



RE: 400148  
Lot 84 MN

**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 36 individual, dated Truss Design Drawings and 0 Additional Drawings.

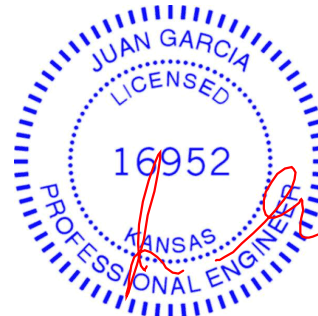
| No. | Seal#     | Truss Name | Date      | No. | Seal#     | Truss Name | Date      |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 1   | I40701746 | a1         | 3/20/2020 | 27  | I40701772 | v5         | 3/20/2020 |
| 2   | I40701747 | a2         | 3/20/2020 | 28  | I40701773 | v6         | 3/20/2020 |
| 3   | I40701748 | a3         | 3/20/2020 | 29  | I40701774 | v7         | 3/20/2020 |
| 4   | I40701749 | a4         | 3/20/2020 | 30  | I40701775 | v8         | 3/20/2020 |
| 5   | I40701750 | a5         | 3/20/2020 | 31  | I40701776 | v9         | 3/20/2020 |
| 6   | I40701751 | a6         | 3/20/2020 | 32  | I40701777 | v10        | 3/20/2020 |
| 7   | I40701752 | a7         | 3/20/2020 | 33  | I40701778 | v11        | 3/20/2020 |
| 8   | I40701753 | a8         | 3/20/2020 | 34  | I40701779 | v12        | 3/20/2020 |
| 9   | I40701754 | a9         | 3/20/2020 | 35  | I40701780 | v13        | 3/20/2020 |
| 10  | I40701755 | a10        | 3/20/2020 | 36  | I40701781 | v14        | 3/20/2020 |
| 11  | I40701756 | a11        | 3/20/2020 |     |           |            |           |
| 12  | I40701757 | a12        | 3/20/2020 |     |           |            |           |
| 13  | I40701758 | a13        | 3/20/2020 |     |           |            |           |
| 14  | I40701759 | b1         | 3/20/2020 |     |           |            |           |
| 15  | I40701760 | b2         | 3/20/2020 |     |           |            |           |
| 16  | I40701761 | b3         | 3/20/2020 |     |           |            |           |
| 17  | I40701762 | b4         | 3/20/2020 |     |           |            |           |
| 18  | I40701763 | c1         | 3/20/2020 |     |           |            |           |
| 19  | I40701764 | c2         | 3/20/2020 |     |           |            |           |
| 20  | I40701765 | c3         | 3/20/2020 |     |           |            |           |
| 21  | I40701766 | d1         | 3/20/2020 |     |           |            |           |
| 22  | I40701767 | d2         | 3/20/2020 |     |           |            |           |
| 23  | I40701768 | v1         | 3/20/2020 |     |           |            |           |
| 24  | I40701769 | v2         | 3/20/2020 |     |           |            |           |
| 25  | I40701770 | v3         | 3/20/2020 |     |           |            |           |
| 26  | I40701771 | v4         | 3/20/2020 |     |           |            |           |

**RELEASE FOR CONSTRUCTION**  
**AS NOTED ON PLANS REVIEW**  
**CODES ADMINISTRATION**  
**LEE'S SUMMIT, MISSOURI**

04/16/2020

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, 2020.  
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.





RE: 400148  
Lot 84 MN

**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

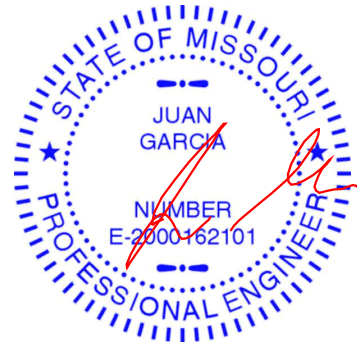
Roof Load: 45.0 psf

Floor Load: N/A psf

This package includes 36 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal#     | Truss Name | Date      | No. | Seal#     | Truss Name | Date      |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 1   | I40701746 | a1         | 3/20/2020 | 27  | I40701772 | v5         | 3/20/2020 |
| 2   | I40701747 | a2         | 3/20/2020 | 28  | I40701773 | v6         | 3/20/2020 |
| 3   | I40701748 | a3         | 3/20/2020 | 29  | I40701774 | v7         | 3/20/2020 |
| 4   | I40701749 | a4         | 3/20/2020 | 30  | I40701775 | v8         | 3/20/2020 |
| 5   | I40701750 | a5         | 3/20/2020 | 31  | I40701776 | v9         | 3/20/2020 |
| 6   | I40701751 | a6         | 3/20/2020 | 32  | I40701777 | v10        | 3/20/2020 |
| 7   | I40701752 | a7         | 3/20/2020 | 33  | I40701778 | v11        | 3/20/2020 |
| 8   | I40701753 | a8         | 3/20/2020 | 34  | I40701779 | v12        | 3/20/2020 |
| 9   | I40701754 | a9         | 3/20/2020 | 35  | I40701780 | v13        | 3/20/2020 |
| 10  | I40701755 | a10        | 3/20/2020 | 36  | I40701781 | v14        | 3/20/2020 |
| 11  | I40701756 | a11        | 3/20/2020 |     |           |            |           |
| 12  | I40701757 | a12        | 3/20/2020 |     |           |            |           |
| 13  | I40701758 | a13        | 3/20/2020 |     |           |            |           |
| 14  | I40701759 | b1         | 3/20/2020 |     |           |            |           |
| 15  | I40701760 | b2         | 3/20/2020 |     |           |            |           |
| 16  | I40701761 | b3         | 3/20/2020 |     |           |            |           |
| 17  | I40701762 | b4         | 3/20/2020 |     |           |            |           |
| 18  | I40701763 | c1         | 3/20/2020 |     |           |            |           |
| 19  | I40701764 | c2         | 3/20/2020 |     |           |            |           |
| 20  | I40701765 | c3         | 3/20/2020 |     |           |            |           |
| 21  | I40701766 | d1         | 3/20/2020 |     |           |            |           |
| 22  | I40701767 | d2         | 3/20/2020 |     |           |            |           |
| 23  | I40701768 | v1         | 3/20/2020 |     |           |            |           |
| 24  | I40701769 | v2         | 3/20/2020 |     |           |            |           |
| 25  | I40701770 | v3         | 3/20/2020 |     |           |            |           |
| 26  | I40701771 | v4         | 3/20/2020 |     |           |            |           |

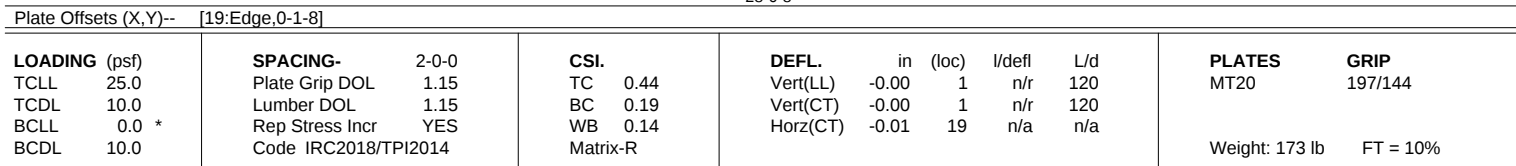
The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision  
based on the parameters provided by Wheeler - Waverly.  
Truss Design Engineer's Name: Garcia, Juan  
My license renewal date for the state of Missouri is December 31, 2020.  
Missouri COA: 001193



**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.

**RELEASE FOR CONSTRUCTION**  
AS NOTED ON PLANS REVIEW  
CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:34 2020 Page 1  
ID:vnPZsGkeTkCAd6C?5h?Z2N6zZ5mk-aGtlubamLopYlvWebJ9HauZP0mGRoSWXuVIOFzZ2qV



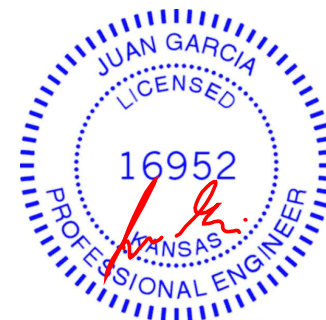
| LUMBER-   |              | BRACING-  |                                                                                       |
|-----------|--------------|-----------|---------------------------------------------------------------------------------------|
| TOP CHORD | 2x4 SPF No.2 | TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | 2x4 SPF No.2 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS      | 2x4 SPF No.2 | WEBS      | 1 Row at midpt 18-19, 16-21, 15-22, 14-23, 13-24, 17-20                               |
| OTHERS    | 2x4 SPF No.2 |           |                                                                                       |

**REACTIONS.** All bearings 28-0-8.  
(lb) - Max Horz 35=426(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 35, 19, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 20  
except 34=196(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 19, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 20  
except 35=292(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-387/40, 3-4=-332/37, 4-5=-310/34, 5-6=-285/31, 6-7=-261/29

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 19, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 20 except (jt=lb) 34=196.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 20, 2020  
**RELEASE FOR CONSTRUCTION**

AS NOTED ON PLANS REVIEW  
CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

**MiTek®**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



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.

|        |       |            |     |     |           |           |
|--------|-------|------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN | I40701747 |
| 400148 | A2    | Common     | 1   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

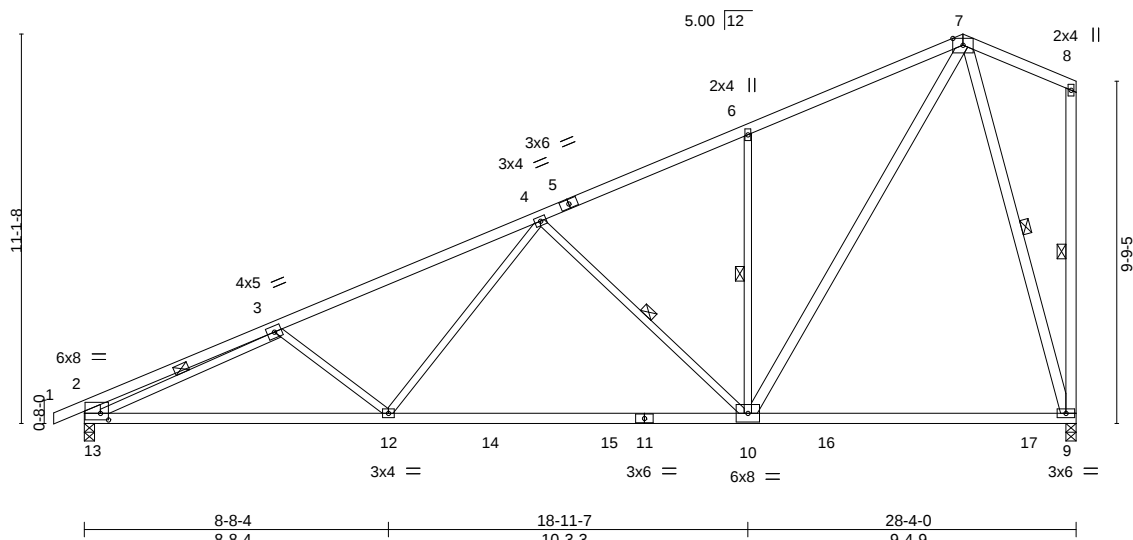
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:45 2020 Page 1

ID:vnPZsGkeTkCA6C?5h?ZN6zZ5mk-?N1vCMpfmBC?Zb5dnP0kEurNDSoOWbP836gOH6zZ2qK

0-10-8 5-6-8 13-0-6 18-11-7 25-1-3 28-4-0  
0-10-8 5-6-8 7-5-15 5-11-1 6-1-12 3-2-13

5x7 =

Scale = 1:65.8



|                       |                                    |       |             |              |             |        |     |                |             |
|-----------------------|------------------------------------|-------|-------------|--------------|-------------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- | [2:0-2-12,0-1-2], [2:0-2-12,0-2-4] |       |             |              |             |        |     |                |             |
| <b>LOADING</b> (psf)  | <b>SPACING-</b>                    | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc)    | L/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 25.0             | Plate Grip DOL                     | 1.15  | TC 0.72     | Vert(LL)     | -0.28 9-10  | >999   | 360 | MT20           | 197/144     |
| TCDL 10.0             | Lumber DOL                         | 1.15  | BC 0.66     | Vert(CT)     | -0.44 10-12 | >763   | 240 |                |             |
| BCLL 0.0 *            | Rep Stress Incr                    | YES   | WB 0.89     | Horz(CT)     | 0.05 9      | n/a    | n/a |                |             |
| BCDL 10.0             | Code IRC2018/TPI2014               |       | Matrix-S    | Wind(LL)     | 0.09 10-12  | >999   | 240 | Weight: 132 lb | FT = 10%    |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-8-11 oc bracing.  
WEBS 1 Row at midpt 4-10, 6-10, 3-13, 8-9, 7-9

#### REACTIONS.

(size) 13=0-3-8, 9=0-3-8  
Max Horz 13=403(LC 8)  
Max Uplift 13=-183(LC 8), 9=-258(LC 8)  
Max Grav 13=1398(LC 2), 9=1390(LC 2)

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

TOP CHORD 2-3=-745/102, 3-4=-2263/253, 4-6=-1256/143, 6-7=-1259/256, 2-13=-490/121  
BOT CHORD 12-13=-644/2197, 10-12=-436/1637, 9-10=-82/337  
WEBS 3-12=-333/239, 4-12=-36/630, 4-10=-768/271, 6-10=-428/221, 7-10=-324/1536, 3-13=-1750/232, 7-9=-1188/308

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 13=183, 9=258.
- This truss 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

**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/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.

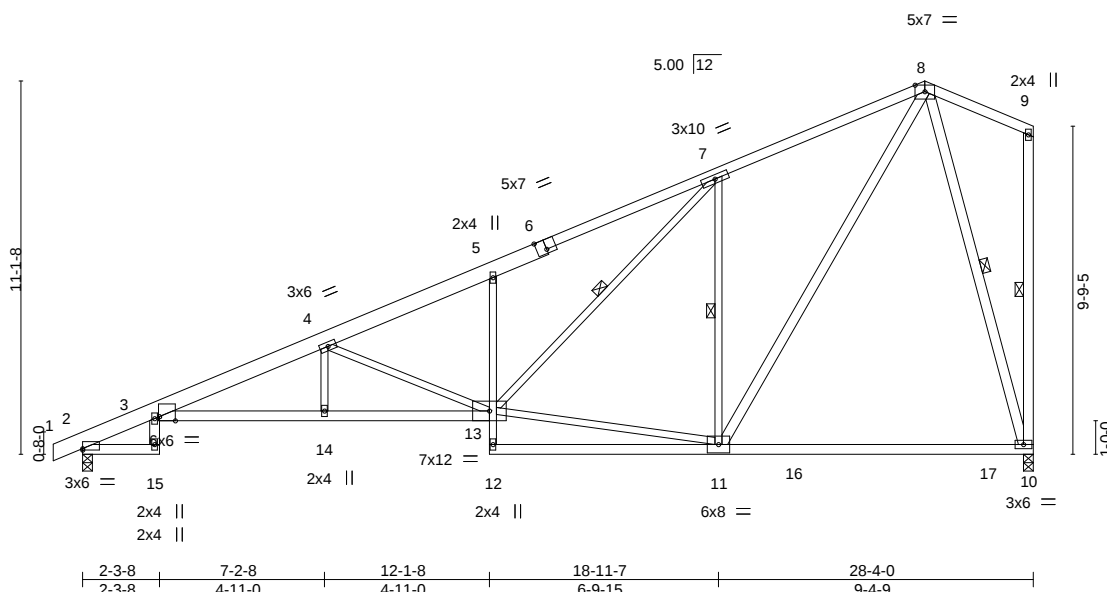
|        |       |              |     |     |           |           |
|--------|-------|--------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type   | Qty | Ply | Lot 84 MN | I40701748 |
| 400148 | A3    | Roof Special | 4   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:46 2020 Page 1

ID:vnPZsGkeTkCad6C?5h?ZN6zZ5mk-UZbHQiqlXUKrBlqL6Xzm6OUjsk1F0vHHmPxpYzZ2qJ

-0-10-8 2-3-8 7-2-8 12-1-8 18-11-7 25-1-3 28-4-0  
0-10-8 2-3-8 4-11-0 4-11-0 6-9-15 6-1-13 3-2-13



Scale = 1:68.7

|                                                                        |       |                       |      |             |      |                                  |                     |                |             |
|------------------------------------------------------------------------|-------|-----------------------|------|-------------|------|----------------------------------|---------------------|----------------|-------------|
| Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [3:0-5-10,Edge], [6:0-3-8,Edge] |       |                       |      |             |      |                                  |                     |                |             |
| <b>LOADING</b> (psf)                                                   |       | <b>SPACING-</b> 2-0-0 |      | <b>CSI.</b> |      | <b>DEFL.</b> in (loc) l/defl L/d |                     | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL                                                                   | 25.0  | Plate Grip DOL        | 1.15 | TC          | 1.00 | Vert(LL)                         | -0.37 3-14 >911 360 | MT20           | 197/144     |
| TCDL                                                                   | 10.0  | Lumber DOL            | 1.15 | BC          | 0.70 | Vert(CT)                         | -0.65 3-14 >519 240 |                |             |
| BCLL                                                                   | 0.0 * | Rep Stress Incr       | YES  | WB          | 1.00 | Horz(CT)                         | 0.38 10 n/a n/a     |                |             |
| BCDL                                                                   | 10.0  | Code IRC2018/TPI2014  |      | Matrix-S    |      | Wind(LL)                         | 0.34 3-14 >976 240  | Weight: 155 lb | FT = 10%    |

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
1-6: 2x6 SP 2400F 2.0E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
3-13: 2x4 SPF 2100F 1.8E, 5-12: 2x3 SPF No.2  
10-12: 2x4 SPF 2400F 2.0E  
WEBS 2x3 SPF No.2 \*Except\*  
3-15,8-11,9-10,8-10: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 8-3-10 oc bracing.  
WEBS 1 Row at midpt 7-13, 7-11, 9-10, 8-10

#### REACTIONS.

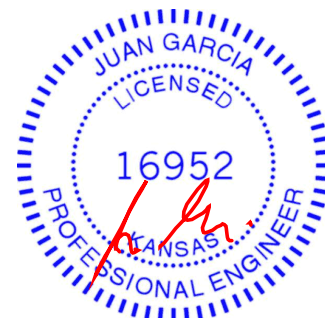
(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=415(LC 8)  
Max Uplift 2=182(LC 8), 10=258(LC 8)  
Max Grav 2=1369(LC 2), 10=1370(LC 2)

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

TOP CHORD 2-3=-725/0, 3-4=-3444/550, 4-5=-2344/356, 5-7=-2329/468, 7-8=-1232/264  
BOT CHORD 3-14=-875/3314, 13-14=-874/3312, 5-13=-339/201, 10-11=-83/328  
WEBS 4-13=-1350/357, 11-13=-227/994, 7-13=-443/1482, 7-11=-1136/443, 8-11=-335/1498,  
8-10=-1153/309

