

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

08/19/2020

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

Re: 400477

Lot 74 RR - Raising Hope House 2021

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: I42427329 thru I42427439

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

Missouri COA: Engineering 001193



August 14,2020

Johnson, Andrew

,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.

**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Half Hip Supported AS NOTED ON PLANS REVIE 142427329 400477 A1 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:16 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-q497D0Ffc87eanw8IQ5UI4aPdbEaqqZnMIVwmFyoBOX -0-10-8 0-10-8 08/19/2020 22-0-5 Scale = 1:57.6 6x6 = 3x4 = 5.00 12 <u></u>15 13 16 12 11 5x7 / 10 9 9-9-2 7 M M X Ø

23

5x7 =

22

21

20

19

18 17

3x4 =

24

Plate Off	Plate Offsets (X,Y) [9:0-3-8,0-3-0], [16:Edge,0-1-8], [17:Edge,0-1-8], [23:0-3-8,0-3-0]											
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	0.40	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	-0.01	17	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	014	Matri	k-S						Weight: 160 lb	FT = 10%

26

LUMBER-

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

**OTHERS** 2x4 SPF No.2 WEDGE

Left: 2x3 SPF No.2

**BRACING-**TOP CHORD

**WEBS** 

**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.): 13-16. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 23-24. 1 Row at midpt

16-17, 13-20, 12-21, 14-19, 15-18

REACTIONS. All bearings 27-5-0.

(lb) -Max Horz 2=410(LC 5)

5x7 =

Max Uplift All uplift 100 lb or less at joint(s) 17, 20, 21, 22, 23, 24, 25, 26, 27,

28, 29, 30, 19, 18

Max Grav All reactions 250 lb or less at joint(s) 17, 2, 20, 21, 22, 23, 24, 25, 26,

27, 28, 29, 30, 19, 18

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

TOP CHORD 2-3=-364/37, 3-4=-315/30, 4-5=-291/28, 5-6=-266/25

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing
- 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) 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 19, 18.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 14,2020



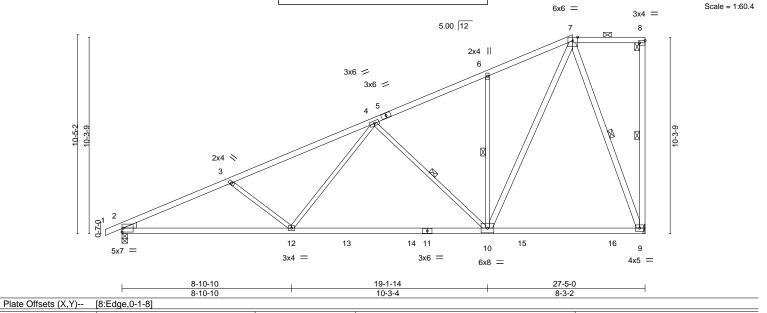
\Lambda WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

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

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427330 AS NOTED ON PLANS REVIE 400477 A2 Half Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:17 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-IGjVRMFHNRFVCxVLl8djrH6U5?T4Z\_4wbyEUIhyoBOW 08/19/2020 19-1-14 23-7-8 27-5-0 -0-10-8 0-10-8 5-8-14 7-5-14 5-11-2 4-5-10



DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

(loc)

9

1 Row at midpt

12

-0.25 10-12

-0.44 10-12

0.05

0.08

I/defI

>999

>737

>999

n/a

L/d

360

240

n/a

240

LUMBER-

**TCLL** 

**TCDL** 

**BCLL** 

**BCDL** 

LOADING (psf)

25.0

10.0

0.0

10.0

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

8-9,7-10,7-9: 2x4 SPF No.2

WEDGE Left: 2x4 SPF No.2

REACTIONS.

(size) 9=Mechanical, 2=0-3-8

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 2=438(LC 5)

Max Uplift 9=-206(LC 8), 2=-209(LC 8) Max Grav 9=1339(LC 2), 2=1351(LC 2)

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

TOP CHORD 2-3=-2487/397, 3-4=-2228/319, 4-6=-1137/207, 6-7=-1098/296

**BOT CHORD** 2-12=-509/2212, 10-12=-296/1549, 9-10=-144/407

3-12=-392/245, 4-12=-35/718, 4-10=-817/277, 6-10=-342/185, 7-10=-296/1386, **WEBS** 

2-0-0

1.15

1.15

YES

CSI.

TC

ВС

WB

Matrix-S

0.74

0.60

0.64

7-9=-1172/225

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) 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) 9=206, 2=209.
- 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.



GRIP

197/144

FT = 10%

**PLATES** 

Weight: 124 lb

MT20

8-9, 4-10, 6-10, 7-9

Structural wood sheathing directly applied or 3-0-1 oc purlins,

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

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427331 AS NOTED ON PLANS REVIE 400477 **A3** Half Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:18 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy/IgWAz\_t70-mTHueiGv8INMp54Xsr8yNVfcOOotINR4gc\_1r8yoBOV 08/19/2020 9-1-13 5-9-13 27-5-0 -0-10-8 2-3-8 0-10-8 2-3-8 25-2-11 4-10-5 6-2-4 6-0-15 2-2-5

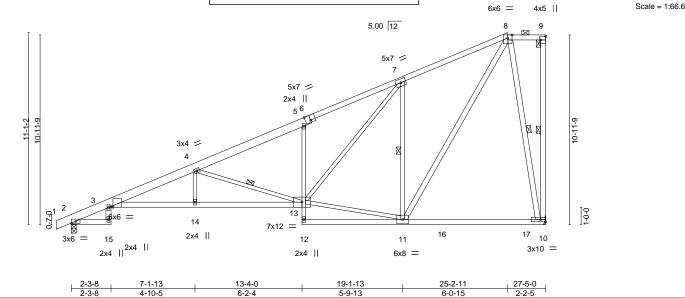


Plate Offsets (X,Y)--[3:0-1-6,Edge], [6:0-3-8,Edge], [9:Edge,0-3-8] SPACING-GRIP LOADING (psf) CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.96 Vert(LL) -0.36 3-14 >909 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.69 Vert(CT) -0.63 3-14 >518 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.95 Horz(CT) 0.36 10 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL 10.0 Matrix-S Wind(LL) 0.30 3-14 >999 240 Weight: 153 lb

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

1-6: 2x6 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 \*Except\*

3-13: 2x4 SPF 2100F 1.8E, 5-12: 2x3 SPF No.2

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

9-10,3-15,8-11,8-10: 2x4 SPF No.2

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

Max Horz 2=470(LC 5)

Max Uplift 10=-237(LC 8), 2=-207(LC 8) Max Grav 10=1317(LC 2), 2=1324(LC 2)

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

TOP CHORD 2-3=-871/0, 3-4=-3439/567, 4-5=-2051/337, 5-7=-1994/441, 7-8=-1089/318

3-14=-695/3302, 13-14=-694/3302, 5-13=-335/193 **BOT CHORD** 

4-14=0/269, 4-13=-1586/384, 11-13=-149/919, 7-13=-349/1380, 7-11=-1145/407, **WEBS** 

8-11=-350/1443, 8-10=-1144/247

## 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) 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) 10=237, 2=207.
- 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

9-10, 4-13, 7-11, 8-10

2-0-0 oc purlins (6-0-0 max.): 8-9.

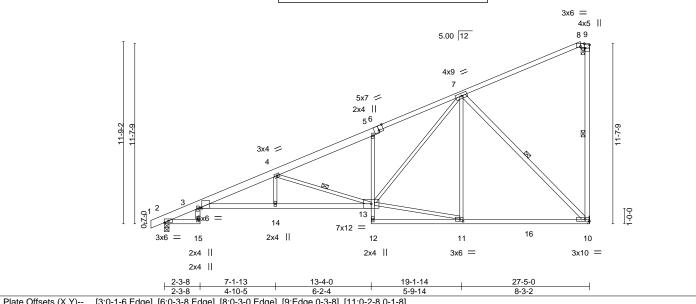
1 Row at midpt

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427332 AS NOTED ON PLANS REVIE 400477 A4 Half Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:19 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-EfrGs2HXv3VDRFfjQZfBwiCm3o7m1sdD2GjaNayoBOU **08/19/2020**-1-14 5-9-14 -0<sub>1</sub>10-8 2-3-8 0-10-8 2-3-8 26-9-14 4-10-5 6-2-4 7-8-1



T late Oil	Hate Offsets (A, 1) [5.0-1-0, Luge], [0.0-0-0, Luge], [0.10-0-0, Luge], [1.10-2-0, 0-1-0]											
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 0.96	Vert(LL) -0.35 3-14 >920 360	MT20 197/144							
TCDL	10.0	Lumber DOL 1.15	BC 0.71	Vert(CT) -0.62 3-14 >525 240								
BCLL	0.0 *	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.36 10 n/a n/a								
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.30 3-14 >999 240	Weight: 141 lb FT = 10%							

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

1-6: 2x6 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 \*Except\*

3-13: 2x4 SPF 2100F 1.8E, 5-12: 2x3 SPF No.2

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

9-10: 2x4 SPF 2400F 2.0E, 3-15,7-10: 2x4 SPF No.2

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

Max Horz 2=498(LC 5)

Max Uplift 10=-270(LC 8), 2=-202(LC 8) Max Grav 10=1304(LC 2), 2=1329(LC 2)

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. FORCES. TOP CHORD 2-3=-897/0, 3-4=-3461/559, 4-5=-2058/324, 5-7=-1983/421, 7-8=-251/102 **BOT CHORD** 3-14=-704/3325, 13-14=-703/3324, 5-13=-280/177, 10-11=-179/963 4-14=0/268, 4-13=-1607/392, 11-13=-157/948, 7-13=-334/1343, 7-11=0/299, **WEBS** 

7-10=-1348/334

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) 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) 10=270, 2=202.
- 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

9-10, 4-13, 7-10

2-0-0 oc purlins (6-0-0 max.): 8-9.

1 Row at midpt

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

Scale = 1:74.3

August 14,2020



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

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

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427333 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400477 **A5** Monopitch DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:20 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-irPe3NIAfMd43OEv\_GAQSwkxpCTmmlmNHwT8v0yoBOT 08/19/20209-1-13 5-9-13 -0-10-8 2-3-8 0-10-8 2-3-8 4-10-5 6-2-4 8-3-3 Scale = 1:70.2 3x6 || 5.00 12 4x9 = 5x7 = 2x4 | 56 3x4 =

> 13-4-0 19-1-13 4-10-5

11

2x4 ||

12

7x12 =

Plate Offsets (X,Y)	[3:0-1-6,Edge], [6:0-3-8,Edge], [10:0-2-8,	<u>0-1-8J</u>

3x6

2x4 ||

2x4 ||

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.35	3-13	>920	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.62	3-13	>525	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.36	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-S	Wind(LL)	0.33	3-13	>985	240	Weight: 142 lb	FT = 10%

**BRACING-**TOP CHORD

**WEBS** 

**BOT CHORD** 

LUMBER-

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

1-6: 2x6 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 \*Except\*

3-12: 2x4 SPF 2100F 1.8E, 5-11: 2x3 SPF No.2

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

8-9,3-14,7-9: 2x4 SPF No.2

REACTIONS. (size) 9=Mechanical, 2=0-3-8

Max Horz 2=481(LC 8)

Max Uplift 9=-329(LC 8), 2=-150(LC 8) Max Grav 9=1304(LC 2), 2=1329(LC 2)

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

TOP CHORD 2-3=-714/0, 3-4=-3462/497, 4-5=-2057/220, 5-7=-1980/309 **BOT CHORD** 3-13=-895/3326, 12-13=-895/3325, 5-12=-273/159, 9-10=-245/966

**WEBS** 4-13=0/268, 4-12=-1610/448, 10-12=-221/952, 7-12=-364/1336, 7-10=0/302,

## NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip
- 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, with BCDL = 10.0psf.

13

2x4 ||

- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 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.



9

9

3x6 =

Structural wood sheathing directly applied, except end verticals.

8-9, 4-12, 7-9

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

15

10

3x6 =

1 Row at midpt

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427334 AS NOTED ON PLANS REVIE 400477 A6 Monopitch **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:20 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-irPe3NIAfMd43OEv\_GAQSwk\_3CVvmIGNHwT8v0yoBOT **08/1|9/2020** 19-1-14 5-11-2 -0-10-8 0-10-8 13-2-12 7-5-14 5-8-14 8-3-2 Scale = 1:66.8 3x6 || 5.00 12 3x6 = 6 3x6 = 3x6 = 2x4 💸 11 12 13 10 14 9 3x4 =3x6 =3x6 =4x5 = 8-10-10 19-1-14 8-10-10 8-3-2 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI Plate Grip DOL 1.15 Vert(LL) -0.26 >999 360 197/144 **TCLL** 25.0 TC 0.82 9-11 MT20

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

**WEBS** 

-0.45

0.06

0.08 9-11

9-11

8

>720

>999

except end verticals

1 Row at midpt

n/a

240

n/a

240

Rigid ceiling directly applied or 9-7-10 oc bracing

Structural wood sheathing directly applied or 2-8-1 oc purlins,

7-8, 4-9, 6-8

Weight: 115 lb

FT = 10%

LUMBER-

**TCDL** 

**BCLL** 

BCDL

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

7-8,6-8: 2x4 SPF No.2

10.0

0.0

10.0

WEDGE

Left: 2x4 SPF No.2

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

Max Horz 2=478(LC 8)

Max Uplift 8=-329(LC 8), 2=-150(LC 8) Max Grav 8=1329(LC 2), 2=1354(LC 2)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 2-3=-2502/266, 3-4=-2238/181, 4-6=-1142/65 **BOT CHORD** 2-11=-656/2227, 9-11=-423/1549, 8-9=-239/1001

**WEBS** 3-11=-407/260, 4-11=-51/728, 4-9=-766/256, 6-9=-56/968, 6-8=-1411/336

# NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip
- 2) 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 0.87

Matrix-S

0.59

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427335 AS NOTED ON PLANS REVIE 400477 B1 Monopitch **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:21 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-A2z0GjloQglxgYp6X\_hf?7HCDcumVIGWWZChRTyoBOS 6-3-9 6-3-9 0<del>8/39/2020</del> 5-1

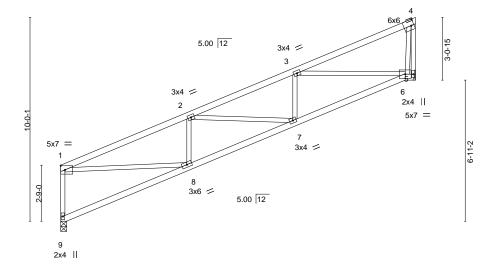


Plate Offsets (X,Y)--[4:0-1-11,Edge] SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 CSI. (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.60 Vert(LL) -0.07 7-8 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.42 Vert(CT) -0.138-9 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.88 Horz(CT) 0.03 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S >999 240 Weight: 66 lb 0.05 7-8

**BRACING-**

TOP CHORD

**BOT CHORD** 

16-11-0

except end verticals.

Structural wood sheathing directly applied or 3-7-5 oc purlins,

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

LUMBER-

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

**WEBS** 2x3 SPF No.2

REACTIONS. (size) 9=0-3-8, 5=Mechanical

Max Horz 9=231(LC 5) Max Uplift 5=-89(LC 8)

Max Grav 9=774(LC 1), 5=774(LC 1)

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

1-9=-732/83, 1-2=-1484/118, 2-3=-1430/133, 4-5=-702/54 TOP CHORD

**BOT CHORD** 7-8=-256/1428, 6-7=-196/1372

1-8=-68/1258, 2-8=-402/105, 3-6=-1138/181, 4-6=-10/575 WFBS

## NOTES-

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



Scale = 1:56.6

August 14,2020



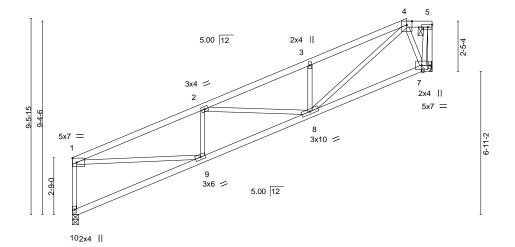
**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427336 AS NOTED ON PLANS REVIE 400477 B2 Half Hip DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:21 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-A2z0GjloQglxgYp6X\_hf?7HD8cu9VsHWWZChRTyoBOS 16-2-5 08/<u>§9/2020</u> 6-3-9 4-8-4 ነ-2-11

6x6 = 3x6 =

Structural wood sheathing directly applied or 3-9-12 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.



		3-9 3-9	11-6-0 5-2-7	16-1		
LOADING         (psf)         SPACING-           TCLL         25.0         Plate Grip DOL           TCDL         10.0         Lumber DOL           BCLL         0.0 *         Rep Stress Incr           BCDL         10.0         Code IRC2018/T	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.54 BC 0.40 WB 0.44 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.07 8-9 -0.13 9-10 0.02 6 0.05 8-9	l/defl L/d >999 360 >999 240 n/a n/a >999 240	<b>GRIP</b> 197/144 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.

10=0-3-8, 6=Mechanical (size) Max Horz 10=211(LC 5)

Max Uplift 6=-74(LC 8) Max Grav 10=774(LC 1), 6=774(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-10=-731/84, 1-2=-1490/121, 2-3=-1405/129, 3-4=-1386/188, 5-6=-750/43

BOT CHORD 8-9=-251/1435, 7-8=-54/393

WEBS 1-9=-71/1266, 2-9=-404/106, 3-8=-320/101, 4-8=-176/1213, 4-7=-606/110, 5-7=-52/766

# 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in 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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

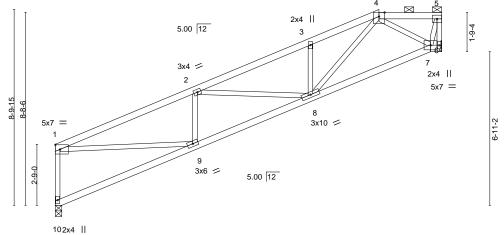


Scale = 1:55.8

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427337 AS NOTED ON PLANS REVIE 400477 ВЗ Half Hip DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:22 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-fEXOU3JQB\_toliOl5hCuYLqOD0DQEJWfkDyF\_vyoBOR 14-7-2 0<mark>8/ fg/2020</mark> 6-3-9 3-1-1 2-9-14 Scale = 1:51.9 6x6 = 4x5 =



	6-3- 6-3-		11-6-1 5-2-7	16-11-0 5-4-15	17-5-0 0-6-0		
LOADING (psf)         SPACING-           TCLL 25.0         Plate Grip D           TCDL 10.0         Lumber DOI           BCLL 0.0 *         Rep Stress I           BCDL 10.0         Code IRC2(	_ 1.15	CSI. TC 0.52 BC 0.39 WB 0.44 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) l/defl -0.06 8-9 >999 -0.13 9-10 >999 0.03 6 n/a 0.06 8-9 >999	L/d 360 240 n/a 240	PLATES GRIP MT20 197/144  Weight: 65 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.

10=0-3-8, 6=Mechanical (size) Max Horz 10=239(LC 5) Max Uplift 10=-79(LC 8), 6=-162(LC 8) Max Grav 10=774(LC 1), 6=774(LC 1)

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

TOP CHORD 1-10=-731/194, 1-2=-1492/325, 2-3=-1396/319, 3-4=-1352/384, 5-6=-747/117

**BOT CHORD** 8-9=-503/1439, 7-8=-209/781

WEBS  $1-9 = -248/1269, \ 2-9 = -407/181, \ 3-8 = -254/138, \ 4-8 = -254/806, \ 4-7 = -597/195,$ 5-7=-107/674

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb)
- 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 3-10-9 oc purlins,

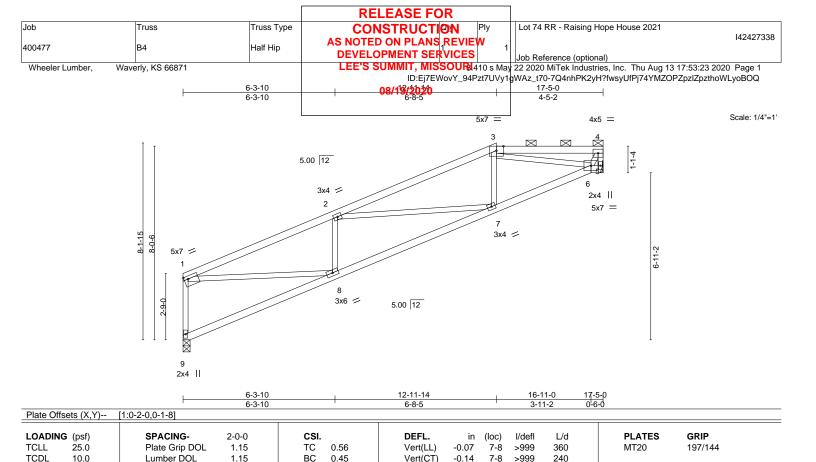
except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.

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

8-3-6 oc bracing: 8-9.

August 14,2020





Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.03

0.06

5

7-8

n/a

>999

8-4-12 oc bracing: 7-8.

n/a

240

LUMBER-

**BCLL** 

**BCDL** 

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

0.0

10.0

REACTIONS.

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

Rep Stress Incr

Code IRC2018/TPI2014

Max Horz 9=211(LC 5)

Max Uplift 9=-80(LC 8), 5=-133(LC 8) Max Grav 9=774(LC 1), 5=774(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-9=-732/187, 1-2=-1524/320, 2-3=-1282/242, 3-4=-377/67, 4-5=-703/116 **BOT CHORD** 7-8=-489/1480, 6-7=-275/1190

WFBS

 $1\text{-}8\text{--}247/1308,\ 2\text{-}8\text{--}405/192,\ 3\text{-}7\text{--}8/290,\ 3\text{-}6\text{--}730/196,\ 4\text{-}6\text{--}114/630}$ 

## 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

WB

Matrix-S

0.45

- 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.

