · · · · ·		6-4-2	3-11	-4
Plate Offse	els (X, Y)	[6:0-3-8,0-2-3], [7:0-	2-0,0-1-8], [15:Eug	e,0-6-12j						
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DO	DL 1.15	TC 0.	.74 Vert(LL)	-0.18 11-13	>999	860	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.	.72 Vert(CT)	-0.34 11-13	>976	240		
BCLL	0.0 *	Rep Stress Ir	ncr NO	WB 0.	.33 Horz(CT)	0.06 9	n/a	n/a		
BCDL	10.0	Code IRC20	18/TPI2014	Matrix-S	Wind(LL)	0.17 11-13	>999 2	240	Weight: 220 lb	FT = 10%

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

2-15,7-9: 2x3 SPF No.2

(size) 15=0-3-8, 9=0-3-8 Max Horz 15=62(LC 7)

Max Uplift 15=-453(LC 4), 9=-447(LC 4) Max Grav 15=1861(LC 1), 9=1905(LC 1)

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

 $2\text{-}3\text{-}3240/822,\ 3\text{-}4\text{-}4923/1332,\ 4\text{-}5\text{-}4753/1288,\ 5\text{-}6\text{-}4756/1290,\ 6\text{-}7\text{-}-2807/726,}$ TOP CHORD

2-15=-1815/468, 7-9=-1877/455

BOT CHORD 14-15=-102/257, 13-14=-749/2942, 11-13=-1285/4920, 10-11=-612/2481

WEBS 3-13=-590/2202, 4-13=-633/339, 5-11=-671/352, 6-11=-674/2488, 2-14=-674/2710,

7-10=-612/2407

REACTIONS.

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, 2x3 - 1 row at 0-9-0 oc.

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

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=453, 9=447,
- 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.



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

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

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

June 18,2020

Continued on page 2





Job Truss Truss Type 400360 L1 Hip Girder

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

Lot 22 HT

141695449

DEVELOPMENT SERVICES 2 Job Reference (optional)
LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:56 2020 Page 2 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-9TYc9zOAt3uNyhVuohlRXde61ICzhV4PQTs4jnz5OLL

Wheeler Lumber, Waverly, KS 66871

NOTES07/01/2020
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 88 lb down and 81 lb up at 6-0-0, 88 lb down and 81 lb up at 8-0-0, 88 lb down and 81 lb up at 10-0-0, 88 lb down and 81 lb up at 12-0-0, 88 lb down and 81 lb up at 16-0-0, 88 lb down and 81 lb up at 16-0-0, 88 lb down and 81 lb up at 18-0-0, 88 lb down and 81 lb up at 20-0-0, and 88 lb down and 81 lb up at 24-0-12 on top chord, and 224 lb down and 106 lb up at 4-11-2, 32 lb down at 6-0-0, 32 lb down at 10-0-0, 32 lb down at 12-0-0, 32 lb down at 14-0-0, 32 lb down at 18-0-0, 32 lb down at 18-0 lb down at 20-0-0, and 32 lb down at 22-0-0, and 217 lb down and 88 lb up at 24-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

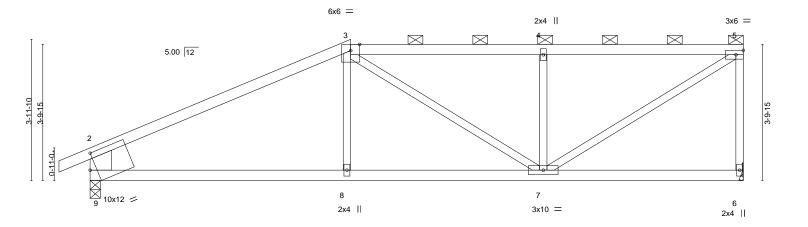
Vert: 1-2=-70, 2-3=-70, 3-6=-70, 6-7=-70, 7-8=-70, 9-15=-20

Concentrated Loads (lb)

Vert: 6=-48(F) 12=-22(F) 14=-224(F) 5=-48(F) 11=-22(F) 10=-217(F) 16=-48(F) 17=-48(F) 18=-48(F) 19=-48(F) 20=-48(F) 21=-48(F) 22=-48(F) 23=-48(F) 24=-22(F) 25=-22(F) 26=-22(F) 27=-22(F) 28=-22(F) 29=-22(F) 30=-22(F)



			RELEASE FUR			
Job	Truss	Truss Type	CONSTRUCTION	Ply	Lot 22 HT	
400360	12	Half Hip	AS NOTED ON PLANS REVIE	W ,		141695450
+00300		I Iali I lip	DEVELOPMENT SERVICES		Job Reference (optional)	
Wheeler Lumber, Wav	erly, KS 66871		LEE'S SUMMIT, MISSOUR4	10 s May	22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:57 2020	Page 1
					TSyOHsj-dg6_MJPoeM0Ear45MPGg3rBl0hbEQybZf7cdFl	
_L -0-10-8	7-3-14		07/01/2020 ¹²⁻⁸⁻¹⁴		18-4-6	
'0-10-8 '	7-3-14		5-5-0		5-7-8	1
]	Scale = 1:32.4



	<u> </u>	7-3-14 7-3-14		12-8-14 5-5-0		 		
Plate Offse	ets (X,Y)	[9:0-2-3,0-5-5]						
LOADING TCLL TCDL	(psf) 25.0 10.0	Plate Grip DOL 1	-0-0 CSI. 1.15 TC 0.66 1.15 BC 0.52	,	(loc) I/defl 7-8 >999 7-8 >999	L/d 360 240	PLATES MT20	GRIP 197/144
BCLL BCDL	0.0 * 10.0		YES WB 0.38	- (- /	6 n/a 7-8 >999	n/a 240	Weight: 64 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*

3-5: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 WEBS 2x3 SPF No.2 *Except* 2-9: 2x8 SP DSS

REACTIONS. (size) 6=Mechanical, 9=0-3-8

Max Horz 9=123(LC 7)

