

06/11/2020

RE: 400302 Lot 15 HT MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.2

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

This package includes 81 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 1 | I41303167 | A1 | 5/14/2020 | 27 | I41303193 | G2 | 5/14/2020 |
| 2 | I41303168 | A2 | 5/14/2020 | 28 | 141303194 | H1 | 5/14/2020 |
| 3 | I41303169 | A3 | 5/14/2020 | 29 | I41303195 | H2 | 5/14/2020 |
| 4 | I41303170 | A4 | 5/14/2020 | 30 | I41303196 | H3 | 5/14/2020 |
| 5 | I41303171 | B1 | 5/14/2020 | 31 | I41303197 | H4 | 5/14/2020 |
| 6 | I41303172 | B2 | 5/14/2020 | 32 | I41303198 | H5 | 5/14/2020 |
| 7 | I41303173 | B3 | 5/14/2020 | 33 | I41303199 | H6 | 5/14/2020 |
| 8 | I41303174 | B4 | 5/14/2020 | 34 | I41303200 | J1 | 5/14/2020 |
| 9 | I41303175 | C1 | 5/14/2020 | 35 | I41303201 | J2 | 5/14/2020 |
| 10 | I41303176 | C2 | 5/14/2020 | 36 | I41303202 | J3 | 5/14/2020 |
| 11 | I41303177 | C3 | 5/14/2020 | 37 | I41303203 | J4 | 5/14/2020 |
| 12 | I41303178 | C4 | 5/14/2020 | 38 | I41303204 | J5 | 5/14/2020 |
| 13 | I41303179 | C5 | 5/14/2020 | 39 | I41303205 | J6 | 5/14/2020 |
| 14 | I41303180 | C6 | 5/14/2020 | 40 | I41303206 | J7 | 5/14/2020 |
| 15 | I41303181 | C7 | 5/14/2020 | 41 | I41303207 | J8 | 5/14/2020 |
| 16 | I41303182 | D1 | 5/14/2020 | 42 | I41303208 | J9 | 5/14/2020 |
| 17 | I41303183 | D2 | 5/14/2020 | 43 | I41303209 | J10 | 5/14/2020 |
| 18 | I41303184 | D3 | 5/14/2020 | 44 | I41303210 | J11 | 5/14/2020 |
| 19 | I41303185 | D4 | 5/14/2020 | 45 | I41303211 | J12 | 5/14/2020 |
| 20 | I41303186 | D5 | 5/14/2020 | 46 | I41303212 | J13 | 5/14/2020 |
| 21 | I41303187 | D6 | 5/14/2020 | 47 | I41303213 | J15 | 5/14/2020 |
| 22 | I41303188 | E1 | 5/14/2020 | 48 | I41303214 | J16 | 5/14/2020 |
| 23 | I41303189 | E2 | 5/14/2020 | 49 | I41303215 | J17 | 5/14/2020 |
| 24 | I41303190 | E3 | 5/14/2020 | 50 | I41303216 | J18 | 5/14/2020 |
| 25 | I41303191 | E4 | 5/14/2020 | 51 | I41303217 | J19 | 5/14/2020 |
| 26 | I41303192 | G1 | 5/14/2020 | 52 | I41303218 | J20 | 5/14/2020 |

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Kansas COA: E-943

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





06/11/2020

RE: 400302 - Lot 15 HT

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

Site Information:

Project Customer: F

Project Name:

Lot/Block:

Address: City, County:

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141303240

141303241

141303242

141303243

141303244

141303245

141303246

141303247

State:

Subdivision:

| O .t.y, | oounny. | | |
|----------------|-----------|------------|-----------|
| No. | Seal# | Truss Name | Date |
| 53 | I41303219 | J21 | 5/14/2020 |
| 54 | I41303220 | J22 | 5/14/2020 |
| 55 | I41303221 | J23 | 5/14/2020 |
| 56 | I41303222 | J24 | 5/14/2020 |
| 57 | I41303223 | J25 | 5/14/2020 |
| 58 | 141303224 | J26 | 5/14/2020 |
| 59 | I41303225 | J27 | 5/14/2020 |
| 60 | I41303226 | K1 | 5/14/2020 |
| 61 | 141303227 | K2 | 5/14/2020 |
| 62 | I41303228 | K3 | 5/14/2020 |
| 63 | I41303229 | K4 | 5/14/2020 |
| 64 | I41303230 | LAY1 | 5/14/2020 |
| 65 | I41303231 | LAY2 | 5/14/2020 |
| 66 | I41303232 | LAY3 | 5/14/2020 |
| 67 | I41303233 | LAY4 | 5/14/2020 |
| 68 | 141303234 | LAY5 | 5/14/2020 |
| 69 | I41303235 | LAY6 | 5/14/2020 |
| 70 | I41303236 | LAY7 | 5/14/2020 |
| 71 | 141303237 | LAY8 | 5/14/2020 |
| 72 | I41303238 | V1 | 5/14/2020 |
| 73 | I41303239 | V2 | 5/14/2020 |
| | | | |

V3

V4

V5

V6

V7

V8

V9

V10

5/14/2020

5/14/2020

5/14/2020

5/14/2020

5/14/2020



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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.2

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

This package includes 81 individual, dated Truss Design Drawings and 0 Additional Drawings.

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| 8 | 141303174 | B4 | 5/14/2020 | 34 | 141303200 | J1 | 5/14/2020 |
| 9 | 141303175 | C1 | 5/14/2020 | 35 | 141303201 | J2 | 5/14/2020 |
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| 11 | 141303177 | C3 | 5/14/2020 | 37 | 141303203 | J4 | 5/14/2020 |
| 12 | 141303178 | C4 | 5/14/2020 | 38 | 141303204 | J5 | 5/14/2020 |
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| 25 | 141303191 | E4 | 5/14/2020 | 51 | 141303217 | J19 | 5/14/2020 |
| 26 | 141303192 | G1 | 5/14/2020 | 52 | 141303218 | J20 | 5/14/2020 |

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193

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





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State:

Subdivision:

| O .t.y, | oounny. | | |
|----------------|-----------|------------|-----------|
| No. | Seal# | Truss Name | Date |
| 53 | I41303219 | J21 | 5/14/2020 |
| 54 | I41303220 | J22 | 5/14/2020 |
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| 64 | I41303230 | LAY1 | 5/14/2020 |
| 65 | I41303231 | LAY2 | 5/14/2020 |
| 66 | I41303232 | LAY3 | 5/14/2020 |
| 67 | I41303233 | LAY4 | 5/14/2020 |
| 68 | 141303234 | LAY5 | 5/14/2020 |
| 69 | I41303235 | LAY6 | 5/14/2020 |
| 70 | I41303236 | LAY7 | 5/14/2020 |
| 71 | 141303237 | LAY8 | 5/14/2020 |
| 72 | I41303238 | V1 | 5/14/2020 |
| 73 | I41303239 | V2 | 5/14/2020 |
| | | | |

V3

V4

V5

V6

V7

V8

V9

V10

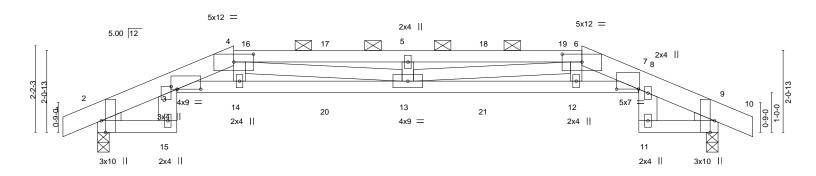
5/14/2020

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| | ⊢— | 2-0-0 3-5-4 | _ | 7-10-0 | | | | 2-2-12 | | | 13-8-0 | 15-8-0 | |
|-------------|-----------|-----------------------------|-------------------|---------------|---------------------|-----------------|----------|-----------|-----------|--------------|---------------|----------------|----------|
| | ' | 2-0-0 1-5-4 | | 4-4-12 | | <u>'</u> | 4 | -4-12 | | | 1-5-4 | 2-0-0 | |
| Plate Offse | ets (X,Y) | [2:0-0-4,0-0-9], [2:0-0-7,0 |)-5-2], [2:0-3-8, | Edge], [3:0-7 | 7-3,0-0-0], [3:0-0- | 13,0-1-13], [4: | 0-6-0,0- | 2-6], [6: | 0-6-0,0-2 | -6], [7:0-6- | 10,0-0-0], [9 | :0-0-4,0-0-9], | [9:0-0-7 |
| | | ,0-5-2], [9:0-3-8,Edge] | | | | | | | | | | | |
| LOADING | (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PL | ATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.78 | Vert(LL) | -0.20 | 13 | >937 | 360 | MT | 20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.65 | Vert(CT) | -0.37 | 13 | >495 | 240 | | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.14 | Horz(CT) | 0.25 | 9 | n/a | n/a | | | |
| BCDL | 10.0 | Code IRC2018/T | PI2014 | Matri | x-S | Wind(LL) | 0.19 | 13 | >976 | 240 | We | eight: 119 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*

4-6: 2x4 SPF No.2

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

3-15,8-11: 2x6 SPF No.2

WEDGE

Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

REACTIONS. (lb/size) 2=996/0-3-8, 9=998/0-3-8

Max Horz 2=-31(LC 30)

Max Uplift 2=-223(LC 4), 9=-221(LC 5) Max Grav 2=996(LC 21), 9=998(LC 22)

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

TOP CHORD 2-3=-552/142, 3-4=-3349/761, 4-16=-4564/1075, 16-17=-4564/1075, 5-17=-4564/1075, 5-18=-4564/1075, 18-19=-4564/1075, 6-19=-4564/1075, 6-7=-3397/771, 7-8=-40/283,

8-9=-541/131

3-14=-758/3515. 14-20=-731/3449. 13-20=-731/3449. 13-21=-732/3447. 12-21=-732/3447.

BOT CHORD 7-12=-727/3378

WEBS 4-13=-300/1135, 5-13=-311/147, 6-13=-304/1139, 6-12=-24/370

NOTES-

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

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

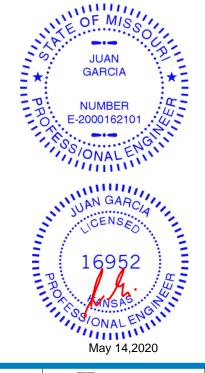
- Webs connected as follows: 2x6 2 rows staggered at 0-9-0 oc, 2x4 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 223 lb uplift at joint 2 and 221 lb uplift at ioint 9.
- 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.

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

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

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



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

2-0-0 oc purlins (5-6-9 max.): 4-6.

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type 400302 HIP GIRDER

CONSTRUCTION Ply AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

RELEASE FOR

Lot 15 HT

141303167

Job Reference (optional) LEE'S SUMMIT, MISSOURI ID:bWuMDBN0tjF5cDvSp 8.240 s Apr 4 2020 MiTek Industries, Inc. Thu May 14 11:56:00 2020 Page 2 hpH12CzbQ-c9qP7nliLJ?elLWE6gAXvwWfW1?85PtnPskkBDzGbFT

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrate the first to support concentrate the 7-10-0, 32 lb down and 23 lb up at 9-10-0, and 32 lb down and 23 lb up at 11-10-0, and 76 lb down and 23 lb up at 12-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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)

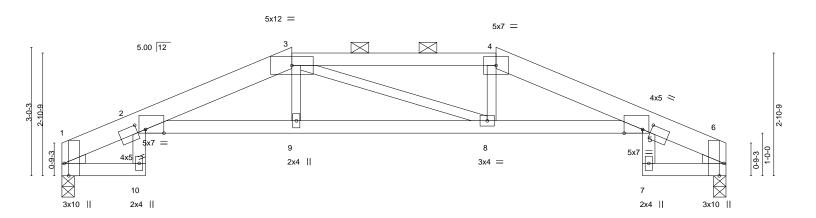
Vert: 1-4=-70, 4-6=-70, 6-10=-70, 2-15=-20, 3-7=-20, 9-11=-20

Concentrated Loads (lb)

Vert: 4=-41(F) 6=-41(F) 14=-108(F) 13=-32(F) 5=-17(F) 12=-108(F) 16=-17(F) 17=-17(F) 18=-17(F) 19=-17(F) 20=-32(F) 21=-32(F) 16=-17(F) 18=-17(F) 1



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303168 AS NOTED ON PLANS REVIE 400302 A2 Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:35 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-blrt_2E_zkurxzMAudAm_okWHSOWsRy4L6DZw?zGs6w 13-7-8 15-7-0 <u>06/11/1/2020</u> 1-11-8 3-5-4 3-5-4 1-11-8



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

| 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 0.83 | Vert(LL) | -0.16 | 8 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.64 | Vert(CT) | -0.29 | 8-9 | >643 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.09 | Horz(CT) | 0.32 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) | 0.10 | 9 | >999 | 240 | Weight: 53 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

except

13-7-8

2-0-0 oc purlins (4-4-9 max.): 3-4.

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

Structural wood sheathing directly applied or 3-2-10 oc purlins,

LUMBER-TOP CHORD 2x6 SPF No.2 *Except*

3-4: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except*

2-10,5-7: 2x4 SPF No.2

WEDGE

Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

REACTIONS. (size) 1=0-3-8, 6=0-3-8 Max Horz 1=-46(LC 9)

> Max Uplift 1=-66(LC 8), 6=-66(LC 9) Max Grav 1=688(LC 1), 6=688(LC 1)

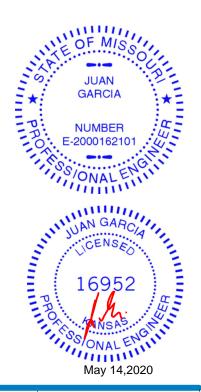
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-399/62, 2-3=-1634/190, 3-4=-1569/191, 4-5=-1634/185, 5-6=-399/57

5-4-12

BOT CHORD 2-9=-130/1564, 8-9=-126/1569, 5-8=-121/1564

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) 1, 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



15-7-0

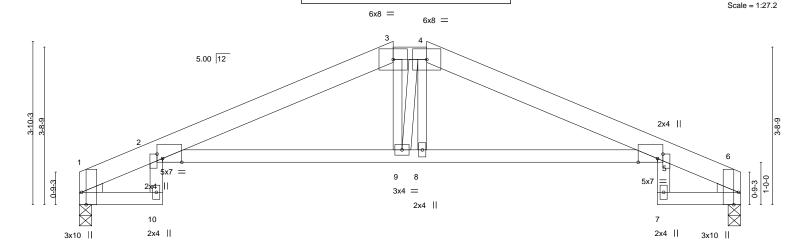
Scale = 1:27.0



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



RELEASE FOR Job Truss Truss Type Lot 15 HT CONSTRUCTION 141303169 AS NOTED ON PLANS REVIE 400302 A3 Hip **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:36 2020 Page 1 Waverly, KS 66871 Wheeler Lumber, ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3xPFCOEck10iZ7xNSLh?X?Gglsl4bu0DZmz6SRzGs6v 13-7-8 7-4-12 15-7-0 06/1<mark>9/202</mark>0 1-11-8 5-5-4 5-5-4 1-11-8



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

| 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 0.88 | Vert(LL) | -0.21 2-9 | >879 360 | MT20 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.62 | Vert(CT) | -0.39 2-9 | >470 240 | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.10 | Horz(CT) | 0.41 6 | n/a n/a | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) | 0.15 2-9 | >999 240 | Weight: 56 lb FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*

3-4: 2x4 SPF No.2 2x4 SPF No.2

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

2-10,5-7: 2x4 SPF No.2 WEDGE

Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

REACTIONS. (size) 1=0-3-8, 6=0-3-8 Max Horz 1=61(LC 8)

Max Uplift 1=-84(LC 8), 6=-84(LC 9) Max Grav 1=688(LC 1), 6=688(LC 1)

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

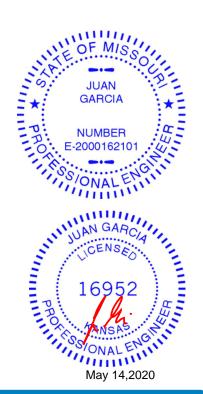
TOP CHORD 1-2=-399/84, 2-3=-1312/118, 3-4=-1222/143, 4-5=-1318/115, 5-6=-400/68

BOT CHORD 2-9=-76/1214, 8-9=-42/1223, 5-8=-45/1220

WEBS 3-9=-115/294

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) 1, 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

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



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303170 AS NOTED ON PLANS REVIE 400302 A4 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:37 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-X7zdPkFEVL8YAGWZ02CE3DprlG8SKLKMoPig?tzGs6u 7-9-8 7-9-8 06/11/2020 7-9-8 Scale = 1:26.4 5x7 = 2 5.00 12 5x7 || Ш 5x7 3 0-9-3 5 2x4 || 7-9-8 Plate Offsets (X,Y)--[1:0-4-4,0-2-8], [3:0-4-4,0-2-8] SPACING-DEFL. L/d **PLATES** GRIP LOADING (psf) CSI. (loc) I/defI **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.86 Vert(LL) -0.07 4-5 >999 360 MT20 197/144

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

-0.16

0.02

0.03

4-5

5-6

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 2-2-0 oc purlins,

BCLL 0.0

10.0

10.0

TCDL

BCDL

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

WEBS 2x6 SPF No.2 *Except* 2-5: 2x3 SPF No.2

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

Max Horz 6=-37(LC 13)

Max Uplift 6=-86(LC 8), 4=-86(LC 9) Max Grav 6=681(LC 1), 4=681(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 1-2=-928/114, 2-3=-928/114, 1-6=-594/134, 3-4=-594/134

BOT CHORD 5-6=-44/758, 4-5=-44/758

WEBS 2-5=0/306

- 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.

1.15

YES

ВС

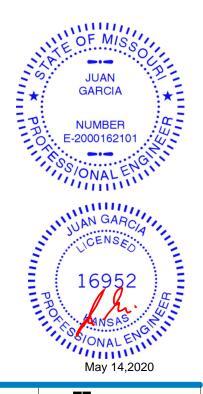
WB

Matrix-R

0.42

0.10

- * 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.
- 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.



FT = 10%

Weight: 41 lb



Job Truss Truss Type B1 400302 Half Hip Girder

12-3-12

5-10-8

Waverly, KS 66871

3-1-12

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

06/1²1/2020

5-10-8

Lot 15 HT

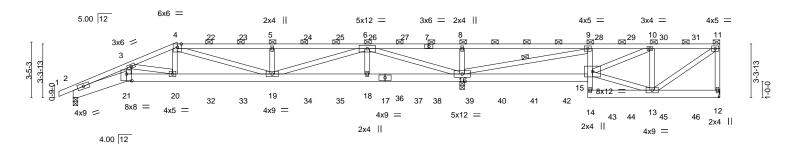
141303171

DEVELOPMENT SERVICES | 2 | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:40 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-xifm2mH7oGX71kF8hAlxhrRMlT8kXWZpUNxKbCzGs6r

31-10-0 35-9-12 40-0-0 7-9-4 3-11-12 4-2-4

Scale = 1:71.3



| 3-3-8 | | -3-12 | 18-2-4 | | 24-0-12 | | 31-10-0 | | | 40-0-0 |
|---------------------|------------------|--------|---------|----------|----------|------------|-----------|-----|-------------|-------------|
| 3-3-8 | ' 3-1-12 | 10-8 | 5-10-8 | <u>'</u> | 5-10-8 | <u>'</u> | 7-9-4 | | 3-11-12 | 4-2-4 |
| Plate Offsets (X,Y) | [21:0-4-0,0-5-0] | | | | | | | | | |
| | | | | | | | | | | |
| 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 | 0.85 | Vert(LL) | -0.20 1 | 9 >999 | 360 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC | 0.45 | Vert(CT) | -0.36 19-2 |) >798 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB | 0.83 | Horz(CT) | 0.13 1 | 2 n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TF | PI2014 | Matrix- | S | Wind(LL) | 0.11 1 | 9 >999 | 240 | Weight: 413 | lb FT = 10% |
| | | | | | | | | | | |

LUMBER-

Wheeler Lumber,

-0-10-8 0-10-8

3-3-8

TOP CHORD 2x4 SPF No.2

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

2-21: 2x8 SP DSS, 9-14: 2x4 SPF No.2

WEBS 2x4 SPF No.2 **BRACING-**TOP CHORD

Structural wood sheathing directly applied or 4-6-8 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-8-10 max.): 4-11. Rigid ceiling directly applied or 10-0-0 oc bracing.

BOT CHORD WEBS 1 Row at midpt 9-16

REACTIONS. (size) 12=Mechanical, 2=0-3-8, 16=0-3-8 (req. 0-3-12)

Max Horz 2=99(LC 26)

Max Uplift 12=-83(LC 4), 2=-102(LC 4), 16=-311(LC 5) Max Grav 12=966(LC 20), 2=1813(LC 1), 16=4796(LC 1)

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

2-3=-6550/430, 3-4=-5177/324, 4-5=-5099/188, 5-6=-5096/187, 6-8=-167/3123, TOP CHORD

8-9=-167/3123, 9-10=-1414/214, 10-11=-941/113, 11-12=-872/117

BOT CHORD 2-21=-472/5902, 20-21=-431/5452, 19-20=-342/4715, 18-19=-41/2182, 16-18=-41/2182,

15-16=-243/1520, 9-15=0/597

WEBS 3-21=-93/1278, 3-20=-674/109, 4-20=-55/1266, 4-19=0/553, 5-19=-788/173,

6-19=-192/3069, 6-18=0/272, 6-16=-5588/181, 8-16=-594/127, 9-16=-4688/383,

13-15=-86/877, 10-15=-134/516, 10-13=-759/207, 11-13=-100/1120

NOTES-

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

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

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) 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) WARNING: Required bearing size at joint(s) 16 greater than input bearing size
- 9) Refer to girder(s) for truss to truss connections.
- 10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=102. 16=311.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuierencestagianzdard ANSI/TPI 1.



May 14,2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid for use only with release controlled in the controlle



Job Truss Truss Type B1 400302 Half Hip Girder

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

Lot 15 HT

141303171

DEVELOPMENT SERVICES | 2 | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:40 2020 Page 2 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-xifm2mH7oGX71kF8hAlxhrRMlT8kXWZpUNxKbCzGs6r

Wheeler Lumber,

Waverly, KS 66871

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

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 121 lb down and 51 lb up at 6-5-4, 103 lb down and 51 lb up at 8-6-0, 103 lb down and 51 lb up at 10-6-0, 103 lb down and 51 lb up at 12-6-0, 103 lb down and 51 lb up at 18 122 lb down and 70 lb up at 38-6-0 on top chord, and 515 lb down and 123 lb up at 6-5-4, 89 lb down at 8-6-0, 89 lb down at 10-6-0, 89 lb down at 12-6-0, 89 lb down at 14-6-0, 89 lb down at 16-6-0, 89 lb down at 18-6-0, 89 lb down at 20-6-0, 255 lb down and 44 lb up at 24-6-0, 255 lb down and 44 lb up at 24-6-0, 255 lb down and 44 lb up at 26-6-0, 255 lb down and 44 lb up at 28-6-0, 255 lb down and 44 lb up at 30-6-0, 75 lb down at 32-6-0, 75 lb down at 34-6-0, and 75 lb down at 36-6-0, and 75 lb down at 38-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

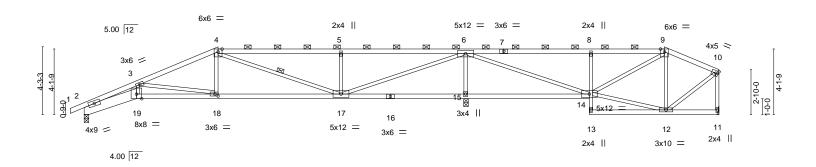
Vert: 1-4=-70, 4-11=-70, 2-21=-20, 15-21=-20, 12-14=-20

Concentrated Loads (lb)

Vert: 4=-98(F) 20=-515(F) 19=-89(F) 5=-98(F) 22=-98(F) 23=-98(F) 24=-98(F) 25=-98(F) 26=-98(F) 27=-98(F) 28=-122(F) 29=-122(F) 30=-122(F) 31=-122(F) 32=-89(F) 33=-89(F) 34=-89(F) 35=-89(F) 36=-89(F) 37=-89(F) 38=-255(F) 40=-255(F) 40=-255(F) 42=-255(F) 42=-255(F) 43=-58(F) 44=-58(F) 45=-58(F) 46 = -58(F)



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303172 AS NOTED ON PLANS REVIE 400302 B2 Hip **DEVELOPMENT SERVICES** Job Reference (optional)
9 2020 MiTek Industries, Inc. Wed May 13 16:44:41 2020 Page 1 LEE'S SUMMIT, MISSOUR 1240 s Mar Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-QvC8F5llZaf_fupKFuHAE3zYrtN5GzCyj1gt8ezGs6q 31-10-0 36-6-12 40-0-0 16-2-3 06/11//2020 5-1-12 7-8-15 7-9-9 4-8-12 3-5-4 Scale = 1:72.6



| 3-3-8 3-3-8 | 5-1-12 | 16- 7-8 | 2-3 -15 | 24-0-12 7-10-9 | - | 31-10-0 7-9-4 | - | | 0-0-0 3-5-4 |
|--|--|--|---|--|---|---------------------------------------|---------------------------------|----------------------------------|------------------------------------|
| Plate Offsets (X,Y) [18:0-2-8,0-1-8] | | | | | | | | | |
| 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/TF | 2-0-0 1.15 1.15 YES PI2014 | CSI. TC 0.83 BC 0.95 WB 0.87 Matrix-S | Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in (loc) -0.20 18-19 -0.38 17-18 0.13 15 0.11 18-19 | l/defl >999 >759 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 150 lb | GRIP 197/144 FT = 10% |

BOT CHORD

WEBS

BRACING-LUMBER-TOP CHORD

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

2-19: 2x8 SP DSS, 8-13: 2x3 SPF No.2

WEBS 2x3 SPF No.2

REACTIONS. (size) 2=0-3-8, 11=Mechanical, 15=0-3-8

Max Horz 2=86(LC 7)

Max Uplift 2=-22(LC 4), 11=-11(LC 4), 15=-100(LC 5) Max Grav 2=984(LC 19), 11=509(LC 20), 15=2199(LC 1)

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

2-3=-3580/80, 3-4=-1804/44, 4-5=-1218/95, 5-6=-1216/93, 6-8=-525/74, 8-9=-505/76, TOP CHORD

9-10=-385/43 10-11=-484/25

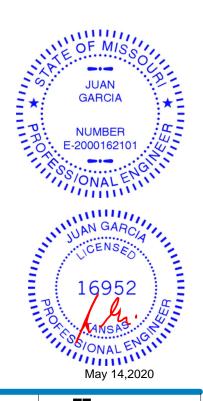
BOT CHORD 2-19=-140/3239, 18-19=-129/2963, 17-18=-59/1624, 15-17=-1176/52, 14-15=-1176/52,