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.
- 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 except (jt=lb) 5=133.
- 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: 63 lb

Structural wood sheathing directly applied or 4-0-15 oc purlins,

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

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

August 14,2020



Lot 74 RR - Raising Hope House 2021

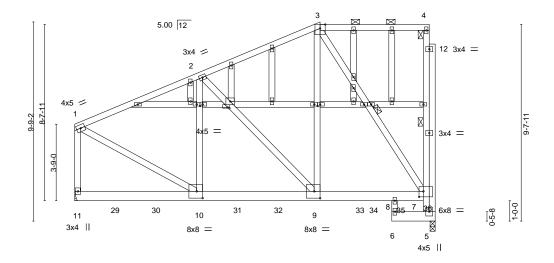
142427339

2-1-8

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-bce9vlLgjb8WX0XhD6FMdlvohpxmiCDyCXRL2nyoBOP 17-8-0

15-6-8 08/19/2020 5-10-14 6-1-6 3-6-3

Scale = 1:56.5



6x6 =

Plate Offs	ets (X,Y)	[7:0-2-8,0-3-4], [9:0-3-8,0	0-4-0], [10:0-3-8	3,0-4-0], [14:0-1-8,0-1-0],	[15:0-1-1,0-0-8],	[16:0-1-8,0-1-0]			
LOADING	i (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	-0.05 10-11	>999 360	MT20	197/144
TODI		1 50		50 007			000 040		

12-0-5

5-10-14

15-6-8

17-8-0

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

1 Row at midpt

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

4-5, 3-7

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

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

**TCDL** 10.0 Lumber DOL BC 0.27 Vert(CT) -0.08 10-11 >999 240 1.15 **BCLL** 0.0 Rep Stress Incr NO WB 0.49 Horz(CT) 0.03 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) **BCDL** 10.0 Matrix-S 0.03 10-11 >999 240 Weight: 309 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2

**BOT CHORD** 2x6 SP 2400F 2.0E \*Except\*

6-8: 2x4 SPF No.2 **WEBS** 2x4 SPF No.2

**OTHERS** 2x4 SPF No.2

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

Max Horz 11=370(LC 7)

Max Uplift 11=-317(LC 8), 5=-392(LC 5) Max Grav 11=3182(LC 1), 5=3305(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-2765/286, 2-3=-1896/249, 5-7=-3229/382, 1-11=-2604/298 **BOT CHORD** 10-11=-352/102, 9-10=-413/2487, 8-9=-280/1627, 7-8=-315/1580

2-10=-132/876, 2-9=-1162/208, 3-9=-270/2753, 3-7=-2903/335, 1-10=-247/2781 **WEBS** 

## 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) 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, with BCDL = 10.0psf.
- 11) Refer to girder(s) for truss to truss connections.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=317, 5=392.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Chit Green to abayeling representation does not depict the size or the orientation of the purlin along the top and/or bottom chord



August 14,2020

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

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

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

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



Job Truss Truss Type B5 400477 GABLE

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. Thu Aug 13 17:53:24 2020 Page 2

Lot 74 RR - Raising Hope House 2021

142427339

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-bce9vlLgjb8WX0XhD6FMdlvohpxmiCDyCXRL2nyoBOP

NOTES
08/19/2020

15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 619 lb down and 59 lb up at 2-0-0, 619 lb down and 63 lb up at 4-0-0, 619 lb down and 63 lb up at 6-0-0, 619 lb down and 63 lb up at 10-0-0, 619 lb down and 63 lb up at 12-0-0, and 619 lb down and 63 lb up at 12-0-0, and 619 lb down and 63 lb up at 10-0-0, 619 lb down and 63 lb up at 10-0-0, 619 lb down and 63 lb up at 12-0-0, and 619 lb down and 63 lb up at 10-0-0, 619 Ib up at 14-0-0, and 614 lb down and 63 lb up at 16-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. 16) Studding applied to ply: 1(Front)

## LOAD CASE(S) Standard

Wheeler Lumber,

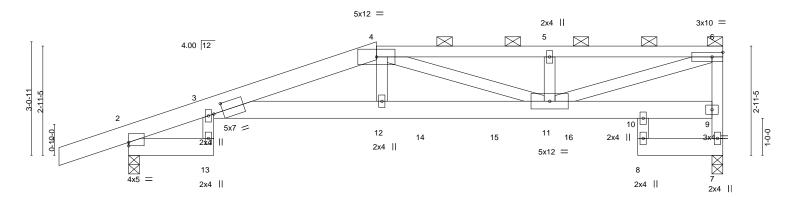
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 8-11=-20, 5-6=-20

Concentrated Loads (lb)

Vert: 10=-619(B) 9=-619(B) 29=-619(B) 30=-619(B) 31=-619(B) 32=-619(B) 33=-619(B) 35=-614(B)





	2-3-8 2-3-8		6-8-1 4-4-9		11-4-0 4-8-0	-	13-8-8 2-4-8	16-0-0 2-3-8	—
Plate Offsets (X,Y)	[2:0-0-0,0-1-2], [3:0-3-1,	0-2-9]							
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/T	2-0-0 1.15 1.15 NO Pl2014	CSI. TC 0.72 BC 0.83 WB 0.41 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.16 3-12 -0.28 3-12 0.19 7 0.14 3-12	>999 3 >677 2 n/a r	60 M <sup>-</sup> 40 n/a		IP //144 T = 10%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x6 SPF 1650F 1.4E \*Except\*

4-6: 2x4 SPF No.2 **BOT CHORD** 2x6 SPF No.2 \*Except\*

8-10: 2x4 SPF No.2 **WEBS** 2x4 SPF No.2

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

Max Horz 2=120(LC 5)

Max Uplift 7=-383(LC 4), 2=-384(LC 4) Max Grav 7=1518(LC 1), 2=1404(LC 1)

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

TOP CHORD 2-3=-680/133, 3-4=-4260/1051, 4-5=-3373/876, 5-6=-3373/876, 7-9=-1474/388,

6-9=-1264/343

**BOT CHORD** 3-12=-1017/4090, 11-12=-1035/4183

WEBS 4-12=-196/985, 4-11=-855/221, 5-11=-317/164, 6-11=-853/3349

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

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 7=383, 2=384,
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 449 lb down and 141 lb up at 6-8-1, 230 lb down and 81 lb up at 7-11-4, 230 lb down and 81 lb up at 9-11-4, and 230 lb down and 81 lb up at 11-11-4, and 230 lb down and 79 lb up at 13-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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

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

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

August 14,2020

Continued on page 2

LOAD CASE(S) Standard

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

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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION 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. Thu Aug 13 17:53:26 2020 Page 2 C1 400477

08/19/2020

Lot 74 RR - Raising Hope House 2021

142427340

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LOAD CASE(S) Standard

Uniform Loads (plf)

Wheeler Lumber,

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

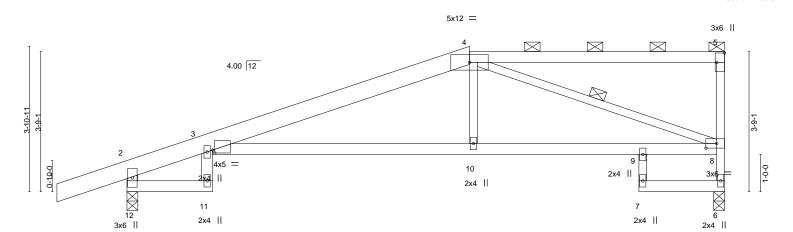
Waverly, KS 66871

Vert: 1-4=-70, 4-6=-70, 2-13=-20, 3-10=-20, 7-8=-20 Concentrated Loads (lb)

Vert: 10=-230(F) 12=-449(F) 14=-230(F) 15=-230(F) 16=-230(F)



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427341 AS NOTED ON PLANS REVIE 400477 C2 Half Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:27 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-?BKHXnNZ0WW4OTGGuEo3FOXCk1sfvXCPuVf0f6yoBOM 13-8-8 16-0-0 08/19/2020 1-10-8 2-3-8 6-10-9 4-6-7 2-3-8



	Z-J-U			0-10-3					4-0-1	2	0-0
Plate Offsets (X,Y)	[3:0-0-11,0-0-15], [5:Edge,0-2-8], [8:0-3-8,0-1-8]										
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.28	٠,	>670	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.55	3-10	>342	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.32	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2	014	Matri	x-S	Wind(LL)	0.24	3-10	>789	240	Weight: 61 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

9-2-1

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.4E \*Except\*

4-5: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 \*Except\* 7-9: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\* 3-11,2-12: 2x4 SPF No.2

REACTIONS. (size) 6=0-3-8, 12=0-3-8

Max Horz 12=166(LC 5) Max Uplift 6=-134(LC 4), 12=-216(LC 4) Max Grav 6=700(LC 1), 12=859(LC 1)

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

TOP CHORD 2-3=-263/11, 3-4=-1296/218, 6-8=-673/147, 2-12=-857/235

**BOT CHORD** 3-10=-212/1223, 9-10=-207/1229, 8-9=-215/1232

4-10=0/317, 4-8=-1250/226 **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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=134, 12=216.
- 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.



16-0-0

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

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

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

4-8

6-0-0 oc bracing: 6-7.

1 Row at midpt

Scale = 1:30.8

August 14,2020



Job Truss Truss Type 400477 C3 Half Hip Girder Wheeler Lumber, Waverly, KS 66871

5-9-13

5-9-13

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

Lot 74 RR - Raising Hope House 2021

142427342

Scale = 1:31.3

DEVELOPMENT SERVICES | Z | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:28 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-TOugk7OBngex0drSSyJlnb3TqQFRe4iY79PZBZyoBOL 08/19/2020<sup>11-5-1</sup> 5-7-5 12-8-0 16-0-0 1-2-15 3-4-0

6x6 = 2x4 || 3x6 = 5  $\boxtimes$  $\boxtimes$ 4.00 12 2x4 -9-1 8x8 = 5x7 10 9 5x12 = 2x4 ||

			0 0 10									
		5-9-13				5-7-5 1-2-15					3-4-0	
Plate Offs	sets (X,Y)	[8:0-6-4,0-4-12], [11:0-3-	12,0-2-8]									
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
CLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04	9-10	>999	360	MT20	197/144
CDL	10.0	Lumber DOL	1.15	ВС	0.55	Vert(CT)	-0.08	9-10	>999	240		
CLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-S	Wind(LL)	0.03	9-10	>999	240	Weight: 183 lb	FT = 10%
						1						

LUMBER-

2x4 SPF No.2 TOP CHORD

1-10-8

BOT CHORD 2x6 SP 2400F 2.0E \*Except\*

5-9: 2x4 SPF No.2 **WEBS** 2x4 SPF No.2 \*Except\*

2-11: 2x6 SPF No.2

**BRACING-**TOP CHORD

**BOT CHORD** 

11-5-1

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

6-0-0 oc bracing: 9-10.

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

Max Horz 11=178(LC 5)

5x7 II

Max Uplift 7=-443(LC 4), 11=-238(LC 4) Max Grav 7=3641(LC 1), 11=1074(LC 1)

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

TOP CHORD 2-3=-1633/234, 3-4=-1560/283, 4-5=-1573/257, 2-11=-880/245

**BOT CHORD** 10-11=-252/1477, 5-8=-174/1327, 7-8=-233/1732

WEBS 3-10=-323/200, 4-10=-335/301, 8-10=-219/1518, 4-8=-124/472, 5-7=-2150/306

## 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, 2x6 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-3-0 oc, 2x4 - 1 row at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) 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) 7=443, 11=238,
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3162 lb down and 337 lb up at 14-9-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



August 14,2020

LOAD CASE(S) Standard

Continued on page 2

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

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



Job Truss Truss Type СЗ 400477 Half Hip Girder

Waverly, KS 66871

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

LEE'S SUMMIT, MISSOURA410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:28 2020 Page 2

08/19/2020

Lot 74 RR - Raising Hope House 2021

142427342

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LOAD CASE(S) Standard

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

Uniform Loads (plf)

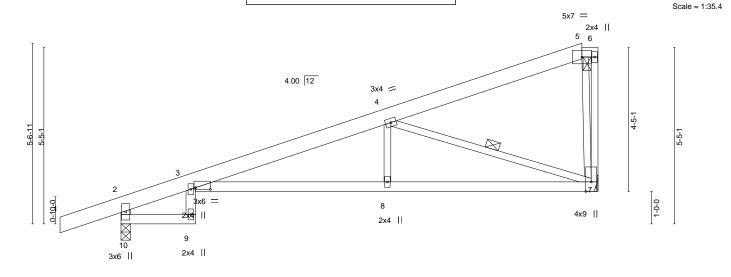
Wheeler Lumber,

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 9-11=-20, 7-8=-20

Concentrated Loads (lb) Vert: 12=-3162(B)

**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427343 AS NOTED ON PLANS REVIE 400477 C4 Half Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:29 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-xaS2ySPpY7moenQe?fqXKpcW?qZfNR3hMp86k?yoBOK 14-8-0 0-5-15 2-3-8 2-3-8 08/19/2020 + 1-10-8 5-10-13 5-11-12



14-8-0

6-5-11

1 Row at midpt

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

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

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

Plate Offsets (X,Y)--[3:0-5-7,0-0-10] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.87 Vert(LL) -0.19 3-8 >888 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.61 Vert(CT) -0.38 3-8 >461 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.58 Horz(CT) 0.21 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL 10.0 Matrix-S Wind(LL) >999 240 Weight: 62 lb 0.13 3-8

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

8-2-5

5-10-13

LUMBER-

TOP CHORD 2x6 SPF No.2 \*Except\*

5-6: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\*

3-9,2-10: 2x4 SPF No.2

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

Max Horz 10=168(LC 5)

Max Uplift 7=-39(LC 8), 10=-86(LC 4) Max Grav 7=639(LC 1), 10=800(LC 1)

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

TOP CHORD 2-3=-266/0, 3-4=-1338/61, 2-10=-795/103 **BOT CHORD** 3-8=-76/1271, 7-8=-75/1270

4-8=0/287, 4-7=-1314/110 WEBS

# NOTES-

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

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

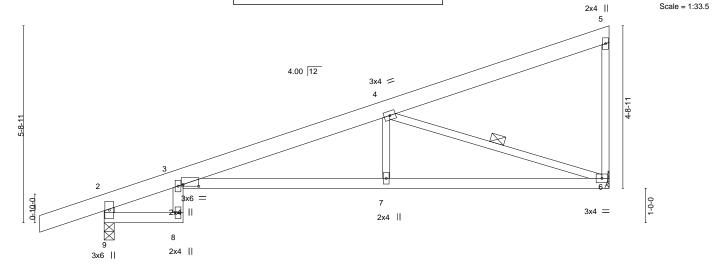


August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427344 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400477 C5 Monopitch DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:29 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-xaS2ySPpY7moenQe?fqXKpcW?qZfNRrhMp86k?yoBOK 2-3-8 2-3-8 08/19/2020 1-10-8 5-10-13 6-5-11



14-8-0

except end verticals.

1 Row at midpt

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

4-6

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

Plate Offsets (X,Y)	Plate Offsets (A, Y) [3:0-5-7,0-0-10]											
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 0.87	Vert(LL) -0.19 3-7 >894 360 MT20 197/144									
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.37 3-7 >463 240									
BCLL 0.0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.21 6 n/a n/a									
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.13 3-7 >999 240 Weight: 59 lb FT = 10%									

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

TOP CHORD 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\*

3-8,2-9: 2x4 SPF No.2

REACTIONS. (size) 6=Mechanical, 9=0-3-8 Max Horz 9=174(LC 5)

Max Uplift 6=-43(LC 8), 9=-86(LC 4) Max Grav 6=639(LC 1), 9=800(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-271/0, 3-4=-1347/62, 2-9=-795/102

3-7=-79/1281, 6-7=-78/1280 **BOT CHORD WEBS** 4-7=0/287, 4-6=-1345/118

- 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) 6, 9.
- 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.







**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427345 AS NOTED ON PLANS REVIE 400477 C6 Monopitch DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:30 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-Qm0Q9oPRJRufFx?qZNMms09hWExH6xeraTugGRyoBOJ 8-2-5 8-2-5 08/19/2020 1-10-8 6-5-11 Scale = 1:33.1 3x4 || 4 4.00 12 3x4 = 3 7 6x8 6 -11 5 2x4 || 3x4 =

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

WEBS

L/d

360

240

n/a

240

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

(loc)

6-7

6-7

5-6

5

>999

>934

>999

except end verticals

1 Row at midpt

n/a

-0.09

-0.18

0.02

0.03

**PLATES** 

Weight: 50 lb

MT20

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

GRIP

197/144

FT = 10%

LUMBER-

LOADING (psf)

TCLL

**TCDL** 

**BCLL** 

BCDL

25.0

10.0

0.0

10.0

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

2x3 SPF No.2 \*Except\* **WEBS** 2-7: 2x6 SPF No.2

REACTIONS. (size) 5=Mechanical, 7=0-3-8 Max Horz 7=190(LC 5)

Max Uplift 5=-43(LC 8), 7=-89(LC 4) Max Grav 5=634(LC 1), 7=803(LC 1)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

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

TOP CHORD 2-3=-928/38, 2-7=-715/134 **BOT CHORD** 6-7=-49/789, 5-6=-49/789 WFBS 3-6=0/317, 3-5=-873/89

## 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-S

0.88

0.46

0.43

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, 7.
- 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427346 AS NOTED ON PLANS REVIE C7 400477 Monopitch **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:30 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-Qm0Q9oPRJRufFx?qZNMms09plE?X61JraTugGRyoBOJ 08/19/2020 1-10-8 5-10-0 Scale = 1:17.6 3x4 || 3 4.00 12 0-10-0 2x4 || 3x10 5-10-0 Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** Plate Grip DOL **TCLL** 25.0 1.15 TC 0.36 Vert(LL) -0.04 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.25 Vert(CT) -0.08 4-5 >846 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

-0.00

0.01

n/a

>999

except end verticals.

4

4-5

n/a

240

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

Structural wood sheathing directly applied or 5-10-0 oc purlins,

LUMBER-

**BCLL** 

**BCDL** 

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

0.0

10.0

2x4 SPF No.2 \*Except\* 3-4: 2x3 SPF No.2

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

Max Horz 5=120(LC 5)

Max Uplift 4=-49(LC 8), 5=-138(LC 4) Max Grav 4=226(LC 1), 5=418(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-370/176

# 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

WB

Matrix-R

0.00

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

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.
- 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)
- 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.



FT = 10%

Weight: 18 lb

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427347 AS NOTED ON PLANS REVIE 400477 C8 Half Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:31 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-uzZoN8Q34I0Wt5a174t?PEhs2eHSrP2\_p7dDotyoBOI 14-8-0 08/19/2020 1-10-8 8-2-5 4-8-12 1-8-15 6x6 = Scale = 1:31.6 2x4 II 5 4.00 12 2x4 || 3 5-0-1 5-0-1 8 6x8 II 3x6 = 3x4 = 12-11-1 14-8-0 4-8-12 Plate Offsets (X,Y)--[7:0-2-8,0-1-8] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.90 Vert(LL) -0.09 7-8 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 BC 0.46 Vert(CT) -0.18 7-8 >933 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.35 Horz(CT) 0.01 6 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S 6-7 >999 240 Weight: 52 lb 0.03 LUMBER-**BRACING-**

TOP CHORD

**BOT CHORD** 

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

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

Max Horz 8=220(LC 5)

Max Uplift 6=-129(LC 4), 8=-201(LC 4) Max Grav 6=634(LC 1), 8=803(LC 1)

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

2-3=-913/142, 3-4=-873/232, 2-8=-718/247 TOP CHORD

**BOT CHORD** 7-8=-141/772

**WEBS** 3-7=-439/240, 4-7=-210/826, 4-6=-573/133

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=129, 8=201.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427348 AS NOTED ON PLANS REVIE 400477 C9 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:31 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-uzZoN8Q34l0Wt5a174t?PEhtBeEtrQv\_p7dDotyoBOI 14-8-0 08/19/2020 1-10-8 5-2-11 3-0-0 1-2-15 2x4 | Scale = 1:28.9 5x7 = 6x6 = 6 4.00 12 3x4 = 3x10 =  $\bigotimes$ 9 8 10 7 2x4 || 3x10 = 3x6 = 3x4 = Plate Offsets (X,Y)--[2:0-0-8,0-1-8] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.82 Vert(LL) -0.09 8-9 >999 360 MT20 197/144

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

-0.16

0.02

0.07

8-9

8-9

>999

>999

n/a

240

n/a

240

Structural wood sheathing directly applied or 4-2-2 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

LUMBER-

**TCDL** 

**BCLL** 

BCDL

TOP CHORD 2x4 SPF No.2 \*Except\* 5-6: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\* 2-10: 2x6 SP DSS

10.0

0.0

10.0

REACTIONS.

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

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Horz 10=203(LC 5)

Max Uplift 7=-130(LC 8), 10=-204(LC 4) Max Grav 7=634(LC 1), 10=803(LC 1)

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

TOP CHORD 2-3=-998/169, 3-4=-584/119, 4-5=-522/138, 2-10=-697/219

**BOT CHORD** 9-10=-180/869, 8-9=-180/869

**WEBS** 3-8=-385/126, 5-8=-110/563, 5-7=-600/144

# 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

ВС

WB 0.30

Matrix-S

0.69

- 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.

1.15

YES

- 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) 7=130, 10=204.
- 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.



FT = 10%

Weight: 58 lb

August 14,2020



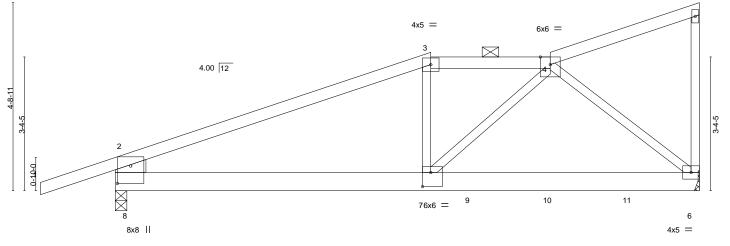


Plate Offsets (X,Y)	Plate Offsets (X,Y) [7:0-2-8,0-4-4], [8:0-5-4,0-4-0]											
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP									
TCLL 25.0	Plate Grip DOL 1.15	TC 0.94	Vert(LL) -0.15 6-7 >999 360 MT20 197/144									
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.27 6-7 >629 240									
BCLL 0.0 *	Rep Stress Incr NO	WB 0.80	Horz(CT) 0.02 6 n/a n/a									
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.14 6-7 >999 240 Weight: 60 lb FT = 10%									

**BRACING-**

TOP CHORD

**BOT CHORD** 

10-11-1

LUMBER-

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

1-3: 2x4 SPF 2100F 1.8E **BOT CHORD** 2x6 SPF 1650F 1.4E **WEBS** 2x3 SPF No.2 \*Except\*

2-8: 2x10 SP DSS

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

Max Horz 8=204(LC 22)

Max Uplift 6=-381(LC 8), 8=-345(LC 4) Max Grav 6=1404(LC 1), 8=1219(LC 1)

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

TOP CHORD 2-3=-1995/494, 3-4=-1781/498, 2-8=-1098/378

BOT CHORD 7-8=-464/1791, 6-7=-284/1107

**WEBS** 3-7=-113/352, 4-7=-252/942, 4-6=-1415/419

# 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

7-11-

- 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) 6=381, 8=345.
- 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) 503 lb down and 181 lb up at 7-11-1, 211 lb down and 76 lb up at 8-11-13, and 238 lb down and 83 lb up at 10-11-4, and 238 lb down and 83 lb up at 12-11-4 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 Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20



14-8-0

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

except end verticals, and 2-0-0 oc purlins (4-3-13 max.): 3-4.

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

August 14,2020

## Continued on page 2



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

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



**RELEASE FOR** Job Truss Truss Type C10 400477

CONSTRUCTION

Lot 74 RR - Raising Hope House 2021

142427349

Roof Special Girder AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES | Job Reference (optional) | Job Ref

LOAD CASE(S) Standard

Wheeler Lumber,

Concentrated Loads (lb) Vert: 7=-503(B) 9=-211(B) 10=-238(B) 11=-238(B)

Waverly, KS 66871

08/19/2020

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

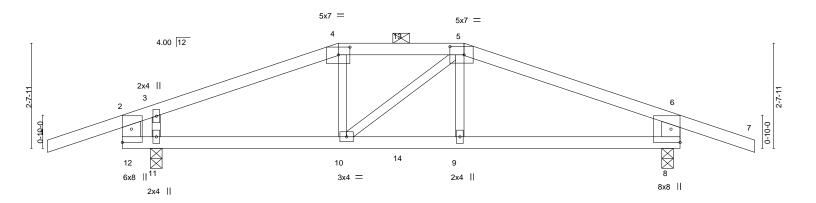
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 142427350 AS NOTED ON PLANS REVIE D1 400477 Hip Girder DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:32 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-M97AaURhr28NVE8DhnOEyRE3R2WoawH82nNmKKyoBOH -1-10-8 1-10-8 0-10-4 0-10-4 15-10-8 1-10-8 0<del>8/19/2020</del>



	0-8-8	5-5-1 4-6-13		8-6-15 3-1-14	-	13-10-0 5-3-1	14 <sub>F</sub> 0 <sub>3</sub> 0 0-2-0
Plate Offsets (X,Y)	0-1-12 [4:0-3-8,0-2-5], [5:0-4-4,	0-2-8]					
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/T	2-0-0 1.15 1.15 NO PI2014	CSI. TC 0.73 BC 0.90 WB 0.10 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.15 9-10 -0.27 9-10 0.02 8 0.14 9-10	I/defl L/d >999 360 >570 240 n/a n/a >999 240	PLATES GRIP MT20 197/144  Weight: 46 lb FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

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

4-5: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF 2100F 1.8E **WEBS** 2x3 SPF No.2 \*Except\*

2-12,6-8: 2x6 SP DSS

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

Max Horz 11=22(LC 8)

0-10-4

Max Uplift 8=-269(LC 5), 11=-303(LC 4) Max Grav 8=927(LC 1), 11=1021(LC 1)

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

TOP CHORD 2-3=-982/207, 3-4=-1107/265, 4-5=-971/258, 5-6=-1259/292, 2-12=-370/71,

6-8=-813/284

11-12=-181/963, 10-11=-165/963, 9-10=-196/1118, 8-9=-196/1105 **BOT CHORD** 

**WEBS** 5-9=-23/307, 3-11=-432/212

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=269, 11=303.
- 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) 79 lb down and 64 lb up at 7-0-0 on top chord, and 197 lb down and 86 lb up at 5-5-1, and 27 lb down at 7-0-0, and 197 lb down and 86 lb up at 8-6-15 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 5-6-6 oc purlins,

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

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

Scale = 1:28.9

August 14,2020





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

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

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



**RELEASE FOR** Truss Type Job Truss D1 400477 Hip Girder

CONSTRUCTION

08/19/2020

AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

Job Reference (optional)

LEE'S SUMMIT, MISSOUR: 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:32 2020 Page 2

Lot 74 RR - Raising Hope House 2021

142427350

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-M97AaURhr28NVE8DhnOEyRE3R2WoawH82nNmKKyoBOH

LOAD CASE(S) Standard

Wheeler Lumber,

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-6=-70, 6-7=-70, 8-12=-20

Concentrated Loads (lb)

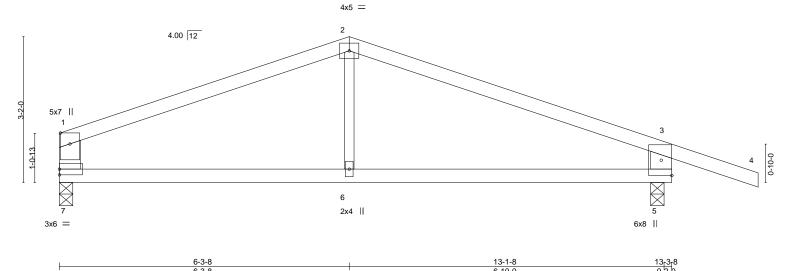
Vert: 10=-197(F) 9=-197(F) 13=-28(F) 14=-12(F)

Waverly, KS 66871



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427351 AS NOTED ON PLANS REVIE D2 400477 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:33 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-qLhZoqSJcMGE6OjPEVvTUfnDxRycJNxHGR6KtmyoBOG 15-2-0 6-3-8 6-3-8 08/19/2020 -0-0 1-10-8



	0-3-8		0-2-0		
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 0.74	Vert(LL)	-0.10 5-6 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.55	Vert(CT)	-0.20 5-6 >760 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.01 5 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.06 5-6 >999 240	Weight: 38 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD** 2x6 SPF No.2 \*Except\*

**WEBS** 2-6: 2x3 SPF No.2

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

Max Horz 7=-46(LC 5)

Max Uplift 7=-81(LC 4), 5=-181(LC 5) Max Grav 7=565(LC 1), 5=737(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-744/98, 2-3=-756/104, 1-7=-462/113, 3-5=-646/220

**BOT CHORD** 6-7=-26/630, 5-6=-26/630

# 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.
- 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) 7 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.