Max Uplift 6=-41(LC 5), 9=-22(LC 4) Max Grav 6=805(LC 1), 9=893(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1172/31, 3-4=-950/64, 4-5=-948/62, 5-6=-756/67, 2-9=-801/64

BOT CHORD 8-9=-72/973, 7-8=-74/970 WEBS 4-7=-474/103, 5-7=-57/1106

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9.
- 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 5-10-10 oc purlins,

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

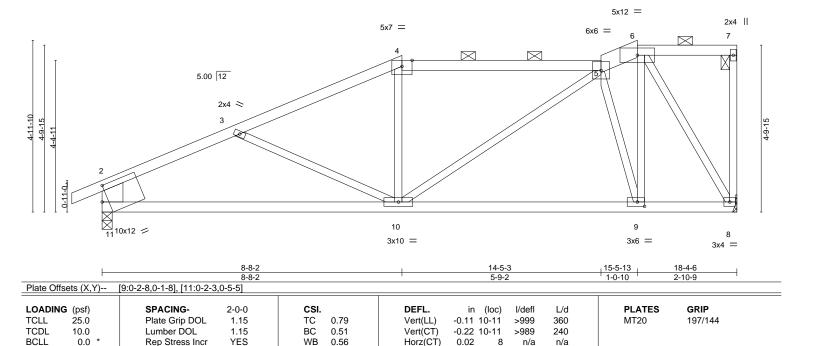
Rigid ceiling directly applied or 10-0-0 oc bracing.

June 18,2020



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695451 AS NOTED ON PLANS REVIE 400360 L3 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:58 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGkEbrTSyOHsj-5sgNafQQPg85C?fHv6nvc2jRg5yg9LyiunLBnfz5OLJ -0-10-8 0-10-8 8-8-2 15-5-13 07/01/2020 3-11-12 4-8-6 1-0-10 2-10-9



Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.04 9-10 >999

240

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

LUMBER-

BCDL

TOP CHORD 2x4 SPF No.2 *Except*

10.0

1-4: 2x4 SPF 2100F 1.8E, 5-6: 2x6 SPF No.2

Code IRC2018/TPI2014

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except* 2-11: 2x8 SP DSS

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

Max Horz 11=157(LC 7)

Max Uplift 8=-20(LC 8), 11=-43(LC 8) Max Grav 8=805(LC 1), 11=893(LC 1)

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

2-3=-1161/92, 3-4=-1020/54, 4-5=-917/70, 5-6=-489/53, 2-11=-801/86 **BOT CHORD** 10-11=-90/958, 9-10=-22/611, 8-9=-19/439

WEBS

5-10=-10/371, 5-9=-703/106, 6-9=-46/791, 6-8=-839/21

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

Matrix-S

- 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) 8, 11.
- 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.



June 18,2020

FT = 10%

Weight: 74 lb

Structural wood sheathing directly applied or 4-10-14 oc purlins,

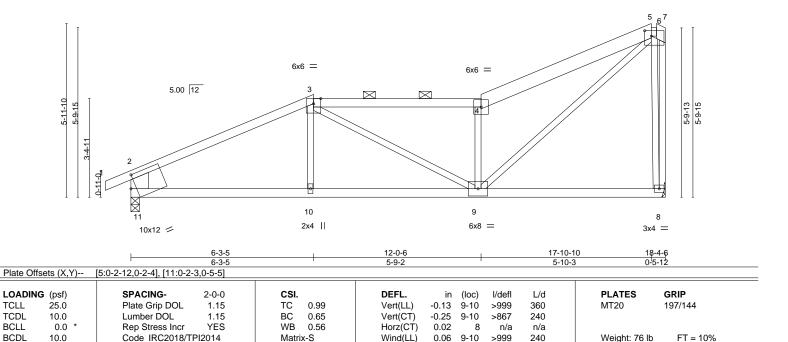
except end verticals, and 2-0-0 oc purlins (5-2-7 max.): 4-5, 6-7.

Scale = 1:33.3



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695452 AS NOTED ON PLANS REVIE 400360 L4 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:36:59 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-Z2Eln?Q2A_Gyp9ETTpJ88GGZMVFeuoFr7R5kK6z5OLI 0-10-8 0-10-8 6-3-5 07/01/2020 5-10-3



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

4-5,5-7: 2x6 SPF No.2 2x4 SPF No.2

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

2-11: 2x8 SP DSS

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

Max Horz 11=189(LC 5)

Max Uplift 8=-47(LC 8), 11=-41(LC 8) Max Grav 8=807(LC 1), 11=893(LC 1)

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

TOP CHORD 2-3=-1201/56, 3-4=-1118/48, 4-5=-1323/107, 2-11=-787/79

BOT CHORD 10-11=-56/1010, 9-10=-58/1008

WEBS 4-9=-919/130, 5-9=-98/1492, 5-8=-755/86

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) 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) 8, 11.
- 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, except end verticals, and

2-0-0 oc purlins (4-4-14 max.): 3-4, 5-6.

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

June 18,2020

6x8 6.00 12 Scale = 1:39.6







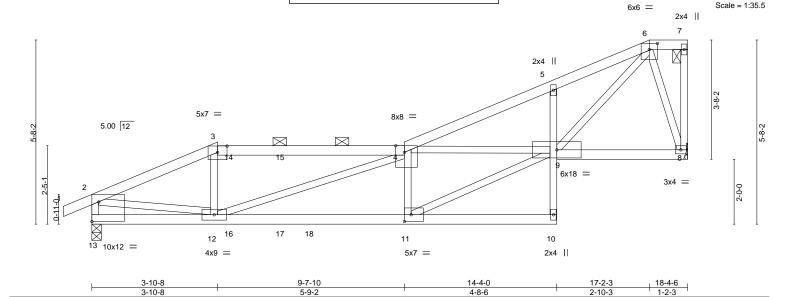


Plate Off	te Offsets (X,Y) [3:0-3-8,0-2-5], [4:0-3-4,Edge], [6:0-3-0,0-2-4], [11:0-2-8,0-2-8], [13:Edge,0-7-4]										
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP							
TCLL	25.0	Plate Grip DOL 1.15	TC 0.81	Vert(LL) -0.17 11-12 >999 360 MT20 197/144							
TCDL	10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.32 11-12 >687 240							
BCLL	0.0 *	Rep Stress Incr NO	WB 0.85	Horz(CT) 0.02 8 n/a n/a							
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.14 11-12 >999 240 Weight: 75 lb FT = 10%							