8-14=-471/113

WEBS 3-19=0/1012, 3-18=-1345/128, 4-18=0/422, 4-17=-438/34, 5-17=-581/137, 6-17=-113/2539, 6-15=-2008/199, 6-14=-88/1679, 12-14=0/308, 10-12=0/398

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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11, 15.
- 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 2-10-4 oc purlins,

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

4-17

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt

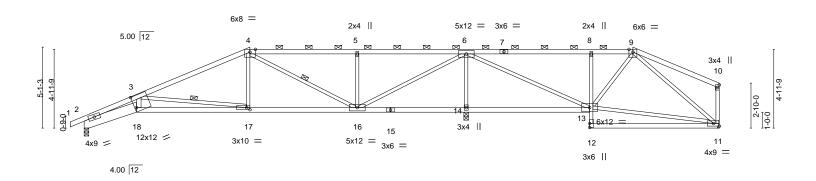


M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303173 AS NOTED ON PLANS REVIE Hip 400302 ВЗ **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:43 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-MHKugnK?5BviuBzjMJJeJU3sSg2OkuPFAL9_CXzGs6o <u>34-6-12</u> 40-0-0 31-10-0 06/1<mark>1/20</mark>20 7-1-12 7-9-4 2-8-12 5-5-4



| | 3-3-8 | 10-5-4 7-1-12 | - | 17-2-6 6-9-2 | | 24-0-12 6-10-6 | + | 31-10-0 7-9-4 | | 34-6-12 2-8-12 | 40-0-0 5-5-4 | |
|---------------|-------|-----------------------|---------------|-----------------|------|-------------------|-------------|------------------|-----|-------------------|-------------------|----------|
| Plate Offsets | | 4-2,Edge], [17:0-2-8, | 0-1-8], [18:0 | | | 0-10-0 | | 1-3-4 | | 2-0-12 | J-J- 4 | |
| LOADING (ps | sf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in (loc) | l/defl | L/d | PL | ATES | GRIP |
| TCLL 25 | 5.Ó | Plate Grip DOL | 1.15 | TC | 0.88 | Vert(LL) | -0.23 17-18 | >999 | 360 | MT | 20 | 197/144 |
| TCDL 10 | 0.0 | Lumber DOL | 1.15 | BC | 0.96 | Vert(CT) | -0.45 17-18 | >632 | 240 | | | |
| BCLL 0 | 0.0 * | Rep Stress Incr | YES | WB | 0.83 | Horz(CT) | 0.15 14 | n/a | n/a | | | |
| BCDL 10 | 0.0 | Code IRC2018/TF | PI2014 | Matri | k-S | Wind(LL) | 0.12 17-18 | >999 | 240 | We | ight: 156 lb | FT = 10% |

TOP CHORD

BOT CHORD

WEBS

LUMBER-**BRACING-**

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

2x4 SPF No.2 *Except*

2-18: 2x8 SP DSS, 8-12: 2x3 SPF No.2 2x3 SPF No.2 *Except*

WEBS 3-18: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 14=0-3-8 (req. 0-3-11), 11=Mechanical

Max Horz 2=87(LC 7)

Max Uplift 2=-19(LC 8), 14=-92(LC 5), 11=-13(LC 9) Max Grav 2=931(LC 19), 14=2341(LC 1), 11=473(LC 20)

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

TOP CHORD $2 - 3 = -3575/100, \ 3 - 4 = -1357/42, \ 4 - 5 = -580/88, \ 5 - 6 = -577/87, \ 6 - 8 = -331/75, \ 8 - 9 = -314/76$ **BOT CHORD** 2-18=-124/3261, 17-18=-125/2932, 16-17=-26/1164, 14-16=-1293/49, 13-14=-1293/49,

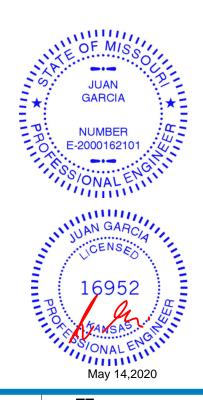
8-13=-442/105

WEBS 3-18=0/1042, 3-17=-1771/188, 4-17=0/438, 4-16=-767/36, 5-16=-493/115,

6-16=-76/2018, 6-14=-2161/188, 6-13=-65/1565, 9-11=-333/25

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
- 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) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 11.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

3-17, 4-16

2-0-0 oc purlins (6-0-0 max.): 4-9.

1 Row at midpt

Rigid ceiling directly applied or 2-2-0 oc bracing.

Scale = 1:72.6



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT AS NOTED ON PLANS REVIE 400302 B4 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

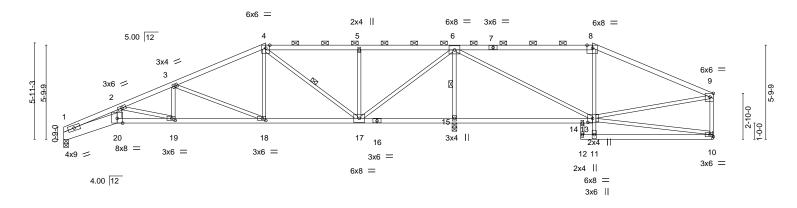
LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:44 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-qUuGt7LdsV1ZWLYvw0qtrhb0q4Q7TKWOP?vXkzzGs6n 06/1<mark>3/202</mark>0 32₋6-12 0-8-12 31-10-0

5-9-2

Scale = 1:70.9

7-5-4

141303174



7-9-4

| | 3-3-8 | 6-9-2 | 12-5-4 | 18-2-6 | 24-0-12 | 1 | 31-10-0 | 32 _r 6-12 | 40-0-0 | |
|------------|-----------|-----------------|--------------------------|------------------------|------------------------|-------------|---------|----------------------|----------------|----------|
| | 3-3-8 | 3-5-9 | 5-8-2 | 5-9-2 | 5-10-6 | ı | 7-9-4 | 0-8-12 | 7-5-4 | ı |
| Plate Offs | ets (X,Y) | [8:0-4-2,Edge], | [9:0-2-8,Edge], [13:0-3- | 8,0-3-0], [18:0-2-8,0- | 1-8], [19:0-2-8,0-1-8] | | | | | |
| LOADING | (nsf) | SPACING | G- 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 25.0 | Plate Gri | | TC 0.91 | | -0.15 19-20 | | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber D | OOL 1.15 | BC 0.87 | Vert(CT) | -0.27 19-20 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stres | ss Incr YES | WB 0.84 | Horz(CT) | 0.11 15 | n/a | n/a | | |
| BCDL | 10.0 | Code IR | C2018/TPI2014 | Matrix-S | Wind(LL) | 0.08 19-20 | >999 | 240 | Weight: 159 lb | FT = 10% |

TOP CHORD

BOT CHORD

WEBS

LUMBER-**BRACING-**

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

1-20: 2x8 SP DSS, 12-14: 2x3 SPF No.2

3-5-9

5-8-2

WEBS 2x3 SPF No.2 *Except*

2-20: 2x4 SPF No.2

(size) 1=0-3-8, 10=Mechanical, 15=0-3-8 (req. 0-3-11)

Max Horz 1=86(LC 7)

Max Uplift 1=-16(LC 8), 10=-29(LC 9), 15=-72(LC 5) Max Grav 1=849(LC 19), 10=485(LC 20), 15=2360(LC 1)

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

TOP CHORD 1-2=-3259/106, 2-3=-1857/57, 3-4=-989/55, 4-5=-294/87, 5-6=-292/85, 6-8=-325/67,

8-9=-441/72, 9-10=-429/64

1-20=-133/2940, 19-20=-121/2643, 18-19=-42/1708, 17-18=-12/833, 15-17=-1087/59, **BOT CHORD**

14-15=-1087/59, 13-14=-1062/88, 12-14=-343/0

WEBS 2-20=-7/934, 2-19=-966/81, 3-18=-933/100, 4-18=0/472, 4-17=-823/35, 5-17=-384/89,

6-17=-35/1607, 6-15=-2198/157, 6-13=-6/1387, 11-13=0/544, 8-13=-492/105,

9-13=-54/271, 3-19=0/339

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); 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) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 15.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 2-10-11 oc purlins,

4-17, 6-15

except end verticals, and 2-0-0 oc purlins (3-2-14 max.): 4-8.

Rigid ceiling directly applied or 5-4-12 oc bracing.

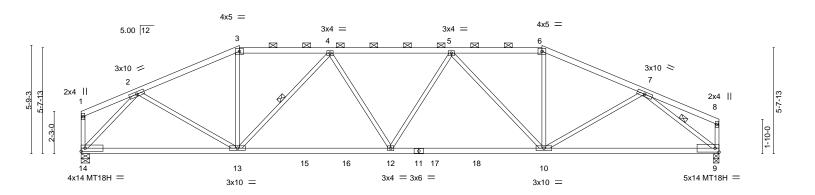
1 Row at midpt



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303175 AS NOTED ON PLANS REVIE C1 400302 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional) LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:45 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-lgSf5TLFdo9Q8V75UkL6Ou8HSUkUClgYefe5HQzGs6m 24-6-12 29-11-0 34-0-0 ¹06/1³1/2020 5-4-4 4-9-15 4-9-15 5-4-5 4-1-0 Scale = 1:61.4



| <u> </u> | 8-5-4 8-5-4 | 16-6-0 8-0-12 | 24-6-12 8-0-12 | 34-0-0 9-5-4 | 1 |
|--|---|---------------------------------------|---|--|---|
| 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 0.53 BC 0.99 WB 0.97 Matrix-S | DEFL. in (loc) l/defl Vert(LL) -0.20 12-13 >999 Vert(CT) -0.36 12-13 >999 Horz(CT) 0.10 9 n/a Wind(LL) 0.10 12 >999 | L/d PLATES GRIP 360 MT20 197/14 240 MT18H 197/14 n/a 240 Weight: 129 lb FT = | |

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2 *Except* BOT CHORD

9-11: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2

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

Max Horz 14=-70(LC 6)

Max Uplift 14=-184(LC 4), 9=-178(LC 5) Max Grav 14=1597(LC 2), 9=1595(LC 2)

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

TOP CHORD 2-3=-2137/304, 3-4=-1912/300, 4-5=-2557/403, 5-6=-2060/319, 6-7=-2298/324

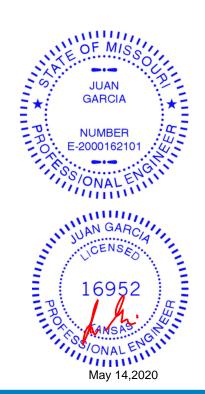
TOP CHORD BOT CHORD $13\text{-}14\text{=-}189/1300,\ 12\text{-}13\text{=-}341/2434,\ 10\text{-}12\text{=-}349/2493,\ 9\text{-}10\text{=-}250/1689}$

WFBS 2-13=-31/764, 3-13=-18/555, 4-13=-842/191, 4-12=0/281, 5-10=-737/178, 6-10=-23/602,

7-10=0/538, 2-14=-1886/303, 7-9=-2079/328

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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=184, 9=178.
- 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 3-3-3 oc purlins,

4-13, 7-9

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

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt



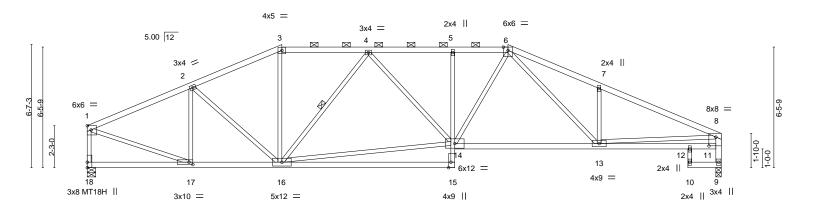
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303176 AS NOTED ON PLANS REVIE 400302 C2 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:46 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ms01lpMtO6HHlfil2RsLw6hP_u77xGohtJOepszGs6l 34-0-0 06/11/2020

15-0-14



22-6-12 2-10-4

| | 5-6-11 | 10-5-4 | 19-8-8 | i | 1 | 27-4-10 | | 32-2-8 | 34-0-0 |
|------------------|-------------------------|------------------------|-----------------------------|----------------------|-------------|---------|-----|----------------|----------|
| | 5-6-11 | 4-10-9 | 9-3-4 | | 1 | 7-8-2 | | 4-9-14 | 1-9-8 |
| Plate Offsets (X | (,Y) [1:Edge,0-2-12], [| 8:0-4-8,0-5-11], [11:0 | -0-0,0-1-12], [15:0-3-8,Edg | je], [17:0-2-8,0-1-8 |] | | | | |
| | | | | | | | | | |
| LOADING (psf | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | I/defI | L/d | PLATES | GRIP |
| ΓCLL 25.0 | Plate Grip | DOL 1.15 | TC 0.74 | Vert(LL) | -0.25 15-16 | >999 | 360 | MT20 | 197/144 |
| CDL 10.0 | Lumber DC | DL 1.15 | BC 0.77 | Vert(CT) | -0.55 15-16 | >734 | 240 | MT18H | 197/144 |
| CLL 0.0 |) * Rep Stress | Incr YES | WB 0.72 | Horz(CT) | 0.11 9 | n/a | n/a | | |
| 3CDL 10.0 | Code IRC2 | 2018/TPI2014 | Matrix-S | Wind(LL) | 0.14 13-14 | >999 | 240 | Weight: 144 lb | FT = 10% |

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

10-5-4

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

5-6-11

5-15,10-12: 2x3 SPF No.2 2x3 SPF No.2 *Except*

WEBS 8-9: 2x4 SPF 2100F 1.8E

REACTIONS. (size) 18=0-5-8, 9=0-3-8 Max Horz 18=-68(LC 4)

Max Uplift 18=-159(LC 4), 9=-154(LC 5) Max Grav 18=1519(LC 1), 9=1519(LC 1)

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

 $1\hbox{-}2\hbox{--}1881/230, 2\hbox{-}3\hbox{--}1989/290, 3\hbox{-}4\hbox{--}1777/284, 4\hbox{-}5\hbox{--}2422/386, 5\hbox{-}6\hbox{--}2437/387,}$ TOP CHORD

 $6-7=-2771/391,\ 7-8=-2792/316,\ 1-18=-1460/188,\ 9-11=-1467/168,\ 8-11=-1437/185$ 16-17=-177/1676, 5-14=-309/116, 13-14=-245/2169, 12-13=-100/595, 11-12=-94/667 BOT CHORD **WEBS**

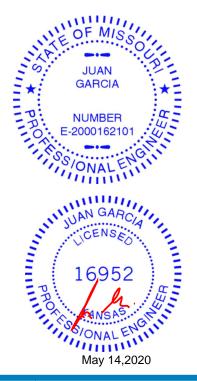
2-17=-516/119, 2-16=0/290, 3-16=-18/447, 4-16=-817/183, 14-16=-286/2101,

4-14=-25/363, 6-14=-75/650, 6-13=-170/507, 7-13=-401/229, 8-13=-186/1912,

1-17=-192/1731

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=159, 9=154. 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 (3-6-14 max.): 3-6.

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

6-0-0 oc bracing: 10-12,9-10.

1 Row at midpt

33-8-8

0-3-8 Scale = 1:61.8



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

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

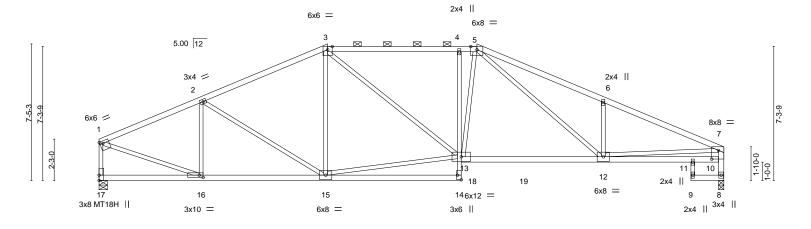
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303177 AS NOTED ON PLANS REVIE 400302 C3 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:48 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDv\$pwhpH1zCzbQ-iF8njV08wjX??zsg9svp0XmiVhlRPBc_KdtltkzGs6j 34-0-0 33-8-8 **06/81/2020** 12-5-4 5-6-11 20-6-12 0-10-4 6-10-9 0-3-8Scale = 1:62.7



| 1 | 5-6-11 | 12-5-4 | 1 | 19-8-8 | 20-6-12 | 27-5- | 4 | 32-2-8 | ₁ 34-0-0 ₁ |
|---------------------|-----------------------|----------------------|----------------------------|----------------------|----------------|--------|-----|----------------|----------------------------------|
| Г | 5-6-11 | 6-10-1 | 0 | 7-3-4 | 0-10-4 | 6-10- | 9 | 4-9-4 | 1-9-8 |
| Plate Offsets (X,Y) | [1:0-2-0,0-1-8], [5:0 | -4-2,Edge], [7:0-4-8 | 3,0-5-11], [10:0-0-0,0-1-1 | 2], [14:Edge,0-2-8], | [16:0-2-8,0-1- | 8] | | | |
| | | | | | | | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip Do | OL 1.15 | TC 0.93 | Vert(LL) | -0.30 12-13 | >999 | 360 | MT20 | 197/144 |
| CDL 10.0 | Lumber DOL | 1.15 | BC 0.97 | Vert(CT) | -0.53 12-13 | >766 | 240 | MT18H | 197/144 |
| 3CLL 0.0 * | Rep Stress I | nor YES | WB 0.70 | Horz(CT) | 0.10 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC20 | 18/TPI2014 | Matrix-S | Wind(LL) | 0.12 12-13 | >999 | 240 | Weight: 143 lb | FT = 10% |

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

4-14,9-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 7-8: 2x4 SPF 2100F 1.8E

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

Max Horz 17=-67(LC 4)

Max Uplift 17=-154(LC 8), 8=-163(LC 9) Max Grav 17=1577(LC 2), 8=1610(LC 2)

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

 $1\hbox{-}2\hbox{--}1964/197, 2\hbox{-}3\hbox{--}2024/259, 3\hbox{-}4\hbox{--}2238/324, 4\hbox{-}5\hbox{--}2242/320, 5\hbox{-}6\hbox{--}2937/413,}$ TOP CHORD

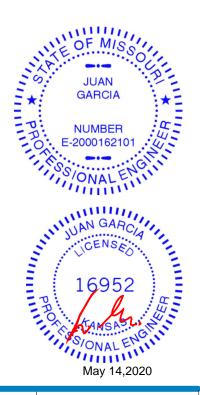
6-7=-2943/284, 1-17=-1492/179, 8-10=-1537/177, 7-10=-1466/194

15-16=-182/1769, 4-13=-546/214, 12-13=-172/2159, 11-12=-94/621, 10-11=-91/705 **BOT CHORD WEBS** 2-16=-489/133, 13-15=-123/1781, 3-13=-93/657, 5-13=-112/713, 5-12=-228/688,

6-12=-465/261, 7-12=-160/2043, 1-16=-160/1839

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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=154, 8=163.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

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

Rigid ceiling directly applied or 2-2-0 oc bracing.

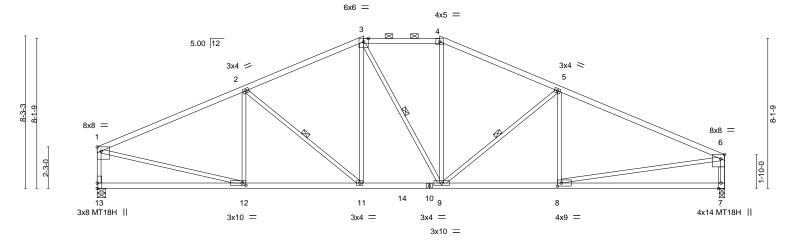


M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303178 AS NOTED ON PLANS REVIE 400302 C4 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:49 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BRh9xqOmg1frc6RtjZQ2YkJuS57k8eU7ZHclQBzGs6i 14-5-4 6-5-13 06/<u>1/1/2</u>020 7-11-7 8-11-8 Scale = 1:62.4



| 1 | /-11-/ | 14-5-4 | 18-6-12 | I | 25-0 | -8 | 1 | 34-0-0 | 1 |
|---------------------|------------------------------------|---------------------------------|------------------|-------|-------|--------|-----|----------------|----------|
| | 7-11-7 | 6-5-13 | 4-1-8 | | 6-5- | 13 | | 8-11-8 | l |
| Plate Offsets (X,Y) | [1:Edge,0-2-12], [6:0-2-8,Edge], [| 7:0-3-8,Edge], [8:0-2-8,0-2-0], | [12:0-2-8,0-1-8] | | | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.85 | Vert(LL) | -0.18 | 7-8 | >999 | 360 | MT20 | 197/144 |
| CDL 10.0 | Lumber DOL 1.15 | BC 0.84 | Vert(CT) | -0.38 | 7-8 | >999 | 240 | MT18H | 197/144 |
| 3CLL 0.0 * | Rep Stress Incr YES | WB 0.66 | Horz(CT) | 0.06 | 7 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) | 0.07 | 8-9 | >999 | 240 | Weight: 137 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

3-4: 2x4 SPF No.2 2x4 SPF No.2

BOT CHORD WEBS 2x3 SPF No.2

REACTIONS. (size) 13=0-5-8, 7=0-3-8 Max Horz 13=-64(LC 4)

Max Uplift 13=-172(LC 8), 7=-181(LC 9) Max Grav 13=1581(LC 2), 7=1578(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-2146/232, 2-3=-1907/229, 3-4=-1701/255, 4-5=-1932/245, 5-6=-2338/261,

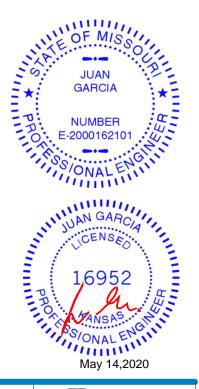
1-13=-1455/211. 6-7=-1435/226

BOT CHORD 11-12=-201/1910, 9-11=-69/1682, 8-9=-176/2076

WEBS 2-12=-287/134, 2-11=-366/177, 3-11=-55/417, 4-9=-31/440, 5-9=-526/204,

1-12=-136/1869, 6-8=-129/1925

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=172, 7=181. 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1. 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

2-11, 3-9, 5-9

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

1 Row at midpt

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

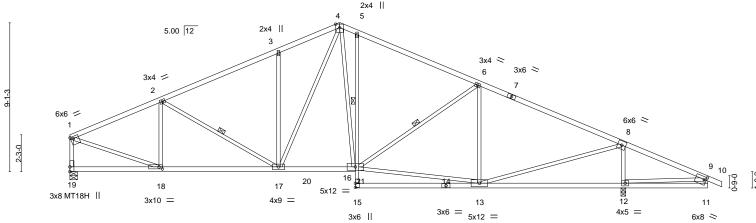


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303179 AS NOTED ON PLANS REVIE 400302 C5 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:50 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhplH1zCzbQ-fdFX8APORLniEG?3HHxH5yr4cVWpt5HHnxMsydzGs6h 17-**56/11/2020** 39-10-8 Scale = 1:70.5 0-0-12 6**0x**610-∓2 2x4 || 5 2x4 || 5.00 12



| | 5-6-10 | 11-0-5 | 16-6-0 | 17-5-8 | 8 25· | 0-8 | 1 | 33-10-4 | 34-0-0 | 39-0-0 |
|--|--|------------------------|---------------------------------------|------------|---|---|---------------------------------------|---------------------------------|---|---|
| | 5-6-10 | 5-5-11 | 5-5-11 | 0-11-8 | 8 7- | 7-0 | 1 | 8-9-12 | 0-1 ⁻¹ 12 | 5-0-0 |
| Plate Offsets (X,Y) | [1:0-2-0,0-1-8], [11: | 0-1-2,0-0-8], [11:0-1- | 12,0-2-0], [18:0-2 | 2-8,0-1-8] | | | | | | |
| LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0 | SPACING- Plate Grip D Lumber DOL Rep Stress I Code IRC20 | 1.15 | CSI. TC 0.82 BC 0.66 WB 0.69 Matrix-S | 6 | DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in (loc) -0.15 13-15 -0.29 13-15 0.06 12 0.08 16-17 | I/defI >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 MT18H Weight: 169 lb | GRIP 197/144 197/144 FT = 10% |

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

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

5-15: 2x3 SPF No.2

WEBS 2x3 SPF No.2

> (size) 19=0-5-8, 12=0-3-8 Max Horz 19=-190(LC 9)

Max Uplift 19=-187(LC 8), 12=-310(LC 9) Max Grav 19=1537(LC 2), 12=2145(LC 2)

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

TOP CHORD $1-2=-1916/240,\ 2-3=-1928/259,\ 3-4=-1903/362,\ 4-5=-1711/336,\ 5-6=-1747/258,$

6-8=-1787/239, 8-9=-176/514, 1-19=-1457/210

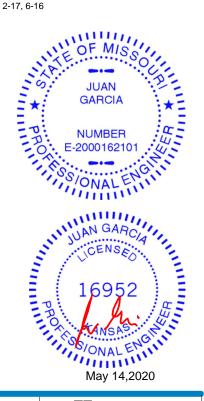
BOT CHORD 17-18=-218/1725, 16-17=-28/1439, 5-16=-423/222, 12-13=-386/186 **WEBS**

2-18=-460/152, 3-17=-432/223, 4-17=-222/721, 4-16=-268/777, 6-13=-569/162, 8-13=-161/2007, 8-12=-1882/390, 1-18=-189/1795, 9-12=-339/193, 13-16=-49/1466

NOTES-

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=187, 12=310.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

5-16

except end verticals.

1 Row at midpt

1 Row at midpt

6-0-0 oc bracing: 12-13,11-12.