Structural wood sheathing directly applied or 5-6-0 oc purlins,

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

except end verticals.

Scale = 1:25.0

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427352 AS NOTED ON PLANS REVIE 400477 D3 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:34 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy 1gWAz\_t70-IYFx?ATyMgO5kYIcoCQi1sJPFrL?2rsRV5stPCyoBOF 6-3-8**08/19/2020** 6-3-8 1-3-8 Scale = 1:20.9 4x5 = 2 5x7 || 4.00 12 3 3x4 || 1-0-13 5 2x4 || 2x4 || 5x7 II

6-3-8	7-7-0
6-3-8	1-3-8

T late Oil	13013 (7, 1)	[0.0 0 11,0 0 0]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.64	Vert(LL) -0.07 5-6 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.17 5-6 >529 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 4 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.06 5-6 >999 240	Weight: 23 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\*

Plate Offsets (X V)-- [3:0-3-11 0-0-0]

1-6: 2x4 SPF No.2

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

Max Horz 6=100(LC 5)

Max Uplift 6=-53(LC 4), 4=-55(LC 4)

Max Grav 6=330(LC 1), 4=330(LC 1)

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

TOP CHORD 1-6=-257/90

# 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) 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.

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427353 AS NOTED ON PLANS REVIE D4 400477 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:34 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy 1gWAz\_t70-IYFx?ATyMgO5kYIcoCQi1sJQ8rMU2rtRV5stPCyoBOF 6-0-0**08/19/2020** 1-3-8 Scale = 1:21.0 4x5 = 5x7 || 4.00 12 3x4 | 2-8-13 1-2-0 2x4 || 2x4 || 5x7 || 6-0-0 Plate Offsets (X,Y)--[3:0-3-11,0-0-0] SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 CSI. (loc) I/defI L/d Plate Grip DOL 0.59 **TCLL** 25.0 1.15 TC Vert(LL) -0.06 5-6 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.31 Vert(CT) -0.14 5-6 >594 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.03 Horz(CT) 0.00 n/a n/a

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.05

5-6

>999

except end verticals.

240

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

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

LUMBER-

**BCDL** 

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

10.0

2x3 SPF No.2 \*Except\* 1-6: 2x4 SPF No.2

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

Max Horz 6=99(LC 5)

Max Uplift 6=-51(LC 4), 4=-52(LC 4) Max Grav 6=317(LC 1), 4=317(LC 1)

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

Code IRC2018/TPI2014

- 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

Matrix-R

- 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) 6, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

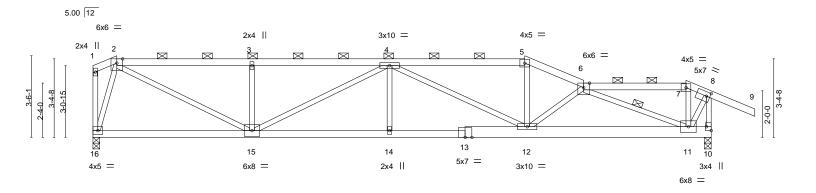


FT = 10%

Weight: 22 lb

August 14,2020





լ1-0-5 լ	6-10-1	12-9-1	18-6-13	21-1-3	25-6-0 26-7-0	
1-0-5	5-9-12	5-11-0	5-9-12	2-6-6	4-4-13 1-1-0	
Plate Offsets (X,Y) [8	:0-1-13,0-2-3], [10:Edge,0-2-8]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP	
TCLL 25.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL) -0.16 14-15	>999 360	MT20 197/144	4
CDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.30 14-15	>999 240		
3CLL 0.0 *	Rep Stress Incr NO	WB 0.75	Horz(CT) 0.07 10	n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.13 14	>999 240	Weight: 107 lb FT =	10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

10-13: 2x6 SPF No.2

**WEBS** 2x3 SPF No.2

REACTIONS. (size) 16=0-3-8, 10=0-3-8 Max Horz 16=-129(LC 6)

Max Uplift 16=-204(LC 5), 10=-360(LC 5) Max Grav 16=1179(LC 1), 10=1255(LC 1)

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

 $2\text{-}3\text{--}2004/394,\ 3\text{-}4\text{--}2002/392,\ 4\text{-}5\text{--}2105/387,\ 5\text{-}6\text{--}2323/409,\ 6\text{-}7\text{--}483/114,}$ TOP CHORD

7-8=-546/130, 8-10=-1314/309

**BOT CHORD** 15-16=-61/357, 14-15=-454/2572, 12-14=-454/2573, 11-12=-437/2400 **WEBS** 

2-15=-323/1872, 3-15=-450/181, 4-15=-645/123, 4-12=-698/157, 5-12=-57/607,

6-12=-360/147, 6-11=-2138/387, 2-16=-1215/298, 8-11=-182/1033

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=204, 10=360,
- 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) 29 lb down and 80 lb up at 25-6-0 on top chord, and 139 lb down and 746 lb up at 25-4-15 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 3-8-14 oc purlins,

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

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (3-5-10 max.): 2-5, 6-7.

August 14,2020





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

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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

**RELEASE FOR** Job Truss Truss Type E1 400477

CONSTRUCTION Roof Special Girder

AS NOTED ON PLANS REVIEW 1
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:36 2020 Page 2
ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-EwNhQsUCuHepzsS\_wdSA6HPmRfvIWZ9jzPL\_T5yoBOD

Lot 74 RR - Raising Hope House 2021

142427354

LOAD CASE(S) Standard Uniform Loads (plf)

Wheeler Lumber,

Vert: 1-2=-70, 2-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 10-16=-20

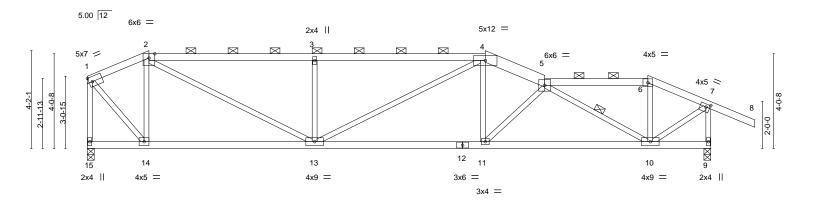
Waverly, KS 66871

Concentrated Loads (lb) Vert: 7=22(F) 11=57(F)

08/19/2020



### **RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 142427355 AS NOTED ON PLANS REVIE 400477 E2 Roof Special **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:36 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-EwNhQsUCuHepzsS\_wdSA6HPjTfxjWdwjzPL\_T5yoBOD 26-7-0 19-6-0 23-10-13 28-5-8 <del>08/19/2020</del> 7-0-13 4-4-13 2-8-3 1-10-8



F	2-7-8 2-7-8		9-8-5 7-0-13	-		16-11-10 7-3-5	+	19-6-0 2-6-6	23-10		
Plate Offsets (X	Y) [7:0-2-(	0,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (lo	,	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.13 11-		360	MT20	197/144
TCDL 10.0 BCLL 0.0		Lumber DOL Rep Stress Incr	1.15 YES	BC WB	0.65 0.50	Vert(CT) Horz(CT)	-0.25 11- 0.06	13 >999 9 n/a	240 n/a		
BCDL 10.0		Code IRC2018/TF	PI2014	Matrix	x-S	Wind(LL)	0.10 11-	13 >999	240	Weight: 104 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

**WEBS** 

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

4-5: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 2x3 SPF No.2

REACTIONS. (size) 15=0-3-8, 9=0-3-8 Max Horz 15=-130(LC 4)

Max Uplift 15=-176(LC 5), 9=-235(LC 5) Max Grav 15=1182(LC 1), 9=1331(LC 1)

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

TOP CHORD 1-2=-805/156, 2-3=-2037/394, 3-4=-2035/392, 4-5=-2124/357, 5-6=-968/154,

6-7=-1088/161, 1-15=-1185/178, 7-9=-1327/232

**BOT CHORD** 13-14=-96/753, 11-13=-278/1956, 10-11=-349/2207

**WEBS** 2-14=-728/202, 2-13=-263/1469, 3-13=-590/240, 4-13=-73/266, 4-11=-12/434,

5-11=-377/140, 5-10=-1448/270, 1-14=-167/1122, 7-10=-137/1202

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=176, 9=235,
- 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 4-11-7 oc purlins,

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

1 Row at midpt

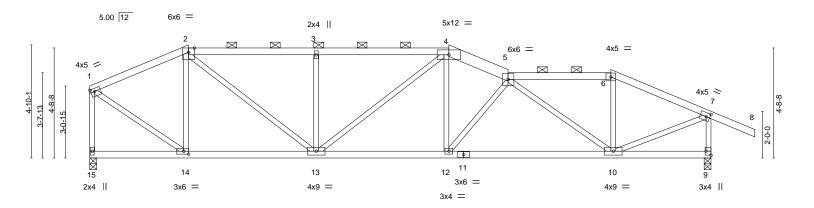
except end verticals, and 2-0-0 oc purlins (2-11-8 max.): 2-4, 5-6.

Scale = 1:49.1

August 14,2020



**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 142427356 AS NOTED ON PLANS REVIE 400477 E3 Roof Special **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:37 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-i7x3dBVqfbmfb01BTL\_PfVx\_g3lgF?dtB34X0XyoBOC 26-7-0 15**-08/19/2020** 5-8-2 17-10-13 22-3-10 28-5-8 4-2-11 5-5-10 2-6-6 4-4-13 4-3-6 1-10-8 Scale = 1:49.3



<del> </del>	4-2-11 4-2-11	9-8-5 5-5-10		15-4-6 5-8-2	17-10-13 2-6-6		2-3-10 -4-13	26-7-0 4-3-6	——
Plate Offsets (X,Y)	[1:0-2-0,0-1-8], [7:0	-1-14,0-2-0], [9:Edg	e,0-2-8], [14:0-2-8,0-1-8]						
COADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip Di Lumber DOL Rep Stress I Code IRC20	. 1.15 ncr YES	CSI. TC 0.44 BC 0.60 WB 0.80 Matrix-S	Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in (loc) -0.09 12-13 -0.20 10-12 0.05 9 0.07 12-13	>999 n/a	L/d 360 240 n/a 240	PLATES MT20 Weight: 108 lb	<b>GRIP</b> 197/144 FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

**WEBS** 

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

4-5: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 2x3 SPF No.2

> (size) 15=0-3-8, 9=0-3-8 Max Horz 15=-128(LC 4)

Max Uplift 15=-153(LC 5), 9=-218(LC 5)

Max Grav 15=1182(LC 1), 9=1331(LC 1)

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

 $1\hbox{-}2\hbox{--}1053/187, 2\hbox{-}3\hbox{--}1688/324, 3\hbox{-}4\hbox{--}1686/323, 4\hbox{-}5\hbox{--}1901/319, 5\hbox{-}6\hbox{--}1203/194,}$ TOP CHORD

6-7=-1364/195, 1-15=-1149/173, 7-9=-1302/231

**BOT CHORD** 13-14=-105/944, 12-13=-222/1741, 10-12=-292/2005

**WEBS** 2-14=-539/151, 2-13=-171/991, 3-13=-465/186, 4-12=-42/485, 5-12=-446/154,

5-10=-1003/192, 6-10=0/264, 1-14=-147/1120, 7-10=-143/1304

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=153, 9=218.
- 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 4-10-1 oc purlins,

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

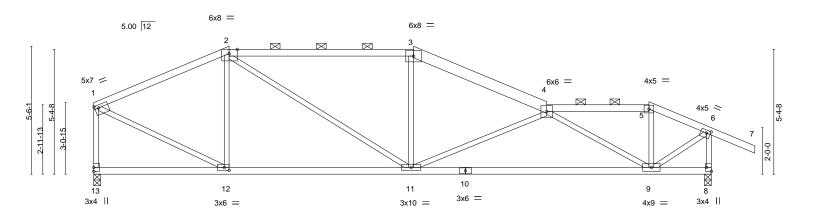
except end verticals, and 2-0-0 oc purlins (4-1-5 max.): 2-4, 5-6.

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427357 AS NOTED ON PLANS REVIE E4 400477 Roof Special DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:38 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-BJUSrXWSQuuWD9cN12VeBiU4kSaY\_P60Qjq5YzyoBOB 26-7-0 23-10-13 28-5-8 08/19/2020 5-9-14 7-11-5 5-8-13 4-4-13 2-8-3 1-10-8



5-9-14		1	13-9-3	19-6-0			23-10-13		26-7-0	
	5-9-14	1	7-11-5		5	8-13		4-4	l-13	2-8-3
Plate Offsets (X,Y)	[1:0-2-0,0-1-8], [2:0-4-3,Ed	dge], [6:0-2-0	,0-1-8], [8:Edge,0-	2-8], [12:0-2-8,0	-1-8]					
LOADING (psf)	SPACING-	2-0-0	CSI.	D	EFL. ir	(loc)	I/defI	L/d	PLATES	GRIP GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.74	V	ert(LL) -0.24	9-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.88	V	ert(CT) -0.50	9-11	>630	240		
3CLL 0.0 *	Rep Stress Incr	YES	WB 0.97	H	orz(CT) 0.05	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI	2014	Matrix-S	l w	ind(LL) 0.06	9-11	>999	240	Weight:	106 lb FT = 10%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

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

2-3: 2x4 SPF 2100F 1.8E, 3-4: 2x6 SPF No.2

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

**WEBS** 2x3 SPF No.2

REACTIONS. (size) 13=0-3-8, 8=0-3-8 Max Horz 13=-126(LC 4)

Max Uplift 13=-124(LC 5), 8=-206(LC 5) Max Grav 13=1182(LC 1), 8=1331(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-1221/188, 2-3=-1591/256, 3-4=-1784/248, 4-5=-998/117, 5-6=-1120/112,

1-13=-1134/152. 6-8=-1365/180

11-12=-93/1078, 9-11=-292/2188

**WEBS** 2-12=-390/142, 2-11=-94/681, 3-11=0/297, 4-11=-663/230, 4-9=-1391/256,

1-12=-129/1166, 6-9=-77/1246

**BOT CHORD** 

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=124, 8=206.
- 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 4-6-15 oc purlins,

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

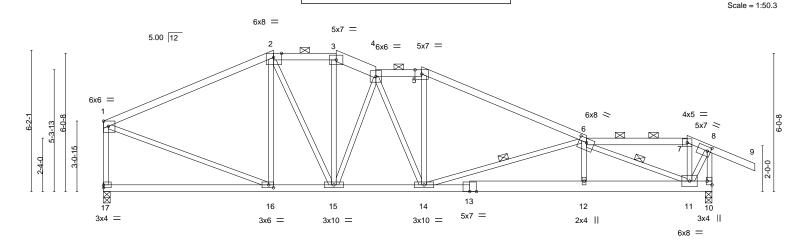
6-0-0 oc bracing: 8-9.

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

Scale = 1:49.6

August 14,2020





<del> </del>	7-5-2 7-5-2	10-2-0   11-10-13   2-8-14   1-8-13	13-10-13 2-0-0	21-1-3 7-2-6	25-6-0 4-4-13	<del>26-7-0</del> 1-1-0
Plate Offsets (X,Y)	[1:Edge,0-2-12], [2:0-4-3,Edge], [6:0-4-0				4-4-13	1-1-0
LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15	CSI. TC 0.70 BC 0.75	Vert(LL) -0.12 12 Vert(CT) -0.22 12		PLATES MT20	<b>GRIP</b> 197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr NO Code IRC2018/TPI2014	WB 0.60 Matrix-S	Horz(CT) 0.05 Wind(LL) 0.09 12	10 n/a n/a -14 >999 240	Weight: 122 lb	FT = 10%

TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-**BRACING-**

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

1-2,5-6: 2x4 SPF 2100F 1.8E, 3-4: 2x6 SPF No.2

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

10-13: 2x6 SPF No.2 **WEBS** 2x3 SPF No.2

REACTIONS. (size) 17=0-3-8, 10=0-3-8

Max Horz 17=-124(LC 6)

Max Uplift 17=-101(LC 8), 10=-333(LC 9) Max Grav 17=1179(LC 1), 10=1255(LC 1)

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

TOP CHORD 1-2=-1290/171, 2-3=-1262/228, 3-4=-1364/229, 4-5=-1561/291, 5-6=-1790/265, 6-7=-481/128, 7-8=-555/143, 1-17=-1112/137, 8-10=-1339/326

**BOT CHORD** 

15-16=-57/1112, 14-15=-120/1502, 12-14=-373/2452, 11-12=-377/2447 2-16=-274/114, 2-15=-116/468, 3-15=-60/367, 4-15=-722/179, 5-14=0/320, **WEBS** 

6-14=-923/234, 6-11=-2182/305, 1-16=-83/1130, 8-11=-210/1032

## 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=101, 10=333.
- 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) 29 lb down and 80 lb up at 25-6-0 on top chord, and 139 lb down and 746 lb up at 25-4-15 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



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

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

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (4-3-12 max.): 2-3, 4-5,

6-14, 6-11

August 14,2020





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

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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Roof Special Girder

AS NOTED ON PLANS REVIEW 1
DEVELOPMENT SERVICES 1
Job Reference (optional)
LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:40 2020 Page 2
ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-7hcCGDXiyW9ESTml9TX6G7ZRuGl2SPNJt1JCcsyoBO9 E5 400477

Lot 74 RR - Raising Hope House 2021

142427358

08/19/2020

LOAD CASE(S) Standard

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

Waverly, KS 66871

Uniform Loads (plf)

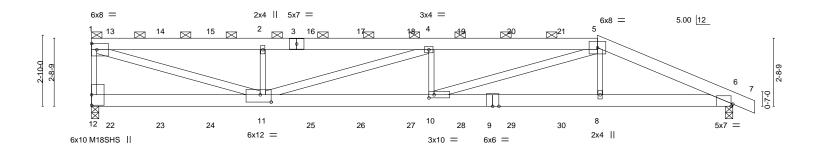
Wheeler Lumber,

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 10-17=-20

Concentrated Loads (lb)

Vert: 7=22(B) 11=57(B)





<del></del>	6-10-0 6-10-0	13-6-11 6-8-12	20-2-3 6-7-8	25-7-0 5-4-13
Plate Offsets (X,Y)	[6:0-0-14,Edge], [10:0-2-8,0-1-8], [11:0		0.0	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. DEI	( /	<b>PLATES GRIP</b> MT20 197/144
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.96 Ver	(CT) -0.56 10-11 >546 240 z(CT) 0.09 6 n/a n/a	M18SHS 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S Wir	d(LL) 0.26 10-11 >999 240	Weight: 124 lb FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

TOP CHORD 2x6 SPF No.2 \*Except\*

3-5: 2x6 SPF 1650F 1.4E **BOT CHORD** 2x6 SPF No.2 \*Except\* 9-12: 2x6 SPF 1650F 1.4E

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

1-11,4-11,5-10: 2x4 SPF 2100F 1.8E

REACTIONS. (size) 12=0-3-8, 6=0-3-8

Max Horz 12=-103(LC 4)

Max Uplift 12=-428(LC 4), 6=-397(LC 5) Max Grav 12=2125(LC 1), 6=2054(LC 1)

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

TOP CHORD 1-12=-1971/487, 1-2=-4799/986, 2-4=-4799/986, 4-5=-6090/1255, 5-6=-4493/872

**BOT CHORD** 10-11=-1176/6086, 8-10=-745/4029, 6-8=-745/4054

1-11=-1008/4983, 2-11=-874/405, 4-11=-1358/290, 4-10=-474/304, 5-10=-457/2277, **WEBS** 

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 12=428, 6=397.
- 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) 113 lb down and 88 lb up at 0-9-8, 108 lb down and 90 lb up at 2-9-8, 108 lb down and 90 lb up at 4-9-8, 108 lb down and 90 lb up at 6-9-8, 108 lb down and 90 lb up at 8-9-8, 108 lb down and 90 lb up at 10-9-8, 108 lb down and 90 lb up at 12-9-8, 108 lb down and 90 lb up at 14-9-8, and 108 lb down and 90 lb up at 16-9-8, and 108 lb down and 90 lb up at 18-9-8 on top chord, and 73 lb down at 0-9-8, 67 lb down at 2-9-8, 67 lb down at 4-9-8, 67 lb down at 6-9-8, 67 lb down at 8-9-8, 67 lb down at 10-9-8, 67 lb down at 12-9-8, 67 lb down down at 14-9-8, 67 lb down at 16-9-8, and 67 lb down at 18-9-8, and 354 lb down and 117 lb up at 20-2-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

CONTINUES GOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)



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

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

Rigid ceiling directly applied or 8-0-1 oc bracing.

August 14,2020

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

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

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

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



Job Truss Truss Type G1 400477 Half Hip Girder

Waverly, KS 66871

# **RELEASE FOR** CONSTRUCTION

AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

1
Job Reference (optional)

LEE'S SUMMIT, MISSOURM410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:41 2020 Page 2

Lot 74 RR - Raising Hope House 2021

142427359

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-buAaTZYLjpH54dLyiA2MpL6XSgZyBrUS6h2l9lyoBO8

08/19/2020

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Wheeler Lumber,

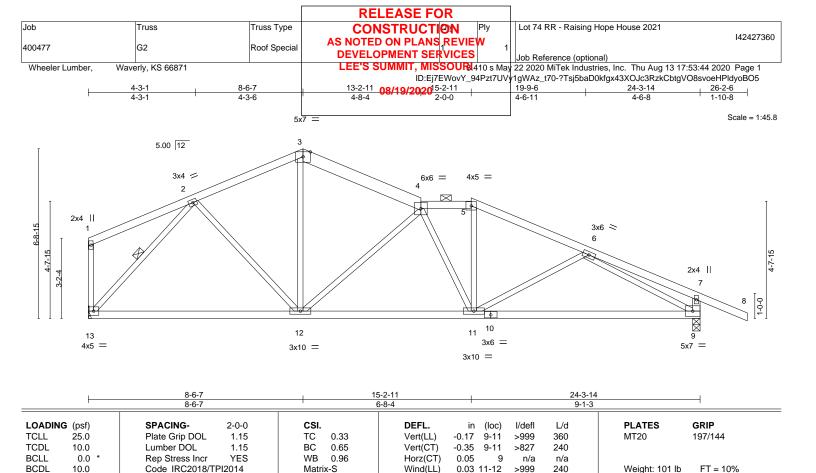
Vert: 1-5=-70, 5-7=-70, 6-12=-20

Concentrated Loads (lb)

Vert: 11=-43(F) 2=-103(F) 8=-354(F) 13=-113(F) 14=-103(F) 15=-103(F) 16=-103(F) 17=-103(F) 18=-103(F) 19=-103(F) 20=-103(F) 21=-103(F) 22=-46(F)

23=-43(F) 24=-43(F) 25=-43(F) 26=-43(F) 27=-43(F) 28=-43(F) 29=-43(F) 30=-43(F)

16023 Swingley Ridge Rd Chesterfield, MO 63017



BRACING-

TOP CHORD

BOT CHORD

**WEBS** 

LUMBER-

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

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

7-9: 2x4 SPF No.2

REACTIONS. (size) 13=Mechanical, 9=0-3-8

Max Horz 13=-110(LC 6) Max Uplift 9=-51(LC 9)

Max Grav 13=1077(LC 1), 9=1231(LC 1)

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

2-3=-1084/64, 3-4=-1069/51, 4-5=-1389/64, 5-6=-1569/52, 6-7=-282/0, 7-9=-375/47 TOP CHORD

12-13=0/789, 11-12=0/1460, 9-11=-36/1450 BOT CHORD

**WEBS** 2-12=0/308, 3-12=0/467, 4-12=-709/83, 5-11=0/338, 2-13=-1160/22, 6-9=-1501/104

## 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 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 4-2-15 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-10-15 max.): 4-5.