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

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

10-13: 2x4 SPF 2100F 1.8E, 5-10: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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

Max Horz 13=207(LC 5)

Max Uplift 8=-188(LC 8), 13=-238(LC 8) Max Grav 8=944(LC 1), 13=1142(LC 1)

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

2-3=-1855/374, 3-4=-1662/375, 4-5=-1652/325, 5-6=-1619/387, 2-13=-1154/257 TOP CHORD

BOT CHORD 11-12=-496/2306, 5-9=-259/159, 8-9=-70/284

WEBS 3-12=0/331, 4-12=-688/128, 4-11=-726/256, 9-11=-524/2463, 4-9=-813/179,

6-9=-416/1774, 6-8=-912/211, 2-12=-278/1586

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) 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) except (jt=lb) 8=188, 13=238.
- 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) 108 lb down and 75 lb up at 3-10-8, and 74 lb down and 61 lb up at 4-3-8, and 74 lb down and 61 lb up at 5-10-8 on top chord, and 32 lb down at 3-10-8, 20 lb down at 4-3-8, and 20 lb down at 5-10-8, and 284 lb down and 63 lb up at 6-9-4 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



Structural wood sheathing directly applied or 4-2-7 oc purlins,

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

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

June 18,2020





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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT Roof Special Sirder AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:00 2020 Page 2 L5 400360

Waverly, KS 66871 Wheeler Lumber,

ID:M6_qRERj_ax8BApGKEbrTSyOHsj-2Fo7?LRhxHOpRJpg1XqNhTpnrvZUdA1?L5qlsYz5OLH

I41695453

07/01/2020

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-6=-70, 6-7=-70, 10-13=-20, 8-9=-20

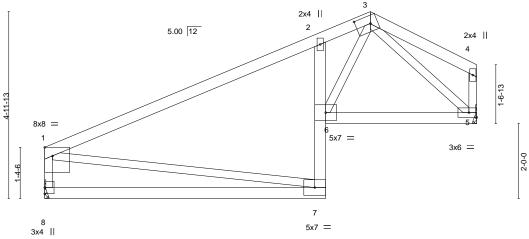
Concentrated Loads (lb)

Vert: 3=-26(B) 12=-16(B) 14=-18(B) 15=-18(B) 16=-11(B) 17=-11(B) 18=-284(B)



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695454 AS NOTED ON PLANS REVIEW 400360 L6 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:01 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-WRMVChSJibWg3TOsbELcEhLzFJvRMnd8alarO_z5OLG 7-6-0 7-6-0 8-8-5 07/01/2020 1-2-5 2-10-1 Scale = 1:30.7 5x7 6.00 12 3 2x4 ||



	ſ	7-6-0	l 8-8-5	11-6-6	1
		7-6-0	1-2-5	2-10-1	
Dieta Offacta (V V)	[1:Edgo 0 2 12] [2:0 4 11 0 2 9]				

Plate Oil	Seis (A, 1)	[1.Euge,0-2-12], [3.0-4-11	1,0-2-0]										
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	0.71	Vert(LL)	-0.12	6	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.21	7-8	>652	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.20	5	n/a	n/a			
BCDL	10.0	Code IRC2018/TF	12014	Matri	x-S	Wind(LL)	0.07	6	>999	240	Weight: 45 lb	FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2-7: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2

REACTIONS. (size) 8=Mechanical, 5=Mechanical

Max Horz 8=99(LC 5)

Max Uplift 8=-9(LC 8), 5=-12(LC 8) Max Grav 8=510(LC 1), 5=510(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 1-2=-538/32, 2-3=-811/110, 1-8=-452/54

BOT CHORD 2-6=-589/157, 5-6=-5/357 **WEBS** 3-6=-99/723, 3-5=-431/14

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

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



Structural wood sheathing directly applied or 4-10-5 oc purlins,

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

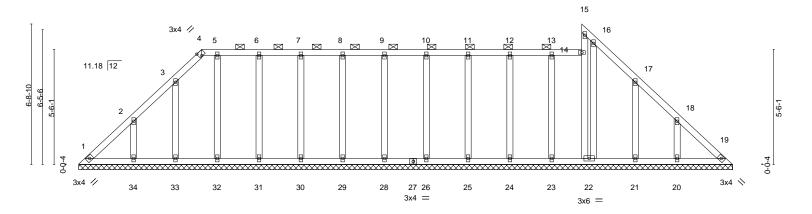
except end verticals.

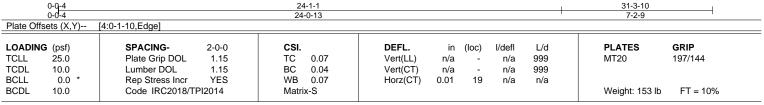
June 18,2020



RELEASE FOR Job Truss Truss Type **CONSTRUCTION** Lot 22 HT 141695455 AS NOTED ON PLANS REVIE 400360 LAY1 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:02 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-_dwtQ1TxTveXgcz28ysrmuul1iQu5GhlpPJOwQz5OLF 31-3-10 <mark>07/0</mark>1/2020 5-10-14 Scale = 1:55.1





LUMBER-**BRACING-**

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

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.): 4-14, 14-22. Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. All bearings 31-3-6.