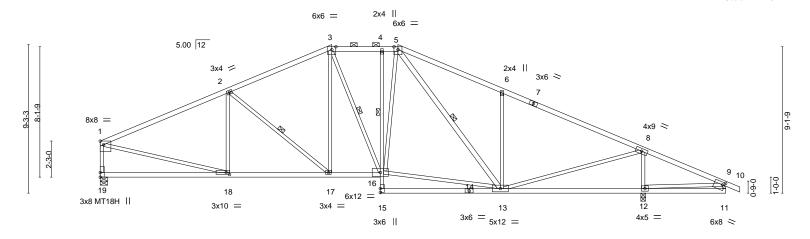


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303180 AS NOTED ON PLANS REVIE 400302 C6 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:52 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-b0NlZsRezy1QTa9SOizlANxQLJDHL_9aFFry0WzGs6f 7-11-7 7-11-7 106/11/2020 25-0-9 6-5-14 39-0-0 33-10-4 39-10₁8 6-5-13 3-0-4 8-9-11 5-1-12 0-10-8 Scale = 1:71.8



| | 7-11-7 7-11-7 | 14-5-4 6-5-13 | 17-5-8 3-0-4 | 25-0- 7-7- | | | 33-10-4 8-9-11 | | 39-0-0 5-0-0 |
|--|--|--|----------------------|---|---|---------------------------------------|---------------------------------|----------------------------------|---|
| Plate Offsets (X,Y) | [1:Edge,0-2-12], [11:0-1-2,0 | | | | • | | 0011 | 0 1 12 | |
| 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/TPI2 | 2-0-0 CSI. 1.15 TC 1.15 BC YES WB 014 Matr | 0.81 0.59 0.67 | DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in (loc) -0.12 18-19 -0.25 18-19 0.05 12 0.07 17-18 | I/defI >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 MT18H Weight: 174 II | GRIP 197/144 197/144 b FT = 10% |

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 *Except*

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

4-15: 2x3 SPF No.2 **WEBS** 2x3 SPF No.2 *Except* 5-13: 2x4 SPF No.2

TOP CHORD **BOT CHORD**

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

except end verticals, and 2-0-0 oc purlins (4-7-4 max.): 3-5. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 12-13,11-12.

1 Row at midpt 4-16 **WEBS** 1 Row at midpt

REACTIONS. (size) 19=0-5-8, 12=0-3-8

Max Horz 19=-173(LC 9)

Max Uplift 19=-171(LC 8), 12=-296(LC 9) Max Grav 19=1474(LC 1), 12=2086(LC 1)

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

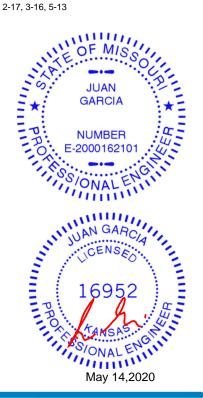
TOP CHORD $1-2=-2003/231,\ 2-3=-1748/228,\ 3-4=-1529/227,\ 4-5=-1524/226,\ 5-6=-1695/356,$

6-8=-1720/214, 8-9=-175/511, 1-19=-1399/210

BOT CHORD 17-18=-166/1763, 16-17=-29/1519, 12-13=-383/185

2-18=-271/134, 2-17=-374/177, 3-17=-55/350, 13-16=-19/1382, 5-16=-18/447, WFBS 6-13=-561/296, 8-13=-167/1938, 8-12=-1883/375, 1-18=-135/1723, 9-12=-331/189

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone: cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=171, 12=296,
- 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.





NOTES-

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

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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303181 AS NOTED ON PLANS REVIE C7 400302 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:53 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3CxgmCSGkG9H5kkeyPU_jaTf4iYZ4TgjUvaWZyzGs6e 06/11/2020 17-5-8 5-0-4 20-6-12 25-11-8 5-6-11 3-10-10 3-1-4 5-4-12 Scale = 1:52.0 6x6 = 6x6 = 2x4 || 3 \boxtimes \boxtimes 5.00 12 3x4 || 6 3x4 = 2 2-3-9 6x6 -2-3-0 12 9 1-0-0 13 11 10 7x12 =₩ 7 3x4 3x6 = 3x4 = 8 4x9 II 4x9 = 20-6-12 5-6-11 6-10-10 Plate Offsets (X,Y)--[1:0-2-0,0-1-8], [7:Edge,0-2-0], [11:0-2-8,0-1-8] SPACING-DEFL. **PLATES** GRIP LOADING (psf) CSI. (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.55 Vert(LL) -0.20 7-8 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.59 Vert(CT) -0.40 7-8 >776 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.52 Horz(CT) 0.04 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S >999 240 Weight: 123 lb 0.04 10 **BRACING-**

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2 *Except* BOT CHORD 4-8: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

5-7: 2x4 SPF No.2

REACTIONS. (size) 12=0-5-8, 7=0-3-8

Max Horz 12=228(LC 7)

Max Uplift 12=-140(LC 8), 7=-140(LC 5) Max Grav 12=1208(LC 2), 7=1210(LC 2)

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

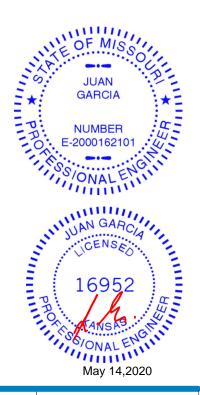
1-2=-1459/177, 2-3=-1324/198, 3-4=-993/208, 4-5=-988/208, 1-12=-1127/164 **BOT CHORD** 10-11=-244/1303, 9-10=-206/1145, 4-9=-336/135

WEBS

2-11=-318/127, 3-10=-2/368, 3-9=-286/81, 7-9=-198/550, 5-9=-87/865, 1-11=-130/1348,

5-7=-1177/215

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



Structural wood sheathing directly applied or 4-1-5 oc purlins,

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

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

1 Row at midpt

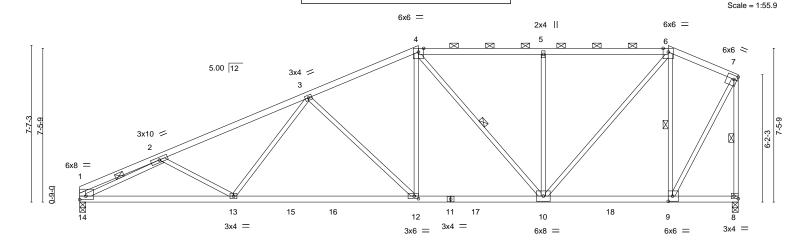


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303182 AS NOTED ON PLANS REVIE D1 400302 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:54 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-XPV2_YSvVZH8juJqW70DFo0n06p3prutiZK35OzGs6d 22-6-0 28-6-12 31-11-8 06/11/2020 3-11-14 7-1-6 5-4-0 6-0-12 6-0-12 3-4-12



| | | 7-5-9 | 16- | 5-4 | 22- | 6-0 | 28 | 3-6-12 | 31-11-8 |
|-------------|-----------|-------------------------------|----------------------------|--------------------------|-------------------|--------------|-----|----------------|----------|
| | ı | 7-5-9 | 8-11 | -11 | 6-0 | -12 | 6 | -0-12 | 3-4-12 |
| Plate Offse | ets (X,Y) | [1:0-1-12,0-0-12], [1:Edge,0- | -2-0], [7:Edge,0-2-4], [8: | Edge,0-1-8], [9:0-2-8,0- | -3-0], [12:0-2-8, | 0-1-8] | | | |
| LOADING | (psf) | SPACING- 2 | 2-0-0 CSI . | DE | FL . in | (loc) I/defl | L/d | PLATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL | 1.15 TC | 0.73 Vei | rt(LL) -0.28 | 12-13 >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 BC | 0.96 Vei | rt(CT) -0.49 | 12-13 >771 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES WB | 0.84 Ho | rz(CT) 0.08 | 8 n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI20 | 014 Matri | x-S Wir | nd(LL) 0.10 | 12-13 >999 | 240 | Weight: 134 lb | FT = 10% |

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

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

1-14: 2x4 SPF No.2

(size) 14=0-3-8, 8=0-3-8 Max Horz 14=253(LC 5)

Max Uplift 14=-184(LC 8), 8=-197(LC 5) Max Grav 14=1512(LC 2), 8=1539(LC 2)

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

1-2=-438/23, 2-3=-2701/308, 3-4=-1941/279, 4-5=-1461/277, 5-6=-1461/277, TOP CHORD

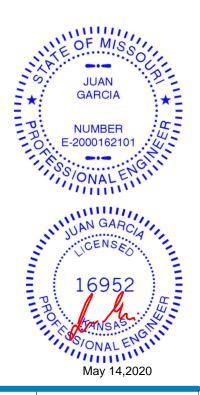
6-7=-710/165, 7-8=-1514/203

BOT CHORD 13-14=-452/2458, 12-13=-335/2182, 10-12=-266/1724, 9-10=-141/653 WEBS 3-13=0/414, 3-12=-640/246, 4-12=-80/763, 4-10=-422/103, 5-10=-516/208,

6-10=-186/1265, 6-9=-975/239, 2-14=-2385/382, 7-9=-184/1343

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=184, 8=197
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

4-10, 6-9, 2-14, 7-8

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

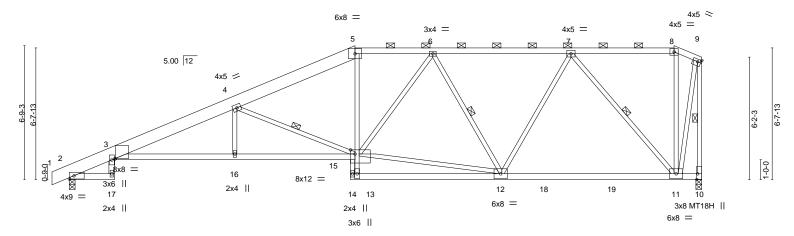
Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt



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





| _ | 2-3-8 | 8-4-6 | 14-2-8 | 14 ₇ 5-4 | 21-10-5 | | 1 | 30-6-12 | 3: | 1-11-8 ₋ |
|-----------------|-------|-----------------------------------|------------------------|---------------------|----------|------------|--------|---------|----------------|---------------------|
| ļ | 2-3-8 | 6-0-14 | 5-10-2 | 0-2-12 | 7-5-1 | | 1 | 8-8-7 | '1 | -4-12 ¹ |
| Plate Offsets (| X,Y) | [3:0-0-5,0-0-0], [9:0-2-0,0-1-8], | , [10:0-3-8,Edge], [15 | :0-2-12,0-2-8] | | | | | | |
| LOADING (ps | sf) | SPACING- 2-0 |)-0 CSI . | 1 | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 25. | .Ó | Plate Grip DOL 1. | 15 TC | 0.85 | Vert(LL) | -0.34 3-16 | >999 | 360 | MT20 | 197/144 |
| TCDL 10. | .0 | Lumber DOL 1. | 15 BC | 0.79 | Vert(CT) | -0.60 3-16 | >630 | 240 | MT18H | 197/144 |
| BCLL 0. | .0 * | Rep Stress Incr YE | ES WB | 0.93 | Horz(CT) | 0.36 10 | n/a | n/a | | |
| BCDL 10. | .0 | Code IRC2018/TPI201 | 4 Matr | rix-S | Wind(LL) | 0.24 3-16 | >999 | 240 | Weight: 166 lb | FT = 10% |

TOP CHORD

BOT CHORD

WEBS

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2 *Except*

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

3-15: 2x4 SPF 2100F 1.8E, 14-15: 2x3 SPF No.2

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

3-17: 2x4 SPF No.2

REACTIONS. (lb/size) 2=1495/0-3-8, 10=1426/0-3-8

Max Horz 2=261(LC 7)

Max Uplift 2=-196(LC 8), 10=-231(LC 5) Max Grav 2=1528(LC 2), 10=1508(LC 2)

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

TOP CHORD 2-3=-807/47, 3-4=-3643/406, 4-5=-2483/345, 5-6=-2186/338, 6-7=-1632/281,

7-8=-327/103, 8-9=-372/112, 9-10=-1665/192

3-16=-551/3522, 15-16=-549/3516, 14-15=-529/0, 12-18=-270/1235, 18-19=-270/1235, BOT CHORD

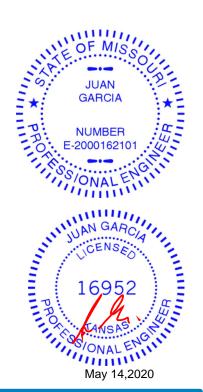
11-19=-270/1235

WEBS 4-15=-1454/327. 12-15=-382/1803. 6-15=-77/367. 6-12=-774/203. 7-12=-27/813.

7-11=-1442/285, 9-11=-176/1555, 13-15=0/667, 5-15=-55/752

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 2 and 231 lb uplift at joint 10.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

4-15, 6-12, 7-11, 9-10

end verticals, and 2-0-0 oc purlins (3-7-12 max.): 5-8.

6-0-0 oc bracing: 14-15.

1 Row at midpt

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



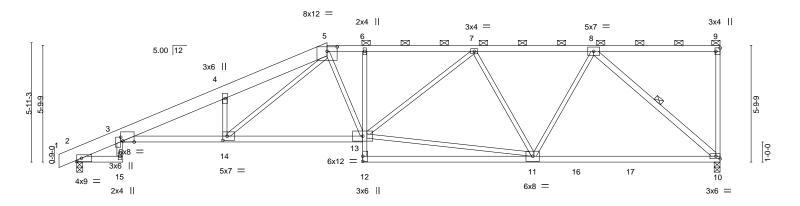
M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

Design Valid for use only with release controlled in the controlle



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303184 AS NOTED ON PLANS REVIE D3 400302 Half Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:56 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-TncpPEU91BYsyBTDdX2hKD57bwaHHmy9AtpA9HzGs6b 31-11-8 06/11/2020 25-8-3 2-3-8 5-0-14 5-0-14 1-9-4 5-11-4 6-3-5 Scale = 1:57.2



| 2-2-2 2- 2-2-2 0- | | 12-5-4 5-0-14 | 14-2-8 | 22-8-9 8-6-1 | - | 31-11-8 9-2-15 | — |
|--|---|---|--------------|---|---|-------------------|--------------------------|
| | [3:0-2-4,0-1-4], [3:0-6-12,E | | | | | 0210 | |
| 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/TPI | 2-0-0 CS 1.15 TC 1.15 BC YES WI 2014 Ma | 0.73 0.59 | DEFL. in (loc) Vert(LL) -0.31 13-14 Vert(CT) -0.56 13-14 Horz(CT) 0.31 10 Wind(LL) 0.20 13-14 | I/defl L/d >999 360 >681 240 n/a n/a >999 240 | MT20 19 | RIP 7/144 FT = 10% |

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x8 SP DSS *Except* 5-9: 2x4 SPF No.2

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

2-15: 2x4 SPF No.2, 6-12: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 3-15,8-10: 2x4 SPF No.2

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

Max Horz 2=243(LC 7)

Max Uplift 10=-254(LC 5), 2=-182(LC 4) Max Grav 10=1499(LC 2), 2=1533(LC 2)

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

TOP CHORD 2-3=-805/59, 3-4=-3846/444, 4-5=-4080/542, 5-6=-2592/420, 6-7=-2578/422,

7-8=-1814/310

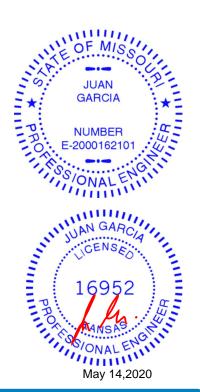
BOT CHORD 3-14=-603/3696, 13-14=-456/2457, 6-13=-259/122, 10-11=-301/1365 WFBS

4-14=-975/295, 5-14=-305/1644, 5-13=-63/371, 11-13=-404/2044, 7-13=-75/535,

7-11=-824/232, 8-11=-28/930, 8-10=-1805/341

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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=254, 2=182.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-2-6 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-4-11 max.): 5-9.

8-10

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

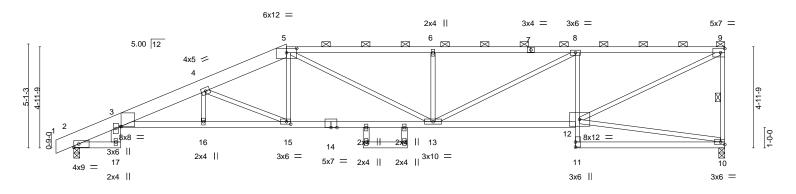
1 Row at midpt



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



RELEASE FOR Job CONSTRUCTION Truss Truss Type Lot 15 HT 141303185 AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 400302 Half Hip Job Reference (optional) LEE'S SUMMIT, MISSOURI ID:bWuMDBN0tjF5cDvSpv 8.240 s Apr 4 2020 MiTek Industries, Inc. Thu May 14 11:56:34 2020 Page 1 hpH1zCzbQ-citGFPi1LmHpqa7m5pnVH5wUEla92cfnE9zXNFzGbEx Wheeler Lumber, Waverly, KS 66871 -0-10-8 0-10-8 2-3-8 6-4-6 10-5-4 17-7-10 24-7-8 31-11-8 7-2-6 **06/11/2020** 2-3-8 4-0-14 4-0-14 6-11-14 7-4-0 Scale = 1:56.6



| L | 2-3-8 | 6-4-6 | 10-5-4 | 17-7-10 | | 24-7 | 7-8 | 1 | 31-11-8 | |
|---------------|--------------|-----------------------------------|---------------------|---------------------|---------------------|----------------------------|--------------|------------|----------------|----------|
| ŗ | 2-3-8 | 4-0-14 | 4-0-14 | 7-2-6 | 1 | 6-11 | -14 | 1 | 7-4-0 | ļ |
| Plate Offsets | (X,Y) | [3:0-0-5,0-0-0], [5:0-6-0, | 0-2-10], [15:0-2-8, | 0-1-8] | | | | | | |
| LOADING (p | osf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| | 5.0 0.0 | Plate Grip DOL Lumber DOL | 1.15 1.15 | TC 0.76 BC 0.77 | Vert(LL) Vert(CT | -0.30 13-15 -0.58 13-15 | >999 >659 | 360 240 | MT20 | 197/144 |
| | 0.0 * 0.0 | Rep Stress Incr Code IRC2018/T | YES PI2014 | WB 0.88 Matrix-S | Horz(CT Wind(LL | , | n/a >999 | n/a 240 | Weight: 147 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

1-5: 2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except*

3-14: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2 2x3 SPF No.2 *Except* **WEBS**

3-17: 2x6 SPF No.2, 18-20,19-21: 2x4 SPF No.2

REACTIONS. (lb/size) 10=1425/0-3-8, 2=1492/0-3-8

Max Horz 2=206(LC 5)

Max Uplift 10=-259(LC 5), 2=-202(LC 4)

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

TOP CHORD 2-3=-719/73, 3-4=-3846/519, 4-5=-3049/472, 5-6=-3145/559, 6-7=-3145/559,

7-8=-3145/559, 8-9=-2330/454, 9-10=-1351/305

BOT CHORD 3-16=-672/3789, 15-16=-668/3777, 14-15=-518/2773, 13-14=-518/2773, 12-13=-489/2341,

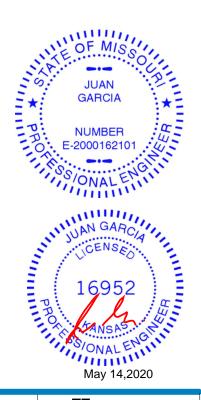
8-12=-956/288

WEBS 4-15=-1123/240, 5-15=-30/595, 5-13=-117/417, 6-13=-505/212, 8-13=-133/908,

9-12=-504/2575

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 259 lb uplift at joint 10 and 202 lb uplift at ioint 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.
- 7) 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 3-0-12 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-9-1 max.): 5-9.

9-10

Rigid ceiling directly applied or 8-1-13 oc bracing.

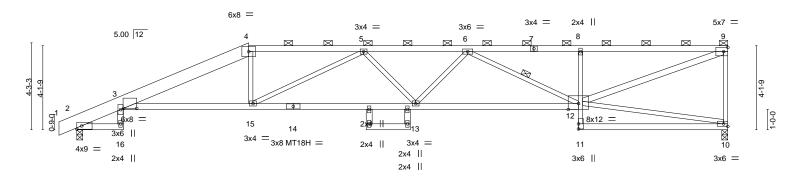
1 Row at midpt



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







| 2-3-8 | 8-5-4 | 16-7-10 | 24-7-8 | 31-11-8 |
|---------------------|----------------------|----------|-------------------------------|-------------------------|
| 2-3-8 | 6-1-12 | 8-2-6 | 7-11-14 | 7-4-0 |
| Plate Offsets (X,Y) | [3:0-7-11,0-0-0] | | | |
| | | | | |
| 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 0.81 | Vert(LL) -0.41 13-15 >932 360 | MT20 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.57 | Vert(CT) -0.76 13-15 >504 240 | MT18H 197/144 |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.82 | Horz(CT) 0.43 10 n/a n/a | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) 0.33 13-15 >999 240 | Weight: 138 lb FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x8 SP DSS *Except*

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

BOT CHORD 2x4 SPF No.2 *Except*

3-14,12-14: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except*

3-16,9-12,17-19,18-20: 2x4 SPF No.2

REACTIONS. (lb/size) 10=1425/0-3-8, 2=1494/0-3-8

Max Horz 2=170(LC 5)

Max Uplift 10=-262(LC 5), 2=-218(LC 4)

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

TOP CHORD 2-3=-713/87, 3-4=-3351/509, 4-5=-3210/524, 5-6=-3967/671, 6-7=-2883/549,

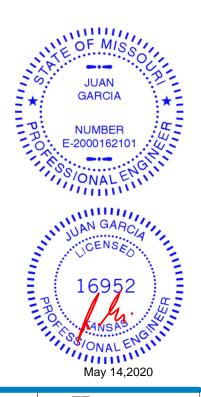
7-8=-2883/549, 8-9=-2873/557, 9-10=-1351/307

BOT CHORD 3-15=-591/3198, 14-15=-777/3955, 13-14=-777/3955, 12-13=-759/3829, 8-12=-507/214

4-15=-1/438, 5-15=-838/228, 6-13=0/293, 6-12=-1064/198, 9-12=-599/3061 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) Provide adequate drainage to prevent water ponding.
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 262 lb uplift at joint 10 and 218 lb uplift at ioint 2
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

end verticals, and 2-0-0 oc purlins (2-6-14 max.): 4-9.

6-12

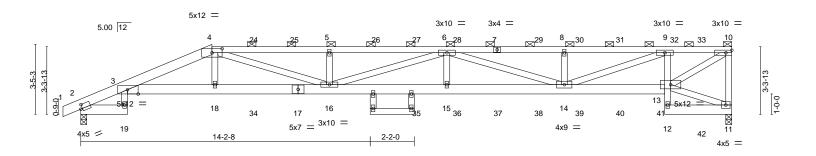
Rigid ceiling directly applied or 8-10-12 oc bracing.

1 Row at midpt



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





| | 2-3-8 | 6-5-4 | 12-2-7 | | 17 | ·-11-10 | 23-8-1 | 3 | 1 | 28-8-0 | 31-11-8 |
|--------------|---------------|----------------------------------|-------------------|-------------|--------------|----------------------|----------------------------|--------------|------------|-----------|-----------------|
| | 2-3-8 | 4-1-12 | 5-9-3 | | į | 5-9-3 | 5-9-3 | | l . | 4-11-3 | 3-3-8 |
| Plate Offse | ets (X,Y) | [2:0-1-1,0-2-8], [3:0-6-4 | ,Edge], [4:0-6-0, | 0-2-6] | | | | | | | |
| LOADING | (psf) | SPACING- | 2-0-0 | CSI. | | 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 | 0.81 0.51 | Vert(LL) Vert(CT) | -0.41 15-16 -0.74 15-16 | >925 >513 | 360 240 | MT20 | 197/144 |
| BCLL BCDL | 0.0 * 10.0 | Rep Stress Incr Code IRC2018/ | NO ΓΡΙ2014 | WB Matri | 0.41 x-S | Horz(CT) Wind(LL) | 0.32 11 0.24 15-16 | n/a >999 | n/a 240 | Weight: 5 | 510 lb FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

1-4: 2x6 SP DSS

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

9-12,20-21: 2x4 SPF No.2

WEBS 2x4 SPF No.2

(lb/size) 11=2891/0-3-8, 2=2862/0-3-8 REACTIONS.

Max Horz 2=100(LC 5)

Max Uplift 11=-114(LC 5), 2=-195(LC 4)

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

TOP CHORD 2-3=-1669/115, 3-4=-8942/674, 4-24=-11247/673, 24-25=-11247/673, 5-25=-11247/673,

5-26=-11247/673, 26-27=-11247/673, 6-27=-11247/673, 6-28=-8983/344, 7-28=-8983/344, 7-29=-8983/344, 8-29=-8983/344, 8-30=-8983/344, 30-31=-8983/344, 31-32=-8983/344,

9-32=-8983/344, 9-33=-4358/178, 10-33=-4358/178, 10-11=-2787/146

3-18=-694/8480, 18-34=-699/8587, 17-34=-699/8587, 16-17=-699/8587, 16-35=-606/11994,

BOT CHORD 15-35=-606/11994, 15-36=-606/11994, 36-37=-606/11994, 37-38=-606/11994,

14-38=-606/11994. 14-39=-214/4605. 39-40=-213/4608. 40-41=-212/4611.

13-41=-211/4614. 9-13=-2195/190

WFBS 3-19=-36/561, 4-18=-63/1230, 4-16=-31/2928, 5-16=-723/192, 6-16=-853/0, 6-15=0/538,

 $6-14=-3177/240,\ 8-14=-608/146,\ 9-14=-178/4688,\ 10-13=-214/5058$

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.

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

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

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 11 and 195 lb uplift at
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

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

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



F MIS O

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

end verticals, and 2-0-0 oc purlins (5-9-9 max.): 4-10.