2-13

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

1 Row at midpt

August 14,2020



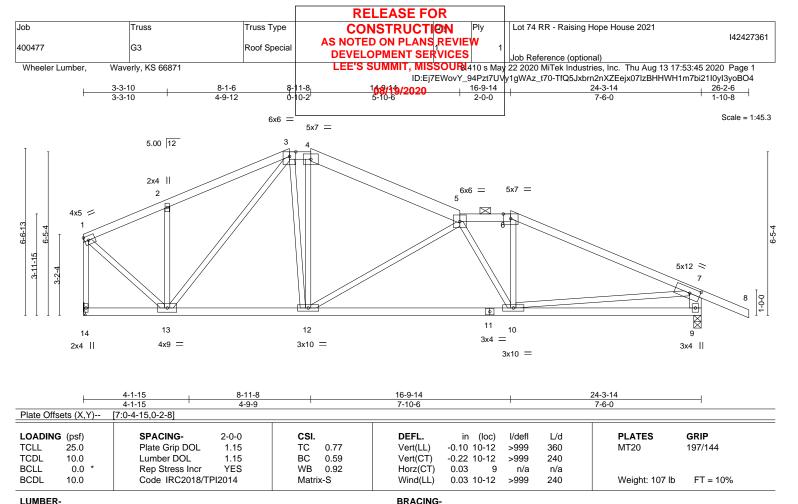


Design valid for use only with MiTek's connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

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





TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\* 4-5: 2x6 SPF No.2

**BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\* 7-9: 2x6 SPF No.2

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

Max Horz 14=-110(LC 6) Max Uplift 9=-50(LC 9)

Max Grav 14=1073(LC 1), 9=1233(LC 1)

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

TOP CHORD 1-2=-813/27, 2-3=-852/63, 3-4=-994/65, 4-5=-1133/47, 5-6=-1471/62, 6-7=-1709/40,

1-14=-1045/8, 7-9=-1165/88

**BOT CHORD** 12-13=0/947, 10-12=0/1626, 9-10=-69/416

**WEBS** 2-13=-318/101, 3-13=-398/0, 3-12=-20/506, 5-12=-747/89, 5-10=-317/30, 6-10=0/351,

1-13=0/984, 7-10=0/1068

## 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) 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 3-3-14 oc purlins,

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

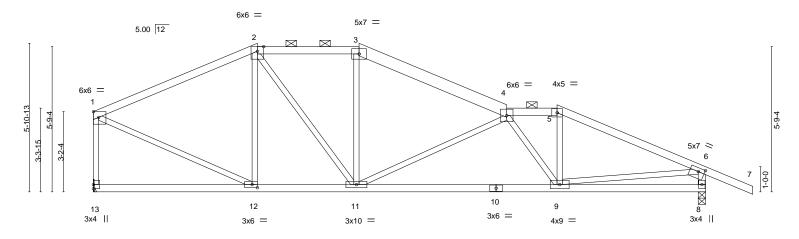
except end verticals, and 2-0-0 oc purlins (4-7-12 max.): 3-4, 5-6.

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427362 AS NOTED ON PLANS REVIE 400477 G4 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:45 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-TfQ5Jxbrn2nXZEejx07lzBHHLH1l7d821l0yl3yoBO4 24-3-14 26-2-6 <del>08/19/2020</del>5-10-6 6-6-3 -0-8 2-0-0 5-10-13 1-10-8 Scale = 1:45.8



	6-6-3	4-0-8	5-10-6	2-0-0	5-10-13	
Plate Offsets (X	Y) [1:Edge,0-2-12], [6:0-3-0,0-1-12	l, [12:0-2-8,0-1-8]				
LOADING (psf)	SPACING- 2-0-	CSI.	DEFL. in	(loc) I/defl L/d	PLATES GRIP	
TCLL 25.0	Plate Grip DOL 1.1	TC 0.71	Vert(LL) -0.12	9-11 >999 360	MT20 197/144	ļ
TCDL 10.0	Lumber DOL 1.1	BC 0.62	Vert(CT) -0.27	9-11 >999 240		
BCLL 0.0	* Rep Stress Incr YE	WB 0.82	Horz(CT) 0.03	8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.04	9-11 >999 240	Weight: 101 lb FT = 1	10%

16-5-1

**BRACING-**

TOP CHORD

**BOT CHORD** 

18-5-1

Structural wood sheathing directly applied or 3-5-6 oc purlins,

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

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

LUMBER-

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

**BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 \*Except\* 6-8: 2x4 SPF No.2

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

Max Horz 13=-110(LC 6) Max Uplift 8=-45(LC 9)

Max Grav 13=1077(LC 1), 8=1231(LC 1)

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

TOP CHORD 1-2=-1095/37, 2-3=-1180/51, 3-4=-1334/30, 4-5=-1525/44, 5-6=-1749/25, 1-13=-1015/21, 6-8=-1178/69

11-12=0/944, 9-11=0/1830

**BOT CHORD WEBS** 2-12=-321/59, 2-11=-24/483, 4-11=-735/92, 4-9=-540/43, 5-9=0/410, 1-12=0/988,

## 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.
- 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.



August 14,2020



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

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

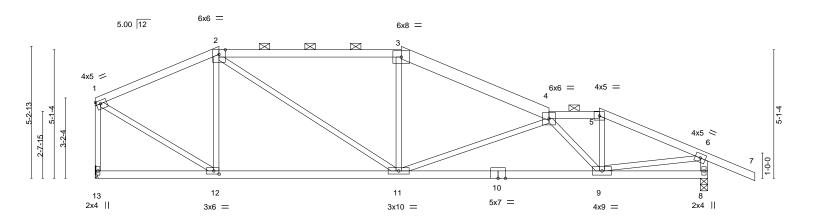
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427363 AS NOTED ON PLANS REVIE 400477 G5 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:46 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 70-yrzTWGcTYMvOAODvVkeXWOpVbhMjs6HCGymWqWyoBO3 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_ 12-1-14 7-2-14 20-0-4 24-3-14 18-0-4 26-2-6 08/19/2020 4-11-0 5-10-6 2-0-0 4-3-10 1-10-8 Scale = 1:45.8



	L 4-11-0	I .	12-1-14	1	18-0-4	20-0-4	24-3-14	
	4-11-0	I	7-2-14	l	5-10-6	2-0-0	4-3-10	
Plate Offsets (X,	/) [1:0-2-0,0-1-8], [12:0-2-8	,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 0.55	Vert(LL)	-0.11 9-11	>999 360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.25 9-11	>999 240		
BCLL 0.0	* Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.04 8	n/a n/a		
BCDL 10.0	Code IRC2018/TI	PI2014	Matrix-S	Wind(LL)	0.04 9-11	>999 240	Weight: 98 lb	FT = 10%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

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

2-3: 2x4 SPF 2100F 1.8E, 3-4: 2x6 SPF No.2

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

6-8: 2x4 SPF No.2

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

Max Horz 13=-110(LC 6)

Max Uplift 13=-3(LC 4), 8=-39(LC 5) Max Grav 13=1077(LC 1), 8=1231(LC 1)

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

1-2=-1007/45, 2-3=-1396/48, 3-4=-1560/37, 4-5=-1489/21, 5-6=-1692/7, 1-13=-1040/22, TOP CHORD

6-8=-1194/51

**BOT CHORD** 11-12=0/893, 9-11=0/2020

**WEBS** 2-12=-417/82, 2-11=-19/660, 4-11=-675/94, 4-9=-806/51, 5-9=0/459, 1-12=-8/1021,

## 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) 13, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-2-13 oc purlins,

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

except end verticals, and 2-0-0 oc purlins (4-9-15 max.): 2-3, 4-5.

August 14,2020



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

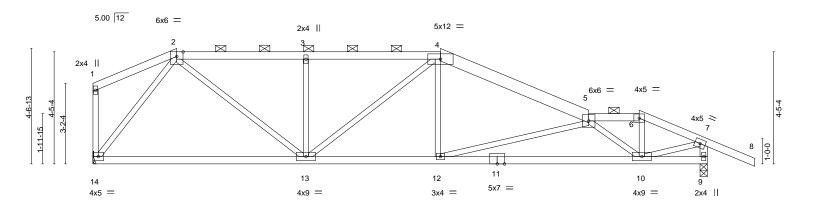
Design valid for use only with MiTek's connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

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



### **RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427364 AS NOTED ON PLANS REVIE 400477 G6 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:47 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-Q2Xrkcd5Jf1FoYo63R9m3cMjF5h?bXBLUcV3MyyoBO2 21-7-8 8-5-3 5-1-6 13-9-**08/19/2020** + 24-3-14 26-2-6 3-3-12 3-3-12 0-6 2-0-0 2-8-6 1-10-8



	3-3-12 8-5-3	13-9-1	19-7-8	21-7-8 24-3-14
	3-3-12 5-1-6	5-3-14	5-10-6	2-0-0 2-8-6
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI.         DEFL.           TC 0.37         Vert(LL)           BC 0.73         Vert(CT)           WB 0.79         Horz(CT)           Matrix-S         Wind(LL)	,	PLATES GRIP MT20 197/144  Weight: 97 lb FT = 10%

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

7-9: 2x4 SPF No.2

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

Max Horz 14=-139(LC 4)

Max Uplift 14=-143(LC 4), 9=-189(LC 5) Max Grav 14=1077(LC 1), 9=1231(LC 1)

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

2-3=-1480/263, 3-4=-1478/261, 4-5=-1743/247, 5-6=-1321/122, 6-7=-1495/125, TOP CHORD

7-9=-1223/173

**BOT CHORD**  $13\text{-}14\text{=-}47/703,\ 12\text{-}13\text{=-}129/1564,\ 10\text{-}12\text{=-}244/2235}$ 

2-13=-118/1025, 3-13=-429/173, 4-12=0/372, 5-12=-706/207, 5-10=-1182/227, **WEBS** 

6-10=-17/450, 2-14=-1122/219, 7-10=-103/1417

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=143, 9=189.
- 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 4-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-3 max.): 2-4, 5-6.

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

6-0-0 oc bracing: 9-10.

Scale = 1:45.6

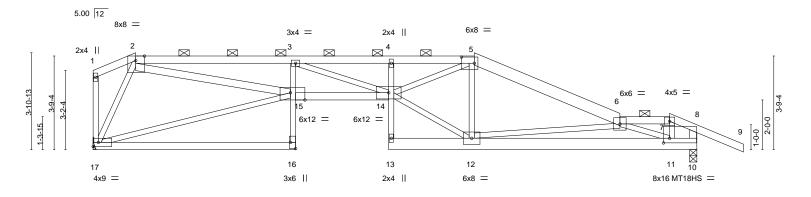
August 14,2020







Scale = 1:46.4



_ 1-8-9	8-1-14		11-10-14	15-4-4	1	21-2	2-11	1 23-2-11 24-3-	14 <sub>1</sub>
1-8-9	6-5-5	ı	3-9-0	3-5-6	1	5-1	0-6	2-0-0 '1-1-	3 '
Plate Offsets (X,Y) [2	2:0-4-3,Edge], [5:0-6-4,0-3-	-0], [10:0-3-0,0-2-	-4], [15:0-7-0,Edge], [16	:Edge,0-2-8]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.34 14-15	>854	360	MT20	197/144
CDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.61 14-15	>474	240	MT18HS	197/144
3CLL 0.0 *	Rep Stress Incr	NO	WB 0.92	Horz(CT)	0.29 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2	014	Matrix-S	Wind(LL)	0.25 14-15	>999	240	Weight: 114 lb	FT = 10%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

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

2-5: 2x4 SPF 2100F 1.8E, 5-6: 2x6 SPF No.2

**BOT CHORD** 2x3 SPF No.2 \*Except\* 16-17: 2x4 SPF No.2, 14-15: 2x4 SPF 2100F 1.8E

10-13: 2x6 SPF No.2

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

2-15: 2x4 SPF No.2, 8-10: 2x4 SPF 2100F 1.8E

REACTIONS. (size) 10=0-3-8, 17=Mechanical

Max Horz 17=-139(LC 6)

Max Uplift 10=-266(LC 5), 17=-171(LC 4) Max Grav 10=1167(LC 1), 17=1075(LC 1)

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

TOP CHORD 2-3=-4045/668, 3-4=-4295/641, 4-5=-4238/639, 5-6=-2008/294, 6-7=-534/79,

7-8=-701/100, 8-10=-649/131

**BOT CHORD** 3-15=-483/169, 14-15=-549/4094, 11-12=-349/2491, 10-11=-87/588

15-17=-50/471, 2-15=-537/3592, 12-14=-204/1997, 5-14=-381/2691, 5-12=-742/162, **WEBS** 

6-12=-697/243, 6-11=-2163/390, 7-11=-86/382, 2-17=-1238/274

- 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) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=266, 17=171,
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 12 lb up at 23-2-11 on top chord, and 167 lb down and 873 lb up at 23-1-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



Structural wood sheathing directly applied or 4-8-13 oc purlins,

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

6-0-0 oc bracing: 10-11.

except end verticals, and 2-0-0 oc purlins (3-0-14 max.): 2-5, 6-7.

August 14,2020

Continued on page 2

LOAD CASE(S) Standard

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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Roof Special Girder AS NOTED ON PLANS REVIEW 1
DEVELOPMENT SERVICES 1
Job Reference (optional)
LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:49 2020 Page 2 G7 400477

08/19/2020

Lot 74 RR - Raising Hope House 2021

142427365

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-MQfc9leMqHHz1syUAsBE81RxHuN23Paeyw\_ARryoBO0

LOAD CASE(S) Standard

Waverly, KS 66871

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

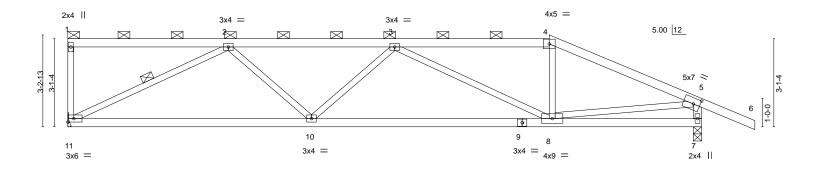
Wheeler Lumber,

Vert: 1-2=-70, 2-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 16-17=-20, 14-15=-20, 10-13=-20

Concentrated Loads (lb) Vert: 11=66(B)

16023 Swingley Ridge Rd Chesterfield, MO 63017

				RELEASE FU	7K			
Job	Truss	Truss Type		CONSTRUCTI	<b>Ø</b> N	Ply	Lot 74 RR - Raising Hope House 2021	
400477	G8	Half Hip	A	S NOTED ON PLANS	REVIE	W 1		142427366
400477	00	l Iali I lip		<b>DEVELOPMENT SER</b>			Job Reference (optional)	
Wheeler Lumber, Wave	erly, KS 66871			LEE'S SUMMIT, MIS	SOUR <sub>4</sub>	10 s May	22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:49 2	2020 Page 1
				ID:Ej7EWo	ovY_94Pz	t7UVy1g	NAz_t70-MQfc9IeMqHHz1syUAsBE81R1_uME3Steyw	/_ARryoBO0
L	5-7-14	1	1-6-2	08/19/2020	16-11	-8	22-3-14	24-2-6
	5-7-14	5	-10-4	00/10/2020	5-5-6	6	5-4-6	1-10-8
								Scalo - 1:40 6



	8-7-0	16-11-8	3	22-3-14	
	8-7-0	8-4-8		5-4-6	'
Plate Offsets (X,Y)	[5:0-2-12,0-2-8]				
LOADING (psf)	SPACING- 2-0-0	CSI. DEFL.	in (loc) I/defl	L/d PLATES	GRIP
TCLL 25.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.42 Vert(LL) BC 0.75 Vert(CT)		360 MT20 240	197/144
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.71 Horz(CT) Matrix-S Wind(LL)		n/a 240 Weight: 79 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

REACTIONS.

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

5-7: 2x4 SPF No.2

(size) 11=Mechanical, 7=0-3-8 Max Horz 11=-104(LC 6) Max Uplift 11=-50(LC 4), 7=-60(LC 5) Max Grav 11=987(LC 1), 7=1141(LC 1)

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

2-3=-1834/57, 3-4=-1381/48, 4-5=-1577/39, 5-7=-1096/81 TOP CHORD

**BOT CHORD** 10-11=-52/1505, 8-10=-57/1969

WEBS 2-11=-1649/122, 2-10=0/501, 3-8=-729/85, 4-8=0/316, 5-8=-9/1244

## NOTES-

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



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

except end verticals, and 2-0-0 oc purlins (4-0-11 max.): 1-4.

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

1 Row at midpt

August 14,2020





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

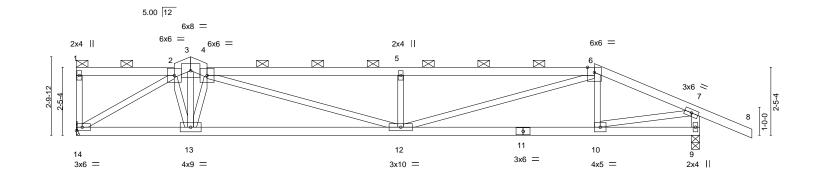
ANSI/TPIT Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427367 AS NOTED ON PLANS REVIE 400477 G9 Roof Special **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:50 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-qdD\_Mef\_baPpf?XgkZiTgE\_BIIIDowtnBakjzHyoBO? 4-1-2 4-8-3 08/19/2020 Scale = 1:41.3



	3-6-1	11-7-7 6-11-4	18-6-11 6-11-4	22-3-14 3-9-3
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.48 BC 0.57 WB 0.67 Matrix-S	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.15         12         >999         360           Vert(CT)         -0.30         12-13         >889         240           Horz(CT)         0.05         9         n/a         n/a           Wind(LL)         0.08         12         >999         240	PLATES GRIP MT20 197/144  Weight: 83 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-2x4 SPF No.2 \*Except\* TOP CHORD

2-3,3-4: 2x6 SPF No.2, 4-6: 2x4 SPF 2100F 1.8E

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

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

7-9: 2x4 SPF No.2

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

Max Horz 14=-83(LC 4)

Max Uplift 14=-11(LC 9), 9=-66(LC 5) Max Grav 14=987(LC 1), 9=1141(LC 1)

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

 $2\text{-}3\text{--}1438/40,\ 3\text{-}4\text{--}1511/57,\ 4\text{-}5\text{--}2692/132,\ 5\text{-}6\text{--}2693/133,\ 6\text{-}7\text{--}1523/65,}$ TOP CHORD

7-9=-1115/77

**BOT CHORD** 13-14=0/1339, 12-13=-18/1723, 10-12=-22/1376

**WEBS** 2-14=-1565/27, 4-12=-64/1071, 5-12=-574/131, 6-12=-74/1380, 7-10=-32/1389,

3-13=-19/550, 4-13=-960/113, 2-13=-14/586

- 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) 14, 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 4-6-15 oc purlins,

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

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

August 14,2020



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

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

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

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Roof Special Girder AS NOTED ON PLANS REVIE 142427368 400477 G10 **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:43 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy gWAz\_t70-XGILuFabFRXpJxUKqb4qumBtnTJifgGla?XsDByoBO6 1-10-14 22-3-14 24-2-6 08/19/2020 1-10-14 2-2-4 6-11-4 6-11-4 2-2-0 1-10-8

5.00 12 6x8 = 5x7 = 6x8 = 3x10 = 6x8 > 2x4 || 5 16 19 20 • 21 22 23 11 25 26 12 13 10 14 15 5x7 Ш 4x9 = 6x8 = 6x12 = 5x7 = 8x8 = 3x4

20-1-14 1-10-14 13-2-10 22-3-14 1-10-14 4-4-8 6-11-4 6-11-4 Plate Offsets (X,Y)--[2:0-3-7,Edge], [4:0-4-0,0-2-3], [6:0-4-9,Edge], [9:Edge,0-6-4], [10:0-2-8,0-2-8], [13:0-2-8,0-3-0] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.98 Vert(LL) -0.35 12-13 >766 360 MT20 197/144 -0.63 12-13 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.75 Vert(CT) >418 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.98 Horz(CT) 0.05 9 n/a n/a Code IRC2018/TPI2014 **BCDL** Wind(LL) 0.30 12-13 >880 240 Weight: 95 lb FT = 10% 10.0 Matrix-S

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SPF No.2 \*Except\* 4-6: 2x4 SPF 2400F 2.0E

**BOT CHORD** 2x6 SPF 1650F 1.4E \*Except\* 9-11: 2x6 SPF No.2

**WEBS** 2x3 SPF No.2 \*Except\* 3-14,3-13,7-9: 2x4 SPF No.2

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

Max Horz 15=-73(LC 4)

Max Uplift 15=-177(LC 9), 9=-305(LC 9) Max Grav 15=1143(LC 1), 9=1230(LC 1)

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

TOP CHORD 1-15=-1051/170, 1-2=-1295/223, 2-3=-1380/251, 3-4=-4208/844, 4-5=-4374/949, 5-6=-4374/949, 6-7=-1676/370, 7-9=-1311/307

13-14=-237/1594, 12-13=-723/3941, 10-12=-323/1585 **BOT CHORD** 

1-14=-252/1563, 2-14=-609/119, 3-14=-572/139, 3-13=-687/3358, 4-13=-2157/522, WFBS

4-12=-185/542, 5-12=-537/258, 6-12=-587/2846, 6-10=-434/134, 7-10=-360/1681

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone: cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=177, 9=305,
- 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) 65 lb down and 41 lb up at 10-6-7, 65 lb down and 41 lb up at 12-6-7, 65 lb down and 41 lb up at 14-6-7, and 65 lb down and 41 lb up at 16-6-7, and 65 lb down and 41 lb up at 18-6-7 on top chord, and 250 lb down and 74 lb up at 8-6-2, 19 lb down at 10-6-7, 19 lb down at 12-6-7, 19 lb down at 14-6-7, 19 lb down at 16-6-7, and 19 lb down at 18-6-7, and 97 lb down and 287 lb up at 20-1-14 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).



Structural wood sheathing directly applied or 2-7-14 oc purlins,

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

6-0-0 oc bracing: 9-10.

except end verticals, and 2-0-0 oc purlins (2-9-7 max.): 1-2, 4-6.

Scale = 1:41.2

August 14,2020

Continued on page 2 LOAD CASE(S) Standard

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

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

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

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



**RELEASE FOR** Job Truss Truss Type G10 400477

CONSTRUCTION Roof Special Girder AS NOTED ON PLANS REVIEW 1
DEVELOPMENT SERVICES Job Reference (optional)
LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:43 2020 Page 2

08/19/2020

Lot 74 RR - Raising Hope House 2021

142427368

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LOAD CASE(S) Standard

Wheeler Lumber,

Waverly, KS 66871

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-6=-70, 6-7=-70, 7-8=-70, 9-15=-20

Concentrated Loads (lb)

Vert: 10=14(B) 16=-2(B) 17=-2(B) 18=-2(B) 19=-2(B) 20=-2(B) 21=-250(B) 22=-0(B) 23=-0(B) 24=-0(B) 25=-0(B) 26=-0(B)

**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427369 AS NOTED ON PLANS REVIE 400477 Н1 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:51 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-lpnMZ\_gcMuXgH95tlHEiDSWQBi9YXXvxPETHVjyoBO\_ 8-5-6 08/19/2020 4-1-2 4-4-4 Scale = 1:18.7 4x5 = 2 5.00 12 3x6 || 4x5 || 3 1-0-0 4 2x4 || 6 3x4 | 3x4 | 4-1-2 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL Vert(LL) -0.03 >999 MT20 197/144 **TCLL** 1.15 TC 0.24 5 360 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.31 Vert(CT) -0.06 5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 4 n/a n/a

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.01

5 >999

except end verticals

240

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

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

Weight: 23 lb

FT = 10%

LUMBER-

BCDL

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

10.0

2-5: 2x3 SPF No.2

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

Max Horz 6=-27(LC 6)

Max Uplift 6=-4(LC 8), 4=-5(LC 9) Max Grav 6=367(LC 1), 4=367(LC 1)

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

Code IRC2018/TPI2014

1-2=-371/21, 2-3=-373/19, 1-6=-285/29, 3-4=-289/32 TOP CHORD

**BOT CHORD** 5-6=0/284, 4-5=0/284

## 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-R

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.

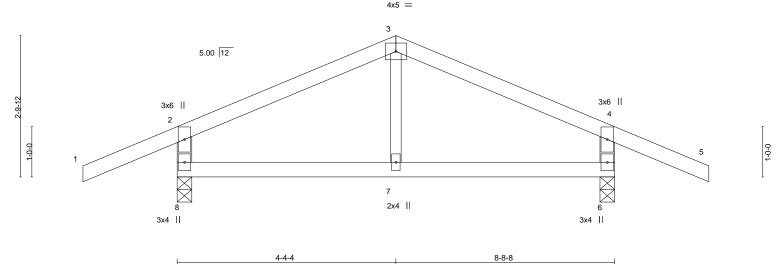
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 14,2020







		ı ı		4-4-4		ı			1-4-4		<u>'</u>	
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	0.42	Vert(LL)	-0.03	7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.05	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	0.01	7	>999	240	Weight: 29 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

3-7: 2x3 SPF No.2

REACTIONS.

(size) 8=0-3-8, 6=0-3-8 Max Horz 8=-23(LC 6)

Max Uplift 8=-97(LC 8), 6=-97(LC 9) Max Grav 8=520(LC 1), 6=520(LC 1)

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

TOP CHORD 2-3=-343/51, 3-4=-343/51, 2-8=-447/123, 4-6=-447/123

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



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

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

except end verticals.