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=182, 10=258.
- This truss 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

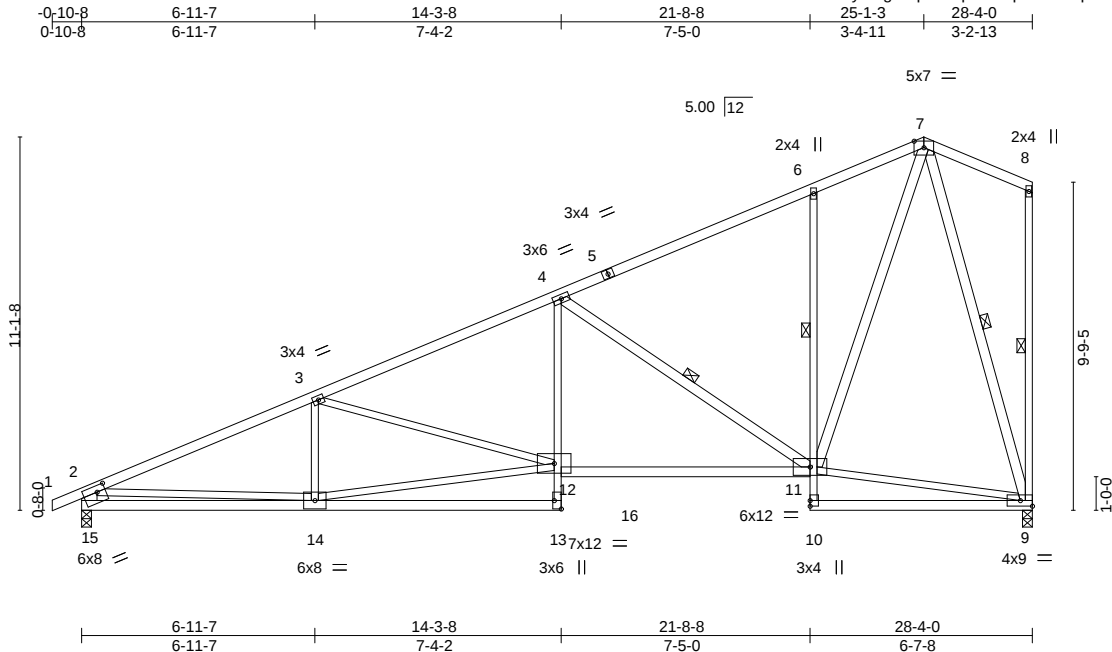
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/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.

|        |       |              |     |     |           |           |
|--------|-------|--------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type   | Qty | Ply | Lot 84 MN | I40701749 |
| 400148 | A4    | Roof Special | 1   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:47 2020 Page 1

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| Plate Offsets (X,Y)-- [13:Edge,0-2-8], [15:0-3-0,0-2-4], [15:0-2-9,0-1-1] |       |                      |      |          |      |                           |             |             |     |                |          |
|---------------------------------------------------------------------------|-------|----------------------|------|----------|------|---------------------------|-------------|-------------|-----|----------------|----------|
| LOADING (psf)                                                             |       | SPACING- 2-0-0       |      | CSI.     |      | DEFL. in (loc) l/defl L/d |             | PLATES GRIP |     |                |          |
| TCLL                                                                      | 25.0  | Plate Grip DOL       | 1.15 | TC       | 0.65 | Vert(LL)                  | -0.16 11-12 | >999        | 360 | MT20           | 197/144  |
| TCDL                                                                      | 10.0  | Lumber DOL           | 1.15 | BC       | 0.68 | Vert(CT)                  | -0.36 11-12 | >935        | 240 |                |          |
| BCLL                                                                      | 0.0 * | Rep Stress Incr      | YES  | WB       | 0.74 | Horz(CT)                  | 0.09 9      | n/a         | n/a |                |          |
| BCDL                                                                      | 10.0  | Code IRC2018/TPI2014 |      | Matrix-S |      | Wind(LL)                  | 0.10 11-12  | >999        | 240 | Weight: 147 lb | FT = 10% |

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2 \*Except\*  
 4-13,6-10: 2x3 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 4-11,7-11,7-9: 2x4 SPF No.2, 2-15: 2x6 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-4 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
 1 Row at midpt 6-11  
 WEBS 1 Row at midpt 4-11, 8-9, 7-9

#### REACTIONS.

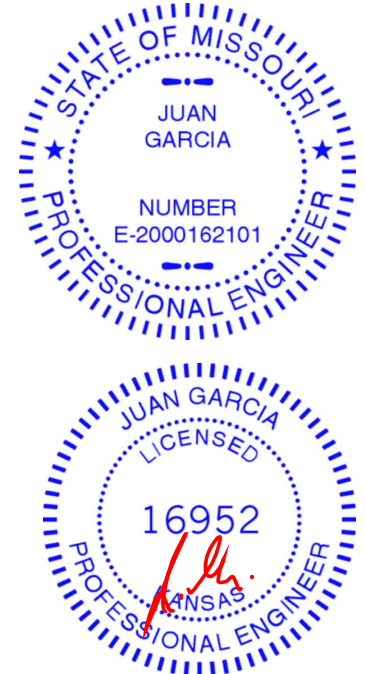
(size) 15=0-3-8, 9=0-3-8  
 Max Horz 15=402(LC 8)  
 Max Uplift 15=-184(LC 8), 9=-257(LC 8)  
 Max Grav 15=1339(LC 1), 9=1258(LC 1)

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

TOP CHORD 2-3=-2324/271, 3-4=-2024/303, 4-6=-945/134, 6-7=-898/235, 2-15=-1270/219  
 BOT CHORD 14-15=-534/754, 4-12=-42/583, 11-12=-485/1796, 6-11=-434/226  
 WEBS 3-14=-269/188, 12-14=-553/2013, 3-12=-292/94, 4-11=-1243/350, 7-11=-359/1369,  
 2-14=-40/1307, 9-11=-69/325, 7-9=-1188/292

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=184, 9=257.
- This truss 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 March 20 2020

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AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
 LEE'S SUMMIT, MISSOURI

**MiTek**  
 04/16/2020  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

|        |       |              |     |     |           |           |
|--------|-------|--------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type   | Qty | Ply | Lot 84 MN | I40701750 |
| 400148 | A5    | Roof Special | 2   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:48 2020 Page 1  
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|        |       |        |         |        |        |        |
|--------|-------|--------|---------|--------|--------|--------|
| 0-10-8 | 3-3-8 | 9-4-4  | 16-6-11 | 21-8-8 | 25-1-3 | 28-4-0 |
| 0-10-8 | 3-3-8 | 6-0-12 | 7-2-8   | 5-1-13 | 3-4-11 | 3-2-13 |

5x7 =

Scale = 1:65.5

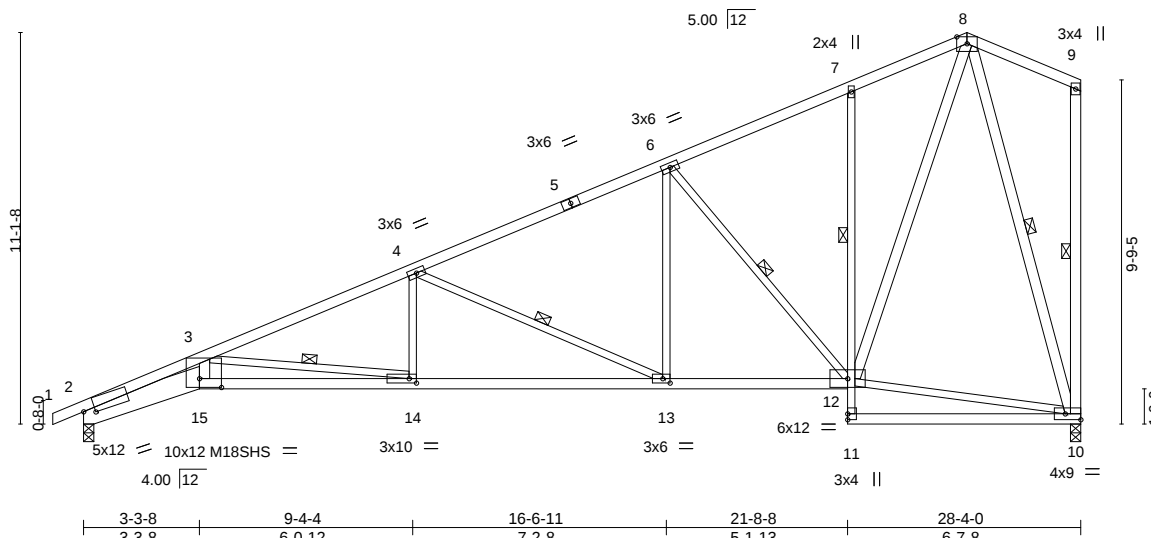


Plate Offsets (X,Y)-- [2:0-3-15,0-1-6], [10:Edge,0-2-0], [13:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-7-8,0-3-0]

| 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 0.93  | Vert(LL) | -0.34 14-15 | >999   | 360 | MT20           | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.79  | Vert(CT) | -0.62 14-15 | >541   | 240 | M18SHS         | 197/144  |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.77  | Horz(CT) | 0.27 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S | Wind(LL) | 0.30 14-15  | >999   | 240 | Weight: 148 lb | FT = 10% |

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2 \*Except\*  
2-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E, 7-11: 2x3 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
3-15,8-12,9-10,8-10: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-0-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 7-5-15 oc bracing. Except:  
1 Row at midpt 7-12  
WEBS 1 Row at midpt 3-14, 4-13, 6-12, 9-10, 8-10

#### REACTIONS.

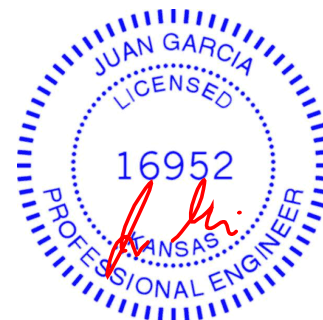
(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=414(LC 7)  
Max Uplift 2=-215(LC 8), 10=-225(LC 8)  
Max Grav 2=1335(LC 1), 10=1261(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5641/1101, 3-4=-2773/465, 4-6=-1637/285, 6-7=-890/210, 7-8=-855/282  
BOT CHORD 2-15=-1206/5179, 14-15=-1095/4639, 13-14=-524/2527, 12-13=-233/1417, 7-12=-289/152  
WEBS 3-15=-296/1592, 3-14=-2131/576, 4-14=0/469, 4-13=-1218/319, 6-13=-46/626, 6-12=-1045/272, 8-12=-320/1306, 10-12=-157/284, 8-10=-1184/204

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=215, 10=225.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 20 2020  
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AS NOTED ON PLANS REVIEW  
CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI  
MiTek®  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

|        |       |              |     |     |           |           |
|--------|-------|--------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type   | Qty | Ply | Lot 84 MN | I40701751 |
| 400148 | A6    | Roof Special | 2   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

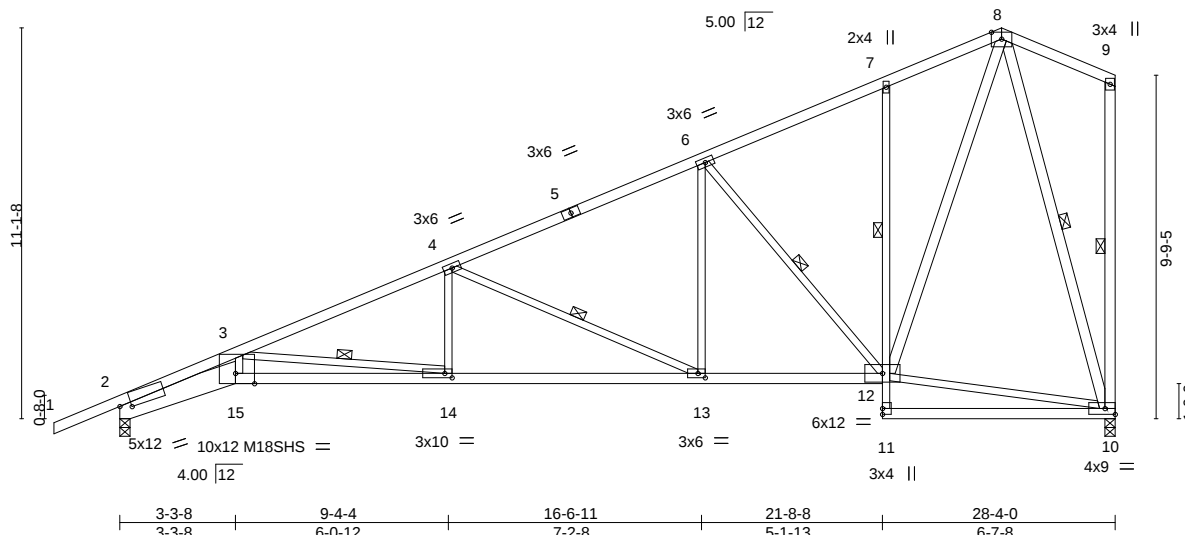
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:50 2020 Page 1

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|        |       |        |         |        |        |        |
|--------|-------|--------|---------|--------|--------|--------|
| 1-10-8 | 3-3-8 | 9-4-4  | 16-6-11 | 21-8-8 | 25-1-3 | 28-4-0 |
| 1-10-8 | 3-3-8 | 6-0-12 | 7-2-8   | 5-1-13 | 3-4-11 | 3-2-13 |

5x7 =

Scale = 1:65.6



|                       |                                                                       |
|-----------------------|-----------------------------------------------------------------------|
| Plate Offsets (X,Y)-- | [2:0-3-15,0-1-6], [13:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-6-8,Edge] |
|-----------------------|-----------------------------------------------------------------------|

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.99  | Vert(LL) | -0.33 14-15 | >999   | 360 | MT20           | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.78  | Vert(CT) | -0.61 14-15 | >547   | 240 | M18SHS         | 197/144  |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.77  | Horz(CT) | 0.27 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S | Wind(LL) | 0.29 14-15  | >999   | 240 | Weight: 149 lb | FT = 10% |

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2 \*Except\*  
 2-15: 2x8 SP DSS, 12-15: 2x4 SPF 2100F 1.8E, 7-11: 2x3 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 8-12,9-10,8-10: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-1-12 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 7-7-5 oc bracing. Except:  
 1 Row at midpt 7-12  
 WEBS 1 Row at midpt 3-14, 4-13, 6-12, 9-10, 8-10

#### REACTIONS.

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=423(LC 7)  
 Max Uplift 2=240(LC 8), 10=223(LC 8)  
 Max Grav 2=1408(LC 1), 10=1257(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5455/1042, 3-4=-2751/457, 4-6=-1629/282, 6-7=-887/209, 7-8=-852/281  
 BOT CHORD 2-15=-1148/4993, 14-15=-1062/4568, 13-14=-516/2506, 12-13=-231/1410, 7-12=-290/152  
 WEBS 3-15=-265/1494, 3-14=-2079/550, 4-14=0/465, 4-13=-1202/313, 6-13=-44/620,  
 6-12=-1038/270, 8-12=-318/1301, 10-12=-157/283, 8-10=-1180/203

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=240, 10=223.
- This truss 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
 LEE'S SUMMIT, MISSOURI

04/16/2020  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

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|                          |       |              |     |     |           |           |
|--------------------------|-------|--------------|-----|-----|-----------|-----------|
| Job                      | Truss | Truss Type   | Qty | Ply | Lot 84 MN | 140701752 |
| 400148                   | A7    | Roof Special | 1   | 1   |           |           |
| Job Reference (optional) |       |              |     |     |           |           |

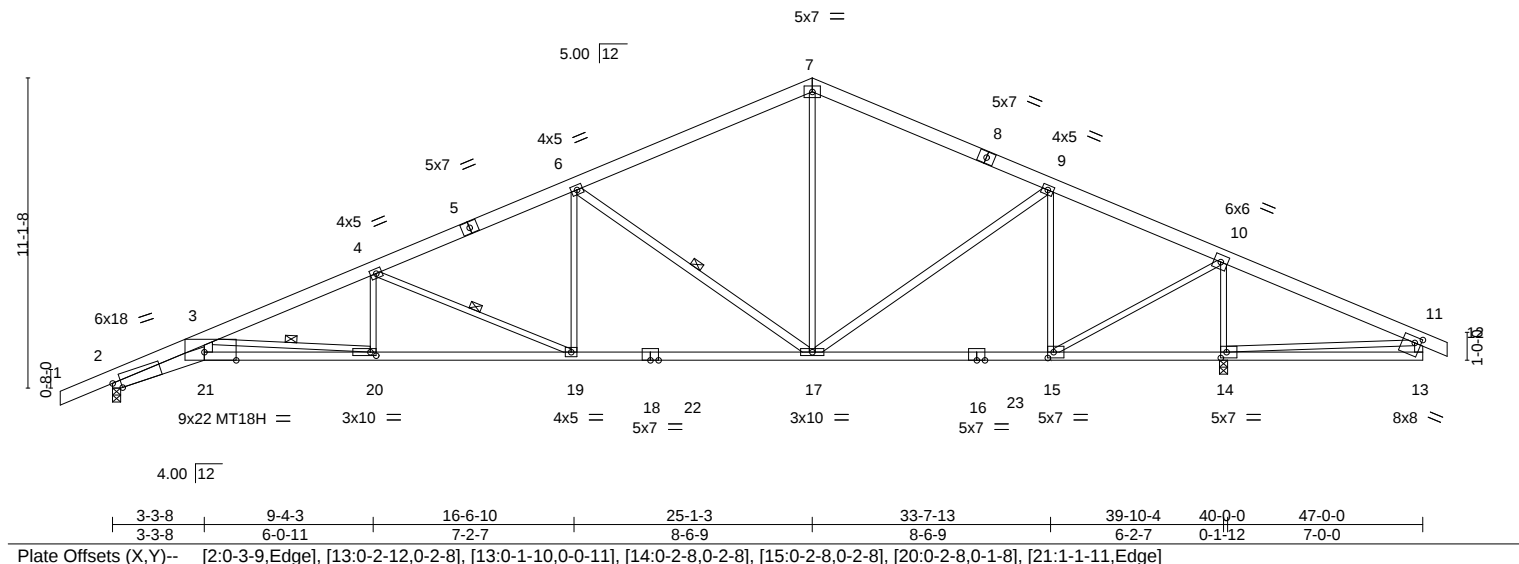
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:51 2020 Page 1

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|        |       |        |         |        |         |         |        |         |
|--------|-------|--------|---------|--------|---------|---------|--------|---------|
| 1-10-8 | 3-3-8 | 9-4-3  | 16-6-10 | 25-1-3 | 33-7-13 | 39-10-4 | 47-0-0 | 47-10-8 |
| 1-10-8 | 3-3-8 | 6-0-11 | 7-2-7   | 8-6-9  | 8-6-9   | 6-2-7   | 7-1-12 | 0-10-8  |

Scale = 1:82.6



| 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) | -0.51    | 20-21  | >940 | MT20           | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.98  | Vert(CT) | -0.89    | 20-21  | >536 | MT18H          | 197/144  |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.94  | Horz(CT) | 0.38     | 14     | n/a  |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S | Wind(LL) | 0.37     | 20-21  | >999 |                |          |
|               |                      |       |          |          |          |        |      | Weight: 221 lb | FT = 10% |

#### LUMBER-

TOP CHORD 2x6 SPF No.2 \*Except\*  
1-5: 2x6 SPF 1650F 1.4E  
BOT CHORD 2x4 SPF 2100F 1.8E \*Except\*  
2-21: 2x6 SPF 1650F 1.4E  
WEBS 2x3 SPF No.2 \*Except\*  
3-21,6-17,9-17,11-13: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 3-20, 4-19, 6-17

#### REACTIONS.

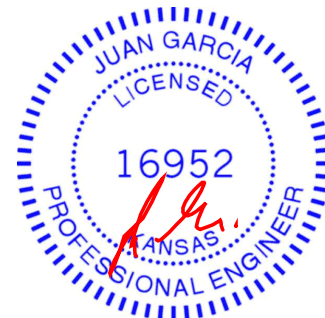
(size) 2=0-3-8, 14=0-3-8 (req. 0-4-3)  
Max Horz 2=225(LC 8)  
Max Uplift 2=307(LC 8), 14=327(LC 9)  
Max Grav 2=1924(LC 2), 14=2669(LC 2)

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

TOP CHORD 2-3=-7667/1263, 3-4=-4474/671, 4-6=-3166/486, 6-7=-1916/319, 7-9=-1915/346, 9-10=-1495/220, 10-11=-231/801  
BOT CHORD 2-21=-1327/6992, 20-21=-1193/6175, 19-20=-712/4154, 17-19=-412/2843, 15-17=-72/1313, 14-15=-641/245  
WEBS 3-21=-339/2256, 3-20=-2035/484, 4-20=0/492, 4-19=-1433/328, 6-19=-35/883, 6-17=-1440/368, 7-17=-80/916, 9-17=-50/474, 9-15=-929/175, 10-15=-168/2234, 10-14=-2346/382, 11-14=-766/289

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
- 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) except (jt=lb) 2=307, 14=327.
- 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.