Max Horz 1=-177(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 19, 33, 32, 31, 30, 29, 28, 26, 25, 24, 23, 22 except

34=-132(LC 8), 21=-102(LC 9), 20=-129(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 19, 34, 33, 32, 31, 30, 29, 28, 26, 25, 24, 23, 22, 21, 20

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 1, 19, 33, 32, 31, 30, 29, 28, 26, 25, 24, 23, 22 except (jt=lb) 34=132, 21=102, 20=129.
- 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.



June 18,2020







Job Truss Truss Type 400360 LAY2 GABLE

Waverly, KS 66871

Wheeler Lumber,

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES Lot 22 HT

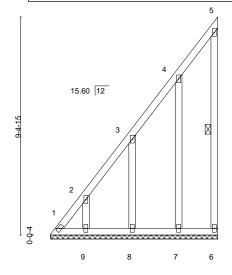
141695456

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:03 2020 Page 1 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-SqTGdMTZDCmOImYEifN4J6QMs6mQqipR233yTtz5OLE

07/<u>0</u>3/2020

Scale = 1:49.7



LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.57	DEFL. ir Vert(LL) n/a	٠,	l/defl n/a	L/d 999	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a	a -	n/a	999	20
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.14 Matrix-P	Horz(CT) -0.00) 6	n/a	n/a	Weight: 45 lb FT = 10%

LUMBER-BRACING-

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

2x4 SPF No.2 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

WEBS 1 Row at midpt

REACTIONS. All bearings 7-2-11.

(lb) -Max Horz 1=349(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) except 1=-216(LC 6), 6=-155(LC 7), 9=-154(LC 8), 8=-180(LC 8),

7=-160(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 6, 9, 8, 7 except 1=343(LC 5)

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

TOP CHORD 1-2=-435/315, 2-3=-353/253, 3-4=-283/194

NOTES-

OTHERS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 216 lb uplift at joint 1, 155 lb uplift at joint 6, 154 lb uplift at joint 9, 180 lb uplift at joint 8 and 160 lb uplift at joint 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.



June 18,2020





Job Truss Truss Type 400360 LAY3 GABLE

Waverly, KS 66871

Wheeler Lumber,

CONSTRUCTION AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES

RELEASE FOR

Lot 22 HT

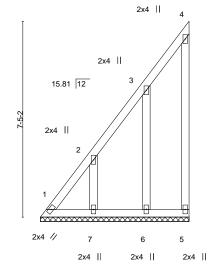
141695457

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:04 2020 Page 1 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-w01eqiUB_WuFww7RGNuJrJzaJW6eZA9bGjoV?Jz5OLD

07/0<u>1/2</u>020

Scale = 1:43.7



LOADIN	· /	SPACING- 2-0-0	CSI. TC 0.34		n (loc)	l/defl	L/d	PLATES GF	
TCLL TCDL	25.0 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	BC 0.02	Vert(LL) n/ Vert(CT) n/	a -	n/a n/a	999 999	MT20 19	7/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.07 Matrix-P	Horz(CT) -0.0	0 5	n/a	n/a	Weight: 32 lb	FT = 10%

LUMBER-BRACING-TOP CHORD

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

BOT CHORD

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

REACTIONS. All bearings 5-7-10. (lb) -Max Horz 1=271(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) except 1=-142(LC 6), 5=-122(LC 7), 7=-186(LC 8), 6=-162(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 5, 7, 6 except 1=256(LC 5)

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

TOP CHORD 1-2=-325/241

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 142 lb uplift at joint 1, 122 lb uplift at joint 5, 186 lb uplift at joint 7 and 162 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695458 AS NOTED ON PLANS REVIE 400360 LAY4 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:05 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-OCb022Vplq16X4hdq4PYOXWqWwSsle3kVNY3Xlz5OLC 07/01/2020 3-9-15

5x7 //

3 11.18 12 13.42 12 2x4 | 2x4 || 5 0-0-4 0-0-4 2x4 // 2x4 📏 2x4 Ш 2x4 ||

Plate Offs	sets (X,Y)	[3:0-3-3,Edge]			
LOADING	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 0.05	Vert(LL) n/a - n/a 999 MT20 197/144	
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) n/a - n/a 999	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 5 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	Weight: 24 lb FT = 10%	

7-0-4

LUMBER-

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD 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 7-0-4. (lb) -Max Horz 1=87(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-117(LC 8), 6=-141(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=117. 6=141.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

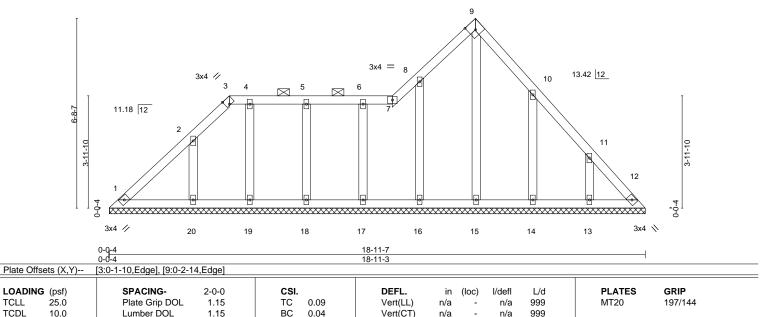


June 18,2020

Scale: 1/2"=1'



RELEASE FOR Job Truss Truss Type Lot 22 HT CONSTRUCTION 141695459 AS NOTED ON PLANS REVIE 400360 LAY5 GABLE **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:06 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-sO9OFOWRW79z9EGpNnxnxk2_iKoq14Ptk1Hc3Cz5OLB 10-0-3 12-11-7 07/01/2020 5-9-2 2-11-4 5-11-15 Scale = 1:40.7 6x6 //



Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

12

n/a

n/a

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

2-0-0 oc purlins (6-0-0 max.): 3-7.