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427371 AS NOTED ON PLANS REVIE 400477 НЗ Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:52 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-m?LknKgE7CfXuJg3r\_lxlf3YQ6VwG\_L4euDq1AyoBNz 8-8-8 08/<del>19/2</del>020 1-10-8 2-10-0 2-10-0 1-10-8

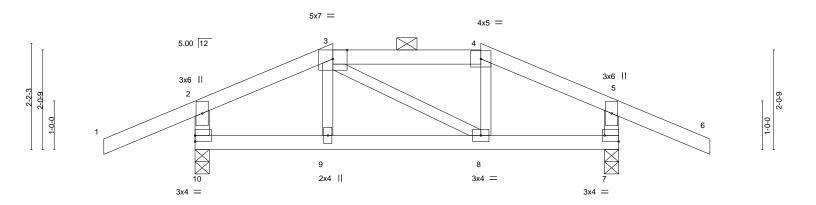


Plate Offsets (X,Y) [	7:Edge,0-1-8]	+	5-10-8 3-0-8	8-8-8 2-10-0	<del></del>
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0	CSI. TC 0.40 BC 0.30 WB 0.03 Matrix-S	DEFL. in Vert(LL) -0.04 Vert(CT) -0.07 Horz(CT) 0.00 Wind(LL) 0.02	(loc) I/defl L/d 8-9 >999 360 8-9 >999 240 7 n/a n/a 8-9 >999 240	PLATES GRIP MT20 197/144  Weight: 32 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 \*Except\* 2-10,5-7: 2x4 SPF No.2

REACTIONS. (size) 10=0-3-8, 7=0-3-8

Max Horz 10=-24(LC 6)

Max Uplift 10=-107(LC 4), 7=-107(LC 5) Max Grav 10=520(LC 1), 7=520(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  $2\text{-}3\text{-}360/48,\ 3\text{-}4\text{-}272/54,\ 4\text{-}5\text{-}-360/48,\ 2\text{-}10\text{-}-434/113,\ 5\text{-}7\text{-}-434/113}$ TOP CHORD

BOT CHORD 9-10=0/272, 8-9=0/272, 7-8=0/272

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=107, 7=107.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 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

Scale = 1:23.7

August 14,2020





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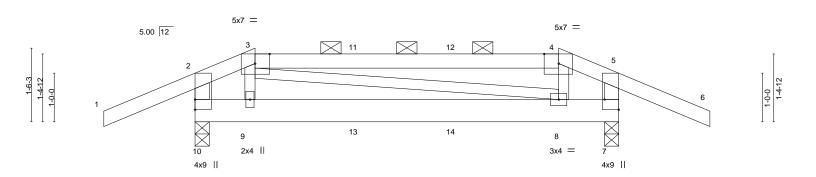
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427372 AS NOTED ON PLANS REVIE 400477 Н4 Hip Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:53 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-ECu6\_ghsuVnOWTFFPiGAltcgxVts?QZEtYyOZcyoBNy 1-2-13 08/<u>15/2</u>020 1-10-8 1-2-13 1-10-8



	1-2-13 1-2-13		7-5-11 6-2-14		8-8- 1-2-		
Plate Offsets (X,Y)	[3:0-3-9,Edge], [4:0-3-9,Edge], [7:Edge,	0-3-8]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.61 BC 0.19 WB 0.09 Matrix-S	Vert(CT) Horz(CT)	in (loc) -0.02 8-9 -0.04 8-9 0.00 7 -0.02 8-9	I/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES MT20 Weight: 38 lb	<b>GRIP</b> 197/144 FT = 10%

**BOT CHORD** 

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x6 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=24(LC 7)

Max Uplift 10=-397(LC 29), 7=-397(LC 28) Max Grav 10=499(LC 45), 7=499(LC 44)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-401/415, 3-4=-350/289, 4-5=-395/413, 2-10=-303/225, 5-7=-309/232 TOP CHORD

BOT CHORD 9-10=-348/375, 8-9=-297/380, 7-8=-336/362

**WEBS** 3-9=-500/127, 4-8=-517/139

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=397, 7=397.
- 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) 45 lb down and 12 lb up at 1-2-13, 50 lb down and 12 lb up at 3-4-4, and 50 lb down and 12 lb up at 5-4-4, and 45 lb down and 12 lb up at 7-5-11 on top chord , and 141 lb down and 737 lb up at 1-2-13, 14 lb down and 16 lb up at 3-4-4, and 14 lb down and 16 lb up at 5-4-4, and 141 lb
- down and 737 lb up at 7-4-4 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 Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20



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 6-0-0 oc bracing.

Scale = 1:23.7

August 14,2020



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

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

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

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



Job Truss Truss Type 400477 H4 Hip Girder

Waverly, KS 66871 Wheeler Lumber,

CONSTRUCTION

**RELEASE FOR** 

Lot 74 RR - Raising Hope House 2021

142427372

AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

1

Job Reference (optional)

LEE'S SUMMIT, MISSOUR: 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:53 2020 Page 2

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-ECu6\_ghsuVnOWTFFPiGAltcgxVts?QZEtYyOZcyoBNy

08/19/2020

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 9=53(B) 8=53(B)

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 142427373 400477 J1 **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:54 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVv1gWAz\_t70-jOSVC?iUfpvF8dqSzPnPr48oCv5oktFN5Cix52yoBNx 8-5-0 2-10-0 2-10-0 08/19/2020 2-4-0 Scale = 1:20.5 5x7 || 11 3.12 12 3 6x8 = 15 13 14 3x4 || 12 2x4 | 3x10 Ш 2-10-0 Plate Offsets (X,Y)-- [3:0-5-9,Edge], [4:Edge,0-2-8], [5:Edge,0-2-8], [7:0-3-8,Edge]

[,9-], [9-,], [9-,			
SPACING- 2-0-0	CSI. DEFL.	in (loc) I/defl L/d	PLATES GRIP
Plate Grip DOL 1.15	TC 0.77 Vert(LL)	-0.18 3 >544 360	MT20 197/144
Lumber DOL 1.15	BC 0.59 Vert(CT	) -0.33 3 >300 240	
Rep Stress Incr NO	WB 0.00 Horz(C	Γ) 0.17 5 n/a n/a	
Code IRC2018/TPI2014	Matrix-R Wind(Ll	.) 0.16 6 >604 240	Weight: 28 lb FT = 10%
	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	SPACING-         2-0-0         CSI.         DEFL.           Plate Grip DOL         1.15         TC 0.77         Vert(LL)           Lumber DOL         1.15         BC 0.59         Vert(CT           Rep Stress Incr         NO         WB 0.00         Horz(CT	Plate Grip DOL         1.15         TC         0.77         Vert(LL)         -0.18         3         >544         360           Lumber DOL         1.15         BC         0.59         Vert(CT)         -0.33         3         >300         240           Rep Stress Incr         NO         WB         0.00         Horz(CT)         0.17         5         n/a         n/a

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

3-6: 2x3 SPF No.2, 3-5: 2x6 SPF No.2

**WEBS** 2x4 SPF No.2 \*Except\* 4-5: 2x3 SPF No.2

REACTIONS. (size) 7=0-3-14, 5=Mechanical

Max Horz 7=109(LC 5)

Max Uplift 7=-161(LC 4), 5=-109(LC 8) Max Grav 7=577(LC 1), 5=481(LC 1)

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

TOP CHORD 2-7=-563/174, 4-5=-260/100

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in 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) except (jt=lb) 7=161, 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) 72 lb down and 134 lb up at 2-1-6, 63 lb down and 36 lb up at 2-4-9, 108 lb down and 63 lb up at 4-11-5, and 97 lb down and 51 lb up at 5-3-12, and 98 lb down and 67 lb up at 7-6-1 on top chord, and 18 lb down and 21 lb up at 2-1-6, 3 lb down at 2-4-9, 3 lb down at 4-11-5, and 24 lb down at 5-3-12, and 63 lb down and 27 lb up at 7-6-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

## LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 6-7=-20, 3-5=-20

Vert: 8=35(B) 9=-40(F) 10=-4(B) 11=-62(F) 14=-16(B) 15=-63(F)



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

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

except end verticals.

August 14,2020

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

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

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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427374 AS NOTED ON PLANS REVIE 400477 J2 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:00 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-XYqmS3nFFfgPsYHbJgup4LOzFKGJ8bWFU89FJiyoBNr 2-3-**08/19/2020** 2-3-8 0-10-8 1-3-15 Scale = 1:13.3

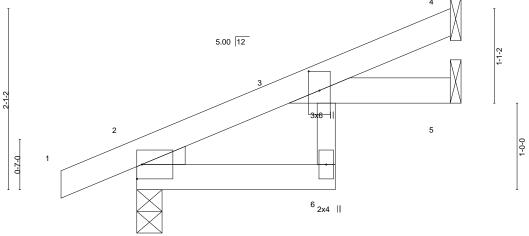


Plate Off	sets (X,Y)	[3:0-2-11,0-1-8]		
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.02 6 >999 360 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) -0.04 6 >925 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT) 0.02 5 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	Wind(LL) 0.03 6 >999 240 Weight: 11 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=75(LC 8)

Max Uplift 4=-52(LC 8), 2=-34(LC 8)

Max Grav 4=129(LC 1), 2=240(LC 1), 5=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) 4, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-7-7 oc purlins.

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427375 AS NOTED ON PLANS REVIE 400477 J3 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:06 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7U\psi/y1gWAz\_t70-MiB1j6r0qVQYaTllgw?DKcezrlK1YJz8s4caWMyoBNI 4-0-14 0<mark>8/19/2020</mark> 1-10-8 1-9-6 Scale = 1:13.8 4.00 12 1-2-5 2 1-10-2 5 9 0-10-0 <sup>6</sup> 2x4 || 3x10 || 4-0-14 [3:0-2-4,0-1-12], [7:0-5-6,0-1-8] Plate Offsets (X,Y)--SPACING-DEFL. **PLATES** GRIP LOADING (psf) (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.02 6 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.12 Vert(CT) -0.04 6 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.02 Horz(CT) 0.02 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-P 0.02 >999 240 Weight: 14 lb 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\*

3-6: 2x3 SPF No.2

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 7=79(LC 4)

Max Uplift 7=-117(LC 4), 4=-39(LC 8)

Max Grav 7=361(LC 1), 4=96(LC 1), 5=70(LC 3)

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

TOP CHORD 2-7=-329/128

## NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 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)
- 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 4-0-14 oc purlins,

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

except end verticals.

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427376 AS NOTED ON PLANS REVIE 400477 J4 Jack-Open **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:11 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy 1gWAz\_t70-jf\_wmqv9f13rgEdjTUbO1gLqam1pDaSt0LJLCZyoBNg 08/19/2020 1-10-8 1-6 Scale = 1:9.7 4.00 12 2 0-10-0 3x10 || 1-6-14 1-6-14 Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-**PLATES** LOADING (psf) 2-0-0 CSI. DEFL. in (loc) I/defI L/d **GRIP TCLL** 25.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) 0.00 >999 360 MT20 197/144 5 **TCDL** 10.0 Lumber DOL ВС 0.08 Vert(CT) 0.00 >999 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

4-5

3

5

n/a

>999

except end verticals.

n/a

240

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

-0.00

-0.00

LUMBER-

**BCLL** 

BCDL

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

0.0

10.0

**WEBS** 2x4 SPF No.2

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

Max Horz 5=46(LC 4) Max Uplift 5=-143(LC 4), 3=-22(LC 1), 4=-16(LC 1)

Code IRC2018/TPI2014

Max Grav 5=306(LC 1), 3=16(LC 4), 4=18(LC 4)

Rep Stress Incr

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-5=-262/142

## 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

WB

Matrix-R

0.00

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

1.15

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.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=143
- 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.



FT = 10%

Weight: 6 lb

Structural wood sheathing directly applied or 1-6-14 oc purlins,

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427377 AS NOTED ON PLANS REVIE 400477 J5 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:16 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-3dnppXzlTah7n?WgF1AZkj3eAng\_uqic9d15tmyoBNb -0-10-8 2-3-8 2-3-8 08/19/2020 0-10-8 Scale = 1:16.6 5.00 12 1-9-1 5x 1-0-0 0-2-0 6 2x4 | 4x5 5-2-10 2-11-2 Plate Offsets (X,Y)--[3:0-0-0,0-0-1] SPACING-CSI. DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 in (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.48 Vert(LL) -0.06 3 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 BC 0.33 Vert(CT) -0.10 3 >583 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.07 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% BCDL 10.0 Matrix-R >966 240 Weight: 15 lb 0.06 3 **BRACING-**TOP CHORD Structural wood sheathing directly applied or 5-2-10 oc purlins.

**BOT CHORD** 

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

LUMBER-

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

3-6: 2x3 SPF No.2

WEDGE

Left: 2x3 SPF No.2

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=102(LC 8)

Max Uplift 4=-58(LC 8), 2=-44(LC 8), 5=-6(LC 8) Max Grav 4=135(LC 1), 2=304(LC 1), 5=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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427378 AS NOTED ON PLANS REVIE 400477 J6 Jack-Open **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:17 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-YpLB1t\_wEtp\_O95tpkhoGxbvQB5\_dHxmOHmfPDyoBNa 08/19/2020 2-0-4 2-0-4 0-10-8 Scale = 1:10.0 5.00 12 1-0-11 4x5 =

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	0.06	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	2-4	>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/TP	12014	Matri	x-P	Wind(LL)	0.00	2	****	240	Weight: 6 lb	FT = 10%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2

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

Max Horz 2=48(LC 8)

Max Uplift 3=-33(LC 8), 2=-36(LC 4)

Max Grav 3=43(LC 1), 2=173(LC 1), 4=36(LC 3)

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

## NOTES-

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

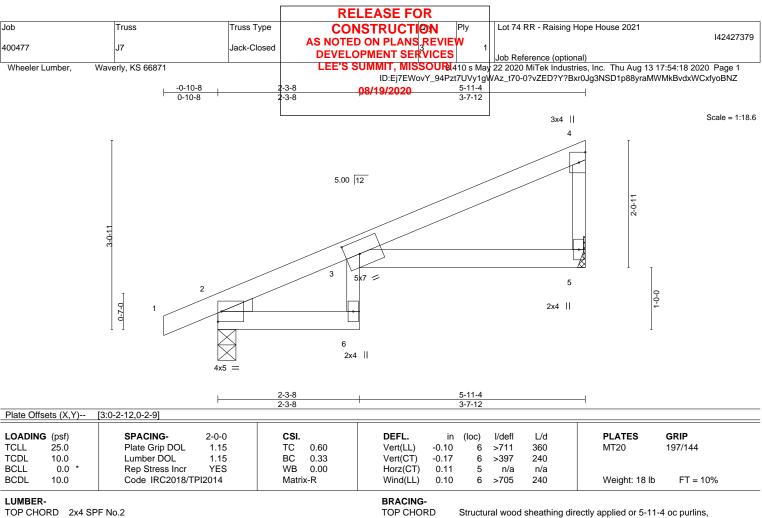


Structural wood sheathing directly applied or 2-0-4 oc purlins.

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

August 14,2020





**BOT CHORD** 

except end verticals.

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

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

3-6: 2x3 SPF No.2

**WEBS** 2x3 SPF No.2

WEDGE

Left: 2x3 SPF No.2

REACTIONS.

(size) 5=Mechanical, 2=0-3-8

Max Horz 2=104(LC 5)

Max Uplift 5=-61(LC 8), 2=-58(LC 8) Max Grav 5=250(LC 1), 2=334(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
- 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) 5, 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427380 AS NOTED ON PLANS REVIE 400477 J8 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:18 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-0?vZED?Y?Bxr0Jg3NSD1p88yqaMGMkBvdxWCxfyoBNZ 08/19/20201-4 5-11-4 0-10-8 Scale = 1:18.7 2x4 || 5.00 12 0-2-0 4 4x5 =2x4 II

LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL Vert(LL) -0.06 >999 360 197/144 **TCLL** 1.15 TC 0.60 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.35 Vert(CT) -0.13 2-4 >544 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 4 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Wind(LL) 0.00 240 Weight: 18 lb FT = 10%

5-11-4

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2

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

Max Horz 2=120(LC 5)

Max Uplift 4=-59(LC 8), 2=-60(LC 8) Max Grav 4=250(LC 1), 2=334(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, 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 5-11-4 oc purlins,

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

except end verticals.

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427381 AS NOTED ON PLANS REVIE 400477 J9 Jack-Closed DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:19 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-UCTyRZ?AmV3ieTEFx9kGMMh6O\_iC5BR2rbGmU5yoBNY 08/<u>19/2</u>020 Scale = 1:18.7 2x4 || 2 5.00 12 0-2-0 

LOADING TCLL TCDL	<b>G</b> (psf) 25.0 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI. TC BC	0.67 0.36	DEFL. Vert(LL) Vert(CT)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	<b>GRIP</b> 197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TPI	YES 2014	WB Matri	0.00 x-P	Horz(CT)	-0.00	3	n/a	n/a	Weight: 17 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

2x4 ||

except end verticals.

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

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

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2

REACTIONS. (size) 3=5-11-4, 1=5-11-4

Max Horz 1=118(LC 5)

Max Uplift 3=-62(LC 8), 1=-36(LC 8) Max Grav 3=263(LC 1), 1=263(LC 1)

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

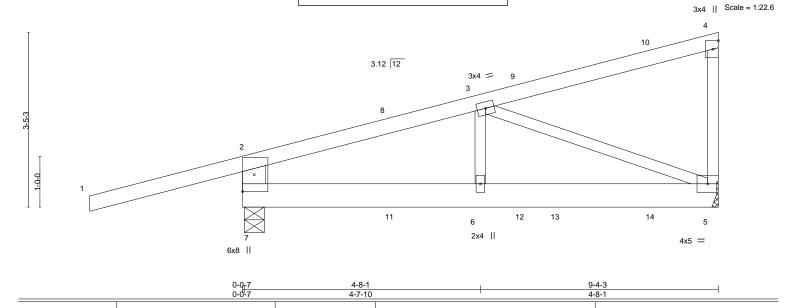
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4x5 =

- 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) 3, 1.
- 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.







DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

(loc)

5-6

5-6

5-6

5

-0.05

-0.08

0.00

0.04

I/defI

>999

>999

>999

except end verticals

n/a

L/d

360

240

n/a

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

240

LUMBER-

LOADING (psf)

25.0

10.0

10.0

0.0

**TCLL** 

**TCDL** 

**BCLL** 

BCDL

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

WEBS 2x3 SPF No.2 \*Except\* 2-7: 2x6 SPF No.2

REACTIONS.

(size) 7=0-4-11, 5=Mechanical

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 7=145(LC 5)

Max Uplift 7=-266(LC 4), 5=-149(LC 8) Max Grav 7=715(LC 1), 5=535(LC 1)

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

TOP CHORD 2-7=-554/247, 2-3=-563/132 BOT CHORD 6-7=-165/481, 5-6=-165/481

WEBS 3-5=-490/167

### NOTES-

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

NO

CSI.

TC

ВС

WB

Matrix-S

0.87

0.45

0.29

- 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) except (jt=lb) 7=266. 5=149.
- 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) 55 lb down and 94 lb up at 2-11-15, 78 lb down and 36 lb up at 3-0-9, and 79 lb down and 54 lb up at 5-6-11, and 102 lb down and 86 lb up at 8-1-6 on top chord, and 10 lb down and 16 lb up at 2-11-15, 9 lb down and 7 lb up at 3-0-9, 16 lb down and 2 lb up at 5-6-11, and 168 lb down and 75 lb up at 6-2-15, and 40 lb down at 8-1-6 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, 2-4=-70, 5-7=-20

Concentrated Loads (lb)

Vert: 8=26(B) 10=-54(B) 11=7(F) 12=2(B) 13=-168(F) 14=-25(B)



**PLATES** 

Weight: 39 lb

MT20

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

GRIP

197/144

FT = 10%

August 14,2020



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

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

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427383 AS NOTED ON PLANS REVIE 400477 J11 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:55 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-Ba0tPLj7Q716InPeX7leNIh5NJX7TKVWKsRUdUyoBNw 08/19/2020 5-0-4 -1-10-8 1-10-8 Scale = 1:19.1 0-4-7 5.00 12 2x4 || 2

5-0-4	-
5-0-4	_
	_

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	0.30	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)	-0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matri	x-R	Wind(LL)	0.02	4-5	>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** 2x4 SPF No.2

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

Max Horz 5=101(LC 8) Max Uplift 5=-66(LC 4), 3=-75(LC 8)

Max Grav 5=388(LC 1), 3=138(LC 1), 4=88(LC 3)

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

TOP CHORD 2-5=-340/110

### 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

3x4

- 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 5-0-4 oc purlins,

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

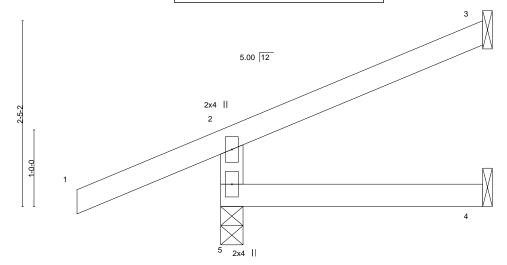
except end verticals.

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427384 AS NOTED ON PLANS REVIE 400477 J12 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:56 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-fmaFdhklBQAzNw\_q4qptwVEGKjvJCnlgZWB2AxyoBNv -1-10-8 3-5-1 08/19/2020 1-10-8 Scale = 1:15.0



			3-5-1	
LOADING (psf)	SPACING- 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) I/defl L/d	<b>PLATES GRIP</b> MT20 197/144
TCLL 25.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.01 4-5 >999 360	
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.01 4-5 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a	Weight: 11 lb FT = 10%
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.00 4-5 >999 240	

BRACING-

TOP CHORD

**BOT CHORD** 

3-5-1

except end verticals.

Structural wood sheathing directly applied or 3-5-1 oc purlins,

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

LUMBER-

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=73(LC 8)

Max Uplift 5=-71(LC 4), 3=-48(LC 8)

Max Grav 5=330(LC 1), 3=77(LC 1), 4=57(LC 3)

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

TOP CHORD 2-5=-289/94

## 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427385 AS NOTED ON PLANS REVIE 400477 J13 Jack-Open DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:56 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-fmaFdhklBQAzNw\_q4qptwVEGKjvLCnlgZWB2AxyoBNv 1-9-13 08/19/2020 1-10-8 1-9-13 Scale = 1:11.7 5.00 12 3x4 || 2 2x4 || 1-9-13 1-9-13

LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in	(loc)	I/defI	L/d	PLATES GRIP	
TCLL 25.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) 0.00	4-5	>999	360	MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.08	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	5	>999	240	Weight: 7 lb FT = 10%	

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

**WEBS** 2x4 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=53(LC 5) Max Uplift 5=-87(LC 4), 3=-14(LC 8), 4=-7(LC 1) Max Grav 5=302(LC 1), 3=4(LC 4), 4=24(LC 3)

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

TOP CHORD 2-5=-262/96

## 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, 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 1-9-13 oc purlins,

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

except end verticals.

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427386 AS NOTED ON PLANS REVIE 400477 J14 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:57 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 gWAz\_t70-7z8dq1kNyklq?4Z1eYL6SjmRy7DcxE\_poAwbiNyoBNu ID:Ej7EWovY\_94Pzt7UVy 1-10-8 08/19/2020 1-10-8 5-3-14 Scale = 1:16.8 3x4 || 3 4.00 12 0-10-0 2x4 || 3x10 || 5-3-14 Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-GRIP LOADING (psf) 2-0-0 DEFL. in (loc) I/defI L/d **PLATES** Plate Grip DOL **TCLL** 25.0 1.15 TC 0.29 Vert(LL) -0.03 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.20 Vert(CT) -0.05 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 n/a n/a 4

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.01

>999

except end verticals.

4-5

240

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

Structural wood sheathing directly applied or 5-3-14 oc purlins,

LUMBER-

**BCDL** 

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

10.0

3-4: 2x3 SPF No.2

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

Max Horz 5=112(LC 5)

Max Uplift 5=-136(LC 4), 4=-43(LC 8) Max Grav 5=398(LC 1), 4=200(LC 1)

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

Code IRC2018/TPI2014

TOP CHORD 2-5=-352/170

## 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

Matrix-R

- 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)
- 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.



FT = 10%

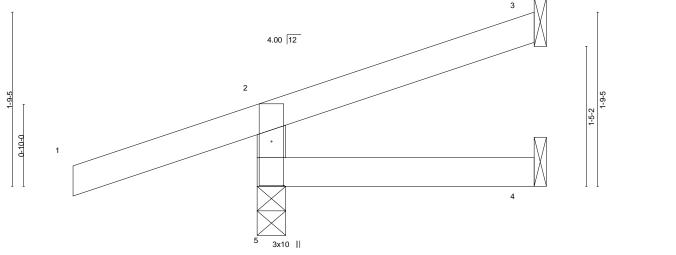
Weight: 17 lb

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427387 AS NOTED ON PLANS REVIE 400477 J15 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:57 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 1gWAz\_t70-7z8dq1kNyklq?4Z1eYL6SjmR67FfxE\_poAwbiNyoBNu ID:Ej7EWovY\_94Pzt7UVy 1-10-8 2-9-14 08/19/2020 1-10-8 2-9-14 Scale = 1:11.7



except end verticals.