March 20 2020  
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AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

|                          |       |              |     |     |           |           |
|--------------------------|-------|--------------|-----|-----|-----------|-----------|
| Job                      | Truss | Truss Type   | Qty | Ply | Lot 84 MN | 140701753 |
| 400148                   | A8    | Roof Special | 2   | 1   |           |           |
| Job Reference (optional) |       |              |     |     |           |           |

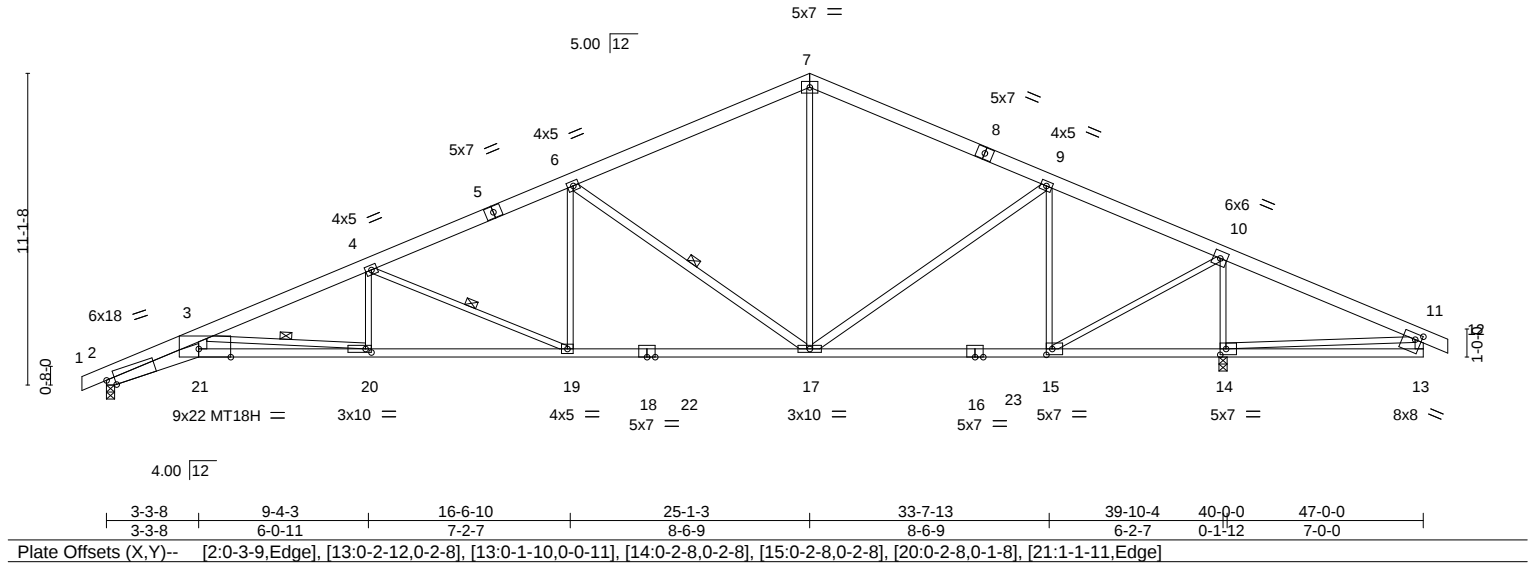
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:52 2020 Page 1

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|        |       |        |         |        |         |         |        |         |
|--------|-------|--------|---------|--------|---------|---------|--------|---------|
| 0-10-8 | 3-3-8 | 9-4-3  | 16-6-10 | 25-1-3 | 33-7-13 | 39-10-4 | 47-0-0 | 47-10-8 |
| 0-10-8 | 3-3-8 | 6-0-11 | 7-2-7   | 8-6-9  | 8-6-9   | 6-2-7   | 7-1-12 | 0-10-8  |

Scale = 1:82.2



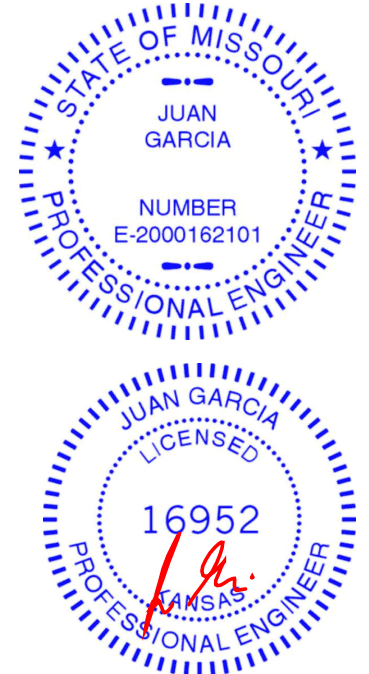
| LOADING (psf) |       | SPACING-             |      | CSI.     |      | DEFL.    |                  | PLATES |  | GRIP           |          |
|---------------|-------|----------------------|------|----------|------|----------|------------------|--------|--|----------------|----------|
| TCLL          | 25.0  | Plate Grip DOL       | 1.15 | TC       | 0.82 | Vert(LL) | -0.51 20-21 >925 | MT20   |  | 197/144        |          |
| TCDL          | 10.0  | Lumber DOL           | 1.15 | BC       | 0.99 | Vert(CT) | -0.90 20-21 >529 | MT18H  |  | 197/144        |          |
| BCLL          | 0.0 * | Rep Stress Incr      | YES  | WB       | 0.94 | Horz(CT) | 0.38 14 n/a n/a  |        |  |                |          |
| BCDL          | 10.0  | Code IRC2018/TPI2014 |      | Matrix-S |      | Wind(LL) | 0.38 20-21 >999  |        |  | Weight: 219 lb | FT = 10% |

| LUMBER-   |                                                             | BRACING-  |                                                                                       |
|-----------|-------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|
| TOP CHORD | 2x6 SPF No.2 *Except*<br>1-5: 2x6 SPF 1650F 1.4E            | TOP CHORD | Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. |
| BOT CHORD | 2x4 SPF 2100F 1.8E *Except*<br>2-21: 2x6 SPF 1650F 1.4E     | BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing.                                   |
| WEBS      | 2x3 SPF No.2 *Except*<br>3-21,6-17,9-17,11-13: 2x4 SPF No.2 | WEBS      | 1 Row at midpt 3-20, 4-19, 6-17                                                       |

| REACTIONS. |                                |
|------------|--------------------------------|
| (size)     | 2=0-3-8, 14=0-3-8 (req. 0-4-3) |
| Max Horz   | 2=210(LC 8)                    |
| Max Uplift | 2=283(LC 8), 14=327(LC 9)      |
| Max Grav   | 2=1864(LC 2), 14=2671(LC 2)    |

| FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD                                                                            | 2-3=-7780/1314, 3-4=-4498/682, 4-6=-3175/490, 6-7=-1920/321, 7-9=-1919/348, 9-10=-1497/221, 10-11=-231/801                                                                            |
| BOT CHORD                                                                            | 2-21=-1381/7104, 20-21=-1238/6272, 19-20=-723/4177, 17-19=-415/2851, 15-17=-73/1315, 14-15=-641/245                                                                                   |
| WEBS                                                                                 | 3-21=-359/2300, 3-20=-2109/518, 4-20=0/501, 4-19=-1448/336, 6-19=-38/889, 6-17=-1446/371, 7-17=-81/918, 9-17=-51/475, 9-15=-931/175, 10-15=-169/2237, 10-14=-2348/382, 11-14=-766/289 |

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
  - 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) except (jt=lb) 2=283, 14=327.
  - 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.



March 20 2020  
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AS NOTED ON PLANS REVIEW  
CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI  
MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

|        |       |              |     |     |           |           |
|--------|-------|--------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type   | Qty | Ply | Lot 84 MN | 140701754 |
| 400148 | A9    | Roof Special | 4   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

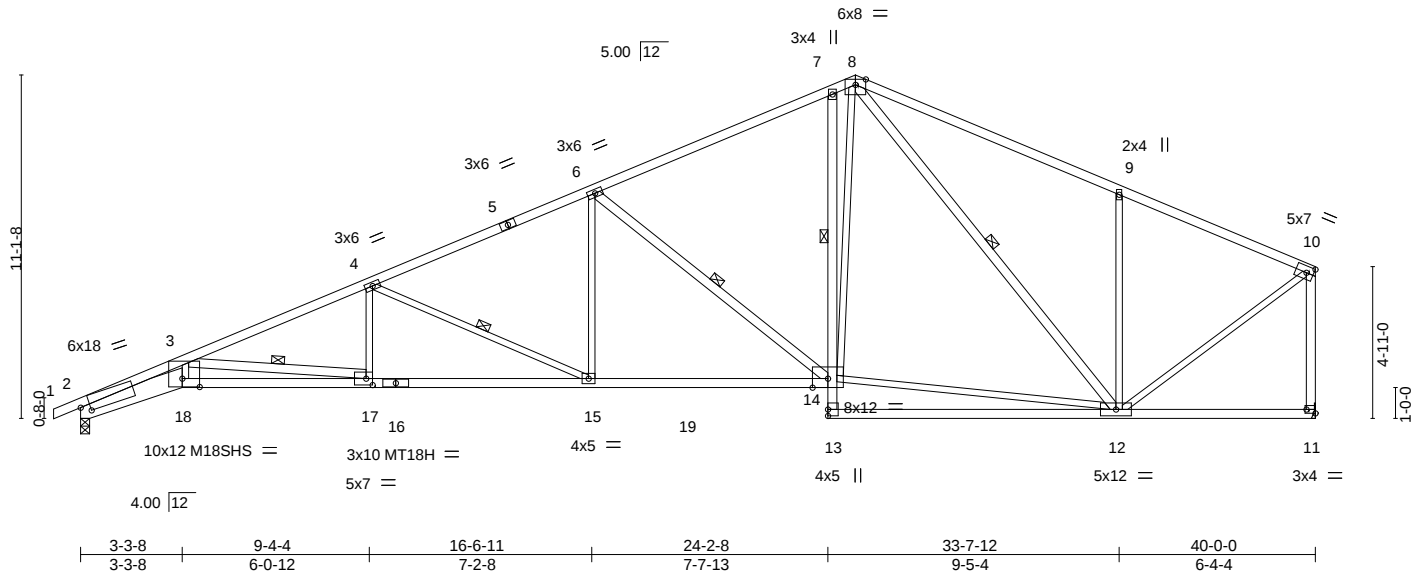
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:54 2020 Page 1

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Job Reference (optional)

|        |       |        |         |        |         |         |        |
|--------|-------|--------|---------|--------|---------|---------|--------|
| 0-10-8 | 3-3-8 | 9-4-4  | 16-6-11 | 24-2-8 | 25-1-3  | 33-7-12 | 40-0-0 |
| 0-10-8 | 3-3-8 | 6-0-12 | 7-2-8   | 7-7-13 | 0-10-11 | 8-6-8   | 6-4-4  |

Scale = 1:74.6



| 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 1.00  | Vert(LL) | -0.51 17-18 | >926   | 360 | MT20           | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.97  | Vert(CT) | -0.90 17-18 | >528   | 240 | MT18H          | 197/144  |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.84  | Horz(CT) | 0.41 11     | n/a    | n/a | M18SHS         | 197/144  |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S | Wind(LL) | 0.38 17-18  | >999   | 240 | Weight: 194 lb | FT = 10% |

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
1-5: 2x4 SPF 2100F 1.8E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
2-18: 2x8 SP DSS, 16-18: 2x4 SPF 2400F 2.0E  
14-16: 2x4 SPF 2100F 1.8E  
WEBS 2x3 SPF No.2 \*Except\*  
3-17,6-14,8-12,10-11: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:  
1 Row at midpt 7-14  
WEBS 1 Row at midpt 3-17, 4-15, 6-14, 8-12

#### REACTIONS.

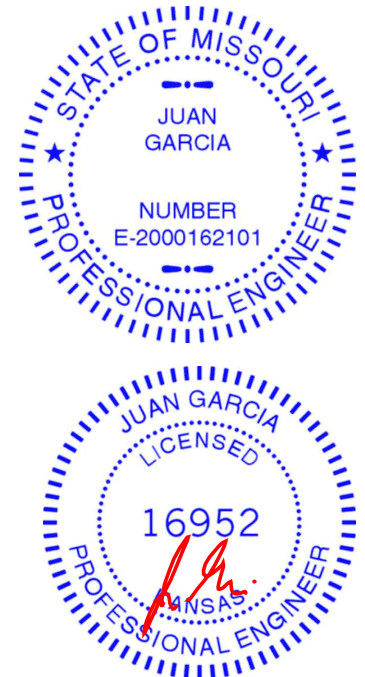
(size) 2=0-3-8, 11=Mechanical  
Max Horz 2=207(LC 12)  
Max Uplift 2=-283(LC 8), 11=-184(LC 9)  
Max Grav 2=1921(LC 2), 11=1857(LC 2)

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

TOP CHORD 2-3=-8546/1410, 3-4=-4555/665, 4-6=-3290/476, 6-7=-2132/342, 7-8=-1983/431,  
8-9=-1646/314, 9-10=-1603/205, 10-11=-1778/207  
BOT CHORD 2-18=-1477/7872, 17-18=-1359/7168, 15-17=-692/4187, 14-15=-397/2963, 7-14=-383/232  
WEBS 3-18=-372/2445, 3-17=-3005/672, 4-17=-1/596, 4-15=-1344/324, 6-15=-34/874,  
6-14=-1382/328, 12-14=-110/1576, 8-14=-358/1540, 8-12=-616/90, 9-12=-597/310,  
10-12=-152/1763

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 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.
- Refer to girder(s) for truss to truss connections.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=283, 11=184.
- This truss 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek

04/16/2020

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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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.