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type 400302 D6 Half Hip Girde

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:bWuMDBN0tjF5cDvSpwhpl

Ply Lot 15 HT

Job Reference (optional)

8.240 s Apr 4 2020 MiTek Industries, Inc. Thu May 14 11:56:59 2020 Page 2 HIZCzbQ-NWujVy0jSRRGKQXa3ZkNoMTkCpA0P1CT_YXMmIzGbEY

141303187

Wheeler Lumber, Waverly, KS 66871

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrate (s) 140 lb down and 62 lb up at 6-5-4, 117 lb down and 62 lb up at 6-5-4. 117 lb down and 62 lb up at 10-6-0, 117 lb down and 62 lb up at 12-6-0, 117 lb down and 62 lb up at 14-6-0, 98 lb down and 51 lb up at 16-6-0, 98 lb down and 51 lb up at 18-6-0, 98 lb down and 51 lb up at 20-6-0, 98 lb down and 51 lb up at 20-6-0, and 98 lb down and 51 lb up at 26-6-0, and and 51 lb up at 28-6-0, and 122 lb down and 70 lb up at 30-6-0 on top chord, and 536 lb down and 145 lb up at 6-5-4, 79 lb down at 8-6-0, 79 lb down at 10-6-0, 79 lb down at 12-6-0, 89 lb down at 16-6-0, 89 lb down at 18-6-0, 89 lb down at 20-6-0, 89 lb down at 22-6-0, 89 lb down at 24-6-0, 89 lb down at 26-6-0, and 89 lb down at 28-6-0, and 75 lb down at 30-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. 13) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-10=-70, 2-19=-20, 3-13=-20, 11-12=-20

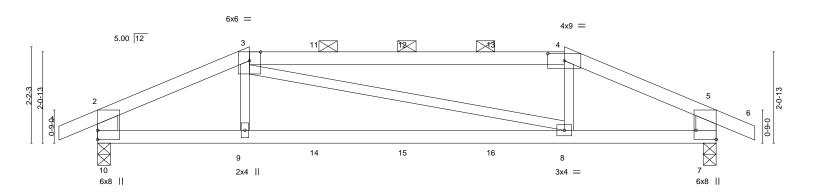
Concentrated Loads (lb)

Vert: 4=-117(B) 7=-98(B) 17=-74(B) 18=-536(B) 16=-74(B) 5=-117(B) 24=-117(B) 25=-117(B) 26=-117(B) 27=-98(B) 28=-98(B) 29=-98(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-122(B) 34=-74(B) 35=-89(B) 36=-89(B) 37=-89(B) 38=-89(B) 39=-89(B) 40=-89(B) 41=-89(B) 42=-58(B)



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303188 AS NOTED ON PLANS REVIE 400302 E1 Hip Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:03 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-m7YStdZYNKQsIGVZXWgK7huGvkuvQ6tBnS?2vNzGs6U 14-10-8 14-0-0 3-5-4 3-5-4 06/1/1/2020 0-10-8 3-5-4 0-10-8



| <u> </u> | 3-5-4 3-5-4 | 10-6-12 7-1-8 | | 14-0-0 3-5-4 | 4 |
|--|--|---|--|--|-------|
| Plate Offsets (X,Y) | | :0-1-2,0-2-12], [7:Edge,0-5-8], [7:0-0-0,0- | 2-12], [10:0-0-0,0-2-12] | | |
| 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. DEFI TC 0.91 Vert(BC 0.91 Vert(WB 0.09 Horz: Matrix-S Wind | LL) -0.15 8-9 >999 CT) -0.35 8-9 >466 CT) 0.03 7 n/a | L/d PLATES GRIP 360 MT20 197/14 240 n/a 240 Weight: 45 lb FT | = 10% |

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 *Except*

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

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

2-10,5-7: 2x6 SP 2400F 2.0E

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

Max Horz 10=17(LC 28)

Max Uplift 10=-183(LC 4), 7=-183(LC 5) Max Grav 10=858(LC 1), 7=858(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1359/274, 3-4=-1168/268, 4-5=-1339/269, 2-10=-750/160, 5-7=-755/161

BOT CHORD 9-10=-220/1197, 8-9=-228/1192, 7-8=-209/1171

WEBS 3-9=0/275, 4-8=0/285

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=183, 7=183.
- 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) 164 lb down and 131 lb up at 3-5-4, 76 lb down and 61 lb up at 5-0-0, 76 lb down and 61 lb up at 7-0-0, and 76 lb down and 61 lb up at 9-0-0, and 164 lb down and 131 lb up at 10-6-12 on top chord, and 55 lb down at 3-5-4, 23 lb down at 5-0-0, 23 lb down at 7-0-0, and 23 lb down at 9-0-0, and 55 lb down at 10-6-0 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

E-2000162101 CIE ONALE 16952 MANSAS May 14,2020

O

GARCIA

NUMBER

Structural wood sheathing directly applied or 2-11-6 oc purlins,

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

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

Scale = 1:26.1

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

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



16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR Job Truss Truss Type E1 400302 Hip Girder

CONSTRUCTION

06/11/2020

Lot 15 HT

I41303188

AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES 1 Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MTek Industries, Inc. Wed May 13 16:45:03 2020 Page 2 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-m7YStdZYNKQsIGVZXWgK7huGvkuvQ6tBnS?2vNzGs6U

LOAD CASE(S) Standard Uniform Loads (plf)

Wheeler Lumber,

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

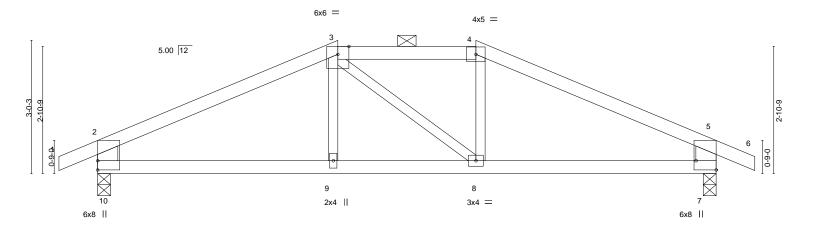
Waverly, KS 66871

Concentrated Loads (lb)

Vert: 3=-64(F) 4=-64(F) 9=-37(F) 8=-37(F) 11=-31(F) 12=-31(F) 13=-31(F) 14=-16(F) 15=-16(F) 16=-16(F)



| | | | | RELEASE FOR | | | |
|-----------------|-------------------|-------|---------|--|-----------|--|---------------------|
| Job | Truss | Tru | ss Type | CONSTRUCTION | Ply | Lot 15 HT | 144000400 |
| 400302 | E2 | Hip | . | AS NOTED ON PLANS REVI | 1 7 | | I41303189 |
| +0030Z | | | | DEVELOPMENT SERVICE | | Job Reference (optional) | |
| Wheeler Lumber, | Waverly, KS 66871 | | | LEE'S SUMMIT, MISSOUR | 240 s Mar | 9 2020 MiTek Industries, Inc. Wed May 13 1 | 6:45:04 2020 Page 1 |
| | | | | ID:bWuMDBN0tjF | 5cDvSpwh | pH1zCzbQ-EK5q4zaA8eYjvQ4l5DBZfvQWx8N | Nf9amL?6lbSpzGs6T |
| 0-10-8 | | 5-5-4 | | —————————————————————————————————————— | 1 | 14-0-0 | 14-10-8 |
| 0-10-8 | | 5-5-4 | | 3-1-8 | | 5-5-4 | 0-10-8 |
| | | | L | | | | Scale = 1:26.1 |



| | | 5-5-4 | 8-6-12 | | | | | | | |
|-------------|----------|---|--------------------|-------------------------------|-------|-------|--------|-----|---------------|----------|
| | ı | 5-5-4 | | 3-1-8 | ı | | | 5- | -5-4 | |
| Plate Offse | ts (X,Y) | [2:0-1-2,0-2-12], [5:0-1-2,0-2-12], [7:Ed | ge,0-5-8], [7:0-0- |)-0,0-2-12], [10:0-0-0,0-2-12 |] | | | | | |
| LOADING | (psf) | SPACING- 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL 1.15 | TC 0. | .58 Vert(LL) | -0.05 | 8-9 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0. | .37 Vert(CT) | -0.10 | 8-9 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0. | .05 Horz(CT) | 0.02 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) | 0.03 | 8-9 | >999 | 240 | Weight: 44 lb | FT = 10% |

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

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

2-10,5-7: 2x6 SPF No.2 (size) 10=0-3-8, 7=0-3-8

Max Horz 10=-27(LC 13) Max Uplift 10=-90(LC 8), 7=-90(LC 9) Max Grav 10=687(LC 1), 7=687(LC 1)

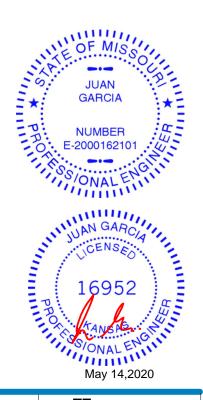
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-877/96, 3-4=-727/108, 4-5=-877/96, 2-10=-612/128, 5-7=-612/128

9-10=-32/729, 8-9=-34/727, 7-8=-34/729 **BOT CHORD**

NOTES-

REACTIONS.

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



Structural wood sheathing directly applied or 5-4-12 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.



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303190 AS NOTED ON PLANS REVIE 400302 E3 Common DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:05 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-jWfCHJbovygaXafxfwioC6zgTYj2u0PUEmU8_FzGs6S 06/11/2020

4x9 =

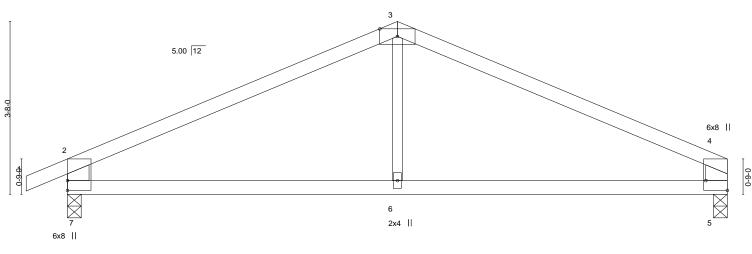
Scale = 1:24.4

Structural wood sheathing directly applied or 5-0-8 oc purlins,

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

except end verticals.

7-0-0



| Plate Offsets (X,Y) | Plate Offsets (X,Y) [2:0-1-2,0-2-12], [4:Edge,0-5-8], [4:0-1-2,0-2-12], [5:0-0-0,0-2-12], [7:0-0-0,0-2-12] | | | | | | | | | | |
|---------------------|--|-------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip DOL | 1.15 | TC | 0.65 | Vert(LL) | -0.05 | 6-7 | >999 | 360 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL | 1.15 | ВС | 0.36 | Vert(CT) | -0.11 | 6-7 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TP | 12014 | Matri | x-R | Wind(LL) | 0.03 | 6-7 | >999 | 240 | Weight: 38 lb | FT = 10% |

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

7-0-0

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

0-10-8

3-6: 2x3 SPF No.2

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

Max Horz 7=47(LC 12) Max Uplift 7=-103(LC 8), 5=-77(LC 9)

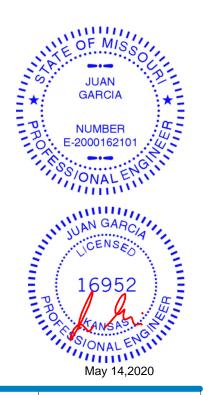
Max Grav 7=690(LC 1), 5=606(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-820/104, 3-4=-815/102, 2-7=-620/149, 4-5=-529/120

BOT CHORD 6-7=-38/662, 5-6=-38/662 **WEBS** 3-6=0/276

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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 except (jt=lb) 7=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.





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



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303191 AS NOTED ON PLANS REVIE 400302 E4 Common Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)
LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:06 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BiDbVfcQgFoR9kE8DeD1kKWrly1ldR8eTQEiWizGs6R 06/11/2020 0-10-8 7-0-0 7-0-0

4x5 =

3 5.00 12 6 8 5 3x10 || 3x10 || 3x10 ||

| 7-0-0 | | | | | | | 7-0-0 | | | | | |
|-----------|-------------|-----------------------------|-----------------|---------------|--------------|-----------------|---------------|-------|--------|-----|----------------|----------|
| Plate Off | fsets (X,Y) | [2:0-0-2,0-0-6], [2:0-0-5,0 | -4-11], [2:0-5- | 8,Edge], [4:0 | -0-2,0-0-6], | [4:0-0-5,0-4-11 |], [4:0-5-8,E | dge] | | | | |
| 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 | 0.65 | Vert(L | .) -0.08 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.39 | Vert(C | Γ) -0.13 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.25 | Horz(0 | T) 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TF | PI2014 | Matri | k-S | Wind(I | L) 0.04 | 4-5 | >999 | 240 | Weight: 111 lb | FT = 10% |

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

REACTIONS. (size) 2=0-3-8, 4=0-3-8 Max Horz 2=58(LC 33)

Max Uplift 2=-172(LC 8), 4=-192(LC 9)

Max Grav 2=1542(LC 1), 4=2117(LC 1)

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

TOP CHORD 2-3=-3009/271. 3-4=-2997/269 BOT CHORD 2-5=-190/2615, 4-5=-190/2615

WEBS 3-5=-77/2023

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7-0-0

- 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) 2=172 4=192
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 946 lb down and 103 lb up at 6-6-13, 489 lb down and 31 lb up at 8-6-0, and 453 lb down and 33 lb up at 10-6-0, and 465 lb down and 49 lb up at 12-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

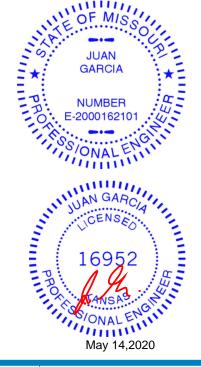
LOAD CASE(S) Standard

Continued on page 2

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

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

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



14-0-0

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

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

Scale = 1:24.4



Job Truss Truss Type E4 400302 Common Girder

RELEASE FOR CONSTRUCTION Ply
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES 2

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MITCH Industries, Inc. Wed May 13 16:45:06 2020 Page 2

06/11/2020

I41303191

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BiDbVfcQgFoR9kE8DeD1kKWrly1ldR8eTQEiWizGs6R

Waverly, KS 66871 Wheeler Lumber,

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

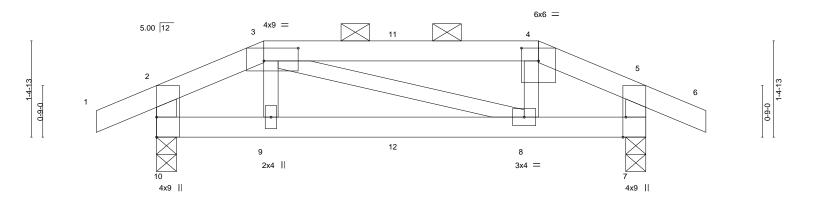
Vert: 6=-946(B) 7=-489(B) 8=-453(B) 9=-465(B)



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303192 AS NOTED ON PLANS REVIE 400302 G1 Hip Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:07 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fvnzi_c3RZwIntpKmLkGHX26vMQbMxqni4zF28zGs6Q 8-0-0 06/11/2020 0-10-8 1-6-12 1-6-12 0-10-8

Scale = 1:16.8



| 1-6-12 | | 5-6-12 | | 7-1-8 | |
|------------------------|---|--|------------------------------|---------------|------------------------|
| | 1-6-12 | 4-0-0 | | 1-6-12 | ı . |
| Plate Offsets (X,Y) [2 | 2:0-0-12,0-1-12], [3:0-6-0,0-2-4], [4:0-3 | -0,0-2-4], [5:0-0-12,0-1-12], [7:0-3-8,E | dge], [7:0-0-0,0-1-12], [10: | 0-0-0,0-1-12] | |
| | | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. DEFI | . in (loc) I/def | l L/d | PLATES GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.27 Vert(| L) -0.01 8-9 >999 | 360 | MT20 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.22 Vert | CT) -0.03 8-9 >999 | 9 240 | |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.03 Horz | CT) 0.00 7 n/a | a n/a | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S Wind | LL) 0.01 8-9 >999 | 9 240 | Weight: 24 lb FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2-10,5-7: 2x4 SPF No.2

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

Max Horz 10=-17(LC 27) Max Uplift 10=-74(LC 4), 7=-74(LC 5)

Max Grav 10=375(LC 1), 7=375(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-368/60, 3-4=-299/56, 4-5=-368/59, 2-10=-308/66, 5-7=-308/65 TOP CHORD

BOT CHORD 9-10=-34/300, 8-9=-30/299, 7-8=-27/300

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 64 lb up at 1-6-12, and 50 lb down and 23 lb up at 3-6-12, and 57 lb down and 64 lb up at 5-6-12 on top chord, and 7 lb down and 3 lb up at 1-6-12, and 3 lb down and 1 lb up at 3-6-12, and 7 lb down and 3 lb up at 5-6-0 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).

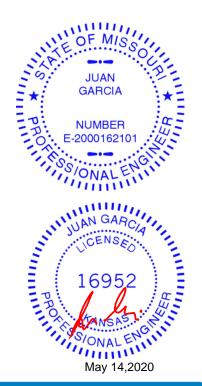
LOAD CASE(S) Standard

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, 5-6=-70, 7-10=-20

Concentrated Loads (lb)

Vert: 9=3(F) 8=3(F) 12=1(F)



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.

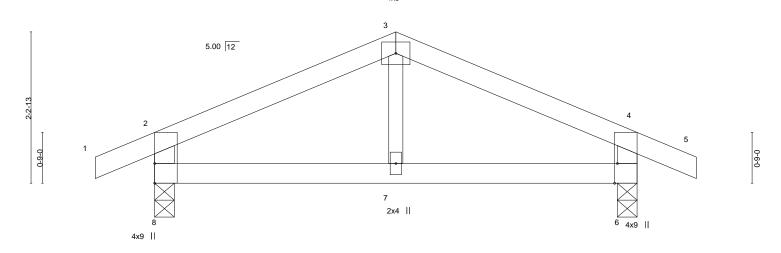


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303193 AS NOTED ON PLANS REVIE 400302 G2 Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:08 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-75LLwKdhCt29O1OWK3GVqlbldln95OwwwkjpbazGs6P 8-0-0 06/11/2020 0-10-8 3-6-12 3-6-12 0-10-8 Scale = 1:17.0 4x5 =



| Plate Offsets | Plate Offsets (X,Y) [2:0-0-12,0-1-12], [4:0-0-12,0-1-12], [6:0-3-8,Edge], [6:0-0-0,0-1-12], [8:0-0-0,0-1-12] | | | | | | | | | | | |
|---------------|--|-----------------|--------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADING (| (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 2 | 25.0 | Plate Grip DOL | 1.15 | TC | 0.21 | Vert(LL) | -0.01 | 7 | >999 | 360 | MT20 | 197/144 |
| TCDL 1 | 10.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | -0.02 | 7 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL 1 | 10.0 | Code IRC2018/TF | PI2014 | Matri | x-R | Wind(LL) | 0.00 | 7 | >999 | 240 | Weight: 21 lb | FT = 10% |

LUMBER-**BRACING-**

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

REACTIONS. (size) 8=0-3-8, 6=0-3-8 Max Horz 8=-15(LC 13)

3-7: 2x3 SPF No.2

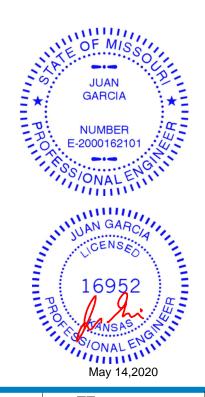
Max Uplift 8=-63(LC 8), 6=-63(LC 9) Max Grav 8=379(LC 1), 6=379(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-333/49, 3-4=-333/48, 2-8=-328/85, 4-6=-328/85

BOT CHORD 7-8=-4/254, 6-7=-4/254

NOTES-

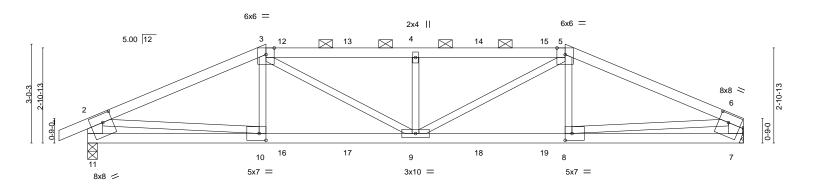
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber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





RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303194 AS NOTED ON PLANS REVIE 400302 Н1 Hip Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3UT5L0fxkUJteLXvSUIzvAgUhZIzZ5GDO2CvfTzGs6N 0-10-8 0-10-8 14-6-12 20-0-0 06/11/2020 4-6-12 4-6-12 5-5-4 Scale = 1:35.1



| L | 5-5-4 | 10-0-0 | 14-6-12 | 20-0-0 |
|-------------------|--|--|--------------------------|--------------------------|
| | 5-5-4 | 4-6-12 | 4-6-12 | 5-5-4 |
| Plate Offsets (X, | ,Y) [6:0-3-8,0-3-0], [7:0-2-9,0-1-1], [8:0-2 | -8,0-2-8], [10:0-2-8,0-2-8], [11:0-3-8,0 | -3-0], [11:0-2-9,0-1-1] | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. DI | FL. in (loc) I/defl L/ | d PLATES GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.88 Ve | rt(LL) -0.16 9 >999 36 | 0 MT20 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.88 Ve | rt(CT) -0.28 8-9 >826 24 | 0 |
| BCLL 0.0 | * Rep Stress Incr NO | WB 0.82 Ho | orz(CT) 0.05 7 n/a n/ | a |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S W | nd(LL) 0.10 9 >999 24 | 0 Weight: 71 lb FT = 10% |
| | | | | |

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

2-11,6-7: 2x6 SPF No.2

(size) 11=0-3-8, 7=Mechanical Max Horz 11=24(LC 5) Max Uplift 11=-184(LC 4), 7=-168(LC 9)

Max Grav 11=1753(LC 1), 7=1671(LC 1)

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

2-3=-3138/360, 3-4=-3608/416, 4-5=-3608/416, 5-6=-3142/359, 2-11=-1687/207, TOP CHORD 6-7=-1604/191

BOT CHORD 10-11=-109/604, 9-10=-308/2819, 8-9=-307/2833, 7-8=-62/480

WEBS 3-10=0/338, 3-9=-85/975, 4-9=-706/186, 5-9=-83/967, 5-8=0/329, 2-10=-246/2289,

6-8=-265/2374

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); 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)
- 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) 121 lb down and 64 lb up at 5-5-4, 109 lb down and 64 lb up at 6-0-0, 98 lb down and 64 lb up at 8-0-0, 98 lb down and 64 lb up at 10-0-0, 98 lb down and 64 lb up at 12-0-0, and 109 lb down and 64 lb up at 14-0-0, and 121 lb down and 64 lb up at 14-6-12 on top chord, and 344 lb down and 99 lb up at 5-5-4, 60 lb down at 6-0-0, 60 lb down at 8-0-0, 60 lb down at 10-0-0, 60 lb down at 12-0-0, and 60 lb down at 14-0-0, and 344 lb down and 99 lb up at 14-6-0 on bottom chord. The design/selection of such connection device(s) is the
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

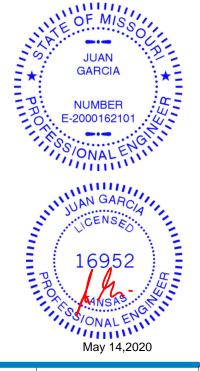
LOAD CASE(S) Standard

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

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



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

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

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



Job Truss Truss Type 400302 H1 Hip Girder

Waverly, KS 66871

RELEASE FOR CONSTRUCTION

06/11/2020

AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:10 2020 Page 2

Lot 15 HT

I41303194

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3UT5L0fxkUJteLXvSUIzvAgUhZIzZ5GDO2CvfTzGs6N

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Wheeler Lumber,

Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 7-11=-20

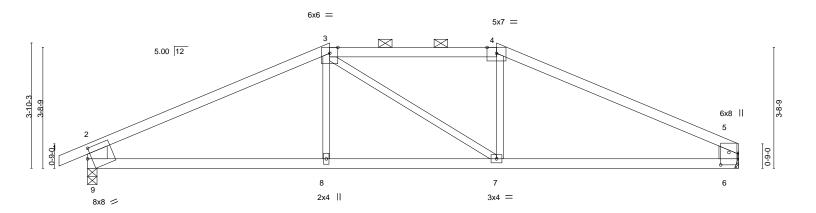
Concentrated Loads (lb)

Vert: 3=-98(F) 5=-98(F) 10=-344(F) 9=-43(F) 4=-98(F) 8=-344(F) 12=-98(F) 13=-98(F) 14=-98(F) 15=-98(F) 16=-43(F) 17=-43(F) 18=-43(F) 19=-43(F) 19=



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303195 AS NOTED ON PLANS REVIE 400302 H2 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:10 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3UT5L0fxkUJteLXvSUIzvAgS4ZKFZFSDO2CvfTzGs6N 0-10-8 0-10-8 20-0-0 7-5-4 7-5-4 06/1<mark>1/20</mark>20



| | 7-5-4 | | 12-6-12 | | | | | 20-0-0 | |
|-----------------------|--|----------------------------|----------|-------|-------|--------|-----|---------------|----------|
| | 7-5-4 | | 5-1-8 | | ' | | | 7-5-4 | <u>'</u> |
| Plate Offsets (X,Y) [| [2:0-3-15,0-0-0], [5:0-4-10,0-3-0], [9:0-1 | -8,0-3-9], [9:0-3-6,0-1-6] | | | | | | | |
| | | | | | | | | | |
| _OADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. | in | (loc) | I/defI | L/d | PLATES | GRIP |
| ΓCLL 25.0 | Plate Grip DOL 1.15 | TC 0.98 | Vert(LL) | -0.15 | 7-8 | >999 | 360 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.74 | Vert(CT) | -0.29 | 7-8 | >809 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.16 | Horz(CT) | 0.04 | 6 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) | 0.07 | 7-8 | >999 | 240 | Weight: 61 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 *Except* 2-9,5-6: 2x8 SP DSS

REACTIONS. (size) 9=0-3-8, 6=Mechanical

Max Horz 9=29(LC 10) Max Uplift 9=-16(LC 4)

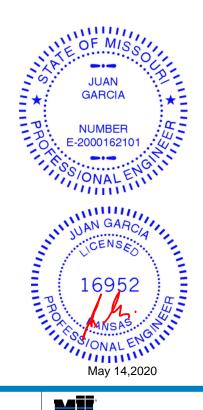
Max Grav 9=958(LC 1), 6=870(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1368/21, 3-4=-1147/35, 4-5=-1351/18, 2-9=-869/62, 5-6=-759/47 8-9=0/1156, 7-8=0/1153, 6-7=0/1149 TOP CHORD

BOT CHORD

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.
- 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, except end verticals, and

2-0-0 oc purlins (4-10-9 max.): 3-4.