LUMBER-

TCLL

TCDL

BCLL

BCDL

TOP CHORD 2x4 SPF No.2

0.0

10.0

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

Rep Stress Incr

Code IRC2018/TPI2014

REACTIONS. All bearings 18-11-3. (lb) -Max Horz 1=172(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 19, 18, 17, 16 except 20=-145(LC 8), 14=-144(LC 9),

WB

Matrix-S

0.09

13=-137(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 12, 19, 18, 17, 16, 15, 14, 13 except 20=272(LC 15)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 1, 12, 19, 18, 17, 16 except (jt=lb) 20=145, 14=144, 13=137.
- 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.



FT = 10%

Weight: 81 lb

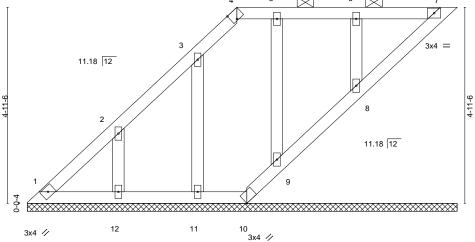
Structural wood sheathing directly applied or 6-0-0 oc purlins, except

June 18,2020



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695460 AS NOTED ON PLANS REVIE 400360 LAY6 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:07 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERi_ax8BApGKEbrTSyOHsj-LbjmTkX4HRHqnOr0xVS0TybAsj85mYT1yh19cez5OLA 10-10-5-3-11 5-3-11 07/01/2020 5-6-1 Scale = 1:29.1 3x4 6



10-10-6 0-0<u>-4</u> 0-0-4 5-6-11

Plate Offsets	(A,Y) [·	4:0-1-10,Eage]											
LOADING (p	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25	5.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144	
TCDL 10	0.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999			
BCLL (0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	7	n/a	n/a			
BCDL 10	0.0	Code IRC2018/TP	12014	Matri	x-S						Weight: 40 lb	FT = 10%	

LUMBER-**BRACING-**

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

OTHERS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. All bearings 10-10-2. (lb) -Max Horz 1=190(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10, 11, 9, 8 except 12=-122(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 12, 11, 9, 8

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 10, 11, 9, 8 except (it=lb) 12=122.
- 8) Non Standard bearing condition. Review required.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

2-0-0 oc purlins (6-0-0 max.): 4-7.

June 18,2020



Job Truss Truss Type 400360 LAY8 GABLE

Waverly, KS 66871

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIE

Lot 22 HT

141695461

DEVELOPMENT SERVICES

6x6 //

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:07 2020 Page 1 ID:pq50?Ycap6WpLXoTu4wfY2za1nE-LbjmTkX4HRHqnOr0xVS0TybA_j8AmYF1yh19cez5OLA

11-7-10 9-5-0<mark>07/01/2020</mark> 2-2-10

Scale = 1:54.8

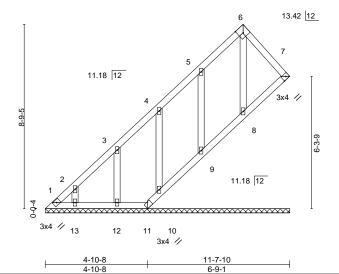


Plate Offs	ets (X,Y)	6:0-2-14,Edge], [7:0-2-4,0-1-8]			
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a - n/a 999	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.00 7 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 51 lb FT = 10%

LUMBER-

Wheeler 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 11-7-10.

(lb) -Max Horz 1=291(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 13 except 7=-101(LC 8), 9=-108(LC 8), 10=-110(LC 8),

12=-108(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 8, 9, 10, 12, 13

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

TOP CHORD 1-2=-333/151, 2-3=-250/123

NOTES-

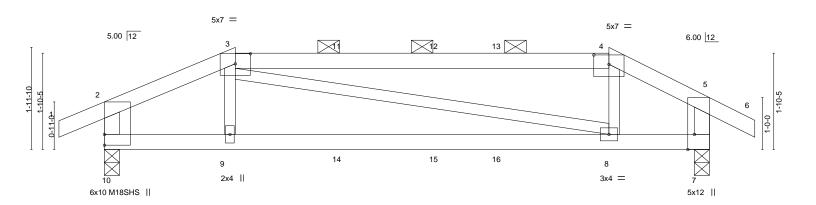
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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, 11, 13 except (jt=lb) 7=101, 9=108, 10=110, 12=108.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 8, 9, 10.
- 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.



June 18,2020







—	2-6-5		9-8-12				11-8-0	
<u> </u>	2-6-5		7-2-7					· · · · · · · · · · · · · · · · · · ·
Plate Offsets (X,Y)	[3:0-3-8,0-2-5], [4:0-3-8,0-2-3], [7:0-3-	8,Edge]						
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. ii	n (loc)	I/defI	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.10	8-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.22	8-9	>610	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr NO	WB 0.18	Horz(CT) 0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.08	8-9	>999	240	Weight: 39 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

3-4: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-10: 2x4 SPF 2400F 2.0E, 5-7: 2x4 SPF 2100F 1.8E

REACTIONS. (size) 10=0-3-8, 7=0-3-8

Max Horz 10=49(LC 35)

Max Uplift 10=-161(LC 4), 7=-141(LC 9) Max Grav 10=581(LC 1), 7=581(LC 1)

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

TOP CHORD 2-3=-759/199, 3-4=-551/160, 4-5=-667/158, 2-10=-476/121, 5-7=-467/96

BOT CHORD 9-10=-186/659, 8-9=-193/658, 7-8=-132/551

- 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=161, 7=141.
- 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) 103 lb down and 132 lb up at 2-6-5, 56 lb down and 37 lb up at 4-7-1, 56 lb down and 37 lb up at 6-5-7, and 56 lb down and 37 lb up at 7-8-0, and 91 lb down and 107 lb up at 9-8-12 on top chord, and 14 lb down and 5 lb up at 2-6-5, 10 lb down and 0 lb up at 4-7-1, 10 lb down and 0 lb up at 6-5-7, and 10 lb down and 0 lb up at 7-8-0, and 14 lb down and 4 lb up at 9-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