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

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

Plate Offsets (X,Y)	[5:0-5-6,0-1-8]			
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 0.28	Vert(LL) 0.00 4-5 >999 3	360 MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) -0.00 4-5 >999 2	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 2	240 Weight: 9 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

**WEBS** 2x4 SPF No.2

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

Max Horz 5=62(LC 4)

Max Uplift 5=-124(LC 4), 3=-31(LC 8)

Max Grav 5=314(LC 1), 3=52(LC 1), 4=44(LC 3)

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

TOP CHORD 2-5=-273/139

## 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) 3 except (jt=lb) 5=124
- 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.

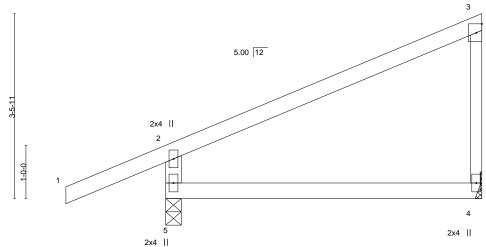


August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427388 AS NOTED ON PLANS REVIE 400477 J16 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:58 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy IgWAz\_t70-b9i?1NI?j2QhcE8DCFsL?wJbFWYsghEz0qg8EpyoBNt -1-10-8 08/19/2020 1-10-8 Scale = 1:21.6 3x4 ||



			5-11-4	
LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.38 BC 0.26	Vert(LL) -0.04 4-5 >999 360 Vert(CT) -0.09 4-5 >773 240	MT20 197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 4 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02 4-5 >999 240	Weight: 19 lb FT = 10%

BOT CHORD

5-11-4

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

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

3-4: 2x3 SPF No.2

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

Max Horz 5=150(LC 5)

Max Uplift 5=-85(LC 8), 4=-56(LC 8) Max Grav 5=423(LC 1), 4=231(LC 1)

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

TOP CHORD 2-5=-373/129

## 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 5-11-4 oc purlins,

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

except end verticals.

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427389 AS NOTED ON PLANS REVIE 400477 J17 Jack-Closed DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:58 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-b9i?1NI?j2QhcE8DCFsL?wJZMWYZghEz0qg8EpyoBNt 08/1<mark>9/2</mark>020 Scale = 1:21.6 3x6 || 2 5.00 12 2x4 || 3 2x4 ||

						5-	11-4							
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	0.50		Vert(LL)	-0.05	3-4	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.28		Vert(CT)	-0.10	3-4	>707	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00		Horz(CT)	-0.00	3	n/a	n/a			
BCDI	10.0	Code IRC2018/T	PI2014	Matri	x-R		Wind(LL)	0.02	3-4	>999	240	Weight: 17 lb	FT = 10%	

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

> 4=0-3-8, 3=Mechanical (size) Max Horz 4=133(LC 5) Max Uplift 4=-33(LC 8), 3=-63(LC 8) Max Grav 4=258(LC 1), 3=258(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.

3x4

- 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 5-11-4 oc purlins,

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





**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 142427390 400477 J18 **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:59 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-3LGOFjmdULYYEOjPmyNaY8sfUwudP8U6FUPimGyoBNs 08/19/2020 3-0-0 6-1-3x4 || Scale = 1:17.1 3 3.12 12 8 9 2x4 || 5x7 5-11-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP (loc) I/defl L/d

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

-0.05

-0.09

0.00

-0.02

4-5

4-5

4-5

>999

>764

>999

except end verticals.

n/a

360

240

n/a

240

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

LUMBER-

**TCLL** 

**TCDL** 

**BCLL** 

BCDL

TOP CHORD 2x6 SPF 1650F 1.4E BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2 \*Except\*

25.0

10.0

0.0

10.0

3-4: 2x3 SPF No.2

REACTIONS.

(size) 5=0-5-10, 4=Mechanical

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 5=108(LC 5)

Max Uplift 5=-212(LC 4), 4=-54(LC 8) Max Grav 5=926(LC 41), 4=229(LC 1)

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

TOP CHORD 2-5=-849/249

### NOTES-

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

TC

BC

WB

Matrix-R

0.80

0.29

0.00

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

1.15

1.15

NO

- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=212.
- 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) Load case(s) 40, 41 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 36 lb up at 3-0-9, and 68 lb down and 65 lb up at 3-0-14, and 67 lb down and 54 lb up at 5-7-10 on top chord, and 9 lb down and 7 lb up at 3-0-9, and 10 lb down and 16 lb up at 3-0-14, and 24 lb down at 5-7-10 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 Except:

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=-20(B) 8=7(F) 9=-8(B)



197/144

FT = 10%

MT20

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

Weight: 26 lb

August 14,2020

#### Continued on page 2



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

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

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



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION J18 400477

Diagonal Hip Sirder AS NOTED ON PLANS REVIEW 1
DEVELOPMENT SERVICES 1
Job Reference (optional)
LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:59 2020 Page 2

08/19/2020

Lot 74 RR - Raising Hope House 2021

142427390

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-3LGOFjmdULYYEOjPmyNaY8sfUwudP8U6FUPimGyoBNs

Waverly, KS 66871

LOAD CASE(S)

Wheeler Lumber,

40) Reversal: User defined: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 1=-250 6=1(B) 7=-20(B) 8=22(F=7, B=16) 9=-8(B)

41) User defined: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 1=-250 7=-20(B) 8=7(F) 9=-8(B)



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427391 AS NOTED ON PLANS REVIE 400477 J19 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:53:59 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-3LGOFjmdULYYEOjPmyNaY8snZwxzP8U6FUPimGyoBNs -1-10-8 3-5-10 08/19/2020 1-10-8 3-5-10 Scale = 1:15.1 5.00 12 2x4 || 2-0-15

			0-2-0	3-3-10	•
LOADING	(psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.01 4-5 >999 360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.01 4-5 >999 240	
BCLL	0.0 *	Rep Stress Incr 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: 11 lb FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

2x4

0-2-0

LUMBER-

REACTIONS.

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

**WEBS** 2x4 SPF No.2

(size)

Max Horz 5=74(LC 8)

Max Uplift 5=-71(LC 4), 3=-49(LC 8)

Max Grav 5=332(LC 1), 3=79(LC 1), 4=58(LC 3)

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

5=0-3-8, 3=Mechanical, 4=Mechanical

TOP CHORD 2-5=-290/95

# NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 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 3-5-10 oc purlins,

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427392 AS NOTED ON PLANS REVIE 400477 J20 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:00 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-XYqmS3nFFfgPsYHbJgup4LOyJKGH8bkFU89FJiyoBNr 08/19/2020 1-10-8 1-10-7 Scale = 1:11.8 5.00 12 3x4 II 2 1-0-0

			0-2-0	1-8-7	- '			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES G	SRIP	_
TCLL 25.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL)	0.00 4-5 >999	360		97/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.08	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			

0-2-0

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

-0.00

1-10-7

>999

except end verticals.

240

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

Weight: 7 lb

Structural wood sheathing directly applied or 1-10-7 oc purlins,

FT = 10%

LUMBER-

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

10.0

REACTIONS.

3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=53(LC 5) Max Uplift 3=-16(LC 8), 4=-6(LC 1), 5=-86(LC 4) Max Grav 3=5(LC 19), 4=25(LC 3), 5=302(LC 1)

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-262/95

# NOTES-

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

Matrix-R

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



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427393 AS NOTED ON PLANS REVIE 400477 J21 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:01 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-?kN8gPnt0zoGTisotNP2dZx7kkY5t2\_Pioupr8yoBNq 1-10-8 2-9-14 08/19/2020 1-10-8 2-9-14 Scale = 1:11.7 4.00 12 2 0-10-0 4 6 3x10 || 0-8-8 2-1-6 Plate Offsets (X,Y)--[6:0-5-6,0-1-8]

SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 CSI. (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.30 Vert(LL) 0.01 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.36 Vert(CT) 0.01 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.03 3 n/a n/a Code IRC2018/TPI2014 FT = 10% BCDL 10.0 Matrix-R Wind(LL) -0.01 >999 240 Weight: 9 lb 4-5

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

**WEBS** 2x4 SPF No.2

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

Max Horz 5=62(LC 4)

Max Uplift 3=-25(LC 8), 4=-78(LC 1), 5=-187(LC 4) Max Grav 3=25(LC 1), 4=55(LC 4), 5=430(LC 1)

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

TOP CHORD 2-6=-300/150

### 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) 3, 4 except (jt=lb) 5=187
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427394 AS NOTED ON PLANS REVIE 400477 J22 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:01 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-?kN8gPnt0zoGTisotNP2dZx76kcbt2\_Pioupr8yoBNq 1-10-8 2-9-14 08/19/2020 1-10-8 2-9-14 Scale = 1:11.7 4.00 12 2 0-10-0 4 3x10 || 2-7-14 Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 CSI. (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.28 Vert(LL) 0.00 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.07 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

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

-0.00

>999

except end verticals.

4-5

240

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

LUMBER-

**BCDL** 

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

10.0

**WEBS** 2x4 SPF No.2

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

Max Horz 5=62(LC 4)

Max Uplift 5=-124(LC 4), 3=-31(LC 8)

Max Grav 5=314(LC 1), 3=52(LC 1), 4=44(LC 3)

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-273/139

### 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

Matrix-R

- 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) 3 except (jt=lb) 5=124
- 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.



FT = 10%

Weight: 9 lb

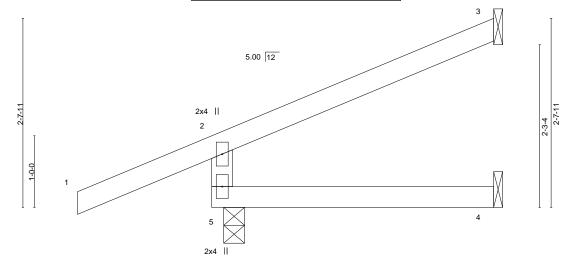
Structural wood sheathing directly applied or 2-9-14 oc purlins,

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427395 AS NOTED ON PLANS REVIE 400477 J23 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:02 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-UwxWtloWmGw65sR\_R5wH9mUlp8yBcVEYxSeMNayoBNp 3-11-4 08/19/2020 1-10-8 Scale: 3/4"=1"



				0-	2-0		3-9-4					
LOADIN	· ·	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	x-R	Wind(LL)	0.01	4-5	>999	240	Weight: 12 lb	FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=82(LC 8)

Max Uplift 5=-69(LC 4), 3=-57(LC 8)

Max Grav 5=348(LC 1), 3=98(LC 1), 4=67(LC 3)

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

TOP CHORD 2-5=-305/97

# 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.

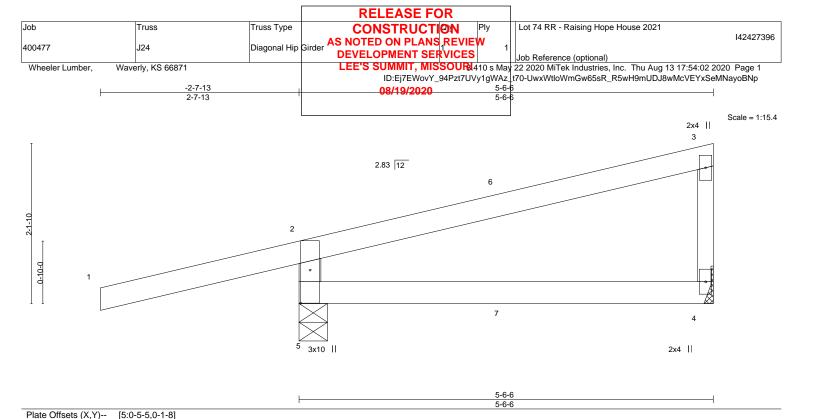


Structural wood sheathing directly applied or 3-11-4 oc purlins,

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

August 14,2020





**TCLL** 25.0 Plate Grip DOL

LOADING (psf)

**BOT CHORD** 

**WEBS** 

TCDL 10.0 Lumber DOL 1.15 ВС 0.23 Vert(CT) -0.06 4-5 >999 240 **BCLL** 0.0 \* Rep Stress Incr NO WB 0.00 Horz(CT) 0.00 n/a n/a 4 Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-R Wind(LL) -0.02 >999 240 4-5 LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD

CSI.

TC

0.63

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

**PLATES** 

Weight: 18 lb

MT20

GRIP

197/144

FT = 10%

except end verticals

(loc)

-0.03

4-5

I/defI

>999

L/d

360

2x4 SPF No.2 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing 3-4: 2x3 SPF No.2

DEFL.

Vert(LL)

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

2x4 SPF No.2

Max Horz 5=88(LC 5)

Max Uplift 5=-186(LC 4), 4=-31(LC 8) Max Grav 5=485(LC 1), 4=186(LC 1)

SPACING-

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

TOP CHORD 2-5=-429/217

## 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.

2-0-0

1.15

- 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=186
- 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) 70 lb down and 14 lb up at 2-9-8, and 70 lb down and 14 lb up at 2-9-8 on top chord, and 14 lb down and 16 lb up at 2-9-8, and 14 lb down and 16 lb up at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

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



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427397 AS NOTED ON PLANS REVIE 400477 J25 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:03 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-y7Vu54p8Xa2zj?0A?oRWi\_0TcXluLyUiA6Nvv1yoBNo -1-10-8 1-10-08/19/2020 1-10-8 1-10-1 Scale = 1:10.2 4.00 12 0-110-0 3x10 || 1-10-15 1-10-15 Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

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	0.28	Vert(LL)	0.00	4-5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	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	
BCDI	10.0	Code IRC2018/TE	212014	Matri	x-R	Wind(LL)	-0.00	5	>999	240	Weight: 7 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEBS 2x4 SPF No.2

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

Max Horz 5=51(LC 4)

Max Uplift 5=-134(LC 4), 3=-13(LC 8), 4=-7(LC 1) Max Grav 5=302(LC 1), 3=5(LC 18), 4=26(LC 3)

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

TOP CHORD 2-5=-260/138

### 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) 3, 4 except (jt=lb) 5=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.



Structural wood sheathing directly applied or 1-10-15 oc purlins,

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427398 AS NOTED ON PLANS REVIE 400477 J26 Jack-Closed DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:03 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-y7Vu54p8Xa2zj?0A?oRWi\_0TcXIZLyUiA6Nvv1yoBNo -1-10-8 4-0-0 08/19/2020 1-10-8 Scale = 1:13.7

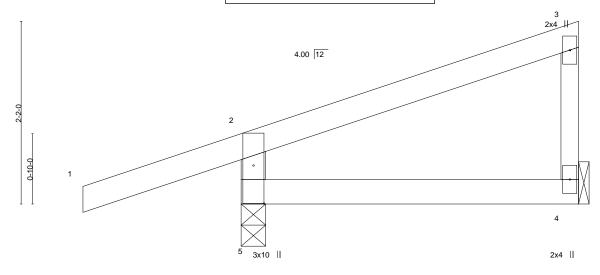


Plate Off	sets (X,Y)	[5:0-5-6,0-1-8]							
LOADING	<b>G</b> (psf)	SPACING- 2-0-	0   <b>CSI</b> .	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	5 TC 0.28	Vert(LL) -0.	01 4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	5 BC 0.10	Vert(CT) -0.	02 4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr YE	S 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: 13 lb	FT = 10%

**BRACING-**TOP CHORD

**BOT CHORD** 

4-0-0

except end verticals.

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

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

LUMBER-

REACTIONS.

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

3-4: 2x3 SPF No.2

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

Max Horz 5=93(LC 5)

Max Uplift 5=-132(LC 4), 4=-27(LC 8) Max Grav 5=348(LC 1), 4=131(LC 1)

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

TOP CHORD 2-5=-308/154

## NOTES-

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

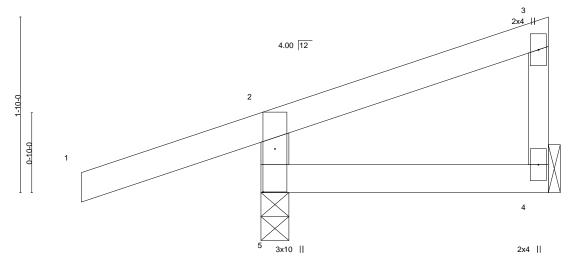


August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427399 AS NOTED ON PLANS REVIE 400477 J27 Jack-Closed DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:04 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-QJ3HIQqmluAqK9bNYWzIFBZeLxfc4PjrPm7TSTyoBNn -1-10-8 08/19/2020 1-10-8 3-0-0 Scale: 1"=1'



3-0-0

except end verticals.

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

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

Plate Off	sets (X,Y)	[5:0-5-6,0-1-8]										
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	0.28	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	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-R	Wind(LL)	-0.00	5	>999	240	Weight: 11 lb	FT = 10%

**BRACING-**TOP CHORD

**BOT CHORD** 

LUMBER-

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

3-4: 2x3 SPF No.2

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

Max Horz 5=78(LC 5)

Max Uplift 5=-133(LC 4), 4=-17(LC 5) Max Grav 5=317(LC 1), 4=72(LC 1)

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

TOP CHORD 2-5=-279/145

## NOTES-

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



August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427400 AS NOTED ON PLANS REVIE 400477 J28 Jack-Closed DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:04 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-QJ3HIQqmluAqK9bNYWzlFBZh4xfS4PjrPm7TSTyoBNn <del>08/<u>19/2</u>020</del> Scale: 1"=1' 4.00 12 2x4 \_H 3x10 2x4 || 3-0-0

BRACING-

TOP CHORD

**BOT CHORD** 

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 0.10	Vert(LL) -0.0	3-4	>999	360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) -0.0	3-4	>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	) 4	>999	240	Weight: 8 lb FT = 10%

LUMBER-

REACTIONS.

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

**WEBS** 2x3 SPF No.2

> 4=0-3-8, 3=Mechanical (size) Max Horz 4=63(LC 5) Max Uplift 4=-19(LC 4), 3=-29(LC 8) Max Grav 4=126(LC 1), 3=126(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 3-0-0 oc purlins,

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



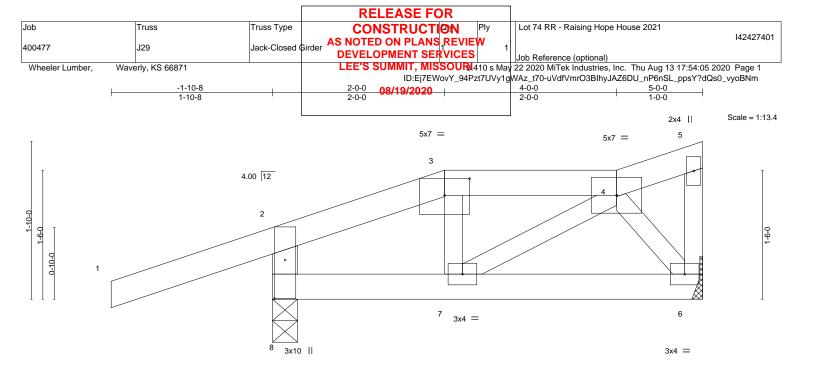


Plate Offsets (X,Y)	[3:0-3-8,0-2-5], [8:0-5-6,0-1-8]	2-0-0		Σ:	0-0	1-0-0
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.32	DEFL. Vert(LL) -0	in (loc) I/d 0.01 7 >9		PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 *	Lumber DOL 1.15 Rep Stress Incr NO	BC 0.12 WB 0.03	Vert(CT) -0	0.01 6-7 >9		W1120 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	- (- /	0.00 7 >9		Weight: 19 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

4-0-0

2-0-0

LUMBER-

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

2-8: 2x4 SPF No.2

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

Max Horz 8=78(LC 5)

Max Uplift 8=-166(LC 4), 6=-52(LC 8) Max Grav 8=364(LC 1), 6=170(LC 1)

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

TOP CHORD 2-8=-313/160

## 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) 6 except (jt=lb) 8=166.
- 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) 59 lb down and 126 lb up at 2-0-0 on top chord, and 29 lb down and 60 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20

Concentrated Loads (lb) Vert: 3=35(B)

OF MISSOL **ANDREW** THOMAS JOHNSON NUMBER PE-2017018993 O STONAL

5-0-0

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

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

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

August 14,2020



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

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



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427402 AS NOTED ON PLANS REVIE 400477 J30 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:06 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-MiB1j6r0qVQYaTllgw?DKcezrlJeYJ\_8s4caWMyoBNI 08/19/202000-0 4-0-0 1-10-8 1-0-0 Scale = 1:15.3 5x7 = 2x4 || 3 4.00 12 2 0-10-0 5 6<sub>2x4</sub> || 3x10 || 2x4 || 4-0-0 2-6-0 1-6-0 Plate Offsets (X,Y)--[3:0-3-8,0-2-5], [7:0-5-6,0-1-8] SPACING-GRIP LOADING (psf) CSI. DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.01 6-7 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.14 Vert(CT) -0.03 6-7 >999 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.00

0.01

5

6-7

n/a

>999

n/a

240

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

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

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

LUMBER-

**BCLL** 

**BCDL** 

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

0.0

10.0

2-7: 2x4 SPF No.2

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

Max Horz 7=95(LC 5)

Max Uplift 7=-137(LC 4), 5=-32(LC 5) Max Grav 7=385(LC 1), 5=184(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 2-7=-326/156

## 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

WB

Matrix-R

0.02

- 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.

YES

- 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) 5 except (jt=lb) 7=137.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



FT = 10%

Weight: 17 lb

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427403 AS NOTED ON PLANS REVIE 400477 J31 Jack-Closed DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:07 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-qulPwSsebpYPBdKyEeWSsqB8b9eNHmTH5kL73oyoBNk 5-0-0 08/19/2020 1-10-8 5-0-0 Scale = 1:16.3 2x4 || 3 4.00 12 2 0-10-0 4 2x4 || 3x10 || Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-GRIP LOADING (psf) 2-0-0 DEFL. (loc) I/defI L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.02 4-5 >999 360 MT20 197/144

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

-0.04

-0.00

0.01

4-5

4-5

4

>999

>999

except end verticals.

n/a

240

n/a

240

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

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

LUMBER-

**TCDL** 

**BCLL** 

**BCDL** 

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

10.0

10.0

0.0

3-4: 2x3 SPF No.2

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

Max Horz 5=108(LC 5)

Max Uplift 5=-134(LC 4), 4=-40(LC 8) Max Grav 5=385(LC 1), 4=184(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-340/166

## NOTES-

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

BC

WB

Matrix-R

0.17

0.00

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

1.15

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.
- 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)
- 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.