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

Scale = 1:35.4

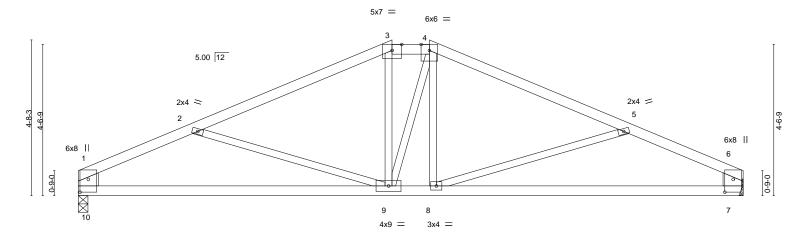


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303196 AS NOTED ON PLANS REVIE 400302 НЗ Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:11 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Xg0UYMfZVoRkFV65?BpCRNDdqzhNlhSNcixTBvzGs6M 16-4-14 20-0-0 06/1<mark>9/20</mark>20 5-10-5-10-2 3-7-2



| | - | | 9-5-4 | | | 1-1-8 | | | | 9-5-4 | , | |
|-----------|--------------|----------------------------|----------|-------|------|----------|-------|-------|--------|-------|---------------|----------|
| Plate Off | sets (X,Y) [| [1:0-4-10,0-3-0], [6:0-4-1 | 0,0-3-0] | | | | | | | | | |
| 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 | 0.98 | Vert(LL) | -0.17 | 8-9 | >999 | 360 | MT20 | 197/144 |
| CDL | 10.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.34 | 7-8 | >680 | 240 | | |
| 3CLL | 0.0 * | Rep Stress Incr | YES | WB | 0.24 | Horz(CT) | 0.04 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TI | PI2014 | Matri | x-S | Wind(LL) | 0.08 | 9 | >999 | 240 | Weight: 70 lb | FT = 10% |

TOP CHORD

10-6-12

LUMBER-**BRACING-**

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

2-0-0 oc purlins (5-4-1 max.): 3-4. WEBS 2x3 SPF No.2 *Except* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 1-10,6-7: 2x8 SP DSS

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

Max Horz 10=26(LC 10)

Max Uplift 10=-10(LC 8), 7=-10(LC 9) Max Grav 10=873(LC 1), 7=873(LC 1)

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

TOP CHORD 1-2=-1414/77, 2-3=-1161/4, 3-4=-1021/26, 4-5=-1160/4, 5-6=-1414/77, 1-10=-763/57,

6-7=-762/57

BOT CHORD 9-10=-75/1214, 8-9=0/1020, 7-8=-49/1214 2-9=-258/133, 3-9=-25/269, 5-8=-259/133 WEBS

NOTES-

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

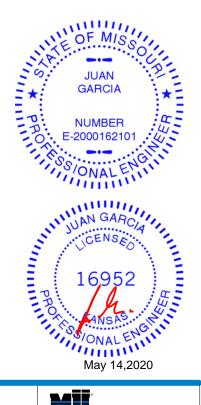
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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



Structural wood sheathing directly applied, except end verticals, and

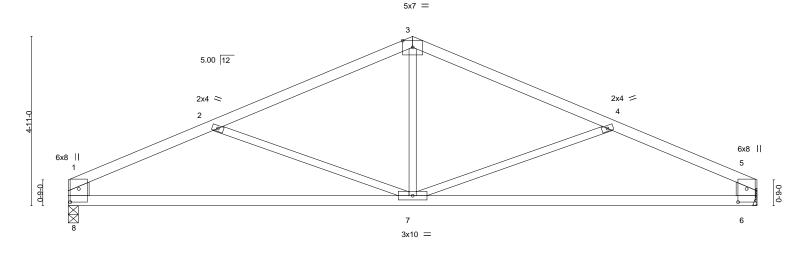
Scale = 1:34.7

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303197 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400302 Н4 Common DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:12 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-?sasligBG5ZbtfhIZvKR_bmrHN?g17dWrMh0kLzGs6L 15-7-14 20-0-0 06/11/2020 4-4-2 5-7-14 5-7 4-4-2 Scale = 1:33.5



| Plate Offsets (X,Y) | [1:0-4-10,0-3-0], [5:0-4-10,0-3-0] | | | | | | | | |
|---------------------|------------------------------------|----------|----------|-------|-------|--------|-----|---------------|----------|
| 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 0.81 | Vert(LL) | -0.19 | ` ź | >999 | 360 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.74 | Vert(CT) | -0.37 | 6-7 | >628 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.31 | Horz(CT) | 0.04 | 6 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) | 0.08 | 7 | >999 | 240 | Weight: 64 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* 1-8,5-6: 2x8 SP DSS

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

Max Horz 8=29(LC 10)

Max Uplift 8=-12(LC 8), 6=-12(LC 9) Max Grav 8=873(LC 1), 6=873(LC 1)

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

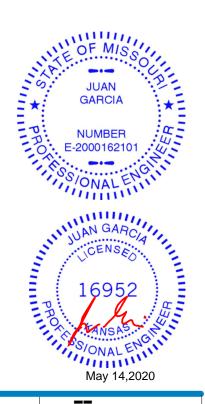
TOP CHORD 1-2=-1414/76, 2-3=-1103/14, 3-4=-1103/14, 4-5=-1414/77, 1-8=-758/60, 5-6=-758/60

10-0-0

BOT CHORD 7-8=-72/1216, 6-7=-43/1216

WEBS 3-7=0/434, 4-7=-331/139, 2-7=-331/139

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



20-0-0

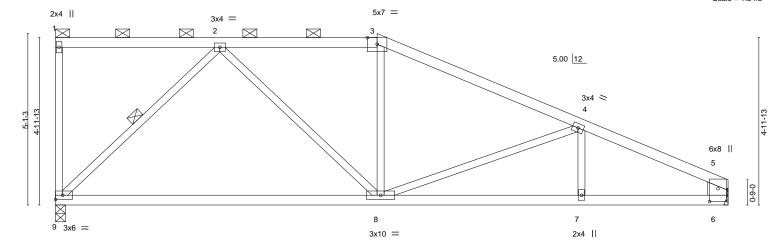
Structural wood sheathing directly applied or 3-3-5 oc purlins,

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303198 AS NOTED ON PLANS REVIE 400302 H5 Half Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:13 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-U38Ez2hp1PhSVoGU7crgXol3GmMymYlg40QaGozGs6K 20-0-0 06/11/2020 4-10-10 4-8-2 6-0-15 4-4-5 Scale = 1:34.3



| | | | -6-12 | | | | | 6-0-15 | | | 4-4-5 | |
|------------|------------|------------------------------|--------|-------|------|----------|-------|--------|--------|-----|---------------|----------|
| Plate Offs | sets (X,Y) | [3:0-3-8,0-2-5], [5:0-4-10,0 |)-3-0] | | | | | | | | | |
| LOADING | 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 | 0.60 | Vert(LL) | -0.20 | `8-9 | >999 | 360 | MT20 | 197/144 |
| ΓCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.67 | Vert(CT) | -0.41 | 8-9 | >569 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.41 | Horz(CT) | 0.02 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI | 2014 | Matri | x-S | Wind(LL) | 0.06 | 7-8 | >999 | 240 | Weight: 72 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

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

5-6: 2x8 SP DSS

(size) 9=0-3-8, 6=Mechanical Max Horz 9=-155(LC 6)

Max Uplift 9=-43(LC 4), 6=-12(LC 9) Max Grav 9=882(LC 1), 6=882(LC 1)

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

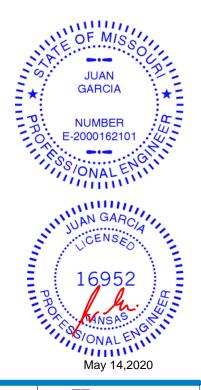
9-6-12

2-3=-979/34, 3-4=-1135/23, 4-5=-1406/40, 5-6=-704/33 TOP CHORD BOT CHORD

8-9=-2/687, 7-8=-13/1230, 6-7=-13/1230 **WEBS** 2-9=-944/90, 2-8=0/406, 4-8=-270/104

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.
- 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, 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-0-12 oc purlins,

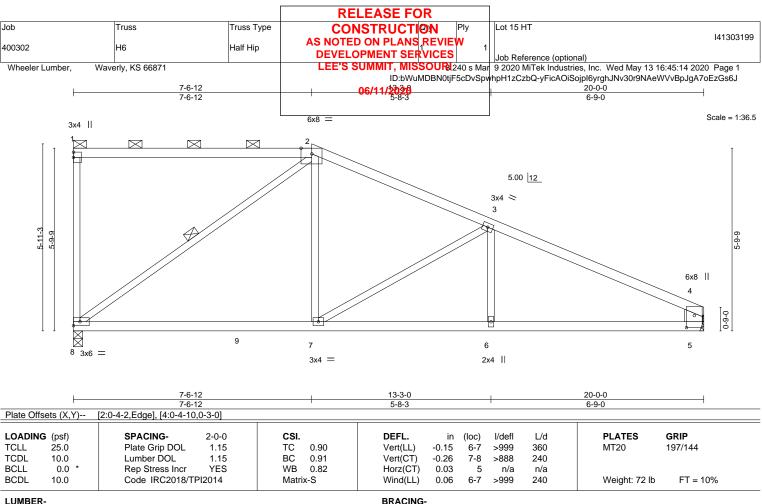
except end verticals, and 2-0-0 oc purlins (5-8-9 max.): 1-3.

2-9

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

1 Row at midpt





TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

4-5: 2x8 SP DSS REACTIONS. (size) 8=0-3-8, 5=Mechanical

Max Horz 8=-182(LC 4) Max Uplift 8=-42(LC 4), 5=-18(LC 9) Max Grav 8=930(LC 2), 5=918(LC 2)

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

1-8=-251/62, 2-3=-973/40, 3-4=-1431/45, 4-5=-759/57 TOP CHORD

7-8=0/843, 6-7=0/1240, 5-6=0/1240 BOT CHORD **WEBS** 2-8=-1020/36, 2-7=0/552, 3-7=-460/93

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

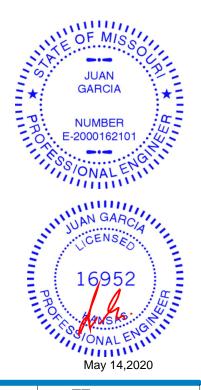
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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, 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) 8, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-11-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-9-12 max.): 1-2.

2-8

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

1 Row at midpt



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



RELEASE FOR Job Truss Truss Type Lot 15 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141303200 400302 J1 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:15 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-QRG_Ojj4Z0x9k6QsE1u8cDORra8YEYFyXKvgKgzGs6l 06/11/2020 1-2-14 1-11-10 Scale = 1:13.5 3.54 12 1-1-12 2 0-6-0 ⁶ 2x4 || 3x6 || 4-8-13 Plate Offsets (X,Y)--[3:0-3-8,0-1-6] SPACING-(loc) **PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. in I/defl L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.40 Vert(LL) -0.04 6 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.28 Vert(CT) -0.09 6 >604 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) 0.04 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-R 0.05 >999 240 Weight: 14 lb 6 LUMBER-**BRACING-**TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins,

BOT CHORD

except end verticals.

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

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

3-6: 2x3 SPF No.2

WEBS 2x4 SPF No.2

REACTIONS. (size) 7=0-4-9, 4=Mechanical, 5=Mechanical

Max Horz 7=68(LC 4)

Max Uplift 7=-85(LC 4), 4=-45(LC 8)

Max Grav 7=322(LC 1), 4=123(LC 1), 5=85(LC 3)

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

TOP CHORD 2-7=-308/105

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) 7, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 20 lb up at 1-11-15, and 66 lb down and 20 lb up at 1-11-15 on top chord, and 3 lb down and 2 lb up at 1-10-5, and 3 lb down and 2 lb up at 1-10-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

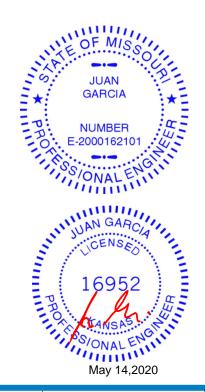
1) Dead + Roof Live (balanced): Lumber Increase=1.15. Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 8=4(F=2, B=2)





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



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303201 AS NOTED ON PLANS REVIE 400302 J2 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:26 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-bZQ8iUrzzPKbYom_OrajYYLOn0xYJXza3X4mDXzGs67 -0-10-8 ²⁻⁰⁻⁰ **06/11/2020** 0-10-8 2-0-0 Scale = 1:13.8 5.00 12 1-2-3 2 5 1-0-0 0-6-0 ⁶ 2x4 || 5x7 || 2-0-0 [2:0-0-12,0-1-12], [3:0-3-8,0-1-5], [7:0-0-0,0-1-12] Plate Offsets (X,Y)--SPACING-**PLATES** GRIP LOADING (psf) DEFL. in (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.17 Vert(LL) -0.01 6 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.13 Vert(CT) -0.02 6 >999 240

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.01

0.02

5

6

n/a

>999

except end verticals.

n/a

240

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

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

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SPF No.2

0.0

10.0

BOT CHORD 2x4 SPF No.2 *Except*

3-6: 2x3 SPF No.2

WEBS 2x4 SPF No.2

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

Rep Stress Incr

Code IRC2018/TPI2014

Max Horz 7=63(LC 8)

Max Uplift 7=-30(LC 8), 4=-38(LC 8), 5=-3(LC 8) Max Grav 7=234(LC 1), 4=87(LC 1), 5=61(LC 3)

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

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

WB

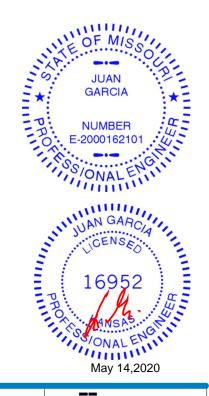
Matrix-R

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.
- 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) 7, 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.



FT = 10%

Weight: 11 lb



RELEASE FOR Job Truss Truss Type 400302 J3 Jack-Open

CONSTRUCTION AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES Lot 15 HT

141303202

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:37 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ngbJ?F_tNni2NV55XfHJVsIHcSjwNVhCblEr5PzGs5y

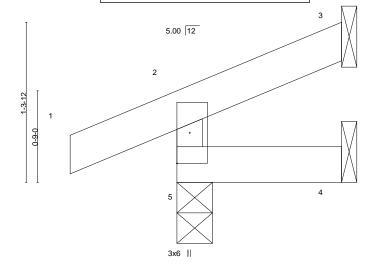
Structural wood sheathing directly applied or 1-4-3 oc purlins,

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

except end verticals.

06/11/2020 0-10-8 1-4-3

Scale = 1:9.4



1-4-3

| Plate Offsets (X,Y) | [2:0-0-8,0-1-4], [5:0-0-0,0-1-4] | | | | |
|---------------------|----------------------------------|----------|-----------------------|-----|-----------------------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl | L/d | PLATES GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.06 | Vert(LL) -0.00 5 >999 | 360 | MT20 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.01 | Vert(CT) -0.00 5 >999 | 240 | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) -0.00 3 n/a | n/a | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) 0.00 5 >999 | 240 | Weight: 5 lb FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

Wheeler Lumber,

Waverly, KS 66871

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

WEBS 2x3 SPF No.2

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

Max Horz 5=33(LC 5)

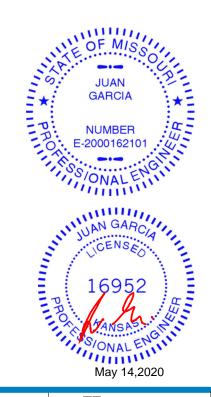
Max Uplift 5=-34(LC 4), 3=-18(LC 8)

Max Grav 5=151(LC 1), 3=20(LC 1), 4=22(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) 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.





RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT Diagonal Hip Girder AS NOTED ON PLANS REVIE 141303203 400302 J4 **DEVELOPMENT SERVICES** Job Reference (optional) LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:38 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Fs9hDb_V85qu?egH5MoY14rGHrvW6rNLqP_OdrzGs5x 8-11-12 06/11/2020 1-2-14 4-7-2 4-4-10 Scale = 1:21.7 3x4 || 3.54 12 3x4 = 2-4-12 3 6 5 11 6x8 4x5 = 2.83 12 6x8 8-11-12 4-4-10 Plate Offsets (X,Y)--[2:0-0-13,0-2-12], [7:0-0-10,0-2-12] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.84 Vert(LL) -0.12 6 >889 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.63 Vert(CT) -0.216 >503 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.48 Horz(CT) 0.06 5 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-S Wind(LL) >975 240 Weight: 32 lb 0.11 6 LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 4-2-4 oc purlins, except end verticals.

BOT CHORD

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

BOT CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2

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

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

Max Horz 7=123(LC 5)

Max Uplift 7=-141(LC 4), 5=-112(LC 8) Max Grav 7=533(LC 1), 5=454(LC 1)

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

TOP CHORD 2-7=-650/210, 2-3=-1088/263 **BOT CHORD** 6-7=-295/994, 5-6=-282/1005 3-6=0/289, 3-5=-959/280 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) 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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=141, 5=112,
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 44 lb up at 3-4-15, 72 lb down and 44 lb up at 3-4-15, and 103 lb down and 78 lb up at 6-2-14, and 103 lb down and 78 lb up at 6-2-14 on top chord, and 6 lb down at 3-4-15, 6 lb down at 3-4-15, and 28 lb down at 6-2-14, and 28 lb down at 6-2-14 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

16952 May 14,2020 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15





Design Valid for use only with release controlled in the controlle



May 14,2020

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RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT I41303203 Diagonal Hip Girder AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES | Job Reference (optional) | Job Ref J4 400302

06/11/2020

Waverly, KS 66871 Wheeler Lumber,

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Fs9hDb_V85qu?egH5MoY14rGHrvW6rNLqP_OdrzGs5x

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-66(F=-33, B=-33) 10=-1(F=-1, B=-1) 11=-40(F=-20, B=-20)



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303204 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400302 J5 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:39 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-j3j3Qx?7vOylcoFUe3JnaHNYYFHZrPxU33jyAHzGs5w -0-10-8 3-3-8 3-3-8 06/11/2020 0-10-8 Scale = 1:20.7 5.00 12 2x4 || 2-5-3 3-0-12 8x8 1-0-0 0-6-0 4.00 12 3x6 Ш Plate Offsets (X,Y)--[2:0-0-8,0-1-4], [7:0-0-7,0-1-4] CSI. SPACING-DEFL. **PLATES** GRIP LOADING (psf) (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.42 Vert(LL) -0.12 6 >654 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.51 Vert(CT) -0.21 6 >362 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.02 Horz(CT) 0.07 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-P 0.09 >833 240 Weight: 18 lb 6 **BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 7=79(LC 8)

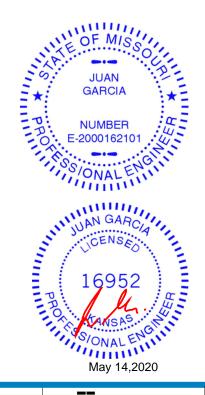
Max Uplift 7=-3(LC 8), 4=-37(LC 8)

Max Grav 7=356(LC 1), 4=168(LC 1), 5=109(LC 1)

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

NOTES-

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



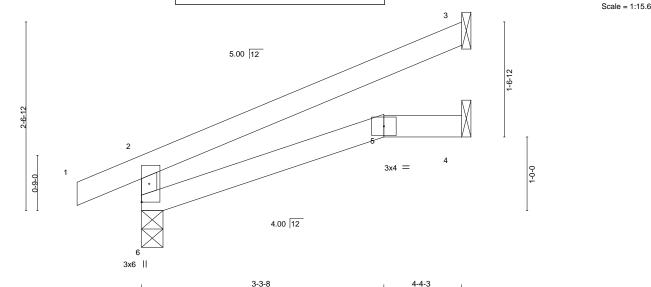
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303205 AS NOTED ON PLANS REVIE 400302 J6 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:40 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BFHReH0lgi4cEyggCng07VwlifiNasReHjTVijzGs5v 4-4-3 -0-10-8 06/11/2020 0-10-8 1-0-11



| | <u> </u> | | | | | | |
|---------------------|----------------------------------|----------|-----------------|-------|------------|---------------|----------|
| | <u>'</u> | | 3-3-8 | ' | 1-0-11 | | |
| Plate Offsets (X,Y) | [2:0-0-8,0-1-4], [6:0-0-7,0-1-4] | | | | | | |
| | | | | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in | (loc) | I/defl L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.27 | Vert(LL) -0.02 | 5-6 | >999 360 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.15 | Vert(CT) -0.03 | 5-6 | >999 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.02 | 3 | n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) 0.01 | 5-6 | >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 2x3 SPF No.2

> (size) 6=0-3-8, 3=Mechanical, 4=Mechanical Max Horz 6=78(LC 8)

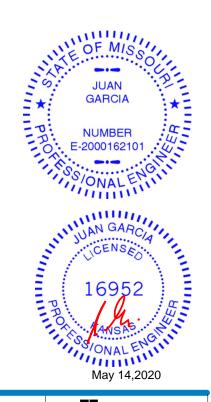
Max Uplift 6=-35(LC 8), 3=-70(LC 8)

Max Grav 6=265(LC 1), 3=132(LC 1), 4=80(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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

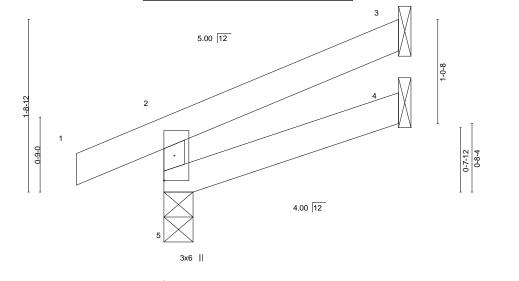


RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303206 AS NOTED ON PLANS REVIE 400302 J7 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:41 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 1zCzbQ-fRqprc1NR0CTs6PsmUMFfiSzb34QJJgnWNC2EAzGs5u

ID:bWuMDBN0tjF5cDvSpwhpF **06/11/2026**-4-3 0-10-8

Scale = 1:11.5



| Plate Off | sets (X,Y) | [2:0-0-8,0-1-4], [5:0-0-7,0-1-4] | | | | | | | | |
|-----------|------------|----------------------------------|----------|----------|-------|-------|--------|-----|--------------|----------|
| 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 0.06 | Vert(LL) | -0.00 | `4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.04 | Vert(CT) | -0.00 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 7 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=45(LC 5)

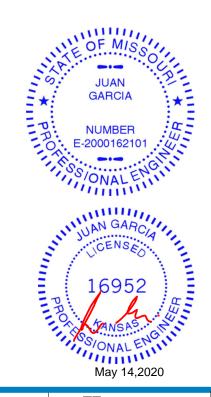
Max Uplift 5=-29(LC 4), 3=-37(LC 8)

Max Grav 5=182(LC 1), 3=61(LC 1), 4=41(LC 3)

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

NOTES-

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



Structural wood sheathing directly applied or 2-4-3 oc purlins,

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT AS NOTED ON PLANS REVIE 400302 J8 Jack-Open **DEVELOPMENT SERVICES**

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:42 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7eOC2y20CJLKTG_3KCtUCw?0?TLe2mwxl1ycnczGs5t

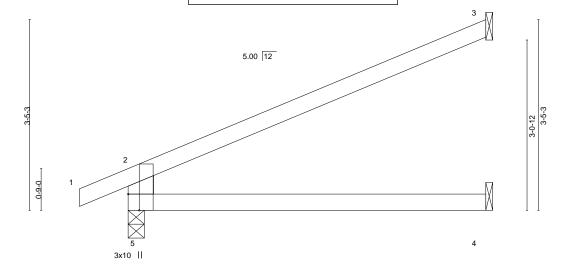
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

Scale = 1:20.7

141303207



[2:0-1-2 0-2-12] [5:0-3-8 Edge] [5:0-0-0 0-2-12]

| Plate Off | sets (X,Y) | [2:0-1-2,0-2-12], [5:0-3-8 | ,Edge], [5:0-0- | 0,0-2-12] | | | | | | | | |
|-----------|------------|----------------------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| 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 | 0.60 | Vert(LL) | -0.06 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(CT) | -0.15 | 4-5 | >505 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.05 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/T | PI2014 | Matri | x-R | Wind(LL) | 0.05 | 4-5 | >999 | 240 | Weight: 17 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

Wheeler Lumber,

Waverly, KS 66871

0-10-8

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

WEBS 2x6 SPF No.2

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

Max Horz 5=79(LC 8)

Max Uplift 5=-4(LC 8), 3=-56(LC 8)

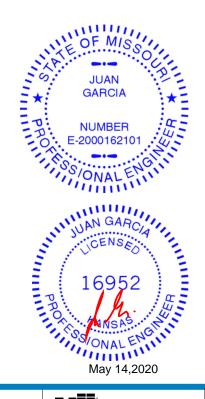
Max Grav 5=361(LC 1), 3=192(LC 1), 4=115(LC 3)

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

TOP CHORD 2-5=-316/57

NOTES-

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





RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303208 AS NOTED ON PLANS REVIE 400302 J9 Jack-Closed **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:42 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7eOC2y20CJLKTG_3KCtUCw?5YTLU2mwxl1ycnczGs5t 6-5-4 <u>069191/2020</u> 0-10-8 0-11-4 Scale = 1:21.8 2x4 || 3x4 || 5.00 12

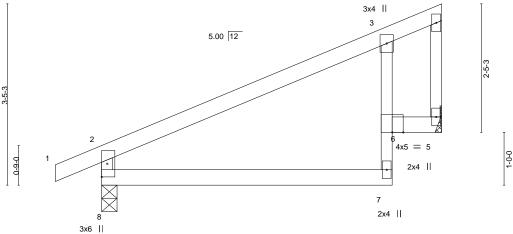


Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [8:0-0-0,0-1-4]

| | | 1/1 | | | | | | | | | | |
|--------|---------|-------------------|-------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| 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 | 0.31 | Vert(LL) | -0.03 | 7-8 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.37 | Vert(CT) | -0.07 | 7-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2 | 2014 | Matri | x-R | Wind(LL) | 0.01 | 6 | >999 | 240 | Weight: 20 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

3-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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

Max Horz 8=96(LC 5)

Max Uplift 8=-14(LC 8), 5=-24(LC 8)

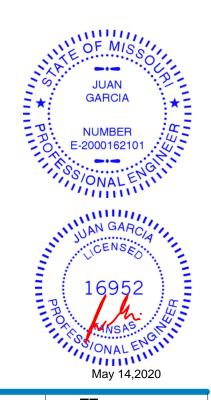
Max Grav 8=354(LC 1), 5=275(LC 1)

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

TOP CHORD 2-8=-309/50

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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in 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) 8, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



RELEASE FOR Job Truss Truss Type Lot 15 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141303209 400302 J10 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:17 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhplf1zCzbQ-MqOlpPkK4eBtzQaFMSwcheTfgOlwiPQF?eOnPZzGs6G **06/11/2020**0-10 3-2-2 3-2-2 1-2-14 2-11-2 Scale = 1:20.7 2x4 || 5 2x4 = 3.54 12 9 6 10 11 0-6-0 4x5 =7 2x4 II 3x10 || 5-9-10 Plate Offsets (X,Y)--[2:0-0-1,0-0-4], [2:0-0-2,0-6-3], [2:0-5-8,Edge], [3:0-4-0,0-2-12] SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES TCLL** 25.0 Plate Grip DOL 1.15 TC 0.96 Vert(LL) -0.21 >505 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 ВС 0.61 Vert(CT) -0.41>257 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.21 Horz(CT) 0.15 6 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-S Wind(LL) >447 240 Weight: 36 lb 0.23 **BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E **BOT CHORD** 2x6 SPF No.2 *Except*

3-7: 2x4 SPF 2100F 1.8E

2x3 SPF No.2 **WEBS** WEDGE

Left: 2x3 SPF No.2

REACTIONS.