Structural wood sheathing directly applied or 5-8-5 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

June 18,2020

Scale = 1:22.2

Continued on page 2





Job Truss Truss Type M1 400360 Hip Girder

RELEASE FOR CONSTRUCTION

07/01/2020

Lot 22 HT

141695462

AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 1 Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MTek Industries, Inc. Wed Jun 17 11:37:09 2020 Page 2 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-HzrXuQYKp2XX0h?O3wUUYNgNkXgoEQiKQ?WGgXz5OL8

Waverly, KS 66871

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Wheeler Lumber,

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20

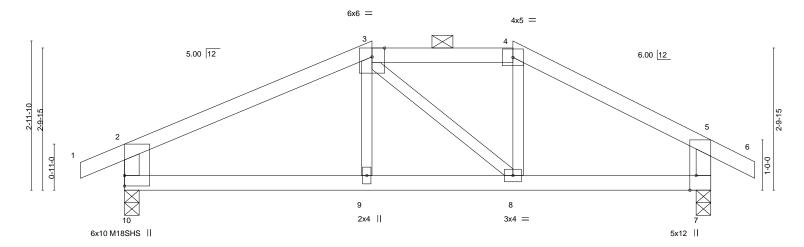
Concentrated Loads (lb)

Vert: 9=2(B) 8=1(B) 14=0(B) 15=0(B) 16=0(B)



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 22 HT 141695463 AS NOTED ON PLANS REVIE 400360 M2 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-IAPv5mZyaMfOerabcd?j5aDZOx3CzvqTffFpCzz5OL7 + **07/01/202**0.2-9-10 12-6-8 0-10-8 4-11-2 3-11-4 0-10-8 Scale = 1:22.9



		4-11-2 4-11-2			7-8-12 2-9-10			11-8-0 3-11-4			———	
Plate Offse	ts (X,Y)	[7:0-3-8,Edge]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.05	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.10	8-9	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix	x-S	Wind(LL)	0.03	8-9	>999	240	Weight: 38 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 *Except*

2-10,5-7: 2x4 SPF No.2

(size) 10=0-3-8, 7=0-3-8 Max Horz 10=63(LC 7)

Max Uplift 10=-82(LC 8), 7=-71(LC 9) Max Grav 10=583(LC 1), 7=583(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $2\hbox{-}3\hbox{-}657/74,\ 3\hbox{-}4\hbox{-}460/79,\ 4\hbox{-}5\hbox{-}-602/72,\ 2\hbox{-}10\hbox{-}-508/114,\ 5\hbox{-}7\hbox{-}-497/98$

BOT CHORD 9-10=-38/533, 8-9=-40/530, 7-8=-10/463

NOTES-

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



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

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

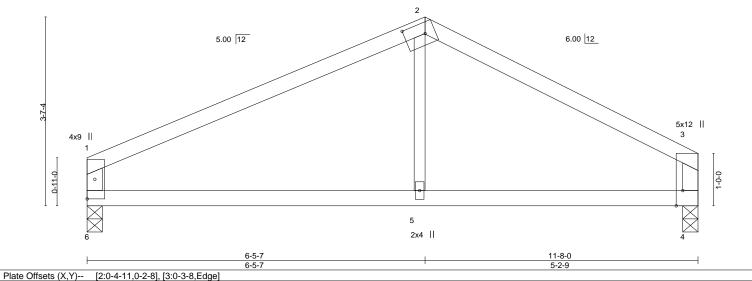
Rigid ceiling directly applied or 10-0-0 oc bracing

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695464 AS NOTED ON PLANS REVIE 400360 МЗ Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-IAPv5mZyaMfOerabcd?j5aDYKx4UzujTffFpCzz5OL7 6-5-7 6-5-7 07/01/2020 5-2-9 Scale = 1:22.0 5x7 =



SPACING-**PLATES** GRIP LOADING (psf) CSI. DEFL. (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.56 Vert(LL) -0.05 5-6 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 BC 0.38 Vert(CT) -0.115-6 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.07 Horz(CT) 0.01 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% BCDL 10.0 Matrix-R >999 240 Weight: 32 lb 0.03 5-6

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2-5: 2x3 SPF No.2

REACTIONS. (size) 6=0-3-8, 4=0-3-8 Max Horz 6=68(LC 5)

Max Uplift 6=-68(LC 8), 4=-58(LC 9) Max Grav 6=512(LC 1), 4=512(LC 1)

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

1-2=-588/77, 2-3=-599/92, 1-6=-429/108, 3-4=-426/88 TOP CHORD

BOT CHORD 5-6=-26/458, 4-5=-28/456

NOTES-

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



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

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

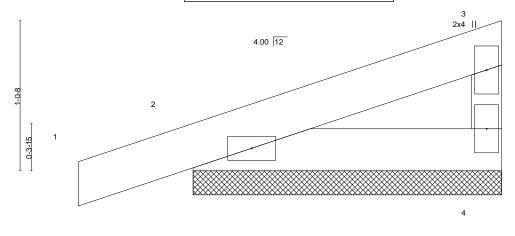
except end verticals.

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695465 AS NOTED ON PLANS REVIE 400360 V4 Valley **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:13 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-9l42jnbqtH1zVJJ9lmZQjDrBW8BYAGTvLdUUplz5OL4 07/01/2020 0-10-8 2-0-12 Scale: 1.5"=1'



2x4 = 2x4 II

TOP CHORD

BOT CHORD

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 Vert(LL) 0.00 120 197/144 **TCLL** TC 0.05 n/r MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) 0.00 120 n/r **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 6 lb FT = 10%

LUMBER-BRACING-

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

WEBS 2x3 SPF No.2

REACTIONS. 4=2-1-11, 2=2-1-11 (size) Max Horz 2=37(LC 5)

Max Uplift 4=-16(LC 8), 2=-56(LC 4) Max Grav 4=81(LC 1), 2=158(LC 1)

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

NOTES-

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

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

except end verticals.