FT = 10%

Weight: 16 lb

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427404 AS NOTED ON PLANS REVIE 400477 J32 Jack-Closed DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:07 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-qulPwSsebpYPBdKyEeWSsqB3u9bAHmTH5kL73oyoBNk 08/19/2020 1-10-8 Scale = 1:19.9 3x6 || 3 4.00 12 3x4 ||

Plate Offsets (X,Y)	[4:Edge,0-2-8], [5:0-5-6,0-1-8]			
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 0.58	Vert(LL) -0.08 4-5 >985 360 MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.17 4-5 >472 240	
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) 0.03 4-5 >999 240 Weight: 21 lb FT = 10%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x4 SPF No.2 \*Except\* 3-4: 2x3 SPF No.2

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

Max Horz 5=137(LC 5)

Max Uplift 5=-144(LC 4), 4=-62(LC 8) Max Grav 5=466(LC 1), 4=283(LC 1)

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

TOP CHORD 2-5=-412/192

## 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.
- 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)
- 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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 142427405 400477 J33 **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:08 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-l4In8otHM6gGpnv8nL1hP1jEDYz20DjRJN5gbEyoBNj 08/19/2020 2-7-13 2-8-7 Scale = 1:10.6 0-3-15 2.83 12 2 -5-10

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

1.0.4.D.W.O. / . O.	anama aaa	001	5-51		<i>(</i> 1 )	1/1.0		DI 4750	anın
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 0.61	Vert(LL)	0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(CT)	0.01	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	-0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

3x10 ||

LUMBER-

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

**WEBS** 2x4 SPF No.2

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

Max Horz 5=52(LC 7)

Max Uplift 5=-158(LC 4), 3=-42(LC 17), 4=-26(LC 1) Max Grav 5=276(LC 1), 3=23(LC 4), 4=28(LC 4)

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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=158.
- 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) 46 lb down and 16 lb up at -2-7-13, and 46 lb down and 16 lb up at -2-7-13 on top chord. The design/selection of such connection device(s) is the
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

Concentrated Loads (lb)

Vert: 1=-71(F=-36, B=-36)

Trapezoidal Loads (plf)

Vert: 1 = -0 (F = 35, B = 35) - to - 2 = -49 (F = 11, B = 11), 2 = -5 (F = 33, B = 33) - to - 3 = -49 (F = 10, B = 10), 5 = 0 (F = 10, B = 10) - to - 4 = -14 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30, B = 10)) - to - 4 (F = 30,



Structural wood sheathing directly applied or 2-8-7 oc purlins,

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 142427406 400477 J34 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:08 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UV/1gWAz\_t70-I4In8otHM6gGpnv8nL1hP1jB6Yyp0DjRJN5gbEyoBNj 08/19/2020 2-4-0 5x7 || Scale = 1:18.4 3 3.12 12 13 3x4 || 5x7

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

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 0.81	Vert(LL) -0.04 4-5 >999	360 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.08 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) 0.02 4-5 >999	240 Weight: 27 lb FT = 10%

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

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

2x6 SPF No.2 \*Except\*

3-4: 2x3 SPF No.2

(size) 5=0-3-14, 4=Mechanical

Max Horz 5=115(LC 22)

Max Uplift 5=-191(LC 4), 4=-91(LC 8) Max Grav 5=553(LC 1), 4=380(LC 1)

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

TOP CHORD 2-5=-501/250, 3-4=-261/131

## 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.
- 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=191
- 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 38 lb up at 2-6-8, 77 lb down and 29 lb up at 3-4-9, and 89 lb down and 71 lb up at 5-1-4, and 101 lb down and 78 lb up at 6-6-15 on top chord , and 4 lb down at 2-6-8, 10 lb down and 8 lb up at 3-4-9, and 20 lb down at 5-1-4, and 39 lb down at 6-6-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)

### LOAD CASE(S) Standard

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

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

Concentrated Loads (lb)

Vert: 8=-23(F) 9=-52(B) 11=8(B) 12=-10(F) 13=-24(B)



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

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427407 DEVELOPMENT SERVICES AS NOTED ON PLANS 400477 J35 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:09 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-mHsAL8uv7Qo7RwUKL3YwyFGR?yInlgzaY1qE7gyoBNi -1-10-8 6-0-0 08/19/2020 1-10-8 6-0-0 Scale = 1:17.8 4.00 12 2-5-13 0-10-0 3x10 6-0-0 Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** 

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

-0.05

-0.11

0.03

0.04

4-5

4-5

4-5

3

>999

>632

>999

except end verticals.

n/a

360

240

n/a

240

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

MT20

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

Weight: 17 lb

197/144

FT = 10%

LUMBER-

**TCLL** 

**TCDL** 

**BCLL** 

**BCDL** 

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

**WEBS** 2x4 SPF No.2

25.0

10.0

0.0

10.0

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

Max Horz 5=106(LC 4)

Max Uplift 5=-127(LC 4), 3=-82(LC 8)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Grav 5=427(LC 1), 3=173(LC 1), 4=107(LC 3)

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

TOP CHORD 2-5=-374/174

### 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-R

0.48

0.31

0.00

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

1.15

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.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=127
- 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427408 AS NOTED ON PLANS REVIE 400477 J36 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:09 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-mHsAL8uv7Qo7RwUKL3YwyFGUIyJNlgzaY1qE7gyoBNi -1-10-8 08/19/2020 1-10-8 5-0-12 Scale: 3/4"=1" 0-4-3 4.00 12 2-2-1 0-10-0 3x10 || 5-0-12 Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** Plate Grip DOL **TCLL** 25.0 1.15 TC 0.30 Vert(LL) -0.03 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.20 Vert(CT) -0.05 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.02

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

3

4-5

0.02

n/a

>999

except end verticals.

n/a

240

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

Structural wood sheathing directly applied or 5-0-12 oc purlins,

LUMBER-

**BCDL** 

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

10.0

**WEBS** 2x4 SPF No.2

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

Max Horz 5=93(LC 4)

Max Uplift 5=-124(LC 4), 3=-68(LC 8)

Max Grav 5=389(LC 1), 3=140(LC 1), 4=89(LC 3)

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-341/162

### 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

Matrix-R

- 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) 3 except (jt=lb) 5=124
- 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.



FT = 10%

Weight: 15 lb

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427409 AS NOTED ON PLANS REVIE 400477 J37 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-FTQYZUuXukw\_242Wvm39USpfqMhdU7Cknhanf7yoBNh 2-6-12 -1-10-8 08/19/2020 1-10-8 2-6-12 Scale = 1:11.3 4.00 12 2 0-10-0

2-6-12

except end verticals.

Structural wood sheathing directly applied or 2-6-12 oc purlins,

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

Plate Offsets (X,Y)	[5:0-5-6,0-1-8]			
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 0.28	Vert(LL) 0.00 4-5 >999 360 MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.07	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: 9 lb FT = 10%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

**WEBS** 2x4 SPF No.2

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

Max Horz 5=59(LC 4)

Max Uplift 5=-126(LC 4), 3=-26(LC 8)

Max Grav 5=308(LC 1), 3=39(LC 1), 4=38(LC 3)

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

TOP CHORD 2-5=-267/137

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 5=126
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427410 AS NOTED ON PLANS REVIE 400477 J38 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-FTQYZUuXukw\_242Wvm39USphFMhuU7Cknhanf7yoBNh 08/19/2020 10 3-8-10 0-10-8 Scale = 1:13.5 5.00 12 0-2-0

				3-0-10	
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 0.19	Vert(LL) -0.01 2-4 >999 360 MT20 197/144	
TCDL	10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.02 2-4 >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/TPI2014	Matrix-P	Wind(LL) 0.00 2 **** 240 Weight: 10 lb FT = 10%	

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2

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

Max Horz 2=77(LC 8)

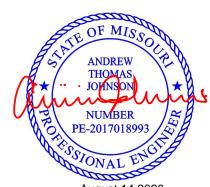
Max Uplift 3=-66(LC 8), 2=-37(LC 8)

Max Grav 3=113(LC 1), 2=240(LC 1), 4=70(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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-8-10 oc purlins.

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427411 AS NOTED ON PLANS REVIE 400477 J39 Jack-Open **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:11 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-jf\_wmqv9f13rgEdjTUbO1gLtxm2WDaSt0LJLCZyoBNg 08/19/2020<sup>2-1-7</sup> 2-1-7 -0-10-8 0-10-8 Scale = 1:10.2 5.00 12 2 0-2-0

2-1-7

BRACING-TOP CHORD

BOT CHORD

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.	.00 2	>999 360	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.	.00 2-4	>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/TPI2014	Matrix-P	Wind(LL) 0.	.00 2	**** 240	Weight: 7 lb FT = 10%

4x5 =

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2

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

Max Horz 2=49(LC 8)

Max Uplift 3=-35(LC 8), 2=-35(LC 4)

Max Grav 3=48(LC 1), 2=177(LC 1), 4=38(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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



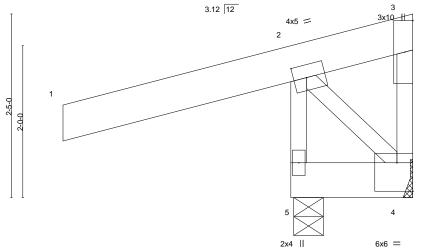
Structural wood sheathing directly applied or 2-1-7 oc purlins.

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427412 AS NOTED ON PLANS REVIE 400477 J40 Jack-Closed Girder DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:12 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVv1gWAz\_t70-BrYIz9wnQLBiIOCv0B6dZtutSAO7y0N0E?3uk?yoBNf 08/19/2020 3-0-0 -7-4 Scale = 1:15.2



1-6-13

except end verticals.

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

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

Plate Off	sets (X,Y)	[2:0-2-1,0-2-0], [4:Edge,0	0-4-8]									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.00	` ź	>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	NO	WB	0.02	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-P	Wind(LL)	0.00	5	****	240	Weight: 15 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.4E **BOT CHORD** 2x6 SPF No.2

**WEBS** 2x3 SPF No.2

REACTIONS.

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

Max Horz 5=92(LC 5)

Max Uplift 5=-278(LC 4), 4=-734(LC 21) Max Grav 5=1327(LC 21), 4=123(LC 4)

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

2-5=-1313/286, 3-4=-142/748 TOP CHORD

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=278 4=734
- 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) Load case(s) 21 has/have been modified. Building designer must review loads to verify that they are correct for the intended use 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 Except:

21) User defined: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb) Vert: 1=-250



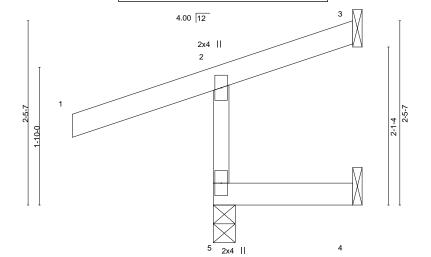
August 14,2020





**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427413 AS NOTED ON PLANS REVIE 400477 J41 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:12 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-BrYlz9wnQLBilOCv0B6dZtu?WAOPy0i0E?3uk?yoBNf 08/19/2020 1-10-8 1-10-4



		1-10-4											
LOADIN TCLL	<b>G</b> (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.27	DEFL. Vert(LL)	in 0.00	(loc) 5	l/defl >999	L/d 240	PLATES MT20	<b>GRIP</b> 197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	5	>999	240			
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TPI	YES 12014	WB Matri	0.00 x-R	Horz(CT)	-0.02	3	n/a	n/a	Weight: 8 lb	FT = 10%	

BRACING-

TOP CHORD

BOT CHORD

1-10-4

except end verticals.

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=64(LC 5)

Max Uplift 5=-107(LC 4), 3=-23(LC 5), 4=-12(LC 5) Max Grav 5=296(LC 1), 3=6(LC 19), 4=32(LC 3)

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

TOP CHORD 2-5=-270/132

# 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) 3, 4 except (jt=lb) 5=107.
- 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 1-10-4 oc purlins,

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

Scale = 1:15.3

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427414 JACK-CLOSED GIRDEN NOTED ON THE SERVICES 400477 J42 Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:13 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-f26gBVxPBfJZwYn5avds65R2UZg9hTyATfoRGSyoBNe 08/19/2020 1-7-9 Scale = 1:10.0 12x12 || 3.12 12 2 -5-1 6x6 | Plate Offsets (X,Y)--[3:Edge,0-2-8] SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.83 Vert(LL) 0.00 >999 360 MT20 197/144 5

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.00

-0.00

-0.00

4-5

4

5

>999

>999

except end verticals.

n/a

240

n/a

240

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

Structural wood sheathing directly applied or 1-7-9 oc purlins,

LUMBER-

TCDL

**BCLL** 

**BCDL** 

TOP CHORD 2x6 SPF 1650F 1.4E **BOT CHORD** 2x6 SPF No.2 **WEBS** 

10.0

10.0

0.0 \*

2x6 SPF No.2 \*Except\*

3-4: 2x3 SPF No.2

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

Max Horz 5=66(LC 7)

Max Uplift 5=-314(LC 4), 4=-846(LC 21) Max Grav 5=1438(LC 21), 4=155(LC 4)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-1210/287, 3-4=-112/643

## NOTES-

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

ВС

WB

Matrix-R

0.21

0.00

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

1.15

NO

- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=314, 4=846,
- 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) Load case(s) 21 has/have been modified. Building designer must review loads to verify that they are correct for the intended use 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 Except:

21) User defined: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

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

Concentrated Loads (lb) Vert: 1=-250



FT = 10%

Weight: 12 lb

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427415 AS NOTED ON PLANS REVIE 400477 J43 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:13 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-f26gBVxPBfJZwYn5avds65RA4ZiDhTyATfoRGSyoBNe 1-10 08/19/2020 1-10-8 Scale = 1:10.2 4.00 12 2 1-1-5 3x10 || 1-10-8 1-10-8 Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 CSI. (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.28 Vert(LL) 0.00 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL ВС 0.08 Vert(CT) 0.00 >999 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

4-5

3

5

n/a

>999

except end verticals.

n/a

240

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

-0.00

-0.00

LUMBER-

**BCLL** 

BCDL

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

0.0

10.0

**WEBS** 2x4 SPF No.2

REACTIONS.

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

Code IRC2018/TPI2014

Max Horz 5=50(LC 4)

Max Uplift 5=-135(LC 4), 3=-12(LC 8), 4=-8(LC 1) Max Grav 5=302(LC 1), 3=4(LC 19), 4=25(LC 3)

Rep Stress Incr

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

TOP CHORD 2-5=-260/138

### 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

WB

Matrix-R

0.00

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

1.15

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.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=135
- 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.



FT = 10%

Weight: 7 lb

Structural wood sheathing directly applied or 1-10-8 oc purlins,

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 142427416 400477 J44 **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:14 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-7Eg3Ory1yyRPXiMI8c85flzDDz?UQwCJiJY?ouyoBNd 08/19/2020 3-0-0 3-4-1

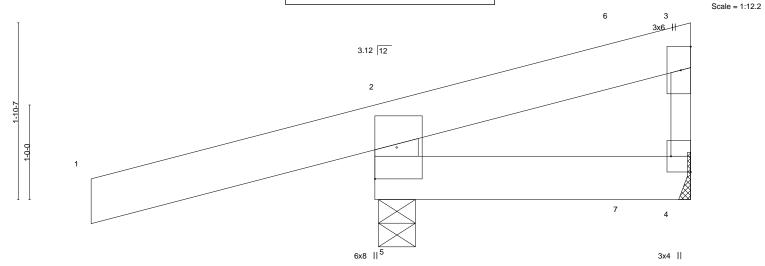


Plate Off	sets (X,Y)	[4:Edge,0-2-8]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	0.00	`4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-R	Wind(LL)	-0.00	4-5	>999	240	Weight: 19 lb	FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

3-3-10

except end verticals.

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

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

LUMBER-

REACTIONS.

TOP CHORD 2x6 SPF 1650F 1.4E **BOT CHORD** 2x6 SPF No.2 **WEBS** 2x6 SPF No.2 \*Except\*

3-4: 2x3 SPF No.2

(size) 5=0-4-11, 4=Mechanical Max Horz 5=85(LC 7)

Max Uplift 5=-231(LC 4), 4=-261(LC 37) Max Grav 5=1000(LC 37), 4=100(LC 21)

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

TOP CHORD 2-5=-857/233

## 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) except (jt=lb) 5=231, 4=261,
- 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) Load case(s) 37 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 28 lb up at 2-8-7 on top chord, and 14 lb down and 8 lb up at 2-8-7 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 Except:

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=8(F)

OF MISSOL **ANDREW THOMAS** JOHNSON PE-- PE-- STONAL NUMBER PE-2017018993

August 14,2020

## Continued on page 2



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

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



**RELEASE FOR** Job Truss Truss Type Diagonal Hip Girder AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES | Job Reference (optional) | Job Reference (optional) | LEE'S SUMMIT, MISSOUR 1410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:14 2020 Page 2 400477 J44

CONSTRUCTION

Lot 74 RR - Raising Hope House 2021

142427416

ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-7Eg3Ory1yyRPXiMI8c85flzDDz?UQwCJiJY?ouyoBNd

LOAD CASE(S)

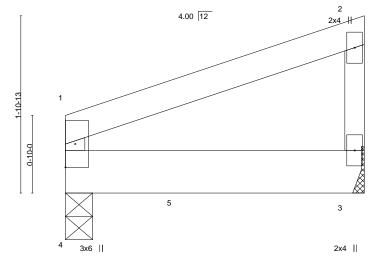
Waverly, KS 66871 Wheeler Lumber,

37) User defined: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

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

Concentrated Loads (lb) Vert: 1=-250 7=8(F) 08/19/2020

**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427417 AS NOTED ON PLANS REVIE 400477 J45 Jack-Closed Girder **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:14 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-7Eg3Ory1yyRPXiMl8c85flzN\_z?iQwCJiJY?ouyoBNd <del>08/19/2</del>020 Scale = 1:12.4



LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP (loc) I/defI L/d Plate Grip DOL Vert(LL) -0.01 >999 197/144 **TCLL** 25.0 1.15 TC 0.14 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.26 Vert(CT) -0.01 >999 240 3-4 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) 0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Wind(LL) 0.00 3-4 >999 240 Weight: 11 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

**WEBS** 2x3 SPF No.2

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

Max Horz 4=63(LC 5) Max Uplift 4=-56(LC 4), 3=-54(LC 8) Max Grav 4=347(LC 1), 3=270(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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 347 lb down and 67 lb up at 1-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

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

Vert: 5=-347(F)



Structural wood sheathing directly applied or 3-2-8 oc purlins,

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427418 AS NOTED ON PLANS REVIE 400477 J46 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:15 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-bQERcBygjGZG9rxUiJfKBWWWaNOy9NSTwzHYLKyoBNc 1-10-8 3-2-8 08/19/2020 1-10-8 3-2-8 Scale = 1:12.4 4.00 12 1-6-10 2 0-10-0 3x10 || Plate Offsets (X,Y)--[5:0-5-6,0-1-8] SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 CSI. in (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.28 Vert(LL) -0.00 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.06 Vert(CT) -0.01 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.00

>999

except end verticals.

4-5

240

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

Structural wood sheathing directly applied or 3-2-8 oc purlins,

LUMBER-

**BCDL** 

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

10.0

**WEBS** 2x4 SPF No.2

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

Max Horz 5=68(LC 4)

Max Uplift 5=-123(LC 4), 3=-38(LC 8)

Max Grav 5=324(LC 1), 3=69(LC 1), 4=52(LC 3)

Code IRC2018/TPI2014

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

TOP CHORD 2-5=-283/142

### 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

Matrix-R

- 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) 3 except (jt=lb) 5=123
- 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.



FT = 10%

Weight: 10 lb

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION Jack-Closed Girder AS NOTED ON PLANS REVIE 142427419 400477 J47 DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:15 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-bQERcBygjGZG9rxUiJfKBWWOzNMS9NSTwzHYLKyoBNc -3-0-0 3-0-0 08/19/2020 1-10-2 Scale = 1:10.3 3

3.12 12 2 3x16 M	4
6x6    <sup>5</sup>	

			' 1-9-11 '	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.83	DEFL.         in (loc)         l/defl         L/d         PLATES         GRIP           Vert(LL)         0.00         5 >999         360         MT20         197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) 0.00 4-5 >999 240 MT18HS 197/144	
BCLL 0.0 * BCDL 10.0	Rep Stress Incr NO Code IRC2018/TPI2014	WB 0.00 Matrix-R	Horz(CT) -0.00 4 n/a n/a Wind(LL) -0.00 5 >999 240 Weight: 13 lb FT = 10%	

BOT CHORD

1-10-2

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

except end verticals.

Structural wood sheathing directly applied or 1-10-2 oc purlins,

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x6 SPF 1650F 1.4E 2x6 SPF No.2 BOT CHORD **WEBS** 2x6 SPF No.2 \*Except\*

3-4: 2x3 SPF No.2

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

Max Horz 5=68(LC 7)

Max Uplift 5=-291(LC 4), 4=-707(LC 21) Max Grav 5=1320(LC 21), 4=129(LC 4)

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

TOP CHORD 2-5=-1111/269. 3-4=-89/529

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) 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) 5=291, 4=707,
- 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) Load case(s) 21 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of
- 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 Except:

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

21) User defined: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb) Vert: 1=-250



August 14,2020





**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427420 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400477 J48 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:16 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-3dnppXzlTah7n?WgF1AZkj3hKnkvuqic9d15tmyoBNb 08/19/2020 1-10-8 Scale = 1:10.4 4.00 12

1-6-3 0-10-0 3x10 ||

2-0-8

except end verticals.

Structural wood sheathing directly applied or 2-0-8 oc purlins,

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

Plate Offsets (X,Y)	[5:0-5-6,0-1-8]							
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 0.28	Vert(LL)	0.00 4-	, 5 >999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	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	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** 2x4 SPF No.2

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

Max Horz 5=52(LC 4)

Max Uplift 5=-133(LC 4), 3=-15(LC 8), 4=-5(LC 1) Max Grav 5=302(LC 1), 3=10(LC 1), 4=27(LC 3)

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

TOP CHORD 2-5=-260/137

### 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) 3, 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427421 AS NOTED ON PLANS REVIE 400477 LAY1 GABLE **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:19 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-UCTyRZ?AmV3ieTEFx9kGMMhEN\_mu5Av2rbGmU5yoBNY 9-2-9 **08/19/2020** 1-4-0 Scale = 1:36.3 5 10.40 12 3 6-9-15 6-7-13 4-3-15 4-3-1512 10 11 7-10-9 7-10-9 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI **PLATES** GRIP (loc) L/d Plate Grip DOL Vert(LL) 197/144 **TCLL** 25.0 1.15 TC 0.16 n/a n/a 999 MT20

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

-0.00

999

n/a

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

Rigid ceiling directly applied or 6-0-0 oc bracing, Except:

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

Weight: 46 lb

FT = 10%

n/a

n/a

10-0-0 oc bracing: 8-9.

8

LUMBER-

**TCDL** 

**BCLL** 

BCDL

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

10.0

0.0

10.0

2x4 SPF No.2 \*Except\* WEBS 5-9: 2x3 SPF No.2

**OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 9-2-9.

Max Horz 1=277(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 8, 11, 10 except 12=-135(LC 8) Max Grav All reactions 250 lb or less at joint(s) 1, 9, 8, 11, 10 except 12=277(LC 15)

1.15

YES

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

TOP CHORD 1-2=-364/211

## NOTES-

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

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

ВС

WB

Matrix-S

0.06

0.10

- 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, 9, 8, 11, 10 except (jt=lb) 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427422 **AS NOTED ON PLANS REVIE** 400477 LAY2 GABLE DEVELOPMENT SERVICES Job Reference (optional) LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:20 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-yO1Kfu0oXoBZFdpRUtFVuZDPCO6HqeFC4F?J0YyoBNX 08/<u>19/2</u>020 Scale = 1:33.9 2x4 2x4 || 10.40 12 2x4 || 2x4 || <sup>6</sup>2x4 || 10.40 12

		2-9-12	3-9-13	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.09	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) n/a - n/a 999	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) n/a - n/a 999	W125 167/111
BCLL 0.0 * BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.03 Matrix-P	Horz(CT) -0.00 5 n/a n/a	Weight: 25 lb FT = 10%

7 5x7 //

6-7-9

LUMBER-BRACING-

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

**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 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 5-6.

REACTIONS. All bearings 6-7-9. (lb) -Max Horz 1=175(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6 except 7=-121(LC 8) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 8, 6 except 7=271(LC 15)

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

#### NOTES-

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

2x4 /

2-9-12

- 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, 5, 8, 6 except (it=lb) 7=121.
- 6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 7, 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.



August 14,2020



Job Truss Truss Type 400477 LAY3 GABLE

Waverly, KS 66871

Wheeler Lumber,

**RELEASE FOR** CONSTRUCTION

AS NOTED ON PLANS REVIE **DEVELOPMENT SERVICES**  Lot 74 RR - Raising Hope House 2021

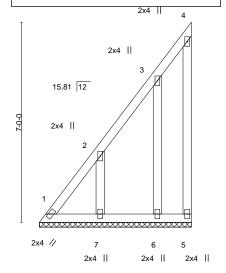
142427423

Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:20 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-yO1Kfu0oXoBZFdpRUtFVuZDM6O6jqdhC4F?J0YyoBNX

08/<u>13/2</u>020

Scale = 1:40.3



LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defl TCLL 25.0 Plate Grip DOL 1.15 Vert(LL) 999 197/144 TC 0.29 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) 999 n/a n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.06 Horz(CT) -0.00 5 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 31 lb FT = 10%

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 5-3-12 oc purlins, BOT CHORD 2x4 SPF No.2 except end verticals. **WEBS** 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. All bearings 5-3-12. (lb) -Max Horz 1=254(LC 5)

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) except 1=-125(LC 6), 5=-115(LC 7), 7=-197(LC 8), 6=-138(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

TOP CHORD 1-2=-301/225

### NOTES-

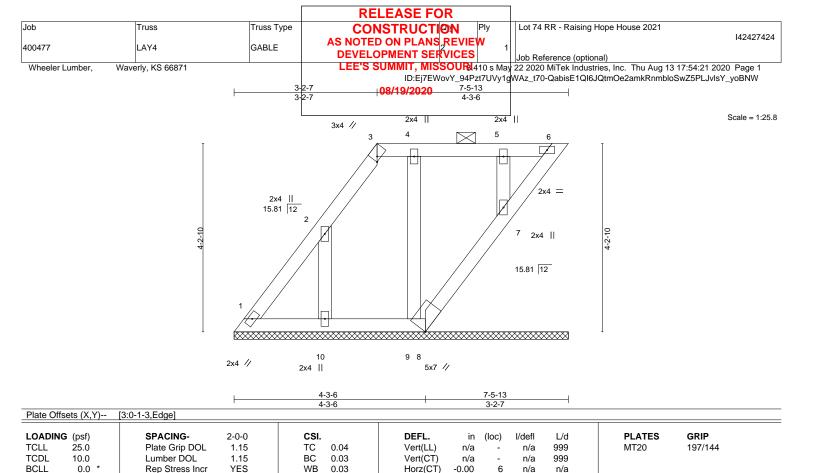
**OTHERS** 

- 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
- 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 125 lb uplift at joint 1, 115 lb uplift at joint 5, 197 lb uplift at joint 7 and 138 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.



August 14,2020





LUMBER-

**BCDL** 

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

10.0

**OTHERS** 2x4 SPF No.2 **BRACING-**

TOP CHORD

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

Weight: 29 lb

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

**BOT CHORD** 

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

REACTIONS. All bearings 7-5-13. (lb) -

Max Horz 1=160(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8, 9, 7 except 10=-159(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 6, 8, 10, 9, 7

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

Code IRC2018/TPI2014

### 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

Matrix-P

- 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in 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, 6, 8, 9, 7 except (jt=lb) 10=159.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 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.