(size) 6=Mechanical, 2=0-4-9

Max Horz 2=114(LC 22)

Max Uplift 6=-136(LC 8), 2=-166(LC 4) Max Grav 6=490(LC 1), 2=582(LC 1)

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

TOP CHORD 3-4=-786/255 **BOT CHORD** 3-6=-269/762 4-6=-771/299 **WEBS**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=136, 2=166.
- 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) 63 lb down and 25 lb up at 3-4-15, 63 lb down and 25 lb up at 3-4-15, and 97 lb down and 59 lb up at 6-2-14, and 97 lb down and 59 lb up at 6-2-14 on top chord, and 31 lb down and 29 lb up at 3-4-15, 31 lb down and 29 lb up at 3-4-15, and 45 lb down and 31 lb up at 6-2-14, and 45 lb down and 31 lb up at 6-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

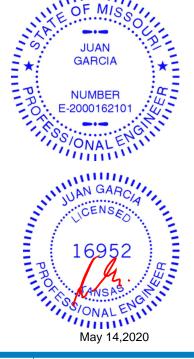
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

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

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid for use only with release controlled in the controlle



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

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

except end verticals



16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT I41303209 Diagonal Hip Girder AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES | Job Reference (optional) | Job Reference (optional) | LEE'S SUMMIT, MISSOURA 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:17 2020 Page 2 J10 400302

Waverly, KS 66871 Wheeler Lumber,

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-MqOlpPkK4eBtzQaFMSwcheTfgOlwiPQF?eOnPZzGs6G 06/11/2020

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 9=-29(F=-14, B=-14) 10=-53(F=-27, B=-27) 11=-90(F=-45, B=-45)



RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303210 AS NOTED ON PLANS REVIE 400302 J11 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:18 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpv whpH1zCzbQ-q0y70llyrxJkba8Rw9RrEs0wqn75RvkPDl8Kx?zGs6F -0-10-8 6-5-4 2-3-8 06/11/2020 0-10-8 4-1-12 Scale = 1:20.7 5.00 12 2-5-3 3-0-12 6 2 1-0-0 0-6-0 Ľ 2x4 | 3x6 4-1-12 Plate Offsets (X,Y)--[2:0-0-8,0-1-4], [8:0-0-0,0-1-4] SPACING-DEFL. **PLATES** GRIP LOADING (psf) CSI. in (loc) I/defI L/d -0.10 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.55 Vert(LL) 5-6 >732 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 BC 0.48 Vert(CT) -0.21 5-6 >367 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.02 Horz(CT) 0.11 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10% **BCDL** 10.0 Matrix-S >918 240 Weight: 18 lb 0.08 5-6

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 8=80(LC 8) Max Uplift 4=-48(LC 8)

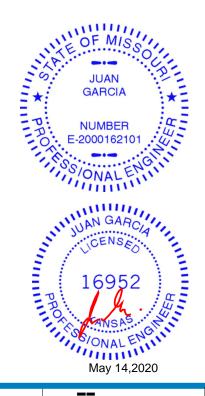
Max Grav 8=368(LC 1), 4=187(LC 1), 5=119(LC 3)

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

TOP CHORD 2-8=-364/21

NOTES-

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



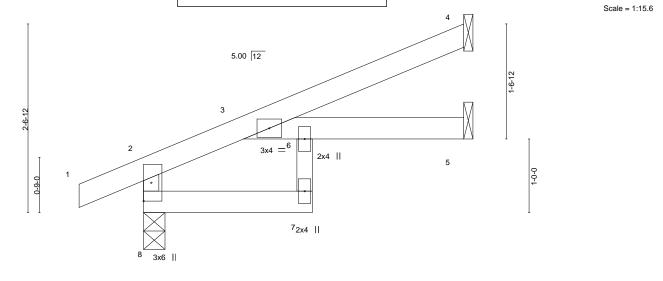
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303211 AS NOTED ON PLANS REVIE 400302 J12 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:19 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ICVVD5macFRbDkjeTty4m3YBHBWVAMEYSytuURzGs6E -0-10-8 2-3-8 06/11/2020+ 0-10-8 2-0-11



0.02

2-0-11

>999

except end verticals.

240

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

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

Weight: 13 lb

Plate Offsets (X,Y)--[2:0-0-8,0-1-4], [8:0-0-0,0-1-4] SPACING-DEFL. **PLATES** GRIP LOADING (psf) CSI. in (loc) I/defI L/d Plate Grip DOL **TCLL** 25.0 1.15 TC 0.18 Vert(LL) -0.02 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.22 Vert(CT) -0.04 6 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.02 5 n/a n/a Code IRC2018/TPI2014 Wind(LL) FT = 10%

BRACING-

TOP CHORD

BOT CHORD

10.0 LUMBER-

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

6-7: 2x3 SPF No.2

WEBS 2x3 SPF No.2

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

Max Horz 8=78(LC 8)

Max Uplift 8=-31(LC 8), 4=-50(LC 8), 5=-2(LC 8) Max Grav 8=275(LC 1), 4=113(LC 1), 5=87(LC 3)

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

TOP CHORD 2-8=-259/55

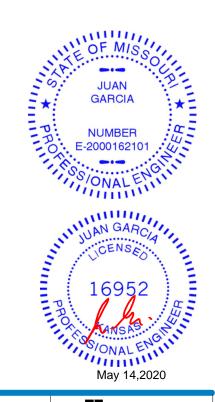
NOTES-

BCDL

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) 8, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303212 AS NOTED ON PLANS REVIE 400302 J13 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:20 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-mP3tRRmCNZZSqtlq1aTJJH5NvbvcvpUhhcdR0uzGs6D

06/11/20201-3 0-10-8

5.00 12 0-8-12 3 1-8-12 2 2x4 = 2x4 II 9 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

| Plate Offsets (X | Y) [2:0-0-8,0-1-4 |], [7:0-0-0,0- | -1-4] | | | | | | | | | |
|-----------------------|-------------------|--------------------|---------------|----------|--------------|----------------------|----------------|--------|----------------|------------|----------------|---------------------|
| LOADING (psf) | | NG- Grip DOL | 2-0-0 1.15 | CSI. | 0.06 | DEFL. Vert(LL) | in -0.00 | (loc) | l/defl >999 | L/d 360 | PLATES MT20 | GRIP 197/144 |
| TCDL 10.0 BCLL 0.0 | * Lumbe | r DOL ress Incr | 1.15 YES | BC WB | 0.03 0.00 | Vert(CT) Horz(CT) | -0.00 -0.00 | 3 5 | >999 n/a | 240 n/a | | |
| BCDL 10.0 | | IRC2018/TP | - | Matri | | Wind(LL) | 0.00 | 3 | >999 | 240 | Weight: 9 lb | FT = 10% |

3x6

LUMBER-

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

5-6: 2x3 SPF No.2

WEBS 2x3 SPF No.2

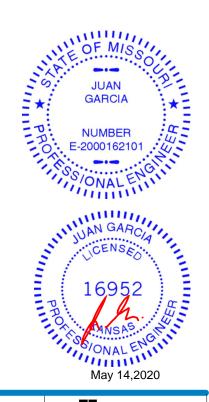
REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical

Max Horz 7=44(LC 8)

Max Uplift 7=-28(LC 4), 4=-18(LC 8), 5=-6(LC 8) Max Grav 7=183(LC 1), 4=41(LC 1), 5=71(LC 3)

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

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



Structural wood sheathing directly applied or 2-4-3 oc purlins,

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

except end verticals.

Scale = 1:11.5



RELEASE FOR Job Truss Truss Type Lot 15 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141303213 400302 J15 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:21 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-FbdGennr8shJS1t0bH?YrUdVo?DPeGkrwGM?YKzGs6C **06/11/2020** 4-8-13 1-2-14 Scale = 1:13.5 3.54 12 6 2-1-12 1-9-10 2 0-6-0 4x9 || ⁵ 4-8-13

| LOADING | • (nof) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------|---------|-----------------|--------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| LUADING | (psi) و | SPACING- | 2-0-0 | CSI. | | DEFL. | ın | (IOC) | ı/aeıi | L/a | PLATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.31 | Vert(LL) | -0.02 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.04 | 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/TI | PI2014 | Matri | x-R | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 13 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x6 SPF No.2

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

Max Horz 5=68(LC 4)

Max Uplift 5=-94(LC 4), 3=-60(LC 8)

Max Grav 5=317(LC 1), 3=133(LC 1), 4=82(LC 3)

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

TOP CHORD 2-5=-281/132

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) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 20 lb up at 1-11-15, and 66 lb down and 20 lb up at 1-11-15 on top chord, and 3 lb down and 2 lb up at 1-11-15, and 3 lb down and 2 lb up at 1-11-15 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

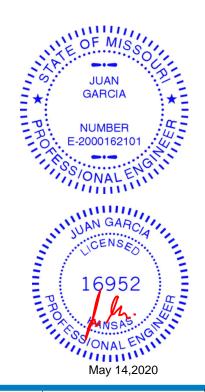
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=4(F=2, B=2)



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

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

except end verticals.



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303214 AS NOTED ON PLANS REVIE DEVELOPMENT SERVICES 400302 J16 Jack-Open DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:21 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-FbdGennr8shJS1t0bH?YrUdXK?EseGkrwGM?YKzGs6C -0-10-8 06/11/2020-4 3-5-4 0-10-8

5.00 12

| Plate Offsets (X,Y)- | Plate Offsets (X,Y) [2:0-0-8,0-1-4], [5:0-0-0,0-1-4] | | | | | | | | | | |
|----------------------|--|----------|---|--|--|--|--|--|--|--|--|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl L/d PLATES GRIP | | | | | | | | |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.15 | Vert(LL) -0.01 4-5 >999 360 MT20 197/144 | | | | | | | | |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.09 | Vert(CT) -0.01 4-5 >999 240 | | | | | | | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) -0.01 3 n/a n/a | | | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) 0.00 4-5 >999 240 Weight: 10 lb FT = 10% | | | | | | | | |

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 TOP CHORD

Structural wood sheathing directly applied or 3-5-4 oc purlins, 2x4 SPF No.2 **BOT CHORD** except end verticals. **WEBS** 2x3 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 5=63(LC 8)

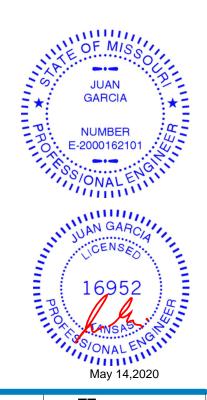
Max Uplift 5=-33(LC 8), 3=-54(LC 8)

Max Grav 5=226(LC 1), 3=101(LC 1), 4=62(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) 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.



Scale = 1:13.8



RELEASE FOR Job Truss Truss Type Lot 15 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141303215 400302 J17 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:23 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-B_I03Tp5gUx1hL1Pii10wvjidoph6AD8Nar5dDzGs6A **06/11/2020**7-6-12 1-2-14 Scale = 1:19.5 4x9 || 3.54 12 6

7-6-12

9

except end verticals.

8

| Plate Of | fsets (X,Y) | [2:0-0-8,0-1-12], [3:0-3-3,E | dge], [4:Edge | e,0-2-8], [5:0 | -0-0,0-1-12] | | | | | | | |
|----------|-------------|------------------------------|---------------|----------------|--------------|----------|-------|-------|--------|-----|---------------|----------|
| LOADIN | IG (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | I/defl | L/d | PLATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.87 | Vert(LL) | -0.11 | 4-5 | >765 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.52 | Vert(CT) | -0.25 | 4-5 | >355 | 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/TPI2 | 2014 | Matri | x-R | Wind(LL) | 0.05 | 4-5 | >999 | 240 | Weight: 21 lb | FT = 10% |

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

4x9 ||

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

2x4 SPF No.2 *Except*

3-4: 2x3 SPF No.2

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

Max Horz 5=122(LC 5)

Max Uplift 5=-124(LC 4), 4=-82(LC 8) Max Grav 5=438(LC 1), 4=329(LC 1)

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

TOP CHORD 2-5=-383/182

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=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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 20 lb up at 1-11-15, 66 lb down and 20 lb up at 1-11-15, and 87 lb down and 62 lb up at 4-9-14, and 87 lb down and 62 lb up at 4-9-14 on top chord, and 3 lb down and 2 lb up at 1-11-15, 3 lb down and 2 lb up at 1-11-15, and 17 lb down at 4-9-14, and 17 lb down at 4-9-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

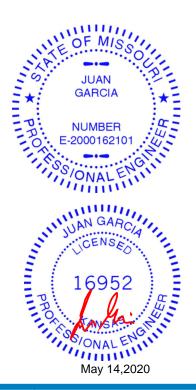
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=-3(F=-1, B=-1) 8=4(F=2, B=2) 9=-13(F=-7, B=-7)



3x4 II

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

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



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT AS NOTED ON PLANS REVIE 400302 J18 Jack-Open DEVELOPMENT SERVICES Wheeler Lumber, Waverly, KS 66871

141303216

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:24 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fAJOHoqjRn3uJVcbGQYFT7F_xCDurdTHcDbf9fzGs69

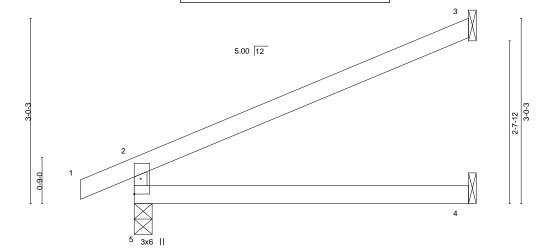
Structural wood sheathing directly applied or 5-5-4 oc purlins,

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

except end verticals.

-0-10-8 06/11/2020 0-10-8

Scale = 1:18.7



BRACING-

TOP CHORD

BOT CHORD

| Plate Offsets (X. | Y) [2:0-0-8,0-1-4], [5:0-0-0,0-1- | -4] | | | | | | | | |
|-------------------|-----------------------------------|-----------------|--------|----------|-------|-------|--------|-----|---------------|----------|
| LOADING (psf) | SPACING- 2 | 2-0-0 CS | ı. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip DOL | 1.15 TC | 0.45 | Vert(LL) | -0.04 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL | 1.15 BC | 0.27 | Vert(CT) | -0.08 | 4-5 | >769 | 240 | | |
| BCLL 0.0 | * Rep Stress Incr | YES WE | 0.00 | Horz(CT) | 0.03 | 3 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI20 | 014 Ma | trix-R | Wind(LL) | 0.02 | 4-5 | >999 | 240 | Weight: 14 lb | FT = 10% |

LUMBER-

REACTIONS.

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

WEBS 2x3 SPF No.2

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

Max Horz 5=68(LC 8)

Max Uplift 5=-4(LC 8), 3=-50(LC 8)

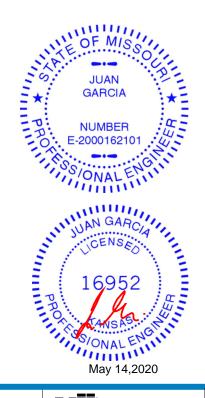
Max Grav 5=312(LC 1), 3=168(LC 1), 4=100(LC 3)

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

TOP CHORD 2-5=-270/46

NOTES-

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



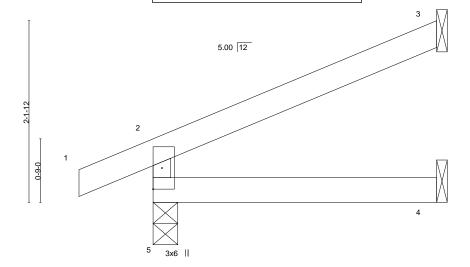


RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303217 AS NOTED ON PLANS REVIE 400302 J19 Jack-Open DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:25 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7MtmU8qLC5BlxfBnq73U0KoDTcbua4jRqtKCh5zGs68 **06/11/2020**3-4-3 -0-10-8 0-10-8

Scale = 1:13.6



3-4-3

TOP CHORD

BOT CHORD

| Plate Off | Plate Offsets (X,Y) [2:0-0-8,0-1-4], [5:0-0-0,0-1-4] | | | | | | | | | | |
|-----------|--|----------------------|----------|----------|-------|-------|--------|-----|--------------|----------|--|
| 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 0.14 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.09 | Vert(CT) | -0.01 | 4-5 | >999 | 240 | | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) | -0.01 | 3 | n/a | n/a | | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 9 lb | FT = 10% | |

BRACING-LUMBER-

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

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

Max Horz 5=61(LC 8)

2x3 SPF No.2

Max Uplift 5=-32(LC 8), 3=-53(LC 8)

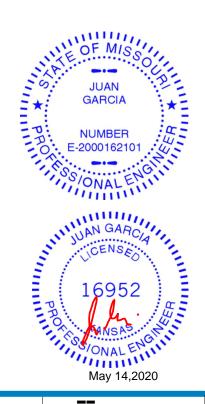
Max Grav 5=222(LC 1), 3=98(LC 1), 4=60(LC 3)

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

NOTES-

WEBS

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

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



Job Truss Truss Type 400302 J20 Jack-Open

Waverly, KS 66871

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

Lot 15 HT

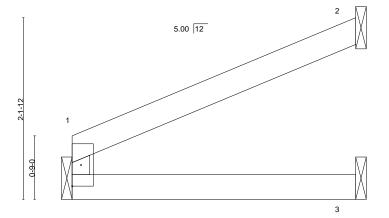
141303218

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:27 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3I_XvqsbkiSSAyLAxY5z5ltZeQHJ2zDjlBpJm_zGs66

06/11/2020

Scale = 1:13.6



| Plate Off | sets (X,Y) | [1:0-0-8,0-1-4], [4:0-0-0,0-1-4] | | | |
|-----------|------------|----------------------------------|----------|--|--|
| LOADIN | G (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl L/d PLATES GRIP | |
| TCLL | 25.0 | Plate Grip DOL 1.15 | TC 0.16 | Vert(LL) -0.01 3-4 >999 360 MT20 197/144 | |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.09 | Vert(CT) -0.01 3-4 >999 240 | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.01 2 n/a n/a | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) 0.00 3-4 >999 240 Weight: 8 lb FT = 10% | |

LUMBER-

Wheeler Lumber,

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

WEBS 2x3 SPF No.2 BRACING-TOP CHORD

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

except end verticals.

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

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical

Max Horz 4=47(LC 8)

Max Uplift 4=-8(LC 8), 2=-55(LC 8)

Max Grav 4=143(LC 1), 2=105(LC 1), 3=61(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) 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.



RELEASE FOR Job Truss Truss Type Lot 15 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141303219 400302 J21 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:28 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-XxYv6AtEV0aJo6vMVGdCdzQImpednQTtXrZsIQzGs65 2-1-0 06/11/2020 1-2-14 2-1-0 Scale = 1:9.7 3.54 12 0-4-1 1-4-6 0-6-0 3x6 || Plate Offsets (X,Y)--[2:0-0-6,0-1-4], [5:0-0-0,0-1-4] SPACING-LOADING (psf) CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) -0.00 >999 360 MT20 197/144 5 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.02 Vert(CT) -0.00 5 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) -0.00 3 n/a n/a Code IRC2018/TPI2014 FT = 10% **BCDL** 10.0 Matrix-R Wind(LL) >999 240 Weight: 7 lb 0.00 5

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=42(LC 7)

Max Uplift 5=-97(LC 6), 3=-24(LC 12) Max Grav 5=83(LC 1), 3=22(LC 1), 4=27(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) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 14 lb down and 5 lb up at -1-2-14, and 14 lb down and 5 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

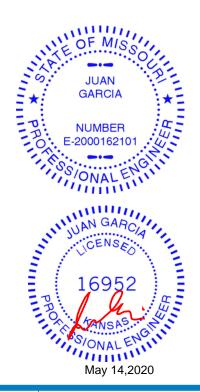
LOAD CASE(S) Standard

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

Vert: 1=-21(F=-11, B=-11)

Trapezoidal Loads (plf)

Vert: 1=0(F=35, B=35)-to-6=-18(F=26, B=26), 6=0(F=35, B=35)-to-2=-15(F=27, B=27), 2=-15(F=27, B=27)-to-3=-50(F=10, B=10), 5=-4(F=8, B=8)-to-4=-14(F=3, B=3)



Structural wood sheathing directly applied or 2-1-0 oc purlins,

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

except end verticals.



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303220 AS NOTED ON PLANS REVIE 400302 J22 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:29 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-086HKWtsGKiAPGUZ3z8RAAzwdD_zWti0IVIQqszGs64 06/11/2020¹⁻⁶⁻¹² -0-10-8 0-10-8 Scale = 1:9.9 5.00 12 1-4-13 -4-13 1-0-6 0-6-0

> 1-6-12 1-6-12

| Plate Off | fsets (X,Y) | [2:0-0-8,0-1-4], [5:0-0-0,0- | -1-4] | | | | | | | | 1 | |
|-----------|-------------|------------------------------|-------|-------|------|----------|-------|-------|--------|-----|--------------|----------|
| 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 | 0.06 | Vert(LL) | -0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TP | 12014 | Matri | x-R | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 5 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

3x6 ||

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=35(LC 5)

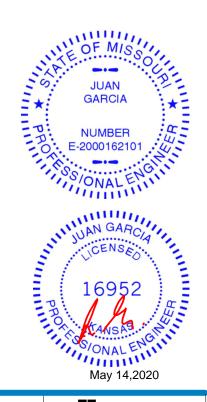
Max Uplift 5=-33(LC 4), 3=-23(LC 8)

Max Grav 5=157(LC 1), 3=31(LC 1), 4=27(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) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 1-6-12 oc purlins,

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

except end verticals.



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



RELEASE FOR Job Truss Truss Type Lot 15 HT CONSTRUCTION Diagonal Hip Girder AS NOTED ON PLANS REVIE 141303221 400302 J23 DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:31 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-yWE1lCv6nxyufaexAOAvFb29H1bm_nCJDpnWvlzGs62 6-0-9 06/11/2020 1-4-13 6-0-9 Scale = 1:15.6

3 3.12 12 6 10 4 3x4 || 3x6 II

| Plate Off | fsets (X,Y) | [2:0-0-5,0-1-4], [4:Edge,0 |)-2-8], [5:0-0-0 | ,0-1-4] | | | | | | | | |
|-----------|-------------|----------------------------|------------------|---------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADIN | · · · · | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.50 | Vert(LL) | -0.05 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.31 | Vert(CT) | -0.10 | 4-5 | >714 | 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/TI | PI2014 | Matri | x-R | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 17 lb | FT = 10% |

6-0-9

LUMBER-**BRACING-**

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

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

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

Max Horz 5=92(LC 7)

Max Uplift 5=-117(LC 4), 4=-61(LC 8) Max Grav 5=383(LC 1), 4=258(LC 1)

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

TOP CHORD 2-5=-335/158

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=117
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 21 lb up at 2-3-15, and 77 lb down and 42 lb up at 2-11-5, and 75 lb down and 54 lb up at 4-10-10 on top chord, and 3 lb down and 2 lb up at 2-3-15, and 5 lb down at 2-11-5, and 16 lb down at 4-10-10 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=-4(B) 9=2(B) 10=-1(F) 11=-7(B)



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

3x6 II



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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT AS NOTED ON PLANS REVIE 400302 J24 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:32 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-QjoQyXwkYF4lGjD8k5h8opbQFR_rjESTSTX4RBzGs61 **06/11/2020**00-1 0-10-8

5.00 12 1-7-10 2 0-6-0

> 3-0-1 3-0-1

> > TOP CHORD

BOT CHORD

| Plate Offsets (X,Y) | Plate Offsets (X,Y) [2:0-0-8,0-1-4], [5:0-0-0,0-1-4] | | | | | | | | | | | |
|---------------------|--|----------|----------|-----------|------------|-----------------------|--|--|--|--|--|--|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. | in (loc) | l/defl L/d | PLATES GRIP | | | | | | |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.10 | Vert(LL) | -0.00 4-5 | >999 360 | MT20 197/144 | | | | | | |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.07 | Vert(CT) | -0.01 4-5 | >999 240 | | | | | | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) | -0.00 3 | n/a n/a | | | | | | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) | 0.00 4-5 | >999 240 | Weight: 9 lb FT = 10% | | | | | | |

LUMBER-**BRACING-**

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

WEBS 2x3 SPF No.2

Max Horz 5=56(LC 8)

Max Uplift 5=-31(LC 8), 3=-47(LC 8)

Max Grav 5=208(LC 1), 3=85(LC 1), 4=54(LC 3)

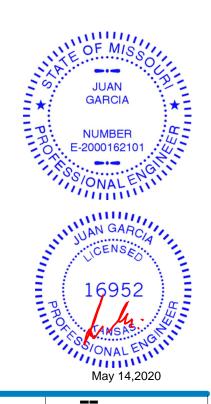
(size) 5=0-3-8, 3=Mechanical, 4=Mechanical

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



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

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

except end verticals.

141303222

Scale = 1:12.9



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT AS NOTED ON PLANS REVIE 400302 J25 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)
LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:33 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-uvMoAtxMJYCcutoKlpCNK07ZVqKDShicg7GdzdzGs60

Structural wood sheathing directly applied or 3-10-8 oc purlins,

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

except end verticals.

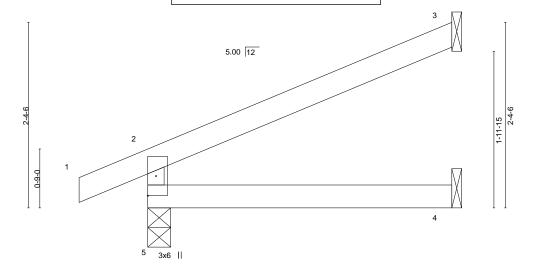
06/11/2020-8

-0-10-8

0-10-8

Scale = 1:14.7

141303223



3-10-8 3-10-8

BRACING-

TOP CHORD

BOT CHORD

| Plate Offsets | Plate Offsets (X,Y) [2:0-0-8,0-1-4], [5:0-0-0,0-1-4] | | | | | | | | | | | |
|---------------|--|-------------------------------|---------------|----------|------|----------------------|---------------|--------------|----------------|------------|----------------|---------------------|
| LOADING () | psf) 25.0 | SPACING- Plate Grip DOL | 2-0-0 1.15 | CSI. | 0.20 | DEFL. Vert(LL) | in -0.01 | (loc) 4-5 | l/defl >999 | L/d 360 | PLATES MT20 | GRIP 197/144 |
| TCDL 1 | 0.0 0.0 * | Lumber DOL Rep Stress Incr | 1.15 YES | BC WB | 0.12 | Vert(CT) Horz(CT) | -0.02 0.01 | 4-5 | >999 n/a | 240 n/a | 25 | 101,7111 |
| | 0.0 | Code IRC2018/TF | | Matri | | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 11 lb | FT = 10% |

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=70(LC 8)

Max Uplift 5=-34(LC 8), 3=-61(LC 8)

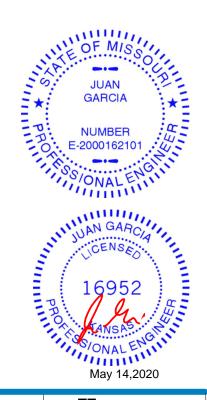
Max Grav 5=244(LC 1), 3=116(LC 1), 4=71(LC 3)

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

NOTES-

REACTIONS.