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|                          |       |              |     |     |           |           |
|--------------------------|-------|--------------|-----|-----|-----------|-----------|
| Job                      | Truss | Truss Type   | Qty | Ply | Lot 84 MN | 140701756 |
| 400148                   | A11   | Roof Special | 1   | 1   |           |           |
| Job Reference (optional) |       |              |     |     |           |           |

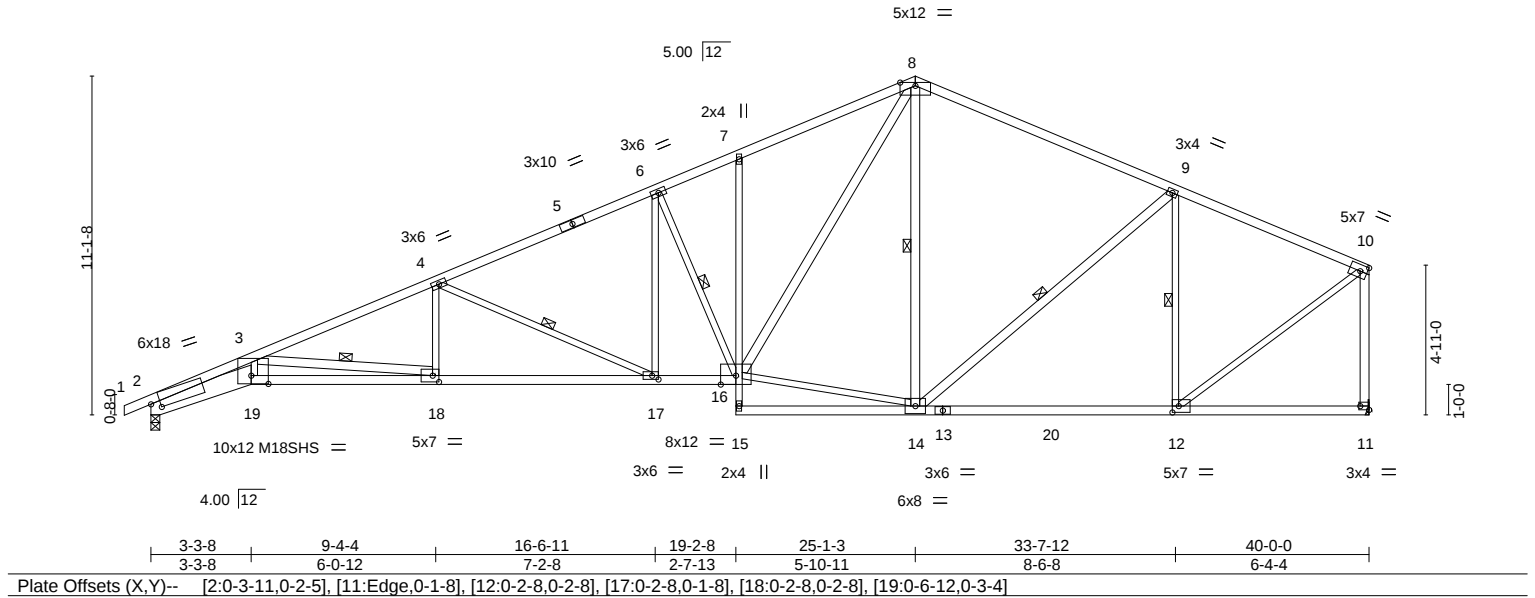
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:37 2020 Page 1

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|        |       |        |         |        |         |         |        |
|--------|-------|--------|---------|--------|---------|---------|--------|
| 0-10-8 | 3-3-8 | 9-4-4  | 16-6-11 | 19-2-8 | 25-1-3  | 33-7-12 | 40-0-0 |
| 0-10-8 | 3-3-8 | 6-0-12 | 7-2-8   | 2-7-13 | 5-10-11 | 8-6-8   | 6-4-4  |

Scale = 1:75.7



| LOADING (psf) |       | SPACING-             |      | CSI.     |      | DEFL.    |                      | PLATES |         | GRIP           |          |
|---------------|-------|----------------------|------|----------|------|----------|----------------------|--------|---------|----------------|----------|
| TCLL          | 25.0  | Plate Grip DOL       | 1.15 | TC       | 0.95 | Vert(LL) | -0.50 18-19 >955 360 | MT20   | 197/144 |                |          |
| TCDL          | 10.0  | Lumber DOL           | 1.15 | BC       | 0.96 | Vert(CT) | -0.88 18-19 >541 240 | M18SHS | 197/144 |                |          |
| BCLL          | 0.0 * | Rep Stress Incr      | YES  | WB       | 0.88 | Horz(CT) | 0.39 11 n/a n/a      |        |         |                |          |
| BCDL          | 10.0  | Code IRC2018/TPI2014 |      | Matrix-S |      | Wind(LL) | 0.37 18-19 >999 240  |        |         | Weight: 194 lb | FT = 10% |

| LUMBER-   |                                                                                          | BRACING-  |                                                                                        |
|-----------|------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------|
| TOP CHORD | 2x4 SPF 2100F 1.8E *Except*<br>5-8: 2x4 SPF No.2                                         | TOP CHORD | Structural wood sheathing directly applied or 1-11-1 oc purlins, except end verticals. |
| BOT CHORD | 2x4 SPF No.2 *Except*<br>2-19: 2x8 SP DSS, 16-19: 2x4 SPF 2400F 2.0E, 7-15: 2x3 SPF No.2 | BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing.                                    |
| WEBS      | 2x3 SPF No.2 *Except*<br>3-18,8-16,8-14,9-14,10-11: 2x4 SPF No.2                         | WEBS      | 1 Row at midpt 3-18, 4-17, 6-16, 8-14, 9-14, 9-12                                      |

| REACTIONS. |                             |
|------------|-----------------------------|
| (size)     | 2=0-3-8, 11=Mechanical      |
| Max Horz   | 2=207(LC 12)                |
| Max Uplift | 2=-283(LC 8), 11=-184(LC 9) |
| Max Grav   | 2=1909(LC 2), 11=1885(LC 2) |

| FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD                                                                            | 2-3=-8454/1402, 3-4=-4538/669, 4-6=-3220/472, 6-7=-2738/456, 7-8=-2758/539, 8-9=-1876/335, 9-10=-1615/206, 10-11=-1807/209                                                            |
| BOT CHORD                                                                            | 2-19=-1469/7784, 18-19=-1351/7089, 17-18=-698/4176, 16-17=-388/2890, 7-16=-291/144, 12-14=-161/1446                                                                                   |
| WEBS                                                                                 | 3-19=-373/2412, 3-18=-2938/658, 4-18=0/616, 4-17=-1411/340, 6-17=-63/789, 6-16=-989/226, 14-16=-102/1546, 8-16=-398/1683, 8-14=-294/145, 9-14=-50/388, 9-12=-854/196, 10-12=-158/1790 |

| NOTES- |                                                                                                                                                                                                                                                                   |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1)     | Unbalanced roof live loads have been considered for this design.                                                                                                                                                                                                  |
| 2)     | Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 |
| 3)     | All plates are MT20 plates unless otherwise indicated.                                                                                                                                                                                                            |
| 4)     | This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.                                                                                                                                                       |
| 5)     | * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.                                               |
| 6)     | 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) except (jt=lb) 2=283, 11=184.                                                                                                               |
| 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.                                                                                                            |



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CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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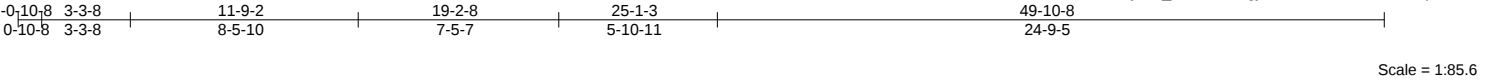
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|        |       |            |     |     |           |           |
|--------|-------|------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN | 140701757 |
| 400148 | A12   | GABLE      | 1   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:41 2020 Page 1

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|                        |                                                                                                                                                                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plate Offsets (X, Y)-- | [2:0-3-13,0-1-9], [6:0-0-0,3-4-9], [6:0-0-0,3-4-9], [6:0-2-0,3-5-9], [12:0-4-0,0-4-8], [19:0-1-2,0-2-12], [20:0-0-0,0-2-12], [35:0-9-0,0-2-1], [36:0-2-8,0-1-8], [37:0-2-0,0-5-0], [44:0-1-11,0-0-4], [47:0-1-11,0-0-4], [50:0-1-11,0-0-4] |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 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 0.60  | Vert(LL) | -0.16 36-37 | >999   | 360 | MT20           | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.66  | Vert(CT) | -0.36 36-37 | >631   | 240 | MT18H          | 197/144  |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.89  | Horz(CT) | 0.08 34     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S | Wind(LL) | 0.13 36-37  | >999   | 240 | Weight: 332 lb | FT = 10% |

|                |                                                                       |                 |                                                                                                                          |
|----------------|-----------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b> |                                                                       | <b>BRACING-</b> |                                                                                                                          |
| TOP CHORD      | 2x6 SPF No.2                                                          | TOP CHORD       | Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals.                                  |
| BOT CHORD      | 2x4 SPF No.2 *Except*<br>2-37: 2x6 SPF No.2, 6-34: 2x3 SPF No.2       | BOT CHORD       | Rigid ceiling directly applied or 6-0-0 oc bracing, Except:<br>10-0-0 oc bracing: 2-37,36-37<br>3-3-4 oc bracing: 34-35. |
| WEBS           | 2x3 SPF No.2 *Except*<br>7-35,7-33: 2x4 SPF No.2, 19-20: 2x6 SPF No.2 | WEBS            | 1 Row at midpt 3-36, 4-35, 7-35, 8-32, 9-31, 10-30                                                                       |
| OTHERS         | 2x4 SPF No.2                                                          |                 |                                                                                                                          |

|                   |                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>REACTIONS.</b> | All bearings 30-8-0 except (jt=length) 2=0-3-8.                                                                                         |
| (lb) - Max Horz   | 2=194(LC 12)                                                                                                                            |
| Max Uplift        | All uplift 100 lb or less at joint(s) 2, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22 except 34=-527(LC 8), 20=-310(LC 21), 21=-100(LC 9)     |
| Max Grav          | All reactions 250 lb or less at joint(s) 33, 20, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22 except 2=482(LC 1), 34=2092(LC 1), 21=413(LC 1) |

|                |                                                                                                                                                                                                                                                                 |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FORCES.</b> | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.                                                                                                                                                                                    |
| TOP CHORD      | 2-3=-1464/211, 3-4=-174/362, 4-6=-289/1329, 6-7=-160/1303, 7-8=0/624, 8-9=0/589, 9-10=0/588, 10-11=-20/589, 11-12=-41/588, 12-13=-62/587, 13-14=-82/585, 14-15=-103/586, 15-16=-124/586, 16-17=-144/589, 17-18=-161/570, 18-19=-205/637, 19-20=-94/298          |
| BOT CHORD      | 2-37=-359/1317, 36-37=-338/1167, 34-35=-2043/558, 6-35=-472/242, 32-33=-527/193, 31-32=-527/193, 30-31=-527/193, 29-30=-527/193, 27-29=-527/193, 26-27=-526/193, 25-26=-526/193, 24-25=-526/193, 23-24=-526/193, 22-23=-526/193, 21-22=-526/193, 20-21=-526/193 |
| WEBS           | 3-37=-26/514, 3-36=-1331/423, 4-36=0/438, 4-35=-1124/292, 33-35=-498/194, 7-35=-1222/285, 18-21=-313/119                                                                                                                                                        |

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - 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.

Continued on page 2



RELEASE FOR CONSTRUCTION March 20 2020

AS NOTED ON PLANS REVIEW  
CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI  
MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

**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/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.

|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701757 |
| 400148 | A12   | GABLE      | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:42 2020 Page 2  
ID:vnPZsGkeTkCad6C?5h?ZN6zZ5mk-boMnaLmnTGqQi8M26HT1cGDuuFNjJEihM8RjgnzZ2qN

- NOTES-**
- 9) 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.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22 except (jt=lb) 34=527, 20=310, 21=100.
  - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek

04/16/2020

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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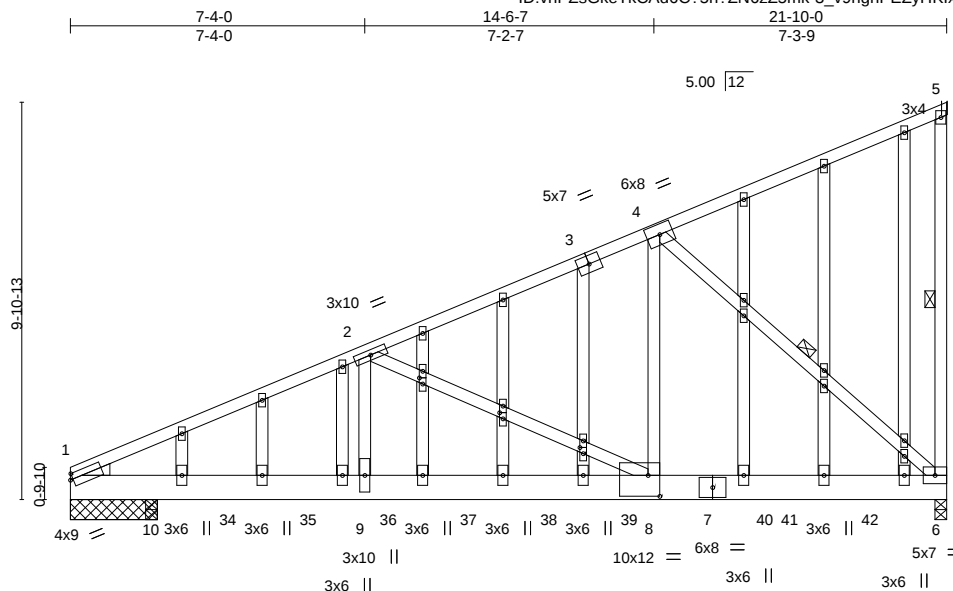
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | 140701758 |
| 400148 | A13   | GABLE      | 1   | 2   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:43 2020 Page 1

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Scale = 1:57.4

|                       |                                                                                                                                 |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Plate Offsets (X,Y)-- | [1:0-0-13,0-1-12], [3:0-1-14,0-0-0], [3:0-0-0,0-1-12], [8:0-3-8,0-6-4], [17:0-1-13,0-1-0], [20:0-1-13,0-1-0], [24:0-1-13,0-1-0] |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.93  | Vert(LL) | -0.16    | 8-9    | >999 | MT20           | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.57  | Vert(CT) | -0.27    | 8-9    | >876 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.97  | Horz(CT) | 0.04     | 6      | n/a  |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S | Wind(LL) | 0.08     | 8-9    | >999 | Weight: 317 lb | FT = 10% |

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x8 SP DSS  
 WEBS 2x4 SPF No.2  
 OTHERS 2x4 SPF No.2  
 WEDGE  
 Left: 2x4 SP No.3

#### BRACING-

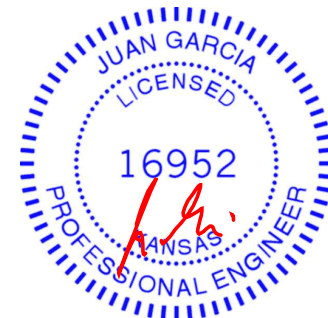
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-6, 4-6

**REACTIONS.** (size) 6=0-3-8 (req. 0-4-2), 1=2-2-0, 10=0-3-8  
 Max Horz 1=410(LC 22)  
 Max Uplift 6=290(LC 8), 1=103(LC 8), 10=219(LC 8)  
 Max Grav 6=5270(LC 2), 1=2004(LC 2), 10=3887(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-7858/301, 2-4=-4978/217  
 BOT CHORD 1-10=-388/7048, 9-10=-388/7048, 8-9=-388/7048, 6-8=-214/4526  
 WEBS 2-9=0/2167, 2-8=-2789/229, 4-8=-93/5459, 4-6=-6049/367

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- 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.
- WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=290, 1=103, 10=219.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Continued on page 2

March 20 2020  
 RELEASE FOR CONSTRUCTION

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AS NOTED ON PLANS REVIEW  
 CODES ADMINISTRATION  
 LEE'S SUMMIT, MISSOURI  
 MiTek®  
 04/16/2020  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

|        |       |            |     |     |                          |
|--------|-------|------------|-----|-----|--------------------------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                |
| 400148 | A13   | GABLE      | 1   | 2   | I40701758                |
|        |       |            |     |     | Job Reference (optional) |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:44 2020 Page 2  
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- NOTES-**
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 912 lb down and 119 lb up at 1-11-4, 914 lb down and 23 lb up at 3-11-4, 914 lb down and 23 lb up at 5-11-4, 914 lb down and 23 lb up at 7-11-4, 914 lb down and 23 lb up at 9-11-4, 914 lb down and 23 lb up at 11-11-4, 912 lb down and 23 lb up at 13-11-4, 899 lb down and 23 lb up at 15-11-4, and 911 lb down and 23 lb up at 17-11-4, and 914 lb down and 23 lb up at 19-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) Studding applied to ply: 1(Front)

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-5=-70, 1-6=-20
- Concentrated Loads (lb)
- Vert: 7=-878(F) 10=-876(F) 34=-878(F) 35=-878(F) 36=-878(F) 37=-878(F) 38=-878(F) 39=-878(F) 41=-878(F) 42=-878(F)

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

**MiTek**  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017


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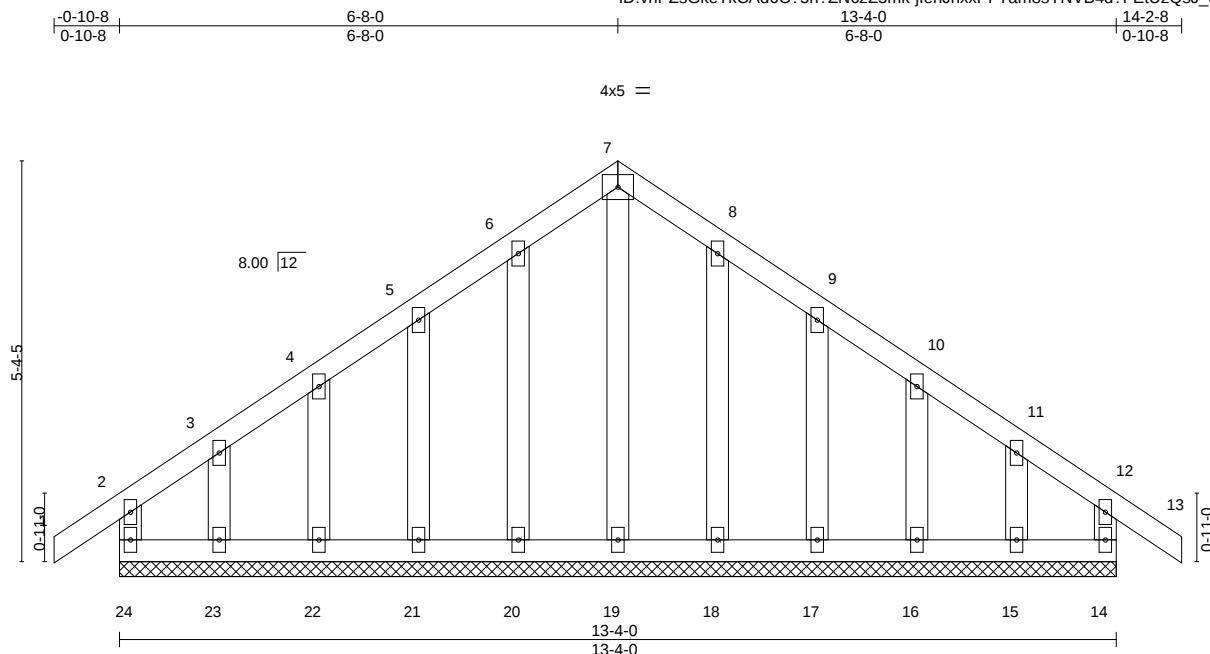
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|        |       |            |     |     |           |           |
|--------|-------|------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN | I40701759 |
| 400148 | B1    | GABLE      | 1   | 1   |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:55 2020 Page 1

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Scale = 1:30.8

| 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 0.07  | Vert(LL) | -0.00 | 13    | n/r    | 120 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.04  | Vert(CT) | -0.00 | 13    | n/r    | 120 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.05  | Horz(CT) | 0.00  | 14    | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-R |          |       |       |        |     | Weight: 66 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 13-4-0.  
(lb) - Max Horz 24=158(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15  
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