FT = 10%

August 14,2020



Job Truss Truss Type 400477 LAY5 GABLE

Waverly, KS 66871

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

Lot 74 RR - Raising Hope House 2021

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

1-13, 2-12, 3-11

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

except end verticals.

1 Row at midpt

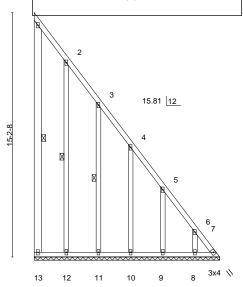
142427425

Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:22 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-un944a233QRHVwzqcIHzz\_JlqCnyIWsVXZUQ4QyoBNV

0<mark>8/99/2020</mark>

Scale = 1:71.7



LOADING	VI /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	PI2014	Matri	x-S						Weight: 99 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

Wheeler Lumber,

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

2x6 SPF No.2 **WEBS** 

**OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 11-6-8. (lb) -

Max Horz 13=-592(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 13 except 7=-290(LC 7), 12=-165(LC 9), 11=-180(LC 9), 10=-174(LC

9), 9=-179(LC 9), 8=-158(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 13, 12, 11, 10, 9, 8 except 7=743(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-252/120, 3-4=-433/193, 4-5=-609/266, 5-6=-791/343, 6-7=-940/404 TOP CHORD **BOT CHORD** 12-13=-247/591, 11-12=-247/591, 10-11=-247/591, 9-10=-247/591, 8-9=-247/591,

7-8=-247/591

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 7=290, 12=165, 11=180, 10=174, 9=179, 8=158.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Job Truss Truss Type 400477 LAY6 GABLE

Waverly, KS 66871

Wheeler Lumber,

**RELEASE FOR** CONSTRUCTION

AS NOTED ON PLANS REVIE **DEVELOPMENT SERVICES**  Lot 74 RR - Raising Hope House 2021

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

1-14, 2-13

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

except end verticals

1 Row at midpt

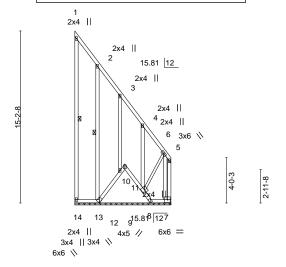
142427426

Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:22 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-un944a233QRHVwzqcIHzz\_JlfCnsIUAVXZUQ4QyoBNV

8**08/519/2020** |

Scale = 1:101.8



2-2-2 4-5-1 6-8-0 8-5-15 2-2-2 2-2-15 2-2-15 1-9-15

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 0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.26	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	, ,					Weight: 87 lb	FT = 10%

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

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

5-9: 2x3 SPF No.2

2x4 SPF No.2 \*Except\*

**OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 8-5-15. Max Horz 14=-387(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 14, 8 except 7=-493(LC 7), 12=-548(LC 9), 10=-770(LC 7),

13=-164(LC 9), 11=-169(LC 9), 9=-1288(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 14, 8, 11 except 7=1068(LC 9), 12=373(LC 7), 10=1019(LC 9), 13=262(LC 16), 9=787(LC 7)

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

TOP CHORD 2-3=-261/124, 3-4=-450/202, 4-5=-596/256

13-14=-293/387, 12-13=-293/387, 11-12=-506/667, 10-11=-501/635, 9-10=-498/643 **BOT CHORD** 

5-7=-843/451, 5-9=-431/753 **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 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) 14, 8 except (jt=lb) 7=493, 12=548, 10=770, 13=164, 11=169, 9=1288.
- 6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 11, 9.
- 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.



August 14,2020



Job Truss Truss Type 400477 LAY7 GABLE

Waverly, KS 66871

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

Lot 74 RR - Raising Hope House 2021

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

1-11, 2-10

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

except end verticals.

1 Row at midpt

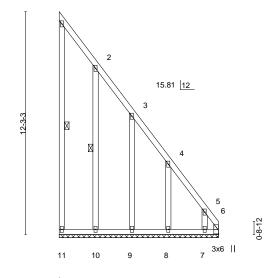
142427427

Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:23 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-MziSHw2hqjZ864Y0A?oCWCrweb7Y1zKemDEzdtyoBNU

<del>08/39/2020</del>

Scale = 1:63.4



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL)	n/a -	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	n/a -	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT)	0.01 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 64 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-TOP CHORD 2x4 SPF No.2

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

**OTHERS** WEDGE

Wheeler Lumber,

Right: 2x4 SPF No.2

REACTIONS. All bearings 8-9-1.

Max Horz 11=-477(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 11 except 10=-186(LC 9), 9=-172(LC 9), 6=-337(LC 7), 8=-185(LC

9), 7=-348(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 11, 10, 9, 8, 7 except 6=812(LC 9)

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

TOP CHORD 2-3=-264/126, 3-4=-439/195, 4-5=-626/275, 5-6=-940/406

**BOT CHORD** 10-11=-199/477, 9-10=-199/477, 8-9=-199/477, 7-8=-199/477, 6-7=-199/477

5-7=-216/368 **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 right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb)
- 10=186, 9=172, 6=337, 8=185, 7=348. 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.



August 14,2020



Job Truss Truss Type 400477 LAY8 GABLE

Waverly, KS 66871

### **RELEASE FOR** CONSTRUCTION

AS NOTED ON PLANS REVIE **DEVELOPMENT SERVICES**  Lot 74 RR - Raising Hope House 2021

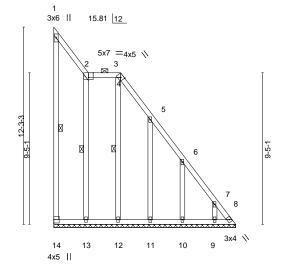
142427428

Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:24 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-q9GrVG3Jb1h?kE7DjiKR2PO0L?Q7mQOo?tzX9JyoBNT

2-1-14 | 4-1-14 | **08/19/2020**11 2-1-14 | 2-0-0 | **08/19/2020**11

Scale = 1:71.6



11-3-11

Plate Off	fsets (X,Y)	[2:0-3-8,Edge], [4:0-2-3,E	dge]									
LOADIN TCLL	<b>G</b> (psf) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.40	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 197/144
TCDL BCLL	10.0 0.0 *	Lumber DOL Rep Stress Incr	1.15 YES	BC WB	0.32 0.15	Vert(CT) Horz(CT)	n/a 0.01	- 8	n/a n/a	999 n/a	2	
BCDL	10.0	Code IRC2018/Ti	PI2014	Matri	x-S						Weight: 79 lb	FT = 10%

LUMBER-

Wheeler Lumber,

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

**BRACING-**

**WEBS** 

TOP CHORD **BOT CHORD** 

1 Row at midpt

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

1-14, 2-13, 3-12

All bearings 11-3-11.

REACTIONS. Max Horz 14=-462(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 14=-238(LC 6), 8=-318(LC 7), 13=-194(LC 5), 12=-247(LC

4), 11=-188(LC 9), 10=-177(LC 9), 9=-151(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 14, 11, 10, 9 except 8=470(LC 4), 13=353(LC 15), 12=258(LC 16)

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

TOP CHORD 4-5=-349/241, 5-6=-416/296, 6-7=-512/369, 7-8=-589/427

13-14=-257/363, 12-13=-258/364, 11-12=-258/364, 10-11=-258/364, 9-10=-258/364, **BOT CHORD** 

8-9=-258/364

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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 238 lb uplift at joint 14, 318 lb uplift at joint 8, 194 lb uplift at joint 13, 247 lb uplift at joint 12, 188 lb uplift at joint 11, 177 lb uplift at joint 10 and 151 lb uplift at joint 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427429 AS NOTED ON PLANS REVIE 400477 LAY9 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:24 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-q9GrVG3Jb1h?kE7DjiKR2PO6u?UfmSCo?tzX9JyoBNT 08/19/2020 3-0-12 3-0-12

3x4 =

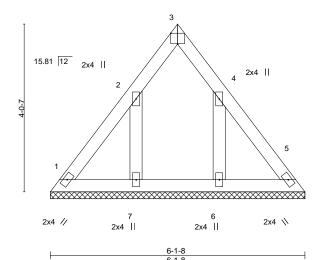


Plate Off	sets (X,Y)	[3:Edge,0-3-2]		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) n/a - n/a 999 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) n/a - n/a 999
BCLL	0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 5 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P	Weight: 23 lb FT = 10%

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 6-1-8. Max Horz 1=-103(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 7=-149(LC 8), 6=-148(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 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) 7=149 6=148
- 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.

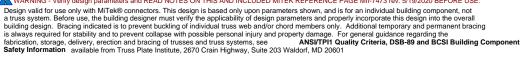


Scale = 1:27.7

August 14,2020



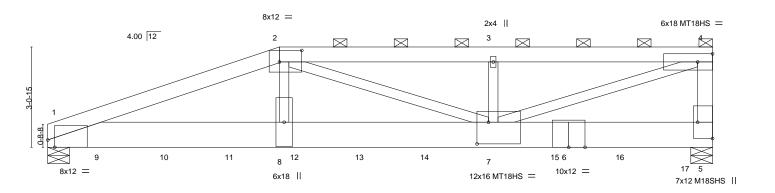






**RELEASE FOR CONSTRUCTION** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 142427430 AS NOTED ON PLANS REVIE 400477 R1 Half Hip Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Z | | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:26 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-nYObwy5Z7exjzYHbr7Mv8qTGepxCE8p4SBSdDByoBNR 1308/19/2020 7-1-6 6-8-13 Scale = 1:35.4



	7-1-6			13-8-3									
		7-1-6		6-6-13							6-8-13	ı	
Plate Offse	Plate Offsets (X,Y) [1:0-2-9,Edge], [2:0-8-4,0-4-4], [5:Edge,0-5-8], [7:0-4-4,0-8-0]												
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	0.80	Vert(LL)	-0.30	7-8	>795	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.53	7-8	>450	240	M18SHS	197/144	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.06	5	n/a	n/a	MT18HS	197/144	
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-S	Wind(LL)	0.18	7-8	>999	240	Weight: 280 lb	FT = 10%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.4E **BOT CHORD** 2x10 SP DSS **WEBS** 2x4 SPF No.2 \*Except\*

4-5: 2x6 SPF No.2, 2-7,4-7: 2x4 SPF 2100F 1.8E

REACTIONS. (size) 1=0-8-0, 5=0-8-0 Max Horz 1=83(LC 22)

Max Uplift 1=-908(LC 4), 5=-99(LC 4)

Max Grav 1=8864(LC 1), 5=10218(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-19337/1770, 2-3=-17189/1034, 3-4=-17189/1034, 4-5=-6570/435 TOP CHORD

BOT CHORD 1-8=-1650/18128, 7-8=-1694/18513, 5-7=-21/840

**WEBS** 2-8=-751/6493, 2-7=-1413/774, 3-7=-362/265, 4-7=-1078/17483

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc. Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-5-0 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); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 1=908
- 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 3-6-12 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-9-1 max.): 2-4.

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

August 14,2020

### Continued on page 2



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

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

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



Job Truss Truss Type R1 400477 Half Hip Girder

Waverly, KS 66871

### **RELEASE FOR** CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

Lot 74 RR - Raising Hope House 2021

142427430

DEVELOPMENT SERVICES | Z | Job Reference (optional)

LEE'S SUMMIT, MISSOUR: 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:26 2020 Page 2 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-nYObwy5Z7exjzYHbr7Mv8qTGepxCE8p4SBSdDByoBNR

NOTES08/19/2020
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 754 lb down and 153 lb up at 1-7-12, 347 lb down and 24 lb up at 1-7-12, 1123 lb down and 197 lb up at 3-7-12, 754 lb down and 182 lb up at 3-7-12, 967 lb down and 31 lb up at 5-7-12, 754 lb down and 94 lb up at 5-7-12, 967 lb down and 70 lb up at 7-7-12, 754 lb down and 109 lb up at 7-7-12, 1055 lb down and 191 lb up at 9-7-12, 754 lb down and 109 lb up at 9-7-12, 1057 lb down and 163 lb up at 11-7-12, 754 lb down and 109 lb up at 11-7-12, 1057 lb down and 23 lb up at 13-7-12, 754 lb down and 109 lb up at 13-7-12, 1057 lb down and 109 lb up at 13-7-1 down and 109 lb up at 15-7-12, 1053 lb down at 17-7-12, 754 lb down and 109 lb up at 17-7-12, and 1062 lb down at 19-7-12, and 759 lb down and 104 lb up at 19-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

Wheeler Lumber,

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=-1812(F=-754, B=-1057) 9=-1101(F=-754, B=-347) 10=-1878(F=-754, B=-1123) 11=-1721(F=-754, B=-967) 12=-1721(F=-754, B=-967) 13=-1809(F=-754, B=-967) 13=-1809(F=-754 B=-1055) 14=-1812(F=-754, B=-1057) 15=-1812(F=-754, B=-1057) 16=-1807(F=-754, B=-1053) 17=-1821(F=-759, B=-1062)

Job Truss Truss Type Valley 400477 V1 Wheeler Lumber, Waverly, KS 66871

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

Lot 74 RR - Raising Hope House 2021

142427431

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:26 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-nYObwy5Z7exjzYHbr7Mv8qTObp75EL24SBSdDByoBNR

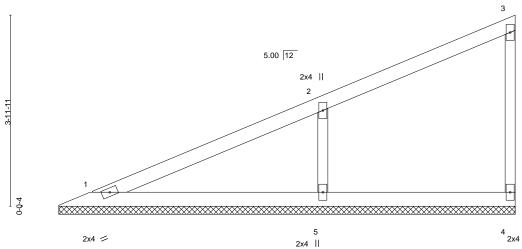
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

<del>08/ရွိ<u>စို/</u>ခို့020</del>

Scale: 1/2"=1' 2x4 ||



LOADING         (psf)         SPACING-         2-0-0         CSI.           TCLL         25.0         Plate Grip DOL         1.15         TC         0.29           TCDL         10.0         Lumber DOL         1.15         BC         0.16           BCLL         0.0 *         Rep Stress Incr         YES         WB         0.07           BCDL         10.0         Code IRC2018/TPI2014         Matrix-S	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999           Horz(CT)         -0.00         4         n/a         n/a	PLATES GRIP MT20 197/144  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=9-5-14, 4=9-5-14, 5=9-5-14

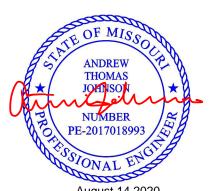
Max Horz 1=159(LC 5) Max Uplift 4=-23(LC 5), 5=-129(LC 8)

Max Grav 1=172(LC 1), 4=122(LC 1), 5=487(LC 1)

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

2-5=-370/182 **WEBS** 

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=129
- 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.



August 14,2020



Job Truss Truss Type Valley 400477 V2

Waverly, KS 66871

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

Lot 74 RR - Raising Hope House 2021

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

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

except end verticals.

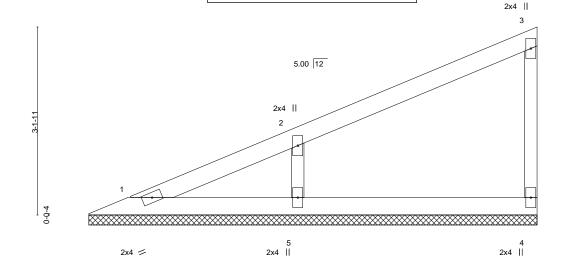
142427432

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:27 2020 Page 1 ID:Ej7EWovY\_94Pzt7UVy 1gWAz\_t70-Fkyz7l6Buy4ZbhsoPrt8g20atDUBzpbEhrCBmeyoBNQ

<del>08/<u>19/2</u>020</del>

Scale = 1:19.3



LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	ВС	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-P	, ,					Weight: 20 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

Wheeler Lumber,

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

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

(size) 1=7-5-14, 4=7-5-14, 5=7-5-14

Max Horz 1=122(LC 5)

Max Uplift 4=-26(LC 8), 5=-102(LC 8)

Max Grav 1=81(LC 16), 4=141(LC 1), 5=384(LC 1)

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

2-5=-299/153 **WEBS** 

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=102
- 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.



August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427433 AS NOTED ON PLANS REVIE Valley 400477 V3 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:27 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-Fkyz7l6Buy4ZbhsoPrt8g20XODSEzpQEhrCBmeyoBNQ 08/<u>19/2</u>020 Scale = 1:14.7 2x4 || 2 5.00 12 3 2x4 = 2x4 ||

LOADING         (psf)           TCLL         25.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.42 BC 0.23 WB 0.00 Matrix-P	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         n/a         -         n/a         999           Vert(CT)         n/a         -         n/a         999           Horz(CT)         -0.00         3         n/a         n/a	PLATES         GRIP           MT20         197/144           Weight: 14 lb         FT = 10%
LUMBER-			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=5-5-14, 3=5-5-14 (size) Max Horz 1=86(LC 5)

Max Uplift 1=-31(LC 8), 3=-48(LC 8) Max Grav 1=211(LC 1), 3=211(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.



Structural wood sheathing directly applied or 5-6-8 oc purlins,

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

August 14,2020





**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 AS NOTED ON PLANS REVIE Valley 400477 V4 DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:28 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 08/<u>19/2</u>020

142427434

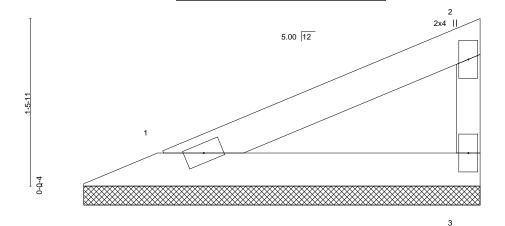
ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-jwWLKe6pfGCQDrQ\_yYONDFYnicqyiGgNwVxkl4yoBNP

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

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

except end verticals.

Scale = 1:10.1



2x4 || 2x4 =

BRACING-

TOP CHORD

BOT CHORD

		i										
LOADING	i (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-P	, ,					Weight: 8 lb	FT = 10%

LUMBER-

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

**WEBS** 2x3 SPF No.2

REACTIONS.

1=3-5-14, 3=3-5-14 (size) Max Horz 1=49(LC 5) Max Uplift 1=-18(LC 8), 3=-28(LC 8) Max Grav 1=121(LC 1), 3=121(LC 1)

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

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



August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427435 AS NOTED ON PLANS REVIE Valley 400477 V5 DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:28 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-jwWLKe6pfGCQDrQ\_yYONDFYmWcqriGgNwVxkl4yoBNP 08/<u>19/2</u>020 Scale = 1:10.4 2x4 5.00 12

0-0-4 3

> 2x4 = 2x4 II

> > BRACING-

TOP CHORD

BOT CHORD

LOADIN	VI /	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	12014	Matri	x-P						Weight: 8 lb	FT = 10%

LUMBER-

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

> 1=3-7-6, 3=3-7-6 (size) Max Horz 1=52(LC 5)

Max Uplift 1=-18(LC 8), 3=-29(LC 8) Max Grav 1=126(LC 1), 3=126(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 3-8-0 oc purlins,

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427436 AS NOTED ON PLANS REVIE Valley 400477 V6 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:29 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-B74kYz7SQZKHq??AWGvclT5tV08VRjvX99hHqWyoBNO 08/<u>19/2</u>020 Scale = 1:15.0 2x4 || 2 5.00 12 2-0-0 3 2x4 || 2x4 = LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc)

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

n/a

-0.00

999

999

n/a

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

n/a

n/a

n/a

except end verticals

LUMBER-

**TCLL** 

**TCDL** 

**BCLL** 

BCDL

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

**WEBS** 2x3 SPF No.2

25.0

10.0

0.0

10.0

REACTIONS.

1=5-7-6, 3=5-7-6 (size) Max Horz 1=88(LC 5) Max Uplift 1=-32(LC 8), 3=-49(LC 8) Max Grav 1=216(LC 1), 3=216(LC 1)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

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

TC

вс

WB

Matrix-P

0.44

0.24

0.00

- 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.

1.15

1.15

YES

- 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.



197/144

FT = 10%

MT20

Structural wood sheathing directly applied or 5-8-0 oc purlins,

Weight: 14 lb







**RELEASE FOR** Job Truss Truss Type CONSTRUCTION Lot 74 RR - Raising Hope House 2021 142427437 AS NOTED ON PLANS REVIE Valley 400477 V7 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:29 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-B74kYz7SQZKHq??AWGvclT5wJ0AeRj3X99hHqWyoBNO 08/<u>19/2</u>020 Scale = 1:19.5 2x4 || 3 5.00 12 2x4 || 2 9-0-0 5 2x4 = 2x4 || 2x4 ||

LOADIN	· · ·		2-0-0	CSI.	0.00	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL TCDL	25.0 10.0	Plate Grip DOL Lumber DOL	1.15 1.15	TC BC	0.20 0.10	Vert(LL) Vert(CT)	n/a n/a	-	n/a n/a	999 999	MT20	197/144
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2018/TPI2	YES 2014	WB Matri	0.05 x-P	Horz(CT)	-0.00	4	n/a	n/a	Weight: 20 lb	FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS.

(size) 1=7-7-6, 4=7-7-6, 5=7-7-6

Max Horz 1=124(LC 5)

Max Uplift 4=-25(LC 8), 5=-103(LC 8)

Max Grav 1=86(LC 16), 4=140(LC 1), 5=389(LC 1)

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

2-5=-303/155 **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=103
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type Lot 74 RR - Raising Hope House 2021 CONSTRUCTION 142427438 AS NOTED ON PLANS REVIE Valley 400477 V8 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:30 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy gWAz\_t70-fJe6lJ84AtS8S9aM4zQrlge4nQW099egNpQrNzyoBNN 5-8-8 08/19/2020 1-10-8 5-8-8 Scale = 1:18.1 2x4 || 4 4.00 12 2x4 || 2x4 || 2x4 П 2x4 Ш 2x4 II LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc)

TCLL 25.0 Plate Grip DOL Vert(LL) 0.01 120 197/144 1.15 TC 0.28 n/r MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) -0.01 120 n/r **BCLL** 0.0 Rep Stress Incr YES WB 0.03 Horz(CT) -0.00 n/a n/a 5 Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Weight: 19 lb FT = 10%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

4-5: 2x3 SPF No.2

**OTHERS** 2x3 SPF No.2

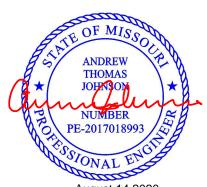
REACTIONS. (size) 7=5-8-8, 5=5-8-8, 6=5-8-8

Max Horz 7=124(LC 5)

Max Uplift 7=-102(LC 4), 5=-28(LC 4), 6=-76(LC 8) Max Grav 7=248(LC 1), 5=153(LC 1), 6=232(LC 1)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) 5, 6 except (jt=lb) 7=102
- 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 5-8-8 oc purlins,

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

August 14,2020



**RELEASE FOR** Job Truss Truss Type **CONSTRUCTION** Lot 74 RR - Raising Hope House 2021 142427439 AS NOTED ON PLANS REVIE Valley 400477 V9 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 410 s May 22 2020 MiTek Industries, Inc. Thu Aug 13 17:54:30 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:Ej7EWovY\_94Pzt7UVy1gWAz\_t70-fJe6lJ84AtS8S9aM4zQrlge07QT6999gNpQrNzyoBNN 08/<u>19/2</u>020 Scale = 1:13.2 2x4 || 4.00 12 0-0-4 3 2x4 = 2x4 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI 25.0 Plate Grip DOL Vert(LL) 999 MT20 197/144 **TCLL** 1.15 TC 0.51 n/a n/a

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

-0.00

999

n/a

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

Structural wood sheathing directly applied or 6-2-8 oc purlins,

Weight: 15 lb

FT = 10%

n/a

n/a

except end verticals.

LUMBER-BOT CHORD

**TCDL** 

**BCLL** 

BCDL

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

**WEBS** 2x3 SPF No.2

10.0

0.0

10.0

REACTIONS.

1=6-1-12, 3=6-1-12 (size) Max Horz 1=77(LC 5) Max Uplift 1=-38(LC 4), 3=-49(LC 8) Max Grav 1=232(LC 1), 3=232(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.

### 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

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WB

Matrix-P

0.28

0.00

- 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.

1.15

YES

- 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.



August 14,2020





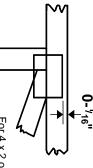


## Symbols

# 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.

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

### REVIEUS Plate location details available in MiTek 20/20 NOTED ON PLANS Software or upon request. PLANS SIZE The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

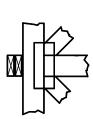
RELEASE FOR CONSTRUCTION

## 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**



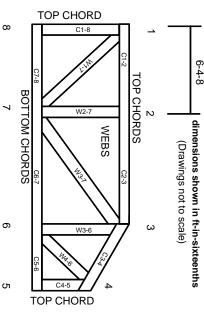
Min size shown is for crushing only reaction section indicates joint Indicates location where bearings number where bearings occur. (supports) occur. Icons vary but

## Industry Standards:

National Design Specification for Metal **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.

DSB-89: ANSI/TPI1:

# 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. 5/19/2020

# **General Safety Notes**

## Damage or Personal Injury Failure to Follow Could Cause Property

- 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

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

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- 10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 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.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.