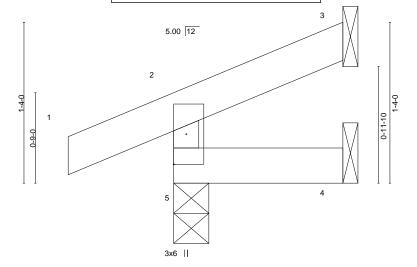
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom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





RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303224 AS NOTED ON PLANS REVIE 400302 J26 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:34 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-M5vANDx_4sKTW1NWsWjctEgmMEhCB8ylvn0BV4zGs6? **06/11/2020** 1-4-13 1-4-13 0-10-8



1-4-13

| Plate Off | fsets (X,Y) | [2:0-0-8,0-1-4], [5:0-0-0,0-1-4] | | | |
|-----------|-------------|----------------------------------|----------|---------------------------------------|----------|
| LOADIN | G (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl L/d PLATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL 1.15 | TC 0.06 | Vert(LL) -0.00 5 >999 360 MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.01 | Vert(CT) -0.00 5 >999 240 | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) -0.00 3 n/a n/a | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-R | Wind(LL) 0.00 5 >999 240 Weight: 5 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

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

Max Horz 5=34(LC 5)

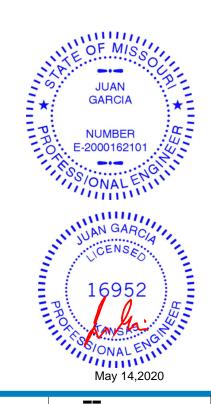
Max Uplift 5=-34(LC 4), 3=-19(LC 8)

Max Grav 5=153(LC 1), 3=23(LC 1), 4=24(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) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 1-4-13 oc purlins,

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

except end verticals.

Scale = 1:9.6



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303225 AS NOTED ON PLANS REVIE 400302 J27 Jack-Open **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:36 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-IU1wovzFcTaBILXvzxm4yfl7t2NAe2R2M5VHZyzGs5z **06/11/2020**²⁻⁵⁻¹⁵
2-5-15 -0-10-8 0-10-8 Scale = 1:10.3

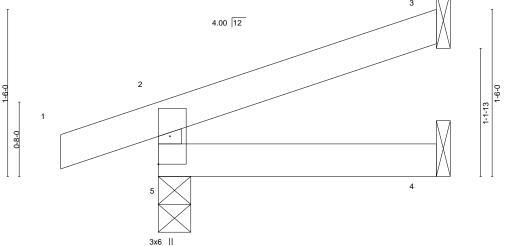


Plate Offsets (X,Y)--[2:0-0-7,0-1-4], [5:0-0-0,0-1-4] SPACING-DEFL. **PLATES** GRIP LOADING (psf) CSI. (loc) I/defI L/d **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) -0.00 4-5 >999 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) -0.00 4-5 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a

Wind(LL)

0.00

>999

5

240

LUMBER-**BRACING-**

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

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

Matrix-R

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

Max Horz 5=43(LC 4)

Max Uplift 5=-58(LC 4), 3=-34(LC 8)

Max Grav 5=188(LC 1), 3=67(LC 1), 4=44(LC 3)

Code IRC2018/TPI2014

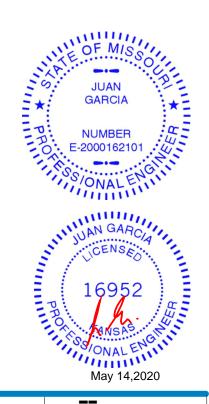
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

BCDL

10.0

- 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.



FT = 10%

Weight: 7 lb

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

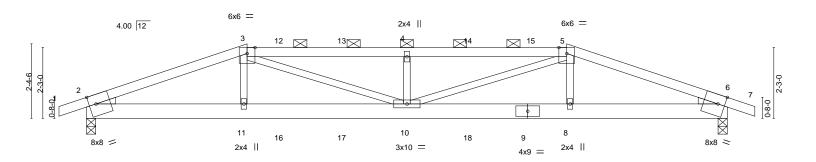


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303226 AS NOTED ON PLANS REVIE 400302 K1 Hip Girder **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:44 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-40WyTe3Gjxb2jZ8RRdvyHL4H4Gu6WbaECLRjrVzGs5r 21-2-8 0-10-8 15-2-14 06/11/2020 0-10-8 5-0-14 5-0-14 5-1-2



| | | 5-1-2 | | 10-2 | 2-0 | | 15 | -2-14 | | | 20-4-0 | |
|---------------|-------|---------------------------------|--------------|---------------|-------------------|------------------|----------|--------|--------|-----|---------------|----------|
| | 1 | 5-1-2 | 1 | 5-0- | 14 | ı | 5- | -0-14 | | | 5-1-2 | ı . |
| Plate Offsets | (X,Y) | [2:0-1-14,0-0-0], [2:0-8-8,0-1- | 9], [2:0-2-1 | 0,Edge], [6:0 | 0-1-14,0-0-0], [6 | :0-8-8,0-1-9], [| 6:0-2-10 | ,Edge] | | | | |
| LOADING (p | osf) | SPACING- 2- | 0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 25 | 5.0 | Plate Grip DOL 1 | .15 | TC | 0.95 | Vert(LL) | -0.19 | 10 | >999 | 360 | MT20 | 197/144 |
| TCDL 10 | 0.0 | Lumber DOL 1 | .15 | BC | 0.87 | Vert(CT) | -0.35 | 10 | >694 | 240 | | |
| BCLL (| 0.0 * | Rep Stress Incr | NO | WB | 0.37 | Horz(CT) | 0.06 | 6 | n/a | n/a | | |
| BCDL 10 | 0.0 | Code IRC2018/TPI20 | 14 | Matrix | r-S | Wind(LL) | 0.17 | 10 | >999 | 240 | Weight: 76 lb | FT = 10% |

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

WEBS 2x3 SPF No.2

WEDGE

Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

REACTIONS. (size) 2=0-3-8, 6=0-3-8

Max Horz 2=34(LC 33)

Max Uplift 2=-340(LC 4), 6=-340(LC 5) Max Grav 2=1369(LC 1), 6=1369(LC 1)

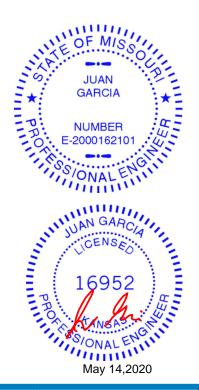
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-3066/704, 3-4=-3699/879, 4-5=-3699/879, 5-6=-3066/705 TOP CHORD **BOT CHORD** 2-11=-630/2796, 10-11=-629/2775, 8-10=-604/2774, 6-8=-605/2796

WEBS 3-11=-20/400, 3-10=-262/1090, 4-10=-599/277, 5-10=-262/1090, 5-8=-21/400

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) 2=340, 6=340.
- 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) 83 lb down and 70 lb up at 6-2-0, 83 lb down and 70 lb up at 8-2-0, 83 lb down and 70 lb up at 10-2-0, and 83 lb down and 70 lb up at 12-2-0, and 83 lb down and 70 lb up at 14-2-0 on top chord, and 226 lb down and 93 lb up at 5-1-2, 31 lb down at 6-2-0, 31 lb down at 8-2-0, 31 lb down at 10-2-0, 31 lb down at 12-2-0, and 31 lb down at 14-2-0, and 226 lb down and 93 lb up at 15-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



Structural wood sheathing directly applied or 2-11-4 oc purlins,

2-0-0 oc purlins (2-2-12 max.): 3-5.

Rigid ceiling directly applied or 9-2-14 oc bracing

Scale = 1:36.6

Continued on page 2

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



Job Truss Truss Type 400302 K1 Hip Girder

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

1

Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:44 2020 Page 2

06/11/2020

Lot 15 HT

I41303226

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-40WyTe3Gjxb2jZ8RRdvyHL4H4Gu6WbaECLRjrVzGs5r

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Wheeler Lumber,

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

Waverly, KS 66871

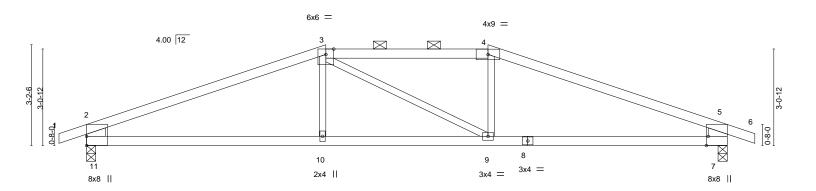
Concentrated Loads (lb)

Vert: 9=-22(B) 11=-226(B) 10=-22(B) 4=-46(B) 8=-226(B) 12=-46(B) 13=-46(B) 15=-46(B) 15=-46(B) 16=-22(B) 17=-22(B) 18=-22(B) 1



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303227 AS NOTED ON PLANS REVIE 400302 K2 Hip **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:45 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-YD4Kh_4uUEjvKjjd?KQBqYdWOglgF44NR?AGNxzGs5q 0-10-8 0-10-8 21-2-8 0-10-8 7-7-2 7-7-2 06/<u>3 1/2</u>020 7-7-2



| | 7-7-2 | 1 | 12-8-14 | 1 | | | 20-4-0 | |
|----------------------|---|----------------------------|-------------------|--------|-----------|-----|---------------|----------|
| | 7-7-2 | T T | 5-1-12 | | | | 7-7-2 | |
| Plate Offsets (X,Y)- | [2:0-1-3,0-3-10], [5:0-1-3,0-3-10], [7:0-0- | 0,0-3-10], [7:0-3-8,Edge], | [11:0-0-0,0-3-10] | | | | | |
| | | | | | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. | in (lo | c) I/defl | L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.65 | Vert(LL) -0. | 12 9-1 | 0 >999 | 360 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.59 | Vert(CT) -0. | 24 9-1 | 0 >990 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.17 | Horz(CT) 0. | 05 | 7 n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) 0. | 08 9-1 | 0 >999 | 240 | Weight: 60 lb | FT = 10% |
| | | | . , | | | | | |

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

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

3-4: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x3 SPF No.2 *Except* 2-11,5-7: 2x8 SP DSS

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

Max Horz 11=33(LC 8)

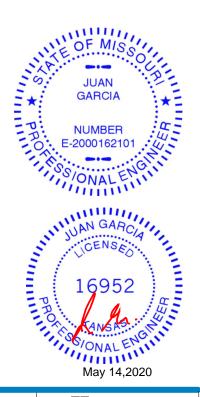
Max Uplift 11=-197(LC 4), 7=-197(LC 5) Max Grav 11=970(LC 1), 7=970(LC 1)

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

TOP CHORD 2-3=-1639/256, 3-4=-1460/278, 4-5=-1639/255, 2-11=-881/241, 5-7=-882/241

BOT CHORD 10-11=-190/1464, 9-10=-193/1460, 7-9=-164/1464

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

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

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

Scale = 1:36.6

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

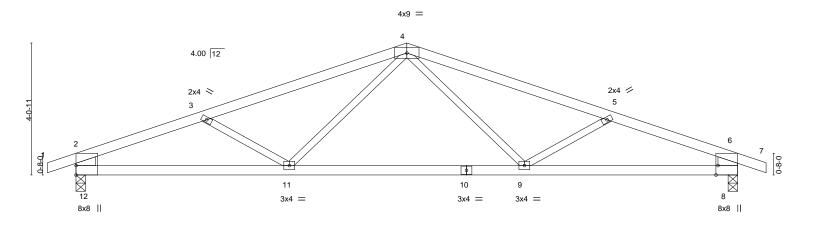
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT I41303228 AS NOTED ON PLANS REVIE 400302 кз Common **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:46 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-0PeiuK5WFYrmytHqZ2xQMmAfm4eL_Y5WgfwpwNzGs5p 20-4-0 21-2-8 0-10-8 0-10-8 06/11/2020 4-0-3 6-1-13 6-1-4-0-3



| | 6-6-10 | 1 | 13-9-6 | | 1 | 20-4-0 | |
|--|--|---------------------------------------|---|--------------------|---|----------------|------------------------|
| | 6-6-10 | ı | 7-2-11 | | | 6-6-10 | <u>'</u> |
| Plate Offsets (X,Y) | [2:0-1-3,0-3-10], [6:0-1-3,0-3-10], [8:0-0- | 0,0-3-10], [8:0-3-8,Edge] | , [12:0-0-0,0-3-10] | | | | |
| LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES | CSI. TC 0.81 BC 0.63 WB 0.12 | DEFL. in Vert(LL) -0.17 Vert(CT) -0.32 Horz(CT) 0.05 | 9-11 >9 9-11 >7 | lefl L/d 199 360 '30 240 n/a n/a | PLATES MT20 | GRIP 197/144 |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) 0.12 | 9-11 >9 | 99 240 | Weight: 65 lb | FT = 10% |

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

2x3 SPF No.2 *Except* 2-12,6-8: 2x8 SP 2400F 2.0E

REACTIONS. (size) 12=0-3-8, 8=0-3-8 Max Horz 12=49(LC 8)

Max Uplift 12=-180(LC 4), 8=-180(LC 5) Max Grav 12=970(LC 1), 8=970(LC 1)

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

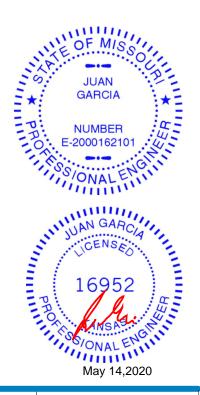
2-3=-1713/290, 3-4=-1502/196, 4-5=-1502/196, 5-6=-1713/290, 2-12=-888/206, TOP CHORD

6-8=-888/206

BOT CHORD 11-12=-263/1537, 9-11=-105/1179, 8-9=-226/1537 WEBS 4-9=-12/348, 5-9=-255/195, 4-11=-11/348, 3-11=-255/195

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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 3-9-12 oc purlins,

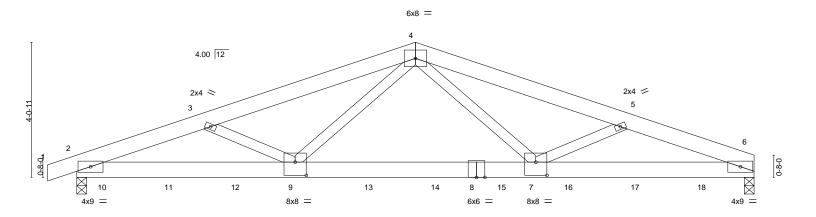
Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

Scale = 1:35.4



| | | | | RELEASE FOR | | | | |
|-----------------|-------------------|-------------|--------|------------------------|------------|------------------------------|---------------------------------|-------------|
| Job | Truss | Truss Type | | CONSTRUCTION | Ply | Lot 15 HT | | |
| 400302 | K4 | Common Giro | lor | AS NOTED ON PLANS REVI | | | 14 | 1303229 |
| +00302 | 174 | Common Gire | ici | DEVELOPMENT SERVICE | _ | Job Reference (optional) | | |
| Wheeler Lumber, | Waverly, KS 66871 | | | LEE'S SUMMIT, MISSOUR | 240 s Mai | 9 2020 MiTek Industries, Inc | . Wed May 13 16:45:47 2020 Pa | age 1 |
| | | | | ID:bWuMDB | N0tjF5cDv9 | pwhpH1zCzbQ-UbC56g580s | szda1s06lSfvzisvUwJjt?gulfNSqz0 | Gs5o |
| ر0-10-8 | 4-0-3 | | 10-2-0 | 06/11/2020 | 16 | -3-13 | 20-4-0 | |
| 0-10-8 | 4-0-3 | ' | 5-1-13 | 00/11/2020 | 6 | 1-13 | 4-0-3 | |
| | | | | | | | | |
| | | | | | | • | Scal | le = 1:34.6 |



| | 1 | 6-6-10 | | 7-2-11 | | | 6-6-10 | 1 |
|------------|------------|------------------------------------|----------|----------------|--------------|-----|----------------|----------|
| Plate Offs | sets (X,Y) | [7:0-4-0,0-4-12], [9:0-4-0,0-4-12] | | | | | | |
| 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 0.59 | Vert(LL) -0.20 | 7-9 >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.84 | Vert(CT) -0.35 | 7-9 >683 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr NO | WB 0.59 | Horz(CT) 0.07 | 6 n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) 0.10 | 7-9 >999 | 240 | Weight: 211 lb | FT = 10% |

13-9-6

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. (size) 6=0-3-8 (req. 0-3-15), 2=0-3-8 (req. 0-4-5)

6-6-10

Max Horz 2=67(LC 33)

Max Uplift 6=-192(LC 5), 2=-264(LC 4) Max Grav 6=4994(LC 1), 2=5496(LC 1)

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

2-3=-10646/477, 3-4=-10820/354, 4-5=-11181/234, 5-6=-10961/376 TOP CHORD

BOT CHORD 2-9=-459/9872, 7-9=-171/7192, 6-7=-323/10155

WFBS 4-7=0/4792, 5-7=-183/795, 4-9=-141/4308, 3-9=-197/719

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 0-7-0 oc. Bottom chords connected as follows: 2x6 - 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) 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 arip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) WARNING: Required bearing size at joint(s) 6, 2 greater than input bearing size.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=192, 2=264,
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 901 lb down and 35 lb up at 0-10-0, 862 lb down and 32 lb up at 2-10-0, 853 lb down and 32 lb up at 4-10-0, 853 lb down and 32 lb up at 6-10-0, 853 lb down and 32 lb up at 8-10-0, 853 lb down and 32 lb up at 10-10-0, 853 lb down and 30 lb up at 12-10-0, 850 lb down at 14-10-0, and 1651 lb down and 188 lb up at 16-10-0, and 123 lb down and 28 lb up at 18-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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. 10/03/2015 BEFORE USE.

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

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



20-4-0

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

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



Job Truss Truss Type 400302 K4 Common Girder

Waverly, KS 66871

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

LEE'S SUMMIT, MISSOUR: 240 s Mar 9 2020 MTek Industries, Inc. Wed May 13 16:45:47 2020 Page 2

Lot 15 HT

I41303229

ID:bWuMDBN0tjF5cDv\$pwhpH1zCzbQ-UbC56g580szda1s06lSfvzisvUwJjt?gulfNSqzGs5o

06/11/2020

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Wheeler Lumber,

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

Concentrated Loads (lb)

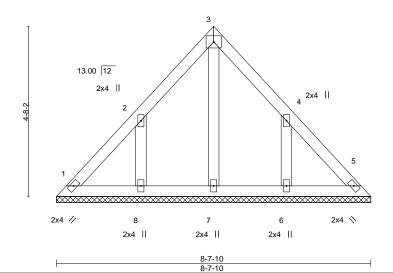
Vert: 9=-853(F) 10=-865(F) 11=-862(F) 12=-853(F) 13=-853(F) 14=-853(F) 15=-853(F) 16=-850(F) 17=-1651(F) 18=-123(F)



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303230 **AS NOTED ON PLANS REVIE** 400302 LAY1 GABLE DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:48 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-yomTJ06mn95UBBRCgS_uRBF9qtTCSTup7yPw_GzGs5n 8-7-10 06/11/2020 4-3-13 4-3-13

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) | 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/Ti | PI2014 | Matri | x-P | | | | | | Weight: 32 lb | FT = 10% |

BRACING-LUMBER-

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

REACTIONS. All bearings 8-7-10.

Max Horz 1=115(LC 7) (lb) -

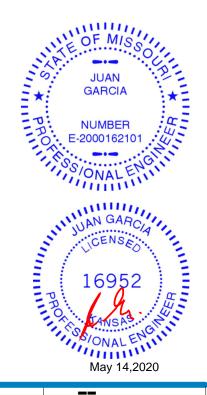
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-161(LC 8), 6=-161(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=161, 6=161,
- 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.



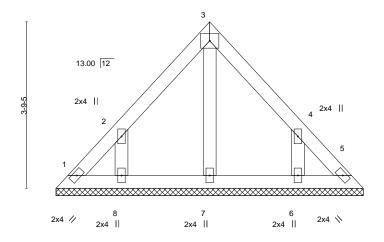
Scale = 1:31.7



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303231 **AS NOTED ON PLANS REVIE** 400302 LAY2 GABLE DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:49 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Q_JrWM7PYTDLpL0PEAV7_OoLqHpVBwEzMc8TWizGs5m 6-11-10 3-5-13 3-5-13 06/11/2020 3-5-13

4x5 =



| | | 0 1 | 11 10 | | |
|---------------|----------------------|----------|---------------|-----------------|------------------------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. [| DEFL. in (l | 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: 25 lb FT = 10% |

6-11-10 6-11-10

LUMBER-BRACING-

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

All bearings 6-11-10. REACTIONS.

(lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-137(LC 8), 6=-137(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=137, 6=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.



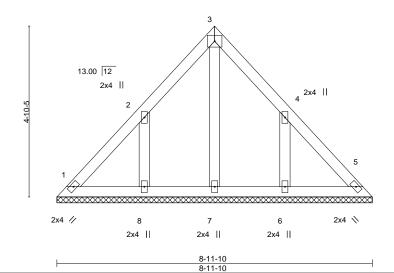
Scale = 1:26.1



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303232 AS NOTED ON PLANS REVIE 400302 LAY3 GABLE DEVELOPMENT SERVICES DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:50 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-uAtDkh81JnLCRUbbot0MXcKVEh9dwNN6aGu138zGs5l 8-11-10 4-5-13 4-5-13 06/11/2020 4-5-13

4x5 =



| LOADING | 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 | 0.07 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TF | PI2014 | Matri | x-P | | | | | | Weight: 34 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SPF No.2

REACTIONS. All bearings 8-11-10.

Max Horz 1=-120(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-168(LC 8), 6=-168(LC 9) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 15), 6=261(LC 16)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=168, 6=168,
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

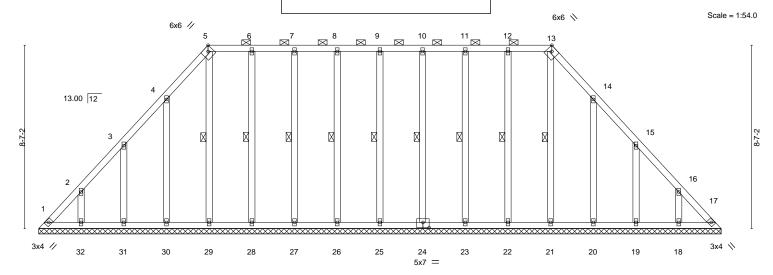
Rigid ceiling directly applied or 10-0-0 oc bracing.

Scale = 1:32.8



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT AS NOTED ON PLANS REVIE 400302 LAY4 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:51 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-MMRbx18f44T22eAnLbXb3pth85UnfpRFpwdabbzGs5k 31-11-10 7-11-3 7-11-3 06/1<mark>01/2020</mark> 7-11-3



| Plate Offsets (X,Y) | Plate Offsets (X,Y) [5:0-2-9,Edge], [13:0-2-9,Edge], [24:0-3-8,0-3-0] | | | | | | | | | | | |
|--|---|---|--|--|--|--|--|--|--|--|--|--|
| 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 0.06 BC 0.04 WB 0.11 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) 0.01 17 n/a n/a | PLATES GRIP MT20 197/144 Weight: 188 lb FT = 10% | | | | | | | | |

31-11-10

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 **BRACING-**

TOP CHORD

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

2-0-0 oc purlins (6-0-0 max.): 5-13. Rigid ceiling directly applied or 10-0-0 oc bracing.

BOT CHORD WEBS

9-25, 8-26, 7-27, 6-28, 5-29, 10-24, 11-23, 1 Row at midpt

12-22, 13-21

REACTIONS. All bearings 31-11-10.

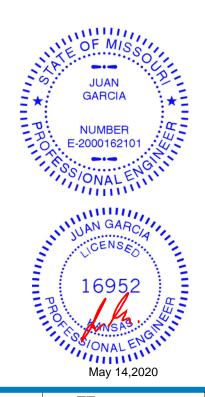
(lb) -Max Horz 1=221(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 17, 25, 26, 27, 28, 29, 24, 23, 22 except 1=-114(LC 6), 30=-135(LC 8), 31=-130(LC 8), 32=-131(LC 8), 20=-134(LC 9), 19=-130(LC 9), 18=-131(LC 9) Max Grav All reactions 250 lb or less at joint(s) 1, 17, 25, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19, 18

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

TOP CHORD 1-2=-284/215

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 25, 26, 27, 28, 29, 24, 23, 22 except (jt=lb) 1=114, 30=135, 31=130, 32=131, 20=134, 19=130, 18=131. 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.



141303233



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

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

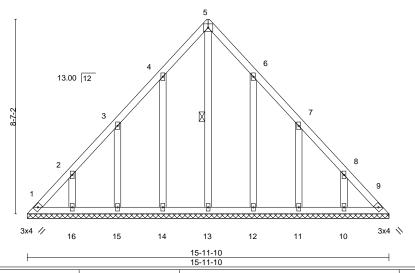
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303234 AS NOTED ON PLANS REVIE 400302 LAY5 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:53 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-JIZMMjAvcijmIyKAT0Z38Ey1huAB7jvYHE6hfTzGs5i 15-11-10 7-11-3 06/11/12020 7-11-3

4x5 =



| 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 | 0.06 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | 0.01 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TF | PI2014 | Matri | x-S | | | | | | Weight: 79 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

OTHERS 2x4 SPF No.2

REACTIONS. All bearings 15-11-10. Max Horz 1=-222(LC 4) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-132(LC 8), 15=-131(LC 8), 16=-131(LC 8),

12=-130(LC 9), 11=-132(LC 9), 10=-131(LC 9)

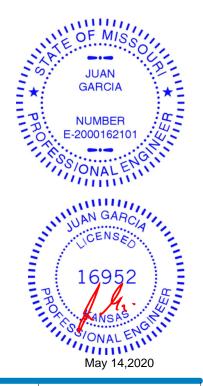
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

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

TOP CHORD 1-2=-295/189, 8-9=-262/140

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=132, 15=131, 16=131, 12=130, 11=132, 10=131.
- 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.