#### FORCES.

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 20, 21, 22, 23, 18, 17, 16, 15.
- This truss 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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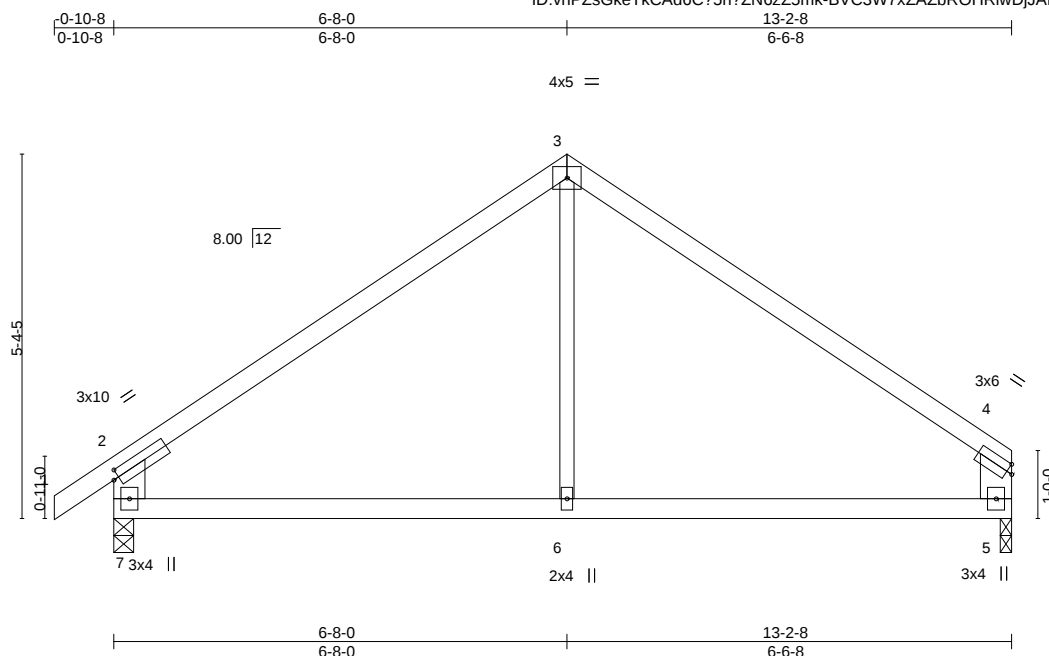
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Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:56 2020 Page 1

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0-10-8 6-8-0 13-2-8  
0-10-8 6-8-0 6-6-8

4x5 = Scale = 1:33.9



|                |                       |                 |                                                                                       |
|----------------|-----------------------|-----------------|---------------------------------------------------------------------------------------|
| <b>LUMBER-</b> |                       | <b>BRACING-</b> |                                                                                       |
| TOP CHORD      | 2x4 SPF No.2          | TOP CHORD       | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD      | 2x4 SPF No.2          |                 |                                                                                       |
| WEBS           | 2x6 SPF No.2 *Except* | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
|                | 3-6: 2x3 SPF No.2     |                 |                                                                                       |

**REACTIONS.** (size) 7=0-3-8, 5=0-2-0  
 Max Horz 7=155(LC 5)  
 Max Uplift 7=-89(LC 8), 5=-62(LC 9)  
 Max Grav 7=654(LC 1), 5=570(LC 1)

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

|           |                                                        |
|-----------|--------------------------------------------------------|
| TOP CHORD | 2-3=-611/108, 3-4=-603/108, 2-7=-590/141, 4-5=-497/111 |
| BOT CHORD | 6-7=-11/393, 5-6=-11/393                               |
| WEBS      | 3-6=0/260                                              |

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (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 at joint(s) 5.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 20, 2020  
**RELEASE FOR CONSTRUCTION**

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CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

**MiTek**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

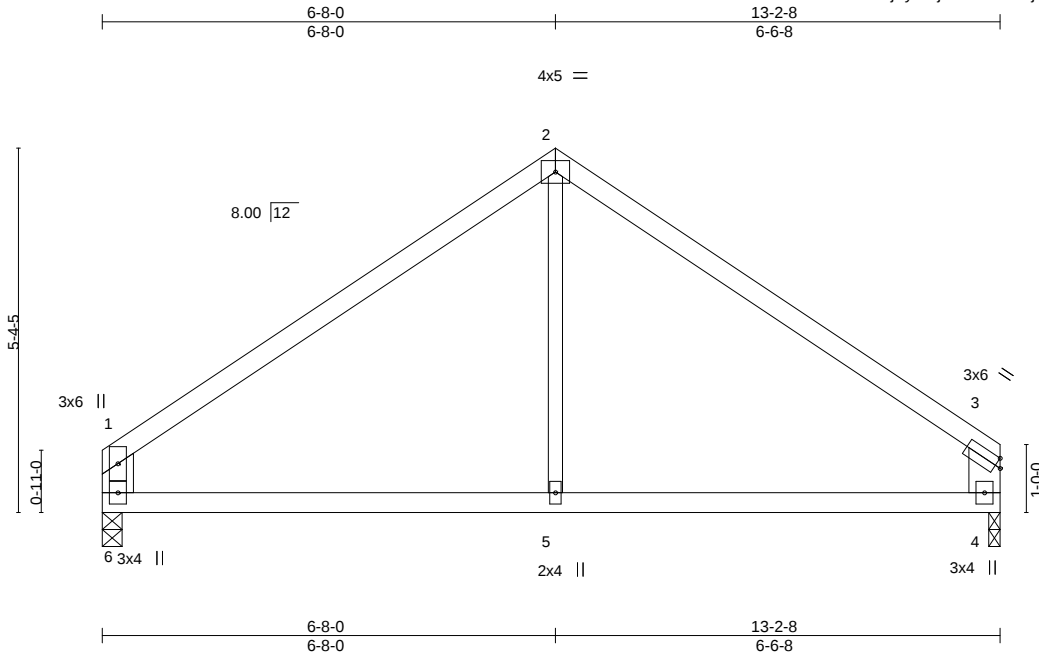


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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701761 |
| 400148 | B3    | Common     | 3   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:57 2020 Page 1  
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Scale = 1:33.9

| 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) | -0.04 | 5-6   | >999   | 360 | MT20          | 197/144  |
| BCDL 10.0     | Lumber DOL           | 1.15  | BC 0.31  | Vert(CT) | -0.09 | 5-6   | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.08  | Horz(CT) | 0.01  | 4     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-R | Wind(LL) | 0.04  | 5-6   | >999   | 240 |               |          |
|               |                      |       |          |          |       |       |        |     | Weight: 40 lb | FT = 10% |

#### 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

#### BRACING-

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

#### REACTIONS.

(size) 6=0-3-8, 4=0-2-0  
Max Horz 6=142(LC 5)  
Max Uplift 6=63(LC 8), 4=62(LC 9)  
Max Grav 6=574(LC 1), 4=574(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-606/106, 2-3=-604/107, 1-6=-499/112, 3-4=-497/110  
BOT CHORD 5-6=-10/395, 4-5=-10/395  
WEBS 2-5=0/254

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 20 2020  
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek

04/16/2020

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

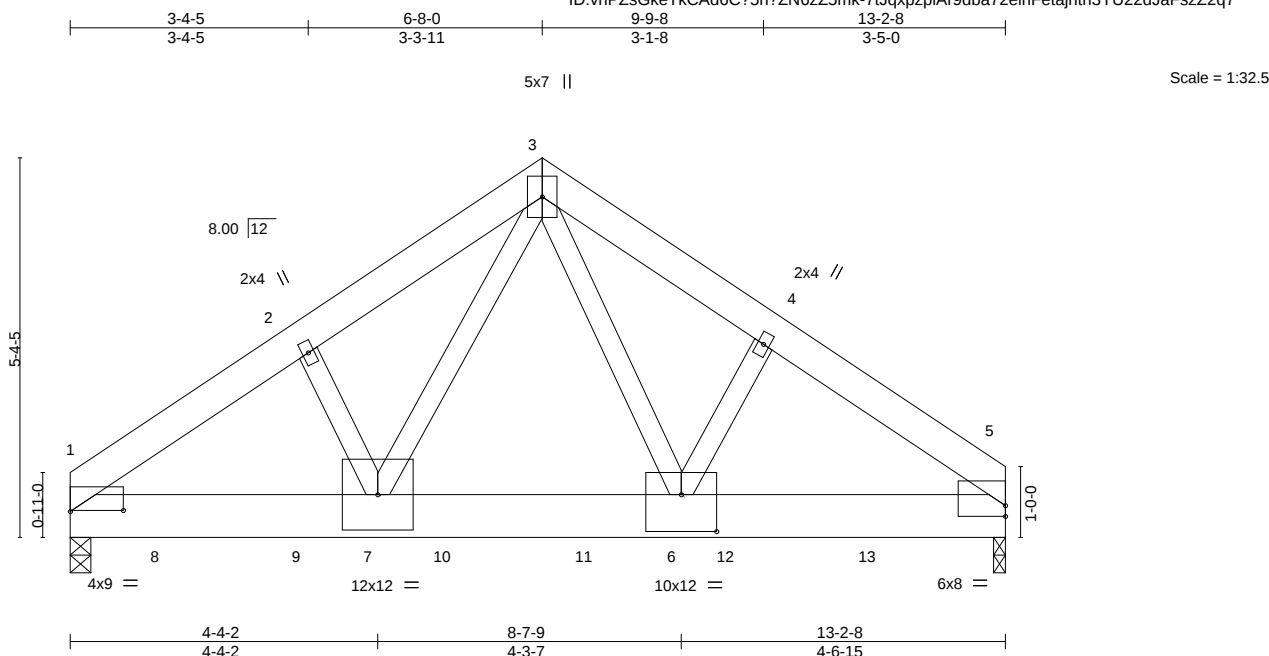
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/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.

|        |       |               |     |     |                          |           |
|--------|-------|---------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type    | Qty | Ply | Lot 84 MN                | I40701762 |
| 400148 | B4    | Common Girder | 1   | 2   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:58 2020 Page 1

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|                                                                          |       |                       |      |             |      |                                  |                    |                |             |
|--------------------------------------------------------------------------|-------|-----------------------|------|-------------|------|----------------------------------|--------------------|----------------|-------------|
| Plate Offsets (X,Y)-- [1:0-9-0,0-0-3], [5:0-0-0,0-1-13], [6:0-6-0,0-6-4] |       |                       |      |             |      |                                  |                    |                |             |
| <b>LOADING</b> (psf)                                                     |       | <b>SPACING-</b> 2-0-0 |      | <b>CSI.</b> |      | <b>DEFL.</b> in (loc) l/defl L/d |                    | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL                                                                     | 25.0  | Plate Grip DOL        | 1.15 | TC          | 0.80 | Vert(LL)                         | -0.05 6-7 >999 360 | MT20           | 197/144     |
| TCDL                                                                     | 10.0  | Lumber DOL            | 1.15 | BC          | 0.51 | Vert(CT)                         | -0.09 6-7 >999 240 |                |             |
| BCLL                                                                     | 0.0 * | Rep Stress Incr       | NO   | WB          | 0.52 | Horz(CT)                         | 0.02 5 n/a n/a     |                |             |
| BCDL                                                                     | 10.0  | Code IRC2018/TPI2014  |      | Matrix-S    |      | Wind(LL)                         | 0.03 6-7 >999 240  | Weight: 173 lb | FT = 10%    |

#### LUMBER-

TOP CHORD 2x6 SPF No.2  
BOT CHORD 2x8 SP DSS  
WEBS 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 1=0-3-8 (req. 0-4-15), 5=0-2-0 (req. 0-4-9)  
Max Horz 1=-125(LC 25)  
Max Uplift 1=-681(LC 8), 5=-626(LC 9)  
Max Grav 1=6282(LC 2), 5=5800(LC 2)

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

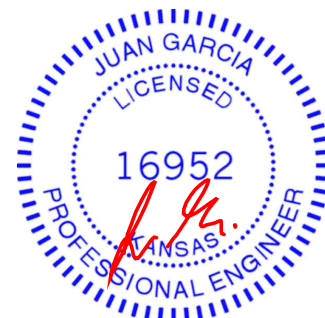
TOP CHORD 1-2=-7438/813, 2-3=-7202/851, 3-4=-7010/823, 4-5=-7226/789  
BOT CHORD 1-7=-661/5751, 6-7=-420/4242, 5-6=-571/5564  
WEBS 2-7=-178/711, 3-7=-491/4021, 3-6=-498/4207, 4-6=-176/719

#### NOTES-

- 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.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=681, 5=626.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1837 lb down and 204 lb up at 1-4-0, 1837 lb down and 204 lb up at 3-4-0, 1837 lb down and 204 lb up at 5-4-0, 1837 lb down and 204 lb up at 7-4-0, and 1865 lb down and 204 lb up at 9-4-0, and 1865 lb down and 204 lb up at 11-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



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CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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|        |       |               |     |     |                          |
|--------|-------|---------------|-----|-----|--------------------------|
| Job    | Truss | Truss Type    | Qty | Ply | Lot 84 MN                |
| 400148 | B4    | Common Girder | 1   | 2   | I40701762                |
|        |       |               |     |     | Job Reference (optional) |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:33:58 2020 Page 2  
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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, 1-5=-20
  - Concentrated Loads (lb)
    - Vert: 8=-1766(B) 9=-1766(B) 10=-1766(B) 11=-1766(B) 12=-1766(B) 13=-1766(B)

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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701763 |
| 400148 | C1    | GABLE      | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

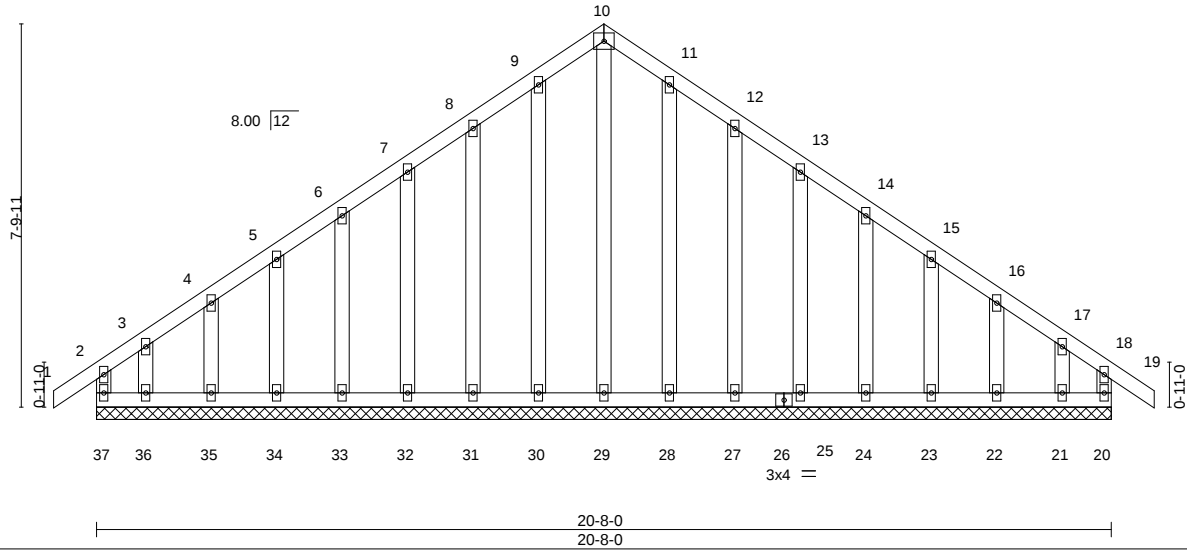
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:00 2020 Page 1

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0-10-8 10-4-0 20-8-0 21-6-8  
0-10-8 10-4-0 10-4-0 0-10-8

4x5 =

Scale = 1:46.9



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.07  | Vert(LL) | -0.00 | 19    | n/r    | 120 | MT20           | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.06  | Vert(CT) | -0.00 | 19    | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.17  | Horz(CT) | 0.00  | 20    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-R |          |       |       |        |     | Weight: 123 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

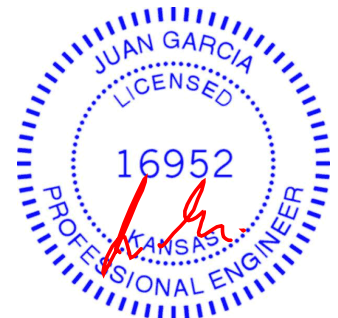
All bearings 20-8-0.  
(lb) - Max Horz 37=-222(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 20, 30, 31, 32, 33, 34, 35, 28, 27, 25, 24, 23, 22 except 37=-145(LC 4), 36=-153(LC 8), 21=-133(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) 37, 20, 29, 30, 31, 32, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21

#### FORCES.

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 30, 31, 32, 33, 34, 35, 28, 27, 25, 24, 23, 22 except (jt=lb) 37=145, 36=153, 21=133.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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LEE'S SUMMIT, MISSOURI

MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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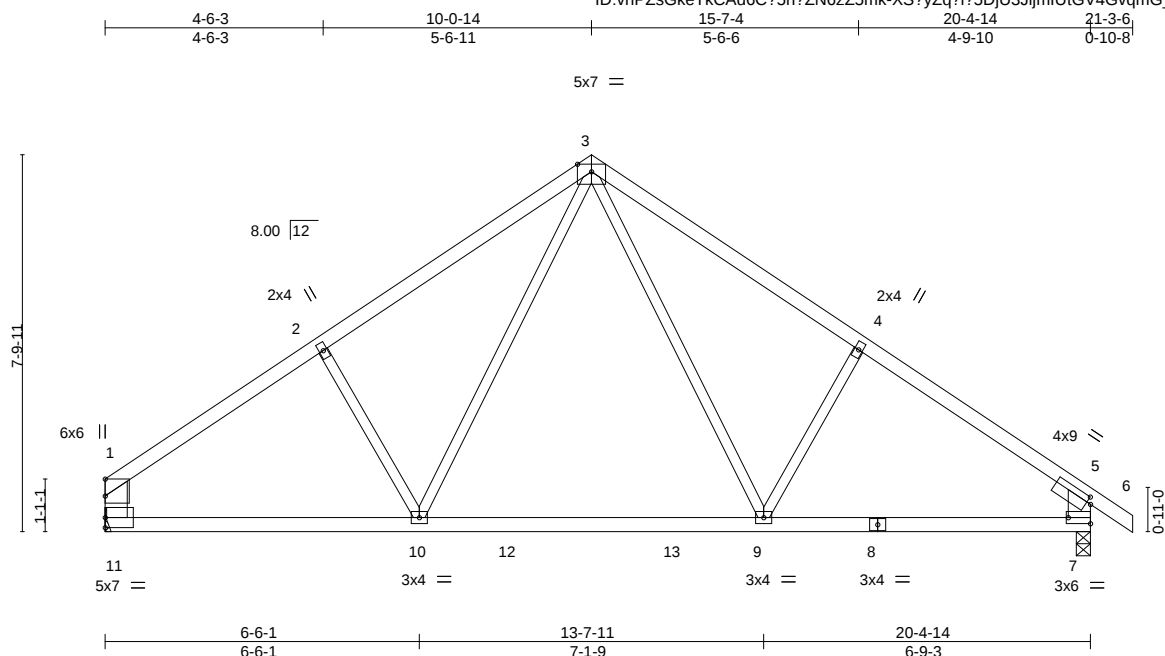
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701764 |
| 400148 | C2    | Common     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:01 2020 Page 1