June 18,2020





Job Truss Truss Type Valley 400360 V5

Waverly, KS 66871

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIE

Lot 22 HT

141695466

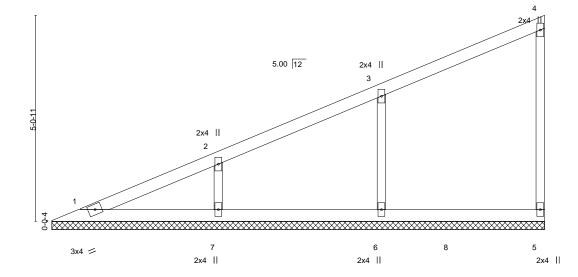
DEVELOPMENT SERVICES

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:14 2020 Page 1 ID:M6_qRERj_ax8BApGKEbrlTSyOHsj-dxeQx7cTeb9q7StMrT4fFQOJ1YWNviQ3ZGD1Mkz5OL3

1<mark>97/09/2020</mark>

Scale = 1:28.3



LOADIN	· · ·	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 35 lb	FT = 10%

LUMBER-

Wheeler Lumber,

TOP CHORD 2x4 SPF No.2

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

OTHERS 2x3 SPF No.2 BRACING-

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 12-1-0. Max Horz 1=206(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 7 except 6=-104(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=416(LC 2), 7=369(LC 2)

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

3-6=-307/150, 2-7=-275/142 WEBS

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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7 except (jt=lb) 6=104
- 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.



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695467 AS NOTED ON PLANS REVIE Valley 400360 V6 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:14 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-dxeQx7cTeb9q7StMrT4fFQOI8YVmviY3ZGD1Mkz5OL3 07/01/2020 Scale: 1/2"=1' 2x4 || 3

0-0-4	1	5.00 12 2x4 2
J	2x4 =	5 4 2x4 2x4

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 0.31 BC 0.17 WB 0.08	DEFL. Vert(LL) Vert(CT) Horz(CT) -(in (loc) n/a - n/a - -0.00 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 26 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=9-8-3, 4=9-8-3, 5=9-8-3

Max Horz 1=162(LC 5)

Max Uplift 4=-23(LC 5), 5=-133(LC 8)

Max Grav 1=180(LC 1), 4=119(LC 1), 5=501(LC 1)

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

2-5=-379/186 **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=133
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Valley 400360 V7 **DEVELOPMENT SERVICES** Wheeler Lumber, Waverly, KS 66871

AS NOTED ON PLANS REVIE

Lot 22 HT

141695468

DEVELOPMENT SERVICES Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:15 2020 Page 1 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-67Co8Td5PuHhkcSYPAbuoewStypOeAzCowzauAz5OL2

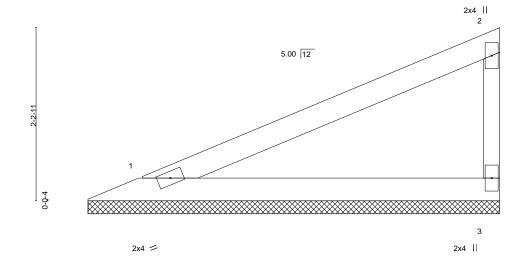
Structural wood sheathing directly applied or 5-4-0 oc purlins,

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

except end verticals.

07/<u>5</u>1/2020

Scale = 1:14.8



TCDL 10	psf) 25.0 0.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.38 0.21 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144
	0.0	Code IRC2018/TF		Matri		H0IZ(C1)	-0.00	3	n/a	n/a	Weight: 13 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=5-3-6, 3=5-3-6 (size) Max Horz 1=82(LC 5)

Max Uplift 1=-29(LC 8), 3=-46(LC 8) Max Grav 1=201(LC 1), 3=201(LC 1)

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

NOTES-

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



June 18,2020







RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695469 AS NOTED ON PLANS REVIE Valley 400360 V8 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:16 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-aKmAMpejACPYMm1kzu67KrTgwMBRNcDM1ai8Qdz5OL1 07/<mark>01/2020</mark>

> 2 2x4 || 6.00 12 9-0-0 3 2x4 / 2x4 ||

LOADING TCLL TCDL	25.0 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.17 BC 0.09	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) n/a - n/a 999 MT20 197/144 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 Weight: 9 lb FT = 10%
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

> 1=3-9-0, 3=3-9-0 (size)

Max Horz 1=64(LC 5) Max Uplift 1=-18(LC 8), 3=-34(LC 8) Max Grav 1=138(LC 1), 3=138(LC 1)

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

NOTES-

REACTIONS.

- 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 3-9-8 oc purlins,

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

except end verticals.

June 18,2020

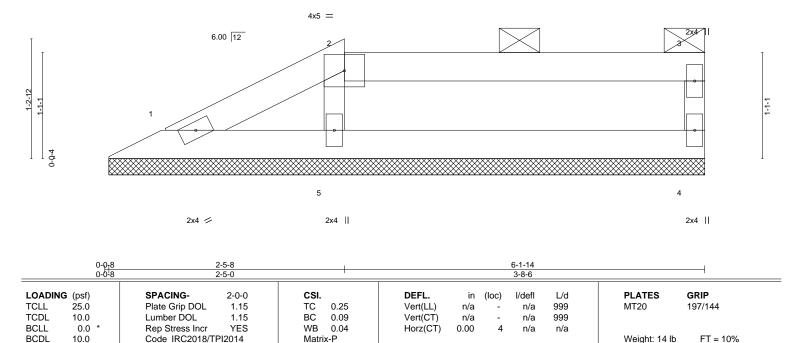
Scale = 1:12.3







			RELEASE FUR		
ob	Truss	Truss Type	CONSTRUCTION Ply	/ Lot 22 HT	
00360	V9	Valley	AS NOTED ON PLANS REVIEW	1	I41695470
00000		Valley	DEVELOPMENT SERVICES	Job Reference (optional)	
Wheeler Lumber,	Waverly, KS 66871		LEE'S SUMMIT, MISSOUR410 s	s May 22 2020 MiTek Industries	, Inc. Wed Jun 17 11:37:16 2020 Page 1
			ID:M6_qRERj_ax8BApGl	KEbrTSyOHsj-aKmAMpejACPYI	Mm1kzu67KrTfhMBRNcgM1ai8Qdz5OL1
ı		2-5-8	07/01/2020	6-1-14	
ſ		2-5-8	0770172020	3-8-6	
					Scale - 1:11 8



TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

> 1=6-1-6, 4=6-1-6, 5=6-1-6 (size)

Max Horz 1=32(LC 5)

Max Uplift 1=-18(LC 8), 4=-34(LC 4), 5=-29(LC 5) Max Grav 1=55(LC 1), 4=156(LC 1), 5=277(LC 1)

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

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
- 3) Provide adequate drainage to prevent water ponding.
- 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, 4, 5.
- 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.



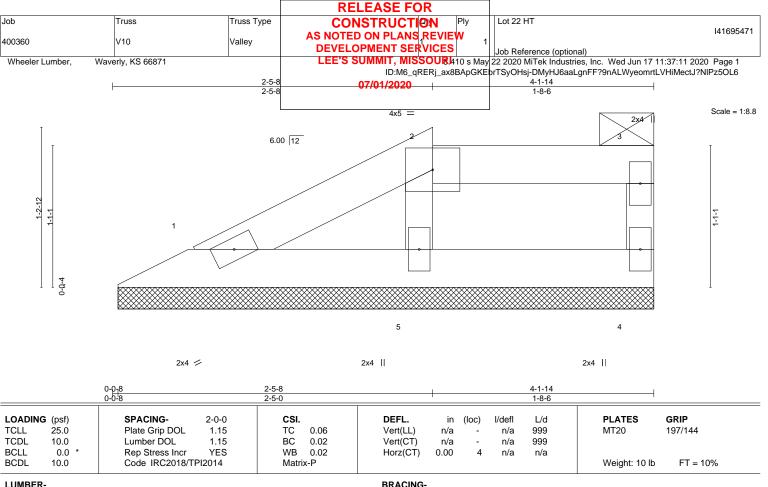
Structural wood sheathing directly applied or 6-1-14 oc purlins,

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

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

June 18,2020





TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

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

REACTIONS.

1=4-1-6, 4=4-1-6, 5=4-1-6 (size) Max Horz 1=32(LC 5)

Max Uplift 1=-12(LC 8), 4=-16(LC 4), 5=-19(LC 5) Max Grav 1=70(LC 1), 4=68(LC 1), 5=170(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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, 4, 5.
- 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 4-1-14 oc purlins,

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

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

June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695472 AS NOTED ON PLANS REVIE V11 Valley 400360 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:12 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEbrTSyOHsj-hYWfWRaC6zv6t9kzk22BA?I02krdRpDm6zkwHrz5OL5

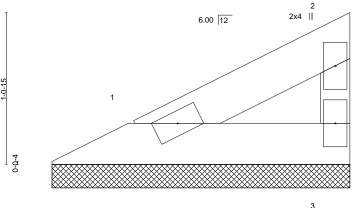
07/0<mark>1/2020</mark>

Scale = 1:8.2

Structural wood sheathing directly applied or 2-1-14 oc purlins,

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

except end verticals.



2x4 / 2x4 ||

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

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

WEBS 2x3 SPF No.2

REACTIONS. 1=2-1-6, 3=2-1-6 (size)

Max Horz 1=30(LC 5) Max Uplift 1=-8(LC 8), 3=-16(LC 8) Max Grav 1=64(LC 1), 3=64(LC 1)

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

NOTES-

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



June 18,2020



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 22 HT 141695473 AS NOTED ON PLANS REVIE Valley 400360 V12 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Wed Jun 17 11:37:12 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:M6_qRERj_ax8BApGKEprTSyOHsj-hYWfWRaC6zv6t9kzk22BA?I?QkrIRpDm6zkwHrz5OL5

07/01/2020

2x4 || 5.00 12

> 2x4 / 2x4 ||

3

LOADIN	G (pcf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
LUADIN	G (psi)		2-0-0	Coi.		DEFL.	ın	(100)	i/deii	L/U	PLATES	GRIF
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-P						Weight: 6 lb	FT = 10%

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 2-11-3 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

REACTIONS. 1=2-10-10, 3=2-10-10 (size)

Max Horz 1=38(LC 5) Max Uplift 1=-14(LC 8), 3=-21(LC 8) Max Grav 1=93(LC 1), 3=93(LC 1)

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

NOTES-

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



June 18,2020

Scale = 1:8.9

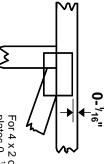


Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

DEVELOPMENT SER
LEE'S SUMMU, MISS

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27/01/2020 S R C SPlate location details available in MiTek 20/20 S osoftware or upon request. <u>software</u> or upon request

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

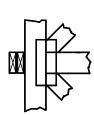
RELEASE FOR CONSTRUCTION

LATERAL BRACING LOCATION



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

BEARING



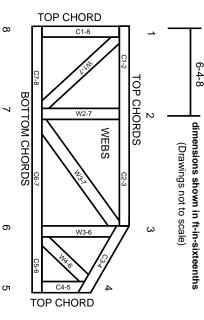
Min size shown is for crushing only reaction section indicates joint Indicates location where bearings number where bearings occur. (supports) occur. Icons vary but

ANSI/TPI1: Industry Standards: National Design Specification for Metal

DSB-89:

Building Component Safety Information Guide to Good Practice for Handling Design Standard for Bracing. Connected Wood Trusses. Installing & Bracing of Metal Plate Plate Connected Wood Truss Construction.

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

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

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

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

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Ņ 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
- bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building
- Cut members to bear tightly against each other

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- locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint
- 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.
- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others.
- 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 project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.