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

5-13

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

1 Row at midpt

Scale = 1:50.9



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303235 AS NOTED ON PLANS REVIE 400302 LAY6 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:54 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-nx7ka3BXN?rdv6vM1j4lhSV9RIVesA9iVusECwzGs5h

06/11/2020

Scale = 1:53.1 6x6 📏 6x6 // 13 13.00 12 X X M M M 7-1-2 3x4 1 25 23 20 18 16 15 19 5x7

16-1-5

| | 1 | 25-5-1 | 1 |
|---------------------|---|--------|---|
| | | 25-5-1 | 1 |
| Plate Offsets (X Y) | [5:0-2-9 Edge] [13:0-2-9 Edge] [19:0-3-8 0-3-0] | | |

| T late Off | Fide Chacts (X, 1) [0.0 2 3, Edge], [10.0 2 5, Edge], [10.0 0 0, 0 0 0] | | | | | | | | | | | |
|------------|---|-----------------|-------|-------|------|----------|-------|-------|--------|-----|----------------|----------|
| LOADIN | · · · | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | -0.00 | 15 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TP | 12014 | Matri | x-S | | | | | | Weight: 166 lb | FT = 10% |

LUMBER-**BRACING-**

7-11-3 7-11-3

TOP CHORD TOP CHORD 2x4 SPF No.2 Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SPF No.2 **WEBS** 2x4 SPF No.2 **BOT CHORD OTHERS** 2x4 SPF No.2

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-13. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,17-18,16-17.

25-5-1

1-4-10

WEBS 1 Row at midpt 5-24, 6-23, 7-22, 8-21, 9-20, 10-19, 11-18, 12-17, 13-16

REACTIONS. All bearings 25-5-1.

Max Horz 1=311(LC 5) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 15, 23, 22, 21, 20, 19, 18, 17, 16 except 1=-144(LC 6),

27=-131(LC 8), 26=-129(LC 8), 25=-136(LC 8), 24=-100(LC 5)

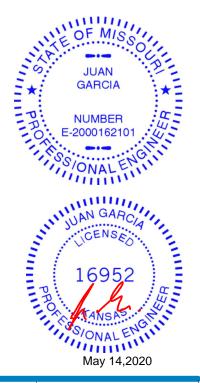
Max Grav All reactions 250 lb or less at joint(s) 15, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16 except 1=256(LC 5)

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

TOP CHORD 1-2=-351/256, 2-3=-282/208

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 23, 22, 21, 20, 19, 18, 17, 16 except (jt=lb) 1=144, 27=131, 26=129, 25=136, 24=100.
- 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.





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

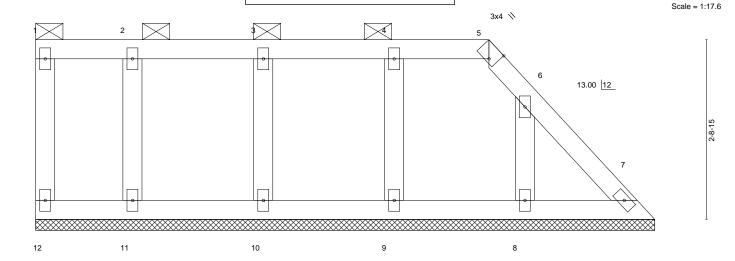
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303236 AS NOTED ON PLANS REVIE 400302 LAY7 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:55 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-F8h6nPC98JzUXGUYaQcXDf2NKisxbeorkYbokMzGs5g 06/11/2020 6-11-2 2-6-7



| Plate Offsets (X,Y | - [5:0-1-7,Edge] | | 9-5-9 | | | | | ' |
|--------------------|----------------------|----------|----------|---------|-----------|-----|---------------|----------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. | in (loc | c) 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 0.02 | Vert(CT) | n/a | - n/a | 999 | | |
| BCLL 0.0 ' | Rep Stress Incr YES | WB 0.02 | Horz(CT) | 0.00 | 7 n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | | | | | Weight: 34 lb | FT = 10% |

9-5-9

LUMBER-**BRACING-**

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

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

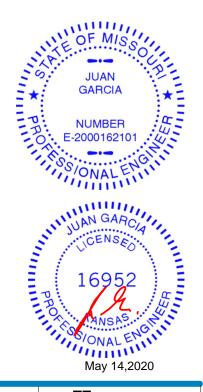
REACTIONS. All bearings 9-5-9.

(lb) -Max Horz 12=-98(LC 4)

Max Uplift All uplift 100 lb or less at joint(s) 12, 7, 11, 10, 9, 8 All reactions 250 lb or less at joint(s) 12, 7, 11, 10, 9, 8

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

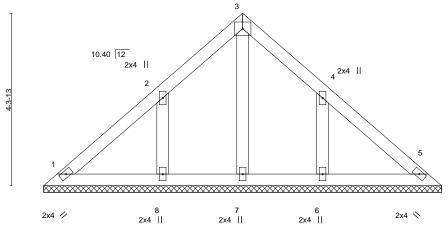
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 7, 11, 10, 9, 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.





RELEASE FOR CONSTRUCTION Job Truss Truss Type Lot 15 HT 141303237 AS NOTED ON PLANS REVIE 400302 LAY8 GABLE **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:56 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-jKFU_ICovd5L9P2l887mmtaXe6CsK5y?zCLLGozGs5f 9-11-8 06/11/2020 4-11-12 4-1 -12 Scale = 1:28.8 4x5 =



| | | | | | | 0 11 0 | | | | | | |
|-----------|-------|------------------|-------|-------|------|----------|------|-------|--------|-----|---------------|----------|
| LOADING (| (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | I/defl | L/d | PLATES | GRIP |
| TCLL 2 | 25.0 | Plate Grip DOL | 1.15 | TC | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL ' | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL ' | 10.0 | Code IRC2018/TPI | I2014 | Matri | x-S | | | | | | Weight: 34 lb | FT = 10% |

9-11-8

LUMBER-BRACING-

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

REACTIONS. All bearings 9-11-8.

Max Horz 1=-104(LC 6)

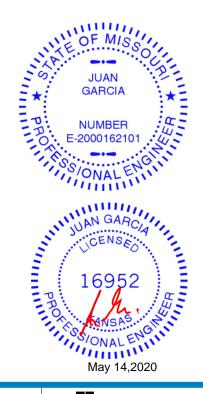
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-134(LC 8), 6=-134(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=274(LC 15), 6=274(LC 16)

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 except (jt=lb) 8=134. 6=134.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





Job Truss Truss Type Valley 400302 V1

Waverly, KS 66871

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

Lot 15 HT

141303238

2x4 ||

except end verticals.

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

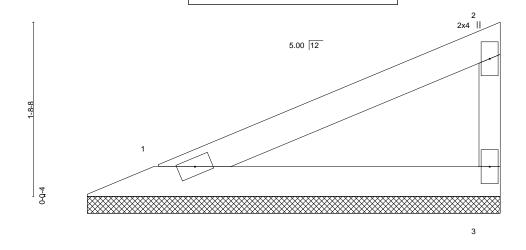
Rigid ceiling directly applied or 10-0-0 oc bracing.

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:57 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BWotC5DQgwDCmZdxire?J47hdWWA3Ye8Bs4voEzGs5e

06/<u>11/2</u>020

Scale = 1:11.3



| LOADIN | \(\(\) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|--------|----------|-----------------|--------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL | 25.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TF | PI2014 | Matri | x-P | | | | | | Weight: 10 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

Wheeler Lumber,

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

2x3 SPF No.2

1=4-0-10, 3=4-0-10 (size) Max Horz 1=60(LC 5) Max Uplift 1=-21(LC 8), 3=-33(LC 8)

Max Grav 1=146(LC 1), 3=146(LC 1)

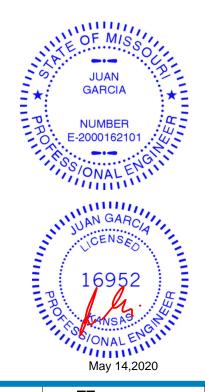
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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

2x4 /

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





Job Truss Truss Type Valley 400302 V2

Waverly, KS 66871

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

Lot 15 HT

141303239

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:58 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fjMFPQE2QEM3OjC7GZ9ErlgtXvt0o?uHQWqSLhzGs5d

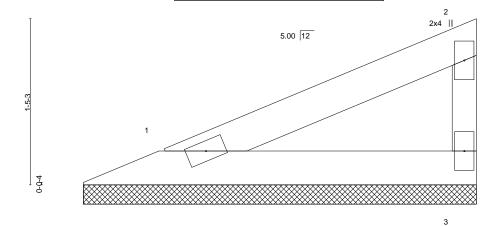
Structural wood sheathing directly applied or 3-5-4 oc purlins,

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

except end verticals.

06/<u>11/2</u>020

Scale = 1:9.9



2x4 / 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

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

LUMBER-

Wheeler Lumber,

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

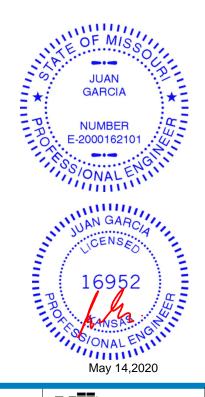
REACTIONS. 1=3-4-10, 3=3-4-10 (size) Max Horz 1=47(LC 5)

Max Uplift 1=-17(LC 8), 3=-26(LC 8) Max Grav 1=116(LC 1), 3=116(LC 1)

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

NOTES-

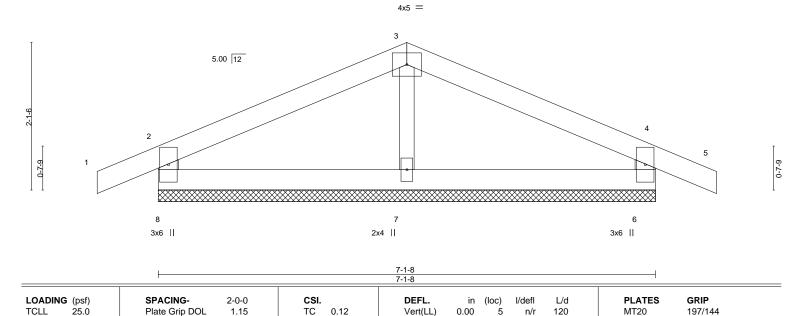
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom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





RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303240 AS NOTED ON PLANS REVIE Valley 400302 V3 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:59 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7vwddmFgBYUw0tnKpGgTOVC2BJCjXSjRfAZ?t7zGs5c8-0-0 06/11/2020 0-10-8 3-6-12 3-6-12 0-10-8 Scale = 1:16.5



Vert(CT)

Horz(CT)

BOT CHORD

0.00

0.00

5

6

n/r

n/a

except end verticals.

120

n/a

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

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

Weight: 21 lb

FT = 10%

LUMBER-BRACING-TOP CHORD

1.15

YES

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

10.0

0.0

10.0

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

REACTIONS. (size) 8=7-1-8, 6=7-1-8, 7=7-1-8

Max Horz 8=-19(LC 13)

Max Uplift 8=-74(LC 8), 6=-76(LC 9)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Grav 8=265(LC 1), 6=265(LC 1), 7=227(LC 1)

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

NOTES-

TCDL

BCLL

BCDL

- 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

ВС

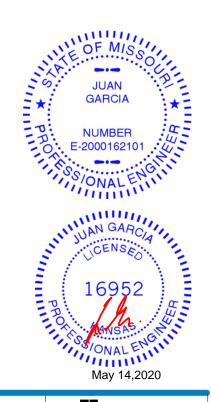
WB

Matrix-R

0.10

0.03

- 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) 8, 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.

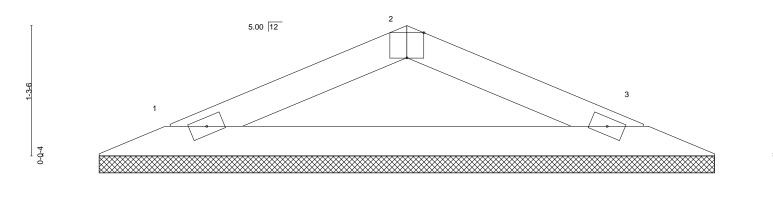




RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303241 AS NOTED ON PLANS REVIE Valley 400302 V4 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:59 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH 1zCzbQ-7vwddmFgBYUw0tnKpGgTOVC2dJAaXS8RfAZ?t7zGs5c 06/11/2020 3-0-14 3-0-14 Scale = 1:11.3

3x4 =



2x4 >

Plate Offsets (X,Y)--[2:0-2-0,Edge] 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 0.09 Vert(LL) n/a n/a 999 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.23 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

BRACING-

TOP CHORD

BOT CHORD

6-1-13

LUMBER-

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

10.0

1=6-0-10, 3=6-0-10 (size) Max Horz 1=17(LC 8)

Max Uplift 1=-27(LC 8), 3=-27(LC 9) Max Grav 1=209(LC 1), 3=209(LC 1)

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

Code IRC2018/TPI2014

NOTES-

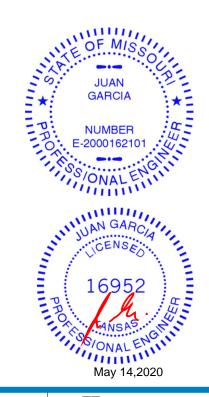
REACTIONS.

BCDL

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



FT = 10%

Weight: 13 lb

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

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



Job Truss Truss Type Valley 400302 V5 Wheeler Lumber, Waverly, KS 66871

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

Lot 15 HT

DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:46:00 2020 Page 1 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-c5U?q6Flyrcnd1MWN_BiwjlAnjXMGuMauqJZPZzGs5b

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

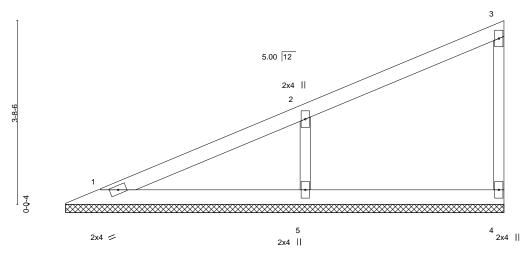
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

06<u>/11/2</u>020

Scale = 1:23.2 2x4 ||

141303242



| LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 * | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES | CSI. TC 0.26 BC 0.13 WB 0.07 | 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 |
|--|--|---------------------------------------|--|-----------------------------|
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-P | 11012(01) -0.00 4 11/4 11/4 | Weight: 24 lb FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

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

(size) 1=8-9-14, 4=8-9-14, 5=8-9-14

Max Horz 1=146(LC 5)

Max Uplift 4=-23(LC 5), 5=-120(LC 8)

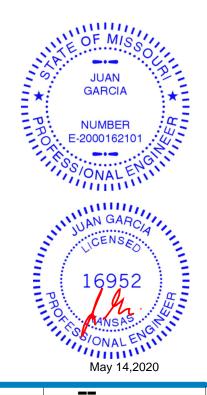
Max Grav 1=142(LC 1), 4=129(LC 1), 5=451(LC 1)

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

2-5=-351/180 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=120
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303243 AS NOTED ON PLANS REVIE Valley 400302 V6 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:46:01 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-4I2N2SGwj9keFBxixhixTwHEK7pc?Mdk6U26y0zGs5a 06<u>/11/2</u>020 Scale = 1:17.8 2x4 | 2 5.00 12 0-0-4 2x4 / 2x4 ||

| LOADING (psf) TCLL 25.0 TCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 | CSI. TC 0.72 BC 0.39 | Vert(LL) n/s | a - | l/defl n/a n/a | L/d 999 999 | PLATES GRIP MT20 197/144 | |
|-----------------------------------|--|----------------------------|----------------|-----|----------------------|-------------------|-----------------------------|--|
| BCLL 0.0 * BCDL 10.0 | Rep Stress Incr YES Code IRC2018/TPI2014 | WB 0.00 Matrix-P | Horz(CT) -0.00 |) 3 | n/a | n/a | Weight: 17 lb FT = 10% | |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

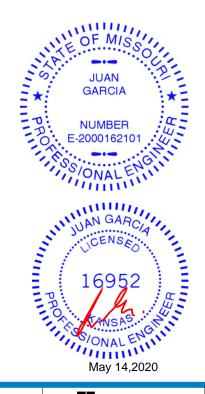
REACTIONS.

1=6-9-14, 3=6-9-14 (size) Max Horz 1=110(LC 5) Max Uplift 1=-40(LC 8), 3=-62(LC 8) Max Grav 1=271(LC 1), 3=271(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 6-10-8 oc purlins,

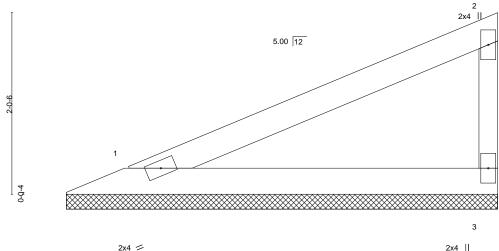
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT AS NOTED ON PLANS REVIE Valley 400302 V7 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:46:01 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-4l2N2SGwj9keFBxixhixTwHLt7t9?Mdk6U26y0zGs5a 06<u>/11//2</u>020



| LOADIN | \(\(\dots\) | SPACING- 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|--------|-------------|----------------------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL | 25.0 | Plate Grip DOL 1.15 | TC 0.30 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.16 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-P | | | | | | Weight: 12 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.2

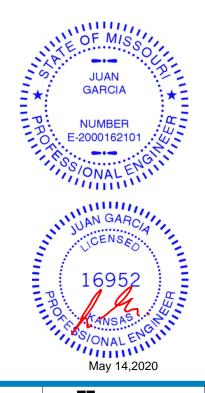
REACTIONS. 1=4-9-14, 3=4-9-14 (size) Max Horz 1=74(LC 5)

Max Uplift 1=-26(LC 8), 3=-41(LC 8) Max Grav 1=181(LC 1), 3=181(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 4-10-8 oc purlins,

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

except end verticals.

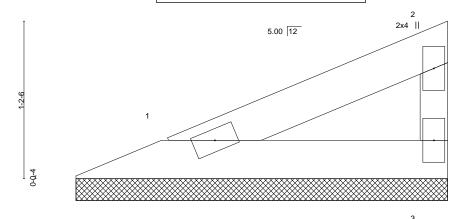
141303244

Scale = 1:12.9



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303245 AS NOTED ON PLANS REVIE Valley 400302 V8 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:46:02 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-YUclFoHYUSsVtKWvVPEA08gZFXFMkpttL8ofUSzGs5Z 0671172020



2x4 / 2x4 ||

TOP CHORD

BOT CHORD

| LOADIN TCLL | G (psf) 25.0 | SPACING- 2 Plate Grip DOL | 2-0-0 1.15 | CSI. TC | 0.07 | DEFL. Vert(LL) | in n/a | (loc) | l/defl n/a | L/d 999 | PLATES MT20 | GRIP 197/144 |
|----------------|---------------------|------------------------------|---------------|------------|------|-------------------|-----------|-------|---------------|------------|----------------|---------------------|
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2018/TPI20 | 014 | Matri | x-P | | | | | | Weight: 6 lb | FT = 10% |

LUMBER-BRACING-

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

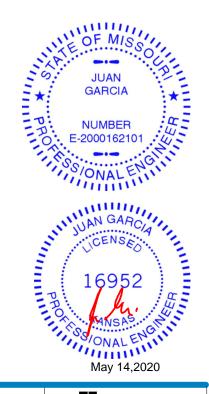
REACTIONS. 1=2-9-14, 3=2-9-14 (size)

Max Horz 1=37(LC 5) Max Uplift 1=-13(LC 8), 3=-21(LC 8) Max Grav 1=91(LC 1), 3=91(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 2-10-8 oc purlins,

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

except end verticals.

Scale = 1:8.8



RELEASE FOR Job Truss Truss Type CONSTRUCTION AS NOTED ON PLANS REVIE Valley 400302 V9 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:46:03 2020 Page 1 Wheeler Lumber, Waverly, KS 66871

7-5-0 7-5-0

Lot 15 HT

141303246

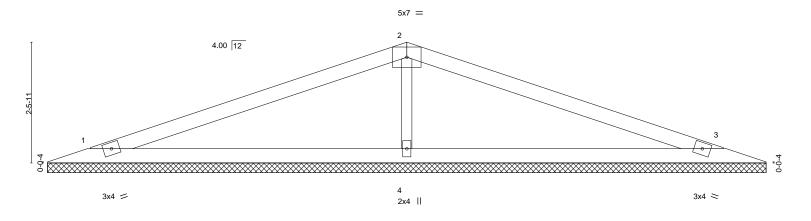
ID:bWuMDBN0tjF5cDvSpwhplf1zCzbQ-0gA8S8IBFm_LUU5526IPYLNbWwVITFf1aoXD0uzGs5Y

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

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

06/11/2020 7-5-0

Scale = 1:23.6



| 0-0-12 | | | 14-10-0 | | | | | | |
|----------------------------|---|------------------------|--------------------------|-----------|-------|---------------|------------|----------------|------------------------|
| LOADING (psf) TCLL 25.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 | CSI. TC 0.61 | DEFL. Vert(LL) | in n/a | (loc) | l/defl n/a | L/d 999 | PLATES MT20 | GRIP 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.35 | Vert(CT) | n/a | - | n/a | 999 | 101120 | 101/144 |
| BCLL 0.0 * BCDL 10.0 | Rep Stress Incr YES Code IRC2018/TPI2014 | WB 0.09 Matrix-S | Horz(CT) | 0.00 | 3 | n/a | n/a | Weight: 34 lb | FT = 10% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

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

REACTIONS. (size)

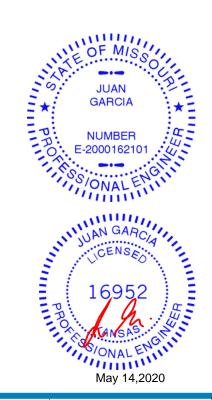
1=14-8-8, 3=14-8-8, 4=14-8-8 Max Horz 1=38(LC 8) Max Uplift 1=-55(LC 4), 3=-60(LC 9), 4=-60(LC 4) Max Grav 1=261(LC 21), 3=261(LC 22), 4=660(LC 1)

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

2-4=-465/138 **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 grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

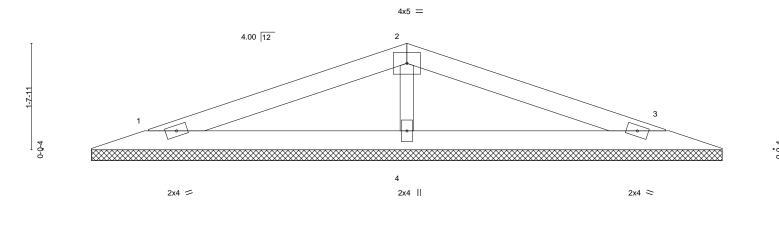
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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



RELEASE FOR Job Truss Truss Type CONSTRUCTION Lot 15 HT 141303247 AS NOTED ON PLANS REVIE Valley 400302 V10 **DEVELOPMENT SERVICES** DEVELOPMENT SERVICES | Job Reference (optional)

LEE'S SUMMIT, MISSOUR 240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:57 2020 Page 1 Wheeler Lumber, Waverly, KS 66871 ID:bWuMDBN0tjF5cDvSpwhplH1zCzbQ-BWotC5DQgwDCmZdxire?J47gFWVj3Yr8Bs4voEzGs5e 9-10-0 06/11/2020 4-11-0 4-11-0



| 0-0-12 0-0-12 | | 9-10-0 9-9-4 | | | | | | | |
|----------------------------|---------------------------------------|------------------------|--------------------------|-------------|--------|---------------|------------|----------------|---------------------|
| LOADING (psf) TCLL 25.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 | CSI. TC 0.21 | DEFL. Vert(LL) | in n/a | (loc) | l/defl n/a | L/d 999 | PLATES MT20 | GRIP 197/144 |
| FCDL 10.0 BCLL 0.0 * | Lumber DOL 1.15 Rep Stress Incr YES | BC 0.13 WB 0.05 | Vert(CT) Horz(CT) | n/a 0.00 | - 3 | n/a n/a | 999 n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | 11312(01) | 0.00 | 0 | 11/4 | 11,0 | Weight: 21 lb | FT = 10% |

LUMBER-BRACING-

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

REACTIONS. 1=9-8-8, 3=9-8-8, 4=9-8-8 (size)

Max Horz 1=24(LC 8)

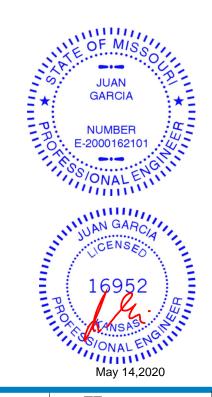
Max Uplift 1=-34(LC 4), 3=-37(LC 9), 4=-37(LC 4) Max Grav 1=160(LC 21), 3=160(LC 22), 4=405(LC 1)

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

2-4=-285/84 **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 grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Scale = 1:17.7

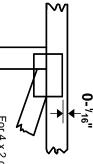


Symbols

PLATE LOCATION AND ORIENTATION



offsets are indicated. Center plate on joint unless x, y and fully embed teeth Apply plates to both sides of truss Dimensions are in ft-in-sixteenths.



plates 0- 1/16" from outside For 4 x 2 orientation, locate edge of truss.

⋛

connector plates. required direction of slots in This symbol indicates the

DEVELOPMENT SER
LEE'S SUMMU, MISS

4

06/11/2020 S R C SPlate location details available in MiTek 20/20 S osoftware or upon request. <u>software</u> or upon request

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

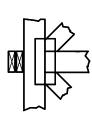
RELEASE FOR CONSTRUCTION

LATERAL BRACING LOCATION



by text in the bracing section of the output. Use T or I bracing if indicated. Indicated by symbol shown and/or

BEARING



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

Industry Standards:

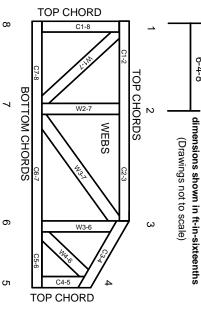
National Design Specification for Metal

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

6-4-8



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

truss unless otherwise shown. Trusses are designed for wind loads in the plane of the

established by others. section 6.3 These truss designs rely on lumber values Lumber design values are in accordance with ANSI/TPI 1

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building
- Cut members to bear tightly against each other

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- locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design
- 14. Bottom chords require lateral bracing at 10 ft. spacing or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.