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Scale: 1/4"=1'

|                                                       |                      |       |             |               |             |        |     |
|-------------------------------------------------------|----------------------|-------|-------------|---------------|-------------|--------|-----|
| Plate Offsets (X,Y)-- [5:0-1-1,0-1-8], [7:Edge,0-1-8] |                      |       |             |               |             |        |     |
| <b>LOADING</b> (psf)                                  | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b>  | in (loc)    | L/defl | L/d |
| TCLL 25.0                                             | Plate Grip DOL       | 1.15  | TC 0.85     | Vert(LL)      | -0.28 9-10  | >867   | 360 |
| TCDL 10.0                                             | Lumber DOL           | 1.15  | BC 0.81     | Vert(CT)      | -0.45 9-10  | >533   | 240 |
| BCLL 0.0 *                                            | Rep Stress Incr      | YES   | WB 0.20     | Horz(CT)      | 0.03 7      | n/a    | n/a |
| BCDL 10.0                                             | Code IRC2018/TPI2014 |       | Matrix-S    | Wind(LL)      | 0.12 9-10   | >999   | 240 |
|                                                       |                      |       |             | <b>PLATES</b> | <b>GRIP</b> |        |     |
|                                                       |                      |       |             | MT20          | 197/144     |        |     |
|                                                       |                      |       |             | Weight: 75 lb | FT = 10%    |        |     |

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 1-11: 2x6 SPF No.2, 5-7: 2x6 SP DSS

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-1 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 11=Mechanical, 7=0-3-8  
 Max Horz 11=-220(LC 4)  
 Max Uplift 11=-99(LC 8), 7=-126(LC 9)  
 Max Grav 11=979(LC 15), 7=1055(LC 16)

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

TOP CHORD 1-2=-1171/149, 2-3=-1036/204, 3-4=-1098/212, 4-5=-1222/155, 1-11=-825/126, 5-7=-930/160  
 BOT CHORD 10-11=-145/1003, 9-10=0/722, 7-9=-45/909  
 WEBS 3-10=-105/424, 3-9=-115/505

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=126.
- This truss 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 March 20 2020

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CODES ADMINISTRATION  
 LEE'S SUMMIT, MISSOURI

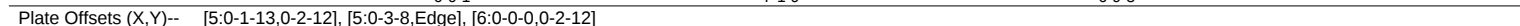
04/16/2020  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

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8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:02 2020 Page 1

Scale: 1/4"=1'

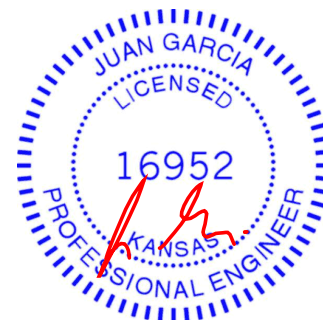


|           |                                                                                       |
|-----------|---------------------------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 3-6-3 oc purlins, except end verticals.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

(size) 10=Mechanical, 6=0-3-8  
 Max Horz 10=-165(LC 4)  
 Max Uplift 10=-3(LC 8), 6=-4(LC 9)  
 Max Grav 10=982(LC 13), 6=983(LC 14)

TOP CHORD 1-2=-1179/37, 2-3=-1042/86, 3-4=-1101/89, 4-5=-1224/38, 1-10=-828/36, 5-6=-840/39  
BOT CHORD 9-10=-419/72, 8-9=0/700, 6-8=0/912  
WEBS 3-9=-42/419, 3-8=-43/490, 4-8=-256/143

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



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|        |       |                        |     |     |           |           |
|--------|-------|------------------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type             | Qty | Ply | Lot 84 MN | I40701766 |
| 400148 | D1    | Common Supported Gable | 1   | 1   |           |           |

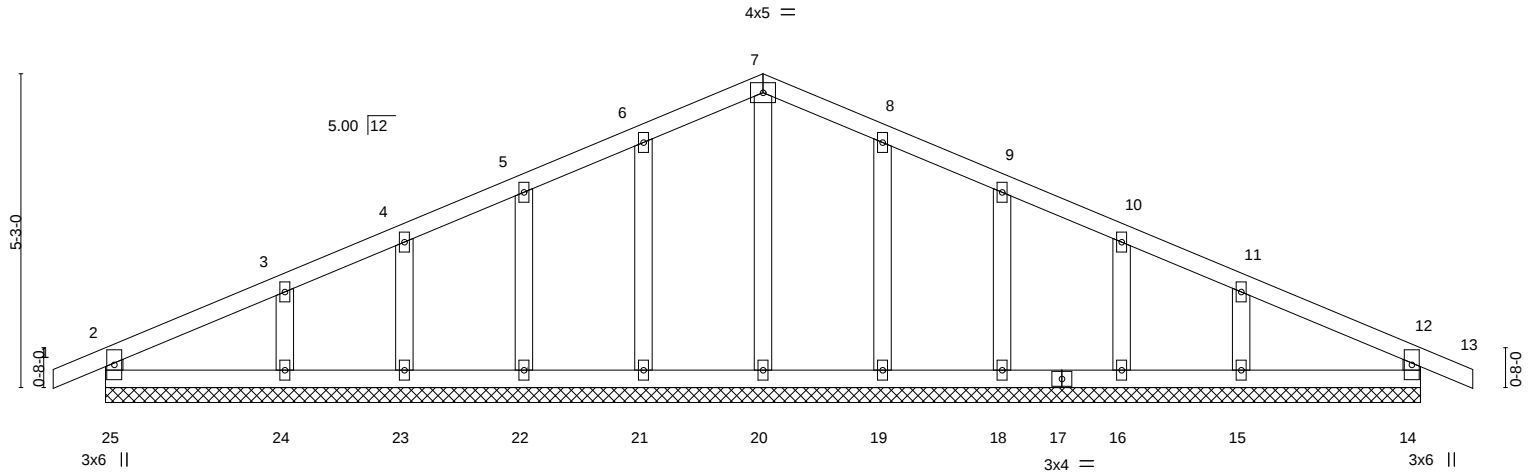
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:03 2020 Page 1

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|        |        |        |         |
|--------|--------|--------|---------|
| 0-10-8 | 11-0-0 | 22-0-0 | 22-10-8 |
| 0-10-8 | 11-0-0 | 11-0-0 | 0-10-8  |

Scale = 1:38.5



| LOADING (psf) |       | SPACING-             |      | CSI.     |      | DEFL.    |       | PLATES        |  | GRIP     |  |
|---------------|-------|----------------------|------|----------|------|----------|-------|---------------|--|----------|--|
| TCLL          | 25.0  | Plate Grip DOL       | 1.15 | TC       | 0.08 | Vert(LL) | -0.00 | MT20          |  | 197/144  |  |
| TCDL          | 10.0  | Lumber DOL           | 1.15 | BC       | 0.05 | Vert(CT) | 0.00  |               |  |          |  |
| BCLL          | 0.0 * | Rep Stress Incr      | YES  | WB       | 0.05 | Horz(CT) | 0.00  |               |  |          |  |
| BCDL          | 10.0  | Code IRC2018/TPI2014 |      | Matrix-R |      |          |       |               |  |          |  |
|               |       |                      |      |          |      |          |       | Weight: 84 lb |  | FT = 10% |  |

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

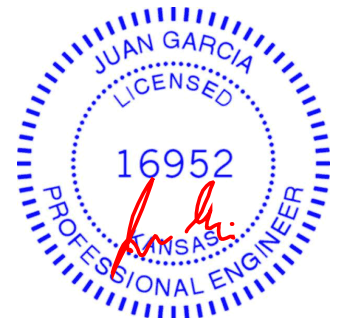
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 22-0-0.  
(lb) - Max Horz 25=73(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 24, 19, 18, 16, 15  
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 18, 16, 15

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 21, 22, 23, 24, 19, 18, 16, 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 20 2020  
**RELEASE FOR CONSTRUCTION**

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek

04/16/2020

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

**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/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.

|        |       |            |     |     |           |           |
|--------|-------|------------|-----|-----|-----------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN | 140701767 |
| 400148 | D2    | Common     | 5   | 1   |           |           |

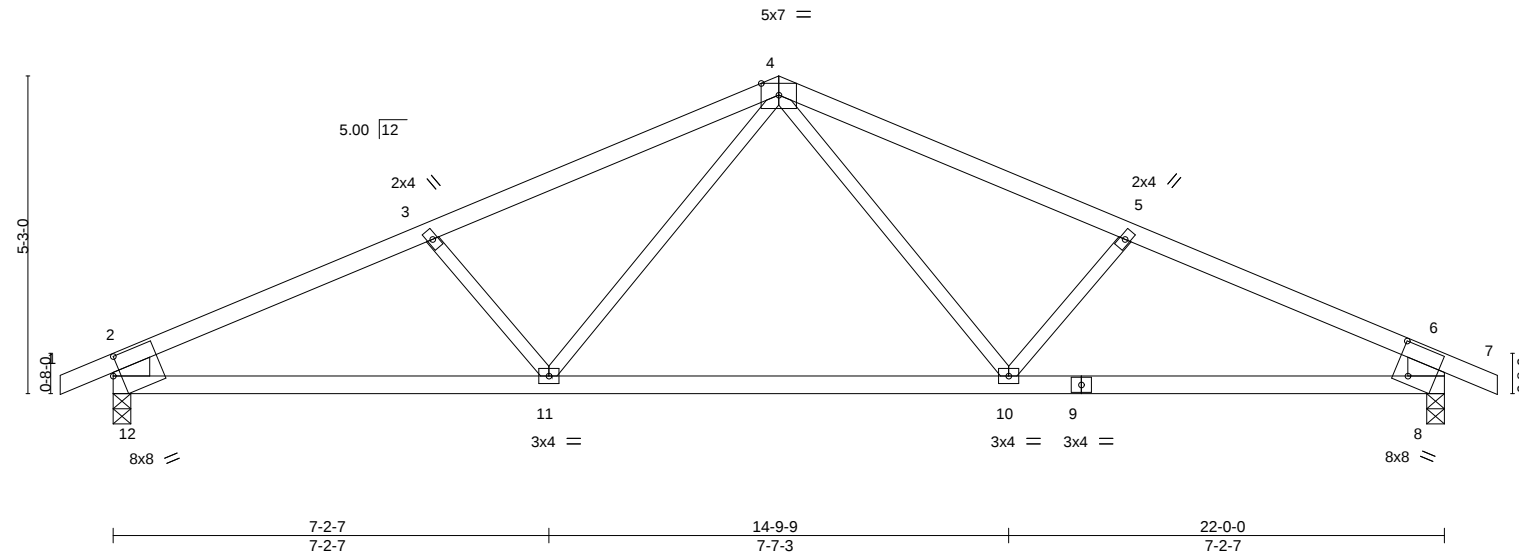
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:04 2020 Page 1

ID:vnPZsGkeTkCad6C?5h?ZN6zZ5mk-y1h5Bs1aH0bILW2HousBVv7ZO6tTTMjwQZmuSVzZ2q1

|        |       |        |         |        |         |
|--------|-------|--------|---------|--------|---------|
| 0-10-8 | 5-3-5 | 11-0-0 | 16-8-10 | 22-0-0 | 22-10-8 |
| 0-10-8 | 5-3-5 | 5-8-10 | 5-8-11  | 5-3-6  | 0-10-8  |

Scale = 1:38.1



| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES        | GRIP     |
|---------------|----------------------|----------|-------------------------------|---------------|----------|
| TCLL 25.0     | 2-0-0                | TC 0.98  | in (loc) l/defl L/d           | MT20          | 197/144  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.69  | Vert(LL) -0.19 10-11 >999 360 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.15  | Vert(CT) -0.38 10-11 >681 240 |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.05 8 n/a n/a       |               |          |
|               | Code IRC2018/TPI2014 |          | Wind(LL) 0.12 10-11 >999 240  | Weight: 71 lb | FT = 10% |

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-12,6-8: 2x8 SP DSS

#### BRACING-

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

#### REACTIONS.

(size) 12=0-3-8, 8=0-3-8  
Max Horz 12=-71(LC 9)  
Max Uplift 12=-150(LC 8), 8=-150(LC 9)  
Max Grav 12=1045(LC 1), 8=1045(LC 1)

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

TOP CHORD 2-3=-1654/231, 3-4=-1441/205, 4-5=-1441/205, 5-6=-1654/231, 2-12=-953/183,  
6-8=-953/183  
BOT CHORD 11-12=-221/1430, 10-11=-62/1043, 8-10=-150/1430  
WEBS 4-10=-66/433, 5-10=-282/190, 4-11=-66/433, 3-11=-282/190

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 12=150, 8=150.
- This truss 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 March 20 2020

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AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

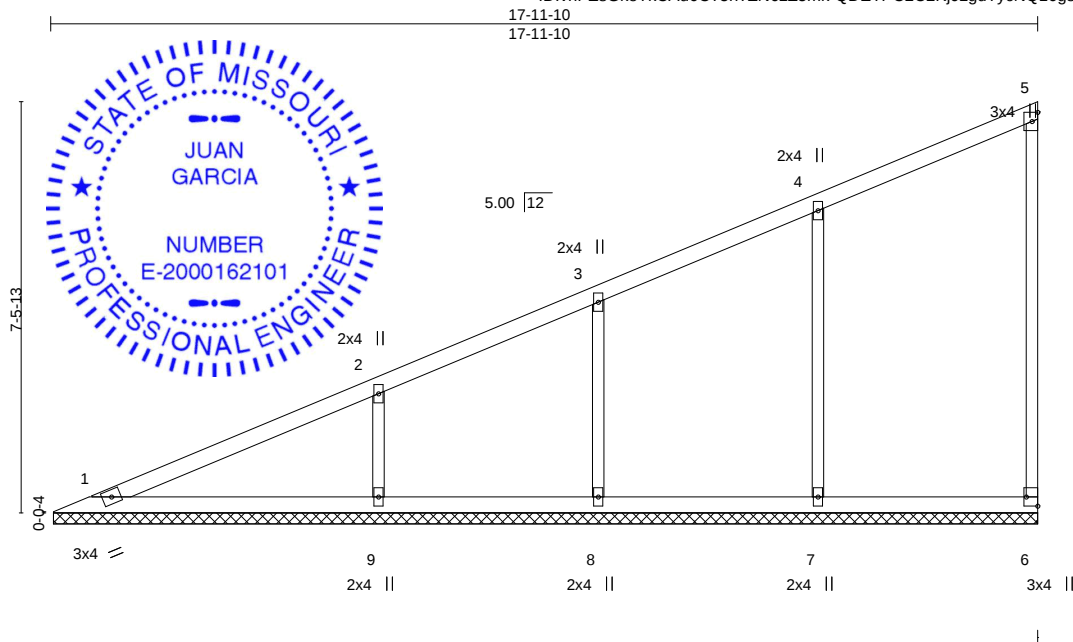
**MiTek**  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701768 |
| 400148 | V1    | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:05 2020 Page 1

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Scale = 1:41.9

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

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.46  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.20  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.24  | Horz(CT) | -0.00 | 6     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |       |       |        |     | Weight: 56 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

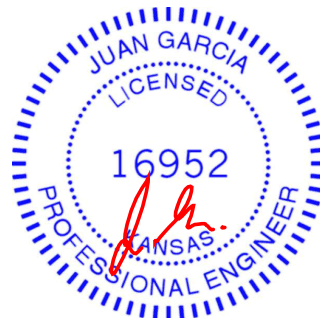
All bearings 17-11-0.  
(lb) - Max Horz 1=312(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 6, 8 except 7=108(LC 8), 9=132(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=488(LC 2), 8=344(LC 2), 9=507(LC 2)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-255/78  
WEBS 4-7=-315/142, 2-9=-373/186

#### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8 except (jt=lb) 7=108, 9=132.
- This truss 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

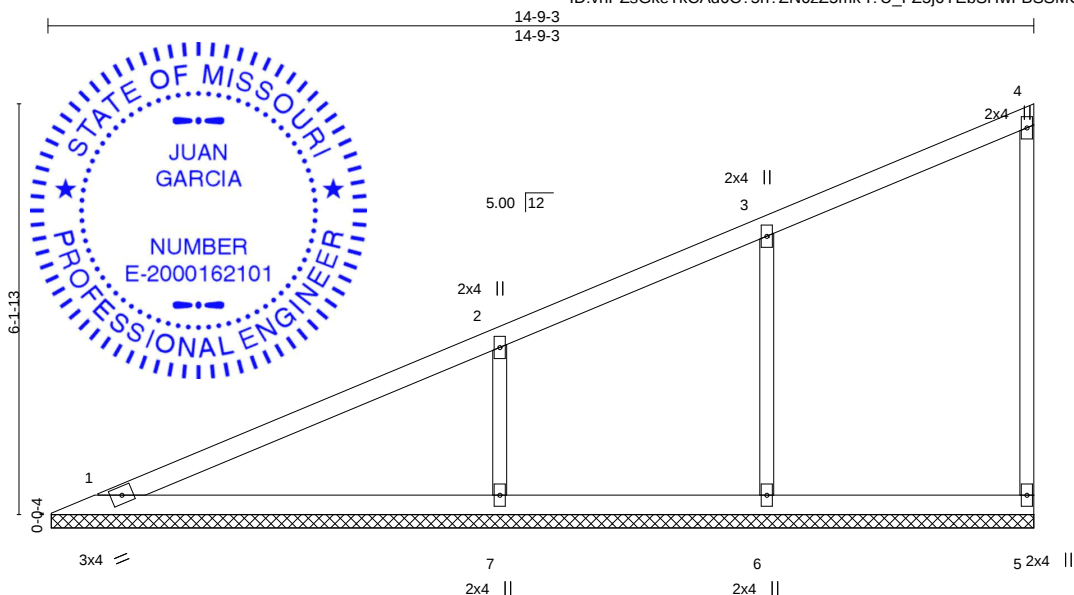
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701769 |
| 400148 | V2    | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:09 2020 Page 1

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Scale = 1:34.5

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.45  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.27  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.11  | Horz(CT) | -0.00 | 5     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |       |       |        |     | Weight: 44 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

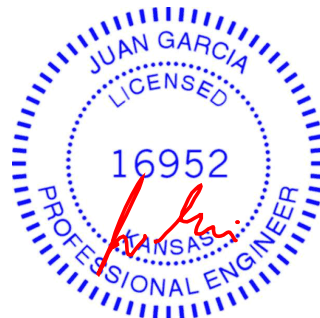
All bearings 14-8-10.  
(lb) - Max Horz 1=254(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=146(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=370(LC 2), 7=561(LC 2)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-259/123, 2-7=-412/208

#### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=146.
- This truss 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

March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek

04/16/2020

16023 Swingley Ridge Rd

Chesterfield, MO 63017

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

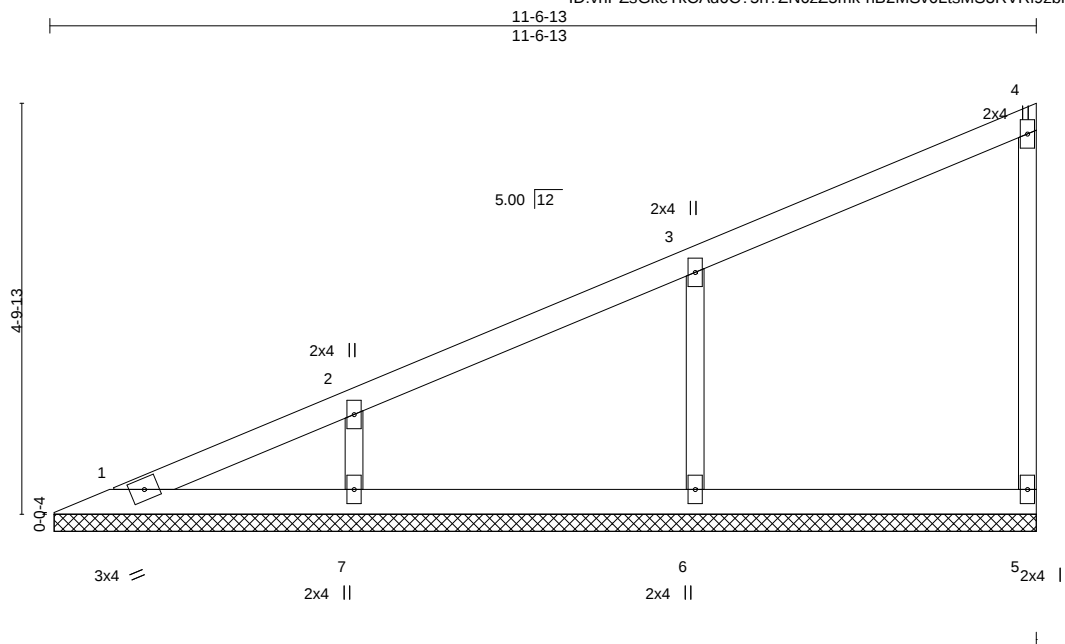
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701770 |
| 400148 | V3    | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:10 2020 Page 1

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| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.20  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.11  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.08  | Horz(CT) | -0.00 | 5     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |       |       |        |     | Weight: 33 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

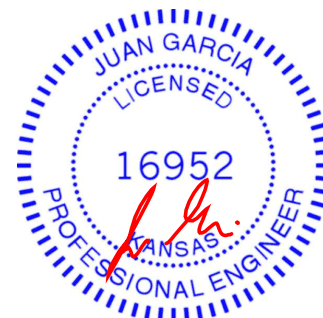
All bearings 11-6-3.  
(lb) - Max Horz 1=195(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 5, 7 except 6=106(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=399(LC 1), 7=331(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-311/153, 2-7=-254/131

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7 except (jt=lb) 6=106.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



RELEASE FOR CONSTRUCTION March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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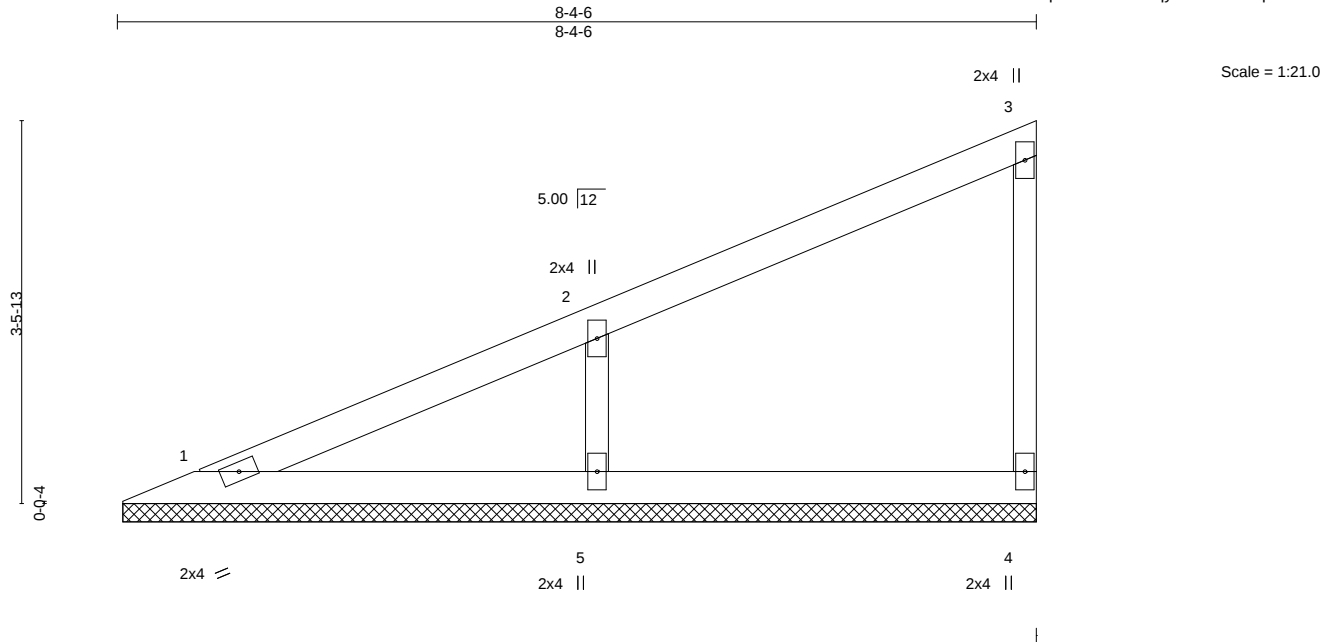
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|                          |       |            |     |     |           |           |
|--------------------------|-------|------------|-----|-----|-----------|-----------|
| Job                      | Truss | Truss Type | Qty | Ply | Lot 84 MN |           |
| 400148                   | V4    | Valley     | 1   | 1   |           | I40701771 |
| Job Reference (optional) |       |            |     |     |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:11 2020 Page 1

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| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.23  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.12  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.06  | Horz(CT) | -0.00 | 4     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |       |       |        |     | Weight: 22 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=8-3-13, 4=8-3-13, 5=8-3-13  
Max Horz 1=137(LC 5)  
Max Uplift 4=-23(LC 8), 5=-112(LC 8)  
Max Grav 1=119(LC 1), 4=135(LC 1), 5=422(LC 1)

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

WEBS 2-5=-328/169

#### 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=112.
- 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

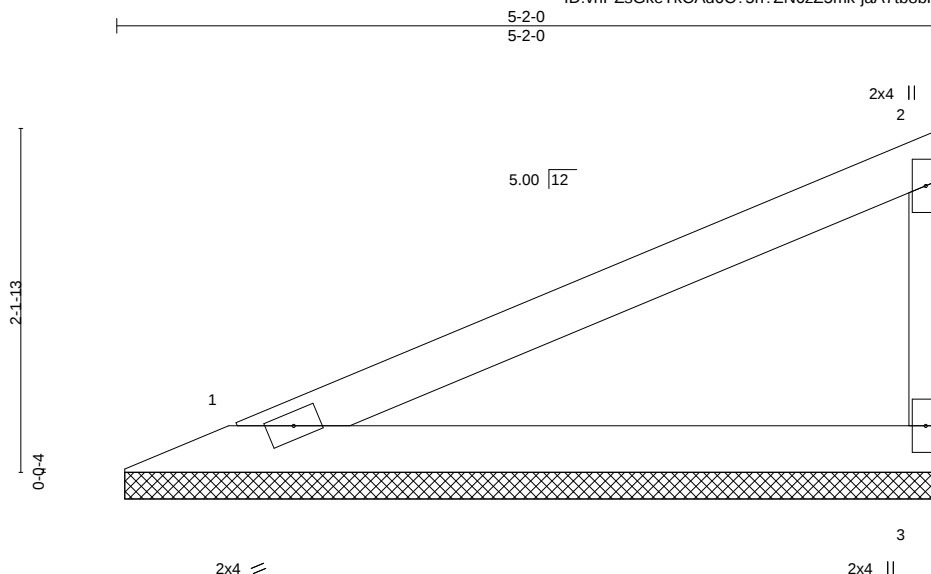
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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/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.

|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701772 |
| 400148 | V5    | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:12 2020 Page 1  
ID:vnPZsGkeTkCAAd6C?5h?ZN6zZ5mk-jaA7tb8bPTc9JlfpSa?3qbS4GLk5L?06GoiJj2zZ2pv



Scale = 1:14.4

| 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 0.35  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.19  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |       |       |        |     | Weight: 13 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-1-6, 3=5-1-6  
Max Horz 1=79(LC 5)  
Max Uplift 1=-28(LC 8), 3=-44(LC 8)  
Max Grav 1=194(LC 1), 3=194(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 CONSTRUCTION March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

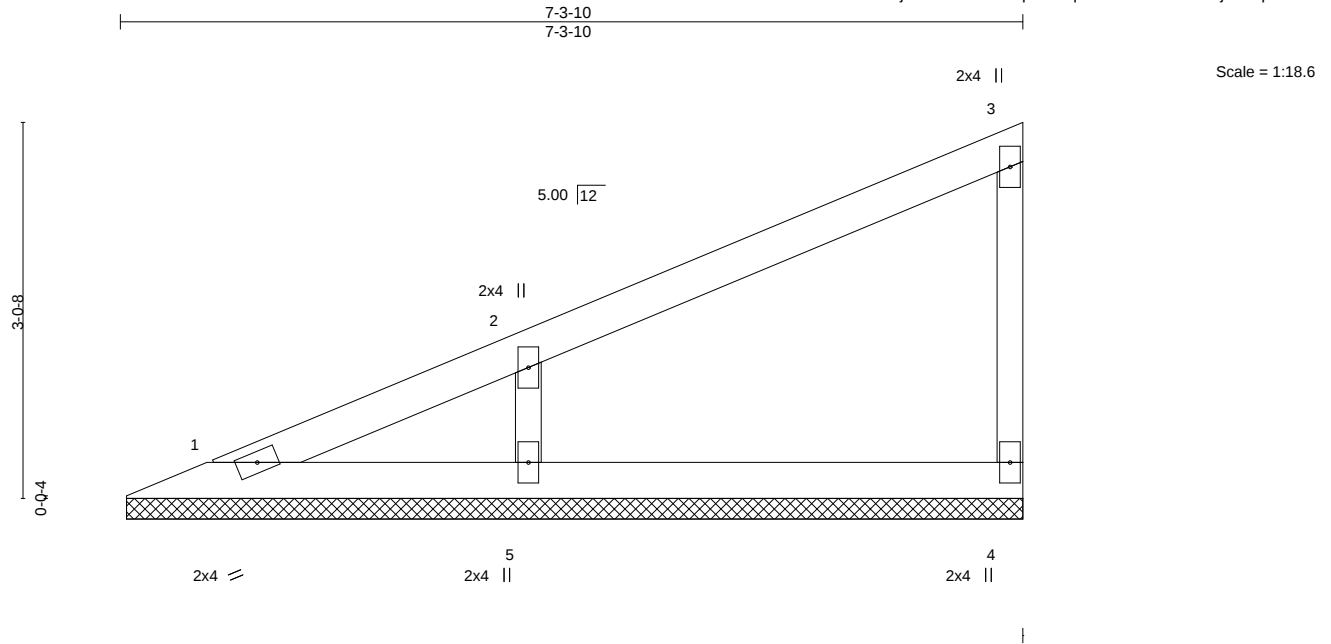
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/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.

|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701773 |
| 400148 | V6    | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:12 2020 Page 1

ID:vnPZsGkeTkCad6C?5h?ZN6zZ5mk-jaA7tb8bPTc9Jlfpsa?3qbS7mLIUL?C6GoiJj2zZ2pv



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.19  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.10  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.05  | Horz(CT) | -0.00 | 4     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |       |       |        |     | Weight: 19 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=7-3-0, 4=7-3-0, 5=7-3-0  
Max Horz 1=118(LC 5)  
Max Uplift 4=-26(LC 8), 5=-100(LC 8)  
Max Grav 1=70(LC 16), 4=142(LC 1), 5=375(LC 3)

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

WEBS 2-5=-292/150

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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, 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 CONSTRUCTION March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek

04/16/2020

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

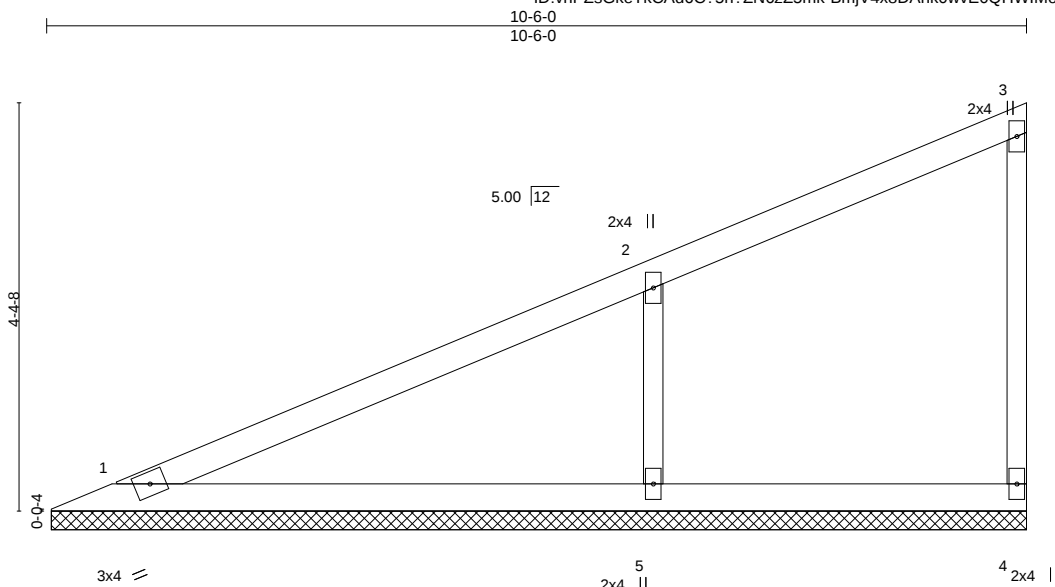
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701774 |
| 400148 | V7    | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:13 2020 Page 1

ID:vnPZsGkeTkCAAd6C?5h?ZN6zZ5mk-BmjV4x8Dank0wvE0QHWIMo?E\_k3o4RsFVSSsFUzZ2pu



| 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 0.41  | Vert(LL) | n/a      | -      | n/a | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.22  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.09  | Horz(CT) | -0.00    | 4      | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |          |        |     | Weight: 29 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=10-5-6, 4=10-5-6, 5=10-5-6  
Max Horz 1=176(LC 5)  
Max Uplift 1=-4(LC 8), 4=-23(LC 5), 5=-148(LC 8)  
Max Grav 1=209(LC 1), 4=102(LC 1), 5=557(LC 1)

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

WEBS 2-5=-420/205

#### 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, 4 except (jt=lb) 5=148.
- 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 March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

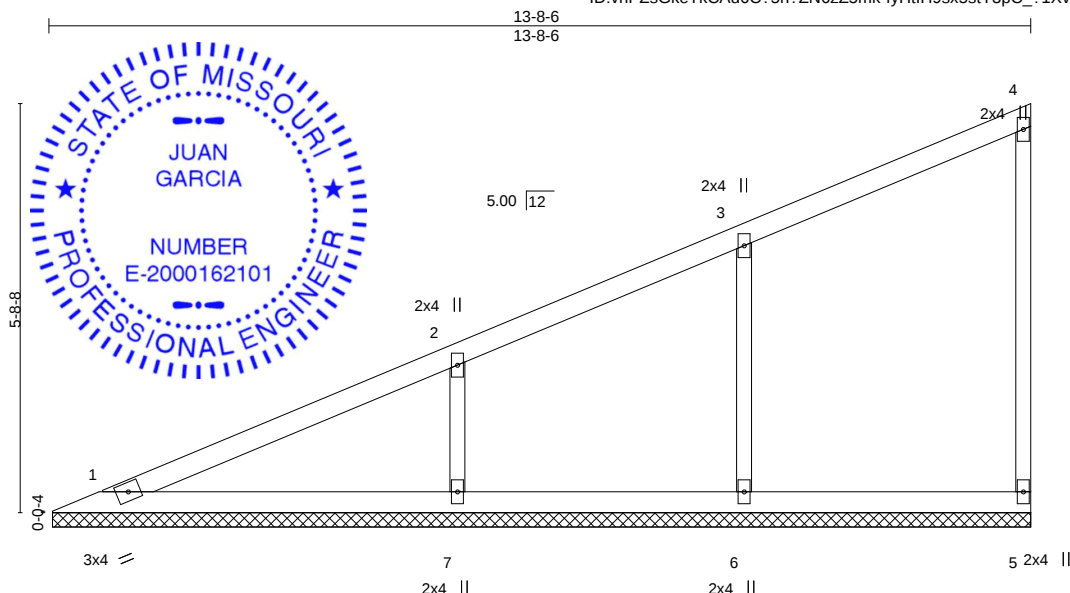
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701775 |
| 400148 | V8    | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:14 2020 Page 1  
ID:vnPZsGkeTkCAAd6C?5h?ZN6zZ5mk-fyHtIH9sx5stY3pC\_?1Xv0YRX8QjpuvPj6BQowzZ2pt



| 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 0.30  | Vert(LL) | n/a      | -      | n/a | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.18  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.10  | Horz(CT) | -0.00    | 5      | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |          |        |     | Weight: 40 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 13-7-13.  
(lb) - Max Horz 1=234(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 7=124(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=405(LC 2), 7=474(LC 2)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-283/136, 2-7=-351/178

#### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=124.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 20 2020  
**RELEASE FOR CONSTRUCTION**

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**AS NOTED ON PLANS REVIEW**  
**CODES ADMINISTRATION**  
**LEE'S SUMMIT, MISSOURI**  
**MiTek**  
**04/16/2020**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

|                          |       |            |     |     |           |           |
|--------------------------|-------|------------|-----|-----|-----------|-----------|
| Job                      | Truss | Truss Type | Qty | Ply | Lot 84 MN | I40701776 |
| 400148                   | V9    | Valley     | 1   | 1   |           |           |
| Job Reference (optional) |       |            |     |     |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:15 2020 Page 1

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16-10-13  
16-10-13

Scale = 1:39.2

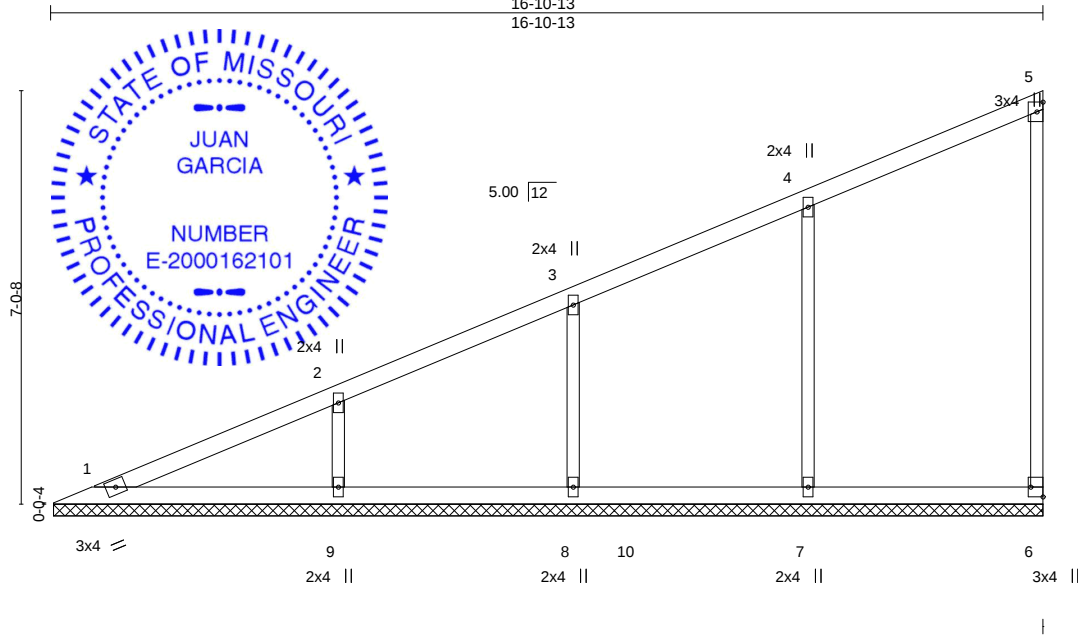


Plate Offsets (X,Y)-- [6:Edge,0-2-8]

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.40  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.17  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.20  | Horz(CT) | -0.00 | 6     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |       |       |        |     | Weight: 52 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 16-10-3.  
(lb) - Max Horz 1=292(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 6, 8 except 7=-106(LC 8), 9=-112(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=479(LC 2), 8=359(LC 2), 9=429(LC 2)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 4-7=-310/142, 3-8=-263/140, 2-9=-318/159

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8 except (jt=lb) 7=106, 9=112.
- 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.



March 20 2020  
RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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|                          |       |            |     |     |           |           |
|--------------------------|-------|------------|-----|-----|-----------|-----------|
| Job                      | Truss | Truss Type | Qty | Ply | Lot 84 MN | I40701777 |
| 400148                   | V10   | Valley     | 1   | 1   |           |           |
| Job Reference (optional) |       |            |     |     |           |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:06 2020 Page 1

ID:vnPZsGkeTkAd6C?5h?ZN6zZ5mk-uQorCY3qpd0bqCgWJufaKD?Jwh7xEgDutF?XOzZ2q?

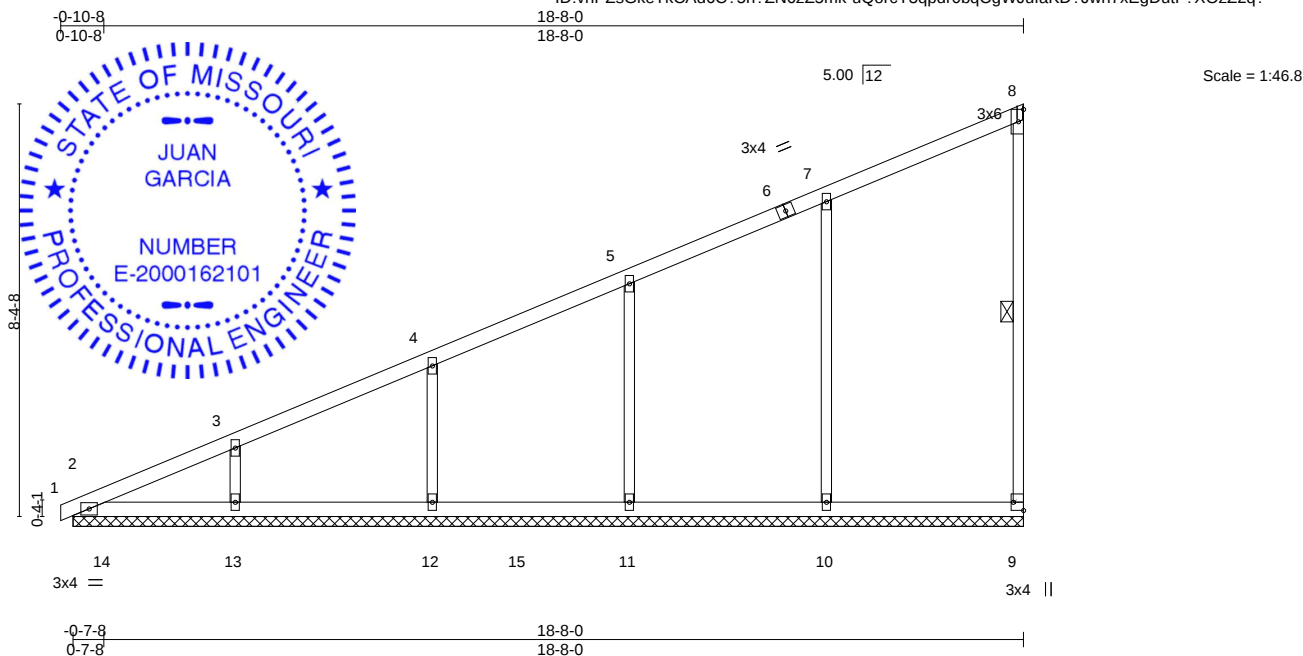


Plate Offsets (X,Y)-- [9:Edge,0-2-8]

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.57  | Vert(LL) | -0.00 | 1     | n/r    | 120 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.16  | Vert(CT) | 0.00  | 1     | n/r    | 120 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.31  | Horz(CT) | -0.00 | 9     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |       |       |        |     | Weight: 64 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

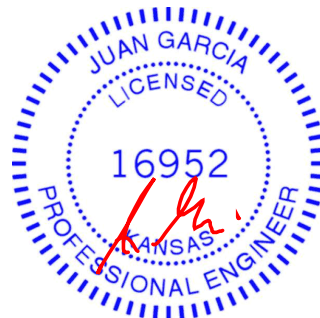
All bearings 19-3-8.  
(lb) - Max Horz 2=352(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 11, 12, 13 except 10=105(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 9, 2 except 10=473(LC 2), 11=417(LC 2), 12=379(LC 2), 13=372(LC 2)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-297/52, 3-4=-251/53  
WEBS 7-10=-308/133, 5-11=-273/146, 4-12=-283/144, 3-13=-276/142

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 11, 12, 13 except (jt=lb) 10=105.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



RELEASE FOR CONSTRUCTION March 20 2020

AS NOTED ON PLANS REVIEW

CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

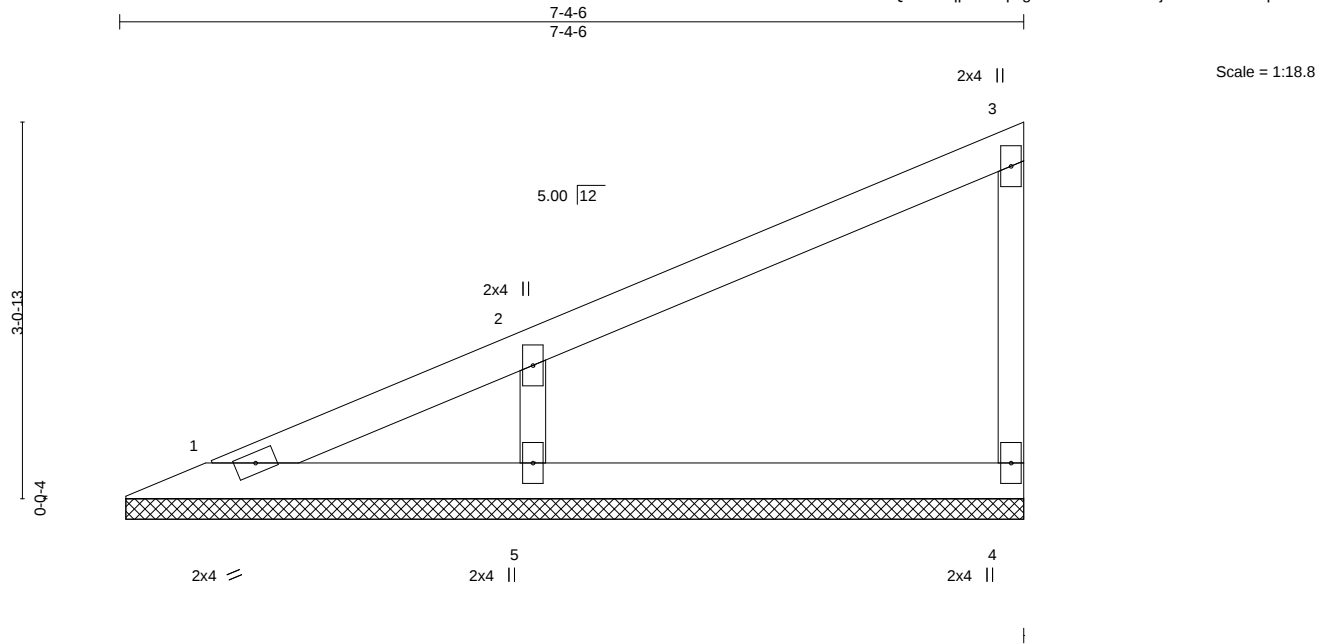
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/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.

|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701778 |
| 400148 | V11   | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:06 2020 Page 1

ID:vnPZsGkeTkCad6C?5h?ZN6zZ5mk-uQorcY3qpdR0bqCgWJufaKD5Fwi4xIjDutF?XOzZ2q?



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.19  | Vert(LL) | n/a   | -     | n/a    | 999 | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.10  | Vert(CT) | n/a   | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.05  | Horz(CT) | -0.00 | 4     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |       |       |        |     | Weight: 19 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 1=7-3-13, 4=7-3-13, 5=7-3-13  
Max Horz 1=119(LC 5)  
Max Uplift 4=-26(LC 8), 5=-100(LC 8)  
Max Grav 1=73(LC 16), 4=141(LC 1), 5=378(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-5=-294/151

#### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=100.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

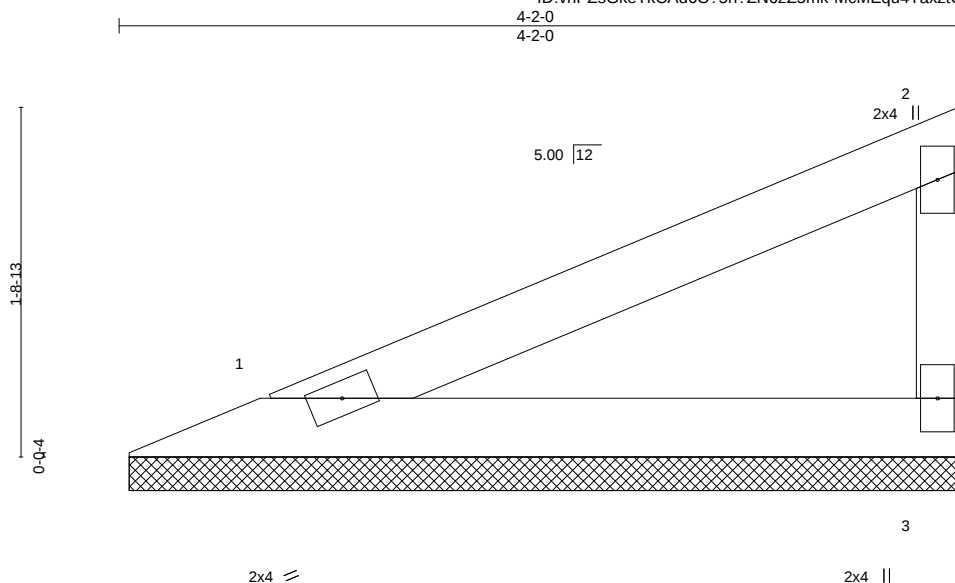
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/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.

|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701779 |
| 400148 | V12   | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:07 2020 Page 1

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Scale = 1:11.4

| 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 0.20  | Vert(LL) | n/a      | -      | n/a | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.11  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00    | 3      | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |          |        |     | Weight: 10 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 1=4-1-6, 3=4-1-6  
Max Horz 1=61(LC 5)  
Max Uplift 1=-22(LC 8), 3=-34(LC 8)  
Max Grav 1=149(LC 1), 3=149(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.



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MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

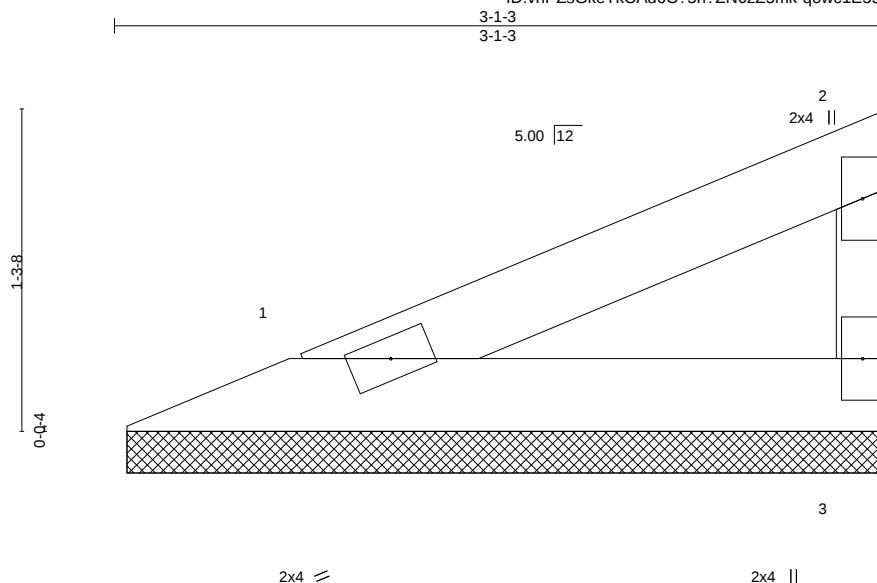
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701780 |
| 400148 | V13   | Valley     | 1   | 1   | Job Reference (optional) |           |

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:08 2020 Page 1

ID:vnPZsGkeTkAd6C?5h?ZN6zZ5mk-qowc1E55LF6kq7L2dkw7fllSPjPPPC1WLBk6aGzZ2pz



Scale = 1:9.2

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES       | GRIP     |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.08  | Vert(LL) | n/a      | -      | n/a | MT20         | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.05  | Vert(CT) | n/a      | -      | n/a |              |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00    | 3      | n/a |              |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |          |        |     | Weight: 7 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-0-10, 3=3-0-10  
Max Horz 1=41(LC 5)  
Max Uplift 1=-15(LC 8), 3=-23(LC 8)  
Max Grav 1=101(LC 1), 3=101(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.



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04/16/2020  
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|        |       |            |     |     |                          |           |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| Job    | Truss | Truss Type | Qty | Ply | Lot 84 MN                | I40701781 |
| 400148 | V14   | Valley     | 1   | 1   | Job Reference (optional) |           |

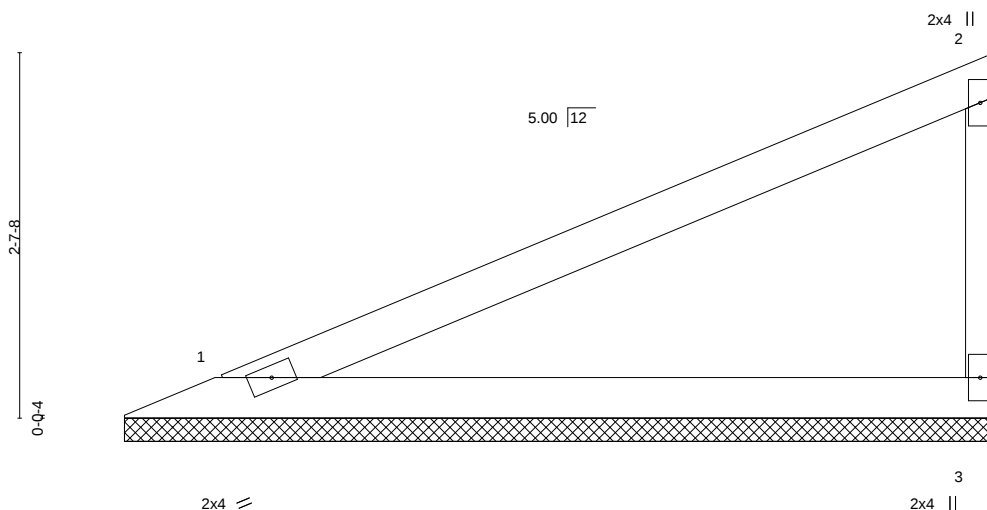
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Mar 20 11:34:09 2020 Page 1

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6-3-10  
6-3-10

Scale = 1:16.5



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 25.0     | Plate Grip DOL       | 1.15  | TC 0.58  | Vert(LL) | n/a      | -      | n/a | MT20          | 197/144  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.31  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00    | 3      | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |          |        |     | Weight: 16 lb | FT = 10% |

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 1=6-3-0, 3=6-3-0  
Max Horz 1=100(LC 5)  
Max Uplift 1=-36(LC 8), 3=-56(LC 8)  
Max Grav 1=245(LC 1), 3=245(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.



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CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

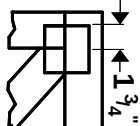
MiTek  
04/16/2020  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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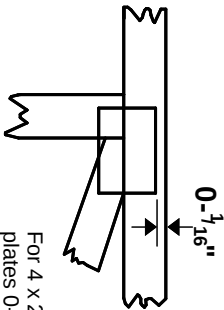
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# Symbols

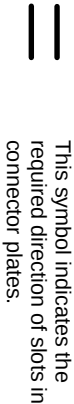
## PLATE LOCATION AND ORIENTATION



Center plate on joint unless X, Y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.



\* Plate location details available in **MiTek 20120** software or upon request.

## PLATE SIZE

4 X 4

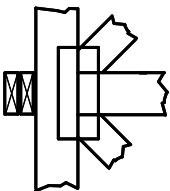
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



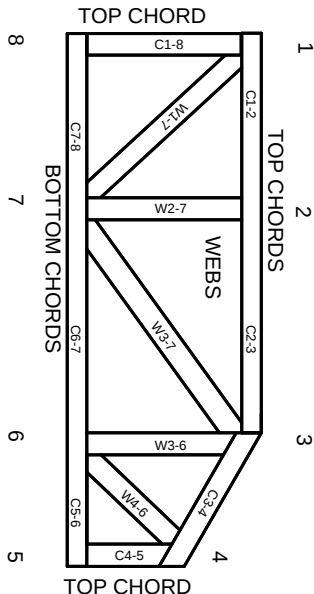
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED C LOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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Mitek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.

RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
CODES ADMINISTRATION  
LEE'S SUMMIT, MISSOURI

04/16/2020